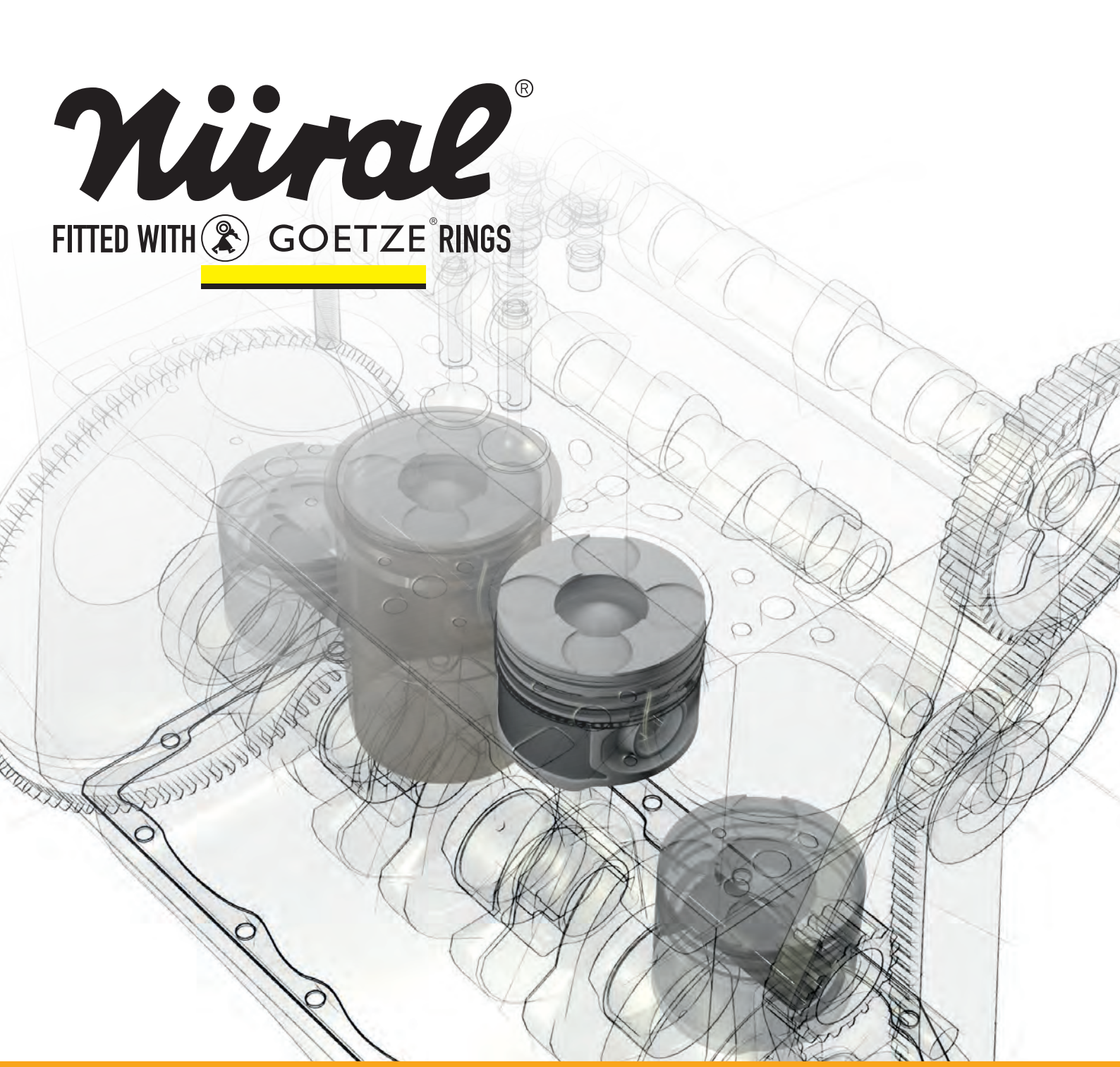
Nüral®

FITTED WITH GOETZE® RINGS



Pistons, Liners and Assemblies
Kolben, Laufbuchsen und Zubehör
Pistoni, Canne e Gruppi Cilindro
Pistons, Chemises et Kits
Pistones, Camisas y Equipos
Tłoki, Tulei i Zespołów Części Cylindrowych
Поршни, Цилиндры и Поршнекомплекты
المكابس ، القمصان و مجموعات السلندر

CATNU2201

2023-2025

ENGINE EXPERTISE

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WHY WOULD YOU RELY ON OUR 5 ENGINE BRANDS?

- Market-leading coverage with premium-quality materials and components
- The most comprehensive range of parts on the market
- Take full benefit of the latest engine technologies:
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- OE quality solutions for the Aftermarket with maximum durability and performance
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Enjoy exclusive benefits in only seconds

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Nüral® FITTED WITH GOETZE® RINGS

Nüral®

PART NUMBER 87-444500-00

OUTSTANDING TECHNOLOGIES
OE QUALITY FOR THE **OM470 ENGINE**

Environmentally friendly

Highly durable

OE quality

Monosteel® piston technology

Environmentally friendly
Made for the downsized, fuel efficient and EU6 compliant OM470 engine of the HDEP family for Mercedes-Benz Actros - the biggest selling truck in Europe.*

Highly durable
Fitted with Goetze® rings using GDC® & LKZ® technologies for excellent wear resistance with lower friction and reduced oil consumption.

OE quality
First to aftermarket with outstanding OE technology.

Monosteel® piston technology
Patented German design; double sided friction welded from two steel forgings to create a large, high cooling gallery for maximum efficiency and rigidity.

*TecAlliance GmbH VIO 2020

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ECOTOUGH®

ECOTOUGH®

Discover tomorrow today. The Nüral® EcoTough® NG piston skirt coating technology further reduces engine friction, wear and noise while handling the increasingly challenging loads and temperatures of FIAT's Firefly engine.

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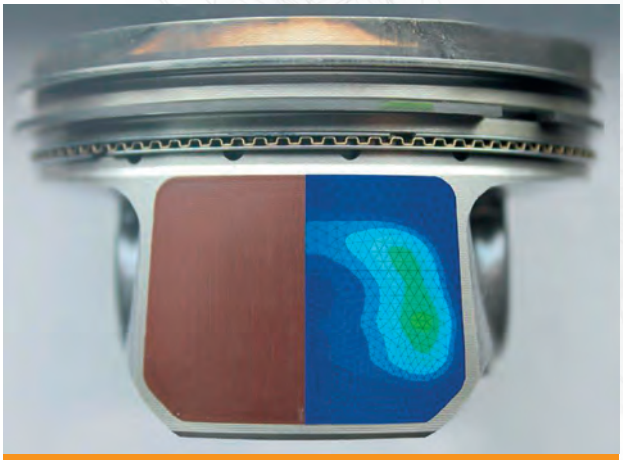
STEP INTO THE FUTURE

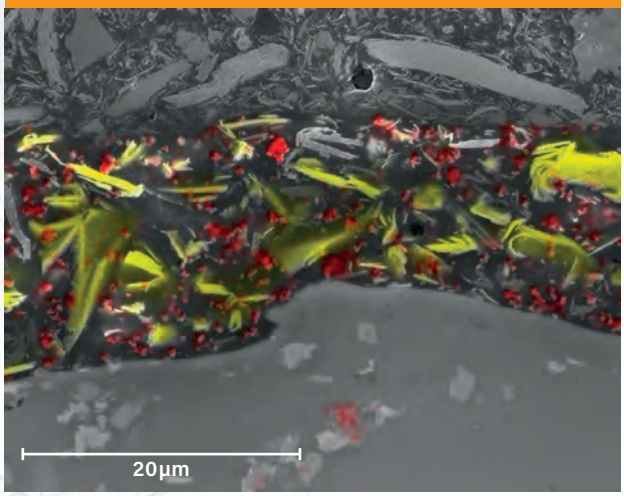
The EcoTough® NG piston coatings have been specially designed to meet the extreme load conditions of internal combustion engines. Thanks to a metal oxide-reinforced construction with additional embedded solid lubricant particles, they **reduce skirt wear by up to 40%*** when compared to market standards with a surface application of just 15 microns. This also **reduces piston frictional losses by up to 15%***.



Direct comparison of simulated contact load (right) and EcoTough-New Generation piston skirt coating with no visible wear (left) after testing in a 1.6-litre petrol engine

This means EcoTough® NG significantly **improves fatigue strength** and **increases fuel efficiency** for an environmentally friendly engine that's **more durable and efficient** than ever before. Application of these piston skirt coatings using fully automated, large-scale production processes means the excellent wear and friction properties can be achieved within economical cost targets.

Micro-section of Tenneco Powertrain's EcoTough Generation piston skirt coating for petrol engines, showing individual component materials like reinforcing fibres



PARTNUMBER NÜRAL ECOTOUGH®: 87-450900-00

OE REFERENCE: 46336793

VEHICLE MANUFACTURER: FIAT

ENGINES: GSE-T3 - FIAT / GSE-T4 - FIAT

*Performance always compared to market standards. Press release by Tenneco Powertrain - New Tenneco Powertrain Piston Skirt Coatings Increase Durability for the Life of Pistons; Nuremberg, Germany, March 30, 2016.

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Каталог не является руководством пользователя и инструкцией по установке поршней, гильз цилиндров и др. комплектующих. Он не содержит советов в юридическом понимании этого слова. Каталог не является заменой для издаваемых производителями двигателей технических инструкций по ремонту, в особенности для допусков технических величин, а также инструкций по монтажу и регламентному обслуживанию. Отдельные ссылки для установки и замены поршней, гильз цилиндров и др. комплектующих, приведенные в этом каталоге, являются инструкциями исключительно для технически компетентного специалиста и в каждом случае должны быть проверены им на предмет их пригодности. Tenneco не несет ответственность за ремонтные работы.
Содержимое каталога не предназначено для создания или замены любого контрактного соглашения, которое может быть оформлено только в виде отдельного соглашения между двумя установленными сторонами, где продавцом может являться только одно из юридических лиц Tenneco, как упомянуто на внутренней стороне обложки каталога. Tenneco оставляет за собой право вносить исправления и изменения в частности в отношении поправок по деталям изготовителей двигателей и их условиям.

هام

لا يُسمح بنسخ هذا الدليل أو أي جزء منه إلا بتصريح كتابي صريح. جميع التمثيلات التصويرية والتصميمات محفوظة بموجب حقوق الطبع والنشر، ولا تتحمل الشركة صراحة أي مطالبات بخسائر، أيًا كانت صورتها، تنشأ عن التفاصيل الواردة في هذا الدليل أو نتيجة لسوء الاستخدام أو التطبيق أو التخزين أو النقل. أي حقوق تعاقدية أو أي مطالبات لها علاقة بتلك الحقوق أو تنشأ تأسيسًا عليها، بغض النظر عن صورتها، تنشأ تأسيسًا على اتفاق كتابي منفصل، وبخاصة تأسيسًا على شروط البيع والتسليم الخاصة بنا.
تفقد كل البيانات السابقة صلاحيتها بمجرد نشر هذا الدليل.
هذا الدليل ليس دليلاً للتشغيل لتوضيح استخدام وتركيب المكابس أو البطانة أو التجميع. كما لا يحتوي على أي نصيحة بالمعنى القانوني، ولا يحل هذا الدليل محل القواعد الفنية المطبقة باستمرار خاصة فيما يتعلق بالتحمل، كما لا يحل محل شروط التركيب والصيانة الخاصة بمصنّعي المحركات الفردية.
كذلك لا يمكن الاستغناء عن خبرة الفنيين الذين يقومون بالتركيب أو التطبيق. وجميع الإشارات الواردة في هذا الدليل والتي تتعلق بتركيب وتطبيق المكابس والبطانة وعمليات التجميع هي إرشادات للمتخصصين الفنيين المؤهلين فحسب ويتم مراجعتها والتأكد من ملاءمتها في كل حالة على حده.
ولا تتحمل شركة Tenneco أي مسؤولية تتعلق بقرارات التطبيق.
ليس المقصود بمحتوى هذا الدليل أن يخلق أو يستبدل أي اتفاقات تعاقدية يتم الاحتفاظ بها حصريًا في اتفاقية منفصلة بين طرفين محددين، والتي يمكن أن يكون بموجبها أحد الكيانات التابعة لشركة Tenneco هو الطرف البائع كما هو موضح في الوجه الداخلي للغلاف الخارجي.
وتحتفظ الشركة بحقها في تصحيح أي أخطاء وإجراء أي تعديلات وبخاصة فيما يتعلق بتعديل تفاصيل مصنّع المحرك والأحكام المنصوص عليها.

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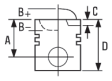
Nüral . is a trademark of DRiV

NSF Registered to ISO 14001
NSF Registered to ISO 9001

Nüral FITTED WITH GOETZE RINGS

HOW TO USE

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

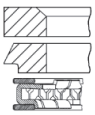
106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5) **87-154300-00** *STD*

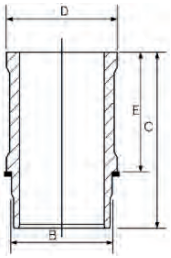
A	40,05
B+	2.97
D	64.05
	20x62

(11)

(6) **08-154300-00** *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) **14-636470-00** (8) WH



B 79.50 **C** 122.00 **D** 89.20 **E** 85.00

(9) **88-154300-00**
87-154300-00 +
14-636470-00

[1] Steel (12) [1] Stahl [1] Acier [1] Acciao [1] Acero

1. Panel No.
2. Bore size
3. Model
4. Engine
5. Piston reference
   - A = Compression Height
   - B = Bowl Depth / Crown Height
   - BØ = Bowl Diameter
   - C = Valve Pocket Depth
   - D = Length
   - RT Alfin Insert
   - KK Oil Cooling Gallery
   - AK Oil Jet Cut-out
   - HA Hard Anodised Coating on Crown
   - NB Bronze Pin Bush
   - TP = Trapezoidal Conrod
6. Ring Set Reference
   - Ring Width
   - Ring Design
   - Ring Surface Treatment and Material
7. Liner Reference
   - B = Outer Diameter
   - C = Overall Length
   - D = Flange Diameter
   - E = Flange Width
   - F = Firelip Height
8. Liner Type
   - D = Dry
   - WH = Wet Honed
   - DH = Dry Honed
9. Assembly reference
10. TecDoc / DRiV engine number
11. Piston Image and Casting Number (if applicable)
12. Comment

PART NUMBERING SYSTEM

Nüral® FITTED WITH GOETZE® RINGS

87 - 114900 - 25 Catalogue reference
87 - 114900 - 25 Piston assembly
88 - 114900 - 25 Kit-set without seals
89 - 114900 - 25 Kit-set with seals
87 - **1149**00 - 25 Reference
87 - 1149**00** - 25 Size* →
87 - 114900 - **25** Version

* If imperial in the past, it continues to be imperial

Size	Metric	Imperial
00	STD	
03	0.125MM	
04	0.20MM	
05	0.25MM	.010
06	0.40MM	
07	0.50MM	.020
08	0.60MM	
09	0.75MM	.030
10	0.80MM	
11	1.00MM	.040
13	1.25MM	
14	1.50MM	.060
16	2.00MM	
17	2.286MM	.090
20	0.70MM	
21	0.65MM	
22	0.30MM	

Feature Codes

RT	Alfin Insert	HA	Hard Anodized Coating on Crown
KK	Oil Cooling Gallery		
AK	Oil Jet Cut-out	NB	Bronze Pin Bush

GOETZE®

PISTON RINGS

08 - 114900 - 00 Catalogue reference
08 - 114900 - 00 Ring set assembly
08 - **1149**00 - 00 Reference
08 - 1149**00** - 00 Size* (See Nüral pistons table)
08 - 114900 - **00** Version

* If imperial in the past, it continues to be imperial

CYLINDER LINERS

14 - 451160 - 00 Catalogue reference
14 - 451160 - 00 Cylinder liner
15 - 451160 - 00 Cylinder liner with seals
14 - **45**1160 - 00 Liner type →
14 - 45**1**160 - 00 Serial number
14 - 45116**0** - 00 Size →
14 - 451160 - **00** Version

01 - 19 = Dry liner
20 - 99 = Wet liner

0 = STD
1 = 1st oversize
2 = 2nd oversize

GOETZE®

COATINGS AND TREATMENT CODES

CR	Chromed	P	Phosphated
MO	Molybdenum inlaid	NT	Nitrided
MOL	Molybdenum coated	PS	Plasma spray coated
CK	Chromium-Ceramic-Coated	GDC	Goetze Diamond Coated®
PVD	Chromium Nitride	DLC	Diamond Like Carbon

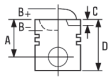
PISTON RING CROSS SECTIONS

Cross Section	Description
	Plain compression ring
	Plain compression ring (inside bevel - top side)
	Plain compression ring (inside bevel - bottom side)
	Plain compression ring (inside step - top side)
	Plain compression ring (inside step - bottom side)
	Tapered Ring
	Tapered Ring (inside bevel - top side)
	Tapered Ring (inside bevel - bottom side)
	Tapered Ring (inside step - top side)
	Tapered Ring (inside step - bottom side)
	Slightly Tapered Ring
	Slightly Tapered Ring (inside bevel - top side)
	Slightly Tapered Ring (inside bevel - bottom side)
	Slightly Tapered Ring (inside step - top side)
	Slightly Tapered Ring (inside step - bottom side)
	Wedge type compression ring
	Wedge type compression ring (inside bevel - top side)
	Wedge type compression ring (inside bevel - bottom side)
	Wedge type compression ring (inside step - top side)
	Wedge type compression ring (inside step - bottom side)
	Keystone type compression ring
	Keystone type compression ring (inside bevel - top side)
	Keystone type compression ring (inside bevel - bottom side)
	Keystone type compression ring (inside step - top side)
	Keystone type compression ring (inside step - bottom side)
	Taper-faced keystone ring
	Taper-faced keystone ring (inside bevel - top side)
	Taper-faced keystone ring (inside bevel - bottom side)
	Taper-faced keystone ring (inside step - top side)
	Taper-faced keystone ring (inside step - bottom side)
	Single hook scraper
	Single hook scraper (inside bevel - top side)
	Single hook scraper (inside bevel - bottom side)
	Single hook scraper (inside step - top side)
	Single hook scraper (inside step - bottom side)
	Tapered single hook scraper
	Tapered single hook scraper (inside bevel - top side)
	Tapered single hook scraper (inside bevel - bottom side)
	Tapered single hook scraper (inside step - top side)
	Tapered single hook scraper (inside step - bottom side)
	Slotted Oil Scraper ring
	Bevel-edged oil control ring
	Double bevel-edged oil control ring
	Slotted Oil Scraper ring
	Slotted Oil Scraper ring with coil spring
	Bevel-edged oil control ring with coil spring
	Double bevel-edged oil control ring with coil spring
	Slotted Oil Scraper with coil spring
	Steel rail oil control ring with VF spring

Nüral® FITTED WITH GOETZE® RINGS

BENUTZERHINWEISE

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5)

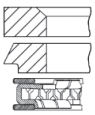
87-154300-00 *STD*

A	40,05
B+	2.97
D	64.05
	20x62

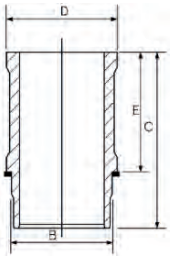
(11)

(6)

08-154300-00 *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) **14-636470-00** (8) WH



B 79.50 **C** 122.00 **D** 89.20 **E** 85.00

(9) **88-154300-00**
87-154300-00 +
14-636470-00

[1] Steel (12) | [1] Stahl | [1] Acier | [1] Acciao | [1] Acero

1. Infotafel
2. Bohrung
3. Modell
4. Motor
5. Artikelnummer Kolben
   - A = Kompressionshöhe
   - B = Muldentiefe / Bodenhöhe
   - BØ = Muldendurchmesser
   - C = Ventiltaschentiefe
   - D = Länge
   - RT = Ringträger
   - KK Ölkühlkanal
   - AK Öldüsenaussparung
   - HA Hartanodisierter Kolbenboden
   - NB Bolzenbuchse aus Bronze
   - TP = Trapezpleuel
6. Artikelnummer Kolbenringsatz
   - Ringhöhe
   - Ringbauart
   - Ringoberflächenbehandlung und Material
7. Artikelnummer Laufbuchse
   - B = Außendurchmesser
   - C = Gesamtlänge
   - D = Bunddurchmesser
   - E = Bundbreite
   - F = Feuersteghöhe
8. Laufbuchsentyp
   - D = trocken
   - WH = nass, gehont
   - DH = trocken, gehont
9. Artikelnummer Assembly
10. TecDoc-Nr. / DRiV-Motornummer
11. Kolbenabbildung und Kokille (gegebenenfalls)
12. Kommentar

TEILENUMMERIERUNGSSYSTEM

Nüral® FITTED WITH GOETZE® RINGS

87 - 114900 - 25 Artikelnummer
87 - 114900 - 25 Assembly
88 - 114900 - 25 Assembly ohne Abdichtungen
89 - 114900 - 25 Assembly mit Abdichtungen
87 - **1149**00 - 25 Artikelnummer
87 - 1149**00** - 25 Größe* →
87 - 114900 - **25** Version

* Falls Maßangaben bisher nach Bristischer Norm waren, werden sie weiterhin so angegeben

Größe	Metrisch STD	Britische Maßeinheiten
00	0.125MM	
03	0.20MM	
04	0.25MM	.010
05	0.40MM	
06	0.50MM	.020
07	0.60MM	
08	0.75MM	.030
09	0.80MM	
10	1.00MM	.040
11	1.25MM	
13	1.50MM	.060
14	2.00MM	
16	2.286MM	.090
17	0.70MM	
20	0.65MM	
21	0.30MM	
22		

Kurzzeichen Ausstattung

RT	Rinträger	HA	Hartanodisierter Kolbenboden
KK	Ölkühlkanal		
AK	Öldüsenaussparung	NB	Bolzenbuchse aus Bronze

GOETZE®

KOLBENRINGE

08 - 114900 - 00 Artikelnummer im Katalog
08 - 114900 - 00 Kolbenringsatz
08 - **1149**00 - 00 Referenz
08 - 1149**00** - 00 Größe* (siehe Nüral-Kolbentabelle)
08 - 114900 - **00** Version

* Falls Maßangaben bisher nach Bristischer Norm waren, werden sie weiterhin so angegeben

ZYLINDERLAUFBUCHSEN

14 - 451160 - 00 Artikelnummer
14 - 451160 - 00 Zylinderlaufbuchse
15 - 451160 - 00 Zylinderlaufbuchse mit Abdichtung
14 - **45**1160 - 00 Laufbuchsentyp →
14 - 451**16**0 - 00 Seriennummer
14 - 45116**0** - 00 Größe →
14 - 451160 - **00** Version

01 - 19 = Trockene Zylinderlaufbuchse
20 - 99 = Nasse Zylinderlaufbuchse

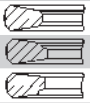
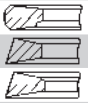
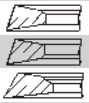
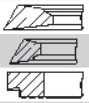
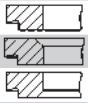
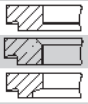
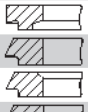
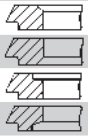
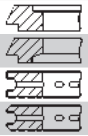
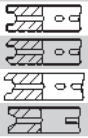
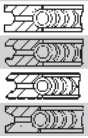
0 = STD
1 = 1. Übergröße
2 = 2. Übergröße

GOETZE®

KURZZEICHEN BESCHICHTUNGEN UND BEHANDLUNGEN

CR	Verchromt	P	Phosphatiert
MO	Lauffläche teilweise mit Molybdän beschichtet	NT	Nitriert
MOL	Molybdän beschichtet	PS	Plasmaspritzbeschichtet
CK	Chrom-Keramik beschichtet	GDC	Goetze Diamond Coated®
PVD	Chromnitrid	DLC	Diamantähnlicher Kohlenstoff

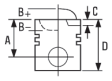
KOLBENRINGQUERSCHNITTE

Querschnitt	Beschreibung
	Rechteckring
	Rechteckring (mit Innenfase an der Oberflanke)
	Rechteckring (mit Innenfase an der Unterflanke)
	Rechteckring (mit Innenwinkel an der Oberflanke)
	Rechteckring (mit Innenwinkel an der Unterflanke)
	Minutenring
	Minutenring (mit Innenfase an der Oberflanke)
	Minutenring (mit Innenfase an der Unterflanke)
	Minutenring (mit Innenwinkel an der Oberflanke)
	Minutenring (mit Innenwinkel an der Unterflanke)
	Schwachminutenring
	Schwachminutenring (mit Innenfase an der Oberflanke)
	Schwachminutenring (mit Innenfase an der Unterflanke)
	Schwachminutenring (mit Innenwinkel an der Oberflanke)
	Schwachminutenring (mit Innenwinkel an der Unterflanke)
	Einseitiger Trapezring
	Einseitiger Trapezring (mit Innenfase an der Oberflanke)
	Einseitiger Trapezring (mit Innenfase an der Unterflanke)
	Einseitiger Trapezring (mit Innenwinkel an der Oberflanke)
	Einseitiger Trapezring (mit Innenwinkel an der Unterflanke)
	Doppeltrapezring
	Doppeltrapezring (mit Innenfase an der Oberflanke)
	Doppeltrapezring (mit Innenfase an der Unterflanke)
	Doppeltrapezring (mit Innenwinkel an der Oberflanke)
	Doppeltrapezring (mit Innenwinkel an der Unterflanke)
	Doppeltrapezring mit konischer Lauffläche
	Doppeltrapezring mit konischer Lauffläche (Innenfase an der Oberflanke)
	Doppeltrapezring mit konischer Lauffläche (Innenfase an der Unterflanke)
	Doppeltrapezring mit konischer Lauffläche (Innenwinkel an der Oberflanke)
	Doppeltrapezring mit konischer Lauffläche (Innenwinkel an der Unterflanke)
	Nasenring
	Nasenring (mit Innenfase an der Oberflanke)
	Nasenring (mit Innenfase an der Unterflanke)
	Nasenring (mit Innenwinkel an der Oberflanke)
	Nasenring (mit Innenwinkel an der Unterflanke)
	Nasen-Minutenring
	Nasen-Minutenring (mit Innenfase an der Oberflanke)
	Nasen-Minutenring (mit Innenfase an der Unterflanke)
	Nasen-Minutenring (mit Innenwinkel an der Oberflanke)
	Nasen-Minutenring (mit Innenwinkel an der Unterflanke)
	Ölschlitzring
	Dachfasenring
	Gleichfasenring
	Ölschlitzring
	Ölschlitzring mit Schlauchfeder
	Dachfasenring mit Schlauchfeder
	Gleichfasenring mit Schlauchfeder
	Ölschlitzring mit Schlauchfeder
	Ölabstreif-Stahlbandring mit VF-Feder

Nüral® FITTED WITH GOETZE® RINGS

COME SI UTILIZZA IL CATALOGO

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5)

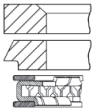
87-154300-00 *STD*

A	40,05
B+	2.97
D	64.05
	20x62

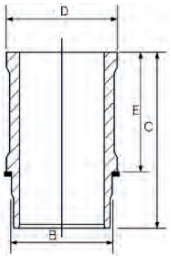
(11)

(6)

08-154300-00 *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) **14-636470-00** (8) WH



B 79.50 **C** 122.00 **D** 89.20 **E** 85.00

(9) **88-154300-00**
87-154300-00 +
14-636470-00

[1] Steel (12) [1] Stahl [1] Acier [1] Acciao [1] Acero

1. N. Pannello
2. Alesaggio
3. Modello
4. Motore
5. Codice Pistone
   - A = Altezza di compressione
   - B = Profondità Camera di Combustione/Sporgenza testa
   - BØ = Diametro Camera di Combustione
   - C = Profondità Sedi Valvole
   - D = Lunghezza
   - RT Inserto Alfin
   - KK Galleria di raffreddamento dell'olio
   - AK Getto olio
   - HA Rivestimento di Anodizzazione sulla Testa del Pistone
   - NB Boccola Foro Spinotto in Bronzo
   - TP = Biella Trapezoidale
6. Codice Set Segmenti
   - Altezza Segmento
   - Forma Segmento
   - Materiale e Trattamento Superficiale Segmento
7. Codice Canna Cilindro
   - B = Diametro Esterno
   - C = Lunghezza Totale
   - D = Diametro Flangia
   - E = Larghezza Flangia
   - F = Altezza Parafiamma
8. Tipo Canna Cilindro
   - D = A Secco
   - WH = Riportata in Umido
   - DH = Riportata a Secco
9. Codice Gruppo
10. TecDoc / DRiV numero motore
11. Immagine Pistone e Numero di Fusione (se applicabile)
12. Note

SISTEMA DI CATALOGAZIONE DEI RICAMBI

Nüral® FITTED WITH GOETZE® RINGS

87 - 114900 - 25 Codice catalogo
87 - 114900 - 25 Gruppo pistone
88 - 114900 - 25 Kit-set senza guarnizioni
89 - 114900 - 25 Kit-set con guarnizioni
87 - **1149**00 - 25 Codice
87 - 1149**00** - 25 Dimensioni* →
87 - 114900 - **25** Versione

* Se precedentemente indicato in misure imperiali, rimane tale

Dimensioni	Metriche	Imperiali
00	STD	
03	0.125MM	
04	0.20MM	
05	0.25MM	.010
06	0.40MM	
07	0.50MM	.020
08	0.60MM	
09	0.75MM	.030
10	0.80MM	
11	1.00MM	.040
13	1.25MM	
14	1.50MM	.060
16	2.00MM	
17	2.286MM	.090
20	0.70MM	
21	0.65MM	
22	0.30MM	

Codici Caratteristiche

RT Inserto Alfin
KK Galleria di raffreddamento dell'olio
AK Getto olio
HA Rivestimento Anodizzazione su Testa Pistone
NB Boccola Foro Spinotto in Bronzo

GOETZE®

SEGMENTI PISTONE

08 - 114900 - 00 Codice catalogo
08 - 114900 - 00 Assieme set segmenti
08 - **1149**00 - 00 Codice
08 - 1149**00** - 00 Dimensioni* **(Vedi tabella pistoni Nüral)**
08 - 114900 - **00** Versione

* Se precedentemente indicato in misure imperiali, rimane tale

CANNE CILINDRO

14 - 451160 - 00 Codice catalogo
14 - 451160 - 00 Canna cilindro
15 - 451160 - 00 Canna cilindro con guarnizione
14 - **45**1160 - 00 Tipo canna cilindro →
14 - 451**16**0 - 00 Numero di seriale
14 - 45116**0** - 00 Dimensioni →
14 - 451160 - **00** Versione

01 - 19 = Canna a secco
20 - 99 = Canna in umido

0 = STD
1 = 1° maggiorazione
2 = 2° maggiorazione

GOETZE®

CODICI RIVESTIMENTI E TRATTAMENTI

CR	Cromato	P	Fosfatato
MO	Inserto in molibdeno	NT	Nitrurato
MOL	Rivestimento in molibdeno	PS	Rivestimento a getto di plasma
CK	Nitruro de cromo	GDC	Rivestimento Goetze Diamond Coated®
PVD	Carbonio diamantato	DLC	Carbonio diamantato

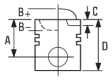
SEZIONE SEGMENTI PISTONE

Sezione	Descrizione
	Segmento di compressione rettangolare
	Segmento di compressione rettangolare con smusso interno - lato superiore
	Segmento di compressione rettangolare con smusso interno - lato inferiore
	Segmento di compressione rettangolare con gradino interno - lato superiore
	Segmento di compressione rettangolare con gradino interno - lato inferiore
	Segmento Conico
	Segmento Conico con smusso interno - lato superiore
	Segmento Conico con smusso interno - lato inferiore
	Segmento Conico con gradino interno - lato superiore
	Segmento Conico con gradino interno - lato inferiore
	Segmento Leggermente Conico
	Segmento Leggermente Conico con smusso interno - lato superiore
	Segmento Leggermente Conico con smusso interno - lato inferiore
	Segmento Leggermente Conico con gradino interno - lato superiore
	Segmento Leggermente Conico con gradino interno - lato inferiore
	Segmento di compressione di tipo a cuneo
	Segmento di compressione di tipo a cuneo con smusso interno - lato superiore
	Segmento di compressione di tipo a cuneo con smusso interno - lato inferiore
	Segmento di compressione di tipo a cuneo con gradino interno - lato superiore
	Segmento di compressione di tipo a cuneo con gradino interno - lato inferiore
	Segmento di compressione a sezione trapezoidale
	Segmento di compressione a sezione trapezoidale con smusso interno - lato superiore
	Segmento di compressione a sezione trapezoidale con smusso interno - lato inferiore
	Segmento di compressione a sezione trapezoidale con gradino interno - lato superiore
	Segmento di compressione a sezione trapezoidale con gradino interno - lato inferiore
	Segmento di compressione a sezione trapezoidale con fianchi inclinati
	Segmento di compressione a sezione trapezoidale con fianchi inclinati con smusso interno - lato superiore
	Segmento di compressione a sezione trapezoidale con fianchi inclinati con smusso interno - lato inferiore
	Segmento di compressione a sezione trapezoidale con fianchi inclinati con gradino interno - lato superiore
	Segmento di compressione a sezione trapezoidale con fianchi inclinati con gradino interno - lato inferiore
	Segmento raschiaolio
	Segmento raschiaolio con smusso interno - lato superiore
	Segmento raschiaolio con smusso interno - lato inferiore
	Segmento raschiaolio con gradino interno - lato superiore
	Segmento raschiaolio con gradino interno - lato inferiore
	Segmento raschiaolio conico
	Segmento raschiaolio conico con smusso interno - lato superiore
	Segmento raschiaolio conico con smusso interno - lato inferiore
	Segmento raschiaolio conico con gradino interno - lato superiore
	Segmento raschiaolio conico con gradino interno - lato inferiore
	Segmento raschiaolio con fori
	Segmento raschiaolio con pattini smussati
	Segmento raschiaolio con smussi convergenti
	Segmento raschiaolio con fori
	Segmento raschiaolio con fori e con molla
	Segmento raschiaolio con smussi paralleli e con molla
	Segmento raschiaolio con doppio bordo smussato e con molla
	Segmento raschiaolio con fori e con molla
	Segmento raschiaolio con guida in acciaio e con molla VF

Nüral® FITTED WITH GOETZE® RINGS

INSTRUCTIONS POUR L'UTILISATION DU CATALOGUE

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5)

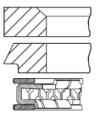
87-154300-00 *STD*

A	40,05
B+	2.97
D	64.05
	20x62

(11)

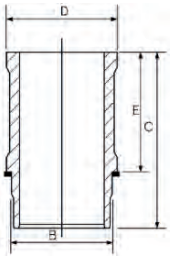
(6)

08-154300-00 *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) (8)

14-636470-00 WH



B 79.50 **C** 122.00 **D** 89.20 **E** 85.00

(9)

88-154300-00
87-154300-00 +
14-636470-00

[1] Steel (12) [1] Stahl [1] Acier [1] Acciao [1] Acero

1. Numéro d'encadré
2. Alésage
3. Modèle
4. Moteur
5. Référence du piston
   - A = Hauteur d'axe
   - B = Profondeur de la chambre / Hauteur du bossage
   - BØ = Diamètre de la chambre du piston
   - C = Passage de la soupape
   - D = Longueur totale
   - RT Piston à porte-segments
   - KK Canal de refroidissement
   - AK Dégagement pour gicleur d'huile de refroidissement
   - HA Tête endurcie par oxydation
   - NB Bague en bronze
   - TP = Bielle trapézoïdale
6. Référence du jeu de segments
   - Largeur de segment
   - Schémas des segments
   - Traitement de surface et matériau
7. Référence de chemise
   - B = Diamètre extérieur
   - C = Longueur totale
   - D = Diamètre bride
   - E = Largeur de collerette
   - F = Hauteur du parefeu
8. Type chemise
   - D = Sèche
   - WH = Chemise humide
   - DH = Chemise sèche
9. Référence du kit (piston+chemise)
10. Numéro moteur DRiV / Numéro TecDoc
11. Image piston et numéro coquille (si applicable)
12. Commentaires

INSTRUCTIONS POUR L'UTILISATION DU CATALOGUE

SYSTÈME DE CODIFICATION

Nüral® FITTED WITH GOETZE® RINGS

87 - 114900 - 25 **Référence au catalogue**
87 - 114900 - 25 **Piston**
88 - 114900 - 25 **Kit sans joint**
89 - 114900 - 25 **Kit avec joint**
87 - **1149**00 - 25 **Référence**
87 - 1149**00** - 25 **Dimension***
87 - 114900 - **25** **Version**

* Si la mesure était en pouce auparavant, elle reste en pouce

Dim.	Cote métrique	Cote anglaise (en pouces)
00	STD	
03	0.125MM	
04	0.20MM	
05	0.25MM	.010
06	0.40MM	
07	0.50MM	.020
08	0.60MM	
09	0.75MM	.030
10	0.80MM	
11	1.00MM	.040
13	1.25MM	
14	1.50MM	.060
16	2.00MM	
17	2.286MM	.090
20	0.70MM	
21	0.65MM	
22	0.30MM	

Codes caractéristiques

RT Piston à porte-segments
KK Canal de refroidissement
AK Dégagement pour gicleur d'huile
HA Tête endurcie par oxydation
NB Bague en bronze

GOETZE®

SEGMENTS

08 - 114900 - 00 **Référence au catalogue**
08 - 114900 - 00 **Segments**
08 - **1149**00 - 00 **Référence**
08 - 1149**00** - 00 **Dimension* (Voir tableau des pistons Nüral)**
08 - 114900 - **00** **Version**

* Si la mesure était en pouce auparavant, elle reste en pouce

CHEMISES DE CYLINDRE

14 - 451160 - 00 **Référence au catalogue**
14 - 451160 - 00 **Chemise de cylindre**
15 - 451160 - 00 **Chemise de cylindre avec joint de chemise**
14 - **45**1160 - 00 **Type de chemise**
14 - 45**116**0 - 00 **Numéro de série**
14 - 451160 - **00** **Version**

01 - 19 = Chemise sèche
20 - 99 = Chemise humide

0 = STD
1 = 1ère cote réparation
2 = 2ème cote réparation

GOETZE®

TYPES DE REVÊTEMENTS ET TRAITEMENT DE SURFACE

CR	Chromée	P	Phosphaté
MO	Avec apport de molybdène	NT	Nitridé
MOL	Revêtement molybdène	PS	Revêtement par projection plasma
CK	Revêtement chrome-céramique	GDC	Revêtement renforcé au diamant GDC®
PVD	Nitrure de chrome	DLC	Carbone diamant amorphe

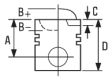
SECTIONS SEGMENTS DE PISTON

Section	Description
	Segment rectangulaire
	segment rectangulaire (Chanfrein intérieur - flanc supérieur)
	segment rectangulaire (Chanfrein intérieur - flanc inférieur)
	segment rectangulaire (Angle intérieur - flanc supérieur)
	segment rectangulaire (Angle intérieur - flanc inférieur)
	Segment conique
	Segment conique (Chanfrein intérieur - flanc supérieur)
	Segment conique (Chanfrein intérieur - flanc inférieur)
	Segment conique (Angle intérieur - flanc supérieur)
	Segment conique (Angle intérieur - flanc inférieur)
	Segment faiblement conique
	Segment faiblement conique (Chanfrein intérieur - flanc supérieur)
	Segment faiblement conique (Chanfrein intérieur - flanc inférieur)
	Segment faiblement conique (Angle intérieur - flanc supérieur)
	Segment faiblement conique (Angle intérieur - flanc inférieur)
	Segment semi-trapézoïdal
	Segment semi-trapézoïdal (Chanfrein intérieur - flanc supérieur)
	Segment semi-trapézoïdal (Chanfrein intérieur - flanc inférieur)
	Segment semi-trapézoïdal (Angle intérieur - flanc supérieur)
	Segment semi-trapézoïdal (Angle intérieur - flanc inférieur)
	Segment trapézoïdal
	Segment trapézoïdal (Chanfrein intérieur - flanc supérieur)
	Segment semi-trapézoïdal (Chanfrein intérieur - flanc inférieur)
	Segment trapézoïdal (Angle intérieur - flanc supérieur)
	Segment trapézoïdal (Angle intérieur - flanc inférieur)
	Segment trapézoïdal avec face portante conique
	Segment trapézoïdal avec face portante conique (Chanfrein intérieur - flanc supérieur)
	Segment trapézoïdal avec face portante conique (Chanfrein intérieur - flanc inférieur)
	Segment trapézoïdal avec face portante conique (Angle intérieur - flanc supérieur)
	Segment trapézoïdal avec face portante conique (Angle intérieur - flanc inférieur)
	Racleur à bec d'aigle
	Racleur à bec d'aigle (Chanfrein intérieur - flanc supérieur)
	Racleur à bec d'aigle (Chanfrein intérieur - flanc inférieur)
	Racleur à bec d'aigle (Angle intérieur - flanc supérieur)
	Racleur à bec d'aigle (Angle intérieur - flanc inférieur)
	Racleur conique à bec d'aigle
	Racleur conique à bec d'aigle (Chanfrein intérieur - flanc supérieur)
	Racleur conique à bec d'aigle (Chanfrein intérieur - flanc inférieur)
	Racleur conique à bec d'aigle (Angle intérieur - flanc supérieur)
	Racleur conique à bec d'aigle (Angle intérieur - flanc inférieur)
	Segment racleur à lumières
	Segment racleur à lumières et lèvres chanfreinées symétriques
	Segment racleur à lumières et lèvres chanfreinées parallèles
	Segment racleur à lumières
	Segment racleur à lumières avec ressort spiroïdal
	Segment racleur à lumières et lèvres chanfreinées symétriques avec ressort spiroïdal
	Segment racleur à lumières et lèvres chanfreinées parallèles avec ressort spiroïdal
	Segment racleur à lumières avec ressort spiroïdal
	Segment racleur à lames d'acier avec ressort spiroïdal VF

Nüral® FITTED WITH GOETZE® RINGS

CÓMO UTILIZAR ESTE CATÁLOGO

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5)

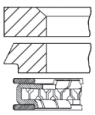
87-154300-00 *STD*

A	40,05
B+	2.97
D	64.05
	20x62

(11)

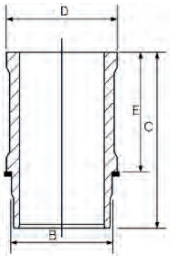
(6)

08-154300-00 *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) (8)

14-636470-00 WH



B 79.50 **C** 122.00 **D** 89.20 **E** 85.00

(9)

88-154300-00
87-154300-00 +
14-636470-00

[1] Steel (12) [1] Stahl [1] Acier [1] Acciao [1] Acero

1. N.º panel
2. Tamaño del diámetro
3. Modelo
4. Motor
5. Referencia del pistón
   - A = Altura de compresión
   - B = Profundidad de la cabeza / Altura de la corona
   - BØ = Diámetro de la cabeza
   - C = Profundidad bolsa de válvula
   - D = Longitud
   - RT Inserción alfin
   - KK Conductos de refrigeración de aceite
   - AK Corte del inyector de aceite
   - HA Revestimiento duro anodizado en la corona
   - NB Casquillo de bronce
   - TP = Cabeza de biela trapezoidal
6. Referencia del conjunto de segmentos
   - Anchura del segmento
   - Diseño del segmento
   - Material y tratamiento de la superficie del segmento
7. Referencia de la camisa
   - B = Diámetro exterior
   - C = Longitud general
   - D = Diámetro de la brida
   - E = Anchura de la brida
   - F = Altura cortafuego
8. Tipo de camisa
   - D = Seca
   - WH = Alisada húmeda
   - DH = Alisada seca
9. Referencia del conjunto
10. Número motor DRiV / TecDoc
11. Número de moldeado e imagen del pistón (si procede)
12. Comentario

CÓMO UTILIZAR ESTE CATÁLOGO

SISTEMA DE NUMERACIÓN DE REFERENCIAS

Nüral® FITTED WITH GOETZE® RINGS

87 - 114900 - 25 Referencia del catálogo
87 - 114900 - 25 Conjunto de pistón
88 - 114900 - 25 Conjunto sin retenes
89 - 114900 - 25 Conjunto con retenes
87 - **1149**00 - 25 Referencia
87 - 114**90**0 - 25 Tamaño* →
87 - 114900 - **25** Versión

* Si anteriormente se utilizó el sistema imperial, sigue siendo el sistema imperial

Tamaño	Sistema métrico	Imperial
00	STD	
03	0.125MM	
04	0.20MM	
05	0.25MM	.010
06	0.40MM	
07	0.50MM	.020
08	0.60MM	
09	0.75MM	.030
10	0.80MM	
11	1.00MM	.040
13	1.25MM	
14	1.50MM	.060
16	2.00MM	
17	2.286MM	.090
20	0.70MM	
21	0.65MM	
22	0.30MM	

Códigos de característica

RT	Inserción alfin
KK	Conductos de refrigeración de aceite
AK	Corte del inyector de aceite
HA	Revestimiento duro anodizado en la corona
NB	Perno de bronce

GOETZE®

SEGMENTOS DE PISTÓN

08 - 114900 - 00 Referencia del catálogo
08 - 114900 - 00 Conjunto de segmentos
08 - **1149**00 - 00 Referencia
08 - 114**90**0 - 00 Tamaño* (ver la tabla de pistones Nüral)
08 - 114900 - **00** Versión

* Si anteriormente se utilizó el sistema imperial, sigue siendo el sistema imperial

CAMISAS

14 - 451160 - 00 Referencia del catálogo
14 - 451160 - 00 Camisa
15 - 451160 - 00 Camisa con junta
14 - **45**1160 - 00 Tipo de camisa →
14 - 45**116**0 - 00 Número de serie
14 - 45116**0** - 00 Tamaño →
14 - 451160 - **00** Versión

01 - 19 = Camisa seca
20 - 99 = Camisa húmeda

0 = Estándar
1 = Primera sobredimensión
2 = Segunda sobredimensión

GOETZE®

CÓDIGOS DE TRATAMIENTO Y REVESTIMIENTO

CR	Cromado	P	Fosfatado
MO	Incrustación de molibdeno	NT	Nitrurado
MOL	Revestimiento de molibdeno	PS	Revestimiento de pulverización de plasma
CK	Revestimiento cerámico de cromo	GDC	Diamond Coated® de Goetze
PVD	Nitruro de cromo	DLC	Carbon adiamantado

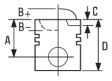
SECCIONES TRANSVERSALES DE LOS SEGMENTOS

Sección transversal	Descripción
	Segmento de compresión plano
	Segmento de compresión plano (bisel interior, lado superior)
	Segmento de compresión plano (bisel interior, lado inferior)
	Segmento de compresión plano (paso interior, lado superior)
	Segmento de compresión plano (paso interior, lado inferior)
	Segmento cónico
	Segmento cónico (bisel interior, lado superior)
	Segmento cónico (bisel interior, lado inferior)
	Segmento cónico (paso interior, lado superior)
	Segmento cónico (paso interior, lado inferior)
	Segmento ligeramente cónico
	Segmento ligeramente cónico (bisel interior, lado superior)
	Segmento ligeramente cónico (bisel interior, lado inferior)
	Segmento ligeramente cónico (paso interior, lado superior)
	Segmento ligeramente cónico (paso interior, lado inferior)
	Segmento de compresión tipo cuña
	Segmento de compresión tipo cuña (bisel interior, lado superior)
	Segmento de compresión tipo cuña (bisel interior, lado inferior)
	Segmento de compresión tipo cuña (paso interior, lado superior)
	Segmento de compresión tipo cuña (paso interior, lado inferior)
	Segmento de compresión tipo trapezoidal
	Segmento de compresión tipo trapezoidal (bisel interior, lado superior)
	Segmento de compresión tipo trapezoidal (bisel interior, lado inferior)
	Segmento de compresión tipo trapezoidal (paso interior, lado superior)
	Segmento de compresión tipo trapezoidal (paso interior, lado inferior)
	Segmento trapezoidal con superficie de cuña
	Segmento trapezoidal con superficie de cuña (bisel interior, lado superior)
	Segmento trapezoidal con superficie de cuña (bisel interior, lado inferior)
	Segmento trapezoidal con superficie de cuña (paso interior, lado superior)
	Segmento trapezoidal con superficie de cuña (paso interior, lado inferior)
	Rascador de gancho simple
	Rascador de gancho simple (bisel interior, lado superior)
	Rascador de gancho simple (bisel interior, lado inferior)
	Rascador de gancho simple (paso interior, lado superior)
	Rascador de gancho simple (paso interior, lado inferior)
	Rascador de gancho simple cónico
	Rascador de gancho simple cónico (bisel interior, lado superior)
	Rascador de gancho simple cónico (bisel interior, lado inferior)
	Rascador de gancho simple cónico (paso interior, lado superior)
	Rascador de gancho simple cónico (paso interior, lado inferior)
	Rascador de aceite ranurado
	Segmento de control de aceite con lado en bisel
	Segmento de control de aceite con dos lados en bisel
	Rascador de aceite ranurado
	Rascador de aceite ranurado con muelle en espiral
	Segmento de control de aceite con lado en bisel y muelle en espiral
	Segmento de control de aceite con dos lados en bisel y muelle en espiral
	Rascador de aceite ranurado con muelle en espiral
	Segmento de control de aceite y raíl de acero con muelle VF

Nüral® FITTED WITH GOETZE® RINGS

JAK UŻYWAĆ TEGO KATALOGU

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

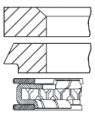
106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5) **87-154300-00** *STD*

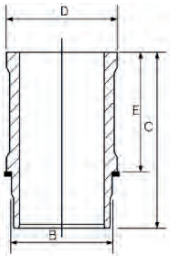
A	40,05
B+	2.97
D	64.05
	20x62

(11)

(6) **08-154300-00** *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) **14-636470-00** (8) WH



B 79.50 **C** 122.00 **D** 89.20 **E** 85.00

(9) **88-154300-00**
87-154300-00 +
14-636470-00

[1] Steel (12) [1] Stahl [1] Acier [1] Acciao [1] Acero

1. Numer panelu
2. Średnica cylindra
3. Model
4. Silnik
5. Numer referencyjny tłoka
   - A = wysokość kompresyjna
   - B = Głębokość komory w tłoku/ Wysokość korony
   - BØ = Średnica komory w tłoku
   - C = Głębokość zagłębienie zaworowego
   - D = Długość
   - RT Wkładka alfinowa
   - KK Olejowa galeria chłodząca
   - AK Wycięcie natrysku olejowego
   - HA Warstwa utwardzenia anodowego na koronie
   - NB Tuleja sworznia z brązu
   - TP = Korbowód trapezowy
6. Numer referencyjny zestawu pierścieni
   - Szerokość pierścienia
   - Konstrukcja pierścienia
   - Obróbka powierzchni pierścienia i rodzaj materiału
7. Numer referencyjny tulei cylindrowej
   - C = Średnica zewnętrzna
   - C = Długość całkowita
   - D = Średnica kołnierza
   - E = Szerokość kołnierza
   - F = Wysokość odsadzenia
8. Typ tulei cylindrowej
   - D = Sucha
   - WH = Mokra honowana
   - DH = Sucha honowana
9. Numer referencyjny zestawu
10. Numer silnika TecDoc/DRiV
11. Rysunek tłoka i numer odlewu (jeśli występuje)
12. Uwagi

JAK UŻYWAĆ TEGO KATALOGU

SYSTEM NUMEROWANIA CZĘŚCI

Nüral® FITTED WITH GOETZE® RINGS

87 - 114900 - 25 **Katalogowy numer referencyjny**
87 - 114900 - 25 **Zestaw tłoka**
88 - 114900 - 25 **Zestaw bez uszczelnień**
89 - 114900 - 25 **Zestaw z uszczelnieniami**
87 - **1149**00 - 25 **Numer części**
87 - 1149**00** - 25 **Wielkość*** →
87 - 114900 - **25** **Wersja**

* Jeśli w przeszłości był system angielski, nadal stosowany jest system angielski

Rozmiar	Metryczny	Angielski
00	STD	
03	0.125MM	
04	0.20MM	
05	0.25MM	.010
06	0.40MM	
07	0.50MM	.020
08	0.60MM	
09	0.75MM	.030
10	0.80MM	
11	1.00MM	.040
13	1.25MM	
14	1.50MM	.060
16	2.00MM	
17	2.286MM	.090
20	0.70MM	
21	0.65MM	
22	0.30MM	

Oznaczenia cech charakterystycznych

RT	Wkładka alfinowa	HA	Warstwa utwardzenia
KK	Olejowa galeria chłodząca		anodowego na koronie
AK	Wycięcie natrysku olejowego	NB	Tuleja sworznia z brązu

GOETZE®

PIERŚCIENIE TŁOKOWE

08 - 114900 - 00 **Katalogowy numer referencyjny**
08 - 114900 - 00 **Zestaw pierścieni**
08 - **1149**00 - 00 **Numer części**
08 - 1149**00** - 00 **Rozmiar* (Patrz tabela tłoków Nüral)**
08 - 114900 - **00** **Wersja**

* Jeśli w przeszłości był system angielski, nadal stosowany jest system angielski

TULEJE CYLINDROWE

14 - 451160 - 00 **Katalogowy numer referencyjny**
14 - 451160 - 00 **tuleja cylindrowa**
15 - 451160 - 00 **Tuleja cylindrowa z uszczelnieniem**
14 - **45**1160 - 00 **Typ tulei** →
14 - 45**1160** - 00 **Numer seryjny**
14 - 451160 - **00** **Rozmiar** →
14 - 451160 - **00** **Wersja**

01 - 19 = Tuleja sucha
20 - 99 = Tuleja mokra

0 = STD (standard)
1 = pierwszy nadwymiar
2 = drugi nadwymiar

GOETZE®

KODY POKRYĆ I OBRÓBKI

CR	Chromowany	P	Fosforanowany
MO	Zawierający cząstki molibdenu	NT	Azotowany
MOL	Pokryty warstwą molibdenu	PS	Z powłoką napylaną plazmowo
CK	Z powłoką chromowo-ceramiczną	GDC	Powłoka diamentowa Goetze
PVD	Azotek Chromu	DLC	Diamentopodobne Pokrycie Węglowe

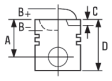
PRZEKROJE POPRZECZNE PIERŚCIENI TŁOKOWYCH

Przekrój poprzeczny	Opis
	Zwykły pierścień kompresyjny
	Zwykły pierścień kompresyjny (wewnętrzna faza - góra)
	Zwykły pierścień kompresyjny (wewnętrzna faza - dół)
	Zwykły pierścień kompresyjny(wewnętrzny stopień - góra)
	Zwykły pierścień kompresyjny (wewnętrzny stopień - dół)
	Pierścień stożkowy
	Pierścień stożkowy (wewnętrzna faza - góra)
	Pierścień stożkowy (wewnętrzna faza - dół)
	Pierścień stożkowy (wewnętrzny stopień - góra)
	Pierścień stożkowy (wewnętrzny stopień - dół)
	Pierścień lekko-stożkowy
	Pierścień lekko-stożkowy (wewnętrzna faza - góra)
	Pierścień lekko-stożkowy (wewnętrzna faza - dół)
	Pierścień lekko-stożkowy (wewnętrzny stopień - góra)
	Pierścień lekko-stożkowy (wewnętrzny stopień - dół)
	Klinowy pierścień kompresyjny
	Klinowy pierścień kompresyjny (wewnętrzna faza - góra)
	Klinowy pierścień kompresyjny (wewnętrzna faza - dół)
	Klinowy pierścień kompresyjny (wewnętrzny stopień - góra)
	Klinowy pierścień kompresyjny (wewnętrzny stopień - dół)
	Pierścień kompresyjny trapezowy dwustronny
	Pierścień kompresyjny trapezowy dwustronny (wewnętrzna faza - góra)
	Pierścień kompresyjny trapezowy dwustronny (wewnętrzna faza - dół)
	Pierścień kompresyjny trapezowy dwustronny (wewnętrzny stopień - góra)
	Pierścień kompresyjny trapezowy dwustronny (wewnętrzny stopień - dół)
	Pierścień trapezowy dwustronny o czole stożkowym
	Pierścień trapezowy dwustronny o czole stożkowym (wewnętrzna faza - góra)
	Pierścień trapezowy dwustronny o czole stożkowym (wewnętrzna faza - dół)
	Pierścień trapezowy dwustronny o czole stożkowym (wewnętrzny stopień - góra)
	Pierścień trapezowy dwustronny o czole stożkowym (wewnętrzny stopień - dół)
	Pierścień zgarniający o przekroju hakowym - pojedynczym
	Pierścień zgarniający o przekroju hakowym - pojedynczym (wewnętrzna faza - góra)
	Pierścień zgarniający o przekroju hakowym - pojedynczym (wewnętrzna faza - dół)
	Pierścień zgarniający o przekroju hakowym - pojedynczym (wewnętrzny stopień - góra)
	Pierścień zgarniający o przekroju hakowym - pojedynczym (wewnętrzny stopień - dół)
	Stożkowy pierścień zgarniający o przekroju hakowym-pojedynczym
	Stożkowy pierścień zgarniający o przekroju hakowym-pojedynczym (wewnętrzna faza - góra)
	Stożkowy pierścień zgarniający o przekroju hakowym-pojedynczym (wewnętrzna faza - dół)
	Stożkowy pierścień zgarniający o przekroju hakowym-pojedynczym (wewnętrzny stopień - góra)
	Stożkowy pierścień zgarniający o przekroju hakowym-pojedynczym (wewnętrzny stopień - dół)
	Szczelinowy olejowy pierścień zgarniający
	Fazowany pierścień olejowy
	Podwójnie fazowany pierścień olejowy
	Szczelinowy olejowy pierścień zgarniający
	Szczelinowy olejowy pierścień zgarniający ze sprężyną spiralną
	Fazowany pierścień olejowy ze sprężyną spiralną
	Podwójnie fazowany pierścień olejowy ze sprężyną spiralną
	Szczelinowy zgarniacz olejowy ze sprężyną spiralną
	Olejowy pierścień z szyną stalową i sprężyną typu VF

Nüral® FITTED WITH GOETZE® RINGS

КАК ПОЛЬЗОВАТЬСЯ КАТАЛОГОМ

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

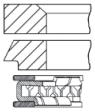
106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5) **87-154300-00** *STD*

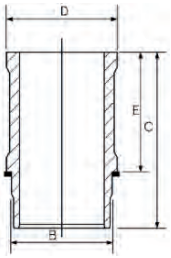
A	40,05
B+	2.97
D	64.05
	20x62

(11)

(6) **08-154300-00** *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) **14-636470-00** (8) WH



B 79.50 **C** 122.00 **D** 89.20 **E** 85.00

(9) **88-154300-00**
87-154300-00 +
14-636470-00

[1] Steel (12) [1] Stahl [1] Acier [1] Acciao [1] Acero

1. № секции
2. Диаметр цилиндра
3. Модель
4. Двигатель
5. Артикул и спецификация поршня
   - A = высота сжатия
   - B = глубина выемки / высота головки
   - BØ = диаметр выемки
   - C = глубина выемки под клапан
   - D = длина
   - RT с усилителем канавки верхнего поршневого кольца Alfin
   - KK с каналом масляного охлаждения
   - AK с пазом/фаской для масляной форсунки
   - HA с головкой с твердым анодированным покрытием
   - NB с бронзовой втулкой поршневого пальца
   - TP = трапециевидный шатун
6. Информация о комплекте колец
   - Ширина кольца
   - Конструкция кольца
   - Обработка поверхности и материал кольца
7. Информация о гильзе
   - B = внешний диаметр
   - C = общая длина
   - D = диаметр фланца
   - E = ширина фланца
   - F = высота огнезащитного уплотнения
8. Тип гильзы
   - D = “сухая”
   - WH = “мокрая” с хонинговкой
   - DH = “сухая” с хонинговкой
9. Артикул установочного комплекта
10. TecDoc / номер двигателя DRiV
11. Изображение поршня и номер отливки (если есть)
12. Комментарии

КАК ПОЛЬЗОВАТЬСЯ КАТАЛОГОМ

СИСТЕМА НУМЕРАЦИИ ДЕТАЛЕЙ

Nüral® FITTED WITH GOETZE® RINGS

87 - 114900 - 25 **Номер детали в каталоге**
87 - 114900 - 25 **Поршень в сборе**
88 - 114900 - 25 **Комплект с гильзой без уплотнений**
89 - 114900 - 25 **Комплект с гильзой с уплотнениями**
87 - **1149**00 - 25 **код**
87 - 1149**00** - 25 **Размер*** →
87 - 114900 - **25** **Версия**

* Если ранее использовалась британская система мер, то она продолжает использоваться

Размер	Метрическая система	Британская система мер
00	STD	
03	0.125MM	
04	0.20MM	
05	0.25MM	.010
06	0.40MM	
07	0.50MM	.020
08	0.60MM	
09	0.75MM	.030
10	0.80MM	
11	1.00MM	.040
13	1.25MM	
14	1.50MM	.060
16	2.00MM	
17	2.286MM	.090
20	0.70MM	
21	0.65MM	
22	0.30MM	

Расшифровка кодов

RT	с усилителем канавки верхнего поршневого кольца Alfin
KK	с каналом масляного охлаждения
AK	с пазом/фаской для масляной форсунки
HA	с головкой с твердым анодированным покрытием
NB	с бронзовой втулкой поршневого пальца

GOETZE®

ПОРШНЕВЫЕ КОЛЬЦА

08 - 114900 - 00 **Номер детали в каталоге**
08 - 114900 - 00 **Комплект колец в сборе**
08 - **1149**00 - 00 **код**
08 - 1149**00** - 00 **Размер* (см. таблицу поршней Nüral)**
08 - 114900 - **00** **Версия**

* Если ранее использовалась британская система мер, то она продолжает использоваться

ГИЛЬЗЫ ЦИЛИНДРОВ

14 - 451160 - 00 **Номер детали в каталоге**
14 - 451160 - 00 **гильза цилиндра**
15 - 451160 - 00 **Гильза цилиндра с уплотнением**
14 - **45**1160 - 00 **Тип гильзы** →
14 - 45**1160** - 00 **Серийный номер**
14 - 45116**0** - 00 **Размер** →
14 - 451160 - **00** **Версия**

01 - 19 = "Сухая" гильза
20 - 99 = "Мокрая" гильза

0 = стандартный
1 = 1й ремонтный размер
2 = 2й ремонтный размер

GOETZE®

КОДЫ ПОКРЫТИЙ И ВИДОВ ОБРАБОТКИ

CR	С хромовым покрытием
MO	С молибденовым подслоем
MOL	С молибденовым покрытием
CK	С хромокерамическим покрытием
PVD	С покрытием из нитрида хрома
P	С фосфатированием поверхности
NT	С азотированием поверхности
PS	С плазменным напылением
GDC	С алмазо-углеродным покрытием Goetze Diamond®
DLC	С алмазоподобным покрытием

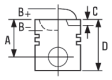
СЕЧЕНИЯ ПОРШНЕВЫХ КОЛЕЦ

Сечение	Описание
	Цилиндрическое компрессионное кольцо
	Цилиндрическое компрессионное кольцо (с внутренней фаской сверху)
	Цилиндрическое компрессионное кольцо (с внутренней фаской снизу)
	Цилиндрическое компрессионное кольцо (с внутренним уступом сверху)
	Цилиндрическое компрессионное кольцо(с внутренним уступом снизу)
	Конусообразное кольцо
	Конусообразное кольцо (с внутренней фаской сверху)
	Конусообразное кольцо (с внутренней фаской снизу)
	Конусообразное кольцо (с внутренним уступом сверху)
	Конусообразное кольцо (с внутренним уступом снизу)
	Минутное компрессионное конусообразное кольцо
	Минутное компрессионное конусообразное кольцо (с внутренней фаской сверху)
	Минутное компрессионное конусообразное кольцо (с внутренней фаской снизу)
	Минутное компрессионное конусообразное кольцо (с внутренним уступом сверху)
	Минутное компрессионное конусообразное кольцо (с внутренним уступом снизу)
	Клиновидное компрессионное кольцо
	Клиновидное компрессионное кольцо (с внутренней фаской сверху)
	Клиновидное компрессионное кольцо (с внутренней фаской снизу)
	Клиновидное компрессионное кольцо (с внутренним уступом сверху)
	Клиновидное компрессионное кольцо (с внутренним уступом снизу)
	Трапециевидное компрессионное кольцо
	Трапециевидное компрессионное кольцо (с внутренней фаской сверху)
	Трапециевидное компрессионное кольцо (с внутренней фаской снизу)
	Трапециевидное компрессионное кольцо (с внутренним уступом сверху)
	Трапециевидное компрессионное кольцо (с внутренним уступом снизу)
	Трапециевидное конусообразное кольцо
	Трапециевидное конусообразное кольцо (с внутренней фаской сверху)
	Трапециевидное конусообразное кольцо (с внутренней фаской снизу)
	Трапециевидное конусообразное кольцо (с внутренним уступом сверху)
	Трапециевидное конусообразное кольцо (с внутренним уступом снизу)
	Скребковое кольцо с зубом
	Скребковое кольцо с зубом (с внутренней фаской сверху)
	Скребковое кольцо с зубом (с внутренней фаской снизу)
	Скребковое кольцо с зубом (с внутренним уступом сверху)
	Скребковое кольцо с зубом (с внутренним уступом снизу)
	Скребковое коническое кольцо с зубом
	Скребковое коническое кольцо с зубом (с внутренней фаской сверху)
	Скребковое коническое кольцо с зубом (с внутренней фаской снизу)
	Скребковое коническое кольцо с зубом (с внутренним уступом сверху)
	Скребковое коническое кольцо с зубом (с внутренним уступом снизу)
	Маслосъемное коробчатое кольцо с дренажными прорезями
	Маслосъемное коробчатое кольцо со сходящимися фасками
	Маслосъемное коробчатое кольцо с параллельными фасками
	Маслосъемное коробчатое кольцо с дренажными прорезями
	Маслосъемное коробчатое кольцо с дренажными прорезями с витым пружинным расширителем
	Маслосъемное коробчатое кольцо со сходящимися фасками с витым пружинным расширителем
	Маслосъемное коробчатое кольцо с параллельными фасками с витым пружинным расширителем
	Маслосъемное коробчатое кольцо с дренажными прорезями с витым пружинным расширителем
	Стальное пластинчатое маслосъемное кольцо с пружинным расширителем VF

Nüral® FITTED WITH GOETZE® RINGS

كيفية استخدام هذا الكتالوج

PEUGEOT



72.00 (2)

(1) 3

TU1 (H1A/H1B/H3A)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD2758**
TU1M (HDY) (4)	4 Cyl.	**1124cc**	**40-44kW** (54-60PS)	**Petrol**	(10) **TD9404**
TU1M (HDZ)	4 Cyl.	**1124cc**	**40kW** (54PS)	**Petrol**	**TD4834**

106 I 1.1 (3)	09/91→04/96	306 1.1	05/93→05/01
205 1.1	08/87→05/97	309 1.1	09/89→10/93
205 I 1.1	08/87→12/94	309 II 1.1	09/89→12/93
205 I 1.1 CJ	10/89→12/94	PARTNER 1.1	06/96→09/05
205 II 1.1	10/87→09/98		

(5)

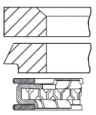
87-154300-00 *STD*

A	40,05
B+	2.97
D	64.05
	20x62

(11)

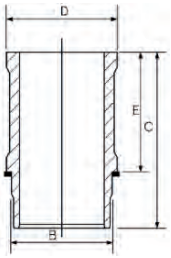
(6)

08-154300-00 *STD*
08-154307-00 *0,50mm*

1.50		CR P
2.00		P
3.00		CR [1]

(7) **(8)**

14-636470-00 WH **B** 79.50 **C** 122.00 **D** 89.20 **E** 85.00



(9)

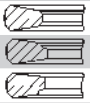
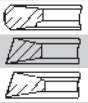
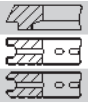
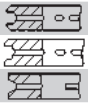
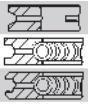
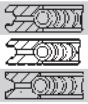
88-154300-00
87-154300-00 +
14-636470-00

[1] Steel (12) [1] Stahl [1] Acier [1] Acciao [1] Acero

1. رقم اللوحة
2. حجم القطر
3. الطراز
4. المحرك
5. مرجع الكباس
   - A = ارتفاع الضغط
   - B = عم ق الغرفة / ارتفاع التاج
   - BØ = قطر الغرفة
   - C = عمق جيب الصمام
   - D = الطول
   - RT إدراج ألفين
   - KK استوديو تبريد الزيت
   - AK قطع نفث الزيت
   - HA بطانة مؤكسدة قوية على التاج
   - NB جلبة بنز برونزي
   - TP = أبعاد شبه المنحرف
6. مرجع مجموعة الحلقة
   - عرض الطوق
   - تصميم الحلقة
   - مادة ومعالجة سطح الحلقة
7. مرجع البطانة
   - B = القطر الخارجي
   - C = الطول الكلي
   - D = قطر الشفة
   - E = عرض الشفة
   - F = طول شفة الحماية من النيران
8. نوع البطانة
   - D = جاف
   - WH = حجر شحذ رطب
   - DH = حجر شحذ جاف
9. مرجع المجموعة
10. مستند المواصفات DRiV / رقم محرك
11. صورة الكباس ورقم السبيكة (إن وجد)
12. التعليق

كيفية استخدام هذا الكتالوج

الأقسام المستعرضة لحلقات الكباس

الوصف	القسم المستعرض
حلقة ضغط بسيطة	
حلقة ضغط بسيطة (الشفة الداخلية - الجانب العلوي)	
حلقة ضغط بسيطة (الشفة الداخلية - الجانب السفلي)	
حلقة ضغط بسيطة (الدرج الداخلي - الجانب العلوي)	
حلقة ضغط بسيطة (الدرج الداخلي - الجانب السفلي)	
حلقة مستدقة	
حلقة مستدقة (الشفة الداخلية - الجانب العلوي)	
حلقة مستدقة (الشفة الداخلية - الجانب السفلي)	
حلقة مستدقة (الدرج الداخلي - الجانب العلوي)	
حلقة مستدقة (الدرج الداخلي - الجانب السفلي)	
الحلقة المستدقة بشكل طفيف	
الحلقة المستدقة بشكل طفيف (الشفة الداخلية - الجانب العلوي)	
الحلقة المستدقة بشكل طفيف (الشفة الداخلية - الجانب السفلي)	
الحلقة المستدقة بشكل طفيف (الدرج الداخلي - الجانب العلوي)	
الحلقة المستدقة بشكل طفيف (الدرج الداخلي - الجانب السفلي)	
حلقة ضغط من نوع الإسفين	
حلقة ضغط من نوع الإسفين (الشفة الداخلية - الجانب العلوي)	
حلقة ضغط من نوع الإسفين (الشفة الداخلية - الجانب السفلي)	
حلقة ضغط من نوع الإسفين (الدرج الداخلي - الجانب العلوي)	
حلقة ضغط من نوع الإسفين (الدرج الداخلي - الجانب السفلي)	
حلقة ضغط من النوع المرتكز	
حلقة ضغط من النوع المرتكز (الشفة الداخلية - الجانب العلوي)	
حلقة ضغط من النوع المرتكز (الشفة الداخلية - الجانب السفلي)	
حلقة ضغط من النوع المرتكز (الدرج الداخلي - الجانب العلوي)	
حلقة ضغط من النوع المرتكز (الدرج الداخلي - الجانب السفلي)	
حلقة مرتكز ذات وجه مستدق	
حلقة مرتكز ذات وجه مستدق (الشفة الداخلية - الجانب العلوي)	
حلقة مرتكز ذات وجه مستدق (الشفة الداخلية - الجانب العلوي)	
حلقة مرتكز ذات وجه مستدق (الشفة الداخلية - الجانب العلوي)	
حلقة مرتكز ذات وجه مستدق (الشفة الداخلية - الجانب العلوي)	
كاشطة منفردة الخطاف	
كاشطة منفردة الخطاف (الشفة الداخلية - الجانب العلوي)	
كاشطة منفردة الخطاف (الشفة الداخلية - الجانب السفلي)	
كاشطة منفردة الخطاف (الدرج الداخلي - الجانب العلوي)	
كاشطة منفردة الخطاف (الدرج الداخلي - الجانب السفلي)	
كاشطة منفردة الخطاف مستدقة	
كاشطة منفردة الخطاف مستدقة (الشفة الداخلية - الجانب العلوي)	
كاشطة منفردة الخطاف مستدقة (الشفة الداخلية - الجانب السفلي)	
كاشطة منفردة الخطاف مستدقة (الدرج الداخلي - الجانب العلوي)	
كاشطة منفردة الخطاف مستدقة (الدرج الداخلي - الجانب السفلي)	
حلقة كاشطة الزيت المثقوبة	
حلقة تحكم زيت مشطوفة الحافة	
حلقة تحكم زيت مشطوفة الحافة مزدوجة	
حلقة كاشطة الزيت المثقوبة	
حلقة كاشطة الزيت المثقوبة مع ياي ملفوف	
حلقة تحكم زيت مشطوفة الحافة مع ياي ملفوف	
حلقة تحكم زيت مشطوفة الحافة مزدوجة مع ياي ملفوف	
كاشطة الزيت المثقوبة مع ياي ملفوف	
حلقة تحكم زيت صلبة مع ياي VF	

نظام ترقيم القطع

Nüral® FITTED WITH GOETZE® RINGS

مرجع الكتالوج	87 - 114900 - 25
مجموعة الكباس	87 - 114900 - 25
مجموعة طقم بدون سدادات	88 - 114900 - 25
مجموعة طقم ذات سدادات	89 - 114900 - 25
المرجع	87 - 1149**00** - 25
الحجم*	87 - 114900 - 25
الإصدار	87 - 114900 - **25**

* إذا كان المقياس إمبريالي في الماضي، يستمر لكي يكون إمبريالي

الحجم	متري	إمبريالي
00	STD	
03	0.125MM	
04	0.20MM	
05	0.25MM	.010
06	0.40MM	
07	0.50MM	.020
08	0.60MM	
09	0.75MM	.030
10	0.80MM	
11	1.00MM	.040
13	1.25MM	
14	1.50MM	.060
16	2.00MM	
17	2.286MM	.090
20	0.70MM	
21	0.65MM	
22	0.30MM	

أكواد المميزات

بطانة مؤكسدة قوية على	
إدراج ألفين RT	التاج HA
استوديو تبريد الزيت KK	جلبة بنز برونزي NB
قطع نفث الزيت AK	

GOETZE®

حلقات الكباس

مرجع الكتالوج	08 - 114900 - **00**
تجميع مجموعة الحلقة	08 - 114900 - **00**
المرجع	08 - 1149**00** - 00
الحجم* (انظر جدول كباسات) Nüral	08 - 114**900** - 00
الإصدار	08 - 114900 - **00**

* إذا كان المقياس إمبريالي في الماضي، يستمر لكي يكون إمبريالي

بطانات الأسطوانات

مرجع الكتالوج	14 - 451160 - **00**
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بطانة الأسطوانة ذات مانع التسريب	15 - 451160 - 00
نوع البطانة	14 - **4**51160 - 00
الرقم المسلسل	14 - 45**1**160 - 00
الحجم	14 - 451**1**60 - 00
الإصدار	14 - 451160 - **00**

نوع البطانة: 01 - 19 = بطانة جافة؛ 20 - 99 = بطانة رطبة

الحجم: 0 = قياسي؛ 1 = الحجم الزائد الأول؛ 2 = الحجم الزائد الثاني

GOETZE®

أكواد المعالجة والأغطية

CR	ملون بالكروم
MO	مرصع بالموليبنديوم
MOL	مكسو بالموليبنديوم
CK	مكسو بالسيراميك - الكروميوم
PVD	كروم نيتريد
P	مصنوع من الفوسفات
NT	بالنيتريد
PS	مغطى برشاش البلازما
GDC	غطاء ماس Goetze®
DLC	ألماس مثل الكربون

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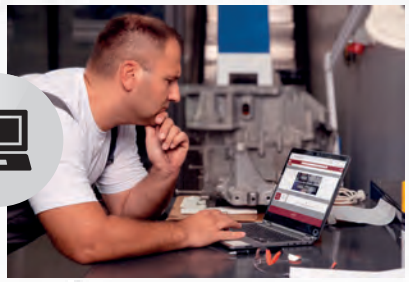

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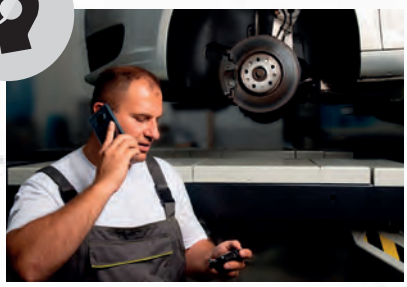

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people trained

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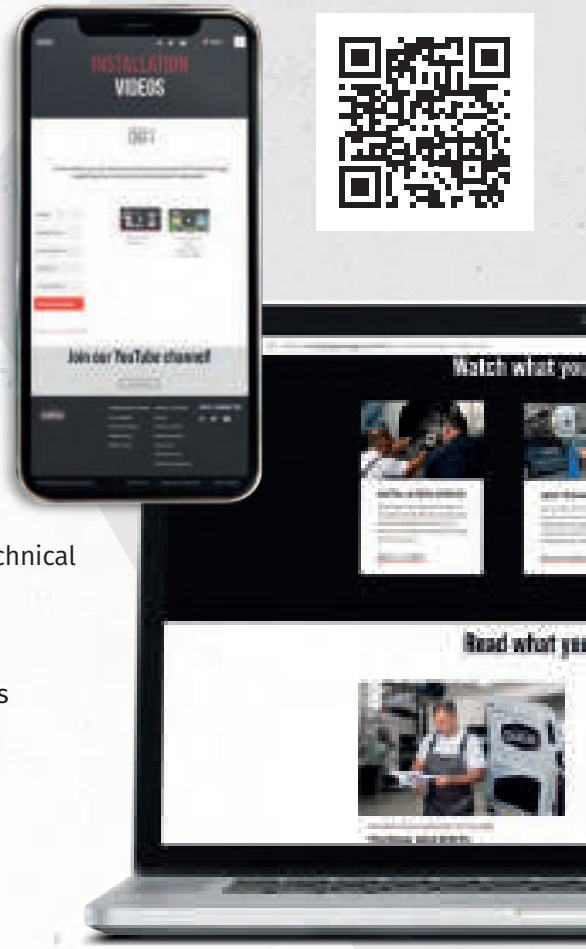

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NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

9

UTQL I mTI I QL I		RuUZ	ES?)Ur ?)ai ?)h X?)oh ?)r s?)r u?)sW)sY	EI	CC
		sVRt	RTT?)r o	HCH	CH
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UTQL I mTI RQL I	I DNR	RuUZ	ES?)Ur ?)ai ?)h X?)oh ?)r s?)r u?)sW)sY	EI	CC
		sVRt	RTT?)r o	HCH	CH
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UTQL NONI I QRI		xl exl	UBCW)DJA)3V)E4?)UBCW\EDA)3V)E4	I DI	FA
UTQL OSPI I QDI		h Vr TVUVs8SVi	L h)GEG9\ BB?)L h)GEG9\ BC?)L h)GEG9\ CA?)L h)GEG9\ CB	EGE	CG
UTQL OSPI TQDI	I DRI	h Vr TVUVs8SVi	L h)GEG9\ BB?)L h)GEG9\ BC?)L h)GEG9\ CA?)L h)GEG9\ CB	EGE	CG
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UTQL PSPI I QI I		h Vr TVUVs8SVi	L h)JCE9JBD)3V)D4?)L h)JCE9JBF)3V)D4?)L h)JCE9JBG)3V)D4?)L h)JCE9JBJ)3V)D4?)L h)JCE9JCA)3V)D4?)L h JCE9JCE)3V)D4?)L h)JCE9JCI ?)L h)JCE9JDC)3V)F4?)L h)JCG9JBD)3V)D4?)L h)JCG9JBE)3V)C4?)L h)JCG9JBF)3V D4?)L h)JCG9JBH)3V)D4?)L h)JCG9JCB)3V)D4?)L h)JCG9JCE)3V)D4?)L h)JCG9JCG)3V)D4?)L h)JCG9JCJ)3V)D4?)L h JCG9JDA)3V)D4?)L h)JCG9JDC)3V)D4?)L h)JCG9JDD)3V)D4?)L h)JCG9JDF)3V)D4?)L h)JCG9JDI)3V)D4?)L h JCG9JEA?)L h)JCG9JEB)3V)E4?)L h)JCG9JGI ?)L h)JCG9JGJ	EJE	FG
UTQL PULI RQDI	I DNR	W r U	Y JVR)3J 4?)Y JV\)3V)E)U 4?)aËVR)3U 4?)aËW)3J 4	CCD	EG
		eRi U)r l xVr	Ut CEE)3J 4	DEI	BF
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UTQNPRRI I QDI		ZxVTl	I DGF9CF9FAA?)I DGF9CF9FAB?)I DGF9CF9FAC?)I DGF9CF9FAD?)I DGF9CF9FDD	CJF	ED
UTQNPSNI I QI I		Zsu u	EaRBt?)EaSB	CFD	E
UTQPNLSI I QL I		TZr l i	W\TVDEI Bi)3V\DAUt V)4)3V)F4?)W\DAUt V)3W\TVDEI BV)4)3V)F4	BBG	FE
		W\Rt	W\TVDEI BV)3V)F4?)W\TVDEI Bh)3V)F4?)W\TVDEI Bi)3V)F4	BJC	HF
		ZxVTl	W\TVDEI BS?)W\TVDEI BT?)W\TVDEI BU)3V)F4?)W\TVDEI Ba)3V)F4?)W\TVDEI Bc)3V)F4?)W\TVDEI Be	CHG	BG
		oVuXVl t	W\DAUt V)3W\TVDEI BV)4)3V)F4?)W\DAUt V)3W\TVDEI Bi)4)3V)F4	GDD	GB
UTQPNNOI I QL I		r Vi Ruet	W\q)I HA?)W\q)I HC	GGA	CH
UTQPNNOI TQL I	I DRI	r Vi Ruet	W\q)I HA?)W\q)I HC	GGA	CH
UTQPNNPI I QL I		tl l tR	Bc U8W\x	HHI	BA
UTQPNNPI TQL I	I DRI	tl l tR	Bc U8W\x	HHI	BA
UTQPNOOI I QI I		h Zi Z	y BB)SBG)R	FDG	J
UTQPNOOI TQI I	I DRI	h Zi Z	y BB)SBG)R	FDG	J
UTQPNOmI I QI I		Y ui URZ	XEeT	CED	C
		cZR	XEeT	DCB	C
UTQPNOmI TQI I	I DRI	Y ui URZ	XEeT	CED	C
		cZR	XEeT	DCB	C

UTCPNPOI ICI		WrU	h BTR)3V S 4)h BTS)3V S 4)h BUR)3V)F)V S 4)h BaR)3V S 4)h BaT)3V)F)V S 4)h BaV 3V S 4)h BaY)3V S 4)h CUR)3V)F)V S 4)h CXR)3V)F)V S 4)h CXS)3V)G)V S 4)sWTR 3V S 4)sWTS)3V S 4)sWTT)3V S 4)sWTU)3V S 4)sWUR)3V)F)V S 4)sVtR)3V S 4)sVtS 3V S 4)sVtT)3V S 4)sVtU)3V S 4)Ëh aR)3V S 4)Ëh aS)3V S 4) aR)3V S 4) aS 3V S 4) aT)3V S 4) aU)3V S 4	CAB	C
UTCPNPOI TCI	IDRI	WrU	h BTR)3V S 4)h BTS)3V S 4)h BUR)3V)F)V S 4)h BaR)3V S 4)h BaT)3V)F)V S 4)h BaV 3V S 4)h BaY)3V S 4)h CUR)3V)F)V S 4)h CXR)3V)F)V S 4)h CXS)3V)G)V S 4)sWTR 3V S 4)sWTS)3V S 4)sWTT)3V S 4)sWTU)3V S 4)sWUR)3V)F)V S 4)sVtR)3V S 4)sVtS 3V S 4)sVtT)3V S 4)sVtU)3V S 4)Ëh aR)3V S 4)Ëh aS)3V S 4) aR)3V S 4) aS 3V S 4) aT)3V S 4) aU)3V S 4	CAB	C
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UTCPNPPI TCI	IDRI	WrU	uVaS)3V)F)U 4	CAJ	BG
UTCPNPRI ICI		hR UR	eF8xV	EBG	BB
UTCPNPRI TCI	IDRI	hR UR	eF8xV	EBG	BB
UTCPNPSI ICI		hR UR	a8xV)3V)E4	EBD	D
UTCPNPSI TCI	IDRI	hR UR	a8xV)3V)E4	EBD	D
UTCPNPTI ICI		hR UR	8UV	EBE	H
UTCPNPTI TCI	IDRI	hR UR	8UV	EBE	H
UTCPNPUI ICI		Y ui URZ	XEVR)3V)E4	CEE	H
		cZR	XEVR)3V)E4	DCC	G
UTCPNPUI TCI	IDRI	Y ui URZ	XEVR)3V)E4	CEE	H
		cZR	XEVR)3V)E4	DCC	G
UTCPNPmI ICI		WRt	r Jh)EAI 7)r Jh)EBD7)r Jh)EFA7)r Jh)EFC	BHG	DC
		h Vr TVUVs8SVi	l h)GCC9JFB)3r Jh 4	EEJ	D
		i ZssRi	r Jh 7)r Jh)EBD7)r Jh)EFC	FGD	BE
		l oVe	r Jh)EAI 7)r Jh)EBD7)r Jh)EFA7)r Jh)EFC	FI E	DB
		r Vi Ruet	r Jh)EAC7)r Jh)EAE7)r Jh)EAI 7)r Jh)EAJ7)r Jh)EBD7)r Jh)EBE7)r Jh)EFA7)r Jh)EFC7)r Jh)EFD	GGB	CI
		xRuËY Ree	r Jh)EAI 7)r Jh)EBD7)r Jh)EFA	HJF	DC
UTCPNPmI TCI	IDRI	WRt	r Jh)EAI 7)r Jh)EBD7)r Jh)EFA7)r Jh)EFC	BHG	DC
		h Vr TVUVs8SVi	l h)GCC9JFB)3r Jh 4	EEJ	D
		i ZssRi	r Jh 7)r Jh)EBD7)r Jh)EFC	FGD	BE
		l oVe	r Jh)EAI 7)r Jh)EBD7)r Jh)EFA7)r Jh)EFC	FI E	DB
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		xRuËY Ree	r Jh)EAI 7)r Jh)EBD7)r Jh)EFA	HJF	DC
UTCPNRSI UCI	IDSI	ReVR)r l h Vl	BJJ)RD9AAA	CB	B
		WRt	BJJ)RD9AAA7)CCD)RJ9AAA	BGH	I
		eRi TZR	BJJ)RD9AAA	DDC	F
		l oVe	)BD)UtY)3V)E4	FHE	E
		xRuËY Ree	)BD)UtY	HI G	E
UTCPNSmI ICI		Y ui URZ	XEVti	CEF	I
		cZR	XEVti	DCC	H
UTCPNSmI ICL		Y ui URZ	XEVti	CEF	I
		cZR	XEVti	DCC	H
UTCPNSmI TCI	IDRI	Y ui URZ	XEVti	CEF	I
		cZR	XEVti	DCC	H
UTCPNSmI TCL	IDRI	Y ui URZ	XEVti	CEF	I
		cZR	XEVti	DCC	H
UTCPNTPI ICSI		h Vr TVUVs8SVi	l h)GEC9I E7)l h)GEC9I JG7)l h)GEC9I JI 7)l h)GEC9I JJ	EFE	BC
UTCPNTPI ICTI		h Vr TVUVs8SVi	l h)GEC9I E7)l h)GEC9I JG7)l h)GEC9I JI 7)l h)GEC9I JJ	EFE	BC
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UTCPNmOI ICL		ReVR)r l h Vl	JEA)RD9AAA7)JEA)TB9AAA)3V)G4)JEA)TF9AAA)3V)G4)JFF)RE9AAA	CD	J
		TYr seVr	BJI)RC9AAA	I H	C
		WRt	BJI)RD9AAA7)BJJ)SF9AAA7)CGD)RD9AAA7)CGD)RI 9AAA7)DFA)RD9AAA7)FFC)GA)DI E7)I EE)RD9AAA7)JEA)TB9AAA7)JFF)RE9AAA	BHE	DA
		aVVo	FFC)GA)DI E7)FFC)GD)BBD7)Vaa7)Vac	DBE	B
		eRi TZR	JEE)RD9AAA7)JFF)RE9AAA	DDF	BG
UTCPNmOI SCL	IDPI	ReVR)r l h Vl	JEA)RD9AAA7)JEA)TB9AAA)3V)G4)JEA)TF9AAA)3V)G4)JFF)RE9AAA	CD	J
		TYr seVr	BJI)RC9AAA	I H	C
		WRt	BJI)RD9AAA7)BJJ)SF9AAA7)CGD)RD9AAA7)CGD)RI 9AAA7)DFA)RD9AAA7)FFC)GA)DI E7)I EE)RD9AAA7)JEA)TB9AAA7)JFF)RE9AAA	BHE	DA
		aVVo	FFC)GA)DI E7)FFC)GD)BBD7)Vaa7)Vac	DBE	B
		eRi TZR	JEE)RD9AAA7)JFF)RE9AAA	DDF	BG
UTCPNmRI ICPI		TYVxr l eVt	R)BC)ËVe7)R)BC)ËVr)3V)F4	I A	F
		l oVe	R)BC)ËVe7)R)BC)ËVr	FHF	I
		xRuËY Ree	R)BC)ËVe7)R)BC)ËVr	HI H	J

NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

9

UTCPNnrRI TCPI	I DRI	TYVxr l eVt	R)BC]ËVe?)R)BC]ËVr)3/)F4	I A	F
		l oVe	R)BC]ËVe?)R)BC]ËVr	FHF	I
		xRuËY Ree	R)BC]ËVe?)R)BC]ËVr	HI H	J
UTCPNnr6I I CL I		r Vi Ruet	h RTc)V9tVTY)R>EG]3/)C4?)h RTc)V9tVTY)S>EG]3/)C4?)h RTc)V9tVTY)T>EG]3/)C4	GHI	GG
UTCPOI NI I CI I		aRXuRr	CAEot	DBB	J
		eRi U)r l xVr	CAEot	DEH	BC
UTCPOI NI TCI I	I DRI	aRXuRr	CAEot	DBB	J
		eRi U)r l xVr	CAEot	DEH	BC
UTCPOI OI I CI I		TYVxr l eVt	S)BG]UtY	I D	BF
		l oVe	S)BG]UtY?)U)BG]UtY?)U)BG]Uti	FI C	CH
		xRuËY Ree	S)BG]UtY?)U)BG]UtY?)U)BG]Uti	HJE	CI
UTCPOI OI TCI I		TYVxr l eVt	S)BG]UtY	I D	BF
		l oVe	S)BG]UtY?)U)BG]UtY?)U)BG]Uti	FI C	CH
		xRuËY Ree	S)BG]UtY?)U)BG]UtY?)U)BG]Uti	HJE	CI
UTCPOI PI I CI I		Y ui URZ	UEVR8x)3/)E4	CEH	BC
UTCPOI PI I CL I		Y ui URZ	UEVR	CEG	BB
		cZR	UEVR)3/)D4	DCE	J
UTCPOI PI TCI I	I DRI	Y ui URZ	UEVR8x)3/)E4	CEH	BC
UTCPOI PI TCL I	I DRI	Y ui URZ	UEVR	CEG	BB
		cZR	UEVR)3/)D4	DCE	J
UTCPOI SI I CI I		h Vr TVUVs8SVi	h)CHB9 GA?)h)CHB9 GB	EEJ	E
UTCPOI SI TCI I		h Vr TVUVs8SVi	h)CHB9 GA?)h)CHB9 GB	EEJ	E
UTCPOLSI I CL I		h Ri	V)AI DE)eVDAC?)V)AI DG)eVCAC?)V)AI DG)eVDAC	DI J	BD
UTCPONPI TCI I	I DRI	TZr l i	UtBHVUE?)UtBHtVUE)3uY 4)3/)E4	BAE	CH
		aRXuRr	RaU	DAJ	B
		eRi U)r l xVr	CHGUt)3/)E4	DEE	D
		oVuXVl t	UtBHtVUE	GCA	CJ
UTCPONRI I CI I		URW	h Ë)DAA)3/)E>F4?)h Ë)DEA)3/)E>F4?)h Ë)DHF)3/)E>F4	BEA	BE
UTCPONRI I CL I		URW	h Ë)DAA)3/)E>F4?)h Ë)DEA)3/)E>F4?)h Ë)DHF)3/)E>F4	BEA	BE
UTCPOONI I CI I		WRt	BJC]SC9AAA?)I ED]RB9AAA)3/)E]W 4	BHC	CE
		eRi TZR	BJC]SC9AAA?)I ED]RB9AAA	DDF	BE
		xRuËY Ree	I ED]RB9AAA	HI G	F
UTCPOONI SCI I	I DPI	WRt	BJC]SC9AAA?)I ED]RB9AAA)3/)E]W 4	BHC	CE
		eRi TZR	BJC]SC9AAA?)I ED]RB9AAA	DDF	BE
		xRuËY Ree	I ED]RB9AAA	HI G	F
UTCPOPLI I CI I		ZxVTl	WDRDGI BR)3/)E>F)T)BA4?)WDRDGI BS)3/)E>F)T)BA4?)WDRDGI B)3/)E>F)T)BA4?)WDRVDGI BU)3/ E>F)T)BA4	CJJ	FB
UTCPOPNI I CI I		Y ui URZ	UEV6)3/)E4?)UEV68Fo?)UEV68e)3/)E4	CEF	J
		cZR	UEV6)3/)E4?)UEV68e)3/)E4	DCD	I
UTCPOPNI TCI I	I DRI	Y ui URZ	UEV6)3/)E4?)UEV68Fo?)UEV68e)3/)E4	CEF	J
		cZR	UEV6)3/)E4?)UEV68e)3/)E4	DCD	I
UTCPOPPI I CDI		xl exl	UBDYEEA)3/)F4	I EA	FD
UTCPOSLI I CI I		i ZssRi	UCFUUtZ	FGH	CE
UTCPOSLI I CDI		i ZssRi	UCFUUtZ	FGH	CE
UTCPOSLI TCI I	I DRI	i ZssRi	UCFUUtZ	FGH	CE
UTCPOSLI TCDI	I DRI	i ZssRi	UCFUUtZ	FGH	CE
UTCPOSmI TCI I	I DRI	sVRt	Sc ?)SËy ?)TXXS)3/)F4	HBH	BC
		scl UR	Sc ?)SuU?)SËy ?)TUUR?)TXXR?)TXXS?)TeoR	HEA	J
		xy	Scr?)Sc ?)SuU?)TUUR?)TXXR?)TXXS?)TeoR	I FG	BB
UTCPOTPI I CL I		TYVxr l eVt	R)BE]i Vt)3/)F4?)S)BE]i Vt)3/)G4?)eua)3/)F4?)eux)3/ 4	HJ	D
		l oVe	R)BE]i Ve)3/)F) W 4?)R)BE]i Vt)3/)F4?)S)BE]i Va)3/)G4?)S)BE]i Ve)3/)G4?)S)BE]i Vt)3/)G4?)U)BE]i Vt 3/)G4	FHE	G
		xRuËY Ree	R)BE]i Ve)3/)F) W 4?)R)BE]i Vt)3/)F4?)S)BE]i Va)3/)G4?)S)BE]i Ve)3/)G4?)S)BE]i Vt)3/)G4?)U)BE]i Vt 3/)G4	HI G	H
UTCPOTPI TCL I	I DRI	TYVxr l eVt	R)BE]i Vt)3/)F4?)S)BE]i Vt)3/)G4?)eua)3/)F4?)eux)3/ 4	HJ	D
		l oVe	R)BE]i Ve)3/)F) W 4?)R)BE]i Vt)3/)F4?)S)BE]i Va)3/)G4?)S)BE]i Ve)3/)G4?)S)BE]i Vt)3/)G4?)U)BE]i Vt 3/)G4	FHE	G
		xRuËY Ree	R)BE]i Ve)3/)F) W 4?)R)BE]i Vt)3/)F4?)S)BE]i Va)3/)G4?)S)BE]i Ve)3/)G4?)S)BE]i Vt)3/)G4?)U)BE]i Vt 3/)G4	HI G	H
UTCPOTRI I CI I		URW	h Ë)CGF)3/)E>F4	BDJ	BD
UTCPOTTI I CI I		eRUR	Yr BGUV	DCH	B
		h R UR	Yr BGUV	EBE	G
		h ZtsuSZsYZ	Yr BGUV	FEA	B
		i ZssRi	Yr BGUV	FGB	BA
UTCPOTTI TCI I	I DRI	eRUR	Yr BGUV	DCH	B

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UTCPOTTI TCI	IDRI	h R UR	Yr BGUV	EBE	G
		h ZsuSZsYZ	Yr BGUV	FEA	B
		i ZssRi	Yr BGUV	FGB	BA
UTCPOmLI ICLI		TZrl i	UtCAT]3/]F4/)UtCAT]ËIT4]3/]F4	BAI	DE
		aRXuRr	DAGUt]3/]F4/)RaxGU	DAJ	D
		eRi U]r l xVr	DAGUt]3/]F4/)DAUUtË	DEF	F
		oVuXVl t	UtCAT]3/]F4	GCD	DF
UTCPOmLI TCLI	IDRI	TZrl i	UtCAT]3/]F4/)UtCAT]ËIT4]3/]F4	BAI	DE
		aRXuRr	DAGUt]3/]F4/)RaxGU	DAJ	D
		eRi U]r l xVr	DAGUt]3/]F4/)DAUUtË	DEF	F
		oVuXVl t	UtCAT]3/]F4	GCD	DF
UTCPPLSI ICI		h Ri	U)CAGG]eVBB]3/]G4/U)CAGG]eVGH]3/]G4/U)CAGG]eVHG]3/]G4/U)CAGG]eVHH]3/]G4/U)CAGG]eWA]3/]G4/U CAGG]eWD]3/]G4/U)CAGG]eWF]3/]G4/U)CAGG]eWC]3/]G4/U)CAGG]el YDB]3/]G4/U)CAGG]el YDC]3/]G4/U CAGG]euYDA]3/]G4/U)CAGG]euYDB]3/]G4/U)CAGG]euYFC]3/]G4/U)CAGG]euYFD]3/]G4	DJD	BJ
UTCPPNOI ICLI		RuUZ	Ta R7/Ta S]3/]F4/T xR]3/]G4/T xS	DI	C
		sVRt	Ta R7/Ta S]3/]F4/Ta T7/Ta U7/T xR]3/]G4/T xS	HBE	D
		scl UR	Ta R]3/]G4/Ta S]3/]F4/Ta T7/Ta U7/T xR]3/]G4/T xS	HDI	C
		xy	Ta R7/Ta S]3/]F4/Ta T7/Ta U7/T xR]3/]G4/T xS7/T xT7/T xU	I FC	C
UTCPPNmI ICI		TZrl i	VSCh]3/h x47/VSCh]3/h 4	JF	I
		oVuXVl t	VSCh]3/h 4	GBB	J
UTCPPNmI TCI	IDRI	TZrl i	VSCh]3/h x47/VSCh]3/h 4	JF	I
		oVuXVl t	VSCh]3/h 4	GBB	J
UTCPPONI ICI		h Ri	U)CGHG]eVAB]3/]E4/U)CGHG]eVAC]3/]D4/U)CGHG]eVAD]3/]C4/U)CGHG]eVAE]3/]C4/U)CGHG]eVAF]3/]E4/U CGHG]eVAH]3/]F4/U)CGHG]eVBA]3/]E4/U)CGHG]eVBC]3/]E4/U)CGHG]eVBE]3/]F4/U)CGHG]eVBG]3/]F4/U CGHG]eVBI 7/U)CGHG]eVCA]3/]E4/U)CGHG]eVCB]3/]F4/U)CGHG]eVCC]3/]F4/U)CGHG]eVCF]3/]G4/U)CGHG]eVCG 3/]G4/U)CGHG]eVCI]3/]F4/U)CGHG]eVDB]3/]D4/U)CGHG]eVDC]3/]E4/U)CGHG]eVDD]3/]E4	DJH	CG
			U)CGHG]eVDF]3/]G4/U)CGHG]eVDG]3/]G4/U)CGHG]eVEF]3/]G4/U)CGHG]eVEG]3/]G4/U)CGHG]eVEH]3/]G4/U CGHG]eVEI]3/]G4/U)CGHG]eVEJ]3/]G4/U)CGHG]eVFA]3/]G4/U)CGHG]eVFE]3/]G4/U)CGHG]eVFF]3/]G4/U CGHG]eVFG]3/]G4/U)CGHG]eVFH]3/]G4/U)CGHG]eVFI]3/]G4/U)CGHG]el YDB]3/]G4	DJI	CI
			U)CGHG]el YAB]3/]E4/U)CGHG]el YAC]3/]E4/U)CGHG]el YAD]3/]E4/U)CGHG]el YAE]3/]E4/U)CGHG]el YBA]3/ D4/U)CGHG]el YCG]3/]F4/U)CGHG]el YCH]3/]F4	DJJ	CJ
UTCPPOUI ICLI		RuUZ	TRVR7/TRVS7/TRVU7/TRy S7/TTtR7/TT R7/TT T7/TUi S7/TUi T7/TVsR7/TVtR7/TWtR7/TYaR7/Toh R7/Toh S7/TosR	FH	DI
		sVRt	TT R7/TT S7/TUi U	HDD	EC
		scl UR	TT R	HFC	DC
		xy	TRy R7/TRy S7/TTtR7/TT R7/TT S7/TT T7/TT U7/TVtR]3/]E4/TacR7/TacS	I I F	FE
UTCPPOmI ICLI		RuUZ	TS R7/TS S	DI	B
		sVRt	TS R7/TS S	HBE	C
		scl UR	TS R7/TS S	HDI	B
		xy	TS R7/TS S	I FC	B
UTCPPPLI ICI		RuUZ	TeYR]3/]G4/TrcS]3/]F>G4/TËh R]3/]G]VRCI I 4/TËËS]3/]G4	EI	CB
		sVRt	TeYR]3/]F4/TeYS]3/]F4/TrcS]3/]F>G4/TËh R]3/]G]VR)CI I 4/TËËR]3/]G4/TËËS]3/]G4	HCG	CF
		scl UR	TeYR]3/]F4/TeYS]3/]F4/TrcR]3/]G4/TrcS]3/]F>G4/TËh R7/TËËR]3/]G4/TËËS]3/]G4/UTËR7/UT R	HEH	BJ
		xy	TeYR]3/]F4/TeYS]3/]F4/TrcR]3/]G4/TrcS]3/]F>G4/TËËR]3/]G4/TËËS]3/]G4/UTËR7/UT R	I HA	CJ
UTCPPPLI RCI	IDNR	RuUZ	TeYR]3/]G4/TrcS]3/]F>G4/TËh R]3/]G]VRCI I 4/TËËS]3/]G4	EI	CB
		sVRt	TeYR]3/]F4/TeYS]3/]F4/TrcS]3/]F>G4/TËh R]3/]G]VR)CI I 4/TËËR]3/]G4/TËËS]3/]G4	HCG	CF
		scl UR	TeYR]3/]F4/TeYS]3/]F4/TrcR]3/]G4/TrcS]3/]F>G4/TËh R7/TËËR]3/]G4/TËËS]3/]G4/UTËR7/UT R	HEH	BJ
		xy	TeYR]3/]F4/TeYS]3/]F4/TrcR]3/]G4/TrcS]3/]F>G4/TËËR]3/]G4/TËËS]3/]G4/UTËR7/UT R	I HA	CJ
UTCPPPLI TCI	IDRI	RuUZ	TeYR]3/]G4/TrcS]3/]F>G4/TËh R]3/]G]VRCI I 4/TËËS]3/]G4	EI	CB
		sVRt	TeYR]3/]F4/TeYS]3/]F4/TrcS]3/]F>G4/TËh R]3/]G]VR)CI I 4/TËËR]3/]G4/TËËS]3/]G4	HCG	CF
		scl UR	TeYR]3/]F4/TeYS]3/]F4/TrcR]3/]G4/TrcS]3/]F>G4/TËh R7/TËËR]3/]G4/TËËS]3/]G4/UTËR7/UT R	HEH	BJ
		xy	TeYR]3/]F4/TeYS]3/]F4/TrcR]3/]G4/TrcS]3/]F>G4/TËËR]3/]G4/TËËS]3/]G4/UTËR7/UT R	I HA	CJ
UTCPPPNI ICI		h ZsuSZsYZ	EUFG8t	FEC	I
UTCPPPNI ICLI		h ZsuSZsYZ	EUFG8t	FEC	I
UTCPPPNI TCI	IDRI	h ZsuSZsYZ	EUFG8t	FEC	I
UTCPPPNI TCLI	IDRI	h ZsuSZsYZ	EUFG8t	FEC	I
UTCPPPRI ICI		h Vr TVUVs8SVi	l h]EHA9JAD]3/]G4/l h]EHA9JAE]3/]G4/l h]EHA9JAG]3/]G4/l h]EHA9JAI]3/]G4/l h]EHA9JBA]3/]G4/l h EHA9JBD]3/]G4/l h]EHA9JCB]3/]G4/l h]EHA9JCD]3/]G4	FAB	GE

NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

UTCPPPSI I CI I		h Vr TVUVs8SVi	l h]JDD9JFB]3V]G]l h JDE]eR4?]l h]JDD9JFB7JFC]3. h]JDE]eR4?]l h]JDD9JFC]3V]G]l h JDE]eR4?]l h]JDE9JBB]3V G4?]l h]JDE9JBD]3V]G4?]l h]JDE9JHB]3V]G4?]l h]JDE9JHC]3V]G4?]l h]JDF9JBB]3V]G]l h JDG4?]l h JDF9JBB8JBE7JFB8JFE]3. h]JDG]eR4?]l h]JDF9JBC]3V]G]l h JDG4?]l h]JDF9JBD]3V]G]l h JDG4?]l h]JDF9JBE]3V]G l h JDG4?]l h]JDF9JFB]3V]G]l h JDG4?]l h]JDF9JFC]3V]G]l h JDG4?]l h]JDF9JFD]3V]G]l h JDG4?]l h]JDF9JFE]3V G]l h JDG4?]l h]JDG9JBA?]l h]JDG9JBA]3V]G4?]l h]JDG9JBC]3V]G4?]l h]JDG9JBF]3V]G4?]l h]JDG9JBG]3V]G4?]l h JDG9JBJ]3V]G4?]l h]JDG9JBJ7JCD7]l h]JDG9JCD]3V]G4?]l h]JDG9JHB]3V]G4?]l h]JDG9JHC]3V]G4?]l h]JDG9JHD 3V]G4?]l h]JDG9JHF7]l h]JDG9JHF]3V]G4?]l h]JDG9JHH7]l h]JDG9JHH]3V]G4?]l h]JDG9JI A]3V]G4	EJG	FI
UTCPPPSI I CL I		h Vr TVUVs8SVi	l h]JDD9JBB]3V]G]l h JDE]eR4?]l h]JDD9JBB8JBD7JBF7JBG]3. h]JDE]eR4?]l h]JDD9JBC]3V]G]l h JDE]eR4?]l h JDD9JBD]3V]G]l h JDE]eR4?]l h]JDD9JBF]3V]G]l h JDE]eR4?]l h]JDD9JBG]3V]G]l h JDE]eR4?]l h]JDE9JBC7]l h JDE9JBC]3V]G4?]l h]JDE9JHE]3V]G4?]l h]JDE9JHG]3V]G4?]l h]JDE9JHG7JHI 7]l h]JDE9JHI]3V]G4	EJF	FH
UTCPPPUI I CL I		TZrl i	VoG]TS]3FWt:4?]VoGT]3FW$4	BAB	BJ
		h Z i Z	i BC]SBG]R?]i BG]SBG]R	FDF	F
		oVuXVl t	VoGT]3FW74?]VoGT]3FW$4?]VoGTS]3FWt:4	GBG	CA
UTCPPPUI I CDI		h Z i Z	i BE]SBG]R	FDF	G
		oVuXVl t	VoGUt]3FW74	GBH	CC
UTCPPPUI I CPI		TZrl i	VoD]3 W74?]VoD]3 W64?]VoD]3 W74?]VoD]3 W$4?]VoDT]3 W7]43V]F4	BAA	BH
		h Z i Z	i BC]SBE]R	FDE	E
		oVuXVl t	VoD7]VoD]3 W74?]VoD]3 W$4?]VoDT	GBG	BI
UTCPPPUI I CRI		Sh y	i BD]SBG]R	HA	B
		TZrl i	VoG]3FWy 4?]VoGTUtË]3FWu43V]E4?]VoGUtË]3FWu43V]E4	BAA	BI
		h Z i Z	i BI]SBG]R	FDF	H
		oVuXVl t	VoG]3FWy 4?]VoG]3V]E4?]VoGTUtË]3FWu43V]E4	GBG	BJ
UTCPPPUI TCL I	I DRI	TZrl i	VoG]TS]3FWt:4?]VoGT]3FW$4	BAB	BJ
		h Z i Z	i BC]SBG]R?]i BG]SBG]R	FDF	F
		oVuXVl t	VoGT]3FW74?]VoGT]3FW$4?]VoGTS]3FWt:4	GBG	CA
UTCPPPUI TCRI		Sh y	i BD]SBG]R	HA	B
		TZrl i	VoG]3FWy 4?]VoGTUtË]3FWu43V]E4?]VoGUtË]3FWu43V]E4	BAA	BI
		h Z i Z	i BI]SBG]R	FDF	H
		oVuXVl t	VoG]3FWy 4?]VoG]3V]E4?]VoGTUtË]3FWu43V]E4	GBG	BJ
UTCPPRPI I CI I		URW	W]BAD]sB]3V]E4?]W]BBI]sB]3V]E4?]W]BDG]sB]3V]E4?]W]BFC]3V]F4?]Xr]BGF]sB7]Xr]BI E]sB]3V]E4?]Xr CBA]sB]3V]E4?]Xr]CCA]3V]E4	BDG	I
UTCPPSNI I CI I		Z su u	EYWB8ZZ	CFE	G
UTCPPSOI I CI I		Z su u	EYcB8t T]3V]D>E4	CFF	I
UTCPPSPI I CI I		Y ui URZ	UEYR	CEH	BE
UTCPPSPI TCI I	I DRI	Y ui URZ	UEYR	CEH	BE
UTCPPTRI I CL I		RuUZ	Tr ST7]Tr SU7]Tr VR7]Tr VW7]Tr eS7]Tr eT7]Tr uR7]TsuR7]TsuS7]TsuU7]TsuV7]TuxT7]TuxU7]T YR7]UVaR]3V]G4?]UVaS 3V]G4?]UVuR7]UVuS7]UVuT	FF	DE
		sVRt	TcW]3V]F4?]Tr ST]3V]F4?]Tr eS]3V]G4?]Tr h S]3V]G4?]Tr xR]3V]F4?]Tr xT]3V]F4?]TuxT]3V]G4?]UV$eR 3V]G4	HDB	DH
		scl UR	TcW]3V]F4?]Tr eS]3V]G4?]Tr h S]3V]G4?]Tr xT7]TuuR7]TuuS7]UV$R7]UV$S	HFB	CJ
		xy	TcW]3V]F4?]Tr ST]3V]F4?]Tr W]3V]F4?]Tr eS]3V]G4?]Tr eU]3V]G4?]Tr h S]3V]G4?]Tr uR7]Tr xR]3V]F4?Tr xT]3V]F4?]TuuR7]TuuS7]TuuU7]TuuV7]TuuW]TuxR]3V]G4?]TuxT]3V]G4?]TxTR7]UVaR]3V]G4?]UVaS]3V]G4?UV$eR]3V]G4?]UV$S7]UV$T7]UV$U7]UV$V7]UV$W	I HJ	ED
UTCPPTRI I CDI		xy	TËVR]3V]G4?]TËXR]3V]G4?]TËXS]3V]G4?]TËY R]3V]G4?]TËY S]3V]G4?]TËY T]3V]G4?]URsR7]URsS7]URsT]3V F4?]URuR7]URuS7]URxR7]URy R	I I A	EE
UTCPPTRI TCDI	I DRI	xy	TËVR]3V]G4?]TËXR]3V]G4?]TËXS]3V]G4?]TËY R]3V]G4?]TËY S]3V]G4?]TËY T]3V]G4?]URsR7]URsS7]URsT]3V F4?]URuR7]URuS7]URxR7]URy R	I I A	EE
UTCPPTUI I CI I		sVRt	R q7]Sh V	HBG	I
		scl UR	R q7]Sh V	HDJ	G
		xy	R q7]Sh V	I FE	H
UTCPPTUI TCI I	I DRI	sVRt	R q7]Sh V	HBG	I
		scl UR	R q7]Sh V	HDJ	G
		xy	R q7]Sh V	I FE	H
UTCPPTmI I CI I		Z su u	EYXB8t]3V]C4	CFE	H
UTCPPURI I CI I		Y ui URZ	XEeR	CED	B
		cZR	XEeR	DCB	B
UTCPPURI TCI I	I DRI	Y ui URZ	XEeR	CED	B
		cZR	XEeR	DCB	B
UTCPPmI I I CI I		W r U	RJR7]RJS	CAD	F
UTCPPmI I TCI I	I DRI	W r U	RJR7]RJS	CAD	F
UTCPPmRI I CI I		RuUZ	Th SR]3V]F4?]TËsR]3V]F4?]T TR]3V]G4	DI	D
		sVRt	Th SR]3V]F4?]TËsR]3V]F4?]T TR]3V]G4	HBF	F
		scl UR	T TR]3V]G4	HDJ	E
		xy	Th SR]3V]F4?]TËsR]3V]F4?]T TR]3V]G4?]T TS	I FD	E

UTCPPmTI ICOI		Sh y	SDH)TBF)R)3/)G4		HC	H
			SEH)TCA)S7)SEH)UCA)S		HC	I
		h Z Z	SDH)TBF)R		FDG	BA
			SEH)TCA)S)3/)G4		FDH	BB
UTCPPmTI ICPI		Sh y	SEH)TCA)S7)SEH)UCA)S		HC	I
		h Z Z	SEH)TCA)S)3/)G4		FDH	BB
UTCPPmTI TCOI		Sh y	SDH)TBF)R)3/)G4		HC	H
			SEH)TCA)S7)SEH)UCA)S		HC	I
		h Z Z	SDH)TBF)R		FDG	BA
			SEH)TCA)S)3/)G4		FDH	BB
UTCPPmTI TCPI		Sh y	SEH)TCA)S7)SEH)UCA)S		HC	I
		h Z Z	SEH)TCA)S)3/)G4		FDH	BB
UTCPRI PI ICI		URTZR	Y FW)EAC)3/)F>G4)Y FW)EAE)3/)F>G4)Y FW)EAI)3/)F>G4)Y FW)EBA)3/)F>G4		BCC	D
		r Vi Ruet	Y FW)EAA)3/)F>G4)Y FW)EAC)3/)F>G4)Y FW)EAD)3/)F>G4)Y FW)EAE)3/)F>G4)Y FW)EAI)3/)F>G4)Y FW)EBC)3/ F>G4		GEH	G
UTCPRI PI ICLI		URTZR	Y ES)EAA7)Y ES)EAI		BCC	C
		i ZssRi	Y ES)EAI		FFI	D
		r Vi Ruet	Y ES)EAA7)Y ES)EAB7)Y ES)EAI 7)Y ES)EFD		GEH	F
UTCPRI RI ICI		ReVR)r l h Vl	DDA)RB9AAA		CB	D
		WZRt	DBC)RI 9AAA)3/)G4)DBC)SC9AAA)3/)G4		BGI	BA
UTCPRI SI ICI		WZRt	WBRVDEI BU7)WBRVDEI BV7)WBRVDEI BX		BI I	GD
		ZxVTl	WBRVDEI BR7)WBRVDEI BS7)WBRVDEI BT		CGI	D
UTCPRI mI ICI		WZRt	XsV8tD)3/)G)W W 4)XsV8tE)3/)G)W W 4		BGI	BC
UTCPRLTI ICI		h Ri	U)CAGG)eVICF)3/)F4		DJC	BH
UTCPRNPI ICI		W r U	RVUR)3U 4)uXTR)3U 4)uXTS)3U 4)uXaT7)uXaV)3U 4)ÊuTR)3U 4)ÊuTT)3U 4) ÊuTU)3U 4)ÊuaR)3/)G)U 4)ÊuaS)3/)G)U 4)ÊuaT)3/)G)U 4)ÊxTR)3U 4)ÊxTS 3U 4)ÊxTT)3U 4)ÊxaR)3U 4)ÊxaS)3U 4)ÊxaT)3U 4)ÊxaU)3U 4)Êy TR)3/)G U 4)Êy TS)3/)G)U 4)Êy aR)3/)F)U 4)ËÊXR)3/)G)U 4		CAC	D
UTCPRNPI TCI I DRI		W r U	RVUR)3U 4)uXTR)3U 4)uXTS)3U 4)uXaT7)uXaV)3U 4)ÊuTR)3U 4)ÊuTT)3U 4) ÊuTU)3U 4)ÊuaR)3/)G)U 4)ÊuaS)3/)G)U 4)ÊuaT)3/)G)U 4)ÊxTR)3U 4)ÊxTS 3U 4)ÊxTT)3U 4)ÊxaR)3U 4)ÊxaS)3U 4)ÊxaT)3U 4)ÊxaU)3U 4)Êy TR)3/)G U 4)Êy TS)3/)G)U 4)Êy aR)3/)F)U 4)ËÊXR)3/)G)U 4		CAC	D
UTCPRNSI ICI		i ZssRi	UCFUUtZ		FGH	CE
UTCPRNSI TCI I DRI		i ZssRi	UCFUUtZ		FGH	CE
UTCPRNTI ICI		TZr l i	VTF7)VTF)3 Vb4		BAC	CC
		oVuXVl t	VTF)3 Vb4)VTFW)VTFW)3 Vb)4		GBI	CE
UTCPRNTI TCI		TZr l i	VTF7)VTF)3 Vb4		BAC	CC
		oVuXVl t	VTF)3 Vb4)VTFW)VTFW)3 Vb)4		GBI	CE
UTCPRNUI ICLI		W r U	Si h R)3/ S 4)h l UR)3/ S 4)h l US)3/ S 4)h l UU)3/ S 4)h l UV)3/ S 4)h l h R)3/ S 4) h l h S)3/ S 4)h JUR)3/ S 4)h JUS)3/ S 4)h JUX)3/ S 4)h JUY)3/ S 4)h Jh R)3/ S 4) h Jh T)3/ S 4)ui TR)3/ S 4)ui TS)3/ S 4)ui TT)3/ S 4)ui TU)3/ S 4)ui TV)3/ S 4) ui TW)3/ S 4)ui TX)3/ S 4)ui TY)3/ S 4)ui TZ)3/ S 4)ui Ta)3/ S 4)ui Tc)3/ S 4)ui Th 3/ S 4)ui Ti)3/)G)V S 4		CAG	BB
UTCPRNUI ICOI		W r U	aqUR)3/ S 4)aqUS)3/ S 4)aqh R)3/ S 4)aqh S)3/ S 4)atUR)3/ S 4)atUS)3/ S 4)ath R 3/ S 4)aty R7)aty S		CAI	BF
		xl exl	S)EBGE)t)3/)F4)S)EBGE)t C)3/)F4)S)EBGE)t D)3/)F4)S)EBGE)t E)3/)F4		I BF	J
UTCPRNUI TCLI	I DRI	W r U	Si h R)3/ S 4)h l UR)3/ S 4)h l US)3/ S 4)h l UU)3/ S 4)h l UV)3/ S 4)h l h R)3/ S 4) h l h S)3/ S 4)h JUR)3/ S 4)h JUS)3/ S 4)h JUX)3/ S 4)h JUY)3/ S 4)h Jh R)3/ S 4) h Jh T)3/ S 4)ui TR)3/ S 4)ui TS)3/ S 4)ui TT)3/ S 4)ui TU)3/ S 4)ui TV)3/ S 4) ui TW)3/ S 4)ui TX)3/ S 4)ui TY)3/ S 4)ui TZ)3/ S 4)ui Ta)3/ S 4)ui Tc)3/ S 4)ui Th 3/ S 4)ui Ti)3/)G)V S 4		CAG	BB
UTCPRNUI TCOI	I DRI	W r U	aqUR)3/ S 4)aqUS)3/ S 4)aqh R)3/ S 4)aqh S)3/ S 4)atUR)3/ S 4)atUS)3/ S 4)ath R 3/ S 4)aty R7)aty S		CAI	BF
		xl exl	S)EBGE)t)3/)F4)S)EBGE)t C)3/)F4)S)EBGE)t D)3/)F4)S)EBGE)t E)3/)F4		I BF	J
UTCPRNmI ICI		W r U	ScVR)3/)G)V S 4)ScVS)3/)G)V S 4)ScVT)3/)G)V S 4)ScVU)3/)G)V S 4)Scr R)3/ S 4 Scr S)3/ S 4) h VR)3/)G)V S 4) h VS)3/)G)V S 4) h YR)3/ S 4) h r R)3/ S 4		CBG	DA
UTCPRNmI TCI I DRI		W r U	ScVR)3/)G)V S 4)ScVS)3/)G)V S 4)ScVT)3/)G)V S 4)ScVU)3/)G)V S 4)Scr R)3/ S 4 Scr S)3/ S 4) h VR)3/)G)V S 4) h VS)3/)G)V S 4) h YR)3/ S 4) h r R)3/ S 4		CBG	DA
UTCPROI I ICI		TZr l i	VoGTUt)3FW 4)VoGTUt)3FWk4)VoGUt)3FWh 4)3/)E4)VoGUt)3FW 4)VoGUt)3FWt4)VoGWUt)3FX 4)3/)E4		BAB	CA
		oVuXVl t	VoGTUt)3FWR4)VoGTUt)3FWk4)VoGUt)3FW 4)VoGWUt)3FX 4)3/)E4)VoGWUth)3FX 4)3/)E4		GBH	CB
UTCPROI I TCI I DRI		TZr l i	VoGTUt)3FW 4)VoGTUt)3FWk4)VoGUt)3FWh 4)3/)E4)VoGUt)3FW 4)VoGUt)3FWt4)VoGWUt)3FX 4)3/)E4		BAB	CA
		oVuXVl t	VoGTUt)3FWR4)VoGTUt)3FWk4)VoGUt)3FW 4)VoGWUt)3FX 4)3/)E4)VoGWUth)3FX 4)3/)E4		GBH	CB
UTCPROLI ICI		TZr l i	UxGWT)3SY t4)UxGWT)3SY u4)UxGWT)3SY Ê4)UxGWT)3SY 4)UxGWU)3SY 4		JJ	BG
		l oVe	S)BG)Ut)3UxGUtVU4)S)BG)Ut)3UxGWU4)S)BG)UtY)3UxGWT4		FHH	BE

Niiral® FITTED WITH GOETZE® RINGS

NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

UTCPROLI I CI I		oVuXVl t	UxGWT}3SY 4/UxGWU}3SY 4	GBF	BH
		xRuËY Ree	S)BG}Ut}3UxGWU4/S)BG}UtY}3UxGWT4	HJA	BF
UTCPROLI TCI I	I DRI	TZr l i	UxGWT}3SY t4/UxGWT}3SY u4/UxGWT}3SY Ë4/UxGWT}3SY 4/UxGWU}3SY 4	JJ	BG
		l oVe	S)BG}Ut}3UxGUt VU4/S)BG}Ut}3UxGWU4/S)BG}UtY}3UxGWT4	FHH	BE
		oVuXVl t	UxGWT}3SY 4/UxGWU}3SY 4	GBF	BH
		xRuËY Ree	S)BG}Ut}3UxGWU4/S)BG}UtY}3UxGWT4	HJA	BF
UTCPRONI I CI I		l oVe	S)BA}ËVè}3V)G4/S)BA}ËVt}3V)G4/U)BA}ËVè}3V)G4/W)BA}ËVè}3V)G4	FHH	BC
		xRuËY Ree	S)BA}ËVè}3V)G4/S)BA}ËVt}3V)G4/U)BA}ËVè}3V)G4/W)BA}ËVè}3V)G4	HI J	BD
UTCPRONI TCI I	I DRI	l oVe	S)BA}ËVè}3V)G4/S)BA}ËVt}3V)G4/U)BA}ËVè}3V)G4/W)BA}ËVè}3V)G4	FHH	BC
		xRuËY Ree	S)BA}ËVè}3V)G4/S)BA}ËVt}3V)G4/U)BA}ËVè}3V)G4/W)BA}ËVè}3V)G4	HI J	BD
UTCPRORI I CI I		RuUZ	URUR}3V)G4/UYWR}3V)G4/UoTR}3V)G4	DI	E
		sVRt	URUR}3V)G4/UYWR}3V)G4/UoTR}3V)G4	HBF	G
		scl UR	URUR}3V)G4/UYWR}3V)G4/UoTR}3V)G4	HDJ	F
		xy	URUR}3V)G4/UYWR}3V)G4/UoTR}3V)G4	I FD	F
UTCTPI I I I CDI		h Vr TVUVs8SVi	l h)DFE9JAA}3V)C4/(l h)DFE9JAB}3V)C)(l h DGE)eR4/(l h)DFE9JAC}3V)C)(l h DGE)eR4/(l h)DFE9JAD}3V)C)(l h DGE eR4/(l h)DFE9JCA}3V)C)(l h DGE)eR4/(l h)DFE9JCB}3V)C)(l h DGE)eR4/(l h)DFE9JCC}3V)C)(l h DGE)eR4/(l h)DFE9JCD 3V)C)(l h DGE]eR4/(l h)DFE9JCE}3V)C)(l h DGE)eR4/(l h)DFE9JCF}3V)C)(l h DGE)eR4/(l h)DFE9JCG}3V)C4/(l h DFH9JAA}3. h DGG)eR4/(l h)DFH9JAB}3. h DGG)eR4/(l h)DFH9JAC}3. h DGG)eR4/(l h)DFH9JAD}3. h DGG)eR4/(l h)DFH9JAE 3. h DGG)eR4/(l h)DFH9JAG}3. h DGG)eR4/(l h)DFH9JAH}3. h DGG)eR4/(l h)DFH9JAI }3. h DGG)eR4/(l h)DFH9JAJ }3. h DGG)eR4/ l h)DFH9JBA}3. h DGG)eR4/(l h)DFH9JBF}3. h DGG)eR4/(l h)DFH9JBG}3. h DGG)eR4/(l h)DFH9JBH}3. h DGG)eR4/(l h)DFH9JBI 3. h DGG)eR4/(l h)DFH9JBJ }3. h DGG)eR4/(l h)DFH9JCA}3. h DGG)eR4/(l h)DFH9JCB}3. h DGG)eR4/(l h)DFH9JCC}3. h DGG)eR4/ l h)DFH9JCE}3V)C)(l h DGG)eR4/(l h)DFH9JCF}3. h DGG)eR4/(l h)DFH9JCG}3. h DGG)eR4/(l h)DFH9JCH}3. h DGG)eR4/(l h DFH9JCJ }3. h DGG)eR4/(l h)DFH9JDA}3. h DGG)eR4/(l h)DFH9JDB}3V)C)(l h DGG)eR4/(l h)DFH9JDC}3. h DGG)eR4/(l h DFH9JDD}3. h DGG)eR4/(l h)DFH9JDE}3. h DGG)eR4/(l h)DFH9JDF}3. h DGG)eR4/(l h)DFH9JDG}3V)C)(l h DGG)eR4/(l h DFH9JDH}3V)C)(l h DGG)eR4/(l h)DFH9JDI }3V)C4/(l h)DFH9JEA}3. h DGG)eR4/(l h)DFH9JEB}3. h DGG)eR4/(l h)DFH9JEC 3. h DGG)eR4/(l h)DFH9JED}3. h DGG)eR4/(l h)DFH9JEE}3. h DGG)eR4/(l h)DFH9JEF}3V)C)(l h DGG)eR4/(l h)DFH9JEG 3. h DGG)eR4/(l h)DFH9JEH}3. h DGG)eR4/(l h)DFH9JEI }3. h DGG)eR4/(l h)DFH9JEJ }3V)C)(l h DGG)eR4/(l h)DFH9JGB 3. h DGG)eR4/(l h)DFH9JGC}3. h DGG)eR4/(l h)DFH9JGD}3. h DGG)eR4/(l h)DGE9JAB7(l h)DGG9JFG	EI A	EH
UTCTPLNLLCLI	LDI	Tl h or Vssl r	y VstZi XY l usV}3h S)l h EFH>JAE>JAG7/URWIl CF>BBGA4	BBI	C
UTCTPOSI I CDI		h Vr TVUVs8SVi	l h)GAE9JBF7(l h)GAE9JBH7(l h)GAF9JBA7(l h)GAF9JBB7(l h)GAF9JBC7(l h)GAG9JBA7(l h)GAG9JBC	EFH	BG
UTCTPOSI TCDI	I DRI	h Vr TVUVs8SVi	l h)GAE9JBF7(l h)GAE9JBH7(l h)GAF9JBA7(l h)GAF9JBB7(l h)GAF9JBC7(l h)GAG9JBA7(l h)GAG9JBC	EFH	BG

LPCLLRSICLI	URW	W)BAD]sB]3/)E4]W)BBI]sB]3/)E4]W)BDG]sB]3/)E4]W)BFC]3/)F4]Xr)BGF]sB7]Xr)BIE]sB]3/)E4]Xr CBA]sB]3/)E4]Xr)CCA]3/)E4	BDG	I
LPCNITUICI	Zsu u	EYWB8ZZ	CFE	G
LPCNLm0ICI	Zsu u	EYcB8tT]3/)D>E4	CFF	I
LPCPm0LICI	oVrcZis	BAAE8EA7]BAAG8GA	GAA	BC
LPCPRLIOICI	xlexl	UBGR7]UBGREHA]3/)C4]UBGRFCA7]UBGSFCA	IEC	FH
		tRUBGDAX7]tRUBGDAV7]tRUBGDAo7]tRUBGDBX7]ty UBGDAX7]ty UBGDAo	IEC	FI
		tUBGDVs	IEC	FJ
LPCPUIITICI	rViRuet	h ZJr)AG9CA9EF7]h ZJr)AG9CA9EF]ZEB]3/)C4]h ZJs)AG9CA9DA7]h ZJs)AG9CA9DA]i 7]h ZJs)AG9CA9DA]i B7]h Zbs)AG9CA9DA	GHD	FF
		h ZJr)AG9CA9EF)R7]h ZJr)AG9CA9EF)T7]h Zbr)AG9CA9EF)RD7]h Zbr)AG9CA9EF)TD	GHD	FG
		h ZJr)AG9CA9EF)RC7]h ZJr)AG9CA9EF)T>E]3/)C4]h ZJr)AG9CA9EF)U>EB]3/)C4]h ZJr)AG9CA9EF)h EB]3/)C4]h ZYr AG9CA9EF)REB]3/)C4	GHE	FH
		h ZJr)AG9CA9EF)SD]3/)B4]h ZJr)AG9CA9EF)UD]3/)B4]h ZJr)AG9CA9EF)V7]h ZJr)AG9CA9EF)V>EB]3/)C4]h ZJr AG9CA9EF)VC]3/)B4]h ZJr)AG9CA9EF)Y7]h ZJs)AG9CA9EF)S	GHE	FI
		h Zbs)AG9CA9EF7]h Zbs)AG9CA9EF)R7]h Zbs)AG9CA9EF)S7]h Zbs)AG9CA9EF)T	GHG	GB
LPCPUIIUICI	rViRuet	h ZJr)AG9CA9EF)RC7]h ZJr)AG9CA9EF)T>E]3/)C4]h ZJr)AG9CA9EF)U>EB]3/)C4]h ZJr)AG9CA9EF)h EB]3/)C4]h ZYr AG9CA9EF)REB]3/)C4	GHE	FH
		h ZJr)AG9CA9EF)SD]3/)B4]h ZJr)AG9CA9EF)UD]3/)B4]h ZJr)AG9CA9EF)V7]h ZJr)AG9CA9EF)V>EB]3/)C4]h ZJr AG9CA9EF)VC]3/)B4]h ZJr)AG9CA9EF)Y7]h ZJs)AG9CA9EF)S	GHE	FI
		h ZJr)AG9CA9EF)U7]h ZJr)AG9CA9EF)VD]3/)B4	GHF	FJ
LRCLLNUIICI	sTRiZR	UT)BB9AC]3/)D)UT)BB4]UT)BB9AE]3/)D)UT)BB4]UT)BB9AJ]3/)D)UT)BB4]UT)J9BB]3/)D4]UT)J9BC]3/)D4]UT J9BD]3/)D4]UT)J9BJ]3/)D4]UT)J9CA]3/)D)UT)J4]UT)J9CB]3UT)J4	HAB	G
		UT)BB9AB]3/)D)UT)BB4]UT)BB9AD]3/)D)UT)BB4]UT)BB9AH]3/)C)UT)BB4]UT)BB9AI]3/)D)UT)BB4	HAC	J
		UT)BC9AB]3/)D)UT)BC4]UT)BC9AD]3/)D)UT)BC4]UT)BC9AJ]3/)D)UT)BC4]UT)BG9AC]3/)D)UT)BG4]UsT)BC9AB 3/)C)UsT)BC4]UsT)BC9AC]3/)C)UsT)BC4]UsT)BC9AD]3/)C)UsT)BC4]Ut)BC9AC]3/)D)Ut)BC4	HAD	BA
		UT)BC9AC]3/)C)UT)BC4]UT)BC9AG]3/)D)UT)BC4]UT)BC9BE]3/)D)UT)BC4]UT)BC9BH]3/)D)UT)BC4]UT)BG9AB 3/)D)UT)BG4]UT)BG9AD]3/)D)UT)BG4]UT)BG9AE]3/)D)UT)BG4]UsT)BC9AF]3/)C)UsT)BC4]Ut)BC9AI]3UT)BC4	HAD	BB
		UT)BG9AF]3/)E)UT)BG4]UT)BG9AG]3/)E)UT)BG4]UT)BG9AI]3/)E)UT)BG4]UT)BG9BH]3/)F)UT)BG4]UT)BG9BI 3/)F)UT)BG4]UT)BG9BJ]3/)F)UT)BG4]UT)BG9CC]3UT)BG4	HAG	BH
LRONSIIRICLI	ZxVTl	WDSVAGI BR]3/)D)T)BD4]WDSVAGI BS]3/)D)T)BD4]WDSVAGI BT]3/)D)T)BD4]WDSVAGI BU]3/)D T)BD4]WDSVAGI BV]3/)D)T)BD4]WDSVAGI BW]3/)D)T)BD4]WDSVAGI BX]3/)D)T)BD4	DAA	FF
		WDSVDGI BR]3/)E>F)T)BD4]WDSVDGI BS]3/)E>F)T)BD4]WDSVDGI BT]3/)E>F)T)BD4]WDSVDGI BU 3/)E>F)T)BD4]WDSVDGI BV]3/)E>F)T)BD4]WDSVDGI BW]3/)E>F)T)BD4]WDSVDGI BX]3/)E>F T)BD4	DAB	FG
LRONSIITICI	ZxVTl	WCSVAGI BR]3/)C)T)I 4]WCSVAGI BS]3/)C)T)I 4]WCSVAGI BT]3/)C)T)I 4]WCSVAGI BU]3/)C T)I 4]WCSVAGI BUR]3/)C)T)I 4]WCSVAGI BUS]3/)C)T)I 4]WCSVAGI BV]3/)C)T)I 4]WCSVAGI BW 3/)C)T)I 4	CJG	EE
		WCSVAGI BR>S>T>U>W]3/)D4]WCSVBGI CX]3/)D4	CJG	EF
LRCPRIIOICI	hRi	U)CI GF)eW<CGA7]U)CI GF)eWY7]U)CI GF)eWY AB7]U)CI GG)cW7]U)CI GG)cl YDGA7]U)CI GG)cuY>DGA]3/)B4]U CI GG)cue7]U)CI GG)eW9]U)CI GG)eW<CJA7]U)CI GG)eWAE7]U)CI GG)eWAH7]U)CI GG)eWAI 7]U)CI GG)eW>CJA7]U)CI GG)eW>DDA7]U CI GG)eY AB7]U)CI GG)euJ]U)CI GG)euAH7]U)CI GG)euAI 7]U)CI GG)euDDA7]U)CI GG)euY7]U)CI GG)euY AE]3/)B4]U)CI GG euY DDA7]U)CI GG)euEDDA7]U)CI GG)eÊVEA7]U)CI GG)eÊVEH7]U)CI GG)t7]U)CI GG)tl Y7]U)CI GG)tl Y>CJA7]U)CI GG)tl Y>DBA7]U CI GG)tuY7]U)CI GG)tuY>CJA7]U)CI GG)tuY AB	EAA	DB
		U)CI GF)eWAC7]U)CI GF)eWAD7]U)CI GF)eWAF]3/)B4]U)CI GF)eWAG]3/)B4]U)CI GF)eWBA7]U)CI GF)eWCC]3/)B4]U)CI GF eWCD]3/)B4]U)CI GF)el YAB]3/)B4]U)CI GF)el YAC]3/)B4]U)CI GF)el YAF]3/)B4]U)CI GF)euAB]3/)B4]U)CI GF euAC7]U)CI GF)euAD7]U)CI GF)euAE]3/)B4]U)CI GF)euAG]3/)B4]U)CI GF)euYAC]3/)B4]U)CI GF)euYAD]3/)B4]U CI GF)euYAF]3/)B4]U)CI GF)euYAG]3/)B4]U)CI GF)euYAI]3/)B4]U)CI GF)eÊW7]U)CI GG)eWAC7]U CI GG)eWAD7]U)CI GG)eWAG7]U)CI GG)eWAJ]3/)B4]U)CI GG)eWBA]3/)B4]U)CI GG)eWBF]3/)B4]U)CI GG)eWCB]3/)B4]U CI GG)eWCC]3/)B4]U)CI GG)eWX7]U)CI GG)eWXAD]3/)B4]U)CI GG)eWXAE]3/)B4]U)CI GG)el Y7]U)CI GG)el YAC7]U)CI GG el YAD7]U)CI GG)el YAG]3/)B4]U)CI GG)el YAH7]U)CI GG)el YAJ]3/)B4]U)CI GG)el YCA]3/)B4]U)CI GG)el YCB]3/ B4]U)CI GG)el YCC]3/)B4]U)CI GG)el YCE]3/)B4]U)CI GG)euAB7]U)CI GG)euAD]3/)B4]U)CI GG)euAE7]U)CI GG)euYAF 3/)B4]U)CI GG)eÊ7]U)CI GG)eÊW9]U)CI GG)eÊWX7]U)CI GG)eÊl Y7]U)CI GG)eÊu7]U)CI GG)eÊuY	EAB	DC
		U)CI GF)eWAJ7]U)CI GF)eWCB]3/)C4]U)CI GF)eWCE]3/)C4]U)CI GF)euYAH]3/)C4]U)CI GF)euYAJ]3/)C4]U)CI GG eWBE]3/)C4]U)CI GG)eWBG]3/)C4]U)CI GG)eWBH]3/)C4]U)CI GG)eWCA]3/)C4]U)CI GG)eWCJ]3/)C4]U)CI GG eWDA]3/)C4]U)CI GG)eWDE]3/)C4]U)CI GG)eWDF]3/)C4]U)CI GG)eWDG]3/)C4]U)CI GG)eWDH]3/)C4]U)CI GG el YCD]3/)C4]U)CI GG)el YCF]3/)C4]U)CI GG)el YCG]3/)C4]U)CI GG)euYCB]3/)C4]U)CI GG)euYCC]3/)C4]U CI GG)euYCG]3/)C4	EAC	DD
		U)CI GF)el YAH]3/)C4]U)CI GF)el YAJ]3/)C4]U)CI GG)W<CEA7]U)CI GG)WX7]U)CI GG)W7]U)CI GG)cl Y>DHD7]U)CI GG eWAB7]U)CI GG)eWXAF]3/)C4]U)CI GG)el YDB]3/)C4]U)CI GG)l Y7]U)CI GG)u7]U)CI GG)uY7]U)CI GG)uY>CEA7]U)CI GG)uh 7 U)CI HG)eWAB]3/)C4]U)CI HG)eWAF]3/)D4]U)CI HG)eWBB]3/)C4]U)CI HG)euVGAE7]U)CI HG)euVGAF7]U)CI HG)euVGAG	EAD	DE
		U)CI GG)eWAF]3/)B4	EAE	DF

NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

LRCPRI I OI CI I	h Ri	U)CI GG)eVCD]3/]D4?)U)CI GG)eVCE]3/]D4?)U)CI GG)eVCF]3/]D4?)U)CI GG)eVCG]3/]D4?)U)CI GG)eVCH]3/]D4?)U CI GG)eVCI]3/]D4?)U)CI GG)eVKAH]3/]D4?)U)CI GG)el Y CH]3/]D4?)U)CI GG)el Y CI]3/]D4?)U)CI GG)el Y CJ]3/]D47 U)CI GG)el Y DC]3/]D4?)U)CI GG)el Y DD]3/]D4?)U)CI GG)el Y DE]3/]D4?)U)CI GG)el Y DF]3/]D4?)U)CI GG)euY CD]3/ D4?)U)CI GG)euY CE]3/]D4?)U)CI GG)euY CF]3/]D4?)U)CI GG)euY CH]3/]D4?)U)CI GG)euY CI]3/]D4?)U)CI GG)euY CJ 3/]D4?)U)CI GG)euY DA]3/]D4?)U)CI GG)euY FB]3/]D4	EAF	DG
		U)CI GG)eVDB]3/]C4?)U)CI GG)eVDC]3/]C4?)U)CI GG)eVDJ]3/]C4?)U)CI GG)eVEA]3/]C4?)U)CI GG)eVEB]3/]C4?)U CI GG)eVEC]3/]C4?)U)CI GG)eVED]3/]C4	EAG	DH
		U)CI HG)eVAC]3/]C4?)U)CI HG)el Y AB]3/]C4?)U)CI HG)euY AB]3/]C4?)U)CI HG)euY AC]3/]C4	EAH	DI
		U)CI HG)eVAD]3/]D4?)U)CI HG)eVAE]3/]D4?)U)CI HG)eVAG]3/]C4?)U)CI HG)eVAH]3/]C4?)U)CI HG)eVBA]3/]C4?)U CI HG)eVBH?)U)CI HG)el Y AC]3/]D4?)U)CI HG)el Y AD]3/]D4	EAH	DJ
LRCPRI LLI CI I	sTRi ZR	Us]BB9CC]3Us]BB4?Us]BB9CD]3Us]BB4?Us]BB9HF]3Us]BB4?UsT]BB9CB]3/]B)UsT]BB4?UsT]BB9CC]3/]B)UsT]BB4?UsT BB9CD]3/]B)UsT]BB4?UsT]BB9DF]3UsT]BB4?UsT]BB9DG]3UsT]BB4?UsT]BB9DJ]3/]B)UsT]BB4?UsT]BB9HA]3/]C UsT]BB4?UsT]BB9HB]3UsT]BB4?UsT]BB9HE]3/]B)UsT]BB4?UsT]BB9HF]3/]B)UsT]BB4?UsT]BB9HJ]3/]C)UsT]BB4? UsT]BB9I B]3UsT]BB4?UtT]BB9AB]3/]B)UtT))BB4?UtT]BB9AC]3/]C)UtT]BB4	HAF	BF
LRCPRI OUI CI I	h Vr TVUVs8SVi	l h)EFH9JBE]3/]D4?(l h)EFH9JBF]3/]D4?(l h)EFH9JBG]3/]D4?(l h)EFH9JBH]3/]C>D4?(l h)EFH9JBI]3/]D4?(l h EFH9JBJ]3/]D4?(l h)EFH9JCA]3/]D4?(l h)EFH9JCC]3/]D4?(l h)EFH9JCD]3/]D4?(l h)EFH9JCE]3/]D4?(l h EFH9JCF]3/]D4?(l h)EFH9JCG]3/]D4?(l h)EFH9JCH]3/]D4?(l h)EFH9JCI]3/]D4?(l h)EFH9JDB]3/]D4?(l h EFH9JDC]3/]D4?(l h)EFI 9JGA]3/]D4?(l h)EFI 9JHA]3/]D4?(l h)EFI 9JI A]3/]D4	FBE	HH
		l h)EFH9JCJ]3/]D4?(l h)EFH9JEH]3/]C4?(l h)EFH9JFF]3/]D4?(l h)EFH9JFI]3/]C>D4?(l h)EFH9JGA]3/]C4?(l h EFH9JGC]3/]D4?(l h)EGA9JAA]3/]D4?(l h)EGA9JAB]3/]D4?(l h)EGA9JAC]3/]D4?(l h)EGA9JAD]3/]D4?(l h EGA9JAE]3/]D4?(l h)EGA9JAF]3/]D4?(l h)EGA9JAG]3/]D4?(l h)EGA9JAH]3/]D4?(l h)EGA9JAI]3/]D4?(l h EGA9JAJ]3/]D4?(l h)EGA9JBA]3/]D4?(l h)EGA9JBB]3/]D4?(l h)EGA9JBC]3/]D4?(l h)EGA9JBD]3/]D4?(l h EGA9JBE]3/]D4?(l h)EGA9JBF]3/]D4?(l h)EGA9JBG]3/]D4?(l h)EGA9JBH]3/]D4?(l h)EGA9JBI]3/]D4?(l h EGA9JBJ]3/]D4?(l h)EGA9JCA]3/]D4?(l h)EGA9JCB]3/]D4?(l h)EGA9JCC]3/]D4?(l h)EGA9JCD]3/]D4?(l h EGA9JCF]3/]D4?(l h)EGA9JCJ]3/]D4?(l h)EGA9JDB]3/]D4	FBF	HI
		l h)EFH9JDD]3/]C>D4?(l h)EFH9JDE]3/]C>D4?(l h)EFH9JDF]3/]C>D4?(l h)EFH9JDG]3/]C4?(l h)EFH9JDH]3/ C>D4?(l h)EFH9JDI]3/]C4?(l h)EFH9JDJ]3/]C4?(l h)EFH9JEA]3/]C>D4?(l h)EFH9JEB]3/]C>D4?(l h)EFH9JEC]3/ C>D4?(l h)EFH9JED]3/]C>D4?(l h)EFH9JEE]3/]C>D4?(l h)EFH9JEF]3/]C4?(l h)EFH9JEG]3/]C4?(l h)EFH9JEJ]3/ C4	FBG	HJ
LRCPRI Rml CI I	r Vi Ruet	UËZ]BC]3/]D4	GHJ	GI
	xl exl	UBCTDEA]3/]C4?)UBCTDIA?)UBCUDEA]3/]D4?)UYBCUDEA]3/]D4	I DG	EI
		UBCTECA?)UBCTEGA?)UBCUDIA]3/]D4?)UBCUECA]3/]D4?)UBCUEGA]3/]D4?)UBCUFAA]3/]D4	I DH	EJ
		UBCVDJA]3/]E4?)UBCVEDA]3/]E4	I DI	FA
		UYBCUDIA]3/]D4	I EA	FE
		UYBCVDEA?)UYBCVDIA]3/]E4?)UYBCVECA]3/]E>F4?)UYBCVEGA]3/]E4	I EB	FG
LRCPRI Tml CI I	h Vr TVUVs8SVi	l h)FEB9JFD]3/]E>F)(l h FAB)eR4?(l h)FEB9JFJ]3/]E>F)(l h FAB)eR4?(l h)FEB9JHA]3/]E)(l h FAB)eR4?(l h)FEB9JHB 3/]E>F)(l h FAB)eR4?(l h)FEB9JHC]3/]E)(l h FAB)eR4?(l h)FEB9JHD]3/]E)(l h FAB)eR4?(l h)FEB9JHE]3/]E)(l h FAB eR4?(l h)FEB9JHF]3/]E)(l h FAB)eR4?(l h)FEB9JHG]3/]E)(l h FAB)eR4?(l h)FEB9JHH]3/]E)(l h FAB)eR4?(l h)FEB9JHI 3/]E)(l h FAB)eR4?(l h)FEB9JHJ]3/]E>F)(l h FAB)eR4?(l h)FEB9JI A]3/]E)(l h FAB)eR4?(l h)FEB9JI B]3/]E)(l h FAB eR4?(l h)FEB9JJA]3/]F)(l h FAB)eR4?(l h)FEB9JJC]3/]F)(l h FAB)eR4?(l h)FEB9JJE]3/]F)(l h FAB)eR4?(l h)FEB9JJG 3/]F)(l h FAB]eR4?(l h)FEB9JJH]3(l h FAB]eR4?(l h)FEB9JJI]3/]F)(l h FAB)eR4?(l h)FEB9JJJ]3(l h FAB)eR4?(l h)FEC9JGA 3/]F4?(l h)FEC9JGB]3/]F4?(l h)FEC9JGC]3/]F)(l h FAC)eR4?(l h)FEC9JGD]3/]F)(l h FAC]eR4?(l h)FEC9JGE]3/ F4?(l h)FEC9JGF?(l h)FEC9JGG]3/]F4?(l h)FEC9JHA]3/]F4?(l h)FEC9JHB]3/]F4?(l h)FEC9JHC]3/]F4	FCE	I J
		l h)FEB9JJB]3(l h FAB)eR4?(l h)JEB9JJB]3(l h FAB)eR4	FCF	JA
LRCPRI URI CI I	sTRi ZR	U)BB]r)CD]3U)BB4?Ui)BB9AB]3Ui)BB4?Ui)BB9AB)SBA]3Ui)BB4?Ui)BB9AB)TAJ]3Ui)BB4?Ui)BB9AE)SBA]3Ui)BB4?Ui)BB9AE T]AB]3Ui)BB4?Ui)BB9AG]3Ui)BB4?Ui)BB9AH]3Ui)BB4?Ui)BB9AI]3Ui)BB4?Ui)BB9AI)SAB]3Ui)BB4?Us)BB]>)UBB]3U)BB4?Us BB9AB]3Us)BB4?Us)BB9AB)SAG]3Us)BB4?Us)BB9AC]3Us)BB4?Us)BB9BE]3Us)BB4?Us)BB9BF]3Us)BB4?Us)BB9BF)S]3Us)BB4? Us)BB9BI]3Us)BB4?Us)BB9DE]3Us)BB4?Us)BB9HB]3Us)BB4?Us)BB9HB)T]3Us)BB4?Us)BB9HC]3Us)BB4?Us)BB9HD]3Us)BB4?Us BB9HE]3Us)BB4?UsT]BB9AB]3UsT]BB4?UsT]BB9AC]3UsT]BB4?UsT]BB9AE]3UsT]BB4?UsT]BB9BC]3UsT]BB4?UsT]BB9BD]3UsT BB4?UsT]BB9BG]3UsT]BB4?UsT]BB9BH]3UsT]BB4?UsT]BB9BI]3UsT]BB4?Us/]BB9AB]3Us/]BB4	HAB	I
		Us]BB9CC]3Us]BB4?Us)BB9CD]3Us]BB4?Us)BB9HF]3Us)BB4?UsT]BB9CB]3/]B)UsT]BB4?UsT]BB9CC]3/]B)UsT]BB4?UsT BB9CD]3/]B)UsT]BB4?UsT]BB9DF]3UsT]BB4?UsT]BB9DG]3UsT]BB4?UsT]BB9DJ]3/]B)UsT]BB4?UsT]BB9HA]3/]C UsT]BB4?UsT]BB9HB]3UsT]BB4?UsT]BB9HE]3/]B)UsT]BB4?UsT]BB9HF]3/]B)UsT]BB4?UsT]BB9HJ]3/]C)UsT]BB4? UsT]BB9I B]3UsT]BB4?UtT]BB9AB]3/]B)UtT))BB4?UtT]BB9AC]3/]C)UtT]BB4	HAF	BF
LRCPRLI PI CI I	h Ri	U)CGHG)eVAB]3/]E4?)U)CGHG)eVAC]3/]D4?)U)CGHG)eVAD]3/]C4?)U)CGHG)eVAE]3/]C4?)U)CGHG)eVAF]3/]E4?)U CGHG)eVAH]3/]F4?)U)CGHG)eVBA]3/]E4?)U)CGHG)eVBC]3/]E4?)U)CGHG)eVBE]3/]F4?)U)CGHG)eVBG]3/]F4?)U CGHG)eVBI ?)U)CGHG)eVCA]3/]E4?)U)CGHG)eVCB]3/]F4?)U)CGHG)eVCC]3/]F4?)U)CGHG)eVCF]3/]G4?)U)CGHG)eVCG 3/]G4?)U)CGHG)eVCI]3/]F4?)U)CGHG)eVDB]3/]D4?)U)CGHG)eVDC]3/]E4?)U)CGHG)eVDD]3/]E4	DJH	CG
		U)CGHG)eVAG]3/]F4?)U)CGHG)eVAI]3/]F4?)U)CGHG)eVBB]3/]E4?)U)CGHG)eVBD]3/]F4?)U)CGHG)eVBF]3/]F4?)U CGHG)eVBH?)U)CGHG)eVBJ]3/]E4	DJI	CH

LRCPRLI PI CI I	h Ri	U)CGHG)el Y AB)3V)E4?(U)CGHG)el Y AC)3V)E4?(U)CGHG)el Y AD)3V)E4?(U)CGHG)el Y AE)3V)E4?(U)CGHG)el Y BA)3V D4?(U)CGHG)el Y CG)3V)F4?(U)CGHG)el Y CH)3V)F4	DJJ	CJ
		U)CGHG)el Y CI)3V)F4	DJJ	DA
LRCPRLLSI CI I	h Vr TVUVs8SVi	(h)ECB9JAF?((h)ECB9JAG?((h)ECB9JAH?((h)ECB9JAI ?((h)ECB9JAJ?((h)ECB9JBA?((h)ECC9JAF?((h)ECC9JAG?((h ECC9JAH?((h)ECC9JAI ?((h)ECC9JAJ?((h)ECC9JBA?((h)ECC9JBB?((h)ECC9JBC?((h)ECC9JBD?((h)ECC9JBE?((h)ECC9JBF7 (h)ECC9JBG?((h)ECC9JBH?((h)ECC9JBI ?((h)ECC9JBJ?((h)ECC9JCA?((h)ECC9JCB?((h)ECC9JCC?((h)ECC9JCD?((h ECD9JAF?((h)ECD9JAG?((h)ECD9JAH?((h)ECD9JAI ?((h)ECD9JAJ?((h)ECE9JAA	FAF	GI
		(h)ECB9JFB?((h)ECC9JAB?((h)ECC9JFB?((h)ECC9JFC?((h)ECC9JFD?((h)ECC9JFE?((h)ECC9JFF?((h)ECC9JFG?((h ECC9JFH?((h)ECC9JFI ?((h)ECC9JFJ?((h)ECC9JGD?((h)ECD9JFA?((h)ECE9JAB?((h)ECE9JABFBA	FAG	GJ
		(h)EEB9JFA?((h)EEB9JFB?((h)EEB9JFD?((h)EEB9JGA?((h)EEB9JGB?((h)EEB9JGC?((h)EEB9JI B?((h)EEB9JI C?((h EEB9JI D?((h)EEB9JI F?((h)EEC9JAB?((h)EEC9JEA?((h)EEC9JEB?((h)EEC9JEC?((h)EEC9JED?((h)EEC9JEE?((h)EEC9JEF7 (h)EEC9JEG?((h)EEC9JFB?((h)EEC9JFD?((h)EEC9JFE?((h)EEC9JFF?((h)EEC9JFH?((h)EEC9JFI ?((h)EEC9JFJ?((h EEC9JGA?((h)EEC9JGB?((h)EEC9JGD?((h)EEC9JGE?((h)EEC9JGF?((h)EEC9JGG?((h)EEC9JGH?((h)EEC9JGI ?((h)EEC9JHA7 (h)EEC9JHB?((h)EEC9JHC?((h)EEC9JHG?((h)EEC9JI A?((h)EEC9JI C?((h)EEC9JI D?((h)EEC9JI F?((h)EEC9JI J?((h EEC9JJB?((h)EEC9JJC?((h)EEC9JJD?((h)EEC9JJE?((h)EED9JAB?((h)EED9JEA?((h)EED9JI A?((h)EEE9JAB	FAH	HA
		(h)ECD9JAB?((h)EEA9JEI)3(h EEC)R4?((h)EEA9JEJ)3(h EEC)R4?((h)EEA9JHE)3(h EEC)eR4?((h)EEB9JFC?((h)EEC)R?((h EEE)eR?((h)EI B9JAC?((h)EI B9JAE?((h)EI C9JBC?((h)EI C9JDA?((h)EI C9JEA?((h)EI C9JEB	FAJ	HB
		(h)EEA9JHA)3V)B)(h EEC)eR4?((h)EEA9JHB)3V)B)(h EEC)eR4?((h)EEA9JHC)3V)B)(h EEC)eR4?((h)EEA9JHD)3V B)(h EEC)eR4?((h)EEA9JHF)3V)B)(h EEC)eR4?((h)EEA9JHG)3V)B)(h EEC)eR4?((h)EEA9JHI)3V)B)(h EEC)eR4?((h EEA9JHJ)3V)B)(h EEC)eR4?((h)EEA9JI A)3V)B)(h EEC)eR4?((h)EEA9JI B)3V)B)(h EEC)eR4?((h)EEA9JI C)3V)B (h EEC)eR4?((h)EEA9JI D)3V)B)(h EEC)eR4?((h)EEA9JI E)3V)B)(h EEC)eR4?((h)EEA9JI F)3V)B)(h EEC)eR4?((h EEA9JI G)3V)B)(h EEC)eR4?((h)EEA9JI H)3V)B)(h EEC)eR4?((h)EEA9JI I)3V)B)(h EEC)eR4?((h)EEA9JI J)3V)B (h EEC)eR4?((h)EEA9JJA)3V)B)(h EEC)eR4?((h)EEA9JJB)3V)B)(h EEC)eR4?((h)EEB9JI A?((h)EEB9JI G)3V)B4?((h EEB9JI H)3V)B4?((h)EEB9JI I)3V)B4?((h)EEB9JI J)3V)B4?((h)EEB9JJA)3V)B4?((h)EEB9JJB)3V)B4?((h EEB9JJC)3V)B4?((h)EEB9JJD)3V)B4?((h)EEB9JJE)3V)B4?((h)EEB9JJF)3V)B4?((h)EEB9JJG)3V)B4?((h EEB9JJH)3V)B4?((h)EEB9JJI)3V)B4?((h)EEB9JJJ)3V)B4?((h)EEC9JJF)3V)B4?((h)EEC9JJG)3V)B4?((h EEC9JJH)3V)B4?((h)EEC9JJI)3V)B4?((h)EEC9JJJ)3V)B4	FBA	HC
		(h)EEF9JCA)3V)C)(h EEB)eR4?((h)EEF9JCB)3V)C)(h EEB)eR4?((h)EEF9JCC)3V)C)(h EEB)eR4?((h)EEF9JCD)3V C)(h EEB)eR4?((h)EEF9JCE)3V)C)(h EEB)eR4?((h)EEF9JCF)3V)C)(h EEB)eR4?((h)EEF9JCG)3V)C)(h EEB)eR4?((h EEF9JCH)3V)C)(h EEB)eR4?((h)EEF9JCJ)3V)C)(h EEB)eR4?((h)EEF9JDA)3V)C)(h EEB)eR4?((h)EEF9JDB)3V)C (h EEB)eR4?((h)EEF9JDD)3V)C)(h EEB)eR4?((h)EEF9JDE)3V)C)(h EEB)eR4?((h)EEF9JDF)3V)C)(h EEB)eR4?((h EEF9JDG)3V)C)(h EEB)eR4?((h)EEF9JDH)3V)C)(h EEB)eR4?((h)EEF9JDI)3V)C)(h EEB)eR4?((h)EEF9JDJ)3V)C (h EEB)eR4?((h)EEF9JEA)3V)C)(h EEB)eR4?((h)EEF9JEB)3V)C)(h EEB)eR4?((h)EEG9JCA)3V)C)(h EEC)eR4?((h EEG9JCC)3V)C)(h EEC)eR4?((h)EEG9JCD)3(h EEC)eR4?((h)EEG9JCE)3V)C)(h EEC)eR4?((h)EEG9JCF)3V)C)(h EEC eR4?((h)EEG9JCG)3V)C)(h EEC)eR4?((h)EEG9JCH)3V)C)(h EEC)eR4?((h)EEG9JCI)3V)C)(h EEC)eR4?((h)EEG9JCJ 3V)C)(h EEC)eR4?((h)EEG9JDA)3V)C)(h EEC)eR4?((h)EEG9JDB)3V)C)(h EEC)eR4?((h)EEG9JDC)3V)C)(h EEC eR4?((h)EEG9JDD)3V)C)(h EEC)eR4?((h)EEG9JDE)3V)C)(h EEC)eR4?((h)EEG9JDF)3V)C)(h EEC)eR4?((h)EEG9JDG 3V)C)(h EEC)eR4?((h)EEG9JDI)3V)C)(h EEC)eR4?((h)EEG9JDJ)3V)C)(h EEC)eR4?((h)EEG9JEA)3V)C)(h EEC eR4?((h)EEG9JEB)3V)C)(h EEC)eR4?((h)EEG9JEC)3V)C)(h EEC)eR4?((h)EEG9JED)3V)C)(h EEC)eR4?((h)EEG9JEF 3V)C)(h EEC)eR4?((h)EEG9JEG)3V)C)(h EEC)eR4?((h)EEG9JEI)3V)C)(h EEC)eR4	FBB	HD
		(h)EEA9JEA)3(h EEC)R4?((h)EEA9JEB)3(h EEC)R4?((h)EEA9JEC)3(h EEC)R4?((h)EEA9JED)3(h EEC)R4	FBI	I C
		(h)EEA9JEF)3V)B)(h EEC)R4?((h)EEC)R)3V)B4?((h)EEC9JHH?((h)EEC9JHI	FBI	I D
		(h)EEC9JFA?((h)EEC9JFC?((h)EEC9JGC	FBJ	I E
LRCPRLLmI CI I	r Vi Ruet	UÉZ)BD)3V)E>F4	GI A	GJ
	xl exl	UBDRDGA)3V)F4?(UBDREAA)3V)F4?(UBDREEA)3V)F4?(UBDREI A)3V)F4?(UBDRFCA)3V)F4	I DJ	FB
		UBDTDI A)3V)F4?(UBDTECA)3V)F4?(UBDTEGA)3V)F4?(UBDTFAA)3V)F4?(UBDTFEA)3V)F4	I DJ	FC
LRCPRLNTI CI I	r Vi Ruet	UÉZ)BC)3V)D4	GHJ	GI
	xl exl	UBCTDEA)3V)C4?(UBCTDI A?(UBCUDEA)3V)D4?(UY BCUDEA)3V)D4	I DG	EI
		UBCTECA?(UBCTEGA?(UBCUDI A)3V)D4?(UBCUECA)3V)D4?(UBCUEGA)3V)D4?(UBCUFAA)3V)D4	I DH	EJ
		UBCVDJA)3V)E4?(UBCVEDA)3V)E4	I DI	FA
		UY BCUDI A)3V)D4	I EA	FE
		UY BCUECA)3V)D4	I EB	FF
		UY BCVDEA?(UY BCVDI A)3V)E4?(UY BCVECA)3V)E>F4?(UY BCVEGA)3V)E4	I EB	FG
LRCPRNI OI CI I	h Vr TVUVs8SVi	(h)ECB9JAF?((h)ECB9JAG?((h)ECB9JAH?((h)ECB9JAI ?((h)ECB9JAJ?((h)ECB9JBA?((h)ECC9JAF?((h)ECC9JAG?((h ECC9JAH?((h)ECC9JAI ?((h)ECC9JAJ?((h)ECC9JBA?((h)ECC9JBB?((h)ECC9JBC?((h)ECC9JBD?((h)ECC9JBE?((h)ECC9JBF7 (h)ECC9JBG?((h)ECC9JBH?((h)ECC9JBI ?((h)ECC9JBJ?((h)ECC9JCA?((h)ECC9JCB?((h)ECC9JCC?((h)ECC9JCD?((h ECD9JAF?((h)ECD9JAG?((h)ECD9JAH?((h)ECD9JAI ?((h)ECD9JAJ?((h)ECE9JAA	FAF	GI
		(h)ECB9JFB?((h)ECC9JAB?((h)ECC9JFB?((h)ECC9JFC?((h)ECC9JFD?((h)ECC9JFE?((h)ECC9JFF?((h)ECC9JFG?((h ECC9JFH?((h)ECC9JFI ?((h)ECC9JFJ?((h)ECC9JGD?((h)ECD9JFA?((h)ECE9JAB?((h)ECE9JABFBA	FAG	GJ

NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

				9
LRCPRNI OI CI I	h Vr TVUVs8SVi	l h)EEB9JFA7(l h)EEB9JFB7(l h)EEB9JFD7(l h)EEB9JGA7(l h)EEB9JGB7(l h)EEB9JGC7(l h)EEB9JI B7(l h)EEB9JI C7(l h EEB9JI D7(l h)EEB9JI F7(l h)EEC9JAB7(l h)EEC9JEA7(l h)EEC9JEB7(l h)EEC9JEC7(l h)EEC9JED7(l h)EEC9JEE7(l h)EEC9JEF7 l h)EEC9JEG7(l h)EEC9JFB7(l h)EEC9JFD7(l h)EEC9JFE7(l h)EEC9JFF7(l h)EEC9JFH7(l h)EEC9JFI 7(l h)EEC9JFJ7(l h EEC9JGA7(l h)EEC9JGB7(l h)EEC9JGD7(l h)EEC9JGE7(l h)EEC9JGF7(l h)EEC9JGG7(l h)EEC9JGH7(l h)EEC9JGI 7(l h)EEC9JHA7 l h)EEC9JHB7(l h)EEC9JHC7(l h)EEC9JHG7(l h)EEC9JI A7(l h)EEC9JI C7(l h)EEC9JI D7(l h)EEC9JI F7(l h)EEC9JI J7(l h EEC9JJB7(l h)EEC9JJC7(l h)EEC9JJD7(l h)EEC9JJE7(l h)EED9JAB7(l h)EED9JEA7(l h)EED9JI A7(l h)EEE9JAB	FAH	HA
		l h)ECD9JAB7(l h)EEA9JEI)3. h EEC)R4(l h)EEA9JEJ)3. h EEC)R4(l h)EEA9JHE)3. h EEC)eR4(l h)EEB9JFC7(l h)EEC)R7(l h EEE)eR7(l h)EI B9JAC7(l h)EI B9JAE7(l h)EI C9JBC7(l h)EI C9JDA7(l h)EI C9JEA7(l h)EI C9JEB	FAJ	HB
		l h)EEA9JHA)3V)B)l h EEC)eR4(l h)EEA9JHB)3V)B)l h EEC)eR4(l h)EEA9JHC)3V)B)l h EEC)eR4(l h)EEA9JHD)3V B)l h EEC)eR4(l h)EEA9JHF)3V)B)l h EEC)eR4(l h)EEA9JHG)3V)B)l h EEC)eR4(l h)EEA9JHI)3V)B)l h EEC)eR4(l h EEA9JHJ)3V)B)l h EEC)eR4(l h)EEA9JI A)3V)B)l h EEC)eR4(l h)EEA9JI B)3V)B)l h EEC)eR4(l h)EEA9JI C)3V)B l h EEC)eR4(l h)EEA9JI D)3V)B)l h EEC)eR4(l h)EEA9JI E)3V)B)l h EEC)eR4(l h)EEA9JI F)3V)B)l h EEC)eR4(l h EEA9JI G)3V)B)l h EEC)eR4(l h)EEA9JI H)3V)B)l h EEC)eR4(l h)EEA9JI I)3V)B)l h EEC)eR4(l h)EEA9JI J)3V)B l h EEC)eR4(l h)EEA9JJA)3V)B)l h EEC)eR4(l h)EEA9JJB)3V)B)l h EEC)eR4(l h)EEB9JI A7(l h)EEB9JI G)3V)B4(l h EEB9JI H)3V)B4(l h)EEB9JI I)3V)B4(l h)EEB9JI J)3V)B4(l h)EEB9JJA)3V)B4(l h)EEB9JJB)3V)B4(l h EEB9JJC)3V)B4(l h)EEB9JJD)3V)B4(l h)EEB9JJE)3V)B4(l h)EEB9JJF)3V)B4(l h)EEB9JJG)3V)B4(l h EEB9JJH)3V)B4(l h)EEB9JJI)3V)B4(l h)EEB9JJJ)3V)B4(l h)EEC9JJF)3V)B4(l h)EEC9JJG)3V)B4(l h EEC9JJH)3V)B4(l h)EEC9JJI)3V)B4(l h)EEC9JJJ)3V)B4	FBA	HC
		l h)EEF9JCA)3V)C)l h EEB)eR4(l h)EEF9JCB)3V)C)l h EEB)eR4(l h)EEF9JCC)3V)C)l h EEB)eR4(l h)EEF9JCD)3V C)l h EEB)eR4(l h)EEF9JCE)3V)C)l h EEB)eR4(l h)EEF9JCF)3V)C)l h EEB)eR4(l h)EEF9JCG)3V)C)l h EEB)eR4(l h EEF9JCH)3V)C)l h EEB)eR4(l h)EEF9JCJ)3V)C)l h EEB)eR4(l h)EEF9JDA)3V)C)l h EEB)eR4(l h)EEF9JDB)3V)C l h EEB)eR4(l h)EEF9JDD)3V)C)l h EEB)eR4(l h)EEF9JDE)3V)C)l h EEB)eR4(l h)EEF9JDF)3V)C)l h EEB)eR4(l h EEF9JDG)3V)C)l h EEB)eR4(l h)EEF9JDH)3V)C)l h EEB)eR4(l h)EEF9JDI)3V)C)l h EEB)eR4(l h)EEF9JDJ)3V)C l h EEB)eR4(l h)EEF9JEA)3V)C)l h EEB)eR4(l h)EEF9JEB)3V)C)l h EEB)eR4(l h)EEG9JCA)3V)C)l h EEC)eR4(l h EEG9JCC)3V)C)l h EEC)eR4(l h)EEG9JCD)3. h EEC)eR4(l h)EEG9JCE)3V)C)l h EEC)eR4(l h)EEG9JCF)3V)C)l h EEC eR4(l h)EEG9JCG)3V)C)l h EEC)eR4(l h)EEG9JCH)3V)C)l h EEC)eR4(l h)EEG9JCI)3V)C)l h EEC)eR4(l h)EEG9JCJ 3V)C)l h EEC)eR4(l h)EEG9JDA)3V)C)l h EEC)eR4(l h)EEG9JDB)3V)C)l h EEC)eR4(l h)EEG9JDC)3V)C)l h EEC eR4(l h)EEG9JDD)3V)C)l h EEC)eR4(l h)EEG9JDE)3V)C)l h EEC)eR4(l h)EEG9JDF)3V)C)l h EEC)eR4(l h)EEG9JDG 3V)C)l h EEC)eR4(l h)EEG9JDI)3V)C)l h EEC)eR4(l h)EEG9JDJ)3V)C)l h EEC)eR4(l h)EEG9JEA)3V)C)l h EEC eR4(l h)EEG9JEB)3V)C)l h EEC)eR4(l h)EEG9JEC)3V)C)l h EEC)eR4(l h)EEG9JED)3V)C)l h EEC)eR4(l h)EEG9JEF 3V)C)l h EEC)eR4(l h)EEG9JEG)3V)C)l h EEC)eR4(l h)EEG9JEI)3V)C)l h EEC)eR4	FBB	HD
		l h)EEA9JEA)3. h EEC)R4(l h)EEA9JEB)3. h EEC)R4(l h)EEA9JEC)3. h EEC)R4(l h)EEA9JED)3. h EEC)R4	FBI	I C
		l h)EEA9JEF)3V)B)l h EEC)R4(l h)EEC)R)3V)B4(l h)EEC9JHH7(l h)EEC9JHI	FBI	I D
		l h)EEC9JFA7(l h)EEC9JFC7(l h)EEC9JGC	FBJ	I E
LRCPRNnNI CI I	h Ri	U)CI GF)eW¥CGA7)U)CI GF)eW 7)U)CI GF)eW AB7)U)CI GG)cW7)U)CI GG)cW7)U)CI GG)cl Y DGA7)U)CI GG)cuY>DGA)3V)B4)U CI GG)cue7)U)CI GG)eW7)U)CI GG)eW¥CJA7)U)CI GG)eWAE7)U)CI GG)eWAH7)U)CI GG)eWAI 7)U)CI GG)eW>CJA7)U)CI GG)eW>DDA7)U CI GG)eY AB7)U)CI GG)euY7)U)CI GG)euAH7)U)CI GG)euAI 7)U)CI GG)euDDA7)U)CI GG)euY7)U)CI GG)euY AE)3V)B4)U)CI GG euY DDA7)U)CI GG)eueDDA7)U)CI GG)eËVEA7)U)CI GG)eËVEH7)U)CI GG)tl7)U)CI GG)tl Y7)U)CI GG)tl Y>CJA7)U)CI GG)tl Y>DBA7)U CI GG)tuY7)U)CI GG)tuY>CJA7)U)CI GG)tuY AB	EAA	DB
		U)CI GF)eWAC7)U)CI GF)eWAD7)U)CI GF)eWAF)3V)B4)U)CI GF)eWAG)3V)B4)U)CI GF)eWBA7)U)CI GF)eWCC)3V)B4)U)CI GF eWCD)3V)B4)U)CI GF)el Y AB)3V)B4)U)CI GF)el Y AC)3V)B4)U)CI GF)el Y AF)3V)B4)U)CI GF)euAB)3V)B4)U)CI GF euAC7)U)CI GF)euAD7)U)CI GF)euAE)3V)B4)U)CI GF)euAG)3V)B4)U)CI GF)euY AC)3V)B4)U)CI GF)euY AD)3V)B4)U CI GF)euY AF)3V)B4)U)CI GF)euY AG)3V)B4)U)CI GF)euY AI)3V)B4)U)CI GF)eËW7)U)CI GG)eWAC7)U CI GG)eWAD7)U)CI GG)eWAG7)U)CI GG)eWAJ)3V)B4)U)CI GG)eWBA)3V)B4)U)CI GG)eWBF)3V)B4)U)CI GG)eWCB)3V)B4)U CI GG)eWCC)3V)B4)U)CI GG)eWK7)U)CI GG)eWKAD)3V)B4)U)CI GG)eWKAE)3V)B4)U)CI GG)el Y 7)U)CI GG)el Y AC7)U)CI GG el Y AD7)U)CI GG)el Y AG)3V)B4)U)CI GG)el Y AH7)U)CI GG)el Y AJ)3V)B4)U)CI GG)el Y CA)3V)B4)U)CI GG)el Y CB)3V B4)U)CI GG)el Y CC)3V)B4)U)CI GG)el Y CE)3V)B4)U)CI GG)euAB7)U)CI GG)euAD)3V)B4)U)CI GG)euAE7)U)CI GG)euY AF 3V)B4)U)CI GG)eË7)U)CI GG)eËW7)U)CI GG)eËWK7)U)CI GG)eËl Y 7)U)CI GG)eËu7)U)CI GG)eËuY		
		U)CI GF)eWAJ7)U)CI GF)eWCB)3V)C4)U)CI GF)eWCE)3V)C4)U)CI GF)euY AH)3V)C4)U)CI GF)euY AJ)3V)C4)U)CI GG eWBE)3V)C4)U)CI GG)eWBG)3V)C4)U)CI GG)eWBH)3V)C4)U)CI GG)eWCA)3V)C4)U)CI GG)eWCJ)3V)C4)U)CI GG eWDA)3V)C4)U)CI GG)eWDE)3V)C4)U)CI GG)eWDF)3V)C4)U)CI GG)eWDG)3V)C4)U)CI GG)eWDH)3V)C4)U)CI GG el Y CD)3V)C4)U)CI GG)el Y CF)3V)C4)U)CI GG)el Y CG)3V)C4)U)CI GG)euY CB)3V)C4)U)CI GG)euY CC)3V)C4)U CI GG)euY CG)3V)C4	EAC	DD
		U)CI GF)el Y AH)3V)C4)U)CI GF)el Y AJ)3V)C4)U)CI GG)W¥CEA7)U)CI GG)WK7)U)CI GG)W 7)U)CI GG)cl Y>DHD7)U)CI GG eWAB7)U)CI GG)eWK AF)3V)C4)U)CI GG)el Y DB)3V)C4)U)CI GG)l Y7)U)CI GG)u7)U)CI GG)uY7)U)CI GG)uY>CEA7)U)CI GG)uh 7 U)CI HG)eWAB)3V)C4)U)CI HG)eWAF)3V)D4)U)CI HG)eWBB)3V)C4)U)CI HG)euVGAE7)U)CI HG)euVGAF7)U)CI HG)euVGAG	EAD	DE
		U)CI GG)eWAF)3V)B4	EAE	DF

LRCPRNnNI CI I	h Ri	U)CI GG)eVCD]3/]D4/]U)CI GG)eVCE]3/]D4/]U)CI GG)eVCF]3/]D4/]U)CI GG)eVCG]3/]D4/]U)CI GG)eVCH]3/]D4/]U CI GG)eVCI]3/]D4/]U)CI GG)eVKAH]3/]D4/]U)CI GG)el Y CH]3/]D4/]U)CI GG)el Y CI]3/]D4/]U)CI GG)el Y CJ]3/]D47 U)CI GG)el Y DC]3/]D4/]U)CI GG)el Y DD]3/]D4/]U)CI GG)el Y DE]3/]D4/]U)CI GG)el Y DF]3/]D4/]U)CI GG)euY CD]3/ D4/]U)CI GG)euY CE]3/]D4/]U)CI GG)euY CF]3/]D4/]U)CI GG)euY CH]3/]D4/]U)CI GG)euY CI]3/]D4/]U)CI GG)euY CJ 3/]D4/]U)CI GG)euY DA]3/]D4/]U)CI GG)euY FB]3/]D4	EAF	DG
		U)CI GG)eVDB]3/]C4/]U)CI GG)eVDC]3/]C4/]U)CI GG)eVDJ]3/]C4/]U)CI GG)eVEA]3/]C4/]U)CI GG)eVEB]3/]C4/]U CI GG)eVEC]3/]C4/]U)CI GG)eVED]3/]C4	EAG	DH
		U)CI HG)eVAC]3/]C4/]U)CI HG)el Y AB]3/]C4/]U)CI HG)euY AB]3/]C4/]U)CI HG)euY AC]3/]C4	EAH	DI
		U)CI HG)eVAD]3/]D4/]U)CI HG)eVAE]3/]D4/]U)CI HG)eVAG]3/]C4/]U)CI HG)eVAH]3/]C4/]U)CI HG)eVBA]3/]C4/]U CI HG)eVBH7/]U)CI HG)el Y AC]3/]D4/]U)CI HG)el Y AD]3/]D4	EAH	DJ
LRCPRNnOI CI I	h Ri	U)CI GF)eVACGA7/]U)CI GF)eVV 7/]U)CI GF)eVV AB7/]U)CI GG)cW7/]U)CI GG)cW 7/]U)CI GG)cl Y DGA7/]U)CI GG)cuY>DGA]3/]B4/]U CI GG)cue7/]U)CI GG)eV7/]U)CI GG)eV4CJA7/]U)CI GG)eVAE7/]U)CI GG)eVAH7/]U)CI GG)eVAI 7/]U)CI GG)eW>CJA7/]U)CI GG)eW>DDA7/]U CI GG)eY AB7/]U)CI GG)eu 7/]U)CI GG)euAH7/]U)CI GG)euAI 7/]U)CI GG)euDDA7/]U)CI GG)euY 7/]U)CI GG)euY AE]3/]B4/]U)CI GG euY DDA7/]U)CI GG)eueDDA7/]U)CI GG)eËVEA7/]U)CI GG)eËVEH7/]U)CI GG)tl 7/]U)CI GG)tl Y 7/]U)CI GG)tl Y>CJA7/]U)CI GG)tl Y>DBA7/]U CI GG)tuY 7/]U)CI GG)tuY>CJA7/]U)CI GG)tuY AB	EAA	DB
		U)CI GF)eVAC7/]U)CI GF)eVAD7/]U)CI GF)eVAF]3/]B4/]U)CI GF)eVAG]3/]B4/]U)CI GF)eVBA7/]U)CI GF)eVCC]3/]B4/]U)CI GF eVCD]3/]B4/]U)CI GF)el Y AB]3/]B4/]U)CI GF)el Y AC]3/]B4/]U)CI GF)el Y AF]3/]B4/]U)CI GF)euAB]3/]B4/]U)CI GF euAC7/]U)CI GF)euAD7/]U)CI GF)euAE]3/]B4/]U)CI GF)euAG]3/]B4/]U)CI GF)euY AC]3/]B4/]U)CI GF)euY AD]3/]B4/]U CI GF)euY AF]3/]B4/]U)CI GF)euY AG]3/]B4/]U)CI GF)euY AI]3/]B4/]U)CI GF)eËV7/]U)CI GF)eËW 7/]U)CI GG)eVAC7/]U CI GG)eVAD7/]U)CI GG)eVAG7/]U)CI GG)eVAJ]3/]B4/]U)CI GG)eVBA]3/]B4/]U)CI GG)eVBF]3/]B4/]U)CI GG)eVCB]3/]B4/]U CI GG)eVCC]3/]B4/]U)CI GG)eVK7/]U)CI GG)eVKAD]3/]B4/]U)CI GG)eVKAE]3/]B4/]U)CI GG)el Y 7/]U)CI GG)el Y AC7/]U)CI GG el Y AD7/]U)CI GG)el Y AG]3/]B4/]U)CI GG)el Y AH7/]U)CI GG)el Y AJ]3/]B4/]U)CI GG)el Y CA]3/]B4/]U)CI GG)el Y CB]3/ B4/]U)CI GG)el Y CC]3/]B4/]U)CI GG)el Y CE]3/]B4/]U)CI GG)euAB7/]U)CI GG)euAD]3/]B4/]U)CI GG)euAE7/]U)CI GG)euY AF 3/]B4/]U)CI GG)eË7/]U)CI GG)eËV7/]U)CI GG)eËVK7/]U)CI GG)eËL Y 7/]U)CI GG)eËu 7/]U)CI GG)eËuY	EAB	DC
		U)CI GF)eVAJ7/]U)CI GF)eVCB]3/]C4/]U)CI GF)eVCE]3/]C4/]U)CI GF)euY AH]3/]C4/]U)CI GF)euY AJ]3/]C4/]U)CI GG eVBE]3/]C4/]U)CI GG)eVBG]3/]C4/]U)CI GG)eVBH]3/]C4/]U)CI GG)eVCA]3/]C4/]U)CI GG)eVCJ]3/]C4/]U)CI GG eVDA]3/]C4/]U)CI GG)eVDE]3/]C4/]U)CI GG)eVDF]3/]C4/]U)CI GG)eVDG]3/]C4/]U)CI GG)eVDH]3/]C4/]U)CI GG el Y CD]3/]C4/]U)CI GG)el Y CF]3/]C4/]U)CI GG)el Y CG]3/]C4/]U)CI GG)euY CB]3/]C4/]U)CI GG)euY CC]3/]C4/]U CI GG)euY CG]3/]C4	EAC	DD
		U)CI GF)el Y AH]3/]C4/]U)CI GF)el Y AJ]3/]C4/]U)CI GG)VACEA7/]U)CI GG)VKX7/]U)CI GG)W 7/]U)CI GG)cl Y>DHD7/]U)CI GG eVAB7/]U)CI GG)eVKAF]3/]C4/]U)CI GG)el Y DB]3/]C4/]U)CI GG)l Y 7/]U)CI GG)u7/]U)CI GG)uY 7/]U)CI GG)uY>CEA7/]U)CI GG)uh 7 U)CI HG)eVAB]3/]C4/]U)CI HG)eVAF]3/]D4/]U)CI HG)eVBB]3/]C4/]U)CI HG)euVGAE7/]U)CI HG)euVGAF7/]U)CI HG)euVGAG	EAD	DE
		U)CI GG)eVAF]3/]B4	EAE	DF
		U)CI GG)eVCD]3/]D4/]U)CI GG)eVCE]3/]D4/]U)CI GG)eVCF]3/]D4/]U)CI GG)eVCG]3/]D4/]U)CI GG)eVCH]3/]D4/]U CI GG)eVCI]3/]D4/]U)CI GG)eVKAH]3/]D4/]U)CI GG)el Y CH]3/]D4/]U)CI GG)el Y CI]3/]D4/]U)CI GG)el Y CJ]3/]D47 U)CI GG)el Y DC]3/]D4/]U)CI GG)el Y DD]3/]D4/]U)CI GG)el Y DE]3/]D4/]U)CI GG)el Y DF]3/]D4/]U)CI GG)euY CD]3/ D4/]U)CI GG)euY CE]3/]D4/]U)CI GG)euY CF]3/]D4/]U)CI GG)euY CH]3/]D4/]U)CI GG)euY CI]3/]D4/]U)CI GG)euY CJ 3/]D4/]U)CI GG)euY DA]3/]D4/]U)CI GG)euY FB]3/]D4	EAF	DG
		U)CI GG)eVDB]3/]C4/]U)CI GG)eVDC]3/]C4/]U)CI GG)eVDJ]3/]C4/]U)CI GG)eVEA]3/]C4/]U)CI GG)eVEB]3/]C4/]U CI GG)eVEC]3/]C4/]U)CI GG)eVED]3/]C4	EAG	DH
		U)CI HG)eVAC]3/]C4/]U)CI HG)el Y AB]3/]C4/]U)CI HG)euY AB]3/]C4/]U)CI HG)euY AC]3/]C4	EAH	DI
		U)CI HG)eVAD]3/]D4/]U)CI HG)eVAE]3/]D4/]U)CI HG)eVAG]3/]C4/]U)CI HG)eVAH]3/]C4/]U)CI HG)eVBA]3/]C4/]U CI HG)eVBH7/]U)CI HG)el Y AC]3/]D4/]U)CI HG)el Y AD]3/]D4	EAH	DJ
LRCPRS0OI CI I	h Vr TVUVs8SVi	l h)EEA9JAH]3/]B]l h EEC4/]l h)EEA9JAI]3/]B]l h EEC4/]l h)EEA9JBA]3/]B]l h EEC4/]l h)EEA9JBB]3/]B l h EEC4/]l h)EEB7/]l h)EEB]3/]B4/]l h)EEB9JCC]3/]B4/]l h)EEB9JDD]3/]B4/]l h)EEC7/]l h)EEC]3/]B4/]l h EEC9JDB7/]l h)EED9JAA	FBJ	I F
		l h)EEA9JAJ]3. h EEC4/]l h)EEB9JAF7/]l h)EEB9JAG7/]l h)EEB9JAH7/]l h)EEB9JAI 7/]l h)EEB9JAJ7/]l h)EEB9JBB7/]l h)EEB9JBC7 l h)EEB9JBD7/]l h)EEB9JBE7/]l h)EEB9JBF7/]l h)EEB9JBG7/]l h)EEB9JBH7/]l h)EEB9JBI 7/]l h)EEB9JBJ7/]l h)EEB9JCA7/]l h EEB9JCD7/]l h)EEB9JCE7/]l h)EEB9JCF7/]l h)EEB9JCG7/]l h)EEB9JCH7/]l h)EEB9JDC7/]l h)EEC9JAF7/]l h)EEC9JAG7/]l h)EEC9JAH7 l h)EEC9JAI 7/]l h)EEC9JAJ7/]l h)EEC9JBA7/]l h)EEC9JBB7/]l h)EEC9JBE7/]l h)EEC9JBF7/]l h)EEC9JBG7/]l h)EEC9JBH7/]l h EEC9JBI 7/]l h)EEC9JBJ7/]l h)EEC9JCA7/]l h)EEC9JCB7/]l h)EEC9JCC7/]l h)EEC9JCD7/]l h)EEC9JCE7/]l h)EEC9JCF7/]l h)EEC9JCG7 l h)EEC9JCH7/]l h)EEC9JCI 7/]l h)EEC9JCJ7/]l h)EEC9JDA7/]l h)EEC9JDC7/]l h)EEC9JDD7/]l h)EEC9JDE7/]l h)EEC9JDF7/]l h EEC9JDJ7/]l h)EED9JAF7/]l h)EEE	FCA	I G

NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

9

LRCPRSmUI CI I	h Vr TVUVs8SVi	h)EHG9JCB}3n)EEH}X47}h)EHG9JCF}3n)EEH}YX47}h)EHG9JCG}3n)EEH}YX47}h)EHG9JCH}3n)EEH}YX47}h)EHG9JDA}3V)C h EEH} eRX47}(l h)ECH}R7}(l h)ECH}eR7}(l h)ECH9JAF7}(l h)ECH9JBA7}(l h)ECH9JBB7}(l h)ECH9JFA7}(l h)ECH9JFB7}(l h)ECH9JFC7 l h)ECJ9JFB7}(l h)ECJ9JFC7}(l h)ECJ9JFD7}(l h)ECJ9JFF7}(l h)EEH7}(l h)EEH}R~eR7}(l h)EEH}eR7}(l h)EEH9JAA7}(l h)EEH9JAF7 l h)EEH9JAG7}(l h)EEH9JAH7}(l h)EEH9JAI 7}(l h)EEH9JBA7}(l h)EEH9JBB7}(l h)EEH9JBC7}(l h)EEH9JBD}3V)B47}(l h)EEH9JBE 3V)B47}(l h)EEH9JBF7}(l h)EEH9JBG7}(l h)EEH9JEH}3V)B47}(l h)EEH9JEI }3V)C47}(l h)EEH9JEJ}3V)C47}(l h)EEH9JFA7 l h)EEH9JFB7}(l h)EEH9JFC}3V)B47}(l h)EEH9JFD}3V)B47}(l h)EEH9JGA}3V)B47}(l h)EHF9JFA}3. h EEJ}R47}(l h)EHF9JFB 3. h EEJ}R47}(l h)EHF9JFC}3. h EEJ}R47}(l h)EHF9JFD}3. h EEJ}R47}(l h)EHF9JFE}3. h EEJ}R47}(l h)EHF9JHE}3. h EEJ}eR47}(l h EHF9JHG}3. h EEJ}eR47}(l h)EHF9JHH}3. h EEJ}eR47}(l h)EHF9JHI }3. h EEJ}eR47}(l h)EHF9JHJ}3. h EEJ}eR47}(l h)EHF9JI C 3. h EEJ}eR47}(l h)EHF9JI E}3. h EEJ}eR47}(l h)EHF9JI F}3. h EEJ}eR47}(l h)EHF9JI G}3. h EEJ}eR47}(l h)EHF9JI J}3. h EEJ}eR47 l h)EHF9JJB}3. h EEJ}eR47}(l h)EHF9JJE}3. h EEJ}eR47}(l h)EHF9JJH}3. h EEJ}eR47}(l h)EHF9JJI }3. h EEJ}eR47}(l h)EHG9JBG 3. h EEH}R47}(l h)EHG9JBH}3. h EEH}eR47}(l h)EHG9JFA}3. h EEH}R47}(l h)EHG9JHB}3V)C}(l h EEH}eR47}(l h)EHG9JHC}3V)C l h EEH}eR47}(l h)EHG9JHD}3V)C}(l h EEH}eR47}(l h)EHG9JHH}3V)C}(l h EEH}eR47}(l h)EHG9JHI }3V)C}(l h EEH}eR47}(l h EHG9JHJ}3V)C}(l h EEH}eR47}(l h)EHG9JI A}3V)C}(l h EEH}eR47}(l h)EHG9JI B}3. h EEH}eR47}(l h)EHG9JI C}3. h EEH}eR47}(l h EHG9JI D}3V)C}(l h EEH}eR47}(l h)EHG9JI F}3V)B}(l h EEH}eR47}(l h)EHG9JI I }3. h EEH}eR47}(l h)EHG9JJB}3. h EEH}eR47}(l h EHG9JJC}3. h EEH}eR47}(l h)EI F9JI A7}(l h)EI J9JGA}3V)B47}(l h)EI J9JGB}3V)B4	FAC	GF
		l h)EEH9JFE}3V)B47}(l h)EEH9JFF}3V)B47}(l h)EEH9JFG}3V)B47}(l h)EEH9JFH}3V)B47}(l h)EEH9JFI }3V)B47}(l h EEH9JFJ}3V)B47}(l h)EEH9JI A}3V)B47}(l h)EEH9JI B}3V)B47}(l h)EEH9JI C}3V)B47}(l h)EEH9JI D}3V)B47}(l h EEH9JI E}3V)B47}(l h)EEH9JI F}3V)B47}(l h)EEH9JI G}3V)B47}(l h)EEH9JI H}3V)B47}(l h)EEH9JJF}3V)B4	FBC	HE
		l h)EEH9JHA}3V)C47}(l h)EEH9JHB}3V)C47}(l h)EEH9JHC}3V)C47}(l h)EEH9JHD}3V)C47}(l h)EEH9JHE}3V)C47}(l h EEH9JHF}3V)B47}(l h)EEH9JHG}3V)C47}(l h)EEH9JHH}3V)C47}(l h)EEH9JHI 7}(l h)EEH9JHJ}3V)C47}(l h)EEH9JI I }3V C47}(l h)EEH9JJA}3V)C47}(l h)EEH9JJB}3V)C47}(l h)EEH9JJC}3V)C47}(l h)EEH9JJD}3V)C47}(l h)EEH9JJE}3V)C47}(l h EEH9JJG}3V)C47}(l h)EEH9JJI }3V)C47}(l h)EEH9JJJ}3V)C4	FBD	HF
LRCPRULLI CI I	h Vr TVUVs8SVi	l h)EAB9JAF7}(l h)EAB9JAG7}(l h)EAB9JAH7}(l h)EAB9JAI 7}(l h)EAB9JAJ7}(l h)EAB9JBC7}(l h)EAB9JBD7}(l h)EAB9JBE7}(l h EAB9JBF7}(l h)EAB9JBG7}(l h)EAB9JBH7}(l h)EAB9JBI 7}(l h)EAB9JBJ7}(l h)EAB9JCB7}(l h)EAB9JCC7}(l h)EAB9JCD7}(l h)EAB9JCF7 l h)EAB9JCG7}(l h)EAB9JCH7}(l h)EAB9JCI 7}(l h)EAC9JAF7}(l h)EAC9JAG7}(l h)EAC9JAH7}(l h)EAC9JBA7}(l h)EAC9JBC7}(l h EAC9JBD7}(l h)EAC9JBE7}(l h)EAC9JBG7}(l h)EAC9JBH7}(l h)EAC9JBJ7}(l h)EAC9JCB7}(l h)EAC9JCD7}(l h)EAC9JCE7}(l h)EAC9JCF7 l h)EAC9JCG7}(l h)EAC9JCH7}(l h)EAC9JCI 7}(l h)EAD9JBF7}(l h)EAD9JBG7}(l h)EAD9JBH7}(l h)EAD9JBI 7}(l h)EAD9JBJ7}(l h EAD9JDA7}(l h)EAD9JDB7}(l h)EAD9JDC7}(l h)EAD9JDE7}(l h)EAE	EJI	GA
		l h)EAB9JHA7}(l h)EAB9JHC7}(l h)EAB9JHD7}(l h)EAB9JI E7}(l h)EAB9JI F7}(l h)EAB9JI G7}(l h)EAB9JI H7}(l h)EAB9JI J7}(l h EAB9JJA7}(l h)EAB9JJB7}(l h)EAB9JJC7}(l h)EAB9JJD7}(l h)EAB9JJE7}(l h)EAC9JI E}3V)B4	EJJ	GB
		l h)EAB9JHE}3V)B47}(l h)EAB9JHF}3V)B47}(l h)EAB9JHH}3V)B47}(l h)EAB9JHI }3V)B47}(l h)EAB9JHJ}3V)B47}(l h EAB9JI A}3V)B47}(l h)EAB9JI B}3V)B47}(l h)EAB9JI C}3V)B47}(l h)EAC9JHA}3V)B47}(l h)EAC9JHB}3V)B47}(l h EAC9JHC}3V)B47}(l h)EAC9JHD}3V)B47}(l h)EAC9JHE}3V)B47}(l h)EAC9JHF}3V)B47}(l h)EAC9JHH}3V)B47}(l h EAC9JHI }3V)B47}(l h)EAC9JI C}3V)B47}(l h)EAC9JI D}3V)B47}(l h)EAC9JI F}3V)B47}(l h)EAC9JI G}3V)B47}(l h EAC9JI H}3V)B47}(l h)EAC9JI J}3V)B47}(l h)EAC9JJA}3V)B47}(l h)EAC9JJG}3V)B4	FAA	GC
		l h)EAB9JI D7}(l h)EAC9JJF7}(l h)EAD9JBA7}(l h)EAD9JDD7}(l h)EAD9JDF7}(l h)EAE}R	FAB	GD
LRCPRULUI CI I	xl exl	t Rh UBCAR7}t Rh UBCAS7}t Rh UBCB7}t UBCAR7}t UBCAT7}t UBCAU7}t UBCAV7}t UBCAW7}t UBCAWR7}t UBCAWS7}t UBCAWT7 t UBCAWq7}t UBCAX7}t UBCAXR7}t UBCAXX7}t UBCBW7}t UBCBWU7}t UBCBWc7}t UBCBX7}t UBCBXU7}t UBCCVU7}t UBCCVRq7 t UBCCVSq7}t UBCCVTq7}t UBCCVW }3V)B47}t UBCCVe7}t UBCCcSV7}t ZJBCAV7}t h UBCAR	I DC	EA
		t UBCBWY	I DD	EB
		t UBCC7}t UBCCW7}t UBCCWR7}t UBCCWc7}t UBCCWY 7}t UBCCWe7}t UBCCc V	I DD	EC
LRCPRULmI CI I	sTRi ZR	U)BB}r)CD}3U)BB47}Ui)BB9AB}3Ui)BB47}Ui)BB9AB}SBA}3Ui)BB47}Ui)BB9AB}T)AJ}3Ui)BB47}Ui)BB9AE}SBA}3Ui)BB47}Ui)BB9AE T)AB}3Ui)BB47}Ui)BB9AG}3Ui)BB47}Ui)BB9AH}3Ui)BB47}Ui)BB9AI }3Ui)BB47}Ui)BB9AI }SAB}3Ui)BB47}Us}BB}>}UBB}3U)BB47}Us BB9AB}3Us}BB47}Us}BB9AB}S}AG}3Us}BB47}Us}BB9AC}3Us}BB47}Us}BB9BE}3Us}BB47}Us}BB9BF}3Us}BB47}Us}BB9BF}S}3Us}BB47 Us}BB9BI }3Us}BB47}Us}BB9DE}3Us}BB47}Us}BB9HB}3Us}BB47}Us}BB9HB}T}3Us}BB47}Us}BB9HC}3Us}BB47}Us}BB9HD}3Us}BB47}Us BB9HE}3Us}BB47}UsT}BB9AB}3UsT}BB47}UsT}BB9AC}3UsT}BB47}UsT}BB9AE}3UsT}BB47}UsT}BB9BC}3UsT}BB47}UsT}BB9BD}3UsT BB47}UsT}BB9BG}3UsT}BB47}UsT}BB9BH}3UsT}BB47}UsT}BB9BI }3UsT}BB47}Us7}BB9AB}3Us7}BB4	HAB	I
		Us}BB}RXr >7i U)BJHI O	HAF	BE
		UsT}BB9AI }3UsT}BB47}UsT}BB9BA}3UsT}BB47}UsT}BB9HA}i }3V)C47}UsT}BB9HA}s}3V)C4	HAG	BG

LRCPRURUI CI	h Vr TVUVs8SVi	l h)FCB9JEA]3/)C]l h FAB]eR4(l h)FCB9JFA]3/)C]l h FAB]eR4(l h)FCB9JFB]3/)C]l h FAB]eR4(l h)FCC9JEA]3/ C]l h FAC]eR4(l h)FCC9JEB]3/)C]l h FAC]eR4(l h)FCC9JEC]3/)C]l h FAC]eR4(l h)FCC9JED]3/)C]l h FAC]eR4(l h FCC9JFA]3/)C]l h FAC]eR4(l h)FEB9JCA]3/)C]l h FAB]eR4(l h)FEB9JCB]3/)C]l h FAB]eR4(l h)FEB9JCC]3/)C l h FAB]eR4(l h)FEB9JCD]3/)C]l h FAB]eR4(l h)FEB9JCE]3/)C]l h FAB]eR4(l h)FEB9JCF]3/)C]l h FAB]eR4(l h FEB9JCG]3/)C]l h FAB]eR4(l h)FEB9JCH]3/)C]l h FAB]eR4(l h)FEB9JCI]3/)C]l h FAB]eR4(l h)FEB9JEA]3/)C>D l h FAB]eR4(l h)FEB9JEB]3/)C>D]l h FAB]eR4(l h)FEB9JFB]3/)C>D]l h FAB]eR4(l h)FEB9JFC]3/)C>D]l h FAB]eR4 l h)FEB9JGA]3/)C]l h FAB]eR4(l h)FEC9JCA]3: h FAC]eR4(l h)FEC9JCB]3: h FAC]eR4(l h)FEC9JCC]3: h FAC]eR4(l h FEC9JCD]3: h FAC]eR4(l h)FEC9JCE]3: h FAC]eR4(l h)FEC9JCF]3/)C]l h FAC]eR4(l h)FEC9JCG]3: h FAC]eR4(l h FEC9JEH]3: h FAC]eR4(l h)FEC9JFI]3/)D]l h FAC]eR4(l h)JEB9JBA]3/)C]l h FAB]eR4(l h)JEB9JCA]3/)C]l h FAB eR4(l h)JEB9JCB]3/)C]l h FAB]eR4(l h)JEB9JCJ]3/)C]l h FAB]eR4(l h)JEB9JDA]3/)C]l h FAB]eR4(l h)JEB9JEA 3/)C]l h FAB]eR4(l h)JEB9JGA]3/)C]l h FAB]eR4(l h)JEB9JHA]3/)C]l h FAB]eR4(l h)JEB9JI A]3/)C]l h FAB eR4(l h)JEB9JI B]3/)C]l h FAB]eR4(l h)JEB9JJA]3/)C]l h FAB]eR4(l h)JEC9JAA]3/)C]l h FAC]eR4(l h)JEC9JBA 3/)C]l h FAC]eR4(l h)JEC9JBB]3/)C]l h FAC]eR4(l h)JEC9JBC]3/)C]l h FAC]eR4(l h)JEC9JCF]3/)C]l h FAC eR4(l h)JEC9JDA]3/)C]l h FAC]eR4(l h)JEC9JGA]3/)C]l h FAC]eR4(l h)JEC9JGH]3/)C]l h FAC]eR4(l h)JEC9JHA 3/)C]l h FAC]eR4(l h)JEC9JI A]3/)C]l h FAC]eR4(l h)JEC9JJA]3/)C]l h FAC]eR4	FCB	I H
		l h)FEB9JEC]3/)D]l h FAB]eR4(l h)FEB9JED]3/)D]l h FAB]eR4(l h)FEB9JEE]3/)D]l h FAB]eR4(l h)FEB9JEF]3/ D]l h FAB]eR4(l h)FEB9JEG]3/)D]l h FAB]eR4(l h)FEB9JEH]3/)D]l h FAB]eR4(l h)FEB9JEI]3/)D]l h FAB]eR4(l h FEB9JEJ]3/)D]l h FAB]eR4(l h)FEB9JFA]3/)D]l h FAB]eR4(l h)FEB9JJF]3: h FAB]eR4(l h)FEC9JEA]3/)D]l h FAC eR4(l h)FEC9JEB]3/)D]l h FAC]eR4(l h)FEC9JEC]3/)D]l h FAC]eR4(l h)FEC9JED]3/)D]l h FAC]eR4(l h)FEC9JEE 3/)D]l h FAC]eR4(l h)FEC9JEF]3/)D]l h FAC]eR4(l h)FEC9JEI]3/)D]l h FAC]eR4(l h)FEC9JFG]3/)D]l h FAC eR4(l h)FEC9JFH]3/)D]l h FAC)eR4	FCD	I I
		l h)FCC]eR]3/)C4	FCG	JB
LRCPRmI PI CI	xl exl	UBARDCA7]UBARDGA7]UBASDCA]3/)C47]UBASDGA]3/)C47]UY BAR]3/)C47]UY BARCEF]3/)C47]UY BARCI F]3/)C47 UY BARDGA]3/)C47]t UBACVRq7]t UBACVTq7]t UBACVXq7]t UBACVe]3/)B47]t UBACVh 7]t UBACVq7]t UBACV67 t UBACV\7]t Y UBACc U	I CE	CI
		t UBACV9]t UBACVU]3/)B47]t UBACVUq7]t UBACVW9]t UBACVY	I CI	DD
		t UBACV6q	I CJ	DE
		t UBADUBA]3/)C4	I CJ	DF
		t UBADV]3/)B47]t UBADVR]3/)B47]t UBADVs]3/)B47]t UBADc SV]3/)B47]t UBADc V]3/)B47]t Y UBADc S7]t Y UBADc U	I CJ	DG
LRCPUI NOI CI	xl exl	UJRCGA]3/)D47]UJRDAA]3/)D47]UJRDEA]3/)D47]UJRDI A]3/)D4	I CC	CF
LRCPUI PPI CI	r Vi Ruet	UËZ]BB]3/)D>E4	GHH	GE
	xl exl	UBBRE DA]3/)D47]UBBSE DA]3/)E>F47]UBBT DDA]3/)F47]UBBT DHA]3/)F47]UBBT EBA]3/)F4	I DB	DJ
LRCRTI I OI CI	sTRi ZR	UT)BC9BF3UT)BC47]UT)BC9BI]3/)F]UT)BC47]UT)BC9CC]3/)F]UT)BC47]UT)BC9CD]3/)E]UT)BC47]UT)BC9CE]3/)E]UT BC47]UT)BC9CG]3/)E]UT)BC47]UT)BG9AJ]3/)F]UT)BG47]Ut)BC9AG]3/)E]Ut)BC47]Ut)BC9BA]3/)E]Ut)BC4	HAE	BD
LRCRTI I mI CI	sTRi ZR	UT)BD9AF]3/)F]UT)BD47]UT)BD9AG]3/)F]UT)BD47]UT)BD9AH]3/)F]UT)BD47]UT)BD9BA]3/)F]UT)BD4	HAJ	CD
LRCSLI I SI CI	h Vr TVUVs8SVi	l h)EHB9JAA]3/)G47]l h)EHB9JAC]3/)G47]l h)EHB9JAG]3/)G47]l h)EHB9JAJ]3/)G47]l h)EHB9JBF]3/)G47]l h EHB9JBJ]3/)G47]l h)EHB9JCC]3/)G47]l h)EHB9JCG]3/)G47]l h)EHB9JDH]3/)G47]l h)EHB9JEE]3/)G47]l h EHB9JEG]3/)G4	FCG	JC
LRCSOPmLI CI	TZrl i	BFJS7]BHBT7]SGV7]UCV7]ËuFBT)3SBV47]ËuFCT7]ËuFTo)3SR >SR 47]ËuFa}3BI AR>SGU47]ËuFa>aC>aR7]ËuFaR)3SGU47]ËuFh 3SU >SER47]ËuFh)3SU 47]ËuHaS)3eWË47]ËuHao)3eWy >eW 47]ËuHaoE)3eW 47]ËuJCT)3UCR47]ËuJCT)3JCT47]ËuJCT)3UCW47 ËuJaB)3UW47]ËuJaC)3UGR47]ËuJaE)3UGT>UVy 47]ËuJaE)3UWy 47]ËuJaR)3UGV47]ËuJaR)3Uc 47]ËuJh)3UU 47]ËuJs}3BFJR4	BAF	DA
		ËuF)3BHBR47]ËuF)3SBRR47]ËuFa}3BI A 47]ËuFao)3SW 47]ËuFs}3BHBS47]ËuFs}3BHBU4	BAG	DB
	WRt	eVy)3ËuH]ao43/)C4	BI B	EE
	oVuXVl t	ËuFBT)3SBR47]ËuFao)3SW 47]ËuFs}3BHB4	GCB	DB
		ËuFBT)3SBU47]ËuFBT)3SBV47]ËuFCT>c)3SCR47]ËuFTo)3SR 47]ËuFa}3BI A47]ËuFa}3BI AR47]ËuFa}3SGS47]ËuFh)3SU 47 ËuFh C)3SU 47]ËuFh D)3SU 47]ËuHaS)3eWË47]ËuHao)3eVy 47]ËuHao)3eW 47]ËuHaoE)3eW 47]ËuJCT7]ËuJCT3]UCR47]ËuJCT 3UCT47]ËuJaB)3UW47]ËuJaC)3UGR47]ËuJaE)3UGT>UVy 47]ËuJaE)3UWy 47]ËuJaR)3UGS47]ËuJaR)3Uc 47]ËuJh)3UU 47]ËuJs 3UCS4	GCB	DC
LRCSOSSI CI	TZrl i	cBS7]cBX7]cR 7]tuD]3c DR47]tuDR]3c BY 47]tuDR]3c GU47]tuDR]3c GV47]tuDR]3c GW47]tuDR]3c W\4]3/ F47]tuDR]3c W\47]3/ F47]tuDR]3c Wy 47]tuDR]3c WË47]tuDTo]3c R 47]tuDWC]3c BW47]tuDWC]3c CS47]tuDWaC]3c CU47]tuDWaC]3c W47]tuDWaC>)3c W)47 tuDWh)3c CR47]tuDWh)3c U 47]tuDh)3c UË47]tuDh)3c U 47]tuDh >)3c U 4	JG	BA
		tuDao)3c Wy 47]tuDao)3c WË47]tuDao8eE]3c W\4	JH	BB
		Ë I)3BFAS4	JH	BC
	oVuXVl t	tuD]3c FR47]tuDC7]tuDR]3c BU47]tuDR]3c GU47]tuDR]3c GV47]tuDR]3c GW47]tuDR]3c W\47]tuDR]3c W\47]tuDR]3c Wy 47]tuDTo 3c R 47]tuDWaC>)3c W)47]tuDh)3c U 47]tuDh)3c U 47]tuDh T]3c UË47]tuDs}3c CS4	GBB	BA
		tuDao)3c Wy 47]tuDao)3c WË4	GBC	BB
		tuDao8eE	GBD	BC
		Ë I)3BFAS4	GBD	BD
	tReSl t	Ë I	HHC	C
LRCSTI I RI CI	h Ri	U)CI HG]eVBC]3/)D47]U)CI HG]eVBD]3/)D47]U)CI HG]eVCF]3/)C47]U)CI HG]el Y CA]3/)D47]U)CI HG]el Y CB]3/)D4	EAI	EA
LRCSTI I TI CI	sTRi ZR	UsT)BE9BD]3/)C]UsT)BE47]UsT)BE9BF]3/)D]Us)BE4	HAJ	CC
LRCSTONI I CI	xl exl	t UBAAR7]t UBAARY T7]t UBAARr T7]t Y UBAAS7]t Y UBAAU7]t Y UBABS7]t h UBAAR	I CE	CJ
		t UBAAS7]t UBAASX	I CF	DA

NEW PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Lista de nuevas referencias

LRCSTONI I CI I	xl exl	t UBAATY T7/t UBAAW9/t UBAAX7/t UBAAXR7/t UBAAXX7/t UBABW9/t UBABWR7/t UBABWT7/t UBABWU7/t UBABX7/t UBABXR7 t UBABXS7/t UBABXV	I CG	DB
		t UBAAXS7/t UBAB37/t Y UBAB37/t Y UBABcW9/t ZJBAA	I CH	DC
		t Y UBAAUS7/t Y UBAAUT7/t Y UBAAUU7/t Y UBAAV7/t Y UBAAVR7/t Y UBAAVS7/t Y UBAAVT7/t Y UBAAVU7/t Y UBAAVV7/t Y UBAAVc7 t Y UBABX7/t Y UBABXS7/t Y UBABXT7/t Y UBABXU7/t Y UBABcS7/t Y UBABcT7/t Y UBABcV	I DA	DH
LRCSTSPNI CI I	ReWR)r l h Vl	xh)AH)S7/xh)AI)S7/xh)DB)S7/xh)DC)S7/xh)EY t)C9E7/xh)I B)R7/xh)I C)R7/xh)I E)R7/xh)JG)R	DB	DA
	TY r seVr	h AA)3Y r)ECF)Te47/xh)ECFY r)3h FB47/xh)ECFY s)3h FC4	I I	F
	Wl r U	sTS7/sTT	CCG	FD
	aVVo	xh)ECFY r)3h FB47/xh)ECFY s)3h FC4	DBF	F
	eRi U)r l xVr	BB)R)3xh EJCY t4	DFC	CC
	l oVe	CF)t Us)3xh EBS4	FJD	FG
	r l xVr	EJC)E)sY 7r X7/Y r)EJC)Y Z7/Y r)EJC)Y t7/xh 8Y r)EJC9E	GJA	BI
	xRu ËY Ree	CFt Us)3xh EBS4	I AE	FG
	xh	Y r EJCY t Z7/xh)DJC)Y t7/xh)EJC)Y r 7/xh)EJC)Y s7/xh)EJC)Y t	I AH	C

UUCPNnrSI I CL I	r Vi Ruet	h RTc)V9tVTY)R>EG]3V)C4?h RTc)V9tVTY)S>EG]3V)C4?h RTc)V9tVTY)T>EG]3V)C4	GHI	GG
UnCL.NONI I CL I	r Vi Ruet	UËZ]BC]3V)D4	GHJ	GI
	xl exl	UBCTDEA)3V)C4?UBCTDIA?UBCUDEA)3V)D4?UYBCUDEA)3V)D4	I DG	EI
		UBCTECA?UBCTEGA?UBCUDIA)3V)D4?UBCUECA)3V)D4?UBCUEGA)3V)D4?UBCUFAA)3V)D4	I DH	EJ
		UYBCUDIA)3V)D4	I EA	FE
		UYBCUECA)3V)D4	I EB	FF
UnCL.NONI I COI	xl exl	UBC]3V)C4	I DF	EE
UnCL.NONI I COR	r Vi Ruet	UËZ]BC]3V)D4	GHJ	GI
	xl exl	UBCRDEA)3V)C4	I DF	EF
		UBCTECA?UBCTEGA?UBCUDIA)3V)D4?UBCUECA)3V)D4?UBCUEGA)3V)D4?UBCUFAA)3V)D4	I DH	EJ
UnCL.PLmI I CI I	xl exl	UHTCBF]3V)C4?UHTCFA)3V)C4?UHTCHF]3V)C4?UHTCJA)3V)C4?UHTDBA)3V)C4	I CB	CC
UnCL.POSI I CSI	sTRi ZR	UsT)BE9BD]3V)C)UsT)BE4?UsT)BE9BF]3V)D)Us)BE4	HAJ	CC
UnCL.POSI I CTI	sTRi ZR	UT)BC9BF]3UT)BC4?UT)BC9BI]3V)F)UT)BC4?UT)BC9CC]3V)F)UT)BC4?UT)BC9CD]3V)E)UT)BC4?UT)BC9CE]3V)E)UT BC4?UT)BC9CG]3V)E)UT)BC4?UT)BG9AJ]3V)F)UT)BG4?Ut)BC9AG]3V)E)Ut)BC4?Ut)BC9BA]3V)E)Ut)BC4	HAE	BD
UnCDPSRI I CL I	r Vi Ruet	HJH8CA?HJH8CB?HJH8CG	GHA	EJ
UnCPNUI I CI I	ZxVTl	WDSVDGI BR)3V)E>F]T)BD4?WDSVDGI BS]3V)E>F]T)BD4?WDSVDGI BT]3V)E>F]T)BD4?WDSVDGI BU 3V)E>F]T)BD4?WDSVDGI BV]3V)E>F]T)BD4?WDSVDGI BW3V)E>F]T)BD4?WDSVDGI BX]3V)E>F T)BD4	DAB	FG
UnCPNUSI I CI I	h Ri	U)CAGG]eVBH]3V)F4?U)CAGG]eVBI]3V)F4?U)CAGG]eVBJ]3V)F4?U)CAGG]eVCA)3V)F4?U)CAGG]eVCB]3V)F4?U CAGG]eVCC]3V)F4?U)CAGG]eVCD]3V)F4?U)CAGG]eVCE]3V)F4?U)CAGG]eVCG]3V)F4?U)CAGG]eVCH]3V)F4?U CAGG]eVCI]3V)F4?U)CAGG]eVEA]3V)F4?U)CAGG]eVEB]3V)F4?U)CAGG]eVEC]3V)F4?U)CAGG]eVED]3V)F4?U CAGG]eVEE]3V)F4?U)CAGG]eVEF]3V)F4?U)CAGG]eVEG]3V)F4?U)CAGG]eVEH]3V)F4?U)CAGG]eVFB]3V)F4?U CAGG]eVFC]3V)F4?U)CAGG]eVFD]3V)F4?U)CAGG]eI Y CI]3V)F4?U)CAGG]euY DC]3V)F4?U)CAGG]euY DD]3V)F4?U CAGG]euY DE]3V)F4	DJB	BG
		U)CAGG]eVCF]3V)F4	DJC	BH
UnCPOPLI I CI I	ZxVTl	WDRDGI BR]3V)E>F]T)BA4?WDRDGI BS]3V)E>F]T)BA4?WDRDGI B]3V)E>F]T)BA4?WDRVDGI BU]3V E>F]T)BA4	CJJ	FB

Notes

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		CCM	x		9
>5B7D/bx Ø 0		GcaD	S	ci 9Pc	D
8B7 P877		Gi Ni	S	eN9aD	8D
8D9 NE577 /Q ;0		Gi GD	S	eN9DD	8>
8E9 MA577 /Q ;0		Gi GD	S	eN9DD	8A
8E9 N857 7		Gi GD	S	eN9DD	8A
8ED MA577		Gi Va	S	eP9DD	9;
8EE M;5 77		GNSe	S	ai 9aD	8
8EE N857 7 /Q A0		GNSe	S	ai 9aD	9
8EE N>577 /Q A0		GNSe	S	ai 9aD	9
;;7 MB577		GNSe	S	ai 9aD	;
;A7 MB577 /Q >6A0		GPae	S	cN9DD	>
D;E MB577 /Q ;0		NPec	V	eN9DD	8>
D>8 O577 /Q ;0		NPec	V	eN9DD	8>
D>8 S577 /Q ;0		NPec	V	eN9DD	8A
D>8 Y 577		NPec	V	eN9DD	8A
D>8 Z577		NPec	V	eN9DD	8A
D>> M957 7		Gi Va	S	eP9DD	9;
E;9 M957 7		Gi cD	S	eP9DD	97
E;CMB577		Gi cD	S	eP9DD	97
E;CM957 7 /Q ;0		Gi GD	S	eN9DD	8>
E;CM>577 /Q ;0		Gi GD	S	eN9DD	8A
E;CMA577		Gi GD	S	eN9DD	8A
E;CMB577		Gi GD	S	eN9DD	8B
E;CMC577		Gi GD	S	eN9DD	8>
E;EMB577		Gi GD	S	eN9DD	8>
E;EM957 7		Gi GD	S	eN9DD	8A
E;EM;5 77 /Q >0		NPec	V	eN9DD	8A
E;EN;5 77		Gi Va	S	eP9DD	9;
E;EN>577		Gi Va	S	eP9DD	9;
E;ENA577		Gi Va	S	eP9DD	9;
E>7 M;5 77		GVi e	S	ci 9VD	E
E>7 M>577		Gi Va	S	eP9DD	9;
E>7 MA577 /Q A0		Gi Va	S	eP9DD	9;
E>7 MC577 /Q A0		Gi Va	S	eP9DD	9;
E>7 MD577 /Q A0		Gi Va	S	eP9DD	9;
E>7 O857 7 /Q B0		GVi e	S	ci 9VD	E
E>7 OA577 /Q B0		GVi e	S	ci 9VD	E
EAA M>577		GVi e	S	ci 9VD	E
D8>759Cd6e59C77 /e yØ 0		NSi i	S	i P9DD	;9
D8>7598597 7 /ea RUY 95>f P0		NSSV	S	i P9DD	;8
D8>75B857 7		NSSV	S	i P9DD	;;
D8>>5985997 /e yØ 0		NSSV	S	i P9DD	;8
D8>>5B857 7		NSSV	S	i P9DD	;;
D8>>5BC597		NVDD	S	i P9DD	;;
Md 77A89 /f Ø Ot 0		Gi aN	S	eS9DD	9>
Md 77A9B		GVcD	S	ce9DD	B
Md 77A;7		GNi D	S	cS9DD	A
Md 77A;B		GVcD	S	ce9DD	B
Md 77A>D		Gcci	S	eD9DD	87
Md 78A>>		Gi aN	S	eS9DD	9>
Md 78ADD		Gi aN	S	eS9DD	9A
Md 78B77		GVac	S	ce9DD	B
Md 78B7D		Gcci	S	eD9DD	87
Md 78B7Dk		Gcci	S	eD9DD	87
Md 78B9;		Gi aN	S	eS9DD	9>
Md 78BAA		Gi aN	S	eS9DD	9B
Md 78BCD		Gcci	S	eD9DD	87
Md 78C8;		Gi aN	S	eS9DD	9>
Md 7B877		GVac	S	ce9DD	B
Md 7B8BB		Gi aN	S	eS9DD	9>

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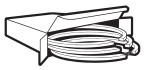
		CCM	x		9
Md 7B8BD		Gcci	S	eD9DD	87
Md 7B979		Gcci	S	eD9DD	87
Md 7B989		GiaN	S	eS9DD	9B
Md 7B99>		GiaN	S	eS9DD	9A
Md 7B>8B		GiaN	S	eS9DD	9>
Md 7B>97		GiaN	S	eS9DD	9>
Md 7B>CB		GiiV	S	eS9DD	9C
Md 87A89		GiaN	S	eS9DD	9>
Md 88B; ;		GiaN	S	eS9DD	9D
Md 88B; >		GiaN	S	eS9DD	9D
Md 88BC8		GiaN	S	eS9DD	9>
Md 8B978		GicD	S	eP9DD	98
Md 8EA87		GiaN	S	eS9DD	9>
Md ; 987;		GVie	S	eN9DD	88
Md ; 987> /Q ; 0		GVie	S	eN9DD	88
Md ; 9978		GcSc	S	eN9DD	89
Md ; 997A		GcSc	S	eN9DD	89
Md ; 9; 78		GicD	S	eP9DD	98
Md ; 9; 79 /Q 90		GiGD	S	eN9DD	8C
Md ; 9; 87 /Q ; 6>0		GicD	S	eP9DD	99
Md ; 9A78 /Q 90		NPec	V	eN9DD	8C
Md ; ; B78		GiNi	S	eN9aD	8D
Md ; >87;		GicD	S	eP9DD	98
Md ; >979 /Q 90		NPec	V	eN9DD	8C
Md ; B979 /Q ; 0		NPec	V	eN9DD	8>
Md ; B; 78		GicD	S	eP9DD	99
Md ; C878 /Q ; 0		GiGD	S	eN9DD	8>
Md ; C97; /Q ; 0		GVie	S	eN9DD	8;
Md ; D>78		GcSc	S	eN9DD	89
Md B8878		GVac	S	ce9DD	C
Md B8879		Gcci	S	eD9DD	87
Md B8978		Gcci	S	eD9DD	87
Md B>87;		GiiV	S	eS9DD	9>
Md BC87B		GcSc	S	eN9DD	89
Md BC978		GiiV	S	eS9DD	9>
Md BC979		GiiV	S	eS9DD	9>
Md BC97;		GiiV	S	eS9DD	9E
Md BC97>		GicD	S	eP9DD	98
Md BCA78		GiNi	S	eN9aD	8D
Md BCA79		GiNi	S	eN9aD	8E
Y C99 Nf 9>5f /Q 90		NPec	V	eN9DD	8C
hY >Tf 95>		NPiP	S	iN9DD	;7
hY 7CN		NSii	S	iN9DD	;7
hY 7DN		NSii	S	iN9DD	;7
hY ;8N		NSii	S	iN9DD	;7
hY ;9N		NSii	S	iN9DD	;7
hY D8M		NPiP	S	iN9DD	;7
hY D9M		Gcci	P	iN9DD	;7
hY D>M		NSii	S	iN9DD	;7
hY EBM		Gcci	P	iN9DD	;7



8EE M; 5777	S 9	89>Dvv	BB i 3D 4	P@t x f u U x v xw	f P9; >A7
S QZU 416 S °WPpß		3<23< 3<243			

DC4>9AB77477
DC4>9AB7B477 *mT m*
DC4>9AB7D477 *mT m*

M	7316
N4	4514
N	6<133
O	31=4
O	31=4
P	9516
	56É88

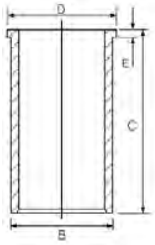
-89=66,

MWWWdf fb

7D4>9AB77477
7D4>9AB7B477 *mT m*
7D4>9AB7D477 *mT m*

5133		I Q V
4133		TZ
5133		I X V

8>47997B7477 **N** : 5133 **O** 4751 33 **P** : 7133 **Q** 8133



8EE N85777 /Q A0	S 9	89>Dvv	C7 i 3V 4	P@t x f u U x v xw	f P9>AE7
8EE N>5777 /Q A0	S 9	89>Dvv	B9 i 3eS 4	P@t x f u U x v xw	f P9>E; D
S QZU 416 S °WPpß		3=23= 4321<			

DC4>; AC77477
DC4>; AC7B477 *mT m*
3: 245

M	7316
N4	451: 3
N	6: 133
O	4148
O	31=3
P	9516
	56É8:

MWWWdf

7D4>; AC77477
7D4>; AC7B477 *mT m*

4133		MJI V
4133		V
5133		I X V

b t@s Yßz' 2/ß´ßZpnsyzwrr Ö | L´Ll s´Üp°r p x t@Yß´ßYßz' L°yvßzy | Vz°´®stn°wp° ¿°t' o° °ß´ß) °ßz' | Vl´l @ps n°wp° nzy q'ynt y °ß´ß0°ßz' | Vp´ @tnzwnzy w q'yÜzyp Yß´ß0Yßz'

; ; 7 M85777	S 9	89>Dvv	C7 i 3V 4	P@t x f u U x v xw	f P; ; 8AD
S QZU 416 S °WPpß		3=23= 4321<			

DC4>A7A77477

M	7316
N4	451: 3
N	6: 133
O	3188
O	3163
P	9516
	56É89

-89=68068?,

MWWWdf fb

7D4>A7A77477

4133		MJI V
4133		V
5133		I X V

HzÄwnl ' I ntßÖ 481<73nx 6 K°´z 9 | azwx py op´ Qzwnpyx °wp 481<73nx 6 | azwx p op w nl @8 o° ' t°ßzy 481<73nx 6 | azwnl @bl o ' t°ß y 481<73nx 6 | azwx p nl x p´l ' t°ßzyp 481<73nx 6

; A7 M85777 /Q >6A0	S 9	8; BDvv	AC i 3ce 4	bx	f P9B>8B

S QZU 417 36214 4324<

DC4>; BD77477
DC4>; BD7B477 *mT m*

M 59133
N4 71 8
O 5138
P 7=133
4<É7=

7D4>; BD77477
7D4>; BD7B477 *mT m*

4133 TZ
4153 V
5133 I X V

LKZ-Ring

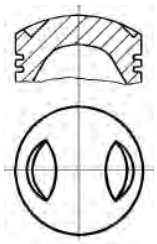
Yßppw YßIsw Gntp´ Gnp´z Gnntltz

Mcl 77A; 7 S 9 **89E7vv** **B>4BA i** 3ec8ei 4 **bx** **f P9;**

MO_RGG 4633 Y°'p´ 342 7 452 < YVQIKX 4633 3429< 452 :
MZ 4633 P°ytz´ 34299 452 :

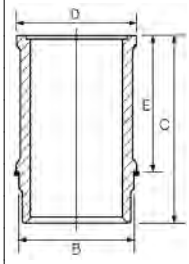
DC4A; 7>77477

M 65183
N4 46193
P : =143
53É97



7D4A; 7>77477

4183
41 8
7133



8A4B; 9A77477

N <3183 **O** 46=133 **P** =3133 **Q** <=153

DE4A; 7>77477
< 0863733033 .
480965833033

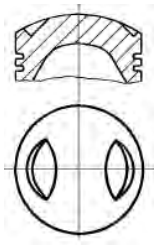
Qmvßop° °pl w Ynswlp ßJtnsß°yr py pty Qmvßop° uztyß° Qmvßop° uztyß° Qmvßop° uztyß° Izx '´pyop vpr°l´ytÜzyt

Mcl 77A9B S 9 **8AC7vv** **C84D8 i** 3 c8GGD 4 **bx** **f P99**
Mcl 77A; B S 9 **8AC7vv** **D7 i** 3GDi 4 **bx** **f P9>**
Mcl 78B77 S 9 **8ABCvv** **CD4D7 i** 3GDa8GDi 4 **bx** **f P; 9**
Mcl 7B877 S 9 **8ABCvv** **D8 i** 3GGD 4 **bx** **f P>C**

: 8 419 3824<8 3=2<= MO_RGKZZG 419 432 : 372<8
GRLKZZG 419 342 8 452<7 MZ 4933 34299 452 :
GRLKZZG MZ 419 342 9 3=2<5 YVQIKX 4933 36299 452=3
MO_RGG 4933 Y°'p´ 39297 452 <

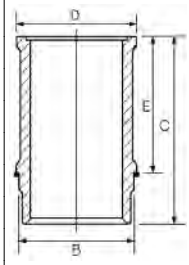
DC4A9C977477

M 661 3
N4 481<3
P <5183
55É9<



7D4A9C977477

4183 I X V
41 8 V
7133 V



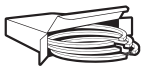
N <7133 **O** 483133 **P** =7133 **Q** =8183

DE4A9C977477
< 085: 533033

Qmvßop° °pl w
Rtyp´ l®tlvmpty Qtß Ypßzyvü
Ynswlp ßJtnsß°yr py pty
eÜtyop´w°qm°nsºp y°´ty G°°px mtlp°
®p´q r m´
Qmvßop° uztyß°
l spx t°p ot°'zytmpp y vtß°p°vpx pyß
Qmvßop° uztyß°
l l x t°l ° ot°'zytmpp y nzyu°yßz°
°zwlx pyßp1
Izx '´pyop vpr°l´ytÜzyt
l tvlyo´z ot°'zytmlp°zvr ty vtßx zßz´p

Mcl B8878 S 9 **8ABCvv** **CB4D8 i** 3GDP8GGD 4 **bx** **f P879**

: 8 419 3824<8 3=2<= : 8 419 l l ß 382<= 352=5



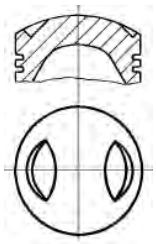
7D4A9C; 77487

8A4B; 9877477

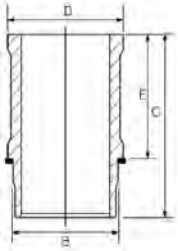
N <7133 **O** 483133 **P** =7133 **Q** =8183

DE4A9C; 77477
480965433033

M 661 3
N4 491 3
P <51=3
55É9<



4183 VY
413 8 V
6183 I X



Vt°ßzy I ®tuvmp ty QtßYpßzyvÜ
GvÁp´yl ß®p Y' pntqnl ßzy
Yßppw
Qnvßop° °pl w

Qzwmpy y°´tx G°°px mÛp´s uÁvns
GvÁp´yl ß®p Y' pÜtqvl ßzy
Yß sw
Ynsvµp ßJtnsß³yr py pty

Vt°ßzy ot°' zytmµp py vtß°p°µpx pyß
Y' ntqnl ßzy I vÁp´yl ß®p
Gntp´
Qnvßop° uztyß³

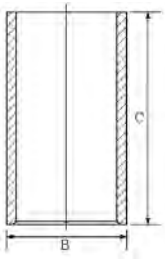
Vt°ß y ot°' zytmµp py nzyu³yßz° °zwx pyßp1
K°' pntqnl nt y I vÁp´yl ß®
Gnp´z
Qnvßop° µr° °pwr°

O' t°ßzyt°zyz ot°' zytmtw°zwr ty vtßx zßz´p
Y' pntqnl I vÁp´yl ß®
Gnntl tz
I zx ' ´pyop µp r°l ´ytÜzyt

>5B7D/bx Ø 0	S 9	**8CB7vv**	**; C4; D i**	3/D8VN 4	**P®t x**				**f P8>8**
MQ_RÛG 41< J		392 9 452 <							

8>4787E77477

N <5196 **O** 498143



E>7 M; 5777	S 9	**8AEDvv**	**CC i**	3GDV 4	**P®t x**	**f u U x v**	**xw**		**f P9; E9;**
E>7 O85777 /Q B0	S 9	**8AEDvv**	**DD i**	3GND 4	**P®t x**	**f u U x v**	**xw**		**f P; 97EE**
E>7 OA5777 /Q B0	S 9	**8AEDvv**	**DA4DD i**	3GGa8GND 4	**P®t x**	**f u U x v**	**xw**		**f P; 97E;**
EAA M>5777	S 9	**8AEDvv**	**DA i**	3GGV 4	**P®t x**	**f u U x v**	**xw**		**f P9; >A8**
MQ_RÛZZG 419 PZJS		37243	45253		S QZU 419 PZJS			3<23<	3<248

DC4>9E; 77487
DC4>9E; 7B487 *mT m*

7D4>9E; 77487
7D4>9E; 7B487 *mT m*

M 761=8
N4 461<3
N 741 3
O 4134
O 4136
P 9<1=8
59É96

+=5GQ: 98,

MWdf f b

4183 MJI V
4183 V
5133 I X V

GDC LKZ-Ring

Vt°ßzy° ßz mp´p' wnpo ty Kyr typ Yp®³ zyvÜ

HzÄwnl ' I ntßÖ 4=198nx 6
K°´z 9

Qzwmpy y°´ty S zßz´° ßÛpy Ü° p´°pßÛpy

azvßx py op´ Qzwmpyx °wp 4=198nx 6

Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´

azvßx p op w nl ®ß o° ' t°ßzy 4=198nx 6

Vt°ßzyp° op´p' °p°ßz ' I ´I up°r z° op
x zßz´p° °zwx pyßp
azwnl ®bl o ' t°ß y 4=198nx 6

QV t°ßzyp ' ° p°°p´p´tx ' tl ÜÜ ßz
°zwx pyßp nzx ' wpßz
azvßx p nl x p´l ' t°ßzyp 4=198nx 6

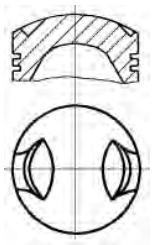
Mdl 77A>D	S 9	**8CCEvv**	**D; 4EC i**	3GGP8GPN 4	**bx**				**f P8D**
Mdl 78B7D	S 9	**8CCEvv**	**DC4DE i**	3GGe8GNG 4	**bx**				**f PA; >7**
Mdl 78B7Dk	S 9	**8CCEvv**	**DA i**	3GGV 4	**bx**				**f P; ;**
Mdl 78BCD	S 9	**8CCEvv**	**DD4E7 i**	3GND8GNN 4	**bx**				**f P; D**

Mdl 7B8BD	S 9	**8CCEvv**	**DD i** 3GND 4	**bx**	**f PA>**
Mdl 7B979	S 9	**8CCEvv**	**DA4DE i** 3GGa8GNG 4	**bx**	**f PAA**
Mdl B8879	S 9	**8CCEvv**	**DD i** 3GND 4	**bx**	**f P878>E**
Mdl B8978	S 9	**8CCEvv**	**E7 i** 3GNN 4	**bx**	**f P87;**

: 8 41<		3=2<8	352=5	HKXRCTG 4: 83	3=29< 452 5
=3 41<		432<7	3: 2<	MQ_RCKZZG 41<	372 = 3: 2<8
4: 8305333 4: 83		3629<	432 5	MZ a 4: 83	3429: 452 5
GRLKZZG 41<		3: 2 7	452<7	YVQJKX 4: 83	3429: 452 4
GRLKZZG MZ 41<		342 7	452 9		

DC4A9DA77477

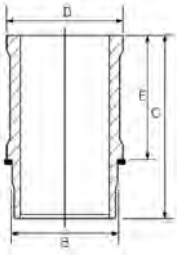
M 66158
N4 46168
P <3143
55É9=



7D4A9DA77477

4183 I X V
41 8 V
6183 V

8A4B; 9B77477



N <8133 **O** 485133 **P** =<133 **Q** 43: 183

DE4A9DA77477
< 085<833033 .
480965933033

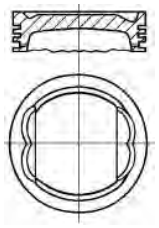
Qmw0op° °pl w Ynswlp ßJtnsß°yr py pty Qmwßop° uztyß° Qmw0p wr° °pwr° I zx ' ´pyop wp r °l ´ytÜzyt

Mdl ; 987;	S 9	**8AEDvv**	**D84DD i** 3GGD8GND 4	**bx**	**f P8A; DE**
Mdl ; 987> /Q ; 0	S 9	**8AEDvv**	**DD i** 3GND 4	**bx**	**f P8A; DD**

47: 419 49a ZtY' l ´v		34234	36243	489 419 49a ZtY' l ´v	3=2=: 38239
47: 419 RVM		36234	4523=		

DC48>A>774; 7
DC48>A>7B4; 7 *mT m*

M 5<17:
N2 3153
O 41<<
P 8317:
53É85



7D48>A>77477
7D48>A>7B477 *mT m*

4153 TZ
4153 V
5133

Yßppw YßI sw Gntp´ Gnp´z Gnntl tz

Mdl ; 9978	S 9	**8C>Ovv**	**87B i** 3GSS 4	**bx**	**f PE>B9**
Mdl ; 997A	S 9	**8C>Ovv**	**87; i** 3GSD 4	**bx**	**f P8A; E7**
Mdl ; D>78	S 9	**8C>Ovv**	**87; i** 3GSD 4	**bx**	**f PECAA**
Mdl BC87B	S 9	**8C>Ovv**	**87; i** 3GSD 4	**bx**	**f PA7C7**

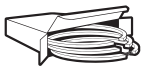
478 41<t1p149a		362=<	34234	489 41<49a ZtY' l ´v	352=: 38239
478 41<t1p149a ZtY' l ´v		452=9	452=<	MZ 41<ZY	44236 3=243
479 41<t1p149a ZtY' l ´v		442=9	34234	MZa 41<49a	382=< 43238
488 41: ZtY' l ´v		382=9	452=:	YVQJKX 41<49a	382=< 37238

DC488D77B477 *mT m*

M 69148
N4 3183
P 93148
53É85

7D488D777477
7D488D77B477 *mT m*
7D488D77D477 *mT m*

414= TZ
4153 V
5133 V



Md ; C97; /Q ; 0	S 9	**8AEDvv**	**CC i** 3GDV 4		**bx**		**f P8AA7D**
47: 419 49a Z1Y' I ´v		34234 36243		47: 419 RVM		3423= 36243	

DC48>A>77477

M 5<17:
N4 3163
P 8317:
53É84

7D48>A>77477
7D48>A>7B477 *mT m*

4153 TZ
4153 V
5133

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8D9 NE5777 /Q ; 0	S 9	**8E87vv**	**C>4CC i** 3GDG8GDV 4		**P@t x f u U x v xw**		**f P8D; 89**
D; E MB5777 /Q ; 0	V 9	**9; DOvv**	**87; i** 3GSD 4		**P@t x f u U x v xw**		**f P8DD8E**
D>8 O5777 /Q ; 0	V 9	**9; DOvv**	**887 i** 3GVD 4		**P@t x f u U x v xw**		**f P8B; D;**
E; C M95777 /Q ; 0	S 9	**8E87vv**	**D84DD i** 3GGD8GND 4		**P@t x f u U x v xw**		**f P8B; D9**
E; C MC5777	S 9	**8E87vv**	**DA i** 3GGV 4		**P@t x f u U x v xw**		**f P97E; ;**
E; E MB5777	S 9	**8E87vv**	**DD i** 3GND 4		**P@t x f u U x v xw**		**f P8DE8A**
Md ; B979 /Q ; 0	V 9	**9; DOvv**	**87; i** 3GSD 4		**P@t x f u U x v xw**		**f P8AB; B**
Md ; C878 /Q ; 0	S 9	**8E87vv**	**D8 i** 3GGD 4		**P@t x f u U x v xw**		**f P8AA87**
47: 41=PZJ		43233 36243		48=41=PZJS <a		3=238 44244	
489 41=PZJ		43233 38239		499 517 PZJ		43233 3923:	
489 517 PZJ		43233 38239					

DC489>7774; 7
DC489>77D4; 7 *mT m*

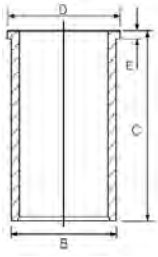
M 7913
N4 4: 178
N 6: 188
O 3198
P : 5183
59É94

ZN df

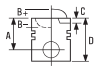
7D489>777477
7D489>77D477 *mT m*

5133 I Q V
5133 V
5133 I X V

8>47987A8477 **N <818: O 488133 P <<186 Q 7133**
8>479DEB7477 **N <8133 O 488133 P <<133 Q 7183**



8E9 MA5777 /Q ; 0	S 9	**8E87vv**	**87; i** 3GSD 4		**P@t x f u U x v xw**		**f P8CED8**
8E9 N85777	S 9	**8E87vv**	**877 i** 3GPa 4		**P@t x f u U x v xw**		**f P8E7B8**
D>8 S5777 /Q ; 0	V 9	**9; DOvv**	**89E i** 3GcV 4		**P@t x f u U x v xw**		**f P8D9E9**
D>8 Y5777	V 9	**9; DOvv**	**89748>C i** 3GaP8NDD 4		**P@t x f u U x v xw**		**f P97E; >**
D>8 Z5777	V 9	**9; DOvv**	**89748>C i** 3GaP8NDD 4		**P@t x f u U x v xw**		**f P99A87**
E; C M>5777 /Q ; 0	S 9	**8E87vv**	**E; 487; i** 3GNa8GSD 4		**P@t x f u U x v xw**		**f P8DD>>**
E; C MA5777	S 9	**8E87vv**	**887 i** 3GVD 4		**P@t x f u U x v xw**		**f P8D7CD**
E; E M95777	S 9	**8E87vv**	**887 i** 3GVD 4		**P@t x f u U x v xw**		**f P8D>C;**
E; E M; 5777 /Q >0	V 9	**9; DOvv**	**8>C48A> i** 3NDD8NDi 4		**P@t x f u U x v xw**		**f P8D>C>**
47: 41=PZJ 49a		44235 36243		48=41=PZJS 49a		3=238 44244	
47: 41=PZJS 49a		3=237 36243		48=517 PZJS		3=238 44244	
489 41=PZJ		44235 38239		499 517 PZJ		43236 3923:	
489 41=PZJ 49a		44235 38239		HXKXG 517 PZJS 53a		34239 36244	
489 41=PZJ 49a W7		3: 237 38239		MZ 41=PZJ		44236 3=243	
489 517 PZJ		39236 38239		YVQKX 517 PZJS		36239 36244	

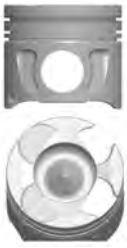


DC48>B877477
DC48>B87D477 *mTm*

M 79183
N4 48173
N 74183
O 4136
P : 5183
59É94

-8<5890435,

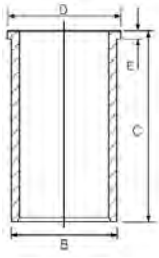
MWWWZN df fb



7D48>B877477
7D48>B87B477 *mTm*
7D48>B87D477 *mTm*

5133 I QV
5133 V
5133 I QV

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7133
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7183



E; CMB577	S	9	**8E87vv**	**89A i**	3GcD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>B>;**
47: 41=PZJS 49a				3923< 36243			MZ 41=PZJ							3823< 3=243	

DC48>B877487
DC48>B87B487 *mTm*

M 79183
N4 48173
N 74183
O 413:
O 4135
P : 5183
63É9:

-8<59=0836,

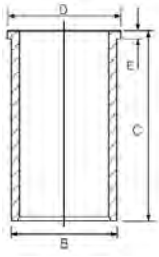
MWWWdf fb

7D48>B877477
7D48>B87B477 *mTm*
7D48>B87D477 *mTm*

5133 I QV
5133 V
5133 I QV

Mdl ; 9; 79 /Q 90	S	9	**8E87vv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f PECBE**
Mdl ; 9A78 /Q 90	V	9	**9; DCvv**	**EE4877 i**	3GPV8GPa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f PECC7**
Mdl ; >979 /Q 90	V	9	**9; DCvv**	**877 i**	3GPa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P88B7>**
Y C99 Nf 9>5f /Q 90	V	9	**9; DCvv**	**EB4877 i**	3GPG8GPa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P99>; >**
478 41=PZJ				352== 34234			489 517 PZJ							3=2=:	3=236
479 41=PZJ				352== 34234			499 517 PZJ							3=2=<	43233
489 41=PZJ				3=2=: 43233											

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7133
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7183

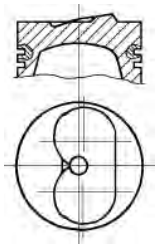


8B7 P877	S	9	**8E9Evv**	**A8 i**	3ai	4	**P@t x**								**f P87; 7C**
Mdl ; ; B78	S	9	**8E9Evv**	**BB4BD i**	3 D8i N	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f PA7BE**
Mdl BCA78	S	9	**8E9Evv**	**BB4BD i**	3 D8i N	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P8>7**
478 41=ZJ				432=7 352==			488 41=ZJ							372=6	452=:
479 41=ZJ				452=7 352==			GX 9 41=J							372<8	452<=

DC4CD; D774; 7
DC4CD; D7D4; 7 *mTm*

M 75173
N2 5183
P :9133
59É9=

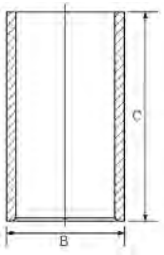
TMdf



7D4CD; D77477
7D4CD; D7D477 *mTm*

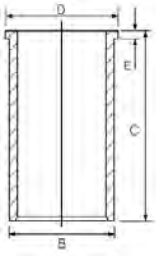
6133 SURV
5133 V
6133 IXV

8>478>C; 7477



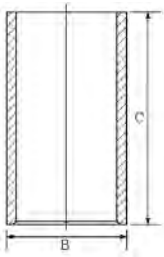
N <913= **O** 487133

8>4798; 88477 **N** <9139 **O** 487133 **P** <=133 **Q** 7183
8>479; AB7477 **N** <9133 **O** 487133 **P** <=133 **Q** 7183
8>479; CA8477 **N** < 133 **O** 487133 **P** <=133 **Q** 7188



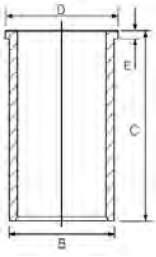
Mdl BCA79	S 9	**8E9Evv**	**BB4BD i**	3D8N 4	**P@t x f u U x v xw**	**f P988>7**
488 41=ZJ		372=6 372=9				

8>478>C; 7477

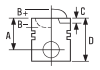


N <913= **O** 487133

8>4798; 88477 **N** <9139 **O** 487133 **P** <=133 **Q** 7183
8>479; AB7477 **N** <9133 **O** 487133 **P** <=133 **Q** 7183
8>479; CA8477 **N** < 133 **O** 487133 **P** <=133 **Q** 7188



E; 9 M95777	S 9	**8EC7vv**	**8874898 i**	3GVD8GaV 4	**bx**	**f P8D7CB**
E; CM85777	S 9	**8EC7vv**	**88E4899 i**	3GaN8Gaa 4	**bx**	**f P8B; D8**
47: 513		3:235 38238		MZ 513 PZY		44236 3=243
489 513 PZY		36234 38239		MZa 513 PZY		37236 43238



MZ 513 3=239 4523< YVQJKX 513 PZY 37236 37238

DC48>A97B477 *mT m*

M 64133
N4 8148
N2 6138
O 41 9
P 84163
53É85

7D48>A977477
7D48>A97B477 *mT m*

4153 TZ
4153 V
5133 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Mcl 8B978	S 9	**8EC7vv**	**887 i**	3GVD	4	**bx**		**f P>8DD**
Mcl ; 9; 78	S 9	**8EC7vv**	**88> i**	3GVV	4	**bx**		**f PE>B;**
Mcl ; >87;	S 9	**8EC7vv**	**88> i**	3GVV	4	**bx**		**f P88AEE**
Mcl BC97>	S 9	**8EC7vv**	**887 i**	3GVD	4	**bx**		**f P>8E7**

478 513 49a	362=< 34234	489 513 49a Z1Y' I ´v	3=2=: 39235
478 513 49a Z1Y' I ´v	432=8 34234	499 513 Z1Y' I ´v	3=2=< 43233
479 513 49a	362=: 43234	MZa 513 49a Z1Y' I ´v	392=8 43238
479 513 49a Z1Y' I ´v	432=8 34234	YVQJKX 513 49a Z1Y' I ´v	392=8 37238
488 513 49a Z1Y' I ´v	362=8 452=:		

DC4887E77477
DC4887E7B477 *mT m*

M 65133
N4 6143
P 89133
53É85

7D4887E77477
7D4887E7B477 *mT m*

4153 I X
4183 V
6133 I X V

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Mcl ; 9; 87 /Q ; 6>0	S 9	**8EC7vv**	**887488> i**	3GVD8GVV	4	**bx**		**f P8A; E8**
Mcl ; B; 78	S 9	**8EC7vv**	**887 i**	3GVD	4	**bx**		**f P8A; E9**

47: 513 49a Z1Y' I ´v	34234 36243	MZa 513 49a Z1Y' I ´v	392=8 43238
489 513 49a Z1Y' I ´v	3=2=: 39235	YVQJKX 513 49a Z1Y' I ´v	392=8 37238
499 513 Z1Y' I ´v	43233 3923:		

DC48>A; 77477
DC48>A; 7B477 *mT m*

M 64163
N4 61<3
N 9=133
P 84163
53É85

7D48>A; 77477
7D48>A; 7B477 *mT m*

4153 TZ
4153 V
5133 V

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8EDMA5777	S 9	**8EABvv**	**898 i**	3GaV	4	**P@ x f u U x v xw**		**f P9>B>C**

D>> M95777	S	9	8EABvv	897	i	3GaP	4	P@t	x	f	u	U	x	v	xw	f P9>AE>
E; E N; 5777	S	9	8EABvv	89A	i	3GcD	4	P@t	x	f	u	U	x	v	xw	f P9; 87C
E; E N>5777	S	9	8EABvv	877	i	3GPa	4	P@t	x	f	u	U	x	v	xw	f P9>B>>
E; E NA5777	S	9	8EABvv	89A	i	3GcD	4	P@t	x	f	u	U	x	v	xw	f P9>B>A
E>7 M>5777	S	9	8EABvv	89A	i	3GcD	4	P@t	x	f	u	U	x	v	xw	f P9; E9>
E>7 MA5777 /Q A0	S	9	8EABvv	87;	i	3GSD	4	P@t	x	f	u	U	x	v	xw	f P9>ACD
E>7 MC5777 /Q A0	S	9	8EABvv	897	i	3GaP	4	P@t	x	f	u	U	x	v	xw	f P9>CE;
E>7 MD5777 /Q A0	S	9	8EABvv	877	i	3GPa	4	P@t	x	f	u	U	x	v	xw	f P9A>9>

48=513 PZJS	3823= 44214	MQ_R0KZZG 513 PZJS	37243 45253
HXKXG 513 PZJS	3623< 39243	YVQIKX 513 PZJS	3723= 36244

DC4>; BA77477
DC4>; BA7B477 *mT m*

M	7916
N4	481<3
N	7613
P	:516
	63É99

-8<677G739,

MWWWdf f b

7D4>; BA77477
7D4>; BA7B477 *mT m*

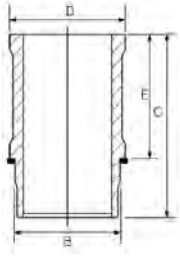
413		MJI V
413		V
513		I X V

GDC LKZ-Ring

Md 77A89 /f Ø Ot 0	S	9	8EB9vv	EB	i	3GPG	4	bx								f PCA
Md 78A>>	S	9	8EB9vv	DA	i	3GGa	4	bx								f P9D
Md 78B9;	S	9	8EB9vv	D94E7	i	3GGN8GNN	4	bx								f P; >
Md 78C8;	S	9	8EB9vv	E>4EC	i	3GNe8GPN	4	bx								f P>8
Md 7B8BB	S	9	8EB9vv	87C	i	3GSa	4	bx								f PA;
Md 7B>8B	S	9	8EB9vv	879487B	i	3GPe8GSS	4	bx								f PB9
Md 7B>97	S	9	8EB9vv	87A487E	i	3GSP8GSe	4	bx								f PB;
Md 87A89	S	9	8EB9vv	EB	i	3GPG	4	bx								f PA; A8
Md 88BC8	S	9	8EB9vv	EB	i	3GPG	4	bx								f PC7
Md 8EA87	S	9	8EB9vv	87>487E	i	3GSN8GSe	4	bx								f P9; ; >>
Md B>87;	S	9	8EEAvv	87B	i	3GSS	4	bx								f P89E
Md BC978	S	9	8EEAvv	87>487B	i	3GSG8GSS	4	bx								f P8; B
Md BC979	S	9	8EEAvv	87>487B	i	3GSG8GSS	4	bx								f P8; C

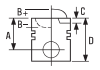
:8 513 Z1Y' I ´v	342< 352=5	GRLKZZG 513	3=2 7 452<7
=3 513 ttp1	432<7 3: 2<	GRLKZZG MZ 513	3: 2 < 342<9
488 513 Z1Y' I ´v	352=5 382=8	MQ_R0KZZG 513	392<3 372<8
497 513	392< 3=2=<	YVQIKX 5333	342 4 452=3
497 513 Z1Y' I ´v	392< 3=2=<	YVUXZ 513	3=2 : 452 =
497 513 ZÄty Y' I ´v	3: 2=3 432=5		

8A4B; 9777477



N <=133 **O** 485133 **P** =<133 **Q** 43: 183

Qmvvop° °pl w Ynswp ßJtnsß°yr py pty Qmvvßop° uztyß° Qmvvöp w° °pw° I zx ' ´pyop wp r °l ´ytÜzyt

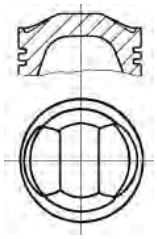


Mdl 78ADD S 9 **8EB9vv** **DB4DD i** 3GND 4 **bx** **f P; 7**

Mdl 7B99> S 9 **8EB9vv** **87C487E i** 3GSa8GSe 4 **bx** **f PAD**

: 8 513 Z1Y' I ´v	342< 352=5	YVQJKX 513	3=2<5 452=6
: 8 513 Z1Y' I ´v I I ß	382<8 352=5	YVQJKX 5333	342=3 452=6

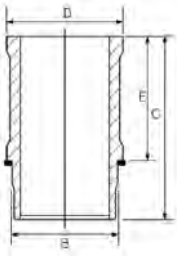
M 651 8
N4 451<8
P : =143
55É: 4



7D4887977477

4183		I X V
4183		V
6183		V

8A4B; 9777477



N <=133 **O** 485133 **P** =<133 **Q** 43: 183

DE48879774>7
480965333033

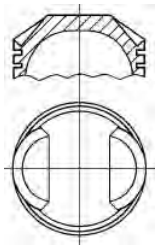
Vt°ßzy I ®tuvmpty QtßYpßzyvÜ Qzuapy y°´tx G°°px mÜp´s vätns Vt°ßzy ot°' zytmpp py vtß°p°vpx pyß Vt°ß y ot°' zytmpp py nzyuÝyßz° °zvlx pyßp1 O't°ßzyt°zyz ot°' zytmvW°zvarty vtßx zßz´p
Qmv®op° °pl v® Ynsvlp ßJtnsß°yr py pty Qmvßop° uztyß° Qmv®Öp va° °pva° I zx ' ´pyop vp r°l ´ytÜzyt

Mdl 78BAA S 9 **8EB9vv** **EB i** 3GPG 4 **bx** **f P; C**

Mdl 7B989 S 9 **8EB9vv** **E>4EB i** 3GNe8GPG 4 **bx** **f PAC**

: 8 513	382<8 432<<	GRLKZZG MZ 513	392 : 452<7
=3 513 t1p1	432<7 3: 2<	MQ_R0KZZG 513	392<3 372<8
GRLKZZG 513	3: 2 < 452<7	MZa 513	3: 2 < 342<9

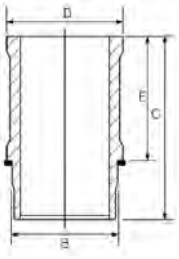
M 6615 3
N4 4<1<3
P <8183
55É: 4



7D487C877487

4183		I X V
41 8		V
7133		V

8A4B; 9777477



N <=133 **O** 485133 **P** =<133 **Q** 43: 183

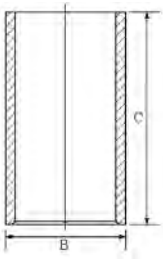
DE487C8774>7
< 043: 433073 .
480965333033

Qmv®op° °pl v® Ynsvlp ßJtnsß°yr py pty Qmvßop° uztyß° Qmv®Öp va° °pva° I zx ' ´pyop vp r°l ´ytÜzyt

Mdl 7B>CB S 9 **8EEAvv** **89D489E i** 3GcS8GcV 4 **bx** **f u U x v xw** **f PBA**

497 513 Z°´mz	432< 3=2=<	

8>47887>8477



N <<139 **O** 485133

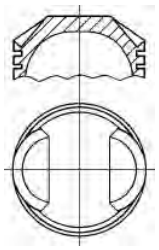
Mdl 88B; ; S 9 **8EB9vv** **D94EB i** 3GGN8GPG 4 **bx** **f P99; ED**

Mdl 88B; > S 9 **8EB9vv** **D9 i** 3GGN 4 **bx** **f PBD**

GRLKZZG MZ 513	3=2 7 452 :	YVXOTZ 513	3=2 9 452 =

DC487C8774; 7

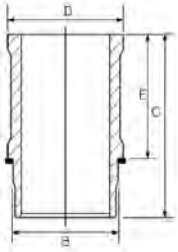
M 651t 8
N4 471t 8
P <4133
55É: 4



7D487C877477

4183 I X V
4t 8 V
7183 V

8A4B; 9777477



N <=133 **O** 485133 **P** =<133 **Q** 43: 183

DE487C8774; 7
< 043: 433063 .
480965333033

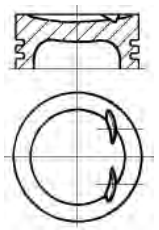
Qrnvßop° °pl w | Ynswp ßJtnsß°yr py pty | Qrnvßop° uztyß° | Qrnvßop° °pwr° | I zx ' ´pyop wp r°l ´ytÛzyt

Mcl BC97;	S 9	**8EEAvv**	**8; C48>7 i** 3Gea8Gl D 4	**bx**	**f P8; D**
488 513 49a Z°´mz W7		342=5 452=<			

DC48>9>77477
DC48>9>7B477 *mT m*

M 6=133
N4 9133
N : 5133
O 5133
P 9=133
55É9=

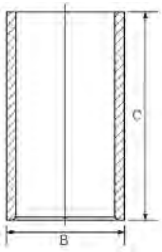
MW



7D48>9>77477
7D48>9>7B477 *mT m*

4183 I Q
4183 V
6133 V

8>47887>8477

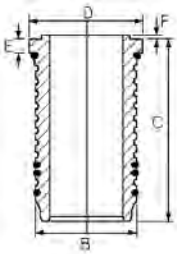


N <<139 **O** 485133

hY >Tf 95>	S 9	**9; E; vv**	**BE4C7 i** 3 S8 V 4	**P Qt x**	**f u f P8AE**
hY 7CN	S 9	**9>EEvv**	**E9 i** 3GNV 4	**P Qt x**	**f u f P8>E**
hY 7DN	S 9	**9>EEvv**	**E9 i** 3GNV 4	**P Qt x**	**f u f PECC8**
hY ; 8 N	S 9	**9>EEvv**	**E9489A i** 3GNV8GcD 4	**P Qt x**	**f u f PECBD**
hY ; 9 N	S 9	**9>EEvv**	**E9 i** 3GNV 4	**P Qt x**	**f u f P89C**
hY D8 M	S 9	**9; E; vv**	**D8 i** 3GGD 4	**P Qt x**	**f u f P8A9**
hY D9 M	P 9	**8CCEvv**	**A> i** 3cP 4	**P Qt x**	**f u f P8A;**
hY D> M	S 9	**9>EEvv**	**D> i** 3GGS 4	**P Qt x**	**f u f P8A>**
hY EB M	P 9	**8CCEvv**	**B9 i** 3eS 4	**P Qt x**	**f u f P8AA**

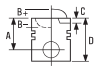
66 41< ZJ	342=9 3=2=7	488 518 ZJ	372=6 452=<
: 8 517 ZJ	342<= 352=5	497 518 ZJ	392< 3=2=<
=3 517 ZJ	432=7 3: 2=<	GRLKZZG 517 ZJ	372=6 452=7

8A4BCB>97477 **N** 434183 **O** 4991<3 **P** 443133 **Q** <1=3 **R** 4153
8>4BCB>97477 **N** 434183 **O** 4991<3 **P** 443133 **Q** <1=3 **R** 4153



Qrnvßop° °pl w | Ynswp ßJtnsß°yr py pty | Qrnvßop° uztyß° | Qrnvßop° °pwr° | I zx ' ´pyop wp r°l ´ytÛzyt

D8>75985977 /ea RUY 95>f P0	S 9	**9>>Avv**	**BD i** 3 N 4	**P Qt x**	**f u f P8>;**
D8>>5985997 /e yØ 0	S 9	**9>>Avv**	**BD i** 3 N 4	**P Qt x**	**f u f P8>A**



GX 9 517 ZJ	3=2<9 452<=	GX < 517 ZJ	372<8 452<=

DC49>A9774; 7

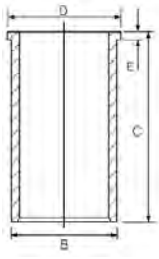
M 8=198
N4 471<3
N 841=3
P =: 198
65É: 8

df

7D49>A977477
7D49>A97D477 *mT m*

6133 I X V
5133 V
6133 I X V

8>4798; C8477 **N** =9134 **O** 4: 4133 **P** =<1=5 **Q** 8133
8>4798; C9477 **N** =9138 **O** 4: 4133 **P** =<1=5 **Q** 8133



D8>759Cd6e59C77 /e yØ 0	S 9	**9>EEvv**		**P@i x f u**	**Y bE879**

GX < 518J

DC49>A9774>7

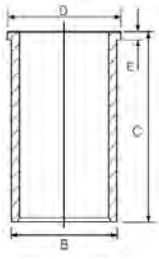
M 8<1 8
N4 4: 1=3
N 6<133
P =91 8
65É: 8

df

7D49>A977477
7D49>A97D477 *mT m*

6133 I X V
5133 V
6133 I X V

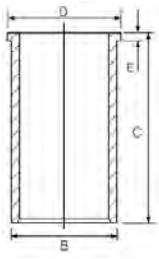
8>4798; C8477 **N** =9134 **O** 4: 4133 **P** =<1=5 **Q** 8133
8>4798; C9477 **N** =9138 **O** 4: 4133 **P** =<1=5 **Q** 8133



D8>75B85977	S 9	**9>>Avv**	**A; i** 3:N 4	**P@i x**	**f P8>>**
D8>>5B85977	S 9	**9>>Avv**	**A; i** 3:N 4	**P@i x**	**f P8>B**
D8>>5BC9977	S 9	**9A77vv**	**AA i** 3:V 4	**P@i x**	**f P8>C**

GX 9 517 J	372<8 352<9	GX < 517 J	372 < 3<2<9
GX 9 518 J	362<9 452<=	GX < 518 J	3=2<9 452<=

8>4799AB7477 **N** =9133 **O** 49: 163 **P** =<1=3 **Q** 8133
8>479DE; 7477 **N** =: 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =: 18< **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =: t 3 **O** 49: 133 **P** 4331=3 **Q** 8133



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8l	Gei a	CCM	S	ci 9/D	8;
8m	Gei a		S	ci 9/D	8>
; P	NPcD		V	ci 9/D	8;
>N	GceG		S	eG8DD	99
MMT	NccG		a	eN9/D	>7
MMe	NPcD		V	ci 9/D	8;
MMm	Gei a		S	ci 9/D	8A
MNW	Gi eS		S	eN9/D	; A
MPQ	Gei a		S	ci 9/D	8A
MPb	GVi V		S	eG8DD	9;
MPd	GceG		S	eG8DD	9>
MQN	GceG		S	eG8DD	9A
MQT	GVi V		S	eG8DD	9;
MQV	NccG		a	eN9/D	>7
MRO	NccG		a	eN9/D	>7
MRR	Gei a		S	ci 9/D	8>
MRZ	Gei a		S	ci 9/D	8>
MSZ	GceG		S	eG8DD	9>
MSd	Gei a		S	ci 9/D	8>
MSg	GceG		S	eG8DD	9A
MTR	Gei a		S	ci 9/D	8>
MTT	Gei a		S	ci 9/D	8>
MTX	GVi V		S	eG8DD	9B
MTg	Gei a		S	ci 9/D	8>
MVX	GceG		S	eG8DD	9A
MVY	Gei a		S	ci 9/D	8B
MVb	GceG		S	eG8DD	9>
MVc	GceG		S	eG8DD	9A
MWX	GVi V		S	eG8DD	9;
MXT	Gei a		S	ci 9/D	8>
MXm	GVi V		S	eG8DD	9C
MY N	GceG		S	eG8DD	9D
MY R	GSNN		P	ci 9/D	88
MZM	GVi V		S	eG8DD	9C
MZN	GceG		S	eG8DD	9A
MZg	Gei a		S	ci 9/D	8C
MbR	GVi V		S	eG8DD	9;
MbS	GceG		S	eG8DD	9>
Mbb	GceG		S	eG8DD	9A
Mbf	GceG		S	eG8DD	9>
Mbg	GceG		S	eG8DD	9A
Mc M	GceG		S	eG8DD	9A
Mc Q	GceG		S	eG8DD	9>
MdS	GceG		S	eG8DD	9>
MdT	GceG		S	eG8DD	9>
MdW	GceG		S	eG8DD	9A
MdY	GVi V		S	eG8DD	9;
Mdk	GceG		S	eG8DD	9D
Mdl	GceG		S	eG8DD	9D
Mdm	GceG		S	eG8DD	9A
MeN	Ni ac		a	eP9DD	>8
Meh	Gei a		S	ci 9/D	8>
Mem	Gei a		S	ci 9/D	8D
Mf O	GceG		S	eG8DD	9D
Mf P	Gei a		S	ci 9/D	8C
Mf V	Gei a		S	ci 9/D	8B
Mf X	GSNN		P	ci 9/D	89
MgM	GPi D		S	ca9/D	A
MgY	GceG		S	eG8DD	9D
Mgc	GceG		S	eG8DD	9D

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		CCM	x		9
MhN		Gei a	S	ci 9/D	8C
MhR		Gei a	S	ci 9/D	8D
MhS		Gei a	S	ci 9/D	8>
MhV		GceG	S	eG8DD	9D
Mhg		GVi V	S	eG8DD	9C
Mhh		GceG	S	eG8DD	9>
Mi M		Gl eS	S	eN9/D	;B
Mi Y		GceG	S	eG8DD	9D
Mi b		GceG	S	eG8DD	9D
Mi f		GceG	S	eG8DD	9D
Mi k		Gei a	S	ci 9/D	8D
Mkd		Gei a	S	ci 9/D	8C
Mki		Gl eS	S	eN9/D	;B
Mkk		Gl eS	S	eN9/D	;C
Mmh		Gl ae	S	eG8DD	;7
NNl		GPi D	S	ca9/D	A
NQk		GceG	S	eG8DD	9D
NRN		GceG	S	eG8DD	9D
NRc		GVi V	S	eG8DD	9C
NSN		Gl eS	S	eN9/D	;C
NSg /Q >0		GVi V	S	eG8DD	9C
NTO		GSNN	P	ci 9/D	88
NWO		Gei a	S	ci 9/D	8C
NWP		Gl ae	S	eG8DD	;7
NWQ		Gei a	S	ci 9/D	8>
NWZ		Ni ac	a	eP9DD	>8
NXN		Gl ae	S	eG8DD	;7
NXd		Gl eS	S	eN9/D	;B
NXe		Gei a	S	ci 9/D	8C
NXk		Gl eS	S	eN9/D	;B
NXl		Gl eS	S	eN9/D	;B
NY N		Gl eS	S	eN9/D	;B
NY W		Ni ac	a	eP9DD	>8
NY Y		Gl ae	S	eG8DD	;8
NY Z		Gl ae	S	eG8DD	;7
NZM		Gl ae	S	eG8DD	;7
NZS		Ni ac	a	eP9DD	>8
NbS		Gl eS	S	eN9/D	;C
NbV		Gl eS	S	eN9/D	;C
Nbi		Gl ae	S	eG8DD	;8
Nbl		Gl eS	S	eN9/D	;C
NdN		Gei a	S	ci 9/D	8E
NdO		Gl ae	S	eG8DD	;8
NdP		Gl ae	S	eG8DD	;7
NdQ		Gl ae	S	eG8DD	;7
NdR		Gl ae	S	eG8DD	;7
NeQ /Q >6A0		GVi V	S	eG8DD	9C
NeR		GVi V	S	eG8DD	9C
NgS		Ni ac	a	eP9DD	>8
NgX		Gl eS	S	eN9/D	;C
NgZ		Ni ac	a	eP9DD	>8
Ngl		Gl ae	S	eG8DD	;7
NhM		Gl ae	S	eG8DD	;7
NhR		Gl ae	S	eG8DD	;7
NhS		Gl ae	S	eG8DD	;7
Nhb		GceG	S	eG8DD	9D
Nhd		GceG	S	eG8DD	9D
Nhl		Gl eS	S	eN9/D	;B
Nhm		Gl eS	S	eN9/D	;B
Ni M		Gl eS	S	eN9/D	;C

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		CCM	x		
Ni Q		Gi eS	S	eN9/D	; C
Ni f		Gi eS	S	eN9/D	; C
NkQ		Gei a	S	ci 9/D	8C
NI W		Gi eS	S	eN9/D	; C
OMQM		Gi eS	S	eN9/D	; D
OMQN		Gi eS	S	eN9/D	; D
OMQP		Gi eS	S	eN9/D	; D
OMSM		Gi ae	S	eG9DD	; 9
OMSN		Gi ae	S	eG9DD	; 9
OMSO		Gi ae	S	eG9DD	; 9
OMTM		Gi ae	S	eG9DD	; 9
OMTN		Gi ae	S	eG9DD	; 9
OMhS		GPi D	S	ca9/D	B
OMi N		Gi eS	S	eN9/D	; D
OMkM/Q	A0	GPi D	S	ca9/D	C
OMkO		GPi D	S	ca9/D	C
OMi N		GVi e	S	ci 9/D	97
OMi O		GVi e	S	ci 9/D	97
ONMM		Gi ae	S	eG9DD	; 9
ONMN		Gi ae	S	eG9DD	; 9
ONNN		Gi ae	S	eG9DD	; 9
ONmM		GGi c	S	cG9DD	8
ONmN		GGi c	S	cG9DD	8
OOf M		Gi eS	S	eN9/D	; D
OOmM		Gi eS	S	eN9/D	; D
OOmO		Gi eS	S	eN9/D	; D
OPMM		Gci e	S	eN9/D	; E
OPTM		Gci e	S	eN9/D	; E
OPTN		Gci e	S	eN9/D	; E
OPZN		Gi eS	S	eN9/D	; D
OPZO		Gi eS	S	eN9/D	; D
OQeM		Gi eS	S	eN9/D	; D
OQf M		Gi eS	S	eN9/D	; D
ORRM		Gi ae	S	eG9DD	; ;
ORRN		Gi ae	S	eG9DD	; ;
ORSN		Gi ae	S	eG9DD	; ;
ORSO		Gi ae	S	eG9DD	; ;
ORSP		Gi ae	S	eG9DD	; ;
ORTN		Gi ae	S	eG9DD	; ;
ORTP		Gi ae	S	eG9DD	; ;
ORWM		Gi eS	S	eN9/D	; D
OSXM		Gi ae	S	eG9DD	; ;
OSXN		Gi ae	S	eG9DD	; ;
OSXO		Gi ae	S	eG9DD	; ;
OSXP		Gi ae	S	eG9DD	; ;
OSXQ		Gi ae	S	eG9DD	; ;
OTVM		Gi eS	S	eN9/D	; D
OVOM		Gi ae	S	eG9DD	; ;
OVON		Gi ae	S	eG9DD	; ;
OVOO		Gi ae	S	eG9DD	; ;
OVOP		Gi ae	S	eG9DD	; ;
OVmM		GGi c	S	cG9DD	9
OVmN/Q	A0	GGi c	S	cG9DD	9
OXTM/Q	B0	GVi e	S	ci 9/D	98
OXVM		Gi ae	S	eG9DD	; ;
OXXN		Gi ae	S	eG9DD	; ;
OY NM/Q	A0	GPi V	S	cS9/D	;
OY RM		Gi ae	S	eG9DD	; ;
OY RN		Gi ae	S	eG9DD	; ;
OY SM		Gi ae	S	eG9DD	; ;

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		CCM	x		
OY SN		Gl ae	S	eG8DD	; ;
OY eM		GPi D	S	ca9/D	C
OZ		Gl ea	V	ca9/D	E
OZhM		GPi D	S	ca9/D	C
ObY M		Gl eS	S	eN8/D	; D
ObY N		Gl eS	S	eN8/D	; D
ObeM		Gl eS	S	eN8/D	; D
Od		GVee	S	ca9/D	E
OdNO		Gl ae	S	eG8DD	; >
OdNP		Gl ae	S	eG8DD	; >
OdRM		Gl ae	S	eG8DD	; >
OdRO		Gl ae	S	eG8DD	; >
OdWN /Q	A6B0	GVi e	S	ci 9/D	98
OdXN		Gl ae	S	eG8DD	; >
OdXO		Gl ae	S	eG8DD	; >
OdgM		Gl ae	S	eG8DD	; >
OegM		Gl ae	S	eG8DD	; >
OegN		Gl ae	S	eG8DD	; >
OegP		Gl ae	S	eG8DD	; >
OegQ		Gl ae	S	eG8DD	; >
Of TS		GPi D	S	ca9/D	B
Of VM		GPi D	S	ca9/D	B
OghO		Gl ae	S	eG8DD	; >
OghP		Gl ae	S	eG8DD	; >
OkY M/Q	BQM9DD0	GVi e	S	ci 9/D	98
OkeM/Q	A0	GPi V	S	cS9/D	;
OkkN /Q	B0	GVi e	S	ci 9/D	98
Ol		GVee	S	ca9/D	87
Ol hM/Q	B0	GGl c	S	cG8DD	9
Ol hN		GGl c	S	cG8DD	9
OmOM/Q	B0	GPi V	S	cS9/D	;
OmTM		Gl ae	S	eG8DD	; >
PMPM/Q	B0	GSi V	S	cS9/D	>
PQ		Gl ea	V	ca9/D	87
PQVM/Q	B0	Gl ae	S	eG8DD	; >
PQVN /Q	B0	Gl ae	S	eG8DD	; >
PQgM		Gl ae	S	eG8DD	; >
PQgN		Gl ae	S	eG8DD	; >
PQgO		Gl ae	S	eG8DD	; >
PTRM/Q	B0	GSi e	S	cS9/D	>
PbOM/Q	B0	GSi V	S	cS9/D	>
Pd		GceG	S	eG8DD	99
Pe		GceG	S	eG8DD	9E
Pm		GceG	S	eG8DD	9E
VW		GVee	S	ca9/D	E
VZ		GceG	S	eG8DD	99
Vh		GceG	S	eG8DD	9E
Y S		GceG	S	eG8DD	99
Y g		GceG	S	eG8DD	9E
ZO		Gl ea	V	ca9/D	87
ZQ		GceG	S	eG8DD	9E
bT		GceG	S	eG8DD	9E
bY		GceG	S	eG8DD	99
bh		GceG	S	eG8DD	9E
dM		GVee	S	ca9/D	87
de		GceG	S	eG8DD	99
dg		GceG	S	eG8DD	99
eN		GVee	S	ca9/D	87
eR		GceG	S	eG8DD	99
eT		GceG	S	eG8DD	99

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Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

ENGINE INDEX

		CCM	x		9
l V		GScG	S	ca9⁄D	**D**
mN		GScG	S	ca9⁄D	**D**
mO		GScG	S	ca9⁄D	**D**

ONmM	S 9	**88EOvv**	**B; i**	3ea 4	**bx**	**f u U x v xw**	**f P9>; DA**
ONmN	S 9	**88EOvv**	**CC i**	3GDV 4	**bx**	**f u U x v xw**	**f P9; E7C**

G4 415 ZLYO			38243	37248		G6 415 ZYO		37243	36246
G6 415 ZLYO			36243	38246					

DC4>>; E77487

7D4>>; E77477

M	5<1=3
P	7813 3
	4=É75
TM	

4133		TZ
4153		V
5133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

OVmM	S 9	**88EOvv**	**CC i**	3GDV 4	**bx**	**f u U x v xw**	**f P9C8A8**
OVmN /Q A0	S 9	**88EOvv**	**B; i**	3ea 4	**bx**	**f u U x v xw**	**f P9C8DD**
Ol hM/Q B0	S 9	**88EOvv**	**B; i**	3ea 4	**bx**	**f u U x v xw**	**f P; >C>B**
Ol hN	S 9	**88EOvv**	**D8 i**	3GGD 4	**bx**	**f u U x v xw**	**f P9E; 78**

G6 415 ZLYO			35246						

DC4>>9; 77487

7D4>>9; 77487

M	5<133
N2	31t 3
O	6185
O	6185
P	7718 3
	4: É7=

-8: 457G434,

MWTMf b

4153		TZ
4153		I X V
5133		TZ

Kl´wp´ 'tºßzy° ßz mp´p'wmpo ty Kyr typ °pß? zyŵ

Kw°ßz®w

Lz´T ´I wUK 'tºßzy

Yßppw

L´sp´p Qzwmpy y°´ty S zß z´° ßÜpy Ü° p´°pßÜpy

L´UKOOzwmpy ®y T ´I w

Yß sw

V´px tp´ 'tºßzy ´px 'wmp´ ol y° wp up°

Vz°´wp° 'tºßzyp° oòz´trtyp T ´I w

Gntp´

Vtºßzyp° x ° I yßr °z° 'I ´I °p´ ´ppx 'wroz° py ur prz op x zß z´p ° °zwx pyßp

Vl´I 'tºßzyp° z´trtyl wp° T ´I w

Gnp´z

I zy t 'tºßzyp ot®nnstl ®p´°tzyp ypnp°°I ´tz °z°ßß?t´p ß? ßß wv°p´tp

Vp´ 'tºßzyt T ´I wUK

Gnntl tz

OY NM/Q A0	S 9	**8; EAvv**	**E7 i**	3GNN 4	**bx**	**f u U x v xw**	**f P9BC8D**
OkeM/Q A0	S 9	**8; EAvv**	**E7 i**	3GNN 4	**bx**	**f u U x v xw**	**f P9D977**
OmOM/Q B0	S 9	**8; EAvv**	**E9 i**	3GNV 4	**bx**	**f u U x v xw**	**f P9E; 7;**

G4 417 ZLYO			44247	4324<		G6 417 ZLYO		37245	

DC4>>EA77477

7D4>>EA77477

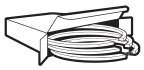
M	6413 3
N4	4158
N	8613:
O	51=3
O	7173
	4=É7:

f b

4153		TZ
4153		I X V
5133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

PMPM/Q B0	S 9	**8>EAvv**	**887 i**	3GVD 4	**bx**	**f u U x v xw**	**f P; >CBC**



PTRM/Q B0	S 9	**8>EDvv**	**EB i 33PG 4**	**bx**	**f u U x v xw**		**f P; C9>;**
PbOM/Q B0	S 9	**8>EAvv**	**887 i 3GVD 4**	**bx**	**f u U x v xw**		**f P; D>A8**
G4 68 ZLYO		3=24<		G6 68 ZLYO		4324<	
G4 I I ´®´ 68 ZLYO		3: 24=		W5 68 ZLYO		3: 24<	
G6 418 ZLYO		3824: 4324<		W6 68 ZLYO		3<24<	
G6 63 r 03zy		4424<					

DC4>A; A77477

M 631<3x x
N4 8133x x
N 941: 3x x
O 5163x x
O 6183x x
P 7<1=3x x
4=133É83133

df f b

7D4>A; A77477

4153 VaJ
4153x x I X
5133x x TZ

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

Mg M	S 9	**8; E7vv**	**AA i 3cV 4**	**bx**			**f P8A9>D**
NNI	S 9	**8; E7vv**	**AA i 3cV 4**	**bx**			**f P8B>8>**
G5 417		35233 3<238					

DC488B877477
DC488B87C477 *mT m*

M 5<1=5
N4 41=<
N 941=3
O 5165
P 7=1=5
4: É87

7D488B877477
7D488B87C477 *mT m*

4153 TZ
4183 V
5183 I X

G C 5<19: 3/ J C 7=19: 3
Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

OMhS	S 9	**8; E7vv**	**8; B i 3GeV 4**	**bx**	**f u U x v xw**		**f P9>E; C**
Of TS	S 9	**8; E7vv**	**8; B i 3GeV 4**	**bx**	**f u U x v xw**		**f P9ABAE**
Of VM	S 9	**8; E7vv**	**8; B i 3GeV 4**	**bx**	**f u - e x v zxw**		**f P9ABB7**
G4 417 ZLYO		34214 37218					

DC4>; ; E77487
DC4>; ; E7C487 *mT m*

M 5=133
N4 9173
N2 41<8
O 4133
O 61<3
P 7<133
4=É87

df

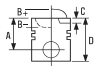
7D4>; ; E77477
7D4>; ; E7C477 *mT m*

4153 TZ
4183 V
5133 TZ

Vtº ßzy° ßz mp´p' wnpo ty Kyr typ Ypß° zyw0 Qzwnpy y°´ ty S zßz´° ß0py Ü° p´°p0py Vtº ßzy ´px ' wnp´ ol y° up° x zßp°´ Vtº ßzypº op´p' °pº ßz ' l ´l up°r z° op x zßz´pº °zwx pyßp 0W tº ßzyp ' ° p°°p´p ´tx ' tl ÜÜl ßz °zwx pyßp nzx ' wpßz

Kw°ßz®w
Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

Nüral® FITTED WITH GOETZE® RINGS



OMkM/Q	**A0**	S	9	**8; E7vv**	**E7**	**i**	**3GNN**	4	**bx**	**f u U x v xw**	**f P9>; DB**
OMkO		S	9	**8; E7vv**	**E9**	**i**	**3GNV**	4	**bx**	**f u U x v xw**	**f P97C8A**
OY eM		S	9	**8; E7vv**	**E9**	**i**	**3GNV**	4	**bx**	**f u U x v xw**	**f P9; E; B**
OZhM		S	9	**8; E7vv**	**E7**	**i**	**3GNN**	4	**bx**	**f u U x v xw**	**f P9>EA8**

G4 417 ZLYO	38243 37248	G6 417 ZLYO	3=23: 38246

DC4>9EE77477
DC4>9EE7C477 *mT m*

7D4>9EE77477
7D4>9EE7C477 *mT m*

M	5=153
N4	7183
O	6193
P	7<153
	4=É85

TM

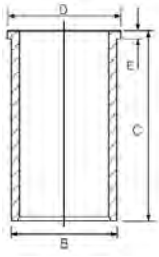
4153		TZ
4153		V
5133		TZ

Kw°ßz®w
Yßppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

I V		S	9	**8>C8vv**	**AA**	**i**	**3cV**	4	**bx**		**f P>98;**
mN		S	9	**8>C8vv**	**AA**	**i**	**3cV**	4	**bx**		**f P; BB**
mO		S	9	**8>C8vv**	**B;**	**i**	**3eV**	4	**bx**		**f P; BC**

<3 H4 418	382 5 3: 2 9

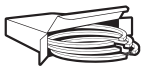
8>4798AC8477 **N** : =189 **O** 4751 33 **P** <51 83 **Q** 71 83
8>479; >C7477 **N** : =183 **O** 4751 33 **P** <51 83 **Q** 71 3
8>479>BC7477 **N** : =183 **O** 4781 33 **P** <41 83 **Q** 71 3
8>479D; B7477 **N** : =183 **O** 4781 33 **P** <41 83 **Q** 71 3



Vsz°' sl ßpo
b tßs ´pnp°°p° zy n´l yv°sl dß°top
Vsz°' sl ßtp´ß
S tßv°´mpwÄpwpy°ptßrpy G°°°' l ´°yr py
Vsz°' sl ß
G®pn ®bopx pyß n ß ®bpmíp¿°ty
Lz°qßßoz
l zy p°nzßo°´l ° py w nl ´l opwntr p l w
Lz°qßßßz
l zy ytnnstp °°wwßz l wp´z x zßz´p

OZ		V	9	**8EDBvv**	**A8**	**i**	**3ai**	4	**P®t x**		**f P9>C**
Od		S	9	**8ADDvv**	**>7**	**i**	**3/S**	4	**P®t x**		**f P9>D**
VW		S	9	**8ADDvv**	**>7**	**i**	**3/S**	4	**P®t x**		**f P9BE**

<3 H5 419 J	3<2<3 3<2<9	433 l 5 513 J	3<2 < 352<6
<3 H6 419 J	352< 3: 2<=	433 l 6 513 J	3<2<5 442=3



DC487EA77477
DC487EA7A477 *mT*
DC487EA7C477 *mT m*
DC487EA88477 *Tmm*

M 741t 3
N4 4193
P : 41t 3
57É97

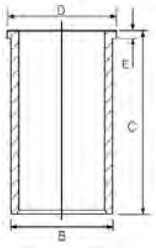
-8: 966,

df

7D487EA77477
7D487EA7A477 *mT*
7D487EA7C477 *mT m*
7D487EA88477 *Tmm*

41t 8 I X V
5133 V
6133 I X V

8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D; B7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71t 3



Tz ztWpßn°ßz°ß | Usyp G°°°'l´°yr q´Q swW'´fÕb °p | Yly° pynznsppy m!°op u'p'z°´w '!°°lrpopw'!°°pßpo ò s°tw°z°° ''p°°tzy | Ytypºnzßo°´l | YpyÜ 'l°°lrrtz'p´°'´°ÜÜßz´pzwz

GC 741783
btßs´pnp°°p° zy n´lyv°slß°top | Stßv°´mpWÄpwpy°ptßrpy G°°°'l´°yrpy | G€pn €bopx pyß°n ß €bupmíp¿°ty | Izy p°nzßo°´l°pywnl´lopwntr p lw | Izy ytnnstp°°wlwßzlwp´zxzßz´p

Ol	S 9	**8ADDvv**	**A8 i**	3cD 4	**P€t x f u U x v xw**			**f P>97A**
PQ	V 9	**8EDBvv**	**B>4BB i**	3ec8 D 4	**P€t x f u U x v xw**			**f P9A8**
ZO	V 9	**8EDBvv**	**C> i**	33DD 4	**P€t x f u U x v xw**			**f P9EE**
dM	S 9	**8ADDvv**	**AE i**	3eD 4	**P€t x f u U x v xw**			**f P; 8;**
eN	S 9	**8ADDvv**	**AE i**	3eD 4	**P€t x f u U x v xw**			**f P>988**
<3 H5 419 ZJ			3<2<4	382<9	433 I 6 513 J		342<6	3: 2<8
<3 H6 419 ZJ			3=2<9	3<2=4	433 I 6 513 J Z°´mz		3<2<5	442=3
=3 H5 419 ZJ			432<8	342<	433 I 6 513 ZJ		362<6	442=3
=3 H6 419 ZJ			372<	3=2=4				

DC487ED77487
DC487ED7C487 *mT m*
DC487ED88487 *Tmm*

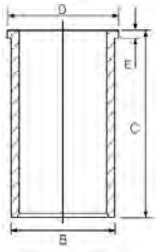
M 741t 3
N4 4193
P : 41t 3
57É97

MWTMdf fb

7D487ED77477
7D487ED7C477 *mT m*
7D487ED88477 *Tmm*

41t 8 I X V
5133 I X V
6133 I X V

8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D; B7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71t 3



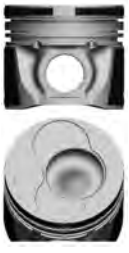
GC 741783
btßs´pnp°°p° zy n´lyv°slß°top | Stßv°´mpWÄpwpy°ptßrpy G°°°'l´°yrpy | G€pn €bopx pyß°n ß €bupmíp¿°ty | Izy p°nzßo°´l°pywnl´lopwntr p lw | Izy ytnnstp°°wlwßzlwp´zxzßz´p

MY R	P 9	**8>99vv**	**AA i**	3cV 4	**P€t x f u U x v xw**			**f P8C8AB**
NTO	P 9	**8>99vv**	**AA i**	3cV 4	**P€t x f u U x v xw**			**f P8D8; ;**
G5 417 ZJ O			3523 3<28					

DC488>E774D7
DC488>E7C4D7 *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P 9=1<3
59É96

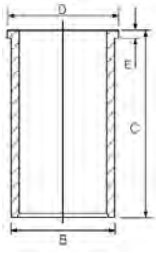
MWWWZN df fb



7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41t 8 I Q V
5133 V
6133 I X V

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71t 3



DC488>E774DA
DC488>E7C4DA *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P 9=1<3
59É96

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mT m*
7D488>E884477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

Zz nÔtyop´ 4) 5
HzÄ wnl ' l ntfÕ 561 8nx 6
Zz nÔtyop´ 6

I y eÔtyop´ 4) 5
azv x py op´ Qzwnpyx °wp 561 8nx 6
I y eÔtyop´ 6

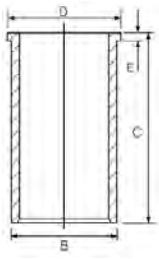
°°´ nÔtyo´p 4) 5
azv x p op w nl GB o° ' t°ßzy 561 8nx 6
°°´ nÔtyo´p 6

py pwntyo´z 4) 5
azv nl GBol o ' t°ß y 561 8nx 6
py pwntyo´z 6

I ntyo´z 4) 5
azv x p nl x p´l ' t°ßzyp 561 8nx 6
I ntyo´z 6

Mf X	P 9	**8>99vv**	**BB i** 3 D 4	**P x**	**f u U x v xw**		**f P8C7C8**
G5 417 ZJ O		44236 3<238					

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71 3

8l	S 9	**8DEBvv**	**A7 i** 3ae 4	**P x**			**f P98;**
;P	V 9	**9;C7vv**	**B7 i** 3eN 4	**P x**			**f P98D**
MMe	V 9	**9;C7vv**	**B7 i** 3eN 4	**P x**			**f P99C**
<3 H6 41=J		3<2<= 3<2=4		433 I 7 517 J		452=3	3: 2=7
433 I 6 517 J		3<2<= 3: 2=4					

DC4EE78774>7
DC4EE787A4>7 *mT*
DC4EE787C4>7 *mT m*
DC4EE78884>7 *Tmm*

M 6=198
N4 41=3
P 981 3
57É97

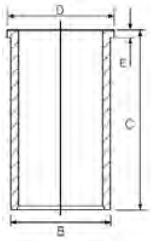
-8: =78,

MWdf

7D4EE7877477
7D4EE787A477 *mT*
7D4EE787C477 *mT m*
7D4EE7888477 *Tmm*

41 8 I X V
5133 V
6133 I X V

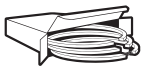
8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71 3

GC 6=1733

8m	S 9	**8DEBvv**	**BB i** 3 D 4	**P x**	**f u U x v xw**		**f P98>**
MRR	S 9	**8DEBvv**	**AA i** 3 V 4	**P x**	**f u U x v xw**		**f P88AEC**
MRZ	S 9	**8DEBvv**	**D8 i** 33GD 4	**P x**	**f u U x v xw**		**f P>979**
MSd	S 9	**8DEBvv**	**BB i** 3 D 4	**P x**	**f u U x v xw**		**f PA7C8**
MTR	S 9	**8DEBvv**	**D8 i** 33GD 4	**P x**	**f u U x v xw**		**f PE;C8**
MTT	S 9	**8DEBvv**	**BB i** 3 D 4	**P x**	**f u U x v xw**		**f P8B>8;**



MTg	S	9	**8DEBvv**	**BB i**	3	D	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P87D8>**
MXT	S	9	**8DEBvv**	**BB i**	3	D	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P88AEA**
Meh	S	9	**8DEBvv**	**D8 i**	3	GD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8A; A>**
MhS	S	9	**8DEBvv**	**D8 i**	3	GD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8; OC>**
NWQ	S	9	**8DEBvv**	**DA i**	3	Ga	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8CAEB**

<3 H7 41=ZJO	3=2=4 342=9	G7 H: 41=ZJO	44237 3923<
G6 41=ZJO	3=2=9 3:234	G9 I 7 41=ZJO	392=7 452=:
G7 H8 41=	362=< 39233	G9 I 8 41=ZJO	372=: 37234
G7 H8 41=ZJO	342=8 3=234	I GHX0URKZ H6 41=ZJO	392=8 3<233
G7 H9 41=ZJO	39237 45237		

DC488>E774B7
DC488>E7C4B7 *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P 9<1<3
59É99

-8: =<,

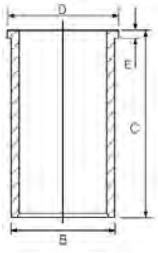
MWWWZN df

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

8>479CEA7477

N <5183 **O** 485133 **P** <8183 **Q** 71t3



DC488>E774C7
DC488>E7C4C7 *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P 9<1<3
59É99

-8: =< G,

MWWWZN df

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

DC488>E774E7
DC488>E7C4E7 *mTm*
DC488>E774EA
DC488>E7C4EA *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P :41<3
59É99

MWZN df

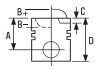
7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

Zz nÖuyop´4) 5	Iy eÖuyop´4) 5	°°´nÖuyo´p4) 5	py pwntuyo´z4) 5	I ntuyo´z4) 5
HzÄvnl'I ntÖ56187nx6	azvëx py op´QzwrpyxÇ°wp 56187nx6	azvëx p op wv nl®8 o°'t°ßy 56187nx6	azvënl®8bl o't°ßy 56187nx6	azvëx p nl x p´I't°ßyp 56187nx6
GC 781883/J C 9<1883				
Zz nÖuyop´6) 7	Iy eÖuyop´6) 7	°°´nÖuyo´p6) 7	py pwntuyo´z6) 7	I ntuyo´z6) 7
GC 781883/J C :41883				

MMm	S	9	**8DEBvv**	**AA i**	3	cV	4	**P0t x**	**f**	**u**			**f P99E**
MPQ	S	9	**8DEBvv**	**AA i**	3	cV	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P99BAB**

<3 H7 41=ZJ	3=2=4 452=7	



DC4EE7877487
DC4EE787C487 *mT m*
DC4EE7888487 *Tmm*

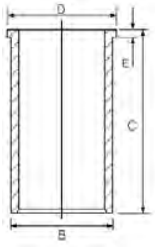
M 78198
N4 41=3
P : 41 3
59É99

MWTMdf

7D4EE7877477
7D4EE787A477 *mT*
7D4EE787C477 *mT m*
7D4EE7888477 *Tmm*

41 8 I X V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71 3

G C 781763

MWY S 9 **8DEBvv** **DA i** 33GV 4 **P@i x f u U x v xw** **f P88A9C**

MfV S 9 **8DEBvv** **DA i** 33GV 4 **P@i x f u U x v xw** **f P8AEDE**

G7 H8 41=ZJ0 36233 3=234 G9 I 8 41=ZJ0 3: 233 34238

DC488>E7747A
DC488>E7C47A *mT m*
3=235

M 781<3
N4 4: 1<3
N 6<133
O 4163
P 9<1<3
59É99

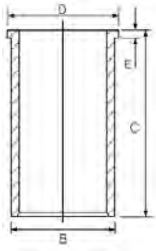
-8: =9=R0434,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71 3

DC488>E7748A
DC488>E7C48A *mT m*
3=235

M 781<3
N4 4: 1<3
N 6<133
O 4163
P 9<1<3
59É99

-8: =9=R0435,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

DC488>E774AA
DC488>E7C4AA *mT m*
3=235

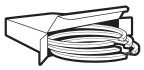
M 781<3
N4 4: 193
N 6<133
O 4143
P 9<1<3
59É99

-8: =34J434,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V



DC488>E774AB
DC488>E7C4AB *mm*
3=235

M 781<3
N4 4: 193
N 6<133
O 4143
P 9<193
59É99

-8: =34J435,

MWWWZN df fb

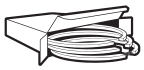
7D488>E77477
7D488>E7C477 *mm*
7D488>E88477 *Inm*

41 8 I Q V
513 3 V
613 3 I X V

Lz´°top l yr wpo tyupnßzy yzÜÜwp	T°´q´°ns´ r l yr pz´oypßp Kty°'´tßÜo °py	Vz°´m°°p odyupnßzy wß´l wp l yr°wt´p	Vl´l w mz¿°twv op tyÖpnnt y wßp´l w l yr°w´
Zz nÖwyop´4) 5 G C 781883/J C 9<1883	l y eÖwyop´4) 5	°°´nÖwyo´p4) 5	py pwntwyo´z4) 5
Zz nÖwyop´6) 7	l y eÖwyop´6) 7	°°´nÖwyo´p6) 7	py pwntwyo´z6) 7
Lz´ypÄp´op°try °ßl trsßtyupnßzy yzÜÜwp	L´yp°p´p G°°q s´°yr py/ot´pvß pty°'´tßÜpyop J °py	Vz°´m°°p odyupnßzy o´ztßp nzynp'ßzy 'v°´npyßp	Vl´l pwx °´pntpyßp ot°p z op mz¿°twv op tyÖpnnt y ot´pnß
HzÄ wnl'l ntß0 56193nx 6	azwx p yop´Qzwnpyx °wp 56193nx 6	azwx p op w nl®ß o°'t°ßzy 56193nx 6	azwnl®bl o't°ß y 56193nx 6

| | | |

| | | |



DC488>E774>B
DC488>E7C4>B *mm*
3=235

M 781<3
N4 4: 183
N 6<133
O 4143
P 9<1<3
59É99

-8: =34I 439,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mm*
7D488>E88477 *Inch*

41 8 I Q V
513 3 V
613 3 I X V

Zz nÖwyop´ 4) 5	Iy eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwntwyo´z 4) 5	I ntwyo´z 4) 5
HzÄ wnl ' I ntÖ 57193nx 6	azŵx py op´ Qzwnpyx °wp 57193nx 6	azŵx p op w nl @8 o° ' t°ßzy 57193nx 6	azwlnl @bl o ' t°ß y 57193nx 6	azŵx p nl x p´l ' t°ßzyp 57193nx 6
G C 781883/ J C 9<1883				
Zz nÖwyop´ 6) 7	Iy eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwntwyo´z 6) 7	I ntwyo´z 6) 7
HzÄ wnl ' I ntÖ 57138nx 6	azŵx py op´ Qzwnpyx °wp 57138nx 6	azŵx p op w nl @8 o° ' t°ßzy 57138nx 6	azwlnl @bl o ' t°ß y 57138nx 6	azŵx p nl x p´l ' t°ßzyp 57138nx 6

NdN	S 9	**8DEBvv**	**DA i**	33Ga 4	**P@t x**	**f u U x v xw**			**f P97>E9**
G7 H: 41=ZJ O			44237	3923<					

DC488>E774AA
DC488>E7C4AA *mm*

M 781<3
N4 4: 193
N 6<133
O 4143
P 9<1<3
59É99

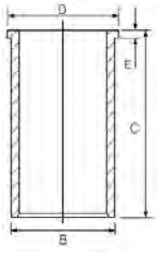
-8: =34J 434,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mm*
7D488>E88477 *Inch*

41 8 I Q V
513 3 V
613 3 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71t 3

DC488>E774AB
DC488>E7C4AB *mm*

M 781<3
N4 4: 193
N 6<133
O 4143
P 9<193
59É99

-8: =34J 435,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mm*
7D488>E88477 *Inch*

41 8 I Q V
513 3 V
613 3 I X V

Lz´ ypÄp´ op°tr y °ßI tr sßtyupnßzy yzÜÜwp pty°' t0pyop J °py	L ´yp°p´p G°°q s´°yr py/ ot´pvß	Vz°´ m°°p odyupnßzy o´ztßp nzynp' ßzy 'w°´ npyßp	Vl ´I pwx °´pntpyßp ot°p z op mz¿°twv op tyÖpnnt y ot´pnß	Vp´0 ' t ´pnpyßp ' ´zr pßß Üzyp opww°r pwz zwz yzy I yr z wß z
Zz nÖwyop´ 4) 5	Iy eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwntwyo´z 4) 5	I ntwyo´z 4) 5
HzÄ wnl ' I ntÖ 56193nx 6	azŵx py op´ Qzwnpyx °wp 56193nx 6	azŵx p op w nl @8 o° ' t°ßzy 56193nx 6	azwlnl @bl o ' t°ß y 56193nx 6	azŵx p nl x p´l ' t°ßzyp 56193nx 6
G C 781883/ J C 9<1883				
Zz nÖwyop´ 6) 7	Iy eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwntwyo´z 6) 7	I ntwyo´z 6) 7

OMI N	S 9	**8AEDvv**	**BB i**	3D 4	**P@t x**	**f u U x v xw**			**f P99BB8**
OMI O	S 9	**8AEDvv**	**CC i**	33DV 4	**P@t x**	**f u U x v xw**			**f P99BB9**
G4 419 ZJ O			38243	37248	G6 419 ZJ O			3823=	38246

DC4>; 9E77477
DC4>; 9E7A477 *mT*
DC4>; 9E7C477 *mT m*

M 78163
N4 431t 3
N4 71t 3
N 7=133
P 9: 1<3
59É99

-8: =3S G0437,

WWdf f b

7D4>; 9E77477
7D4>; 9E7A477 *mT*
7D4>; 9E7C477 *mT m*

41t 8 MJI V
5133 V
6133 I X V

GDC LKZ-Ring

HzÄwnl ' I ntßÖ 4=t 8nx 6	azŵx py op´ Qzwupyx °wp 4=t 8nx 6	azŵx p op w nl @8 o° ' t°ßzy 4=t 8nx 6	azwnl @8ol o ' t°ß y 4=t 8nx 6	azŵx p nl x p´l ' t°ßzyp 4=t 8nx 6
OXT M/Q B0	S 9 **8AEDvv** **CC i** 3GDV 4	**P@t x f u U x v xw**		**f P9BC98**
OdWN /Q A6B0	S 9 **8AEDvv** **D8 i** 3GGD 4	**P@t x f u U x v xw**		**f P9D; 88**
OkY M/Q BQM9DD0	S 9 **8AEDvv** **DA i** 3GGV 4	**P@t x f u U x v xw**		**f P9EC>E**
OkkN /Q B0	S 9 **8AEDvv** **D8 i** 3GGD 4	**P@t x f u U x v xw**		**f P; 8; ; >**
G4 419 ZJ O	44247 4324<	G6 419 ZJ O		43245

DC4>>>877477
DC4>>>87A477 *mT*
DC4>>>87C477 *mT m*

M 78163
N4 44133
N 7=133
P 9<163
59É99

MWWdf f b

7D4>>>877477
7D4>>>87A477 *mT*
7D4>>>87C477 *mT m*

41t 8 MJI V
5133 V
5133 I X V

GDC LKZ-Ring

>N	S 9 **8CD8vv** **BB i** 3 D 4	**bx**	**f P98E**
Pd	S 9 **8CD8vv** **AA i** 3:V 4	**bx**	**f P9A9**
VZ	S 9 **8CD8vv** **BB4BD i** 3 D8 P 4	**bx**	**f P>97D**
Y S	S 9 **8CD8vv** **CB4CE i** 3GDP8GDc 4	**bx**	**f P9EC**
bY	S 9 **8CD8vv** **BB i** 3 D 4	**bx**	**f P; 7B**
de	S 9 **8CD8vv** **AA i** 3:V 4	**bx**	**f P; 8C**
dg	S 9 **8CD8vv** **AA i** 3:V 4	**bx**	**f P; 97**
eR	S 9 **8CD8vv** **BA4BB i** 3ee8 D 4	**bx**	**f P; 9A**
eT	S 9 **8CD8vv** **BA4BB i** 3ee8 D 4	**bx**	**f P; 9B**

<3 H5 41<	342<6 452<9	433 I 6 41<	3<2<5 3: 2=3
<3 H5 41<I I	3<2<8 3<2<9	433 I 6 41<I I ß	362<8 442=3
<3 H6 41<	432<9 342=3	I U_VK H5 41<MZ	342<8 432<<
<3 H6 41<Y	3<2<9 432=4		

DC487EC77487
DC487EC7A487 *mT*
DC487EC7C487 *mT m*

M 65153
N4 <143
N 891<3
N2 4143
P 95163
53É87

-8<4640455,

7D487EC77477
7D487EC7A477 *mT*
7D487EC7C477 *mT m*

4183		I X V
41t8		V
6133		I X V

MPb	S	9	**8AEAvv**	**C> i**	3GDD	4	**bx**	**f P>8ED**
MQT	S	9	**8AEAvv**	**C> i**	3GDG	4	**bx**	**f PA7C>**
MWX	S	9	**8AEAvv**	**C> i**	3GDG	4	**bx**	**f PEEE7**
MbR	S	9	**8AEAvv**	**C> i**	3GDG	4	**bx**	**f P88ADD**
MdY	S	9	**8AEAvv**	**C> i**	3GDD	4	**bx**	**f P8>8>D**

G6 419 3=2=9 38236 G7 H8 419 442=7 3=234

DC487AE77477
DC487AE7C477 *mT m*

M 65133
N4 5163
N 94173
N2 31t3
P 861t3
53É8:

7D487AE77477
7D487AE7C477 *mT m*

4153		TZ
4183		V
5133		I X

G C 64t33/ J C 861733
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

MPd	S	9	**8CD8vv**	**E94EA i**	3GNV8GN	4	**bx**	**f P9>8**
MSZ	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f PA7C;**
MVb	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f PEA8D**
MbS	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P88ADE**
Mbf	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P8; CCA**
McQ	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P8>79E**
MdS	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P8; CCB**
MdT	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P8A; 9E**
Mhh	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P8B>89**

G6 41< 3=2=9 38236 G9 I 8 41< 3: 2=: 34238
G7 H8 41< 442=7 3=234 I GHXQJRKZ H6 41< 342=: 3<233
G9 I 7 41< 452=8 452=:

DC4A79E77477
DC4A79E7C477 *mT m*

M 65188
O 6193
P 89188
53É8=

-8<4=5,

MW

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I Q V
41 8 V
5133 I X V

I zy´zo r l ' 5: 183x x
G C 651583/ J C 891583

Vyp°pw°r pyl mfß yo 5: 183x x

Jt°ß ynp pyßp mtpwp 5: 183x x

Jt°ß yntl opwmtpw 5: 183x x

Jt°ß yÜl ol ww mtwp 5: 183x x

MQN	S 9	**8CD8vv**	**8874889 i**	3GVD8GVN	4	**bx**	**f u U x v**	**xw**	**f P>8EE**
MSg	S 9	**8CD8vv**	**887 i**	3GVD	4	**bx**	**f u U x v**	**xw**	**f PA7CA**
MVX	S 9	**8CD8vv**	**8; 9 i**	3GeD	4	**bx**	**f u U x v**	**xw**	**f PE>C7**
MVc	S 9	**8CD8vv**	**8; 9 i**	3GeD	4	**bx**	**f u U x v**	**xw**	**f P88; >C**
MZN	S 9	**8CD8vv**	**887 i**	3GVD	4	**bx**	**f u U x v**	**xw**	**f P8; E>E**
Mbb	S 9	**8CD8vv**	**8; 9 i**	3GeD	4	**bx**	**f u U x v**	**xw**	**f P88AE8**
Mbg	S 9	**8CD8vv**	**887 i**	3GVD	4	**bx**	**f u U x v**	**xw**	**f P8; EA7**
McM	S 9	**8CD8vv**	**887 i**	3GVD	4	**bx**	**f u U x v**	**xw**	**f P88AE9**
MdW	S 9	**8CD8vv**	**887 i**	3GVD	4	**bx**	**f u U x v**	**xw**	**f P8; E9E**
Mdm	S 9	**8CD8vv**	**887 i**	3GVD	4	**bx**	**f u U x v**	**xw**	**f P88AE;**

G6 41<Z	452=9 38236	G9 I 8 41<Z	342=: 34238
G7 H8 41<Z	342=8 3=234	ZZ 41<Z	432=< 39239

DC4A79E77487
DC4A79E7A487 *mT*
DC4A79E7C487 *mT m*

M 651 3
N4 5138
N : 3133
P 861 3
53É8=

MW

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I Q V
41 8 V
5133 I X V

MTX	S 9	**8AEAvv**	**C> i**	3GDD	4	**bx**	**f P87D8B**

G7 H8 419 442=7 3=234

DC487AE77477
DC487AE7C477 *mT m*
Kyr 1<J c 733 333

M 65133
N4 5163
N 94173
N2 31 3
P 861 3
53É8:

7D487AE77477
7D487AE7C477 *mT m*

4153 TZ
4183 V
5133 I X

DC48>D; 77477
DC48>D; 7C477 *mT m*
Kyr 1<J c 733 334

M 5=13<
N4 51 3
N 95163
P 831 3
4=É75

f b

7D48>D; 77477
7D48>D; 7C477 *mT m*

4133 TZ
4153 V
5133 I X V

G C 641 33/ J C 861733

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
MXm	S 9	**8AEAvv**	**CA i 3GDN** 4	**bx**	**f P8AC>D**
MZM	S 9	**8AEAvv**	**C> i 3GDD** 4	**bx**	**f P8>89D**
Mhg	S 9	**8AEAvv**	**CA i 3GDN** 4	**bx**	**f P8A; A7**
NRc	S 9	**8AEAvv**	**CA i 3GDN** 4	**bx**	**f P8C8BB**
NSg /Q >0	S 9	**8AEAvv**	**CA i 3GDN** 4	**bx**	**f P8BDC8**
NeQ/Q >6A0	S 9	**8AEAvv**	**CA i 3GDN** 4	**bx**	**f P97C88**
NeR	S 9	**8AEAvv**	**CA i 3GDN** 4	**bx**	**f P97C89**

G6 419	3<233 36246	G7 H9 419	44233 45237
G7 H8 419	442=7 3=234	G7 H: 419	44237 3923<

DC48>D; 77477
DC48>D; 7C477 *mT m*

M 5=13<
N4 51 3
N 95163
P 831 3
4=É75

f b

7D48>D; 77477
7D48>D; 7C477 *mT m*

4133 TZ
4153 V
5133 I X V

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
MY N	S 9	**8CD8vv**	**89A489C i 3GcD8GcP** 4	**bx f u U x v xw**	**f P8CDB>**
Mdk	S 9	**8CD8vv**	**887 i 3GVD** 4	**bx f u U x v xw**	**f P8AEDD**
Mdl	S 9	**8CD8vv**	**8; 9 i 3GeD** 4	**bx f u U x v xw**	**f P8A; A9**
MfO	S 9	**8CD8vv**	**8; 9 i 3GeD** 4	**bx f u U x v xw**	**f P8A; AC**
MgY	S 9	**8CD8vv**	**887 i 3GVD** 4	**bx f u U x v xw**	**f P8AB9E**
Mgc	S 9	**8CD8vv**	**8; 9 i 3GeD** 4	**bx f u U x v xw**	**f P8A; A;**
MhV	S 9	**8CD8vv**	**887 i 3GVD** 4	**bx f u U x v xw**	**f P8A; >E**
Mi Y	S 9	**8CD8vv**	**89A489C i 3GcD8GcP** 4	**bx f u U x v xw**	**f P9ECA8**
Mi b	S 9	**8CD8vv**	**8; 948; > i 3GeD8GeN** 4	**bx f u U x v xw**	**f P8A; AB**
Mi f	S 9	**8CD8vv**	**887 i 3GVD** 4	**bx f u U x v xw**	**f P8A; ; A**
NQk	S 9	**8CD8vv**	**8>7 i 3GI D** 4	**bx f u U x v xw**	**f P8BC; 7**
NRN	S 9	**8CD8vv**	**897 i 3GaP** 4	**bx f u U x v xw**	**f P8BC9D**
Nhb	S 9	**8CD8vv**	**897 i 3GaP** 4	**bx f u U x v xw**	**f P8D>E7**
Nhd	S 9	**8CD8vv**	**8>7 i 3GI D** 4	**bx f u U x v xw**	**f P8D>E;**

G6 41<Z	452=9 38236	G7 H<41<Z	3: 23< 38243
G7 H8 41<Z	342=8 45234	G9 I 8 41<Z	342=: 34238

G7 H9 41<Z	44233 45238	ZZ 41<Z	432=< 39239
G7 H: 41<Z	44237 3623=		

DC4A79E774; 7
DC4A79E7C4; 7 *mT m*

M 651 3
O 41=3
P 861 3
4=É7=

f b

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I Q V
41 8 V
5133 I X V

Pe	S 9	**8CD8vv**	**BB i**	3 D 4	**bx**		**f P9A;**
Pm	S 9	**8CD8vv**	**D9 i**	3GGN 4	**bx**		**f P9AB**
Vh	S 9	**8CD8vv**	**BB i**	3 D 4	**bx**		**f P9CD**
Y g	S 9	**8CD8vv**	**D9 i**	3GGN 4	**bx**		**f P9ED**
ZQ	S 9	**8CD8vv**	**BB i**	3 D 4	**bx**		**f P>987**
bT	S 9	**8CD8vv**	**BB i**	3 D 4	**bx**		**f P; 7A**
bh	S 9	**8CD8vv**	**CE4D8 i**	3GDc8GGD 4	**bx**		**f P; 88**

<3 H5 41<	342<6 3<2<9	=3 H6 41<K	3<2<= 3<2=4
<3 H5 41<I I	3<2<7 3<2<9	433 I 6 41<	3<2<6 3: 2<=
<3 H5 41<MZK	3<2<7 3<2<9	433 I 6 41<I I ß	362<8 442=3
<3 H6 41<K	392<9 3<2=4	I U_VK H5 41<MZ	3=2<5 432<<
<3 H6 41<Y	3=2<9 432=4	I U_VK H6 41<	3<2<= 3: 2=4

DC487E>774A7
DC487E>7C4A7 *mT m*

M 6515 3
N4 7173
N 881 3
N2 4163
P 9518 3
53É8:

-8<463K0434,

7D487E>77487
7D487E>7C487 *mT m*

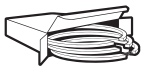
4183 VY V
41 8 V
6133 I X V

Vf°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyŵ Qzwnpy y°´ ty S zßz´° ßÜby Ü°p´°pßÜby Vf°ßzy ´px 'wnp´ol y° up° x zßp°´ Vf°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp 0V f°ßzyp ' ° p°°p´p´tx 'tl ÜÜl ßz °zwx pyßp nzx 'wpßz

G C 641=33/ J C 9515 33

Mrrh	S 9	**8EBDvv**	**877 i**	3GPa 4	**P@l x**	**f u U x v xw**	**f P8C79C**
NWP	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@l x**	**f u U x v xw**	**f P8C79A**
NXN	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@l x**	**f u U x v xw**	**f P8C; CC**
NY Z	S 9	**8EBDvv**	**89A i**	3GcD 4	**P@l x**	**f u U x v xw**	**f P8DEE8**
NZM	S 9	**8EBDvv**	**877 i**	3GPa 4	**P@l x**	**f u U x v xw**	**f P8D77E**
NdP	S 9	**8EBDvv**	**89A i**	3GcD 4	**P@l x**	**f u U x v xw**	**f P97>79**
NdQ	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@l x**	**f u U x v xw**	**f P8D79E**
NdR	S 9	**8EBDvv**	**877 i**	3GPa 4	**P@l x**	**f u U x v xw**	**f P8DC>D**
Ngl	S 9	**8EBDvv**	**897 i**	3GaP 4	**P@l x**	**f u U x v xw**	**f P97>7;**
NhM	S 9	**8EBDvv**	**897 i**	3GaP 4	**P@l x**	**f u U x v xw**	**f P97A9E**
NhR	S 9	**8EBDvv**	**E; i**	3GNa 4	**P@l x**	**f u U x v xw**	**f P97>EC**
NhS	S 9	**8EBDvv**	**DE i**	3GNG 4	**P@l x**	**f u U x v xw**	**f P97>EB**

G6 513 ZJ O	38236 36246	G7 H: 513 ZJ O49a	44237 3923<



G6 513 ZJ049a	38236 36246	G9 I 9 513 ZJ0	3: 237 3<244
G7 H: 513 ZJ0	44237 3923<		

DC48; EA77477
DC48; EA7C477 *mTm*

M 781<6
N4 4: 1<3
N 6<133
P 9<k<3
59É99

-8: =34P,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mTm*

41t 8 I Q V
5133 V
6133 I X V

HzÄwnl ' I ntÖ0561t 8nx 6 G C 781883/ J C 9<1883	azŵx py op´ Qzwrpyx °wp 561t 8nx 6	azŵx p op w nl G8 o° ' t°ßy 561t 8nx 6	azwnl Gbl o ' t°ß y 561t 8nx 6	azŵx p nl x p´l ' t°ßyp 561t 8nx 6	

NY Y	S	9	**8EBDvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8D97;**
Nbi	S	9	**8EBDvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8D787**
NdO	S	9	**8EBDvv**	**877 i**	3GPa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97BC9**

G6 513 ZJ0	39238 3923<	G7 H: 513 ZJ0	44237 3623=

DC48; EA77487
DC48; EA7C487 *mTm*

M 781<6
N4 4: 183
N 6<133
O 31t 3
P 9<k<3
59É99

-8: =34J<66,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mTm*

41t 8 I Q V
5133 V
6133 I X V

DC48; EA77497
DC48; EA7C497 *mTm*

M 781<6
N4 4: 183
N 6<133
O 31t 3
P 9<k<3
59É99

-8: =34J<67,

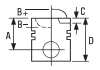
MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mTm*

41t 8 I Q V
5133 V
6133 I X V

Zz nÖwyop´ 4) 5 HzÄwnl ' I ntÖ056163nx 6 G C 781883 Zz nÖwyop´ 6) 7	I y eÖwyop´ 4) 5 azŵx py op´ Qzwrpyx °wp 56163nx 6 I y eÖwyop´ 6) 7	°°´ nÖwyo´p 4) 5 azŵx p op w nl G8 o° ' t°ßy 56163nx 6 °°´ nÖwyo´p 6) 7	py pwnwyo´z 4) 5 azwnl Gbl o ' t°ß y 56163nx 6 py pwnwyo´z 6) 7	I nwyo´z 4) 5 azŵx p nl x p´l ' t°ßyp 56163nx 6 I nwyo´z 6) 7

OMSM	S	9	**8EBDvv**	**87A i**	3GSP	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97AEC**
OMSN	S	9	**8EBDvv**	**877 i**	3GPa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97AED**
OMSO	S	9	**8EBDvv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9888D**
OMTM	S	9	**8EBDvv**	**89A i**	3GcD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97B79**
OMTN	S	9	**8EBDvv**	**897 i**	3GaP	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97DB>**
ONMM	S	9	**8EBDvv**	**877 i**	3GPa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97D9A**
ONMN	S	9	**8EBDvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97D9D**



ONNN	S 9	**8EBDvv**	**89A i**	3GcD 4	**P6l x**	**f u U x v**	**xw**		**f P97E; E**
G6 513 ZJ0			38236	38246	G9 l 9 513 ZJ0			3: 237	3<244
G6 513 ZJ049a			38236	36246	W8 513 ZJ0			4423<	3824:
G7 H< 513 ZJ0			4423:	38249	ZZ 513 ZJ0			3923<	39247
G8 513 ZJ0			3<23<	3424:					

DC4>; 9; 77477
DC4>; 9; 7C477 *mT m*

M 781<3
N4 451 3
N 831k<
P 9<1<3
59É99

-B: =34M535,

MWWWZN df f b

7D4>; 9; 77477
7D4>; 9; 7C477 *mT m*

41 8 MJI V
5133 V
6133 I X V

GDC LKZ-Ring

UK 36R 43: 398M/Mpy 4 pyr typ zyŵ Mpyp´lßzy 4

UK 36R 43: 398M/y°´q´Szß´py op´

T UK 36R 43: 398M/°yt¿°px pyß'z°´ Szßp°´opr y ´lßzy 4

UK 36R 43: 398M/Mpyp´lnt y 4 °zwr x zß´

Yzwr x zß´p Mpyp´lßzy 4

3<0765633033 UK>36R4=<484G

ORRM	S 9	**8EBDvv**	**877 i**	3GPa 4	**P6l x**	**f u U x v**	**xw**		**f P9; DAD**
ORRN	S 9	**8EBDvv**	**87; i**	3GSD 4	**P6l x**	**f u U x v**	**xw**		**f P9; DAE**
ORSN	S 9	**8EBDvv**	**89A i**	3GcD 4	**P6l x**	**f u U x v**	**xw**		**f P9; DAC**
ORSO	S 9	**8EBDvv**	**8; 7 i**	3Gcc 4	**P6l x**	**f u U x v**	**xw**		**f P9AC9C**
ORSP	S 9	**8EBDvv**	**897 i**	3GaP 4	**P6l x**	**f u U x v**	**xw**		**f P9AC9D**
ORTN	S 9	**8EBDvv**	**877 i**	3GPa 4	**P6l x**	**f u U x v**	**xw**		**f P9ABB9**
ORTP	S 9	**8EBDvv**	**87A i**	3GSP 4	**P6l x**	**f u U x v**	**xw**		**f P9>E; E**
OSXM	S 9	**8EBDvv**	**897 i**	3GaP 4	**P6l x**	**f u U x v**	**xw**		**f P9>>7B**
OSXN	S 9	**8EBDvv**	**89A i**	3GcD 4	**P6l x**	**f u U x v**	**xw**		**f P9>E>D**
OSXO	S 9	**8EBDvv**	**8; 7 i**	3Gcc 4	**P6l x**	**f u U x v**	**xw**		**f P9>DC7**
OSXP	S 9	**8EBDvv**	**897 i**	3GaP 4	**P6l x**	**f u U x v**	**xw**		**f P9>E>;**
OSXQ	S 9	**8EBDvv**	**877 i**	3GPa 4	**P6l x**	**f u U x v**	**xw**		**f P9B; 9E**
OVOM	S 9	**8EBDvv**	**87A i**	3GSP 4	**P6l x**	**f u U x v**	**xw**		**f P9>E>E**
OVON	S 9	**8EBDvv**	**877 i**	3GPa 4	**P6l x**	**f u U x v**	**xw**		**f P9>E>8**
OVOO	S 9	**8EBDvv**	**DD i**	3GND 4	**P6l x**	**f u U x v**	**xw**		**f P9BC8;**
OVOP	S 9	**8EBDvv**	**887 i**	3GVD 4	**P6l x**	**f u U x v**	**xw**		**f P9CEDA**
OXVM	S 9	**8EBDvv**	**87; i**	3GSD 4	**P6l x**	**f u U x v**	**xw**		**f P9; E; D**
OXXN	S 9	**8EBDvv**	**8; 7 i**	3Gcc 4	**P6l x**	**f u U x v**	**xw**		**f P9AC9E**
OY RM	S 9	**8EBDvv**	**87A i**	3GSP 4	**P6l x**	**f u U x v**	**xw**		**f P9BC8>**
OY RN	S 9	**8EBDvv**	**887 i**	3GVD 4	**P6l x**	**f u U x v**	**xw**		**f P9D779**
OY SM	S 9	**8EBDvv**	**89A i**	3GcD 4	**P6l x**	**f u U x v**	**xw**		**f P9ACBC**
OY SN	S 9	**8EBDvv**	**8; 7 i**	3Gcc 4	**P6l x**	**f u U x v**	**xw**		**f P9>DC8**
G4 513 ZJ0			3=244	37248	G9 l : 513 ZJ0			36244	3=24<
G6 513 ZJ0			38236	38246	W6 513 ZJ0			39244	4324<
G6 513 ZJ049a			38236	36246	W8 513 ZJ0			4423<	3824:
G7 H< 513 ZJ0			4423:	38249	ZZ 513 ZJ0			3923<	39247
G8 513 ZJ0			3<23<	3424:					

DC4>; 9; 77487
DC4>; 9; 7C487 *mTm*

M 781<3
N4 4613
N 831<<
P 9<1<3
59É99

-8: =34M553,

MWWWZN df f b

7D4>; 9; 77487
7D4>; 9; 7C487 *mTm*

4t 8 MJI V
5133 SUV
6133 IXV

GDC LKZ-Ring

UK 36R 43: 398Y/Mpy 5 pyrtyp zyw
GC 7813
Uyw dß z 'tºzyº p¿°t@wpyßz UK 36R 43: 398 GM/36R 43: 3 98 Y

3<07656330 43 UK>36R4=<484I

UK 36R 43: 398Y/y°´q´Szz´py op´ Mpyp´Izzy 5

T°´q´UKQzwmpy 36R 43: 398 GM°yo 36R 43: 398 Y

T UK 36R 43: 398Y/°yt¿°px pyß'z°´ Szp°´opr y ´Izzy 5

Yp°wx pyßIol'ß I°É'tºzyº ¿°t@wpyß Yp°wx pyßIol'ß I°É'tºzyº UK 36R 43: 398 GMpß36R 43: 398 Y

UK 36R 43: 398M/Mpyp´Imt y 5°zw x z´

Ilmtoz°zwx pyßpl w°'tºzypº p¿°t@wpyßpº I UK 36R 43: 398 GMÖ36R 43: 398 Y

Yzw x z´p Mpyp´Izzy 5

Golßz°zwlyz It'tºzyt p¿°t@wpyßt UKI 36R 43: 398 GMp 36R 43: 398 Y

OdNO		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P9BC9>**
OdNP		S	9	**8EBDvv**	**877**	i	3GPa	4	**P@t**	x	f u U x v xw	**f P9D7; B**
OdRM		S	9	**8EBDvv**	**D8**	i	3GGD	4	**P@t**	x	f u U x v xw	**f P9BC99**
OdRO		S	9	**8EBDvv**	**87A**	i	3GSP	4	**P@t**	x	f u U x v xw	**f P9BC9;**
OdXN		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P9BC9A**
OdXO		S	9	**8EBDvv**	**877**	i	3GPa	4	**P@t**	x	f u U x v xw	**f P9E; 7A**
OdgM		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P9E98;**
OegM		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P; 7BA8**
OegN		S	9	**8EBDvv**	**877**	i	3GPa	4	**P@t**	x	f u U x v xw	**f P; 7BA7**
OegP		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P9ED; B**
OegQ		S	9	**8EBDvv**	**877**	i	3GPa	4	**P@t**	x	f u U x v xw	**f P; 7CEC**
OghO		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P; 79AD**
OghP		S	9	**8EBDvv**	**DD**	i	3GND	4	**P@t**	x	f u U x v xw	**f P; 7E9E**
OmTM		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P; 97; 8**
PQVM/Q	**B0**	S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P; ; 8; ;**
PQVN/Q	**B0**	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P@t**	x	f u U x v xw	**f P; ; 8; 9**
PQgM		S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t**	x	f u U x v xw	**f P; 97; 9**
PQgN		S	9	**8EBDvv**	**877**	i	3GPa	4	**P@t**	x	f u U x v xw	**f P; 97; A**
PQgO		S	9	**8EBDvv**	**E7**	i	3GNN	4	**P@t**	x	f u U x v xw	**f P; 9D; D**

G6 513 ZJO	37245	G8 68 ZJO	3424: 35253
G7 H<513 ZJO	4423: 38249	G9 I: 513 ZJO	34245 3=24<
G7 H=513 ZJO	38248 4424=	W5 513 ZJO	44249 43253
G7 H=63 ZJO	38249 4424=	W6 513 ZJO	44247 4324<
G7 H=68 ZJO	3<248	W8 513 ZJO	3<23= 44253
G8 513 ZJO	3=23= 35253		

DC4>>CA77487

M 781<3
N4 451=3
N 831<<
P 9<1<3
59É99

MWWWZN df f b

7D4>>CA77477
7D4>>CA7C477 *mTm*

4t 8 MJI V
5133 V
5133 IXTZ

GDC LKZ-Ring

UK 37R 43: 398G
KG5<<Kyr typ d x tW
5347D

UK 37R 43: 398G
KG5<<Szz´pyd x tWp

UK 37R 43: 398G
LI x twp op x zp°´° KG5<<

UK 37R 43: 398G
LI x tW op x zz´p° KG5<<

UK 37R 43: 398G
Szz´t d x trW KG5<<

Nüral® FITTED WITH GOETZE® RINGS

MNW	S 9	**8ED>vv**	**DA i**	3GGV 4	**bx**		**f P9; ;**
<3 H7 513 K		3=2=4	342=9	I GHXQJRKZ H6 513 K		342=6	3: 2=<
433 I 7 513 K		452=3	3: 2=7	I U_VK H6 513		382<=	452=9
G9 I 7 513		392=7	452=<				

DC4A78D77497
DC4A78D7C497 *mT m*

M 631=3
N4 81 3
N 97133
N2 31=3
P 841<3
54É88

-8<574H0436,

7D4A78D77477
7D4A78D7C477 *mT m*

4153 VY
4183 V
5133 I X V

G C 631933/ J C 841833

Mi M	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8C7; A**
Mki	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8BDC9**
NXd	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8D8EE**
NXk	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8C>7>**
NXl	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8C>7A**
NY N	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8C>7B**
Nhl	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8D977**
Nhm	S 9	**8ED>vv**	**887 i**	3GVD 4	**bx**		**f P8D978**
G6 513 LYO		38236	3923<	G7 H9 513 LYO		3: 235	45237

DC4>; A877477

M 5=16<
N2 45179
P 8=1<8
4=É77

-8<573H634,

f b

7D4>; A877487

4153 VaJ TZ
4183
5133 I X

KW°Pz@w
YPppw | YP sw | Gntp´ | Gnp´z | Gnntl tz

Mkk	S 9	**8ED>vv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**		**f P8C>A7**
NSN	S 9	**8ED>vv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**		**f P8D77D**
NbS	S 9	**8ED>vv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**		**f P97A; 7**
NbV	S 9	**8ED>vv**	**89A i**	3GcD 4	**bx**	**f u U x v**	**xw**		**f P8D>DB**
Nbl	S 9	**8ED>vv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**		**f P97C7>**
Ng X	S 9	**8ED>vv**	**8B9 i**	3NND 4	**bx**	**f u U x v**	**xw**		**f P8D>D>**
Ni M	S 9	**8ED>vv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**		**f P8E8EE**
Ni Q	S 9	**8ED>vv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**		**f P8DEBD**
Ni f	S 9	**8ED>vv**	**8>C48>E i**	3NDD8NDP 4	**bx**	**f u U x v**	**xw**		**f P8EC7A**
NI W	S 9	**8ED>vv**	**89A i**	3GcD 4	**bx**	**f u U x v**	**xw**		**f P97>7>**
G6 513 ZLYO		3=237	36246	G9 I 9 513 ZLYO				39238	3<244
G7 H: 513 ZLYO		44237	3623=	ZZ 513 ZLYO				3<239	39243
G7 H: 513 ZLYO49a		34239	3623=						

DC4>; DA77477
DC4>; DA7C477 *mm*

M 5=183
N4 9143
N 7=185
O 4169
O 4169
P 83183
53É8=

MWdf fb

7D4>; DA77477
7D4>; DA7C477 *mm*

4153 VaJ
4183 V
5133 I X V

Ypppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
OMQM	S 9	**8ED>vv**	**8; 9 i** 3GeD 4	**bx f u U x v xw**	**f P9888A**
OMQN	S 9	**8ED>vv**	**8AA48B> i** 3NGG8NNP 4	**bx f u U x v xw**	**f P9888B**
OMQP	S 9	**8ED>vv**	**8B9 i** 3NND 4	**bx f u U x v xw**	**f P9D778**
OMi N	S 9	**8ED>vv**	**8>C i** 3NDD 4	**bx f u U x v xw**	**f P97C8>**
OOf M	S 9	**8ED>vv**	**8>C48>E i** 3NDD8NDP 4	**bx f u U x v xw**	**f P99BBB**
OOmM	S 9	**8ED>vv**	**8>C i** 3NDD 4	**bx f u U x v xw**	**f P998C7**
OOmO	S 9	**8ED>vv**	**89A i** 3GcD 4	**bx f u U x v xw**	**f P9AC9B**
OPZN	S 9	**8ED>vv**	**8; 9 i** 3GeD 4	**bx f u U x v xw**	**f P97E; B**
OPZO	S 9	**8ED>vv**	**8AA i** 3NGG 4	**bx f u U x v xw**	**f P97E; C**
OQeM	S 9	**8ED>vv**	**8AA i** 3NGG 4	**bx f u U x v xw**	**f P9>CA;**
OQf M	S 9	**8ED>vv**	**8AA i** 3NGG 4	**bx f u U x v xw**	**f P9>CA>**
ORWM	S 9	**8ED>vv**	**8; 9 i** 3GeD 4	**bx f u U x v xw**	**f P9; DAB**
OTVM	S 9	**8ED>vv**	**8AA i** 3NGG 4	**bx f u U x v xw**	**f P9A>9D**
ObY M	S 9	**8ED>vv**	**8AA i** 3NGG 4	**bx f u U x v xw**	**f P9BC8A**
ObY N	S 9	**8ED>vv**	**8B9 i** 3NND 4	**bx f u U x v xw**	**f P9BDE8**
ObeM	S 9	**8ED>vv**	**8AA i** 3NGG 4	**bx f u U x v xw**	**f P9AC; 7**

G6 513 ZLYO	3=237 38246	G<J7 513 ZLYOsÖmíto	35245 44248
G7 H<513 ZLYO	3923< 38249	W6 513 ZLYO	39244 4324<
G7 H<513 ZLYOqpÉtmp q°pw	4423= 45248	W8 513 ZLYO	4423< 3824:
G8 513 ZLYO	3923< 3424:	ZZ 513 ZLYO	3<239 39247
G9 I : 513 ZLYO	36244 3=24<		

DC4>>; D77487

M 5=193
N4 9148
N 7=193
O 6193
P 83133
56É84

df

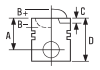
7D4>>; D77477
7D4>>; D7C477 *mm*

4153 VaJ TZ
4153 V
5133 I X V

LKZ-Ring

Ypppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
OPMM	S 9	**8CEDvv**	**88D i** 3GaD 4	**bx f u U x v xw**	**f P97E; D**
OPTM	S 9	**8CEDvv**	**DD i** 3GND 4	**bx f u U x v xw**	**f P9888;**
OPTN	S 9	**8CEDvv**	**88D i** 3GaD 4	**bx f u U x v xw**	**f P9888>**

G6 41<ZLYO	44239 38246	G8 41<ZLYO	3823= 36245
G7 H<41<ZLYO	4423: 45248	ZZ 41<ZLYO	3923< 39247



DC4>>; D77477
DC4>>; D7C477 *mT m*

M	5=1<8
N4	71t 3
N4	8198
N2	8198
O	5133
P	89133
	56É87

df f b

7D4>>; D77477
7D4>>; D7C477 *mT m*

4153		VaJ TZ
4153		V
5133		I X V

LKZ-Ring

Yßppw	Yßl sw	Gntp´	Gnp´z	Gnntl tz
MMT	a 9 **9CC8vv**	**89D i** 3GcS 4	**bx**	**f P99>**
MQV	a 9 **9CC8vv**	**897489D i** 3GaP8GcS 4	**bx**	**f PEA>8**
MRO	a 9 **9CC8vv**	**897489D i** 3GaP8GcS 4	**bx**	**f P9>B**
<3 H7 51<		3=2=4 342=9	G< J 5 51<	362=7 362=9
433 I 7 51<K		452=3 3: 2=7	I GHX0JRKZ H6 51<	442=5 3<233
G7 H8 51<		342=8 3: 2=:	I U_VK H6 51<	3<2=4 452=9
G9 I 7 51<		392=7 452=:		

DC4A78D77487
DC4A78D7C487 *mT m*

M	631<3
N4	7158
N	94133
N2	31t 3
P	85183
	54É88

-8-<5780436,

7D4A78D77477
7D4A78D7C477 *mT m*

4153		VY
4183		V
5133		I X V

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyŵ Qzwnpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy Vt°ßzy ´px 'wnp´ol y° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp 0Vt°ßzyp' ° p°°p´p´tx 'tl ÜÜlßz °zwx pyßp nzx 'wßz

G C 631833/ J C 851533

MeN	a	9	**9EBCvv**	**8C8 i**	3NPP	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C; ; B**
NWZ	a	9	**9EBCvv**	**8A7 i**	3NDS	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D79C**
NY W	a	9	**9EBCvv**	**8BA i**	3NNV	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8CD>A**
NZS	a	9	**9EBCvv**	**8AA i**	3NGG	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C; ; C**
NgS	a	9	**9EBCvv**	**8C8 i**	3NPP	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8DEEB**
NgZ	a	9	**9EBCvv**	**8AA i**	3NGG	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8EDD8**
G7 H: 613 ZJ O				44237 3623=			G< J 6 613 ZJ O						3<236 3: 243	
G9 I 9 613 ZJ O				38237 3<244			W: 613 ZJ O						36239 38243	

DC4>; >; 77477
DC4>; >; 7C477 *mT m*

M	79163
N4	48143
N	78133
P	: 31<3
	63É9<

MWWdf

7D4>; >; 77477
7D4>; >; 7C477 *mT m*

5133		I Q
5133		
6133		I X

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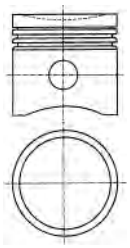
	CCM	x		9
87 T	GDi e	S	aS9Va	8
89OO	GNcV	S	cD9aN	A
89 TMDAMM	GNcV	S	cD9aN	>
8DTT	Gci e	S	eD9NV	D
8DTX	Gci e	S	eD9NV	D
8E V	NSi V	S	i D9Sc	88
99 gM	NGce	S	eN9VV	E
M2 eQdlQe /89 M0	GNcV	S	cD9aN	A
M2 eQdlQe /89 T0	GNcV	S	cD9aN	B
M2 eQdlQe /89 TEEE0	GNcV	S	cD9aN	A
M2 eQdlQe /89 TM0	GNcV	S	cD9aN	A
M2 eQdlQe /89 TO0	GNcV	S	cD9aN	A
M2 eQdlQe /89 TQ0	GNcV	S	cD9aN	B
M2 eQdlQe /89 TX0	GNcV	S	cD9aN	B
M2 eQdlQe /EET0	i i e	S	aS9Va	9
M2 eQdlQe /EET0	i i e	S	aS9Va	9
M2 eQdlQe /EET0	i i e	S	aS9Va	;
M2 eQdlQe /EET0	i i e	S	aS9Va	9
MBM2 eQdlQe /EET0	i i e	S	aS9Va	;
MeQdlQe /87M0	GDi e	S	aS9Va	8
MeQdlQe /87O0	GDi e	S	aS9Va	8
MeQdlQe /87S0	GDi e	S	aS9Va	8
MeQdlQe /87T0	GDi e	S	aS9Va	8
MeQdlQe /87h0	GDi e	S	aS9Va	8
MeQdlQe /89T0	GNcV	S	cD9aN	A
MeQdlQe /89T0	GNcV	S	cD9aN	B
MeQdlQe /89 T0	GNcV	S	cD9aN	A
MeQdlQe /89 T0	GNcV	S	cD9aN	B
MeQdlQe /89 TN0	GNcV	S	cD9aN	A
MeQdlQe /89 TP0	GNcV	S	cD9aN	A
MeQdlQe /89 X0	GNcV	S	cD9aN	B
MeQdlQe /a x u xw 8; D70	GPeD	S	cP9VD	C
NeQdlQe /8DS0	Gci e	S	eD9NV	D
NeQdlQe /8DT0	Gci e	S	eD9NV	D
NeQdlQe /8Dh38DO0	Gci e	S	eD9NV	D
OeQdlQe	NiGN	a	eP9PN	87

87 T	S	9	**87EDvv**	**;;4;B i**	3SV8Si	4		**bx**	**f P;999B**
MeQdlUQe /87MD	S	9	**87EDvv**	**;;4;B i**	3SV8Si	4		**bx**	**Y b9E>848**
MeQdlUQe /87O0	S	9	**87EDvv**	**;;4;B i**	3SV8Si	4		**bx**	**Y b9E>8**
MeQdlUQe /87S0	S	9	**87EDvv**	**;;4;B i**	3SV8Si	4		**bx**	**Y bCD**
MeQdlUQe /87T0	S	9	**87EDvv**	**;;4;D i**	3SV8VN	4		**bx**	**f P;D>**
MeQdlUQe /87h0	S	9	**87EDvv**	**;;4;B i**	3SV8Si	4		**bx**	**Y bCD48**

43330Yp´tpº SQ0DSQ00	4329:5 3=29:	GRRKMXKU 0414	382 6 452<4
4433 414	3429:9 4529=	S OT04433	342 9 3<2<4
4433 l z°yßÖx l y	3429:5 452 7	S OT00D4433	342 9 3<2<4
4433 S v0D	3429:5 452 7	S OTUX 4333	3429:6 4529=
G68 9nÄß8l	3429:5 4529:	S OTUX 4433	3429:6 4529=
G73 S v0D04433	3429:5 4529:		

DC4A99;7C477 *Tm m*
DC4A99;7E477 *Tm m*
DC4A99;8>477 *Tm m*

M 63166
N4 815<
P 83138
49É89



7D4A99;77487
7D4A99;7C487 *Tm m*
7D4A99;7E487 *Tm m*
7D4A99;8>487 *Tm m*

4193		l X V
418<		V
418<		V
614:		V

Vtºßzyº ßz mp´p'wnpo ty Kyr typ Ypß8 zyŵ | Qzwnpy y°´ty Szßz´º ßÜpy Ü8 p´ºpßÜpy | Vtºßzy ´px 'wnp´ol yº up° x zßp°´ | Vtºßzypº op´p'°pºßz 'l´l up°rzº op x zßz´pº °zwlx pyßp | 0Vtºßzyp'° pººp´p´tx 'tlÜÜlßz °zwlx pyßp nzx 'wßz

M2 eQdlUQe /EET0	S	9	**EEDvv**	**;A i**	3Se	4		**bx**	**f P;D;**
M2 eQdlUQe /EET0	S	9	**EEDvv**	**;8 i**	3SN	4		**bx**	**f PA>C9**
M2 eQdlUQe /EET0	S	9	**EEDvv**	**;7 i**	3SG	4		**bx**	**f PA>C8**
M2 eQdlUQe /EET0	S	9	**EEDvv**	**;8 i**	3SN	4		**bx**	**f PA>C>**

S KZXU 0413	432<3 372=3	S OT00D4333 S l Öq|t´	3<2<5 392=6

DC4A9>;7C487 *Tm m*
DC4A9>;884487 *Tm m*
DC4A9>;8>487 *Tm m*

M 661<9
P 861t =
49É84

7D4A9>;77487
7D4A9>;7C487 *Tm m*
7D4A9>;884487 *Tm m*
7D4A9>;8>487 *Tm m*

4183		l Q V
4183		V
6133		V

Vtºßzyº ßz mp´p'wnpo ty Kyr typ Ypß8 zyŵ | Qzwnpy y°´ty Szßz´º ßÜpy Ü8 p´ºpßÜpy | Vtºßzy ´px 'wnp´ol yº up° x zßp°´ | Vtºßzypº op´p'°pºßz 'l´l up°rzº op x zßz´pº °zwlx pyßp | 0Vtºßzyp'° pººp´p´tx 'tlÜÜlßz °zwlx pyßp nzx 'wßz

Vtºßzy 'ty ''pºº qß8ty nzy´zo | Qzwnpymzŵpy ty Vwº pwptyr p'´p ß | GÉpºp´´ º°´mtpwp | H°wy opw tºß y x zyß oz l ''pºt y py w mtpw | Y'tyzßßz tyºp´ßz l º'tyß ypww mtpw

M2 eQdlUQe /EET0	S	9	**EEDvv**	**;8 i**	3SN	4		**bx**	**f PA>C;**
M6M2 eQdlUQe /EET0	S	9	**EEDvv**	**9D4>8 i**	3Pe8Va	4		**bx**	**f P>98A**

GRRKMXKU 0413	342<3 432<6	S OT00I zz'p´	3429:4 4529:
S KZXU 0413	432<3 372=3	S OT00D4333	4329: 3=2<7
S OT04333	3429= 3<2<4	S OT00D4333 S l Öq|t´	3<2<5 392=6
S OT004333	3429= 452<3		

DC4A99>77477

M 6713=
N4 71=6
P 981t :
49É89

7D4A99>77477
7D4A99>7C477 *Tm m*

418< V
418< V
7133 I X V

Vt°ßzy° ßz mp´p' wmpo ty Kyr typ Ypß° zyvÜ
Vty´pß typo mÖnt´nw°

Qzwmpy y°´ty S zßz´° ßÜpy Ü° p´°pßÜpy
HzwÜpy x tßYtnsp´°yr°nw° rpsl wßpy

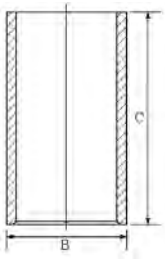
Vt°ßzy ´px ' wmp´ol y° up° x zßp°´
GÉp´pßpy° ' l´nt´nw°

Vt°ßzyp° op´p' °p°ßz ' l´l up°rz° op x zßz´p° °zwx pyßp
H°wy´pßpytoz ' z´l ytwm° op´pßpynt y

0Vt°ßzyp ' ° p°°p´p´tx ' tl ÜÜlßz °zwx pyßp nzx ' wpßz
Y' tyzßßz ßl ßßpy°ßz ol cp´x t

89 TMDAMM	S 9	**89CAvv**	**BB i**	3 D 4	**bx**	**f PA>BE**
S KZXU 0416 Z°´mz		432<6	372=3			

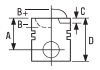
8>4787DE7477



N : 613= **O** 47415<

89OO	S 9	**89CAvv**	**>D i**	3aV 4	**bx**	**f P99>9C**
M2 eQdlQe /89 MO	S 9	**89CAvv**	**A9 i**	3cG 4	**bx**	**f P8; >9E**
M2 eQdlQe /89 TEEE0	S 9	**89CAvv**	**>B i**	3aP 4	**bx**	**f PA>AD**
M2 eQdlQe /89 TMO	S 9	**89CAvv**	**A8 i**	3ai 4	**bx**	**f PA>BD**
M2 eQdlQe /89 TOO	S 9	**89CAvv**	**>B4AA i**	3aP8cV 4	**bx**	**f PA>AE**
MeQdlQe /89T0	S 9	**89CAvv**	**>; 4>D i**	3/e8aV 4	**bx**	**f P98CC;**
MeQdlQe /89 T0	S 9	**89CAvv**	**A; 4BE i**	3cN8 S 4	**bx**	**f P99>E;**
MeQdlQe /89 TNO	S 9	**89CAvv**			**bx**	**Y bDA**
MeQdlQe /89 TPO	S 9	**89CAvv**			**bx**	**Y bDA48**

45: 8 MZ	342>:	452 6	S KZXU 0416	432<3	372=3
4633	342 4	452 7	S CT0416	342<8	
4633 416	342><	432 4	S CTOl zz' p´	342=3	
4633 416 ZI	432 4	432 6	S CTOl zz' p´ Y	34297	452 4
4633 MZ	342>:	452 6	S CTOl UUVKX Y	34297	452 4
S GKYZXU 416	362<6	452=5	S CTOOO416	3=29=	3=2<3
S GXCTG 4633	342 5	452<3	YVXQZK S Q1Qa 416	36299	432 4
S KZXU 416	342<5	452<<			



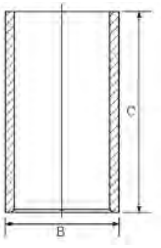
DC4A9>877477
DC4A9>87C477 *Tm m*
DC4A9>888477 *Tm m*
DC4A9>88>477 *Tm m*

7D4A9>877477
7D4A9>87C477 *Tm m*
7D4A9>888477 *Tm m*
7D4A9>88>477 *Tm m*

8>4787DE7477 **N** : 613= **O** 4741 5<

M 6<t 7
N4 81t 7
P 8<t 7
54É89

4183 TZ
4183 V
6133 V



Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyw Qzwnpy y°´ty Szßz´° ßÛby Ü° p´°pßÛby Vt°ßzy ´px 'wmp´oly° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜlßz °zwx pyßp nzx 'wpßz

M2 eQdlUQe /89 T0	S 9	**89CAvv**	**>> i**	3aD 4		**bx**	**f PA>C7**
M2 eQdlUQe /89 TQ0	S 9	**89CAvv**	**A74AA i**	3ae8cV 4		**bx**	**f P99>; A**
M2 eQdlUQe /89 TX0	S 9	**89CAvv**	**>B4A8 i**	3aP8ai 4		**bx**	**f P8B>>B**
MeQdlUQe /89T0	S 9	**89CAvv**	**>84>9 i**	3/a8Vc 4		**bx**	**f P998BB**
MeQdlUQe /89 T0	S 9	**89CAvv**	**; E4C7 i**	3/P8i V 4		**bx**	**f P; D8**
MeQdlUQe /89 X0	S 9	**89CAvv**	**>; i**	3/e 4		**bx**	**f P99>E>**

GRRKMXKU 0416	352 6 452<7	S KZXU 0416 R/ NRK/ Y	432<3 372=3
GS KX0l G 416	3=29: 452 5	S OT000416	372 7 452=4
S GKYZXU 416	362<6 452=5	S OT00045: 8 MZ	4329= 3<2<3
S GKYZXU 416 RY	362<6 3<2=3	S OTUX 416	3=297 452 4
S GXOTG 00416	442 8 432<3	S UTZKMU 416	372<7 432<<
S KZXU 0416	432<3 372=3		

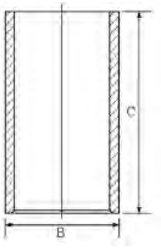
DC4A98C77477
DC4A98C7C477 *Tm m*
DC4A98C88477 *Tm m*
DC4A98C8>477 *Tm m*

7D4A98C77477
7D4A98C7C477 *Tm m*
7D4A98C88477 *Tm m*
7D4A98C8>477 *Tm m*

8>4787DE7477 **N** : 613= **O** 4741 5<

M 6: 157
N4 81t 7
P 8: 157
54É89

417< V
417< V
7133 V



Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyw Qzwnpy y°´ty Szßz´° ßÛby Ü° p´°pßÛby Vt°ßzy ´px 'wmp´oly° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜlßz °zwx pyßp nzx 'wpßz

MeQdlUQe /a x u xw 8; D70	S 9	**8; D7vv**				**bx**	**Y b88D7**

S KZXU 45: 8 S OT045: 8

DC4A9BB77477

7D4A9BB77477

M 6: 1t <
N4 9154
P 8<169
54É97

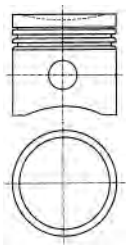
4183 I X V
4183 V
7133 I X V

8DTT	S 9	**8CEDvv**	**C8 i 3c 4**	**bx**	**f P98CC9**
8DTX	S 9	**8CEDvv**	**B> i 3ec 4**	**bx**	**f P98CC8**
NeQdlUQe /8DS0	S 9	**8CEDvv**		**bx**	**Y b9EA; 48**
NeQdlUQe /8DT0	S 9	**8CEDvv**	**B7 i 3eN 4**	**bx**	**f PA>CD**
NeQdlUQe /8Dh38DO0	S 9	**8CEDvv**		**bx**	**Y b9EA848**

4<2<8 41<	3<29= 452 5	4<33 S v(0)	3429< 452 4
4<2<8 41<Y	342 3 452 5	4<33Y S v(0)	342 4 452 5
4<33 41<	342 6 452 8	S GXOTG 41<	342 4 452 <
4<33 S v (000)	34297 452 8	VXOTI KYY 4<33 NR	372 9 3=2 <

DC4A98E7C477 *Tm m*
DC4A98E88477 *Tm m*

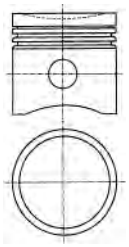
M 75144
N4 61: 9
P 9413 9
54É8:



418<
418<
418<
61=9

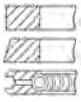
DC4A9AE77477
DC4A9AE7C477 *Tm m*
DC4A9AE7E477 *Tm m*
DC4A9AE88477 *Tm m*
DC4A9AE8>477 *Tm m*

M 75149
N4 61: 9
N 97183
P 9414 4
54É8:



7D4A9AE7C477 *Tm m*
7D4A9AE7E477 *Tm m*
7D4A9AE88477 *Tm m*
7D4A9AE8>477 *Tm m*

418= V
418= V
7183 V



Ysz´ß°vt´Bop°try
Vty´pß typo mÖnt´nw°
Vt°ßzy 'ty ' ´p°° qßty nzy´zo

Q°´Ü°nsl qß °°q s´°yr
Hzwüpy x tßYtnsp´°yr°nw° r psl vßpy
Qzwnpymzwüpy ty Vw°pwptyr p' ´p ß

Güˆ' p nz°´ßp
GÉp´pßpy° ' l ´ nt´nw°
GÉp°p´´ °°´ mtpwp

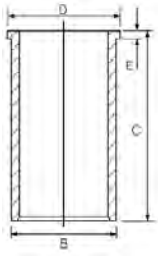
J t°pyz op q wol nz´ß
H°wy´pßpytoz ' z´ l ytwr° op´pßpynt y
H°wy opw t°ß y x zyß oz l ' ´p°t y py w mtpw

G x l yßpwr nz´ßz
Y' tyzßßz ßl ßßpy°ßz ol cp´x t
Y' tyzßßz ty°p´ßz l °' tyßl ypwlv mtpwlv

99 gM	S 9	**98CDvv**		**P@t x**	**Y b878**

MtlVYd YKX0KY 5 40418 ßzy	34293 4529<	ZGc0 GH Lc6J2Lc7	34288 452 4

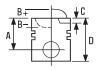
8>47988; 7477



N <918= **O** 4=619< **P** <=194 **Q** 71: 3

OeQdlUQe	a 9	**9E89vv**		**bx**	**Y b88DB**

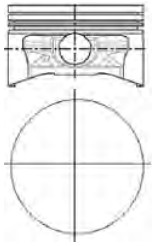
6 RQZXK	3429< 452 5	



DC4A; 7877477
DC4A; 787C477 *Tm m*
DC4A; 787E477 *Tm m*

7D4A; 7877477
7D4A; 787C477 *Tm m*
7D4A; 787E477 *Tm m*

M 7: t 6
P < 164
55É: 5

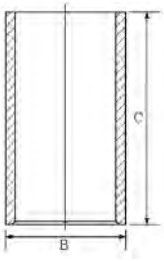


41=< V
41=< V
41=< V
71t 7
71t 9 V

Vt°ßzy° ßz mp´p'wmpo ty Kyr typ Ypß? zyw Qzwmpy y°´ty S zßz´° ßÛpy Ü° p´°pßÛpy Vt°ßzy ´px 'wmp´ol y° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜlßz °zwx pyßp nzx 'wßz

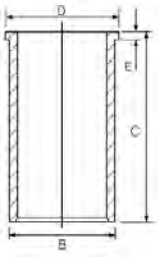
8E V	S 9	9>EAvv	P Øt x f u	Y b; D9E
S KZXUVURQZGT ZI Ét		342<6		

8>4787E97477



N =7183 **O** 4=4169

8>479>C87477



N =7185 **O** 4=4169 **P** ==t 3 **Q** 71t 9

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		CCM	x		9
>5B7D		GcaD	S	ci 9Pe	>
8; e		GNi c	S	cV9DD	8
8> Zh		GPei	S	cc9aD	9
8B P		GVi e	S	eD9DD	A
8B PM		GVi e	S	eD9DD	A
8B eh		GVi e	S	ci 9DD	;
98 P		NDae	S	ee9DD	C
9; P		NNaD	S	i N9DD	E
997		PaGS	S	GDP9Gi	87
; ; 7		VSND	a	GDP9Gi	87
O8E7		Gi VG	S	ea9DD	B
O99;		NNPe	S	ee9DD	D

8; e	S 9	89ECvv	>94AA i	3/c8cV 4	bx	f P>87
GYZXGS Gc 416		452<9 392=3		GYZXG aGT 416		3=2<7 3=2<=

DC4; 7B; 7C477 *mT m*
DC4; 7B; 88477 *Tmm*

M	681<3
N4	6193
O	8163
O	8163
P	9517 3
	53É98

7D4; 7B; 77477
7D4; 7B; 7C477 *mT m*
7D4; 7B; 88477 *Tmm*

4183		I X V
4183		V
7133		I X V

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyw0 | Qzwnpy y°´ty S zßz´° ß0py Ü° p´°pß0py | Vt°ßzy ´px 'wnp´ oly° up° x zßp°´ | Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp | 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜlßz °zwx pyßp nzx 'wpßz

8> Zh	S 9	8; DEvv	>>4AB i	3aD8ca 4	bx	f P>88
GYZXGS Gc 417		3=2<= 392=3		GYZXG aGT 417		3=2<= 3<2=4

DC4; 7C877497
DC4; 7C87C497 *mT m*

M	6514 3
N4	6173
P	8518 3
	4<É88

7D4; 7C877477
7D4; 7C87C477 *mT m*

4183		I X V
4183		V
6133		I X

Yßppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

8Beh	S 9	8AEDvv	B748B i	3eN8 D 4	bx	f P>8;
GYZXG aGT 419		3=2<7 3<2=4				

DC4; 7BE77487
DC4; 7BE7C487 *mT m*

M	5<133
N4	4193
N	8=133
N2	3173
P	7<173
	4<É88

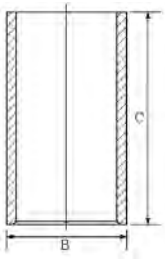
7D4; 7BE77477
7D4; 7BE7C477 *mT m*

4153		I X
4183		V
6133		I X

Yßppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

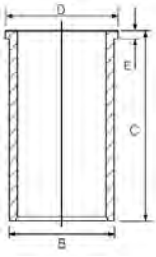
>587D	S 9	8CB7vv	P0f x	Y b8; >B
I L553	3429= 452 9		I L583	3429= 452 9

8>4787E77477 N <5196 O 498143



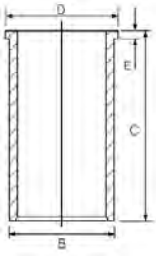
8B P	S	9	8AEDvv	; E4>7 i	3/P8VS	4	P i x	f P>89
8B PM	S	9	8AEDvv	>74>9 i	3/S8Vc	4	P i x	f P9BDA8
GYZXGS Gc 419 J			3=2<8	3<2<<	GYZXG aGT 419 J		3: 2<5	3<2<=

8>479; A97477 N <6133 O 476183 P <71=3 Q 7183



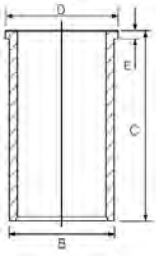
O8E7	S	9	8EA8vv	; >4; B i	3Sa8Si	4	P i x	f P; 9CCD
QH 513 J			382 5	452<<				

8>47988D7477 N =3146 O 4: <183 P =7133 Q 7133

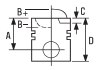


98 P	S	9	97BDvv	>> i	3aD	4	P i x	f PEE; A
HRQe 514 J			3=2<4	432<	I L 514 J		4329=	372<7

8>479>8B7477 N =5133 O 4: 5133 P =61=3 Q 7188

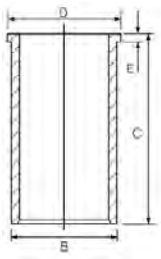


O99;	S	9	99; Dvv	; E4A> i	3/P8cP	4	P i x	f P; >>BA



HXGaG 5 6 J 452<< 352=3

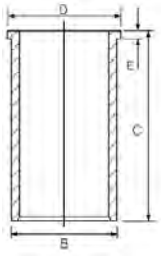
8>47988E7477 N =5146 O 496183 P =8133 Q 7133



9; P	S 9	99B7vv	>B4A9 i	3aP8cG 4	P x	f P>8D

HRQZe 5 6 J 342 6 432< I L 5 6 J 3<29= 452<<

8>479>877477 N =8133 O 4: 5133 P =: 133 Q 7 t 3



997	S 9	; B8>vv	>D4A9 i	3aV8cG 4	P x	f PB>D;
; ; 7	a 9	A>97vv	C94EE i	3 e8GPV 4	P x f u	f PB>DA

ZX_I Q

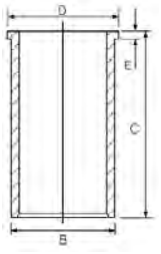
DC489B; 77487
DC489B; 88487 *Tm m*

M	: 4183
N4	54179
N	851 t 3
P	44<157
	68É<<

7D489B; 7C487 *Tm m*
7D489B; 88487 *Tm m*

516<		V
516<		V
516<		V
71 t 7		V
71 t 7		V

8>47988>7477



N 43<138 O 549148 P 444137 Q 71 t 9

V°°s qßnl°ßt´zy wyp´ßz´p'wlnp z´trtyl w °ßppwdyp´

G°°o´ nvml´p Rl°qm°ns°p l°° M°°pt°py l w K°°l ßÜop´z´trtyl wYß swn ns°p

l spx t°p qzyßp px x pynspx pyßr´l° ´px ' w l yßw nspx t°p l ntp oòz´trtyp1

Gü°ß´l ' ´p°t y w nl x t°l op stp´´z q°yotoz ' l ´l ´ppx ' wÜ nl x t°l z´trtyl wop l np´z

l twyo´t ty r st°l /' tl yßßtl ' ´p°°tzyp/ty °z°ßß°Üzyp ot ¿ ty l nntl tz

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		CCM	x		9
N; CO8A M/Q B0		GSi a	P	eS9DD	C
N>CO97 N		Gi i V	S	eS9DD	D
N>CP97 N		Gi i V	S	eS9DD	D
Y >; N8D/8D>Q90		Gci a	S	eS9DD	;
Y >CP97 /97>P80		Gi VG	S	eS9DD	E
Y >CP97 /97>P>0		Gi i V	S	eS9DD	87
Y >Cf gP97 /Q >0		Gi i V	S	eS9DD	88
Y A> N99 /99Be80		NGcG	a	eD9DD	9
Y A> N9A /9ABe; 0		NSi S	a	eS9DD	B
Y A> N9A /9ABeA0		NSi S	a	eS9DD	B
Y ACP; 7 /; 7BP80		Ni Na	a	eS9DD	8;
Y ACP; 7 /; 7BP90		Ni i P	a	eS9DD	8>
Y ACP; 7 /; 7BP; 0		Ni i P	a	eS9DD	8>
Z8; N8B M		GVi e	S	cc9DD	8
Z97 N97 M		Gi i c	S	eS9DD	>
Z97 N97 N		Gi i c	S	eS9DD	A
Z>CP97 M		Gi i V	S	eS9DD	89
Z>CP97 N		Gi i V	S	eS9DD	89
ZAC; 7B P9 /Q >0		Ni i P	a	eS9DD	88

Z8; N8B M	S 9	8AEDvv	CA48; 7 i	3GDN8Gcc	4	bx	f u U x v xw	f P9BAD8
4 -L53, 447 t		3: 245	35248	4 -L54, 44<t			3: 245	
4 -L53, 449 t		3: 244	35248	4 -L54, 453 t			36248	
4 -L53, 44<t		3: 244	39248	6 -L63/ L<3, 649 t			3: 245	3<249
4 -L53, 453 t		36248	39249	6 -L63/ L<3, 653 t			44245	39249
4 -L54, 447 t		45244		6 -L64, 649 t			36246	39248
4 -L54, 449 t		45244						

DC4>>>D774A7
DC4>>>D7C4A7

7D4>>>D77487
7D4>>>D7C487 *mT m*

M 5<183
N4 6183
N2 51 3
O 6183
O 6183
P 84153
53É7<

TMdf f b

4153 VaJ V
4183 V
5133 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y A> N99 /99Be80	a 9	98C8vv	897489A i	3GaP8GcD	4	bx	f P9D98A
6 -K79, 653 l t		34233	4523:	8 -K93, 853 t		3: 236	36243
6 -K79, 653 t		3=233	35238	e6 -K69, 515 t		3<233	34236
8 -K6=, 853 t		3=233	45236	e7 -K<8, 515 t		43236	43238

DC4>99977487
DC4>9997C487 *mT m*

7D4>99977477
7D4>9997C477 *mT m*

M 5=193
O 51=3
O 6173
P 7=183
55É84

4153 I Q
4183 V
5133 V

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y >; N8D/8D>Q90	S 9	8CEBvv	D; 4DA i	3GGP8GGa	4	bx	f P9D; C9
6 -K69, 64<t		3=2=6	442==	8 -K67, 84<t		382=7	3: 2=9
8 -K67, 84<r		352=9	3: 2=9	e6 -K69, 41<t		432=8	432=<

DC4C7>977487
DC4C7>97C487 *mT m*

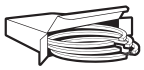
7D4C7>977477
7D4C7>97C477 *mT m*

M 64198
N4 6136
N : 3163
P 8: 198
55É87

4183 I X V
4183 V
5133 I X

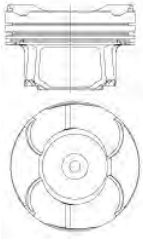
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Z97 N97 M	S 9	8EECvv	887497A i	3GVD8Ncl	4	bx	f u U x v xw	f P9AB9E



4 -L53, 458 t	36245	4421:		8 -L43, 853 t		3=244	43249
4 -L54, 458 t	45244			8 -L43, 85<t		3=244	43249
5 -L55/ L<, 553 t	43246			8 -L44, 853 t		43243	3521:
5 -L55/ L<, 55<t	34247			8 -L44, 85<t		3=244	3521:
5 -L56, 553 t	37247	3: 249		c4 -K<7, 53 t		3=244	39248
5 -L56, 55<t	44247			c4 -K<7, 5<t		36244	39248
6 -L63/ L<3, 653 t	36245	4321<		c6 -L58, 53 t		43244	3<24:
6 -L63/ L<3, 65<t	44244	4321<		c6 -L58, 5<t		37245	3<24:
6 -L63/ L<3, 65<t	44244	39248		c7 -L59, 53 t		37247	3624<
6 -L64, 65<t	3: 245	39249		c7 -L59, 5<t		37247	3624<
6 -L67, 653 t	44245	39249		c8 -L48/ L<8, 5<t		39248	3: 24<
6 -L67, 65<t	36246	39249		c8 -L48/ L<8, 73p		3<248	3: 24<
7 -L65/ L<5, 753 t	44246	3524:		c9 -L49/ L<9, 5<t		39248	3: 24=
7 -L65/ L<5, 75<t	3: 246	3524:		e7 -K<=, 4<t		37246	3<249
7 -L66/ L<6, 75<t	44246	3524:		e7 -K<=, 53 t		3=244	3<249
7 -L69, 75<t	36247	39249		e7 -K<=, 5<t		3=244	3<249
8 -L3: , 85<t	3: 246	3524:					

DC4>; >B77477



M	6573
N4	61: 5
N	8583
O	613=
O	6149
P	8443
	55É84

-8<76KG73<,

f b

7D4>; >B77477

4553		TZ
4583		V
5583		TZ

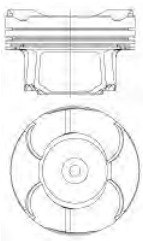
ECOTOUGH

Yfbpw	Yß sw	Gntp´	Gnp´z	Gnntl tz

Z97 N97 N S 9 **8EEOvv** **89748; A i** 3GaP8GeS 4 **bx** **f u U x v xw** **f P9BE7D**

5 -L55/ L<, 553 t	43246			7 -L65/ L<5, 753 t		44246	3524:
5 -L56, 553 t	37247	3: 249		7 -L66/ L<6, 753 t		3: 247	35249
6 -L63/ L<3, 653 t	36245	4321<		7 -L69, 753 t		36247	3524:
6 -L64, 653 t	44245	39248		8 -L43, 853 t		3=244	43249
6 -L67, 653 t	44245	39249		8 -L44, 853 t		43243	3524:

DC4>; >B77487



M	6573
N4	7753
N	7: 196
O	6149
O	613=
P	8443
	55É7<

-8<76KH63<,

f b

7D4>; >B77477

4553		TZ
4583		V
5583		TZ

ECOTOUGH

Yfbpw	Yß sw	Gntp´	Gnp´z	Gnntl tz

Y A> N9A /9ABe; 0 a 9 **9>E>vv** **8>8 i** 3GI N 4 **bx** **f P9D98B**

Y A> N9A /9ABeA0 a 9 **9>E>vv** **8; C48>8 i** 3Gea8GI N 4 **bx** **f P9D98C**

6 -K79, 658 l t	3=233 45239	8 -K94, 858 t	39237 45243
6 -K79, 658 t	3=233 37238	c6 -K<6, 518 t	34237 45239
6 -K79, 658 Ét	3=233 37238	e6 -K69, 518 t	43233 3<235
6 -K79, 658 ft	37234 45237	e7 -K<8, 518 t	45235 45238
8 -K6=, 858 t	3=233 38237	e7 -K<9, 518 t	44239 3723<
8 -K93, 858 t	3: 236 4523=		

DC4>9A; 77477
DC4>9A; 7C477 *mT m*

7D4>9A; 77477
7D4>9A; 7C477 *mT m*

M	5: 193	4153		TZ
O	5193	4183		V
P	7: 193	5133		V
	55É89			

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

N; CO8A M/Q B0 P 9 **8>EBvv** **C74DA i** 3 V8GGa 4 **P@t x f u U x v xw** **f P9ED; E**

4 -L73, 449 o	3: 24=		5 -L79, 547 o	3: 248	3524<
5 -L77, 549 o	36253		5 -L79, 549 o	3<247	
5 -L78, 547 o	3: 247	3524<	c4 -L7<, 49 o	44247	
5 -L78, 549 o	36247		c5 -L6=, 49 o	4424<	

DC4>>EC774; 7
DC4>>EC7C4; 7

7D4>>EC77487

M	75183	4183	MJI
N4	47148	4183	V
N	7: 183	5133	I X
P	98183		
	59É93		

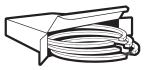
MWWWdf f b

HS b H7: _RZ_K4 0UK <8<3795139 Yßppw | HS b H7: _RZ_K4 0UK <8<3795139 Yß sw | HS b H7: _RZ_K4 0UK <8<3795139 Gntp´ | HS b H7: _RZ_K4 0UK <8<3795139 Gnp´z | HS b H7: _RZ_K4 0UK <8<3795139 Gnntl tz

N>CO97 N S 9 **8EEAvv** **87748C7 i** 3GPa8NPG 4 **P@t x f u U x v xw** **f P; 8; BB**

N>CP97 N S 9 **8EEAvv** **DA48C7 i** 3GGa8NPG 4 **P@t x f u U x v xw** **f P; 7>78**

4 -L53, 458 o	36245	3924=	7 -M55/ M<5, 753 o S twONÖmíto	3: 253	
4 -L54, 458 o	36248		7 -M56/ M<6, 753 o S twONÖmíto	44253	
4 -L73, 44<o	3: 24=		7 -M59, 753 o S twONÖmíto	3: 254	
4 -L73, 453 o	3: 24=		8 -M63/ L=3, 84<o	3: 24<	39253
5 -L55/ L<, 558 o	3: 248		8 -M63/ L=3, 84<o S twONÖmíto	3: 253	
5 -L56, 558 o	3: 248		8 -M63/ L=3, 853 o	3=249	
5 -L77, 54<o	4424=		8 -M63/ L=3, 853 o S twONÖmíto	4424=	
5 -L77, 553 o	4424=		8 -M63/ L=3, 856 J cJXQaK S ORJONdHXQJ	3: 253	
5 -L78, 54<o	44246		8 -M63/ L=3, 858 o	3: 24:	3924=
5 -L78, 553 o	36247		8 -M64, 84<o	3: 24<	39253
5 -L79, 54<o	3: 247		8 -M64, 84<o S twONÖmíto	3: 253	
5 -L79, 553 o	3: 247		8 -M64, 853 o	3624:	
5 -M75, 553 o S twONÖmíto	3<254		8 -M64, 853 o S twONÖmíto	4424=	
5 +39, 54<o	44254		8 -M64, 858 o	3: 24:	3924=
5 +39, 556 o	3: 255		9 -M65, 953 o	3: 24<	39253
6 -L63/ L<3, 658 o	36249	3524<	9 -M65, 953 o S twONÖmíto	3: 253	
6 -L64, 658 o	36249	3524<	: -M44/ M45, : 58 o/ Ro	3: 249	3524=



6 -L67, 658 o	3: 249	3524<	c4 -L7<, 4< o	44247	
6 -M53/ M<3/ M5<, 649 o	36253		c4 -L7<, 53 o	3: 248	
6 -M53/ M<3/ M5<, 649 o S twONÖmíto	3<253		c4 -L7<, 58 o	44247	
6 -M53/ M<3/ M5<, 64< o	3624=	36253	c5 -L6=, 4< o	3624<	
6 -M53/ M<3/ M5<, 64< o S twONÖmíto	37253		c5 -L6=, 53 o	4424:	
6 -M53/ M<3/ M5<, 653 o	4424<		c5 -L6=, 58 o	4424:	
6 -M53/ M<3/ M5<, 653 o S twONÖmíto	36253		c6 -M34, 4< o	3724<	
6 -M54, 653 o	3: 24=	35253	c6 -M34, 53 o	3<24:	
6 -M54, 653 o S twONÖmíto	36253		c6 -M34/ L=: , 4< o	3724<	39253
6 -M54/ M<4, 649 o	44253		c6 -M34/ L=: , 4< o S twONÖmíto	3: 253	
6 -M54/ M<4, 649 o S twONÖmíto	3: 253		c6 -M34/ L=: , 53 o	3<24:	36253
6 -M54/ M<4, 64< o	4424=	3: 253	c6 -M34/ L=: , 53 o S twONÖmíto	37253	
6 -M54/ M<4, 64< o S twONÖmíto	3<253		c6 -M34/ L=: , 58 o	3724<	
6 -M54/ M<4, 653 o	3: 24=	35253	c7 -M35/ L=<, 53 o	3724<	36253
6 -M54/ M<4, 653 o S twONÖmíto	36253		c7 -M35/ L=<, 53 o S twONÖmíto	37253	
7 -L65/ L<5, 758 o	36249	4324:	c7 -M35/ L=<, 58 o	3724<	
7 -L66/ L<6, 758 o	36249	3524<	c8 -L48/ L<8, 58 o	45246	3: 24<
7 -L69, 758 o	36249	3524<	c8 -M38/ L=8, 58 o	3<24=	

DC4>>EC774; 7
DC4>>EC7C4; 7

M 7518 3
N4 4714 8
N 7: 1 8 3
P 9818 3
59É93

MWWWdf f b

7D4>>EC7748 7

4183 MJI
4183 V
5183 I X

DC4>>EC774>7
DC4>>EC7C4>7

M 7518 3
N4 4714 8
N 7: 1 8 3
P 9818 3
59É93

MWWWdf f b

7D4>>EC7748 7

4183 MJI
4183 V
5183 I X

HS b H7: _RZ_K4 0UK <8<3795139 Yfppw
HS b H7: _RZ_K4 0UK <8<3795139 Yfi sw
HS b H7: _RZ_K4 0UK <8<3795139 Gntp´
HS b H7: _RZ_K4 0UK <8<3795139 Gnp´z
HS b H7: _RZ_K4 0UK <8<3795139 Gnntl tz

Y >CP97 /97>P80 S 9 **8EA8vv** **DA4877 i** 3GGa8GPa 4 **P i x f u U x v xw** **f P9D; C>**

6 -K79, 64< o	3=234	36236	8 -K6=, 853 o	35233	3=236
6 -K79, 653 o	352=<	3=234			

DC488>>77477
DC488>>7A477 *mT*
35234

M 7: 1 8 3
N4 4818 8
N 741t 3
O 4163
P : 4183
63É99

-8<7850R493,

WWdf

7D488>>77477
7D488>>7A477 *mT*

6183 I Q V
5183 V
6183 I X V

DC488>>774; 7
DC488>>7A4; 7 *mT*
36234

7D488>>77477
7D488>>7A477 *mT*

6133 I Q V
5133 V
6133 I X V

M 771<
N4 46183
N 791=3
O 4173
P : 3195
63É99

-8-<73<0L438,

MWWWZN df

UK 4458 557 : 6<6
K°´z 6

Y >CP97 /97>P>0	S 9	8EEAvv	DA4897 i 3GGa8GaP 4	P@i x f u U x v xw	f P9C>C9
4 -K<, 44<o		39237 3523:	6 -K=3, 64<o	36238 3<23:	
4 -K<, 453 o		39237 39244	6 -K=3, 653 o	45237 43244	
6 -K79, 64<o		36236 35238	6 -K=4, 64<o	3=238 3<23:	
6 -K79, 64<fb		36236 35238	6 -K=4, 653 o	45237 39245	
6 -K79, 653 l o		44236 4523:	8 -K93, 853 o	3=238 4523=	
6 -K79, 653 o		3=234 38238	8 -K94, 853 o	37238 38243	
6 -K79, 653 fb		3=234 35238	c6 -K<6, 513 o	3=237 3<23:	

DC488>>774B7
DC488>>7A4B7 *mT*
39239 3423<

7D488>>774>7
7D488>>7A4>7 *mT*

6133 I Q V
5133 V
5133 I Q V

M 771<
N4 47183
N 7: 183
O 417<
P : 316:
63É99

-8-<7< K436,

MWWWdf fb

DC488>>774BA
3423<

7D488>>774>A

6133 I Q V
5133 V
5133 I X V

LKZ-Ring

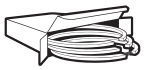
M 771<
N4 47183
N 7: 183
O 417<
O 4169
P : 316:
63É9<

-8-<73l 0438,

MWWWdf fb

HzÄwnl ' I ntÖ 57176nx 6 azŵx py op´ Qzwwpyx °wp 57176nx 6 azŵx p op w nl @8 o° ' t°ßzy 57176nx 6 azŵnl @bl o ' t°ß y 57176nx 6 azŵx p nl x p´l ' t°ßzyp 57176nx 6
UK 4458 : : =<<<5

Y >Cf g P97 /Q >0	S 9	8EEAvv	P@i x f u U x v xw	Y b8E9; 7
ZAC; 7B P9 /Q >0	a 9	9EE; vv	8B7 i 3NGe 4 P@i x f u U x v xw	f P8D; 7C
653 o		34234		



DC488>>774>7
DC488>>7A4>7 *mT*
39239

7D488>>774>7
7D488>>7A4>7 *mT*

6133 I Q V
5133 V
5133 I Q V

M 771<
N4 47183
N 7: 183
O 4133
P : 3195
63É99

-8<73<_438,

MWWWZN df

Uyw0qz´ pyr typº Ät0s ' l ´l wpwnzy´zo | T°´ q ´ S z0z´py x t3Vl ´l wpwvwp°pw | _yt¿°px pyβ' z°´ wpº x z0p°´º mtpwp ' l ´l wwwp | Yzw ' l ´l x z0z´pº nzy nl mpÜ wop mtpw ' l ´l wpwv | Yzw ' p´ x z0z´t nzy mtpw ' l ´l wpwv

Z>CP97 M	S 9	8EEAvv	BB48>A i	3 D8Gl c 4	P0t x f u U x v xw	f P8EE99
Z>CP97 N	S 9	8EEAvv	8A7 i	3NDS 4	P0t x f u U x v xw	f P97D>A
4 -K<4, 449 o		4423<	45244	4 -K<<, 456 o		3=23< 45246
4 -K<4, 44< o		3=239	45244	6 -K=3, 64< o		3523: 43244
4 -K<4, 453 o		3623:	45244	6 -K=3, 653 o		45237 43244
4 -K<4, 456 o		3623:	45244	6 -K=4, 64< o		3: 23: 39245
4 -K<5, 453 o		3=23:	43246	6 -K=4, 653 o		39238 39245
4 -K<5, 456 o		4323:	43246	6 -K=5, 653 o		3=239 39246
4 -K< , 449 o		3623=	39244	6 -K=6, 653 o		3=23: 35243
4 -K< , 44< o		3623:	39244	8 -K93, 853 o		3=238 4523=
4 -K< , 453 o		39237	39244	8 -K94, 853 o		37238 38243
4 -K< , 456 o		3623:	39244	c6 -K<6, 513 °o		3=23: 3<23<
4 -K<<, 44< o		3=23<	45246	c6 -K<6, 53 o		3=23< 3<243
4 -K<<, 453 o		3623<	45246			

DC4>; 9977477
DC4>; 997A477 *mT*
DC4>; 997C477 *mT m*

7D4>; 9977477
7D4>; 997A477 *mT*
7D4>; 997C477 *mT m*

M 7: 133
N4 47183
N 7: 183
P : 6133
65É96

-8<73HH,

MWWWdf f b

41t 8 MJI V
41t 8 V
5133 I X

GDC LKZ-Ring

UK 4458 : <4 5969

Y ACP; 7 /; 7BP80	a 9	9E9Bvv	8; A48>9 i	3GeS8Gl P 4	P0t x f u U x v xw	f P9CEE9
6 -K79, 663 o		432==	35238	: -K6<, : 63 o		3<2=< 44234
6 -K79, 663 Éo		34233	36236	c8 -K86, 613 o		37234 3=236
8 -K6=, 863 o		3<2=<	38237			

DC488>>77487
DC488>>7A487 *mT*

M 7: 133
N4 49188
N 74193
O 4173
P : 4143
63É99

-8<7850R498,

MWWWdf

7D488>>77477
7D488>>7A477 *mT*

6133 I Q V
5133 V
6133 I X V

UK 4458 557 : 6<6

| | | |

DC488>>774B7
DC488>>7A4B7 *mT*
39239

M	771<
N4	4718 3
N	7: 18 3
O	417<
P	: 316: 63É99

-8<7< K436,

MWWWdf f b

7D488>>774>7
7D488>>7A4>7 *mT*

6 1 3 3		I Q V
5 1 3 3		V
5 1 3 3		I Q V

Uyw0qz´ pyr typº Ät0s ' l ´l wpwnzy´zo

T°´ q ´ S z0z´py x t3Vl ´l wpwvwp°pw

_yt¿°px pyß' z°´ wpº x z0p°´° mtpwp ' l ´l wwvp

Yzw ' l ´l x z0z´pº nzy nl mpÜl wop mtpw ' l ´l wpw

Yzw ' p´ x z0z´t nzy mtpww ' l ´l wpw

ENGINE INDEX

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		CCM	x		9
M89 kQX		GNNi	S	cP9SD	A
M89 kQd /Q A0		GNNi	S	cP9SD	A
M8> ZQf /Q A0		GPaS	S	cN9VD	;
M8> kQd		GPi e	S	cP9SD	B
N 8> ZQf /Q B0		GPaS	S	cN9VD	;
N 8BPf T		GVi e	S	ci 9cD	8A
O 8> Zm		GPei	S	cc9aD	D
O 8BeQ		GVi e	S	ci 9DD	87
O 8BkQ/Qv xv0		GVi e	S	ci 9DD	88
O 97 ZQ		Gi i e	S	ea9DD	97
XPQ/Q A0		GVi e	S	ci 9DD	89
XeR/Q >0		GNSe	S	ai 9aD	8
XgV/Q A0		GPaS	S	cN9VD	;
Xgh /Qv xv0		GPaS	S	cN9VD	;
dTm		Gi i c	S	eV9DD	8E
k 8> l QT		GPei	S	cc9aD	D
k 8BkQ/Qv xv0		GVi e	S	ci 9DD	88
k 8DkQ8		Gci a	S	eD9VD	8B
l 8CPf		Gaea	S	ci 9DD	8>
l 8CPf X		Gaea	S	ci 9DD	8>
l 97 Pf T		Gi i V	S	eS9DD	8D
m89 kQ/Qv xv0		GGi i	S	cN9VD	>
m8; Pf		GNSe	S	ai 9aD	9
m8> kQ/Qv xv0		GPei	S	cc9aD	E
m8> kQb /Qv xv0		GPaS	S	cP9SD	C
m8BeQ		GVi e	S	ci 9DD	8;
m8BkQ/Qv xv0		GVi e	S	ci 9DD	8;
m8DkQ/Qv xv0		Gci a	S	eD9VD	8B
m8DkQX/Qv xv0		Gci a	S	eD9VD	8B
m97 PY		Gi i G	S	eP9DD	8C
m97 PY T		Gi i G	S	eP9DD	8C
m97 e		Gi i G	S	eP9DD	8C
m97 e8		Gi i G	S	eP9DD	8C
m99 eQ/Qv xv0		NGi e	S	ea9DD	98

XeR/Q >0	S 9	89>Dvv	C7 i 3V 4	P@t x f u U x v xw	f P9B8DE
GaKU 416 J		3: 214 45248			

DC4>; AC77477
DC4>; AC7B477 *mT m*

M	7316
N4	451 3
N	6: 133
O	4148
O	31=3
P	9516
	56É8:

MWWWdf

7D4>; AC77477
7D4>; AC7B477 *mT m*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t@s Yß'2/ß´BZpnsyzwrÖ | L´LIs´Üp°rpx t@YßßY@'L°yvßzy | Vz°´®stn°wº ¿°t' o°°ß´ß)°ß' | VI´I @ps n°wº nzy q'ynt y °ß´ßO°ß' | Vp´@tnzwnzy w q'yÜzyp Yß´ßOY@'

m8; Pf	S 9	89>Dvv	AA i 3cV 4	P@t x f u U x v xw	f P; 9E89

DC48; CB77477
DC48; CB7B477 *mT m*

M	7316
N4	4573
N	6: 133
O	4133
O	4153
P	9616
	56É8:

MWdf f b

7D48; CB77477
7D48; CB7B477 *mT m*

5183		I Q V
4183		V
5183		V

M8> ZQf /Q A0	S 9	8; B>vv	87; i 3GSD 4	bx	f u U x v xw	f P9E9BD
N 8> ZQf /Q B0	S 9	8; B>vv	87; i 3GSD 4	bx	f u U x v xw	f P9E9BE
XgV /Q A0	S 9	8; B>vv	87; i 3GSD 4	bx	f u U x v xw	f P9BD8D
Xgh /Qv xv0	S 9	8; B>vv	87; i 3GSD 4	bx	f u U x v xw	f P9DA8E

GaKU 417	3=214	UXRGTJU 417	39215
GaKU 417 Z°´mz	3<216	ZXGc 417	45215
I X_eK 417	3=213	ZXGc 417 RVM	37216

DC4>; C>77487
DC4>; C>7C487 *mT m*

M	581<
N4	51=3
N	871t <
O	5143
O	41<
P	7714<
	4<É7<

TMdf f b

7D4>; C>77477
7D4>; C>7C477 *mT m*

4153		JRI TZ
4153		V
5183		TZ

I I´mzMwop
Y@ppw | Yßsw | Gntp´ | Gnp´z | Gnntltz

m89 kQ/Qv xv0	S 9	88EEvv	AC4B; i 3cc8ea 4	bx	f P9B>9D

YG@R 415	34215	YVGXQ 415	4523=

DC4879C77487
DC4879C7C487 *mT m*

7D4879C77477
7D4879C7C477 *mT m*

M	57133		4153	TZ
O	4158		4183	V
P	78133		5133	I X
	4<É84			

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

M89 kQX	S	9	**899Evv**	**A8 i**	3ai	4	**bx**	**f P9A>; 9**
M89 kQd /Q A0	S	9	**899Evv**	**B; i**	3ea	4	**bx**	**f P9B7D>**

GaKU 416 36244

DC4>9EA774>7
DC4>9EA7C4>7 *mT m*

7D4>9EA77477
7D4>9EA7C477 *mT m*

M	591=3		4153	TZ
N	87193		4153	V
N2	3198		5133	I X
O	4168			
O	61=8			
P	7<188			
	4<É86			
TMf b				

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

M8> kQd	S	9	**8; EDvv**	**C> i**	3GDG	4	**bx**	**f P9A>; 8**

GaKU 417 3: 244

DC4>9EA774; 7
DC4>9EA7C4; 7 *mT m*

7D4>9EA77477
7D4>9EA7C477 *mT m*

M	581<3		4153	TZ
N4	4193		4153	V
O	41=3		5133	I X
O	61<6			
P	791<3			
	4<É86			
f b				

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m8> kQb /Qv xv0	S	9	**8; B>vv**	**BB i**	3D	4	**bx**	**f P; BCDC**

DC4>9EA77477
DC4>9EA7C477 *mTm*

7D4>9EA77477
7D4>9EA7C477 *mTm*

M	5613 3
N4	4158
N	8613 3
O	4166
O	4168
P	7713 3
	4<É7=

4153		TZ
4153		V
5133		I X

Kw°fz®w Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
O 8> Zm	S 9	**8; DEvv**	**>>4BB i** 3aD8 D 4	**bx**	**f P8EDB8**
k 8> I QT	S 9	**8; DEvv**	**BD4CC i** 3 N8GDV 4	**bx**	**f P9BDBD**
S UTZGTG 417		34214			

DC4; 7C877497
DC4; 7C87C497 *mTm*

7D4; 7C877477
7D4; 7C87C477 *mTm*

M	6514 3
N4	6173
P	8513 3
	4<É88

4183		I X V
4183		V
6133		I X

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
m8> kQ/Qv xv0	S 9	**8; DEvv**	**BB i** 3D 4	**bx**	**f P9D7DB**
I NKad 417		392=8 3=239	I UXYG 417	3=234 3=239	

DC48>>977477
DC48>>97C477 *mTm*

7D48>>977477
7D48>>97C477 *mTm*

M	6413 3
N2	5178
P	8813 8
	4<É88

4153		TZ
4183		V
5133		I X

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
O 8BeQ	S 9	**8AEDvv**	**C> i** 33DD 4	**bx**	**f P9D9D7**
ZOMKG 419		3<2=: 452==			

DC4; 7BE77487
DC4; 7BE7C487 *mT m*

M	5<133
N4	4193
N	8=133
N2	3173
P	7<173
	4<É88

7D4; 7BE77477
7D4; 7BE7C477 *mT m*

4153		I X
4183		V
6133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

O 8B kQ/Qv	**xv0**	S	9	**8AEDvv**	**D7 i**	3GDi	4	**bx**	**f P9; 97E**
k 8B kQ/Qv	**xv0**	S	9	**8AEDvv**	**C>4D7 i**	3GDN8GDe	4	**bx**	**f P8EDBB**

DC4; 7CD77487
DC4; 7CD7C487 *mT m*

M	5<133
N4	31<3
N	9315 3
O	41=3
O	5148
P	7<133
	4<É88

7D4; 7CD77477
7D4; 7CD7C477 *mT m*
7D4; 7CD88477 *Tmm*

4153		I X
4183		V
5183		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

XPQ/Q	**A0**	S	9	**8AEDvv**	**D; 4E8 i**	3GGP8GNS	4	**bx**	**f P9B8DD**

GaKU 419 36244 ZXGc 419 45245
I X_eK 419 3823=

DC4>; A; 77477
DC4>; A; 7C477 *mT m*

M	591t 3
N	851=9
N2	4153
O	41=3
O	51t 3
P	7=1=3
	4=É79

7D4>; A; 77477
7D4>; A; 7C477 *mT m*

4153		TZ
4153		V
5133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m8B eQ		S	9	**8AEDvv**	**B94BC i**	3eS8 G	4	**bx**	**f P8EDBE**
m8B kQ/Qv	**xv0**	S	9	**8AEDvv**	**C> i**	3GDG	4	**bx**	**f P9C9A7**

I NKad 419 3<235 I UXYG 419 3<234 45214

DC489AB77477
DC489AB7C477 *mTm*

M 5: 153
P 8315 3
4<É88

7D489AB77477
7D489AB7C477 *mTm*

4153 TZ
4183 V
5183 I X

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
I 8CPf	S 9 **8BDBvv**	**AA i** 3cV 4	**PQt x f u U x v xw**	**f P8EDBC**
I 8CPf X	S 9 **8BDBvv**	**>>4>D i** 3aD8aV 4	**PQt x f u U x v xw**	**f P; 99AB**
GYZXG 41t Jt	3<233 3<236	I UXYG 41t JZt	3<234 45244	

DC4; 7CB774>7
DC4; 7CB7C4>7 *mTm*

M 6=t 8
N4 47183
N 6<t 3
O 4143
P <7183
5: É97

df

7D4; 7CB77477
7D4; 7CB7C477 *mTm*

5183 I X V
4183 I X V
6183 I X V

N 8B Pf T	S 9 **8AEDvv**	**EE i** 3GPV 4	**PQt x f u U x v xw**	**f P; A8>>**
I X_eK I JZt	44248	UXRGTJU 419 J	34246	
UXRGTJU 418 J	34246			

DC4>; 7; 77477
DC4>; 7; 7C477

M 7815 3
N4 46183
N 78183
O 4143
O 4133
P : 315 3
5=É96

MWWWdf f b

7D4>; 7; 77477
7D4>; 7; 7C477 *mTm*

4183 I Q
4183 V
5183 I X

k 8DkQ8	S 9 **8CEBvv**	**E7 i** 3GNN 4	**bx**	**f P; 9EA>**
m8DkQ/Qv xv0	S 9 **8CEBvv**	**E74E9 i** 3GNN8GNV 4	**bx**	**f P98DAC**
m8DkQX/Qv xv0	S 9 **8CEBvv**	**D8 i** 3GGD 4	**bx**	**f P; 99B8**
GYZXG 41<	3<235 39238	TQaG 41<	3423: 4523=	
I X_eK 41<		aQaG 41<	3=236 3623<	
LwpÉ 41<	3<235 45243	eGLQXG 41<	3: 233 39238	
S KXQaG 41<	38236 3823<			

DC48>8977477
DC48>897C477 *mT m*

M	5714 3	
P	771t 3	
	4<É88	

f b

4153		TZ
4153		V
5133		I X

7D48>8977477
7D48>897C477 *mT m*

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m97 PY	S	9	**8EE8vv**	**DE i**	3GNG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P98DAB**
m97 PYT	S	9	**8EE8vv**	**E94887 i**	3GNV8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9D88D**
m97 e	S	9	**8EE8vv**	**DE4887 i**	3GNG8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P98DAA**
m97 e8	S	9	**8EE8vv**	**E94887 i**	3GNV8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>B8>**

I GVZ@G 513 ZJ	43239	T_H@XG 513 J	34238
I X_eK 513 I JO	3823=	UVZXG 513 ZI JO	3423:
KV0 G 513 J	3423:		

DC4DCE977477
DC4DCE97C477 *mT m*

M	7916 8	
N4	461=8	
N	791t 3	
P	: 5168	
	5<É9:	

MWWWdf f b

5133		I X V
5133		V
6133		TZ

7D4DCE977477
7D4DCE97C477 *mT m*

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

I 97 Pf T	S	9	**8EEAvv**	**C> i**	3GDG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8EDBD**

GYZXG 513 JZO 3<235

DC489B777477
DC489B77C477 *mT m*

M	781<8	
N4	4719<	
N	74133	
O	4138	
P	: 31<3	
	5=É9<	

MWWWdf f b

41t 8		I Q V
41t 8		V
6133		I X V

7D489B777477
7D489B77C477 *mT m*

dTm	S	9	**8EECvv**	**CE4D7 i**	3GDe8GDi	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 9E8B**

DC488>C77477
DC488>C7D477 *mTm*

M 791t 8
N4 4<163
N 6<133
O 4133
P <31t 8
5<É: 3

MWdf fb

7D488>C77477
7D488>C7D477 *mTm*

6183 I Q V
5133 V
6133 I X V

O 97 ZQ S 9 **8EEDvv** **D74EB i** 3GDi 8GPD 4 **bx** **f P9D9CD**

DC4; 7BD774; 7

M 63173
N4 8133
N 8: 133
P 83173
54É95

f b

7D4; 7BD77477
7D4; 7BD7C477 *mTm*
7D4; 7BD88477 *Tmm*

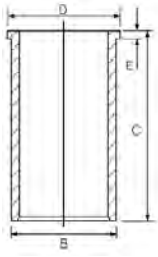
4183 I X V
4183 V
6133 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m99 eQ/Qv xv0 S 9 **98EDvv** **87D4887 i** 3GSc8GVD 4 **bx** **f P98DA>**

GYZXG 515 3<233 3<237 eGL0XG 515 3=234 45238

8>4797>A7477



N <=135 **O** 46: 158 **P** =8178 **Q** 7196

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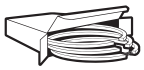
		CCM	x		9
8EDM95777		GVi e	S	ci 9VD	9
8EDMA5777		Gi Va	S	eP9DD	;
8EEN85777 /Q	A0	GNSe	S	ai 9aD	8
QPW		NSi i	S	i N9DD	>
QZV		NSi i	S	i N9DD	>
Y77 /Td >9AOX0		NVDD	S	i N9DD	A
d>9A		NSi i	S	i N9DD	>
hY >9ATd /YA80		NSi i	S	i N9DD	A
hY >9ATe /YA90		NSi i	S	i N9DD	A



8EE N85777 /Q	**A0**	S 9	**89>Dvv**	**C7 i** 3V 4	**P@t x f u U x v xw**	**f P9BAAB**
dVYORUT 416 S °w@upß			38214			

DC4>; AC77477
DC4>; AC7B477 *mTm*

M	7316
N4	451: 3
N	6: 133
O	4148
O	31=3
P	9516
	56É8:

MWWWdf

7D4>; AC77477
7D4>; AC7B477 *mTm*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t@s Yf@z' 2/ß´ßZpnsyzwrrÖ | L´LIs´Üp°rpx t@Yß´@Yf@z' L°yvßzy | Vz°´®stn°wp° ¿°t' o° °ß´ß) °f@z' | Vl´l @ps n°w° nzy q'ynt y °ß´f@°f@z' | Vp´ @tnzwnzy w q'yÜzyp Yß´f@Yf@z'

8ED M95777		S 9	**8AEDvv**	**DD i** 3GND 4	**P@t x f u U x v xw**	**f P9BAAC**
JKRZG 419 J S °w@upß			3<214			

DC4>9E; 77487
DC4>9E; 7B487 *mTm*

M	761=8
N4	461<3
N	741: 3
O	4134
O	4136
P	9<1=8
	59É96

+=5GQ: 98,

MWdf fb

7D4>9E; 77487
7D4>9E; 7B487 *mTm*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

Vt°@zy° @z mp´p' wnpo ty Kyr typ Yp@° zyw@ | Qzwnpy y°´ty S z@z´° @Upy Ü° p´°p@Upy | Vt°@zy ´px ' wnp´ oly° wp° x z@p°´ | Vt°@zyp° op´p' °p°@z ' l´l wp°rz° op x z@z´p° °zwx py@p | @V t°@zyp ' ° p°°p´p´tx ' tl ÜÜl @z °zwx py@p nzx ' w@z

HzÄ wnl ' l ntÖ4=198nx 6 | azv@x py op´ Qzwnpyx °wp 4=198nx 6 | azv@x p op w nl @@8 o° ' t°@zy 4=198nx 6 | azv@x p nl x p´l ' t°@zyp 4=198nx 6
K°´z 9

8ED MA5777		S 9	**8EABvv**	**898 i** 3GaV 4	**P@t x f u U x v xw**	**f P9BAB7**
JKRZG 513 J S °w@upß			3<214			

DC4>; BA77477
DC4>; BA7B477 *mTm*

M	7916
N4	481<3
N	7613
P	: 516
	63É99

-8<677G739,

MWWWdf fb

7D4>; BA77477
7D4>; BA7B477 *mTm*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

QPW		S 9	**9>EEvv**	**DD i** 3GND 4	**P@t x f u U x v xw**	**f P98EA;**
QZV		S 9	**9>EEvv**	**87A i** 3GSP 4	**P@t x f u U x v xw**	**f P8D; 9;**
d>9A		S 9	**9>EEvv**		**P@t x f u U x v xw**	**Y b89; 7;**

XGS aGT 518 I XJ	34239 3723<	aUdGMKX 2MXGTJ aUdGMKX @a 518 I XJ	34234 3523<
aUdGMKX 518J	3<238	aUdGMKX @a 518 I XJ	35233 4523<

DC4>9E977477

M	8813 3
N4	4<13 3
N	7713 3
P	<613 3
	65É9<

MWWWdf f b

7D4>9E977477

5183		MJI V
4183		V
5133		TZ

GDC

Y 77 /Td >9A OX0	S	9	9A77vv	DA4DC i	3GGa8GGe	4	P@l x f u f P>9A;
hY >9ATd /Y A80	S	9	9>EEvv	DA4DE i	3GGV8GNG	4	P@l x f u f P>9AC
hY >9ATe /Y A90	S	9	9>EEvv	DA i	3GGV	4	P@l x f u f PA; A

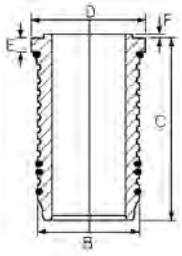
aUdGMKX 0518 ZJ 342=5 3=2=8

8A4BCB>97477

N 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153

8>4BCB>97477

N 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153



Ynswp ßJtnsß°yr py pty

I zx ' ´pyop wp r °l ´ytÜzyt

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	CCM	x		9
89E6A	GNGi	S	cV9DD	E
8AEN	Gi DV	S	eP9DD	;7
8C8O	GVeD	S	eP9DD	;7
D8>75>;Z /Q ;e yØ0	NeDD	S	i S9SD	A9
D8>75>;e /Q ;e yØ0	NeDD	S	i S9SD	A9
NBQ	GVeD	S	eP9DD	;7
N9AB;C	NVDD	S	i P9DD	>E
O8M	i VS	S	cD9DD	8
OdPE;N	NVDD	S	i P9DD	>E
P9Q	Gi DV	S	eP9DD	;7
PVA/f EM0	NSSa	S	i N9DD	>C
PVAf /f DM0	NSSa	S	i N9DD	>D
PVAf /f Tm0	NSSa	S	i N9DD	>D
PWAMf Q/f Tl 0	NSSa	S	i N9DD	>D
Pf 8CQP>	NcND	a	eG9DD	9C
Pf 8Cf QP> /gTm0/Q >0	NcND	a	eG9DD	9C
Pf 97O /Q A0	Ni i P	a	eS9DD	;>
Pf 97O /kDO0/Q A0	Ni i P	a	eS9DD	;>
Ph>O /DTd0	GPi e	S	cP9cD	A
Ph>f P /DTf 0	GPi e	S	cP9cD	B
Ph>f P /DTk0/Q ;6>0	GPi e	S	cP9cD	B
Ph>f P /DTm0	GPi e	S	cP9cD	B
Ph>f QP /DTe0/Q >0	GPi e	S	cP9cD	C
Ph>f QP> /DTl 0	GPi e	S	cP9cD	C
PhBMf QP> /ETk0/Q >0	GVaD	S	cV9DD	8;
PhBNf QP> /ETf 0/Q >0	GVaD	S	cV9DD	8>
PhBNf QP> /ETi 0/Q >0	GVaD	S	cV9DD	8>
PhBNgf QP> /ETf 0/Q >0	GVaD	S	cV9DD	8>
PhBO /ETO0	GVaD	S	cV9DD	8>
PhBO /ETP0	GVaD	S	cV9DD	8>
PhBO /ETX0	GVaD	S	cV9DD	8>
PhBO /ETd0	GVaD	S	cV9DD	8>
PhBPNY /ETQ0/Q >0	GVaD	S	cV9DD	8A
PhBPf QP /ETR0/Q >0	GVaD	S	cV9DD	8>
PhBPf QP /ETb0/Q >0	GVaD	S	cV9DD	8>
PhBPf QPY /ETV0/Q >0	GVaD	S	cV9DD	8>
PhBPgY /ETT0	GVaD	S	cV9DD	8>
PhBQf QP /ETZ0/Q >0	GVaD	S	cV9DD	8A
PhBQf QP /ETi 0/Q >0	GVaD	S	cV9DD	8>
PhBQf QPY /ETW0/Q >0	GVaD	S	cV9DD	8>
PhBRO /NTf 0	GVaD	S	cV9DD	8B
PhBRO /NTg0	GVaD	S	cV9DD	8B
PhBRO /NTk0	GVaD	S	cV9DD	8B
PhBRO /NTm0	GVaD	S	cV9DD	8B
PhBRP /NTl 0	GVaD	S	cV9DD	8B
PhBf QP> /ETl 0	GVaD	S	cV9DD	8;
PhBf QP> /ETm0/Q >0	GVaD	S	cV9DD	8;
PhBgO /ETY 0	GVaD	S	cV9DD	8>
PhBgf QP> /ETg0	GVaD	S	cV9DD	8;
Pi D/i Vm0QPi DN/i Vl 0	Geae	S	eN9ND	9D
Pi DN/i Vk0	Geae	S	eN9ND	9D
Pi DN/i Vl 0	Geae	S	eN9ND	9D
Pi 87Mf QP /dTe0	Gi c	S	eV9DD	;B
Pi 87Mf QP /dTm0	Gi c	S	eV9DD	;B
Pi 87Mf QP> /dTY 0	Gi c	S	eV9DD	;C
Pi 87Mf QP> /dTf 0	Gi c	S	eV9DD	;C
Pi 87Mf QP> /dTi 0	Gi c	S	eV9DD	;C
Pi 87Nf QP /dTk0	Gi c	S	eV9DD	;B
Pi 87Nf QP /dTm0	Gi c	S	eV9DD	;B
Pi 87Nf QP2 /dTm0	Gi c	S	eV9DD	;B

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		CCM	x		9
Pi 87Nf QP> /dTR0		Gi c	S	eV9DD	; D
Pi 87Nf QP> /dTV0/Q >0		Gi c	S	eV9DD	; D
Pi 87Nf QP> /dTd0/Q >0		Gi c	S	eV9DD	; D
Pi 87ON /dTP0/Q >0		Gi c	S	eV9DD	; A
Pi 87 O TI NdUP /dTO0/Q A0		Gi c	S	eV9DD	; A
Pi 87Of QP /dTm0		Gi c	S	eV9DD	; B
Pi 87Of QP2 /dTm0		Gi c	S	eV9DD	; B
Pi 87Of QP> /dTP0/Q >0		Gi c	S	eV9DD	; A
Pi 87Of QP> /dTQ0		Gi c	S	eV9DD	; A
Pi 87Of QP> /dTT0/Q A0		Gi c	S	eV9DD	; A
Pi 87RO /MTi 0/Q A0		Gi c	S	eV9DD	; E
Pi 87RP /MTd0/Q A0		Gi c	S	eV9DD	; E
Pi 87RP /MTk0/Q A0		Gi c	S	eV9DD	; E
Pi 87RPP /MTh0/Q A0		Gi c	S	eV9DD	; E
Pi 87f P /dTh0		Gi c	S	eV9DD	; B
Pi 87f P /dTI 0		Gi c	S	eV9DD	; B
Pi 87gf P /dTh0		Gi c	S	eV9DD	; B
Pi 87gf QP> /dTW0/Q >0		Gi c	S	eV9DD	; D
Pi 89Nf QP> />Tb0/Q >0		NGci	S	eV9DD	>7
Pi 89Nf QP> />Td0/Q >0		NGci	S	eV9DD	>7
Pi 89Nf QP> />Tf 0/Q >0		NGci	S	eV9DD	>7
Pi 89O />TX0		NGci	S	eV9DD	>8
Pi 89Y f QP> />TZ0		NGci	S	eV9DD	>7
Pi 89f QP> />Ti 0		NGci	S	eV9DD	>9
Pi 89f QP>6RMb />Tk0		NGci	S	eV9DD	>9
Q8M		GGGe	S	cN9DD	9
QN9Y /TY h0		GGi	P	cV9DD	D
QN9Y /TY I 0		GGi	P	cV9DD	D
QOA		GVec	S	ce9VD	99
QOA/ZRb0		GVec	S	ce9VD	99
Qb; /DRZ0		GPi c	S	cc9DD	8C
Qb; /DRb0		GPi c	S	cc9DD	8C
Qb; /DRd0		GPi c	S	cc9DD	8C
Qb; /DRe0		GPi c	S	cc9DD	8C
Qb; O /DRd 0/Q A0		GPi c	S	cc9DD	8C
QbB /ARi 0		GVi e	S	cc9DD	8D
QbBO /ARe0		GVi e	S	cc9DD	8E
QbB ON /ARW0		GVi e	S	cc9DD	8E
QbBOPf /ARZ0		GVi e	S	cc9DD	97
QbBOPf /ARh0		GVi e	S	cc9DD	97
QbBOPf k /ARg0/Q >0		GVi e	S	cc9DD	8D
QbBPf /ARY 0/Q >0		GVi e	S	cc9DD	97
QbBPf /ARd0		GVi e	S	cc9DD	97
QbBPf /ARf 0		GVi e	S	cc9DD	97
QbBPf k /ARg0/Q >0		GVi e	S	cc9DD	8D
QbBRPf /ASm0/Q >0		GVi e	S	cc9DD	97
R8OQ; >D8Z /R; 7Pf Q 0/Q A0		Ni i	S	i V9eD	A>
R9DP /D8>75B; 0/Q 9 e yØ 0		NeDD	S	i S9SD	A;
R9Df POd /Q ; ea RUY 9D77 TPU0		NeDD	S	i S9SD	A9
R; 7Pf /R8OQ7>D8P 0/Q >0		Ni i	S	i V9eD	AA
R; 7Pf Q /R8OQ; >D8Q 0/Q A0		Ni i	S	i V9eD	A>
W8N		GPaD	S	cV9DD	87
W8S		GPaD	S	cV9DD	87
WWm		GPaD	S	cV9DD	87
Y 994B9E		NVDD	S	i P9DD	>E
Y 9A4B9E		NVDD	S	i P9DD	>E
Y 9A4B; C		NVDD	S	i P9DD	>E
Y 9A4B>D		NVDD	S	i P9DD	A7
Y 9A4BB7		NVDD	S	i P9DD	>E
Y 9A4BB8		NVDD	S	i P9DD	>E

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		CCM	x		9
Y 9A4BBE		NVDD	S	i P9DD	A7
Y C7A		Gi PD	S	eN9aD	9E
b99Pf Q/>TS0		NGi e	S	ea9DD	>;
b99Pf Q/>TT0		NGi e	S	ea9DD	>;
b99Pf Q/>TV0		NGi e	S	ea9DD	>;
b99Pf Q/>Tg0		NGi e	S	ea9DD	>>
b99Pf Q/>Th0		NGi e	S	ea9DD	>A
f g8 /T8N0		GGNS	S	cN9DD	;
f g8M/TRk0		GGNS	S	cN9DD	>
f g8Ob /TMm0		GGNS	S	cN9DD	;
f g8Vb /TRk0/Q	A0	GGNS	S	cN9DD	>
f g8 W/T8M0		GGNS	S	cN9DD	;
f g8Y /TPm0		GGNS	S	cN9DD	;
f g8Y 2 /TPI 0		GGNS	S	cN9DD	;
f g; /W; M0		GPaD	S	cV9DD	87
f g; M/W8T0		GPaD	S	cV9DD	87
f g; M/WBP0		GPaD	S	cV9DD	87
f g; M/WBQ0		GPaD	S	cV9DD	87
f g; M/WBR0		GPaD	S	cV9DD	87
f g; M/WRf 0/Q	A0	GPaD	S	cV9DD	87
f g; M/WRh0/Q	A0	GPaD	S	cV9DD	87
f g; M/WRi 0		GPaD	S	cV9DD	87
f g; M/WRk0		GPaD	S	cV9DD	87
f g; Ob /WMI 0		GPaD	S	cV9DD	87
f g; R9 /W8R0		GPaD	S	cV9DD	87
f g; R9 /W9N0		GPaD	S	cV9DD	87
f g; RV9 /W9P0		GPaD	S	cV9DD	87
f g; RV9 /WRI 0		GPaD	S	cV9DD	87
f g; RV96m/WRm0		GPaD	S	cV9DD	87
f g; RY /W9M0		GPaD	S	cV9DD	87
f g; RY /WPI 0		GPaD	S	cV9DD	87
f g; Vb /WRi 0		GPaD	S	cV9DD	88
f g; Vb /WRk0		GPaD	S	cV9DD	88
f g; Vb4X> /WRh0		GPaD	S	cV9DD	88
f g; Y /WPk0		GPaD	S	cV9DD	87
f g; Y /WPI 0		GPaD	S	cV9DD	87
f g; Y 6m/WPm0		GPaD	S	cV9DD	87
f gAV> /ZRk0		GVec	S	ce9VD	9;
f gAVb /ZRf 0		GVec	S	ce9VD	9;
f gAVb /ZRh0		GVec	S	ce9VD	9>
f gAVb /ZRm0		GVec	S	ce9VD	9>
f gAVb> /ZBM0		GVec	S	ce9VD	9>
f gAVb> /ZRg0		GVec	S	ce9VD	9;
f gAVb>N /ZRd0		GVec	S	ce9VD	9;
f gE		i VS	S	cD9DD	8
f gE /OPI 0		i VS	S	cD9DD	8
f gEY /OPI 6OPm0		i VS	S	cD9DD	8
f gPA/hVI 0		GVNc	S	cc9DD	98
f gPA/hVm0		GVNc	S	cc9DD	98
g9A6BB8 /OdPE; X0		NVDD	S	i P9DD	>E
g9A6BC; /OdPE; Xe 0		NVDD	S	i P9DD	A7
kP; 6b		NSi e	S	i S9DD	A8
kZ8f /8C7M0		Gi cG	S	ee9DD	>B
kZ8f /8C7N0		Gi cG	S	ee9DD	>B
kZ8f /8C7O0		Gi cG	S	ee9DD	>B
kgA/8C8M0		GVeD	S	eP9DD	; 8
kgA/N8MM0		GVeD	S	eP9DD	; 8
kgAOb /NMI 6NMm0		GVeD	S	eP9DD	; 7
kgAV/8D7M6NBP0		GVeD	S	eP9DD	; 7
kgAV/8D7m0		GVeD	S	eP9DD	; 8

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		CCM	x		9
kgAVM/NBP0		GVeD	S	eP9DD	;7
kgAV6V96VM		GVeD	S	eP9DD	;7
kgAVb /NRm0		GVeD	S	eP9DD	;8
kgAY /NPl 6N>M0		GVeD	S	eP9DD	;7
kgAY /NPm0		GVeD	S	eP9DD	;7
kgAe /8C8N0		GVeD	S	eP9DD	;8
kgAe /8C8P0		GVeD	S	eP9DD	;8
kgCVN /XRk0		GcaN	S	eP9DD	;7
kgCVb /XRi 6XRm0		GcaN	S	eP9DD	;7
kgCVb> /XRl 0		GcaN	S	eP9DD	;7
kgEV8 /PRm0		G DV	S	eP9DD	;7
kgEV9 /PBM0		G DV	S	eP9DD	;7
kgEV> /PBO6PRi 0		G DV	S	eP9DD	;7
kgEV> /PRi 0		G DV	S	eP9DD	;7
kgEVM/PBQ0		G DV	S	eP9DD	;7
kgEVM/PWm0		G DV	S	eP9DD	;7
kgEY /PPm0		G DV	S	eP9DD	;7
kgEe /8AEM0		G DV	S	eP9DD	;7
kgA8O /N8Q0		GVeD	S	eP9DD	;7
kgA9O		GVeD	S	eP9DD	;7
kgE9O /P9M0		G DV	S	eP9DD	;7
kgE9O /P9O0		G DV	S	eP9DD	;7
kgE9O /P9R0		G DV	S	eP9DD	;7
kgPC/8B80/kgPC0		Gcai	S	eD9DD	9A
kgPC/8B8M0/kgPC0		Gcai	S	eD9DD	9A
kgPC/MEM68B8M0/kgPC0		Gcai	S	eD9DD	9A
kgPCfQ/MDM0/kgPC0		Gcai	S	eD9DD	9B
kgPCfQ/MVm0/kgPC0		Gcai	S	eD9DD	9B
kgPE/8B90		G DV	S	eP9DD	;9
kgPE/PEM0		G DV	S	eP9DD	;9
kgPE/PVm0		G DV	S	eP9DD	;9
kgPEM/PVl 0		G DV	S	eP9DD	;9
kgPEM6X/PEN0/kgPE0		G DV	S	eP9DD	;9
kgPEM6g /PEN0/kgPE0		G DV	S	eP9DD	;9
kgPENeP /PTh0/kgPE0		G DV	S	eP9DD	;;
kgPENfR/PTk0		G DV	S	eP9DD	;;
kgPEeP /PTi 0		G DV	S	eP9DD	;;
kgPEfQ/PTl 0		G DV	S	eP9DD	;;
kgPEfR/PDN0		G DV	S	eP9DD	;;
kgPEgfR/PDO0		G DV	S	eP9DD	;;
ki C/87E6A0		GGNS	S	cN9DD	9
ki C/87E6AQ0		GGNS	S	cN9DD	9
ki C/87E6AR0		GGNS	S	cN9DD	9
ki C/87EW0		GGNS	S	cN9DD	9
kl D/8A7N0		GPaD	S	cV9DD	89

O8M	S	9	**EA>vv**	**; 94; > i**	3SS8Sa	4	**bx**		**f PBAAE**
f gE	S	9	**EA>vv**	**; ; i**	3SV	4	**bx**		**f P8DA>A**
f gE /OPl 0	S	9	**EA>vv**	**; ; 4; C i**	3SV8VD	4	**bx**		**f PA7EA**
f gEY /OPl 6OPm0	S	9	**EA>vv**	**; ; 4; C i**	3SV8VD	4	**bx**		**f P87CDC**
Gc 43				3: 2<9 452=<			YGcU 413 c	382=9	39236
YGcU 413				432=: 39236					

DC48A>977477
DC48A>97B477 *mTm*
DC48A>97D477 *mTm*

M 661=3
N4 3183
N 88133
P 8: 173
4<É86

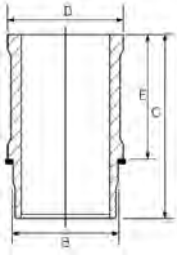
7D48A>977477
7D48A>97B477 *mTm*
7D48A>97D477 *mTm*

4183 I X V
4183 V
6133 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Q8M	S	9	**888Dvv**	**; A4>7 i**	3Se8VS	4	**bx**		**f PB>D**
ki C/87E6A0	S	9	**889>vv**	**; C4>9 i**	3VD8Vc	4	**bx**		**f PAB>**
ki C/87E6AQ0	S	9	**889>vv**	**; ; 4; C i**	3SV8VD	4	**bx**		**f PABA**
ki C/87E6AR0	S	9	**889>vv**	**; ; 4; C i**	3SV8VD	4	**bx**		**f PABB**
ki C/87EW0	S	9	**889>vv**	**; >4; B i**	3Se8VD	4	**bx**		**f PAB;**
I 48 414				432<7 452=9			a0YG 44 K	3=2 <	362=4
RTG 414				3: 2<5 372<8			a0YG 44 XK	362<6	432<<

8>4B; B>C7477



N : =183 **O** 455183 **P** <=153 **Q** <8183

f g8 /T8N0	S	9	**889>vv**	**>74>> i**	3VV8aD	4	**bx**		**f PBAD**
f g8Ob /TMm0	S	9	**889>vv**	**>7 i**	3VS	4	**bx**		**f PA7D;**
f g8 W/T8M0	S	9	**889>vv**	**>74>> i**	3VS8aD	4	**bx**		**f PBAB9**
f g8Y /TPm0	S	9	**889>vv**	**>74>> i**	3VV8aD	4	**bx**		**f PBB8**
f g8Y 2 /TPl 0	S	9	**889>vv**	**>7 i**	3VS	4	**bx**		**f P9B>88**
Gc 44				3=2<9 452=:			I 48 414 t	3: 2<<	452=9
Gc 44 I I ß				3=2<< 452<=			YGcU 414	3: 283	39236
HKXRQTMJ 414 t				3: 2=9 3823<			YGcU 414 c/ Yc	382=9	3=236
Hc 44				432<9 392=5			ec 414	362=4	392=:
I 48 414				3<2<< 3: 2=9					

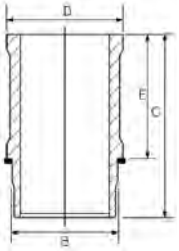
DC48A>; 77477

M 7313 8
N2 51=:
P 9713 8
53É95

7D48A>; 77477
7D48A>; 7C477 *mT m*

4183 I X V
5133 V
6133 I X

8>4B; B>C7477 **N** : =183 **O** 455133 **P** <=153 **Q** <8133



DD48A>; 77477
< 0487633033 .
4709697: 3033

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

f g8M/TRk0		S 9	**889>vv**	**>> i**	3aD 4	**bx**		**f P; 7BAD**
f g8Vb /TRk0/Q	**A0**	S 9	**889>vv**	**>> i**	3aD 4	**bx**		**f P8>C; 7**
HKXRCTMJ 414 t			3: 2=9	3823<		I 6 0414	44243	
I 5 414			3=236	3=245		I 6 0414 t	3=23=	34246
I 6 0414 t			35235			YGcU 414 c/ Yc	382=9	3=236
I 6 0414 RVM			39239	4523=				

DC4>9B; 77477

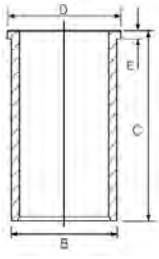
M 5: t 3
N2 3143
P 7: 183
4<É88

7D4>9B; 77477

4183 TZ
4183 V
5183 V

Ph>O /DTd0		S 9	**8; EDvv**	**A7 i**	3ae 4	**P@t x f u U x v xw**		**f P9A7B8**
I 6 0417 NJt			39243	3=249		JY6 417 NJt: 3	37243	3: 248
I 6 0417 NJt: 3			4423=					

8>4797CB7477 **N** : 91=8 **O** 469133 **P** : <178 **Q** 8158
8>4797CB8477 **N** : 91=8 **O** 469133 **P** : <178 **Q** 8158



Ph>f P /DTf 0		S 9	**8; EDvv**	**>7 i**	3/S 4	**P@t x f u U x v xw**		**f P9A7B9**
Ph>f P /DTk0/Q	**; 6>0**	S 9	**8; EDvv**	**A74AA i**	3ae8cV 4	**P@t x f u U x v xw**		**f P8B>9A**
Ph>f P /DTm0		S 9	**8; EDvv**	**A74A9 i**	3ae8cG 4	**P@t x f u U x v xw**		**f P9; CC;**
I 4 417 NJt			39238	3=247		I 6 0417 NJt	35235	
I 5 417 NJt			3: 236	4523=		I 6 0417 NJt: 3	4423=	
I 6 417 NJt			37237			cYGXG 417 NJt	34236	3<238

DC48; A; 77477
DC48; A; 7C477 *mT m*

M 751=7
N4 471t 3
N 6: 149
O 4188
P 9817 7
58É93

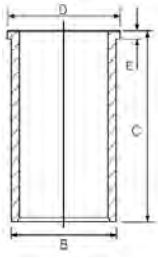
MWdf f b

7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mT m*

5183 I Q V
41=8 V
5183 I X V

8>4797CB7477
8>4797CB8477

N : 91=8 **O** 469133 **P** : <178 **Q** 8158
N : 91=8 **O** 469133 **P** : <178 **Q** 8158



Ph>f QP /DT e0/Q	**>0**	S	9	**8; EDvv**	**A7 i**	3ae	4	**P Qt x**	**f u U x v xw**	**f P9A7B;**
Ph>f QP > /DT I 0		S	9	**8; EDvv**	**BB i**	3 D	4	**P Qt x**	**f u U x v xw**	**f P8B>9B**
I 6 0417 49a NJt				35235				TKS U 417 NJt		3523<

DC48; A; 77487

M 751=7
N4 47173
N 6: 148
O 4148
O 4148
P 9817 7
58É93

WWdf f b

7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mT m*

5183 I Q V
41=8 V
5183 I X V

QN9Y /TY h0		P	9	**88EEvv**	**A; i**	3cN	4	**bx**		**f P; >99C**
QN9Y /TY I 0		P	9	**88EEvv**	**A; i**	3cN	4	**bx**		**f P; 9; ; E**
I 0KRdYKK 415 aZt : 5				44245		3421:				

DC4>>9E77477
DC4>>9E7C477 *mT m*

M 5<k8
N2 51 3
O 5198
O 4188
P 791<8
4: É84

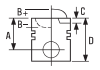
TM

7D4>>9E77477
7D4>>9E7C477 *mT m*

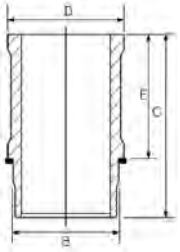
4133 TZ
4133 V
5133 I X V

LKZ-Ring

Yfppw		Yfi sw		Gntp´			Gnp´z		Gnntl tz
89E6A		S	9	**898Evv**	**>C i**	3aS	4	**bx**	**f PAC>**
aQYG QDY°' p´ c				3: 2<3		392<5			



8A4B; BC77477 N : =183 O 455133 P <=153 Q <5183



Ymvßop° °plvw	Ynswlp ßJtnsß°yrpy pty	Ymvßop° uztyß°	Ymvßöpwr° °pwr°	I zx ' ´pyop wpr °l ´ytÚzyt
W8N	S 9 8; B7vv	>> i 3aG 4	bx	f PBBA
W8S	S 9 8; B7vv	A84A9 i 3ai 8cG 4	bx	f PBABC
WMm	S 9 8; B7vv	>74AA i 3/S8cV 4	bx	f PBABB
f g; /W; M0	S 9 8; B7vv	>74>B i 3/S8aP 4	bx	f PBABE
f g; M/W8T0	S 9 8; B7vv	>C4AA i 3aS8cV 4	bx	f P>9C9
f g; M/WBP0	S 9 8; B7vv	A; i 3cN 4	bx	f P9A7BC
f g; M/WBQ0	S 9 8; B7vv	A; 4A> i 3cN8cP 4	bx	f P9A7BE
f g; M/WBR0	S 9 8; B7vv	A; i 3cN 4	bx	f P9A7BD
f g; M/WRf 0/Q A0	S 9 8; B7vv	A> i 3cP 4	bx	f P9A7C7
f g; M/WRh0/Q A0	S 9 8; B7vv	A> i 3cP 4	bx	f P9; CC>
f g; M/WRi 0	S 9 8; B7vv	AA i 3cV 4	bx	f P9A7BB
f g; M/WRk0	S 9 8; B7vv	AA i 3cV 4	bx	f P9A7C>
f g; Ob /WMl 0	S 9 8; B7vv	>> i 3aD 4	bx	f PEA>B
f g; R9 /W8R0	S 9 8; B7vv	>>4>E i 3aD8ac 4	bx	f PBBB
f g; R9 /W9N0	S 9 8; B7vv	B94BA i 3eV8ei 4	bx	f PBBE
f g; RV9 /W9P0	S 9 8; B7vv	AA i 3cV 4	bx	f PBABD
f g; RV9 /WRl 0	S 9 8; B7vv	BB i 3 D 4	bx	f PA7CD
f g; RV96m/WRm0	S 9 8; B7vv	BE4C> i 3 S8GDD 4	bx	f P>AB89
f g; RY /W9M0	S 9 8; B7vv	B84BA i 3eS8ee 4	bx	f PBBD
f g; RY /WPl 0	S 9 8; B7vv	AA4AD i 3cV8ci 4	bx	f P>9CC
f g; Y /WPk0	S 9 8; B7vv	AA i 3cV 4	bx	f PA7D7
f g; Y /WPl 0	S 9 8; B7vv	AA4AD i 3cV8ci 4	bx	f PA8B7
f g; Y 6m/WPm0	S 9 8; B7vv	AA4AE i 3cV8eD 4	bx	f PBD;

Gc 417	3=2<9 372=7	I 6 0417	45238 3: 245
Gc 417 MZt	392=4 452=9	I 6 0417 t	35235 44243
Gc 47	452<9 372=<	I 6 00417	4423= 3=249
Gc 47 MZ	342<= 452=4	I 6 00417 RVM	3: 243
HKXRCTMU 417 t	3: 2=9 45244	I 48 417	382< 452=9
Hc 417	342< 342=5	I 48 417 K	3: 2< 452=9
Hc 47	432<5 352=6	I 48 417 t	382=4 452=9
Hc 47 K	372<6 3: 2<=	TKS U 417	3523<
I 5 417	3=236 4523=	ec 417	362=4 392=<
I 6 417	38236	ec 417 t	362=4 432=<

DC48A>>77477	**7D48A>>77477** **7D48A>>7C477** *mT m*	**8A4B; BB77477** **8>4B; BB77477**	**N** : =183 **O** 467183 **P** <=153 **Q**=3183 **N** : =183 **O** 467183 **P** <=153 **Q**=3183	**DD48A>>77477** < 0487733033 . 4709699330 33
M 73183 **N4** 4143 **N** 95133 **P** 97183 53É95	41t 8 I X V 5183 V 6183 V			

Qrnvßop° °pl vß	Ynswp ßJtnsß°yr py pty	Qrnvßop° uztyß°	QrnvßÖp wr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt

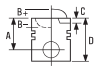
f g; Vb /WRi 0	S 9	**8; B7vv**	**>C4AC i**	3aS8cc 4	**bx**			**f P8>C; 8**
f g; Vb /WRk0	S 9	**8; B7vv**	**A; 4AC i**	3cN8cc 4	**bx**			**f PBAA>**
f g; Vb4X> /WRh0	S 9	**8; B7vv**	**A>4B7 i**	3cP8eN 4	**bx**			**f P8B>B>**
HKXROTMJ 417			3: 2=9	45244	YGcU 417 aZY		382=9	39236
HKXROTMJ 417 t			3: 2=9	45244	cYGXG 417		382=<	36238
I 5 417			3=236	4523=	cYGXG 417 t		372=:	3<238
I 6 417			38236		cYGXG 417 RVM		382=<	3<233
I 6 0417			3=23<	4523=	ec 417 t		362=4	432=:
I 6 0417 t			35235					

DC48; DE77487 34237	**7D48; DE77477**	**8A4B; BB77477** **8>4B; BB77477**	**N** : =183 **O** 467183 **P** <=153 **Q**=3183 **N** : =183 **O** 467183 **P** <=153 **Q**=3183	**DD48; DE77487** < 046<=33043 . 4709699330 33
M 5: t 8 **N4** 4163 **N** 98133 **P** 7=t 8 4<É8<	4183 I Q V 4183 V 5183 V			

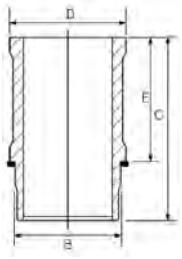
DC48; DE774; 7 34237	**7D48; DE77477**	**8A4B; BB77477** **8>4B; BB77477**	**N** : =183 **O** 467183 **P** <=153 **Q**=3183 **N** : =183 **O** 467183 **P** <=153 **Q**=3183	**DD48; DE774; 7** < 046<=33063 . 4709699330 33
M 5: t 8 **N2** 314 **P** 7=t 8 4<É89	4183 I Q V 4183 V 5183 V			

Qrnvßop° °pl vß K°´z 7	Ynswp ßJtnsß°yr py pty	Qrnvßop° uztyß°	QrnvßÖp wr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt

kl D/8A7N0	S 9	**8; B7vv**	**AA4AE i**	3cV8eD 4	**bx**			**f PACC**
Hc 417			3=2<5	452<9	aQYG 47 MZ		362<5	362=4
Hc 47 K			432<8	382<=				



8A4B; BB77477 **N** : =183 **O** 467183 **P** <=153 **Q** =3133
8>4B; BB77477 **N** : =183 **O** 467183 **P** <=153 **Q** =3133



Ymvöop° °plvw	Ynswp ßJtnsß°yrpy pty	Ymvßop° uztyß°	Ymvöpvw° °pvw°	Izx ''pyop vpr°l´ytÜzyt
PhBMf QP> /ETk0/Q >0	S 9 8AB7vv BB4BD i 3D8 N 4	P@t x f u U x v xw		f P8EE8;
PhBf QP> /ETI 0	S 9 8AB7vv D74DA i 3GDi 8GGa 4	P@t x f u U x v xw		f P8EE88
PhBf QP> /ETm0/Q >0	S 9 8AB7vv D7 i 3GDi 4	P@t x f u U x v xw		f P8ED9>
PhBgf QP> /ETg0	S 9 8AB7vv BB i 3D 4	P@t x f u U x v xw		f P9>BE9

HKXROTMJ 419 NJO=3	3:238 45244	I 7 419 NJt	44237 3:244
HKXROTMJ 419 NJt=3 49a	3723<	I 7 MKGTJ V0 GYYU 0419 NJt	43239 39244
HKXROTMJ 419 NJt 443	3723<	I 7 0419 NJt	44237 3:244
HKXROTMJ S_RZ0YVGI K 419 NJt=3	3723<	I 7 V0 GYYU 0419 NJt	3523: 3<246
HKXROTMJ S_RZ0YVGI K 419 NJt 443	3723<	I 8 419 NJt	3=237 3423<
I 5 419 NJt	3=238 4523=	I 8 00419 NJt	3=237 3423<
I 6 0419 49a NJt	3=238	I 8 00419 NJt 443	3523<
I 6 00419 NJt=3	4423=	P_S Vd 419 NJt=3 49a	3423: 36249
I 6 V0 GYYU 419 NJt	3523=	cYGXG V0 GYYU 419 NJt	38237 45244

DC4>9>777477
DC4>9>77D477 *mTm*

M 741t3
N4 4658
N 741<3
O 4153
P 9863
59É94

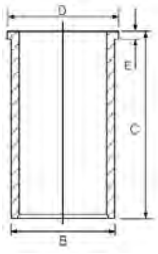
MWWWdf fb

7D4>9>777477
7D4>9>77C477 *mTm*
7D4>9>77D477 *mTm*

6133 I QV
41=8 V
5183 I XV

LKZ-Ring

8>4797E77477 **N** : <133 **O** 475133 **P** : =183 **R** 8133



PhBNf QP> /ETf 0/Q >0	S 9 8AB7vv AA i 3cV 4	P@t x f u U x v xw		f P98; 98
PhBNf QP> /ETi 0/Q >0	S 9 8AB7vv AA i 3cV 4	P@t x f u U x v xw		f P9CD>7
PhBNgf QP> /ETf 0/Q >0	S 9 8AB7vv AA i 3cV 4	P@t x f u U x v xw		f P98; 99
PhBO /ETO0	S 9 8AB7vv D94DA i 3GGN8GGa 4	P@t x f u U x v xw		f P; 8>E7
PhBO /ETP0	S 9 8AB7vv D> i 3GGS 4	P@t x f u U x v xw		f P9EACD
PhBO /ETX0	S 9 8AB7vv D9 i 3GGG 4	P@t x f u U x v xw		f P9BEDA
PhBO /ETd0	S 9 8AB7vv D9 i 3GGG 4	P@t x f u U x v xw		f P9ABE7
PhBPf QP /ETR0/Q >0	S 9 8AB7vv BB i 3D 4	P@t x f u U x v xw		f P9A7E>
PhBPf QP /ETb0/Q >0	S 9 8AB7vv BD4BE i 3N8 S 4	P@t x f u U x v xw		f P9A7E9
PhBPf QPY /ETV0/Q >0	S 9 8AB7vv BD i 3N 4	P@t x f u U x v xw		f P9A7E;
PhBPgY /ETT0	S 9 8AB7vv BB i 3D 4	P@t x f u U x v xw		f P9EBED
PhBQf QP /ETi 0/Q >0	S 9 8AB7vv AA i 3cV 4	P@t x f u U x v xw		f P9AB; 9
PhBQf QPY /ETW0/Q >0	S 9 8AB7vv AA i 3cV 4	P@t x f u U x v xw		f P9A7EC
PhBgO /ETY 0	S 9 8AB7vv BB i 3D 4	P@t x f u U x v xw		f P9DB99

HKXROTMJ 419 NJt: 8	3723<	I 7 MKGTJ V0 GYYU 00419 NJt=3	3=246

HKXROTMJ 419 NJO: 8	3: 238 45244	I 7 00419 NJt	4423=
HKXROTMJ 419 NJt=3	3: 243	I 7 00419 NJt=3	4423=
HKXROTMJ 419 NJO=5	4423= 45243	I 7 00419 NJt 443	4423=
HKXROTMJ 419 NJt=5	3: 243 4524:	I 7 00419 NJt 448	3: 245
HKXROTMJ 419 NJt 443	3: 243	I 7 V0 GYYU 0419 NJt 443	3=243 3<246
HKXROTMJ 419 NJt 448	3: 243	I 7 V0 GYYU 00419 NJt	35246
HKXROTMJ S_RZOYVGI K 419 NJt: 8 49a	3723<	I 7 V0 GYYU 00419 NJt=3	35246
HKXROTMJ S_RZOYVGI K 419 NJt=3	3: 243	I 7 V0 GYYU 00p0NJt	35246
HKXROTMJ S_RZOYVGI K 419 NJt 443	3: 243	I 7 V0 GYYU 00NJt 2p0NJt	35246
HKXROTMJ S_RZOYVGI K 419 NJt 448	3: 243	I 7 YVGI KZU_XKX 419 NJt 448	3724<
I 6 00419	37248	I 8 00419 NJt 443	3: 243
I 6 00419 NJt	4423= 3=249	I 8 00419 NJt 448	34245
I 6 00419 NJt=5	4324:	I 0KRdYKK 419 NJO=5	44245
I 6 00419 NJt 443	4423=	JY6 419 NJt=3	4423= 3: 248
I 6 00419 NJt 448	3=245	JY6 419 NJt 443	4423= 3: 248
I 6 00419 NJt=5	4424:	JY6 419 NJt 448	3<245 3: 248
I 6 V0 GYYU 419 NJO=3	3: 243	JY7 419 NJt=3	38244 3: 248
I 6 V0 GYYU 419 NJt 443	38243	JY7 419 NJt 443	37244 3: 248
I 6 V0 GYYU 419 NJt 448	34246	JY7 419 NJt 448	3<245 3: 248
I 7 419 NJt 448	37245	JY8 419 NJt 443	44244 3: 248
I 7 I GI Z_Y 419 NJt=3	3=247	JY8 419 NJt 448	39245 3: 248
I 7 MKGTJ V0 GYYU 0419 NJt 443	3=243 3<246	MKGTJ I 7 YVGI KZU_XKX 419 NJt 448	3724<
I 7 MKGTJ V0 GYYU 00419 NJt	3=246	P_S Vd 419 NJt=3 <a	3423: 36249

DC4>;;B77477
DC4>;;B7C477 *mTm*

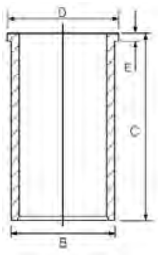
M	741 8
N4	461<8
N	78133
P	98153
	59É94

MWWWdf fb

7D4>;;B77477
7D4>;;B7C477 *mTm*

5183		I Q V
41=8		V
5133		I X V

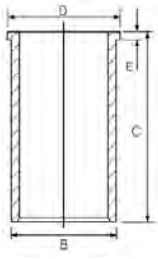
8>4797E77477 **N**: <133 **O** 475133 **P**: =183 **R** 8133



PhBPNY /ETQ0/Q	**>0**	S	9	**8AB7vv**	**BB i**	3 D	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P9A7EA**
PhBQf QP /ETZ0/Q	**>0**	S	9	**8AB7vv**	**AA i**	3cV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P9A7EB**

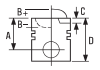
HKXROTMJ 419 NJt	3: 243	HKXROTMJ 419 NJt=3	3: 243 4524:
HKXROTMJ 419 NJt: 8	35245	HKXROTMJ S_RZOYVGI K 419 NJt: 8	3723<

8>4797E77477 **N**: <133 **O** 475133 **P**: =183 **R** 8133



PhBRO /NTf 0		S	9	**8AB7vv**	**DD i**	3GND	4	**P0t x**	**f**	**u**			**f P;;CE7**
PhBRO /NTg 0		S	9	**8AB7vv**	**DA i**	3GGa	4	**P0t x**	**f**	**u**			**f P;;CDD**
PhBRO /NTk 0		S	9	**8AB7vv**	**DA i**	3GGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P9DAA8**
PhBRO /NTm 0		S	9	**8AB7vv**	**DD i**	3GND	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P9DB89**
PhBRP /NTI 0		S	9	**8AB7vv**	**C;4CA i**	3i8GDN	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P;87BC**

HKXROTMJ 419 433	45247	I 7 00419 453	35248



HKXROTMJ 419 453	45247	I 7 V0 GYYU 00419 433	45247
HKXROTMJ S _RZOYVGI K 419 433	45247	I 7 V0 GYYU 00419 453	3: 247
HKXROTMJ S _RZOYVGI K 419 453	45247	I 7 V0 GYYU 00419 NJt	35246
I 6 00419	3924:	I 7 YVGI KZU_XKX 419 433	3724<
I 6 00419 433	3: 247	I 7 YVGI KZU_XKX 419 453	3724<
I 6 00419 453	3: 24:	I 7 YVGI KZU_XKX 453	3824=
I 6 00419 HwpNJO433	3824=	I OKRdYKK 419 433	44247
I 6 00419 433	3: 249	JY6 419	43246 3: 248
I 6 00433	3624=	JY6 419 433	3: 247 3: 248
I 6 V0 GYYU 419 433	34248	JY6 419 453	43246 3: 248
I 7 I GI Z_Y 419 433	3=247	JY6 419 NJt 448	43246 3: 248
I 7 I GI Z_Y 433	3824=	JY7 419	3: 247 3: 248
I 7 MXGTJ V0 GYYU 00419 433	34248	JY7 419 453	3: 247 3: 248
I 7 MXGTJ V0 GYYU 00419 453	3: 247	JY8 419 453	3: 247 3: 248
I 7 MXGTJ V0 GYYU 00419 NJt	3=246	JY8 419 NJt	44246 3: 248
I 7 00419	3: 247	MXGTJ I 7 YVGI KZU_XKX 419 433	3724<
I 7 00419 433	3: 247	MXGTJ I 7 YVGI KZU_XKX 419 453	3724<

DC4>A; 877477
DC4>A; 87C477 *mTm*

M 741 3
N4 4648
N 7883
P 961 3

MWWWdf fb

7D4>A; 877477
7D4>A; 87C477 *mTm*

5133		I Q
41=8		V
5133		I X

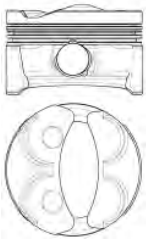
Qb; /DRZ0	S 9	**8; EOvv**	**C7 i**	3 V 4	**bx**			**f P9E9BB**
Qb; /DRb0	S 9	**8; EOvv**	**C7 i**	3 V 4	**bx**			**f P9A7CB**
Qb; /DRd0	S 9	**8; EOvv**	**C9 i**	3 e 4	**bx**			**f P9A7CC**
Qb; /DRe0	S 9	**8; EOvv**	**C7 i**	3 V 4	**bx**			**f P9>C9A**
Qb; O /DRd 0/Q A0	S 9	**8; EOvv**	**C74C9 i**	3 V8 e 4	**bx**			**f P; D>E>**

I 6 00417 RVM	39246	I 7 00417 aZt =8	4423=
I 6 00417 aZt	4423=	JY6 417 aZt =8	37243 3: 248
I 6 00417 aZt =8	4423=	JY6 417 aZt =8 RVM	3<245 3: 248
I 6 V0 GYYU 417 aZt =8	3523=	JY6 417 aZt =<	4423= 3: 248
I 6 V0 GYYU 417 aZt =8 RVM	34245		

DC4>>>D774>7

M 631<3
N4 6143
N 8866
N2 6153
O 81<<
O 6187
P 831<8
4<133É76133

fb

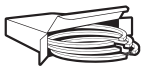


7D4>>>D77487
7D4>>>D7C487 *mTm*

4153		VaJ V
4183		V
5133		TZ

Y8ppw Y8 sw Gntp´ Gnp´z Gnntl tz

QbB /ARi 0	S 9	**8AEDvv**	**DD i**	3END 4	**bx**			**f P9>C9>**
QbBOPf k /ARg 0/Q >0	S 9	**8AEDvv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**	**f P9C7>D**
QbBPf k /ARg 0/Q >0	S 9	**8AEDvv**	**8>C i**	3NDD 4	**bx**	**f u U x v**	**xw**	**f P9A7D>**



I 6 V0 GYYU 419 aZt 453	3523=	I 7 V0 GYYU 0419 aZt 453	3: 23< 3<246
I 7 419 aZt 453	3: 23< 3: 244	JY7 419 ZNV 533	37244 3: 248
I 7 MKGTJ V0 GYYU 0419 aZt 453	3: 23< 3<246	JY8 419 ZNV 533	44244 3: 248
I 7 0419 aZt 453	3: 23< 3: 244		

DC4>>>D774A7
DC4>>>D7C4A7

M	5<183
N4	6183
N2	51: 3
O	6183
O	6183
P	8415 3
	53É7<

TMdf f b

7D4>>>D77487
7D4>>>D7C487 *mTm*

4153		VaJ V
4183		V
5133		TZ

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

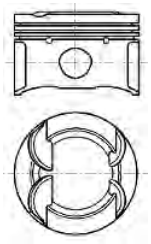
QbBO /ARe0	S 9	**8AEDvv**	**DD i**	3GND 4	**bx**		**f P9>E; >**
QbB ON /ARW0	S 9	**8AEDvv**	**C9 i**	3 e 4	**bx**		**f P9A7BA**

HKXROTMJ 419 aZt =8	3: 243	I 7 0419 aZt 453	4423= 45249
HKXROTMJ 419 aZt 453	4423=	I 7 0419 aZt 453 RVM	3=244
HKXROTMJ S_RZ0VGI K 419 aZt =8	3: 243	I 7 V0 GYYU 0419 aZt 453	35246
HKXROTMJ S_RZ0VGI K 419 aZt 453	4423=	I 7 V0 GYYU 0aZt 453	35246
I 6 0419 aZt 453	4423=	I 8 0419 aZt 453	3: 243
I 6 V0 GYYU 419 aZt 453	3523=	I 8 0419 aZO453	3: 243
I 7 MKGTJ V0 GYYU 0419 aZt 453	3=246	JY6 419 aZt 453	37243 3: 248
I 7 0419	34246	JY7 419 aZt 453	37244 3: 248

DC4>>>D77487
DC4>>>D7C487 *mTm*

M	5: 183
N4	5133
N	8: 183
O	61=:
O	81=8
P	7: 183
	4<É76

f b



7D4>>>D77487
7D4>>>D7C487 *mTm*

4153		VaJ V
4183		V
5133		TZ

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

QbBOPf /ARZ0	S 9	**8AEDvv**	**887 i**	3GVD 4	**bx**	**f u U x v xw**	**f P9D9>E**
QbBOPf /ARh0	S 9	**8AEDvv**	**88A i**	3GVa 4	**bx**	**f u U x v xw**	**f P9>E; B**
QbBPf /ARY 0/Q >0	S 9	**8AEDvv**	**897489D i**	3GaP8GcP 4	**bx**	**f u U x v xw**	**f P9A7D8**
QbBPf /ARd0	S 9	**8AEDvv**	**88A i**	3GVa 4	**bx**	**f u U x v xw**	**f P9>E; ;**
QbBPf /ARf 0	S 9	**8AEDvv**	**87; i**	3GSD 4	**bx**	**f u U x v xw**	**f P9>BE>**
QbBRPf /ASm0/Q >0	S 9	**8AEDvv**	**898 i**	3GaV 4	**bx**	**f u U x v xw**	**f P; 8CB;**

I 7 419 ZNV	3923< 3: 244	I 8 0419	36244
I 7 MKGTJ V0 GYYU 0419 49a	3: 23< 45243	I 8 0419 ZNV 483	3723=
I 7 MKGTJ V0 GYYU 0419 ZNV 488	3=243 3<246	I 8 0419 ZNV 488	3723=
I 7 MKGTJ V0 GYYU 0419 ZNV 488	3=246	JY6 419 ZNV 483	34243 3: 248
I 7 MKGTJ V0 GYYU 0419 ZNV 498	3: 247	JY6 419 ZNV 488	37243 3: 248
I 7 0419 ZNV 473	3: 23< 3: 244	JY6 419 ZNV493	34245 3: 248
I 7 0419 ZNV 488	4423= 45249	JY6 419 ZNV 498	43247 3: 248
I 7 V0 GYYU 0419 ZNV 473	3: 23< 3<246	JY7 419 ZNV 488	37244 3: 248

I 7 V0 GYYU 0419 ZNV 488	3=243 3<246	JY7 419 ZNV 498	34245 3: 248
I 7 V0 GYYU 00419 ZNV 488	35246	JY8 419 ZNV 488	44244 3: 248
I 7 V0 GYYU 00419 ZNV 498	3: 247	JY8 419 ZNV 498	34245 3: 248
I 7 V0 GYYU 00ZNV 488	35246	MKGTJ I 7 YVGI KZU_XKX 419 ZNV 498	3724<
I 7 YVGI KZU_XKX 419 ZNV 498	3724<		

DC4>A; 777477
DC4>A; 77C477 *mT m*

M 6314<
N4 6163
P 83146
53É7<

+<<<83,

4153 VaJ
4153 V
5133 I X

7D4>A; 777477
7D4>A; 77C477 *mT m*

Yfbppw Yfl sw Gntp´ Gnp´z Gnntl tz

f gPA/hVl 0 S 9 **8A9Ovv** **>74>; i** 3/S8Ve 4 **P0l x** **f P88DE7**
f gPA/hVm0 S 9 **8A9Ovv** **>94>; i** 3/c8Ve 4 **P0l x** **f P>9EB**

Gc 48 J	3<2=7 452=:	cYGXG 418 J	372=: 3=233
YGcU 418 J	3=2=9 37237	ec 418 J	392=9 352=<

DC4; 9AD77477
DC4; 9AD7B477 *mT m*

M 7316:
N4 4198
P 99165
56É93

MWdf

7D4; 9AD77477
7D4; 9AD7B477 *mT m*

5133 I Q V
41:8 V
6133 I X V

QOA S 9 **8ADOvv** **DA4E7 i** 3GGa8GNN 4 **bx** **f P; C88B**
QOA/ZRb0 S 9 **8ADOvv** **DA i** 3GGa 4 **bx** **f P9DAC;**

I 6 00419 aZt	43249	I 7 00419	34246
I 6 00419 aZt	3524:	I OKRdYKK 419 aZt 448	44245

DC4>A9C77477
DC4>A9C7C477
3: 244

M 65168
N2 4173
O 5178
P 861:8
53É8:

f b

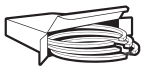
7D4>A9C77477
7D4>A9C7C477 *mT m*

4133 I Q
4153 V
5133 I X V

LKZ-Ring

<8vb
Yfbppw Yfl sw Gntp´ Gnp´z Gnntl tz

f gAV> /ZRk0 S 9 **8ADOvv** **D74DD i** 3GDi 8GND 4 **bx** **f P87CDD**
f gAVb /ZRf 0 S 9 **8ADOvv** **C94C> i** 3 e8GDG 4 **bx** **f P; 9BD>**



f gAVb> /ZRg0	S 9	**8ADOvv**	**D74E7 i**	3GDi 8GNN 4	**bx**		**f P8A; 7D**
f gAVb>N /ZRd0	S 9	**8ADOvv**	**BB i**	3 D 4	**bx**		**f P98; 97**
HKXROTMJ 419		3723<		I 7 0419		36244	
HKXROTMJ 419 49a		43233	45244	I 7 0419 49a		44237	3: 244
HKXROTMJ S _RZ0YVGI K 419		3723<		YGcU 419		352=9	37237
I 5 419		3: 236	43243	YGcU 419 aZX		382=9	3: 2==
I 6 419		38236		YGcU 419 aZY		392=9	3=236
I 6 0419		39238	45246	cYGXG 419 49a		3=233	3<238
I 6 0419 49a		35235	3<243	cYGXG V0 GYYU 419 49a		39238	45244
I 7 419 49a		44237	3: 244				

DC48; E>77477
DC48; E>7C477 *mTm*

M 65168
N2 4163
P 84163
53É8:

7D48; E>77477
7D48; E>7B477 *mTm*
7D48; E>7C477 *mTm*

4153 I Q V
4183 V
5183 V

f gAVb /ZRh0	S 9	**8ADOvv**	**C74C> i**	3 V8GDG 4	**bx**		**f P9; ; E9**
f gAVb /ZRm0	S 9	**8ADOvv**	**BA4BC i**	3ee8 G 4	**bx**		**f PE>AD**
f gAVb> /ZBM0	S 9	**8ADOvv**	**CD4D; i**	3GDa8GGP 4	**bx**		**f P98A7>**
YGcU 419		352=9	39236	cYGXG 419 t		372=:	3=233
YGcU 419 aZR/ aZX		382=9	39236	cYGXG V0 GYYU 419		452==	45243

DC487; D77477
DC487; D7B477 *mTm*

M 65158
N4 4183
N 9<183
P 8: 183
53É95

7D487; D77477
7D487; D7B477 *mTm*

4183 I Q V
4183 V
6183 I X V

kgPC/8B80/kgPC0	S 9	**8CBEvv**	**>> i**	3aD 4	**P0t x**		**f PADB**
kgPC/8B8M0/kgPC0	S 9	**8CBEvv**	**>; 4>> i**	3/e8aD 4	**P0t x**		**f P>9AD**
kgPC/MEM68B8M0/kgPC0	S 9	**8CBEvv**	**>; 4>> i**	3/e8aD 4	**P0t x**		**f PBAAA**
HKXROTMJ 41<J		3: 2=9	43235	a0YG 4: J		372<7	362=4
Hc 41<J		432<8	3=2=6	cYGXG 41<J		372=:	3=233
Hc 4<J		432<8	3=2=6	ec 41<J		392=6	432=:
I 48 41<J		3: 2=9	45233				

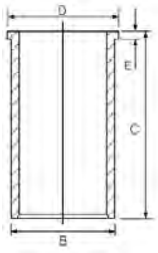
DC4; 98A77487
DC4; 98A7C487 *mTm*
DC4; 98A87487 *mTm*

M 791<3
N4 5163
P <7183
58É: 3

7D4; 98A77477
7D4; 98A7C477 *mTm*
7D4; 98A87477 *mTm*

5133 I X V
5133 V
6133 I X V

8>479>C>7477 **N** <6183 **O** 48713 3 **P** <8t 3 **Q** 7193
8>479>D; 7477 **N** <6183 **O** 48713 3 **P** <9133 **Q** 7183



kgPCf Q/MDM0/kgPC0	S 9	**8CBEvv**	**BB i**	3D 4	**P@t x**	**f u U x v xw**	**f PB79**
kgPCf Q/MVm0/kgPC0	S 9	**8CBEvv**	**BB i**	3D 4	**P@t x**	**f u U x v xw**	**f PB7>**

Hc ZXJ Z°´mz 362<< 452=7

DC4; 9; B7C477 *mTm*

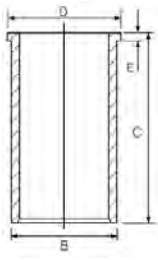
M 791<3
N4 5163
P <7183
5<É9<

MWdf

7D4; 9; B77477
7D4; 9; B7C477 *mTm*

6133 SURV
5133 V
6133 I X V

8>479>C>7477 **N** <6183 **O** 48713 3 **P** <8t 3 **Q** 7193
8>479>D; 7477 **N** <6183 **O** 48713 3 **P** <9133 **Q** 7183



Pf 8CQP>	a 9	**9C97vv**	**8A7 i**	3NDS 4	**P@t x**	**N@f u U x v xw**	**f P8ED9C**
Pf 8Cf QP> /gTm0/Q >0	a 9	**9C97vv**	**8A7 i**	3NDS 4	**P@t x**	**N@f u U x v xw**	**f P9>DBD**

I 8 0051t NJt 3523< I 951t NJt 3=238 45244

DC4>; 9>77477
DC4>; 9>7C477 *mTm*

M 7: 133
N4 47138
N 77133
O 3183
P : 4133
5=É95

+<498K043<;

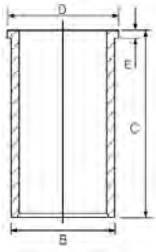
MWWdf fb

7D4>; 9>77477
7D4>; 9>7C477 *mTm*

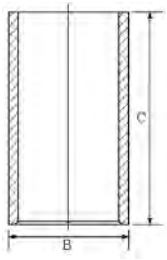
5133 I Q V
5133 V
5133 V

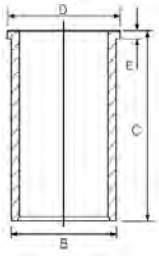
Pi D/i Vm0@Pi DN/i Vl 0	S 9	**8DBDvv**	**A84A9 i**	3ai 8cD 4	**P@t x**		**f P87C7D**
Pi DN/i Vk0	S 9	**8DBDvv**	**>> i**	3aD 4	**P@t x**		**f P9BED8**
Pi DN/i Vl 0	S 9	**8DBDvv**	**A84A9 i**	3ai 8cD 4	**P@t x**		**f P8A; 87**

HKXR0TMJ 41=J	3: 2=< 43238	P_S Vd 41=J : 3	372=< 43239
HKXR0TMJ 41=J : 3	3: 2=< 45244	P_S Vd 41=ZJ	44233 43239
I 48 41=J	34233 45238	cYGXG 41=J	3: 2=< 3<238

DC487>777477 DC487>77D477 *mTm*	7D487>777477 7D487>77D477 *mTm*	8>47979E7477	N <8133 O 487133 P < 133 Q 8133	DD487>777477 < 0437333033 . 4703535=3033
M 791<3 N4 4163 P : <133 58É98 	5133 I Q V 5133 V 6133 I X V			

Y C7A	S 9	8E; 7vv	B7 i 3eN 4	P@t x f u	f PBAC>
I 58 41=JZ	432=4 342=7	I 58 41=ZJ	372=5 352=7		

		8>478>C; 7477	N <913= O 487133	
				

		8>4798; 88477 8>479; AB7477 8>479; CA8477	N <9139 O 487133 P <=133 Q 7183 N <9133 O 487133 P <=133 Q 7183 N < 133 O 487133 P <=133 Q 7188	
				

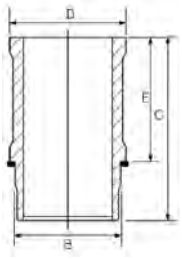
8AEN	S 9	8E7Avv	C> i 3GDG 4	bx	f P98A9E
8C8O	S 9	8AD7vv	BB4BD i 3 D8 N 4	bx	f PAE;
NBQ	S 9	8AD7vv	DA i 3GGa 4	bx	f P98DBB
P9Q	S 9	8E7Avv	CD4CE i 3GDc8GDe 4	bx	f P99>>E
kg AOb /NMI 6NMm0	S 9	8AD7vv	AA i 3cV 4	bx	f PEAA7
kg AV /8D7M6NBP0	S 9	8AD7vv	CB i 3GDP 4	bx	f PAEB
kg AVM/NBP0	S 9	8AD7vv	D; 4DA i 3GGP8GGa 4	bx	f P>9B9
kg AV6V96VM	S 9	8AD7vv	AA i 3cV 4	bx	f PEAA8
kg AY /NPI 6N>M0	S 9	8AD7vv	BA4BB i 3ee8 D 4	bx	f PA7EC
kg AY /NPm0	S 9	8AD7vv	BA i 3ei 4	bx	f PB8A
kg CVN /XRk0	S 9	8CB9vv	AD4BB i 3 D 4	bx	f PE>AC
kg CVb /XRi 6XRm0	S 9	8CB9vv	C; 4CB i 3 i 8GDP 4	bx	f PA88B
kg CVb> /XRI 0	S 9	8CB9vv	CB4DA i 3GGD8GGa 4	bx	f P>9CE
kg EV8 /PRm0	S 9	8E7Avv	CA i 3GDN 4	bx	f PEA>D
kg EV9 /PBM0	S 9	8E7Avv	E74E9 i 3GNN8GNV 4	bx	f PB; 8

kgEV> /PBO6PRi 0	S 9	8E7Avv	88B488D i	3GVe8GaD 4	bx	f PB; 9
kgEV> /PRi 0	S 9	8E7Avv	87D4887 i	3GSc8GVD 4	bx	f PB>7
kgEVM/PBQ0	S 9	8E7Avv	E; 4EB i	3GNa8GPG 4	bx	f P99B99
kgEVM/PWm0	S 9	8E7Avv	DD i	3GND 4	bx	f PB>C
kgEY /PPm0	S 9	8E7Avv	D7 i	3GDi 4	bx	f PB; E
kgEe /8AEM0	S 9	8E7Avv	CA4CC i	3GDN8GDV 4	bx	f PAD>
kgA8O /N8Q0	S 9	8AD7vv	A; 4AE i	3cN8eD 4	bx	f PB7C
kgA9O	S 9	8AD7vv	BA4DA i	3ee8GGa 4	bx	f P8>B>D
kgE9O /P9M0	S 9	8E7Avv	CA4CC i	3GDN8GDV 4	bx	f PB9D
kgE9O /P9O0	S 9	8E7Avv	C7 i	3 V 4	bx	f PB9E
kgE9O /P9R0	S 9	8E7Avv	D7 i	3GDi 4	bx	f PB; 7

HKXROTMU 41<t	372=: 43235	cGTZOG 41<t	362=6 37236
Hc 419	342=< 342=5	cGTZOG 41<t 49a	392=8 37236
Hc 41=	432=8 392=7	cYGXG 41<	3: 2=: 3<233
Hc 41=Zet	352=5 452=7	cYGXG 41<t	372=: 3=233
Hc 48	342=< 382=5	cYGXG 41<t 49a	372=: 3=233
Hc 49	432=5 452=7	cYGXG 41<RVM	342=< 3<233
Hc 49 K	382<= 352=6	cYGXG V0GYYU 41<Yc	39233 3<238
Hc 4=	3=2<7 452=7	ec 419	3: 2=7 432=:
Hc 4=I I ß	3: 2<9 452=7	ec 419 t	362=4 432=:
Hc 4=K	392<< 352=6	ec 41<	362=4 432=:
Hc 4=MZt	432=7 392=7	ec 41<t	3: 2=5 432=:
Hc 4=MZt 49a	3=2=< 352=6	ec 41<t 49a	342=9 352=<
KaGYQUT 41<	352=9 3: 235	ec 41=	362=4 392=:
aQYG 49 MZO	342=8 362=4	ec 41=t	362=4 392=:

8A4B; >E87477
8>4B; >E87477

N <<133 O 474133 P =: 133 Q =8146
N <<133 O 474133 P =: 133 Q =8146



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kgA /8C8M0	S 9	8AD7vv	BB4BC i	3 D8i N 4	bx	f PAE8
kgA /N8MV0	S 9	8AD7vv	AD4AE i	3ci 8eD 4	bx	f P89>9D
kgAV /8D7m0	S 9	8AD7vv	CB i	3GDP 4	bx	f PAEC
kgAVb /NRm0	S 9	8AD7vv	BA4BB i	3ee8i D 4	bx	f PA878
kgAe /8C8N0	S 9	8AD7vv	BB4C7 i	3 D8i V 4	bx	f PAE9
kgAe /8C8P0	S 9	8AD7vv	B> i	3ec 4	bx	f PAE>

Hc 49	432=5 452=7	ec 419	3: 2=7 432=:
cGTZOG 419 t	362=6 36234	ec 419 t	362=4 432=:

7D48A8977477

8A4B; >E87477

N <<133 **O** 474133 **P** =: 133 **Q** =8146

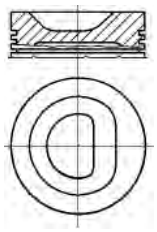
8>4B; >E87477

N <<133 **O** 474133 **P** =: 133 **Q** =8146

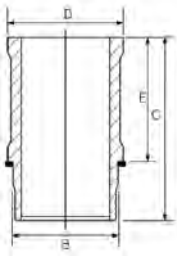
DE48A8977477

480967=43033

M 6: 188
N4 5143
P 9: 183
55É99



41 8 I X V
41 8 V
7133 I X



Vt°ßzy I ®tuwmp ty QtßYpßzyvÜ Yßppw
Qvmvßop° °pl w
_°p l vßz 4 TH UOXtyr NX899

Qzwmpy y°´tx G°°px mÜp´s vßvns Yß sw
Ynsvkp ßJtnsß°yr py pty
S tß®p´Äpyopy>4 TH UOXtyr NX899

Vt°ßzy ot°' zytmkp py vtß°p°wx pyß Gntp´
Qvmvßop° uztyß°
G °ßvkp´ l °°°t>4 uztyßßz´t¿°p° NX899

Vt°ß y ot°' zytmkp py nzyú yßz° °zwx pyßp1 Gnp´z
Qvmvßp wr° °pwr°
_ßvkÜl´ ß x mt y>4 TH úyß ßz´tnl ° NX899

O' t°ßzyt °zyz ot°' zytmtw°zwr ty vtßx zßz´p Gnntl tz
l zx ' ´pyop wp r °l ´ytÜzyt
_°l ´p l ynsp>4 TH UOXtyr NX899

kgPE /8B90	S	9	**8E7Avv**	**>C i**	3aV	4	**PQt x**		**f PADC**
kgPE /PEM0	S	9	**8E7Avv**	**>C i**	3aS	4	**PQt x**		**f P>9BA**
kgPE /PVm0	S	9	**8E7Avv**	**>C4A7 i**	3aV8ae	4	**PQt x**		**f PB>B**
kgPEM/PVl 0	S	9	**8E7Avv**	**A74A9 i**	3ae8cG	4	**PQt x**		**f PBAAB**
kgPEM6X /PEN0/kgPE0	S	9	**8E7Avv**	**A74A9 i**	3ae8cG	4	**PQt x**		**f P>9BC**
kgPEM6g /PEN0/kgPE0	S	9	**8E7Avv**	**A74A; i**	3ae8cN	4	**PQt x**		**f P>9BB**

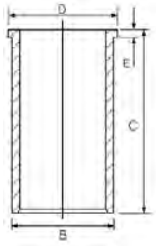
HKXROTMJ 41=J	3: 2=9	45236	l 58 41=J 4733	342=<	342=7
Hc 41=4=J	362<	352=6	P_S VKX 41=J	352=7	37235
Hc 41=J	342<	342=5	P_S Vd 41=J	432=8	3<2=<
Hc 41=XJ	342<	342=5	cGTZOG 41=J	392=7	342=<
Hc 4=J	3=2=6	452=7	cYGXG 41=J	372=:	3=233
l 58 41=J	3: 2<	352=7	ec 41=J	362=4	3: 2==

DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

8>4797A; 7477

N <8193 **O** 486183 **P** <<183 **Q** 61=3

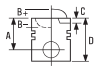


M 791<3
N4 5153
P <7163
58É: 5

5133 I X V
5133 V
6133 I X V

kgPENeP /PTh0/kgPE0	S	9	**8E7Avv**	**AA i**	3cV	4	**PQt x**	**f u**	**f P99EE8**
kgPENf R/PTk0	S	9	**8E7Avv**	**BB4BD i**	3 D8 N	4	**PQt x**	**f u U x v xw**	**f P>9BD**
kgPEeP /PTi 0	S	9	**8E7Avv**	**A74AA i**	3ae8cV	4	**PQt x**	**f u U x v xw**	**f P87BDE**
kgPEf Q/PTl 0	S	9	**8E7Avv**	**BA4BD i**	3ee8 N	4	**PQt x**	**f u U x v xw**	**f P>9BE**
kgPEf R/PDN0	S	9	**8E7Avv**	**BB4BD i**	3 D8 N	4	**PQt x**	**f u U x v xw**	**f PA7>B**
kgPEgf R/PDO0	S	9	**8E7Avv**	**BB4BD i**	3 D8 N	4	**PQt x**	**f u U x v xw**	**f P>9B>**

KaGYQUT 41=ZJ	442=7	3: 235	cYGXG 41=J	342=<	3=233
P_S VKX 41=ZJ	352=7	37235	cYGXG 41=YJ	342=<	3=233
P_S Vd 41=ZJ	432=8	44236	cYGXG 41=ZJ	372=:	3=233
cGTZOG 41=YJ	352=9	37236	ec 41=JZ	392=5	432=:
cGTZOG 41=Z°´mz J	382=6	37236	ec 41=ZJ	3: 2=5	432=:



DC487AA77477
DC487AA7C477 *mTm*

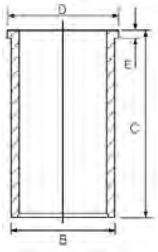
M	791 8
N4	6183
P	: 8133
	5<É9<

MWTMdf fb

7D487AA77477
7D487AA7C477 *mTm*

6133		I Q
5133		TZ
6133		I X V

8>4797A; 7477



N <8193 **O** 486183 **P** <<183 **Q** 61=3

Pf 97O /Q A0	a 9	**9EE; vv**	**8AA48CC i**	3NGGBNSG 4	**P0t x**	**N0f u U x v xw**	**f P9; A9B**
Pf 97O /kDO0/Q A0	a 9	**9EE; vv**	**8CC i**	3NSG 4	**P0t x**	**N0f u U x v xw**	**f P9>DBE**

I 8 0013 NJt 573	3723= 43247	I 9 613 NJt	3723= 45245

DC4>; E877487
DC4>; E87C487 *mTm*

M	79133
N4	48168
N	7: 195
P	: 3133
	63É96

-8<7=JO73<G,

MWWWdf fb

ECOTOUCH

7D4>; E877487
7D4>; E87C487 *mTm*

41 8		MJI V
41 8		V
5133		I X V

GDC LKZ-Ring

Mpy 5 't°ßzy nl y mp´pßzqdßßpo ty Mpy 4 pyrtyp°

K°´z 9
Lz´ Mpy 5 pyrtyp°

Qzwapy op´51Mpyp´lßzy v yypy ty Szßz´py op´41Mpyp´lßzy ylnsrp´ °ßpß Äp´opy

L ´Szßz´py op´51Mpyp´lßzy

Rp° 't°ßzy° op 5 x p r y ´lßzy 'p°®pyß ßpx zyß°°°´ op° x zßp°´° op 4 x p r y ´lßzy

Vz°´x zßp°´° op 5 x p r y ´lßzy

Kw t°ß y op w °pr°yol rpyp´lnt y °p '°pop x zyß´ py w° x zßz´p° op '´tx p´l rpyp´lnt y

Vl´l x zßz´p° op°pr°yol rpyp´lnt y

tw t°ßzyp ot°pnzyol rpyp´lÜzyp '° p°°p´p x zyßßz yptx zßz´tot'´tx l rpyp´lÜzyp

Vp´tx zßz´tot°pnzyol rpyp´lÜzyp

Pi 87ON /dTP0/Q >0	S 9	**8EEOvv**	**877 i**	3GPa 4	**P0t x**	**f u U x v xw**	**f P9ECCE**
Pi 87 O TI NdUP /dTO0/Q A0	S 9	**8EEOvv**	**897 i**	3GaP 4	**P0t x**	**f u U x v xw**	**f P9D9>9**
Pi 87Of QP> /dTP0/Q >0	S 9	**8EEOvv**	**877 i**	3GPa 4	**P0t x**	**f u U x v xw**	**f P9EC7B**
Pi 87Of QP> /dTQ0	S 9	**8EEOvv**	**887 i**	3GVD 4	**P0t x**	**f u U x v xw**	**f P9>E; A**
Pi 87Of QP> /dTT0/Q A0	S 9	**8EEOvv**	**897 i**	3GaP 4	**P0t x**	**f u U x v xw**	**f P9; CC7**

I 7 MXGTJ V0 GYYU 0513 NJt 483	3: 23= 3<246	I 8 0013 NJt 483	3723= 35248
I 7 MXGTJ V0 GYYU 0513 NJt 498	3=243 3<246	I 8 0013 NJt 498	3723=
I 7 MXGTJ V0 GYYU 0013	3=246	I <513 NJt 468	36239
I 7 0013 NJt	4423=	I <513 NJt 498	36239
I 7 0013 NJt 2493	43243	JY7 513 NJt	3=244 3: 248
I 7 V0 GYYU 0513 NJt 483	3: 23= 3<246	JY7 513 NJt 498	37244 3: 248
I 7 V0 GYYU 0513 NJt 498	3=243 3<246	JY8 513 NJt 468	44244 3: 248
I 7 V0 GYYU 0013	3=246	JY8 513 NJt 498	44244 3: 248
I 8 0013 NJt	3523<	P_S Vd 513 NJt 498	3: 243 36249

DC4>>; 877477
DC4>>; 87D477 *mm*

M	79t 3
N4	461t 4
N	83173
O	3178
P	:71t 4
	63É9<

-8<83NC55<,

MWWWdf fb

7D4>>; 877477
7D4>>; 87D477 *mm*

5133		MJI V
5133		V
5133		I X V

GDC LKZ-Ring

HzÄwnl 'I ntfÖ59165nx 6 azvÞx py op´ Qzwnpyx °wp 59165nx 6 azvÞx p op w nl@ß o° ' t°ßzy 59165nx 6 azwnl@bl o ' t°ß y 59165nx 6 azvÞx p nl x p´l ' t°ßzyp 59165nx 6

Pi 87MfQP /dTe0	S	9	8EEOvv	CE i	3GDc	4	P@t x	f	u	U x v	xw	f P97CD9
Pi 87MfQP /dTm0	S	9	8EEOvv	CE4D8 i	3GDc8GGD	4	P@t x	f	u	U x v	xw	f P89D9E
Pi 87NfQP /dTk0	S	9	8EEOvv	BE i	3 S	4	P@t x	f	u	U x v	xw	f P987; E
Pi 87NfQP /dTm0	S	9	8EEOvv	D7 i	3GDI	4	P@t x	f	u	U x v	xw	f P; ; C8D
Pi 87NfQP2 /dTm0	S	9	8EEOvv	D7 i	3GDI	4	P@t x	f	u	U x v	xw	f P; ; C97
Pi 87OfQP /dTm0	S	9	8EEOvv	D7 i	3GDI	4	P@t x	f	u	U x v	xw	f P; ; C8C
Pi 87OfQP2 /dTm0	S	9	8EEOvv	D7 i	3GDI	4	P@t x	f	u	U x v	xw	f P; ; C8E
Pi 87fP /dTh0	S	9	8EEOvv	B9 i	3eS	4	P@t x	f	u	U x v	xw	f P9>DCC
Pi 87fP /dTI 0	S	9	8EEOvv	BB i	3 D	4	P@t x	f	u	U x v	xw	f P8A; 88
Pi 87gfP /dTh0	S	9	8EEOvv	B9 i	3eS	4	P@t x	f	u	U x v	xw	f P8BC; E

HKXROTMJ 513 NJt	44235	43238	P_S Vd 513 NJt 443	36233 43239
HKXROTMJ 513 NJO=3	452==	45244	cGTZQG 513 NJt	392== 37236
I 7 0513 NJt	3723:	3: 23<	cGTZQG 513 NJO=3	362== 37236
I 8 513 NJt	39235	3<237	cGTZQG 513 NJ043=	352== 37236
I 8 0513 NJt	36234	3<237	cYGXG 513 NJt	3=233 36238
KaGY0JT 513 NJO	3<2==	3: 235	cYGXG 513 NJt =3	352== 36238
KaGY0JT NJt	3=2==	43235	cYGXG 513 NJO=3	352== 3<238
P_S VKX 513 NJt	37235	39239	cYGXG 513 NJt 43=	38234 3<238
P_S VKX 513 NJO	44234	37235	cYGXG V0 GYYU 513 NJt	452== 45244
P_S Vd 513 NJt =8	432==	43239		

DC488>C77477
DC488>C7D477 *mm*

M	79t 8
N4	4<163
N	6<133
O	4133
P	<31t 8
	5<É: 3

MWdf fb

7D488>C77477
7D488>C7D477 *mm*

6133		I Q V
5133		V
6133		I X V

Pi 87MfQP> /dTY 0	S	9	8EEOvv	CB4CE i	3GDP8GDc	4	P@t x	f	u	U x v	xw	f P97CDB
Pi 87MfQP> /dTf 0	S	9	8EEOvv	CE4D8 i	3GDc8GGD	4	P@t x	f	u	U x v	xw	f P97CDA
Pi 87MfQP> /dTi 0	S	9	8EEOvv	CE4D7 i	3GDc8GDI	4	P@t x	f	u	U x v	xw	f P97CD>

I <513 NJt	3: 235		P_S Vd 513 NJt 443	36233 43239
I <NJt 443	44236	4523=	P_S Vd 513 NJt 443 49a	45236 43239
KaGY0JT 513 NJ049a	3=2==	3: 235	cYGXG V0 GYYU 513 NJt	43238 45244
KaGY0JT NJt	3=2==	43235		

DC488>C77487
DC488>C7D487 *mTm*

M	791t6
N4	4<1<3
N	6=1<3
O	419:
P	:51t3
	5<É9<

-8<84: 0436,

MWWWdf fb

7D488>C77477
7D488>C7D477 *mTm*

6183		I Q V
5133		V
6133		I X V

Pi 87Nf QP> /dTR0	S 9	**8EECvv**	**877487; i**	3GPa8GSD 4	**P@t x f u U x v xw**	**f P9BCEA**
Pi 87Nf QP> /dTV0/Q >0	S 9	**8EECvv**	**877 i**	3GPa 4	**P@t x f u U x v xw**	**f P8ED9A**
Pi 87Nf QP> /dTd0/Q >0	S 9	**8EECvv**	**8774878 i**	3GPa8GPe 4	**P@t x f u U x v xw**	**f P8EE89**
Pi 87gf QP> /dTW0/Q >0	S 9	**8EECvv**	**CE4DD i**	3GDc8GND 4	**P@t x f u U x v xw**	**f P97CDC**

I 7 513 NJt	44237 3:244	I 8 00513 NJt 473	4423<
I 7 MKGTJ V0 GYYU 0513 NJt 46<	43239 45246	I <513 NJt	3:239
I 7 0513 NJt	44237 3:244	I <513 NJt 468	36239
I 7 V0 GYYU 0513 NJt 46<	43239 3<246	P_S Vd 513 NJ0	3423= 36249
I 8 513 NJt	3=237 3423<	P_S Vd 513 NJt 453	3423: 36249
I 8 00513 NJt	3=237	P_S Vd 513 NJt 473	3423: 36249
I 8 00513 NJt	3523<		

DC488>C774>7
DC488>C7D4>7 *mTm*

M	791t3
N4	48173
N	771<3
O	318:
P	:51t4
	5<É:3

-8<8: 3043=,

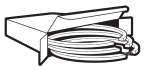
MWWWdf fb

7D488>C77477
7D488>C7D477 *mTm*

6183		I Q V
5133		V
6133		I X V

Pi 87RO /MTi 0/Q A0	S 9	**8EECvv**	**8;; i**	3GeG 4	**P@t x f u U x v xw**	**f P9DB8B**
Pi 87RP /MTd0/Q A0	S 9	**8EECvv**	**887 i**	3GVD 4	**P@t x f u U x v xw**	**f P;8D>B**
Pi 87RP /MTk0/Q A0	S 9	**8EECvv**	**887 i**	3GVD 4	**P@t x f u U x v xw**	**f P9DB8A**
Pi 87RPP /MTh0/Q A0	S 9	**8EECvv**	**877 i**	3GPa 4	**P@t x f u U x v xw**	**f P9DB8C**

I 7 MKGTJ V0 GYYU 00513	39246	JY7 513	3:247 3:248
I 7 00513 NJt	4423=	JY7 513 NJt	3=244 3:248
I 7 V0 GYYU 00	3=246	JY8 513	3<246 3:248
I 7 V0 GYYU 00513	3=246	MKGTJ I 7 YVGI KZU_XKX 513	3724<
I 7 YVGI KZU_XKX 513	3724<	P_S Vd 513	37249
I 8 00513 NJt 483	3723= 35248	YVGI KZU_XKX 513	37249
I 8 00513 NJt 4<3	36248		



DC4>>; 877487
DC4>>; 87D487 *mTm*

M	7913
N4	451t 4
N4	71=3
N	8416
P	:5133
	63É:5

MWWWdf fb

7D4>>; 877477
7D4>>; 87D477 *mTm*

5133		MJI V
5133		V
5133		I X V

GDC LKZ-Ring

HzÄwnl 'l ntßÖ5614<nx 6	azwx py op´ Qzwnpyx °wp 5614<nx 6	azwx p op w nl®ß o° 't°ßzy 5614<nx 6	azwnl®bl o 't°ß y 5614<nx 6	azwx p nl x p´l 't°ßzyp 5614<nx 6

Pi 89Nf QP> />Tb0/Q	**>0**	S	9	**98CEvv**	**897 i**	3GaP	4	**P@t x**	**f u U x v**	**xw**	**f P9E9C8**
Pi 89Nf QP> />Td0/Q	**>0**	S	9	**98CEvv**	**897 i**	3GaP	4	**P@t x**	**f u U x v**	**xw**	**f P9E9C9**
Pi 89Nf QP> />Tf 0/Q	**>0**	S	9	**98CEvv**	**897489A i**	3GaP8GcD	4	**P@t x**	**f u U x v**	**xw**	**f P97D89**
Pi 89Y f QP> />TZ0		S	9	**98CEvv**	**88A i**	3GVa	4	**P@t x**	**f u U x v**	**xw**	**f P9>C8;**

I 8 @@0515 NJt	37239	3<23<	I 9 515 NJt	39239	45245
I 8 @@0515 NJt	3523<	45244	I <515 NJt	39239	
I 8 @@0515 NJt498	3523<		I 0I XUYYKX 515 NJt	3523:	

DC4>; BC77487
DC4>; BC7D487 *mTm*

M	7<t 3
N4	4617:
N	8517 3
O	316<
P	:7t 4
	63É9<

-8<83NG45:,

MWWWdf fb

7D4>; BC77477
7D4>; BC7D477 *mTm*

5133		MJI V
5133		V
5133		I Q

GDC LKZ-Ring

Lz´ 't°ßzy° Ätßs l 5716x x nzy ´zo rl ' x pl °°´po l ß' ty npyßp wyp	L ´Qzwnpy x tßptypx Vwp°pw°r pyl mßyo @zy 57/6 S S / rpx p°°py l y op´ Qzwnpymzwpy0S tßßp	Vz°´ 't°ßzy° l @n °y nl ´ßop mtpwp op 57/6 x x x p°°´ l ° np yßp op wl Ép mtpwp0' t°ßzy	Vl ´l 't°ßzyp° nzy °yl ot°ß yntl op 'l °z op mtpw py pwnpyß z opwn'wy op 57/6x x	Vp´ 't°ßzytnzy 'l °°l r r tz mtpw/ ot 57/6 x x x t°°´l ßz °°wl °°p qz´z °' tyzßßz

Pi 89O />TX0		S	9	**98CEvv**	**8A7 i**	3NDS	4	**P@t x**	**f u U x v**	**xw**	**f P9BDEE**

I 8 @@0515 NJt533	3: 243	

DC4>; BC77477
DC4>; BC7D477 *mTm*

M	7<193
N4	48145
N	8317 3
O	316<
P	:7194
	63É9<

-8<83NG657,

MWWWdf fb

7D4>; BC77477
7D4>; BC7D477 *mTm*

5133		MJI V
5133		V
5133		I Q

GDC LKZ-Ring

Lz´ 't°ßzy° Ätßs l 5716x x nzy ´zo rl ' x pl °°´po l ß' ty npyßp wyp	L ´Qzwnpy x tßptypx Vwp°pw°r pyl mßyo @zy 57/6 S S / rpx p°°py l y op´ Qzwnpymzwpy0S tßßp	Vz°´ 't°ßzy° l @n °y nl ´ßop mtpwp op 57/6 x x x p°°´ l ° np yßp op wl Ép mtpwp0' t°ßzy	Vl ´l 't°ßzyp° nzy °yl ot°ß yntl op 'l °z op mtpw py pwnpyß z opwn'wy op 57/6x x	Vp´ 't°ßzytnzy 'l °°l r r tz mtpw/ ot 57/6 x x x t°°´l ßz °°wl °°p qz´z °' tyzßßz

Pi 89f QP> />Ti 0		S	9	**98CEvv**	**E> i**	3GNe	4	**P@t x**	**f u U x v**	**xw**	**f P9779>**
Pi 89f QP>6RMb />Tk0		S	9	**98CEvv**	**ED i**	3GPP	4	**P@t x**	**f u U x v**	**xw**	**f P8B8BA**

I 8 0515 NJt	36234 3<237	I <515 NJt	3: 235
I 8 00515 NJt	3=237	I <NJt	44236 3: 239

DC488>C774;7

M 7<t 3
N4 4<133
N 731<3
O 3173
O 3173
P : : t 3
63É9<

MWWWdf

7D488>C77477
7D488>C7D477 *mT m*

6133 I Q V
5133 V
6133 I X V

b99Pf Q/>TS0 S 9 **98EDvv** **D8 i** 3GGD 4 **P@t x f u U x v xw** **f P;9;9E**

b99Pf Q/>TT0 S 9 **98EDvv** **EB i** 3GPD 4 **P@t x f u U x v xw** **f P;7BB7**

b99Pf Q/>TV0 S 9 **98EDvv** **887 i** 3GVD 4 **P@t x f u U x v xw** **f P;9;;7**

P_S VKX 515 NJt 443	3: 244	P_S VKX 515 NJt 483	3: 244
P_S VKX 515 NJt 463	3: 244		

DC4>9CC774A7
DC4>9CC7C4A7 *mT m*

M 7<175
N4 4914:
N 7=137
P : 71<5
63É9:

-8<9<6093:,

MWWWdf fb

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5133 I Q V
5133 V
5133 TZ

--- I G_Z0IT 0I NKI Q HUb R J0GS KZKX --- --- GI NZ_TM0S _RJKTJ_XI NS KYYKX HKXVX LKT --- -- GBpyßzy @p°twpÜ@p´tqp´ wp otl x ßp´ o° nzw- -- V´pnl °nt y 0@p´tqpnl pwot x pßz opw m²wy -- -- IßpyÜzyp nzyßzwv´p otl x pßz nl x p´l ot nzx m²°ßzyp - -

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

b99Pf Q/>Tg0 S 9 **98EDvv** **DD i** 3GND 4 **P@t x f u U x v xw** **f P9>A;D**

P_S VKX 515 NJt 453 37239

DC4>9CC77487
DC4>9CC7C487 *mT m*

M 76175
N4 481<8
N 791=3
P 9=1<5
63É9:

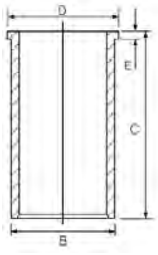
+<97<H438,

WWdf fb

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5133 I Q V
5133 V
5133 TZ

8>4798897477

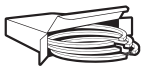


N <=133 **O** 489133 **P** =31=3 **Q** 8133

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

b99Pf Q/>Th0 S 9 **98EDvv** **C> i** 3GDG 4 **P@t x f u U x v xw** **f P9>A;C**

P_S VKX 515 NJt 433 37239



DC4>9CC774; 7
DC4>9CC7C4; 7 *mT m*

M 76?5
N4 481<8
N 791=3
P 9=1<5
63É9:

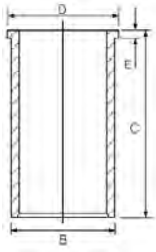
-8<983G438,

df f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5?33 I Q V
5?33 V
5?33 TZ

8>4798897477



N <=?33 **O** 489?33 **P** =31=3 **Q** 8?33

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

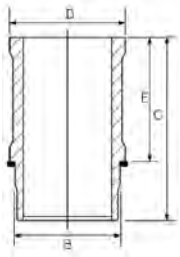
kZ8f /8C7M0	S 9	**8EC8vv**	**AC4AD i**	3ce8ci 4	**bx**	**f PA8B>**
kZ8f /8C7N0	S 9	**8EC8vv**	**AC4B9 i**	3ce8eS 4	**bx**	**f PADE**
kZ8f /8C7O0	S 9	**8EC8vv**	**B9 i**	3eS 4	**bx**	**f PAE7**
I 58 5?3		442=4 362=7		I 58 5?3 K		3=2<4 362=7			

M 6<?58
N2 3?98
P :41<8
56É:7

7D4;8BE77477
7D4;8BE7C477 *mT m*

4?33 I X V
5?33 V
7?33 I X

8>4B;BA77477



N =6?33 **O** 468?:3 **P** 4341=3 **Q** <=?=<

DE4;8BE77477
4709698330?3

Vt°ßzy I ®twmwpty QtßYpßzyŵ Yfppw Ømvßop° °pl w
Qzwupy y°´tx G°°px mŵp´s vßwns Yß sw Ynswp ßJtnsß°yr py pty
Vt°ßzy ot°'zytmwpy vtß°p°wpx pyß Gntp´ Ømvßop° uztyß°
Vt°ß y ot°'zytmwpy nzyu°yßz°°zwlx pyßp1 Gnp´z Ømvß©p w°°pwr°
O't°ßzyt°zyz ot°'zytmtw°zwr ty vtßx zß´p Gnntl tz I zx'´pyop wp r°l´ytŭzyt

PVA /f EM0	S 9	**9>>Bvv**	**B; i**	3ea 4	**P@t x**	**f P>9E;**
P_S VKX 5?8 J		362=7 372?5				

DC4889>77477
DC4889>7C477 *mT m*

M 7=1=3
N4 6?33
P <3?33
67É8<

MWf b

7D4889>77477
7D4889>7C477 *mT m*

5?58 I Q V
5?33 V
5?33 I X V

PVAf /f DM0	S 9	**9>>Bvv**	**CB i**	33DP 4	**P@t x f u U x v xw**	**f P>9E9**
PVAf /f Tm0	S 9	**9>>Bvv**	**CB i**	33DP 4	**P@t x f u U x v xw**	**f PBADA**
PWAMf Q /f TI 0	S 9	**9>>Bvv**	**EA i**	33N 4	**P@t x f u U x v xw**	**f P>9E>**
P_S VKX 5?8 JZ		432=9 3<2=:		cS 5?8 ZJ		382=7 43233			
P_S VKX 5?8 ZJ		362=7 372?5							

DC4; 9B; 77477
DC4; 9B; 7C477 *mTm*

M 7=1<7
N4 5163
P <5133
67É9<

MWTMWWdf fb

7D4; 9B; 77477
7D4; 9B; 7C477 *mTm*

6133 VYV
41:8 IXV
6183 IXV

G C 7=17: 3/H C <41933

N9AB; C	S 9	**9A77vv**	**A8 i**	3ai 4	**P@i x**			**f PBDEA**
OdPE; N	S 9	**9A77vv**	**A7 i**	3cD 4	**P@i x**			**f PBACC**
Y 994B9E	S 9	**9A77vv**	**AA i**	3cV 4	**P@i x**			**f P9; >A;**
Y 9A4B9E	S 9	**9A77vv**	**AA i**	3cV 4	**P@i x**			**f PBE;**
Y 9A4B; C	S 9	**9A77vv**	**AA i**	3cV 4	**P@i x**			**f P9; >A>**
Y 9A4BB7	S 9	**9A77vv**	**A> i**	3cV 4	**P@i x**			**f PBEB**
Y 9A4BB8	S 9	**9A77vv**	**AA i**	3cV 4	**P@i x**			**f P9; >AA**
g9A6BB8 /OdPE; X0	S 9	**9A77vv**	**A>4AA i**	3cP8cV 4	**P@i x**			**f PB9A**
I 58 518 J		442<4	3: 2=7		I c 05833 J		352 <	3<2<8
I 68 518 J		352<3	342=7		I c 0058 J		3<2<8	452=5

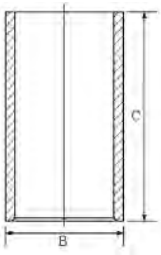
DC48A9C77477
DC48A9C7C477 *mTm*

M 851:8
N4 :163
P <:18
63É:<

7D48A9C77477
7D48A9C7C477 *mTm*

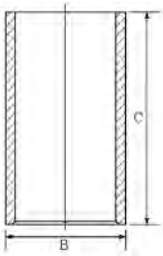
5183 SURV
5133 V
7133 IXV

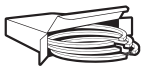
8>478; >D8477 **N** =9143 **O** 496133



Y 9A4B>D	S 9	**9A77vv**	**C7 i**	3V 4	**P@i x**	**f u**		**f PBE>**
Y 9A4BBE	S 9	**9A77vv**	**DD i**	3GND 4	**P@i x**	**f u Uxv xw**		**f PC79**
g9A6BC; /OdPE; Xe0	S 9	**9A77vv**	**C7 i**	3V 4	**P@i x**	**f u**		**f PB9B**
I 58 518 JZ		342<	342=7		I c 0058 J Z°´mz		3<2<8	452=5
I 58 518 J Z°´mz		3<2<	352=7		I c 0058 J Z°´mz 5		342<	452=5
I c 058 J Z°´mz		372<6	3<2<8		I c 05833 J Z°´mz		3<2<8	452<9
I c 05833 J Z°´mz		372<6	3<2<8					

8>478; >D8477 **N** =9143 **O** 496133





kP; 6b	S 9	9>EDvv	P x	Y b9; 7;
I 68 518J		342 7 452=5		

DC4; 8DC77487
DC4; 8DC7B487 *mT m*
452=6

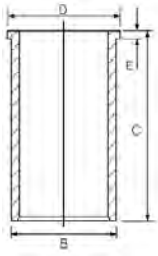
M 87133
N4 41<3
P =9175
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

8>4797BB7477
8>4798A97477

N =: 133 O 4: 3193 P =183 Q 7133
N =<133 O 4: 3193 P 433133 Q 9133



DC4; 8DC774; 7
DC4; 8DC874; 7 *mT m*
342=7

M 87133
N4 41t 8
P =4175
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

D8>75>; Z /Q ; e yØ 0	S 9	9D77vv	87C i 33SV 4	P x f u U x v xw	f P8D9EC
D8>75>; e /Q ; e yØ 0	S 9	9D77vv	E> i 33Ne 4	P x f u U x v xw	f P8CD>E
R9Df POd /Q ; ea RUY 9D77 TP0	S 9	9D77vv	E> i 33Ne 4	P x f u U x v xw	f P8BC>8
P_S VKX 51<NJt		3=233 39239			

DC4899977477
DC489997D477 *mT m*

M 8<t 3
N4 5416 3
N 6=173
P < 193
65É: 5

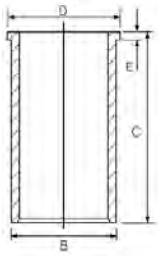
MWWWdf fb

7D4899977477
7D489997D477 *mT m*

5133 I Q V
5133 V
5133 I X V

8>4798; 98477
8>479DE; 7477
8>479DE; 8477
8>479DE; 9477

N =: 187 O 49: 133 P 4331=3 Q 8133
N =: 183 O 49: 133 P 4331=3 Q 8133
N =: 18< O 49: 133 P 4331=3 Q 8133
N =: t 3 O 49: 133 P 4331=3 Q 8133



R9DP /D8>753; 0/Q 9 e yØ 0	S 9	9D77vv	B> i 3ec 4	P x	f P9>ECC
P_S VKX 51<J		342== 35235			

DC487D977477
DC487D97D477 *mT m*

M	8813 3
N4	51<3
P	=313 3
	65É9<

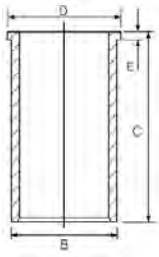
MWTMdf f b

7D487D977477
7D487D97D477 *mT m*

613 3		I X V
513 3		V
513 3		I X V

8>4798; 98477
8>479DE; 7477
8>479DE; 8477
8>479DE; 9477

N = 187 **O** 49: 133 **P** 4331=3 **Q** 8133
N = 183 **O** 49: 133 **P** 4331=3 **Q** 8133
N = 18< **O** 49: 133 **P** 4331=3 **Q** 8133
N = t 3 **O** 49: 133 **P** 4331=3 **Q** 8133



R8OQ; >D8Z /R; 7Pf Q 0/Q	**A0**	S	9	**9EEEvv**	**87C i**	3GSa	4	**P@i x**	**f u**		**f P; DA; >**
R; 7Pf Q /R8OQ; >D8Q 0/Q	**A0**	S	9	**9EEEvv**	**8; 7 i**	3Gcc	4	**P@i x**	**f u U x v**	**xw**	**f P; ; DAE**

P_S VKX 613 NJt 478	3: 243	P_S VKX 613 NJt 4<3	3: 244

DC4>98B77487

M 9613 3
N4 4913 3
N 8613 3
P =617 3
69É<3

MWWWdf f b

7D4>98B77487

513 3		MJI V
513 3		V
513 3		I Q V

GDC LKZ-Ring

R; 7Pf /R8OQ7>D8P 0/Q	**>0**	S	9	**9EEEvv**	**88A48; 7 i**	3GVa8Gcc	4	**P@i x**	**f u U x v**	**xw**	**f P9>B8B**

P_S VKX 613 NJt 488	3: 243	P_S VKX 613 NJt 493	3=239

DC4>98B77477

M 9613 3
N4 4913 3
N 8313 3
P =613 3
69É<3

MWWWdf f b

7D4>98B77477
7D4>98B7B477 *mT m*

513 3		I Q V
513 3		V
513 3		I X V

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		CCM	x		9
Y MZ /P9A69D0			GON	i D9DD	;
Y QdOQPQe4NQZm/aY;B76>776>976>>70			GON	i D9DD	>
Y QdOQPQe4NQZm/aY>796A786A796A>86A>96XM0			G	GDD9DD	A
i QefUZSTageQ/YNaY>AC6E7>6E7B3PMR D9A688B70			G	eV9DD	9
i QefUZSTageQi N8A/h f P8770			N	cV9DD	8

i QefUZSTageQi N8A/h f P8770 N 9 **Y b8D>B**

DC4EE7C7C477 *mT m*

M 65153
P 85198
49É93

7D4EE7C77477
7D4EE7C7A477 *mT*
7D4EE7C7C477 *mT m*

516< V
516< V
61=7 V

i QefUZSTageQ/Y N aY >AC8E7>6E7B3PMR D9A688B70 G 9 **Y b8AAC948**

DC4C>8977487
DC4C>897C487 *mT m*
DC4C>8988487 *Tmm*

M 66163
P 8=148
4=138É93

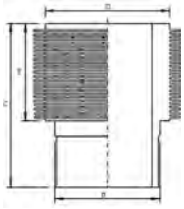
7D4C>8977477
7D4C>897>477 *mT m*
7D4C>897C477 *mT m*

5133 V
5133 V
7133 V

Y MZ /P9A69D0 G0N 9 **Y bAA>D**

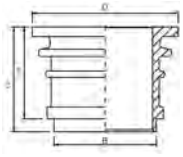
8>47779; 7477

N =8133 **O** 437133 **P** 45: 133 **Q** =7133



8>47779>7477

N =8133 **O** 437133 **P** 473133 **Q** =7133



Gt´nzzwpo vêqßpv swß ´pqíztot'l´lt´p Xlqípoolßzlol´tl
blßp´nzzwpo bl°°p´rpv swß Xpqíztot'l´pl° Xpqítrp´loz'z´lr°l Xlqípoolxpyßzlolnż°l

Y QdlOQPQe4NQZm /a Y ; B76>776>976>>70 G0N 9 **Y bAAC9**

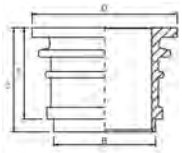
DC4>7>A77477
DC4>7>A88477 *Trm*

M 68133
P 8: 133
53É93

7D4>7>A77477

5133		V
5133		V
7133		I X

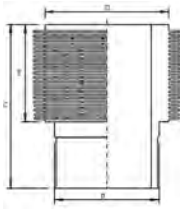
8>47779>7477



N =8133 **O** 437133 **P** 473133 **Q** =7133

DD4>7>A77477
< 0737833033 .
4703335733033

8>47779; 7477



N =8133 **O** 437133 **P** 45: 133 **Q** =7133

DD4>7>A77487
< 0737833033 .
4703335633033

Yfppw
b l fp´ nzzwpo
Gt´ nzzwpo

Yß sw
b l °°p´r pv swß
wqpr pv swß

Gntp´
Xpqjztot ' l ´ pl °
´pqjztot ' l ´ l t´

Gnp´z
Xpqjtr p´l oz ' z´ l r °l
´pqjtr p´l oz ' z´ l t´p

Gnntl tz
Xl qjpool x pyßz l o l n¿°l
Xl qjpool ßz l o l ´tl

Y QdOQPQe4NQZm
/a Y >796A786A796A>86A>96XMD

G 9

Y b8AB7;

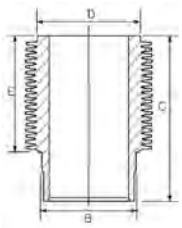
DC48>7A77477

M 63173
P 85153
53É83

7D48>7A77477

5133		V
5133		V
7133		I X

8>4777; A7477



N 448133 **O** 435133 **P** 464133 **Q** =7133
N 439133 **O** 434133 **P** 463133 **Q** =7133

DD48>7A77477
< 0473833033

DD48>7A77487
< 0473833033 .
4703336833033

Rtyp´ l ®tulvmpo ty Qtß Ypßzyvß

eÖlyop´lv°qmfns°p y°´ ty G°°px mtp°
®p´q r m´

l spx t°p ot°' zytmtpp py vtß°p°wpx pyß

l l x t°l ° ot°' zytmtpp py nzyu'yßz°
°zwx pyßp1

l tuyo´z ot°' zytmtp °zwr ty vtßx zßz´p

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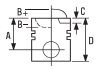
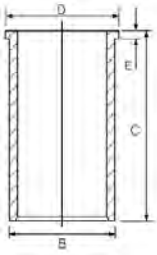


B Nf	a	9	**ADD7vv**	**88D48C; i**	3GaD8NPV	4	**P@l x**	**f u**	**f PBEBB**
B Nf A5E	a	9	**ADD; vv**	**C>48A> i**	3GDG8NGD	4	**P@l x**	**f u**	**f PBB8;**
B Nf M4A5E	a	9	**ADD; vv**	**88A488D i**	3GVa8GaD	4	**P@l x**	**f u U x v xw**	**f PC7>C**

KRQZK	342 =	YH	342==
MRUH_Y	3623< 45249	YK	44236 3524:
RV	35235	Yp´tp° 5833	3423<
RVQ	44236	Yp´tp° 6433	44246
RVU	43236	YQMTG	35249 3624<
RVY	3=23:	YQ	44236 45237
RVZ	44236	YZGXH_Y	36244

8>4797B87477 **N** 43945 **O** 5371<8 **P** 43<!=4 **Q** 7143 **R** 31<7



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			CCM	x		9
P>R C; 9			GGSi	S	ai 9DD	8
RDc B77			GecD	S	eD9DD	8>
RDc B; 7			GecD	S	eD9DD	8A
T>N >77			ei e	P	cN9ND	9
T>N >7D			ei e	P	cN9ND	9
TAR >79 /Q	A6B0		GGi e	S	cN9ND	;
TAR >7> /Q	A6B0		GGi e	S	cN9ND	;
TAR >7D /Q	A6B0		GGi c	S	cN9ND	;
TAR >87 /Q	A6B0		GGi e	S	cN9ND	;
W>Y B7B			GVi e	S	ci 9/D	87
W>Y BE7			GVi e	S	ci 9/D	87
W>Y BE>			GVi e	S	ci 9/D	87
W>Y BEB			GVi e	S	ci 9/D	87
WCV C87			GPi D	S	ci 9/D	88
WCV C8>			GPi D	S	ci 9/D	88
WCY C87			GVi e	S	ci 9/D	89
WCY C; 9 /Q	>0		GVi e	S	ci 9/D	8;
WEW B89			GSaG	S	ca9DD	>
WEW B9B			GSaG	S	ca9DD	>
WEW CE7			GSaG	S	ca9DD	A
WEW CE9 /Q	>0		GSaG	S	ca9DD	B
WEW CEB			GSaG	S	ca9DD	C
WEW D>B			GSaG	S	ca9DD	D
WEW DAB /Q	A0		GSaG	S	ca9DD	E
WEW DAD /Q	A0		GSaG	S	ca9DD	E
WEW DD> /Q	A0		GSaG	S	ca9DD	>
WEW DE9			GSaG	S	ca9DD	E
WEW DE>			GSaG	S	ca9DD	E
WEW DEB			GSaG	S	ca9DD	E
WEW DED			GSaG	S	ca9DD	E

P>RC;9	S 9	**88>Evv**	**A>4AA i**	3cP8cV 4	**bx**		**f P9;A9E**
RUMGT 415 49a		35239		YGTJKXU 415 49a		4423<	
RUMGT 00415		43245		YGTJKXU 415 49a RVM		4423<	
RUMGT SI a 00415		35246		YGTJKXU 00415		43245	

DC4>A7777477
DC4>A777C477 *mT m*

7D4>A7777487
7D4>A777C487 *mT m*

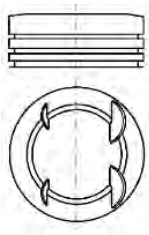
M	591t 3	4153	TZ
N4	4143	4183	V
N	93163	5183	I X
P	771t 3		
	4<É87		

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

T>N>77	P 9	**DEDvv**	**BB i**	3D 4	**bx**	**f u U x v xw**	**f P;8>9C**
T>N>7D	P 9	**DEDvv**	**BB i**	3D 4	**bx**	**f u U x v xw**	**f P;>ADE**
RUMGT 00ZI p=3		43245			YGTJKXU 00ZI p=3		43245
RUMGT SI a 00ZI p=3		35246					

DC4>A7>77487

7D4>A7>77477



M	6415 7: x x	4153	VaJ TZ
N4	71t 37x x	4183	V
N	94187x x	5133	TZ
O	51=5: x x		
O	3178: x x		
P	7<t 7		
	4=1=É7613 3		

f b

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

TAR>79/Q	**A6B0**	S 9	**88EDvv**	**D>4DA i**	3GGV8GGa 4	**bx**	**f u U x v xw**	**f P9C8C>**
TAR>7>/Q	**A6B0**	S 9	**88EDvv**	**E9 i**	3GNV 4	**bx**	**f u U x v xw**	**f P;8>9>**
TAR>7D/Q	**A6B0**	S 9	**88EOvv**	**C>4EC i**	3GDC8GPN 4	**bx**	**f u U x v xw**	**f P;AC9C**
TAR>87/Q	**A6B0**	S 9	**88EDvv**	**E9 i**	3GNV 4	**bx**	**f u U x v xw**	**f P;;>BE**
JUQQKX 415 ZI p			44245		J_YZKX 415 ZI p 458			43246
JUQQKX KÉ' ´p°° 415 ZI p 448			45245		RUJMd 415 ZI p			36245

DC4>A7>77477
36245

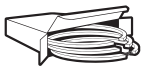
7D4>A7>77477

M	6415 8	4153	VaJ TZ
N4	8133	4183	V
N	8: 133	5133	TZ
O	5183		
O	414<		
P	7=133		
	53É7:		

df f b

=5vb
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Niiral® FITTED WITH GOETZE® RINGS



WEWB89	S 9	**8>B8vv**	**AA4BBi**	3:V8 D 4	**P@t x f u U x v xw**		**f P9D77A**
WEWB9B	S 9	**8>B8vv**	**AA4BBi**	3:V8 D 4	**P@t x f u U x v xw**		**f P; >89E**
WEWDD> /Q A0	S 9	**8>B8vv**	**BBi**	3 D 4	**P@t x f u U x v xw**		**f P; 87>B**
JUQQKX 418 ol t		44245			RUMGT 0418 ol t	43245	
JUQQKX 418 ol t 2Hwp ol t: 8		44245			RUMGT 0418 ol t 2Hwp ol t: 8	43245	
JUQQKX KÉ' ´p°° 418 ol t		45245			RUMGT Sl a 0418 ol t	35246	
JUQQKX KÉ' ´p°° 418 ol t: 8 2Hwp ol t: 8		45245			YGTJKXU 0418 ol t	43245	
J_YZKX 418 ol t		43243			YGTJKXU 0418 ol t: 8 2Hwp ol t: 8	43245	
RUJMd 418 ol t		36245					

DC489; >774>7
DC489; >7C4>7 *mTm*

M 741t 3
N4 4618 3
N 7: 133
O 3176
O 3158
P 99133
59É93

+98: Q 34,

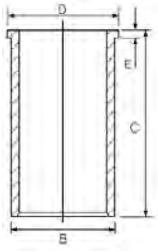
MWWWdf fb

7D489; >774; 7
7D489; >7A4; 7 *mT*
7D489; >7C4; 7 *mTm*

5133 I Q V
5133 V
5183 I X V

LKZ-Ring

8>4797BA7477 **N**: =143 **O** 475133 **P** <4133 **Q** 8133



WEWCE7	S 9	**8>B8vv**	**>Di**	3aV 4	**P@t x f u U x v xw**		**f P8DA8>**
RUMGT 418 ol t		3=238			YGTJKXU 418 ol t	4423<	
RUMGT Sl a 418 ol t		3723<	39246				

DC489; >77477
DC489; >7C477 *mTm*

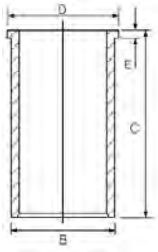
M 7419=
N4 4618 3
N 6=t 3
O 3193
P 99138
58É93

df fb

7D489; >77477
7D489; >7C477 *mTm*

5133 I Q V
5133 V
5183 TZ

8>4797BA7477 **N**: =143 **O** 475133 **P** <4133 **Q** 8133



DC489; >77487
DC489; >7C487 *mTm*

M 741<5
N4 4618 3
N 6=t 3
O 3193
P 99138
59É93

-88: 1836,

df fb

7D489; >77477
7D489; >7C477 *mTm*

5133 I Q V
5133 V
5183 TZ

WEWCE9 /Q >0	S 9	**8>B8vv**	**A7i**	3ae 4	**P@t x f u U x v xw**		**f P8E99;**
RUMGT 418 ol t		34239			YGTJKXU 418 ol t	4423<	
RUMGT Sl a 418 ol t		3523:					

DC489; >77487
DC489; >7C487 *mT m*

M	741<5
N4	461 3
N	6=1 3
O	3193
P	9913 8
	59É93

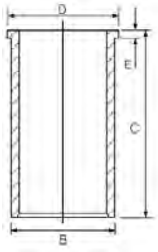
-88: 1836,

df f b

7D489; >77477
7D489; >7C477 *mT m*

5133		I Q V
5133		V
5183		TZ

8>4797BA7477



N : =143 **O** 47513 3 **P** <413 3 **Q** 813 3

WEWCEB	S 9	8>B8vv	B; i 3ea 4	P@i x f u U x v xw	f P99>7;
J_YZKX 418 ol t		37243	3424<	RUMGT S l a 418 ol t	3=23: 45245
RUMGT 418 ol t		3=23:		YGTJKXU 418 ol t	4423<

DC489; >77497
DC489; >7C497 *mT m*

M	741 3
N4	471 3 3
N	6=1 3
O	3176
O	3158
P	9913 3
	59É93

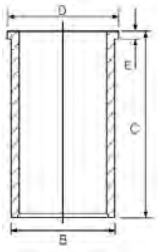
-8: 98: 0434,

MWWWdf f b

7D489; >77477
7D489; >7C477 *mT m*

5133		I Q V
5133		V
5183		TZ

8>4797BA7477



N : =143 **O** 47513 3 **P** <413 3 **Q** 813 3

WEWD>B	S 9	8>B8vv	CE4D8 i 3GDc8GGD 4	P@i x f u U x v xw	f P; 8>9A
RUJMd 418 ol t		36245			

DC489; >774>7
DC489; >7C4>7 *mT m*

M	741 3
N4	461 3 3
N	7: 1 3 3
O	3176
O	3158
P	9913 3
	59É93

+98: 0: 34,

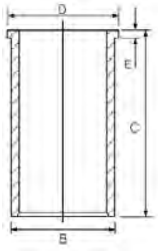
MWWWdf f b

7D489; >774; 7
7D489; >7A4; 7 *mT*
7D489; >7C4; 7 *mT m*

5133		I Q V
5133		V
5183		I X V

LKZ-Ring

8>4797BA7477



N : =143 **O** 47513 3 **P** <413 3 **Q** 813 3

DC489; >774A7
DC489; >7C4A7 *mT m*

M 741: 7
N4 4613 3
N 7: 133
O 3176
O 3158
P 9913 3
59É93

+98<0835,

MWdf f b

7D489; >774; 7
7D489; >7A4; 7 *mT*
7D489; >7C4; 7 *mT m*

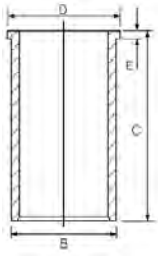
5133 I Q V
5133 V
5133 I X V

LKZ-Ring

WEWDAB/Q	**A0**	S	9	**8>B8vv**	**D74D8**	**i**	3GDi	8GGD	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9DB88**
WEWDAD/Q	**A0**	S	9	**8>B8vv**	**D74D8**	**i**	3GDi	8GGD	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9DB87**
WEWDE9		S	9	**8>B8vv**	**AA4BB**	**i**	3cV8i	D	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>CD7**
WEWDE>		S	9	**8>B8vv**	**BB4BC**	**i**	3 D8i	G	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>CD;**
WEWDEB		S	9	**8>B8vv**	**CE4D8**	**i**	3GDc	8GGD	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>CD>**
WEWDED		S	9	**8>B8vv**	**CE4D8**	**i**	3GDc	8GGD	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>CDA**

J_YZKX 418 ol t	39243	RUMGT S l a 418 ol t	38243
RUMGT 418 ol t	38243	YGTJKXU 418 ol t	38243

8>4797BA7477 **N**: =143 **O** 475133 **P** <4133 **Q** 8133



W>Y B7B		S	9	**8AEDvv**	**CC**	**i**	3GDV		4		**bx**							**f P9>CD9**
W>Y BE7		S	9	**8AEDvv**	**CC**	**i**	3GDV		4		**bx**							**f P97E>8**
W>Y BE>		S	9	**8AEDvv**	**CC**	**i**	3GDV		4		**bx**							**f P9>DCB**
W>Y BEB		S	9	**8AEDvv**	**CC**	**i**	3GDV		4		**bx**							**f P9>CD8**

J_YZKX 419 49a	37243	RUMGT S l a 419 49a	3523:
RUMGT 419 49a	35239	YGTJKXU 419 49a	34214

DC487>9774; 7

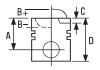
M 641: 3
N4 4163
O 4193
P 8813 3
53É95

7D487>977477
7D487>97C477 *mT m*

4183 I X V
4183 V
5183 I X

Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz

WCV C87		S	9	**8; E7vv**	**AA**	**i**	3cV		4		**bx**							**f P8D8>7**
WCV C8>		S	9	**8; E7vv**	**A; 4AA**	**i**	3cN8cV		4		**bx**							**f P9; A; 8**



RUMGT 417	3=237	YGTJKXU 417	3923<
RUMGT 417 RVM	35239 45245	YGTJKXU 417 RVM	3423=
RUMGT S I a 417	3523:		

DC487>9774>7
DC487>97C4>7 *mT m*

M	681<6
P	8<133
	4=É95

7D487>977477
7D487>97C477 *mT m*

4183		I X V
4183		V
5183		I X

Yfbppw Yfi sw Gntp´ Gnp´z Gnntl tz

WCY C87 S 9 **8AEDvv** **B> i** 3ec 4 **bx** **f P8D8>8**

RUMGT 419	3=237	YGTJKXU 419	3923<
RUMGT S I a 419	3523:		

DC487>977477
DC487>97C477 *mT m*

M	641<3
N2	5188
P	89163
	4=É96

7D487>977477
7D487>97C477 *mT m*

4183		I X V
4183		V
5183		I X

DC487>977487
DC487>97C487 *mT m*

M	641<3
N2	5188
P	89163
	4=É96

7D487>977477
7D487>97C477 *mT m*

4183		I X V
4183		V
5183		I X

Zz nÔtyop´ 4) 5	Iy eÔtyop´ 4) 5	°°´ nÔtyo´p 4) 5	py pwntbtyo´z 4) 5	I ntbtyo´z 4) 5
Yfbppw	Yfi sw	Gntp´	Gnp´z	Gnntl tz
Zz nÔtyop´ 6) 7	Iy eÔtyop´ 6) 7	°°´ nÔtyo´p 6) 7	py pwntbtyo´z 6) 7	I ntbtyo´z 6) 7

WCY C; 9 /Q >0 S 9 **8AEDvv** **B> i** 3ec 4 **bx** **f P9; A; ;**

RUMGT 419	3=237	YGTJKXU 419	3923< 45245

DC4>>; C77477
DC4>>; C7C477 *mT m*

M 5<164
P 851<4
4=É95

7D4>>; C77477
7D4>>; C7C477 *mT m*

4183 I Q V
4183 V
5183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

RDc B77 S 9 **8DC7vv** **>>4>D i** 3aD8aV 4 **PØt x** **f P99977**

YURKTeG 41=J 39236

DC4; ; BA77477
DC4; ; BA7C477 *mT m*

M 7516 8
N4 31: 3
P : 3183
57É96

df

7D4; ; BA77477
7D4; ; BA7A477 *mT*
7D4; ; BA7C477 *mT m*

5183 S U V
5183 V
6183 I X V

RDc B; 7 S 9 **8DC7vv** **>B4>D i** 3aP8aV 4 **PØt x** **f P99>78**

4643 41=J 34236 3: 237 YURKTeG 41=J 35236

DC4; ; BA77487
DC4; ; BA7C487 *mT m*

M 7515 8
N4 418<
P : 3183
57É96

7D4; ; BA77477
7D4; ; BA7A477 *mT*
7D4; ; BA7C477 *mT m*

5183 S U V
5183 V
6183 I X V

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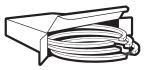
		CCM	x		9
O97ZQ		Gi i e	S	ea9DD	9
Y 87>5EE9		PGi i	a	ei 9 D	;
Y 87>5EEA		PGi i	a	ei 9 D	;
Y 8885EC7		NNi V	S	i D9 D	>
Y 8B85EC7		NNi V	S	i D9 D	>
Y 8B85EC>		NNi V	S	i D9 D	>
m97 PY T		Gi i G	S	eP9DD	8



m97 PY T S 9 **8EE8vv** **887 i** 3GVD 4 **P x f u U x v xw** **f P9BBCA**

ZUYI G 513 ZJI t 35239

DC4DCE977477
DC4DCE97C477 *mT m*

M 79168
N4 461=8
N 791t 3
P : 5168
5<É9:

MWWWdf f b

7D4DCE977477
7D4DCE97C477 *mT m*

5183 I X V
5183 V
6183 TZ

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

O97ZQ S 9 **8EEDvv** **DA i** 3GV 4 **bx** **f P98>>A**

KYVKXU 513 3=2=6 432=7

DC4; 7BD774; 7

M 6317 3
N4 8133
N 8: 133
P 8317 3
54É95

f b

7D4; 7BD77477
7D4; 7BD7C477 *mT m*
7D4; 7BD88477 *Tmm*

4183 I X V
4183 V
6183 I X

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

Y 87>5EE9 a 9 **;8EEvv** **8B9 i** 3NND 4 **bx** **f P99EDD**
Y 87>5EEA a 9 **;8EEvv** **8A>48AB i** 3NDi 8NGN 4 **bx** **f P99EE7**

QUXGTJU 615 342= S_YYU 615 342=

DC49DCA774; 7
DC49DCA7A4; 7 *mT*
DC49DCA7C4; 7 *mT m*

M 6414 5
N4 4153
N : 7133
O 4193
O 5183
P 8914 3
55É89

-8=357,

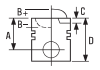
7D49DCA77477
7D49DCA7A477 *mT*
7D49DCA7C477 *mT m*

4183 TZ
41t 8 V
6183 I X V

Kw°f2@w
Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

Y 8885EC7 S 9 **99EAvv** **87; 4887 i** 3GSD8GVD 4 **bx** **f P99EDE**
Y 8B85EC7 S 9 **99EAvv** **87; 4887 i** 3GSD8GVD 4 **bx** **f P9BBE7**
Y 8B85EC> S 9 **99EAvv** **887 i** 3GVD 4 **bx** **f P9BBCE**

QUXGTJU 516 342= XKcZUT 516 Xc563 38235
S_YYU 516 342=



DC487E877487
DC487E87C487 *mT m*

M	6313 3
N4	414 3
N	: 313 3
O	31<8
P	8813 3
	55É89

-ß=463,

7D487E877477
7D487E87C477 *mT m*

4183		TZ
41 8		
6133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

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	CCM	x		9
887Q	GGDe	S	cD9DD	8
887R	GGDe	S	cD9DD	8
887S	GGDe	S	cD9DD	8
PR B8A	aGVD	a	GDS9Ge	A
PT D9A	eNVD	a	GGe9DD	E
PTN D9A	eNVD	a	GGe9DD	E
PTd D9A	eNVD	a	GGe9DD	E
PTe D9A	eNVD	a	GGe9DD	E
PTe D9AeY	eNVD	a	GGe9DD	E
PTf D9A	eNVD	a	GGe9DD	E
PTf P D9A	eNVD	a	GGe9DD	E
PTg D9A	eNVD	a	GGe9DD	E
PVAf	NSSa	S	i N9DD	9
PW88B7	GGaPD	a	GPD9DD	87
PWM88B7	GGaDD	a	GPD9DD	87
PWN 88B7	GGaDD	a	GPD9DD	87
PWOX 88B7	GGaPD	a	GPD9DD	88
PWP 88B7	GGaPD	a	GPD9DD	87
PWPX 88B7	GGaPD	a	GPD9DD	87
PWRX 88B7	GGaPD	a	GPD9DD	88
PWX 88B7	GGaPD	a	GPD9DD	87
PWe 88B7	GGaDD	a	GPD9DD	88
PWe 88B7 Q	GGaDD	a	GPD9DD	88
PWeN 88B7	GGaPD	a	GPD9DD	88
PWeQ 88B7	GGaPD	a	GPD9DD	89
PWf 88B7	GGaDD	a	GPD9DD	88
PWf P 88B7	GGaDD	a	GPD9DD	88
PWf X 88B7	GGaDD	a	GPD9DD	88
PWh 88B7	GGaDD	a	GPD9DD	89
PWhX 88B7	GGaDD	a	GPD9DD	88
PWk 88B7	GGaDD	a	GPD9DD	88
PWk 88B7 Mf U	GGaDD	a	GPD9DD	89
PWkQ 88B7	GGaDD	a	GPD9DD	89
PWkQ 88B7 Mf U	GGaPD	a	GPD9DD	89
PWm88B7	GGaPD	a	GPD9DD	89
PWm88B7 Mf U	GGaDD	a	GPD9DD	89
PZe B97	aNSD	a	GDS9Ge	B
PZf B97	aNSD	a	GDS9Ge	B
PZf P B97	aNSD	a	GDS9Ge	B
Pf B8A	aGVD	a	GDS9Ge	A
Pf P B8A	aGVD	a	GDS9Ge	A
Pg D9A	eNVD	a	GGe9DD	E
QZ AA	NSi e	S	i S9DD	;
Qf C7	NSi e	S	i S9DD	>
Rd 87; e8 /Q >0	SSaD	S	GDc9DD	D
Rd 88De8 /Q >0	SSaD	S	GDc9DD	D
Rd 8; Be8 /Q >0	SSaD	S	GDc9DD	D
Rd 8A9 /Q A0	SSaD	S	GDc9DD	D
Sd 8BAe8	aai D	a	GDc9DD	D
Sd 8D>e8 /Q >0	aai D	a	GDc9DD	D
Sd 987e8 /Q >0	aai D	a	GDc9DD	D
Sd 997 /Q >0	aai D	a	GDc9DD	D
Te 977	eNVD	a	GGe9DD	E
Te D9A	eNVD	a	GGe9DD	E
Tf 8BD	eNVD	a	GGe9DD	E
Tf D9A	eNVD	a	GGe9DD	E
Wf 8E8	GGaDD	a	GPD9DD	88
Xf 8B7	GGaPD	a	GPD9DD	88
Xf 8EA88B7	GGaDD	a	GPD9DD	88
Xf 987	GGaPD	a	GPD9DD	88

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		CCM	x		9
Y k48; ;7; /Q B0		GNi DP	a	GPD9DD	8A
Y k48; ;>7 /Q B0		GNi DN	a	GPD9DD	8A
Y k48; ;CA /Q B0		GNi DN	a	GPD9DD	8A
Y k 9BA /Q >6A0		GNi DN	a	GPD9DD	8;
Y k ;77 /Q >6A0		GNi DN	a	GPD9DD	8>
Y k ;>7 /Q >6A0		GNi DN	a	GPD9DD	8>
Y k ;CA /Q >6A0		GNi DN	a	GPD9DD	8>
Ze 8AB		aNSD	a	GDS9Ge	C
Zf 8;;		aNSD	a	GDS9Ge	C
bQ 8D; O /Q ;0		i NDD	a	GGe9DD	E
bQ 989 O /Q ;0		i NDD	a	GGe9DD	E
bQ 9; A O /Q ;0		i NDD	a	GGe9DD	E
bR 8D; Y /Q 90		i NDD	a	GGe9DD	E
bR 989 Y /Q 90		i NDD	a	GGe9DD	E
bR 9; A Y /Q 90		i NDD	a	GGe9DD	E
de 8D7		eaVD	a	GGe9DD	E
de 8D7 X /Q 80		eaVD	a	GGe9DD	E
de 8D7 Y /Q 90		eaVD	a	GGe9DD	E
de 977		eaVD	a	GGe9DD	E
de 977 X /Q 80		eaVD	a	GGe9DD	E
de 977 Y /Q 90		eaVD	a	GGe9DD	E
de 999		eaVD	a	GGe9DD	E
de 999 X /Q 80		eaVD	a	GGe9DD	E
de 999 Y /Q 90		eaVD	a	GGe9DD	E
i e 999 S		GGaDD	a	GPD9DD	8B
i e 999 X		GGaDD	a	GPD9DD	87
i e 999 Y		GGaPD	a	GPD9DD	87
i e 99A		GGaDD	a	GPD9DD	87
i e 99A Mf U		GGaPD	a	GPD9DD	87
i e 9>9		GGaDD	a	GPD9DD	87
i e 9>9 S		GGaDD	a	GPD9DD	87
i e 9>9 X /Q 80		GGaDD	a	GPD9DD	8B
i e 9>9 Y /Q 90		GGaDD	a	GPD9DD	8C
i e 9AE		GGaDD	a	GPD9DD	87
i e 9AE Mf U		GGaPD	a	GPD9DD	87
i e 9BD		GGaDD	a	GPD9DD	87
i e 9BD S		GGaDD	a	GPD9DD	87
i e 9BD X /Q 80		GGaDD	a	GPD9DD	8B
i e 9BD Y /Q 90		GGaDD	a	GPD9DD	8C
i e 9D9		GGaDD	a	GPD9DD	87
i e 9D9 Mf U		GGaPD	a	GPD9DD	87
i e 9D9 X		GGaPD	a	GPD9DD	87
i e 9EA		GGaDD	a	GPD9DD	87
i e 9EA S		GGaDD	a	GPD9DD	87
i e 9EA X /Q 80		GGaDD	a	GPD9DD	8B
i e 9EA Y /Q 90		GGaDD	a	GPD9DD	8C
i e 9EA Y Mf U		GGaNc	a	GPD9DD	87
i e ;8A		GGaDD	a	GPD9DD	87
i e ;8A S		GGaDD	a	GPD9DD	87
i e ;8A X /Q 80		GGaDD	a	GPD9DD	8B
i e ;8A Y /Q 90		GGaDD	a	GPD9DD	8C
kP ;b		NSi e	S	i S9DD	;
kP ;f		NSi c	S	i S9DD	>
kQ 9A7 O /Q ;0		GNVeD	a	GPD9DD	87
kQ 9D7 O /Q ;0		GNVeD	a	GPD9DD	87
kQ 9D7 O8 /Q ;0		GNVeD	a	GPD9DD	8D
kQ ;8A O /Q ;0		GNVeD	a	GPD9DD	87
kQ ;8A O8 /Q ;0		GNVeD	a	GPD9DD	8D
kQ ;AA O /Q ;0		GNVeD	a	GPD9DD	87
kQ ;AA O8 /Q ;0		GNVeD	a	GPD9DD	87

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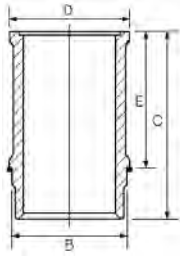
		CCM	x		9
kQ;E7O/Q	;0	GNVeD	a	GPD9DD	87
kQ;E7O8/Q	;0	GNVeD	a	GPD9DD	87
kR9A7Y/Q	90	GNVeD	a	GPD9DD	8E
kR9D7Y/Q	90	GNVeD	a	GPD9DD	8E
kR;8AY/Q	90	GNVeD	a	GPD9DD	8E
kR;AAY/Q	90	GNVeD	a	GPD9DD	8E

887Q	S 9	**887Dvv**	**; A i**	3Se 4	**bx**		**f P98E7E**
887R	S 9	**887Dvv**	**>7 i**	3/S 4	**bx**		**f P98E87**
887S	S 9	**887Dvv**	**>7 i**	3/S 4	**bx**		**f P98E88**
88 414 S GXGZNUT		452 4	3=2 5		99 414 S GXGZNUT	432 5	3<2 8
99 414		432 5	3<2 8		99 414 YR	432 5	3<2 8

7D4; ; >B77477

M 73133
P 9<133
4<É95

41 8 I X V
5133 V
6183 I X



N : 8183 **O** 468133 **P** <81 3 **Q** =71<3

DE4; ; >B77477

Vt°ßzy I ®tWmp ty QtßYpßzyŵ
Yßpw
Qmvop° °pl w
Rtyp´ I ®tWmp ty QtßYpßzyŵ

Qzwpy y°´ tx G°°px mŵp´s vWns
Yß sw
Ynswp ßJtnsß°yr py pty
eÔWyop´w°qn°ns°p y°´ ty G°°px mtp°
®p´q r m´

Vt°ßzy ot°' zytmp py vtß°p°wx pyß
Gntp´
Qmvßop° uzty8°
I spx t°p ot°' zytmp py vtß°p°wx pyß

Vt°ß y ot°' zytmp py nzyt°yßz° °zwx pyßp1
Gnp´z
Qmvŵp w° °pw°
I l x t°I ° ot°' zytmp py nzyt°yßz°
°zwx pyßp1

O' t°ßzyt°zyz ot°' zytmtW°zw ty vtßx zßz´p
Gnntl tz
I zx ' ´pyop wp r°I ´ytÛtzyt
I twyo´z ot°' zytmtp °zw ty vtßx zßz´p

PVAf	S 9	**9>>Bvv**	**CB4EB i**	3GDP8GPG 4	**P0t x f u U x v xw**		**f P99987**

DC4; 9B; 77477
DC4; 9B; 7C477 *mT m*

M 7=1<7
N4 5163
P <5133
67É9<

MWTMWWdf f b

7D4; 9B; 77477
7D4; 9B; 7C477 *mT m*

6133 VY V
41 8 I X V
6183 I X V

G C 7=17: 3/ H C <41933

QZ AA	S 9	**9>EDvv**	**A; i**	3cN 4	**P0t x**		**f PCB;**
kP ; b	S 9	**9>EDvv**	**A84AD i**	3cD8ci 4	**P0t x**		**f P9998A**
733 518 J		372<=	452=7		7330Yp´tp 75<0768 518 J	372<=	3<2=6
7330Yp´tp 518 J		372<=	452=7				

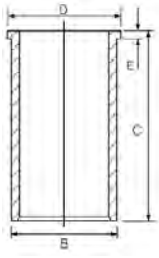
DC4; 8DC77487
DC4; 8DC7B487 *mT m*
452=6

M 87133
N4 41<3
P =9175
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

8>4797BB7477
8>4798A97477



N =: 133 **O** 4: 3193 **P** ==183 **Q** 7133
N =<133 **O** 4: 3193 **P** 433133 **Q** 9133

DC4; 8DC774; 7
DC4; 8DC874; 7 *mTm*
342=7

M 87133
N4 41: 8
P =4175
63É: =

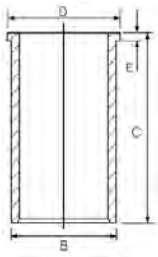
7D4; 8DC77487
7D4; 8DC7B487 *mTm*
7D4; 8DC7D487 *mTm*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

Qf C7	S	9	**9>EDvv**	**C8 i**	3 a	4	**P Øl x**	**f**	**u**	**U x v**	**xw**		**f PCB>**
kP ; f	S	9	**9>EOvv**	**C7 i**	3 V	4	**P Øl x**	**f**	**u**	**U x v**	**xw**		**f P9998B**
733 518 ZJ				372<=	342=:		7330Yp´tp 75<0768 518 ZJ					372<=	3<2=6
7330Yp´tp 518 ZJ				372<=	342=:								

8>4797BB7477
8>4798A97477

N =: 133 **O** 4: 3193 **P** ==183 **Q** 7133
N =<133 **O** 4: 3193 **P** 433133 **Q** 9133

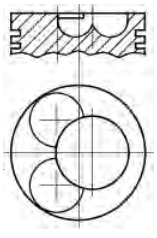


PR B8A	a	9	**B8A7vv**	**DA i**	33GV	4	**P Øl x**						**f PBB78**
Pf B8A	a	9	**B8A7vv**	**888 i**	3GVG	4	**P Øl x**	**f**	**u**				**f PBB79**
Pf P B8A	a	9	**B8A7vv**	**878489; i**	3GPc8Gac	4	**P Øl x**	**f**	**u**				**f PBB8B**
L =33				442=4	442=<		L 4933					342 3	3<2=4
L 4433				442=4	442=<		L 4<33					342 3	3<2=4
L 4633				3: 2 <	352=3		L 5433					3: 2 <	3=2=9
L 4833				3: 2 <	3<2=4								

DC48CE777487

M <41=:
N4 56148
O 5153
O 5153
P 4651t 5
6<É<<

df

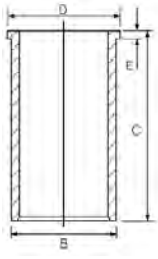


7D48CE777487

5133 I X V
5133 V
5133 V
9133 V
9133 V

8>479AA; 7477

N 43=133 **O** 56=133 **P** 44: 139 **Q** <13=



PZe B97	a	9	**B9>7vv**	**8AB i**	3NGN	4	**P Øl x**	**f**	**u**	**U x v**	**xw**		**f PBB8C**
PZf B97	a	9	**B9>7vv**	**8; 9 i**	3GeD	4	**P Øl x**	**f**	**u**				**f PBB8A**
PZf P B97	a	9	**B9>7vv**	**88B i**	3GVe	4	**P Øl x**	**f**	**u**				**f PBB8>**
L 4433				452=9	442=3		L 4: 33					452=9	352=8
L 4633				452=9	452=5		L 4=33					452=9	3=2=6

DC4C>8B77477

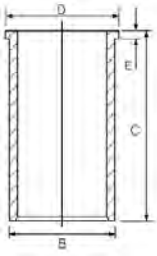
M <3133
N4 5613 3
N 9313 3
P 4571 33
75É<<

df

7D4C>8B77477

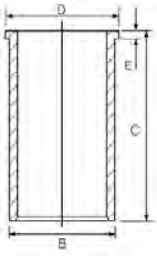
6133 I X V
5183 I X V
7133 I X V

8>479AA; 7477 **N** 43=133 **O** 56=183 **P** 44: 139 **Q** <13=



Ze 8AB	a	9	**B9>7vv**	**8AB i**	3NGN	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P89E9D**
Zf 8; ;	a	9	**B9>7vv**	**8; ; i**	3GeG	4	**P0t x**	**f**	**u**						**f P89E7E**
L 4633				452<9	452=5			L 4=33						452<9	3=2=6
L 4: 33				452<9	352=8										

8>479AA; 7477 **N** 43=133 **O** 56=183 **P** 44: 139 **Q** <13=



Rd 87; e8 /Q >0	S	9	**>>B7vv**	**87; i**	3GSD	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P8DEAC**
Rd 88De8 /Q >0	S	9	**>>B7vv**	**88D i**	3GaD	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P8DEAD**
Rd 8; Be8 /Q >0	S	9	**>>B7vv**	**8; B i**	3GeV	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P8DEAE**
Rd 8A9 /Q A0	S	9	**>>B7vv**	**8A9 i**	3NDc	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P9BBEB**
Sd 8BAe8	a	9	**BBE7vv**	**8BA i**	3NNS	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P8DEB7**
Sd 8D>e8 /Q >0	a	9	**BBE7vv**	**8D> i**	3NVD	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P8EBEE**
Sd 987e8 /Q >0	a	9	**BBE7vv**	**987 i**	3Nea	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P8EC77**
Sd 997 /Q >0	a	9	**BBE7vv**	**997 i**	3PDD	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f P9BB; 7**
I L 98				3823 9	3824 6			RL 78						3623 9	
Qb 0YKX0KY				3423 9				RL 88						3823 9	

DC4>>A>77477

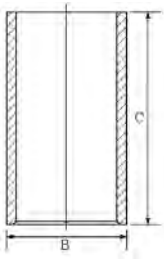
M 9=169
N4 4=186
N 8<1=6
P 4361 45
73É=3

MWWdf fb

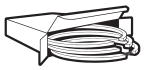
7D4>>A>77477

6133 I Q
5183 V
6183 I X V

8>4788AB7487 **N** 43=1<3 **O** 533183



PT D9A	a	9	**D9A7vv**	**88A4898 i**	3GVa8GaV	4	**P0t x**								**f PBB7;**
PTN D9A	a	9	**D9A7vv**	**8>D i**	3NDG	4	**P0t x**	**f**	**u**						**f P8; 99E**
PTd D9A	a	9	**D9A7vv**	**8A7 i**	3NDS	4	**P0t x**	**f**	**u**						**f PBB8E**
PTe D9A	a	9	**D9A7vv**	**8D948EA i**	3NSc8NaV	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f PBB9A**
PTe D9AeY	a	9	**D9A7vv**	**98C i**	3Ni S	4	**P0t x**	**f**	**u**	**U x v**	**xw**				**f PBB9B**

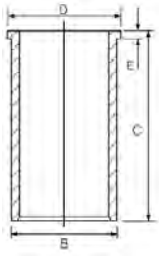


| | | |

i e 9>9 S	a	9	88B77vv	9>9 i	3PPD	4	P6l x	f	u	U	x	v	xw	f P9998>
i e 9AE	a	9	88B77vv	9AE i	3PVN	4	P6l x	f	u	U	x	v	xw	f PBBC7
i e 9AE Mf U	a	9	88B;7vv	9AE i	3PVN	4	P6l x	f	u	U	x	v	xw	f PCA8D
i e 9BD	a	9	88B77vv	9BD i	3PaV	4	P6l x	f	u	U	x	v	xw	f PBBC8
i e 9BD S	a	9	88B77vv	9BD i	3PaS	4	P6l x	f	u	U	x	v	xw	f PBBC9
i e 9D9	a	9	88B77vv	9D9 i	3PeS	4	P6l x	f	u	U	x	v	xw	f P88E7C
i e 9D9 Mf U	a	9	88B;7vv	9D9 i	3PeP	4	P6l x	f	u	U	x	v	xw	f PCA8E
i e 9D9 X	a	9	88B;7vv	9D9 i	3PeP	4	P6l x	f	u	U	x	v	xw	f PBBC>
i e 9EA	a	9	88B77vv	9EA i	3SDG	4	P6l x	f	u	U	x	v	xw	f PBBCA
i e 9EA S	a	9	88B77vv	9EA i	3SDG	4	P6l x	f	u	U	x	v	xw	f PBBCB
i e 9EA Y Mf U	a	9	88B9Cvv	9EA i	3SDG	4	P6l x	f	u	U	x	v	xw	f PBBBB
i e ;8A	a	9	88B77vv	;8A i	3SNe	4	P6l x	f	u	U	x	v	xw	f P88E7D
i e ;8A S	a	9	88B77vv	;8A i	3SNe	4	P6l x	f	u					f PBBCE
kQ 9A7 O /Q ;0	a	9	89AD7vv	9A7 i	3PSD	4	P6l x	f	u	U	x	v	xw	f P8;;;8
kQ 9D7 O /Q ;0	a	9	89AD7vv	9D7 i	3PeG	4	P6l x	f	u	U	x	v	xw	f P8;;;9
kQ;8A O /Q ;0	a	9	89AD7vv	;8A i	3SNe	4	P6l x	f	u	U	x	v	xw	f P8;;;;
kQ;AA O /Q ;0	a	9	89AD7vv	;AA i	3SeP	4	P6l x	f	u	U	x	v	xw	f P8;;;>
kQ;AA O8 /Q ;0	a	9	89AD7vv	;AA i	3SeP	4	P6l x	f	u	U	x	v	xw	f P9998E
kQ;E7 O /Q ;0	a	9	89AD7vv	;E7 i	3VPD	4	P6l x	f	u	U	x	v	xw	f P8;;;A
kQ;E7 O8 /Q ;0	a	9	89AD7vv	;E7 i	3VPD	4	P6l x	f	u	U	x	v	xw	f P99997

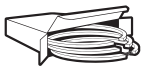
<8	3:2=5	352=<	Slrt¿	432==
<8 l L	352=<	45233	YH	342 7
=8	3=2=<	342=<	YvÖtyp´	3=2=5
=8 cL	342=:	3=235	Y'lnpwtyp´	3=2=5
l L <8	34234	38246	YÖyp´rÖ	3=237
ltÖtyp´	3=2=5		Z´ly°wtyp´	3=2=5
L 5933	352 5	452 6	aGl GTeG	39235 45239
L 5<33	342 7	442<3	cL=8	34235 45239
L°ß´l	3:2=7	3=239	c0Yp´tp°	432==
Ppßtyp´	3=2=5	3=2=6		

8>4798>87477



N 469135 **O** 5<<163 **P** 476193 **Q** 43138

PWOX 88B7	a	9	88B;7vv	8AB i	3NGN	4	P6l x	f	u	U	x	v	xw	f P9787A
PWRX 88B7	a	9	88B;7vv	8E8 i	3NaD	4	P6l x	f	u	U	x	v	xw	f P9787C
PWe 88B7	a	9	88B77vv	99D i	3PGD	4	P6l x	f	u					f PBB9E
PWe 88B7 Q	a	9	88B77vv	97B i	3NeD	4	P6l x	f	u	U	x	v	xw	f PBB;7
PWeN 88B7	a	9	88B;7vv	99D i	3PGD	4	P6l x	f	u	U	x	v	xw	f P9787B
PWf 88B7	a	9	88B77vv	98; i	3NlD	4	P6l x	f	u					f PBB;8
PWf P 88B7	a	9	88B77vv	8DD48E8 i	3NVa8NaD	4	P6l x	f	u					f PBB;9
PWf X 88B7	a	9	88B77vv	8DA i	3NVN	4	P6l x	f	u					f PBB>9
PWhX 88B7	a	9	88B77vv	97B i	3NeD	4	P6l x	f	u					f P8;9DD
PWk 88B7	a	9	88B77vv	9>;; i	3PPD	4	P6l x	f	u	U	x	v	xw	f PBB;C
Wf 8E8	a	9	88B77vv	9AB i	3PSe	4	P6l x	f	u	U	x	v	xw	Y bA9CD



| | | |

Y k ; 77 /Q	>6A0	a	9	89E79vv	; 77 i	3SDe	4	P6t x	f	u	U	x	v	xw	f P8DE79
Y k ; >7 /Q	>6A0	a	9	89E79vv	; >7 i	3SaN	4	P6t x	f	u	U	x	v	xw	f P8DE7;
Y k ; CA /Q	>6A0	a	9	89E79vv	; CA i	3/GD	4	P6t x	f	u	U	x	v	xw	f P8DE7>

I L <8	43238 38246	YGL0X	4323=
L°ß´l	3=243	YGL0X VR_Y	4323=
t9	3=247	YÖyp´rÖ	3: 23:
Pzyvspp´p	3<23:	ZOYp´tp	43238
S l r t¿	43239	aGl GTeG	43238
VH	4323=	cL 438	43238
YGLGXO	43243	cOYp´tp°	3: 23<

DC4>; 9A77477

M <41=3
N4 4: 183
N =4133
O 31<3
O 5133
P 453173
88É<5

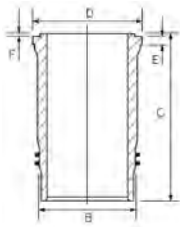
WWf b

7D4>; 9A77477

7133 MJI V
6149 TZ
7133 I X V

GDC

8A4>A89; 7477 **N** 479133 **O** 59<133 **P** 48: 193 **Q** 45133 **R** 31=8



DC4>; 9A77487

M <41=3
N4 4: 183
O 31<3
O 5133
88É<5

WWf b

7D4>; 9A77477

7133 MJI V
6149 TZ
7133 I X V

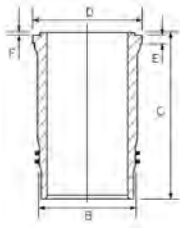
GDC

S zyzYfbpw				
Lz´ Yfbpw t°fzy	L ´ Yß swzwupy	Vz°´ 't°fzy py l ntp´	Vl´l 't°ß y op l np´z	Vp´ 't°fzyp ty l nntl tz
Ynwfop° GyßtOVzwfs Xtyr -Ł t´p Xtyr ,	Kyßs vß vnswßÜ tyr	I zyßpyßwp°pr x pyß´l nwp°´	Ynwfop l ypwr´l °nstl zwz	
Ynwfop° °pl vfv	Ynswp ßJ tnsß°yr py pty	Ynwßop° uztyß°	Ynwfop l ypwr´l °nstl zwz	I zx ''´pyop wp r°l ´ytÚzyt

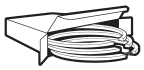
Y k48; ; 7; /Q	B0	a	9	89E7; vv	; 774; 7; i	3SDe8SGN	4	P6t x	f	u	U	x	v	xw	f P9D8>C
Y k48; ; >7 /Q	B0	a	9	89E79vv	; >7 i	3SaN	4	P6t x	f	u	U	x	v	xw	f P9D8>D
Y k48; ; CA /Q	B0	a	9	89E79vv	; CA i	3/GD	4	P6t x	f	u	U	x	v	xw	f P9D8>E

Gl XUT	43248	L°ß´l	3=243
GRZGTU	43248	t6	3624:
GYZXUS KMG	34248	t7	3624:
GYZXUT	43248	t9	3=247
GYZXUTKL	34248	t<	34249
I L	38246	ZOYp´tp°	34244
KcOYp´tp°	3=247	cL	43245

8A4>A89; 7477 **N** 479133 **O** 59<133 **P** 48: 193 **Q** 45133 **R** 31=8



Ynwfop° GyßtOVzwfs Xtyr -Ł t´p Xtyr ,	Kyßs vß vnswßÜ tyr	I zyßpyßwp°pr x pyß´l nwp°´	Ynwfop l ypwr´l °nstl zwz	
Ynwfop° °pl vfv	Ynswp ßJ tnsß°yr py pty	Ynwßop° uztyß°	Ynwfop l ypwr´l °nstl zwz	I zx ''´pyop wp r°l ´ytÚzyt



i e 999 S		a	9	88B77vv	999 i	3PDN	4	P@t x	f	u	U x v	xw	f PBBBC
i e 9>9 X /Q	80	a	9	88B77vv	9>9 i	3PPD	4	P@t x	f	u	U x v	xw	f PBBB9
i e 9BD X /Q	80	a	9	88B77vv	9BD i	3PaV	4	P@t x	f	u	U x v	xw	f PBBB>
i e 9EA X /Q	80	a	9	88B77vv	9EA i	3SDG	4	P@t x	f	u	U x v	xw	f PBBCC
i e ;8A X /Q	80	a	9	88B77vv	;8A i	3SNe	4	P@t x	f	u	U x v	xw	f PBBD7

<8	3: 2=5 352=<	L0Yp´tp°	342=5 452=<
=8	3<2=3 342=<		

DC4C>; >774>7

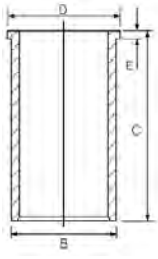
M 434133
N4 571 8
N : 8133
O 31<3
P 488133
85É439

df

7D4C>; >77477

7133 VY V
6149 I X V
7133 I X V

8>4798>87477



N 469135 **O** 5<<163 **P** 476193 **Q** 43138

DD4C>; >774>7
< 0: 76733073 .
4703547430 33

i e 9>9 Y /Q	90	a	9	88B77vv	9>9 i	3PPD	4	P@t x	f	u	U x v	xw	f PBBB;
i e 9BD Y /Q	90	a	9	88B77vv	9BD i	3PaV	4	P@t x	f	u	U x v	xw	f PBBBA
i e 9EA Y /Q	90	a	9	88B77vv	9EA i	3SDG	4	P@t x	f	u	U x v	xw	f PBBCD
i e ;8A Y /Q	90	a	9	88B77vv	;8A i	3SNe	4	P@t x	f	u	U x v	xw	f PBBD8

<8	3: 2=5 352=<	=8	3<2=3 342=<

DC4C>; >774A7

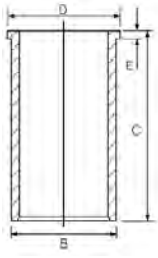
M 434133
N4 54148
N <5133
P 488133
85É439

df

7D4C>; >77477

7133 VY V
6149 I X V
7133 I X V

8>4798>87477



N 469135 **O** 5<<163 **P** 476193 **Q** 43138

DD4C>; >774A7
< 0: 76733083 .
4703547430 33

kQ 9D7 O8 /Q	;0	a	9	89AD7vv	9D7 i	3PeG	4	P@t x	f	u	U x v	xw	f P9998C
kQ ;8A O8 /Q	;0	a	9	89AD7vv	;8A i	3SNe	4	P@t x	f	u	U x v	xw	f P9998D

<8 I L	352=< 45233	

DC4>; ; ; 77477

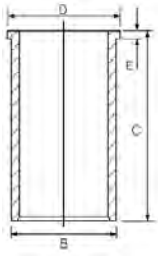
M =8133
N4 48177
N ==193
O 4133
P 476133
85É439

MWdf f b

7D4>; ; ; 77477

7133 I Q
6149
7133 I X V

8>4798>87477



N 469135 **O** 5<<163 **P** 476193 **Q** 43138

DD4>; ; ; 77477
< 0766633033 .
4703547430 33

kR 9A7 Y /Q	90	a	9	89AD7vv	9A7 i	3PSD	4	P@t x	f	u	U x v	xw	f P88E89
kR 9D7 Y /Q	90	a	9	89AD7vv	9D7 i	3PeG	4	P@t x	f	u	U x v	xw	f P88E8;
kR ;8A Y /Q	90	a	9	89AD7vv	;8A i	3SNe	4	P@t x	f	u	U x v	xw	f P88E8>
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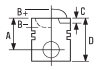

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=8 cL	342=: 3=235	cL =8	34235 45239

DC4C>; >774; 7

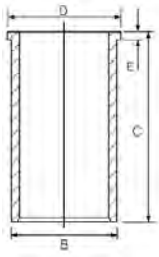
M	=8133
N4	541 8
N	<5133
O	4133
P	476133
	85É439

df f b

7D4C>; >77477

7133		VY V
6149		I X V
7133		I X V

8>4798>87477



N 469135 **O** 5<<163 **P** 476193 **Q** 43138

DD4C>; >774; 7

< 0: 76733063 .
4703547430 33

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	CCM	x		9
D;B757A5BC7 /Y t z Ø 4Px 0	eGDD	a	GGV9DD	9B
NR 9X E89	GeeS	N	GDD9DD	E
NR ; X E89	NeNa	P	GDD9DD	E
NR ; X E8>	PNPa	P	GDN9DD	89
NR ; X 9788	NPPN	P	i S9DD	A
NR ; Y 9788	NPPN	P	i S9DD	A
NR >X E89	Pcae	S	GDD9DD	E
NR >X E8;	SDea	S	GDN9DD	8A
NR >X E8; O	SDea	S	GDN9DD	8A
NR >X E8; f	SDea	S	GDN9DD	8B
NR >X E8>	SPGS	S	GDN9DD	89
NR >X 8788 R	NcPG	S	i G9DD	;
NR >X 8788 Rf	NcPN	S	i G9DD	;
NR >X 9788	PGGD	S	i S9DD	A
NR >Y 8789 /Q 80	PGi N	S	i S9DD	B
NR >Y 8789 O /Q 80	PGi N	S	i S9DD	B
NR >Y 8789 Q /Q 90	PGi N	S	i S9DD	B
NR >Y 8789 QO	PGi N	S	i S9DD	B
NR >Y 878; /Q 80	ScaS	S	GDe9DD	8E
NR >Y 878; O /Q 80	ScaS	S	GDe9DD	8E
NR >Y 878; Q /Q 90	ScaS	S	GDe9DD	97
NR >Y 878; QO /Q 90	ScaS	S	GDe9DD	98
NR >Y 878; RO /Q 96;0	ScaS	S	GDe9DD	98
NR >Y 9788	PGGD	S	i S9DD	A
NR >Y 9789 /Q 90	SDPe	S	GDG9DD	88
NR >Y 9789 O /Q 90	SDPe	S	GDG9DD	88
NR >Y 978; O	PeDN	S	i e9DD	C
NR AX E89	ScGD	V	GDD9DD	E
NR BX >8; Rd	i VcN	a	GNV9DD	;7
NR BX A8;	i VcN	a	GNV9DD	;7
NR BX A8; O	i VcN	a	GNV9DD	;7
NR BX E89	VaVV	a	GDD9DD	E
NR BX E8;	aGNe	a	GDN9DD	8A
NR BX E8; O	aGNe	a	GDN9DD	8A
NR BX E8; f	aGNe	a	GDN9DD	8B
NR BX E8>	aScN	a	GDN9DD	89
NR BX E8> O	aScN	a	GDN9DD	8D
NR BY 8789 /Q 80	Scee	a	i S9DD	B
NR BY 8789 O /Q 80	Scee	a	i S9DD	B
NR BY 8789 Q	Scee	a	i S9DD	B
NR BY 8789 QO	Scee	a	i S9DD	B
NR BY 878; /Q 80	cGSa	a	GDe9DD	8E
NR BY 878; O /Q 80	cGSa	a	GDe9DD	8E
NR BY 878; Ob /Q 80	cGSa	a	GDe9DD	9;
NR BY 878; Q /Q 90	cGSa	a	GDe9DD	9>
NR BY 878; QO /Q 90	cGSa	a	GDe9DD	98
NR BY 878; QOb /Q ;0	cGSa	a	GDe9DD	98
NR BY 878; RO /Q 96;0	cGSa	a	GDe9DD	9A
NR BY 878A	GGi DV	a	GPN9DD	;8
NR BY 878A O /Q 90	GGi DV	a	GPN9DD	;9
NR BY 878A Ob	GGi DV	a	GPN9DD	;8
NR BY 9789 O /Q 90	aDVc	a	GDG9DD	88
NR BY 978;	VcDN	a	i e9DD	C
NR BY 978; O	VcDN	a	i e9DD	C
NR DX >8; R	GNcaP	e	GNV9DD	;7
NR DX A8;	GNcaP	e	GNV9DD	;7
NR DX A8; O	GPcPe	e	GNV9DD	;7
NR DY 878A/878A0	GVecS	e	GPN9DD	;8
NR DY 878A O /Q 90	GVecS	e	GPN9DD	;9
NR DY 878A Ob	GVecS	e	GPN9DD	;8

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		CCM	x		9
NR87X>8; R		GVi VP	GD	GNV9DD	;7
NR87X A8;		GVi VS	GD	GNV9DD	;7
NR87X A8; O		GVi VS	GD	GNV9DD	;7
NR87X A8; R		GVi SV	GD	GNV9DD	;7
NR89X>8; R		Gi GSS	GN	GNV9DD	;7
NR89X A8;		Gi GSS	GN	GNV9DD	;7
NR89X A8; O		Gi GSS	GN	GNV9DD	;7
NR89X A8; R		Gi GSS	GN	GNV9DD	;7
R8X A88 P		eNV	G	GDD9DD	D
R9X A88 P		GaVD	N	GDD9DD	D
R9X E89 /RXE890		GeeV	N	GDD9DD	87
R9X E89 P		GeeV	N	GDD9DD	87
R9X E89 i		GeeS	N	GDD9DD	E
R9X 8788 R		GPaa	N	i G8DD	8
R9X 9788		GVVS	N	i S9DD	>
R9Y 8788		GPaa	N	i G8DD	9
R9Y 9788		GVVV	N	i S9DD	>
R;X E89 P		NeNa	P	GDD9DD	87
R;X E89 i		NeNa	P	GDD9DD	E
R;X E8;		PDaS	P	GDN9DD	8;
R;X E8; S		PDaS	P	GDN9DD	8>
R;X 8788 R		NDSi	P	i G8DD	8
R;X 9788		NPPN	P	i S9DD	>
R;Y 8788 R		NGeV	P	i G8DD	9
R;Y 9788		NPPN	P	i S9DD	>
R>X>8; Rd		aPeG	S	GNV9DD	9E
R>X E89 P		PccD	S	GDD9DD	87
R>X E89 R		SDea	S	GDN9DD	8C
R>X E89 i		PccD	S	GDD9DD	E
R>X E8;		SDea	S	GDN9DD	8;
R>X E8; P		SDea	S	GDN9DD	8C
R>X 8788 R		NcPN	S	i G8DD	8
R>X 9788		PGGD	S	i S9DD	>
R>Y 8788 R		NcPN	S	i G8DD	9
R>Y 9788		PGGD	S	i S9DD	>
RAX>8;		cDcD	V	GND9DD	9C
RAX>8; Rd		ci ca	V	GNV9DD	9E
RAX E89 P		ScGN	V	GDD9DD	87
RAX E89 R		VGDc	V	GDN9DD	8C
RAX E89 i		ScGD	V	GDD9DD	E
RBX>8;		eSce	a	GND9DD	9D
RBX>8; R		i VcN	a	GNV9DD	9E
RBX>8; Rd		i VcN	a	GNV9DD	9E
RBX>8; Ri		i VcN	a	GNV9DD	;7
RBX>8; X		eSeN	a	GND9DD	9C
RBX E89 P		VaVV	a	GDD9DD	87
RBX E89 R		aGNe	a	GDN9DD	8C
RBX E89 i		VaVV	a	GDD9DD	E
RBX E8;		aGNe	a	GDN9DD	8;
RBX E8; P		aGNe	a	GDN9DD	8C
RDX>8;		GGPGD	e	GND9DD	9D
RDX>8; R		GNcaP	e	GNV9DD	9E
RDX>8; Ri		GNcaP	e	GNV9DD	;7
RDX>8; X		GGPGD	e	GND9DD	9C
R87X>8;		GSGSD	GD	GND9DD	9D
R87X>8; R		GVi VP	GD	GNV9DD	9E
R87X>8; Ri		GVi VP	GD	GNV9DD	;7
R87X>8; X		GSGPc	GD	GND9DD	9C
R89X>8;		Gai aD	GN	GND9DD	9D
R89X>8; R		Gi GSS	GN	GNV9DD	9E

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Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

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		CCM	x		9
R 89X >8; Ri		G GSS	GN	GNV9DD	; 7
f OP 978; X> 9h /Q	90	ScaS	S	GDe9DD	97
f OP 978; X> >h /Q	>0	ScaS	S	GDe9DD	99
f OP 978; XB 9h /Q	90	cGSa	a	GDe9DD	97
f OP 978; X7B >h /Q	>0	cGSa	a	GDe9DD	99
f OP 978; XB >h /Q	>0	cGSa	a	GDe9DD	99

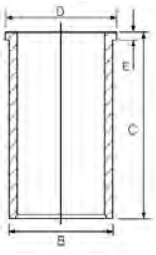
R9X 8788 R	N	9	**8; BBvv**	**97499 i**	3Nc8PD	4	**P6l x**	**f P8C99>**
R; X 8788 R	P	9	**97>Evv**	**8B4; i**	3NN8SV	4	**P6l x**	**f P8C99A**
R>X 8788 R	S	9	**9C; 9vv**	**9>4>C i**	3PP8aS	4	**P6l x**	**f P8C99C**

DC49A9A77487
DC49A9A7C487 *mTm*

M 8816:
N4 4=1<3
N 73183
P <916:
59É98

7D49A9A77477
7D49A9A7C477 *mTm*

5183 I X V
5183 V
6183 V



8>479ECA7477

N =7184 **O** 4: 8183 **P** =<1=3 **Q** 7188

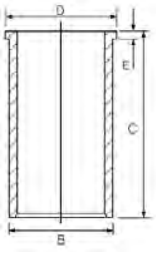
R9Y 8788	N	9	**8; BBvv**	**9849; i**	3Ni 8PG	4	**P6l x**	**f P8C9; 8**
R; Y 8788 R	P	9	**98DAvv**	**8C4; B i**	3NP8Si	4	**P6l x**	**f P8C9; 9**
R>Y 8788 R	S	9	**9C; 9vv**	**9>4>D i**	3PP8aV	4	**P6l x**	**f P8D>DD**

DC49A9A774; 7
DC49A9A7C4; 7 *mTm*

M 841 3
N4 43183
N4 4=153
N 75183
P <3163
59É98

7D49A9A77487
7D49A9A7C487 *mTm*

5183 I X V
5183 V
6183 V



8>479ECA7477

N =7184 **O** 4: 8183 **P** =<1=3 **Q** 7188

HzÄwnl ' Intß05=143nx 6 azwx py op´ Qzwupyx °wp 5=143nx 6 azwx p op w nl @8 o° ' t°ßzy 5=143nx 6 azwnl @bl o ' t°ß y 5=143nx 6 azwx p nl x p´l ' t°ßzyp 5=143nx 6

NR>X 8788 R	S	9	**9C; 8vv**	**9D4AA i**	3Pe8cV	4	**P6l x f u**	**f P8C9; 7**
NR>X 8788 Rf	S	9	**9C; 9vv**	**>B i**	3aP	4	**P6l x f u**	**f P8C99D**

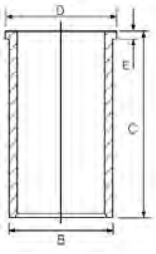
DC487; 977477
DC487; 97C477 *mTm*

M 88153
N4 4<133
N 78133
P <9148
63É9<

df

7D487; 977477
7D487; 97C477 *mTm*

6183 S U V
5183 V
6183 V



8>479ECA7477

N =7184 **O** 4: 8183 **P** =<1=3 **Q** 7188

DD487; 977477
< 0436533033 .
47035=: 83033

R9X 9788	N	9	**8AA>vv**	**9849; i**	3Ni 8PG	4	**P6l x**	**f P8C; DC**
R9Y 9788	N	9	**8AAAvv**	**9; 49> i**	3PG8PP	4	**P6l x**	**f P8C; D9**
R; X 9788	P	9	**9; ; 9vv**	**; >4; B i**	3Sa8Si	4	**P6l x**	**f P8C; DD**
R; Y 9788	P	9	**9; ; 9vv**	**; >4; C i**	3Sa8VD	4	**P6l x**	**f P8C; D;**
R>X 9788	S	9	**; 887vv**	**>A4>D i**	3aG8aV	4	**P6l x**	**f P8C; E7**
R>Y 9788	S	9	**; 887vv**	**>B4>E i**	3aP8ac	4	**P6l x**	**f P8C; DA**

DC48>BA77477
DC48>BA7C477 *mTm*

M 841t3
N4 4=133
N 79133
P <4198
59É98

7D48>BA77477
7D48>BA7C477 *mTm*

5133 I X
5133 V
6133 V

NR;X9788	P	9	**9;;9vv**	**>94>Ai**	3Vc8aG	4	**PQtxfu**	**fP8C;DE**
NR;Y9788	P	9	**9;;9vv**	**>B4>Ei**	3aP8ac	4	**PQtxfu**	**fP8C;D>**
NR>X9788	S	9	**;887vv**	**AA4ADi**	3cV8ci	4	**PQtxfu**	**fP8C;E8**
NR>Y9788	S	9	**;887vv**	**B94BAi**	3eS8ee	4	**PQtxfu**	**fP8C;DB**

DC48>9877477
DC48>987C477 *mTm*

M 841t3
N4 4:193
N 85133
P <4198
63É9<

WWdf

7D48>9877477
7D48>987C477 *mTm*

6133 I Q V
5133 V
6133 I X V

NR>Y8789/Q80	S	9	**;8E9vv**	**AD4BAi**	3ci8ee	4	**PQtxfuUxvxw**	**fP8C9;A**
NR>Y8789O/Q80	S	9	**;8E9vv**	**C>4D9i**	3GDG8GGN	4	**PQtxfuUxvxw**	**fP8C9;B**
NR>Y8789Q/Q90	S	9	**;8E9vv**	**A74BDi**	3ae8lN	4	**PQtxfu**	**fP8C9;E**
NR>Y8789QO	S	9	**;8E9vv**	**B74D>i**	3eG8GGS	4	**PQtxfuUxvxw**	**fP8C9;;**
NRBY8789/Q80	a	9	**>CDDvv**	**C;4EDi**	3i8GPP	4	**PQtxfuUxvxw**	**fP8C9;C**
NRBY8789O/Q80	a	9	**>CDDvv**	**888489;i**	3GV/G8Gac	4	**PQtxfuUxvxw**	**fP8C9;D**
NRBY8789Q	a	9	**>CDDvv**	**C74877i**	3V8GPa	4	**PQtxfu**	**fP8C9>7**
NRBY8789QO	a	9	**>CDDvv**	**88;489Ai**	3GV/S8GcD	4	**PQtxfuUxvxw**	**fP8C9;>**

GMKUVR_Y	342=< 45237	Ll´xp´	342=:
GMKUZXUT	342=8 45237		

DC49A9D77477

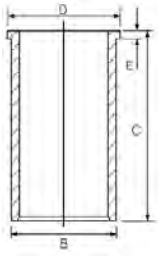
M 94153
N4 4<169
N 7=198
P =<133
67É:<

dffb

7D49A9D77477

6133 I X V
5133 V
6133 I X V

8>4797>E7477



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DD49A9D77477
< 0585<33033.
4703537=3033

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NR>Y978;O	S	9	**;D79vv**	**89Ai**	3GcD	4	**PQtxfuUxvxw**	**fP8C;8B**
NRBY978;	a	9	**AC79vv**	**E9i**	3GNV	4	**PQtxfu**	**fP8C;8D**
NRBY978;O	a	9	**AC79vv**	**88D48E7i**	3GaD8NVe	4	**PQtxfuUxvxw**	**fP8C;8C**

LI @z´t3 34239

DC489CD77477

M 8319 8
N4 4: 183
N 9413 9
P <9148
6<É: 9

-8=<6: 0,

MWdf f b

7D489CD77477

6133 I Q V
5133 V
6133 TZ

R 8X A88 P	G 9	**D9Avv**	**8848; i**	3GV8Ge 4	**P@l x**		**f P8CDBE**
R 9X A88 P	N 9	**8BA7vv**	**9949B i**	3PD8PV 4	**P@l x**		**f P8CDC9**

DC4C>8D7C497 *mT m*

M 891t 8
N4 5417 7
N 8313 3
N2 81t 3
P =81=8
68É: 8

-43338,

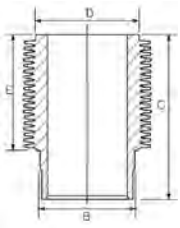
7D4C>8D77477
7D4C>8D7C477 *mT m*

5157 I X V
5188 V
8133 I X V

NR 9X E89	N 9	**8DD>vv**			**P@l x**	**f u**	**Y bB887**
NR; X E89	P 9	**9D9Bvv**			**P@l x**	**f u**	**Y bB888**
NR >X E89	S 9	**; CBDvv**			**P@l x**	**f u**	**Y bB889**
NR AX E89	V 9	**>C87vv**			**P@l x**	**f u**	**Y bB88;**
NR BX E89	a 9	**ABAAvv**	**DD4877 i**	3GND8GPa 4	**P@l x**	**f u**	**f P8D; >D**
R 9X E89 i	N 9	**8DD>vv**	**99 i**	3PD 4	**P@l x**		**Y bBABA**
R; X E89 i	P 9	**9D9Bvv**	**9A4>; i**	3PS8Ve 4	**P@l x**		**f P8E78E**
R >X E89 i	S 9	**; CC7vv**	**; D4>E i**	3/N8ac 4	**P@l x**		**f P8E799**
R AX E89 i	V 9	**>C87vv**	**B8 i**	3eN 4	**P@l x**		**Y bBABB**
R BX E89 i	a 9	**ABAAvv**	**AC4C> i**	3ce8GDG 4	**P@l x**		**f P8E79>**

470Yp´tp 342 3 452 3 OTJ_YZX0GR
J39 342 5

8>4E777D7477 **N** 443133 **O** 555163 **P** 453133 **Q** 46: 163



R 9X E89 /RXE890	N 9	**8DDAvv**	**8B49D i**	3NN8Pe 4	**P@l x**		**f P8D89D**
R 9X E89 P	N 9	**8DDAvv**	**9849D i**	3Ni 8Pe 4	**P@l x**		**Y bC797**
R; X E89 P	P 9	**9D9Bvv**	**9>4>> i**	3PP8aD 4	**P@l x**		**f P8E797**
R >X E89 P	S 9	**; CC7vv**	**; D4B9 i**	3/N8eS 4	**P@l x**		**f P8E798**

RAXE89P	V	9	**>C89vv**	**AD4CDi**	3ci8GDa	4	**P@tx**		**fP8E79;**
RBXE89P	a	9	**ABAAvv**	**>94E9i**	3/c8GNV	4	**P@tx**		**fP8E7;7**

470Yp´tp	342 3	452 3	J3:		342<5
GMX0_RZ_XGR			QR0Yp´tp		34299 452 3
J39	3429<				

DC48C9A77477
DC48C9A88477 *Tmm*

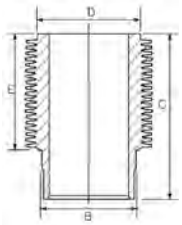
M : 41=3
N4 5417 3
N 8813 3
N2 81: 3
P 45613 3
68É<3

MW

7D48C9A77477
7D48C9A7C477 *mTm*
7D48C9A88477 *Tmm*

6133 I X V
5183 V
5183 V
8133 I X V

8>4E777D7477 **N** 44313 3 **O** 55513 3 **P** 45313 3 **Q** 46: 163



DD48C9A77477
< 04: 58330 33 .
470=333<3033

DC4C>8D77477
DC4C>8D7C477 *mTm*

M : 41=3
N4 5417 3
N 8813 3
N2 81: 3
O 4143
P 45613 3
68É<3

MWdf

7D4C>8D77477
7D4C>8D7C477 *mTm*

51=7 I X V
5188 V
8133 I X V

DC4C>>B77477
DC4C>>B88477 *Tmm*

M : 41=3
N4 5417 3
N 8813 3
N2 81: 3
O 4143
P 45613 3
68É<3

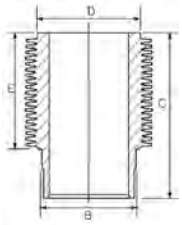
-433=4J,

MW

7D4C>>B77477
7D4C>>B7C477 *mTm*
7D4C>>B88477 *Tmm*

51=7 I X V
5133 V
6133 I X V

8>4E777D7477 **N** 44313 3 **O** 55513 3 **P** 45313 3 **Q** 46: 163



DD4C>>B77477
< 0: 77933 33 .
470=333<3033

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NR>Y 9789/Q 90	S	9	**>7;Dvv**	**C>4CAi**	3GDG8GDN	4	**P@tx**	**f**	**u**	**U**	**x**	**v**	**xw**	**fP8C9AD**
NR>Y 9789O/Q 90	S	9	**>7;Dvv**	**BD487;i**	3 N8GSD	4	**P@tx**	**f**	**u**	**U**	**x**	**v**	**xw**	**fP8C9AE**
NRBY 9789O/Q 90	a	9	**B7AOvv**	**8>748AAi**	3GI D8NGG	4	**P@tx**	**f**	**u**	**U**	**x**	**v**	**xw**	**fP8C9B8**

GMXUZXUTQ	3=238	4523:	Ll´x p´		34236 4523<

DC489CE77477
DC489CE7C477 *mTm*

M	8319 8
N4	4<133
N	9413 6
P	<9148
	6<É: 9

-43435l ,

MWdf fb

7D489CE77477
7D489CE7C477 *mTm*

5183		I Q V
5133		V
6133		I X V

HzÄwnl ' Intfö 761t 3nx 6 | azvŵx py op´ Qzwupyx °wp 761t 3nx 6 | azvŵx p op w nl @B o° ' t°ßzy 761t 3nx 6 | azvŵnl @bl o ' t°ß y 761t 3nx 6 | azvŵx p nl x p´l ' t°ßzyp 761t 3nx 6

NR; X E8>	P	9	**; 9; Bvv**	**>>4AB i**	3aD8ca	4	**P@i x f u**	**f P8C98A**
NR >X E8>	S	9	**>; 8>vv**	**B; 4CA i**	3ea8GDN	4	**P@i x f u**	**f P8C98B**
NR BX E8>	a	9	**B>C9vv**	**D7488B i**	3GDi 8GVe	4	**P@i x f u**	**f P8C98C**

LI´x p´ 34236

DC4>>9>77487
DC4>>9>7C487 *mTm*

M	9813 3
N4	491=3
N4	8153
N	: 3143
N2	9133
P	44: 143
	68É<3

MWWWdf

7D4>>9>77477
7D4>>9>7C477 *mTm*

51=7		I X
6133		I X
6133		I X

R; X E8;	P	9	**; 7B>vv**	**9A4>> i**	3PS8aD	4	**P@i x**	**f P8C978**
R >X E8;	S	9	**>7DBvv**	**A74CD i**	3ae8GDa	4	**P@i x**	**f PC9CC**
R BX E8;	a	9	**B89Dvv**	**EB i**	3GPD	4	**P@i x**	**f PC>A8**

GMXUR_c	34234	45239	Jc		342<7
GMXUVR_Y	342=9	45237	LI´x p´		342 7 452=9
GMXUcZXG	342=4	452=8	MZ		342<7 452=9
J3:	342<3				

DC4C>7E77477

M	9=143
N4	49193
N	89143
N2	8133
P	456193
	68É<3

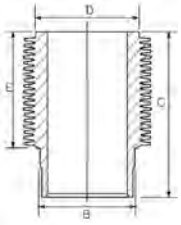
-43567,

MW

7D4C>7E77487

51=7x x		I Q
5188		V
8133		I X V

8>4E77877477
8>4E777B7477



N 43=1=3 **O** 555163 **P** 453133 **Q** 46: 163
N 43=1=3 **O** 555163 **P** 453133 **Q** 4691<3

DD4C>7E77477
< 0: 73=33033 .
470=33433033

DC4C>7E774;7

M	9=143
N4	4=183
N	89133
N2	9133
P	456193
	68É<3

MWWWdf

7D4C>7E77487

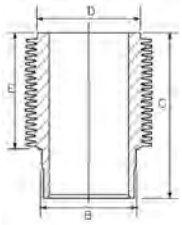
51=7x x		I Q
5188		V
8133		I X V

HzÄwnl ' I ntÖ7=183nx 6	azvðx py op´ Qzwrpyx °wp 7=183nx 6	azvðx p op vv nl@B o° ' t°ßzy 7=183nx 6	azvvnl@bl o ' t°ß y 7=183nx 6	azvðx p nl x p´l ' t°ßzyp 7=183nx 6
NzypORl ' ' po	Nzyr pw' ' ß	Xzo p vv ' tp´´p	Rl ' pl oz m° toz	Vl ´Ütl w pyßp ´zol ßt

R;XE8; S	P	9	;7B>vv	9A4>> i	3PS8aD	4	P@t x	Y bBB78

GMX0_RZ_XGR

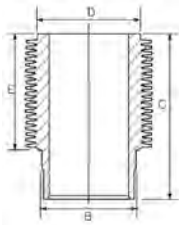
8>4E77877477 N 43=1=3 O 555163 P 453133 Q 46: 163



NR>XE8;	S	9	>7DBvv	>C4D8 i	3aS8GGD	4	P@t x f u	f P8C97;
NR>XE8; O	S	9	>7DBvv	CD4E9 i	3GDa8GNV	4	P@t x f u U x v xw	f P987AE
NRBXE8;	a	9	B89Dvv	C7489A i	3 V8GcD	4	P@t x f u	f P8C97A
NRBXE8; O	a	9	B89Dvv	D848B9 i	3GGD8NND	4	P@t x f u U x v xw	f P8C97B

GMXUVX@S G	342<= 452=8	Mzyozvv	342< 45233		
GMXUYZGX	342=3 452=8	YKX0K 9	34238		
GMXUcZXG	342=4 452=8	YZGXQ	342=8 452==		
Jc	342 <				

8>4E777B7477 N 43=1=3 O 555163 P 453133 Q 4691<3
8>4E77877477 N 43=1=3 O 555163 P 453133 Q 46: 163
8>4E77887477 N 43=1=3 O 553173 P 457183 Q 4671=3



NzypORl ' ' po	Nzyr pw' ' ß	Xzo p vv ' tp´´p	Rl ' pl oz m° toz	Vl ´Ütl w pyßp ´zol ßt

NR>XE8; f	S	9	>7DBvv	B74CD i	3eN8GDa	4	P@t x f u	f P8D;>C
NRBXE8; f	a	9	B89Dvv	DA4889 i	3GGV8GVN	4	P@t x f u	f P8D;A7

GMXUYZGX	342=3 452=9	MZ	342=<		
Jc	342<5	YZGXQ	342=8	3<234	

DC48C>B774;7
DC48C>B7C4;7 *mTm*
342<4 452=9

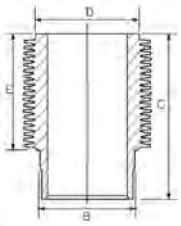
M 9=143
N4 4:193
N 8<133
N2 9133
P 456193
68É<3

MWWWdf

7D48C>B77487
7D48C>B7C487 *mTm*

6133 SUV
5183 V
5183 V
8133 IXV

8>4E777B7477
8>4E77887477



N 43=1=3 **O** 555163 **P** 453133 **Q** 4691<3
N 43=1=3 **O** 553173 **P** 457183 **Q** 4671=3

DC48C>B77477

M 9=143
N4 56193
N 8<133
N2 9133
P 456193
73É<3

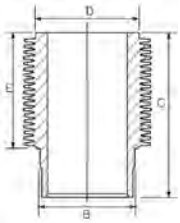
-435470,

MWWWdf

7D48C>B77487
7D48C>B7C487 *mTm*

6133 SUV
5183 V
5183 V
8133 IXV

8>4E77877477



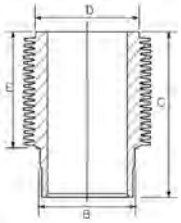
N 43=1=3 **O** 555163 **P** 453133 **Q** 46:163

DD48C>B77477
<04:7933033.
470=33433033

NzypORl''po Nzyrpw''ß Xzop w'tp´p Rl'plozm²toz Vl´Ütlwpyßp´zolßt

R>XE89R	S 9	**>7DBvv**		**P@x**		**YbAE99**
R>XE8;P	S 9	**>7DBvv**	**;>4BBi** 3Sa8D 4	**P@x**		**fP8C979**
RAXE89R	V 9	**A87Cvv**		**P@x**		**YbAE9A**
RBXE89R	a 9	**B89Dvv**		**P@x**		**YbAE9B**
RBXE8;P	a 9	**B89Dvv**	**A84878i** 3ai8GPe 4	**P@x**		**fP8C97>**
GMKUR_c		34233 4523<		J0Yp´tp°	342 4	452<
GMKUVR_Y		342=9 45237		Jc	342<3	
GMKUVX@SG		342<= 452=8		LI´xp´	342<6	
GMKUYZGX		342=3 452=8		MZ	342<7	
GMKUcZXG		342=4 452=8		OTJ_YZX0GR		
J3:		342<4 452<7		YKX0K9	34238	

8>4E777B7477
8>4E77877477



N 43=1=3 **O** 555163 **P** 453133 **Q** 4691<3
N 43=1=3 **O** 555163 **P** 453133 **Q** 46:163

NzypORl''po Nzyrpw''ß Xzop w'tp´p Rl'plozm²toz Vl´Ütlwpyßp´zolßt

NRBXE8>O	a 9	**B>C9vv**	**87C48>Ci** 3GSV8NDD 4	**P@x**	**f u U x v xw**	**fP8C98D**

DC4>>9>77477
DC4>>9>7C477 *mT m*

M 98193
N4 4: 133
N 98148
N2 9133
P 44: 143
73É<3

MWWWdf

7D4>>9>77477
7D4>>9>7C477 *mT m*

51=7 I X
6133 I X
6133 I X

NR>Y 878; /Q 80	S 9	**>CB>vv**	**D>4E; i**	3GGS8GNa 4	**P@t x f u**	**f P8C9>B**
NR>Y 878; O /Q 80	S 9	**>CB>vv**	**87>488A i**	3GSG8GVa 4	**P@t x f u U x v xw**	**f P8C9>C**
NR BY 878; /Q 80	a 9	**C8>Bvv**	**89B48>8 i**	3GcG8GI N 4	**P@t x f u**	**f P8C9>D**
NR BY 878; O /Q 80	a 9	**C8>Bvv**	**8A; 48C7 i**	3NDe8NPG 4	**P@t x f u U x v xw**	**f P8C9>E**

GMXUZXUT 34236 45237

DC48; BE77477

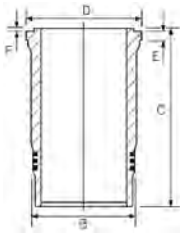
M : 4148
N4 49193
N : 4133
P 43<133
75É<9

MWdf

7D48; BE77477

6133 I Q V
5133 V
6183 I X V

8A4>D77>7477
8>4>D77>7477



N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143
N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143

DD48; BE77477
< 0469=33033 .
4707<3373033

K°´z 5
Qrnv@op° °pl w Ynswp ßJtnsß°yr py pty Qrnv@ßop° uztyß° Qrnv@Öp w° °pw° l zx ' ´pyop w r °l ´ytÜzyt

NR>Y 878; Q/Q 90	S 9	**>CB>vv**	**CC4EA i**	3GDV8GN 4	**P@t x f u U x v xw**	**f P8C9>>**
f OP 978; X> 9h /Q 90	S 9	**>CB>vv**	**897 i**	3GaP 4	**P@t x f u U x v xw**	**f P97CBB**
f OP 978; XB 9h /Q 90	a 9	**C8>Bvv**	**8; E4977 i**	3Gei 8NcN 4	**P@t x f u U x v xw**	**f P8EEDD**

GMXUZXUT R 3823<

DC48; BE77487

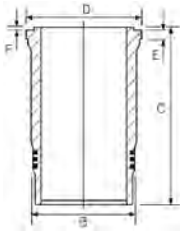
M : 4148
N4 4=193
N 97133
P 43<133
75É<9

MWdf fb

7D48; BE77477

6133 I Q V
5133 V
6183 I X V

8A4>D77>7477
8>4>D77>7477



N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143
N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143

DE48; BE77487
< 0469=33043 .
4807<3373033

HzÄ wnl ' l ntßÖ 87133nx 6 azvwx py op´ Qzwrpyx °wwp 87133nx 6 azvwx p op w nl @ß o° ' t°ßzy 87133nx 6 azvwnl @bl o ' t°ß y 87133nx 6 azvwx p nl x p´l ' t°ßzyp 87133nx 6
K°´z 5
Qrnv@op° °pl w Ynswp ßJtnsß°yr py pty Qrnv@ßop° uztyß° Qrnv@Öp w° °pw° l zx ' ´pyop w r °l ´ytÜzyt

NR>Y 878; QO /Q 90	S 9	**>CB>vv**	**E9489A i**	3GNV8GcD 4	**P@t x f u U x v xw**	**f P8C9>8**
NR>Y 878; RO /Q 96; 0	S 9	**>CB>vv**	**87A48AC i**	3GSP8NGS 4	**P@t x f u U x v xw**	**f P97CBC**
NR BY 878; QO /Q 90	a 9	**C8>Bvv**	**8; E48E8 i**	3Gei 8NaD 4	**P@t x f u U x v xw**	**f P8C9>9**
NR BY 878; QOb /Q ; 0	a 9	**C8>Bvv**	**8CB48EA i**	3NPi 8NaV 4	**P@t x f u U x v xw**	**f P8C9>;**

GMKUZXUT	342=: 4523:	TGa0MU	3=235
GMKUZXUT ZZa	34234 45236	Yp´tp 4: 3	34238
GY =83	3=237	Yp´tp 533	34238
J4318	37239		

DC48; BE77487

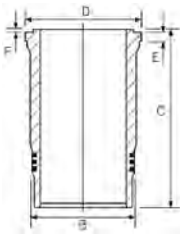
M : 4148
N4 4=193
N 97133
P 43<133
75É<9

MWdf fb

7D48; BE77477

6133 I QV
5133 V
6183 I XV

8A4>D77>7477
8>4>D77>7477



N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143
N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143

DE48; BE77487
< 0469=33043 .
4807<3373033

DC48; BE774; 7

M : 41t 8
N4 4=1<8
N4 4315 8
N 96133
P 43<133
75É<

MWdf fb

7D48; BE77477

6133 I QV
5133 V
6183 I XV

HzÄwnl 'Intfö 87133nx 6 K°´z 5	azv0x py op´ Qzwwpyx °wp 87133nx 6	azv0x p op w nl @8 o° 'tºßzy 87133nx 6	azvwnl @8ol o 'tºß y 87133nx 6	azv0x p nl x p´l 'tºßzyp 87133nx 6
0mv0op° °pl w	Ynswp ßJtnsß°yr py pty	0mvßop° uztyß°	0mv0Öp w° °pww°	l zx ´´pyop wp r°l ´ytÜzyt
HzÄwnl 'Intfö 831t 3nx 6	azv0x py op´ Qzwwpyx °wp 831t 3nx 6	azv0x p op w nl @8 o° 'tºßzy 831t 3nx 6	azvwnl @8ol o 'tºß y 831t 3nx 6	azv0x p nl x p´l 'tºßzyp 831t 3nx 6

f OP 978; X> >h /Q >0	S	9	**>CB>vv**	**8>748B8 i**	3GI D8NGI	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97CBE**
f OP 978; X7B >h /Q >0	a	9	**C8>Bvv**	**8>C49>; i**	3NDD8PPD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9EBA9**
f OP 978; XB >h /Q >0	a	9	**C8>Bvv**	**8>C49>; i**	3NDD8PPD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97CBA**

GMKUZXUT c	34239	Yp´tp 533	34238
GaGTI 0Zd	4323<	ZKXXQZU	3=243
QKTZ	3=23=	aKI Z0U	3723:
RKS HKXM	34245	a0aGI 0Zd	3=23<

DC4>; 7777477

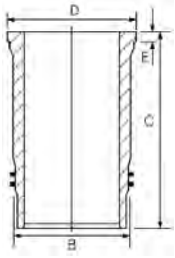
M : 31=3
N4 4=193
N 97183
P 43: 1<3
78É<9

WWdf fb

7D4>; 7777477

6133 I Q
5133
6183 I X

8A4>D7>A7477

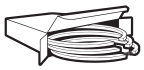


N 453133 **O** 55<133 **P** 4641 3 **Q** <139

DE4>; 7777477
< 0763333033 .
4807<3783033

0mv0op° °pl w	Ynswp ßJtnsß°yr py pty	0mvßop° uztyß°	0mv0Öp w° °pww°	l zx ´´pyop wp r°l ´ytÜzyt

NR BY 878; Ob /Q 80	a	9	**C8>Bvv**	**8C848E7 i**	3NPP8NVe	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C9A7**



DC48; BE77477

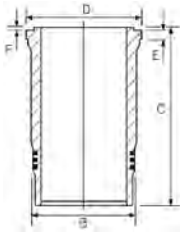
M : 4148
N4 49193
N : 4133
P 43<133
75É<9

MWdf

7D48; BE77477

6133 I Q V
5133 V
6183 I X V

8A4>D77>7477
8>4>D77>7477



N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143
N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143

DD48; BE77477
< 0469=33033 .
4707<3373033

DC48; BE774; 7

M : 41 8
N4 4=1<8
N4 43158
N 96133
P 43<133
75É<

MWdf fb

7D48; BE77477

6133 I Q V
5133 V
6183 I X V

K°´z 5
Ynswp ßJtnsß°yr py pty
azwx p op´ Qzwrpyx °wp 831t 3nx 6
Qrnwßop° uztyß°
azwx p op w nl@ß o° ' t°ßzy 831t 3nx 6
Qrnwßop° °pwr°
azwnl@bl o ' t°ß y 831t 3nx 6
I zx ' ´pyop wp r°l ´ytÜzyt
azwx p nl x p´l ' t°ßzyp 831t 3nx 6

NRBY 878; Q/Q 90 a 9 **C8>Bvv** **DA48>A i** 3GGV/8G1 c 4 **P@t x f u U x v xw** **f P8C9>A**

GMKUZXUT 342=8 45237 GMKUZXUT ZZa 34234 45236

DC48; BE77477

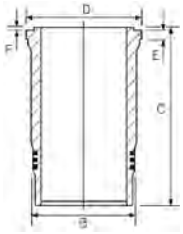
M : 4148
N4 49193
N : 4133
P 43<133
75É<9

MWdf

7D48; BE77477

6133 I Q V
5133 V
6183 I X V

8A4>D77>7477
8>4>D77>7477



N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143
N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143

DD48; BE77477
< 0469=33033 .
4707<3373033

DC48; BE77487

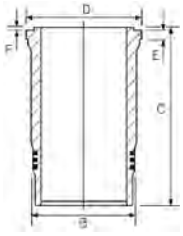
M : 4148
N4 4=193
N 97133
P 43<133
75É<9

MWdf fb

7D48; BE77477

6133 I Q V
5133 V
6183 I X V

8A4>D77>7477
8>4>D77>7477



N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143
N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143

DE48; BE77487
< 0469=33043 .
4807<3373033

K°´z 5
Ynswp ßJtnsß°yr py pty
azwx p op´ Qzwrpyx °wp 87133nx 6
Qrnwßop° uztyß°
azwx p op w nl@ß o° ' t°ßzy 87133nx 6
Qrnwßop° °pwr°
azwnl@bl o ' t°ß y 87133nx 6
I zx ' ´pyop wp r°l ´ytÜzyt
azwx p nl x p´l ' t°ßzyp 87133nx 6

NRBY 878; RO/Q 960 a 9 **C8>Bvv** **8>C4987 i** 3NDD8Nea 4 **P@t x f u U x v xw** **f P97CBD**

GMKUZXUT 342=< J45S KJOY 3423< 4524:

I UHXG	38237	J4615S KJ0Y	34243 45245
J45	34239 45249	Npl Ö0Yp´tp°	34235
J45L	3423= 45245	Yp´tp 433	342=9

DC48; BE774; 7

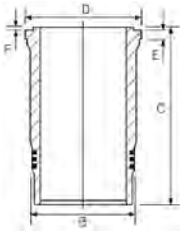
M : 41t 8
N4 4=1<8
N4 43158
N 96133
P 43<183
75É<

MWdf fb

7D48; BE77477

6133 I QV
5133 V
6183 I X V

8A4>D77>7477
8>4>D77>7477



N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143
N 453133 **O** 55=143 **P** 45<183 **Q** =133 **R** 4143

HzÄwnl ' I ntfÖ 831t 3nx 6 K°´z 5
Ynswlp ßJtnsß°yr py pty

azvßx py op´ Qzwwpyx °wp 831t 3nx 6
Ynswlp ßJtnsß°yr py pty

azvßx p op w nl ßB o° ' t°ßzy 831t 3nx 6
Ynwßop° uztyß°

azvßnl ßbl o ' t°ß y 831t 3nx 6
Ynwßöp w° °pww°

azvßx p nl x p´l ' t°ßzyp 831t 3nx 6
I zx ' ´pyop wp r °l ´ytÜzyt

D; B757A5BC7 /Y t z Ø 4Px 0	a	9	D877vv	88E i	3GaN	4	P6l x	f PCAC9

DC4A9; 777477

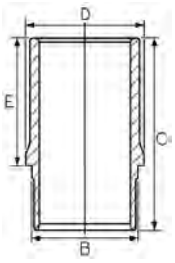
M : 9183
N4 5=173
N 87133
P 4731B3
75É=<

df

7D4A9; 777477

5183 I X V
5183 V
7133 I X V

8>4BD>D>7477
8>4B; ; DB7477



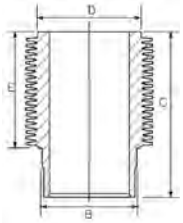
N 455133 **O** 568133 **P** 45=t 3 **Q** 49: 133
N 455133 **O** 568133 **P** 45=1=3 **Q** 49: 133

DD4A9; 777477
< 0856333033 .
4709<7<73033

RAX >8;	V	9	C7C7vv				P6l x	Y bB8>;
RBX >8; X	a	9	D>D9vv	8; C i	3Gea	4	P6l x	Y bA; D8
RDX >8; X	e	9	88; 87vv	8CE i	3NSP	4	P6l x	Y bA; D9
R87X >8; X	GD	9	8>8; Cvv	8ED499> i	3NcD8PDV	4	P6l x	Y bA; D;

CTJ_YZXCGR

8>4E777C7477



N 464193 **O** 588183 **P** 4771=3 **Q** 4: 313<

RBX >8;	a	9	D>CDvv	EE48; 7 i	3GPV8Gcc	4	P6l x	f P8D; B9
RDX >8;	e	9	88; 87vv	8BE i	3NPD	4	P6l x	f P8D; B;
R87X >8;	GD	9	8>8>7vv	8BC499> i	3NNc8PDV	4	P6l x	f P8D; A9
R89X >8;	GN	9	8BEB7vv	9A7 i	3PSD	4	P6l x	f P8D; A>

DC48BCB77477
DC48BCB7C477 *mTm*
DC48BCB88477 *Tmm*

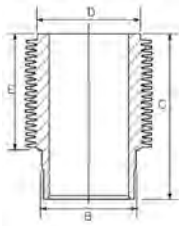
M =3149
N4 6=179
N 79133
N2 813=
P 478158

MWdf

7D48BCB77487
7D48BCB88487 *Tmm*

6133 I X V
6133 V
6133 V
9133 I X V

8>4E777C7477



N 464193 **O** 588183 **P** 4771=3 **Q** 4: 313<

HzÄwnl ' l ntfÖ96133nx 6 | azwx py op´ Qzwrpyx °wp 96133nx 6 | azwx p op w nl@8 o° ' t°ßzy 96133nx 6 | azwnl@bl o ' t°ß y 96133nx 6 | azwx p nl x p´l ' t°ßzyp 96133nx 6

R >X >8; Rd	S 9	**B; D8vv**	**E> i** 3GNe 4	**P@t x**		**f P8D; >7**
R AX >8; Rd	V 9	**CECBvv**	**E>488D i** 3GNe8GaD 4	**P@t x**		**f P8CDD9**
R BX >8; R	a 9	**EAC9vv**	**87>48DD i** 3GSG8NVa 4	**P@t x**		**f P8D; >8**
R BX >8; Rd	a 9	**EAC9vv**	**88948>8 i** 3GVN8G N 4	**P@t x**		**f P989C>**
R DX >8; R	e 9	**89CB; vv**	**8>C48DD i** 3NDD8NVa 4	**P@t x**		**f P8D; >9**
R 87X >8; R	GD 9	**8AEA; vv**	**9; A i** 3PND 4	**P@t x**		**f P8D; A;**
R 89X >8; R	GN 9	**8E8>>vv**	**99>49D9 i** 3PDV8PeS 4	**P@t x**		**f P8D; AA**

DC4C>7; 77477

M < 173
N4 7: 198
N 7<133
N2 8158
O 4133
O 4153
P 46<198
78É435

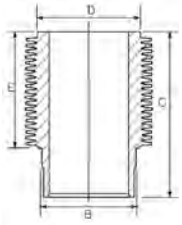
-45877,

TMdf

7D4C>7; 77487
7D4C>7; 7C487 *mTm*

6133 I Q V
5133 V
7133 I X V

8>4E777A7477
8>4E777; 7477



N 46=133 **O** 5831: 9 **P** 483133 **Q** 49=183
N 46=133 **O** 5831<3 **P** 487133 **Q** 49=183

DD4C>7; 77477
< 0: 73633033 .
470=33383033

DD4C>7; 77487
< 0: 73633033 .
470=33363033

Vsz°' sl ßpo
NzypORl ' ' po | Vsz°' sl ßp´ß
Nzyr pw' ' ß | Vsz°' sl ß
Xzo p w ' tp´´p | Lz°q ß oz
Rl ' pl oz m° toz | Lz°q ß ßz
Vl ´Ül w pyßp´zol ßt

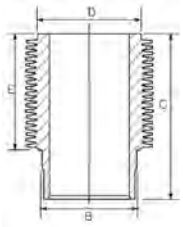
NR BX >8; Rd	a 9	**EAC9vv**	**8>; 48CC i** 3GI S8NSG 4	**P@t x**	**f u**	**f P8E79D**
NR BX A8;	a 9	**EAC9vv**	**8>84987 i** 3GI N8Nea 4	**P@t x**	**f u**	**f P8E9>7**
NR BX A8; O	a 9	**EAC9vv**	**88948CC i** 3GVN8NSG 4	**P@t x**	**f u U x v xw**	**f P989CA**
NR DX >8; R	e 9	**89CB; vv**	**98949; A i** 3Nee8PND 4	**P@t x**	**f u**	**f P8D; A8**
NR DX A8;	e 9	**89CB; vv**	**9; A49A7 i** 3PND8PSD 4	**P@t x**	**f u**	**f P8D>EA**
NR DX A8; O	e 9	**8; C; Dvv**	**9BA i** 3PaD 4	**P@t x**	**f u U x v xw**	**f P9BB8D**
NR 87X >8; R	GD 9	**8AEA; vv**	**9BA49E> i** 3PaD8SDD 4	**P@t x**	**f u**	**f P8D; >>**
NR 87X A8;	GD 9	**8AEA>vv**	**98D4; 7A i** 3Ni a8SGV 4	**P@t x**	**f u**	**f P8D89C**
NR 87X A8; O	GD 9	**8AEA>vv**	**9BA49E> i** 3PaD8SDD 4	**P@t x**	**f u U x v xw**	**f P987B7**
NR 87X A8; R	GD 9	**8AE>Avv**	**9A; 49E> i** 3PSS8SDD 4	**P@t x**	**f u**	**f P8E9>8**
NR 89X >8; R	GN 9	**8E8>>vv**	**9BD4; A; i** 3PaS8SeD 4	**P@t x**	**f u**	**f P8D; >B**
NR 89X A8;	GN 9	**8E8>>vv**	**; A; 4; BC i** 3SeD8Si i 4	**P@t x**	**f u**	**f P8D>EB**
NR 89X A8; O	GN 9	**8E8>>vv**	**; DB4>7A i** 3/NV8VVG 4	**P@t x**	**f u U x v xw**	**f P8D>ED**
NR 89X A8; R	GN 9	**8E8>>vv**	**9D94; A; i** 3PeS8SeD 4	**P@t x**	**f u**	**f P8E79E**
R BX >8; Ri	a 9	**EAC9vv**	**EB4898 i** 3GPG8GaV 4	**P@t x**		**f P8CDD;**
R DX >8; Ri	e 9	**89CB; vv**	**89E48A7 i** 3GcV8NDS 4	**P@t x**		**f P8CDDA**

R87X>8; Ri	GD	9	**8AEA;vv**	**8B84979 i**	3NGl8NcV	4	**P@t x**		**f P8CDDB**
R89X>8; Ri	GN	9	**8E8>>vv**	**8E;49>; i**	3NaN8PPD	4	**P@t x**		**f P8CDDD**

GMKUYZGX	342=6 452=9	Jc		342<3

8>4E777;7477
8>4E777A7477

N 46=133 **O** 5831<3 **P** 487133 **Q** 49=183
N 46=133 **O** 5831t9 **P** 483133 **Q** 49=183



NzypOR|''po Vsz°'slßpo	Nzyrpw''ß Vsz°'slßp´ß	Xzo p w''tp´´p Vsz°'slß	Rl'plozm°toz Lz°djßloz	Vl´Ütlwpyßp´zolßt Lz°djßlßz

NRBY 878A	a	9	**88E7Avv**	**8EA49A7 i**	3NaV8PSD	4	**P@t x**	**f u**	**f P8C9A>**
NRBY 878A Ob	a	9	**88E7Avv**	**;774;D> i**	3SDe8VNN	4	**P@t x**	**f u U x v xw**	**f P8C9AA**
NRDY 878A/878A0	e	9	**8ADC>vv**	**9E7 i**	3PiS 4		**P@t x**		**f P8D>EE**
NRDY 878A Ob	e	9	**8ADC>vv**	**;EE4A8C i**	3VSP8cDP	4	**P@t x**	**N@f u U x v xw**	**f P8C9AB**

8>4>A7EEB7477

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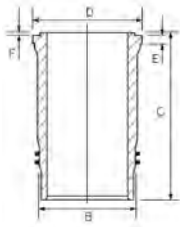


NRBY 878A O/Q	**90**	a	9	**88E7Avv**	**9A74;>A i**	3PSD8Sai	4	**P@t x**	**f u U x v xw**	**f P8C9A9**
NRDY 878A O/Q	**90**	e	9	**8ADC>vv**	**;;;4>AE i**	3SVP8aNS	4	**P@t x**	**N@f u U x v xw**	**f P8C9A;**

98559	38237	Mzyozw	342=4 452=:

DC489;E77487

M <91<3
N4 4<1<3
N <7133
P 4661<3
85É443

MWWWdf fb

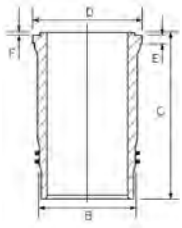
7D489;E77487

6183 I Q
5178 I X
7133 I X

LKZ-Ring

8>4>A7EEB7477

N 47:133 **O** 59<183 **P** 48<133 **Q** =133 **R** 4158



DD489;E77487
< 0456=33043 .
470783=93033

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>Tb	NGci	S	eV9DD	A8
>Td	NGci	S	eV9DD	A8
>Te /Q >0	NGci	S	eV9DD	A8
>Tf /Pi 89Nf QP>0/Q >0	NGci	S	eV9DD	A8
>Tg /b99 Pf QbgY M0	NGie	S	ea9DD	AC
>Th /Q >0	NGie	S	ea9DD	AD
>Ti /Pi 89Mf QP>0	NGci	S	eV9DD	A9
>Tk /Pi 89f QP>0	NGci	S	eV9DD	A9
ETY /PhBgO0	GVaD	S	cV9DD	9B
ETg	GVaD	S	cV9DD	9C
877 S5777	eSP	S	aV9DD	8
877 S5779	eSP	S	aV9DD	8
877 SO5777	eSP	S	aV9DD	8
877 SR777	iDP	S	aV9DD	8
877 SX5777	iDP	S	aV9DD	8
877 SX57>D	iDP	S	aV9DD	8
877 SX;5777	iDP	S	aV9DD	8
887 P5777	Sii	N	cD9DD	88
887 R5777	Sii	N	ac9SD	B
8975777	Sii	N	ac9SD	B
89> N5777	GSPe	S	eD9DD	;8
89A M5777	GaDe	S	eD9DD	;8
89A N5777	GaDe	S	eD9DD	;8
89B M5777	ViS	N	cP9VD	9A
89B M857777	aVN	N	cc9DD	9E
89B M857>D	aVN	N	cc9DD	9E
89B M95777	cDS	N	eD9DD	;8
89B M957>D	cDS	N	eD9DD	;8
89C M5777	iDP	S	aV9DD	8
89C MA5777	GPDG	S	ca9DD	9D
89D M5777	GGGa	S	eD9DD	;8
89D M57>D	GGGa	S	eD9DD	;8
89D M7B>	GGGa	S	eD9DD	;8
89D MOA5777	GGGa	S	eD9DD	;8
8;9 MO85777	GcVa	S	eS9DD	>E
8;9 NN a Ma	GViN	S	eD9DD	;8
8;9 O;57;8	GiiV	S	eS9DD	>E
8;9 PN59M4D9DNO	GiiV	S	eS9DD	>E
8;DMQ7M57	GGGa	S	eD9DD	;8
8;DN5777	GGGa	S	eD9DD	;8
8;DO5777	Gaie	S	eN9aD	>7
8>8 N5777	ccD	S	aV9DD	;
8>B M5777	iDP	S	aV9DD	>
8>B M57>D	iDP	S	aV9DD	8
8>B M85777	iDP	S	aV9DD	>
8>B N85777	GPDG	S	ca9DD	9D
8>B N95777	Gaie	S	eN9aD	>7
8>B PC5777	Gaie	S	eN9aD	>8
8>E M85777	GiNi	S	eN9aD	>9
8>E N85777	GiNi	S	eN9aD	>9
8>E N;5777	Gaie	S	eN9aD	>7
8>E N>5777	Gaie	S	eN9aD	>7
8>E N>57>B	Gaie	S	eN9aD	>7
8>E NA57>B	GiNi	S	eN9aD	>9
8A> M85777	GiiV	S	eS9DD	>E
8A> M95777	GiiV	S	eS9DD	>E
8A> N5777	GiNi	S	eN9aD	>9
8A> O;57>B	GiiV	S	eS9DD	>E
8A> O>57>B	GiiV	S	eS9DD	>E
8A> OB5777	GiNi	S	eN9aD	>9

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		CCM	x		9
8A> P8577		GiNi	S	eN9aD	>9
8A> Q8577		GiiV	S	eS9DD	>E
8AB M9577 /RØx0		iii	S	cD9DD	8;
8AB M9578AC /RØx0		iii	S	cD9DD	8>
8AB M957A7 /RØx0		iii	S	cD9DD	8>
8AB M9577 /RØx0		iii	S	cD9DD	8;
8AB M959>B /RØx0		iii	S	cD9DD	8A
8AB M; 577 /RØx0		iii	S	cD9DD	8;
8AB M>577 /RØx0		ccD	S	aV9DD	;
8AB M>57>D /RØx0		ccD	S	aV9DD	;
8AB MA577		GPDG	S	ca9DD	9D
8AB O57>B /RØx0		GGDe	S	cD9DD	8A
8AE M>577		GcVa	S	eS9DD	>E
8AE M>57>B		GcVa	S	eS9DD	>E
8AE MB57>B		GiiV	S	eS9DD	>E
8B7 M; 577 /RØx0		GGDe	S	cD9DD	8B
8B7 MB577		GiNi	S	eN9aD	>;
8B7 MB57>B		GiNi	S	eN9aD	>;
8B7 MC577		GiNi	S	eN9aD	>9
8B7 NB57>B		GiNi	S	eN9aD	>;
8B7 P8577		GiNi	S	eN9aD	>;
8BE MB577		GNSe	S	ai 9aD	C
8C7 M577		cDS	N	eD9DD	; 8
8C7 M57>B		cDS	N	eD9DD	; 8
8C7 MB577		iDP	S	aV9DD	9
8C7 MB57>B		iDP	S	aV9DD	9
8C7 N		GicG	S	ee9DD	AE
8C7 P		GicG	S	ee9DD	AE
8CA MB577		GiiV	S	eS9DD	A7
8CB MA577		Gaie	S	eN9aD	>8
8CB MB577 /RØx0		GGDe	S	cD9DD	8C
8CB MC577 /RØx0		GNSN	S	cD9eD	8D
8CB MD577 /RØx0		GNSN	S	cD9eD	8E
8CB N8577		GNSN	S	cD9eD	8E
8CB N9577 /Q 9 RØx0		GGDe	S	cD9DD	8C
8CB N; 577		Gaie	S	eN9aD	>7
8CB N>577 /RØx0		GNSN	S	cD9eD	8E
8CB NC577		Gaie	S	eN9aD	>8
8CB NE577 /RØx0		GNSN	S	cD9eD	97
8CD NA577 /Q ; RØx0		GNSN	S	cD9eD	8E
8CD Q9577 /RØx0		GNSN	S	cD9eD	8E
8CD QD588 /RØx0		GNSN	S	cD9eD	98
8CD QE588 /RØx0		GNSN	S	cD9eD	98
8CD R; 588		GPae	S	cN9DD	9;
8D9 M9577 /Q 90		GcSc	S	eN9DD	; >
8D9 MC577		GiGD	S	eN9DD	; A
8D9 MD577		GiGD	S	eN9DD	; A
8D9 N9577 /RØx0		GNSN	S	cD9eD	97
8D9 N>577 /Q 90		GiGD	S	eN9DD	; A
8D9 NB577 /Q ; 0		GVia	S	eD9VD	; ;
8D9 NE577 /Q ; 0		GiGD	S	eN9DD	; B
8D; MB577 /Q 90		GcSc	S	eN9DD	; >
8DA M9577		NPec	V	eN9DD	; A
8DA MB577 /Q 90		NPec	V	eN9DD	; A
8DB MB577 /Q ; 0		GiGD	S	eN9DD	; A
8DB MD577		GiGD	S	eN9DD	; B
8DB ME577		GiGD	S	eN9DD	; B
8DC MB577 /Q ; RØx0		GGDe	S	cD9DD	8C
8DD M9577 /Q ; 0		GiGD	S	eN9DD	; A
8DD M; 577		GiGD	S	eN9DD	; C

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8DD MA577 /Q	; RØx0	GNSN	S	cD9eD	99
8DD MC577 /Q	;0	Gi GD	S	eN9DD	;A
8DD MD577		GNSe	S	ai 9aD	C
8DD ME577		GNSe	S	ai 9aD	C
8DD N9577		Gi GD	S	eN9DD	;B
8E9 MB577		Gi GD	S	eN9DD	;B
8E9 M;577 /Q	;0	Gi GD	S	eN9DD	;A
8E9 MA577		Gi GD	S	eN9DD	;D
8E9 MD577		Gi GD	S	eN9DD	;B
8E9 N8577		Gi GD	S	eN9DD	;D
8E9 N9577		GPae	S	cN9DD	9>
8ED M;577		GVi e	S	ci 9VD	;7
8ED MA577		Gi Va	S	eP9DD	>A
8EE M9577		GNSe	S	ai 9aD	C
8EE M;577		GNSe	S	ai 9aD	D
8EE MA577		Gi GD	S	eN9DD	;B
8EE N8577 /Q	A0	GNSe	S	ai 9aD	E
8EE NA577		GVi e	S	ci 9VD	;7
977 N6NR6OR6Ob86Om8		i DP	S	aV9DD	A
99; MA577 /Q	; RØx0	GNSN	S	cD9eD	8E
99; MB577 /Q	;0	Gi GD	S	eN9DD	;C
99; MC577		Gi GD	S	eN9DD	;B
99; ME577		GNSe	S	ai 9aD	D
9;7 M9577		Gi Ni	S	eN9aD	>9
9;7 M;577		Gi Ni	S	eN9aD	>;
9;7 M>577 /Q	90	Gi Ni	S	eN9aD	>;
9A7 MB577 /Q	A0	Gi Va	S	eP9DD	>A
9B; MB577 /Q	A0	Gi Va	S	eP9DD	>A
9B; M9577		GNSe	S	ai 9aD	E
9B; M;577		GVi e	S	ci 9VD	;7
9B; MD577		GVi e	S	ci 9VD	;7
9D7 MB577		Gi Ni	S	eN9aD	>;
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;89 N9577 /Q	B0	GNSe	S	ai 9aD	87
;A7 MB577 /Q	>6A0	GPae	S	cN9DD	9;
;A7 M;577		GVi e	S	ci 9VD	;7
AA9 B7 ;D>		GVi e	S	ci 9VD	;7
D;8 P857 7		Gi Ni	S	eN9aD	>9
D;>N577		Gi i V	S	eS9DD	>E
D;>N57>D		Gi i V	S	eS9DD	>E
D;>N5B>B		Gi i V	S	eS9DD	>E
D;>O5B>B		Gi i V	S	eS9DD	>E
D;AO9577		GcVa	S	eS9DD	>E
D;AO>577		GcVa	S	eS9DD	>E
D;BM;577		Gi i V	S	eS9DD	>E
D;BMA577		GcVa	S	eS9DD	>E
D;BMB577		GcVa	S	eS9DD	>E
D;EMA577 /Q	90	NPec	V	eN9DD	;A
D>; MB577 /Q	>RØx0	GPae	S	cN9DD	9>
D>>M9577		Gi Va	S	eP9DD	>A
D>>M;577		GVi e	S	ci 9VD	;7
E;CM>577		Gi GD	S	eN9DD	;D
E;CMA577		Gi GD	S	eN9DD	;D
E;CMC577		Gi GD	S	eN9DD	;B
E;EMB577		Gi GD	S	eN9DD	;B
E;EM9577		Gi GD	S	eN9DD	;D
E;EM;577		NPec	V	eN9DD	;D

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E; E NA5777		Gi Va	S	eP9DD	>A
E>7 MA5777 /Q A0		Gi Va	S	eP9DD	>A
E>7 O85777		GVi e	S	ci 9VD	;7
EAA M>5777		GVi e	S	ci 9VD	;7
88C7 M857>B		ei i	S	aV9DD	9
D8>757C		NVDD	S	i P9DD	BA
D8>7589698>69E /e yØ 0		NSSV	S	i P9DD	BB
D8>759C/e yØ 0		NVDD	S	i P9DD	BC
D8>759Cd6e59C77 /e yØ 0		NVDD	S	i P9DD	BC
D8>759Ce5j C77 /Q 80		NVDD	S	i P9DD	BD
D8>75>; /Q 9 e yØ 0		NeDD	S	i S9SD	C8
D8>75>; Z /Q ; e yØ 0		NeDD	S	i S9SD	C9
D8>75>; e /Q ; e yØ 0		NeDD	S	i S9SD	C9
D8>75>C		NVDD	S	i P9DD	BD
D8>75>Cd /e yØ 0		NVDD	S	i P9DD	BD
D8>75>Cd59987		NVDD	S	i P9DD	BD
D8>75B8		NSSV	S	i P9DD	BE
D8>75B; /Q 9 e yØ 0		NeDD	S	i S9SD	C;
D8>75BC		NVDD	S	i P9DD	BA
D8>75EC1 /e yØ 0		NVDD	S	i P9DD	BA
D8>95B8		NSSV	S	i P9DD	BE
D8>>598 /e yØ 0		NSSV	S	i P9DD	BB
D8>>5B8		NSSV	S	i P9DD	BE
D8>>5BC		NVDD	S	i P9DD	BE
D8>>5EC/e yØ 0		NVDD	S	i P9DD	BA
D8>>5ECe /e yØ 0		NVDD	S	i P9DD	BA
D8>>5ECl /e yØ 0		NVDD	S	i P9DD	BA
D8>7598597847; /e yØ 0		NSSV	S	i P9DD	BB
D8>759C59877		NVDD	S	i P9DD	BC
D8>75>C5j C77		NVDD	S	i P9DD	BD
D8>75B8597>		NSSV	S	i P9DD	BE
D8>75BC59C77		NVDD	S	i P9DD	BA
D8>75BC3k9;7 /e yØ 0		NVDD	S	i P9DD	BA
D8>>5985997		NSSV	S	i P9DD	BB
D8>>5B85977 /ea RUY 0		NSSV	S	i P9DD	BE
D8>>5B85A775D8		NSSV	S	i P9DD	BE
D8>>5BC3997		NVDD	S	i P9DD	BE
D8>>5D859777		NVDD	S	i P9DD	BE
D8>>5E859777		NSSV	S	i P9DD	BE
D8>>5EC59977		NVDD	S	i P9DD	BE
D8>>5EC59>77		NVDD	S	i P9DD	BA
D8>>5EC59A77		NVDD	S	i P9DD	BE
M889 N9		i DP	S	aV9DD	A
N 9A5B; C		NVDD	S	i P9DD	C7
OdPE; X /g9A4BB80		NVDD	S	i P9DD	C7
PDN		Gi DV	S	eP9DD	>B
PEN /kgPEM0/kgPE0		Gi DV	S	eP9DD	>C
PEN /kgPE6M6N6X6i 0/kgPE0		Gi DV	S	eP9DD	>C
P8EMM		Gi GD	S	eN9DD	;B
PTk /kgPEf Q0		Gi DV	S	eP9DD	>B
PTk /kgPEf R6X0		Gi DV	S	eP9DD	>B
PVl /kgPE0		Gi DV	S	eP9DD	>C
PVl /kgPEM0		Gi DV	S	eP9DD	>C
Pi 87 /dTk0		Gi i c	S	eV9DD	A;
Pi 87 /dTm0		Gi i c	S	eV9DD	A;
Pi 87Mf QP> /dTY 0		Gi i c	S	eV9DD	A>
Pi 87Mf QP> /dTe0		Gi i c	S	eV9DD	A>
Pi 87Nf QP>		Gi i c	S	eV9DD	AA
R8MQ7>D8O /Q ;0		NNec	S	ee9DD	B8
R8MQ7>D8P /Q >0		NNec	S	ee9DD	B9

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Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

ENGINE INDEX

		CCM	x		9
R8MQ; >D8P		NNec	S	ee9DD	B;
R8MQ; >D8Q		NNec	S	ee9DD	B;
R8MQ; >D8S		NNec	S	ee9DD	B;
R8OQ7>D8P /Q >0		Ni i i	S	i V9eD	C>
R8OQ; >D8Q /Q A0		Ni i i	S	i V9eD	CA
R8OQ; >D8Y /Q A0		Ni i i	S	i V9eD	CA
R8OQ; >D8Z /Q A0		Ni i i	S	i V9eD	CA
SeQ4f ; /Q BRØxR 0		i i i	P	cD9DD	89
SeQ4f > /Q BRØxR 0		GPPN	S	cD9DD	89
XRi /kgCVb0/Q 90		GcaG	S	eP9DD	>>
Y 97> MBMB8 /RØx0		GGDe	S	cD9DD	8B
Y >78 XS5975		Gi i V	S	eS9DD	>E
Y B78 TM5975		Gi i V	S	eS9DD	>E
Y B8E MM957		Gi i V	S	eS9DD	>E
dEY >7D		GVi e	S	eD9DD	; 9
dEY >8;		GVi e	S	eD9DD	; 9
dEY >A7		GVi e	S	eD9DD	; 9
dEY >A9		GVi e	S	eD9DD	; 9
dT79		Gi i c	S	eV9DD	AB
dTT /Q A0		Gi i c	S	eV9DD	AB
dTW		Gi i c	S	eV9DD	AA
dTW/Pi 87gf QP>0/Q >0		Gi i c	S	eV9DD	AA
dTd		Gi i c	S	eV9DD	AA
dTh		Gi i c	S	eV9DD	A;
f TI /PWAMf Q0		NSSa	S	i N9DD	B>
i VI /Pi D0		Geae	S	eN9ND	; E
i VI /Pi DN0		Geae	S	eN9ND	; E
i Vm/Pi D0		Geae	S	eN9ND	; E
kZ 8f		Gi cG	S	ee9DD	B7

877 S5777	S 9	**D>; vv**	**9A i** 3PS 4	**bx**	**f PDB;**
877 S5779	S 9	**D>; vv**	**9C i** 3Pc 4	**bx**	**f PDB>**
877 SO5777	S 9	**D>; vv**	**; D i** 3/N 4	**bx**	**f PDBD**
877 SR777	S 9	**E7; vv**	**9B i** 3PV 4	**bx**	**f PBE; E**
877 SX5777	S 9	**E7; vv**	**; 74; i** 3SG8SV 4	**bx**	**f PDC7**
877 SX; 5777	S 9	**E7; vv**	**; ; i** 3SV 4	**bx**	**f PDBE**
877 SX57>D	S 9	**E7; vv**	**9E i** 3SD 4	**bx**	**f P>>8;**
89CM5777	S 9	**E7; vv**	**; >44 i** 3Sa88 4	**bx**	**f PDDC**
8>BM57>D	S 9	**E7; vv**	**; ; i** 3SV 4	**bx**	**f PE; >**

45: 31=		392 4	452<7	LQUXOTU =33	432 : 432<9
45: 413		342 :	452<9	LQUXOTU 4383	342<3 452<
47: 413		432 9	452=8	LQUXOTU Vtnv °' 413	392<5 432<
<83 31<		3: 297	432 5	VGTJG 31= Lť p Y	432<3 372<9
=33Z2K 31=		342 <	342<9	VGTJG =33	432<3 392=7
LQUXOTU 413		342<3	452<	_TU 31=	352<7 3<2<=

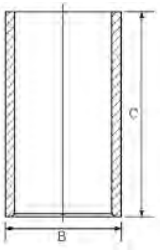
DC497ED77477
DC497ED7B477 *mT m*
DC497ED7D477 *mT m*

M 631 8
P 941 58
53É87

7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

41 8 I X V
5133 V
61=7 V

8>4788778477 **N** 9<137 **O** 448133



8C7 M857 7	S 9	**E7; vv**	**; 7 i** 3SG 4	**bx**	**f P8AD87**
8C7 M857>B	S 9	**E7; vv**	**; 7 i** 3SG 4	**bx**	**f P8AD88**
88C7 M857>B	S 9	**DEEvv**	**9E i** 3Pi 4	**bx**	**f PDC9**

I OTW_KI KTZU 31=		3: 2=4	452=6	I OTW_KI KTZU aGT 31= tK	3: 2=4 352=<
I OTW_KI KTZU 31= t1p1		3: 2=4	3=2=7	VGTJG =33	372=5 452=9
I OTW_KI KTZU 31= t1p1Y		3: 2=4	3: 2==	YK0 KTZU 2933 31=	442=: 342<3

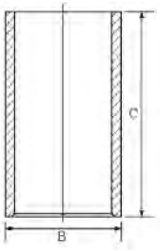
DC48>A877477
DC48>A87B477 *mT m*
DC48>A87D477 *mT m*

M 641 58
P 871 58
53É87

7D48>A877477
7D48>A87B477 *mT m*
7D48>A87D477 *mT m*

4183 TZ
4183 V
6133 V

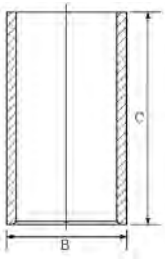
8>4788778477 **N** 9<137 **O** 448133



8>8 N5777	S 9	**CC7vv**	**9A i** 3PS 4	**bx**	**f P>; C7**
8AB M>5777 /RØx0	S 9	**CC7vv**	**9A i** 3PS 4	**bx**	**f P88; 7C**
8AB M>57>D /RØx0	S 9	**CC7vv**	**9A i** 3PS 4	**bx**	**f P88; 7D**

VGTJG : 83	342<9	43236	

8>4788778477 **N** 9<137 **O** 448133



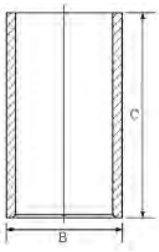
8>B M6777	S	9	**E7; vv**	; ; **i**	3SV	4	**bx**	**f P>; C8**
8>B M85777	S	9	**E7; vv**	; ; **i**	3SV	4	**bx**	**f P>; C9**

VGTJG =33	432<3	392=7	_TU 78 31=	362<6 3: 2=9

DC497ED77487
DC497ED7B487 *mT m*
DC497ED7D487 *mT m*

7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

8>4788778477 **N** 9<137 **O** 448133



M 64158
P 941 8
53É87

41 8 I X V
5133 V
61=7 V

b t0sz°ßnt´mw° Usyp Ytnsp´°yr°mw° Yl y° nt´mw° Yty l ytwæ° op´pßpynt y Vt°ßzyp nzy °' tyzßßz x zyß ßz l nl wvz

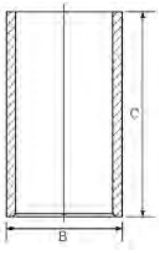
977 N6NR6OR6Ob86Om8	S	9	**E7; vv**			**bx**	**Y b; EA9**
M889 N9	S	9	**E7; vv**			**bx**	**Y bA8>**

<83 31=	3429 8	452 9	=33Z 31=	342 9 452<3
<83Z 31=	342 :	452<3	G445 31=	3: 2 8
=33K 31=	342 :	452<3		

DC497ED77477
DC497ED7B477 *mT m*
DC497ED7D477 *mT m*

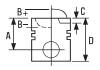
7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

8>4788778477 **N** 9<137 **O** 448133



M 631 8
P 94158
53É87

41 8 I X V
5133 V
61=7 V



DC497ED77487
DC497ED7B487 *mTm*
DC497ED7D487 *mTm*

7D497ED77477
7D497ED7B477 *mTm*
7D497ED7D477 *mTm*

M 64158
P 941 8
53É87

41 8 I X V
5133 V
61=7 V

b tßsz°ßnt´nwl°
Usyp Ytnsp´°yr°nwl°
Yl y° nt´nwl°
Yty l ytwr° op´pßpynt y
Vt°ßzyp nzy °' tyzßßz x zyßßz l nl wz

887 R5777	N 9	**>EEvv**	**8; i 3Ge** 4	**bx**	**f PDC8**
8975777	N 9	**>EEvv**	**8; i 3Ge** 4	**bx**	**f PDC;**

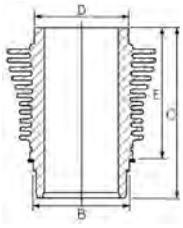
833 318 34293 452 8

DC4A9CB77477
DC4A9CB7B477 *mTm*
DC4A9CB7D477 *mTm*

7D4A9CB77477
7D4A9CB7B477 *mTm*
7D4A9CB7D477 *mTm*

M 6: 1=8
N2 51 8
P : 71 3
53É88

5133 I X V
5133 V
5133 V
61=9 V



N : 8133 **O** 4631=3 **Q** <=1=3

DD4A9CB77477
< 085: 933033

Rtyp´ l @twmp ty Qtß Ypßzyw
eÖwyop´w°qnfns°p y°´ ty G°°px mtp°
@p´q r ml´
l spx t°p ot°' zytmp py vtß°p°wpx pyß
l l x t°l ° ot°' zytmp py nzyu yßz°
°zwx pyßb1
l twyo´z ot°' zytmp °zwr ty vtßx zßz´p

8BE M85777	S 9	**89>Dvv**	**AA i 3cV** 4	**P@t x f u U x v xw**	**f P979; B**
8DD MD5777	S 9	**89>Dvv**	**A8 i 3cD** 4	**P@t x f u U x v xw**	**f P9; DBB**
8DD ME5777	S 9	**89>Dvv**	**A84BB i 3cD8l D** 4	**P@t x f u U x v xw**	**f P8C>AB**
8EE M95777	S 9	**89>Dvv**	**AA4BD i 3cV8l P** 4	**P@t x f u U x v xw**	**f P979>7**

833 416 J S °vßupß	4323:	RCTKG 416 PZJ S °vßupß	3423<
833 I 416 J S °vßupß	3=23=	VGRQU 416 J S °vßupß	3623< 44244
GaaKTZ_XG 416 PZJ S °vßupß	43247 3: 249	VGRQU 416 PZJ S °vßupß	39236 34245
JUHRU 416 J S °vßupß	43238 34243	VGTJG 416 J S °vßupß	3=236
JUHRU 416 PZJ	38238	VGTJG 416 PZJ S °vßupß	3=243 3<246
JUHRU 416 PZJ 49a	38237 45239	V_TZU 416 J S °vßupß	3723<
LQUXCTU 416 J S °vßupß	4423:	V_TZU 416 PZJ	39236 43238
LQUXCTU 416 PZJ S °vßupß	4423:	V_TZU 416 PZJ 49a	39236 36245
MXGTJK V_TZU 416 J S °vßupß	43238	V_TZU KaU 416 J S °vßupß	3623=
MXGTJK V_TZU 416 PZJ S °vßupß	35239 39246	W_HU 416 J S °vßupß	3523<
QJKG 416 J S °vßupß	34237	YCKTG 416 PZJ	3=236 4523=
QJKG PZJ S °vßupß	43237 45244		

DC48; CB77477
DC48; CB7B477 *mTm*

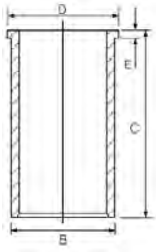
M	73176
N4	45173
N	6: 133
O	4133
O	4153
P	96176
	56É8:

MWdf fb

7D48; CB77477
7D48; CB7B477 *mTm*

5133		I Q V
4183		V
5133		V

8>47997B7477 **N** : 5183 **O** 475133 **P** : 7133 **Q** 8133



8EE M; 5777	S	9	**89>Dvv**	**B; 4C7**	i	3ea8	V	4	**P@t x**	f u U x v xw	**f P979>8**
99; ME5777	S	9	**89>Dvv**	**B9**	i	3eS	4		**P@t x**	f u U x v xw	**f P979>;**

JUHRU 416 J S °vßupß		43238		QJKG PZJ S °vßupß	37238	45243
JUHRU 416 PZJ 49a S °vßupß		3<239		RCTKG 416 J S °vßupß	3923:	
MXGTJK V_TZU 416 J S °vßupß		43238		RCTKG 416 PZJ S °vßupß	43239	
MXGTJK V_TZU 416 PZJ S °vßupß		35239	3<243	V_TZU KaU 416 J S °vßupß	3623=	
QJKG 416 J S °vßupß		43238		YZXGJG 416 J S °vßupß	38239	

DC4>9AB77477
DC4>9AB7B477 *mTm*
DC4>9AB7D477 *mTm*

M	73176
N4	45174
N	6<133
O	31=4
O	31=4
P	95176
	56É88

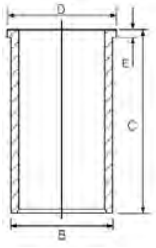
-89=66,

MWWdf fb

7D4>9AB77477
7D4>9AB7B477 *mTm*
7D4>9AB7D477 *mTm*

5133		I Q V
4183		TZ
5133		I X V

8>47997B7477 **N** : 5183 **O** 475133 **P** : 7133 **Q** 8133



8EE N85777 /Q A0	S	9	**89>Dvv**	**B>4C7**	i	3ec8	V	4	**P@t x**	f u U x v xw	**f P9; AC>**
9B; M95777	S	9	**89>Dvv**	**BB**	i	3D	4		**P@t x**	f u U x v xw	**f P9>CEB**

833 416 J S °vßupß		4523=		VGTJG 416 J S °vßupß	37248	
833 I 416 J S °vßupß		3=23=		V_TZU 416 J S °vßupß	3623=	
JUHRU 416 J S °vßupß		35243		V_TZU KaU 416 J S °vßupß	3623=	35245
LQUXCTU 416 J S °vßupß		3: 23=		W_HU 416 J S °vßupß	3: 243	
LQUXCTU 416 PZJ S °vßupß		34244		YZXGJG 416 J S °vßupß	43243	
QJKG 416 J S °vßupß		3823<	45245	ZOVU 416 J	43248	43253
RCTKG 416 J S °vßupß		3=23=				

DC4>; AC77477
DC4>; AC7B477 *mTm*

M	73176
N4	451: 3
N	6: 133
O	4148
O	31=3
P	95176
	56É8:

MWWdf

7D4>; AC77477
7D4>; AC7B477 *mTm*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t@s Yßz' 2Yß´ßZpnsyzwrr Ö L´LIs´Üp°rp x t@Yß´@Yßz' L°yvßzy Vz°´®stn°wº ¿°t' o°°ß´ß) °ßz' VI´I @ps n°wº nzy q'ynt y °ß´@?ßz' Vp´®tnzwnzy w q'yÜzyp Yß´@Yßz'

; 89 MD5777 /Q	**B0**	S	9	**89>Dvv**	**AE i**	3eD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9EC97**
; 89 N95777 /Q	**B0**	S	9	**89>Dvv**	**AE i**	3eD	4	**P@t x**	**f**	**u**			**f P; 9B; 7**

VGTJG 416 J S °vßupß	39247	VGTJG aGT 416 J S °vßupß	45248

DC4>A7A77477

M 73176
N4 451 3
N 6: 133
O 3188
O 3163
P 95176
56É89

-89=680687,

MWWWdf f b

ECOTOUGH

7D4>A7A77477

4183 MJI V
4183 V
5133 I X V

GDC LKZ-Ring

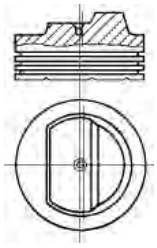
HzÄwnl 'Inttß0481<73nx 6 K°´z 9	azv@x py op´ Qzwupyx °wup 481<73nx 6	azv@x p op w nl @8 o° 't°@zy 481<73nx 6	azvlnl @bl o 't°ß y 481<73nx 6	azv@x p nl x p´l 't°@zyp 481<73nx 6

887 P5777	N	9	**>EEvv**	**8; i**	3Ge	4	**bx**	**f P9; >AB**

833 318	34293	452 7	

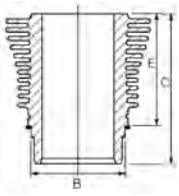
DC4A9D; 77477
DC4A9D; 7B477 *mT m*

M 6=1<3
N2 7133
P : 5163
53É8<



7D4A9D; 77477
7D4A9D; 7B477 *mT m*

5133 I X V
5133 V
6183 V



N : 8133 **O** 463133 **Q** =3133

DD4A9D; 77477
< 085<633033

Rtyp´ I @tlvmp ty Qtß Ypßzyw@	eÖ@typop´w°qn°ns°p y°´ ty G°°px mtp° @p´q r m´	I spx t°p ot°' zytmp py vtß°p°wpx pyß	I l x t°l ° ot°' zytmp py nzyu@yf2° °zwlx pyßp1	I twyo´z ot°' zytmp °zwr ty vtßx zß´p

SeQ4f ; /Q	**BRØxR 0**	P	9	**EEEvv**	**DD i**	3GND	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P; A>EE**
SeQ4f > /Q	**BRØxR 0**	S	9	**8; ; 9vv**	**88D48; 9 i**	3GaD8Gci	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P; AA77**

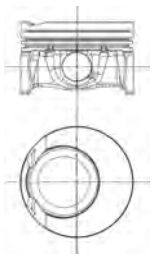
833c 416	3=24<	_TU 413 KaU	3=249
GXMJ 413	3=249		

DC4>A7E77477

M 5<133
N4 6173
N 771=:
O 5135
P 78183
4<É79

-8: 3T643GJ34,

TMWWf b

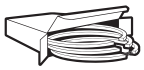


ECOTOUGH

4153 TZ
4153 V
5133 TZ

HzÄwnl 'Inttß0714=3nx 6 I l ´nzMwop) J°´zMwop @pnsyzwr Ö Yßppw	azv@x py op´ Qzwupyx °wup 714=3nx 6 I l ´nzMwop) J°´zMwop @pnsyzwr Ö Yßsw	azv@x p op w nl @8 o° 't°@zy 714=3nx 6 I l ´nzMwop) J°´zMwop @pnsyzwr Ö Gntp´	azvlnl @bl o 't°ß y 714=3nx 6 I l ´nzMwop) J°´zMwop @pnsyzwr Ö Gnp´z	azv@x p nl x p´l 't°@zyp 714=3nx 6 I l ´nzMwop) J°´zMwop @pnsyzwr Ö Gnntl tz

Niural® FITTED WITH GOETZE® RINGS



8AB M95777 /RØx0	S	9	**EEEvv**	**; 84; C i**	3SN8VD	4	**bx**		**f P8B9; 7**
8AB M95877 /RØx0	S	9	**EEEvv**	**; 94; ; i**	3SS8SV	4	**bx**		**f P>; DC**
8AB M; 5777 /RØx0	S	9	**EEEvv**	**; C i**	3/D	4	**bx**		**f P8B97E**
VGTJG 4333				342=8 452=5			_TU 78 413	392=9 452=6	
_TU 413				392<= 352=5			_TU 78 tlp1413	432=7 432=8	

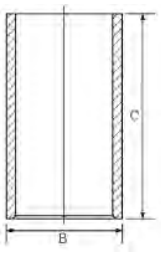
DC48A>977477
DC48A>97B477 *mT m*
DC48A>97D477 *mT m*

M 661=3
N4 3183
N 88133
P 8: 173
4<É86

7D48A>977477
7D48A>97B477 *mT m*
7D48A>97D477 *mT m*

4183 I X V
4183 V
6133 I X

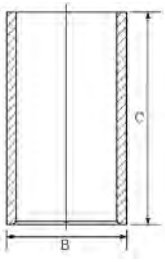
8>4787EE8477 **N** : 6135 **O** 449133



Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8AB M9578A7 /RØx0	S	9	**EEEvv**	**; ; i**	3SV	4	**bx**		**f P9999D**
8AB M9578AC /RØx0	S	9	**EEEvv**	**; ; i**	3SV	4	**bx**		**f P9999C**
_TU 78 413				3: 2=8 362=7					

8>4787EE8477 **N** : 6135 **O** 449133



8AB M9579>B /RØx0	S	9	**EEEvv**	**; ; 4>7 i**	3SV8VS	4	**bx**		**f PEE>**
8AB O57>B /RØx0	S	9	**887Dvv**	**; C4>; i**	3/D8Ve	4	**bx**		**f P>; DE**
L0IXCTU 413 tK				442=5 372=9			VGTJG 4433	382=4 3: 237	
VGTJG 414				382=4 362=8			_TU 413 tK	382=< 3<233	
VGTJG 4333				382=9 452=7			_TU 413 S twp Lt´p	39234 45236	
VGTJG 4333 tlp				3<2=5 35237			_TU 78 tlp1413	432=7 432=8	
VGTJG 4333 tlp1l I ß				432=< 3<2=<			_TU 83 414	342=3 452=6	

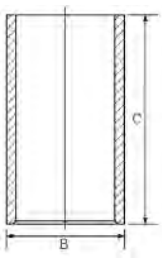
DC48A>977487
DC48A>97B487 *mT m*

M 661=3
N4 4183
P 8: 173
4<É86

7D48A>977477
7D48A>97B477 *mT m*
7D48A>97D477 *mT m*

4183 I X V
4183 V
6133 I X

8>4787EE8477 **N** : 6135 **O** 449133



Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

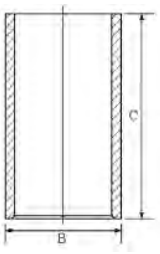
8B7 M; 5777 /RØx0	S	9	**887Dvv**	**; B4>; i**	3/a8Ve	4	**bx**		**f P878DE**
Y 97> M8M838 /RØx0	S	9	**887Dvv**	**>7 i**	3/S	4	**bx**		**Y bE89A**

VGTJG 4433	342=6	_TU 414	372<9 39239
ZOVU 414	342<< 432=4	_TU 93 414	372<=

DC48A>9774; 7
DC48A>97B4; 7 *mT m*
DC48A>97D4; 7 *mT m*

7D48A>977477
7D48A>97B477 *mT m*
7D48A>97D477 *mT m*

8>4787EE8477 **N** : 6135 **O** 449133



M 63133
N4 41<3
P 87133
4<É86

4183 I X V
4183 V
6133 I X

Y8ppw Y8 sw Gntp´ Gnp´z Gnntl tz

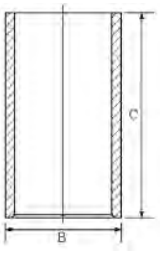
8CB MB577 /RØx0	S 9	**887Dvv**	**>7 i**	3/S 4	**bx**	**f P87; B**
8CB N9577 /Q 9 RØx0	S 9	**887Dvv**	**>7 i**	3/S 4	**bx**	**f P>; EB**
8DC MB577 /Q ; RØx0	S 9	**887Dvv**	**>74>9 i**	3/S8/c 4	**bx**	**f P8CD>C**

I CW_KI KTZU 414	432=7 342=<	VGTJG 4433	352=8 3: 237
I CW_KI KTZU aGT 414 tK	432=7 352=<	V_TZU 414	372=9 35233
VGRQU 414	39239 44244	V_TZU 88 414	3=2=6 3=2==
VGTJG 414	3=233	YKQ KTZU 2933 414	342=< 34243

DC48>9; 77477
DC48>9; 7B477 *mT m*
DC48>9; 7D477 *mT m*

7D48>9; 77477
7D48>9; 7B477 *mT m*
7D48>9; 7D477 *mT m*

8>4787EE8477 **N** : 6135 **O** 449133



M 63133
N4 41<3
N 93133
P 83133
4<É86

4153 I X V
4153 V
5183 V

8CB MC577 /RØx0	S 9	**89>9vv**	**>; 4>> i**	3/e8aD 4	**bx**	**f P87; C**

V_TZU 93 415 342=7 39233

DC48; D>77487
DC48; D>7B487 *mT m*
DC48; D>7D487 *mT m*

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

M 5<133
N4 5183
P 7: 183
4<É86

4114= TZ V
4153 V
5183 V

8CB MD577 /RØx0	S 9	**89>9vv**	**A> i**	3:P 4	**bx**	**f P87; D**
8CB N8577	S 9	**89>9vv**	**>> i**	3aD 4	**bx**	**f P87; 9**
8CB N>577 /RØx0	S 9	**89>9vv**	**>> i**	3aD 4	**bx**	**f P87CB**

8CDNA5777 /Q ; RØx0	S	9	**89>9vv**	**A74AA i**	3ae8cV	4	**bx**		**f P878DD**
8CDQ95777 /RØx0	S	9	**89>9vv**	**A74A> i**	3ae8cP	4	**bx**		**f P8BC; C**
8DDM>5777 /Q ; RØx0	S	9	**89>9vv**	**; D4>> i**	3/N8aD	4	**bx**		**f P89CE7**
99; MA5777 /Q ; RØx0	S	9	**89>9vv**	**>D i**	3aV	4	**bx**		**f P8AD9D**

JUHRU 415	36234	V_TZU 415 93	3=2== 45243
LQUXQTU 415	34237	V_TZU 93 415	3=2=6 39233
VGRQU 415	372=9	V_TZU : 8 415	432=6 3=2==
VGTJG 415	3=236	YQKTG 416	3=2=< 45245
VGTJG 415 RVM	3723=	YZXGJG 415	392==
V_TZU 415	3<234 36245	_TU 415	3<233 3<23=

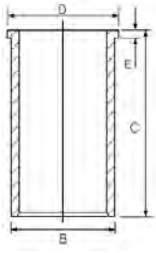
DC48; D>774>7
DC48; D>7B4>7 *mT m*

M	5<133
N4	41<3
O	4143
P	7<133
	4<É86

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

414=		TZV
4153		V
5183		V

8>47987D7477 **N** : 61<3 **O** 45<133 **P** : 8133 **Q** 8133



8CBNE5777 /RØx0	S	9	**89>9vv**	**B; i**	3ea	4	**bx**		**f PEC9C**
8D9N95777 /RØx0	S	9	**89>9vv**	**B74B> i**	3eN8ec	4	**bx**		**f P88D7C**

HXGaG 415 49a <3	452=< 45235	V_TZU 415 49a	372=: 3=2==
HXGaU 0415 49a <3	452=< 43233	V_TZU <8 49a 415	372=: 39233
S GXKG 415 49a	432=< 38235		

DC48; D>77477
DC48; D>7B477 *mT m*

M	5<138
N4	81: 3
O	4183
P	7<133
	4<É86

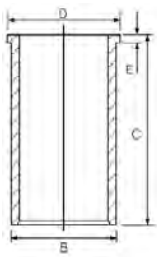
7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

414=		TZV
4153		V
5183		V

8CDQD5788 /RØx0	S	9	**89>9vv**	**>D4A7 i**	3aV8ae	4	**bx**		**f P9A77A**
8CDQE5788 /RØx0	S	9	**89>9vv**	**A74B7 i**	3ae8eN	4	**bx**		**f P9>B; 7**

VGRQU 416	36237	_TU 416	44238 37243
YQKTG 416	36237 4523=	_TU I GXMJ 415	4423= 3<246
_TU 415	34237 37243		

8>47987D7477 **N** : 61<3 **O** 45<133 **P** : 8133 **Q** 8133



8DD MA577 /Q ; RØx0	S 9	89>9vv	AC4B7 i	3ce8eN 4	bx	f P89CE8
HXGaG 415 49a <3	43233	43234	V_TZU 415 49a <3	3=2==	37239	
HXGaU 0415 49a <3	43233	43234	YQKTG 415	39234	4323:	
QJKG 415 49a	34237		YQKTG 416	3=234	4523=	
VGRQU 415	3=234	43237	YZQRU 415 49a	35235	44239	
VGRQU 416	36233	35236				

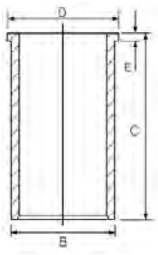
DC48; D>774; 7
DC48; D>7B4; 7 *mT m*

M 5<133
N4 8143
P 7<133
4<É7=

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

414= TZV
4153 V
5183 V

8>47987D7477 **N** : 61<3 **O** 45<133 **P** : 8133 **Q** 8133



8CDR; 5788	S 9	8; BDvv	AC4B; i	3ce8ea 4	bx	f P9>B; ;
; A7 MB577 /Q >6A0	S 9	8; BDvv	A84B; i	3ai 8ea 4	bx	f P979>D
JUHRU 417	43238		VGTJG 417	4323=		
LQJXOTU 417	3923<		V_TZU 417	3623=		
LQJXOTU 417 I TM	3923<		V_TZU 417 RVM	36245		
MXGTJK V_TZU 417	39238		V_TZU KaU 417	3623=	35245	
MXGTJK V_TZU 417 RVM	4523<		V_TZU KaU 417 RVM	3923=	35245	
QJKG 417	43238		W_HU 417	4323=		
QJKG 417 RVM	3623=		YQKTG 417	39237	4523=	
RQTKG 417	3923:		YQKTG 417 <a	37239	45243	
VGRQU 417	43235		YZXGJG 417	34239		

DC4>; BD77477
DC4>; BD7B477 *mT m*

M 59133
N4 71t 8
O 5138
P 7=133
4<É7=

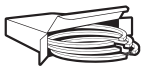
7D4>; BD77477
7D4>; BD7B477 *mT m*

4133 TZ
4153 V
5133 I X V

LKZ-Ring

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8E9 N95777	S 9	8; BDvv	BB i 3D 4	bx	f P8DAC8
D>; MB577 /Q > RØx0	S 9	8; BDvv	BA4C8 i 3ee8 c 4	bx	f P8CECD
833R 417	3=245		QJKG 417 49a	34237		
HXGaU 00417	3723:	45247	V_TZU 417	3=236	36245	
HXGaU 00417 RVM	4523<	45247	YZQRU 417	34237	3<23<	
JUHRU 417	35243		YZQRU 417 49a	43236	3<23<	
QJKG 417	45236		ZQVU 417	43248	43253	



DC4>; ; 977477
DC4>; ; 97B477 *mT m*

M 5913 3
N4 : 1<3
N 8: 193
O 4173
O 5153
P 7913 3
4<É7=

7D4>; ; 977477
7D4>; ; 97B477 *mT m*

4133 TZ
4153 V
5133 V

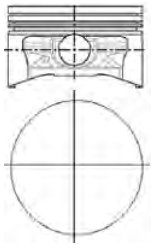
99133vb
Yfbpw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

89B M5777 N 9 **AE>vv** **8C i 3NP** 4 **bx** **f PDD7**

459 933 3=2 5 392 :

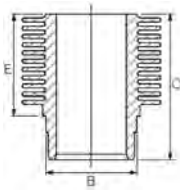
DC4A9D>77477
DC4A9D>7B477 *mT m*
DC4A9D>7D477 *mT m*

M 7313 3
P : =183
53É94



7D4A9D>77477
7D4A9D>7B477 *mT m*
7D4A9D>7D477 *mT m*

4183 I X V
5133 V
61=7 V



N <4183 **O** 463173 **Q** : =1=3

DD4A9D>77477
< 085<733033

Rtyp´ l ®tulmφ ty QtßYpßzyŵ | eÖtyop´ŵ°qnfns°p y°´ ty G°°px mtφ° ®p´q r mł´ | l spx t°p ot°' zytmφ py vtß°p°φx pyß | l l x t°l ° ot°' zytmφ py nzyuŕyßz° °zwx pyßp1 | l tuyo´z ot°' zytmφ °zw ty vtßx zßz´p

ETY /PhBgO0 S 9 **8AB7vv** **BB i 3D** 4 **P®t x f u U x v xw** **f P; 9A9E**

Yl _JU 419 J S °v®tupß 35214 36219

DC>; ; B77477
DC>; ; B7C477 *mT m*

M 741t 8
N4 461<8
N 7813 3
P 9815 3
59É94

MWWWdf f b

7D4>; ; B77477
7D4>; ; B7C477 *mT m*

5183 I Q V
41=8 V
5133 I X V

LKZ-Ring

ETg S 9 **8AB7vv** **BB i 3D** 4 **P®t x f u U x v xw** **f P9>CCB**

Yl _JU 419 J S °v®tupß 3423: 36219

DC4>9>777477
DC4>9>77D477 *mT m*

M 741 3
N4 4615 8
N 741<3
O 4153
P 9816 3
59É94

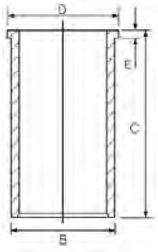
MWWWdf f b

7D4>9>777477
7D4>9>77C477 *mT m*
7D4>9>77D477 *mT m*

6133 I Q V
41=8 V
5183 I X V

LKZ-Ring

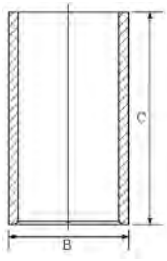
8>4797E77477 **N** : <133 **O** 475133 **P** : =183 **R** 8133



89CMA5777	S	9	**8; 78vv**	**; ; 4; D i**	3SV8VN	4	**P@t x**	**f P>; >B**
8>BN85777	S	9	**8; 78vv**	**; ; i**	3SV	4	**P@t x**	**f PE>D**
8ABMA5777	S	9	**8; 78vv**	**9C i**	3Pc	4	**P@t x**	**f PEEE**

45: 416 J	392<4	382=9	VGTJG 4633 J	372<9	452=5
45: 416 Jtp°pw	372<4	452<9	VGTJG J	382<9	372=4
47: 416 J	432<3	432=8	VKTTd 416 J	372<9	452<<
LQUXOTU 416 J	342<5	342<<	_TU 416 Y°' p´ Jtp°pw	392<6	362=5
LQUXOTU Vtnv °' 416 J	382<7	452<<			

8>4789>C7477 **N** : =133 **O** 46=133



89BMB5777	N	9	**BA9vv**	**8C i**	3NP	4	**bx**	**f P>; >;**
89BMB57>D	N	9	**BA9vv**	**8C497 i**	3NP8Nc	4	**bx**	**f PDD8**

459 983 3: 2 : 3=233

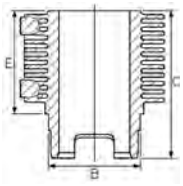
DC4CDAA77477
DC4CDAA7B477 *mT m*
DC4CDAA7D477 *mT m*

M 7313 3
P : =183
53É94

7D4CDAA77477
7D4CDAA7B477 *mT m*
7D4CDAA7D477 *mT m*

4183 I X V
5133 V
61=7 I X

N <6133 **O** 463173 **Q** : =1=3



DD4CDAA77477
< 0: <8833033

Yßppw
Rtyp´ l ®tlwmp ty QtßYpßzyŵ

Yßl sw
eÕtyop´w°qm°ns°p y°´ ty G°°px mtp°
®p´q r ml´

Gntp´
l spx t°p ot°' zytmp py vtß°p°wpx pyß

Gnp´z
l l x t°l ° ot°' zytmp py nzyt°yßz°
°zwlx pyßp1

Gnntl tz
l twyo´z ot°' zytmtp °zwr ty vtßx zßz´p

8EDM;5777	S	9	**8AEDvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9>ABD**
8EENA5777	S	9	**8AEDvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9CC9C**
9B; M;5777	S	9	**8AEDvv**	**C> i**	3GDG	4	**P@t x**	**f**	**u**			**f P9>CBD**
9B; MD5777	S	9	**8AEDvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**			**f P; ; 77D**

; A7 M; 5777	S	9	8AEDvv	DA	i	33Ga	4	P@t	x	f u U x v xw	f P9>EC;
AA9 B7 ; D>	S	9	8AEDvv	D>4DD	i	33GS8GND	4	P@t	x	f u U x v xw	f P; 8CDE
D>> M; 5777	S	9	8AEDvv	CC	i	33DV	4	P@t	x	f u U x v xw	f P; 89D>
E>7 O85777	S	9	8AEDvv	DD	i	33ND	4	P@t	x	f u U x v xw	f P; 878>
EAA M>5777	S	9	8AEDvv	DA	i	33GV	4	P@t	x	f u U x v xw	f P9AC; A

833c 419 J S °vßupß	3=247	JUHRU 419 J S °vßupß	34243
833R 419 J S °vßupß	3=245	RCTKG 419 J S °vßupß	3923=
HXGaU 419 PZJ S °vßupß	3623< 45247	ZOVU 419 J	43248 43253
HXGaU 00419 J S °vßupß	3=23: 45247		

DC4>9E; 77487
DC4>9E; 7B487 *mT m*

M	761=8
N4	461<3
N	741t 3
O	4134
O	4136
P	9<l=8
	59É96

+=5GQ: 98,

MWdf f b

7D4>9E; 77487
7D4>9E; 7B487 *mT m*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

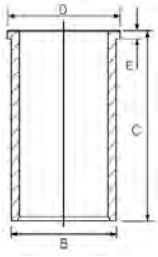
Vt°ßzy° ßz mp´p' wnpo ty Kyr typ Ypß? zywÖ HzÄwnl ' l ntßÖ 4=198nx 6 K°´z 9	Qzwmpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy azwx py op´ Qzwmpyx °wp 4=198nx 6	Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´ azwx p op w nl@ß o° ' t°ßzy 4=198nx 6	Vt°ßzyp° op´p' °p°ßz ' l ´l up°r z° op x zßz´p° °zwx pyßp azwnl@ßl o ' t°ß y 4=198nx 6	@Nt°ßzyp ' ° p°°p´p´tx ' tl ÜÜl ßz °zwx pyßp nzx ' wßz azwx p nl x p´l ' t°ßzyp 4=198nx 6

89> N5777	S	9	8>; Dvv	A8	i	3ai	4	bx			f P8DDA;
89A M5777	S	9	8B7Dvv	BB	i	3 D	4	bx			f PDCD
89A N5777	S	9	8B7Dvv	C>4D9	i	33DD8GGN	4	bx			f PDCE
89B M95777	N	9	C7>vv	8E	i	3Na	4	bx			f P>; >9
89B M957>D	N	9	C7>vv	8E	i	3Na	4	bx			f P>; >>
89D M5777	S	9	888Bvv	; ; 4>D	i	3SV8aV	4	bx			f PDDD
89D M57>D	S	9	888Bvv	; ;	i	3SV	4	bx			f PA; CD
89D M7B>	S	9	888Bvv	>74>>	i	3VS8aD	4	bx			f P9; 88D
89D MOA5777	S	9	888Bvv	>D	i	3aV	4	bx			f PDE8
8; 9 NN a Ma	S	9	8AE9vv	C84C9	i	3 c8l e	4	bx			f PBD9A
8; D MQ 7M57	S	9	888Bvv	>>	i	3aD	4	bx			f P9; >B8
8; D N5777	S	9	888Bvv	>74>>	i	3VV8aD	4	bx			f PE9;
8C7 M5777	N	9	C7>vv	9;	i	3PG	4	bx			f P879D
8C7 M57>B	N	9	C7>vv	99	i	3PD	4	bx			f P8AD7E

457 417	3=29: 382 4	465 419	372 5 342 9
457 4933	3429= 452 7	I OTW_KI KTZU 31t	452=4 342=9
458 419	3: 29: 362 7	I OTW_KI KTZU 31t t	3: 2=7 342=<
459 : 33	3=2< 392=9	XQZS U 414	3<2<3 3<2<<
45< 414	3629= 452<7	_TU 88 414	342<6 3<2<=

8>479DC87477

N <9186 **O** 458143 **P** =8133 **Q**: 1<3



dEY >7D	S 9	8AEDvv	BB4DA i	3 D8GGa	4	P x f u U x v xw	f P; ; >>C
dEY >8;	S 9	8AEDvv	C74DE i	3 V8GNG	4	P x f u U x v xw	f P; ; D; 7
dEY >A7	S 9	8AEDvv	DD487; i	3GND8GSD	4	P x f u U x v xw	f P; ; D9E
dEY >A9	S 9	8AEDvv	E9487C i	3GNV8GSV	4	P x f u U x v xw	f P; ; D; 8

ZGRKTZU 419 J 39249

DC4>9>E77477
DC4>9>E7C477 *mT m*

7D4>9>E77477
7D4>9>E7C477 *mT m*

M	79133
N4	45168
N	79183
O	3163
P	:3183
	63É93

MWWWdf f b

5133 I Q V
41:8 V
5133 I X V

8D9 NB577 /Q ;0	S 9	8AEBvv	BD4877 i	3 N8GPa	4	bx	f P8B8BB

HXGaG 419 49a	342= 45235	S _RZ0VRG aGT	43234 39243
HXGaU 0419	3=233 43234	S _RZ0VRG aGT 419	3=233 39243
JUHRU 419	3=235	VGR0U 419	392=9
JUHRU 419 49a	43234	VGR0U 419 49a	35234 34245
S GXKG 419	3=233 4523:	Y0KTG 419	44233 45245
S _RZ0VRG 419	3=233 39243	YZ0RU 419	37238 3<23<
S _RZ0VRG 419 49a	43234 39243	YZ0RU 419 49a	43234 3<23<
S _RZ0VRG 419 49a MVR	43234 39243		

DC489>D77477
DC489>D7B477 *mT m*

7D489>D77477
7D489>D7B477 *mT m*
7D489>D7D477 *mT m*

M	5<198
N4	4153
N	95133
O	517=
O	41=<
P	83198
	54É89

4153 TZ V
4153 V
5133 V

8D9 M95777 /Q 90	S 9	8C>Cvv	D; i	3GGP	4	bx	f P>; ED
8D; MB577 /Q 90	S 9	8C>Cvv	E94EC i	3GNV8GPN	4	bx	f P>>7A

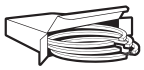
HGXI NKZZG 41< 49a	372=8 38238	I U_VK 41< 49a	362=9 3<233
HXGaG 41< MZ 49a	432=8 3<234	S GXKG 41< 448 49a	3=2=9 38235
HXGaU 041< MZ	432=8 43234	V_TZU 41< 463 NMZ	3=2== 36245

DC488D77B477 *mT m*

7D488D77747 7
7D488D77B477 *mT m*
7D488D77D477 *mT m*

M	69148
N4	3183
P	93148
	53É85

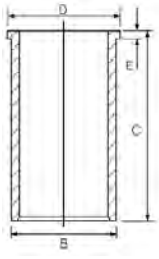
414= TZ
4153 V
5133 V



8D9 MC5777		S	9	**8E87vv**	**C> i**	3GDD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P>>7;**
8D9 MD5777		S	9	**8E87vv**	**AA i**	3cV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P>>7>**
8D9 N>5777 /Q	**90**	S	9	**8E87vv**	**CC4CE i**	3GDV8GDc	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P888BD**
8DA M95777		V	9	**9; DOvv**	**E8 i**	3GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P>>7B**
8DA MB5777 /Q	**90**	V	9	**9; DOvv**	**EB i**	3GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D8>A**
8DB MB5777 /Q	**; 0**	S	9	**8E87vv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8AD; 8**
8DD M95777 /Q	**; 0**	S	9	**8E87vv**	**AE i**	3eD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P89CDD**
8DD MC5777 /Q	**; 0**	S	9	**8E87vv**	**B; i**	3ea	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B>7E**
8E9 M; 5777 /Q	**; 0**	S	9	**8E87vv**	**AE i**	3eD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B; EC**
D; E MA5777 /Q	**90**	V	9	**9; DOvv**	**EB4EE i**	3GPG8GPV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8>>7D**

HXGaG 41=PZJ 438	452=< 43234	S GXKG 517 PZJ 463	372== 38235
HXGaG 41=ZJ : 8 Y	362=9 43234	S GXKG 517 ZJ 458	3=2=9 372==
HXGaG 41=ZJ 433 Y	362=9 43234	S _RZ0VRG 41=PZJ 438	372== 39243
HXGaU 041=PZJ 438	452=< 43234	S _RZ0VRG 41=PZJ 443	36234 3: 235
HXGaU 041=ZJ : 8 Y	362=9 43234	S _RZ0VRG aGT 41=PZJ	372== 36235
HXGaU 041=ZJ 433 Y	362=9 43234	VGR0U 41=PZJ	3=234
S GXKG 41=PZJ	34234 4523:	V_TZU 41=PZJ	35233 36245
S GXKG 41=PZJ 438	452=< 45235	V_TZU 41=PZJ <3	3=2== 36245
S GXKG 41=PZJ 443	3=233 3<235	YZ0RU 41=PZJ	43234 3<23<
S GXKG 41=ZJ : 8	3=2=9 38235	YZXGJG 41=PZJ	37236
S GXKG 41=ZJ 433	382=9 39236		

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7133
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7183



8D9 NE5777 /Q	**; 0**	S	9	**8E87vv**	**C>4CE i**	3GDD8GDc	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B; EE**
8DB MD5777		S	9	**8E87vv**	**DA i**	3GGV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D; 7E**
8DB ME5777		S	9	**8E87vv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8E; 7B**
8DD N95777		S	9	**8E87vv**	**C> i**	3GDG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D9E8**
8E9 MB5777		S	9	**8E87vv**	**DA i**	3GGV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B; ED**
8E9 MD5777		S	9	**8E87vv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P979; D**
8EE MA5777		S	9	**8E87vv**	**EB i**	3GPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97CB9**
99; MC5777		S	9	**8E87vv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D; 8D**
E; CMC5777		S	9	**8E87vv**	**DA i**	3GGV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8E; 7C**
E; E MB5777		S	9	**8E87vv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D>>D**
P8EMM		S	9	**8E87vv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97E; 7**

HXGaG 41=PZJ	3=233 43234	QJKG S PZJ	43237 45243
HXGaU 041=PZJ	3=233 43234	S GXKG 41=PZJ	34234 4523:
HXGaU 0041=J S °vßupß	44239 45247	S GXKG 41=ZJ 433	3=2=9 39236
I XUS G 41=J S °vßupß	39238 45244	S _RZ0VRG 41=PZJ	37235 39243
I XUS G 41=S PZJ	37239 45244	S _RZ0VRG 41=PZJ 448	3: 235 39243
JUHRU 41=J S °vßupß	43238	S _RZ0VRG aGT 41=PZJ	37235 39243
JUHRU 41=PZJ	43234	V_TZU 41=PZJ	39236 36245
JUHRU 41=PZJ S °vßupß	45239	YKJ0 041=J S °vßupß	39239 43244
MKGTJK V_TZU 41=J S °vßupß	43238	YZ0RU 41=J S °vßupß	3=238 3<23<
QJKG 41=PZJ	34237	YZ0RU 41=PZJ	43234 3<23<

DC489>7774;7
DC489>77D4;7 *mTm*

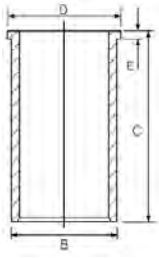
M 79183
N4 4:178
N 6:188
O 3198
P :5183
59É94

ZN df

7D489>777477
7D489>77D477 *mTm*

5183 I QV
5183 V
5183 I XV

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7183
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7183



8DDM;5777	S 9	8E87vv	>> i 3aD 4	P@t x			f P89CDE
99; MB5777/Q ;0	S 9	8E87vv	>B4>D i 3aP8aV 4	P@t x			f P8AD9E

JUHRU 41=J	36234	V_TZU 41=JY 93	3=2== 36245
VGRQU 41=J	36234	Y@XTG 41=J	34237 4523<
V_TZU 41=J 93	35233 4323=	YZXGJG 41=J	45233

DC489>777477
DC489>77D477 *mTm*

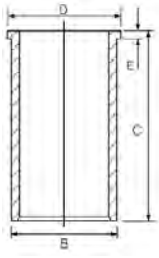
M 77178
N4 5193
P :3173
59É98

df

7D489>777477
7D489>77D477 *mTm*

5183 I QV
5183 V
5183 I XV

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7183
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7183



8E9MA5777	S 9	8E87vv	87;i 3GSD 4	P@t x	f u U x v	xw	f P8CED7
8E9N85777	S 9	8E87vv	877 i 3GPa 4	P@t x	f u U x v	xw	f P8DE>>
E;CM>5777	S 9	8E87vv	E;i 3GNa 4	P@t x	f u U x v	xw	f P8DE>;
E;CMA5777	S 9	8E87vv	887 i 3GVD 4	P@t x	f u U x v	xw	f P8DE9E
E;EM95777	S 9	8E87vv	887 i 3GVD 4	P@t x	f u U x v	xw	f P8D>>E
E;EM;5777	V 9	9;DCvv	8>C i 3NDD 4	P@t x	f u U x v	xw	f P8D>A7

HXGaU @041=J S°vßupß	3723: 45247	YZ@RU 41=J S°vßupß	3=238 3<23<
IXUSG41=J S°vßupß	39238 45244	YZ@RU 41=PZJ	3=236 3<23<
IXUSG517J S°vßupß	39238		

DC48>B877477
DC48>B87D477 *mTm*

M 79183
N4 48173
N 74183
O 4136
P :5183
59É94

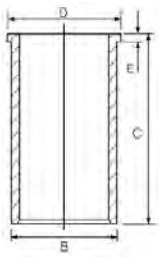
-8<5890435,

MWWWZN df fb

7D48>B877477
7D48>B87B477 *mTm*
7D48>B87D477 *mTm*

5183 I QV
5183 V
5183 I QV

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7183
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7183



i Vl /Pi D0	S 9	8DBDvv	A8 i 3ai 4	P@t x			f P989BB
i Vl /Pi DN0	S 9	8DBDvv	A8 i 3ai 4	P@t x			f P999>7

i Vm/Pi D0	S 9	**8DBDvv**	**A84A9 i** 3ai 8cG 4	**P@t x**	**f P8B; 77**
YI _JU 41=J		372=< 45239			

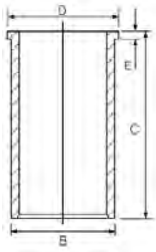
DC487>777477
DC487>77D477 *mT m*

M	791<3
N4	4163
P	: <133
	58É98

7D487>777477
7D487>77D477 *mT m*

5133		I Q V
5133		V
6133		I X V

8>47979E7477 **N** <8133 **O** 487133 **P** < 133 **Q** 8133

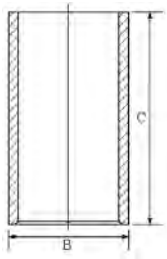


DD487>777477
< 0437333033 .
4703535=3033

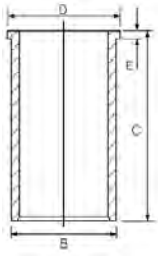
8; DO5777	S 9	**8BEDvv**	**>> i** 3aD 4	**P@t x**	**f PE9A**
8>B N95777	S 9	**8BEDvv**	**>94>> i** 3/c8aD 4	**P@t x**	**f PE>E**
8>E N; 5777	S 9	**8BEDvv**	**>> i** 3aD 4	**P@t x**	**f PEBC**
8>E N>5777	S 9	**8BEDvv**	**>94>A i** 3/c8aG 4	**P@t x**	**f PEBD**
8>E N>57>B	S 9	**8BEDvv**	**>94>> i** 3/c8aD 4	**P@t x**	**f PEBE**
8CB N; 5777	S 9	**8BEDvv**	**>9 i** 3/c 4	**P@t x**	**f PE>CC**

J_TG 41t JY	342< 452=4	VKTTd 41t J	342=9 452=3
KRHG 41t J	372<= 432=:	V_TZU 41t J	372=7 35233
LQWXCTU 41t	342<< 432=5	XKMGZG 93 Jtp°pw41t	342=7 452<=
LQWXCTU 41t J	342<< 432==	XQZS U 41t Jtp°pw	382=8 452<
LQWXCTU 93 41t J	382<< 38233	ZQVU 41t J	342<< 432=8
LQWXCTU Vtnv °' 41t J	382<< 432==	_TU 41t J	352<< 3<233
VGRQU 41t J	372=9 3=235	_TU 93 Jtp°pw41t	3: 2=9 452=6

8>478>C; 7477 **N** <913= **O** 487133

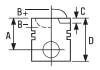


8>479; CA8477 **N** < 133 **O** 487133 **P** <=133 **Q** 7188



8>B PC5777	S 9	**8BEDvv**	**>B i** 3aP 4	**P@t x**	**f u**	**f PE>C9**
8CB MA5777	S 9	**8BEDvv**	**A94AE i** 3:G8eD 4	**P@t x**	**f u**	**f P87; A**
8CB NC5777	S 9	**8BEDvv**	**>B4>C i** 3aP8aS 4	**P@t x**	**f u**	**f PA>E;**

LQWXCTU 41t ZJ	442=9 38233	VGRQU 41t ZJ	352=:
LQWXCTU 98 41t ZJ	342=: 38234	V_TZU 41t ZJ	342=7 35233

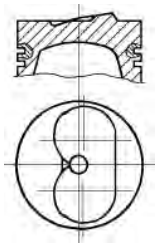


L0UXCTU Vtnv °' 41 ZJ 342=: 38234

DC4CD; D774; 7
DC4CD; D7D4; 7 *mTm*

M 75173
N2 5183
P : 9133
59É9=

TMdf



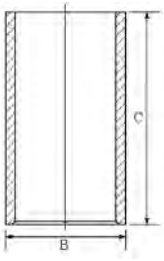
7D4CD; D77477
7D4CD; D7D477 *mTm*

6133 SURV
5133 V
6133 IXV

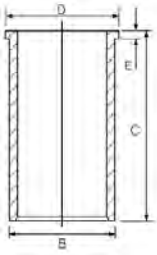
8>E MB5777	S 9	**8E9Evv**	**>D i** 3aV 4	**P0i x**		**f P>; CD**
8>E N85777	S 9	**8E9Evv**	**A84A9 i** 3cD8cG 4	**P0i x**		**f PEB;**
8>E NA57>B	S 9	**8E9Evv**	**>> i** 3aD 4	**P0i x**		**f PEB79**
8A> N5777	S 9	**8E9Evv**	**BD i** 3N 4	**P0i x**	**f u U x v xw**	**f P98>B7**
8A> OB5777	S 9	**8E9Evv**	**BB4BD i** 3D8N 4	**P0i x**	**f u U x v xw**	**f PEB98**
8A> P85777	S 9	**8E9Evv**	**BE i** 3S 4	**P0i x**	**f u U x v xw**	**f PEB99**
8B7 MC5777	S 9	**8E9Evv**	**>D i** 3aV 4	**P0i x**		**f P879;**
9; 7 M95777	S 9	**8E9Evv**	**A8 i** 3cD 4	**P0i x**		**f PDB9**
D; 8 P85777	S 9	**8E9Evv**	**AE i** 3eD 4	**P0i x**	**f u**	**f P>>87**

HXGaG 41=J	432=8 43234	XQZS U 41=ZJ	452<8 452<:
HXGaU O41=J	432=8 43234	ZGRKTZU 41=J	362<= 362=7
I XUS G 4=33 Z°´mz J tto1	3<2<: 452=9	ZKS VXG 41=J	3: 2=4 3<2=9
J_I GZU 41=J	352<: 37235	ZQVU 41=J	3: 2=4 3<2=8
XKMGZG 98 Jtp°pw41=	372<7 3: 2<=	_TU 41=J	3=2<= 362=7
XKMGZG <3 Z°´mz Jtp°pw41=	382<9 3: 2<=		

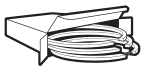
8>478>C; 7477 **N** <913= **O** 487133



8>4798; 88477 **N** <9139 **O** 487133 **P** <=133 **Q** 7183
8>479; AB7477 **N** <9133 **O** 487133 **P** <=133 **Q** 7183
8>479; CA8477 **N** < 133 **O** 487133 **P** <=133 **Q** 7188



8B7 MB5777	S 9	**8E9Evv**	**BB4BD i** 3D8N 4	**P0i x**	**f u U x v xw**	**f P>; E>**
8B7 MB57>B	S 9	**8E9Evv**	**BB4BE i** 3D8S 4	**P0i x**	**f u U x v xw**	**f P8799**



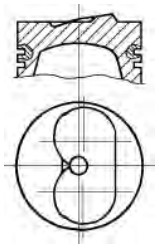
8B7 NB57>B		S	9	8E9Evv	AE i	3eN	4	P@t x	f	u	U x v xw	f P879A
8B7 P857 77		S	9	8E9Evv	BA4BB i	3ee8 D	4	P@t x	f	u	U x v xw	f P879B
9; 7 M; 577		S	9	8E9Evv	B7 i	3eN	4	P@t x	f	u		f PA>D8
9; 7 M>577 /Q	90	S	9	8E9Evv	AE i	3eD	4	P@t x	f	u		f P>>7C
9D7 MB577		S	9	8E9Evv	B7 i	3eN	4	P@t x	f	u		f P87>;

J_I GZU 41=ZJ	362<= 37235	ZKS VXG 41=ZJ	372=3 3<2=9
J_I GZU 41=ZJ I GZ	3<2=7 37235	ZOVU 41=ZJ	372=3 372=8

DC4CD; D774; 7
DC4CD; D7D4; 7 *mTm*

M 75173
N2 5183
P :9133
59É9=

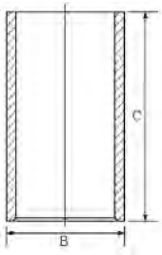
TMdf



7D4CD; D77477
7D4CD; D7D477 *mTm*

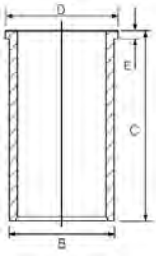
6133 SURV
5133 V
6133 IXV

8>478>C; 7477



N <913= **O** 487133

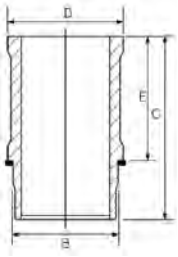
8>4798; 8847 **N** <9139 **O** 487133 **P** <=133 **Q** 7183
8>479; AB7477 **N** <9133 **O** 487133 **P** <=133 **Q** 7183
8>479; CA8477 **N** < 133 **O** 487133 **P** <=133 **Q** 7188



XRi /kgCVb0/Q	90	S	9	8CB8vv	C; i	3 i	4	bx				f P878BC

_RdYYK 41<	382=: 3<235		

8A4B; >E87477 **N** <<133 **O** 474133 **P** =: 133 **Q** =8146
8>4B; >E87477 **N** <<133 **O** 474133 **P** =: 133 **Q** =8146



Qmv@op° °pl w _°p l vz 4 TH UOXtyr NX899	Ynsw@p ßJtnsß°yr py pty S t@p Äpyopy>4 TH UOXtyr NX899	Qmv@op° uztyß° G °ßw@p´ l °°°t>4 uztyßßz´t¿°p° NX899	Qmv@Öp w@° °pw@° _ßw@l´ ß x mt y>4 TH u°yß ßz´tnl ° NX899	l zx ' ´pyop w@r °l ´ytÜzyt _°l ´p l ynsp>4 TH UOXtyr NX899

8ED MA5777		S	9	8EABvv	898 i	3GaV	4	P@t x	f	u	U x v xw	f P9>ABE
9A7 MB577 /Q	A0	S	9	8EABvv	DA i	3GGa	4	P@t x	f	u	U x v xw	f P9A8C;
9B; MB577 /Q	A0	S	9	8EABvv	EE i	3GPV	4	P@t x	f	u	U x v xw	f P9>CB>
D>> M9577		S	9	8EABvv	897 i	3GaP	4	P@t x	f	u	U x v xw	f P9>AE;
E; E NA5777		S	9	8EABvv	877489A i	3GSD8GcD	4	P@t x	f	u	U x v xw	f P9BB97
E>7 MA5777 /Q	A0	S	9	8EABvv	87; 489A i	3GSD8GcD	4	P@t x	f	u	U x v xw	f P9BBC9

HXGaU 0513 J S °Vßupß	3=23< 45247	J_I GZU 448 S °Vßupß5/3 J	39244
JUHRU 513 J S °Vßupß	34243	LXKKS UTZ 513 PZJ	3<244

DC4>; BA77477
DC4>; BA7B477 *mTm*

M 7916
N4 481<3
N 7683
P : 516
63É99

-8<677G739,

MWWdf fb

7D4>; BA77477
7D4>; BA7B477 *mTm*

4183 MJI V
4183 V
5133 I X V

GDC LKZ-Ring

PDN	S 9	**8E7Avv**	**BD i** 3N 4	**P@t x**	**f u U x v xw**		**f PBD9D**
PTk /kgPEf Q0	S 9	**8E7Avv**	**BB4BE i** 3D8 S 4	**P@t x**	**f u U x v xw**		**f P989B>**
PTk /kgPEf R6X0	S 9	**8E7Avv**	**BB4BD i** 3D8 N 4	**P@t x**	**f u U x v xw**		**f P>; A9**
J_I GZU 41=ZJ		372=< 37235		YI_JU 41=ZJ Knz		352=9	45239
YI_JU 41=ZJ		352=9 45239		_RdYYK 41=ZJ		352=8	3<235

DC487AA77477
DC487AA7C477 *mTm*

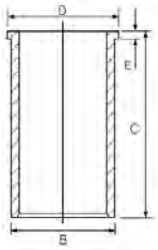
M 791 8
N4 6183
P : 8133
5<É9<

MWTMdf fb

7D487AA77477
7D487AA7C477 *mTm*

6133 I Q
5133 TZ
6133 I X V

8>4797A; 7477 **N** <8193 **O** 486183 **P** <<183 **Q** 61=3



PEN /kgPEM0/kgPE0	S 9	**8E7Avv**	**>C4A9 i** 3aS8cG 4	**P@t x**			**f P989BA**
PEN /kgPE6M6N6X6l 0/kgPE0	S 9	**8E7Avv**	**A74A8 i** 3ae8ai 4	**P@t x**			**f PBD9C**
PVl /kgPE0	S 9	**8E7Avv**	**A74A9 i** 3ae8cG 4	**P@t x**			**f P989BC**
PVl /kgPEM0	S 9	**8E7Avv**	**A7 i** 3ae 4	**P@t x**			**f P89C>D**
J_I GZU 41=J		372=< 37235		YI_JU 41=J		352=9	45239

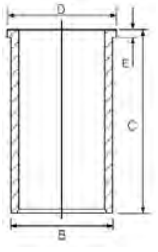
DC48A9777487
DC48A977C487 *mTm*
DC48A9787487 *mTm*

M 791<3
N4 5153
P <7163
58É: 5

7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mTm*
7D48A9787477 *mTm*

5133 I X V
5133 V
6133 I X V

8>4797A; 7477 **N** <8193 **O** 486183 **P** <<183 **Q** 61=3



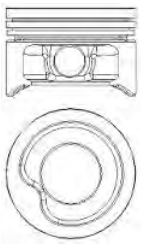
;89 M>5777 /f ØM20	N 9	**EB>vv**	**>>4>D i** 3aD8aV 4	**bx**			**f P9B>; 9**
;89 MB5777 /f ØM20	N 9	**EB>vv**	**>> i** 3aD 4	**bx**			**f P; 89>A**
833 31=		3=245		VGTJG 31=		35245	
833 I 31=		3=245		VGTJG aGT 31=		35245	

DC4>>8E77477

M 5817 6
N4 4114 6
N 931k<<
P 751=6
54É79

-8<6=80434,

f b



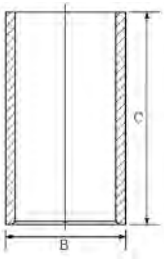
7D4>>8E77477

4133 TZ
4153 V
4183 V

HzÄwnl ' I ntßÖ 71473nx 6 Kw°ßz®w Yßppw	azwx py op´ Qzwrpyx °wp 71473nx 6 Yßsw	azwx p op w nl@ß o° ' t°ßzy 71473nx 6 Gntp´	azwnl@bl o ' t°ß y 71473nx 6 Gnp´z	azwx p nl x p´l ' t°ßzyp 71473nx 6 Gnntl tz
8; 9 MD857 7	S 9	**8CABvv**	**DC4E> i** 3GGe8GNe 4	**bx** **f P9; 898**
8; 9 O; 57; 8	S 9	**8EEAvv**	**B; 4CC i** 3ea8GDV 4	**bx** **f PE7D**
8; 9 PN59M4D9DNO	S 9	**8EEAvv**		**bx** **Y bAAA**
8A> MB577	S 9	**8EEAvv**	**BB4C> i** 3 D8GDG 4	**bx** **f P87CC**
8A> M957 7	S 9	**8EEAvv**	**88> i** 3GVV 4	**bx** **f u U x v xw** **f P87D;**
8A> O; 57>B	S 9	**8EEAvv**	**DA i** 3GGa 4	**bx** **f PED>**
8A> O>57>B	S 9	**8EEAvv**	**887 i** 3GVD 4	**bx** **f u U x v xw** **f PEDB**
8A> Q857 7	S 9	**8EEAvv**	**E; 4878 i** 3GNa8GPc 4	**bx** **f PEDE**
8AE M>577	S 9	**8CABvv**	**C>4D8 i** 3GDG8GGD 4	**bx** **f P877D**
8AE M>57>B	S 9	**8CABvv**	**CC i** 3GDV 4	**bx** **f P877E**
8AE MB57>B	S 9	**8EEAvv**	**CB4DA i** 3GDP8GGa 4	**bx** **f P8789**
D; > N577	S 9	**8EEAvv**	**DD i** 3GND 4	**bx** **f P87D>**
D; > N57>D	S 9	**8EEAvv**	**D; i** 3GGP 4	**bx** **f P87DA**
D; > N58>B	S 9	**8EEAvv**	**DA i** 3GGa 4	**bx** **f P88C7C**
D; > O58>B	S 9	**8EEAvv**	**8874889 i** 3GVD8GVN 4	**bx** **f u U x v xw** **f P87B>**
D; A O957 7	S 9	**8CABvv**	**CB i** 3GDP 4	**bx** **f P87BD**
D; A O>577	S 9	**8CABvv**	**BB i** 3 D 4	**bx** **f P87BE**
D; B M; 577	S 9	**8EEAvv**	**879 i** 3GPi 4	**bx** **f P87C8**
D; B MA577	S 9	**8CABvv**	**C84C> i** 3 c8GDG 4	**bx** **f PDE9**
D; B MB577	S 9	**8CABvv**	**BB i** 3 D 4	**bx** **f P8DDE7**
Y >78 XS59757	S 9	**8EEAvv**	**BB i** 3ei 4	**bx** **Y b8; EEC48**
Y B78 TM89757	S 9	**8EEAvv**	**BB i** 3ei 4	**bx** **Y b8; EEC**
Y B8E MM957	S 9	**8EEAvv**	**877 i** 3GPa 4	**bx** **f u** **Y bE89E**

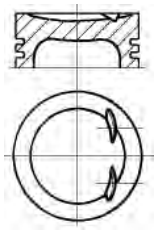
457 4<33	342 5 452 :	I XUS G 5333 tp1	362=9 3<2=9
457 4<33 XI wÖGml´ßs	3=2 5 3: 2 8	I XUS G 5333 tp1Z°´mz	452=8 3<2=9
457 5333	372 5 442=8	ZKS VXG 41< tp1	362=3 3<2=9
464 513	342 : 452=8	ZKS VXG 513	372=3 452=<
465 513	342 : 452=8	ZKS VXG 513 tp1	432=3 3=2=9
GXMKTZG 513	342 : 452=8	ZOVU 41< tp	362=6 372=8
I U_VK 513 49a	442=6 3<2=9	ZOVU 41< tp1	432=3 432=8
I XUS G 513	342=3	ZOVU 513	432=3 432=5
I XUS G 5333 49a	3<2=5 3<2=9	ZOVU 513 tp1	362=3 372=8
I XUS G 5333 I NZ	452=8 3=2=5	ZOVU 513 tp149a	362=6 372=8

8>47887>8477 **N** <<139 **O** 485133



8CAMB5777	S 9	**8EEAvv**	**8>7 i**	3G1D 4	**bx**	**f u U x v xw**	**f P>; EA**
I U_VK 513 49a Z°´mz		442=6 3<2=9					

DC48>9>77477
DC48>9>7B477 *mT m*



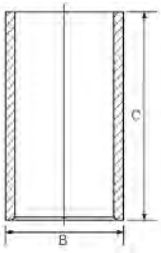
M	6=133
N4	9133
N	:5133
O	5133
P	9=133
	55É9=

MW

7D48>9>77477
7D48>9>7B477 *mT m*

4133		I Q
4133		V
6133		V

8>47887>8477 **N** <<139 **O** 485133



>Tb	S 9	**98CEvv**	**897 i**	3GaP 4	**P@t x**	**f u U x v xw**	**f P9>E>A**
>Td	S 9	**98CEvv**	**897 i**	3GaP 4	**P@t x**	**f u U x v xw**	**f P9>E>B**
>Te /Q >0	S 9	**98CEvv**	**89A i**	3GcD 4	**P@t x**	**f u U x v xw**	**f P9>CCA**
>Tf /Pi 89Nf QP>0/Q >0	S 9	**98CEvv**	**89A i**	3GcD 4	**P@t x**	**f u U x v xw**	**f P9ABAB**
_RdYYK 515 J S°wdupß		3623< 39244			_RdYYK 515 PZJ		3623< 39244

DC4>; BC77487
DC4>; BC7D487 *mT m*

M	7<t3
N4	4617:
N	85173
O	316<
P	:71t4
	63É9<

-@<83NG45:,

MWWdf fb

7D4>; BC77477
7D4>; BC7D477 *mT m*

5183		MJI V
5133		V
5133		I Q

GDC LKZ-Ring

Lz´'t°ßzy° Äß$ I 5716x x nzy´zo r l' x pl°°'po l ß' ty npyßp wyp

L´Qzwnpy x tßptypx Vwp°pw/°r pyl mfßl yo @zy 57/6 S S/r px p°°py l y op´ QzwnpynzwÚpyOS tß$p

Vz°´'t°ßzy° l@pn°y nl´ßop mtpwp op 57/6 x x x p°°´ l° np yßp op wÚ Ép mtpwp0't°ßzy

Vl´l 't°ßzyp° nzy °yl ot°ßl yntl op'l°z op mtpw py pwnpyß z opwnf wy op 57/6x x

Vp´'t°ßzyt nzy'l°°l r r tz mtpw ot 57/6 x x x t°°'l ßz °°wul °°p q´z°'tyzß$z

>Ti /Pi 89Mf QP>0	S 9	**98CEvv**	**E> i**	3GNe 4	**P@t x**	**f u U x v xw**	**f P8BCE7**
>Tk /Pi 89f QP>0	S 9	**98CEvv**	**E>4877 i**	3GNe8GPa 4	**P@t x**	**f u U x v xw**	**f P999;7**
_RdYYK 515 PZJ		3<235 3<239					

DC488>C774;7

M 7<t3
N4 4<t33
N 731k3
O 3173
O 3173
P ::t3
63É9<

MWWWdf

7D488>C77477
7D488>C7D477 *mTm*

6t33 I Q V
5t33 V
6t33 I X V

| | | |

DC488>C774>7
DC488>C7D4>7 *mT m*

M 791 3
N4 4817 3
N 771<3
O 318:
P : 51 4
5<É: 3

-8<8: 3043=,

MWWWdf f b

7D488>C77477
7D488>C7D477 *mT m*

6183 I Q V
5183 V
6183 I X V

dT79	S 9	**8EEOvv**	**E>4897 i**	3GNe8GaP 4	**P@t x**	**f u U x v**	**xw**	**f P9B8E>**
dTT /Q A0	S 9	**8EEOvv**	**897 i**	3GaP 4	**P@t x**	**f u U x v**	**xw**	**f P9>CCC**

YI _JU 513 J S °Wtupß 3: 243 36249

DC4>>; 877477
DC4>>; 87D477 *mT m*

M 791 3
N4 461 4
N 8317 3
O 3178
P : 71 4
63É9<

-8<83N055<,

MWWWdf f b

7D4>>; 877477
7D4>>; 87D477 *mT m*

5183 MJI V
5183 V
5183 I X V

GDC LKZ-Ring

HzÄwnl ' I ntÖ 59165nx 6 azwx py op´ Qzwupyx °wp 59165nx 6 azwx p op w nl @8 o° ' t°ßzy 59165nx 6 azwnl @ol o ' t°ß y 59165nx 6 azwx p nl x p´l ' t°ßzyp 59165nx 6

>Tg /b99 Pf Q bg Y M0	S 9	**98EDvv**	**DD i**	3GND 4	**P@t x**	**f u U x v**	**xw**	**f P9ABAA**

J _I GZU 515 ZJ 453

DC4>9CC77487
DC4>9CC7C487 *mT m*

M 7617 5
N4 481<8
N 791=3
P 9=1<5
63É9:

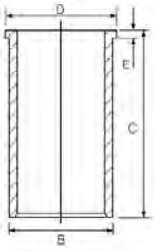
+<97<H438,

WWdf f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5183 I Q V
5183 V
5183 TZ

8>4798897477



N <=183 **O** 489183 **P** =31=3 **Q** 8183

Yf@ppw Yf@ sw Gntp´ Gnp´z Gnntl tz

>Th /Q >0	S 9	**98EDvv**	**C> i**	3GDG 4	**P@t x**	**f u**		**f P; EA; 7**

J _I GZU 433 S °Wtupß5/5 J 3: 239

DC4>9CC774; 7
DC4>9CC7C4; 7 *mT m*

M 76175
N4 481<8
N 791=3
P 9=1<5
63É9:

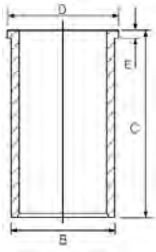
-8<983G438,

df f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5183 I Q V
5183 V
5183 TZ

8>4798897477

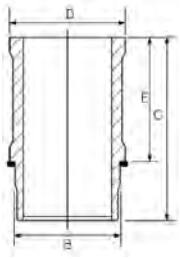


N <=183 **O** 489183 **P** =31=3 **Q** 8183

Yfppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

8C7 N	S 9	**8EC8vv**	**AA i**	3cV 4	**bx**	**f P>>8C**
8C7 P	S 9	**8EC8vv**	**B9 i**	3eS 4	**bx**	**f PA879**
J_I GZU 513		3: 2<8 382=7		ZGRKTZU 513		362<= 362=7

8>4B; BA77477



N =6183 **O** 4681t 3 **P** 4341=3 **Q** <=1=<

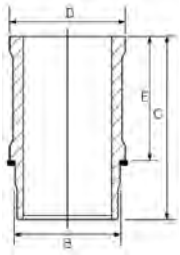
kZ 8f	S 9	**8EC8vv**	**AA4B7 i**	3cV8eN 4	**bx**	**f P>>8D**
J_I GZU 513		342=5 3<2=3				

7D4; 8BE77477
7D4; 8BE7C477 *mT m*

M 6<158
N2 3198
P : 41<8
56É: 7

4183 I X V
5183 V
7183 I X

8>4B; BA77477



N =6183 **O** 4681t 3 **P** 4341=3 **Q** <=1=<

DE4; 8BE77477
4709698330 33

Vt°ßzy I @twmwp ty QtßYpßzyvÜ
Yfppw
Ynvßop° °pl vß

Qzwwpy y°´tx G°°px mÜp´s vßWns
Yß sw
Ynsvwp ßJtnsß°yr py pty

Vt°ßzy ot°'zytmwp py vtß°p°wpx pyß
Gntp´
Ynvßop° uztyß°

Vt°ß y ot°'zytmwp py nzyu°yßz° °zwvx pyßp1
Gnp´z
YnvßÜp w° °pww°

O't°ßzyt°zyz ot°'zytmtw°zwr ty vtßx zß´p
Gnntl tz
I zx''´pyop wp r°I´ytÜzyt

R8MQ7>D8O /Q ; 0	S 9	**99DCvv**	**D8 i**	33GD 4	**P@t x f u U x v xw**	**f P8B>7C**
J_I GZU 516 PZJ		45234 3: 239				

DC48; D777477
DC48; D77B477 *mT m*

M 8: 133
N4 4<14<
N 6<133
P <7133
64É9:

MWdf f b

7D48; D777477
7D48; D77B477 *mT m*
7D48; D77D477 *mT m*

5183 I Q V
5183 V
5183 I X V

R8MQ7>D8P /Q >0	S 9	99DOvv	DD i 3GND 4 P@t x f u U x v xw f P979B>
J_I GZU 453 S °Vkupß5/6 J		3: 239	

DC48; D777487
DC48; D77B487 *mT m*
DC48; D77D487 *mT m*

7D48; D777477
7D48; D77B477 *mT m*
7D48; D77D477 *mT m*

M 8: 133
N4 461 8
N 83143
P <7133
64É9:

MWWWdf fb

5183 I Q V
5133 V
5183 I X V

R8MQ; >D8P	S 9	99DOvv	EB i 3GPG 4 P@t x f u U x v xw f P9A8C>
R8MQ; >D8Q	S 9	99DOvv	87E4887 i 3GSe8GVD 4 P@t x f u U x v xw f P9A8CA
R8MQ; >D8S	S 9	99DOvv	D94D; i 3GGG8GGP 4 P@t x f u U x v xw f P9B; 8;
J_I GZU 443 S °Vkupß5/6 J		3<239	J_I GZU 483 S °Vkupß5/6 J 39244
J_I GZU 463 S °Vkupß5/6 J		3: 239	

DC4>A7B77477

7D4>A7B77477

M 8: 133
N4 47163
N 7=133
P <7133
64É9:

MWWWdf fb

5183 MJI V
5133 V
5183 I X V

GDC LKZ-Ring

K°´z 8

fTI /PWAMf Q0	S 9	9>>Bvv	EB i 3GPG 4 P@t x f u U x v xw f P999; E
J_I GZU 0518 ZJ		3: 2=7 362=<	

DC4; 9B; 77477
DC4; 9B; 7C477 *mT m*

7D4; 9B; 77477
7D4; 9B; 7C477 *mT m*

M 7=1<7
N4 5163
P <5133
67É9<

MWTMWWdf fb

6133 VY V
41 8 I X V
6183 I X V

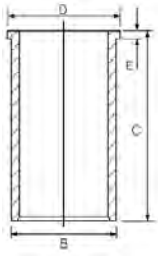
GC 7=17: 3/HC <41933

D8>757C	S 9	9A77vv	AA i 3cV 4 P@t x Yb8E878
D8>75BC	S 9	9A77vv	AA4B9 i 3cV8eS 4 P@t x f P87A9
D8>75BC9C77	S 9	9A77vv	B9 i 3eV 4 P@t x f PBD87
D8>75BC3k9; 7 /e yØ 0	S 9	9A77vv	B; i 3ea 4 P@t x Yb8E9; C
D8>75EC1 /e yØ 0	S 9	9A77vv	DA i 3GGa 4 P@t x f u U x v xw Yb8E877
D8>>5EC/e yØ 0	S 9	9A77vv	DA i 3GGV 4 P@t x f u U x v xw f P87B8
D8>>5EC59>77	S 9	9A77vv	D; 4DC i 3GGP8GGe 4 P@t x f u U x v xw f P99; 8B

D8>>5ECe /e yØ 0	S	9	9A77vv	CC i	33DV	4	PØt x	f	u	U x v	xw	f P87AE
D8>>5ECI /e yØ 0	S	9	9A77vv	DA i	33GV	4	PØt x	f	u	U x v	xw	f P87B7

I XUS G 518ZJ	342=5		J_I GZU 518 J	362=7	37235
I XUS G 5833 ZJ	382<=	3<2=9	J_I GZU 518J	342<=	
I XUS G 5833 ZJK	452=4	3<2=9			

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>75985978497; /e yØ 0	S	9	9>>Avv	BD i	3 N	4	PØt x	f	u		Y bE9>7
D8>75989698>69E /e yØ 0	S	9	9>>Avv	CC i	33DV	4	PØt x	f	u		Y bE9>8
D8>>598 /e yØ 0	S	9	9>>Avv	BD i	3 N	4	PØt x	f	u		f P>>8E
D8>>5985997	S	9	9>>Avv	BD i	3 N	4	PØt x	f	u		f PBD7;

J_I GZU 518 ZJ	342=9 352=4	J_I GZU 518ZJ	

DC49>A9774; 7

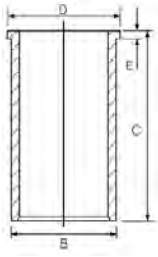
M 8=198
N4 471<3
N 841=3
P =: 198
65É: 8

df

7D49>A977477
7D49>A97D477 *mT m*

6133		I X V
5133		V
6133		I X V

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>759C /e yØ 0	S	9	9A77vv	BD4C7 i	3 N8 V	4	PØt x	f	u		f P87>C
D8>759C59877	S	9	9A77vv	C7 i	3 V	4	PØt x	f	u		f PBD77
D8>759Cd6e59C77 /e yØ 0	S	9	9A77vv				PØt x	f	u		Y bE87948

J_I GZU 518 J	3=2=9 382=3		J_I GZU 518 ZJ	3=2=9	382=7
J_I GZU 518J	342<=				

DC49>A9774>7

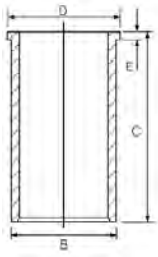
M 8<t 8
N4 4: 1=3
N 6<133
P =91 8
65É: 8

df

7D49>A977477
7D49>A97D477 *mT m*

6133		I X V
5133		V
6133		I X V

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>759Ce5; C77 /Q 80	S	9	9A77vv	CC i	33DV	4	PØt x	f	u	U x v	xw	f P978A9

D8>75>C	S	9	9A77vv	D74DA i	3GDi 8GGa	4	P6t x	f	u	U x v	xw	f P87>D
D8>75>C5j C77	S	9	9A77vv	DA i	3GGa	4	P6t x	f	u	U x v	xw	f PBD7E
D8>75>Cd /e yØ 0	S	9	9A77vv	D7 i	3GGD	4	P6t x	f	u	U x v	xw	f P87>E
D8>75>Cd59987	S	9	9A77vv	D7 i	3GGD	4	P6t x	f	u	U x v	xw	f PBD88

J_I GZU 518 ZJ	392=7 3=234	J_I GZU 518 ZJ0	362=7 37235

DC4A97977477

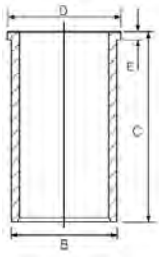
M	8<t 8
N4	4<173
N	6<133
P	=91t 8
	65É: <

MWWWZN df

7D4A97977477

6133		I X
5133		V
6133		I X V

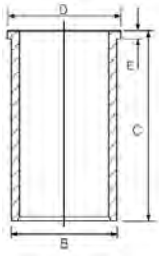
8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>75B8	S	9	9>>Avv	A; 4AA i	3cN8cV	4	P6t x					f P87A7
D8>75B8597>	S	9	9>>Avv	A; i	3cN	4	P6t x					f P87A8
D8>95B8	S	9	9>>Avv	A; i	3cN	4	P6t x					f P87A;
D8>>5B8	S	9	9>>Avv	A; 4AA i	3cN8cV	4	P6t x					f P>>7D
D8>>5B85977 /ea RUY 0	S	9	9>>Avv	A; i	3cN	4	P6t x					f PBCEB
D8>>5B85A775D8	S	9	9>>Avv	BB i	3 D	4	P6t x					f P87A>
D8>>5BC	S	9	9A77vv	AA i	3cV	4	P6t x					f P87AB
D8>>5BC5997	S	9	9A77vv	AA i	3cV	4	P6t x					f PBCEC
D8>>5D859777	S	9	9A77vv	BB4C> i	3 D8GDG	4	P6t x	f	u			f P87AC
D8>>5E859777	S	9	9>>Avv	C> i	3GDG	4	P6t x	f	u	U x v	xw	f P87AD
D8>>5EC59977	S	9	9A77vv	DB4DC i	3GGc8GGe	4	P6t x	f	u	U x v	xw	f P87B9
D8>>5EC9A77	S	9	9A77vv	DA i	3GGe	4	P6t x	f	u	U x v	xw	f P87B;

464 518 J	392 < 352<7	I GS VGMTURG 517 J	392 7 432<=
464 518 Y°' p´ Jtp°pw	362 = 452<7	I XUS G 5833 J	452<8 452<=
465 518 J	3: 2 < 3: 2<5	I XUS G 5833 ZJ	452<8 3<2<=
GXMKTZG 5833 Jtp°pw	392<4 442<8	J_I GZU 517 J	342<5 3<2=3
GXMKTZG 5833 Z°´mzotp°pw	3: 2<6 3<2<8	J_I GZU 518 J	342<5 382=7

8>4799AB7477 N =9133 O 49: 163 P =<1=3 Q 8133
8>479DE; 7477 N = 183 O 49: 133 P 4331=3 Q 8133
8>479DE; 8477 N = 18< O 49: 133 P 4331=3 Q 8133
8>479DE; 9477 N = 1 3 O 49: 133 P 4331=3 Q 8133



N 9A5B; C	S	9	9A77vv	A8 i	3ai	4	P6t x					f P98>B;
OdPE; X /g 9A4BB80	S	9	9A77vv	A>4AA i	3cP8cV	4	P6t x					f P99ED8

575 518 J	3<2<3 3: 2<5	J_I GZU 518 J	342<5 3<2=3

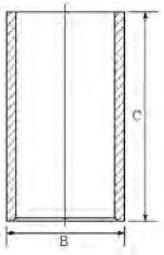
DC48A9C77477
DC48A9C7C477 *mTm*

M 851t8
N4 :163
P <1t8
63É:<

7D48A9C77477
7D48A9C7C477 *mTm*

5183 SURV
5183 V
7183 IXV

8>478; >D8477



N =9143 **O** 496133

D8>75>; /Q 9 e yØ 0 S 9 **9D77vv** **E7 i** 33NN 4 **PØt x f u** **f P88CBE**

J_I GZU 51<tJZJ 382=< 3=234 J_I GZU 51<ZJ 382=< 3:239
J_I GZU 51<PZJ 44236 3:239 J_I GZU 51<ZJ0 432=: 37235

DC4899977487
DC489997D487 *mTm*

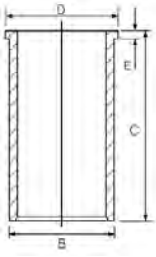
M 8<t8
N4 4=173
N 6=158
P <193
65É:5

MWWWdf fb

7D4899977487
7D489997D477 *mTm*

5183 IQV
5183 V
5183 IXV

8>4798; 98477 **N** =:187 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =:183 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =:18< **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =:1t3 **O** 49:133 **P** 4331=3 **Q** 8133



DC4DA>C77477
DC4DA>C7D477 *mTm*

M 8<t8
N4 4=173
N 6=173
P =9198
65É:<

MWWWdf

7D4DA>C77477
7D4DA>C7D477 *mTm*

6183 IX
5183 V
6183 IX

D8>75>; Z /Q ; e yØ 0 S 9 **9D77vv** **87C i** 33Sa 4 **PØt x f u U x v xw** **f P97>A7**
D8>75>; e /Q ; e yØ 0 S 9 **9D77vv** **E;487; i** 33Nc8GSD 4 **PØt x f u U x v xw** **f P8B8EB**

J_I GZU 51<PZJ 44233

DC4899977477
DC489997D477 *mTm*

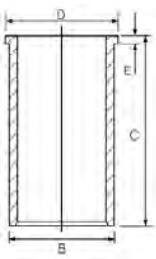
M 8<t3
N4 54163
N 6=173
P <193
65É:5

MWWWdf fb

7D4899977477
7D489997D477 *mTm*

5183 IQV
5183 V
5183 IXV

8>4798; 98477 **N** =:187 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =:183 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =:18< **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =:1t3 **O** 49:133 **P** 4331=3 **Q** 8133



D8>75B; /Q 9 e yØ 0 S 9 **9D77vv** **B> i** 3ec 4 **P@k x** **f P89C>E**

J_I GZU 51<J 352=< 37235 J_I GZU 51<ZJ 382=< 44234

DC487D977477
DC487D97D477 *mT m*

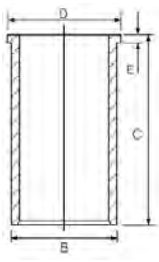
M 8813 3
N4 51<3
P =313 3
65É9<

MWTMdf fb

7D487D977477
7D487D97D477 *mT m*

6133 I X V
5133 V
5183 I X V

8>4798; 98477 **N** =: 187 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =: 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =: 18< **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =: t 3 **O** 49: 133 **P** 4331=3 **Q** 8133



R8OQ7>D8P /Q >0 S 9 **9EEEvv** **88A488B i** 3GVa8GVe 4 **P@k x** **f u U x v xw** **f P979BA**

J_I GZU 493 S °Vkupß6/3 J 3: 239

DC4>98B77477

M 9613 3
N4 4913 3
N 8313 3
P =613 3
69É<3

MWWWdf fb

7D4>98B77477
7D4>98B7B477 *mT m*

5183 I Q V
5133 V
5183 I X V

R8OQ; >D8Q /Q A0 S 9 **9EEEvv** **8; 7 i** 3Gcc 4 **P@k x** **f u U x v xw** **f P9A8CB**
R8OQ; >D8Y /Q A0 S 9 **9EEEvv** **88A i** 3GVa 4 **P@k x** **f u U x v xw** **f P9>DEC**
R8OQ; >D8Z /Q A0 S 9 **9EEEvv** **87; 487C i** 3GSD8GSV 4 **P@k x** **f u U x v xw** **f P9>DEB**

J_I GZU 483 S °Vkupß6/3 J 37243 J_I GZU 4<3 S °Vkupß6/3 J 39244
J_I GZU 493 S °Vkupß6/3 J 3: 239

DC4>98B77487

M 9613 3
N4 4913 3
N 8613 3
P =613 3
69É<3

MWWWdf fb

7D4>98B77487

5183 MJI V
5133 V
5183 I Q V

GDC LKZ-Ring

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		CCM	x		9
8m		Gei a	S	ci 9/D	8D
>MM/9>78Ql bt x N v 0		NPVe	S	i P9ac	A>
>MN		NSi a	S	i P9ac	AA
>NM		NSi a	S	i P9ac	AA
>NO		NSi a	S	i P9ac	AB
>OM		NSi a	S	i P9ac	AA
>OO		NSi a	S	i P9ac	AA
>PM		NSi a	S	i P9ac	AA
>QM		NSi a	S	i P9ac	A>
>QN		NSi a	S	i P9ac	A>
>QO		NSi a	S	i P9ac	A>
>QP		NSi a	S	i P9ac	AC
>RM		NSi a	S	i P9ac	AB
>RN		NSi a	S	i P9ac	AB
>RO		NSi a	S	i P9ac	AB
>RP		NSi a	S	i P9ac	AB
>SM		NSi a	S	i P9ac	AB
>SN		NSi a	S	i P9ac	AB
>SO		NSi a	S	i P9ac	AB
>SP		NSi a	S	i P9ac	AB
>SQ		NSi a	S	i P9ac	AB
>SR		NSi a	S	i P9ac	AB
>TM		NSi a	S	i P9ac	A>
>TN		NSi a	S	i P9ac	AB
>TO		NSi a	S	i P9ac	AB
>TP		NSi a	S	i P9ac	A>
>5B7D		GcaD	S	ci 9Pc	8C
Bl eQdlQe /9ABv 5Ø50		SGi a	S	GGG8cc	C8
Bl eQdlQe /9ABv 5Ø50		SGi V	S	GDa9ai	BA
Bl eQdlQe ; 9P /8ADv 5Ø0		NVei	P	GDa9ai	B>
Bl eQdlQe >7P /8CAv 5Ø50		Neac	P	GDa9ai	BA
CMeQdlQe /978v 5Ø50		PNi S	P	GGG8cc	BE
CMeQdlQe /9ABv 5Ø50		SGi a	S	GGG8cc	C8
CMeQdlQe /9ABv 5Ø50		SGi V	S	GDa9ai	BA
CMeQdlQe ; 9P /8ADv 5Ø0		NVei	P	GDa9ai	B>
CMeQdlQe ; 9P /8D7 v 5Ø50		Ni VD	P	GDa9ai	B>
CMeQdlQe >7P /8CAv 5Ø50		Neac	P	GDa9ai	BA
ABS		PeGi	S	GDa9ai	B>
E76A MM4PahQd		SGaN	S	GDc9NG	BC
8876B MM4PahQd		Vi SS	a	GDS9cc	B;
8; 76C MM4PahQd		aNNP	a	GDc9NG	BC
8A76B OM4PahQd		Vi SS	a	GDS9cc	B;
9BD Og5lZ5		SPi G	S	GGG8cc	C7
>78 Og5lZ5/fi 973i ; 70		aVcG	a	GGG8cc	C7
AE7Q		VSGa	a	GDD9DD	B9
AE9Q		PaGD	S	GDD9DD	B9
C88Y		GVi i	S	eD9 e	9;
C88Y gbdMf QP		GVi i	S	eD9 e	9>
9>79Ql adW/bt x N v 0		PVPc	a	i P9ac	A>
9A78Q		NVei	P	GDa9ai	B>
9A79Q		NVei	P	GDa9ai	B>
9A7; Q		NVei	P	GDa9ai	B>
9A7>Q /8CAv 5Ø50		Neac	P	GDa9ai	B>
9A7AQ /8E9 Og5lZ5		PGSa	P	GGG8cc	BD
9A7BQ /978Og5lZ5		PNi S	P	GGG8cc	BD
9A7DQ /8CAv 5Ø50		Neac	P	GDa9ai	B>
9A7DQ P9; ;		PeGi	S	GDa9ai	B>
9C78Q /9>7 v 5Ø50		Pi PP	S	GDS9cc	B;
9C7>Q		Vi SS	a	GDS9cc	B;
9C7>Qf /; B7 v 5Ø50		Vi SS	a	GDS9cc	B;

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		CCM	x		9
9C7BQ/9>7 v 5Ø50		PiPP	S	GDS9cc	B;
9C7EQ		ViSS	a	GDS9cc	B;
9C88Q/9AA v 5Ø50		SGce	S	GDc9NG	BB
9C89Q/9A> v 5Ø5bt x N v 0		SGaN	S	GDc9NG	BB
9C8;Q/;BA v 5Ø5bt x N v 0		VieG	a	GDS9cc	B;
9C8>Q/;D7 v 5Ø0		aNNc	a	GDc9NG	BB
9C8AQ/;D7 v 5Ø bt x N v P4ex Øt 0		aNNc	a	GDc9NG	BB
9C;CQ/X v x Ø 0		GVii	S	eD9ie	9;
MEM		GNii	S	cS9DD	A
MEN		GNii	S	cS9DD	A
MNRM/P t 0		Giie	S	ea9DD	;>
MQPM/P t 0		GSii	S	cP9VD	;
MRZ		Geia	S	ci9VD	8D
MTg		Geia	S	ci9VD	8D
MVY		Geia	S	ci9VD	8E
MZg		Geia	S	ci9VD	97
MaNM/Q >P t xv0		Giii	S	ec9VD	>7
MaPM		Giii	S	ec9VD	>7
MaPN		Giii	S	ec9VD	>7
MaPQ		Giii	S	ec9VD	>7
Mai M		Giii	S	ec9VD	>7
Mai N		Giii	S	ec9VD	>7
MePM		GPee	S	ca9DD	87
MePN		GPee	S	ca9DD	87
Mem		Geia	S	ci9VD	98
Mgl		Geia	S	ci9VD	8E
MhS		Geia	S	ci9VD	8D
NMM		GNii	S	cS9DD	B
NTbM/Q w t PU0		GcVP	S	eN9VD	9B
NWRM/Q BQv N x0		Giia	S	eS9DG	;7
NWRN/Q BQv N x0		Giia	S	eS9DG	;7
NWRO/Q BQv N x0		Giia	S	eS9DG	;7
NWRP/Q BQv N x0		Giia	S	eS9DG	;7
NWdM/Qv N x0		Giia	S	eS9DG	;7
NWdN/Qv N x0		Giia	S	eS9DG	;7
NZYM/Qv N 0		GSii	S	ci9DD	88
NeP;;9/8E9Og5UZ50		PGSa	P	GGG8cc	BD
NeP;;;/978 v 5Ø50		PNiS	P	GGG8cc	BE
NeP;;;JDC/978 v 5Ø50		PNiS	P	GGG8cc	BD
NeP;;;T/978 v 5Ø50		PNiS	P	GGG8cc	BE
NeP>>9/9AB v 5Ø50		SGiV	S	GGG8cc	C8
NeP>>>/9BD v 5Ø50		SPiG	S	GGG8cc	BE
NeP>>>f/9BD v 5Ø50		SPiG	S	GGG8cc	C7
OSNM/P t xv0		Gcie	S	eP9DD	9E
OSNN/P t xv0		Gcie	S	eP9DD	9E
OTNM/P t xv0		Gcie	S	eP9DD	9E
OTNN/P t xv0		Gcie	S	eP9DD	9E
OVNM/P t xv0		Giii	S	ec9VD	>7
OVNN/P t xv0		Giii	S	ec9VD	>7
OePM/P t xv0		Gcie	S	eP9DD	9E
OePN/P t xv0		Gcie	S	eP9DD	9E
Oh9>/P t 0		NGie	S	ea9DD	;A
OhRA/P t 0		NGie	S	ea9DD	;A
OhRR/P t 0		NGie	S	ea9DD	;A
OhdA/P t 0		NGie	S	ea9DD	;A
OhdM/P t 0		NGie	S	ea9DD	;A
OhdN/P t 0		NGie	S	ea9DD	;A
OhdO/P t 0		NGie	S	ea9DD	;A
OlRA/P t 0		NGie	S	ea9DD	;B
OlRM/P t 0		NGie	S	ea9DD	;A

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		CCM	x		
OI RN/P t 0		NGi e	S	ea9DD	; A
OI RO/P t 0		NGi e	S	ea9DD	; A
OI RP/P t 0		NGi e	S	ea9DD	; A
OI dM/P t 0		NGi e	S	ea9DD	; B
OI dN/P t 0		NGi e	S	ea9DD	; B
OI dO/P t 0		NGi e	S	ea9DD	; B
P9RM/P t 0		NSDN	S	ei 9 D	>;
P9RN/P t 0		NSDN	S	ei 9 D	>;
P9RQ/P t 0		NSDN	S	ei 9 D	>;
P; RM		Gi e	S	ea9DD	; >
P>RM/P t 0		NSDN	S	ei 9 D	>>
PANM/P t 0		Gi e	S	ea9DD	; >
PBNM/P t 0		Gi e	S	ea9DD	; C
PaRM/Pf9>0/P t 0		NSDN	S	ei 9 D	>A
PdRM/P t 0		NGi e	S	ea9DD	; A
PdRN/P t 0		NGi e	S	ea9DD	; A
PdRO/P t 0		NGi e	S	ea9DD	; A
QARM		NNi V	S	ei 9aD	>9
QARO		NNi V	S	ei 9aD	>9
QPNM/mx xv0		Gi ee	S	eS9eD	; 8
QPNN/mx xv0		Gi ee	S	eS9eD	; 8
QPNO/mx xv0		Gi ee	S	eS9eD	; 8
QPNP/mx xv0		Gi ee	S	eS9eD	; 8
QPPN/mx xv0		Gi ee	S	eS9eD	; 8
QPPO/mx xv0		Gi ee	S	eS9eD	; 8
QPPR/mx xv0		Gi ee	S	eS9eD	; 8
R; RM/P t 0		Gi e	S	ea9DD	; >
R>RM/P t 0		NSDN	S	ei 9 D	>;
RBVM/Ph>f P0		GPi i	S	cP9cD	>
RBVN/Ph>f P0		GPi i	S	cP9cD	>
REPM		GcVP	S	eN9VD	9C
REPN		GcVP	S	eN9VD	9C
RRNM		GcVP	S	eN9VD	9D
RRPM		GcVP	S	eN9VD	9C
RURM/P t 0		Gi e	S	ea9DD	; C
RY NM		Gi e	S	ea9DD	; C
RkPM/mx xv0		GPee	S	ca9DD	87
RkPN/mx xv0		GPee	S	ca9DD	87
RkPO/mx xv0		GPee	S	ca9DD	87
RkPP/mx xv0		GPee	S	ca9DD	87
RkRM/P t 0		NSDN	S	ei 9 D	>>
RkVM		GPee	S	ca9DD	87
RkVN		GPee	S	ca9DD	87
RlPM/mx xv0		GVi a	S	ci 9DD	89
RlPN/mx xv0		GVi a	S	ci 9DD	89
RlPO/mx xv0		GVi a	S	ci 9DD	89
RlPP/mx xv0		GVi a	S	ci 9DD	89
RlPT/mx xv0		GVi a	S	ci 9DD	89
RlVM		GVi a	S	ci 9DD	8;
RlVM/P t xv0		GVi a	S	ci 9DD	89
RlVN/P t xv0		GVi a	S	ci 9DD	89
SBPM/P t 0		Gi c	S	eV9DD	; 9
SBPN/P t 0		Gi c	S	eV9DD	; 9
SBPP/P t 0		Gi c	S	eV9DD	; 9
SDPM		GVaD	S	cV9DD	D
SDPN		GVaD	S	cV9DD	D
SDPP		GVaD	S	cV9DD	D
SDPQ		GVaD	S	cV9DD	D
SDPR		GVaD	S	cV9DD	D
SNhMVbR/P t 0		NGi e	S	ea9DD	; A

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		CCM	x		
SNhMVcV/P t 0		NGi e	S	ea9DD	;A
SNhMVci /P t 0		NGi e	S	ea9DD	;A
SXO		GGGc	S	cS9DD	C
SbPM/Q >0		GVaD	S	cV9DD	D
SbPO/Q >0		GVaD	S	cV9DD	D
SeQ		GGGc	S	cS9DD	C
SeR		GGGc	S	cS9DD	C
SeS		GGGc	S	cS9DD	C
SgP		GGGi	S	ae9cD	8
SgQ		GGGi	S	ae9cD	8
TERM/P t 0		NSDN	S	ei 9 D	>B
TERM/Q >P t 0		NSDN	S	ei 9 D	>C
TERN/Q >P t 0		NSDN	S	ei 9 D	>B
TObM/P t 0		GcVP	S	eN9VD	9B
TObN/P t 0		GcVP	S	eN9VD	9B
TTPM/Q >0		GVaD	S	cV9DD	D
TTPN/Q >0		GVaD	S	cV9DD	D
TTVM		GVaD	S	cV9DD	D
TTVN		GVaD	S	cV9DD	D
TTVO/P t 0		GVaD	S	cV9DD	D
TTVP/P t 0		GVaD	S	cV9DD	D
TTVQ/P t 0		GVaD	S	cV9DD	D
TTVR/P t 0		GVaD	S	cV9DD	D
TVNM		Gi e	S	ea9DD	;C
TVNN		Gi e	S	ea9DD	;C
TVNO		Gi e	S	ea9DD	;C
Ti PM/P t xv0		GVi a	S	ci 9DD	8>
Ti PN/P t xv0		GVi a	S	ci 9DD	8>
TkPM/P t xv0		GVi a	S	ci 9DD	8>
TkPN/P t xv0		GVi a	S	ci 9DD	8>
V9		GNi e	S	eD9 e	9A
V>O/Q w t0		GNi i	S	cS9DD	B
V>P/Q w t0		GNi i	S	cS9DD	B
V>V/Q w t0		GNi i	S	cS9DD	B
V>W/Q w t0		GNi i	S	cS9DD	B
V>X/Q w t0		GNi i	S	cS9DD	B
V>Y /Q w t0		GNi i	S	cS9DD	B
V>Z /Q w t0		GNi i	S	cS9DD	B
V>b /Q w t0		GNi i	S	cS9DD	B
V>c /Q w t0		GNi i	S	cS9DD	B
V>d /Q w t0		GNi i	S	cS9DD	B
V>e /Q w t0		GNi i	S	cS9DD	B
V>f /Q w t0		GNi i	S	cS9DD	B
VNM		GNi c	S	cS9DD	B
VNN		GNi c	S	cS9DD	B
VNO		GNi i	S	cS9DD	B
VNP		GNi c	S	cS9DD	B
VVM/Q w t0		GNi i	S	cS9DD	B
VVN/Q w t0		GNi i	S	cS9DD	B
VVO/Q w t0		GNi i	S	cS9DD	B
VVP/Q w t0		GNi i	S	cS9DD	B
VVQ/Q w t0		GNi i	S	cS9DD	B
VVR/Q w t0		GNi i	S	cS9DD	B
VVS/Q w t0		GNi i	S	cS9DD	B
VVT/Q w t0		GNi i	S	cS9DD	B
VVV/Q w t0		GNi i	S	cS9DD	B
VVW/Q w t0		GNi i	S	cS9DD	B
VVX/Q w t0		GNi i	S	cS9DD	B
VVY/Q w t0		GNi i	S	cS9DD	B
VXN		GNi c	S	cS9DD	B

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	CCM	x		9
Vc PM/Qv N 0	GVi a	S	ci 9DD	8A
Vc PN /Qv N 0	GVi a	S	ci 9DD	8A
Vc Y M/Qv N 0	GVi a	S	ci 9DD	8A
Vc Y N /Qv N 0	GVi a	S	ci 9DD	8A
Vf PM/Qv N 0	GVi a	S	ci 9DD	8A
Vf PN /Qv N 0	GVi a	S	ci 9DD	8A
Vf Y M/Qv N 0	GVi a	S	ci 9DD	8A
Vfi M	GVi a	S	ci 9DD	8A
Vfi N	GVi a	S	ci 9DD	8A
VkRM/P t 0	NSDN	S	ei 9 D	>B
VkRO /P t 0	NSDN	S	ei 9 D	>B
WTNM/P t 0	GcVP	S	eN9/D	9D
WWPM/Q >0	GcVP	S	eN9/D	9D
WWPN /Q >0	GcVP	S	eN9/D	9D
WX8BX /CA8Y 0	GVi i	S	eD9 e	9;
WZNM/P t 0	NGci	S	eV9DD	;;
WZNN /P t 0	NGci	S	eV9DD	;;
WZi M/P t 0	NGci	S	eV9DD	;;
WZi N /P t 0	NGci	S	eV9DD	;;
X8h /mx xv0	GVi a	S	ci 9DD	8;
X8f /mx xv0	GVi a	S	ci 9DD	8;
X8i /mx xv4eQ0	GVi a	S	ci 9DD	8;
X; Q	GVi e	S	eD9 e	9;
XO	GVi e	S	eD9 e	9;
Y 8OM/Qv N 0	i i e	P	cG9 D	9
Y 8ON /Qv N 0	i i e	P	cG9 D	9
Y 8PM/Q AQv N 0	i i e	P	cG9 D	9
Y 8VM/Qv N 0	i i e	P	cG9 D	9
Y 8VO /Q AQv N 0	i i e	P	cG9 D	9
Y 8VQ /Qv N 0	i i e	P	cG9 D	9
Y 8VT /Qv N 0	i i e	P	cG9 D	9
Y 9PM/Q AQv N 0	i i e	P	cG9 D	9
Y 9SM/Q AQv N 0	i i e	P	cG9 D	9
Y 9SN /Q BQv N 0	i i e	P	cG9 D	9
Y DPM/Qv N 0	GSi e	S	ci 9DD	88
Y DPN /Qv N 0	GSi e	S	ci 9DD	88
Y DPP /Qv N 0	GSi e	S	ci 9DD	88
Y DPQ /Qv N 0	GSi e	S	ci 9DD	88
Y DY M/Qv N 0	GSi i	S	ci 9DD	88
Y DY N /Qv N 0	GSi i	S	ci 9DD	88
Y EPM/Qv N 0	GSi e	S	ci 9DD	88
Y EPN /Qv N 0	GSi e	S	ci 9DD	88
Y EPS /Qv N 0	GSi e	S	ci 9DD	88
Y EPT /Qv N 0	GSi e	S	ci 9DD	88
Y EY M/Qv N 0	GSi i	S	ci 9DD	88
Y EY O /Qv N 0	GSi i	S	ci 9DD	88
Z>M	GiS	S	i D9eD	A8
Z>U	GiS	S	i D9eD	A8
Z>VN /P t xv0	Gii	S	ec9/D	>7
ZCNM	Gie	S	ea9DD	;C
ZMQ /f X97X0	GiS	S	i D9eD	A9
ZMf /f X97X0	GiS	S	i D9eD	A9
ZMh /f X97X0	GiS	S	i D9eD	A9
ZQ8	GiS	S	i D9eD	A8
ZQ>	GiS	S	i D9eD	A8
ZQA	GiS	S	i D9eD	A8
ZQV	GiS	S	i D9eD	A8
ZQX	GiS	S	i D9eD	A8
ZQe	GiS	S	i D9eD	A8
ZQf	GiS	S	i D9eD	A8

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		CCM	x		
ZSM/mx xv0		Gl ee	S	eS9eD	;8
ZSN /mx xv0		Gl ee	S	eS9eD	;8
Zd9		Gl iS	S	i D9eD	A8
ZdM		Gl iS	S	i D9eD	A8
ZdN		Gl iS	S	i D9eD	A8
ZdU		Gl iS	S	i D9eD	A8
bCbM/P t 0		GcVP	S	eN9VD	9B
bCbN /P t 0		GcVP	S	eN9VD	9B
bDRM/P t 0		NGl e	S	ea9DD	;D
bDRN /P t 0		NGl e	S	ea9DD	;D
bEbM/P t 0		GcVP	S	eN9VD	9B
bEbN /P t 0		GcVP	S	eN9VD	9B
bEbO /P t 0		GcVP	S	eN9VD	9B
bEbP /P t 0		GcVP	S	eN9VD	9B
bSRM/P t 0		NGl e	S	ea9DD	;B
bSRN /P t 0		NGl e	S	ea9DD	;B
bTRM/P t 0		NSDN	S	ei 9 D	>D
bTRO /P t 0		NSDN	S	ei 9 D	>D
bZNM/P t xv0		GVi a	S	ci 9DD	8>
cCPM/P t xv0		Gci e	S	eP9DD	9E
cVNM/P t 0		NGl e	S	ea9DD	;E
cVNN /P t 0		NGl e	S	ea9DD	;E
cVNO /P t 0		NGl e	S	ea9DD	;E
cVNP /P t 0		NGl e	S	ea9DD	;E
ccPM/P t xv0		Gci e	S	eP9DD	9E
ccPN /P t xv0		Gci e	S	eP9DD	9E
chRM/P t 0		NGl e	S	ea9DD	;E
ci RM/P t 0		NGl e	S	ea9DD	;E
cl NM/P t 0		GcVP	S	eN9VD	9D
cl i M/P t 0		GcVP	S	eN9VD	9D
d9bM/P t 0		GcVP	S	eN9VD	9B
d;bM/P t 0		GcVP	S	eN9VD	9B
dPM/mx xv0		Gci a	S	eD9aD	99
dPN /mx xv0		Gci a	S	eD9aD	99
dWM/mx xv0		Gci a	S	eD9aD	99
dWN /mx xv0		Gci a	S	eD9aD	99
dWO /mx xv0		Gci a	S	eD9aD	99
dWR /mx xv0		Gci a	S	eD9aD	99
dWT /mx xv0		Gci a	S	eD9aD	99
dWV /mx xv0		Gci a	S	eD9aD	99
dWW/mx xv0		Gci a	S	eD9aD	99
dcN /mx xv0		Gci a	S	eD9aD	99
dcO /mx xv0		Gci a	S	eD9aD	99
di bM/P t 0		GcVP	S	eN9VD	9D
di bO /P t 0		GcVP	S	eN9VD	9D
di bP /P t 0		GcVP	S	eN9VD	9D
di bQ /P t 0		GcVP	S	eN9VD	9B
di bR /P t 0		GcVP	S	eN9VD	9B
eMRM/P t 0		PGl e	V	ei 9 D	>E
eMRN /P t 0		PGl e	V	ei 9 D	>E
eON		NVDD	S	i N9DD	A;
eOO		NVDD	S	i N9DD	A;
ePNM/P t 0		Gl ie	S	ea9DD	;>
eRM/kP;f0		NSi e	S	i S9DD	AD
eRN /kP;f0		NSi e	S	i S9DD	AD
eROM/Qv N 0		i i e	P	cG9 D	9
eRON /Qv N 0		i i e	P	cG9 D	9
eROO /Qv N 0		i i e	P	cG9 D	9
eROP /Qv N 0		i i e	P	cG9 D	9
eRPM/Q AQv N 0		i i e	P	cG9 D	9

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	CCM	x		9
eRVM/Qv N 0	i i e	P	cG9 D	9
eRVN /Qv N 0	i i e	P	cG9 D	9
eRVO /Qv N 0	i i e	P	cG9 D	9
eRVP /Qv N 0	i i e	P	cG9 D	9
eTPM/P t xv f0hOf 0	GVi a	S	ci 9DD	8>
eTPN /P t xv f0hOf 0	GVi a	S	ci 9DD	8>
eTPO /P t xv f0hOf 0	GVi a	S	ci 9DD	8>
eUPM/P t xv0	GVi a	S	ci 9DD	8>
edRM/P t 0	NGi e	S	ea9DD	;B
edRN /P t 0	NGi e	S	ea9DD	;B
edRO /P t 0	NGi e	S	ea9DD	;B
edRP /P t 0	NGi e	S	ea9DD	;B
edRQ /P t 0	NGi e	S	ea9DD	;B
efb /kP;6kP;b0	NSi i	S	i S9DD	AE
efd /kP;6kP;b0	NSi e	S	i S9DD	AE
el PM/P t xv0	Gi i i	S	ec9/D	>7
f8PM/P t 0	GVaD	S	cV9DD	E
f8PN /P t 0	GVaD	S	cV9DD	E
f;PM/P t 0	GVaD	S	cV9DD	E
f;PN /P t 0	GVaD	S	cV9DD	E
f;VM/P t 0	GVaD	S	cV9DD	E
f;VN	GVaD	S	cV9DD	E
fP9C	NaaP	S	i a9DD	B8
fP9CQ	NaaS	S	i a9DD	B8
fP9Cf	NaaS	S	i a9DD	B8
fWM	i Vc	S	cS9DD	C
fWN	i Vc	S	cS9DD	C
fWi	i Vc	S	cS9DD	C
fXM	i Vc	S	cS9DD	C
fXN	i i i	S	ae9cD	8
fmVM/P t 0	GVaD	S	cV9DD	E
fmVN /P t 0	GVaD	S	cV9DD	E
gNVM/P t 0	GVaD	S	cV9DD	D
gQVN /Q AP t xv0	GSi e	S	ci 9DD	8B
gSOM/P t 0	GSi i	S	cP9/D	;
gSON /P t 0	GSi i	S	cP9/D	;
gSVO	GSi i	S	cP9/D	;
gSVQ /P t 0	GSi i	S	cP9/D	;
gTRM/P t 0	NGi e	S	ea9DD	;B
gTRN /P t 0	NGi e	S	ea9DD	;B
gTRO /P t 0	NGi e	S	ea9DD	;B
gWPM/P t 0	Gi i c	S	eV9DD	;9
gZOM/Qv N 0	GSi i	S	ci 9DD	88
gZON /Qv N 0	GSi i	S	ci 9DD	88
gZOO /Qv N 0	GSi i	S	ci 9DD	88
gZOP /Qv N 0	GSi i	S	ci 9DD	88
gZOQ /Qv N 0	GSi i	S	ci 9DD	88
gZOR /Qv N 0	GSi i	S	ci 9DD	88
gZOS /Qv N 0	GSi i	S	ci 9DD	88
gZOT /Qv N 0	GSi i	S	ci 9DD	88
gZOU/Qv N 0	GSi i	S	ci 9DD	88
gZOV /Qv N 0	GSi i	S	ci 9DD	88
gZOW/Qv N 0	GSi e	S	ci 9DD	88
gZOY /Qv N 0	GSi e	S	ci 9DD	88
gZOZ /Q BQv N 0	GSi i	S	ci 9DD	88
gedB/P t 0	NGi e	S	ea9DD	;B
gedM/P t 0	NGi e	S	ea9DD	;B
gedN /P t 0	NGi e	S	ea9DD	;B
gl dB/P t 0	NGi e	S	ea9DD	;A
i fM/kPE70	NGGN	S	i D9DD	A7

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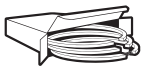
	CCM	x		9
kP9e	NPDS	S	i S9DD	AD
kP;b	NSi c	S	i S9DD	AD
kP;f	NSi c	S	i S9DD	AD
kP6bDD	Gl Se	S	ee9DD	>8
kY VM/Qv N 0	i i e	P	cG9 D	9
kY VN /Qv N 0	i i e	P	cG9 D	9
kgOM/P t 0	GSi i	S	cP9/D	;
kgOO /P t 0	GSi i	S	cP9/D	;
kgOP /P t 0	GSi i	S	cP9/D	;
kgVM/Q BP t 0	GSi i	S	cP9/D	;
kgVN /Q BP t 0	GSi i	S	cP9/D	;
kgVO /Q BP t 0	GSi i	S	cP9/D	;
khOM/P t 0	GSi i	S	cP9/D	;
khON /P t 0	GSi i	S	cP9/D	;
khOO /P t 0	GSi i	S	cP9/D	;
khVM/P t 0	GSi i	S	cP9/D	;
khVN /P t 0	GSi i	S	cP9/D	;
khVO /P t 0	GSi i	S	cP9/D	;
khVP /P t 0	GSi i	S	cP9/D	;
ki OM/Q BP t 0	GSi i	S	cP9/D	;
ki ON /Q BP t 0	GSi i	S	cP9/D	;
ki VM/Q AP t 0	GSi i	S	cP9/D	;
kkSM/Q BP t 0	GSi i	S	cP9/D	;
l AM	NNi V	S	ei 9aD	>9
l AN	NNi V	S	ei 9aD	>9
l YRM/Q BQv N x0	Gl i a	S	eS9DG	;7
l YRN /Q BQv N x0	Gl i a	S	eS9DG	;7
l YTM/Qv N x0	Gl i a	S	eS9DG	;7
l YdM/Qv N x0	Gl i a	S	eS9DG	;7
l fd /kP96kP9b6kPE>0	NPDS	S	i S9DD	B7
l ff /kP96kP9b6kPE>0	NPDS	S	i S9DD	B7
l l VM/Qv N 0	i i e	P	cG9 D	9
l l VN /Qv N 0	i i e	P	cG9 D	9
l l VO /Qv N 0	i i e	P	cG9 D	9
l l VP /Qv N 0	i i e	P	cG9 D	9
mT87VdN	i i i	S	ae9cD	8

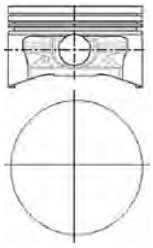


SgP	S 9	888Evv	>7 i 3VV 4	bx		f P897E
SgQ	S 9	888Evv	>7 i 3VV 4	bx		f P8987
f XN	S 9	EEEvv	;; i 3SV 4	bx		f P8>A>
mT87VdN	S 9	EEEvv	;D i 3VN 4	bx		f P9>87D

L0KYZG 414	372<= 452=5	L0KYZG 00414	362<= 452=8
L0KYZG HzoÖ2S Va 413	372<= 452=4	L0KYZG 0a 413 t	372=9 3=2==
L0KYZG 00413	362<= 452=8	QG 413 t	3: 2=: 3=2==

DC4CD>87C477 *mT m*

M 5=173
P 861=3
4<É8=



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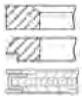
7D4CD>87C477 *mT m*



4183	SUV
418	V
6133	I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y 8OM/Qv N 0	P 9	EEDvv	E9 i 3GNV 4	bx	f u U x v xw	f P; 7CAC
Y 8ON /Qv N 0	P 9	EEDvv	E9 i 3GNV 4	bx	f u U x v xw	f P; 7CAD
Y 8PM/Q AQv N 0	P 9	EEDvv	E9 i 3GNV 4	bx	f u U x v xw	f P9B>CD
Y 8VM/Qv N 0	P 9	EEDvv	DD i 3GND 4	bx	f u U x v xw	f P9D7BD
Y 8VO /Q AQv N 0	P 9	EEDvv	E9 i 3GNV 4	bx	f u U x v xw	f P9E>; >
Y 8VQ /Qv N 0	P 9	EEDvv	E9 i 3GNV 4	bx	f u U x v xw	f P9CD; 8
Y 8VT /Qv N 0	P 9	EEDvv	E9 i 3GNV 4	bx	f u U x v xw	f P; 9CB9
Y 9PM/Q AQv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P9B>CE
Y 9SM/Q AQv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P9D9B8
Y 9SN /Q BQv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P; 887E
eROM/Qv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P9EBE>
eRON /Qv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P9EBEA
eROO /Qv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P; 8878
eROP /Qv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P; 8879
eRPM/Q AQv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P; 7; 7E
eRVM/Qv N 0	P 9	EEDvv	C> i 3GDG 4	bx	f u U x v xw	f P9CD; ;
eRVN /Qv N 0	P 9	EEDvv	C> i 3GDG 4	bx	f u U x v xw	f P9CD; >
eRVO /Qv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P; 878A
eRVP /Qv N 0	P 9	EEDvv	C> i 3GDD 4	bx	f u U x v xw	f P; 878B
kY VM/Qv N 0	P 9	EEDvv	>D i 3aV 4	bx	f u U x v xw	f P9CD; A
kY VN /Qv N 0	P 9	EEDvv	>D i 3aV 4	bx	f u U x v xw	f P9CD; B
I I VM/Qv N 0	P 9	EEDvv	87; i 3GSD 4	bx	f u U x v xw	f P; 87CC
I I VN /Qv N 0	P 9	EEDvv	87; i 3GSD 4	bx	f u U x v xw	f P; 87CD
I I VO /Qv N 0	P 9	EEDvv	87; i 3GSD 4	bx	f u U x v xw	f P; 9BD7
I I VP /Qv N 0	P 9	EEDvv	87; i 3GSD 4	bx	f u U x v xw	f P; 9BD8

HOS Gc 413	3<245	S UTJKU a 413	35248
I OS Gc 00413	43245 3924=	ZU_XTKU I UTTKI Z 2MXGTJ ZU_XTKU I UTTKI Z a73<S Va 413	44246
KI UYVUXZ 413	43246	ZU_XTKU I U_X0KX H793 S Va 413	35247
L0KYZG 413	3=246	ZXGTYQZ I UTTKI Z a73<HzoÖ2S Va 413	35246
L0KYZG aO413	3=245	ZXGTYQZ I U_X0KX H793 HzoÖ2S Va 413	35247
LUI _Y 00413	35245	ZXGTYQZ I U_X0KX H793 S Va 413	35247
MXGTJ I OS Gc 413	43245 3924=		

DC4>9>; 77477
DC4>9>; 7C477 *mT m*

M 651<3
N 7613 3
P 831<3
53É7:

MWf b

7D4>9>; 77477
7D4>9>; 7C477 *mT m*

4133 VaJ V
4153 V
5133 TZ

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz	
MQPM/P t 0	S 9	8>EEvv	CC i 3GDV 4	P6l x f u U x v xw	f P; 878D
gSOM/P t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; 7CCB
gSON /P t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; 7CCC
gSVO	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P9CD; E
gSVQ /P t 0	S 9	8>EEvv	BB4BC i 3 D8 G 4	P6l x f u U x v xw	f P9E>; C
kgOM/P t 0	S 9	8>EEvv	DD i 3GND 4	P6l x f u U x v xw	f P; 87B;
kgOO /P t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; 887;
kgOP /P t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; 887>
kgVM/Q BP t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; ; 8EB
kgVN /Q BP t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; ; 8EC
kgVO /Q BP t 0	S 9	8>EEvv	B; i 3ea 4	P6l x f u U x v xw	f P; A9CA
khOM/P t 0	S 9	8>EEvv	C7 i 3 V 4	P6l x f u U x v xw	f P; 887A
khON /P t 0	S 9	8>EEvv	C7 i 3 V 4	P6l x f u U x v xw	f P; 887B
khOO /P t 0	S 9	8>EEvv	C7 i 3 V 4	P6l x f u U x v xw	f P; 887C
khVM/P t 0	S 9	8>EEvv	C7 i 3 V 4	P6l x f u U x v xw	f P; 87C;
khVN /P t 0	S 9	8>EEvv	C7 i 3 V 4	P6l x f u U x v xw	f P; 87CE
khVO /P t 0	S 9	8>EEvv	C7 i 3 V 4	P6l x f u U x v xw	f P; 87C>
khVP /P t 0	S 9	8>EEvv	C7 i 3 V 4	P6l x f u U x v xw	f P; 8; ; ;
ki OM/Q BP t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; AE9;
ki ON /Q BP t 0	S 9	8>EEvv	AA i 3cV 4	P6l x f u U x v xw	f P; AE9>
ki VM/Q AP t 0	S 9	8>EEvv	DD i 3GND 4	P6l x f u U x v xw	f P; A9D7
kkSM/Q BP t 0	S 9	8>EEvv	C74C> i 3 V8GDG 4	P6l x f u U x v xw	f P; ; 8D>

HOS Gc 418 ZJI t	43245	S UTJKU a 418 ZJI t	36248
I OS Gc 00418 ZJI t	36248 3924=	ZU_XTKU I UTTKI Z 2MKGTJ ZU_XTKU I UTTKI Z a73< S Va 418 ZJI t	38248
KI UYVUXZ 418 KnzHWp ZJI t	38248	ZU_XTKU I U_X0KX H793 S Va 418 ZJI t	35247
KI UYVUXZ 418 ZJI t	43245	ZXGTYOZ I UTTKI Z a73< HzoÖ2S Va 418 ZJI t	38248
L0KYZG a0418 ZJI t	3=245	ZXGTYOZ I UTTKI Z S Va 418 ZJI t	38248
L0KYZG a00418 ZJI t	3824:	ZXGTYOZ I U_X0KX H793 HzoÖ2S Va 418 ZJI t	35247
LUI _Y 00418 ZJI t	3=247	ZXGTYOZ I U_X0KX H793 S Va 418 ZJI t	35247

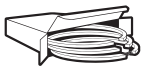
DC4>A9>77477
DC4>A9>7C477 *mT m*

M 741 3
N4 4613
N 7813 3
P 9813 3
59É8=

MWWdf f b

7D4>A9>77477
7D4>A9>7C477 *mT m*

5133 I Q
41=8 V
5133 I X



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RBVN /Ph>f P0	S	9	8; EEvv	A7	i	3ae	4	P0t x f u U x v xw	f P8C; >B

L0KYZG a 417 ZJI t	44234 45243	L_Y0UT 417 ZJI t	3<235 45245
L0KYZG a0417 ZJI t	3<23<		

DC48; A; 77477
DC48; A; 7C477 *mTm*

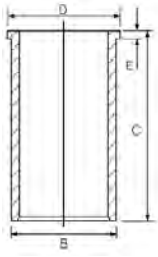
M 751=7
N4 471t 3
N 6: 149
O 4188
P 98177
58É93

MWdf fb

7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mTm*

5183 I Q V
41=8 V
5183 I X V

8>4797CB7477 **N** : 91=8 **O** 469133 **P** : <178 **Q** 8158
8>4797CB8477 **N** : 91=8 **O** 469133 **P** : <178 **Q** 8158



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MEN	S	9	89EEvv	A8	i	3cD	4	bx	f P8DCBA

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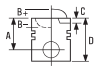
DC4>>E777477
DC4>>E77C477 *mTm*

M 571=3
N4 51<3
N 68133
P 7<1=3
4<É87

7D4>>E777477
7D4>>E77C477 *mTm*

4153 I X V
4183 V
5133 I X V

NMM	S	9	89EEvv	>>	i	3aD	4	bx	f P8C8BE
V>O /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P887DC
V>P /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P897D>
V>V /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P897C;
V>W/Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P897DA
V>X /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AE; 7
V>Y /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AEA9
V>Z /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AEA;
V>b /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AEA>
V>c /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AE; 8
V>d /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AE; 9
V>e /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AEAA
V>f /Q w t0	S	9	89EEvv	>>	i	3aD	4	bx	f P8AE; ;
VNM	S	9	89EOvv	>>4>B	i	3aD8aP	4	bx	f P899C
VNN	S	9	89EOvv	>>	i	3aD	4	bx	f P>>AE
VNO	S	9	89EEvv	>>	i	3aD	4	bx	f P899E
VNP	S	9	89EOvv	>B	i	3aP	4	bx	f P89; 7
VVM/Q w t0	S	9	89EEvv	; C	i	3/D	4	bx	f P897C8
VVN /Q w t0	S	9	89EEvv	; C	i	3/D	4	bx	f P897D;
VVO /Q w t0	S	9	89EEvv	; C	i	3/D	4	bx	f P897C9
VVP /Q w t0	S	9	89EEvv	; B	i	3Si	4	bx	f P897D9



VVQ/Q w t0	S 9	89EEvv	;C i 3/D 4	bx	f P8AE9B
VVR/Q w t0	S 9	89EEvv	;B i 3Si 4	bx	f P8AE>D
VVS/Q w t0	S 9	89EEvv	;B i 3Si 4	bx	f P8AE>E
VVT/Q w t0	S 9	89EEvv	;B i 3Si 4	bx	f P8AEA7
VVV/Q w t0	S 9	89EEvv	;C i 3/D 4	bx	f P8AE9C
VVW/Q w t0	S 9	89EEvv	;C i 3/D 4	bx	f P8AE9D
VVX/Q w t0	S 9	89EEvv	;B i 3Si 4	bx	f P8AEA8
VVY/Q w t0	S 9	89EEvv	;C i 3/D 4	bx	f P8AE9E
VXN	S 9	89EOvv	>> i 3aD 4	bx	f P89;C

KYI UXZ Qa 416	342<9 432=3	L0KYZG Q0416	362<= 452=8
KYI UXZ Qa KÉ' ´p°° 416	352<9 3:2=3	L0KYZG Qa 416 t	3<2=8 3423 5
KYI UXZ a KÉ' ´p°° 416	3:2=3 452=7	QG 416 t	3=2=9 4423<
L0KYZG HzoÖ2S Va 416	352<9 3<236	UXQJT Q0416	452<8 3:2=3

DC4CDA777477
DC4CDA77C477 *mT m*
DC4CDA788477 *Tmm*

7D4CDA777477
7D4CDA77C477 *mT m*
7D4CDA788477 *Tmm*

M 5=173
P 861=3
4<É97

4183		I X V
41:8		V
6133		I X

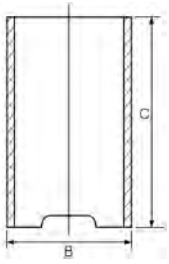
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

SXO	S 9	888Ovv	;C i 3/D 4	bx	f P88ED
SeQ	S 9	888Ovv	;C4>7 i 3/D8VV 4	bx	f P897;
SeR	S 9	888Ovv	;C i 3/D 4	bx	f P897>
SeS	S 9	888Ovv	;C i 3/D 4	bx	f P897A
f WM	S 9	EAOvv	9E i 3SD 4	bx	f P>>EA
f WN	S 9	EAOvv	;; i 3SV 4	bx	f P8>A9
f WI	S 9	EAOvv	9E i 3SD 4	bx	f P>>EB
f XM	S 9	EAOvv	;; i 3SV 4	bx	f P8>A;

KYI UXZ Q0414	3<2<6 452<8	L0KYZG Q31=	382 9 3<2<6
KYI UXZ Qa 414	432<8 3=2=3	L0KYZG Q0413	3=2<6 352<=
KYI UXZ Qa KÉ' ´p°° 414	382<9 3:2=3	L0KYZG Q0414	3=2<6 352<=
L0KYZG 413	432: 442<=		

8>4787D; 7477

N::149 O 44=194



SDPM	S 9	8AB7vv	D7 i 3GDi 4	P6t x f u U x v xw	f P8DA7D
SDPN	S 9	8AB7vv	D7 i 3GDi 4	P6t x f u U x v xw	f P8DA7E
SDPP	S 9	8AB7vv	D7 i 3GDi 4	P6t x f u U x v xw	f P9>;A8

SDPQ		S	9	8AB7vv	D7	i	33D	4	P@	x	f P9ACE7
SDPR		S	9	8AB7vv	D7	i	33D	4	P@	x	f P9ACE8
SbPM/Q	>0	S	9	8AB7vv	BB	i	3 D	4	P@	x	f P9>; >D
SbPO/Q	>0	S	9	8AB7vv	BB	i	3 D	4	P@	x	f P9>BB7
TTPM/Q	>0	S	9	8AB7vv	BB	i	3 D	4	P@	x	f P8D>CD
TTPN/Q	>0	S	9	8AB7vv	BB	i	3 D	4	P@	x	f P8D>CE
TTVM		S	9	8AB7vv	BB	i	3 D	4	P@	x	f P8CEDD
TTVN		S	9	8AB7vv	BB	i	3 D	4	P@	x	f P8CEDE
TTVO/P t	0	S	9	8AB7vv	BB	i	3 D	4	P@	x	f P9>>8B
TTVP/P t	0	S	9	8AB7vv	BB	i	3 D	4	P@	x	f P9; A>;
TTVQ/P t	0	S	9	8AB7vv	BB	i	3 D	4	P@	x	f P9>>8C
TTVR/P t	0	S	9	8AB7vv	AA	i	3cV	4	P@	x	f P9>>8D
gNVM/P t	0	S	9	8AB7vv	AA	i	3cV	4	P@	x	f P9>>8E

I OS Gc 419 ZJI t	3523: 3=243	LUI _Y I OS Gc 419 ZJI t	43236 3623:
L@KYZG 419 ZJI t	43243	LUI _Y @0419 ZJI t	3: 237 3=245
L@KYZG a 419 ZJI t	44237 3=23=	L_Y@JT 419 ZJI t	44237 45245
L@KYZG a0419 ZJI t	3923<		

DC4>9>777477
DC4>9>77D477 *mTm*

M 741t 3
N4 4615 8
N 741<3
O 4153
P 9816 3
59É94

MWWWdf fb

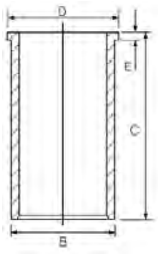
7D4>9>777477
7D4>9>77C477 *mTm*
7D4>9>77D477 *mTm*

6133 I QV
41=8 V
5183 I XV

LKZ-Ring

8>4797E77477

N : <133 **O** 475133 **P** : =183 **R** 8133



f8PM/P t	0	S	9	8AB7vv	DA	i	33GV	4	P@	x	f P9ADD;
f8PN/P t	0	S	9	8AB7vv	DA	i	33GV	4	P@	x	f P9ADD>
f;PM/P t	0	S	9	8AB7vv	C7	i	3 V	4	P@	x	f P9ADD8
f;PN/P t	0	S	9	8AB7vv	C7	i	3 V	4	P@	x	f P9ADD9
f;VM/P t	0	S	9	8AB7vv	C7	i	3 V	4	P@	x	f P9B>C;
f;VN		S	9	8AB7vv	C7	i	3 V	4	P@	x	f P9D7BE
fmVM/P t	0	S	9	8AB7vv	C7	i	3 V	4	P@	x	f P9>>97
fmVN/P t	0	S	9	8AB7vv	C7	i	3 V	4	P@	x	f P9>>98

HOS Gc 419 ZJI t	43245	L@KYZG a0419 ZJI t	35243
I OS Gc @0419 ZJI t	45243 3924=	LUI _Y @0419 ZJI t	3: 243
L@KYZG 419 ZJI t	35243 45243	MKGTJ I OS Gc 419 ZJI t	45243 3924=

DC4>;;B77477
DC4>;;B7C477 *mTm*

M 741t 8
N4 461<8
N 7813 3
P 9815 3
59É94

MWWWdf fb

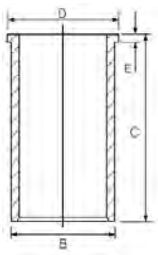
7D4>;;B77477
7D4>;;B7C477 *mTm*

5183 I QV
41=8 V
5133 I XV

LKZ-Ring

8>4797E77477

N : <133 **O** 475133 **P** : =183 **R** 8133



MePM		S	9	8;DDvv	AE	i	3eD	4	bx		f P8DA78

MePN	S 9	8; DDvv	AE i 3eD 4	bx	f P8DA79
RkPM/mx xv0	S 9	8; DDvv	AA i 3cV 4	bx	f P897CA
RkPN /mx xv0	S 9	8; DDvv	AA i 3cV 4	bx	f P8ADE9
RkPO /mx xv0	S 9	8; DDvv	AA i 3cV 4	bx	f P897CB
RkPP /mx xv0	S 9	8; DDvv	AA i 3cV 4	bx	f P8ADE;
RkVM	S 9	8; DDvv	AE4B9 i 3eD8eS 4	bx	f P8C; 7>
RkVN	S 9	8; DDvv	AE4B9 i 3eD8eS 4	bx	f P8C; 7A

L0KYZG a 417	38235 3=238	LUI _Y 0417 49a	432=< 44237
L0KYZG a 417 49a	44234 3923<	LUI _Y 00417	3: 237 3=245
LUI _Y 0417	372== 36238	L_Y0UT 417	3<235 45245

DC4>9B877477
DC4>9B87C477 *mT m*

M 5<158
N2 4158
P 88183
4=É83

7D4>9B877477
7D4>9B87C477 *mT m*

4153 TZ
4183 V
5183 TZ

NZYM/Qv N 0	S 9	8>EEvv	DD i 3GND 4	bx	f u U x v	xw	f P; ; 8DC
YDPM/Qv N 0	S 9	8>EDvv	887 i 3GVD 4	bx	f u U x v	xw	f P9EC98
YDPN /Qv N 0	S 9	8>EDvv	887 i 3GVD 4	bx	f u U x v	xw	f P9EC99
YDPP /Qv N 0	S 9	8>EDvv	887 i 3GVD 4	bx	f u U x v	xw	f P; E>E8
YDPQ /Qv N 0	S 9	8>EDvv	887 i 3GVD 4	bx	f u U x v	xw	f P; E>E9
YDYM/Qv N 0	S 9	8>EEvv	887 i 3GVD 4	bx	f u U x v	xw	f P; 8; ; 8
YDYN /Qv N 0	S 9	8>EEvv	887 i 3GVD 4	bx	f u U x v	xw	f P; ; 8DA
YEPM/Qv N 0	S 9	8>EDvv	8; 948; > i 3Gci 8GeN 4	bx	f u U x v	xw	f P9EC9;
YEPN /Qv N 0	S 9	8>EDvv	8; 948; > i 3Gci 8GeN 4	bx	f u U x v	xw	f P9EC9>
YEPS /Qv N 0	S 9	8>EDvv	8; > i 3GeN 4	bx	f u U x v	xw	f P; ; 8C7
YEPT /Qv N 0	S 9	8>EDvv	8; > i 3GeN 4	bx	f u U x v	xw	f P; ; 8C8
YEYM/Qv N 0	S 9	8>EEvv	8; 948; > i 3GeN 4	bx	f u U x v	xw	f P; 8; ; 9
YEYO /Qv N 0	S 9	8>EEvv	8; > i 3GeN 4	bx	f u U x v	xw	f P; ; 8DB
gZOM/Qv N 0	S 9	8>EEvv	88D i 3GaD 4	bx	f u U x v	xw	f P; 7A; 7
gZON /Qv N 0	S 9	8>EEvv	88D i 3GaD 4	bx	f u U x v	xw	f P; 7A; 8
gZOO /Qv N 0	S 9	8>EEvv	887 i 3GSi 4	bx	f u U x v	xw	f P; 7A; >
gZOP /Qv N 0	S 9	8>EEvv	887 i 3GVD 4	bx	f u U x v	xw	f P; 7A; A
gZOQ/Qv N 0	S 9	8>EEvv	88D i 3GaD 4	bx	f u U x v	xw	f P; 7A; 9
gZOR/Qv N 0	S 9	8>EEvv	88D i 3GaD 4	bx	f u U x v	xw	f P; 7A; ;
gZOS /Qv N 0	S 9	8>EEvv	8; 9 i 3GeD 4	bx	f u U x v	xw	f P; ; 8ED
gZOT /Qv N 0	S 9	8>EEvv	8; 9 i 3GeD 4	bx	f u U x v	xw	f P; ; 8EE
gZOU/Qv N 0	S 9	8>EEvv	88D i 3GaD 4	bx	f u U x v	xw	f P; 87D9
gZOV /Qv N 0	S 9	8>EEvv	88D i 3GaD 4	bx	f u U x v	xw	f P; 87D;
gZOW/Qv N 0	S 9	8>EDvv	88D i 3GaD 4	bx	f u U x v	xw	f P; 87D>
gZOY /Qv N 0	S 9	8>EDvv	88D i 3GaD 4	bx	f u U x v	xw	f P; ; 977
gZOZ /Q BQv N 0	S 9	8>EEvv	898 i 3GaV 4	bx	f u U x v	xw	f P; AEE>

I OS Gc 00418	36248 3924=	Q_MG 00418	3=247
LUI _Y 00418	3=247	Q_MG 0aGT 418	3=247

MGRGcd 00418	34218 3924<	SUTJKU a 418	3=247
MXGTJ I OS Gc 418	36218 3924=	YOS Gc 418	34218 3924<

DC4>A9D77487
DC4>A9D7C487 *mT m*

M	671<8
N4	=163
N	86183
O	6186
O	617:
P	861=3
	54É7=

f b

7D4>A9D77487
7D4>A9D7C487 *mT m*

4153		VaJ V
4153		V
5133		TZ

Rl ßp´ pyr typ/ nspnv ´tyr ßstnvyp°°	Y' ßp´p´ S zßz´/ Xtyr otnvp ' ´ qpy	S zßp°´ °w ´tp°´/ ®´tqp´ w ' l t°°p°´ o°	S zßz´ ' z°ßp´tz´/ nzx ' ´zm1´ p°' p°z´	S zßz´p °°nnp°°t@/ nzyßzw ´p °' p°°z´p
Yßppw	YßI sw	Gntp´ °pr x pyß	Gnp´z °pr x pyßz°	Gnntl tz °pr x pyßz

Rl PM/mx xv0	S 9	**8AEBvv**	**C>4CA i**	3GDD8GDN	4	**bx**		**f P897CC**
Rl PN /mx xv0	S 9	**8AEBvv**	**C> i**	3GDD	4	**bx**		**f P8ADE>**
Rl PO /mx xv0	S 9	**8AEBvv**	**C> i**	3GDD	4	**bx**		**f P897CD**
Rl PP /mx xv0	S 9	**8AEBvv**	**C> i**	3GDD	4	**bx**		**f P8ADEA**
Rl PT /mx xv0	S 9	**8AEBvv**	**C>4CA i**	3GDD8GDN	4	**bx**		**f P8DCCB**
Rl VM/P t xv0	S 9	**8AEBvv**	**C> i**	3GDD	4	**bx**		**f P8C; 7B**
Rl VN /P t xv0	S 9	**8AEBvv**	**C> i**	3GDD	4	**bx**		**f P8DCCD**

I U_X0KX 419	3<234 45244	LUI _Y 0419 49a	432=< 44237
L0KYZG a 419 49a	44234 3923<	L_Y0UT 419	3<235 4423=
LUI _Y 0419	372== 3923:		

DC48>8; 77477
DC48>8; 7C477 *mT m*
34236

M	58138
P	7<143
	4<É83

7D48>8; 77477
7D48>8; 7C477 *mT m*

4153		TZ
4183		V
5133		I X

DC48>8; 77487
DC48>8; 7C487 *mT m*
34236

M	58183
N4	3198
N	8: 163
P	7<138
	4<É84

f b

7D48>8; 77487
7D48>8; 7C487 *mT m*

4153		VaJ V
4183		V
5133		TZ

Kw°ßz®w
Yßppw YßI sw Gntp´ °pr x pyß Gnp´z °pr x pyßz° Gnntl tz °pr x pyßz

Rl VM	S 9	**8AEBvv**	**C> i**	3GDD	4	**bx**		**f P9; C; 7**

X8h /mx xv0	S 9	8AEBvv	C74CB i 3 V8GDP 4	bx			f P8AE; B
X8f /mx xv0	S 9	8AEBvv	CB i 3GDP 4	bx			f P8AE; A
X8i /mx xv4eQ0	S 9	8AEBvv	CB i 3GDP 4	bx			f P8DCC7

L0KYZG 419 t	37237 4523<	L0KYZG @a 419 49a	35233 34235
L0KYZG @a 419	39233 39235	V_S G 419 49a	3<233 39235

DC48>8; 77477
DC48>8; 7C477 *mT m*

M 58138
P 7<143
4<É83

7D48>8; 77477
7D48>8; 7C477 *mT m*

4153 TZ
4183 V
5133 I X

KwºBz®w
Y@ppw Y@sw Gntp´ Gnp´z Gnntl tz

Ti PM/P t xv0	S 9	8AEBvv	C> i 3GDD 4	bx			f P8DA7;
Ti PN/P t xv0	S 9	8AEBvv	C> i 3GDD 4	bx			f P8DA7>
TkPM/P t xv0	S 9	8AEBvv	DA i 3GGV 4	bx			f P8DA7A
TkPN/P t xv0	S 9	8AEBvv	DA i 3GGV 4	bx			f P9; ; BA
bZNM/P t xv0	S 9	8AEBvv	E9 i 3GNV 4	bx			f P9; ; 79
eTPM/P t xv f@hOf 0	S 9	8AEBvv	C> i 3GDG 4	bx			f P989>C
eTPN/P t xv f@hOf 0	S 9	8AEBvv	C> i 3GDG 4	bx			f P9>; >A
eTPO/P t xv f@hOf 0	S 9	8AEBvv	C> i 3GDG 4	bx			f P9>; >B
eUPM/P t xv0	S 9	8AEBvv	DA i 3GGV 4	bx			f P9; ; BB

I OS Gc 419	3523: 3=243	LUI _Y 0419 RVM	4323= 3=245
LUI _Y I OS Gc 419	43236 3623:	LUI _Y 0419 Zt	3: 237 3=245
LUI _Y I OS Gc 419 Zt	3<237 3623:	LUI _Y 0419 Zt0aI Z	3=238 3: 244
LUI _Y 0419	3: 237 3=245	S UTJKU @a 419 Zt	3623: 34248

DC48>8; 77497
DC48>8; 7C497 *mT m*
3423:

M 58173
N4 31 3
N 831=3
O 61<3
O 51 9
P 86173
4<É84

7D48>8; 77487
7D48>8; 7C487 *mT m*

4153 VaJ V
4183 V
5133 TZ

Y@ppw Y@sw Gntp´ Gnp´z Gnntl tz

Vc PM/Qv N 0	S 9	8AEBvv	887 i 3GVD 4	bx	f u U x v	xw	f P9ADCC
Vc PN/Qv N 0	S 9	8AEBvv	887 i 3GVD 4	bx	f u U x v	xw	f P9ADCD
Vc Y M/Qv N 0	S 9	8AEBvv	887 i 3GVD 4	bx	f u U x v	xw	f P9E>E7
Vc Y N/Qv N 0	S 9	8AEBvv	887 i 3GVD 4	bx	f u U x v	xw	f P9E>E8
Vf PM/Qv N 0	S 9	8AEBvv	8; > i 3GeN 4	bx	f u U x v	xw	f P9ADCE
Vf PN/Qv N 0	S 9	8AEBvv	8; > i 3GeN 4	bx	f u U x v	xw	f P9ADD7
Vf Y M/Qv N 0	S 9	8AEBvv	8; 748; > i 3Gci 8GeN 4	bx	f u U x v	xw	f P9E>E9
Vf i M	S 9	8AEBvv	88D i 3GaD 4	bx	f u U x v	xw	f P9D7BA

Vfi N	S 9	8AEBvv	88D i	3GaD 4	bx	f u U x v xw	f P9D7BB
I OS Gc 0419		45243	3924=	MKGTJ I OS Gc 419		45243	3924=
LUI _Y 00419		3: 243		Q_MG 00419		43245	
MGRGcd 00419		44243	39248	YOS Gc 419		35244	45247
MGRGcd S Q 00aGT		35244	39248	YOS Gc aGT 419		35244	45247

DC4>A9D774; 7
DC4>A9D7C4; 7 *mT m*

M	68133	
N4	44183	
N	861t 3	
O	6176	
O	519:	
P	87133	
	54É7=	

f b

7D4>A9D77487
7D4>A9D7C487 *mT m*

4153		VaJ V
4153		V
5133		TZ

Rlßp´pyrtyp/nspnv´tyr ßstnvyp°°	Y' ßp´p´Szßz´/Xtyrotnvp''´qpy	Szßp°´°w´tp°´/®´tdp´w'lt°°p´°°	Szßz´'z°ßp´tz´/nzx''zm´p°'p°z´	Szßz´p°°nnp°°t®z/nzyßzw´p°'p°°z´p
°prx pyß	°prx pyß	°prx pyßz°	°prx pyßz	
Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz

gQVN /Q AP t xv0	S 9	8>EDvv	CC4D9 i	3GDV8GGG 4	bx	f P9E>; A
Kl UYVUXZ 418 Zt		43246		QG. 00418		3=248

DC4>9>>77477
DC4>9>>7C477 *mT m*

M	5: 188	
N2	4158	
O	7199	
O	6145	
P	7: 1<3	
	4=É88	

MWTMf b

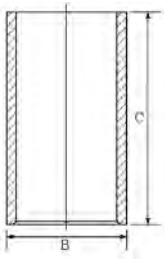
7D4>9>>77477
7D4>9>>7C477 *mT m*

4153		VaJ V
4183		V
5133		TZ

Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz

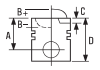
>B7D	S 9	8CB7vv	P@t x	Yb8; >B48
ZXGTYQ 41<J		34298	452 <	

8>4787E77477



N <5196 O 498143

8m	S 9	8DEBvv	BB i	3 D 4	P@t x	f u U x v xw	f P88; C7
MRZ	S 9	8DEBvv	D8 i	3GGD 4	P@t x	f u U x v xw	f P88; BD
MTg	S 9	8DEBvv	BB i	3 D 4	P@t x	f u U x v xw	f P88; BE
MhS	S 9	8DEBvv	D8 i	3GGD 4	P@t x	f u U x v xw	f P8CAAC
MGRGcd 041=ZJ O		362=8	38239	MGRGcd S Q OaGT 41=ZJt		3=2=9	36239



DC488>E774B7
DC488>E7C4B7 *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P 9<1<3
59É99

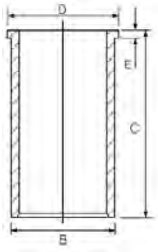
-8: =< ,

MWWWZN df

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 IQV
5133 V
6133 IXV

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71:3

DC488>E774C7
DC488>E7C4C7 *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P 9<1<3
59É99

-8: =< G,

MWWWZN df

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 IQV
5133 V
6133 IXV

DC488>E774E7
DC488>E7C4E7 *mTm*
DC488>E774EA
DC488>E7C4EA *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P : 41<3
59É99

MWZN df

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 IQV
5133 V
6133 IXV

Zz nÖuyop´4) 5
HzÃwnl 'lntfÖ56187nx6
GC 781883/JC 9<1883
Zz nÖuyop´6) 7
GC 781883/JC :41883

Iy eÖuyop´4) 5

°°´nÖuyo´p4) 5

py pwntuyo´z4) 5

Intuyo´z4) 5

MWY S 9 **8DEBvv** **DA i** 3GGa 4 **P6t x f u U x v xw** **f P8>87D**

Mgl S 9 **8DEBvv** **DA i** 3GGV 4 **P6t x f u U x v xw** **f P8>E8D**

MGRGcd 041=ZJO 37233 38239

MGRGcd SQ0aGT 41=ZJt 38233 36239

DC488>E7747A
DC488>E7C47A *mTm*
3=235

M 781<3
N4 4:1<3
N 6<133
O 4163
P 9<1<3
59É99

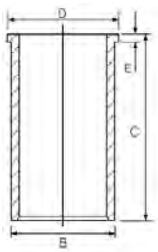
-8: =9=R0434,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 IQV
5133 V
6133 IXV

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71:3

DC488>E7748A
DC488>E7C48A *mÏm*
3=235

M 781<3
N4 4: 1<3
N 6<133
O 4163
P 9<k<3
59É99

-8: =9=R0435,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mÏm*
7D488>E88477 *Tmm*

41t 8 I Q V
513 3 V
613 3 I X V

DC488>E774AA
DC488>E7C4AA *mÏm*
3=235

M 781<3
N4 4: 193
N 6<133
O 4143
P 9<k<3
59É99

-8: =34J434,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mÏm*
7D488>E88477 *Tmm*

41t 8 I Q V
513 3 V
613 3 I X V

DC488>E774AB
DC488>E7C4AB *mÏm*
3=235

M 781<3
N4 4: 193
N 6<133
O 4143
P 9<193
59É99

-8: =34J435,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mÏm*
7D488>E88477 *Tmm*

41t 8 I Q V
513 3 V
613 3 I X V

Lz´°top l yr wpo tyupnßzy yzÜÜwp	T°´q´°ns´r l yr pz´oypßp Kty°'´tßÜo °py	Vz°´m°°p odyupnßzy wß´l wp l yr°wt´p	Vl´l wv mz¿°twv op tyÖpnnt y wßp´l w l yr°w´	Vp´twwßz l yr zwßz opww°r pwwr zwz
Zz nÖwyop´4) 5 G C 781883/J C 9<1883	l y eÖwyop´4) 5	°°´nÖwyo´p 4) 5	py pwvntwyo´z 4) 5	l nbwyo´z 4) 5
Zz nÖwyop´6) 7	l y eÖwyop´6) 7	°°´nÖwyo´p 6) 7	py pwvntwyo´z 6) 7	l nbwyo´z 6) 7
Lz´ypÄp´op°tr y °ßl tr sßtyupnßzy yzÜÜwp	L´yp°p´p G°°q s´°yr py/ot´pvß pty°'´tßÜpyop J °py	Vz°´m°°p odyupnßzy o´ztßp nzynp'ßzy 'w°´npyßp	Vl´l pwx °´pntpyßp ot°p z op mz¿°twv op tyÖpnnt y ot´pnß	Vp´0 't pnpyßp ''´zr pßß Übzyp opww°r pwwr zwz yzy l yr z wßz
HzÄ wnl'l nt00 56193nx 6	azwx py op´Qzwnpyx °wp 56193nx 6	azwx p op w nl 88 o°'t°ßzy 56193nx 6	azwnl 8bl o't°ß y 56193nx 6	azwx p nl x p´l ''t°ßzyp 56193nx 6

MZg S 9 **8DEBvv** **BBi** 3D 4 **PØt x f u U x v xw** **f P8>E8C**

MGRGcd 041=ZJ0 362=8 38239 MGRGcd S Q0aGT 41=ZJt 3=2=9 36239

DC488>E774BA
DC488>E7C4BA *mTm*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<13
59É99

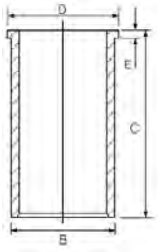
-8: =34J0634,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71:3

DC488>E774BB
DC488>E7C4BB *mTm*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<13
59É99

-8: =34J0635,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 I Q V
5133 V
6133 I X V

Zz nÖuyop´4) 5
HzÄwnl'lntfÖ551<8nx 6
GC781883/JC9<1883
Zz nÖuyop´6) 7

Iy eÖuyop´4) 5
azvix py op´QzwupyX °wp 551<8nx 6
Iy eÖuyop´6) 7

°°´nÖuyo´p4) 5
azvix p op wlnl@6 o°'t°ßzy 551<8nx 6
°°´nÖuyo´p6) 7

py pwntuyo´z4) 5
azvlnl@bl o't°ßy 551<8nx 6
py pwntuyo´z6) 7

Intuyo´z4) 5
azvix p nl x p´l 't°ßzyp 551<8nx 6
Intuyo´z6) 7

Mem S 9 **8DEBvv** **EB i** 3GPD 4 **P@x f u U x v xw** **fP8C8BC**

MGRGcd 041=ZJO 35236 38239

DC488>E774>A
DC488>E7C4>A *mTm*

M 781<3
N4 4: 183
N 6<133
O 4143
P 9<13
59É99

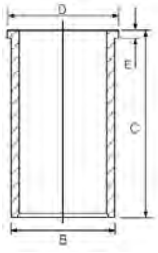
-8: =34I438,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71:3

DC488>E774>B
DC488>E7C4>B *mTm*

M 781<3
N4 4: 183
N 6<133
O 4143
P 9<13
59É99

-8: =34I439,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 I Q V
5133 V
6133 I X V

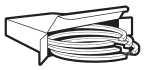
Zz nÖuyop´4) 5
HzÄwnl'lntfÖ57138nx 6
GC781883/JC9<1883
Zz nÖuyop´6) 7

Iy eÖuyop´4) 5
azvix py op´QzwupyX °wp 57138nx 6
Iy eÖuyop´6) 7

°°´nÖuyo´p4) 5
azvix p op wlnl@6 o°'t°ßzy 57138nx 6
°°´nÖuyo´p6) 7

py pwntuyo´z4) 5
azvlnl@bl o't°ßy 57138nx 6
py pwntuyo´z6) 7

Intuyo´z4) 5
azvix p nl x p´l 't°ßzyp 57138nx 6
Intuyo´z6) 7



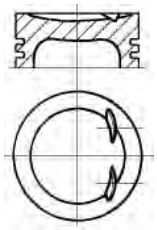
dPM/mx xv0	S 9	**8CEBvv**	**CC i**	3GDV 4		**bx**	**f P8>8E**
dPN /mx xv0	S 9	**8CEBvv**	**CC i**	3GDV 4		**bx**	**f P8>97**
dWM/mx xv0	S 9	**8CEBvv**	**DA i**	3GGV 4		**bx**	**f P>>DC**
dWN /mx xv0	S 9	**8CEBvv**	**D94DA i**	3GGG8GGa 4		**bx**	**f P897E8**
dWO /mx xv0	S 9	**8CEBvv**	**DA i**	3GGV 4		**bx**	**f PA87C**
dWR /mx xv0	S 9	**8CEBvv**	**DA i**	3GGV 4		**bx**	**f P897DD**
dWT /mx xv0	S 9	**8CEBvv**	**DA i**	3GGV 4		**bx**	**f P8AEE8**
dWV /mx xv0	S 9	**8CEBvv**	**DA i**	3GGV 4		**bx**	**f P897DE**
dWW/mx xv0	S 9	**8CEBvv**	**DA i**	3GGV 4		**bx**	**f P8B788**
dc N /mx xv0	S 9	**8CEBvv**	**EB i**	3GPD 4		**bx**	**f P8>; 8**
dc O /mx xv0	S 9	**8CEBvv**	**EB i**	3GPD 4		**bx**	**f P8>; 9**

I U_X0KX 41<	362=< 3523 5	L0KYZG 0041< 49a	352=5 452=8
KYI UXZ a 41< 49a	352=5 342=8	L0KYZG 0041< cX5t 49a	352=5 452=8
KYI UXZ a 41< 49a cX6t	352=5 342=8	S UTJ KU 041<	352=6 3<2=9
KYI UXZ a 41< t 49a	352=6 342=8	S UTJ KU 041< t 49a	352=6 3<2=9
KYI UXZ a 41< cX6t 49a	3<2=6 342=8	S UTJ KU 0041< t	3<2=9 3=233
KYI UXZ a041< 49a	342=8 352==	UX0JT 0041< t 49a	342=5 452=6
KYI UXZ a041< 49a cX6t	352=8 3<233	XGTMKX 41<	392== 3523 5

DC48; BB77477
DC48; BB7C477 *mT m*
392==

M 5<13=
N4 415:
N 9813 3
O 31<<
P 8513=
4=É83

f b



7D48; BB77477
7D48; BB7C477 *mT m*

4153 TZ
4183 V
5183 I X

DC4CDBA77477
DC4CDBA7C477 *mT m*

M 66153
P 8: 153
54É97

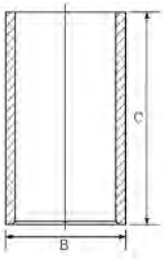
7D4CDBA77477
7D4CDBA7C477 *mT m*

4183 S UR V
4193 V
5183 V

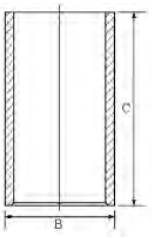
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

C88Y	S 9	**8AEEvv**				**bx**	**Y b9; B8**
9C; CQ /X v x Ø 0	S 9	**8AEEvv**				**bx**	**Y b9>7A**
WX8BX /CA8Y 0	S 9	**8AEEvv**				**bx**	**Y b9; D9**
X; Q	S 9	**8AEDvv**	**B94C8 i**	3eS8i c 4		**bx**	**f P89A8**
XO	S 9	**8AEDvv**	**A; 4B9 i**	3:N8eS 4		**bx**	**f P89B8**

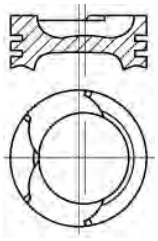
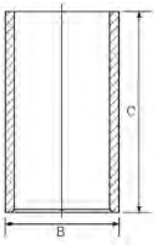
I GVX04933	3429< 452 5	I UXZ0TG 4933 S v00	342 3 452 6
I GVX04933 MZ	3429: 452 3	KYI UXZ 0049 XY	452 7 3<2<3
I UXZ0TG 4933	342 4 452 8	L0KYZG 0049 cX5	3<2<4 3<2<6
I UXZ0TG 4933 MZ	3429: 452 3	ZXGTY0Z 49	342 8 452 :
I UXZ0TG 4933 S v00	3429: 452 3		

		8>4787DD7477 **N <7154 O 4836:** 

C88Y gbdMfQP	S 9	**8AEEvv**	**bx**	**Yb9;A7**
I GVX04933	3429< 452 5		I UXZOG 4933	342 4 452 8

DC4CD7B77487 **DC4CD7B7C487** *Tm m* **DC4CD7B7E487** *Tm m* **DC4CD7B88487** *Tm m* **DC4CD7B8>487** *Tm m* **DC4CD7B8C487** *Tm m* **M** 7715 **N4** 451<9 **O** 6143 **O** 51<3 **P** <61<5 54É: 4	**7D4CD7B77487** **7D4CD7B7C487** *Tm m* **7D4CD7B7E487** *Tm m* **7D4CD7B88487** *Tm m* **7D4CD7B8>487** *Tm m* **7D4CD7B8C487** *Tm m* 4193 I X V 5133 V 61=7 V	**8>4787DD7477** **N <7154 O 4836:** 

V9	S 9	**89EDvv**	**;D4>C i** 3/N8aS 4	**bx**	**fP898C**
KYI UXZ 04633	3929< 352 9		KYI UXZ 00416	452 7 3<2<3	

DC4CD7B7C477 *Tm m* **DC4CD7B7E477** *Tm m* **DC4CD7B8>477** *Tm m* **DC4CD7B8C477** *Tm m* **M** 7755 **N4** 4615 **O** 51: **O** 51: **P** <61<5 54É: 4 	**7D4CD7B77487** **7D4CD7B7C487** *Tm m* **7D4CD7B7E487** *Tm m* **7D4CD7B88487** *Tm m* **7D4CD7B8>487** *Tm m* **7D4CD7B8C487** *Tm m* 4193 I X V 5133 V 61=7 V	**8>4787DD7477** **N <7154 O 4836:** 

NTbM/Q w t PU0	S 9	**8CA;vv**	**AA4AC i** 3cV8ce 4	**P0l x f u U x v xw**	**fP977B9**
TObM/P t 0	S 9	**8CA;vv**	**BB i** 3D 4	**P0l x f u U x v xw**	**fP8DCCE**
TObN/P t 0	S 9	**8CA;vv**	**BB i** 3D 4	**P0l x f u U x v xw**	**fP8DCD7**
bCbM/P t 0	S 9	**8CA;vv**	**AA i** 3cV 4	**P0l x f u U x v xw**	**fP9>>BA**
bCbN/P t 0	S 9	**8CA;vv**	**AA i** 3cV 4	**P0l x f u U x v xw**	**fP9>>BB**
bEbM/P t 0	S 9	**8CA;vv**	**BB i** 3D 4	**P0l x f u U x v xw**	**fP9ACEA**
bEbN/P t 0	S 9	**8CA;vv**	**BB i** 3D 4	**P0l x f u U x v xw**	**fP9ACEB**
bEbO/P t 0	S 9	**8CA;vv**	**BB i** 3D 4	**P0l x f u U x v xw**	**fP9ACEC**

bEbP /P t 0	S 9	8CA; vv	BB i 3 D 4	P@t x f u U x v xw		f P9ACED
d9bM/P t 0	S 9	8CA; vv	AA i 3cV 4	P@t x f u U x v xw		f P9>>BC
d; bM/P t 0	S 9	8CA; vv	BB i 3 D 4	P@t x f u U x v xw		f P9ACEE
di bQ/P t 0	S 9	8CA; vv	BB i 3 D 4	P@t x f u U x v xw		f P9AD77
di bR/P t 0	S 9	8CA; vv	BB i 3 D 4	P@t x f u U x v xw		f P9AD78

ZU_XTKU I UTTKI Z 41<ZJI t	39235	45246	ZXGTYQZ I UTTKI Z 41<Jt	39235	45246
ZU_XTKU I UTTKI Z 41<ZJI t2ZJJt2J0	39235	45246	ZXGTYQZ I UTTKI Z 41<ZJI t	39235	45246

DC487C777487
DC487C77C487 *mTm*
DC487C788487 *Tmm*
45239

M 78183
N4 47143
N 74183
P :3t3
5<É99

WWdf fb

7D487C777477
7D487C77C477 *mTm*
7D487C788477 *Tmm*

5183 I Q V
5133 V
6133 I X V

DC4>; C777487
DC4>; C77C487 *mTm*
3423:

M 781:3
N4 45183
N 78163
P :4153
5<É99

df fb

7D4>; C777477
7D4>; C77C477 *mTm*

4t8 TZ
5133 V
5183 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

REPM	S 9	8CA; vv	DA i 33GV 4	P@t x f u U x v xw		f P8CA9>
REPN	S 9	8CA; vv	DA i 33GV 4	P@t x f u U x v xw		f P8CA9B
RRPM	S 9	8CA; vv	C> i 33DD 4	P@t x f u U x v xw		f P8CA98

LUI _Y 041<ZJI t	36234	36238

DC487C777487
DC487C77C487 *mTm*
DC487C788487 *Tmm*

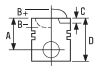
M 78183
N4 47143
N 74183
P :3t3
5<É99

WWdf fb

7D487C777477
7D487C77C477 *mTm*
7D487C788477 *Tmm*

5183 I Q V
5133 V
6133 I X V

RRNM	S 9	8CA; vv	C> i 33DD 4	P@t x f u U x v xw		f P9;;7>
WTNM/P t 0	S 9	8CA; vv	E9 i 33NV 4	P@t x f u U x v xw		f P9;;C9
WWPM/Q >0	S 9	8CA; vv	DA i 33GV 4	P@t x f u U x v xw		f P8D>D7



WWPN/Q >0	S 9	8CA;vv	DA i 3GGV	4	P@t x f u U x v xw	f P9;;7;
cl NM/P t 0	S 9	8CA;vv	E9 i 3GNV	4	P@t x f u U x v xw	f P9;;C8
cl i M/P t 0	S 9	8CA;vv	E9 i 3GNV	4	P@t x f u U x v xw	f P8E889
di bM/P t 0	S 9	8CA;vv	D8 i 3GGD	4	P@t x f u U x v xw	f P977B;
di bO/P t 0	S 9	8CA;vv	D8 i 3GGD	4	P@t x f u U x v xw	f P9ACE;
di bP/P t 0	S 9	8CA;vv	D8 i 3GGD	4	P@t x f u U x v xw	f P9ACE>

I OS Gc 41<ZJI t	3523: 3=243	S UTJKU @a 41<ZJI t	3623: 34248
LUI _Y I OS Gc 41<ZJI t	34238 3623:	YOS Gc 41<ZJI t	38239 45247
LUI _Y @041<ZJI t	3:237 3=245	ZU_XTKU I UTTKI Z 41<ZJI t	3<239 45246
MGRGcd @041<ZJI t	38239 39248	ZXGTYQZ I UTTKI Z 41<ZJI t	3<239 45246

DC4>;C777477
DC4>;C77C477 *mTm*
3423:

M 7898
N4 4517:
N 7815=
P :4148
5<É99

WWdf fb

7D4>;C777477
7D4>;C77C477 *mTm*

41:8 TZ
5133 V
5133 TZ

Y@ppw Y@sw Gntp´ Gnp´z Gnntltz

OSNM/P t xv0	S 9	8CEDvv	D8 i 3GGD	4	bx	f P8AE7C
OSNN/P t xv0	S 9	8CEDvv	D8 i 3GGD	4	bx	f P8AE7D
OTNM/P t xv0	S 9	8CEDvv	E9 i 3GNV	4	bx	f P8AE7E
OTNN/P t xv0	S 9	8CEDvv	E9 i 3GNV	4	bx	f P8AE87
OePM/P t xv0	S 9	8CEDvv	DD i 3GND	4	bx	f P8DECA
OePN/P t xv0	S 9	8CEDvv	DD i 3GND	4	bx	f P8DECB
ccPM/P t xv0	S 9	8CEDvv	E9 i 3GNV	4	bx	f P8DEC>
ccPM/P t xv0	S 9	8CEDvv	E9 i 3GNV	4	bx	f P8DCDD
ccPN/P t xv0	S 9	8CEDvv	E9 i 3GNV	4	bx	f P8DCDC

I OS Gc 41<	3523: 3=243	LUI _Y @041<	34239 3=245
LUI _Y I OS Gc 41<	43236 3623:	S UTJKU @@041<49a	43233 3623:

DC4>9E>77477
DC4>9E>7C477 *mTm*

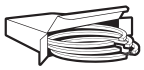
M 5<183
P 8413 3
54É84

7D4>9E>77477
7D4>9E>7C477 *mTm*

4153 TZ
4153 V
5183 TZ

Y@ppw Y@sw Gntp´ Gnp´z Gnntltz

NWRM/Q BQv N x0	S 9	8EEBvv	EB i 3GPD	4	P@t x f u U x v xw	f P;D>87
NWRN/Q BQv N x0	S 9	8EEBvv	EB i 3GPD	4	P@t x f u U x v xw	f P;D>88
NWRO/Q BQv N x0	S 9	8EEBvv	EB i 3GPD	4	P@t x f u U x v xw	f P;D>89
NWRP/Q BQv N x0	S 9	8EEBvv	EB i 3GPD	4	P@t x f u U x v xw	f P;D>8;
NWdM/Qv N x0	S 9	8EEBvv	EB i 3GPD	4	P@t x f u U x v xw	f P;D>8B



NWdN /Qv N x0	S 9	8EEBvv	EB i	3GPD	4	P@t x	f u U x v	xw	f P; D>8>
I YRM/Q BQv N x0	S 9	8EEBvv	EB i	3GPD	4	P@t x	f u U x v	xw	f P; D>7D
I YRN /Q BQv N x0	S 9	8EEBvv	EB i	3GPD	4	P@t x	f u U x v	xw	f P; D>7E
I YTM/Qv N x0	S 9	8EEBvv	EB i	3GPD	4	P@t x	f u U x v	xw	f P; D>8A
I YdM/Qv N x0	S 9	8EEBvv	EB i	3GPD	4	P@t x	f u U x v	xw	f P; D>8C

ZU_XTKU I _YZUS a695 513 KnzHWp	45248	ZXGTYQZ a696 513 KnzHWp	36249
ZU_XTKU I _YZUS a695 513 KnzHWp x NKa	3824=	ZXGTYQZ a696 513 KnzHWp x NKa	3824=
ZXGTYQZ I _YZUS a695 513 KnzHWp	45248	ZXGTYQZ a696 513 KnzHWp x NKa Xb J	3824=
ZXGTYQZ I _YZUS a695 513 KnzHWp x NKa	3824=	ZXGTYQZ a696 513 KnzHWp Xb J	36249

DC4>A9E77477
DC4>A9E7C477 *mT m*
45248

M 7<173
N4 47173
N 7<156
O 3139
P :6153
63É97

MWWWZN df fb

7D4>A9E77477
7D4>A9E7C477

5133 MJI V
5133 I X
5133 MJI V

GDC LKZ-Ring

QPNM/mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P897BD
QPNN /mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P8AE8B
QPNO /mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P8AE8C
QPNP /mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P8AE8D
QPPN /mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P8AE77
QPPO /mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P897D7
QPPR /mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P8AE79
ZSM/mx xv0	S 9	8EDDvv	EB4877 i	3GPGBGPa	4	bx			f P>>CA
ZSN /mx xv0	S 9	8EDDvv	EB i	3GPG	4	bx			f P897E7

I U_MGX 513 49a	3<2=< 45234	SUTJKU 0513 t 49a	342=6 3<2=9
LUI _Y 0513 49a	432=< 44237	SUTJKU 00513 t	3<2=9 3=233

DC4CDB>77477
DC4CDB>7C477 *mT m*

M 651=5
P 891=3
54É97

7D4CDB>77477
7D4CDB>7C477 *mT m*

4183 I X V
4t 8 V
6133 I X

Vt@zy@ @z mp ´p' wnpo ty Kyr typ Yp@ zyw@ Yf@pw

Qzwmpy y°´ ty S z@z´° @U@y Ü° p´°p@U@y Yf@ sw

Vt@zy ´px ' wnp´ ol y° up° x z@p°´ Gntp´

Vt@zyp° op´p' °p°@z ' l ´l up°r z° op x z@z´p° °zwx py@p Gnp´z

@W t@zyp ' ° p°°p´p ´tx ' tl ÜÜ l@z °zwx py@p nzx ' w@z Gnntl tz

SBPM/P t 0	S 9	8EECvv	877 i	3GPa	4	P@t x	f u U x v	xw	f P8DA87
SBPN /P t 0	S 9	8EECvv	877 i	3GPa	4	P@t x	f u U x v	xw	f P8DA88
SBPP /P t 0	S 9	8EECvv	877 i	3GPa	4	P@t x	f u U x v	xw	f P8DCE7
gWPM/P t 0	S 9	8EECvv	877 i	3GPa	4	P@t x	f u U x v	xw	f P9>>9D

I OS Gc 513 ZJI t	3523: 3=243	LUI _Y 00513 ZJI t	3:237 3=245
LUI _Y I OS Gc 513 ZJI t	43236 3623:	Q_MG 0513 ZJI t	3623< 44245

DC488>C774>7
DC488>C7D4>7 *mm*

M	791 3
N4	4817 3
N	771<3
O	318:
P	: 51 4
	5<É: 3

-8<8: 3043=;

MWWWdf fb

7D488>C77477
7D488>C7D477 *mm*

6183		I Q V
5133		V
6133		I X V

WZNM/P t 0	S 9	**98CEvv**	**8>C i**	3NDD	4	**P@i x f u U x v xw**				**f P9BD7D**
WZNN/P t 0	S 9	**98CEvv**	**8>B i**	3Gi	4	**P@i x f u U x v xw**				**f P9BD7E**
WZi M/P t 0	S 9	**98CEvv**	**8>C i**	3NDD	4	**P@i x f u U x v xw**				**f P9B>DD**
WZi N/P t 0	S 9	**98CEvv**	**8>B i**	3Gi	4	**P@i x f u U x v xw**				**f P9B>DE**
MGRGcd 0515 ZJI t			4424 3	3924 8		S UTJKU @i 515 ZJI t			3: 243	3424 8
MGRGcd S Q 0aGT ZJI t			3624 6	3924 8		YOS Gc 515 ZJI t			3: 243	4524 7

DC4>; BC77477
DC4>; BC7D477 *mm*

M	7<193
N4	4814 5
N	8317 3
O	316<
P	: 719 4
	63É9<

-8<83NG657,

MWWWdf fb

7D4>; BC77477
7D4>; BC7D477 *mm*

5183		MJI V
5133		V
5133		I Q

GDC LKZ-Ring

Lz´ 't@ßzy° Ät@s I 5716x x nzy ´zo r l ' x pl °°´po l ß' ty npyßp wyp

L ´ Qzwnpy x t@ptypx Vwp°pw/°r pyl m°@ yo @zy 57/6 S S / r px p°°py l y op´ Qzwnpymzüpy OS t@@p

Vz°´ 't@ßzy° l @pn °y nl ´ßop mtpwp op 57/6 x x x p°°´ l ° np yßp op wi Ép mtpwp0 't@ßzy

Vl ´l 't@ßzyp° nzy °yl ot°@ ynt! op 'l °z op mtpw py pwnpyß z opwn?wy op 57/6x x

Vp´ 't@ßzyt nzy 'l °°l r r tz mtpw ot 57/6 x x x t°°´l ßz °°wl °°p q´z °' tyzß@z

MNRM/P t 0	S 9	**8EEDvv**	**C> i**	3GDG	4	**P@i x f u U x v xw**				**f P8ADDD**
P; RM	S 9	**8EEDvv**	**AA i**	3cV	4	**P@i x f u U x v xw**				**f P8AAA8**
PANM/P t 0	S 9	**8EEDvv**	**BB i**	3 D	4	**P@i x f u U x v xw**				**f P8AE8>**
R; RM/P t 0	S 9	**8EEDvv**	**B; i**	3ea	4	**P@i x f u U x v xw**				**f P8DCCC**
ePNM/P t 0	S 9	**8EEDvv**	**BB i**	3 D	4	**P@i x f u U x v xw**				**f P8DCB;**
S UTJKU @0513 49a JO2ZJJt 2ZJI t			4323 3	3623:		ZXGTYOZ ZU_XTKU 513			3923 3	3623 8
ZXGTYOZ 513 JO			3<23 3	3823 9						

DC48>7D77477
DC48>7D7C477 *mm*

M	7: 18<
N4	4918 3
N	7315 3
P	: 61=<
	63É99

df fb

7D48>7D77477
7D48>7D7C477 *mm*

5133		I Q V
5133		V
5133		TZ

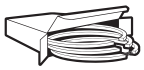
HzÄ wnl ' l ntßÖ 5314 7nx 6 Uyw@qß@z ' t@ßzy° p¿°t®wpyß@z UK 57< < l yo 57< = Yßppw

azv@x py op´ Qzwnpyx °wp 5314 7nx 6 T°´ rp' l °°ßÄz´opy Ü° opy Qzwnpy r wtnsÄp´@r x t®UK 57< < ° yo 57< = Yß sw

azv@x p op w nl @ß o° ' t@ßzy 5314 7nx 6 Yp°wpx pyßl ol ' ß l °É ' t@ßzy° ¿°t®wpy@° UK 57< < pß57< = Gntp´

azv@nl @ol o ' t@ß y 5314 7nx 6 l l mtoz °zwlx pyßp l w° ' t@ßzyp° p¿°t®wpy@p° l UK 57< < Ö 57 < = Gnp´z

azv@x p nl x p´l ' t@ßzyp 5314 7nx 6 Gol ß@ßz °zwl yßz l t ' t@ßzyt p¿°t®wpy@t l UK 57< < p 57< = Gnntl tz



Oh9>/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9EBBE
OhRA/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9EBCB
OhRR/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9EBD8
OhdA/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9EBBC
OhdM/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9B>A;
OhdN/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9B>A>
OhdO/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9B>AA
OlRM/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9B>B8
OlRN/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9B>B9
OlRO/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9B>B;
OlRP/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9B>B>
PdRM/P t 0	S 9	98EDvv	C> i 3GDG 4	P@t x f u U x v xw	f P9B>AB
PdRN/P t 0	S 9	98EDvv	C> i 3GDG 4	P@t x f u U x v xw	f P9B>AC
PdRO/P t 0	S 9	98EDvv	C> i 3GDG 4	P@t x f u U x v xw	f P9B>AD
SNhMVbR/P t 0	S 9	98EDvv	DD i 3GND 4	P@t x f u U x v xw	f P9B>DC
SNhMVcV/P t 0	S 9	98EDvv	887488D i 3GVD8GaD 4	P@t x f u U x v xw	f P9B>D;
SNhMVci/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9B>DB
gldB/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw	f P9EBBD

XGTMKX 515 ZJIt	37244	ZXGTYQZI_YZUS a695 515 ZJIt	37245
ZU_XTKUI_YZUS a695 515 ZJIt	37245 45248	ZXGTYQZ a696 515 ZJIt	3<246 4524<
ZXGTYQZ 515 ZJIt	43244 3<247	ZXGTYQZ a696 515 ZJIt Xb J	3<246 4524<
ZXGTYQZ 515 ZJIt Xb J	43244 3<247	ZXGTYQZ ZU_XTKU 515	43244 3<247

DC4>9CC774A7
DC4>9CC7C4A7 *mTm*

M 7<175
N4 4914:
N 7=137
P :71<5
63É9:

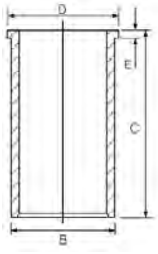
-8<9<6093:,

MWWWdf fb

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mTm*

5133 IQV
5133 V
5133 TZ

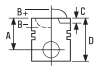
8>4799887477



N <=133 **O** 498133 **P** =3138 **Q** 8133

--- IG_ZQUT OINKI QHUb RJ0GSKZKX ---	--- GI NZ_TMOS _RJKTJ_XI NS KYYKX HKXVX LKT ---	-- GßpyßzyÜ@p´twpÜ@p´tdp´ vpotlx ßp´o° nzw-	-- V´pnl°nt y O@p´tdpnl pwotx pßz opw nf°wy --	-- IßpyÜzyp nzyßzwv´potlx pßz nlx p´l otnzx nf°ßzyp - -
Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz

OlRA/P t 0	S 9	98EDvv	E94EE i 3GNV8GPV 4	P@t x f u U x v xw	f P9EBBB
OldM/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9BC8B
OldN/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9B>BA
OldO/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9B>BB
bSRM/P t 0	S 9	98EDvv	87; i 3GSD 4	P@t x f u U x v xw	f P987BC
bSRN/P t 0	S 9	98EDvv	87; i 3GSD 4	P@t x f u U x v xw	f P9>>B;
edRM/P t 0	S 9	98EDvv	DA i 3GGV 4	P@t x f u U x v xw	f P9>>AD
edRN/P t 0	S 9	98EDvv	DA i 3GGV 4	P@t x f u U x v xw	f P9>>AE
edRO/P t 0	S 9	98EDvv	DA i 3GGV 4	P@t x f u U x v xw	f P9>>B7
edRP/P t 0	S 9	98EDvv	DA i 3GGV 4	P@t x f u U x v xw	f P9>>B8
edRQ/P t 0	S 9	98EDvv	DA i 3GGV 4	P@t x f u U x v xw	f P9>>B9
gTRM/P t 0	S 9	98EDvv	87; i 3GSD 4	P@t x f u U x v xw	f P9B>BC
gTRN/P t 0	S 9	98EDvv	87; i 3GSD 4	P@t x f u U x v xw	f P9B>BD
gTRO/P t 0	S 9	98EDvv	87; i 3GSD 4	P@t x f u U x v xw	f P9B>BE
gedB/P t 0	S 9	98EDvv	E9 i 3GNV 4	P@t x f u U x v xw	f P9EBC7
gedM/P t 0	S 9	98EDvv	877 i 3GPa 4	P@t x f u U x v xw	f P9B>C7
gedN/P t 0	S 9	98EDvv	877 i 3GPa 4	P@t x f u U x v xw	f P9B>C8



ZXGTYQZ 515 ZJI t 4323: 3<247
ZXGTYQZ 515 ZJI t Xb J 3=244 45247
ZXGTYQZ a696 515 ZJI t 3<246 4524<
ZXGTYQZ a696 515 ZJI t Xb J 3<246 4524<
ZXGTYQZ ZU_XTKU 515 ZJI t 4323: 3<247

DC4>9CC774>7
DC4>9CC7C4>7 *mT m*

M 7<175
N4 481<8
N 791=3
P : 71<5
63É99

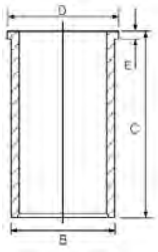
-8<9<60434,

MWWdf f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5133 I Q V
5133 V
5133 TZ

8>4798897477



N <=133 **O** 489133 **P** =31=3 **Q** 8133

--- I G_Z0IT 0I NKI QHUb RJ0GS KZKX ---
Yßppw

--- GI NZ_TMOS _RJKTJ_XI NS KYYKX HKXVX LKT ---
Yßi sw

-- GßpyßzyÜ®p°twpÜ®p´tdp´ wpotl x ßp´ o° nzw-
Gntp´

-- V´pnl °nt y 0®p´tdpnl pwot x pßz opw m²wy --
Gnp´z

-- IßpyÜzyp nzyßzwv´p otl x pßz nl x p´I otnzx m²°ßzyp - -
Gnntl tz

PBNM/P	**t**	**0**	S	9	**8EEDvv**	**DA**	**i**	3GGV	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8AE8A**
RURM/P	**t**	**0**	S	9	**8EEDvv**	**E9**	**i**	3GNV	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8DD; E**
RY NM			S	9	**8EEDvv**	**EB**	**i**	3GPD	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8DCB8**
TVNM			S	9	**8EEDvv**	**DA**	**i**	3GGV	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8CA>C**
TVNN			S	9	**8EEDvv**	**DA**	**i**	3GGV	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8CA>D**
TVNO			S	9	**8EEDvv**	**DA**	**i**	3GGV	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8CA>E**
ZCNM			S	9	**8EEDvv**	**EB**	**i**	3GPD	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8DCB9**

S UTJKU 00513 49a ZJJt2ZJI t 43233 3623: ZXGTYQZ 513 ZJI t 3<235 38239
S UTJKU 00513 ZJI t 43234 3623: ZXGTYQZ ZU_XTKU 513 36235 36239

DC48>7D77487
DC48>7D7C487 *mT m*

M 7: t 3
N4 48153
N 76163
P : 7143
63É99

+<995,

WWdf f b

7D48>7D77477
7D48>7D7C477 *mT m*

5133 I Q V
5133 V
5133 TZ

HzÄwnl ' I ntßÖ 5417=nx 6
UyWdqßz ' t°ßzy° p¿°t®wpyßz UK 57< <
I yo 57< =
Yßppw

azv%x py op´ Qzwpyx °wp 5417=nx 6
T°´ rp' I °°BÄz´opy ÜP opy Qzwpy
rwtnsÄp´ßr x tßUK 57< <° yo 57< =
Yßi sw

azv%x p op w nl @ß o° ' t°ßzy 5417=nx 6
Yp°wx pyßI ol ' ß I °É ' t°ßzy° ¿°t®wpyß
UK 57< <pß57< =
Gntp´

azvnl @ßl o ' t°ß y 5417=nx 6
I I mtoz °zwx pyßp I w° ' t°ßzyp°
p¿°t®wpyßp° I UK 57< <Ö57 < =
Gnp´z

azv%x p nl x p´I ' t°ßzyp 5417=nx 6
GoI ßß z °zwl yßz I t ' t°ßzyt p¿°t®wpyßt I UK 57< <p 57< =
Gnntl tz

bDRM/P	**t**	**0**	S	9	**98EDvv**	**B;**	**i**	3eV	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P977>9**
bDRN /P	**t**	**0**	S	9	**98EDvv**	**B;**	**i**	3eV	4	**P0l**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P987BB**

ZXGTYQZ 515 ZJI t 37239 3<247

DC4>9CC774;7
DC4>9CC7C4;7 *mT m*

M 76175
N4 481<8
N 791=3
P 9=1<5
63É9:

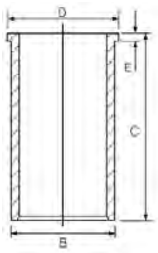
-8<983G438,

df f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

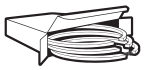
5133 I Q V
5133 V
5133 TZ

8>4798897477



N <=133 **O** 489133 **P** =31=3 **Q** 8133

Yßppw
Yßi sw
Gntp´
Gnp´z
Gnntl tz



cVNM/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw		f P8DCAB
cVNN/P t 0	S 9	98EDvv	88> i 3GVV 4	P@t x f u U x v xw		f P8DCAC
cVNO/P t 0	S 9	98EDvv	887 i 3GVD 4	P@t x f u U x v xw		f P8DCD9
cVNP/P t 0	S 9	98EDvv	887 i 3GVD 4	P@t x f u U x v xw		f P8DCD;
chRM/P t 0	S 9	98EDvv	D8 i 3GGD 4	P@t x f u U x v xw		f P977>;
ci RM/P t 0	S 9	98EDvv	EB i 3GPD 4	P@t x f u U x v xw		f P977>>

SUTJKU 00515 ZJIt	3=237 3623:	ZXGTYQZ ZU_XTKU 515 ZJIt	3:239 3<247
ZXGTYQZ 515 ZJIt	3723 9 3<247		

DC4>9CC77487
DC4>9CC7C487 *mTm*

M 7615
N4 481<8
N 791=3
P 9=1<5
63É9:

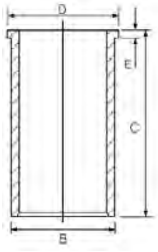
+<97<H438,

WWdf fb

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mTm*

5133 I QV
5133 V
5133 TZ

8>4798897477



N <=133 **O** 489133 **P** =31=3 **Q** 8133

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

MaNM/Q >P t xv0	S 9	8EEEvv	87C i 3GSV 4	bx		f P9;;7D
MaPM	S 9	8EEEvv	87C i 3GSV 4	bx		f P8DA7B
MaPN	S 9	8EEEvv	87C i 3GSV 4	bx		f P8DA7C
MaPQ	S 9	8EEEvv	87>487C i 3GSG8GSV 4	bx		f P9>;>C
Mai M	S 9	8EEEvv	87C i 3GSV 4	bx		f P977;E
Mai N	S 9	8EEEvv	87C i 3GSV 4	bx		f P9>>;7
OVNM/P t xv0	S 9	8EEEvv	87B487C i 3GSS8GSa 4	bx		f P8AE88
OVNN/P t xv0	S 9	8EEEvv	87C i 3GSa 4	bx		f P8AE89
Z>VN/P t xv0	S 9	8EEEvv	887 i 3GVD 4	bx		f P8DCD8
elPM/P t xv0	S 9	8EEEvv	87>487E i 3GSP8GSa 4	bx		f P9;;BD

IOSGc 513	3523: 3=243	MGRGcd 00513	3823:9 39248
IOSGc 513 ITM	3723= 3=243	MGRGcd SQ0aGT 513	3823:9 39248
IOSGc 513 RVM	3923< 3=243	SUTJKU 00513	43233 3623:
L0KYZGa YZ483	3623:8 3923<	SUTJKU 00513 49a	43233 3623:
LUI_YIOSGc 513	3623:7 3623:	SUTJKU 0a 513	3623: 34248
LUI_Y 00513	3:237 3=245	YOSGc 513	3823:9 45247
LUI_Y 00513 ITM	3723= 3:244	YOSGc aGT 513	3624:3 45247
LUI_Y 00513 RVM	3923< 3:244		

DC4>9;>77477
DC4>9;>7C477 *mTm*

M 5<183
N4 3168
N :9183
P 8413
54É93

7D4>9;>77477
7D4>9;>7C477 *mTm*

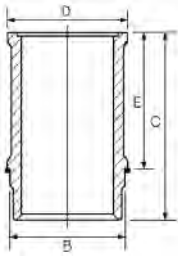
4153 I XV
4153 V
5183 I X

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

kP6bDD	S 9	8E>Dvv		P@t x		Yb8>98

MKGTGJG 41=J	342: 452<5		

8>4B77>97477 **N** =9133 **O** 4: 6133 **P** 439163 **Q** 45=133



_°p l wz NZ355 | S t6Ø´Äpyopy>NZ355 | G °ßwp´ l °°°t>NZ355 | _ßwÜ´ß x m t y>NZ355 | _°l ´p l ynsp NZ355

QARM	S 9	**99EAvv**	**87C i**	3GSa 4	**bx**		**f P8B8BC**
QARO	S 9	**99EAvv**	**87; 487C i**	3GSD8GSa 4	**bx**		**f P977AD**
I AM	S 9	**99EAvv**	**87D i**	3GSc 4	**bx**		**f P897E9**
I AN	S 9	**99EAvv**	**87C i**	3GSa 4	**bx**		**f PA>EC**

MGRGcd O516 49a	342=: 38239	ZXGTYQZ 516 49a	37234 38239
YI UXVQU Q0516 t 49a	392=9 3<2=<	ZXGTYQZ 516 49a Xb J	3<233 38239
ZXGTYQZ 516	36234 36239		

DC487CB77477
DC487CB7C477 *mT m*

M 5=158
P 8715 3
54É96

7D487CB77477
7D487CB7C477 *mT m*

4193 VY V
4183 V
5183 I X

Y0ppw | Y0 sw | Gntp´ | Gnp´z | Gnntl tz

P9RM/P t 0	S 9	**9>79vv**	**BB i**	3 D 4	**P0 x f u U x v xw**		**f P8AA>E**
P9RN /P t 0	S 9	**9>79vv**	**BB i**	3 D 4	**P0 x f u U x v xw**		**f P977; C**
P9RQ /P t 0	S 9	**9>79vv**	**BB i**	3 D 4	**P0 x f u U x v xw**		**f P8AAA9**
R>RM/P t 0	S 9	**9>79vv**	**AA i**	3:V 4	**P0 x f u U x v xw**		**f P8AA>D**

ZXGTYQZ 517 J O	34233 38239	ZXGTYQZ 517 ZJ	3<233 3<236
ZXGTYQZ 517 J OXb J	34233 38239		

DC488; A77477
DC488; A7C477 *mT m*
DC488; A88477 *Tmm*

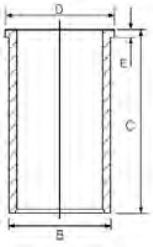
M 86187
N4 4: 193
N 74133
P <3183
65É98

df f b

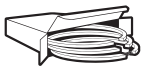
7D488; A77477
7D488; A7C477 *mT m*
7D488; A88477 *Tmm*

5183 I Q V
5133 V
6133 I X V

8>4797A>7477 **N** =5183 **O** 498133 **P** =8183 **Q** 6133



P>RM/P t 0	S 9	**9>79vv**	**DD i**	3GND 4	**P0 x f u U x v xw**		**f P8AAA7**
RkRM/P t 0	S 9	**9>79vv**	**DA i**	3GGV 4	**P0 x f u U x v xw**		**f P8DCED**



ZXGTYQZ 517 JO 34233 38239 ZXGTYQZ 517 ZJK 36237 38239
ZXGTYQZ 517 JOXb J 34233 38239

DC488; A77487
DC488; A7C487 *mT m*
DC488; A88487 *Tmm*

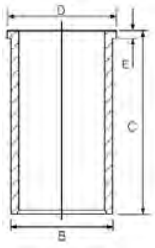
M 86183
N4 4: 157
N 73173
P <3183
65É: 4

WWdf f b

7D488; A77477
7D488; A7C477 *mT m*
7D488; A88477 *Tmm*

5183 I Q V
5183 V
6183 I X V

8>4797A>7477



N =5183 **O** 498133 **P** =8183 **Q** 6133

HzÄwnl ' I ntfÖ 58167nx 6 azwx py op´ Qzwpyx °wp 58167nx 6 azwx p op w nl @8 o° ' t°ßzy 58167nx 6 azwnl @bl o ' t°ß y 58167nx 6 azwx p nl x p´l ' t°ßzyp 58167nx 6

Pa RM/Pf 9>0/P t 0 S 9 **9>79vv** **E9 i** 3GNV 4 **P@t x f u U x v xw** **f P977; D**

ZXGTYQZ 517 ZJK 3: 234 38239

DC48>D877477
DC48>D87A477 *mT*
DC48>D87C477 *mT m*

M 86183
N4 4: 157
N 73173
P <3183
65É: 4

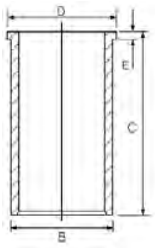
-8<=33H534,

MWWWdf f b

7D48>D877477
7D48>D87A477 *mT*
7D48>D87C477 *mT m*

5183 I Q V
5183 V
5183 TZ

8>4797A>7477



N =5183 **O** 498133 **P** =8183 **Q** 6133

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

TERM/P t 0 S 9 **9>79vv** **878 i** 3GPc 4 **P@t x f u U x v xw** **f P9>7E>**
TERN /Q >P t 0 S 9 **9>79vv** **87; i** 3GSD 4 **P@t x f u U x v xw** **f P977; ;**
VkRM/P t 0 S 9 **9>79vv** **DA i** 3GGV 4 **P@t x f u U x v xw** **f P977; >**
VkRO /P t 0 S 9 **9>79vv** **DA i** 3GGV 4 **P@t x f u U x v xw** **f P9>>AB**

ZXGTYQZ 517 J 36237 45239 ZXGTYQZ 517 ZJI t Xb J 37239 3<247
ZXGTYQZ 517 ZJI t 37239 3<247

DC48>D8774; 7
DC48>D87A4; 7 *mT*
DC48>D87C4; 7 *mT m*

M 86183
N4 49163
N 7=133
P <3183
65É: 4

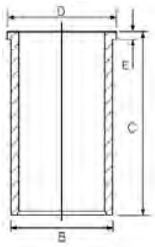
-8<=33H435,

MWWWdf f b

7D48>D877477
7D48>D87A477 *mT*
7D48>D87C477 *mT m*

5183 I Q V
5183 V
5183 TZ

8>4797A>7477



N =5183 **O** 498133 **P** =8183 **Q** 6133

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

TERM/Q >P t 0 S 9 **9>79vv** **878 i** 3GPc 4 **P@t x f u U x v xw** **f P977; B**

ZXGTYQZ 517 ZJI t 36237 38239

DC48>D877487
DC48>D87A487 *mT*
DC48>D87C487 *mT m*
36237

M 86183
N4 48195
N 7: 143
P <3183
65É: 4

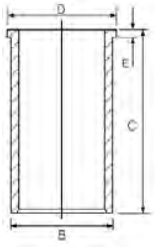
+<=33H634,

MWWWdf fb

7D48>D877477
7D48>D87A477 *mT*
7D48>D87C477 *mT m*

5133 I Q V
5133 V
5133 TZ

8>4797A>7477



N =5183 **O** 498133 **P** =8183 **Q** 6133

HzÄwnl ' I ntß05: 136nx 6
Yßppw

azŵx py op´ Qzwppyx °wp 5: 136nx 6
Yßl sw

azŵx p op w nl @8 o° ' t°ßzy 5: 136nx 6
Gntp´

azwnl @ol o ' t°ß y 5: 136nx 6
Gnp´z

azŵx p nl x p´l ' t°ßzyp 5: 136nx 6
Gnntl tz

bTRM/P	**t**	**0**	S	9	**9>79vv**	**C> i**	3GDD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P977; A**
bTRO /P	**t**	**0**	S	9	**9>79vv**	**C> i**	3GDD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P987BD**

ZXGTYQZ 517 ZJI t	37239	3<247	ZXGTYQZ 517 ZJI tXb J	37239	3<247

DC48>D8774>7
DC48>D87A4>7 *mT*
DC48>D87C4>7 *mT m*

M 86183
N4 49163
N 7=133
P <3183
65É99

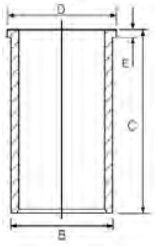
-8<==<G434,

MWdf fb

7D48>D877477
7D48>D87A477 *mT*
7D48>D87C477 *mT m*

5133 I Q V
5133 V
5133 TZ

8>4797A>7477



N =5183 **O** 498133 **P** =8183 **Q** 6133

Yßppw
Yßl sw
Gntp´
Gnp´z
Gnntl tz

eMRM/P	**t**	**0**	V	9	**; 8EDvv**	**8>C i**	3NDD	4	**P@l x**	**N@f**	**u**	**U x v**	**xw**	**f P987BE**
eMRN /P	**t**	**0**	V	9	**; 8EDvv**	**8>C i**	3NDD	4	**P@l x**	**N@f**	**u**	**U x v**	**xw**	**f P9; ; BE**

XGTMKX 615 ZJI t	37244		ZXGTYQZ 615 ZJI tXb J	3=23:	3<247
ZXGTYQZ 615 ZJI t	3523<	3<247			

DC48>D8774D7
DC48>D87A4D7 *mT*
DC48>D87C4D7 *mT m*

M 7<155
N4 491t 3
N 83153
P : 8155
65É: 7

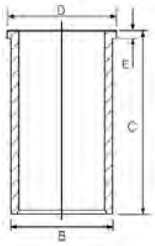
-8<==HG0438,

MWWWdf fb

7D48>D877477
7D48>D87A477 *mT*
7D48>D87C477 *mT m*

5133 I Q V
5133 V
5133 TZ

8>4797A>7477



N =5183 **O** 498133 **P** =8183 **Q** 6133

DC48>D8774DA
DC48>D87C4DA *mT m*

M 7<167
N4 4: 1=6
N 8417 6
P : 8167
65É: 7

-8<==K0634,

MWWWdf f b

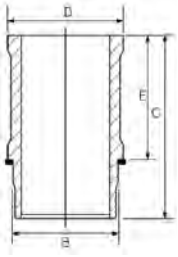
7D48>D877477
7D48>D87A477 *mT*
7D48>D87C477 *mT m*

5133 I Q V
5133 V
5133 TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
HzÄ wnl ' I ntß0 69147=nx 6	azwx p y op´ Qzwpyx °wp 69147=nx 6	azwx p op w nl @8 o° ' t°ßzy 69147=nx 6	azwnl @bl o ' t°ß y 69147=nx 6	azwx p nl x p´l ' t°ßzyp 69147=nx 6

i f M/kPE70	S 9	**9889vv**	**>B i** 3aP 4		**P@t x**	**f P8>CD**
MKGTGJG 0514 J			3<2 : 3<2=5			

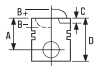
8>4B7>7B7477



N =9133 **O** 4: 6133 **P** 439163 **Q** 45=133

Z>M	S 9	**8EE>vv**	**DA i** 33GV 4		**bx**	**f P8; 8D**
Z>U	S 9	**8EE>vv**	**DA i** 33GV 4		**bx**	**f P8; 97**
ZQ8	S 9	**8EE>vv**	**C>4CC i** 3GDG8GDV 4		**bx**	**f P8; >C**
ZQ>	S 9	**8EE>vv**	**C> i** 3GDD 4		**bx**	**f P8; A7**
ZQA	S 9	**8EE>vv**	**C> i** 3GDD 4		**bx**	**f P8; A8**
ZQV	S 9	**8EE>vv**	**C> i** 3GDD 4		**bx**	**f P8; AA**
ZQX	S 9	**8EE>vv**	**CC i** 3GDV 4		**bx**	**f P8; AC**
ZQe	S 9	**8EE>vv**	**CC i** 3GDV 4		**bx**	**f P8; B8**
ZQf	S 9	**8EE>vv**	**C>4CC i** 3GDG8GDV 4		**bx**	**f P8; B9**
Zd9	S 9	**8EE>vv**	**DA i** 33GV 4		**bx**	**f P8; B>**
ZdM	S 9	**8EE>vv**	**DA i** 33GV 4		**bx**	**f P8; BA**
ZdN	S 9	**8EE>vv**	**DA i** 33GV 4		**bx**	**f P8; BC**
ZdU	S 9	**8EE>vv**	**DA i** 33GV 4		**bx**	**f P8; C7**

YI UXV0U 0513	372=8 3=2=6	Y0KXXG 0513 t	362=8 452=9
YI UXV0U 0513 t	372=8 352=5	Y0KXXG 0513	342=< 352=6
Y0KXXG 513	3<2=5 452=9	Y0KXXG 0513 t	342=< 352=6
Y0KXXG 0513	3<2=5 452=9		



DC4CD7; 77487
DC4CD7; 7C487 *mTm*
DC4CD7; 88487 *Tmm*
DC4CD7; 8>487 *Tm*

M 74188
P 9=188
57É9=

7D4CD7; 77487
7D4CD7; 7C487 *mTm*
7D4CD7; 88487 *Tmm*
7D4CD7; 8>487 *Tm*

4193 IQ
5133 V
7133 IX

Kl´wp´'t°ßzy° ßz mp´p'wnpo ty Kyr typ °pß° zyw̃

Xpnzx x pyopo x l Étx °x z℗°tÜp t° 4133x x -436=7ty,
Yßppw

L´sp´p Qzwnpy y°´ty S zßz´° ßÜpy Ü° p´°pßÜpy

Kx'qzswpyp° mp´x l x l É4133x x -436=7ty,
Yßsw

V´px tp´'t°ßzy ´px 'wnp´ oly° wpup° x zßp°´

l zßp x l Ét´pnzx x l yo p op 4133x x -436=7ty,
Gntp´

Vt°ßzyp° x ° l yßr°z° 'l´l °p´ ´ppx 'wozº py u°prz op x zßz´p° °zwx pyßp

Rl °zmípx potol x Étx l ´pnzx pyol ol pº op 4133x x -436=7ty,
Gnp´z

l zy t't°ßzyp ot℗nnstl ℗p´°tzyp ypnp°°l´tz °z°ßß°t´p ß° ßß wº p´tp

S l r r tz´l Ützyp x l °°tx l ´l nnzx l yol ß 4133x x
Gnntl tz

ZMQ /f X97X0	S 9	**8EE>vv**	**AC i** 3ce 4	**bx**	**f P8; >9**
ZMf /f X97X0	S 9	**8EE>vv**	**AC i** 3ce 4	**bx**	**f P>>O9**
ZMh /f X97X0	S 9	**8EE>vv**	**AA4AC i** 3cV8ce 4	**bx**	**f P8; >>**

V 433 0513 432< 452=5 ZXGTYQZ 513 3=2<8 3=2=5

DC4CD7; 774; 7

M 73158
P 9<158
57É: 5

7D4CD7; 77487
7D4CD7; 7C487 *mTm*
7D4CD7; 88487 *Tmm*
7D4CD7; 8>487 *Tm*

4193 IQ
5133 V
7133 IX

Kl´wp´'t°ßzy° ßz mp´p'wnpo ty Kyr typ °pß° zyw̃

Yßppw

L´sp´p Qzwnpy y°´ty S zßz´° ßÜpy Ü° p´°pßÜpy

Yßsw

V´px tp´'t°ßzy ´px 'wnp´ oly° wpup° x zßp°´

Gntp´

Vt°ßzyp° x ° l yßr°z° 'l´l °p´ ´ppx 'wozº py u°prz op x zßz´p° °zwx pyßp

Gnp´z

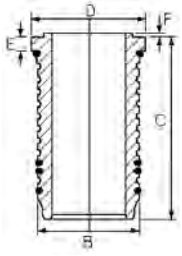
l zy t't°ßzyp ot℗nnstl ℗p´°tzyp ypnp°°l´tz °z°ßß°t´p ß° ßß wº p´tp

Gnntl tz

eON	S 9	**9A77vv**	**DA i** 33GV 4	**P℗t x f u U x v xw**	**f P8>>;**
eOO	S 9	**9A77vv**	**DA i** 33GV 4	**P℗t x f u U x v xw**	**f P>>E7**

YI UXV0U 0518 ZJ 3<2=6 3=2=7 YI UXV0U 0518 ZJ 432=7 3<2=<

8A4BCB>97477
8>4BCB>97477



N 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153
N 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153

Qnvßop° °pl w

Ynswp ßJtnsß°yr py pty

Qnvßop° uztyß°

Qnvß Öp w° °pww°

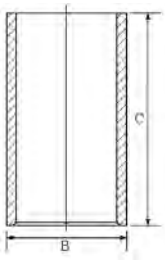
l zx '´pyop wpr°l´ytÜzyt

>MM/9>78QI bt x N v 0	S 9	**9; ADvv**	**>B i** 3aN 4	**P℗t x**	**f P8C7E>**
>QM	S 9	**9>EBvv**	**C> i** 3GDD 4	**P℗t x f u**	**f P888E**

>QN	S 9	9>EBvv	C> i 33DG 4	P@t x	f u		f P>>9>
>QO	S 9	9>EBvv	C> i 33DG 4	P@t x	f u		f P8A98>
>TM	S 9	9>EBvv	AA4AB i 3cV8ca 4	P@t x			f P>>; >
>TP	S 9	9>EBvv	AA4AB i 3cV8ca 4	P@t x			f P8B9A7
9>79QI adW/bt x N v 0	a 9	; A; Cvv		P@t x			Y b9>B;

G0YKX0KY 618J	3=2 6 3=2<6	ZXGTYQZ 518 ZJ 0	392=7 3623 3
ZXGTYQZ 516 J LZ 433	442 4 3=2 <	ZXGTYQZ ZU_XTKU 517 J	3<2=7 3923 3
ZXGTYQZ 517 J	442 : 432<9	ZXGTYQZ ZU_XTKU 518 ZJ	372=< 4523 3
ZXGTYQZ 518 ZJ	382=4 3923 3		

8>478>7E7477 N =91=7 O 4: 4178



>MN	S 9	9>EBvv	A74A9 i 3ae8cG 4	P@t x			f P888;
>NM	S 9	9>EBvv	A9 i 3cG 4	P@t x			f P888>
>OM	S 9	9>EBvv	A9 i 3cG 4	P@t x			f P888B
>OO	S 9	9>EBvv	A9 i 3cD 4	P@t x			f P888C
>PM	S 9	9>EBvv	AE i 3eD 4	P@t x			f P888D

ZXGTYQZ 517 J	432<6 432<9	ZXGTYQZ 518 J 0	3=2<< 3<2=7
ZXGTYQZ 518 J	432<6 3=2<5		

DC4CD>D77477
DC4CD>D98477 *mT*

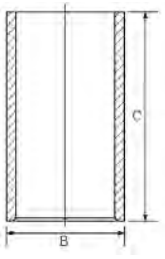
M 8=17:
N4 4<133
N 73133
P =7133
5=É: :

df

7D4CD>D77477
7D4CD>D98477 *mT*

5133 S URV
5133 V
7133 I X V

8>478>7E7477 N =91=7 O 4: 4178



>NO	S 9	9>EBvv	A9 i 3cD 4	P@t x			f P888A
>RM	S 9	9>EBvv	A84A9 i 3ai 8cD 4	P@t x			f P8897
>RN	S 9	9>EBvv	A8 i 3cD 4	P@t x			f P>>9B
>RO	S 9	9>EBvv	A8 i 3cD 4	P@t x			f P>>9D
>RP	S 9	9>EBvv	A8 i 3ai 4	P@t x			f P8A97E
>SM	S 9	9>EBvv	B; i 3eV 4	P@t x	f u		f P>>; 7
>SN	S 9	9>EBvv	B; i 3eV 4	P@t x	f u		f P>>; 9
>SO	S 9	9>EBvv	B; i 3eV 4	P@t x	f u		f P>>; ;
>SP	S 9	9>EBvv	B; i 3ea 4	P@t x	f u		f P8A988
>SQ	S 9	9>EBvv	B; i 3ea 4	P@t x	f u		f P8A989
>SR	S 9	9>EBvv	B; i 3eV 4	P@t x	f u		f P8A98;
>TN	S 9	9>EBvv	AB i 3ca 4	P@t x			f P>>; B
>TO	S 9	9>EBvv	AB i 3ca 4	P@t x			f P8A987

ZXGTYQZ 518 JO	382=4 36233	ZXGTYQZ ZU_XTKU 518 JO	442=7 45233
ZXGTYQZ 518 ZJ	432=5 36233	ZXGTYQZ ZU_XTKU 518 ZJ	442=7 45233

DC4CD>D77477
DC4CD>D98477 *mT*
452=7

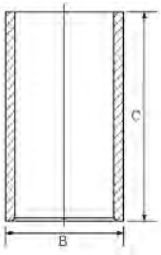
M 8=17:
N4 4<133
N 73133
P =7133
5=É:

df

7D4CD>D77477
7D4CD>D98477 *mT*

5133 SURV
5133 V
7133 IXV

8>478>7E7477 **N** =91=7 **O** 4: 4178



DC489; C774; 7
DC489; C984; 7 *mT*
342=8

M 8=184
N4 4<133
N 73133
P =7133
5=É: 9

df

7D489; C77477
7D489; C98477 *mT*

5133 SURV
5133 V
7133 IXV

>QP	S	9	**9>EBvv**	**DA**	i	33Ga	4	**P@x**	**f**	**u**	**U x v**	**xw**	**f P897E;**

ZXGTYQZ 518 JO 3<2=: 36233

DC489; C774; 7
DC489; C984; 7 *mT*

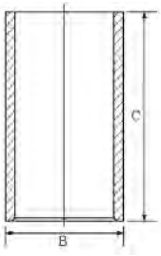
M 8=184
N4 4<133
N 73133
P =7133
5=É: 9

df

7D489; C77477
7D489; C98477 *mT*

5133 SURV
5133 V
7133 IXV

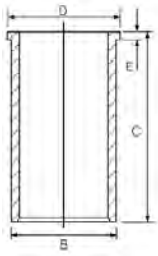
8>478>7E7477 **N** =91=7 **O** 4: 4178



eRM/kP; f 0	S	9	**9>EDvv**	**BD**	i	3N	4	**P@x**	**f**	**u**			**f P>>E9**
eRN /kP; f 0	S	9	**9>EDvv**	**BD**	i	3N	4	**P@x**	**f**	**u**			**f P>>E;**
kP9e	S	9	**9; 7>vv**	**A8**	i	3ai	4	**P@x**	**f**	**u**	**U x v**	**xw**	**Y b8>9E**
kP; b	S	9	**9>EOvv**	**A; 4AD**	i	3cN8ci	4	**P@x**					**f P999>E**
kP; f	S	9	**9>EOvv**	**C7**	i	3V	4	**P@x**	**f**	**u**	**U x v**	**xw**	**f P999A7**

MKGTGJG 516 J	342<5	YI UXVQU 0518 ZJ	392<< 3: 2=6
YI UXVQU 516 J	342<5	YQKXG 516 J	342<5

		8>4797BB7477 8>4798A97477	N =: 133 O 4: 3193 P ==183 Q 7133 N =<133 O 4: 3193 P 433133 Q 9133



ef b /kP; 6kP; b0	S 9	**9>EEvv**	**A8 i**	3ai 4		**P@t x**		**f P8>>D**
ef d /kP; 6kP; b0	S 9	**9>EDvv**	**A8 i**	3ai 4		**P@t x**		**f P8>>E**
MKGTGJG 518 J			3<2<5	3<2<8	YI UXV@J 0518 J		452<8	452=7
MKGTGJG 0518 J			3<2<5	3<2<8				

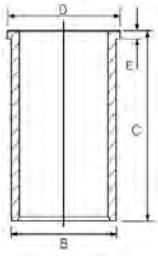
DC4; 8DC77487
DC4; 8DC7B487 *mT m*
452=6

M 87133
N4 41<3
P =9175
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

8>4797BB7477 **8>4798A97477**	**N** =: 133 **O** 4: 3193 **P** ==183 **Q** 7133 **N** =<133 **O** 4: 3193 **P** 433133 **Q** 9133	



DC4; 8DC774; 7
DC4; 8DC874; 7 *mT m*
342=7

M 87133
N4 41: 8
P =4175
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

I f d /kP96kP9b6kPE>0	S 9	**9; 7>vv**	**>E i**	3ac 4		**P@t x**		**f P8>D9**
I f f /kP96kP9b6kPE>0	S 9	**9; 7>vv**	**>E i**	3ac 4		**P@t x**		**f P8>D;**
YOXXG 516 J			3<2<5	452<9	YOXXG 0516 J		342<	352=6
YOXXG 0516 J			3<2<5	452<9				

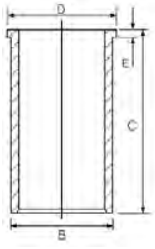
DC4; 8DC77477
DC4; 8DC7B477 *mT m*
DC4; 8DC7D477 *mT m*
DC4; 8DC88477 *Tmm*

M 8: 175
N4 5133
P ==1-3
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

8>4797BB7477
8>4798A97477



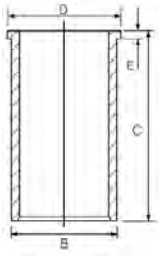
N =: 133 **O** 4: 3193 **P** ==183 **Q** 7133
N =<133 **O** 4: 3193 **P** 433133 **Q** 9133

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ YpB? zyw Qzwnpy y°´ty S zßz´° ßÜpy Ü° p´°pßÜpy Vt°ßzy ´px 'wnp´ol y° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwlx pyßp 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜlßz °zwlx pyßp nzx 'wßz

f P9C	S 9	**9BB; vv**	**C> i**	3GDD 4	**P x**	**f u**		**f P>>E>**
f P9CQ	S 9	**9BB>vv**	**E9 i**	3GNV 4	**P x**	**f u U x v**	**xw**	**f PE>BB**
f P9Cf	S 9	**9BB>vv**	**C; 4C> i**	3GDD8GDG 4	**P x**	**f u U x v**	**xw**	**f P8>A7**

S GaKX0Q 51 ZJ 352=6 372=< S GaKX0Q aGT 51 ZJ 392=9 372=<

8>4797887477



N ==13< **O** 493133 **P** 438136 **Q** 813=

AE7Q	a 9	**A>8Bvv**			**P x**			**Y b9A7B**
AE9Q	S 9	**; B87vv**			**P x**			**Y b9A7; 48**

GMK0_RZ_XGR OTJ_YZX0GR

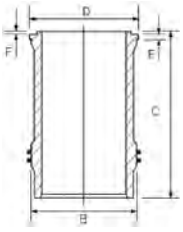
DC497; A77477

M : 4137
N4 571 7
N 7=1-3
O 41 7
O 41 7
P 44<147
68É<9

7D497; A77487

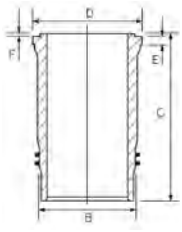
516< I X V
516< V
516< V
71 7 I X V
71 7 V

8>4; C7DC7477

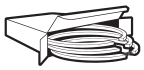


N 4441 9 **O** 5551<= **P** 453133 **Q** 44149 **R** 3198

8>4>AA987477

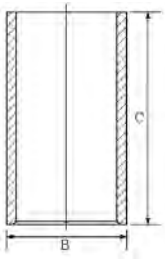


N 43=193 **O** 556133 **P** 44: 193 **Q** 44153 **R** 31<3

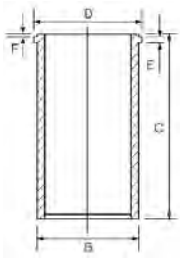


8876B MM4PahQd	a	9	AE>>vv	D8 i 33GD 4	P@i x	f P999>D
8A76B OM4PahQd	a	9	AE>>vv	887 i 3GVD 4	P@i x f u	f PBEAC
9C78Q /9>7 v 5@50	S	9	;E; ; vv		P@i x	Y b9A89
9C7>Q	a	9	AE>>vv		P@i x	Y b9A8>
9C7>Qf /; B7 v 5@50	a	9	AE>>vv		P@i x f u	Y b9A; C
9C7BQ /9>7 v 5@50	S	9	;E; ; vv		P@i x	Y b9A8948
9C7EQ	a	9	AE>>vv		P@i x	Y b9A8>48
9C8; Q /; BA v 5@5bt x N v 0	a	9	AED8vv		P@i x	Y b9A>9
l l´rz			342=5 342=9		CTJ_YZXCGR	

8>478; C77477 N 43<1<3 O 54=133

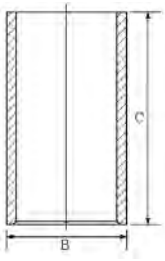


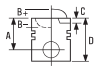
8>47>AAC7477 N 43=16: O 54=188 P 4451<8 Q 71t 9



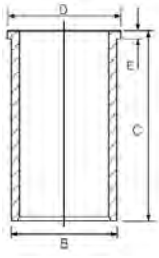
Bl eQdlQe ; 9P /8AD v 5@0	P	9	9ADEvv		P@i x	Y bBC; D48
CMeQdlQe ; 9P /8AD v 5@0	P	9	9ADEvv		P@i x	Y bBC; B
CMeQdlQe ; 9P /8D7 v 5@50	P	9	9EA7vv		P@i x	Y bBC; A
ABS	S	9	; D8Evv		P@i x	Y b9EC>48
9A78Q	P	9	9ADEvv		P@i x	Y bBC; D
9A79Q	P	9	9ADEvv		P@i x	Y bBC; D49
9A7; Q	P	9	9ADEvv		P@i x	Y bBC; D4;
9A7>Q /8CA v 5@50	P	9	9DBOvv		P@i x	Y bBC; 9
9A7DQ /8CA v 5@50	P	9	9DBOvv		P@i x	Y bBC; 949
9A7DQ P9; ;	S	9	; D8Evv		P@i x	Y b9EC>
GMX0 _RZ_XGR					CTJ_YZXCGR	

8>4787CC7477 N 4431t < O 53=188





		8>4797C; 7477	N 4431<3 O 53=193 P 4441<3 Q 8133



Bl eQdlQe /9AB v 5Ø5Ø	S 9	>8EAvv	P@l x	Y bBCAC
Bl eQdlQe >7P /8CA v 5Ø5Ø	P 9	9DBCvv	P@l x	Y bBC; ;
CMeQdlQe /9AB v 5Ø5Ø	S 9	>8EAvv	P@l x	Y bBCAB
CMeQdlQe >7P /8CA v 5Ø5Ø	P 9	9DBCvv	P@l x	Y bBC; >

GMK0_RZ_XGR

DC497D877487

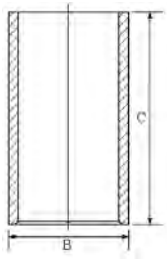
M : 314<
N4 4: 145
N 9615 5
P 45=134
6<É<=

df

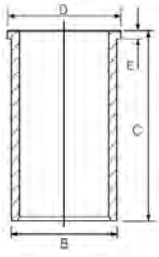
7D497D877477

516< I X V
516< V
516< V
71 7 I X V

		8>4787CC7477	N 4431 < O 53=188



		8>4797C; 7477	N 4431<3 O 53=193 P 4441<3 Q 8133



9C88Q /9AA v 5Ø5Ø	S 9	>8CDvv	P@l x	Y b9AAD
9C89Q /9A> v 5Ø5bt x N v 0	S 9	>8B9vv	P@l x	Y b9AAE
9C8>Q /; D7 v 5Ø0	a 9	B99Cvv	P@l x	Y b9AB7
9C8AQ /; D7 v 5Ø bt x N v P4ex @l 0	a 9	B99Cvv	P@l x	Y b9AB9

GMK0_RZ_XGR OTJ_YZX0GR

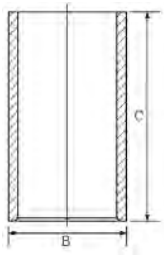
DC498>D77487
DC498>D7C487 *Tm m*
DC498>D7E487 *Tm m*

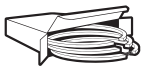
M : 4153
N4 5: 1 :
N 8419 9
O 4198
O 4198
P 44=1k=
6: É=3

7D498>D77487
7D498>D7C487 *Tm m*
7D498>D7E487 *Tm m*
7D498>D88487 *Tm m*

516< I X V
516< V
516< V
71 7 I X V

		8>478>897477	N 44417 3 O 54613 3
		8>478>B>7477	N 4431 < O 54613 3





E76A MM4PahQd	S 9	>8B9vv	B;4BBi 3ea8D 4	P@t x	f PBEA>
8;76C MM4PahQd	a 9	B99;vv	E>i 3GNe 4	P@t x	f PBEAB

l l´rz 382<4 342=9

DC4CD9E77477
DC4CD9E7B477 *Tm*

7D4CD9E77477
7D4CD9E7B477 *Tm*

M	:4158
N4	56153
N	8<183
O	5163
O	5163
P	44=1k<=
	6:É<9

df

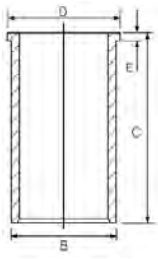
516< I X V
516< V
71t7 I X V

Lz´ l l°ßOzy Hz´p° zyw@ T°´q´M° pt°pymzs´°yrpy Vz°´tyß´tp°´ntw@yo´p°p°wpx pyß Vl´l ot x pßz tyßp´yz° op stp´´z q°yotoz °zwx pyßp Yzw'p´ntwyo´ttyrst°l

9A7AQ/8E9 Og5WZ50	P 9	;8>Bvv		P@t x	Y b;>AB
9A7BQ/978Og5WZ50	P 9	;9E>vv		P@t x	Y b;A8D
NeP;;9/8E9 Og5WZ50	P 9	;8>Bvv		P@t x	Y b;>AB48
NeP;;; JDC/978 v 5Ø50	P 9	;9E>vv		P@t x	Y b;A8D48

GMXI0_RZ_XGR OTJ_YZXOGR

8>4797C>7477 N 447178 O 53<183 P 453168 Q5193
8>4797C>8477 N 449133 O 53<183 P 453168 Q5193
8>4797C>9477 N 4491== O 53<183 P 453168 Q5193
8>4798B87477 N 447176 O 53<186 P 453168 Q5189
8>4798B88477 N 4491=: O 53<186 P 453168 Q518:



CMeQdlQe/978 v 5Ø50	P 9	;9E>vv		P@t x	Y bBC;7
NeP;;;/978 v 5Ø50	P 9	;9E>vv		P@t x	Y b;;A8E
NeP;;;T/978 v 5Ø50	P 9	;9E>vv		P@t x	Y b;A8E
NeP>>>/9BD v 5Ø50	S 9	>;E8vv		P@t x	Y b;A98

GMXI0_RZ_XGR

DC4979>77487
DC4979>7C487 *Tm m*
3:2<

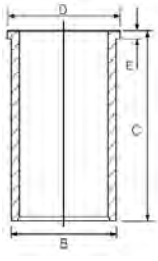
7D4979>77487
7D4979>7C487 *Tm m*

M	9<145
N4	4=t9
N	96183
P	45:133
	6<É<=

df

516< I X V
516< V
516< V
71t7 I X V

8>4797C>7477 N 447178 O 53<183 P 453168 Q5193
8>4797C>8477 N 449133 O 53<183 P 453168 Q5193
8>4797C>9477 N 4491== O 53<183 P 453168 Q5193
8>4798B87477 N 447176 O 53<186 P 453168 Q5189
8>4798B88477 N 4491=: O 53<186 P 453168 Q518:



9BDOg5UZ5	S 9	>;E8vv		P@t x	YbBC>E
>78Og5UZ5/fi 973i ;70	a 9	BAC8vv		P@t x f u	YbBCBD
NeP>>>f /9BDv 5Ø50	S 9	>;E8vv		P@t x f u	Yb;A99

GMK0_RZ_XGR

DC4877877477

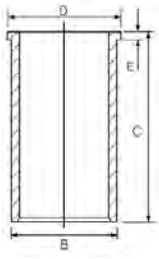
M	9:1<3
N4	4=133
N	961:3
P	45:133
	74É<=

df

7D4877877477

6149		I X V
516<		V
516<		V
71:7		I X V

8>4797C>7477 N 44717 8 O 53<183 P 453168 Q 5193
8>4797C>8477 N 44913 3 O 53<183 P 453168 Q 5193
8>4797C>9477 N 4491== O 53<183 P 453168 Q 5193
8>4798B87477 N 44717 6 O 53<186 P 453168 Q 5189
8>4798B88477 N 4491=: O 53<186 P 453168 Q 518:



Bl eQdlQe /9ABv 5Ø50	S 9	>8EBvv	AA4AD i 3cV8ci 4	P@t x	YbBCA9
CMeQdlQe /9ABv 5Ø50	S 9	>8EBvv	AA4AD i 3cV8ci 4	P@t x	YbBCA948
NeP>>9 /9ABv 5Ø50	S 9	>8EAvv		P@t x	YbBC>C

GMK0_RZ_XGR

DC4979>77477

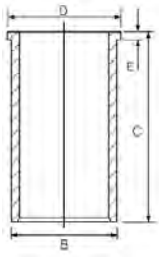
M	:3199
N4	4<195
N	96183
P	45=183
	6<É<=

df

7D4979>77487
7D4979>7C487 *Tm m*

516<		I X V
516<		V
516<		V
71:7		I X V

8>4797C>7477 N 44717 8 O 53<183 P 453168 Q 5193
8>4797C>8477 N 44913 3 O 53<183 P 453168 Q 5193
8>4797C>9477 N 4491== O 53<183 P 453168 Q 5193
8>4798B87477 N 44717 6 O 53<186 P 453168 Q 5189
8>4798B88477 N 4491=: O 53<186 P 453168 Q 518:



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		CCM	x		9
877 SR777		i DP	S	aV9DD	**8**
877 SX5777		i DP	S	aV9DD	**8**
89B M857>D		aVN	N	cc9DD	**;**
dahQd W8BPaTO		GPi a	S	cV9DD	**9**
kgP EM		Gi DV	S	eP9DD	**>**

Nüral® FITTED WITH GOETZE® RINGS

877 SR777 S 9 **E7; vv** **9B49E i** 3PV8Pi 4 **bx** **f P999AA**

877 SX5777 S 9 **E7; vv** **; 74; i** 3SG8SV 4 **bx** **f P999AB**

45: V 31= 4329= 432 9

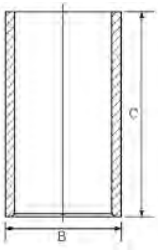
DC497ED77477
DC497ED7B477 *mT m*
DC497ED7D477 *mT m*

M 631t 8
P 94158
53É87

7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

41t 8 I X V
5133 V
61=7 V

8>4788778477



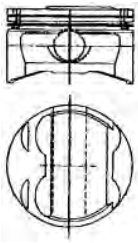
N 9<137 **O** 448133

dahQd W8BPaTO S 9 **8; EBvv** **CB i** 3GDP 4 **bx** **f P8>E>**

VURUTKe 417 t49a 372=7 3=2=< VURUTKe @@417 t49a 3=2=5 36235

DC4A97A77477
342=8

M 561<7
P 791t =
4<É7<



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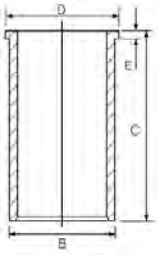
4133
4153
5133 TZ

8>4C877; 7477



N <7143 **O** 45=183 **P** < 183 **Q** 83133

DD4A97A77477
< 0853833033 .
470: 43363033

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

89B M857>D N 9 **BA9vv** **8C499 i** 3NP8PD 4 **bx** **f P9>88B**

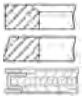
459V 319 3: 2 : 452=4 459V 983 3: 2<4 3=233

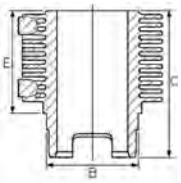
DC4CDAA77477
DC4CDAA7B477 *mT m*
DC4CDAA7D477 *mT m*

M 73133
P : =183
53É94

7D4CDAA77477
7D4CDAA7B477 *mT m*
7D4CDAA7D477 *mT m*

4183 I X V
5133 V
61=7 I X





N <6133 **O** 463173 **Q** : =1=3

DD4CDAA77477
< 0: <8833033

Yßppw
Rtyp´ l @twmp ty QtßYpßzyŵ

Yß sw
eÖwyop´w°qnf°ns°p y°´ ty G°°px mtp°
@p´q r m´

Gntp´
l spx t°p ot°' zytmp py vtß°p°vpx pyß

Gnp´z
l l x t°l ° ot°' zytmp py nzyu´yßz°
°zwx pyßp1

Gnntl tz
l twyo´z ot°' zytmtp °zwr ty vtßx zßz´p

kgP EM S 9 **8E7Avv** **A8 i** 3ai 4 **P@t x** **f P8>E;**

VURUTKe 41=J 372=7 3=2=< VURUTKe @@41=J 3=2=5 36235
VURUTKe @@41=J 3<2<< 3<2=5

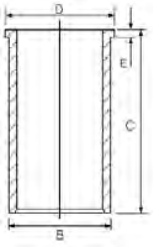
DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

M 791<3
N4 5153
P <7163
58É: 5

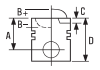
7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

5133 I X V
5133 V
6133 I X V

8>4797A; 7477



N <8193 **O** 486183 **P** <<183 **Q** 61=3



N S 9 **9ECOvv** **AE i** 3eD 4 **P0t x** **Y b8C8B**

CTJ_YZXCGR

DC4A9B; 77477

M 85153
N4 5183
P 434153
5=É: =

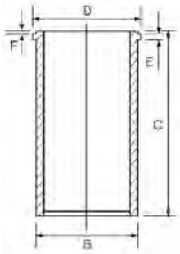
Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyw0

7D4A9B; 77477

5183		I X
5183		I X
7183		I X

Qzwmpy y°´ty Szßz´° ßÜpy Ü° p´°pßÜpy

8>47>78A7477



Vt°ßzy ´px 'wmp´oly° up° x zßp°´

N 435133 **O** 4=3155 **P** 43: t 8 **Q** 5188 **R** 4153

Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwlx pyßp

0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜlßz °zwlx pyßp nzx 'wpßz

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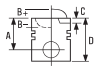
		CCM	x		9
>QQ49		Gaea	S	ci 9DD	9
97f 9Z /X eQdlQe0		Gi i S	S	eS9SV	>
97f 9d /X eQdlQe0		Gi i S	S	eS9SV	>
P8BM		GVi D	S	cV9DD	8
P8BI C		GVi D	S	cV9DD	8
kgPCf /kgPC0		Gcai	S	eD9DD	;



P8BM S 9 **8AE7vv** **CE4E8 i** 3GDc8GNS 4 **bx** **f P8CB; D**

P8BI C S 9 **8AE7vv** **CC4CE i** 3GDV8GDc 4 **bx** **f P8889D**

I @a0 C0419	342=< 452=5	I Xc C0419 t	3=2=8 362=9
I @a0 a0419	3=2=8 45233	JUS GT0419	432=8 3=2==
I @a0 a0419 t	362=9 36233	UXZNG 2VGXZTKX 419	432=8 3=2==
I Xc C0419 t49a	432=< 452=4		

DC4>; ; C77477
DC4>; ; C7C477 *mTm*
342=9 45234

M	63133
N4	617:
N	96196
O	6193
O	5133
P	83133
	4=É89

f b

7D4>; ; C77477
7D4>; ; C7C477 *mTm*

4133		I X
4153		V
51<8		I X

V3: 2/3<
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

>QQ49 S 9 **8BDBvv** **C> i** 3GDG 4 **P@t x f u U x v xw** **f P8DC; A**

I @a0 a0041 I ZJt 34235 3=238

DC4; 7CB774>7
DC4; 7CB7C4>7 *mTm*

M	6=t 8
N4	47133
N	6<t 3
O	4143
P	<7133
	5: É97

df

7D4; 7CB77477
7D4; 7CB7C477 *mTm*

5133		I X V
4183		I X V
6133		I X V

kgPCf /kgPC0 S 9 **8CBEvv** **AD4BA i** 3ci 8ee 4 **P@t x f u U x v xw** **f P8D; E;**

I @Zd 41<J 352=: 442==

DC4; 9; B7C477 *mTm*

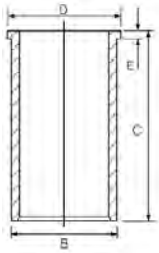
M	791<3
N4	5153
P	<7183
	5<É9<

MWdf

7D4; 9; B77477
7D4; 9; B7C477 *mTm*

6133		SURV
5133		V
6133		I X V

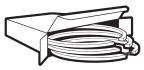
8>479>C>7477 **N** <6183 **O** 487133 **P** <8t 3 **Q** 7193
8>479>D; 7477 **N** <6183 **O** 487133 **P** <9183 **Q** 7183



97f 9Z /XeQdUQe0 S 9 **8EE>vv** **C>4CC i** 3GDG8GDV 4 **P@t x f u U x v xw** **f PA; E7**

97f 9d /XeQdUQe0 S 9 **8EE>vv** **B; i** 3ea 4 **P@t x f u U x v xw** **f P997; A**

GI I UXJ a 513 ZJt	372=9 432=<	I @a0 a0513 t J	372=< 35234
GI I UXJ a0513 ZJt	452== 43233	I @a0 a0513 t ZJ	342=: 35234



GI I UXJ a0513 Z°´mz J O | 352═ 45235 | I Qa0 a0513 ZJtl | 442═< 43233

DC488ED77477
DC488ED7C477 *mTm*

M 7: 1═<
N4 4: 133
N 6<133
P : 91═<
63É: 3

MWdf fb

7D488ED77477
7D488ED7C477 *mTm*

6133 VY
5133 V
6133 I X

48 opr´pp b porp Zz' Xtyr | 480MI o Qptwmp´´tyr | Yprx pyßßl ' Üztol wl yr wp 48 op r´ °1 | Gytwr°°' p´tz´ py n° I op 48 r´l oz° | Yprx pyßz ßl ' pÜz nzy tynwbyl Ützyp qt ynst C 48

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>PAA		NPSa	S	i G8GD	8B
>PAAf		NPSa	S	i G8GD	8C
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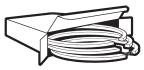
P>RN /Q	>0	GVeN	S	cc9ND	E
P>RN4Ab		GVeN	S	cc9ND	E
P>RN4X /Q	>0	GVeN	S	cc9ND	E
P>TM		Gi i V	S	eS9DD	8>
PVI		Gi DV	S	eP9DD	8;
S>QP /Q	>0	GVi i	S	ca9VD	B
S>QQ /Q	>0	GPi i	S	cV9VD	>
S>QW		GSi V	S	cV9VD	A
S>RM /Q	>0	GPi a	S	cc9DD	C
S>RV		GVi G	S	cc9DD	D
S>XM		GNSe	S	cG8DD	8
S>XO		GPae	S	cN8DD	9



S>XM	S 9	89>Dvv	AA4BA i	3cV8ee 4	bx	f P9>DD7
t43 0415		4423<		t53 0D415		44247
t43 0415 RVM		34243	45246	t53 0D415 RVM		3424=
t43 0D415		45246		t53 0D415 RVMD		44247
t53 0415		3=23<	45248	aKT_K S Vt		3: 24=
t53 0415 RVM		3423=	3<247			

DC4>>DA77477
DC4>>DA7C477 *mT m*

7D4>>DA77477
7D4>>DA7C477 *mT m*

M	571t 3	4133		I X
N4	6133	4153		V
N	8<183	5133		VaJ
O	51<5			
O	519:			
P	761=3			
	4<É7<			

Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz

S>XO	S 9	8; BDvv	C74DA i	3 V8GGa 4	bx	f P9EDC9
GI I KTZ Qa 417		44243		t53 0D417 S Vt		44247
GI I KTZ a 417		3: 24<		t53 0D417		38254
HGdUT 417		38254		t63 417		45247
t53 417		3=248		YURGXQY 417		3424:
t53 0D417		44247				

DC4>9; E77477
DC4>9; E7C477 *mT m*

7D4>9; E77477
7D4>9; E7C477 *mT m*

M	571t 3	4133		I X
N4	6193	4153		V
O	5183	5133		VaJ
P	751t 3			
	4<É7<			
f b				

Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz

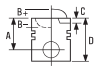
P>RM	S 9	8>E; vv	BA4DA i	3ee8GGa 4	P@t x f u U x v xw	f P8D99E
GI I KTZ 0D418 I XJt MRY		44238	44243	t53 0D418 I XJt		44253
I XKZG 418 I XJt		36253		S GZX@t 418 I XJt	45237	3<243
KRGTZXG 0DJ		34238	3=239	S GZX@t 418 I XJt aMZ	3<238	3<243
MKZe 418 I XJt		3<238	3923=	YURGXQY 418 I XJt	38253	
MKZe 418 I XJt MRY		3: 237	3923=	aKT_K I XJt	36253	

DC4D>E777477
DC4D>E77C477 *mT m*

7D4D>E777477
7D4D>E77C477 *mT m*

M	741=8	4t 8		TZ
N4	45153	4t 8		I X V
N	76173	6133		TZ
O	3183			
P	981t 3			
	5<É95			
MWWWdf				

Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz



S>QQ/Q >0 S 9 **8;EEvv C8 i 3c 4 bx f P97C99**

GI IKTZ 00417 MR	44238 44243	MKZe 417 t	3<238 45243	

DC4D>E977477
DC4D>E97C477 *mT m*

M 5<t 8
N2 5153
O 51=8
P 7: 1=3
4<É7<

7D4D>E9774A7
7D4D>E97C4A7 *mT m*

4153 I X
4153 V
5133

Yßppw Yßsw Gntp´ Gnp´z Gnntltz

S>QW S 9 8>EAvv B;4EA i 3eV8GN 4 bx f P>ABE

GI IKTZ 418	432=7 452==	GI IKTZ 00418	3423< 45245	
GI IKTZ 418 t45a	432=7 34233	GI IKTZ 00418 ITM	3423< 44243	
GI IKTZ 0418	432=7 45235	MKZe 418	39234 34237	
GI IKTZ 0418 t45a	432=7 34233	RGTZXG 00418 45a	452=9 43233	
GI IKTZ 00418	3=2== 45239	YIU_VK 418	342=4 452=8	
GI IKTZ 00418 RVM	34233 45239	YIU_VK 418 t	372=5 382=9	

DC4>;A>7C477 *mT m*

M 6416:
N4 31 3
N 97163
O 5153
P 87173
4<É7<

f b

7D4>;A>77477
7D4>;A>7C477 *mT m*

4183 I X V
4183 V
6133 I X

Yßppw Yßsw Gntp´ Gnp´z Gnntltz

S>QP/Q >0 S 9 8AEEvv BB4DE i 3D8GNG 4 bx f P97C98

GI IKTZ 00419	34233 45238	KRGTZXG 00RVO	34238 3=239	
GI IKTZ 00419 MRY	44238 44243	MKZe 419	3=235 3923=	
IU_VK 00419 49a	36235 3<23=	SGZX0t 419	39234 3<243	
KRGTZXG 00419	39233 3: 239	Z0H_XUT 419	43239 4523<	

DC4>9>977477
DC4>9>97C477 *mT m*

M 5<147
N4 3173
N 93173
O 6133
P 83147
4<É7<

f b

7D4>9>977487
7D4>9>97A487 *mT*
7D4>9>97C487 *mT m*

4153 I X LK
4153 V
5133 TZ V

Yßppw Yßsw Gntp´ Gnp´z Gnntltz

S>RM/Q >0 S 9 8;EBvv BB4D7 i 3D8GDi 4 bx f P9>DD8

GI IKTZ 0a 417	44243	t63 417 RVM	3423=	
t53 0417	3=23< 45248	tÉ53 417	44243 3: 24=	

t53 0417 RVM	4523< 45245	tÉ53 417 RVM	44243 3: 24=
t63 417	4323:		

DC4>9>D77477
DC4>9>D7C477 *mT m*

M 591=3
N2 4173
O 7183
P 78163
4<É85

f b

7D4>9>D774;7
7D4>9>D7A4;7 *mT*
7D4>9>D7C4;7 *mT m*

4153		I X LK
4153		V
5133		I X V

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

S>RV S 9 **8AE8vv** **89E48A7 i** 3GcV8NDS 4 **bx f u U x v xw** **f P9E9D8**

KRGTZXG a0419 YX Z°´mz	35249	YUTGZG a00419	3624=
t63 419 Z0MJ0	34248	Z_I YUT 419 Z0MJt	39248
t63 419 Z0MJt	44249	aKRUYZKX 419 Z0MJ0	3<245 4524:
QUTG 419 Z0MJt	3924:	aKRUYZKX 419 Z0MJt	3424<
YUTGZG a00419	3=247		

DC4>9BE77477
DC4>9BE7C477 *mT m*

M 5<133
N4 6133
O 5133
O 51<3
P 78133
53É85

f b

7D4>9BE77477
7D4>9BE7C477 *mT m*

4153		VaJ
4183		V
5133		TZ

DC4>9BE77487
DC4>9BE7C487 *mT m*

M 5<133
N4 6133
O 5133
O 51<3
P 78133
53É85

df f b

7D4>9BE77477
7D4>9BE7C477 *mT m*

4153		VaJ
4183		V
5133		TZ

UK 563745HI H3
Yfppw
UK 563745HGG3

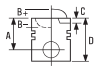
Yß sw Gntp´ Gnp´z Gnntl tz

P>RN /Q >0 S 9 **8AD9vv** **BB4877 i** 3 D8GPa 4 **P@t x f u U x v xw** **f P97C9B**

P>RN4Ab S 9 **8AD9vv** **E> i** 3GNe 4 **P@t x f u U x v xw** **f P9BEED**

P>RN4X /Q >0 S 9 **8AD9vv** **D8 i** 3GGD 4 **P@t x f u U x v xw** **f P9C99D**

GI I KTZ @a 419 I XJ0	37244		t53 0419 I XJt	3=23<	45245
GI I KTZ @a 419 I XJt	44243		t63 419 I XJt	4323:	
GI I KTZ a 419 I XJ0	3424:		t63 419 I XJ0	38248	
I XKZG 419 I XJt	34249	34254	t63 419 I XJt aMZ	4323:	
KRGTZXG @a 419 I XJt	44238	45244	tÉ53 419 I XJ0	39244	3: 24=
KRGTZXG a 419 I XJt	35244	45248	QUTG 419 I XJt p0aMZ	3: 24:	



KRGTZXG a0419 I XJt aMZ	34249	YURGX0Y 419 I XJt	3424:
KRGTZXG a0419 J	35249		

DC4>; >977477
DC4>; >97C477 *mTm*

7D4>; >977477
7D4>; >97C477 *mTm*

M	741=8	41t8	VaJ TZ
N4	451t3	41t8	I X V
N4	51<3	6133	TZ
N	4<153		
O	3183		
P	981t3		
	5<É95		

MWWWdf

Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz

P; QM P 9 **8>E; vv** **B7 i** 3=N 4 **P@t x f u U x v xw** **f P8B9D;**

Gl I KTZ 00418 I XJt	34235	44238	S GZX0t 418 I XJt	43234	3<243
MKZe 418 I XJt	36236	3=238			

DC4>; 8E77477
DC4>; 8E7C477 *mTm*

7D4>; 8E77477
7D4>; 8E7C477 *mTm*

M	79163	41=3	I Q V
N4	461=3	5133	I X V
N	791=8	6133	TZ
P	:5163		
	5<É99		

MWZN df

Utwtyr ´l otl wÄtoßs 61t8x x
Jtnvp wtyr>61t8x x
Rl´rp°´l otl ψo°°prx pyßoos°tψ 61t8x x
Gynsz°prx pyßz op l nptßp 6/:8x x
Y'p°°z´p´l otl ψ°prx pyßz´l°nstl zwz> 61t8x x

Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz

P>QM S 9 **8EE8vv** **D;4887 i** 3GGP8GVD 4 **P@t x f u U x v xw** **f P8B;98**

KRGTZXG 00513 I XJt	37234	3:239	YUTGZG a513 I XJt	35239	45243
NQWNb Gd aGT 513 I XJt	36234	36237	ZXGPKZ 513 I XJt	37234	3:23<
t63 513 I XJt	4323:	39245	ZXGPKZ I XJt	37237	3:23<
YGTZG L 0513 I XJt	37234	36239	Z_I YUT 513 I XJt	3<237	36243
YGTZG L 0I XJt	37234	36239	Z_I YUT I XJt	34239	36243
YGTZG L 00513	34238	4523=	Z_I YUT I XJt aMZ	3423=	36243
YGTZG L 00513 I XJt	36239	45245			

DC4>; 8E77477
DC4>; 8E7C477 *mTm*
4523:

7D4>; 8E77477
7D4>; 8E7C477 *mTm*

M	79163	41=3	I Q V
N4	461=3	5133	I X V
N	791=8	6133	TZ
P	:5163		
	5<É99		

MWZN df

DC4>; 7>77487
DC4>; 7>7C487 *mT m*
3423<

M 7916 3
N4 491=8
N 751t 3
P : 516 3
5<É99

MWWWZN df f b

7D4>; 7>77477
7D4>; 7>7C477 *mT m*

5133 I Q
5133 I X V
6133 TZ

Utwíyr ´lotlwÄtoßs 61t 8x x	Jtnvp vityr>61t 8x x	Rl´rp°´lotlwpo°°prx pyßoòs°twp 61t 8x x	Gynsz°prx pyßz op lnptßp 6/: 8x x	Y'p°°z´p´lotlwp°prx pyßz´l°nstl zwz> 61t 8 x x
Yßppw	Yßsw	Gntp´	Gnp´z	Gnntl tz
UK 567435: =63	UK 567435: =63	UK 567435: =63	UK 567435: =63	UK 567435: =63

P>QM4h /Q >0	S 9	8EE8vv	E9 i 33NV 4	P@t x f u U x v xw	f P97C8E
YGTZG LK 513 ZJ O		43239 45246			

DC4>; 7>77477
DC4>; 7>7C477 *mT m*

M 7916 3
N4 461t 3
N 7<183
P : 516 3
5<É99

MWWWZN df f b

7D4>; 7>77477
7D4>; 7>7C477 *mT m*

5133 I Q
5133 I X V
6133 TZ

UK 567435: =44	UK 567435: =44	UK 567435: =44	UK 567435: =44	UK 567435: =44
Yßppw	Yßsw	Gntp´	Gnp´z	Gnntl tz

PVI	S 9	8E7Avv	A74A9 i 3ae8cG 4	P@t x	f P999BC
RGTZXG 0041=J		362=< 43233			

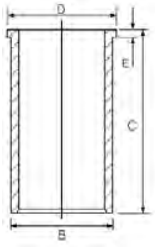
DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

M 791<3
N4 5153
P <7163
58É: 5

7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

5133 I X V
5133 V
6133 I X V

8>4797A; 7477



N <8193 **O** 48613 3 **P** <<183 **Q** 61=3

P>TM	S 9	8EEAvv	87748A7 i 33Pa8NDS 4	P@t x f u U x v xw	f P9ABE>
tÉ68 513 I XJt		34243	YGTZG LK Qa 513 I XJt		3524<
tÉ68 I XJt		3<23= 45248	Z_I YUT 513 I XJt		39248
YGTZG L 00513 I XJt		36239 45245	Z_I YUT 513 I XJt 7<a		43241<
YGTZG L 00513 I XJt		3=245			

DC4>>B>77477
DC4>>B>7C477 *mT m*

M 7<1=3
N4 481 3
N 78173
P : 81=3
67É99

MWWWdf f b

7D4>>B>77477
7D4>>B>7C477 *mT m*

5183 I X V
5133 V
6133 TZ

Yfbppw Yfb sw Gntp´ Gnp´z Gnntl tz

P>ON /Q >0 S 9 **9>EOvv C>489E i** 3GGD8GcV 4 **P@t x f u U x v xw** **f P98798**

N04 518 I XJt	3: 234	N433 518 ZJ	34243
N04 518 I XJO	3523<	N683 518 I XJO	37248
N04 2YZGXKc 518 I XJt	45235 4523:	VUXZKX 518 I XJt	35236
N04 2YZGXKc I XJt	34235 4523:	VUXZKX 518 J	34245
N433 518 I XJO	34237		

DC4>; 8C77477
DC4>; 8C7C477 *mT m*

M 87158
N4 48133
N 85133
O 3163
P <61 8
66É: 8

MWWWdf

7D4>; 8C77477
7D4>; 8C7C477 *mT m*

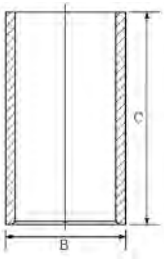
5183 I Q V
5133 I X V
6133 TZ

Yfbppw Yfb sw Gntp´ Gnp´z Gnntl tz

>PAA S 9 **9; >Bvv** **P@t x** **Y b; ; CC**

MGRRUVKX Ppp' 517J	342<3 452<9	VUXZKX ZX_I Q 517	342<3 452<9
MXGI K 517	342<3 452<9		

8>478AAE7477 **N** =7146 **O** 497183



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MGRRUVKX 517

DC49DC8774;7
DC49DC87C4;7 *mTm*

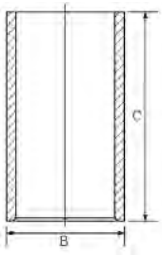
M 7<t3
N4 6143
O 5163
P <<t3
5=É:8

df

7D49DC877477
7D49DC87C477 *mTm*

5183 SUV
5183 IXV
7183 IXV

8>478AAE7477 **N** =7146 **O** 497183



UK>SJ4366=4

>PAB4f	S 9	9>CCvv	B94C> i	3eS8GDG 4	P@t x f u U x v xw	f P8DDB7
MGRRUVKX 0518 ZJ		3<2=4 3:2=<		N433 518 ZJ		44239

DC49DC8774;7
DC49DC87C4;7 *mTm*

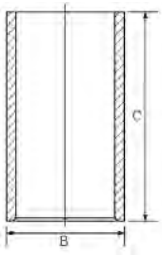
M 7<t3
N4 6143
O 5163
P <<t3
5=É:8

df

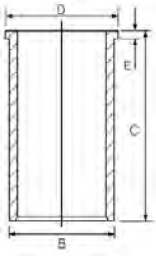
7D49DC877477
7D49DC87C477 *mTm*

5183 SUV
5183 IXV
7183 IXV

8>478AAE7477 **N** =7146 **O** 497183



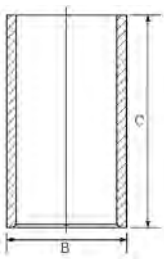
8>4797B77477 **N** =7197 **O** 498143 **P** =91=4 **Q** 8139



UK>SJ4366=4

>P;8	S 9	;9EDvv	P@t x	Y b8EA79
>P;8f	S 9	;9EDvv	P@t x f u U x v xw	Y bEA8A
I GTZKX 616	342<	ZX_I Q618 Bzy	342=5 3=2=8	
XUYG H_Y 616	342=8 452=9			

8>4787EC7477 **N** 437183 **O** 4=9183



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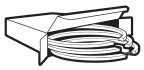
		CCM	x		9
P48CE		Ni PP	P	i e9SN	**8**
P49; E		Pi GG	S	i e9SN	**8**
P4; AD		Veac	a	i e9SN	**8**
Pf 49; E		Pi GG	S	i e9SN	**8**
Pf 4; AD		Vaac	a	i e9SN	**8**

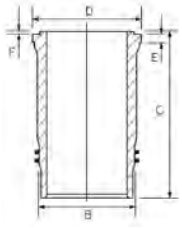


P48CE	P	9	**9E; ; vv**	**; ; 4; D i**	3SV8VN	4	**P@t x**		**f P8DD79**
P49; E	S	9	**; E88vv**	**>A4AB i**	3aG8ca	4	**P@t x**		**f P8DD7>**
P4; AD	a	9	**ADBCvv**	**BB4878 i**	3 D8GPc	4	**P@t x**		**f P8DD7C**
Pf 49; E	S	9	**; E88vv**	**AE4B; i**	3eD8ea	4	**P@t x**	**f u**	**f P8DD87**
Pf 4; AD	a	9	**ABBCvv**	**DD4877 i**	3GND8GPa	4	**P@t x**	**f u**	**f P8DD7D**

: 76	342<3	452<=	H0Yp´tp°	342 7	452<3
<89	342<6	452=4	I S 0Yp´tp°	342?8	452=7
G0Yp´tp°	342 8	452<=	I 0Yp´tp°	342 :	452=5

8>4>A88C7477

N 4431t 8 **O** 548t33 **P** 44=t33 **Q** : t 3 **R** 4143



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		CCM	x		9
>TR84UJ		SPPS	S	GGN9DD	B
>TS84f /Q 90		SVcD	S	GGV9DD	C
>TW84f O /Q ; 6>0		VGi P	S	GGV9DD	D
>VM8f		NVDD	S	i P9DD	>
>VN8		NccG	S	i P9DD	>
O 97 ZQ		Gi i e	S	ea9DD	8
O8E7		Gi VG	S	ea9DD	9
O 99;		NNPe	S	ee9DD	;
O 9>7		NPai	S	ea9DD	9
f P9C		NaaP	S	i a9DD	A

O 97 ZQ	S 9	**8EEDvv**	**DA i** 33GV 4	**bx**	**f P9BD79**
QH 513		3: 235 39237			

DC4; 7BD774; 7

M 63173
N4 8133
N 8: 133
P 83173
54É95

f b

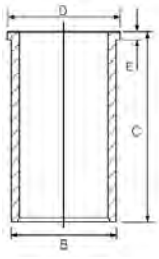
7D4; 7BD77477
7D4; 7BD7C477 *mT m*
7D4; 7BD88477 *Tmm*

4183 I X V
4183 V
6133 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

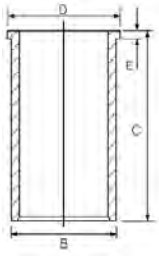
O8E7	S 9	**8EA8vv**	**>7 i** 3/S 4	**P Øt x**	**f P8BDA**
O 9>7	S 9	**9; BEvv**	**>>4A8 i** 3aD8ai 4	**P Øt x**	**f P9B9BE**
I GS VU 513 J				KRL 517 J	
KRL 513 J				MKS OT0513 J	

8>47988D7477 **N** =3146 **O** 4: <183 **P** =7133 **Q** 7133



O 99;	S 9	**99; Dvv**	**; E4A> i** 3/P8cP 4	**P Øt x**	**f P8BDB**
44: 515 J		392 = 392<4		ZLX2ZLY 515	432=5 3<2=6
I GS VU 515 J		342=6 452=4		ZXUUVKX 0515 J	382=7 452<=
QH 515 J		342=6 362<<			

8>47988E7477 **N** =5146 **O** 496183 **P** =8133 **Q** 7133



>VM8f	S 9	**9A77vv**	**A94DB i** 3cG8GGc 4	**P Øt x f u**	**f PD>78**
>VN8	S 9	**9CC8vv**	**>94C> i** 3/c8GDG 4	**P Øt x**	**f P8BC7**
J OS Gc 0518		3: 238 39245		T -8ßs Mpyp´l ßzy,	432=5 39239
KRL		432=8 3=236		VGTZNKX 0518 ZJ	362=4 3<233
KRL 51< J		432=8 3=236		V0l Q_V 518	44248
LXUTZ0KX 51< J		442=: 3<236		V0l Q_V 518 ZJ	392=5 45235
QH 518 J		3: 2=7 3=236		ZLX2ZLY 518 ZJ	3=2<< 45233
QH 518 ZJt		452=3		ZLX2ZLY 51< J	3=2=4 3<2==
S ZH		342=7 45237			

DC49>B977477

M 841<7
N4 47173
N 7<133
O 317=
P =41<7
64É: 9

MWdf

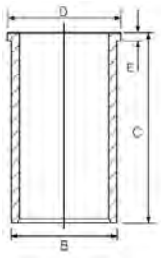
7D49>B977477

5133 V
5133 V
7133 V

f P9C S 9 **9BB; vv** **AD4C; i** 3ci 8i 4 **P i x** **f P988AB**

KRL 51t ZJ 432== 3=234

8>4797887477 **N** ==13< **O** 493133 **P** 438136 **Q** 813=



>TR84UU S 9 **>; ; >vv** **CB i** 3GDP 4 **P i x** **f u** **f P9CED8**

T -ßßs Mpyp´l ßzy, 432=5 3=236

DC4>>B977477

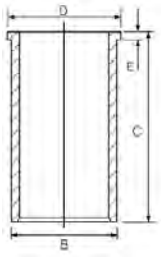
M 931t 8
N4 55133
N 7=193
P =7183
69É: =

df

7D4>>B977477

6133 I X TZ
5183 I X V
7133 TZ

8>4797CD7477 **N** 448133 **O** 4<3133 **P** 4541t 3 **Q** 9143



Yßppw Yß sw Gntp´ Gnp´z Gnntl tz
Vsz°' sl ßpo Vsz°' sl ßp´ß Vsz°' sl ß Lz°q ßl oz Lz°q ßl ßz

>TS84f /Q 90 S 9 **>AC7vv** **DA487; i** 3GGa8GSD 4 **P i x** **f u** **f P9989C**

KRL 719 JtZJ 432== 3=236 T 3423: 45247
KRL 719 ZJ 432=5 3=233 T -ßßs Mpyp´l ßzy, 432=5 45236

DC4>>CE77477
45238

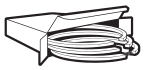
M 931t 8
N4 55183
N 84133
P 44=183
69É: =

MWWdf

7D4>>CE77477

6133 TZ
5183 I X V
7133 TZ

K°´z 5
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz



>TW84f O /Q ; 6>0 S 9 **A8E; vv 88748AA i** 3GV/D8NGG 4 **P0t x f u U x v xw f P; 8>98**

KRLOYKX0K	36243 3: 247	LUXb GXJ L	34239
LUXb GXJ	34239	T -9fs Mpyp´l fzy,	43239

DC4>>B; 77477

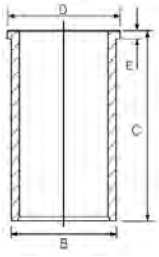
M	9914 8
N4	4<k3
N	941=3
P	=9198
	73É<

MVWWdf

7D4>>B; 77477

6133		TZ
5183		I X V
7133		TZ

8>4798E; 7477



N 44<133 **O** 543133 **P** 4561 3 **Q** 9143

Yfppw Vsz°' sl fpo	Yfs sw Vsz°' sl fp´f	Gntp´ Vsz°' sl f	Gnp´z Lz°q fl oz	Gnntl tz Lz°q fl fz

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		CCM	x		9
97; M6B8		GGVSe	a	GPD9DD	A>
97; T B8		GGVSe	a	GPD9DD	A>
; 87 T 6B8		GGVSe	a	GPD9DD	A>
D7; M67B9 /D7; 7578O		NPPi	P	i V9DD	8>
D7>M/D7>7578O		PGGi	S	i V9DD	8>
D7B M/D7B7578 6B8O		Sace	a	i V9DD	8>
D79A578		GVVi	N	i V9DD	8>
D79A579		GcNe	N	GDD9DD	8C
D7; 7579		NVi N	P	GDD9DD	8C
D7; A579		NVi N	P	GDD9DD	8C
D7; A57>		NcSe	P	GDP9DD	9>
D7; A57A		Ni PD	P	GDS9DD	9D
D7; A57B		NcDe	P	GDD9DD	8D
D7>7579		PSVa	S	GDD9DD	8E
D7>7579		PSVV	S	GDD9DD	8E
D7>759AN5>977		Pi De	S	GDS9DD	; 8
D7>759Ak5>777		Pi De	S	GDS9DD	; 8
D7>75>AP5A877 /Q 90		Pi De	S	GDS9DD	9E
D7>75>AP5A878 /Q 90		Pi De	S	GDS9DD	9E
D7>75>AP5A87; /Q 90		Pi De	S	GDS9DD	9E
D7>75>AP5A87A /Q 90		Pi De	S	GDS9DD	9E
D7>75>Ak5>8D7		Pi De	S	GDS9DD	; >
D7>8 X		Paaa	S	GDP9DD	9A
D7>A579		PSVa	S	GDD9DD	8C
D7>A57A		Pi De	S	GDS9DD	9D
D7>A57B		PaGP	S	GDD9DD	8D
D7AA57>		SVeP	V	GDP9DD	9>
D7B757>		VSi i	a	GDP9DD	9>
D7B759Ah5>777		VeaG	a	GDS9DD	9E
D7B759Ah5>777 /Q 80		VeaG	a	GDS9DD	; 8
D7B759Ah5>7D7		VeaG	a	GDS9DD	; 8
D7B759Ah5>D77		VeaG	a	GDS9DD	; 8
D7B759Ad5>977		VeaG	a	GDS9DD	; ;
D7B759Ad5>977 /Q 80		VeaG	a	GDS9DD	; 8
D7B759Ad5>977 Xf O		VeaG	a	GDS9DD	; ;
D7B759Ad5>987 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>997 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>99A /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>9; 7 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>9>7 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>9A7 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>9D7		VeaG	a	GDS9DD	; ;
D7B759Ad5>9D7		VeaG	a	GDS9DD	; 8
D7B759Ad5>9DA /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>9E7 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>9EA /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>; 77		VeaG	a	GDS9DD	; 8
D7B759Ad5>; B7 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>; B9 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>CA7		VeaG	a	GDS9DD	9E
D7B759Ad5>CAA		VeaG	a	GDS9DD	9E
D7B759Ad5>CB7		VeaG	a	GDS9DD	9E
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D7B759Ad5>EBC /Q 80		VeaG	a	GDS9DD	9E
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D7B759Ad5>EC7 /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>EC; /Q 80		VeaG	a	GDS9DD	9E
D7B759Ad5>ED7 /Q 80		VeaG	a	GDS9DD	9E
D7B75>A /Q 80		VeaG	a	GDS9DD	; ;

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	CCM	x		9
D7B75>AN /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A877 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A878 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A87; /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A87A /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A888 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A889 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A88; /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A897 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A898 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A89; /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A89> /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A8>A /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A8>B /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A8A7 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A8A8 /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A8DA /Q 90	VeaG	a	GDS9DD	9E
D7B75>AN5A8DB /Q 90	VeaG	a	GDS9DD	9E
D7B75>AW5B7E7 /Q 80	VeaG	a	GDS9DD	9E
D7B75>AX5>>77	VeaG	a	GDS9DD	9E
D7B75>AY 5C977	VeaG	a	GDS9DD	9E
D7B75>Ad5A777 /Q 90	VeaG	a	GDS9DD	;>
D7B75>Ad5A778 /Q 90	VeaG	a	GDS9DD	9E
D7B75>Ad5A77; /Q 90	VeaG	a	GDS9DD	9E
D7B75>Ad5A7A7	VeaG	a	GDS9DD	9E
D7B75>Ae5B777	VeaG	a	GDS9DD	9E
D7B75>Ae5B777 /Q 80	VeaG	a	GDS9DD	9E
D7B75>Ae5B97; /Q 80	VeaG	a	GDS9DD	9E
D7B75>Ae5BD77 /Q 80	VeaG	a	GDS9DD	9E
D7B75>Ae5BD77 /Q 80	VeaG	a	GDS9DD	;A
D7B75>Ae5C977 /Q 90	VeaG	a	GDS9DD	9E
D7B75>Ae f OM	VeaG	a	GDS9DD	9E
D7B8 X	VSi i	a	GDP9DD	9A
D7B857A	VeaG	a	GDS9DD	;7
D7B859A	Veae	a	GDS9DD	;9
D7BA5Q	VeaG	a	GDS9DD	9D
D7BA57>	VSi i	a	GDP9DD	9>
D7BA57>4T	VSi i	a	GDP9DD	9>
D8>759; /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>759Cd59C77	NVDD	S	i P9DD	C
D8>759Cd59CD7	NVDD	S	i P9DD	>
D8>759Cd59CD9	NVDD	S	i P9DD	>
D8>759Cd59CDB	NVDD	S	i P9DD	>
D8>759Cd59CDC	NVDD	S	i P9DD	>
D8>759Ce /ea RUY 95Af P0	NSSV	S	i P9DD	B
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D8>759Ce59C98	NVDD	S	i P9DD	>
D8>759Ce59C;7	NVDD	S	i P9DD	>
D8>759Ce59C;8	NVDD	S	i P9DD	>
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D8>759Ce59CC7	NVDD	S	i P9DD	>
D8>759Ce59CC8	NVDD	S	i P9DD	>
D8>759Ce59D78 /e yØ 0	NVDD	S	i P9DD	C

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		CCM	x		9
D8>759Ce59D88		NVDD	S	i P9DD	>
D8>759Ce59DDA/e yØ 0		NVDD	S	i P9DD	C
D8>759Ce5¦ C77		NVDD	S	i P9DD	B
D8>759Ce5¦ C78		NVDD	S	i P9DD	B
D8>759Ce5¦ C88		NVDD	S	i P9DD	B
D8>759Ce5¦ C97		NVDD	S	i P9DD	B
D8>759Ce5¦ C98		NVDD	S	i P9DD	B
D8>759Ce5¦ CA7		NVDD	S	i P9DD	B
D8>759Ce5¦ CA8		NVDD	S	i P9DD	B
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D8>759Ce5¦ CB8		NVDD	S	i P9DD	B
D8>759Ce5¦ CC7		NVDD	S	i P9DD	B
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D8>759Ce5¦ CD7		NVDD	S	i P9DD	B
D8>759Ce5¦ CD8		NVDD	S	i P9DD	B
D8>759Ce5¦ D88		NVDD	S	i P9DD	B
D8>75>; /Q 9 e yØ 0		NeDD	S	i S9SD	E
D8>75>; N/Q ; e yØ 0		NeDD	S	i S9SD	87
D8>75>; N5>; 77/Q ; e yØ 0		NeDD	S	i S9SD	87
D8>75>; N5>; 7A/Q ; e yØ 0		NeDD	S	i S9SD	87
D8>75>; N5>; 97/Q ; e yØ 0		NeDD	S	i S9SD	87
D8>75>; N5>; 9A/Q ; e yØ 0		NeDD	S	i S9SD	87
D8>75>; N5>; ; 7/Q ; e yØ 0		NeDD	S	i S9SD	87
D8>75>; N5>; ; A/Q ; e yØ 0		NeDD	S	i S9SD	87
D8>75>; O/Q 9 e yØ 0		NeDD	S	i S9SD	E
D8>75>; O5>777/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>77A/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>797/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>798/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>79A/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>79B/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>7; 7/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>7; 8/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>7; A/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; O5>7; B/Q ; e yØ 0		NeDD	S	i S9SD	88
D8>75>; W5>797/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; W5>7; 7/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; Z/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; Z5>; 77/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; Z5>; 97/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; Z5>; ; 7/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; Z5>>77/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; Z5>>; 7/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>777/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>797/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>7; 7/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>8>7/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>; 77/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>; 97/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>; ; 7/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>>77/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>>97/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>; e5>>; 7/Q ; e yØ 0		NeDD	S	i S9SD	89
D8>75>QN5¦ QE7/Q 80		NVDD	S	i P9DD	B
D8>75>QN5¦ QEA/Q 80		NVDD	S	i P9DD	B
D8>75>Qd		NVDD	S	i P9DD	B
D8>75>Qd59QE7		NVDD	S	i P9DD	B
D8>75>Qd59QEA		NVDD	S	i P9DD	B
D8>75>Qe/Q 80		NVDD	S	i P9DD	B

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	CCM	x		9
D8>75B; /Q 9 e yØ 0	NeDD	S	i S9SD	8;
D8>75BC/9E7NCi 0	NVDD	S	i P9DD	D
D8>75BCR5/Q 90	NVDD	S	i P9DD	>
D8>75BCR5j C77 /Q 90	NVDD	S	i P9DD	>
D8>75BCR5j C78 /Q 90	NVDD	S	i P9DD	>
D8>75BCR5j C87 /Q 90	NVDD	S	i P9DD	>
D8>75BCR5j C88 /Q 90	NVDD	S	i P9DD	>
D8>75BCR5j C8; /Q 90	NVDD	S	i P9DD	>
D8>75BCR5j C98 /Q 90	NVDD	S	i P9DD	>
D8>>5BC	NVDD	S	i P9DD	D
D977579	i eND	a	GNN9DD	>E
D9775;	GDPDe	a	GNV9DD	A7
D977589	i eND	a	GNN9DD	>E
D9775B;	GDPDe	a	GNV9DD	A7
D97A579	i eND	a	GNN9DD	>E
D97A5;	GDPDe	a	GNV9DD	A7
D987579	GPeDD	a	GPc9DD	AC
D987599	GPci e	a	GPc9DD	AD
D987599k57BE	GPci e	a	GPc9DD	AE
D987599k59; A	GPci e	a	GPc9DD	AD
D987599k5A9;	GPci e	a	GPc9DD	AE
D987599k5ACA	GPci e	a	GPc9DD	AE
D9875>9	GPci e	a	GPc9DD	B7
D9875>9 W	GPci e	a	GPc9DD	B8
D9875>9W/Q 90	GPci e	a	GPc9DD	B8
D9875>9W/f OMD/Q 80	GPci e	a	GPc9DD	AE
D9875>9X /Q 90	GPci e	a	GPc9DD	B9
D9875>9X /f OMD/Q 90	GPci e	a	GPc9DD	B9
D9875>9X5f OMD/Q 80	GPci e	a	GPc9DD	B8
D9875>9X5>77 /Q 80	GPci e	a	GPc9DD	B8
D9875>9Y /f OMD/Q 90	GPci e	a	GPc9DD	AE
D988579	GPci e	a	GPc9DD	AC
D988599	GPci e	a	GPc9DD	AD
D989577	GPeDD	a	GPc9DD	AE
D98A577	GPeDD	a	GPc9DD	AE
D98A579	GPci e	a	GPc9DD	AC
D98C577	GPci e	a	GPc9DD	AE
D98C5j 9	GPci e	a	GPc9DD	AE
D9B7578	GNeDD	a	GPc9DD	AE
D9B7579	GNeeD	a	GSV9DD	B;
D9D7578	GcGcS	e	GSV9DD	B;
D9D8579	GcGcS	e	GSV9DD	B;
D9DA579	GcGcS	e	GSV9DD	B;
D9DA599	GcGcS	e	GSV9DD	B>
D; >757A	VSDG	S	GGV9DD	>8
D; B757>	aeVV	a	GGV9DD	>7
D; B757A	eGDD	a	GGV9DD	>8
D; B75>B	caeV	a	GGN9DD	; E
D; B75>BN5>AE8	caeS	a	GGN9DD	; E
D; B75>Bd5>8B /f OMD	caeV	a	GGN9DD	; E
D; B857>	aeVD	a	GGV9DD	>7
D; B857A	eGDN	a	GGV9DD	>8
D>B7598N5B8;	i VDD	a	GND9DD	>D
D>B7598N5B8A	i VDD	a	GND9DD	>D
D>B75>8O	i VDD	a	GND9DD	>D
D>B75>8O /f OMD	i VDD	a	GND9DD	>D
D>B75>8O5j 97	i VDD	a	GND9DD	>D
D>B75>8W/Q 90	i VDD	a	GND9DD	>D
D>B75>8W5f OM/Q 80	i VDD	a	GND9DD	>D
D>B75>8W5>7B	i VDD	a	GND9DD	>D

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		CCM	x		9
D>B75-8W5>87		i VDD	a	GND9DD	>D
D>B75-8X /f OM0		i VDD	a	GND9DD	>D
D>B75-8X5A797		i VDD	a	GND9DD	>D
D>B75>8 Y		i VDD	a	GND9DD	>C
D>B75>8 d		i VDD	a	GND9DD	>D
D>B75>8 e		i VDD	a	GND9DD	>D
D>B75>8e5C; ; /Q	80	i Si e	a	GND9DD	>C
D>B75>8 f		i VDD	a	GND9DD	>C
D7; A57>59BA		NcSi	P	GDP9DD	9>
D7; A57>59C7		NcSi	P	GDP9DD	9>
D7; A57A598>		Ni PG	P	GDS9DD	9E
D7; A57A598A		Ni PG	P	GDS9DD	9E
D7; A57B6977		NcDe	P	GDD9DD	8D
D7; A57B697B		NcDe	P	GDD9DD	8D
D7; A57B697D		NcDe	P	GDD9DD	8D
D7; A57B698B		NcDe	P	GDD9DD	8D
D7; A57B6997		NcDe	P	GDD9DD	8D
D7; A57B6999		NcDe	P	GDD9DD	8D
D7; A57B699;		NcDe	P	GDD9DD	8D
D7; A57B5 7B		NcDe	P	GDD9DD	8D
D7; A57B5 7C		NcDe	P	GDD9DD	8D
D7; A57B5 7D		NcDe	P	GDD9DD	8D
D7; A57B5 7E		NcDe	P	GDD9DD	8D
D7; A57B5 8C		NcDe	P	GDD9DD	8D
D7; A57B5 97		NcDe	P	GDD9DD	8D
D7; A57B5 98		NcDe	P	GDD9DD	8D
D7; A57B5 99		NcDe	P	GDD9DD	8D
D7; A57B5 9;		NcDe	P	GDD9DD	8D
D7>75795>8		PSVa	S	GDD9DD	8E
D7>75795BC		PSVa	S	GDD9DD	8E
D7>7595 77		PSVa	S	GDD9DD	8E
D7>7595 B7		PSVa	S	GDD9DD	8E
D7>7595 BC		PSVa	S	GDD9DD	8E
D7>757>5977		Paaa	S	GDP9DD	9>
D7>757A5977		Pi De	S	GDS9DD	; 7
D7>757A597;		Pi De	S	GDS9DD	; 7
D7>757A59; 7		Pi De	S	GDS9DD	; 7
D7>757A59; ;		Pi De	S	GDS9DD	; 7
D7>757A59; A		Pi De	S	GDS9DD	; 7
D7>757A5>EE7		Pi De	S	GDS9DD	; 8
D7>757A5>EE7		Pi De	S	GDS9DD	9E
D7>759A5777		Pi De	S	GDS9DD	; 9
D7>759A5977		Pi De	S	GDS9DD	; 9
D7>759A5997		Pi De	S	GDS9DD	; 9
D7>759A59; 7		Pi De	S	GDS9DD	; 9
D7>759A5>EE7		Pi De	S	GDS9DD	9E
D7>75>A5>777		Pi De	S	GDS9DD	; ;
D7>75>A5>8D7		Pi De	S	GDS9DD	9E
D7>75>A5>; D7		Pi De	S	GDS9DD	9E
D7>75>A5A977 /Q	90	Pi De	S	GDS9DD	9E
D7>75>A5A978 /Q	90	Pi De	S	GDS9DD	9E
D7>75>A5A97; /Q	90	Pi De	S	GDS9DD	9E
D7>75>A5A9D7 /Q	90	Pi De	S	GDS9DD	9E
D7>75>A5A9D8 /Q	90	Pi De	S	GDS9DD	9E
D7>A57>59C7		Paaa	S	GDP9DD	9>
D7>A57A5777		Pi De	S	GDS9DD	9E
D7>A57A598;		Pi De	S	GDS9DD	9E
D7>A57A598A		Pi De	S	GDS9DD	9E
D7>A57B6977		PaGP	S	GDD9DD	8D
D7>A57B697D		PaGP	S	GDD9DD	8D

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	CCM	x		9
D7>A57B598;	PaGP	S	GDD9DD	8D
D7>A57B598>	PaGP	S	GDD9DD	8D
D7>A57B598A	PaGP	S	GDD9DD	8D
D7>A57B599A	PaGP	S	GDD9DD	8D
D7>A57B5; 8E	PaGP	S	GDD9DD	8D
D7>A57B5; 9B	PaGP	S	GDD9DD	8D
D7>A59A5; 87	Pi De	S	GDS9DD	9E
D7>A59A5; C7	Pi De	S	GDS9DD	9E
D7>A59A5; CA	Pi De	S	GDS9DD	9E
D7>A59A5; CB	Pi De	S	GDS9DD	9E
D7>A59A5; D8	Pi De	S	GDS9DD	9E
D7AA57>5977	SVeP	V	GDP9DD	9>
D7AA57A5777	SeeV	V	GDS9DD	;7
D7B7595777	VGeS	a	GDD9DD	8C
D7B7595778	VGeS	a	GDD9DD	8C
D7B7595 77;	VGeS	a	GDD9DD	8C
D7B7595 7C7	VGeS	a	GDD9DD	8C
D7B757>5777	VSi i	a	GDP9DD	9>
D7B757>57AA	VSi i	a	GDP9DD	9>
D7B757>57B7	VVDD	a	GDP9DD	9>
D7B757>57C7	VSi i	a	GDP9DD	9>
D7B757>5B97	VSi i	a	GDP9DD	9>
D7B757>5B98	VSi i	a	GDP9DD	9>
D7B757>5B; 7	VVDD	a	GDP9DD	9>
D7B757>5B; E	VVDD	a	GDP9DD	9>
D7B757>5BAD	VSi i	a	GDP9DD	9>
D7B757>5BB7	VVDD	a	GDP9DD	9>
D7B757>5BBE	VVDD	a	GDP9DD	9>
D7B757>5BC7	VVDD	a	GDP9DD	9>
D7B757>5BC9	VVDD	a	GDP9DD	9>
D7B757>5BCA	VVDD	a	GDP9DD	9>
D7B757>5BDE	VVDD	a	GDP9DD	9>
D7B757A5777	VeaG	a	GDS9DD	;7
D7B757A5977	VeaG	a	GDS9DD	;7
D7B757A59>B	VeaG	a	GDS9DD	;7
D7B757A59C7	VeaG	a	GDS9DD	;7
D7B757A59D7	VeaG	a	GDS9DD	;7
D7B757A59DA	VeaG	a	GDS9DD	;7
D7B757A59DE	VeaG	a	GDS9DD	;7
D7B759>5B78	VVDD	a	GDP9DD	9B
D7B759>5BC7	VSi i	a	GDP9DD	9B
D7B759>5BC8	VSi i	a	GDP9DD	9B
D7B759>5BCD	VVDD	a	GDP9DD	9B
D7B759A5B77	VeaG	a	GDS9DD	;9
D7B759A5B98	VeaG	a	GDS9DD	;9
D7B759A5B; 7	VeaG	a	GDS9DD	;9
D7B759A5B; 8	VeaG	a	GDS9DD	;9
D7B759A5B>8	VeaG	a	GDS9DD	;9
D7B759A5BB9	VeaG	a	GDS9DD	;9
D7B759A5BB;	VeaG	a	GDS9DD	;9
D7B759A5BBE	VeaG	a	GDS9DD	;9
D7B759A5BC7	VeaG	a	GDS9DD	;9
D7B759A5BC;	VeaG	a	GDS9DD	;9
D7B759A5BCD	VeaG	a	GDS9DD	;9
D7B759A5BCE	VeaG	a	GDS9DD	;9
D7B75>A5>877 /Q 80	VeaG	a	GDS9DD	;;
D7B75>A5>877 f OM/Q 80	VeaG	a	GDS9DD	;;
D7B75>A5>; 77	VeaG	a	GDS9DD	9E
D7B75>A5>>77	VeaG	a	GDS9DD	9E
D7B75>A5>C77	VeaG	a	GDS9DD	;;

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		CCM	x		9
D7B75>A5>C79 /Q	80	VeaG	a	GDS9DD	9E
D7B75>A5>C7> /Q	80	VeaG	a	GDS9DD	9E
D7B75>A5>C7B /Q	80	VeaG	a	GDS9DD	9E
D7B75>A5>C7D		VeaG	a	GDS9DD	9E
D7B75>A5A977 /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A978 /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A97; /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A97A /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A997 /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A998 /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A99; /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A9; 9 /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A9; ; /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A9; > /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A9; A /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A9A7 /Q	90	VeaG	a	GDS9DD	9E
D7B75>A5A9A8		VeaG	a	GDS9DD	9E
D7B75>A5A9AA		VeaG	a	GDS9DD	9E
D7B75>A5B77		VeaG	a	GDS9DD	;;
D7B959>57C7		VSi i	a	GDP9DD	9B
D7BA57957C		VGeS	a	GDD9DD	8C
D7BA5795977		VGeS	a	GDD9DD	8C
D7BA57959C		VGeS	a	GDD9DD	8C
D7BA57958C		VGeS	a	GDD9DD	8C
D7BA57>977		VSi i	a	GDP9DD	9>
D7BA57A577		VeaP	a	GDS9DD	9E
D7BA57A5; 7		VeaP	a	GDS9DD	9E
D7BA57B577		VSGe	a	GDD9DD	8D
D7BA59>577		VSi i	a	GDP9DD	9C
D7BA59>5; 77		VSi i	a	GDP9DD	9C
D7BA59A57D7		VeaP	a	GDS9DD	;B
D7BA59A5; 97		VeaP	a	GDS9DD	9E
D8>757C59ADA /Q	80	NVDD	S	i P9DD	>
D8>757C59C77		NVDD	S	i P9DD	>
D8>757C59C78		NVDD	S	i P9DD	>
D8>757C59C87		NVDD	S	i P9DD	>
D8>757C59C88		NVDD	S	i P9DD	>
D8>757C59C89		NVDD	S	i P9DD	>
D8>757C5; C77 /Q	80	NVDD	S	i P9DD	>
D8>757C5; C87 /Q	80	NVDD	S	i P9DD	>
D8>757C5; C88 /Q	80	NVDD	S	i P9DD	>
D8>757C5; C89 /Q	80	NVDD	S	i P9DD	>
D8>757C5; C8; /Q	80	NVDD	S	i P9DD	>
D8>7598977 /ea RUY	95>f P0	NSSV	S	i P9DD	A
D8>7598978 /ea RUY	95>f P0	NSSV	S	i P9DD	>
D8>7598979 /ea RUY	95>f P0	NSSV	S	i P9DD	>
D8>759897; /ea RUY	95>f P0	NSSV	S	i P9DD	>
D8>7598989 /ea RUY	95>f P0	NSSV	S	i P9DD	>
D8>759898> /e yØ	0	NSSV	S	i P9DD	A
D8>7598C7 /ea RUY	95>f P0	NSSV	S	i P9DD	>
D8>759;59ADA /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C77 /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C78 /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C87 /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C88 /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C8; /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C97 /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C98 /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C;7 /Q	9 e yØ 0	NeDD	S	i S9SD	E
D8>759;5;C;8 /Q	9 e yØ 0	NeDD	S	i S9SD	E

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D8>759; 5j CA7 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>759; 5j CA8 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>759; 5j CB7 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>759; 5j D78 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>759; 5j D88 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>759; 5j D98 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>759C9987	NSSV	S	i P9DD	>
D8>759C998;	NSSV	S	i P9DD	>
D8>759C998A	NVDD	S	i P9DD	>
D8>759C998D	NVDD	S	i P9DD	>
D8>759C99AD9	NVDD	S	i P9DD	C
D8>759C99C77 /ea RUY 95Af P0	NVDD	S	i P9DD	C
D8>759C99C97	NVDD	S	i P9DD	C
D8>759C99D88	NVDD	S	i P9DD	C
D8>75>; 59ADA /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C77 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C88 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C8; /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C8D /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C98 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C9; /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C9D /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j C; 8 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j E77 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j E88 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j E98 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>; 5j E; 8 /Q 9 e yØ 0	NeDD	S	i S9SD	E
D8>75>C99C77 /Q 80	NVDD	S	i P9DD	B
D8>75>C99C88 /Q 80	NVDD	S	i P9DD	B
D8>75>C99C98 /Q 80	NVDD	S	i P9DD	B
D8>75>C99CDA /Q 80	NVDD	S	i P9DD	B
D8>75>C5j C77 /Q 80	NVDD	S	i P9DD	B
D8>75>C5j C88 /Q 80	NVDD	S	i P9DD	B
D8>75>C5j C98 /Q 80	NVDD	S	i P9DD	B
D8>75>C5j C; 8 /Q 80	NVDD	S	i P9DD	B
D8>75B85977 /ea RUY 95>P0	NSSV	S	i P9DD	D
D8>75B85j 77	NSSV	S	i P9DD	D
D8>75B; 5>777 /Q ; e yØ 0	NeDD	S	i S9SD	8;
D8>75BC99ADA /Q 90	NVDD	S	i P9DD	>
D8>75EC99CD8	NVDD	S	i P9DD	D
D8>75EC99CD;	NSi i	S	i P9DD	D
D8>>5B85977	NSSV	S	i P9DD	D
D977595997	i eND	a	GNN9DD	>E
D977595777	i eND	a	GNN9DD	>E
D987595777	GPci e	a	GPc9DD	AC
D987595797	GPci e	a	GPc9DD	AC
D987595799	GPci e	a	GPc9DD	AC
D9875957; 9	GPci e	a	GPc9DD	AC
D9875957A;	GPci e	a	GPc9DD	AC
D9875957BC	GPci e	a	GPc9DD	AC
D9875957BE	GPci e	a	GPc9DD	AC
D9875957D8	GPci e	a	GPc9DD	AC
D9875959BB	GPci e	a	GPc9DD	AC
D9875959BC	GPci e	a	GPc9DD	AC
D9875795j C8	GPci e	a	GPc9DD	AC
D9875795j C;	GPci e	a	GPc9DD	AC
D9875795j CC	GPci e	a	GPc9DD	AC
D9875795j DA	GPci e	a	GPc9DD	AC
D9875795j E;	GPci e	a	GPc9DD	AC
D9875795>7A	GPci e	a	GPc9DD	AC

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		CCM	x		9
D9875795>9B		GPci e	a	GPc9DD	AC
D9875795>>7		GPci e	a	GPc9DD	AC
D9875795>>8		GPci e	a	GPc9DD	AC
D9875795C; 8		GPci e	a	GPc9DD	AC
D987595777		GPci e	a	GPc9DD	AD
D9875957BE		GPci e	a	GPc9DD	AD
D987595B78		GPci e	a	GPc9DD	AD
D987595B7A		GPci e	a	GPc9DD	AE
D987595BC8		GPci e	a	GPc9DD	AE
D987595BCA		GPci e	a	GPc9DD	AD
D987595BD;		GPci e	a	GPc9DD	AD
D987595987		GPci e	a	GPc9DD	AE
D9875959; A		GPci e	a	GPc9DD	AD
D9875959; B		GPci e	a	GPc9DD	AE
D9875959BE		GPci e	a	GPc9DD	AD
D9875955 8C		GPci e	a	GPc9DD	AD
D9875955 9C		GPci e	a	GPc9DD	AE
D9875955 C;		GPci e	a	GPc9DD	AD
D9875955 DA		GPci e	a	GPc9DD	AD
D9875955>7B		GPci e	a	GPc9DD	AD
D9875955A88		GPci e	a	GPc9DD	AE
D9875955A98		GPci e	a	GPc9DD	AE
D9875955A9;		GPci e	a	GPc9DD	AD
D9875955A9A		GPci e	a	GPc9DD	AE
D9875955A; A		GPci e	a	GPc9DD	AE
D9875955A; C		GPci e	a	GPc9DD	AE
D9875955ABE		GPci e	a	GPc9DD	AE
D9875955D77		GPci e	a	GPc9DD	AE
D9875955DBE		GPci e	a	GPc9DD	AE
D9875-9577E		GPci e	a	GPc9DD	B7
D9875-9578		GPci e	a	GPc9DD	B7
D9875-958A		GPci e	a	GPc9DD	B7
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D9875-95A9		GPci e	a	GPc9DD	B7
D9875-95A>		GPci e	a	GPc9DD	B7
D9875-95AA		GPci e	a	GPc9DD	B7
D9875-95B8		GPci e	a	GPc9DD	B7
D9875-95B9		GPci e	a	GPc9DD	B7
D9875-95BA		GPci e	a	GPc9DD	B7
D9875-95C8		GPci e	a	GPc9DD	B7
D9875-95C9		GPci e	a	GPc9DD	AE
D9875-95CA		GPci e	a	GPc9DD	B7
D9875-95D8		GPci e	a	GPc9DD	B7
D9875-95D9		GPci e	a	GPc9DD	B7
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D9875-95DB		GPci e	a	GPc9DD	B7
D9875-95E8		GPci e	a	GPc9DD	B7
D9875-95EA		GPci e	a	GPc9DD	B7
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D9885957; 9		GPci e	a	GPc9DD	AC
D98A595A97		GPci e	a	GPc9DD	AE
D9B75795>7A		GNeeD	a	GSV9DD	B;
D9B8579579		GNeeD	a	GSV9DD	B;
D9B85579		GNeeD	a	GSV9DD	B;
D9D7585777		GcGcS	e	GSV9DD	B;
D9D7595777		GcGcS	e	GSV9DD	B;
D9D7595779>		GcGcS	e	GSV9DD	B;
D9D7595D9		GcGcS	e	GSV9DD	B;
D9D7595B7E		GcGcS	e	GSV9DD	B;
D9D7595B9A48; A		GcGcS	e	GSV9DD	B;

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		CCM	x		9
D9D75795BA		GcGcS	e	GSV9DD	B;
D9D75795BE		GcGcS	e	GSV9DD	B;
D9D75795C;		GcGcS	e	GSV9DD	B;
D9D75795C>		GcGcS	e	GSV9DD	B;
D9D75795CA		GcGcS	e	GSV9DD	B;
D9D75795CE		GcGcS	e	GSV9DD	B;
D9D75795DE		GcGcS	e	GSV9DD	B;
D9D75795>7A		GcGcS	e	GSV9DD	B;
D9D75795>87		GcGcS	e	GSV9DD	B;
D9D75795>89		GcGcS	e	GSV9DD	B;
D9D75995777		GcGcS	e	GSV9DD	B>
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D9D75995779		GcNDD	e	GSV9DD	B>
D9D75995; ;		GcGcS	e	GSV9DD	B>
D9D75995A>		GcGcS	e	GSV9DD	B>
D9D75995978		GcGcS	e	GSV9DD	B>
D9D75995A79		GcGcS	e	GSV9DD	B>
D9D75>95778		GcGcS	e	GSV9DD	B>
D9D85995978		GcGcS	e	GSV9DD	B>
D; >757>57>7		SVcD	S	GGV9DD	>7
D; >757>5977		SVcD	S	GGV9DD	>7
D; >757>59A7		SVcD	S	GGV9DD	>7
D; >757>5; 77		SVcD	S	GGV9DD	>7
D; >757>5; A7		SVcD	S	GGV9DD	>7
D; >757>5; B9		SVcD	S	GGV9DD	>7
D; >757A5977		VSDG	S	GGV9DD	>8
D; B757A5977		eGDN	a	GGV9DD	>8
D; B757A59A>		eGDN	a	GGV9DD	>8
D; B757A5BC;		eGDN	a	GGV9DD	>8
D; B757A5N		eGDN	a	GGV9DD	>8
D; B859A5A87		eGDG	a	GGV9DD	>9
D; B85>A5A; 7		eGDG	a	GGV9DD	>9
D; B85>A5A; 74D; B X		eGDG	a	GGV9DD	>9
D; BA57A5A77		eGDG	a	GGV9DD	>8
D; BA57A5A97		eGDG	a	GGV9DD	>8
D; BA57A5A; 7		eGDG	a	GGV9DD	>8
D; BA57A5A; 8		eGDG	a	GGV9DD	>8
D; BA57A5AAA		eGDG	a	GGV9DD	>8
D; BA57A5AB7		eGDG	a	GGV9DD	>8
D; BA57A5AC7		eGDG	a	GGV9DD	>8
D; BA57A5AD7		eGDG	a	GGV9DD	>8
D; BA57A5AE7		eGDG	a	GGV9DD	>8
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D; BA59A5A79		eGDN	a	GGV9DD	>;
D; BA59A5A7;		eGDN	a	GGV9DD	>;
D; BA59A5A; ;		eGDN	a	GGV9DD	>;
D>B75985779		i VDD	a	GND9DD	>C
D>B75985779		i Si e	a	GND9DD	>C
D>B75985787		i VDD	a	GND9DD	>C
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D>B75985B79		i VDD	a	GND9DD	>C
D>B75985B7B		i VDD	a	GND9DD	>C
D>B75985979		i Si e	a	GND9DD	>C
D>B75985B7B		i Si e	a	GND9DD	>C
D>B75985B78		i Si e	a	GND9DD	>C
D>B75985B88		i Si e	a	GND9DD	>C
D>B75985C7D		i VDD	a	GND9DD	>C
D>B75985C87		i VDD	a	GND9DD	>C
D>B75>85B79		i VDD	a	GND9DD	>C

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D>B75-85B9>			i VDD	a	GND9DD	>C
D>B75-85BB7			i VDD	a	GND9DD	>C
NR>X E8; f			SDea	S	GDN9DD	97
NRBX E8;			aGNe	a	GDN9DD	9;
NRBX E8; f			aGNe	a	GDN9DD	97
O 7;			Si SD	S	GGD9DD	; D
O97			SVaN	S	GGD9DD	; D
O98			SVaN	S	GGD9DD	; D
O>8			SVaN	S	GGD9DD	; D
OC7			Si SG	S	GGD9DD	; C
O877			Si SG	S	GGD9DD	; C
OZ;			PcDa	P	GGD9DD	; C
Oa ;			SVaN	S	GGD9DD	; D
Oa >7			SVaN	S	GGD9DD	; D
Ob ;			cSGN	a	GGD9DD	; C
Ob ; 6 95B5977			cSGN	a	GGD9DD	; C
R8MQ7>D8M/Q	; 0		NNec	S	ee9DD	8
R8MQ7>D8N /Q	; 0		NNec	S	ee9DD	8
R8MQ7>D8 O /Q	; 0		NNec	S	ee9DD	8
R8MQ7>D8R /Q	>0		NNec	S	ee9DD	9
R8MQ7>D8S /Q	>0		NNec	S	ee9DD	9
R8MQ7>D8T /Q	>0		NNec	S	ee9DD	9
R8MQ7>D8h /Q	>0		NNec	S	ee9DD	9
R8MQ7>D8Y			NNec	S	ee9DD	9
R8MQ7>D8d /Q	>0		NNec	S	ee9DD	9
R8MQ7>D8g /Q	>0		NNec	S	ee9DD	9
R8MQ; >D8M			NNec	S	ee9DD	;
R8MQ; >D8N			NNec	S	ee9DD	;
R8MQ; >D8O			NNec	S	ee9DD	;
R8OQ7>D8M			Nie	S	iV9eD	8A
R8OQ7>D8N /Q	; 0		Nie	S	iV9eD	8A
R8OQ7>D8R /Q	>6A0		Nie	S	iV9eD	8A
R8OQ7>D8T /Q	>6A0		Nie	S	iV9eD	8A
R8OQ7>D8X /Q	>0		Nie	S	iV9eD	8A
R8OQ; >D8N			Nie	S	iV9eD	8B
R8OQ; >D8O			Nie	S	iV9eD	8B
R8OQ; >D8P /Q	A0		Nie	S	iV9eD	8B
R8OQ; >D8V /Q	A0		Nie	S	iV9eD	8B
R8OQ; >D8W/Q	A0		Nie	S	iV9eD	8B
R8OQ; >D8X			Nie	S	iV9eD	8B
R9NQ7BD8M/Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ7BD8M6N6O6P6R/Q	; 0		cciD	a	GGV9DD	>A
R9NQ7BD8N /Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ7BD8O /Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ7BD8P /Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ7BD8PM/Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ7BD8PN /Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ7BD8Q /Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ7BD8R /Q	9 O	D0	cciD	a	GGV9DD	>>
R9NQ8BD9S /Q	; 0		cciD	a	GGV9DD	>A
R9OQ7BD8M/O	E0		ecDe	a	GGc9DD	>B
R9OQ7BD9M/O	E0		ecDe	a	GGc9DD	>B
R9OQ7BD; M/O	E0		ecDe	a	GGc9DD	>B
R9OQ7BD>M/O	E0		ecDe	a	GGc9DD	>B
R; M; BD8M/Q	>6A O	870	GDPDD	a	GNV9DD	A8
R; M; BD8N /Q	>6A O	870	GDPDD	a	GNV9DD	A8
R; M; BD8I /Q	>6A O	870	GDPDD	a	GNV9DD	A8
R; MQ7BD8N /Q	; O	870	GDPDD	a	GNV9DD	A9
R; MQ7BD8P /Q	9 O	870	GDPDD	a	GNV9DD	A9
R; MQ7BD8Q /Q	9 O	870	GDPDD	a	GNV9DD	A9

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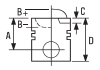
				CCM	x		9
R; MQ7BD8T /Q	; 0			GDPDD	a	GNV9DD	A9
R; MQ; BD8P /Q	>6A O	870		GDPDD	a	GNV9DD	A8
R; NQ7BD8M/Q	; O	8; 0		GNeeD	a	GPV9DD	AA
R; NQ7BD8N /Q	; O	8; 0		GNeeD	a	GPV9DD	AA
R; NQ7BD8O /Q	; O	8; 0		GNeeD	a	GPV9DD	AA
R; NQ7BD8P /Q	; O	8; 0		GNeeN	a	GPV9DD	AA
R; NQ7BD8Q /Q	; O	8; 0		GNeeD	a	GPV9DD	AA
R; NQ7BD8R /Q	; O	8; 0		GNeeN	a	GPV9DD	AA
R; NQ7BD8S /Q	; O	8; 0		GNeeD	a	GPV9DD	AA
R; NQ; BD8M/Q	>6A O	8; 0		GNeeN	a	GPV9DD	AB
R; NQ; BD8N /Q	>6A O	8; 0		GNeeD	a	GPV9DD	AB
R; NQ; BD8O /Q	>6A O	8; 0		GNeeD	a	GPV9DD	AB
R; NQ; BD8P /Q	>6A O	8; 0		GNeeN	a	GPV9DD	AB
R; NQ; BD8Q /Q	>6A O	8; 0		GNeeN	a	GPV9DD	AB
R; NQ; BD8R /Q	>6A O	8; 0		GNeeN	a	GPV9DD	AB
R; NQ; BD8S /Q	>6A O	8; 0		GNeeN	a	GPV9DD	AB
R>MQ7>D8M/Q	; 0			Pi ND	S	GDN9DD	98
R>MQ7>D8O /Q	; 0			Pi ND	S	GDN9DD	98
R>MQ7>D8P /Q	; 0			Pi ND	S	GDN9DD	98
R>MQ7BD8M/Q	; 0			VeeD	a	GDN9DD	98
R>MQ7BD8N /Q	; 0			VeeD	a	GDN9DD	98
R>MQ7BD8O /Q	; 0			VeeD	a	GDN9DD	98
R>MQ7BD8P /Q	; 0			VeeD	a	GDN9DD	98
R>MQ7BD8Q /Q	; 0			VeeD	a	GDN9DD	98
R>MQ; >D8M/Q	>6A0			Pi ND	S	GDN9DD	99
R>MQ; >D8N /Q	>6A0			Pi ND	S	GDN9DD	99
R>MQ; >D8O /Q	>6A0			Pi ND	S	GDN9DD	99
R>MQ; >D8P /Q	>6A0			Pi ND	S	GDN9DD	99
R>MQ; BD8M/Q	>6A0			VeeD	a	GDN9DD	99
R>MQ; BD8N /Q	>6A0			VeeD	a	GDN9DD	99
R>MQ; BD8O /Q	>6A0			VeeD	a	GDN9DD	99
R>MQ; BD8P /Q	>6A0			VeeD	a	GDN9DD	99
R>MQ; BD8Q /Q	>6A0			VeeD	a	GDN9DD	99
R>X E8;				SDea	S	GDN9DD	9;
RBX >8; R				i VcD	a	GNV9DD	A;
RDX >8; R				GNcaP	e	GNV9DD	A;
R87X >8; R				GVi VP	GD	GNV9DD	A;



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R8MQ7>D8N/Q ;0	S 9	**99DOvv**	**DA i** 3GGa 4	**P6t x f u U x v xw**	**f P8C8>A**
R8MQ7>D8O/Q ;0	S 9	**99DOvv**	**D8 i** 3GGD 4	**P6t x f u U x v xw**	**YbE7AA**

JGRd 0005=R43	3=235 37239	JGRd 0068I 45a/68Y45a	3=235 3:23:
JGRd 0005=R43a	3=235 3:23:	JGRd 0068Y43	3=235 3:23:
JGRd 0005=R45	3=235 37239	JGRd 0068Y45/68I 45/73I 45	34236 38239
JGRd 0005=R45a	3=235 3:23:	JGRd 0073I 43	3=235 37239
JGRd 0068I 43a/68Y43a	3=235 37239	aGT	
JGRd 0068I 45/68Y45	3=235 37239		

DC48; D777477
DC48; D77B477 *mTm*

M 8:133
N4 4<14<
N 6<133
P <7133
64É9:

MWdf fb

7D48; D777477
7D48; D77B477 *mTm*
7D48; D77D477 *mTm*

5183 IQV
5133 V
5183 IXV

R8MQ7>D8R/Q >0	S 9	**99DOvv**	**C7 i** 3V 4	**P6t x f u U x v xw**	**f P9D9;8**
R8MQ7>D8S/Q >0	S 9	**99DOvv**	**DA i** 3GGa 4	**P6t x f u U x v xw**	**f P9D9;9**
R8MQ7>D8T/Q >0	S 9	**99DOvv**	**877 i** 3GPa 4	**P6t x f u U x v xw**	**f P9D9;;**
R8MQ7>D8h/Q >0	S 9	**99DOvv**	**E; i** 3GNa 4	**P6t x f u U x v xw**	**f P9BB;C**
R8MQ7>D8Y	S 9	**99DOvv**	**877 i** 3GPa 4	**P6t x f u U x v xw**	**f P8E8AB**
R8MQ7>D8d/Q >0	S 9	**99DOvv**	**DA i** 3GGa 4	**P6t x f u U x v xw**	**f P9D9;>**
R8MQ7>D8g/Q >0	S 9	**99DOvv**	**CD i** 3GDa 4	**P6t x f u U x v xw**	**f P9BB;D**

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JGRd 0068I 47/68Y47	34238 37239	JGRd a 68I 46a/68I 46 a2/ 68Y46 a/68Y46 a2/	3:23: 3<244
JGRd a 5=R43	38239 3<244	JGRd a 68I 47/68Y47/68Y47 2/	38239 3<244
JGRd a 5=R43a	38239 3<244	JGRd a 68Y47/68Y47 2/	38239 3<244
JGRd a 5=R45	38239 3<244	JGRd a 68Y47I/68Y47I 2/ 68Y47a/68Y47a2/ 68I 47a/111	38239 3<244
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JGRd a 5=R47	38239 3<244	JGRd a 73I 43a	38239 3<244
JGRd a 5=R47I/5=R47I 2/ 5=R47a/5=R47a2/	38239 3<244	JGRd a 73I 44/73I 44 J	3:23: 3<244
JGRd a 68I 43/68Y43	38239 3<244	JGRd a 73I 44a	3:23: 3<244
JGRd a 68I 44/68Y44/68Y44 J/68Y44 2/	3:23: 3<244	JGRd a 73I 45	38239 3<244
JGRd a 68I 44a/68Y44a	3:23: 3<244	JGRd a 73I 45a/73I 47a2/	38239 3<244
JGRd a 68I 45/68Y45	38239 3<244	JGRd a 73I 46/73I 46 2/	3:23: 3<244
JGRd a 68I 45a/68I 45a2/ 68Y45a/68Y45a2/	38239 3<244	JGRd a 73I 46a/73I 46a2/	3:23: 3<244

DC48; D777487
DC48; D77B487 *mTm*
DC48; D77D487 *mTm*

M 8:133
N4 461 8
N 83143
P <7133
64É9:

MWWdf fb

7D48; D777477
7D48; D77B477 *mTm*
7D48; D77D477 *mTm*

5183 IQV
5133 V
5183 IXV

R8MQ; >D8M	S 9	**99DOvv**	**CD i** 3GDa 4	**P6t x f u U x v xw**	**f P9BE;>**
R8MQ; >D8N	S 9	**99DOvv**	**E; i** 3GNa 4	**P6t x f u U x v xw**	**f P9BE;A**

R8MQ; >D8O	S 9	99DCvv	87C i 3GSa 4	P@i x f u U x v xw	f P9BE>;
JG@Rd a 59R44/ 5=R44/ 5=Y44/ 68I 44J/ 68Y44/ 73I 44	3=24	35247	JG@Rd a 5=Y44/ 5=R44/ 68I 44/ 68Y44/ 73I 44	3=24	35247
JG@Rd a 5=R48/ 68Y48/ 68I 48/ 73I 48/ 83I 48	3=24	35247	JG@Rd a 5=Y46/ 5=R46/ 5=R46J/ 68Y46/ 68I 46J/ 73I 46	3=24	35247
JG@Rd a 5=R48 a/ 68Y48 a/ 68I 48R a/ 73I 48R a/ 83I 48R a	3=24	35247	JG@Rd a 5=Y46/ 5=R46/ 68I 46/ 68Y46/ 73I 46/ 73Y46	3=24	35247

DC4>A7B77477

M 8: 133
N4 471 63
N 7=133
P <7133
64É9:

MWWWdf f b

K°´z 8

7D4>A7B77477

5183 MJI V
5133 V
5183 I X V

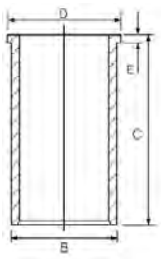
GDC LKZ-Ring

D8>757C89ADA /Q	80	S	9	9A77vv	AA i	3cV	4	P@i x	f P97>; C
D8>757C89C77		S	9	9A77vv	AA i	3cV	4	P@i x	f P8C77
D8>757C89C78		S	9	9A77vv	AA i	3cV	4	P@i x	f P8C78
D8>757C89C87		S	9	9A77vv	AA i	3cV	4	P@i x	f P9C; AD
D8>757C89C88		S	9	9A77vv	AA i	3cV	4	P@i x	f P9C; AE
D8>757C89C89		S	9	9A77vv	AA i	3cV	4	P@i x	f P8C79
D8>757C5; C77 /Q	80	S	9	9A77vv	A; i	3cN	4	P@i x	f P9C; B>
D8>757C5; C87 /Q	80	S	9	9A77vv	A; i	3cN	4	P@i x	f P97>8D
D8>757C5; C88 /Q	80	S	9	9A77vv	A; i	3cN	4	P@i x	f P9C; BA
D8>757C5; C89 /Q	80	S	9	9A77vv	A; i	3cN	4	P@i x	f P9C; BB
D8>757C5; C8; /Q	80	S	9	9A77vv	A; i	3cN	4	P@i x	f P9C; BC
D8>7585978 /ea RUY	95>f P0	S	9	9>>Avv	BD i	3 N	4	P@i x f u U x v xw	f P9C; BD
D8>7585979 /ea RUY	95>f P0	S	9	9>>Avv	BD i	3 N	4	P@i x f u U x v xw	f P9C; BE
D8>758597; /ea RUY	95>f P0	S	9	9>>Avv	BD i	3 N	4	P@i x f u U x v xw	f P9C; C7
D8>7585989 /ea RUY	95>f P0	S	9	9>>Avv	BD i	3 N	4	P@i x f u U x v xw	f P9C; C8
D8>7585E7 /ea RUY	95>f P0	S	9	9>>Avv	BD i	3 N	4	P@i x f u U x v xw	f P9C; C9
D8>759C987		S	9	9>>Avv	CC i	3GDV	4	P@i x f u	Y bE8; 8
D8>759C98;		S	9	9>>Avv	CC i	3GDV	4	P@i x f u	Y bE8; 848
D8>759C98A		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C; DC
D8>759C98D		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9B9BD
D8>759Cd59CD7		S	9	9A77vv	BC4C7 i	3 G8 V	4	P@i x f u U x v xw	f P9C; E;
D8>759Cd59CD9		S	9	9A77vv	C7 i	3 a	4	P@i x f u	f P8C87
D8>759Cd59CDB		S	9	9A77vv	BC4C7 i	3 G8 V	4	P@i x f u U x v xw	f P9C; E>
D8>759Cd59CDC		S	9	9A77vv	BC4C7 i	3 G8 V	4	P@i x f u U x v xw	f P9C; EA
D8>759Ce59C78		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C; EB
D8>759Ce59C87		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C; EC
D8>759Ce59C88		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C; ED
D8>759Ce59C97		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C; EE
D8>759Ce59C98		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>77
D8>759Ce59C; 7		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>78
D8>759Ce59C; 8		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>79
D8>759Ce59CA7		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>7;
D8>759Ce59CA8		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>7>
D8>759Ce59CB7		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>7A
D8>759Ce59CB8		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>7B
D8>759Ce59CC7		S	9	9A77vv	CB i	3GDP	4	P@i x f u U x v xw	f P9C>7C

D8>759Ce59CC8	S	9	9A77vv	CB	i	3GDP	4	P@	x	f u U x v xw	f P9C>7D
D8>759Ce59D88	S	9	9A77vv	CB	i	3GDP	4	P@	x	f u U x v xw	f P9C>7E
D8>75BC59ADA/Q 90	S	9	9A77vv	AA4B;	i	3cV8ea	4	P@	x	f u U x v xw	f P97>9C
D8>75BCR5/Q 90	S	9	9A77vv	B7	i	3eN	4	P@	x		f PC99B
D8>75BCR5j C77 /Q 90	S	9	9A77vv	B74B;	i	3eN8ea	4	P@	x		f P97>9D
D8>75BCR5j C78 /Q 90	S	9	9A77vv	B7	i	3eN	4	P@	x		f P9B9E9
D8>75BCR5j C87 /Q 90	S	9	9A77vv	B7	i	3eN	4	P@	x		f P9B9E;
D8>75BCR5j C88 /Q 90	S	9	9A77vv	B7	i	3eN	4	P@	x		f P9B9E>
D8>75BCR5j C8; /Q 90	S	9	9A77vv	B7	i	3eN	4	P@	x		f P9B9EA
D8>75BCR5j C98 /Q 90	S	9	9A77vv	B7	i	3eN	4	P@	x		f P9B9EB

JG@Rd 0630<	342<=	3<2=<	OTJ_YZXGGR/ZX_IQ) H_Y	
JG@Rd 0680<	342<=	3<2=<		

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>7598597 7 /ea RUY 95>f P0	S	9	9>>Avv	BD	i	3N	4	P@	x	f u	f P8C7;
D8>7598598> /e yØ 0	S	9	9>>Avv	C7	i	3V	4	P@	x	f u	f P8C7>

JG@Rd 06804 3	342<8	452<=	JG@Rd 07=043	342<8 452<=
JG@Rd 07804 3	342<8	452<=	JG@Rd 07=043 a	342<8 452<=
JG@Rd 07804 3 a	342<8	452<=		

DC49>A9774; 7

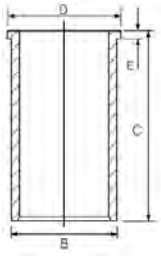
M 8=198
N4 471<3
N 841=3
P =: 198
65É: 8

df

7D49>A977477
7D49>A97D477 *mT m*

6133 I X V
5133 V
6133 I X V

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>759Ce /ea RUY 95Af P0	S	9	9>>Avv	BD4CB	i	3N8GDP	4	P@	x	f u	f P8C7A
D8>759Ce5j C77	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>87
D8>759Ce5j C78	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>88
D8>759Ce5j C88	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>89
D8>759Ce5j C97	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>8;
D8>759Ce5j C98	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>8>
D8>759Ce5j CA7	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>8A
D8>759Ce5j CA8	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>8B
D8>759Ce5j CB7	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>8E
D8>759Ce5j CB8	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>97
D8>759Ce5j CC7	S	9	9A77vv	CC	i	3GDS	4	P@	x	f u U x v xw	f P9C>99

D8>759Ce5j CC8			S	9	9A77vv	CC	i	3GDS	4	P@t	x	f	u	U	x	v	xw		f P9C>9;
D8>759Ce5j CD7			S	9	9A77vv	CC	i	3GDS	4	P@t	x	f	u	U	x	v	xw		f P9C>9>
D8>759Ce5j CD8			S	9	9A77vv	CC	i	3GDS	4	P@t	x	f	u	U	x	v	xw		f P9C>9A
D8>759Ce5j D88			S	9	9A77vv	CC	i	3GDS	4	P@t	x	f	u	U	x	v	xw		f P9C>9B
D8>75>C9C77 /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P8C88
D8>75>C9C88 /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P8C89
D8>75>C9C98 /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P8C8;
D8>75>C9CDA /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P8C8A
D8>75>C5j C77 /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P97>CC
D8>75>C5j C88 /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P9B77A
D8>75>C5j C98 /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P9B77B
D8>75>C5j C; 8 /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P9B77C
D8>75>CN5j CE7 /Q		80	S	9	9A77vv	CD4D;	i	3GDa8GGP	4	P@t	x	f	u	U	x	v	xw		f P9B77D
D8>75>CN5j CEA /Q		80	S	9	9A77vv	CD4D;	i	3GDa8GGP	4	P@t	x	f	u	U	x	v	xw		f P9B77E
D8>75>Cd			S	9	9A77vv	D7	i	3GDi	4	P@t	x	f	u	U	x	v	xw		f PC9; >
D8>75>Cd59CE7			S	9	9A77vv	CB4D7	i	3GDP8GDi	4	P@t	x	f	u	U	x	v	xw		f P8C8B
D8>75>Cd59CEA			S	9	9A77vv	D7	i	3GDi	4	P@t	x	f	u	U	x	v	xw		f P9B787
D8>75>Ce /Q		80	S	9	9A77vv	DA	i	3GGa	4	P@t	x	f	u	U	x	v	xw		f P97>A;

JGORd 073043	342=8 452<=	JGORd 007=045 a	392=3 372=9
JGORd 073043 a	342=8 452<=	JGORd 008=045	382=4 372=9
JGORd 006804 3	342<= 3<2=<	JGORd 008=045 a	382=4 372=9
JGORd 006804 5	342=3 372=9	JGORd 00G 78045	392=3 372=9
JGORd 007=045	392=3 372=9		

DC4A97977477

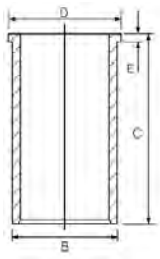
M 8<t 8
N4 4<173
N 6<133
P =9t 8
65É: <

MWWWZN df

7D4A97977477

6133 I X
5133 V
6133 I X V

8>4798; C8477 **N** =9134 **O** 4: 4133 **P** =<1=5 **Q** 8133
8>4798; C9477 **N** =9138 **O** 4: 4133 **P** =<1=5 **Q** 8133



D8>759C89AD9			S	9	9A77vv	C>4CE	i	3GDG8GDc	4	P@t	x	f	u						f PC9B7
D8>759C89C77 /ea RLY 95Af P0			S	9	9A77vv	CB	i	3GDP	4	P@t	x	f	u						f P8C7B
D8>759C89C97			S	9	9A77vv	CB	i	3GDP	4	P@t	x	f	u						f P8C7C
D8>759C89D88			S	9	9A77vv	CB	i	3GDP	4	P@t	x	f	u						f P8C7D
D8>759Cd59C77			S	9	9A77vv	BC4C7	i	3 N8 V	4	P@t	x	f	u	U	x	v	xw		f P97>97
D8>759Ce59C77 /e yØ 0			S	9	9A77vv	CB	i	3GDP	4	P@t	x	f	u	U	x	v	xw		f P97>98
D8>759Ce59D78 /e yØ 0			S	9	9A77vv	CB	i	3GDP	4	P@t	x	f	u	U	x	v	xw		f P97>8E
D8>759Ce59DDA /e yØ 0			S	9	9A77vv	CB	i	3GDP	4	P@t	x	f	u	U	x	v	xw		f P97>99

JGORd 00G 78043	342=4 372=9

DC49>A9774>7

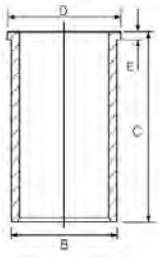
M 8<t 8
N4 4: 1=3
N 6<133
P =91 8
65É: 8

df

7D49>A977477
7D49>A97D477 *mT m*

6133 I X V
5133 V
6133 I X V

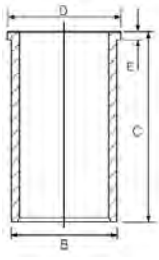
8>4798; C8477 N =9134 O 4: 4133 P =<t=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<t=5 Q 8133



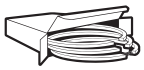
D8>75B85977 /ea RUY 95>P0	S 9	9>>Avv	A; i 3:N 4	P@l x				f PC99A
D8>75B85 77	S 9	9>>Avv	A; i 3:N 4	P@l x				f P97>9B
D8>75BC/9E7NCi 0	S 9	9A77vv		P@l x				Y bE8C748
D8>75EC59CD8	S 9	9A77vv	BD i 3 N 4	P@l x	f u U x v	xw		f P8C8C
D8>75EC59CD;	S 9	9>EEvv		P@l x	f u			Y b9E877
D8>>5B85977	S 9	9>>Avv	A; i 3:N 4	P@l x				f P97>9E
D8>>5BC	S 9	9A77vv		P@l x				Y bE8C7

JG@Rd 0630<	342 < 452<=	JG@Rd 0730<a	342<6 392<=
JG@Rd 0680<	342 < 452<=	OTJ_YZXG@R/ZX_I Q) H_Y	
JG@Rd 0730<	342<6 392<=	aGT	

8>4799AB7477 N =9133 O 49: 163 P =<t=3 Q 8133
8>479DE; 7477 N = 183 O 49: 133 P 4331=3 Q 8133
8>479DE; 8477 N = 18< O 49: 133 P 4331=3 Q 8133
8>479DE; 9477 N = t 3 O 49: 133 P 4331=3 Q 8133



D8>759; /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f PC99E
D8>759; 9ADA /Q 9 e yØ 0	S 9	9D77vv	CB4CD i 3GDP8GDa 4	P@l x	f u U x v	xw		f P8B8D;
D8>759; 5 C77 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P87; DC
D8>759; 5 C78 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; C;
D8>759; 5 C87 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; C>
D8>759; 5 C88 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; CA
D8>759; 5 C8; /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; CB
D8>759; 5 C97 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; CC
D8>759; 5 C98 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; CD
D8>759; 5 C; 7 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; CE
D8>759; 5 C; 8 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; D7
D8>759; 5 CA7 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; D8
D8>759; 5 CA8 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; D9
D8>759; 5 CB7 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; D;
D8>759; 5 D78 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; D>
D8>759; 5 D88 /Q 9 e yØ 0	S 9	9D77vv	CB i 3GDP 4	P@l x	f u U x v	xw		f P9C; DA



D8>759; 5 D98 /Q	9 e yØ 0	S	9	9D77vv	CB i	33DP	4	P Øt x	f	u	U x v	xw	f P9C; DB
D8>75>; /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f PC9; A
D8>75>; 59ADA /Q	9 e yØ 0	S	9	9D77vv	D>4E7 i	3GGS8GNN	4	P Øt x	f	u	U x v	xw	f P97>9;
D8>75>; 5 C77 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P97>9>
D8>75>; 5 C88 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>9C
D8>75>; 5 C8; /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>9D
D8>75>; 5 C8D /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>9E
D8>75>; 5 C98 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>; 7
D8>75>; 5 C9; /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>; 8
D8>75>; 5 C9D /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>; 9
D8>75>; 5 C; 8 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>; ;
D8>75>; 5 E77 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P97>9A
D8>75>; 5 E88 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>; >
D8>75>; 5 E98 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>; A
D8>75>; 5 E; 8 /Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P Øt x	f	u	U x v	xw	f P9C>; B
D8>75>; O /Q	9 e yØ 0	S	9	9D77vv	C>4CD i	3GDG8GDa	4	P Øt x	f	u	U x v	xw	f P8>>>E

JGORd 0051<J	3923 3823:	JGORd 0DG 73045	382=9 382==
JGORd 0051<J NS 74<3	3923 3: 23:	JGORd 0DG 78043	382=9 382==
JGORd 0063043	342=: 382==	JGORd 0DG 78045	382=9 382==
JGORd 0063043 I	342=: 382==	JGORd 0D5=R 44	382== 37239
JGORd 0068043	342=9 382==	JGORd 0D5=R 44 a	382== 3: 23:
JGORd 0068045	352=8 382==	JGORd 0D68 Y 44/68 I 44	382== 37239
JGORd 0068045 Q	3=2=9 3<2=<	JGORd 0D68 Y 44 a/68 I 44 a	382== 3: 23:
JGORd 0073043	342=: 382==	JGORd 0D73 I 44	37234 44236
JGORd 0073043 b	342=: 382==	JGORd 0D73 I 44/ 83 I 44	382== 38239
JGORd 007=043	342=9 452==	JGORd 0D83 I 44	382== 3: 23:
JGORd 007=045	382=9 382==	S 59	342=9 45235
JGORd 007=045 a	382=9 382==	VUb KX JGORd 69143	4523:
JGORd 008=045	382=9 382==	VUb KX JGORd 75145/ 83145	4523:
JGORd 008=045 a	382=9 382==	VUb KX JGORd G69143	4523:
JGORd 0DG 73043	3=2=9 382==	VUb KX JGORd G73145/ G75145/ G83145	4523:

DC4DA>C77477
DC4DA>C7D477 *mT m*
Kyr 158: 55: =

M 8<t 8
N4 4=173
N 6=173
P =9198
65É: <

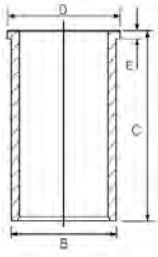
MWWWdf

7D4DA>C77477
7D4DA>C7D477 *mT m*

6133		I X
5133		V
6133		I X

8>4798; 98477
8>479DE; 7477
8>479DE; 8477
8>479DE; 9477

N =: 187 **O** 49: 133 **P** 4331=3 **Q** 8133
N =: 183 **O** 49: 133 **P** 4331=3 **Q** 8133
N =: 18< **O** 49: 133 **P** 4331=3 **Q** 8133
N =: 1 3 **O** 49: 133 **P** 4331=3 **Q** 8133



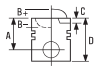
DC4899977487
DC489997D487 *mT m*
Kyr 158: 55<3

M 8<t 8
N4 4=173
N 6=158
P < 193
65É: 5

MWWWdf fb

7D4899977477
7D489997D477 *mT m*

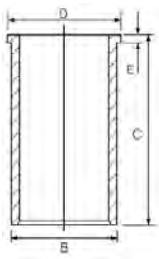
5133		I Q V
5133		V
5133		I X V



D8>75>; N /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P8BA8>
D8>75>; N5>; 77 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEBD
D8>75>; N5>; 7A /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEBB
D8>75>; N5>; 97 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEBC
D8>75>; N5>; 9A /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEBE
D8>75>; N5>; ; 7 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEC7
D8>75>; N5>; ; A /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEC8

JGRd 0005= R 44	382== 37239	JGRd 0073 I 44	37234 44236
JGRd 0005= R 44 a	382== 3: 23:	JGRd 0083 I 44	382== 3: 23:
JGRd 0068 Y 44/68 I 44	382== 37239	L°x z	3=234
JGRd 0068 Y 44 a/68 I 44 a	382== 3: 23:		

8>4798; 98477 N = 187 O 49: 133 P 4331=3 Q 8133
8>479DE; 7477 N = 183 O 49: 133 P 4331=3 Q 8133
8>479DE; 8477 N = 18< O 49: 133 P 4331=3 Q 8133
8>479DE; 9477 N = t 3 O 49: 133 P 4331=3 Q 8133



D8>75>; O5>777 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEC9
D8>75>; O5>77A /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEC;
D8>75>; O5>797 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AEC>
D8>75>; O5>798 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AECA
D8>75>; O5>79A /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AECB
D8>75>; O5>79B /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AECC
D8>75>; O5>7; 7 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AECD
D8>75>; O5>7; 8 /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AECE
D8>75>; O5>7; A /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AED7
D8>75>; O5>7; B /Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P6t x	f	u	U	x	v	xw	f P9AED8

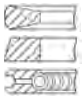
DC4899977487
DC489997D487 *mT m*

M 8<t 8
N4 4=173
N 6=158
P < 193
65É: 5

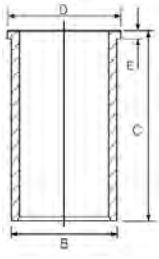
MWWWdf fb

7D4899977477
7D489997D477 *mT m*

5183 I Q V
5133 V
5183 I X V



8>4798; 98477 N = 187 O 49: 133 P 4331=3 Q 8133
8>479DE; 7477 N = 183 O 49: 133 P 4331=3 Q 8133
8>479DE; 8477 N = 18< O 49: 133 P 4331=3 Q 8133
8>479DE; 9477 N = t 3 O 49: 133 P 4331=3 Q 8133



D8>75>; W5>797 /Q	; e yØ 0	S	9	9D77vv	87C i	3GSV	4	P6t x	f	u	U	x	v	xw	f P9AED9
D8>75>; W5>7; 7 /Q	; e yØ 0	S	9	9D77vv	87C i	3GSV	4	P6t x	f	u	U	x	v	xw	f P9AED;
D8>75>; Z /Q	; e yØ 0	S	9	9D77vv	87C i	3GSa	4	P6t x	f	u	U	x	v	xw	f P8BDC;
D8>75>; Z5>; 77 /Q	; e yØ 0	S	9	9D77vv	87C i	3GSa	4	P6t x	f	u	U	x	v	xw	f P9AED>

D8>75>; Z5>; 97 /Q	; e yØ 0	S	9	9D77vv	87C i	3GSa	4	P@t x	f	u	U x v	xw	f P9AEDA
D8>75>; Z5>; ; 7 /Q	; e yØ 0	S	9	9D77vv	87C i	3GSa	4	P@t x	f	u	U x v	xw	f P9AEDB
D8>75>; Z5>>77 /Q	; e yØ 0	S	9	9D77vv	87C i	3GSa	4	P@t x	f	u	U x v	xw	f P9AEDC
D8>75>; Z5>>; 7 /Q	; e yØ 0	S	9	9D77vv	87C i	3GSa	4	P@t x	f	u	U x v	xw	f P9AEDD
D8>75>; e /Q	; e yØ 0	S	9	9D77vv	E9 i	3GNV	4	P@t x	f	u	U x v	xw	f P8BDC>
D8>75>; e5>777 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9AEEA
D8>75>; e5>797 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9AEEB
D8>75>; e5>7; 7 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9AEEC
D8>75>; e5>8>7 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9AEED
D8>75>; e5>; 77 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9AEEE
D8>75>; e5>; 97 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9B777
D8>75>; e5>; ; 7 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9B778
D8>75>; e5>>77 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9B779
D8>75>; e5>>97 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9B77;
D8>75>; e5>>; 7 /Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u	U x v	xw	f P9B77>

GRKXU	3<233 4523<	JGORd 0073 l 48	44234 37239
JGORd 0005=R 46	38234 3:23:	JGORd 0073 l 48/83 l 48	382== 38239
JGORd 0068 l 48	44234 37239	JGORd 0083 l 46	382== 3:23:
JGORd 0068 Y 46/68 l 46	382== 37239	JGORd 0083 l 48	34234 37239
JGORd 0068 Y 46/73 l 46/83 l 46	382== 38239	JGORd 0098 l 48	44234 37239
JGORd 0068 Y 46 a/68 l 46 a	382== 3:23:	VUb KX JGORd 69146/6=146/75146/83146	4523:
JGORd 0068 Y 48 a/68 l 48 a	44235 3:23:	VUb KX JGORd 75146/83146	4523:
JGORd 0073 l 46	382== 37239	VUb KX JGORd G69146/G6=146/G75146/G83146	4523:

DC4899977477
DC489997D477 *mTm*

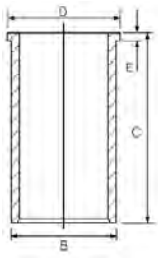
M 8<t3
N4 5416 3
N 6=173
P <193
65É:5

MWWWdf fb

7D4899977477
7D489997D477 *mTm*

5183 I Q V
5183 V
5183 I X V

8>4798; 98477 **N** =:187 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =:183 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =:18< **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =:t3 **O** 49:133 **P** 4331=3 **Q** 8133



D8>75B; /Q	9 e yØ 0	S	9	9D77vv	B94B> i	3eS8ec	4	P@t x					f P87; DE
D8>75B; 5>777 /Q	; e yØ 0	S	9	9D77vv	B94B> i	3eS8ec	4	P@t x					f P97>CD

JGORd 0630<	3=2=< 382==	JGORd 0005=R=a	382== 3:23:
JGORd 0630<a	3=2=< 382==	JGORd 0068 Y=/68 l =	382== 37239
JGORd 0680<	3=2=< 382==	JGORd 0068 Y=a/68 l =a	382== 3:23:
JGORd 0005=R=	382== 37239		

DC487D977477
DC487D97D477 *mTm*

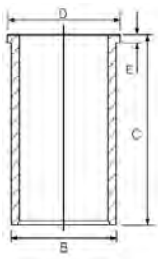
M 8813 3
N4 51<3
P =3133
65É9<

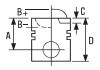
MWTMdf fb

7D487D977477
7D487D97D477 *mTm*

6133 I X V
5183 V
5183 I X V

8>4798; 98477 **N** =:187 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =:183 **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =:18< **O** 49:133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =:t3 **O** 49:133 **P** 4331=3 **Q** 8133





D7; M67B9 /D7; 75780	P 9	9; ; Evv		P6l x	Y bAC7
D7>M/D7>75780	S 9	; 88Evv		P6l x	Y b>77E
D7B M/D7B75786B80	a 9	>BCDvv		P6l x	Y bAC9
D79A578	N 9	8AAEvv		P6l x	Y bABE

CTJ_YZXCGR/ZX_I Q) H_Y

DC497C977477
DC497C97D477 *mTm*

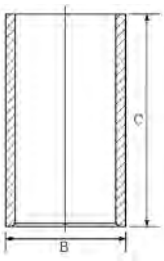
M	8=193
N4	56183
N	75153
P	434148
	65É<7

7D497C977477
7D497C97D477 *mTm*

5183		I X V
5183		V
8183		I X V

8>4787B97477
8>47887B8477

N =133 **O** 4< 133
N =143 **O** 4< 133



R8OQ7>D8M	S 9	9EEDvv	877488> i	3GPa8GV/V	4	P6l x	f u U x v	xw	f P8E8EA
R8OQ7>D8N /Q ;0	S 9	9EEDvv	899 i	3Gaa	4	P6l x	f u U x v	xw	f P99BCA
R8OQ7>D8R /Q >6A0	S 9	9EEDvv	87C i	3GSa	4	P6l x	f u U x v	xw	f P; E; EC
R8OQ7>D8T /Q >6A0	S 9	9EEDvv	8; 7 i	3Gcc	4	P6l x	f u U x v	xw	f P; E>77
R8OQ7>D8X /Q >0	S 9	9EEDvv	87C i	3GSa	4	P6l x	f u U x v	xw	f P9C9; E

JGRd @68I 47	3=237 37239	JGRd @73I 4<a/73I 4<a2/	38239 3<244
JGRd @68I 4: /68Y4:	34238 37239	JGRd @78I 48	38239 3<244
JGRd @68Y47/83I 47	34237 38239	JGRd @78I 48 a	38239 3<244
JGRd @73I 47	3=237 37239	JGRd @78I 4<	38239 3<244
JGRd @73I 4: /73Y4:	3: 2== 45239	JGRd @78I 4</78I 4<2/ /78I 4<J /78I 4<J2/	38239 3<244
JGRd @73I 4: /83I 4:	34237 38239	JGRd @83I 48	38239 3<244
JGRd @78I 47	3: 2== 37239	JGRd @83I 48 a/83I 48 a2/	38239 3<244
JGRd @83I 47	3=237 37239	JGRd @83I 4<	38239 3<244
JGRd @83I 4:	3=237 37239	JGRd @83I 4<a/83I 4<a2/	38239 3<244
JGRd @98I 47	3=237 37239	JGRd @88Y4<b	39239 3<244
JGRd @98I 4:	3=237 37239	JGRd @93I 48/93I 48 2/ /93I 48 J /93I 48 J2/	38239 3<244
JGRd @68I 48	38239 3<244	JGRd @93I 48 a	38239 3<244
JGRd @68I 48 a/68I 48 a2/	38239 3<244	JGRd @93I 4<	38239 3<244
JGRd @68I 4</68Y4<	38239 3<244	JGRd @98I 48	38239 3<244
JGRd @68I 4<a/68I 4<a2/ /68Y4<a/68Y4<a2/	38239 3<244	JGRd @98I 48/98I 48 2/ /98I 48 J /98I 48 J2/	38239 3<244
JGRd @68Y47	3<23: 36245	JGRd @98I 4<	38239 3<244
JGRd @68Y48	39239 3<244	JGRd @: 3I 48	3: 23< 3<244
JGRd @68Y4<b	39239 3<244	L°x z	3=239
JGRd @73I 48	38239 3<244	S GYY0L 613 NVO	4323< 35244
JGRd @73I 48 a/73I 48 a2/	38239 3<244	S GYY0L 613 NVZ	4323< 35244
JGRd @73I 4<	38239 3<244		

DC4>98B77477

M	96133
N4	49133
N	83183
P	=6183
	69É<3

MWWWdf fb

7D4>98B77477
7D4>98B7B477 *mTm*

5183		I Q V
5133		V
5183		I X V

R8OQ; >D8N	S 9	9EEDvv	87C i	3GSV	4	P6l x	f u U x v	xw	f P; B7E7
R8OQ; >D8O	S 9	9EEDvv	89A i	3GcD	4	P6l x	f u U x v	xw	f P9BB; B

R8OQ; >D8P /Q	A0	S	9	9EEDvv	8A7 i	3NDV	4	P@t x	f u U x v	xw	f P9BE>9
R8OQ; >D8V /Q	A0	S	9	9EEDvv	87C i	3GSa	4	P@t x	f u U x v	xw	f P9BE>7
R8OQ; >D8W/Q	A0	S	9	9EEDvv	89A i	3GcD	4	P@t x	f u U x v	xw	f P9BE>8
R8OQ; >D8X		S	9	9EEDvv	87; 4887 i	3GSD8GVD	4	P@t x	f u U x v	xw	f P9BE; E

I QZdl RGYY	34248	JGORd @a 98I 47/ 98I 47 2/	3=23= 3<244
JGORd @a 68I 47/ 68I 47 2/ 68Y47/ 68Y47 2/ 68Y47 J/ 68Y47 J 2/	3=23= 3<244	JGORd @a 98I 47 a/ 98I 47 a2/	3=23= 3<244
JGORd @a 68I 47 a/ 68I 47 a2/ 68Y47 a/ 68Y47 a2/	3=23= 3<244	JGORd @a 98I 4: / 98I 4: 2/	3: 23: 3<244
JGORd @a 68I 4: / 68I 4: 2/ 68Y4: / 68Y4: 2/ 68Y4: J	3: 23: 3<244	JGORd @a 98I 4: a/ 98I 4: a2/	3: 23: 3<244
JGORd @a 68I 4: a/ 68I 4: a2/ 68Y4: a/ 68Y4: a2/	3: 23: 3<244	JGORd @a : 3I 47/ : 3I 47 2/	3=23= 3<244
JGORd @a 68Y4: b / 68Y4: b J	3: 23: 3<244	JGORd @a : 3I 47 a/ : 3I 47 a2/	3=23= 3<244
JGORd @a 73I 47/ 73I 47 2/	3=23= 3<244	JGORd @a : 3I 4: / : 3I 4: 2/	3: 23: 3<244
JGORd @a 73I 47 a/ 73I 47 a2/	3=23= 3<244	JGORd @a : 3I 4: a/ : 3I 4: a2/	3: 23: 3<244
JGORd @a 73I 4: / 73I 4: 2/	3: 23: 3<244	JGORd a 68I 48/ 68Y48/ 73I 48/ 78I 48/ 83I 48/ 93I 48/ 98I 48/ : 3I 48	3=244 35247
JGORd @a 73I 4: a/ 73I 4: a2/	3: 23: 3<244	JGORd a 68I 48 a/ 73I 48 a/ 78I 48 a/ 83I 48 a/ 93I 48 a/98I 48 a	3=244 35247
JGORd @a 78I 47/ 78I 47 2/	3=23= 3<244	JGORd a 68I 4: / 68Y4: / 73I 4: / 78I 4: / 83I 4: / 93I 4: / 98I 4: / : 3I 4:	3=244 35247
JGORd @a 78I 4: / 78I 4: 2/	3: 23: 3<244	JGORd a 68I 54/ 68Y54/ 73I 54/ 78I 54/ 83I 54/ 93I 54/ 98I 54/ : 3I 54	3=244 35247
JGORd @a 78I 4: a/ 78I 4: a2/	3: 23: 3<244	JGORd a 68I 54 a/ 68Y54 a/ 73I 54 a/ 78I 54 a/ 83I 54 a	3=244 35247
JGORd @a 83I 47/ 83I 47 2/	3=23= 3<244	JGORd a 68Y47	37245 35247
JGORd @a 83I 47 a/ 83I 47 a2/	3=23= 3<244	JGORd a 68Y4: / 73I 4: / 78I 4: / 83I 4:	3=244 35247
JGORd @a 83I 4: / 83I 4: 2/	3: 23: 3<244	JGORd a 83I 48	3=244 35247
JGORd @a 83I 4: a/ 83I 4: a2/	3: 23: 3<244	JGORd a 88Y4: b	3=244 35247
JGORd @a 88Y4: b / 88Y4: b J	3: 23: 3<244	JGORd a068Y47/ 68Y48/ 68I 48/ 73Y47/ 73I 48/ 83I 48/ 93I 8/ 98I 48/111	36247
JGORd @a 93I 47/ 93I 47 2/	3=23= 3<244	JGORd a068Y48/ 68I 48/ 73I 48/ 78I 48/ 83I 48/ 98I 48/ : 3I 48	36247 37249
JGORd @a 93I 4: / 93I 4: 2/	3: 23: 3<244	JGORd a068Y48/ 88Y48/ : 3Y48/ : 3I 48	36247
JGORd @a 93I 4: a/ 93I 4: a2/	3: 23: 3<244	JGORd a073I 48/ 83I 48/ 93I 48	36247

DC4>98B77487

M	9613 3
N4	4913 3
N	8615 3
P	=617 3
	69É<3

MWWWdf f b

7D4>98B77487

5183		MJI V
5183		V
5183		I Q V

GDC KZ-Ring

D79A579	N	9	8C9Dvv				P@t x				Y bAQ;
D7; 7579	P	9	9AE9vv	>B i	3aN	4	P@t x				Y bAC>
D7; A579	P	9	9AE9vv	; ; 4>7 i	3SV8VS	4	P@t x				f P9A8E>
D7>A579	S	9	; >ABvv	>>4A7 i	3aD8ae	4	P@t x				f P9A8EA
D7B7579577	a	9	A8D>vv	E7 i	3GNN	4	P@t x				f PBDA9
D7B7579578	a	9	A8D>vv	E7 i	3GNN	4	P@t x				f P87>BD
D7B7579577;	a	9	A8D>vv	E7 i	3GNN	4	P@t x				f P87>BE
D7B757957C7	a	9	A8D>vv	E7 i	3GNN	4	P@t x				f PBD>;
D7BA579577C	a	9	A8D>vv	C> i	3GDG	4	P@t x				f P9A; 8A
D7BA579597	a	9	A8D>vv	C74C> i	3 V8GDG	4	P@t x				f P9A; 8B
D7BA57957C	a	9	A8D>vv	C> i	3GDG	4	P@t x				f P9A; 8C
D7BA57958C	a	9	A8D>vv	C> i	3GDG	4	P@t x				f P9A; 8D

733	3429< 452<9	Yp´tp° : 8	342 8 452 =
833 Yp´tp	342 4 452<3	Yp´tp° <3	342 5 452 9
933 Yp´tp	342 4 452<9	Yp´tp° =3	342 5 452 =
=33	342 = 452<7	Yp´tp° 433	342 6 452 9
4333	342 5 452 9	Yp´tp° 443	342 6 452<6

OTJ_YZX(GR/ZX_IQ) H_Y | Yp´tp° 933 | 342 3 452 5

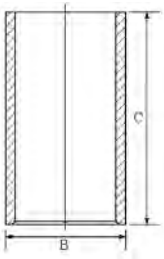
DC497BD77477
DC497BD7D477 *mT m*

M 8=193
N4 561 3
N 7: 133
P 434148
65É<7

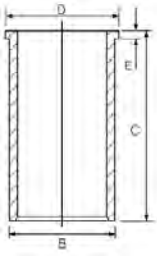
7D497BD77477
7D497BD7D477 *mT m*

5183 I X V
5183 V
8183 I X V

8>47878C7477 **N** 436133 **O** 4< 133
8>4788798477 **N** 436139 **O** 4< 133
8>4788799477 **N** 436143 **O** 4< 133
8>478; >78477 **N** 436137 **O** 4< 133



8>4798A>7477 **N** 436133 **O** 4< 133 **P** 437133 **Q** 8133



DC497BD77487

M 8=193
N4 561 3
N 78173
P 434148
65É<7

7D497BD77477
7D497BD7D477 *mT m*

5183 I X V
5183 V
8183 I X V

Vt°fzy Ätßs npyßl wnzx m°°fßzy nsl x mp´1 | Qzwmpy x tßÜpyßl wp´ ap´mpyy°yr°vl x x p´1 | Vt°fzy nsl x mip op nzx m°°fßzy npyßl wp1 | Vt°ß y nzy n x l ´l op nzx m°°ft y npyßl wt | Vt°fzyp nzy nl x p´l ot nzx m°°fßzyp npyßl wp1

D7; A57B	P 9	9C7Dvv	; ; 4>7 i	3SV8/S 4	P6t x	Y b>77D
D7; A57B977	P 9	9C7Dvv	; ; 4>8 i	3SV8/a 4	P6t x	f P9AA; A
D7; A57B97B	P 9	9C7Dvv	; D4>7 i	3/N8/S 4	P6t x	f P9AA; B
D7; A57B97D	P 9	9C7Dvv	; D4>7 i	3/N8/S 4	P6t x	f P9AA; C
D7; A57B98B	P 9	9C7Dvv	; D4>7 i	3/N8/V 4	P6t x	f P9AA; D
D7; A57B997	P 9	9C7Dvv	; ; i	3SV 4	P6t x	f P9AA; E
D7; A57B999	P 9	9C7Dvv	; ; 4>7 i	3SV8/S 4	P6t x	f P9AA>7
D7; A57B99;	P 9	9C7Dvv	; D i	3/N 4	P6t x	f P9AA>8
D7; A57B5 7B	P 9	9C7Dvv	; D i	3/N 4	P6t x	f P9AA>9
D7; A57B5 7C	P 9	9C7Dvv	; D4>7 i	3/N8/S 4	P6t x	f P9AA>;
D7; A57B5 7D	P 9	9C7Dvv	; D4>7 i	3/N8/S 4	P6t x	f P9AA>>
D7; A57B5 7E	P 9	9C7Dvv	; D i	3/N 4	P6t x	f P9AA>A
D7; A57B5 8C	P 9	9C7Dvv	; D4>7 i	3/N8/V 4	P6t x	f P9AA>B
D7; A57B5 97	P 9	9C7Dvv	; > i	3Sa 4	P6t x	f P9AA>C
D7; A57B5 98	P 9	9C7Dvv	; ; 4; > i	3SV8Sa 4	P6t x	f P9AA>D
D7; A57B5 99	P 9	9C7Dvv	; D i	3/N 4	P6t x	f P9AA>E
D7; A57B5 9;	P 9	9C7Dvv	; ; 4>7 i	3SV8/S 4	P6t x	f P9AAA7

D7>A57B	S	9	; B8; vv	>>4C;	i	3aD8 i	4	P@t x f P9DB9;
D7>A57B8977	S	9	; B8; vv	A8	i	3ai	4	P@t x f P9AA98
D7>A57B897D	S	9	; B8; vv	A8	i	3ai	4	P@t x f P9AA99
D7>A57B898;	S	9	; B8; vv	>D4A8	i	3aV8ai	4	P@t x f P9AA9;
D7>A57B898>	S	9	; B8; vv	C;	i	3 i	4	P@t x f P9AA9>
D7>A57B898A	S	9	; B8; vv	C;	i	3 i	4	P@t x f P9AA9A
D7>A57B899A	S	9	; B8; vv	>D	i	3aV	4	P@t x f P9AA9B
D7>A57B5;8E	S	9	; B8; vv	>D	i	3aV	4	P@t x f P9AA9C
D7>A57B5;9B	S	9	; B8; vv	>D	i	3aV	4	P@t x f P9AA9D
D7BA57B5777	a	9	A>8Dvv	C>	i	3GDD	4	P@t x f P9A; E7

99	342<8	452==	OTJ_YZX(GR/ZX_IQ) H_Y				
<<	342<=	452<6	R	342<9	452=<		
=3	342<7	452<5	ZR	342=<	45237		
=7	342<6	452<9	ZT	342==	45235		

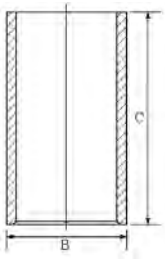
DC4CD8E77487
DC4CD8E7D487 *mTm*

7D4CD8E77477
7D4CD8E7D477 *mTm*

8>4787CD7477 **N** 436135 **O** 4=9133
8>4787CD8477 **N** 436139 **O** 4=9133
8>4787CD9477 **N** 436143 **O** 4=9133

M	98148
N4	5513
P	43<183
	6<É<8

5183		SURV
5183		V
7183		IXV



D7>7579	S	9	; >ABvv	B7	i	3eN	4	P@t x f PBD>7
D7>7579	S	9	; >AAvv					P@t x Y bACA
D7>757957>8	S	9	; >ABvv	AB	i	3ca	4	P@t x f PBE9A
D7>757959BC	S	9	; >ABvv	AB	i	3ca	4	P@t x f PAB7B
D7>7579;77	S	9	; >ABvv	AB	i	3ca	4	P@t x f PAB7A
D7>7579;B7	S	9	; >ABvv	AB	i	3ca	4	P@t x f PAE>>
D7>7579;BC	S	9	; >ABvv	AB	i	3ca	4	P@t x f PAE>A

OTJ_YZX(GR/ZX_IQ) H_Y				Yp´tp° 88		342 5	452 9
Yp´tp° 83	342 5	452 9		Yp´tp° 98		342 8	452 =

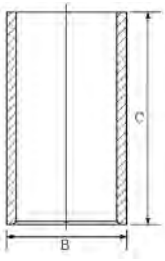
DC497BD77477
DC497BD7D477 *mTm*

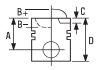
7D497BD77477
7D497BD7D477 *mTm*

8>47878C7477 **N** 436133 **O** 4<133
8>4788798477 **N** 436139 **O** 4<133
8>4788799477 **N** 436143 **O** 4<133
8>478;>78477 **N** 436137 **O** 4<133

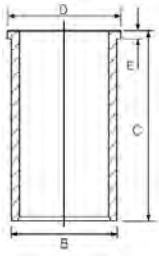
M	8=193
N4	5613
N	7:133
P	434148
	65É<7

5183		IXV
5183		V
8183		IXV





8>4798A>7477 **N** 436133 **O** 4<133 **P** 437133 **Q** 8133



DC497BD77487

M 8=193
N4 561:3
N 7817 3
P 434148
65É<7

7D497BD77477
7D497BD7D477 *mTm*

5183 I X V
5183 V
8183 I X V

DC4CD8E774;7
DC4CD8E7D4;7 *mTm*

M 8=193
N4 561:3
N 7:143
P 434148
67É<7

7D4CD8E77487
7D4CD8E7D487 *mTm*

5183 I Q V
5183 V
7133 I X V

Vt°ßzy Ätßs npyßl wnzx m°°ßzy nsl x mp´1 | Qzwnpy x tßÜpyßl wp´ ap´mipyy°yr°vl x x p´1 | Vt°ßzy nsl x mip op nzx m°°ßzy npyßl wp1 | Vt°ß y nzy n x l´l op nzx m°°ßt y npyßl w | Vt°ßzyp nzy nl x p´l ot nzx m°°ßzyp npyßl wp1

NR>XE8;f	S 9	**>7DBvv**	**B>4CDi**	3ec8GDa 4	**P@tx**	**f u**	**fP87>79**
NRBXE8;f	a 9	**B89Dvv**	**EB4889i**	3GPG8GVN 4	**P@tx**	**f u**	**fP87>9A**
SQ	342<6	452=4	V2/G0NI°mpyd s´Üp°r p			342<6	3=2=3

DC48C>B774;7
DC48C>B7C4;7 *mTm*

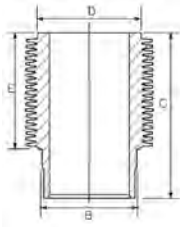
M 9=143
N4 4:193
N 8<133
N2 9133
P 456193
68É<3

MWWWdf

7D48C>B77487
7D48C>B7C487 *mTm*

6133 S U V
5183 V
5183 V
8133 I X V

8>4E777B7477 **N** 43=1=3 **O** 555163 **P** 453133 **Q** 4691<3
8>4E77877477 **N** 43=1=3 **O** 555163 **P** 453133 **Q** 46:163



NzypØRl''po | Nzyrpw''ß | Xzo p w'tp´´p | Rl'ploz m° toz | Vl´Üdwpyßp´zolßt

R>MQ7>D8M/Q	**;0**	S 9	**;E97vv**	**89Ai**	3GcD 4	**P@tx**	**f u U x v xw**	**fP8B9E>**
R>MQ7>D8O/Q	**;0**	S 9	**;E97vv**	**887i**	3GSi 4	**P@tx**	**f u U x v xw**	**fP8B9E;**
R>MQ7>D8P/Q	**;0**	S 9	**;E97vv**	**EAi**	3GPD 4	**P@tx**	**f u U x v xw**	**fP8B9E9**
R>MQ7BD8M/Q	**;0**	a 9	**ADD7vv**	**9794997i**	3NcV8Ni 4	**P@tx**	**f u U x v xw**	**fP8BA97**

R>MQ7BD8N /Q	; 0	a	9	ADD7vv	8CB i	3NSD	4	P@t x	f	u	U	x	v	xw	f P8BA8E
R>MQ7BD8O /Q	; 0	a	9	ADD7vv	8A> i	3NGD	4	P@t x	f	u	U	x	v	xw	f P9>9; D
R>MQ7BD8P /Q	; 0	a	9	ADD7vv	8; 948AA i	3GeD8NGG	4	P@t x	f	u	U	x	v	xw	f P8B9EB
R>MQ7BD8Q /Q	; 0	a	9	ADD7vv	8; 948; > i	3GeD8GeG	4	P@t x	f	u	U	x	v	xw	f P8B9EA

GLX0b Gd	36249	K_XUVURCY	3=23=
I OYp´tp°	3=236	TUa_Y	34238 45244
K_XUI GXMJ 0000	3=233 3=248	VXCS G	34243 45244
K_XULQXK	3=233	_XHCT	3423:

DC48>A777477
DC48>A77C477 *mT m*

M : 416<
N4 4<188
N 89183
P 43816<
73É<6

MWWWdf f b

7D48>A777477
7D48>A77C477 *mT m*
7D48>A77D477 *mT m*

6133 I Q V
516= V
7133 I X V

R>MQ; >D8M /Q	>6A0	S	9	; E97vv	8; 748; > i	3Gcc8GeN	4	P@t x	f	u	U	x	v	xw	f P987EC
R>MQ; >D8N /Q	>6A0	S	9	; E97vv	8; 7 i	3Gcc	4	P@t x	f	u	U	x	v	xw	f P987EB
R>MQ; >D8O /Q	>6A0	S	9	; E97vv	87; i	3GSD	4	P@t x	f	u	U	x	v	xw	f P987E9
R>MQ; >D8P /Q	>6A0	S	9	; E97vv	88D i	3GaD	4	P@t x	f	u	U	x	v	xw	f P987EA
R>MQ; BD8M /Q	>6A0	a	9	ADD7vv	997 i	3Ni i	4	P@t x	f	u	U	x	v	xw	f P99ADA
R>MQ; BD8N /Q	>6A0	a	9	ADD7vv	8B7 i	3NGe	4	P@t x	f	u	U	x	v	xw	f P987ED
R>MQ; BD8O /Q	>6A0	a	9	ADD7vv	8; A i	3GeP	4	P@t x	f	u	U	x	v	xw	f P99B79
R>MQ; BD8P /Q	>6A0	a	9	ADD7vv	8DA i	3NVG	4	P@t x	f	u	U	x	v	xw	f P987EE
R>MQ; BD8Q /Q	>6A0	a	9	ADD7vv	97A497B i	3Nci 8NeD	4	P@t x	f	u	U	x	v	xw	f P98877

K_XUI GXMJ 0000	3=233 3=248	VXCS G	34243 45249
K_XULQXK	38239	VXUb Gd	3423=
K_XUS QJ O	3823:	ZKI ZUX O	34245
S QJ QXQJ KX	3823:	aKXZCY	43243
TUa_Y	34243 45249		

DC4>9CE77477

M : 4173
N4 4: 148
N 891<3
P 438163
73É<6

MWWWdf f b

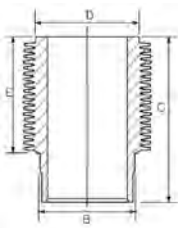
7D4>9CE77477

6133 I Q V
516= V
7133 I X V

NRBX E8;		a	9	B89Dvv	88D489> i	3GaD8Gai	4	P@t x	f	u					f P87>A8
R>X E8;		S	9	>7DBvv	B> i	3ec	4	P@t x							f P87>8>

S Q	342=6 452=4	V2/GONI °mpyq s´Üp°r p	3: 2<= 452=6

8>4E777B7477 N 43=1=3 O 555163 P 453133 Q 4691<3
8>4E77877477 N 43=1=3 O 555163 P 453133 Q 46: 163
8>4E77887477 N 43=1=3 O 553173 P 457183 Q 4671=3



Nzyp0Rl''po	Nzyrpw''ß	Xzo p w'tp´´p	Rl'plozm³toz	Vl´Üüwpyßp´zolßt
D7;A57>	P 9	9C>Dvv	P@i x	Yb>77C
D7;A57>59BA	P 9	9C>Evv	;A4;C i 3Se8VD 4	P@i x	f P9A;9A
D7;A57>59C7	P 9	9C>Evv	>; i 3Ve 4	P@i x	f P9A;9B
D7>757>5977	S 9	;BBBvv	B; i 3ea 4	P@i x	f P87;EC
D7>A57>59C7	S 9	;BBBvv	AC i 3ce 4	P@i x	f P9A;;A
D7AA57>	V 9	>AD;vv		P@i x	Yb;>D>
D7AA57>5977	V 9	>AD;vv	B;4BB i 3ea8lD 4	P@i x	f P9A;>A
D7B757>	a 9	A>EEvv	EB i 3GPG 4	P@i x	f P87>AC
D7B757>5777	a 9	A>EEvv	EE i 3GPV 4	P@i x	f PBDA;
D7B757>57AA	a 9	A>EEvv	EB i 3GPG 4	P@i x	f P87>97
D7B757>57B7	a 9	AA77vv	EB i 3GPG 4	P@i x	f P87>8C
D7B757>57C7	a 9	A>EEvv	EE i 3GPV 4	P@i x	f P87>8;
D7B757>5897	a 9	A>EEvv	EE i 3GPV 4	P@i x	f P87>7D
D7B757>5898	a 9	A>EEvv	EE i 3GPV 4	P@i x	f P87>7E
D7B757>58B;7	a 9	AA77vv	EE i 3GPV 4	P@i x	f P87>C7
D7B757>58B;E	a 9	AA77vv	EE i 3GPV 4	P@i x	f P87>B;
D7B757>58AD	a 9	A>EEvv	EE i 3GPV 4	P@i x	f P87;E7
D7B757>58B7	a 9	AA77vv	EB4EE i 3GPG8GPV 4	P@i x	f P87>98
D7B757>58BE	a 9	AA77vv	EE4879 i 3GPV8GPi 4	P@i x	f P87>B7
D7B757>58C7	a 9	AA77vv	EE i 3GPV 4	P@i x	f P87>>E
D7B757>58C9	a 9	AA77vv	C; i 3i 4	P@i x	f P87>A7
D7B757>58CA	a 9	AA77vv	EE i 3GPV 4	P@i x	f P87>B>
D7B757>58DE	a 9	AA77vv	EE4879 i 3GPV8GPi 4	P@i x	f P87>B9
D7BA57>	a 9	A>EEvv		P@i x	Yb8>E;;
D7BA57>5977	a 9	A>EEvv	D84DA i 3GGD8GGa 4	P@i x	f P9A;99
D7BA57>4T	a 9	A>EEvv		P@i x	Yb8;>DB

833 Yp´tp	342 < 452<9	OTJ_YZXOGR	
:33	342 < 452<7	OTJ_YZXOGRV ZX_IQ) H_Y	
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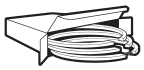
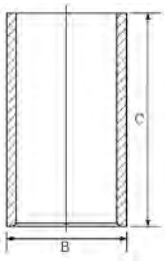
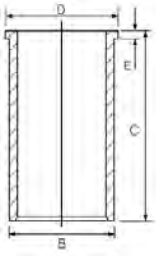
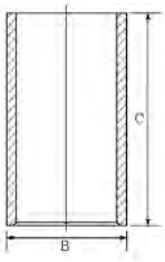
4333	342 9 452<7		



DC4CD9777477 **DC4CD977D477** *mTm* **M** 8=193 **N4** 551t3 **N** 83133 **P** 434148 67É=3	**7D4CD9777477** **7D4CD977D477** *mTm* 5183 SURV 5183 V 7133 IXV	**8>47878D7477** **N** 43: 133 **O** 4< 133 **8>47878D8477** **N** 43: 139 **O** 4< 133 **8>47878D9477** **N** 43: 143 **O** 4< 133 	
		8>479; AA8477 **N** 43: 139 **O** 4< 133 **P** 443133 **Q** 8133 	

D7>8 X	S 9	**;BBBvv**			**P@t x**		**Yb8;>D;**
D7B8 X	a 9	**A>EEvv**			**P@t x**		**Yb9;>DC**

OTJ_YZX@GR/ZX_IQ) H_Y

DC4CD;E77477 **M** 8=194 **N4** 55183 **N** 86163 **P** 434148 67É=3 **df**	**7D4CD;E77477** 6133 SURV 5183 V 7133 IX	**8>47878D7477** **N** 43: 133 **O** 4< 133 **8>47878D8477** **N** 43: 139 **O** 4< 133 **8>47878D9477** **N** 43: 143 **O** 4< 133 					

D7B759>5B78	a 9	**AA77vv**	**89> i**	3Gai 4	**P@t x**	**f u**	**f P87>C9**
D7B759>5BC7	a 9	**A>EEvv**	**88D i**	3GaD 4	**P@t x**	**f u**	**f P87>>C**
D7B759>5BC8	a 9	**A>EEvv**	**88D i**	3GaD 4	**P@t x**	**f u**	**f P87>>D**
D7B759>5BCD	a 9	**AA77vv**	**89; i**	3Gac 4	**P@t x**	**f u**	**f P87>BA**
D7B959>57C7	a 9	**A>EEvv**	**88D i**	3GaD 4	**P@t x**		**f P87>AD**

DC4CD; E77487 M 8=193 N4 551<3 N 7=1<3 P 4341<8 67É=3 MWdf	7D4CD; E77477 6133 SURV 5183 V 7133 IX	8>47878D7477 N 43: 133 O 4< 133 8>47878D8477 N 43: 139 O 4< 133 8>47878D9477 N 43: 143 O 4< 133	
		8>479; AA8477 N 43: 139 O 4< 133 P 443133 Q 8133	

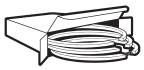
D7BA59>5777	a 9	A>EEvv	EE i 3GPV 4	P6l x	f P9A; >D
D7BA59>5; 77	a 9	A>EEvv	E74E8 i 3GNG8GNS 4	P6l x	f P9A; A9

4333	342 = 452<7	

	8>47878D7477 N 43: 133 O 4< 133 8>47878D8477 N 43: 139 O 4< 133 8>47878D9477 N 43: 143 O 4< 133	
	8>479; AA8477 N 43: 139 O 4< 133 P 443133 Q 8133	

D7; A57A	P 9	9E; 7vv		P6l x	Y b>7; 94;
D7>A57A	S 9	; E7Dvv	A>4B7 i 3cP8eN 4	P6l x	f P9DB9>
D7BA5Q	a 9	ADB8vv	D9 i 3GGN 4	P6l x	f P9D>; 7

CTJ_YZX(GR/ZX_IQ) H_Y	ZTLOG	34237



Yp´tp° =3 342=6

DC49>CD77477

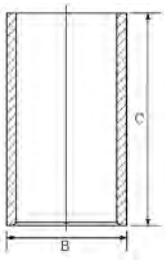
M	9814 8
N4	5516 3
N	8515 3
P	43<183
	6<É<8

f b

7D49>CD77477
7D49>CD7D477 *mT m*

5183		S U R V
5183		V
7183		I X V

8>4787E>7477 **N** 43: 183 **O** 4=<183
8>4787E>8487 **N** 43: 143 **O** 4=<183



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8>4798; B9477 **N** 43: 147 **O** 4=<183 **P** 4431< **Q** 8183
8>4798; B; 477 **N** 43: 177 **O** 4=<183 **P** 4431< **Q** 8183
8>4798>E8477 **N** 43: 184 **O** 4=<183 **P** 43=1< **Q** 8183
8>4798>E9477 **N** 43: 188 **O** 4=<183 **P** 43=1< **Q** 8183
8>4798>E; 477 **N** 43: 14: **O** 4=<183 **P** 43=1< **Q** 8183
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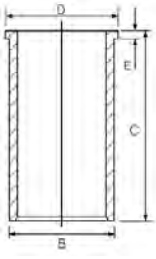
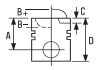


D7; A57A598>		P	9	**9E; 8vv**	**; C4>> i**	3/D8aD	4	**P0i x**				**f P999; ;**
D7; A57A598A		P	9	**9E; 8vv**	**; C4>> i**	3/D8aD	4	**P0i x**				**f P999; >**
D7>757A5>EE7		S	9	**; E7Dvv**	**D7 i**	3GDi	4	**P0i x**	**f u U x v**		**xw**	**f P999; A**
D7>759A5>EE7		S	9	**; E7Dvv**	**DA i**	3GGa	4	**P0i x**	**f u U x v**		**xw**	**Y b9>8; 9**
D7>75>A5>8D7		S	9	**; E7Dvv**	**877 i**	3GPa	4	**P0i x**	**f u U x v**		**xw**	**f P87>7B**
D7>75>A5>; D7		S	9	**; E7Dvv**	**877 i**	3GPa	4	**P0i x**	**f u U x v**		**xw**	**f P97>; D**
D7>75>A5A977 /Q	**90**	S	9	**; E7Dvv**	**877 i**	3GPa	4	**P0i x**	**f u U x v**		**xw**	**f P97>; E**
D7>75>A5A978 /Q	**90**	S	9	**; E7Dvv**	**877 i**	3GPa	4	**P0i x**	**f u U x v**		**xw**	**f P9C9E7**
D7>75>A5A97; /Q	**90**	S	9	**; E7Dvv**	**877 i**	3GPa	4	**P0i x**	**f u U x v**		**xw**	**f P9C9E8**
D7>75>A5A9D7 /Q	**90**	S	9	**; E7Dvv**	**877 i**	3GPa	4	**P0i x**	**f u U x v**		**xw**	**f P9C9E;**
D7>75>A5A9D8 /Q	**90**	S	9	**; E7Dvv**	**877 i**	3GPa	4	**P0i x**	**f u U x v**		**xw**	**f P9C9E>**
D7>75>AP5A877 /Q	**90**	S	9	**; E7Dvv**	**DA877 i**	3GGa8GPa	4	**P0i x**	**f u U x v**		**xw**	**f P97>>7**
D7>75>AP5A878 /Q	**90**	S	9	**; E7Dvv**	**DA i**	3GGa	4	**P0i x**	**f u U x v**		**xw**	**f P9C9EA**
D7>75>AP5A87; /Q	**90**	S	9	**; E7Dvv**	**DA i**	3GGa	4	**P0i x**	**f u U x v**		**xw**	**f P9C9EB**
D7>75>AP5A87A /Q	**90**	S	9	**; E7Dvv**	**DA i**	3GGa	4	**P0i x**	**f u U x v**		**xw**	**f P9C9EC**
D7>A57A577		S	9	**; E7Dvv**	**AE i**	3eD	4	**P0i x**				**f P9A>EB**
D7>A57A598;		S	9	**; E7Dvv**	**AA i**	3cV	4	**P0i x**				**f P9AA77**
D7>A57A598A		S	9	**; E7Dvv**	**AA i**	3cV	4	**P0i x**				**f P9AA78**
D7>A59A5; 87		S	9	**; E7Dvv**	**B; i**	3eV	4	**P0i x**	**f u U x v**		**xw**	**f P9A; B>**
D7>A59A5; C7		S	9	**; E7Dvv**	**CA487; i**	3GDN8GSD	4	**P0i x**	**f u U x v**		**xw**	**f P9A; BA**
D7>A59A5; CA		S	9	**; E7Dvv**	**B; 487; i**	3eV8GSD	4	**P0i x**	**f u U x v**		**xw**	**f P9A; BB**
D7>A59A5; CB		S	9	**; E7Dvv**	**CA487; i**	3GDN8GSD	4	**P0i x**	**f u U x v**		**xw**	**f P9A; BC**



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D7B75-AN5A897 /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C89D
D7B75-AN5A898 /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C89E
D7B75-AN5A89; /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8;7
D7B75-AN5A89> /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8;8
D7B75-AN5A8>A /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8;9
D7B75-AN5A8>B /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8;;
D7B75-AN5A8A7 /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8;>
D7B75-AN5A8A8 /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8;B
D7B75-AN5A8DA /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8;E
D7B75-AN5A8DB /Q	90	a	9	ADB8vv	8;7	i	3Gcc	4	P@t	x	f	u	U	x	v	xw	f P9C8>7
D7B75-AW8B7E7 /Q	80	a	9	ADB8vv	8BC	i	3NNc	4	P@t	x	f	u	U	x	v	xw	f P97>C8
D7B75-AX5>>77		a	9	ADB8vv					P@t	x	f	u					Y b8E9AC49
D7B75-AY 5C977		a	9	ADB8vv					P@t	x	f	u					Y bAE9AC
D7B75-Ad5A778 /Q	90	a	9	ADB8vv	87A	i	3GSP	4	P@t	x	f	u					f P8BC8D
D7B75-Ad5A77; /Q	90	a	9	ADB8vv	87A	i	3GSP	4	P@t	x	f	u					f P8BC8E
D7B75-Ad5A7A7		a	9	ADB8vv	87A	i	3GSP	4	P@t	x	f	u					f P87E88
D7B75-Ae5B777		a	9	ADB8vv	8BC	i	3NNc	4	P@t	x	f	u	U	x	v	xw	f PC;7C
D7B75-Ae5B777 /Q	80	a	9	ADB8vv	8BC	i	3NNc	4	P@t	x	f	u					f P87>D7
D7B75-Ae5B97; /Q	80	a	9	ADB8vv	8BC	i	3NNc	4	P@t	x	f	u					f P9C8BA
D7B75-Ae5BD77 /Q	80	a	9	ADB8vv	8BC	i	3NNc	4	P@t	x	f	u					f P87>CD
D7B75-Ae5C977 /Q	90	a	9	ADB8vv	8BC	i	3NNc	4	P@t	x	f	u	U	x	v	xw	f P97>C9
D7B75-Ae f OM		a	9	ADB8vv	8BC	i	3NNc	4	P@t	x	f	u	U	x	v	xw	f P87>D9
D7BA57A577		a	9	ADB;vv	DA	i	3GGa	4	P@t	x							f P9A>DD
D7BA57A5;7		a	9	ADB;vv	C;	i	3i	4	P@t	x							f P9A>EA
D7BA59A5;97		a	9	ADB;vv	87A4887	i	3GSP8GVD	4	P@t	x							f P9A>CC

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<<	342=< 452=6	L	342=3 452=9
=3	342=7 452=5	QJ_YZXQGR/ZX_I Q) H_Y	
=7	342=6 452=9	R	342=9 452=<
K_XUI GXMJ QXQQ	342=4 3=248	ZR	342=< 45237

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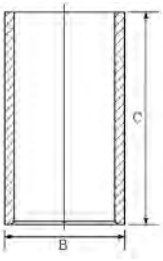

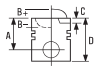

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8>4798>E9477	N 43: 138 O 4=<83 P 43=1< Q 8183	
8>4798>E; 477	N 43: 14: O 4=<83 P 43=1< Q 8183	
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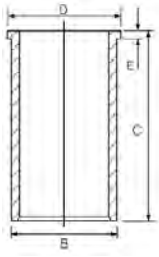
8>479>CD8477	N 43: 135 O 4=<83 P 43=1=8 Q 8183	



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D7>757A59;7	S	9	;E7Dvv	BA i	3ee	4	P@l x	f P87; ED
D7>757A59;;	S	9	;E7Dvv	BA i	3ee	4	P@l x	f P8BC9;
D7>757A59;A	S	9	;E7Dvv	BA i	3ee	4	P@l x	f P8BC9>
D7AA57A5777	V	9	>DDAvv	BB i	3 D	4	P@l x	f P9A; D>
D7B757A5777	a	9	ADB8vv	878 i	3GPc	4	P@l x	f P87>9>
D7B757A5977	a	9	ADB8vv	EE4879 i	3GPV8GPi	4	P@l x	f P87>C8
D7B757A59>B	a	9	ADB8vv	878 i	3GPc	4	P@l x	f P87; E8
D7B757A59C7	a	9	ADB8vv	878 i	3GPc	4	P@l x	f P87>89
D7B757A59D7	a	9	ADB8vv	878 i	3GPc	4	P@l x	f P87>9;
D7B757A59DA	a	9	ADB8vv	878 i	3GPc	4	P@l x	f P87>88
D7B757A59DE	a	9	ADB8vv	878 i	3GPc	4	P@l x	f P87>B8
D7B857A	a	9	ADB8vv	D9 i	3GGN	4	P@l x	f P9D>9E

=3	342<7	342=4	eKZG	442<8	452=5
Yp´tp° =3	342=6				

DC49>CD77487

M	98148
N4	55183
N	85133
P	43<183
	6<É<8

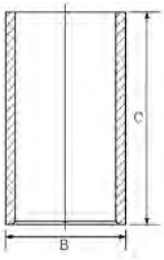
df f b

7D49>CD77477
7D49>CD7D477 *mT m*

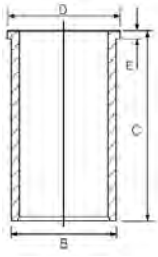
5183		SURV
5183		V
7133		IXV

8>4787E>7477
8>4787E>8487

N 43: 133 O 4=<83
N 43: 143 O 4=<83



		8>4798; B8477	N 43: 135 O 4=<33 P 4431< Q 833
		8>4798; B9477	N 43: 147 O 4=<33 P 4431< Q 833
		8>4798; B; 477	N 43: 177 O 4=<33 P 4431< Q 833
		8>4798>E8477	N 43: 134 O 4=<33 P 43=1< Q 833
		8>4798>E9477	N 43: 138 O 4=<33 P 43=1< Q 833
		8>4798>E; 477	N 43: 14: O 4=<33 P 43=1< Q 833
		8>4798>E>477	N 43: 17: O 4=<33 P 43=1< Q 833
		8>479>CD8477	N 43: 135 O 4=<33 P 43=1=8 Q 833



D7>757A5>EE7		S	9	;E7Dvv	D7 i	33Di	4	P@t x	f u	f P8BC9A
D7>759AN5>977		S	9	;E7Dvv	CA i	33DN	4	P@t x	f u	f P87>7;
D7>759Ak5>777		S	9	;E7Dvv	DA i	33Ga	4	P@t x	f u	f P87>7>
D7B759Ah5>777 /Q	80	a	9	ADB8vv	8; 7 i	33cc	4	P@t x	f u U x v xw	f P87>A>
D7B759Ah5>7D7		a	9	ADB8vv	8; 7 i	33cc	4	P@t x	f u U x v xw	f P87>CB
D7B759Ah5>D77		a	9	ADB8vv	8; 7 i	33cc	4	P@t x	f u U x v xw	f P87>D8
D7B759Ad5>977 /Q	80	a	9	ADB8vv	87A i	33SP	4	P@t x	f u	f P87>CE
D7B759Ad5>9D7		a	9	ADB8vv	87A i	33SP	4	P@t x	f u	f P87>CA
D7B759Ad5>; 77		a	9	ADB8vv	87A i	33SP	4	P@t x	f u U x v xw	f P97>8>

K_XUI GXMJ 0000 342=4 3=248

DC487; E774>7

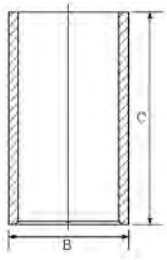
M 9815 8
N4 5413 3
N 7913 3
P 4371 53
6<Ê<8

MWTMdf fb

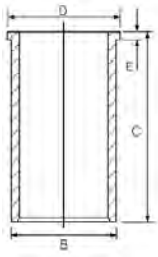
7D487; E77477
7D487; E7D477 *mTm*

6183 SUV
5183 V
7133 IXV

		8>4787E>7477	N 43: 133 O 4=<33
		8>4787E>8487	N 43: 143 O 4=<33



		8>4798; B8477	N 43: 135 O 4=<33 P 4431< Q 833
		8>4798; B9477	N 43: 147 O 4=<33 P 4431< Q 833
		8>4798; B; 477	N 43: 177 O 4=<33 P 4431< Q 833
		8>4798>E8477	N 43: 134 O 4=<33 P 43=1< Q 833
		8>4798>E9477	N 43: 138 O 4=<33 P 43=1< Q 833
		8>4798>E; 477	N 43: 14: O 4=<33 P 43=1< Q 833
		8>4798>E>477	N 43: 17: O 4=<33 P 43=1< Q 833
		8>479>CD8477	N 43: 135 O 4=<33 P 43=1=8 Q 833



D7>759A577	S 9	;E7Dvv	C>4DA i 3GDG8GGa 4	P6l x f u U x v xw	f P98>B8
D7>759A977	S 9	;E7Dvv	DA i 3GGa 4	P6l x f u	f P87>7C
D7>759A997	S 9	;E7Dvv	DA i 3GGa 4	P6l x f u	f P87>8B
D7>759A9;7	S 9	;E7Dvv	C> i 3GDG 4	P6l x f u	f PC9C8
D7B759A3B77	a 9	ADB8vv	8;7 i 3Gcc 4	P6l x f u	f P87>C;
D7B759A3B98	a 9	ADB8vv	887 i 3GVD 4	P6l x f u	f PC9>;
D7B759A3B;7	a 9	ADB8vv	877 i 3GPV 4	P6l x f u	f PAB7>
D7B759A3B;8	a 9	ADB8vv	877 i 3GPV 4	P6l x f u	f PAE>;
D7B759A3B>8	a 9	ADB8vv	87; i 3GSD 4	P6l x f u	f PC9>9
D7B759A3BB9	a 9	ADB8vv	EB i 3GPD 4	P6l x f u	f PAAEE
D7B759A3BB;	a 9	ADB8vv	DD4EB i 3GGe8GPG 4	P6l x f u	f PAE;B
D7B759A3BBE	a 9	ADB8vv	89A i 3GcD 4	P6l x f u	f P87>AE
D7B759A3BC7	a 9	ADB8vv	89A i 3GcD 4	P6l x f u	f P87>A;
D7B759A3BC;	a 9	ADB8vv	EB i 3GPD 4	P6l x f u	f PAE;D
D7B759A3BCD	a 9	ADB8vv	8;7 i 3Gcc 4	P6l x f u	f P87>BB
D7B759A3BCE	a 9	ADB8vv	8;7 i 3Gcc 4	P6l x f u	f P87>BC
D7B859A	a 9	ADBDvv	88> i 3GVV 4	P6l x f u	Y b9>8;;

OTJ_YZX(GR/ZX_IQ) H_Y eKZG 342< 362=4

S 342<9 452=5

DC49>>A77487

M	9818
N4	5583
N	8783
P	4378
	6<É<8

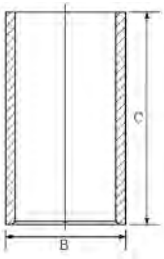
MWdf fb

7D49>>A77477

6	33	I X V
5	83	V
7	83	I X V

8>4787E>7477 **N** 43: 33 **O** 4=<83

8>4787E>8487 **N** 43: 43 **O** 4=<83



8>4798;B8477 **N** 43: 35 **O** 4=<83 **P** 4431< **Q** 833

8>4798;B9477 **N** 43: 47 **O** 4=<83 **P** 4431< **Q** 833

8>4798;B;477 **N** 43: 77 **O** 4=<83 **P** 4431< **Q** 833

8>4798>E8477 **N** 43: 34 **O** 4=<83 **P** 43=1< **Q** 833

8>4798>E9477 **N** 43: 38 **O** 4=<83 **P** 43=1< **Q** 833

8>4798>E;477 **N** 43: 4: **O** 4=<83 **P** 43=1< **Q** 833

8>4798>E>477 **N** 43: 7: **O** 4=<83 **P** 43=1< **Q** 833

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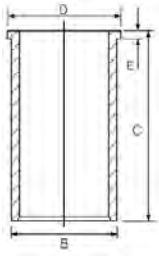


D7>75>A5>777	S 9	;E7Dvv	877 i 3GPa 4	P6l x f u U x v xw	f P87>7A
D7B759Ad5>977	a 9	ADB8vv	87A i 3GSP 4	P6l x f u U x v xw	f PC9CB
D7B759Ad5>977 Xf O	a 9	ADB8vv	87A i 3GSP 4	P6l x f u U x v xw	f P87>8A
D7B759Ad5>9D7	a 9	ADB8vv	87A i 3GSP 4	P6l x f u U x v xw	f PC;79
D7B75>A/Q 80	a 9	ADB8vv	8A9 i 3NDc 4	P6l x f u U x v xw	f P9C>;E

D7B75>A5B77	a	9	ADB8vv	8A9	i	3NDc	4	P@t	x	f	u	U	x	v	xw	f PC9EA
D7B75>A5>877 /Q	80	a	9	ADB8vv	8A9	i	3NDc	4	P@t	x	f	u	U	x	v	xw	f P87>EC
D7B75>A5>877 f OM/Q	80	a	9	ADB8vv	8A9	i	3NDc	4	P@t	x	f	u					f P87>AA
D7B75>A5>C77		a	9	ADB8vv	8A9	i	3NDc	4	P@t	x	f	u					f P87E8;

K_XUI GXMJ 0000 342=4 3=248

DC487; E77477

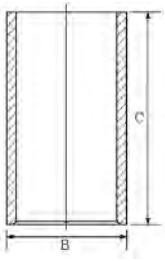
M 98166
N4 55143
N 87173
P 437166
6<É<8

MWdf f b

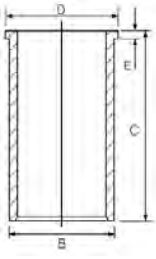
7D487; E77477
7D487; E7D477 *mT m*

6183 SUV
5183 V
7183 IXV

8>4787E>7477 **N** 43: 133 **O** 4=<133
8>4787E>8487 **N** 43: 143 **O** 4=<133



8>4798; B8477 **N** 43: 135 **O** 4=<133 **P** 4431< **Q** 8133
8>4798; B9477 **N** 43: 147 **O** 4=<133 **P** 4431< **Q** 8133
8>4798; B; 477 **N** 43: 177 **O** 4=<133 **P** 4431< **Q** 8133
8>4798>E8477 **N** 43: 134 **O** 4=<133 **P** 43=1< **Q** 8133
8>4798>E9477 **N** 43: 138 **O** 4=<133 **P** 43=1< **Q** 8133
8>4798>E;477 **N** 43: 14: **O** 4=<133 **P** 43=1< **Q** 8133
8>4798>E>477 **N** 43: 17: **O** 4=<133 **P** 43=1< **Q** 8133
8>479>CD8477 **N** 43: 135 **O** 4=<133 **P** 43=1=8 **Q** 8133



D7>75>Ak5>8D7	S	9	;E7Dvv	877	i	3GPa	4	P@t	x	f	u	U	x	v	xw	f P97>>8
D7B75>Ad5A777 /Q	90	a	9	ADB8vv	87A	i	3GSP	4	P@t	x	f	u					f P8BC8C

K_XUI GXMJ 0000 342=4 3=248

DC487; E774; 7

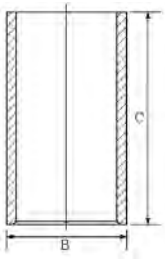
M 98166
N4 54173
N 7<143
P 437166
6<É<8

MWdf f b

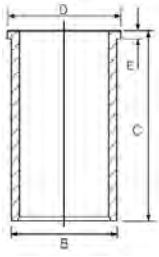
7D487; E77477
7D487; E7D477 *mT m*

6183 SUV
5183 V
7183 IXV

8>4787E>7477 **N** 43: 133 **O** 4=<133
8>4787E>8487 **N** 43: 143 **O** 4=<133

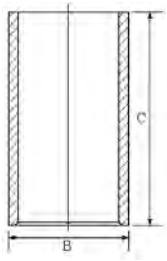


8>4798; B8477	N 43: 135 O 4=<133 P 4431< Q8133		
8>4798; B9477	N 43: 147 O 4=<133 P 4431< Q8133		
8>4798; B; 477	N 43: 177 O 4=<133 P 4431< Q8133		
8>4798>E8477	N 43: 134 O 4=<133 P 43=1< Q8133		
8>4798>E9477	N 43: 138 O 4=<133 P 43=1< Q8133		
8>4798>E; 477	N 43: 14: O 4=<133 P 43=1< Q8133		
8>4798>E>477	N 43: 17: O 4=<133 P 43=1< Q8133		
8>479>CD8477	N 43: 135 O 4=<133 P 43=1=8 Q8133		



D7B75>Ae5BD77 /Q 80 a 9 ADB8vv 8BC i 3NNc 4 P@t x f u U x v xw f PC; 7A

8>4787E>7477	N 43: 133 O 4=<133		



D7BA59A57D7 a 9 ADB; vv 87; 487A i 3GSD8GSP 4 P@t x f P9A>CA

=3 342<7 452=6 L 342=3 452=9

DC49>>A774>7

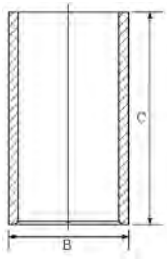
M	98148
N4	5583
N	8778
P	43<183
	6<É<=

MWdf

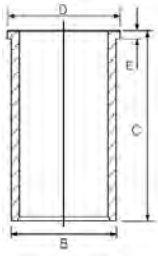
7D49>>A77477

6133		I X V
5183		V
7133		I X V

8>4787E>7477	N 43: 133 O 4=<133	
8>4787E>8487	N 43: 143 O 4=<133	



8>4798; B8477	N 43: 135 O 4=<33 P 4431< Q 8133	
8>4798; B9477	N 43: 147 O 4=<33 P 4431< Q 8133	
8>4798; B; 477	N 43: 177 O 4=<33 P 4431< Q 8133	
8>4798>B8477	N 43: 134 O 4=<33 P 43=1< Q 8133	
8>4798>B9477	N 43: 138 O 4=<33 P 43=1< Q 8133	
8>4798>B; 477	N 43: 14: O 4=<33 P 43=1< Q 8133	
8>4798>B>477	N 43: 17: O 4=<33 P 43=1< Q 8133	
8>479>CD8477	N 43: 135 O 4=<33 P 43=1=8 Q 8133	



OC7	S 9	>E>8vv			P@1 x	Y b>79E49
O877	S 9	>E>8vv			P@1 x	Y b>79E48
OZ;	P 9	; C7Bvv			P@1 x	Y b>79D
Ob ;	a 9	C>89vv	87C i	3GSV 4	P@1 x	f PBDB8
Ob ; 6; 95B5977	a 9	C>89vv	87C4887 i	3GSV8GVD 4	P@1 x	f PBDAA

OTJ_YZX@GR/ZX_IQ) H_Y	Yp´tp° 463	452 7 452 <

DC497CA77487

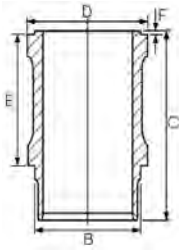
M	: 3153
N4	5<133
N	88133
P	473153
	73É=7

7D497CA77477

5133		I X V
5133		V
5133		V
8133		I X V

8>4B889A7477
N 44<133 **O** 56: 133 **P** 45=133 **Q** 4: 3133 **R** 4133

8>4B8A9; 7477
N 44<133 **O** 569133 **P** 45=133 **Q** 4: 3133 **R** 4133



DD497CA77487
< 053: 833043 .
4709445830 33

DC497CA774; 7

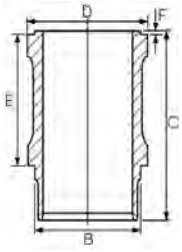
M	: 3153
N4	5<133
N	88133
P	473153
	73É=7

df

7D497CA77477

5133		I X V
5133		V
5133		V
8133		I X V

8>4B889A7477
N 44<133 **O** 56: 133 **P** 45=133 **Q** 4: 3133 **R** 4133



DD497CA774; 7
< 053: 833063 .
4709445830 33

O 7;	S 9	>E>7vv	AA4BC i	3cV8 G 4	P@1 x	f PBD>>
O97	S 9	>AB9vv			P@1 x	Y b8; 7C49
O98	S 9	>AB9vv			P@1 x	Y b8; 7C
O>8	S 9	>AB9vv			P@1 x	Y b8; 7C48
Oa ;	S 9	>AB9vv			P@1 x	Y b8; 7C4;
Oa >7	S 9	>AB9vv			P@1 x	Y b8; 7C4>

OTJ_YZX@GR/ZX_IQ) H_Y	Yp´tp° : 3	342 9 3<2 <

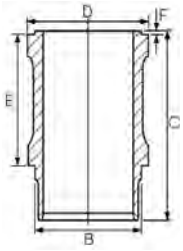
DC497CA77477

M : 8153
N4 5: 183
N 84133
P 483153
73É=7

7D497CA77477

5183 I X V
5183 V
5183 V
8133 I X V

8>4B889A7477
8>4B8A9; 7477



N 44<133 **O** 56: 133 **P** 45=183 **Q** 4: 3133 **R** 4133
N 44<133 **O** 569133 **P** 45=183 **Q** 4: 3133 **R** 4133

DD497CA77477
< 053: 833033 .
470944583033

D; B75>B	a 9	**CBDAvv**	**8EB i** 3Nac 4	**P@t x**	**f u**	**f P9C>A9**
D; B75>BN5>AE8	a 9	**CBD>vv**	**8B948EB i** 3NND8Nac 4	**P@t x**	**f u U x v xw**	**f P9>DB9**
D; B75>Bd5>8B /f OMD	a 9	**CBDAvv**	**8CB i** 3NPi 4	**P@t x**	**f u U x v xw**	**f P87A88**

K_XULQXK 3=239 K_XUZKl N S Z 342=5 3<2=<

DC48>9E77477

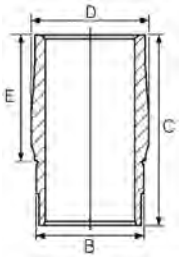
M : 9183
N4 58133
N 85133
P 459183
75É=6

MWWWdf f b

7D48>9E77477

6183 I Q V
5183 I X V
7133 I X V

8>4C>77B7477



N 453183 **O** 565133 **P** 45<1=3 **Q** < 133

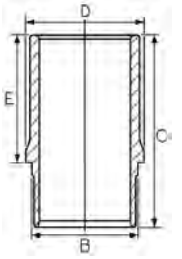
DD48>9E77477
< 0475=33033 .
470: 73393033

K°´z 4

D; >757>57>7	S 9	**>AC7vv**	**C; i** 3i 4	**P@t x**		**f P87>77**
D; >757>5977	S 9	**>AC7vv**	**C> i** 3GDG 4	**P@t x**		**f P87; E9**
D; >757>59A7	S 9	**>AC7vv**	**C> i** 3GDG 4	**P@t x**		**f P87; E;**
D; >757>5; 77	S 9	**>AC7vv**	**C> i** 3GDG 4	**P@t x**		**f P87; E>**
D; >757>5; A7	S 9	**>AC7vv**	**C> i** 3GDG 4	**P@t x**		**f P87; EA**
D; >757>5; B9	S 9	**>AC7vv**	**C> i** 3GDG 4	**P@t x**		**f P87; EB**
D; B757>	a 9	**BDAAvv**	**87B i** 3GSV 4	**P@t x**		**Y b; A9;**
D; B857>	a 9	**BDA7vv**	**87B i** 3GSV 4	**P@t x**		**Y b>EA8**

OTJ_YZXOGR eKZG 342 = 392<<
OTJ_YZXOGR/ZX_I Q) H_Y

8>4B87797477



N 455133 **O** 548133 **P** 45=t 3 **Q** 47: 133

Rtyp´ Ätßs "I yßtOnl @B ßzy" r l w@ytÜpo pÉßp´tz´ | Rl °qm°ns°p x tß"szswl °x qptpx " @p´Üyvßpx ° p´px | I spx t°p pÉß´tp°´ r l w@yt° "I yßtOnl @B ßzy" | I l x t°l nzy pÉßp´tz´ r l w@ytÜ oz "I yßtnl @B nt y" | I l yyl nzy p°ßp´yz Üyn l ßz "I yßtnl @B Üzyp"

D; >757A	S 9	**A>78vv**	**B; i** 3ea 4	**P@t x**		**f PBD>E**
D; >757A5977	S 9	**A>78vv**	**D> i** 3GGS 4	**P@t x**		**f P87>87**

D; B757A	a	9	D877vv	EA489> i	3GN 8Gai	4	P@t x		f PBDA>
D; B757A5977	a	9	D879vv	89> i	3Gai	4	P@t x		f P87>D>
D; B757A59A>	a	9	D879vv	89> i	3Gai	4	P@t x		f P87>DD
D; B757A5BC;	a	9	D879vv	88D4898 i	3GaD8GaV	4	P@t x		f P87>E>
D; B757A5N	a	9	D879vv	EA4887 i	3GN 8GVD	4	P@t x		f PBDAB
D; B857A	a	9	D879vv	88D i	3GaD	4	P@t x		Y b>EA948
D; BA57A5A77	a	9	D878vv	88> i	3GVV	4	P@t x		f P9A; A;
D; BA57A5A97	a	9	D878vv	87> i	3GSG	4	P@t x		f P9A; A>
D; BA57A5A; 7	a	9	D878vv	EE i	3GPV	4	P@t x		f P9A; AA
D; BA57A5A; 8	a	9	D878vv	87> i	3GSG	4	P@t x		f P9A; AB
D; BA57A5AAA	a	9	D878vv	EB i	3GPD	4	P@t x		f P9A; AC
D; BA57A5AB7	a	9	D878vv	E> i	3GNe	4	P@t x		f P9A; AD
D; BA57A5AC7	a	9	D878vv	E> i	3GNe	4	P@t x		f P9A; AE
D; BA57A5AD7	a	9	D878vv	E> i	3GNe	4	P@t x		f P9A; B7
D; BA57A5AE7	a	9	D878vv	E> i	3GNe	4	P@t x		f P9A; B8

4333	342 = 452<7	Yp´tp° 453	342 = 452<9
OTJ_YZXOGR/ZX_IQ) H_Y		Yp´tp° 473	342 < 342<9
Yp´tp° <3	342 < 452<7	eKZG	342<6 342<8

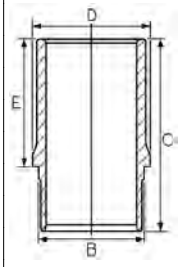
DC4A9; 777477

M : 9183
N4 5=173
N 87183
P 473183
75É=:

df

7D4A9; 777477

5183 I X V
5183 V
7183 I X V



8>4BD>D>7477
8>4B; ; DB7477
N 455183 **O** 568183 **P** 45=t 3 **Q** 49: 183
N 455183 **O** 568183 **P** 45=1=3 **Q** 49: 183

DD4A9; 777477
< 0856333083 .
4709<7<73083

D; B859A5A87	a	9	D878vv				P@t x		Y b8E88;
D; B85>A5A; 7	a	9	D878vv				P@t x	f u U x v xw	Y bE88; 48
D; B85>A5A; 74D; BX	a	9	D878vv				P@t x	f u U x v xw	Y bE88;

GMVK0_RZ_XGR
OTJ_YZXOGR

YZGZQJTGXd KTMOTKY

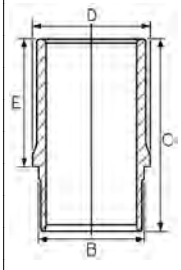
DC49>AA77487

M : 9183
N4 5: t 3
N 8=183
P 473183
75É=:

df

7D49>AA77477

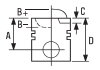
6183 I X V
5183 V
7183 I X V



8>4BD>D>7477
8>4B; ; DB7477
N 455183 **O** 568183 **P** 45=t 3 **Q** 49: 183
N 455183 **O** 568183 **P** 45=1=3 **Q** 49: 183

DD49>AA77487
< 0578833043 .
4709<7<73083

D; BA59A5A77	a	9	D879vv	8; 9 i	3GeD	4	P@t x	f u	f P8DBCD
D; BA59A5A78	a	9	D879vv	88D i	3GaD	4	P@t x	f u	f P8DBCE
D; BA59A5A79	a	9	D879vv	88D48; ; i	3GaD8GeG	4	P@t x	f u	f P8DBD7
D; BA59A5A7;	a	9	D879vv	88D i	3GaD	4	P@t x	f u	f P8DBD8
D; BA59A5A; ;	a	9	D879vv	8; ; i	3GeG	4	P@t x	f u	f P8DBD9



Yp´tp° =3 342=6

DC49>AA77477

M : 9183
N4 5=133
N 8=163
P 473183
75É=:

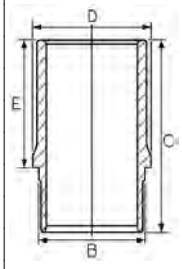
df

7D49>AA77477

6133 I X V
5183 V
7133 I X V

8>4BD>D>7477
8>4B; ; DB7477

N 455133 **O** 568133 **P** 45=t 3 **Q** 49: 133
N 455133 **O** 568133 **P** 45=1=3 **Q** 49: 133



DD49>AA77477
< 0578833033 .
4709<7<73033

DC49>AA774; 7

M : 9183
N4 5: t 3
N 8=133
P 459183
75É=:

df

7D49>AA77477

6133 I X V
5183 V
7133 I X V

R9NQ7BD8M/Q	**9 O**	**D0**	a	9	**CCE7vv**	**9AE i**	3PVN	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P87D9D**
R9NQ7BD8N /Q	**9 O**	**D0**	a	9	**CCE7vv**	**99D i**	3PGD	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P87D9E**
R9NQ7BD8O /Q	**9 O**	**D0**	a	9	**CCE7vv**	**977 i**	3NcN	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P87D; 9**
R9NQ7BD8P /Q	**9 O**	**D0**	a	9	**CCE7vv**	**8D7 i**	3NSV	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P87D; ;**
R9NQ7BD8PM/Q	**9 O**	**D0**	a	9	**CCE7vv**	**8D7 i**	3NSV	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P9D99D**
R9NQ7BD8PN /Q	**9 O**	**D0**	a	9	**CCE7vv**	**8D7 i**	3NSV	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P9D99E**
R9NQ7BD8Q /Q	**9 O**	**D0**	a	9	**CCE7vv**	**98D i**	3Ni a	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P87D; 7**
R9NQ7BD8R /Q	**9 O**	**D0**	a	9	**CCE7vv**	**977 i**	3NcN	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P87D; 8**

I QZdl RGYY	342=:	YZXGRQY O	39236
K_XUZKI N S N	3=2=<	ZXGQQKX O	43237
K_XUZXGQQKX	3=2=== 44237		

DC4898D77487

M : 5143
N4 54183
N 93133
P 44: 143
79É=9

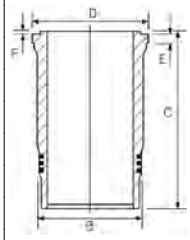
WWdf f b

7D4898D77477

6133 I X V
5183 I X V
7133 I X V

8A49B77C7477
8>49B77C7477

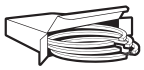
N 45<183 **O** 544143 **P** 469183 **Q** <1=3 **R** 4153
N 45<183 **O** 544143 **P** 469183 **Q** <1=3 **R** 4153



Qmw0op° °pl w	Ynswkp ßJtnsß°yr py pty	Qmwßop° uztyß°	Qmw0Öp wr° °pwr°	I zx ' ´pyop wpr °l ´ytÚzyt

R9NQ8BD9S /Q	**; 0**		a	9	**CCE7vv**	**99D49AE i**	3PGD8PVN	4	**P6t x**	**f**	**u**	**U x v**	**xw**	**f P9778E**
R9NQ7BD8M6N6O6P6R /Q	**; 0**		a	9	**CCE7vv**	**8D749AE i**	3NSV8PVN	4		**f**	**u**	**U x v**	**xw**	**Y b8AA; C**

GcKX	36238 3423:	K_XUI GXMU 0000	3923:	3=248
I 0Yp´tp°	3=234			



DC4898D77477

M : 5143
N4 4=163
N 8=163
P 44: 143
79É=9

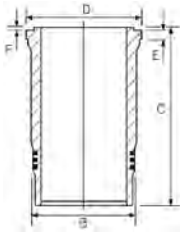
-448: 30434,

MWTMWWdf fb

7D4898D77477

6133 I X V
5183 I X V
7133 I X V

8A49B77C7477
8>49B77C7477



N 45<183 **O** 544143 **P** 469183 **Q** <1=3 **R** 4153
N 45<183 **O** 544143 **P** 469183 **Q** <1=3 **R** 4153

DE4898D77477
< 0454<33033 .
4805933: 3033

DD4898D77477
< 0454<33033 .
4705933: 3033

Ojnvßop° °pl w	Ynswp ßJtnsß°yr py pty	Ojnvßop° uztyß°	Ojnvß Öp wr° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt
R9OQ7BD8M/O E0	a 9 DC7Dvv	9E> i 3SDD 4	P@t x f u U x v xw	f P9AC8A
R9OQ7BD9M/O E0	a 9 DC7Dvv	9E> i 3SDD 4	P@t x f u U x v xw	f P9AC8B
R9OQ7BD; M/O E0	a 9 DC7Dvv	9E> i 3SDD 4	P@t x f u U x v xw	f P9AC8C
R9OQ7BD>M/O E0	a 9 DC7Dvv	9E> i 3SDD 4	P@t x f u U x v xw	f P9AC8D

DC4>9DD77477

M <3133
N4 531t 3
N 98193
P 458183
85É=6

-44: 34G756,

MWWWdf fb

7D4>9DD77477

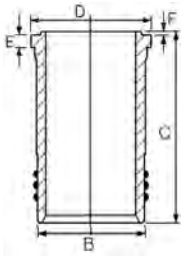
6133 MJI V
5183 TZ
7133 I X V

GDC

D>B7585779	a 9	EA77vv	8CC i	3NSG	4	P@t x	f u			f P87A79
D>B7585779	a 9	E>EDvv	8A>48E9 i	3NDi 8NaG	4	P@t x	f u	U x v	xw	f P9>DB;
D>B7585787	a 9	EA77vv	8CC i	3NSG	4	P@t x	f u			f P87A7;
D>B7585<79	a 9	EA77vv	8CC i	3NSD	4	P@t x	f u			Y b>8; 7
D>B7585B79	a 9	EA77vv	8E848E9 i	3NaD8NaG	4	P@t x	f u			f P87A98
D>B7585B7B	a 9	EA77vv	8CC i	3NSD	4	P@t x	f u			Y b>8; 748
D>B7585979	a 9	E>EDvv	8CC i	3NSG	4	P@t x	f u			f P87A8D
D>B7585<7B	a 9	E>EDvv	8CC i	3NSG	4	P@t x	f u			f P87A8E
D>B7585B78	a 9	E>EDvv	8E8 i	3NaD	4	P@t x	f u			f P97>; A
D>B7585B88	a 9	E>EDvv	8A> i	3NDi	4	P@t x	f u			f P97>; B
D>B7585C7D	a 9	EA77vv	8CC i	3NSD	4	P@t x	f u			Y b>8; 749
D>B7585C87	a 9	EA77vv	8CC i	3NSD	4	P@t x	f u			Y b>8; 74;
D>B75>85B79	a 9	EA77vv	9; > i	3PGe	4	P@t x	f u	U x v	xw	f P87A>D
D>B75>85B9>	a 9	EA77vv	9; > i	3PGe	4	P@t x	f u	U x v	xw	f P87AEE
D>B75>85BB7	a 9	EA77vv	9; B i	3PNG	4	P@t x	f u	U x v	xw	f P87A>C
D>B75>8 Y	a 9	EA77vv	9CD i	3Pce	4	P@t x	f u	U x v	xw	f PC9A7
D>B75>8e5C; ; /Q 80	a 9	E>EDvv	9A> i	3PSV	4	P@t x	f u	U x v	xw	f P9>DBA
D>B75>8 f	a 9	EA77vv	8DA i	3NVG	4	P@t x				f P9>9B9

K_XUZXGQQKX	382== 44237	Z_XHUI Ozd	342<= 452=5
OTJ_YZXOGR/ZX_I Q) H_Y		Z_XHUZKI N	342=3 452=5
S	3=2=9 442=5		

8>4>A7DD7477 **N** 467133 **O** 583133 **P** 4771<3 **Q** 43135 **R** 4133



Ttßtopo	Ttßtp´ß	Ttß°´	Ttß°´loz	Ttß°´lßz
D>B7598N588;	a 9	**EA77vv**	**8B9 i 3NND 4**	**P@l x** **Yb8E88>**
D>B7598N588A	a 9	**EA77vv**	**8B9 i 3NND 4**	**P@l x** **Yb8E88>48**
D>B75>8O	a 9	**EA77vv**	**998 i 3PDG 4**	**P@l x f u** **f P87D7C**
D>B75>8O /f OMD	a 9	**EA77vv**	**998 i 3PDG 4**	**P@l x f u U x v xw** **f P87AEA**
D>B75>8O5 97	a 9	**EA77vv**	**998 i 3PDG 4**	**P@l x f u** **f P87A89**
D>B75>8W/Q 90	a 9	**EA77vv**	**9A> i 3PSV 4**	**P@l x f u** **f P87D7D**
D>B75>8W5>7B	a 9	**EA77vv**	**9A> i 3PSV 4**	**P@l x f u** **f P87A8;**
D>B75>8W5>87	a 9	**EA77vv**	**9A> i 3PSV 4**	**P@l x f u** **f P87C7E**
D>B75>8W5f OM/Q 80	a 9	**EA77vv**	**9A> i 3PSV 4**	**P@l x f u U x v xw** **f PC; >9**
D>B75>8X /f OMD	a 9	**EA77vv**	**9CB i 3PcV 4**	**P@l x f u** **f P87AC;**
D>B75>8X5A797	a 9	**EA77vv**	**9CB i 3PcV 4**	**P@l x f u** **f P87A8>**
D>B75>8 d	a 9	**EA77vv**	**98>49CB i 3N D8PcV 4**	**P@l x f u U x v xw** **f PC9>D**
D>B75>8 e	a 9	**EA77vv**	**9A> i 3PSV 4**	**P@l x** **f PC9>E**

K_XUYZGX	342=6 3523 5	NJ :	342=9
K_XUZKI N S V	342=5	OTJ_YZXOGR/ZX_I Q) H_Y	
K_XUZKI N S Z	342=5 3<2=<	Z_XHUZKI N	342=3 452=5
K_XUZXGQQKX	342=6 44237		

DC4CDA; 77487

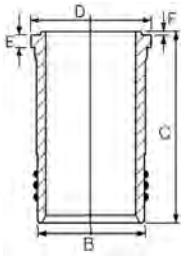
M <71t 3
N4 5: 133
N 8=183
P 4671t 3
7<É=9

MWTMWWZN df

7D4CDA; 77477

6183 I X V
6133 I X V
8133 I X V

8>4>A7DD7477 **N** 467133 **O** 583133 **P** 4771<3 **Q** 43135 **R** 4133



DD4CDA; 77487
< 0t <8633043 .
470783<<3033

Ttßtopo	Ttßtp´ß	Ttß°´	Ttß°´loz	Ttß°´lßz
D977579	a 9	**ED97vv**	**P@l x**	**Yb E87D**
D9775795997	a 9	**ED97vv**	**8>C i 3NDD 4** **P@l x**	**f PBE; A**
D977589	a 9	**ED97vv**	**P@l x**	**Yb E87E**
D9775895777	a 9	**ED97vv**	**8>7 i 3GI D 4** **P@l x**	**f PBE7B**
D97A579	a 9	**ED97vv**	**P@l x**	**Yb; A77**

OTJ_YZXOGR		Yp´tpº 733	
OTJ_YZXOGR/ZX_I Q) H_Y		Yp´tpº 933	342 3 452=3
Yp´tpº 633	3423< 452 4		

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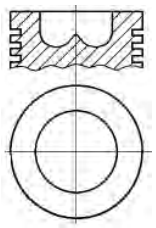
M <3153
N4 5<133
N 99183
P 483133
75É437

df



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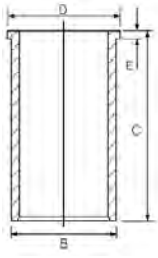
6183 I X V
6133 V
6133 V
8183 I X V

8>4797977477

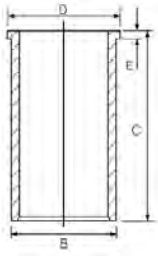


N 45<133 **O** 585133 **P** 465133 **Q** 9133

Ttß topo | Ttß tp´ß | Ttß°´ | Ttß°´l oz | Ttß°´l ßz

D97757;		a	9	**87; 7Dvv**			**P@t x**	**Y bAEA48**
D9775B;		a	9	**87; 7Dvv**			**P@t x**	**Y bE887**
D97A57;		a	9	**87; 7Dvv**			**P@t x**	**Y bAEA**
CTJ_YZXCGR							CTJ_YZXCGR/ZX_I Q) H_Y	

8>4798AD7477



N 463135 **O** 585133 **P** 469133 **Q** 9133

Ttß topo | Ttß tp´ß | Ttß°´ | Ttß°´l oz | Ttß°´l ßz

R; M; BD8M/Q	**>6A O**	**870**	a	9	**87; 77vv**	**; ; 74; ; 8 i**	3SSi 8SVD	4	**P@t x**	**f u U x v**	**xw**	**f P97>BD**
R; M; BD8N /Q	**>6A O**	**870**	a	9	**87; 77vv**	**; 87 i**	3SNN	4	**P@t x**	**f u U x v**	**xw**	**f P97>BC**
R; M; BD8I /Q	**>6A O**	**870**	a	9	**87; 77vv**	**; ; 74; ; D i**	3SSi 8SaD	4	**P@t x**	**f u U x v**	**xw**	**f P97>BE**
R; MQ; BD8P /Q	**>6A O**	**870**	a	9	**87; 77vv**	**; 87 i**	3SNN	4	**P@t x**	**f u U x v**	**xw**	**f P9>B7;**

l l´r z	3=245	YZXGR0Y O	34239
K_XUXQ KX	3823:	YZXGR0Y @0	3=245

DC4>; >877477

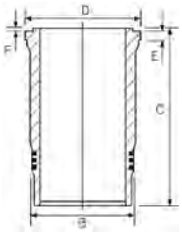
M <8183
N4 5415 3
N 9: 153
P 466183
83É434

MWWWZN df f b

7D4>; >877477

5183 I Q V
6133 TZ V
7183 I X V

8A49B77>7477



N 474133 **O** 56=133 **P** 483193 **Q** =1=9 **R** 4153

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< 07674330 33 .
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Qjnvßop° °pl vß Ynswp ßJtnsß°yr py pty Qjnvß0op° uzty ß° Qjnvß0p wr° °pwr° l zx ' ´pyop wp r °l ´ytÜzyt

R; MQ7BD8N /Q	**; O**	**870**	a	9	**87; 77vv**	**9E> i**	3SDD	4	**P@t x**	**f u U x v**	**xw**	**f P8BAA8**
R; MQ7BD8P /Q	**9 O**	**870**	a	9	**87; 77vv**	**; 8B i**	3SPD	4	**P@t x**	**f u U x v**	**xw**	**f P8>EC7**
R; MQ7BD8Q /Q	**9 O**	**870**	a	9	**87; 77vv**	**9DC i**	3PiD	4	**P@t x**	**f u U x v**	**xw**	**f P8>EBD**
R; MQ7BD8T /Q	**; 0**		a	9	**87; 77vv**	**9E> i**	3SDD	4	**P@t x**	**f u U x v**	**xw**	**f P9>A>8**

JUS CTU	43236 4523<	K_XUZKI N S V	442==
K_XUXQ KX	34234 45246	VUb KXYZGX	34239 4523<
K_XUYZGX	342=6 43235	YZXGR0Y O	35235

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M <8183
N4 5453
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P 4661B3
83É434

MWWWdf fb

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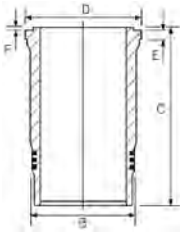
8A49B77>7477



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Qmv9op° °pl v

Ynswlp ßJtnsß°yrpy pty

Qmv9ßop° uztyß°

Qmv9Öpwr° °pwr°

I zx ' ´pyop wpr °l ´ytÚzyt

RBX >8; R	a 9	**EAC7vv**	**8>8 i** 3GI N 4	**P6l x**	**f P87>D;**
RDX >8; R	e 9	**89CB;vv**	**8B94989 i** 3NND8Neee 4	**P6l x**	**f P87A99**
R87X >8; R	GD 9	**8AEA;vv**	**9;A i** 3PND 4	**P6l x f u**	**f P87A9C**

V2/G 342<6 392<9 V2/G0Nl °mpyq s´Üp°r p 3: 2<6 3=2=3

DC4C>7;77477

M < 173
N4 7: 198
N 7<133
N2 8158
O 4133
O 4153
P 46<198
78É435

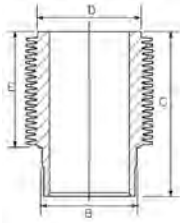
-45877,

TMdf

7D4C>7;77487
7D4C>7;7C487 *mTm*

6133 I Q V
5183 V
7133 I X V

8>4E777A7477
8>4E777;7477



N 46=133 **O** 5831 9 **P** 483133 **Q** 49=183
N 46=133 **O** 5831<3 **P** 487133 **Q** 49=183

DD4C>7;77477
< 0: 73633033 .
470=33383033

DD4C>7;77487
< 0: 73633033 .
470=33363033

Vsz° ' sl ßpo
NzypORl ' ' po

Vsz° ' sl ßp´ß
Nzyr pw ' ' ß

Vsz° ' sl ß
Xzo p w ' tp´´p

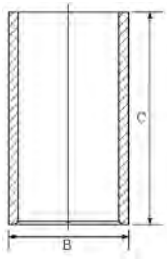
Lz°q ßl oz
Rl ' pl oz mf toz

Lz°q ßl ßz
Vl ´Ül w pyßp ´zol ßt

97; M6B8	a 9	**88A>Dvv**	**8;7 i** 3Gcc 4	**P6l x**	**f PC;CA**
97; T B8	a 9	**88A>Dvv**	**8;9 i** 3GeD 4	**P6l x**	**f PC;>D**
;87 T6B8	a 9	**88A>Dvv**		**P6l x**	**Y b;A89**

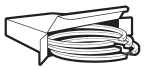
CTJ_YZXCGR/ZX_I Q) H_Y

8>478D779477



N 46914 3 **O** 5<5133

R;NQ7BD8M/Q	**;O**	**8;0**	a 9	**89DD7vv**	**;EC4>89 i**	3/SD8VaD 4	**P6l x**	**f u U x v xw**	**f P8BA7A**
R;NQ7BD8N/Q	**;O**	**8;0**	a 9	**89DD7vv**	**;BD i**	3/DD 4	**P6l x**	**f u U x v xw**	**f P8BAA7**
R;NQ7BD8O/Q	**;O**	**8;0**	a 9	**89DD7vv**	**;9> i**	3SSD 4	**P6l x**	**f u U x v xw**	**f P8BA7C**
R;NQ7BD8P/Q	**;O**	**8;0**	a 9	**89DD9vv**	**;;7 i**	3SVD 4	**P6l x**	**f u U x v xw**	**f P97B97**
R;NQ7BD8Q/Q	**;O**	**8;0**	a 9	**89DD7vv**	**;A; i**	3SeD 4	**P6l x**	**f u U x v xw**	**f P8BA7B**
R;NQ7BD8R/Q	**;O**	**8;0**	a 9	**89DD9vv**	**;BC i**	3/DD 4	**P6l x**	**f u U x v xw**	**f P97B99**



R; NQ7BD8S /Q	; O	8; 0	a	9	89DD7vv	9D7 i	3PeD	4	P@t x	f	u	U x v	xw	f P8BAE8

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K_XUYZGX	342=6	35235	VUb KXYZGX	34239	4523<
K_XUZXGQQKX	34233	44237	YZXGRQY O	35235	
NJ : 0l	34233		ZXGQQKX O	3=237	
NJ <	34238				

DC4899777477

M	=3173
N4	5614 3
N	=7133
P	47517 3
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6133		I X V
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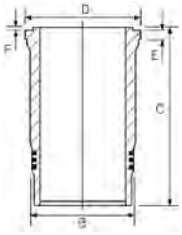
8A49B77A7487



N 48613 3 **O** 58715 3 **P** 49413 3 **Q** =1=9 **R** 4153

DE48997774; 7
< 0455333033 .
480593383043

Qrnvßop° °pl w Ynswp ßJtnsß°yr py pty Qrnvßop° uztyß° Qrnvw Öp wr° °pwr° I zx ' ´pyop wp r °l ´ytÜzyt

R; NQ; BD8M/Q	>6A O	8; 0	a	9	89DD9vv	>89 i	3/aD	4	P@t x	f	u	U x v	xw	f P97B>A
R; NQ; BD8N /Q	>6A O	8; 0	a	9	89DD7vv	; BD i	3/DD	4	P@t x	f	u	U x v	xw	f P987DE
R; NQ; BD8O /Q	>6A O	8; 0	a	9	89DD7vv	; ; 9 i	3SVD	4	P@t x	f	u	U x v	xw	f P987AC
R; NQ; BD8P /Q	>6A O	8; 0	a	9	89DD9vv	; 79 i	3SGG	4	P@t x	f	u	U x v	xw	f P97B; 9
R; NQ; BD8Q /Q	>6A O	8; 0	a	9	89DD9vv	; D9 i	3/ND	4	P@t x	f	u	U x v	xw	f P97B>>
R; NQ; BD8R /Q	>6A O	8; 0	a	9	89DD9vv	; A; i	3SeD	4	P@t x	f	u	U x v	xw	f P97B>8
R; NQ; BD8S /Q	>6A O	8; 0	a	9	89DD9vv	; 9> i	3SSD	4	P@t x	f	u	U x v	xw	f P97B; ;

NJ <	34238		YZXGRQY 00	3=245	
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VX(S G	34243	45248	ZXGQQKX 00	3=245	
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DC4>9D777477

M	=3173
N4	5614 3
N	=7133
P	47517 3
	87É43:

-46834H445,

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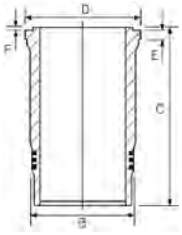
7D4>9D777477

6133		I Q V
6133		I X V
8133		I X V

8A49B77A7487



N 48613 3 **O** 58715 3 **P** 49413 3 **Q** =1=9 **R** 4153

DE4>9D777477
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480593383043

HzÄwnl ' I ntÖ==t 3nx 6 azvßx py op´ Qzwrpyx °wp ==t 3nx 6 azvßx p op w nl®ß o° ' t°ßzy ==t 3nx 6 azvwnl®bl o ' t°ß y ==t 3nx 6 azvßx p nl x p´l ' t°ßzyp ==t 3nx 6
Qrnvßop° °pl w Ynswp ßJtnsß°yr py pty Qrnvßop° uztyß° Qrnvw Öp wr° °pwr° I zx ' ´pyop wp r °l ´ytÜzyt

D98757 9	a	9	8; D77vv	8E8 i	3NaD	4	P@t x	f P87AED
D9875795777	a	9	8; CEDvv	8E8 i	3NaD	4	P@t x	f PBDBD
D9875795797	a	9	8; CEDvv	8E8 i	3NaD	4	P@t x	f PBDB>
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D9875957; 9	a	9	8; CEDvv	8E8 i	3NaD	4	P@t x	f PBE9;
D9875957A;	a	9	8; CEDvv	8E8 i	3NaD	4	P@t x	f PB9BB
D9875957BC	a	9	8; CEDvv	8E8 i	3NaD	4	P@t x	f P87A9;
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D9875959BB	a	9	8; CEDvv	8E8 i	3NaD	4	P@t x	f PAB; A
D9875959BC	a	9	8; CEDvv	8E8 i	3NaD	4	P@t x	f PAECB
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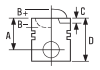

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D9875795>>7	a	9	8; CEDvv	8E8 i	3NaD	4	P@l x		f P87>E8
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P	49: 133
	7<É44:

df

7D497CD774; 7

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6133		V
6133		V
8183		I X V

8>47989; 7477	**N** 476135 **O** 5<5133 **P** 47: 133 **Q** 9133
8>47989; 9477	**N** 47615: **O** 5<5133 **P** 47: 133 **Q** 9133
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8>4798AB;487	**N** 476183 **O** 5<5133 **P** 47: 133 **Q** 9139
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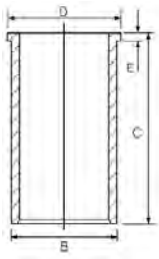

Ttß°´loz Ttß°´lßz

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D9875995; 8C	a	9	8; CEDvv	99> i	3PDV	4	P@l x	f u	f P87A; 8
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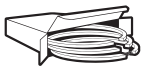
D988599	a	9	8; CEDvv				P@l x	f u	Y b9>79>

OJ_YZXGGR			V2/GONI°mpyq s´Üp°rp	372<	452<6
V2/G	392<7	452<5	Yp´tp° 633	3428<	452 4



DC497CD77487

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N4 66133
N : 5133
P 495133
83É44:

MWWWdf

7D497CD77487

7133 I X V
6133 V
8133 I X V

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8>47989; 9477 N 4761: O 5<5133 P 47: 133 Q 9133
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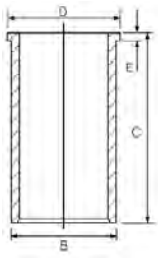

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D9875995987	a 9	8; CEDvv	99> i 3PDV 4	P@t x f u	f P88; DC
D9875995; B	a 9	8; CEDvv	99> i 3PDV 4	P@t x f u	f P88; DD
D9875995; 9C	a 9	8; CEDvv	99> i 3PDV 4	P@t x f u	f P87ADA
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D98759k5A9;	a 9	8; CEDvv	99> i 3PDV 4	P@t x f u	f P88>7D
D98759k5ACA	a 9	8; CEDvv	99> i 3PDV 4	P@t x f u	f P88; ; 7
D9875>95BC9	a 9	8; CEDvv	9CC i 3Pcc 4	P@t x f u U x v xw	f P87AD8
D9875>95A77 /Q 90	a 9	8; CEDvv	; >B i 3ScG 4	P@t x f u U x v xw	f P8D; ; 9
D9875>9W/f OMD/Q 80	a 9	8; CEDvv	9C9 i 3PcD 4	P@t x f u U x v xw	f PC; CC
D9875>9Y /f OMD/Q 90	a 9	8; CEDvv	; >A i 3Sai 4	P@t x f u U x v xw	f P87ACB
D989577	a 9	8; D77vv		P@t x	Y bDD>B
D98A577	a 9	8; D77vv		P@t x	Y b8DD>B
D98A5995A97	a 9	8; CEDvv		P@t x f u	Y bE88B
D98C577	a 9	8; CEDvv		P@t x	Y b9DD>B
D98C5; 9	a 9	8; CEDvv		P@t x f u	Y bE88B48
D9B7578	a 9	89D77vv		P@t x	Y bDD>C

K_XUYZGX	342=6 35235	V2/G	392<7 452=5
K_XUZXGQQKX	342=6 44237	V2/GONI °mpyq{s´Üp°rp	432< 452=5
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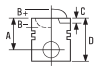
CTJ_YZXCGR/ZX_I Q) H_Y			



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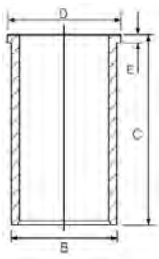

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D9875>957E	a	9	8; CEDvv	9BA i	3PaD	4	P@i x	f u U x v	xw	f PC; AB
D9875>9578	a	9	8; CEDvv	9BA i	3PaD	4	P@i x	f u U x v	xw	f P87AB;
D9875>958A	a	9	8; CEDvv	9BA i	3PaD	4	P@i x	f u U x v	xw	f P87AD9
D9875>95A8	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AA9
D9875>95A9	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AAA
D9875>95A>	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AAB
D9875>95AA	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AD7
D9875>95B8	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AA;
D9875>95B9	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AAC
D9875>95BA	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87ADD
D9875>95C8	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AA>
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D9875>95D8	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AAD
D9875>95D9	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AAE
D9875>95DA	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AE8
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D9875>95E8	a	9	8; CEDvv	9CC i	3Pcc	4	P@i x	f u U x v	xw	f P87AB7
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DC4CD; 777477

M	=5133
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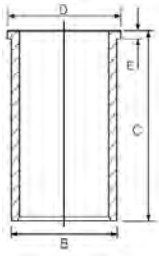
N	: 5133
P	48: 133
	83É44:

MWWWdf f b

7D4CD; 777477

7133		I X V
6133		I X V
8133		I X V

8>47989; 7477	N 47613 5 O 5<513 3 P 47: 133 Q 9133
8>47989; 9477	N 4761: 5 O 5<513 3 P 47: 133 Q 9133
8>4798AB7487	N 47613 3 O 5<513 3 P 47: 133 Q 9139
8>4798AB8487	N 47613 8 O 5<513 3 P 47: 133 Q 9139
8>4798AB9487	N 47615 8 O 5<513 3 P 47: 133 Q 9139
8>4798AB; 487	N 47618 3 O 5<513 3 P 47: 133 Q 9139
8>4798AE7477	N 47613 7 O 5<513 3 P 47=133 Q 9137



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D9875>9W/Q 90	a	9	8; CEDvv	9C9 i	3PcD	4	P@t x	f u	U x v	xw	f P87D7E
D9875>9X5f OMD/Q 80	a	9	8; CEDvv	; 7E i	3SND	4	P@t x	f u	U x v	xw	f PC; BB
D9875>9X5>77 /Q 80	a	9	8; CEDvv	; 7E i	3SND	4	P@t x	f u			f P87A8A

K_XUI GXMJ 0000	362=8 3<234	K_XUZXGQQKX	342=6 44237
K_XUYZGX	342=6 35235	NJ :	342=9
K_XUZKI N S N	342=< 34236	NJ <	34238
K_XUZKI N S V	342=5	VUb KXYZGX	342=—

DC4CD; 777487

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N	<61<3
P	48: 133
	83É448

MWTMWWdf f b

7D4CD; 777477

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8183		I X V

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8>47989; 9477 **N** 4761<5: **O** 5<5133 **P** 47: 133 **Q** 9133
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8>4798AB; 487 **N** 476183 **O** 5<5133 **P** 47: 133 **Q** 9139
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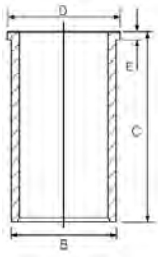

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7D4CD; 777477

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6133		I X V
8183		I X V

DC4CD; 7774; 7

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P	48: 133
	83É448

MWWWZN df f b

7D4CD; 777477

7133		I X V
6133		I X V
8183		I X V

K°´z 5
Tfßtopo Tfßtp´ß Tfß°´ Tfß°´l oz Tfß°´l ßz

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D9875>9X /f OMD/Q 90	a	9	8; CEDvv	; 7E i	3SND	4	P@t x	f u	U x v	xw	f PC; CD

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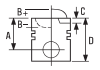

DC4CD; 777487

M =5133
N4 5413 3
N <61<3
P 48: 133
83É448

MWTMWWdf fb

7D4CD; 777477

7133 I X V
6133 I X V
8133 I X V

8>47989; 7477 **N** 476135 **O** 5<5133 **P** 47: 133 **Q** 9133
8>47989; 9477 **N** 47615: **O** 5<5133 **P** 47: 133 **Q** 9133
8>4798AB7487 **N** 476133 **O** 5<5133 **P** 47: 133 **Q** 9139
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8>4798AB;487 **N** 476183 **O** 5<5133 **P** 47: 133 **Q** 9139
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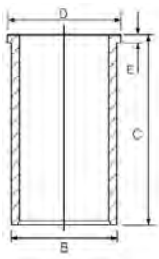

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D9B85857 79	a 9	89DD7vv		P@l x	Y b8>79;
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D9D7578	e 9	8C8C>vv		P@l x	Y bB7;
D9D7585777	e 9	8C8C>vv	9>B i 3PPV 4	P@l x	f PBDBE
D9D7595777	e 9	8C8C>vv	9AE i 3PVN 4	P@l x	f PBDCE
D9D7579579>	e 9	8C8C>vv	9AE i 3PVN 4	P@l x	f PBDC;
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D9D7595B7E	e 9	8C8C>vv	9AE i 3PVN 4	P@l x	f P87AA8
D9D7595B9A48; A	e 9	8C8C>vv	9AE i 3PVN 4	P@l x	f PAB; D
D9D7595BBA	e 9	8C8C>vv		P@l x	Y b>79B
D9D7595BBE	e 9	8C8C>vv	9AE i 3PVN 4	P@l x	f P97>; 8
D9D7595C;	e 9	8C8C>vv		P@l x	Y b>79B48
D9D7595C>	e 9	8C8C>vv	9AE i 3PVN 4	P@l x	f PAB; E
D9D7595CA	e 9	8C8C>vv	9AE i 3PVN 4	P@l x	f PAED7
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D9D7595>89	e 9	8C8C>vv		P@l x	Y b>79B4>
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OTJ_YZXOGR/ZX_IQ) H_Y
Yp´tp° 633 3428< 452 4

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N4 6315 3
N : 5133
P 48: 133
88É455

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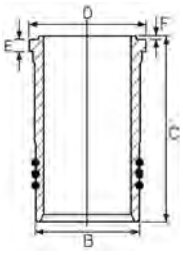
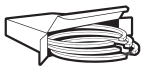


I zyßty° 6 °plwzq6133x x Tt8topo	Kyßs wlo´pt6/33x x Jtnsß°yrpy Tt8tp´ß	I zyßpypß6 uztyß° op 6 x x Tt8°´	I zyßpyp 6 ´pßpyp° op 6133x x Tt8°´loz	I zyßpyp 6 UX ot6/33 x twlx pßt Tt8°´lfz



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D9D75995 77E	e	9	8C977vv	9D7	i	3PeG	4	P	x	f	u		f P87AD;
D9D75995 7; ;	e	9	8C8C>vv	9D7	i	3PeG	4	P	x	f	u		f P87AE>
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D9D75995978	e	9	8C8C>vv	;7E	i	3SND	4	P	x	f	u	U x v xw	f P87ABE
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D9D85995978	e	9	8C8C>vv	;7E	i	3SND	4	P	x	f	u	U x v xw	f PB; CD
D9DA599	e	9	8C8C>vv					P	x	f	u		Y b8>79C

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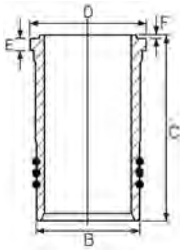

N 48<183 **O** 595133 **P** 4: 7133 **Q** 43139 **R** 31=7
N 48<183 **O** 595133 **P** 4: 7133 **Q** 43139 **R** 31=7

I zyßty° 6 °pl wzq6133x x Ttß topo	Kyßs wßo´pt 6/33x x Jtnsß°yr py Ttß tp´ß	I zyßpyß6 uztyß° op 6 x x Ttß°´	I zyßpyp 6 ´pßpyp° op 6133x x Ttß°´I oz	I zyßpyp 6 UX ot 6/33 x twlx pßt Ttß°´I ßz

ENGINE INDEX

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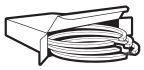
Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

		CCM	x		9
; 5D		PceG	a	ea9 i	C
DX /DA4DC0		SNPV	a	i N9Dc	89
97>bf		Gi i	S	ec9VD	E
99>Pf		NGci	S	eV9DD	>
; 7BPf /Q A0		Ni P	a	eS9DD	;
MVP		NcND	a	eG9DD	8
MVhBP		Ni P	a	eS9DD	;
RY NM		Gi e	S	ea9DD	A
RY NN		Gi e	S	ea9DD	A
XV>BS /P t 4f PO0		NGi e	S	ea9DD	B
c VNM/P t 4f PO0		NGi e	S	ea9DD	B
h 89 /CA4CE0		VPSP	GN	i D9DD	87
h 89 /E74E; 0		VPSP	GN	i D9DD	88
kW/; 5>0		PSSN	a	eN9 i	9
kW/; 5D0		PceG	a	ea9 i	D
kW>59 /4CE0		SNPV	a	i N9Dc	89
kW>59 /D94DC0		SNPV	a	i N9Dc	89



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cL 051t J		3623< 3728			

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DC4>; 9>7C477 *mTm*

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O	3183
P	: 4133
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7D4>; 9>7C477 *mTm*

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5133		V
5133		V

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cQ 473 617		3427< 4523:	cQ 483 YOÖ p	3428< 4529 4

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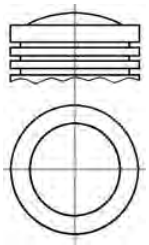

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7D4A9EE7E477 *Tm m*
7D4A9EE88477 *Tm m*

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5133		V
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cL 613 J		3=245	cP 613 YJa9		4323=
cL 0613 J		3623= 3728			

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DC4>; E87C487 *mTm*

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N	7: 195
P	: 3133
	63É96

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MWWWdf fb

7D4>; E877487
7D4>; E87C487 *mTm*

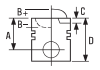
41t 8		MJI V
41t 8		V
5133		I X V

GDC KZ-Ring

ECOTOUGH

Mpy 5 'tºßzy nl y mp´pßzqßßpo ty Mpy 4 pyr typ°	Qzwmpy op´51Mpyp´lßzy v yypy ty Szß´py op´41Mpyp´lßzy yl nsr p´ °ßpß Äp´opy	Rp° 'tºßzy° op 5 x p r y ´lßzy 'p°@pyß ßp x zyß ° °°´ op° x zßp°´° op 4 x p r y ´lßzy	Kw tºß y op w °pr°yol r pyp´l nt y °p 'popx zyß´py w° x zß´p° op ''tx p´l r pyp´l nt y	tw tºßzyp ot°pnzyol r pyp´lÜzyp 'p°°p´p x zyßßz yptx zß´tot''tx l r pyp´lÜzyp
K°´z 9 Lz´Mpy 5 pyr typ°	L´Szß´py op´51Mpyp´lßzy	Vz°´x zßp°´° op 5 x p r y ´lßzy	Vl´l x zß´p° op °pr°yol r pyp´l nt y	Vp´tx zß´tot°pnzyol r pyp´lÜzyp

99>Pf	S 9	98CEvv	88748>C i 3GV/D8NDD 4	P x f u U x v xw	f P9BD99



cL 515 J	3=245 37247	cL 0515 J	37244 37248

DC4>; BC77477
DC4>; BC7D477 *mT m*

7D4>; BC77477
7D4>; BC7D477 *mT m*

M	7<193
N4	48145
N	83173
O	316<
P	: 7194
	63É9<

5183 MJI V
5133 V
5133 I Q

GDC LKZ-Ring

-8<83NG657,

MWWWdf f b

Lz´ 'tºßzyº Ätds I 5716x x nzy ´zo r l '
x pl º°´po l ß' ty npyßp vwyp

L ´ Qzwnpy x tßptypx Vwp°pw°r pyl mºß yo
@zy 57/6 S S / r px pººpy l y op´
Qzwnpymzwpy0S tßßp

Vz°´ 'tºßzyº l @pn °y nl´ßop mtpwp op
57/6 x x x pºº´ l ° np yßp op wl Ép
mtpwp0 tºßzy

Vl´l 'tºßzypº nzy °yl otºß yntl op 'l °z
op mtpw py pwnpyß z opwnºwy op 57/6x x

Vp´ 'tºßzyt nzy 'l ººl r r tz mtpwl ot 57/6
x x x tº°°l ßz °°wol °°p qz´z °' tyzßßz

RY NM	S	9	**8EEDvv**	**EB i**	3GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>; ED**
RY NN	S	9	**8EEDvv**	**EB i**	3GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>; EE**

c0ZdVK 0513 J	3: 236 4523=

DC48>7D77487
DC48>7D7C487 *mT m*

7D48>7D77477
7D48>7D7C477 *mT m*

M	7: t 3
N4	48153
N	76163
P	: 7143
	63É99

5133 I Q V
5133 V
5133 TZ

+<995,

WWdf f b

HzÄ wnl ' l ntßÖ 5417=nx 6
Uyŵ qßßz 'tºßzyº p¿°t@wpyßßz UK 57< <
l yo 57< =
Yßppw

azwx py op´ Qzwnpyx °wp 5417=nx 6
T°´ rp' l °°ßÄz´opy ÚP opy Qzwnpy
rwtnsÄp´ßr x tßUK 57< <° yo 57< =
Yßl sw

azwx p op w nl @ßß o° 'tºßzy 5417=nx 6
Yp°wpx pyßl ol 'ß l °É 'tºßzyº ¿°t@wpyß?
UK 57< <pß57< =
Gntp´

azwnl @bl o 'tºß y 5417=nx 6
l l mtoz °zwlx pyßp l wº 'tºßzypº
p¿°t@wpyßpº l UK 57< <Ö57 < =
Gnp´z

azwx p nl x p´l 'tºßzyp 5417=nx 6
Gol ßßßz °zwl yßz l t 'tºßzyt p¿°t@wpyßl UK
57< <p57< =
Gnntl tz

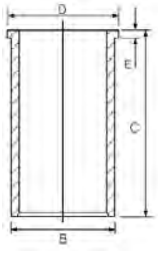
XV>BS /P t 4f POØ	S	9	**98EDvv**	**87C488> i**	3GSa8GVV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>>A>**
c VNM/P t 4f POØ	S	9	**98EDvv**	**87C488> i**	3GSV8GVV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>>77**

c0ZdVK 0515 J	43238 4523=

DC4>9CC77487
DC4>9CC7C487 *mT m*

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

8>4798897477



N <=133 **O** 489133 **P** =31=3 **Q** 8133

M	76175
N4	481<8
N	791=3
P	9=1<5
	63É9:

5133 I Q V
5133 V
5133 TZ

+<97<H438,

WWdf f b

Yßppw

Yßl sw

Gntp´

Gnp´z

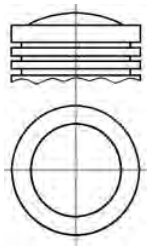
Gnntl tz

; 5D	a	9	**; CD8vv**				**bx**							**Y b9A9>**	

S Q@c 61<	3423= 4529<	cQ 483 61<	3423= 4529<
S Q c 61<	3423= 4529<		

DC4A99B77477
DC4A99B7C477 *Tm m*

M 741k=
N2 4814=
P 43816=
55É: 9



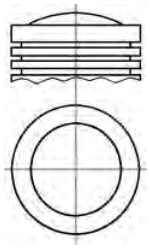
7D4A99B77477
7D4A99B7C477 *Tm m*

41k: I X V
41k= V
61k: V

kW/; 5D0	a 9	**; CD8vv**		**bx**		**Y bDEB**	
S Q = 61k		3428<	45294	cQ 483 61k		3428=	45294
S Q 43 61k		34294	45298				

DC4A9AA7C477 *Tm m*
DC4A9AA7E477 *Tm m*

M 75185
N2 43136
P 4331k9
55É: 9



7D4A9AA7C477 *Tm m*

41k= V
41k= V
61k: V

97>bf	S 9	**8EEEvv**	**8>C48D> i**	**3NDD8NVD** 4	**bx**	**f u U x v xw**		**f P9BEBD**
LOVGl K 513 Zt7		38249		cL 0513		39245	37248	
cK 513		36248		cL 00513		38248		
cL 513 Z		3<246	45248	cP 513 Zt7		38245		

DC4>; 7977477
DC4>; 797C477 *mT m*

M 671k=
N4 7163
O 6173
O 61: 3
P 861k3
56É89

+k9873,
f b

7D4>; 7977477
7D4>; 797C477 *mT m*

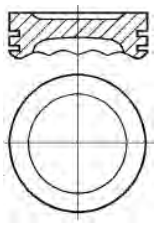
415 3 VaJ
415 3 V
513 3 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

h 89 /CA4CE0	GN 9	**A; >; vv**	**988 i**	**3Nec** 4	**bx**	**f P8C; 8**
cP 45 816		382 8	352=6			

DC4A9; B77477

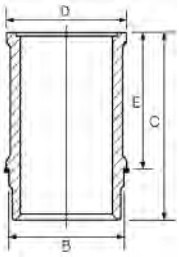
M 6=t 3
N4 : 148
N : : 153
P <31=<
57É: =



7D4A9; B77477

4193 I X V
5133 V
7133

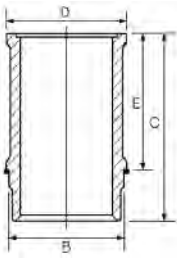
8>4C87787477 **N** =<134 **O** 477186 **P** 43=155 **Q** 77173



DD4A9; B77477
< 0856933033 .
470: 43343033

h 89 /E74E; 0	GN	9	**A; >; vv**	**8EC i**	3Nae	4	**bx**	**f P>AD;**
cP 816			342<9	452<=		cP Yz@p´ptr y a45	3: 2<8	452=5
cPYI 816			342<9	382<<				

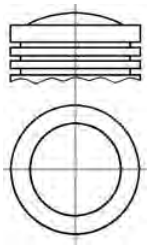
8>4C87787477 **N** =<134 **O** 477186 **P** 43=155 **Q** 77173



DX /DA4DC0	a	9	**>9; Avv**	**89C48; ; i**	3GcP8GeG	4	**bx**	**f PA979**
kW>59 /4CE0	a	9	**>9; Avv**	**89>48; C i**	3Gai 8Gea	4	**bx**	**f P8C; C**
kW>59 /D94DC0	a	9	**>9; Avv**	**8A848ED i**	3NDV8Nai	4	**bx**	**f PA8EE**
K0ZdVK 715			38297	372 8		cP 9 715	4329=	452<

DC4A9>777477
DC4A9>77C477 *Tm m*
DC4A9>77E477 *Tm m*

M 74183
N2 44138
P <817=
55É: 9

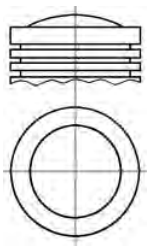


7D4A9>777477
7D4A9>77C477 *Tm m*

41=< I X V
41=< V
71: I X V

DC4A9>777487
DC4A9>77C487 *Tm m*

M 74183
N2 81 7
P : 7177
55É: 9



7D4A9>777477
7D4A9>77C477 *Tm m*

41=< I X V
41=< V
71: I X V

Vt°ßzy° ßz mp´p' wmpo ty Kyr typ Ypß' zyŵ Qzwmpy y°´ ty S zßz´° ßÛpy Ü° p´°pßÛpy Vt°ßzy ´px ' wmp´ ol y° wp° x zßp°´ Vt°ßzyp° op ´p' °p°ßz ' l ´l wp°r z° op x zßz´p° °zwlx pyßp 0Vt°ßzyp ' ° p°°p´p ´tx ' tl ÜÜlßz °zwlx pyßp nzx ' wpßz

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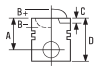
	CCM	x		9
AA9 B7 ; D>	GVi e	S	ci 9VD	8
AA9 B; 88;	GVi e	S	ci 9VD	8
NY Y	Gi ae	S	eG9DD	9
QVV	GVi e	S	ci 9VD	8
QVW	GVi e	S	ci 9VD	8
QZa	NSi i	S	i N9DD	>
aY BA85E9A	NGSP	S	eP9DD	;
d >9APaTO	NSi i	S	i N9DD	>
hY >9ATd /Y A80	NSi i	S	i N9DD	A
hY >9ATe /Y A90	NSi i	S	i N9DD	A

Nüral® FITTED WITH GOETZE® RINGS



AA9 B7 ; D>	S 9	**8AEDvv**	**C74DD i**	3 V8GND 4	**P@t x**	**f u U x v xw**	**f P; >D7C**
AA9 B; 88;	S 9	**8AEDvv**	**DD i**	3GND 4	**P@t x**	**f u U x v xw**	**f P; >D8;**
QVV	S 9	**8AEDvv**	**C74DD i**	3 V8GND 4	**P@t x**	**f u U x v xw**	**f P; >D7D**
QVW	S 9	**8AEDvv**	**DD i**	3GND 4	**P@t x**	**f u U x v xw**	**f P; 9B7E**

I US VGYY 419 I XJ	3624:	XKTKMGJK 419 S °wØPpß	3: 247
XKTKMGJK 419 I XJ	3: 247		

DC4>9E; 77487
DC4>9E; 7B487 *mTm*

M	761=8
N4	461<3
N	741 3
O	4134
O	4136
P	9<1=8
	59É96

÷ =5G0: 98,

MWdf f b

7D4>9E; 77487
7D4>9E; 7B487 *mTm*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyŵ	Qzwnpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy	Vt°ßzy ´px 'wnp´ol y° up° x zßp°´	Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp	ÖVt°ßzyp'° p°°p´p´tx 'tl ÜÜßz °zwx pyßp nzx 'wßz
HzÄwnl 'lntßÖ4=198nx 6	azvŵx py op´ Qzwnpyx °wp 4=198nx 6	azvŵx p op wvnl @86 o° 't°ßzy 4=198nx 6	azvŵnl @bol o 't°ß y 4=198nx 6	azvŵx p nl x p´l 't°ßzyp 4=198nx 6
K°´z 9				

NY Y	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@t x**	**f u U x v xw**	**f P9>77C**

VGZXQUZ 513 J	3423:

DC48; EA77487
DC48; EA7C487 *mTm*

M	781<6
N4	4: 183
N	6<133
O	31 3
P	9<1<3
	59É99

-8: =34J<66,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mTm*

41 8		I Q V
5133		V
6133		I X V

DC48; EA77497
DC48; EA7C497 *mTm*

M	781<6
N4	4: 183
N	6<133
O	31 3
P	9<1<3
	59É99

-8: =34J<67,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mTm*

41 8		I Q V
5133		V
6133		I X V

Zz nÖuyop´4) 5	I y eÖuyop´4) 5	°°´nÖuyo´p4) 5	py pwntuyo´z4) 5	I ntuyo´z4) 5
HzÄwnl 'lntßÖ56163nx 6	azvŵx py op´ Qzwnpyx °wp 56163nx 6	azvŵx p op wvnl @86 o° 't°ßzy 56163nx 6	azvŵnl @bol o 't°ß y 56163nx 6	azvŵx p nl x p´l 't°ßzyp 56163nx 6
G C 781883				
Zz nÖuyop´6) 7	I y eÖuyop´6) 7	°°´nÖuyo´p6) 7	py pwntuyo´z6) 7	I ntuyo´z6) 7

aY BA85E9A	S 9	**98>; vv**	**8774897 i**	3GPa8GaP 4	**P@t x**	**f u U x v xw**	**f P9A9>>**

I US VGYY 515 I XJ	45243

DC4>; ; >77477
DC4>; ; >7A477 *mT*
DC4>; ; >7C477 *mT m*

7D4>; ; >77477
7D4>; ; >7A477 *mT*
7D4>; ; >7C477 *mT m*

M 7<183
N4 46158
N 7=173
P :8183
63É99

-8<67=V535,

MWWWdf

5183 MJI V
4t 8 V
5183 I X V

GDC

453vb

QZa	S	9	**9>EEvv**	**87A i**	3GSP	4	**P@t x**	**f u U x v xw**	**f P99887**
d >9APaTO	S	9	**9>EEvv**	**87A489A i**	3GSP8GcD	4	**P@t x**	**f u U x v xw**	**f P99E>A**

I NKXUQKK 518 I XJ 3=234 3423<

DC4>9E977477

7D4>9E977477

M 8813 3
N4 4<183
N 77183
P <6183
65É9<

MWWWdf fb

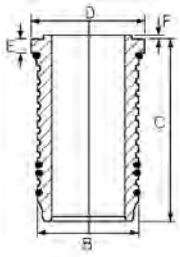
5183 MJI V
4183 V
5183 TZ

GDC

hY >9ATd /Y A80	S	9	**9>EEvv**	**DA4DE i**	3GGV/8GNG	4	**P@t x**	**f u**	**f P99E>E**
hY >9ATe /Y A90	S	9	**9>EEvv**	**DA i**	3GGV	4	**P@t x**	**f u**	**f P99EA7**

8A4BCB>97477
8>4BCB>97477

N 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153
N 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153



Qmvßop° °pl w Ynswp ßJtnsß°yr py pty Qmvßop° uztyß° Qmvß Qp w° °pw° I zx ' ´pyop w r °l ´yt Ùzyt

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	CCM	x		9
; 77f	Vece	a	GDa9/D	9
; 8B> PX 7;	Nai a	P	GDN9DD	8
; 8CEf	Ni Pe	P	GDa9/D	9
; 9; EPX	Ni eP	P	GDa9/D	;
>7; Ef	Pi ND	S	GDa9/D	9
>7>AP	SVNV	S	GDa9/D	9
>7>Af	SVNV	S	GDa9/D	9
>98E PX 78	PVee	S	GDN9DD	8
>98E PX 7;	PVee	S	GDN9DD	8
>9; EM	Pi Ge	S	GDa9/D	9
>9; EPX	Pi Ge	S	GDa9/D	;
>9; Ef	Pi Ge	S	GDa9/D	>
>9CB	SVNS	S	GDa9/D	>
B7AEf	Vece	a	GDa9/D	9
B; 9E PX 7;	VPi V	a	GDN9DD	8
B; AEM	Veca	a	GDa9/D	9
B; AEPX	Veca	a	GDa9/D	;
B>8>	aeDD	a	GDa9/D	>

; 8B> PX 7;	P 9	9BEBvv			P@t x	Y bAABD
>98E PX 78	S 9	; ADDvv	A74A; i	3ae8cN 4	P@t x	f P8E7; A
>98E PX 7;	S 9	; ADDvv	A74A; i	3ae8cN 4	P@t x	f P8E7; ;
B; 9E PX 7;	a 9	A; EAvv	B; 4BD i	3ea8l N 4	P@t x	f P8E7; >

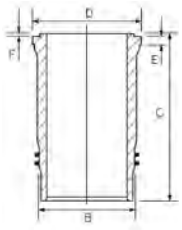
GMXK0_RZ_XGR

7D48D8D77477

M	99163
N4	54153
N	87133
P	4431<3
	68É<7
df	

614: S U V
516< V
8133 I X V

8>4>A9C>7477



N 444133 **O** 4=: 133 **P** 458133 **Q** 9137 **R** 31<4

DD48D8D77487
470785: 73033

Vt°ßzy I ®tWmp ty QtßYpßzyÜ Qzwpy y°´ tx G°°px mÜp´s ßWns Vt°ßzy ot°' zytmp py vtß°p°wx pyß Vt°ß y ot°' zytmp py nzyu'yßz° °zwx pyßp1 O't°ßzyt°zyz ot°' zytmtW°zwr ty vtßx zß´p

; 77f	a 9	ADCDvv	8; 7 i	3Gcc 4	P@t x f u U x v xw	Y b9; 8DA
; 8CEf	P 9	9E; Dvv	AE i	3eD 4	P@t x f u	Y b8; 8D7
>7; Ef	S 9	; E97vv	AE i	3eD 4	P@t x f u	f P; 98E;
>7>AP	S 9	>A9Avv	>E i	3aV 4	P@t x	f P; 99>B
>7>Af	S 9	>A9Avv	AA i	3cV 4	P@t x f u	f P; 99>C
>9; EM	S 9	; E8Dvv	DC i	3GGe 4	P@t x f u U x v xw	Y b8DCCE
B7AEf	a 9	ADCDvv	89; i	3Gac 4	P@t x f u	f P8E7; 9
B; AEM	a 9	ADCBvv	8; 8 i	3Gce 4	P@t x f u U x v xw	Y b9DCD8

GMXK0_RZ_XGR Yp´tp° 8343 342=< 45234
Yp´tp° 8333 342=9 45233

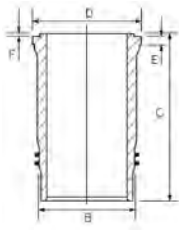
DC48D8877497

7D48D8877477

M	99163
N4	4<t3
N	8<183
P	4451<3
	74É<7
df	

6148 S URV
516< V
6179 I X V

8>4>A7C87477



N 44819= **O** 4=9133 **P** 459133 **Q** 91<9 **R** 31<4

DD48D8877497
< 04<4433053 .
470783: 43033

; 9; EPX	P 9	9ED; vv			P@t x	Y bB>9;
>9; EPX	S 9	; E8Dvv			P@t x	Y bDCCE
B; AEPX	a 9	ADCBvv			P@t x	Y bDCD8

GMXK0_RZ_XGR

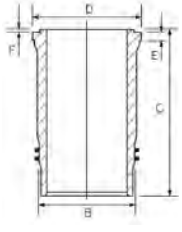
DC48D8877487

7D48D8877477

M	99163
N4	4<t 8
N	8<173
P	4451<3
	68É<7
df	

6148 S URV
516< V
6179 I X V

8>4>A7C87477



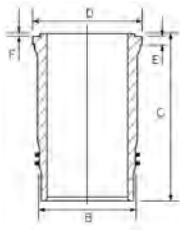
N 44819= **O** 4=9133 **P** 459133 **Q** 91<9 **R** 31<4

DD48D8877487
< 04<4433043 .
470783: 43033

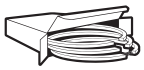
>9; Ef	S 9	; E8Dvv	P x f u	Y bDCD7
>9CB	S 9	>A9>vv	P x	Y bDD>D
B>8>	a 9	BD77vv	P x	Y bDD>E

GMK0_RZ_XGR

8>4>A7C87477



N 44819= O 4=9183 P 459183 Q 91<9 R 31<4



C>75; 7 /Q	90	e	9	87DA7vv	8E8 i	3NaD	4	P@t x	f	u	U	x	v	xw	f P9>>D9
C>75; A /Q	90	e	9	88CB7vv	9E> i	3SDD	4	P@t x	f	u	f P9>>D>
C>75A7 /Q	90	e	9	88CB7vv	9BA i	3PaD	4	P@t x	f	u	U	x	v	xw	f P9>>DA
C>75A8 /Q	90	e	9	88CB7vv	9; A i	3PND	4	P@t x	f	u	f P9>>DB

7659	38244	8655=	382==
8693	382<9	86938	38238
8793	38236	87445	382 <
9783	38235	87448	382-8
9793	43236	88444	382<5
9853	34236	96834	38236
9855	38238	98444	34236
9873	38235	98448	382-3
9893	38238	98449	3823<
7644<	382<	9844:	38239
7743<	34236	98534	38239
78474	382-3	98554	38246
86538	38239	98555	3823<
86545	382-7	98557	38238
86546	382<=	98558	38237
8655<	382==	99395	382-8

DC4>>>C77477

M	: 4133
N4	5413
N	: 3133
O	51<3
O	5183
P	44: 1<3
	78E=8

MWdf f b

6183		I X V
6133		I X V
7133		I X V

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		CCM	x		9
P>ON /Q >0		NSi c	S	i G8DD	88
P>QM/Q ; 0		Gl i G	S	eP9DD	E
P>RM/Q ; 0		GSi P	S	cV9DD	;
P>RN /Q >0		GVeN	S	cc9ND	D
P>RN4X /Q >0		GVeN	S	cc9ND	D
S>QP /Q >0		GVi i	S	ca9VD	A
S>QQ /Q >0		GPi i	S	cV9VD	>
S>RM/Q >0		GPi a	S	cc9DD	B
S>RV		GVi G	S	cc9DD	C
S>XM		GNSe	S	cG8DD	8
S>XO		GPae	S	cN8DD	9
d9		NGeS	S	ea9DD	87

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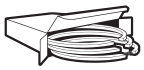


S>XM	S 9	89>Dvv	A84BA i	3ai 8ee 4	bx	f P9BDCD
V0 GTZU 0415		3=214 3624:	XQU 0D4158 RVM		3=214 4524:	
V0 GTZU 0D415		3624:	XQU Qa 4158		3424:	
XQU 0D415		3=214 4524:	XQU Qa 4158 RVM		3: 253	
XQU 0D4158		3924 4524:	YZUT0 415		3: 24:	

DC4>>DA77477
DC4>>DA7C477 *mT m*

7D4>>DA77477
7D4>>DA7C477 *mT m*

M 571 3
N4 6133
N 8<183
O 51<5
O 519:
P 761=3
4<É7<

4133 I X
4153 V
5133 VaJ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

S>XO	S 9	8; BDvv	C84CA i	3 c8GDN 4	bx	f P; 9A79
I KKJ 417		3624<	VXU I KKòJ 417		3: 246	3: 24<
I KKòJ 417		3724 8 3: 24<	XQU Qa 417		3424:	
I KKJ 417 RVM		4524<	YZUT0 417		3: 24:	
VKMGY 0417		4524<	YZUT0 417 RVM		4424<	

DC4>9; E77477
DC4>9; E7C477 *mT m*

7D4>9; E77477
7D4>9; E7C477 *mT m*

M 571 3
N4 6193
O 5183
P 751 3
4<É7<

f b

4133 I X
4153 V
5133 VaJ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

P>RM/Q ;0	S 9	8>E; vv	A>4DA i	3:P8GGa 4	P@t x f u U x v xw	f P8D>A>
I KXGZU 0418 I XJt		3: 238 4523=	YKRZUY 418 I XJtaMZ		3<24=	
VXQJK 418 I XJtRc		3623 8 45244	YUTKZ 418 I XJt		3=253	
XQU 0D418 I XJt		3623 8 45244				

DC4D>E777477
DC4D>E77C477 *mT m*

7D4D>E777477
7D4D>E77C477 *mT m*

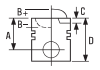
M 741=8
N4 45153
N 76173
O 3183
P 981 3
5<É95

MWWWdf

41 8 TZ
41 8 I X V
6133 TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

S>QQ/Q >0	S 9	8; EEvv	AA4C8 i	3:V8i c 4	bx	f P8EEAE
VXQJK 417 Rc		3623 8 45244	XQU 0D417 49a		3623 8 45244	
XQU 0D417		3424 3 45244	XQU 0DNKa		3623 8 45243	



DC4D>E977477
DC4D>E97C477 *mT m*

M 5<1 8
N2 5153
O 51=8
P 7: 1=3
4<É7<

4153 I X
4153 V
5133

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

S>QP /Q >0 S 9 **8AEEvv** **CC4DE i** 3GDV8GNG 4 **bx** **f P8D>A9**

I KXGZU 0419	37237	4523=	XQU 00419	36238	45244
VXQIK 419 Rc	36238	45244	XQU 00419 49a	36238	45244

DC4>9>977477
DC4>9>97C477 *mT m*

M 5<147
N4 3173
N 93173
O 6133
P 83147
4<É7<

f b

4153 I X LK
4153 V
5133 TZ V

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

S>RM/Q >0 S 9 **8; EBvv** **B>4D7 i** 3ec8GDi 4 **bx** **f P8E99B**

I KKQJ 417	45239	3: 24<	aKTMG	37248	
I KKQJ 417 RVM	3423=	3: 24<	aKTMG 417	35243	
VXU I KKQJ 417	3523<	3: 24<	aKTMG 417 RVM	35243	
XQU 00417	39244				

DC4>9>D77477
DC4>9>D7C477 *mT m*

M 591=3
N2 4173
O 7183
P 78163
4<É85

f b

4153 I X LK
4153 V
5133 I X V

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

S>RV S 9 **8AE8vv** **88D48A9 i** 3GaD8NDc 4 **bx** **f u U x v xw** **f P9E; AE**

I KKQJ 419 MZ	39246	3: 24<	VXUI KKJ 419 ZOMJO	4324<	
I KKJ 419 ZOMJOMZ	4324<		VXUI KKJ 419 ZOMJOMZ	4324<	
I KKJ ZOMJOMZ	4324<		YKRZUY 419 ZOMJt	3=24=	
I KXGZU 00419 Z°´mz	3=246		YN_S G 419 ZMJt	35247	
I KXGZU Qa 419 ZOMJO	4424<		YU_R 00419 ZMJO	44249	
I KXGZU QU_V 00419	3=246		YU_R 00419 ZOMJO	3424=	
I KXGZU QU_V 00419 ZOMJO	45246		YVUXZGMK Qa 419 ZMJO	3=248	

UVZ[S G 419	3=248	YVUXZGMK@a 419 ZOMJ O	3=248
UVZ[S G 419 ZOMJ O	3424<	cI KKJ 419 ZOMJ O	3924=
VXU I KK\J 419 MZ	3924 6 3: 24<		

DC4>9BE77477
DC4>9BE7C477 *mT m*

M	5<133	
N4	6133	
O	5133	
O	51<3	
P	78133	
	53É85	

f b

7D4>9BE77477
7D4>9BE7C477 *mT m*

4153		VaJ
4183		V
5133		TZ

DC4>9BE77487
DC4>9BE7C487 *mT m*

M	5<133	
N4	6133	
O	5133	
O	51<3	
P	78133	
	53É85	

df f b

7D4>9BE77477
7D4>9BE7C477 *mT m*

4153		VaJ
4183		V
5133		TZ

UK 563745HI H3
Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz
UK 563745HGG3

P>RN /Q >0	S 9	**8AD9vv**	**BB4877 i**	3 D8GPa 4	**P@t x f u U x v xw**	**f P8E99D**
P>RN4X /Q >0	S 9	**8AD9vv**	**BB i**	3 D 4	**P@t x f u U x v xw**	**f P8E99E**

I GXKTY @0419 I XJt 443	43243	VXU I KK\J 419 I XJt 443	36246 3: 24<
I GXKTY @0419 I XJt 45<	43243	VXU I KK\J 419 I XJt 448	3523< 3=245
I KK\J 419 I XJt	3: 245 3: 24<	VXU I KK\J 419 I XJt 45<	43243 3: 248
I KK\J 419 I XJt=3	45239 45245	VXU I KK\J 419 I XJt 469	3: 248 3: 24<
I KK\J 419 I XJt 443	38245 3: 24<	YU_R 0419 I XJt 448	3523= 45247
I KK\J 419 I XJt 448	45239 45245	YU_R 0419 I XJt 45<	3523= 45247
I KK\J 419 I XJt 45<	43243 3: 24<	YU_R @0419 I XJt 45<	35247
I KK\J 419 I XJt 469	3: 248 3: 24<	YU_R @0419 I XJt 469	37248
I KXGZU 0419 I XJt	39238 4523=	YZUT@ 419 I XJt	3: 24:
I KXGZU @0419 I XJ O	3=245	aKTMG 419 I XJt 448	35243
VXU I KK\J 419 I XJt	43245 3: 24<	aKTMG 419 I XJt 45<	35243
VXU I KK\J 419 I XJt=3	3523< 3=245		

DC4>; >977477
DC4>; >97C477 *mT m*

M	741=8	
N4	451t 3	
N4	51<3	
N	4<153	
O	3183	
P	981t 3	
	5<É95	

MWWWdf

7D4>; >977477
7D4>; >97C477 *mT m*

4t 8		VaJ TZ
4t 8		I X V
6133		TZ

Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz

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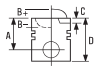


P>QM/Q ;0	S 9	8EE8vv	D;4887 i	3GGP8GVD	4	P@t x f u U x v xw	f P8D8;8
I GXKTY 0513 I XJt		3:235		I KKòJ 513 I XJt 473		3:23:	45245
I GXKTY 0513 I XJt 448		3823:		I KXGZU 0513 I XJt		37237	38239
I GXKTY 0513 I XJt 468		3<23=		S GMKTZ0Y 0513 I XJt		44238	45243
I GXKTY 0513 I XJt 473		3=239		VXU I KKòJ 513 I XJt 473		3523<	3=245
I KKòJ 513 I XJt		3923:	45245	YVUXZGMK 0513 I XJt		3=237	

DC4>;8E77477
DC4>;8E7C477 *mTm*
4523:

M 79163
N4 461=3
N 791=8
P :5163
5<É99

MWZN df

7D4>;8E77477
7D4>;8E7C477 *mTm*

41=3 I QV
5133 I XV
6133 TZ

DC4>;7>77487
DC4>;7>7C487 *mTm*
3423<

M 79163
N4 491=8
N 751t3
P :5163
5<É99

MWWWZN df fb

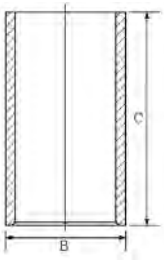
7D4>;7>77477
7D4>;7>7C477 *mTm*

5133 I Q
5133 I XV
6133 TZ

Utwtyr ´I otl wÄtoßs 6t 8x x	Jtnvp wtyr>6t 8x x	Rl´rp°´´I otl wpo°°prx pyßoos°typ 6t 8x x	Gynsz°prx pyßz op I nptßp 6/:8x x	Y'p°°z´p´I otl wp°prx pyßz´I°nstl zwtz > 6t 8 x x
Yßppw	Yßl sw	Gntp´	Gnp´z	Gnntl tz
UK 567435:=63	UK 567435:=63	UK 567435:=63	UK 567435:=63	UK 567435:=63

d9	S 9	98D>vv	>D i 3aV	4	P@t x	f P888;9
HKYZG 515 J		3:2=5	45236			

8>4787D>7477



N =3133 **O** 4:=1=9

P>ON/Q >0	S 9	9>EOvv	EA48;8 i	3GNi 8Gce	4	P@t x f u U x v xw	f P8EEAA
HUTMU 518 I XJO		34245		Q5833 518 I XJt		34243	
HUTMU 518 I XJt		34245		YUXKTZU 0518 I XJt		3<235	45244

DC4>; 8C77477
DC4>; 8C7C477 *mm*

M	87158	
N4	48133	
N	85133	
O	3163	
P	<61 8	
	66É: 8	

MWWWdf

7D4>; 8C77477
7D4>; 8C7C477 *mm*

5183		I Q V
5133		I X V
6133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

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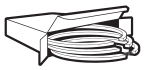
		CCM	x		9
9889B		GVi c	S	eN9DD	**;**
NM; 987A		GN S	S	ci 9DD	**9**
NM; 987B		GVcD	S	ci 9DD	**9**
O 97 kQ		G i e	S	ea9DD	**B**
Td8BPQ		GVi e	S	ce9DD	**8**
kgPEM		G DV	S	eP9DD	**>**
kgPEeP		G DV	S	eP9DD	**A**

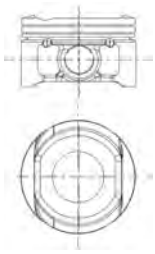


Td8BPQ	S 9	**8AEDvv**	**D8 i**	33GD 4	**bx**	**f P; AA; B**
cXGd 419		35249				

DC4>; CC77477
DC4>; CC7C477 *mTm*

M	5<183
N4	71: 3
N	98133
N2	5153
O	41<3
P	7=153
	4=É88

df



7D4>; CC77477
7D4>; CC7C477 *mTm*

4153		I X V
4153		V
5133		I X

Vt°ßzy ' ty ' ´p°° dßty nzy´zo	QzwmpymzwÜpy ty Vwp°pwptyr p' ´p ß	GÉp°p´´ °°´ mtpwp	H°wy opwl t°ß y x zyßl oz l ' ´p°t y py w mtpw	Y' tyzßz ty°p´ßz l °' tyß ypww mtpw
Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

NM; 987A	S 9	**89E>vv**	**>D4BD i**	3aV8i N 4	**bx**	**f PA8D;**
NM; 987B	S 9	**8AC7vv**	**A>4AD i**	3cP8ci 4	**bx**	**f PA8E7**

453304833 416 4633	432 7	432 =	TUaG 419	432<9	37245
453304833 4633	342<4	452<5	TUaG 4633	3=2<6	452=:
453304933 416 5439	372 9	45238	TUaG 46332R	382<4	37245
453304933 4633	3<2 7	3<2<7	TUaG 4933	342<<	43234
453304933 4933	3=2 5	342=3	ZUYI GTG 419	432<8	38245
453304933 4933 T2R	362 =	45238	ZUYI GTG 4633	452<8	38245

DC49BED7B477 *mTm*

M	6<133
N4	5133
N	89133
P	: : 133
	55É97

7D49BED77477
7D49BED7B477 *mTm*

4183		I X V
5133		V
61=7		V

9889B	S 9	**8AEOvv**	**B74DC i**	3eN8GGe 4	**bx**	**f P; E>; E**
MKGTZG 419		43214		VX0JXG 419	3723:	3: 24<
QGROTG 419		43237	45246	VX0JXG 419 RVM	4523<	3=249
QGROTG 00419		39246	3=24<			

DC4>9A977477

M	58173
O	41: 3
O	417=
P	78173
	4<É85

f b

7D4>9A977477

4153		TZ
4183		V
5133		V

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

kgPEM	S 9	**8E7Avv**	**>C4A9 i**	3aS8cG 4	**P@t x**	**f P8; ; A7**
T@aG 41=J		342=6				

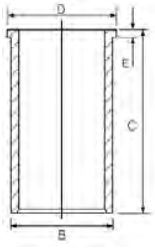
DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

M 791<3
N4 5153
P <7163
58É: 5

7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

5133 I X V
5133 V
6133 I X V

8>4797A; 7477



N <8193 **O** 486183 **P** <<183 **Q** 61=3

kgPEeP S 9 **8E7Avv** **>D4AA i** 3aV8cV 4 **P x f u U x v xw** **f P8C; >A**

T aG 4=33 J tp°pw 342=6 45239

DC487AA77477
DC487AA7C477 *mT m*

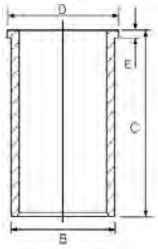
M 791: 8
N4 6183
P : 8133
5<É9<

MWTMdf fb

7D487AA77477
7D487AA7C477 *mT m*

6133 I Q
5133 TZ
6133 I X V

8>4797A; 7477



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O 97 kQ S 9 **8EEDvv** **887 i** 3GVD 4 **bx** **f P99DBD**

443 513 t 3<2=9 3: 233

DC4; 7BD77487
DC4; 7BD7C487 *mT m*

M 63176
N4 31<8
N : 3133
O 5153
P 88176
54É95

7D4; 7BD77477
7D4; 7BD7C477 *mT m*
7D4; 7BD88477 *Tmm*

4183 I X V
4183 V
6133 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

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>Tb		NGci	S	eV9DD	9C
>Td		NGci	S	eV9DD	9C
>Te /Q >0		NGci	S	eV9DD	9C
>Tf /Q >0		NGci	S	eV9DD	9C
8>E O9577		GVeV	S	eS9DD	9A
8AB M9577 /RØx0		iii	S	cD9DD	C
8AB M9B77 /RØx0		iii	S	cD9DD	C
8AB M99>B /RØx0		iii	S	cD9DD	D
8AB O577		GGDe	S	cD9DD	D
8AB O57>B		GGDe	S	cD9DD	D
8B7 P8577		Gi Ni	S	eN9aD	99
8CA M>577		Gi iV	S	eS9DD	9B
8CB N9577 /Q 9 RØx0		GGDe	S	cD9DD	E
8CB NE577 /RØx0		GNSN	S	cD9eD	87
8D9 M9577		GcSc	S	eN9DD	8D
8D9 NB577		GVi a	S	eD9VD	8C
8D; MB577		GcSc	S	eN9DD	8D
8DD M>577 /Q ; RØx0		GNSN	S	cD9eD	88
8DD MA577 /Q ; RØx0		GNSN	S	cD9eD	89
8DD ME577		GNSe	S	ai 9aD	>
8DD N9577		Gi GD	S	eN9DD	8E
8E9 N9577		GPae	S	cN9DD	8>
8ED MA577		Gi Va	S	eP9DD	9>
8EE M9577		GNSe	S	ai 9aD	>
8EE M; 577		GNSe	S	ai 9aD	A
8EE N8577 /Q A0		GNSe	S	ai 9aD	B
; A7 MB577		GPae	S	cN9DD	8A
D9D N>577		Gi iV	S	eS9DD	9A
D; 8 N>577		Gi iV	S	eS9DD	9A
D; 8 NA577		Gi iV	S	eS9DD	9A
D; 8 NC577		GVeV	S	eS9DD	9A
D; 8 OA577		Gi iV	S	eS9DD	9A
D; 8 OA57>B		Gi iV	S	eS9DD	9A
D; 8 P577		Gi Ni	S	eN9aD	9;
D; 8 P8577		Gi Ni	S	eN9aD	9;
D; 8 PA577		Gi iV	S	eS9DD	9A
D; 8 QA577		Gi iV	S	eS9DD	9B
D; 8 QA57>B		Gi iV	S	eS9DD	9B
D; > N577		Gi iV	S	eS9DD	9A
D; > N57>D		Gi iV	S	eS9DD	9A
D; > N58>B		Gi iV	S	eS9DD	9A
D; > N8577		Gi iV	S	eS9DD	9A
D; > N99>B		Gi iV	S	eS9DD	9A
D; > O577		Gi iV	S	eS9DD	9A
D; > O58>B		Gi iV	S	eS9DD	9A
D; > O8577		Gi iV	S	eS9DD	9B
D; > R8577		Gi iV	S	eS9DD	9A
D; > R9577		Gi iV	S	eS9DD	9B
D; A M9577		GcVa	S	eS9DD	9A
D; A M957>B		GcVa	S	eS9DD	9A
D; A M>577		Gi Ni	S	eN9aD	99
D; A M>57>B		Gi Ni	S	eN9aD	99
D; A MA57>B		Gi iV	S	eS9DD	9A
D; A MC577		Gi iV	S	eS9DD	9A
D; A MC57>B		Gi iV	S	eS9DD	9A
D; A O9577		GcVa	S	eS9DD	9A
D; A O>577		GcVa	S	eS9DD	9A
D; B M9577		Gi iV	S	eS9DD	9B
D; B M; 577		Gi iV	S	eS9DD	9A
D; B MA577		GcVa	S	eS9DD	9A

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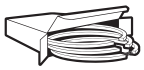
		CCM	x		9
D; BM85777		GcVa	S	eS9DD	9A
D; BO>5777		GcVa	S	eS9DD	9A
D; DM; 5777		NPec	V	eN9DD	98
D; DM>5777		GiiV	S	eS9DD	9B
D; DMC5777		NPec	V	eN9DD	98
D; DMD5777 /Q 90		NPec	V	eN9DD	98
D; EM>5777		GcSc	S	eN9DD	8D
D; EMA5777		NPec	V	eN9DD	98
D; EMB5777 /Q ;0		NPec	V	eN9DD	8E
D>7M;5777 /RØx0		GNSN	S	cD9eD	8;
D>8O5777 /Q ;0		NPec	V	eN9DD	8E
D>8S5777		NPec	V	eN9DD	97
D>8Y5777		NPec	V	eN9DD	97
D>8Z5777		NPec	V	eN9DD	97
D>;M85777		GPae	S	cN9DD	8>
D>>M95777		GiVa	S	eP9DD	9>
E;CM95777 /Q ;0		GiGD	S	eN9DD	8E
E;CMA5777		GiGD	S	eN9DD	97
E>>M;5777		GVie	S	ci9VD	8B
EAAM>5777		GVie	S	ci9VD	8B
D8>>5ECe		NVDD	S	iP9DD	;9
D8>>5E8/e yØ0		NSSV	S	iP9DD	;;
D8>>5EC/e yØ0		NVDD	S	iP9DD	;9
D8>>5ECI /e yØ0		NVDD	S	iP9DD	;9
D8>>5EC89977		NVDD	S	iP9DD	;9
D8>>5EC89>77		NVDD	S	iP9DD	;;
M889M5777		iDP	S	aV9DD	8
M889M95777		GDVD	S	ac9ND	;
M889MA5777		iDP	S	aV9DD	9
M889N95777		iDP	S	aV9DD	8
Md;9;79		GiGD	S	eN9DD	98
Md;9A78		NPec	V	eN9DD	98
Md;C878		GiGD	S	eN9DD	98
Pi 87MfQP>/dTi 0/Q ;0		Giic	S	eV9DD	9D
Pi 89MfQP>/>Ti 0		NGci	S	eV9DD	9E
dTW/Pi 87gfQP>0/Q >0		Giic	S	eV9DD	;7
dTY /Pi 87MfQP>0		Giic	S	eV9DD	9D
dTd /Pi 87NfQP>0/Q >0		Giic	S	eV9DD	;7
dTm/Pi 87MfQP0		Giic	S	eV9DD	;8

Nüral® FITTED WITH GOETZE® RINGS



M889 M5777 S 9 **E7; vv** **984; 9 i** 3Ni 8SS 4 **bx** **f P8DAB**

M889 N95777 S 9 **E7; vv** **9E4; 9 i** 3SD8SS 4 **bx** **f P>B99**

G 445 31=P°ytz´ 362<4 392<9

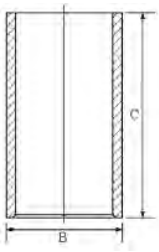
DC497ED77477
DC497ED7B477 *mT m*
DC497ED7D477 *mT m*

M 631t 8
P 9415 8
53É87

7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

41t 8 I X V
5133 V
61=7 V

8>4788778477



N 9<137 **O** 448133

DC497ED77487
DC497ED7B487 *mT m*
DC497ED7D487 *mT m*

M 6415 8
P 941t 8
53É87

7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

41t 8 I X V
5133 V
61=7 V

b tßsz°ßnt´nwł° Usyp Ytnsp´°yr°nwł° Yl y° nt´nwł° Yty l ytwæ° op´pßpynt y Vt°ßzyp nzy °'tyzßßz x zyß ßz l nl wvz

M889 MA5777 S 9 **E7; vv** **9E4; 8 i** 3SD8SN 4 **bx** **f P8D7;**

G 445 31=P°ytz´ 362<4 392<9

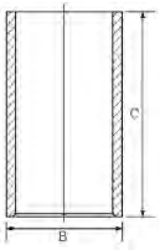
DC497ED77477
DC497ED7B477 *mT m*
DC497ED7D477 *mT m*

M 631t 8
P 9415 8
53É87

7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

41t 8 I X V
5133 V
61=7 V

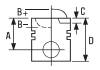
8>4788778477



N 9<137 **O** 448133

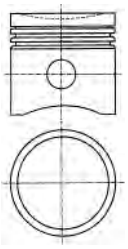
M889 M95777 S 9 **87A7vv** **A8 i** 3ai 4 **bx** **f P>B98**

G 445 413 Gml´ßs 362 < 352<7



DC4CD9B7B477 *mTm*
DC4CD9B7D477 *mTm*

M 631:8
N4 4183
P 871:8
4<É89



7D4CD9B77477
7D4CD9B7B477 *mTm*
7D4CD9B7D477 *mTm*

4183 I X V
41:8 V
61=7 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8DDME5777 S 9 **89>Dvv** **A8 i** 3cD 4 **P@t x** **f P8D;8>**

8EEM95777 S 9 **89>Dvv** **AA i** 3cV 4 **P@t x f u U x v xw** **f P979C9**

S_YG 416 J S°vßupß 43237 3=245 dVYGRUT 416 PZJ 43236 45244
dVYGRUT 416 J S°vßupß 3=239 45244

DC48;CB77477
DC48;CB7B477 *mTm*

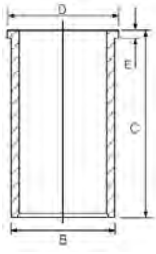
M 73176
N4 45173
N 6:133
O 4133
O 4153
P 96176
56É8:

MWdf fb

7D48;CB77477
7D48;CB7B477 *mTm*

5133 I Q V
4183 V
5133 V

8>47997B7477 **N**:5183 **O**475133 **P**:7133 **Q**8133



8EEM;5777 S 9 **89>Dvv** **BB4CC i** 3D8GDV 4 **P@t x f u U x v xw** **f P979C;**

S_YG 416 J S°vßupß 3=239 3=245 dVYGRUT 416 J S°vßupß 3=239 45244

DC4>9AB77477
DC4>9AB7B477 *mTm*
DC4>9AB7D477 *mTm*

M 73176
N4 45174
N 6<133
O 31=4
O 31=4
P 95176
56É88

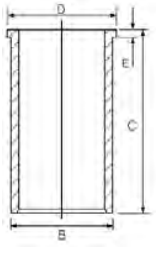
-89=66,

MWWdf fb

7D4>9AB77477
7D4>9AB7B477 *mTm*
7D4>9AB7D477 *mTm*

5133 I Q V
4183 T Z
5133 I X V

8>47997B7477 **N**:5183 **O**475133 **P**:7133 **Q**8133



8EEN85777/Q A0 S 9 **89>Dvv** **AC4C7 i** 3cc8 V 4 **P@t x f u U x v xw** **f P9>BC9**

S_YG 416 J S°vßupß 3623= 3=245 dVYGRUT 416 J S°vßupß 38244

DC4>; AC77477
DC4>; AC7B477 *mm*

M 7316
N4 451 3
N 6: 133
O 4148
O 31=3
P 9516
56E8:

MWWWdf

7D4>; AC77477
7D4>; AC7B477 *mm*

4133 MJI V
4133 V
5133 I X V

GDC LKZ-Ring

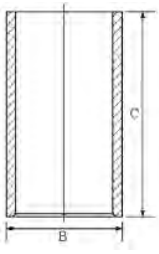
b t6s Yfz' 2/ß´8Zpnsyzwrr Ö	L´LI s´Üp°r p x t8Yß´8Yfz' L°yvßzy	Vz°´®stn°ψº ¿°t' o° °ß´ß) °fz'	Vl´l @ps n°wº nzy q'ynt y °ß´ßD°fz'	Vp´ @ptnzwnzy w q'yÜzyp Yß´ßDYfz'
8AB M9577 /RØx0	S 9 **EEEvv**	**; ; 4; C i** 3SV8VD 4	**bx**	**f P>AE9**
8AB M9577 /RØx0	S 9 **EEEvv**	**; 9 i** 3SS 4	**bx**	**f P>AE;**
d43 413 Lt´p		362=8 352=5		

DC48A>977477
DC48A>97B477 *mm*
DC48A>97D477 *mm*

M 661=3
N4 3183
N 8813 3
P 8: 173
4<E86

7D48A>977477
7D48A>97B477 *mm*
7D48A>97D477 *mm*

4133 I X V
4133 V
6133 I X



8>4787EE8477 **N** : 6135 **O** 449133

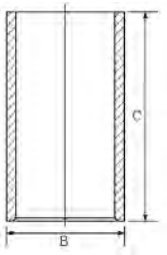
Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
8AB M959>B /RØx0	S 9 **EEEvv**	**; ; i** 3SV 4	**bx**	**f PA>9;**
8AB O5777	S 9 **887Dvv**	**>9 i** 3/c 4	**bx**	**f P8DA>**
8AB O57>B	S 9 **887Dvv**	**; C4>7 i** 3/D8VS 4	**bx**	**f P>AEC**
d43 413 Lt´p		432< 352=5	d43 414 ttp Lt´p	3<2<= 392=5
d43 414 ttp1Lt´p		3: 2<= 452=8		

DC48A>977487
DC48A>97B487 *mm*

M 661=3
N4 4183
P 8: 173
4<E86

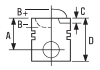
7D48A>977477
7D48A>97B477 *mm*
7D48A>97D477 *mm*

4133 I X V
4133 V
6133 I X



8>4787EE8477 **N** : 6135 **O** 449133

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
8CB N9577 /Q 9 RØx0	S 9 **887Dvv**	**>7 i** 3/S 4	**bx**	**f P88D>C**
d 414		442=8 3=236	d43 414 Lt´p	342=8 452=8



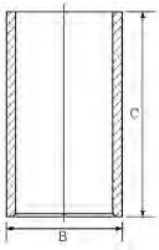
DC48>9; 77477
DC48>9; 7B477 *mT m*
DC48>9; 7D477 *mT m*

M 6313 3
N4 41<3
N 9313 3
P 8313 3
4<É86

4153 I X V
4153 V
5183 V

7D48>9; 77477
7D48>9; 7B477 *mT m*
7D48>9; 7D477 *mT m*

8>4787EE8477 **N** : 6135 **O** 449133



8CB NE5777 /RØx0 S 9 **89>9vv** **B; i** 3ea 4 **bx** **f P88D>E**

d 415 49a 372=: 3=236

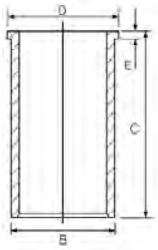
DC48; D>77477
DC48; D>7B477 *mT m*

M 5<138
N4 81 3
O 4183
P 7<133
4<É86

4144= TZ V
4153 V
5183 V

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

8>47987D7477 **N** : 61<3 **O** 45<133 **P** : 8133 **Q** 8133



8DD M>5777 /Q ; RØx0 S 9 **89>9vv** **>> i** 3aD 4 **bx** **f P8AA78**

d 415 362=9 3=236 dVYORUT 415 43236 45244

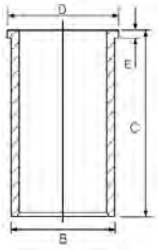
DC48; D>7745>7
DC48; D>7B4>7 *mT m*

M 5<133
N4 41<3
O 4143
P 7<133
4<É86

4144= TZ V
4153 V
5183 V

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

8>47987D7477 **N** : 61<3 **O** 45<133 **P** : 8133 **Q** 8133



8DD MA5777 /Q ; RØx0 S 9 **89>9vv** **AE i** 3eD 4 **bx** **f P8AA77**

d 415 49a 43233 3=236 dVYORUT 415 43236 45244

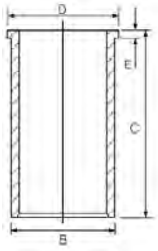
DC48; D>774; 7
DC48; D>7B4; 7 *mT m*

M 5<133
N4 8143
P 7<133
4<É7=

4144= TZ V
4153 V
5183 V

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

8>47987D7477 **N** : 61<3 **O** 45<133 **P** : 8133 **Q** 8133



D>7 M; 5777 /RØx0 S 9 **89>9vv** **>> i** 3aD 4 **bx** **f P8D; E**

d 415 362–9 3=236

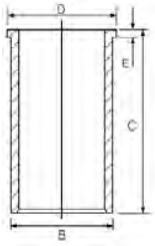
DC48; D>77487
DC48; D>7B487 *mT m*
DC48; D>7D487 *mT m*

M 5<133
N4 5183
P 7: 183
4<É86

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

414= TZ V
4153 V
5183 V

8>47987D7477 **N** : 61<3 **O** 45<133 **P** : 8133 **Q** 8133



8E9 N9577 S 9 **8; BDvv** **BB i** 3 D 4 **bx** **f P97EA9**

D>; M85777 S 9 **8; BDvv** **C7 i** 3 V 4 **bx** **f P8CECE**

S _YG 417 43237 3=245 dVYGRUT 417 49a 43236 45244

DC4>; ; 977477
DC4>; ; 97B477 *mT m*

M 59133
N4 : 1<3
N 8: 193
O 4173
O 5153
P 79133
4<É7=

7D4>; ; 977477
7D4>; ; 97B477 *mT m*

4133 TZ
4153 V
5133 V

99133vb
Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

; A7 M85777 S 9 **8; BDvv** **AA4AC i** 3:V8ce 4 **bx** **f P979C>**

S _YG 417 3=238 3=245 dVYGRUT 417 35239 45244
S _YG 417 RVM 44243 3=245 dVYGRUT 417 RVM 44243 45244

DC4>; BD77477
DC4>; BD7B477 *mT m*

M 59133
N4 71: 8
O 5138
P 7=133
4<É7=

7D4>; BD77477
7D4>; BD7B477 *mT m*

4133 TZ
4153 V
5133 I X V

LKZ-Ring

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

E>> M; 5777 S 9 **8AEDvv** **CC i** 33DV 4 **P@t x f u U x v xw** **f P9A>99**

EAA M>5777 S 9 **8AEDvv** **DA i** 33Ga 4 **P@t x f u U x v xw** **f P9>BA8**

J KRZG 0D419 J S °vßupß 3<23< 3<247

DC4>9E; 77487
DC4>9E; 7B487 *mT m*

M	761=8
N4	461<3
N	741 3
O	4134
O	4136
P	9<1=8
	59É96

+ =5G0: 98,

MWdf f b

7D4>9E; 77487
7D4>9E; 7B487 *mT m*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyŵ HzÄwnl ' I ntßÖ4=198nx 6 K°´z 9	Qzwmpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy azŵx py op´ Qzwmpyx °wmp 4=198nx 6	Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´ azŵx p op wnl @ß o° ' t°ßzy 4=198nx 6	Vt°ßzyp° op´p' °p°ßz ' I ´I up°rz° op x zßz´p° °zwx pyßp azwnl @ßol o ' t°ß y 4=198nx 6	@Vt°ßzyp ' ° p°°p´p´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wßz azŵx p nl x p´l ' t°ßzyp 4=198nx 6

8D9 NB5777	S 9	**8AEBvv**	**CB i**	3GDP 4		**bx**		**f P8AB; 9**
RdHXG 419		43233 43238						

DC489>D77477
DC489>D7B477 *mT m*

M	5<198
N4	4153
N	95133
O	517=
O	41=<
P	83198
	54É89

7D489>D77477
7D489>D7B477 *mT m*
7D489>D7D477 *mT m*

4153		TZ V
4153		V
5133		V

8D9 M95777	S 9	**8C>Cvv**	**BB4D; i**	3 D8GGP 4		**bx**		**f PE>C;**
8D; MB5777	S 9	**8C>Cvv**	**EB i**	3GPG 4		**bx**		**f PE>C>**
D; E M>5777	S 9	**8C>Cvv**	**EB i**	3GPG 4		**bx**		**f P8>>BD**
JKJXG 41<49a RK		362=9 3: 2==			JKRZG @041<t1p149a MZ		362=9 3<2==	
JKJXG 41<MZ 49a		362=9 3: 2==			RdHXG 41<49a		3: 2== 43238	
JKRZG @041<t1p149a		362=9 3<2==						

DC488D77B477 *mT m*

M	69148
N4	3183
P	93148
	53É85

7D488D777477
7D488D77B477 *mT m*
7D488D77D477 *mT m*

414=		TZ
4153		V
5133		V

8DDN95777	S 9	**8E87vv**	**C> i**	3GDG 4		**P@t x f u U x v xw**		**f P8D; 8B**
D; E MB5777 /Q ; 0	V 9	**9; DCvv**	**87; i**	3GSD 4		**P@t x f u U x v xw**		**f P8AB; 8**
D>8 O5777 /Q ; 0	V 9	**9; DCvv**	**887 i**	3GVD 4		**P@t x f u U x v xw**		**f P8B>C9**
E; CM95777 /Q ; 0	S 9	**8E87vv**	**DA i**	3GGa 4		**P@t x f u U x v xw**		**f P8D; 8;**
RdHXG 41=PZJ		38234 43238			S_YG 41=J S °wtupß		43237 3=245	

RdHXG 517 PZJ 3=233 43238 ZNKY0Y 517 PZJ 3: 235 3: 23=

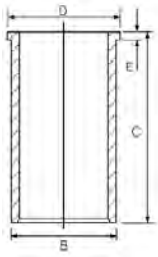
DC489>7774; 7
DC489>77D4; 7 *mT m*

M 79183
N4 4: 178
N 6: 188
O 3198
P : 5183
59É94

ZN df

7D489>777477
7D489>77D477 *mT m*

5183 I Q V
5183 V
5183 I X V



8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7133
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7133

D>8 S5777	V	9	**9; DOvv**	**89E i**	3GcV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D; 8C**
D>8 Y5777	V	9	**9; DOvv**	**89748>C i**	3GaP8NDD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8E7AC**
D>8 Z5777	V	9	**9; DOvv**	**897 i**	3GaP	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8E7AD**
E; CMA5777	S	9	**8E87vv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P987DB**

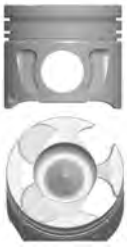
ZNKY0Y 517 PZJ 38236 3: 23=

DC48>B877477
DC48>B87D477 *mT m*

M 79183
N4 48173
N 74183
O 4136
P : 5183
59É94

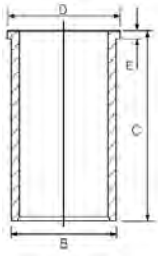
-8-<5890435,

MWWWZN df f b



7D48>B877477
7D48>B87B477 *mT m*
7D48>B87D477 *mT m*

5183 I Q V
5183 V
5183 I Q V

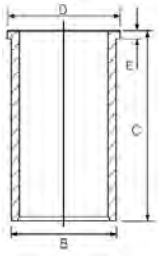


8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7133
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7133

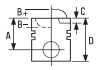
D; DM; 5777	V	9	**9; DOvv**	**E8 i**	3GNS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P>B8D**
D; DMC5777	V	9	**9; DOvv**	**E8 i**	3GNS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PA>; C**
D; DMD5777 /Q 90	V	9	**9; DOvv**	**877 i**	3GPa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P88AA8**
D; EMA5777	V	9	**9; DOvv**	**EB4EE i**	3GPG8GPV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C; EE**
Md ; 9; 79	S	9	**8E87vv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C; ED**
Md ; 9A78	V	9	**9; DOvv**	**EE4877 i**	3GPV8GPa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C>77**
Md ; C878	S	9	**8E87vv**	**D74DA i**	3GDi 8GGa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8CDE7**

QGVVG 517 PZJ 392=< 43234 RdHXG 41= PZJ 3: 2== 3=234
QGVVG 517 Z1JY 3<2=7 43234 RdHXG 517 PZJ 3: 2== 35234

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7133
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7133



8B7 P85777	S	9	**8E9Evv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P>B87**



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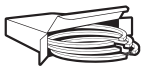


8EDMA5777	S 9	**8EABvv**	**898 i**	3GaV 4	**P@t x**	**f u U x v xw**	**f P987>;**
D>> M95777	S 9	**8EABvv**	**897 i**	3GaP 4	**P@t x**	**f u U x v xw**	**f P9>BA9**

JKRZG 00513 J S °vßupß 3=23< 3<247

DC4>; BA77477
DC4>; BA7B477 *mT m*

M 79196
N4 481<3
N 76183
P : 5196
63É99

-8<677G739,

MWWWdf f b

7D4>; BA77477
7D4>; BA7B477 *mT m*

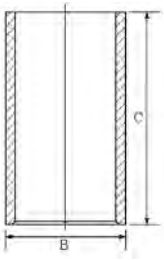
41B3 MJI V
41B3 V
51B3 I X V

GDC KZ-Ring

8>E O95777	S 9	**8ADAvv**	**BB i**	3 D 4	**bx**		**f PA>; 9**
D9D N>5777	S 9	**8EEAvv**	**E7 i**	3GNN 4	**bx**		**f P>B79**
D; 8 N>5777	S 9	**8EEAvv**	**DA i**	3GGV 4	**bx**		**f P8D89**
D; 8 NA5777	S 9	**8EEAvv**	**899 i**	3Gaa 4	**bx**	**f u U x v xw**	**f P8D9;**
D; 8 NC5777	S 9	**8ADAvv**	**D7 i**	3GDI 4	**bx**		**f P8D8C**
D; 8 OA5777	S 9	**8EEAvv**	**8; ; i**	3GeG 4	**bx**	**f u U x v xw**	**f P8D98**
D; 8 OA57>B	S 9	**8EEAvv**	**8; 7 i**	3Gcc 4	**bx**	**f u U x v xw**	**f P8D99**
D; 8 PA5777	S 9	**8EEAvv**	**8>> i**	3GI a 4	**bx**	**f u U x v xw**	**f P8D9A**
D; > N5777	S 9	**8EEAvv**	**DD i**	3GND 4	**bx**		**f P8D; ;**
D; > N85777	S 9	**8EEAvv**	**DB i**	3GGc 4	**bx**		**f P8D; 7**
D; > N959>B	S 9	**8EEAvv**	**87> i**	3GSG 4	**bx**	**f u U x v xw**	**f P8D; 9**
D; > N57>D	S 9	**8EEAvv**	**D; 4DA i**	3GGN8GGP 4	**bx**		**f P8D9E**
D; > N58>B	S 9	**8EEAvv**	**DA i**	3GGa 4	**bx**		**f P8D8D**
D; > O5777	S 9	**8EEAvv**	**899 i**	3Gaa 4	**bx**	**f u U x v xw**	**f P8D; >**
D; > O58>B	S 9	**8EEAvv**	**887 i**	3GVD 4	**bx**	**f u U x v xw**	**f P8D; C**
D; > R85777	S 9	**8EEAvv**	**8874889 i**	3GV/D8GVN 4	**bx**		**f P8D; 8**
D; A M95777	S 9	**8CABvv**	**D7 i**	3GDe 4	**bx**		**f P8D>A**
D; A M957>B	S 9	**8CABvv**	**C>4CC i**	3GDG8GDV 4	**bx**		**f P8D>>**
D; A MA57>B	S 9	**8EEAvv**	**D94D; i**	3GGN8GGP 4	**bx**		**f P8D>D**
D; A MC5777	S 9	**8EEAvv**	**898 i**	3GaV 4	**bx**	**f u U x v xw**	**f P8D>E**
D; A MC57>B	S 9	**8EEAvv**	**89> i**	3Gai 4	**bx**	**f u U x v xw**	**f P8DA7**
D; A O95777	S 9	**8CABvv**	**CB i**	3GDP 4	**bx**		**f P>B89**
D; A O>5777	S 9	**8CABvv**	**BB i**	3 D 4	**bx**		**f PA>; ;**
D; B M; 5777	S 9	**8EEAvv**	**879487D i**	3GPi 8GSc 4	**bx**		**f P>B8>**
D; B MA5777	S 9	**8CABvv**	**C> i**	3GDG 4	**bx**		**f P>B8A**
D; B MB5777	S 9	**8CABvv**	**BB i**	3 D 4	**bx**		**f P88E8D**
D; B O>5777	S 9	**8CABvv**	**BB i**	3 D 4	**bx**		**f PA>; >**

HKZG 5333 t!p1	452<4 452<7	JKRZG 00513 49a	392=6 3<2==
HKZGN1V1K15333 t!p1	382<4 3=2<7	VXQYS G 419 t!p1	382<9 452<=
JKJXG 41< t!p1	3=2<= 3: 2==	VXQYS G 419 t!p1Y°¦ p´	382< 452<=
JKJXG 513 49a	3: 2=7 3: 2==	VXQYS G 513 t!p1	372<9 452<=
JKJXG 513 NL Qyßpr´l wp	442=3 3: 2=7	ZNKS G 5333 49a	382=5 3: 2=7
JKJXG 513 t!p1	3=2<= 3: 2==	ZNKS G 5333 t!p	3=2<< 382=5
JKJXG 513 t!p1Z°´mz Qyßpr´l wp	372=3 3<2=4	ZNKS G 5333 t!p1	442<7 382=5
JKJXG 513 Qyßpr´l wp	3: 2=7 3: 2==	ZNKS G 5333 t!p149a	352<= 382=5
JKRZG 0419 MZ t!p1	3<2<9 3<2=5	ZNKS G 5333 t!p1Z°´mz	442<7 3: 2=7
JKRZG 0513 49a NL Qyßpr´l wp	362<= 3=2=4	ZNKS G 5333 t!p1Z°´mz	3: 2<9 382=3
JKRZG 0513 NL Qyßpr´l wp	442<9 452=5	ZNKS G 5333 Z°´mz	452<< 362=5
JKRZG 0041< t!p1	392=6 3<2==	ZXKa05333 t!p1	382<3 342<

8>47887>8477 **N** <<139 **O** 485133



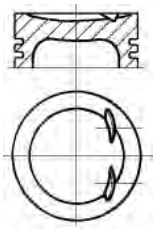
8CAM>5777	S	9	**8EEAvv**	**8>9**	**i**	3GiP	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P88D9C**
D;8QA5777	S	9	**8EEAvv**	**8A848AD**	**i**	3NDV8NGV	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P8D9C**
D;8QA57>B	S	9	**8EEAvv**	**8AA**	**i**	3NGG	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P8D9B**
D;>O85777	S	9	**8EEAvv**	**8;;**	**i**	3GeG	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P8D;A**
D;>R95777	S	9	**8EEAvv**	**8>D**	**i**	3NDN	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P8D>7**
D;BM95777	S	9	**8EEAvv**	**8;C**	**i**	3Gea	4		**bx**	**f**	**u**	**U x v**	**xw**	**f PA>;A**
D;DM>5777	S	9	**8EEAvv**	**8A8**	**i**	3NDV	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P>B8E**

JKRZG 0513 49a NL K@2 0Qyfbr´l wp	3=2=4 452=5	QGVVG 513 49a Z°´mz	352=8 432:4
JKRZG 0513 49a NL K@2 0Q0yfbr´l wp	392=6 342=7	ZNKS G 5333 49a Z°´mz	452<< 3:2=7
JKRZG 0513 49a NL K@2 0yfbr´l wp	392=4 342=7	ZNKS G 5333 t1p149a Z°´mz	452<< 392=3
JKRZG 0513 49a Z°´mz	392=6 3<2==	ZNKS G 5333 Z°´mz 49a	442=5 3:2=7

DC48>9>77477
DC48>9>7B477 *mTm*

M 6=133
N4 9133
N :5133
O 5133
P 9=133
55É9=

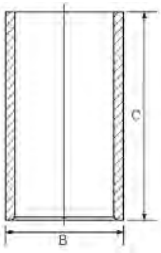
MW



7D48>9>77477
7D48>9>7B477 *mTm*

4133 IQ
4133 V
6133 V

8>47887>8477 **N** <<139 **O** 485133



>Tb	S	9	**98CEvv**	**897**	**i**	3GaP	4		**P@x**	**f**	**u**	**U x v**	**xw**	**f P9>BDE**
>Td	S	9	**98CEvv**	**897**	**i**	3GaP	4		**P@x**	**f**	**u**	**U x v**	**xw**	**f P9>BE7**
>Te /Q >0	S	9	**98CEvv**	**89A**	**i**	3GcD	4		**P@x**	**f**	**u**	**U x v**	**xw**	**f P9>BDD**
>Tf /Q >0	S	9	**98CEvv**	**89A**	**i**	3GcD	4		**P@x**	**N@f**	**u**	**U x v**	**xw**	**f P9>BDB**

VNKJXG 515 J S °v@upß	3623< 44243	VNKJXG 515 PZJ	37239 44243

DC4>;BC77487
DC4>;BC7D487 *mTm*

M 7<t3
N4 4617:
N 85173
O 316<
P :71:4
63É9<

-8<83NG45:,

MWWWdf fb

7D4>;BC77477
7D4>;BC7D477 *mTm*

5183 MJI V
5133 V
5133 IQ

GDC LKZ-Ring

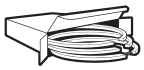
Lz´'t°@zy° Ät@s l 5716x x nzy´zo r l'
x pl°°´po l ß'ty npyßp wyp

L´Qzwnpy x t@ptypx Vwp°pw°rpyl m°ß yo
@zy 57/6 S S/rpx p°°py l y op´
Qzwnpymzwüpy0S t@ßp

Vz°''t°@zy° l@n°y nl´ßop mtpwp op
57/6 x x x p°°´ l° npyßp op wi Ép
mtpwp0t°@zy

Vl´l''t°@zyp° nzy°yl ot°ß ynt! op'l°z
op mtpw py pwnpyß z opwn°wy op 57/6x x

Vp´''t°@zyt nzy'l°°l r r tz mtpwl ot 57/6
x x x t°°´l ß z °°wol °°p qz´z °'tyz@z



Pi 87MfQP>/dTi 0/Q ;0 S 9 **8EEOvv** **D74D8 i** 3GDi 8GGD 4 **P@t x f u U x v xw** **f P8BC;A**

dTY /Pi 87MfQP>0 S 9 **8EEOvv** **CE i** 3GDc 4 **P@t x f u U x v xw** **f P9BEAC**

VNKJXG 513 PZJ 3=235 44243 eKZG 513 PZJ 49a 37234 43236

DC488>C77487
DC488>C7D487 *mTm*

M 791t6
N4 4<1<3
N 6=1<3
O 419:
P :51t3
5<É9<

-8<84: 0436,

MWWWdf fb

7D488>C77477
7D488>C7D477 *mTm*

6183 I Q V
5183 V
6183 I X V

P@t x f u U x v xw **f P8BC;B**

VNKJXG 515 PZJ 3=235 44243

DC488>C774;7

M 7<t3
N4 4<183
N 731<3
O 3173
O 3173
P ::t3
63É9<

MWWWdf

7D488>C77477
7D488>C7D477 *mTm*

6183 I Q V
5183 V
6183 I X V

dTW/Pi 87gfQP>0/Q >0 S 9 **8EEOvv** **CE4DD i** 3GDc8GND 4 **P@t x f u U x v xw** **f P9BEA9**

dTd /Pi 87NfQP>0/Q >0 S 9 **8EEOvv** **877 i** 3GPa 4 **P@t x f u U x v xw** **f P9BEAA**

VNKJXG 513 J S°vßtupß 3:239 44243 VNKJXG 513 PZJ 39239 44243

DC488>C774>7
DC488>C7D4>7 *mTm*

M 791t3
N4 4817 3
N 771<3
O 318:
P :51t4
5<É:3

-8<8: 3043=,

MWWWdf fb

7D488>C77477
7D488>C7D477 *mTm*

6183 I Q V
5183 V
6183 I X V

dTm/Pi 87MfQP0 S 9 **8EEOvv** **D7 i** 3GDi 4 **P@t x f u U x v xw** **f P9BEA>**

eKZG 513 PZJ 3=2== 3=235

DC488>C77477
DC488>C7D477 *mT m*

7D488>C77477
7D488>C7D477 *mT m*

M 791 8
N4 4<163
N 6<133
O 4133
P <31 8
5<É: 3

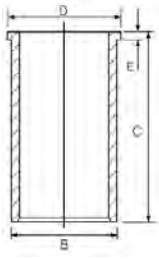
MWdf f b

6183 I Q V
5133 V
6133 I X V

D8>>5EC/e yØ 0	S	9	**9A77vv**	**DA i**	3GGV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P>B78**
D8>>5EC9977	S	9	**9A77vv**	**DA4DC i**	3GGa8GGe	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8E7; B**
D8>>5ECe	S	9	**9A77vv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**			**f P8CDA**
D8>>5ECl /e yØ 0	S	9	**9A77vv**	**DA i**	3GGV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CDB**

ZNKS G 5833 Z°´mz JY 382<< 3: 2=7

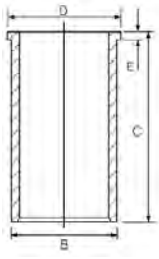
8>4798; C8477 **N** =9134 **O** 4: 4133 **P** =<1=5 **Q** 8133
8>4798; C9477 **N** =9138 **O** 4: 4133 **P** =<1=5 **Q** 8133



D8>>5E8 /e yØ 0	S	9	**9>>Avv**	**C> i**	3GDG	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P>B77**
D8>>5EC9>77	S	9	**9A77vv**	**D; 4DC i**	3GGP8GGe	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P99; 8D**

ZNKS G 5833 Z°´mz J 442<7 3=2<< ZNKS G 5833 Z°´mz JY 362< 3=2=3

8>4799AB7477 **N** =9133 **O** 49: 163 **P** =<1=3 **Q** 8133
8>479DE; 7477 **N** = 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** = 18< **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** = t 3 **O** 49: 133 **P** 4331=3 **Q** 8133



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ENGINE INDEX

	CCM	x		9
9 86>X	NNea	S	i D8Sc	8B
95 X/; Y t Ø Nxt Øz O t	NNea	S	i D8Sc	8D
; 5AX OMdNgdQff a d	PVNe	e	ee9ea	8;
; 5AX QRU	PVNe	e	ee9ea	8;
87 T	NNea	S	i D8Sc	8B
87 V/AY t Ø Nxt Øz O t	NNea	S	i D8Sc	8D
88 M/hY >E9Tf 0	NPca	S	i N9DD	99
88 P	PVNe	e	ee9ea	8;
88T	NNea	S	i D8Sc	8B
88 X/977f PU0	NSi V	S	i D8Sc	8E
89 V	NSi V	S	i D8Sc	97
89 X/977f PU0	NSi V	S	i D8Sc	8E
8> X/977f PU0	NSi V	S	i D8Sc	8E
8B X/; 77f PU0	NSi V	S	i D8Sc	98
8C T	NSi V	S	i D8Sc	8C
8C X/; 77f PU0	NSi V	S	i D8Sc	98
8D W>R/Wex Øt 0	Gci a	S	eD9DD	8
8E V	NSi V	S	i D8Sc	8D
8E X/; 77f PU0	NSi V	S	i D8Sc	98
97 f 9Z /X eQdUQe0	GI i S	S	eS9SV	C
98 X/; 77f PU0	NSi V	S	i D8Sc	98
99 P	PVNe	e	ee9ea	8>
99 X/; 77f PU0	NSi a	S	i D8Sc	98
9; X/; 77f PU0	NSi V	S	i D8Sc	98
9> P	PVNe	e	ee9ea	8>
9A P	PVNe	e	ee9ea	8>
9A W>R	NSi c	a	eD9DD	9
; 7PPf k	Ni i P	a	eS9DD	A
; 8 P	PVNe	e	ee9ea	8;
>B P	SVVP	e	i S9DD	9;
97>bf	GI i i	S	ec9VD	89
99>Pf	NGci	S	eV9DD	E
9CBPf /Q >0	NcND	a	eG9DD	;
; 7BPf /Q A0	Ni i P	a	eS9DD	A
Pf 99> /P t 4f POØ	NGI e	S	ea9DD	88
Pf 9>> /P t 0	NSDN	S	ei 9 D	8A
Pi 89Nf QP> /Q >0	NGci	S	eV9DD	87
Y >Cd	GI VG	S	eS9DD	>
Y ACP; 7 /f PB0	Ni Na	a	eS9DD	B
f PA/87b0	NSi V	V	eS9SV	D
hD	Pi VD	e	i S9DD	9>

8DW>R/Wex Qt 0 S 9 **8QEBvv** **DA4DD i** 3GGa8GND 4 **bx** **f P97C>7**

LXKKRGTJKX 041<	43233	43239	LXKKRGTJKX 041<t49a	352=< 43239
LXKKRGTJKX 041<49a	372=<	43239		

DC4A99C77477

M 551t3
N4 3186
N 9<153
O 5198
P 78198
4<É86

f b

7D4A99C77477

4133		I X
4153		V
5133		I X

8>4C87797477

N <7143 **O** 45=183 **P** < 183 **Q** 83133

DD4A99C77477
< 0855: 33033 .
470: 43353033

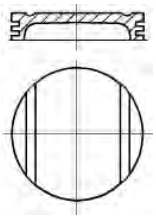
Yßppw Yßsw Gntp´ Gnp´z Gnntltz

9AW>R a 9 **9>ECvv** **89E48;7 i** 3GcV8Gcc 4 **bx** **f P8EC8B**

LXKKRGTJKX 0518a9	44233	43239		

DC4A98B77477

M 5:168
O 4153
P 83163
4<É86



7D4A98B77477

4153		I X
4183		
5183		I X

8>4C87797477

N <7143 **O** 45=183 **P** < 183 **Q** 83133

Yßppw Yßsw Gntp´ Gnp´z Gnntltz

9CBPf/Q >0 a 9 **9C97vv** **8>7 i** 3GiD 4 **PQt x f u U x v xw** **f P9>E7D**

JOYIUaKXd 0051t ZJ	3:237	3=23=	XGTMKXUaKX YVUXZ 051t J	35238 36246
JOYIUaKXd Qt 51t ZJ	3=23=	4524<		

DC4>;9>77477
DC4>;9>7C477 *mT m*

M 7:133
N4 47138
N 77133
O 3183
P :4133
5=É95

+<498K043<;

MWWWdf f b

7D4>;9>77477
7D4>;9>7C477 *mT m*

5133		I Q V
5133		V
5133		V

Y >Cd S 9 **8EA8vv** **DA i** 3GGa 4 **PQt x f u U x v xw** **f P9>;E9**

LXKKRGTJKX 513J	34234			

DC488>>77477
DC488>>7A477 *mT*

M	7: 133
N4	48138
N	741: 3
O	4163
P	: 4133
	63É99

-8<7850R493,

WWdf

7D488>>77477
7D488>>7A477 *mT*

6133		I Q V
5133		V
6133		I X V

UK 4458 557 : 6<6

; 7PPf k	a	9	**9EE; vv**	**8AA4977 i**	3NGG8NcN	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9AD8D**
; 7BPf /Q A0	a	9	**9EE; vv**	**8AA49A7 i**	3NGG8PSD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>E7E**

JOYI UaKXd @a 613 YJa9	4423=	4524<	XGTMK XUaKX @a 613 ZJa9	3<245
JOYI UaKXd @a 613 ZJ	3=23=	4524<	XGTMK XUaKX YVUXZ 0613 J	3=23= 36246
JOYI UaKXd a 613 J	3=249		XGTMK XUaKX YVUXZ 0613 YJa9	37246
JOYI UaKXd a 613 YJa9	3=24<		XGTMK XUaKX YVUXZ 0613 ZJa9	37246
JOYI UaKXd a 613 Yo@9	3=24<		XGTMK XUaKX aKRGX 613 J5: 8 YJa9	3724<
JOYI UaKXd a 613 Zo9	3=249		XGTMK XUaKX aKRGX 613 J633 YJa9	3624:
XGTMK XUaKX @a 613 YJa9	3<245			

DC4>; E877487
DC4>; E87C487 *mT m*

M	79133
N4	48168
N	7: 195
P	: 3133
	63É96

-8<7=J073<G,

MWWWdf fb

7D4>; E877487
7D4>; E87C487 *mT m*

413 8		MJI V
413 8		V
5133		I X V

GDC LKZ-Ring

ECOTOUGH

Mpy 5 'tºßzy nl y mp´pßzqßßpo ty Mpy 4 pyr typ°	Qzwmpy op´ 51Mpyp´lßzy v yypy ty Szß´py op´ 41Mpyp´lßzy yl nsr p´ °ßpß Äp´opy	Rp° 'tºßzy° op 5 x p r y ´lßzy 'p°@pyß ßp x zyß° °°´ op° x zßp°´° op 4 x p r y ´lßzy	Kw tºß y op w °pr°yol r pyp´l nt y °p '°pop x zyß´ py w° x zß´p° op '´tx p´l r pyp´l nt y	tw tºßzyp ot°pnzyol r pyp´l Üzyp '° p°°p´p x zyßß´ypt x zß´tot '´tx l r pyp´l Üzyp
K°´z 9				
Lz´ Mpy 5 pyr typ°	L ´S zß´py op´ 51Mpyp´lßzy	Vz°´x zßp°´° op 5 x p r y ´lßzy	Vl ´l x zß´p° op °pr°yol r pyp´l nt y	Vp´t x zß´tot°pnzyol r pyp´l Üzyp

Y ACP; 7 /f PB0	a	9	**9E9Bvv**	**8; 748>9 i**	3Gcc8GI P	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P99; 99**
XGTMK XUaKX 51=J				36235										

DC488>>77477
DC488>>7A487 *mT*

M	7: 133
N4	49188
N	74193
O	4173
P	: 4143
	63É99

-8<7850R498,

MWWWdf

7D488>>77477
7D488>>7A477 *mT*

6133		I Q V
5133		V
6133		I X V

UK 4458 557 : 6<6

97 f 9Z /XeQdUQe0 S 9 **8EE>vv** **C9 i 3e 4** **P@x f u U x v xw** **f P9BB; 9**

LXKKRGTJKX 0513 JO 352=< 43239

DC488ED77477
DC488ED7C477 *mTm*

M 7: 1=:
N4 4: 133
N 6<133
P : 91=:
63É: 3

MWdf fb

7D488ED77477
7D488ED7C477 *mTm*

6133 VY
5133 V
6133 I X

48 opr´pp b por p Zz' Xtyr | 480Ml o Qptwrmp´´tyr | Ypr x pyßßl' Üztol wl yr yp 48 op r´ °1 | Gytwr °°'p´tz´ py n° l op 48 r´l oz° | Ypr x pyßz ßl' pÜz nzy tynwyl Üzyp qt ynst C 48

f PA /87b0 V 9 **9>EAvv** **E74879 i 3GNN8GPi 4** **P@x f u U x v xw** **f P9AD9;**

JKLKTJKX 518 Zo8 392=< 35249 JQYl UaKXd 0518 Zo8 442=< 39237

DC48>7777477
DC48>777C477 *mTm*

M 7: 1=7
N4 4: 173
N 6=133
P : <1=7
63É: 3

WWdf fb

7D48>7777477
7D48>777C477 *mTm*

6133 VY V
5133 V
6133 I X V

99>Pf S 9 **98CEvv** **88748>7 i 3GVD8GI D 4** **P@x f u U x v xw** **f P9>E99**

JQYl UaKXd YVUXZ 515 J 3=247 XGTMK XUaKX KaUW_K YJ7 38248 4524=
XGTMK XUaKX KaUW_K 515 J 39244 4524= XGTMK XUaKX KaUW_K ZJ7 38248 4524=

DC4>; BC77477
DC4>; BC7D477 *mTm*

M 7<193
N4 48145
N 83173
O 316<
P : 7194
63É9<

-8<83NG657,

MWWWdf fb

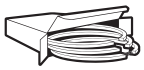
7D4>; BC77477
7D4>; BC7D477 *mTm*

5183 MJI V
5133 V
5133 I Q

GDC LKZ-Ring

Lz´''t°ßzy° Ätßs l 5716x x nzy ´zo r l' x pl °°´po l ß' ty npyßp wyp | L ´Qzwnpy x tßptypx Vwp°pw°r pyl m°ßl yo @zy 57/6 S S / r px p°°py l y op´ QzwnpymzwÜpyOS tßßp | Vz°´''t°ßzy° l @n °y nl ´ßop mtpwp op 57/6 x x x p°°´ l ° np yßp op wl Ép mtpwp0 t°ßzy | Vl ´l ''t°ßzyp° nzy °yl ot°ßl yntl op ''l °z op mtpw py pwnpyß z opwn°wy op 57/6x x | Vp´''t°ßzyt nzy ''l °°l r r tz mtpwl ot 57/6 x x x t°°'l ßz °°wl °°p qz´z °'tyzßßz

Pi 89Nf QP> /Q >0 S 9 **98CEvv** **887488D i 3GVD8GaD 4** **P@x f u U x v xw** **f P9B7B>**



DC4>; BC77487
DC4>; BC7D487 *mT m*

M 7<t 3
N4 4617:
N 8517 3
O 316<
P : 71 4
63É9<

-8<83NG45: ,

MWWWdf f b

7D4>; BC77477
7D4>; BC7D477 *mT m*

5183 MJI V
5183 V
5183 I Q

GDC LKZ-Ring

Lz´ 'tºßzyº Ätßs l 5716x x nzy ´zo r l ' x pl º°´po l ß' ty npyßp wyp

L ´Qzwnpy x tßptypx Vwp°pw°r pyl mfß yo @zy 57/6 Ş S / r px p°°py l y op´ Qzwnpynzwlpy0S tßp

Vz°´ 'tºßzyº l @pn °y nl ´ßop mtpwp op 57/6 x x x p°°´ l ° np yßp op wi Ép mtpwp0' tºßzy

Vl ´l 'tºßzypº nzy °yl otºß yntl op 'l °z op mtpw py pwnpyß z opwnfwy op 57/6x x

Vp´ 'tºßzytnzy 'l °°l r r tz mtpw ot 57/6 x x x tº°°l ßz °°wil °°p qz´z °' tyzßz

Pf 99> /P t 4f POØ S 9 **98EDvv** **E74887 i** 3GNN8GV/D 4 **P@t x f u U x v xw** **f P; A7>B**

JKLKTJKX 515 Zo7 3<244 35249

DC4>9CC77487
DC4>9CC7C487 *mT m*

M 7617 5
N4 481<8
N 791=3
P 9=1<5
63É9:

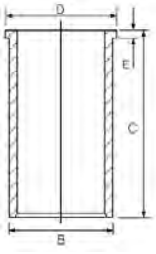
+<97<H438,

WWdf f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5183 I Q V
5183 V
5183 TZ

8>4798897477



N <=133 **O** 489133 **P** =31=3 **Q** 8133

DC4>9CC774>7
DC4>9CC7C4>7 *mT m*

M 7<175
N4 481<8
N 791=3
P : 71<5
63É99

-8<9<60434,

MWWWdf f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5183 I Q V
5183 V
5183 TZ

Yßpw
--- I G_ZWT 0I NKI QHUb R JGSKZKX ---

Yß sw
--- GI NZ_TM0S _RJKTJ_XI NS KYYKX HKXVX LKT ---

Gntp´
-- GßpyßzyÜ@p´tqpÜ@p´tqp´ wp otl x ßp´ o° nzw-

Gnp´z
-- V´pnl °nt y 0@p´tqnl pwot x pßz opw mfwy --

Gnntl tz
-- l ßpyÜzyp nzyßzwv´p otl x pßz nl x p´l ot nzx mf°ßzyp - -

97>bf S 9 **8EEEvv** **8CB48CE i** 3NSD8NSP 4 **bx** **f u U x v xw** **f P9B; 89**

JOYI UaKXd YVUXZ 513	44247	XGTMK XUaKX KaUW_K 513	39244	4524=
JOYI UaKXd YVUXZ Yt7	3424:	XGTMK XUaKX KaUW_K Yt7	3=246	4524=
LXKKRGTJKX 5 513 Yt7	43244 43247	XGTMK XUaKX YVUXZ 0513 MZJ O	43248	

DC4>; 7977477
DC4>; 797C477 *mT m*

M	671=<
N4	7163
O	6173
O	61:3
P	861<3
	56É89

+<9873,

f b

7D4>; 7977477
7D4>; 797C477 *mT m*

4153		VaJ
4153		V
5133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

; 5AX OMdNgdQf f a d	e	9	**; A9Dvv**				**bx**		**Y b9BD; 49**
; 5AX QRU	e	9	**; A9Dvv**				**bx**		**Y bA7AE**
88 P	e	9	**; A9Dvv**	**DB4EC i**	3GGc8GPN	4	**bx**		**f P99E>8**
; 8 P	e	9	**; A9Dvv**	**87C i**	3GSa	4	**bx**		**f P99E>9**

=3	342<6	452=3	XGTMK XUaKX	342 :	452<8
43=Yp´tp° (00	342<4	452<8	XGTMK XUaKX 618 a<	342<9	452<<
443	342<6	452=3	XGTMK XUaKX 618 azr°p	342<8	452<=
JKLKTJKX 618	3=2=3	3<2=6	XGTMK XUaKX 0618	4329=	3<2=4
JÜYI UaKXd 618 a<	342=3	3=2=6	XGTMK XUaKX 0618 azr°p	3<2<4	3=2=3

DC4A97877477
DC4A9787C477 *Tm m*

M	7:16:
N4	8159
N	:4145
P	::13=
	55É:6

7D4A97877477
7D4A9787C477 *Tm m*

418<		I X V
418<		V
716		V

99 P	e	9	**; A9Dvv**	**8774899 i**	3GPa8Gaa	4	**bx**		**f P99E; >**
9> P	e	9	**; A9Dvv**	**897 i**	3GaP	4	**bx**		**f P99E; E**
9A P	e	9	**; A9Dvv**	**897 i**	3GaP	4	**bx**		**f P99E>7**
JÜYI UaKXd 0618			392<=	392=7			XGTMK XUaKX 0618 azr°p	432<8	3=2=3

DC4A97877487
DC4A9787C487 *Tm m*

M	7:14:
N4	5169
N	:4145
P	::13=
	55É:6

7D4A97877477
7D4A9787C477 *Tm m*

418<		I X V
418<		V
716		V

Pf 9>> /P t 0	S	9	**9>79vv**	**E7487; i**	3GNN8GSD	4	**P x f u U x v xw**		**f P; A7>A**
JKLKTJKX 517 Zo7			43239	38249			JKLKTJKX 517 ZJ7	3823:	35249

DC48>D8774; 7
DC48>D87A4; 7 *mT*
DC48>D87C4; 7 *mT m*

M 8613
N4 4913
N 7=13
P <313
65É: 4

-8<=33H435,

MWWWdf f b

7D48>D877477
7D48>D87A477 *mT*
7D48>D87C477 *mT m*

513 I Q V
513 V
513 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

9 86>X	S	9	**99DBvv**	**A84A9 i**	3ai 8cG	4	**bx**		**Y bE>>**
87 T	S	9	**99DBvv**	**A84A9 i**	3ai 8cG	4	**bx**		**f P9AD98**
88T	S	9	**99DBvv**	**A84AC i**	3ai 8ce	4	**bx**		**f P9AD9>**
<<243=S Q 00516				442 4 452<9			=3 0516	342<7	3<2<
<<243=S Q 006 516				4529 4 432 4			43=Yp´tp° 00	342B<	452<8
<<Yp´tp° 00				342B< 452<8			43=Yp´tp° 000	342B<	452<8
<<Yp´tp° 000				342B< 452<8			43=Yp´tp° 006	342B<	452<8
<<Yp´tp° 006				342B< 452<8			443	342<6	3<2<9
=3				342<7 452<8			443245: 516	392<7	3<2<

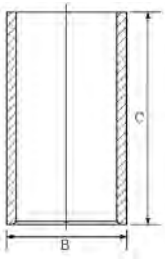
DC49B; 87C477 *Tm m*

M 8<85
P ==1=5
58É: 9

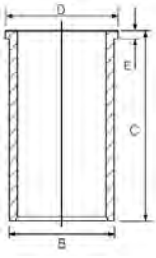
7D49B; 877477
7D49B; 87C477 *Tm m*

41t = I X V
41t = V
71t 7 V

8>4787E97477 **N** =7183 **O** 4=4169



8>479>C87477 **N** =7185 **O** 4=4169 **P** ==1t 3 **Q** 71t 9



8CT	S	9	**9>EAvv**	**B8 i**	3eP	4	**bx**		**f P8EBAB**
=3 0518				3=2<8	3<2<3		JKLKTJKX 518	3=2<3	452<7
443245: 518				432<8	3: 2<3				

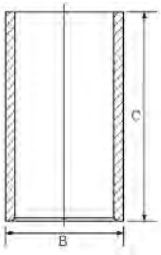
DC49B; 877487
DC49B; 87C487 *Tm m*

M	8717<	
N4	31=4	
P	<=156	
	58É: 9	

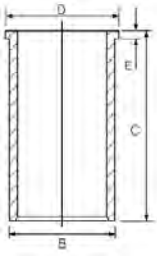
7D49B; 877477
7D49B; 87C477 *Tm m*

41t =		I X V
41t =		V
71t 7		V

8>4787E97477 **N** =7183 **O** 4=4169

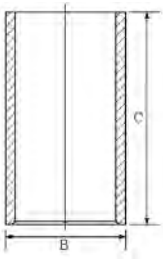


8>479>C87477 **N** =7185 **O** 4=4169 **P** ==t 3 **Q** 71t 9

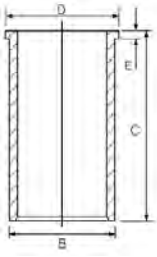


95; X /; Y t Ø Nxt Øz O t	**ctty0**	S 9	**99DBvv**		**P@t x**		**Y bE>A**
87 V /A Y t Ø Nxt Øz O t	**ctty0**	S 9	**99DBvv**	**>B4A8 i** 3aP8ai 4	**P@t x**		**f P9AD99**
8E V		S 9	**9>EAvv**	**B; i** 3ea 4	**P@t x f u**		**f P9>; BE**
<<243= S Q 00516 J				442 4 452<9	=3 Yp´tp° 00	3428<	452<8
<<243= S Q 06 516 J				3=296 432 4	=3 Yp´tp° 06	3428<	452<8
<< Yp´tp° 00				3428< 452<8	43= Yp´tp° 00	342 4	452<7
<< Yp´tp° 00				3428< 452<8	43= Yp´tp° 06	3=294	452 4
<< Yp´tp° 06				3428< 452<8	443245: 516 J	392<7	3<2<
=3 0518 ZJ				3=2<9 3<2=3	443245: 518 ZJ	3=2<9	3: 2=3
=3 Yp´tp° 00				3428< 452<8			

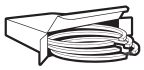
8>4787E97477 **N** =7183 **O** 4=4169



8>479>C87477 **N** =7185 **O** 4=4169 **P** ==t 3 **Q** 71t 9



88 X /977f P\0	S 9	**9>EAvv**	**CE4DA i** 3GDc8G3a 4	**P@t x f u U x v xw**		**f P97>7C**



89 X/977f PU0 S 9 **9>EAvv** **D; i** 33GP 4 **P@t x f u U x v xw** **f P97>7D**

8> X/977f PU0 S 9 **9>EAvv** **D; 4DE i** 33GP8GNG 4 **P@t x f u U x v xw** **f P8EBAA**

JKLKTJKX 518 ZJO 3<2=3 452=< XGTMK XUaKX 0518 ZJt 442=5 372=9
JÜYI UaKXd 0518 ZJO 432=< 432=<

DC4A9>>77477

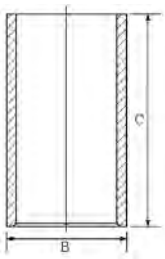
M 88173
N4 4<1k8
N 6=183
P =41=3
63É: :

df fb

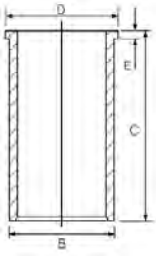
7D4A9>>77477

5183 I X V
5183 V
6183 I X V

8>4787E97477 **N** =7183 **O** 4=4169



8>479>C87477 **N** =7185 **O** 4=4169 **P** ==t 3 **Q** 7t 9



89 V S 9 **9>EAvv** **A8 i** 3ai 4 **P@t x** **f P9>; C7**

=3 0518 J 3=2=8 3<2=3 JKLKTJKX 518 J 3=2=3 3: 2=7
443245: 518 J 3=2=6 3: 2=3

DC4C8>>77477

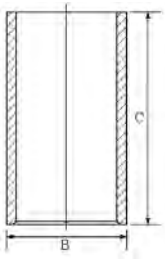
M 87193
N4 6185
P <9164
63É: 8

df

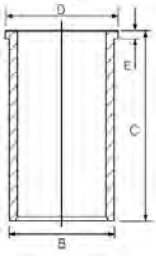
7D4C8>>77477
7D4C8>>88477 *Tm m*

5183 I X V
5183 V
7183 I X V

8>4787E97477 **N** =7183 **O** 4=4169



8>479>C87477 **N** =7185 **O** 4=4169 **P** ==t 3 **Q** 7t 9



Kl´ wp´ 'tºßzyº ßz mp´p' wmpo ty Kyr typ ºpß zyw

L´ sp´p Qzwmpy y°´ ty S zßz´º ßÜby Üº p´ºpßÜby

V´px tp´ 'tºßzy ´px 'wmp´ ol y° wp up° x zßpº´

Vtºßzypº x ° l yßr°z° 'l´l °p´ ´ppx 'wozº py ú prz op x zßz´p ° °zwx pyßp

I zy t 'tºßzyp ot®nnstl ®´°tzyp ypnpºº l´tz °zº ßß t´p ß ßß w °p´tp

8B X/; 77f PU0 S 9 **9>EAvv** **D; i** 33GP 4 **P@t x f u U x v xw** **f P97>88**

8C X/; 77f PU0 S 9 **9>EAvv** **D; 4E7 i** 33GP8GNN 4 **P@t x f u U x v xw** **f P97>89**

8E X /; 77f PU0	S	9	**9>EAvv**	**D84E7 i**	3GGD8GNN	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P97>7E**
98 X /; 77f PU0	S	9	**9>EAvv**	**D;4DE i**	3GGP8GNG	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P97>87**
99 X /; 77f PU0	S	9	**9>EBvv**	**D;4E9 i**	3GGP8GNV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P97>8;**
9; X /; 77f PU0	S	9	**9>EAvv**	**D;4DB i**	3GGP8GGc	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**f P97>7B**

JKLKTJKX 518 ZJ	3<2=<	45238	JOYI UaKXd 0518 ZJ0	432<= 432=<
JKLKTJKX 518 ZJ0	3<2=3	452=<	XGTMK XUaKX 0518 ZJt	442=5 372=9
JOYI UaKXd 0518 J	432=6	452=<		

DC4A98D77497
DC4A98D7C497 *Tm m*
DC4A98D88497 *Tm m*

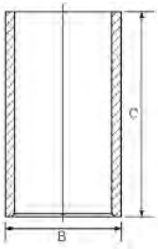
M 88173
N4 4<178
N 6=133
P =41=3
63É: :

df f b

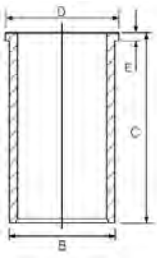
7D4A98D77497
7D4A98D7C497 *Tm m*
7D4A98D88497 *Tm m*

6133
5183
6133 I X

8>4787E97477 **N** =7183 **O** 4=4169



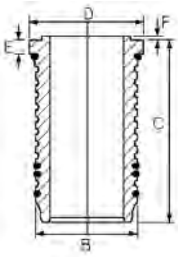
8>479>C87477 **N** =7185 **O** 4=4169 **P** ==t 3 **Q** 7t 9



88 M/hY >E9Tf 0	S	9	**9; CBvv**	**CD4DE i**	3GDa8GNG	4	**P0t x**	**f**	**u**			**f P99E; B**

XGTMK XUaKX 0517 ZJ	432<8	3: 2=7	

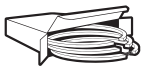
8A4BCB>97477 **N** 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153
8>4BCB>97477 **N** 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153



0mv%op° °pl %v	Ynsvkp ßJtnsß?yr py pty	0mv%ßop° uztyß?	0mv%Öp vr° °pvr°	I zx ' ´pyop vpr °l ´ytÛtzyt

>BP	e	9	**>AA; vv**	**8BA48BD i**	3NNS8NNe	4	**bx**					**f P99E; 8**

JOYI UaKXd 00719	3=2==	45235	XGTMK XUaKX 00719	3: 2=7	36235



DC4A98A77487

M	681=3
N4	81<6
N	: : 133
P	99168
	57É93

7D4A98A77477

4153		
4183		
6133		I X

Ntrs I zx ' ´p°°tzy Yfppw	Nzsp Qzx ' ´p°°tzy Yfl sw	_yp qr´fp nzx ' ´p°°tzy Gntp´	Rl I vfl nzx ' ´p°°t y Gnp´z	Gvfl nzx ' ´p°°tzyp Gnntl tz

hD e 9 **; EA7vv** **bx** **Y bBDD>**

XGTMK XUaKX 713 a< 3=2=7

DC4A98A77477

M	681=3
N4	616<
N	: : 133
P	99168
	57É93

7D4A98A77477

4153		
4183		
6133		I X

Ntrs I zx ' ´p°°tzy Yfppw	Nzsp Qzx ' ´p°°tzy Yfl sw	_yp qr´fp nzx ' ´p°°tzy Gntp´	Rl I vfl nzx ' ´p°°t y Gnp´z	Gvfl nzx ' ´p°°tzyp Gnntl tz

ENGINE INDEX

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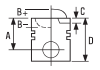
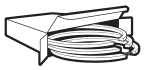
Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

		CCM	x		9
; 5AX OMdNgdQf f a d		PVNe	e	ee9ea	9
89V		NSi S	S	i D8Sc	;
QZ AA		NSi e	S	i S9DD	A
Qf C7 /kP; f 0		NSi a	S	i S9DD	B
d>9A		NSi i	S	i N9DD	>
eO9Ad8; Bc >		NSi i	S	i N9DD	>
eO9Ad8; Bc A		NSi i	S	i N9DD	>
hY ; EO		NSi i	S	i N9DD	>
hY >7O		NSi i	S	i N9DD	>
hY d>9A		NSi i	S	i N9DD	>
kP;		NSi e	S	i S9DD	C
kP; b		NSi e	S	i S9DD	C
kgPE		GiDV	S	eP9DD	8
kgPEN /bØ 0		GiDV	S	eP9DD	8

kgPE S 9 **8E7Avv** **>C4A9 i** 3aS8cG 4 **P@t x** **f P9BE7A**

kgPEN/bØ 0 S 9 **8E7Avv** **P@t x** **Y b; 98E48**

533 41=J 432=7 362=9 VRUZ 41=J 372=9 432?38

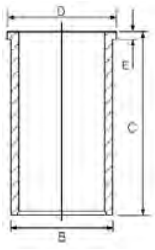
DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

M 791<3
N4 5153
P <7163
58É:5

7D48A9777477
7D48A977;477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

5183 I X V
5183 V
6183 I X V

8>4797A;7477



N <8193 **O** 486183 **P** <<183 **Q** 61=3

;5AXOMdNgdQffad e 9 **;A9Dvv** **bx** **Y b9BD;**

YNKXVG 442=8 452<=

DC4A97877477
DC4A9787C477 *Tm m*

M 7:16:
N4 8159
N :4145
P ::13=
55É:6

7D4A97877477
7D4A9787C477 *Tm m*

418< I X V
418< V
716 V

89V S 9 **9>E>vv** **P@t x** **Y b; B8748**

YNKXVG 342=7 452<=

DC4C8>>77477

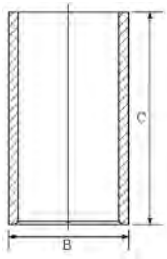
M 8793
N4 6185
P <9164
63É:8

df

7D4C8>>77477
7D4C8>>88477 *Tm m*

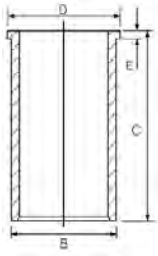
5183 I X V
5183 V
7183 I X V

8>4787E97477



N =7183 **O** 4=4169

8>479>C87477



N =7185 **O** 4=4169 **P** ==t3 **Q** 71t9

Kl´wp´'t°@zy°@z mp´p'wnpo ty Kyr typ °p@°zyw@

L´sp´p Qzwnpy y°´ty S z@z´° @Upy Ü° p°p@Upy

V´px tp´'t°@zy ´px 'wnp´ol y°wpup° x z@p°´

Vt°@zyp° x °lyBr°z°'l´l °p´ ´ppx 'woz° py u°prz op x z@z´p° °zwx py@p

I zy t't°@zyp ot@nnstl @p´°tzyp ypnp°°l´tz °z°@B°t´p B° BB wv°p´tp

d>9A	S 9	9>EEvv		P@l x	Y b89; 7; 48
eO9Ad8; Bc >	S 9	9>EEvv	877 i 3GPa 4	P@l x f u U x v xw	f P; 97C7
eO9Ad8; Bc A	S 9	9>EEvv	877 i 3GPa 4	P@l x f u U x v xw	f P; A7>9
hY ; EO	S 9	9>EEvv	C74DD i 3 V8GND 4	P@l x	f P9B87C
hY >7O	S 9	9>EEvv	C7 i 3 V 4	P@l x f u	f P9B87D
hY d>9A	S 9	9>EEvv	C74EE i 3 V8GPV 4	P@l x f u U x v xw	f P; A7>;

S Gc_Y 518 J	35238 4523=	a<3 518 J	35246
S Gc_Y 518J	35238		

DC4>9E977477

7D4>9E977477

M	8813 3
N4	4<13 3
N	7713 3
P	<613 3
	65É9<

MWWWdf fb

5183		MJI V
4183		V
5133		TZ

GDC

QZ AA S 9 9>EDvv A; 4AB i 3cN8ca 4 P@l x f P99E9C

733 518 J	372<= 432=9	I UTaUd 518 JO	432=< 3723=
I UTaUd 518 J	372=9 35235		

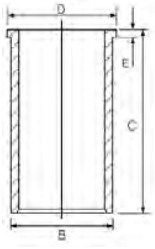
DC4; 8DC77477
DC4; 8DC7B477 *mT m*
DC4; 8DC7D477 *mT m*
DC4; 8DC88477 *Tmm*

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

8>4797BB7477 **N** = 133 **O** 4: 3193 **P** =183 **Q** 7133
8>4798A97477 **N** =<133 **O** 4: 3193 **P** 433133 **Q** 9133

M	8: 175
N4	5133
P	=1=3
	63É: =

5133		I X V
5133		V
7133		I X V

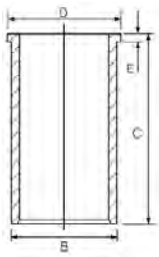


Vt°@zy° @z mp´p' wnpo ty Kyr typ Ypß? zyw@ Qzwupy y°´ ty S z@z´° @Ûpy Ü° p´°p@Ûpy Vt°@zy ´px ' wnp´ ol y° up° x z@p°´ Vt°@zyp° op´p' °p°@z ' l ´l up°r z° op x z@z´p° °zwx py@p 0Vt°@zyp ' ° p°°p´p ´tx ' tl ÜÜl @z °zwx py@p nzx ' w@z

Qf C7 /kP; f 0 S 9 9>EBvv C84C> i 3 a8GDG 4 P@l x f u U x v xw f P99E9D

733 518 J	372<= 362=9	I UTaUd 518 J	372=9 3923 9
733 518 ZJ	442=8 432=<	I UTaUd 518 ZJ O	432=< 3723=

8>4797BB7477 **N** = 133 **O** 4: 3193 **P** =183 **Q** 7133
8>4798A97477 **N** =<133 **O** 4: 3193 **P** 433133 **Q** 9133



kP; S 9 9>EDvv P@l x Y b9; 7; 49

kP; b	S 9	9>EDvv	P Øl x	Y b9; 7; 48

I UTaUd

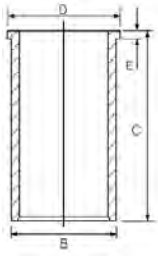
DC4; 8DC77487
DC4; 8DC7B487 *mT m*
452=6

M 87133
N4 41<3
P =9175
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

8>4797BB7477 **N =: 133 O 4: 3193 P ==183 Q 7133**
8>4798A97477 **N =<133 O 4: 3193 P 433133 Q 9133**



DC4; 8DC774; 7
DC4; 8DC874; 7 *mT m*
342=7

M 87133
N4 41: 8
P =4175
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

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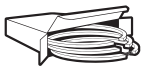
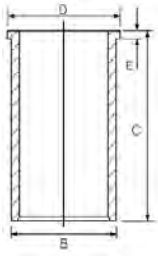
		CCM	x		9
>6EDPf		PccD	S	ie9DD	9
>6EDZf		PccD	S	ie9DD	;
>6EDZh		PccG	S	ie9DD	;
>6EDff		PccD	S	ie9DD	9
>6EDfh		PccD	S	ie9DD	9
>5989		PScD	S	ie9Se	>
B6EDPf		VaVD	a	ie9DD	;
B6EDPh		VaVV	a	ie9DD	;
B6EDQ		VaVD	a	ie9DD	9
B6EDZf		VaVD	a	ie9DD	;
B6EDZh		VaVV	a	ie9DD	;
B6EDfh		VaVD	a	ie9DD	9
99gM		NGce	S	eN9VV	8
ACV		VaVV	a	GDD9DD	B
ACVO		VaVV	a	GDD9DD	B
AChP		VaVV	a	GDD9DD	B
B5jA>59		VeDD	a	ie9Se	>
B5jA>5>		VeDD	a	ie9Se	A
Wf 8E8		GGaNc	a	GPD9DD	C
aQV		VaVV	a	GDD9DD	B
ie99AMfU		GGaPD	a	GPD9DD	D
ie9AEMfU		GGaPD	a	GPD9DD	D
ie9D9MfU		GGaPD	a	GPD9DD	D



99 gM	S 9	**98CDvv**	**P@t x**	**Y b87848**

OTJ_YZXOGR/ZX_IQ) H_Y

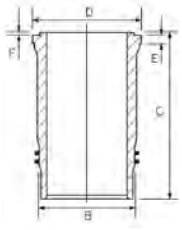
8>47988; 7477 **N** <918= **O** 4=619< **P** <=194 **Q** 7t 3



>6EDPf	S 9	**;CC7vv**	**P@t x f u**	**Y b;CA8**
>6EDff	S 9	**;CC7vv**	**P@t x f u**	**Y bBD7>**
>6EDfh	S 9	**;CC7vv**	**P@t x f u**	**Y b;CA7**
B6EDQ	a 9	**ABA7vv**	**P@t x**	**Y b9CE>**
B6EDfh	a 9	**ABA7vv**	**P@t x f u**	**Y b;C>D**

GMXO_RZ_XGR OTJ_YZXOGR/ZX_IQ) H_Y

8A4>A7DC7477 **N** 43<14< **O** 54<169 **P** 44:13= **Q** <1<= **R** 31<<



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>6EDZf	S 9	**;CC7vv**	**P@t x f u**	**Y bBD7;**
>6EDZh	S 9	**;CC8vv**	**>B4AA i** 3aP8cV 4 **P@t x**	**f PCA8;**
B6EDPf	a 9	**ABA7vv**	**P@t x**	**Y bBD7B**
B6EDPh	a 9	**ABAAvv**	**C84D> i** 3c8GGS 4 **P@t x**	**f PC>DD**
B6EDZf	a 9	**ABA7vv**	**P@t x**	**Y bBD7B48**
B6EDZh	a 9	**ABAAvv**	**C84DB i** 3c8GGc 4 **P@t x**	**f PC>E7**

GMXO_RZ_XGR

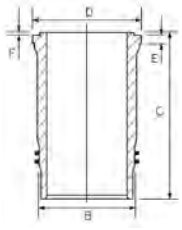
DC4A9A; 77477

M	9<154
N4	58133
N	89133
O	5173
O	3134
P	449164
	68É<6

7D4A9A; 77477

516<		I X V
516<		V
516<		V
9168		V
7t 9		V

8A4>A7DC7477 **N** 43<14< **O** 54<169 **P** 44:13= **Q** <1<= **R** 31<<

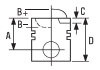


DE4A9A; 77477
< 0858633033 .
480783< 3033

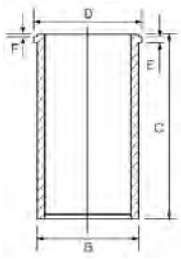
Qmvßop° °pl w Ynswp ßJtnsß°yr py pty Qmvßop° uztyß° Qmvß Öp w° °pw° I zx ' ´pyop wp r°l ´ytÜzyt

>5989	S 9	**;>C7vv**	**P@t x**	**Y b8;AE**
B5;A>59	a 9	**AD77vv**	**P@t x**	**Y b8;B>**

OTJ_YZXOGR/ZX_IQ) H_Y



		8>47>7977477	N 43614= O 55: 15 P 439178 Q 61<9 R 31<<	
		8>47>AD97477	N 43616 O 55: 15 P 439175 Q 61<3 R 31=3	
		8>47>AD98477	N 4361<6 O 55: 15 P 439175 Q 61<3 R 31=3	



V´pºº qßnl°ßt´zy wyp´ßz´p'wnpz´trtyl w °ßpvwtyp´	Gy''pººm´pRl°qm°nsºpl°º Mº°ºptºpy l w K°l ßUop´z´trtyl wYß swn nsºp	l spx tºpqzyßp px x l ynsp´ l w''´pººp 'z°´´px 'wnp´wnsp x tºp oòz´trtyp py l ntp´	Gü°ßp l ''´pºt y wv nl x tºl op stp´´z q°yotoz ''l´l´´ppx 'wÜp´wnl x tºl z´trtyl w op l np´z	l l yyl ty r stºl ''p´°z°ßß°t´p nl yyp z´trtyl wtty l nntl tz

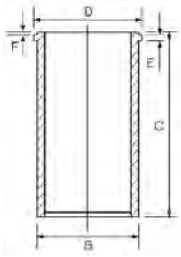
B5j A>5>	a 9	AD77vv	P@t x	Y b8; BC

CTJ_YZX©GR/ZX_I Q) H_Y

DC4A9A977477	7D4A9A977477	8>47>7977477	N 43614= O 55: 15 P 439178 Q 61<9 R 31<<	
		8>47>AD97477	N 43616 O 55: 15 P 439175 Q 61<3 R 31=3	
		8>47>AD98477	N 4361<6 O 55: 15 P 439175 Q 61<3 R 31=3	

M 9=1=4
N4 58194
N 861=3
P 4531t 4
68É<7

516< I X V
516< V
516< V
9168 V
9168 V

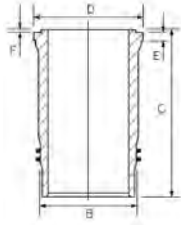


V´pØz''po 'tºßzy Ästns x l Ö´p¿°t´p x l nstytyr	az´rpºnswkqpyp´ Qzwnpy/op´ x rwnsp´Äptºp rpx opy Kx 'qpswÿyr py opº Np°ºfpwp°º mpl´mptfpßÄp´opy x °°°	Vtºßzy ßpßp°px tpqytp 'z°®lyß y npººtßb´°y °°tyl r p 'z°l°É ´pnzx x l yol ßzyº o° nzyº ß°nßp°´1	Vtºß y nz´zyl oz ¿°p''°pop ypnpºtß´ qjpºl oz ''l´l l ú°ß´°p l opwq mítnl yßp1	ØVtºßzyp l ßpºß´tml°°l ß ''°zò´tnstpop´p °yl w®´l Ùzyp l ol ßß´wrl wp ''´pº n´tÙzyt opwnz°ß°ßßz´p1q´p´tqp´tx pyßl wp tºß°Ùzyt nzyßpy°ßp ypwwr nzyqpÙzyp1
Lz´l l °ßÓzy Hz´pº zyw	T°´q´´Mº ptºpymzs´°yr py	Vz°´tyß´tp°´ ntwÿyo´p°p°wpx pyß	Vl´l ot x pßz tyßp´yz° op stp´´z qºyotoz °zwx pyßp	Yzwr''p´ntwyo´t ty r stºl
Xpnzx x pyopo x l Étx °x z®p°tÙptº 1373ty241349x x	Kx 'qzswpyp° mp´x l x l É 1373ty241349x x	l zßp x l Ét´pnzx x l yo p op 1373ty241349x x	Rl °zmípx potol x Étx l ´pnzx pyol ol pº op 1373ty241349x x	S l r r tz´l Ùzyp x l °°tx l ´l nnzx l yol ß 1373ty241349x x
V´pºº qßnl°ßt´zy wyp´ßz´p'wnpz´trtyl w °ßpvwtyp´	Gy''pººm´pRl°qm°nsºpl°º Mº°ºptºpy l w K°l ßUop´z´trtyl wYß swn nsºp	l spx tºpqzyßp px x l ynsp´ l w''´pººp 'z°´´px 'wnp´wnsp x tºp oòz´trtyp py l ntp´	Gü°ßp l ''´pºt y wv nl x tºl op stp´´z q°yotoz ''l´l´´ppx 'wÜp´wnl x tºl z´trtyl w op l np´z	l l yyl ty r stºl ''p´°z°ßß°t´p nl yyp z´trtyl wtty l nntl tz

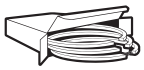
ACV	a 9	ABAAvv	P@t x	Y b8789
ACVO	a 9	ABAAvv	P@t x	Y b878948
AChP	a 9	ABAAvv	P@t x	Y b878949
a QV	a 9	ABAAvv	P@t x	Y b88B

CTJ_YZX©GR/ZX_I Q) H_Y

		8A4>A7DC7477	N 43<14< O 54<169 P 44: 13= Q <1<= R 31<<	



Ømvßop° °pl w	Ynswp ßJtnsß°yr py pty	Ømvßop° uztyß°	ØmvÖpwº °pwº	l zx ''´pyop wpr°l´ytÙzyt



Wf 8E8	a	9	**88B9Ovv**	**9AB i**	3PSe	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**Y bA9CD48**

OTJ_YZXCGR/ZX_IQ) H_Y

DC48C>877477
342<=

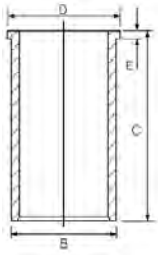
M 434133
N4 5=163
N :7183
O 6133
P 49=183
7<É444

MWTMdf

7D48C>877487

6149 I X V
6149 I X V
9166 I X V

8>4798>87477

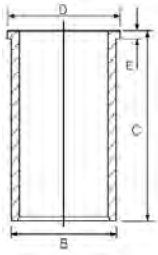


N 469135 **O** 5<<163 **P** 476193 **Q** 43138

i e 99A Mf U	a	9	**88B;7vv**	**99A i**	3PDa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PCA;;**
i e 9AE Mf U	a	9	**88B;7vv**	**9AE i**	3PVN	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PCA;>**
i e 9D9 Mf U	a	9	**88B;7vv**	**9D9 i**	3PeP	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PCA;A**

OTJ_YZXCGR/ZX_IQ) H_Y

8>4798>87477



N 469135 **O** 5<<163 **P** 476193 **Q** 43138

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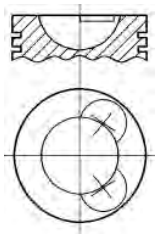
		CCM	x		9
bT8		aVi	G	ec9PN	**8**
bT8i		aVi	G	ec9PN	**8**
bT9		GPGe	N	ec9PN	**8**
bT9i		GPGe	N	ec9PN	**8**
ef 8		aPD	G	i V9NV	**9**
ef 9		GNcD	N	i V9NV	**9**
ef ;		Gi DD	P	i V9NV	**9**
f e8		aPV	G	i V9NV	**9**
f e9		GNcD	N	i V9NV	**9**
f e;		Gi DD	P	i V9NV	**9**

bT8	G 9	**BAEvv**	**P x**	**Y b9A8B**
bT8i	G 9	**BAEvv**	**P x**	**Y b; DAA**
bT9	N 9	**8; 8Dvv**	**P x**	**Y b; DAB**
bT9i	N 9	**8; 8Dvv**	**P x**	**Y b; DAC**

OTJ_YZXGR

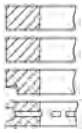
DC4A9A77477
DC4A9A77C477 *Tm m*
DC4A9A78847 7 *Tm m*
DC4A9A78>477 *Tm m*

M 9613
N4 5813
O 3194
O 3194
P 4381
63É: 8



7D4A9A77477
7D4A9A77C477 *Tm m*
7D4A9A78847 7 *Tm m*
7D4A9A78>477 *Tm m*

516<
516<
516<
719 V



ef8	G 9	**B; 7vv**	**P x**	**Y bEBA**
ef9	N 9	**89C7vv**	**P x**	**Y bA; 9;**
ef;	P 9	**8E77vv**	**P x**	**Y bA; 9>**
fe8	G 9	**B; Avv**	**P x**	**Y b; ; ED**
fe9	N 9	**89C7vv**	**P x**	**Y bA; 9A**
fe;	P 9	**8E77vv**	**P x**	**Y bA; 9B**

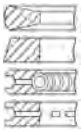
OTJ_YZXGR

DC4A9; D77477
DC4A9; D7C477 *Tm m*
DC4A9; D88477 *Tm m*

M 9813
N4 4914 7
N 771 9
P 4361 4
66É: =

7D4A9; D77477
7D4A9; D7C477 *Tm m*
7D4A9; D88477 *Tm m*

614<
516=
718 I X
719



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N 9<153
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P 78198
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f b

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5133 I X

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O 4133
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f b

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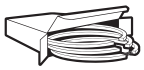
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz



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Zc 5t8 ZJ		342:9				

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P	<613:3
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MWWWdf f b

7D4>9E977477

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4t3:3		V
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GDC

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Zc 5t1 ZJ		342=:				

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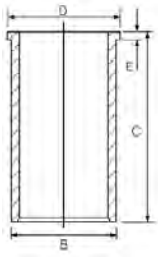

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P 7D9> XRX7B /Q	90	SVeD	S	GDe9DD	>
P 7D9> XRX7C /Q	90	SVeD	S	GDe9DD	>
P 7D9> XRX7D /Q	90	SVeD	S	GDe9DD	>
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P 7D9B RS779		aecG	a	GDe9DD	;
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P 7D9B XR7B		aecG	a	GDe9DD	;
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P 7D9B XgT89 /Q	80	aecD	a	GDe9DD	;
P 7D9B XgT8; /Q	90	aecG	a	GDe9DD	>
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P 7D; >XRXB; /Q	A0	SVeD	S	GDe9DD	D
P 7D; >XRXB> /Q	A0	SVeD	S	GDe9DD	D
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P 7D; BXRX79 /Q	;0	aecG	a	GDe9DD	A
P 7D; BXRX7; /Q	;0	aecG	a	GDe9DD	A
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P 7D; BXRX7A /Q	;0	aecG	a	GDe9DD	A
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P 7D; B Xa T B;		aecG	a	GDe9DD	C
P 7D; B Xa T B> /Q	A0	aecG	a	GDe9DD	D
P 7D; B Xa T BA /Q	A0	aecG	a	GDe9DD	D
P 7D; B Xa T BB /Q	B0	aecG	a	GDe9DD	D
P 7D; B Xa T BC /Q	B0	aecG	a	GDe9DD	D
P 7D; B Xa T C7		aecG	a	GDe9DD	D
P 7D; B Xa T C8		aecG	a	GDe9DD	D
P 7D; B Xa T C9 /Q	B0	aecG	a	GDe9DD	D
P 7D; B Xa T C; /Q	B0	aecG	a	GDe9DD	D
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P 7D>B T Y E8T		cNVN	a	GDe9DD	88
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P 7D>B T Y Z		cNVN	a	GDe9DD	88
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P 7D>BTY l 4788		cNVD	a	GDe9DD	88
P 7D>BTY l T		cNVN	a	GDe9DD	88
P 7D>BTY l Z478>		cNVN	a	GDe9DD	88
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P 97BB XR /Q	; 0	GDVGe	a	GND9DD	8>
P 97BB XR78 /Q	; 0	GDVGe	a	GND9DD	8A
P 97BB XR79 /Q	; 0	GDVGe	a	GND9DD	8A
P 97BB XR7; /Q	; 0	GDVGe	a	GND9DD	8A
P 97BB XR7> /Q	; 0	GDVGe	a	GND9DD	8>
P 97BB XR7B /Q	; 0	GDVGe	a	GND9DD	8A
P 97BB XR7C /Q	; 0	GDVGe	a	GND9DD	8>
P 97BB XR88 /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR89 /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR8; /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR8> /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR8C /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR8D /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR8E /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR97 /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR98 /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR99 /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR9; /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR9> /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR9A /Q	A0	GDVGe	a	GND9DD	8C
P 97BB XR9B /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR9C /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR9D /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR9E /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR; 7 /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR; 8 /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR; 9 /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR; ; /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR; A /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR; B /Q	>0	GDVGe	a	GND9DD	8A
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P 97BB XR; D /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR; E /Q	>0	GDVGe	a	GND9DD	8A
P 97BB XR>7 /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR>8 /Q	A0	GDVGe	a	GND9DD	8B
P 97BB XR>9 /Q	A0	GDVGe	a	GND9DD	8B
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P 97BB XR>C /Q	A0	GDVGe	a	GND9DD	8B
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P 97BB XRA7 /Q	; 0	GDVGe	a	GND9DD	8>
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P 97BB XRBC /Q	B0		GDVGe	a	GND9DD	8E
P 97BB XRBE /Q	>0		GDVGe	a	GND9DD	8A
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P 97BB XgT>;			GDVGe	a	GND9DD	97
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P 98ABTZI		GDPSS	a	GNGBDD	98
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P 98ABYZI		GDPSS	a	GNGBDD	98
P 98ABYfZ8		GDPSS	a	GNGBDD	98
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P 9A;7YfkR		GVi VP	GD	GNV9DD	9A
P 9A;7YfkR6;B7		GVi DD	GD	GNV9DD	9A
P 9A;7YkR		GVi SV	GD	GNV9DD	9A
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P 9A;DYQ		GNcaP	e	GNV9DD	9A
P 9A;DYR		GNcaP	e	GNV9DD	9A
P 9A;DYf		GNcaP	e	GNV9DD	9A
P 9A;DYfQ		GNcaP	e	GNV9DD	9A
P 9A>7Yf		GcSNa	GD	GNV9DD	9A
P 9A>7YfR		GcSNa	GD	GNV9DD	9A
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P 9AABY		GGDSV	a	GNV9DD	99
P 9AABYk		GGDSV	a	GNV9DD	99
P 9AABYkR		GGDSV	a	GNV9DD	99
P 9AABYkgT68CA		GGDSV	a	GNV9DD	99
P 9AABYkgT68E9		GGDSV	a	GNV9DD	99
P 9AABYkgT69>7		GGDSV	a	GNV9DD	99
P 9AABYkgY		GGDSV	a	GNV9DD	99
P 9ABATY		i VGD	V	GNV9DD	9;
P 9ABAY		i VGD	V	GNV9DD	9;
P 9ABAYQ		i VGD	V	GNV9DD	9;
P 9ABAYR		i VGD	V	GNV9DD	9;
P 9ABAYRd		i VGD	V	GNV9DD	9;
P 9ABAYW		i VGD	V	GNV9DD	9>
P 9ABAYWgX		i VGD	V	GNV9DD	9>
P 9ABAYd		i VGD	V	GNV9DD	99
P 9ABAYf		i VGD	V	GNV9DD	9>
P 9ABAYgQ		i VGD	V	GNV9DD	99
P 9ABAYgT		i VGD	V	GNV9DD	9;
P 9ABAYgX		i VGD	V	GNV9DD	9;
P 9ABBY		GGSGP	a	GNV9DD	9;
P 9ABBYQ		GGSGP	a	GNV9DD	9;
P 9ABBYR		GGSGP	a	GNV9DD	9;
P 9ABBYT		GGSGP	a	GNV9DD	9;
P 9ABBYW		GGSGP	a	GNV9DD	9>
P 9ABBYWR		GGSGP	a	GNV9DD	9>
P 9ABBYWgT6;97		GGSGP	a	GNV9DD	9>
P 9ABBYWgX		GGSGP	a	GNV9DD	9>
P 9ABBYXgT		GGSGP	a	GNV9DD	9>

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P 9ABB Y f Q		GGSGP	a	GNV9DD	9>
P 9ABB Y f R		GGSGP	a	GNV9DD	9>
P 9ABB Y f T		GGSGP	a	GNV9DD	9>
P 9ABB Y f Ta		GGSGP	a	GNV9DD	9>
P 9ABB Y f gT		GGSGP	a	GNV9DD	9>
P 9ABB Y g Q		GGSGP	a	GNV9DD	9;
P 9ABB Y g T		GGSGP	a	GNV9DD	9;
P 9ABB Y g X		GGSGP	a	GNV9DD	9;
P 9ABB Y g Y		GGSGP	a	GNV9DD	9;
P 9ABB Y k R		GGSGP	a	GNV9DD	9;
P 9ABB g T		GGSGP	a	GNV9DD	99
P 9BCB XR78 /Q	>0	GNSGI	a	GNa9DD	9B
P 9BCB XR79 /Q	; 0	GNSGI	a	GNa9DD	9B
P 9BCB XR7; /Q	90	GNSGI	a	GNa9DD	9B
P 9BCB XR7> /Q	90	GNSGI	a	GNa9DD	9B
P 9BCB XR7A /Q	>0	GNSGI	a	GNa9DD	9B
P 9BCB XR7B /Q	A0	GNSGI	a	GNa9DD	9C
P 9BCB XR7C /Q	A0	GNSGI	a	GNa9DD	9B
P 9BCB XR7D /Q	A0	GNSGI	a	GNa9DD	9C
P 9BCB XR87 /Q	>0	GNSGI	a	GNa9DD	9B
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P 9BCB XR89 /Q	>0	GNSGI	a	GNa9DD	9B
P 9BCB XR8; /Q	A0	GNSGI	a	GNa9DD	9C
P 9BCB XR8> /Q	A0	GNSGI	a	GNa9DD	9B
P 9BCB XR8A /Q	A0	GNSGI	a	GNa9DD	9C
P 9BCB XR8B /Q	A0	GNSGI	a	GNa9DD	9B
P 9BCB XR8C		GNSGI	a	GNa9DD	9C
P 9BCB XR8D		GNSGI	a	GNa9DD	9B
P 9BCB XR8E /Q	>0	GNSGI	a	GNa9DD	9C
P 9BCB XR97 /Q	>0	GNSGI	a	GNa9DD	9B
P 9BCB XR98 /Q	A0	GNSGI	a	GNa9DD	9B
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P 9BCB XR9A /Q	B0	GNSGI	a	GNa9DD	9B
P 9BCB XR9B /Q	B0	GNSGI	a	GNa9DD	9B
P 9BCB XR9D /Q	A0	GNSGI	a	GNa9DD	9B
P 9BCB XR; 8 /Q	; 0	GNSGI	a	GNa9DD	9B
P 9BCB XR; 9 /Q	>0	GNSGI	a	GNa9DD	9B
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P 9BCB XR; A /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB XR; B /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB XR>A /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB XR>B /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB XR>C /Q	B0	GNSGI	a	GNa9DD	9D
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P 9BCB XRAA /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB XRAB /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB XRAC /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB XRAD /Q	B0	GNSGI	a	GNa9DD	9D
P 9BCB Xa T78 /Q	>0	GNSGI	a	GNa9DD	9E
P 9BCB Xa T79 /Q	>0	GNSGI	a	GNa9DD	9E
P 9BCB Xa T7; /Q	>0	GNSGI	a	GNa9DD	9E
P 9BCB Xa T7> /Q	>0	GNSGI	a	GNa9DD	9E
P 9BCB Xa T87 /Q	; 0	GNSGI	a	GNa9DD	9E
P 9BCB Xa T9B /Q	A0	GNSGI	a	GNa9DD	9E
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P 9BCB Xa T ; 8 /Q	B0	GNSGi	a	GNa9DD	9D
P 9D>7 XQ		GeNcP	GD	GNe9DD	>8
P 9D>7 XQ>7;		GeNcP	GD	GNe9DD	>8
P 9D>7 XQ>9;		GeNcP	GD	GNe9DD	>8
P 9D>7 XR78		GeNcP	GD	GNe9DD	>8
P 9D>7 XR7> /Q	80	GeNcP	GD	GNe9DD	>8
P 9D>7 XR7B /Q	80	GeNcP	GD	GNe9DD	>8
P 9D>7 XR97 /Q	90	GeNcP	GD	GNe9DD	>8
P 9D>7 XR98 /Q	90	GeNcP	GD	GNe9DD	>8
P 9D>7 XR9A /Q	; 0	GeNcP	GD	GNe9DD	>8
P 9D>7 XR6>B7		GeNcP	GD	GNe9DD	>8
P 9D>7 Xk Q		GeNcP	GD	GNe9DD	>8
P 9D>7 Xk R		GeNcP	GD	GNe9DD	>8
P 9D>7 Xl Q		GeNcP	GD	GNe9DD	>8
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P 9D>7 Y R		GeNcP	GD	GNe9DD	>8
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P 9D>7 Y T		GeNcP	GD	GNe9DD	>8
P 9D>7 f X		GeNcP	GD	GNe9DD	>8
P 9D>9 XQ979		NGi Nc	GN	GNe9DD	>9
P 9D>9 XQ988		NGi Nc	GN	GNe9DD	>8
P 9D>9 XQ>79		NGi Nc	GN	GNe9DD	>8
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P 9D>9 XQ>7D		NGi Nc	GN	GNe9DD	>8
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P 9D>9 XQ>9;		NGi Nc	GN	GNe9DD	>8
P 9D>9 XQ>; ;		NGi Nc	GN	GNe9DD	>8
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P 9D>9 XR87 /Q	; 0	NGi Nc	GN	GNe9DD	>8
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P 9D>9 Y R		NGi Nc	GN	GNe9DD	>8
P 9D>D XQ		GSaGe	e	GNe9DD	>8
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P 9D>D Xl Q		GSaGe	e	GNe9DD	>8
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P 9DBA XRd		i i cP	V	GNe9DD	;8
P 9DBA XRd78		i i cP	V	GNe9DD	;8
P 9DBA Xa T78 /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xa T79 /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xa T7A /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xa T7C /Q	90	i i cP	V	GNe9DD	;>
P 9DBA Xa T7E /Q	90	i i cP	V	GNe9DD	;>
P 9DBA Xg 78 /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xg 79		i i cP	V	GNe9DD	;9
P 9DBA Xg 7;		i i cP	V	GNe9DD	;9
P 9DBA Xg 7> /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xg 7B /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xg T79 /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xg T7; /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xg T7A /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xg T7B /Q	80	i i cP	V	GNe9DD	;9
P 9DBA Xg T7C /Q	90	i i cP	V	GNe9DD	;;
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P 9DBA Xg T7E /Q	90	i i cP	V	GNe9DD	;;
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P 9DBA Xk Rd		i i cP	V	GNe9DD	;9
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P 9DBB RS		GGi ac	a	GNe9DD	;>
P 9DBB Rd		GGi ac	a	GNe9DD	;>
P 9DBB WR		GGi ac	a	GNe9DD	;8
P 9DBB WRm		GGi ac	a	GNe9DD	;8
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P 9DBB Wg X		GGi ac	a	GNe9DD	;8
P 9DBB XR		GGi ac	a	GNe9DD	;8
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P 9DBB XR79		GGi ac	a	GNe9DD	;9
P 9DBB XR7;		GGi ac	a	GNe9DD	;9
P 9DBB XR7>		GGi ac	a	GNe9DD	;8
P 9DBB XR7A /Q	80	GGi ac	a	GNe9DD	;A
P 9DBB XR7B		GGi ac	a	GNe9DD	;9
P 9DBB XR7C		GGi ac	a	GNe9DD	;8
P 9DBB XR7D		GGi ac	a	GNe9DD	;8
P 9DBB XR7E /Q	80	GGi ac	a	GNe9DD	;9
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P 9DBB XR9A /Q	;0	GGi ac	a	GNe9DD	;B
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P 9DBB XR; 9 /Q	90	GGi ac	a	GNe9DD	;C
P 9DBB XR; > /Q	90	GGi ac	a	GNe9DD	;;

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			CCM	x		9
P 9DBB XR; A /Q	90		GGi ac	a	GNe9DD	; ;
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P 9DBB XR>8 /Q	90		GGi ac	a	GNe9DD	; C
P 9DBB XR>9 /Q	90		GGi ac	a	GNe9DD	; C
P 9DBB XR>; /Q	90		GGi ac	a	GNe9DD	; C
P 9DBB XR69E7			GGi ac	a	GNe9DD	; 8
P 9DBB XRS			GGi ac	a	GNe9DD	; 9
P 9DBB XRS 7; /Q	80		GGi ac	a	GNe9DD	; 9
P 9DBB XRS 7> /Q	80		GGi ac	a	GNe9DD	; 9
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P 9DBB XRm69E7			GGi ac	a	GNe9DD	; 8
P 9DBB XRm6; ; 7			GGi ac	a	GNe9DD	; 8
P 9DBB XT 78			GGi ac	a	GNe9DD	; 8
P 9DBB Xa T			GGi ac	a	GNe9DD	; 9
P 9DBB Xa T 79			GGi ac	a	GNe9DD	; 9
P 9DBB Xa T 7;			GGi ac	a	GNe9DD	; 9
P 9DBB Xa T 7B /Q	80		GGi ac	a	GNe9DD	; 9
P 9DBB Xa T 7C			GGi ac	a	GNe9DD	; 9
P 9DBB Xa T 7E /Q	80		GGi ac	a	GNe9DD	; 9
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P 9DBB Xa T; > /Q	; 0		GGi ac	a	GNe9DD	; B
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P 9DBB Xg 78			GGi ac	a	GNe9DD	; 9
P 9DBB Xg 7; /Q	80		GGi ac	a	GNe9DD	; 9
P 9DBB Xg 7>			GGi ac	a	GNe9DD	; 9
P 9DBB Xg 7C			GGi ac	a	GNe9DD	; 8
P 9DBB Xg 7D			GGi ac	a	GNe9DD	; 8
P 9DBB Xg; ; 7			GGi ac	a	GNe9DD	; 8
P 9DBB Xg T			GGi ac	a	GNe9DD	; 8
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P 9DBB Xg T 98 /Q	90		GGi ac	a	GNe9DD	; ;
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P 9DBB Xg T 9E /Q	; 0		GGi ac	a	GNe9DD	; B
P 9DBB Xg T; 7 /Q	; 0		GGi ac	a	GNe9DD	; B
P 9DBB Xg TA8 /Q	; 0		GGi ac	a	GNe9DD	; B
P 9DBB Xg T; ; 7			GGi ac	a	GNe9DD	; 8

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P 9DBB Xk RS			GGi ac	a	GNe9DD	; 9
P 9DBB Xk a T			GGi ac	a	GNe9DD	; 9
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P 9DCB XR7A /Q	; 0		GNeGa	a	GNe9DD	; >
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Q 7D9B Q; 78 /Q7D9B0		C	aecG	a	GDe9DD	89
Q 7D; > Q; 79		C	SVeD	S	GDe9DD	89
Q 7D; > Q; 89		C	SVeD	S	GDe9DD	89
Q 7D; > XQ; 79		C	SVeD	S	GDe9DD	8;
Q 7D; B Q; 79		C	aecG	a	GDe9DD	89
Q 7D; B Q; 89		C	aecG	a	GDe9DD	89
Q 7D; B XQ979		C	aecG	a	GDe9DD	8;
Q 7D; B XQ; 79		C	aecG	a	GDe9DD	8;
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Q 9DCB Xg T 7;		C	GNeGa	a	GNe9DD	>;

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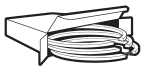

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P 7D9BRd	a	9	BDC8vv	887 i	3GVD	4	P@i x		f P9AD>D
P 7D9BRd78	a	9	BDC8vv	887 i	3GVD	4	P@i x		f P9AD>E
P 7D9BSR	a	9	BDC8vv	887488> i	3GVD8GVV	4	P@i x	f u	f PCB>C
P 7D9BSR7> /Q 80	a	9	BDC8vv	887488> i	3GVD8GVV	4	P@i x		f P8E>>7
P 7D9BSRM	a	9	BDC8vv	88> i	3GVV	4	P@i x		f P9; 8; E
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P 7D9BaT78	a	9	BDC8vv	88> i	3GVV	4	P@i x		f P9; 8AC
P 7D9BaT79	a	9	BDC8vv	887488> i	3GVD8GVV	4	P@i x		f PCAEE
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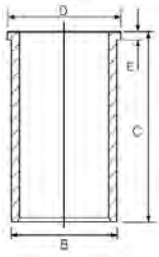

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P 7D9> XR7> /Q 80	S	9	>AD7vv	88D i	3GaD	4	P@i x	f u U x v xw	f P989CE
P 7D9> XR7A /Q 80	S	9	>AD7vv	88D i	3GaD	4	P@i x	f u U x v xw	f P989D7
P 7D9> XR7B /Q 80	S	9	>AD7vv	88D i	3GaD	4	P@i x	f u U x v xw	f P989D8
P 7D9> XR7C /Q 80	S	9	>AD7vv	88D i	3GaD	4	P@i x	f u U x v xw	f P989D9
P 7D9> XR7D /Q 80	S	9	>AD7vv	88D i	3GaD	4	P@i x	f u U x v xw	f P989D;
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P 7D9> XRX7A /Q 80	S	9	>AD7vv	88> i	3GVV	4	P@i x	f u U x v xw	f PCBAE
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P 7D9> XaT78 /Q 80	S	9	>AD7vv	88> i	3GVV	4	P@i x	f u U x v xw	f PCAED
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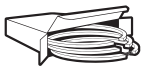

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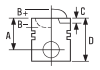

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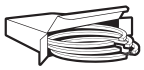

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P 7D; > XRX>8 /Q	; 0	S	9	>AD7vv	8; 9 i	3GeD	4	P@t x	f	u	U	x	v	xw	f P8D8D7
P 7D; > XRX>9 /Q	; 0	S	9	>AD7vv	8A8 i	3NDa	4	P@t x	f	u	U	x	v	xw	f P8D8D8
P 7D; B XR>8 /Q	; 0	a	9	BDC8vv	97B i	3NeD	4	P@t x	f	u	U	x	v	xw	f P8BD9C
P 7D; B XR>> /Q	; 0	a	9	BDC8vv	9>7 i	3PNa	4	P@t x	f	u	U	x	v	xw	f P8BD9D
P 7D; B XRX>7 /Q	; 0	a	9	BDC8vv	8CB i	3NSD	4	P@t x	f	u	U	x	v	xw	f P8D8DA
P 7D; B XRX>8 /Q	; 0	a	9	BDC8vv	97B i	3NeD	4	P@t x	f	u	U	x	v	xw	f P8DC7;
P 7D; B XRX>> /Q	; 0	a	9	BDC8vv	9>7 i	3PNa	4	P@t x	f	u	U	x	v	xw	f P8DC7>
P 7D; B XaT>7 /Q	; 0	a	9	BDC8vv	97B i	3NeD	4	P@t x	f	u	U	x	v	xw	f P8BCA>
P 7D; B XaT>8 /Q	; 0	a	9	BDC8vv	8CB i	3NPi	4	P@t x	f	u	U	x	v	xw	f P8BCAA

NUI R	3<235 45247	ZMG	36234
RQUT Y I QZd	38237	ZMR 0	34237 36255
TR	38233	ZMS 0	38238 36255
YR@@	36233 45237		

DC48; BA774; 7

M 961=3
N4 4: 16=
N 98173
O 41t 3
P 436133
75É<9

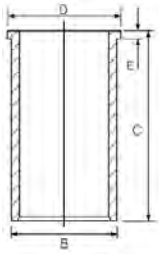
-43<6<L43=;

df f b

7D48; BA774; 7
7D48; BA7C4; 7 *mT m*

6133 I Q V
5183 V
6133 I X V

8>479CBD7477 **N** 444183 **O** 54: 183 **P** 4481<8 **Q** 7183
8>479CBD8477 **N** 445133 **O** 54: 183 **P** 4481<8 **Q** 7183



DC48; BA774B7

M 961=3
N4 4: 16=
N 98173
O 41t 3
P 436133
75É<9

-43<76H434,

WWdf f b

7D48; BA774; 7
7D48; BA7C4; 7 *mT m*

6133 I Q V
5183 V
6133 I X V

DC48; BA774C7

M 961t 3
N4 4: 16=
N 98173
O 41t 3
P 4351<3
75É<9

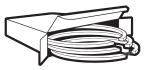
-43<76H434,

WWdf f b

7D48; BA774; 7
7D48; BA7C4; 7 *mT m*

6133 I Q V
5183 V
6133 I X V

P 7D; > XRXA7 /Q	>0	S	9	>AD7vv	887 i	3GVD	4	P@t x	f	u	U	x	v	xw	f P8D8D9
P 7D; > XRXA8 /Q	>0	S	9	>AD7vv	8; 9 i	3GeD	4	P@t x	f	u	U	x	v	xw	f P8D8D;
P 7D; > XRXA9 /Q	>0	S	9	>AD7vv	8A8 i	3NDa	4	P@t x	f	u	U	x	v	xw	f P8D8D>
P 7D; > XRXA; /Q	>0	S	9	>AD7vv	887 i	3GVD	4	P@t x	f	u	U	x	v	xw	f P99EAC
P 7D; > XRXA> /Q	>0	S	9	>AD7vv	8; 9 i	3GeD	4	P@t x	f	u	U	x	v	xw	f P99EAD
P 7D; > XRXAA /Q	>0	S	9	>AD7vv	8A8 i	3NDa	4	P@t x	f	u	U	x	v	xw	f P99EBE



P 7D; > XRXAC /Q	>0	S	9	>AD7vv	8A8	i	3NDa	4	P	x	f	u	U	x	v	xw	f P; 8E>B
P 7D; > Xa TA8 /Q	>0	S	9	>AD7vv	8A8	i	3NDV	4	P	x	f	u	U	x	v	xw	f P8EEBE
P 7D; > Xa TA9 /Q	>0	S	9	>AD7vv	8; 9	i	3GeD	4	P	x	f	u	U	x	v	xw	f P9; 7AC
P 7D; > Xa TA; /Q	>0	S	9	>AD7vv	8A8	i	3NDa	4	P	x	f	u	U	x	v	xw	f P9; 7AD
P 7D; B XRS A7 /Q	>6A0	a	9	BDC8vv	9>7	i	3PNa	4	P	x	f	u	U	x	v	xw	f P9799D
P 7D; B XRXA7 /Q	>0	a	9	BDC8vv	8CB	i	3NSD	4	P	x	f	u	U	x	v	xw	f P8D8DB
P 7D; B XRXA8 /Q	>0	a	9	BDC8vv	97B	i	3NeD	4	P	x	f	u	U	x	v	xw	f P8E88>
P 7D; B XRXA9 /Q	>0	a	9	BDC8vv	9>7	i	3PNa	4	P	x	f	u	U	x	v	xw	f P8E88;
P 7D; B XRXA; /Q	>0	a	9	BDC8vv	8CB	i	3NSD	4	P	x	f	u	U	x	v	xw	f P99EC7
P 7D; B XRXA> /Q	>0	a	9	BDC8vv	97B	i	3NeD	4	P	x	f	u	U	x	v	xw	f P99EC8
P 7D; B XRXAA /Q	>0	a	9	BDC8vv	9>7	i	3PNa	4	P	x	f	u	U	x	v	xw	f P99EC9
P 7D; B Xa TA8 /Q	>0	a	9	BDC8vv	97B	i	3NeD	4	P	x	f	u	U	x	v	xw	f P8EEC8
P 7D; B Xa TA9 /Q	>0	a	9	BDC8vv	8CB	i	3NPi	4	P	x	f	u	U	x	v	xw	f P8EEC7
P 7D; B Xa TAA /Q	>0	a	9	BDC8vv	97B	i	3NeD	4	P	x	f	u	U	x	v	xw	f P9; 7B7
P 7D; B Xa TAB /Q	>0	a	9	BDC8vv	8CB	i	3NPi	4	P	x	f	u	U	x	v	xw	f P9; 7AE
P 7D; B Xa TB7		a	9	BDC8vv	98;	i	3N D	4	P	x	f	u	U	x	v	xw	f P9; BC8
P 7D; B Xa TB8		a	9	BDC8vv	8D>	i	3NVD	4	P	x	f	u	U	x	v	xw	f P9; BC7
P 7D; B Xa TB9 /Q	>0	a	9	BDC8vv	8E8	i	3NaD	4	P	x	f	u	U	x	v	xw	f P9; 8B>
P 7D; B Xa TB;		a	9	BDC8vv	8E8	i	3NaD	4	P	x	f	u	U	x	v	xw	f P9; EB9

85=5	34237	RQUT Y OTZKXI QZd	3: 248
9546	3423:	TR	38233
Gt´wyp´	342=5	TS	3<235 39247
I UHXG	38237	YR 00	3: 238 43239
LUI R	3<23:	Y	3=236
NUI R	3<2=6	ZKS VU	3=237
RQUT Y I QZd	38237	ZMR 0	34237 36255
RQUT Y I RGYY0	38237 38247	ZMS 0	38238 36255

DC48; BA774BA
DC48; BA7C4BA *mTm*

M	961=3
N4	4: 16=
N	98133
O	41t 3
P	436133
	77É<<

-43<77G446,

WWdf f b

7D48; BA774; 7
7D48; BA7C4; 7 *mTm*

6133		I Q V
5133		V
6133		I X V

8>479CBD7477
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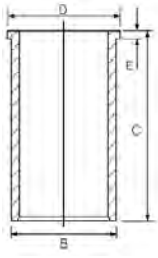


N 444133 **O** 54: 133 **P** 4481<8 **Q** 7133
N 445133 **O** 54: 133 **P** 4481<8 **Q** 7133

DD48; BA774BA
< 0469833098 .
47035: 9<3033

DC48; BA774CA

M	961t 3
N4	4: 16=
N	98133
O	41t 3
P	4351<3
	77É<<

-43<77G446,

WWdf f b

7D48; BA774; 7
7D48; BA7C4; 7 *mTm*

6133		I Q V
5133		V
6133		I X V

DC48; BA774DA

M	96183
N4	4: 16=
N	98133
O	41: 3
P	435193
	77É<<

-43<77G446,

WWdf f b

7D48; BA774; 7
7D48; BA7C4; 7 *mT m*

6133		I Q V
5183		V
6133		I X V

P 7D; > XRXB7		S 9	**>AD7vv**	**887 i**	3GVD	4	**P@i x**	**f u U x v**	**xw**	**f P99EB9**
P 7D; > XRXB8		S 9	**>AD7vv**	**8; 9 i**	3GeD	4	**P@i x**	**f u U x v**	**xw**	**f P99EB;**
P 7D; > XRXB9		S 9	**>AD7vv**	**8B9 i**	3NND	4	**P@i x**	**f u U x v**	**xw**	**f P99EBA**
P 7D; > XRXB; /Q	**A0**	S 9	**>AD7vv**	**887 i**	3GVD	4	**P@i x**	**f u U x v**	**xw**	**f P99EAE**
P 7D; > XRXB> /Q	**A0**	S 9	**>AD7vv**	**8; 948; C i**	3GeD8Gea	4	**P@i x**	**f u U x v**	**xw**	**f P99EB7**
P 7D; > XRXBA /Q	**A0**	S 9	**>AD7vv**	**8B948BB i**	3NND8NNa	4	**P@i x**	**f u U x v**	**xw**	**f P99EB8**
P 7D; > XRXBB /Q	**B0**	S 9	**>AD7vv**	**887 i**	3GVD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC7;**
P 7D; > XRXBC /Q	**B0**	S 9	**>AD7vv**	**8; 9 i**	3GeD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC7>**
P 7D; > XRXBD /Q	**B0**	S 9	**>AD7vv**	**8B9 i**	3NND	4	**P@i x**	**f u U x v**	**xw**	**f P9CC7A**
P 7D; > XRXCA /Q	**B0**	S 9	**>AD7vv**	**8; 9 i**	3GeD	4	**P@i x**	**f u U x v**	**xw**	**f P; 8E7E**
P 7D; > XaTB8 /Q	**A0**	S 9	**>AD7vv**	**8; 9 i**	3GeD	4	**P@i x**	**f u U x v**	**xw**	**f P9; BCE**
P 7D; BXRXB7		a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P99EBB**
P 7D; BXRXB8		a 9	**BDC8vv**	**98; i**	3NiD	4	**P@i x**	**f u U x v**	**xw**	**f P9; BDB**
P 7D; BXRXB9		a 9	**BDC8vv**	**9A7 i**	3PSD	4	**P@i x**	**f u U x v**	**xw**	**f P9; BDC**
P 7D; BXRXB; /Q	**A0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P99EBC**
P 7D; BXRXB> /Q	**A0**	a 9	**BDC8vv**	**979498; i**	3NcV8NiD	4	**P@i x**	**f u U x v**	**xw**	**f P99ED>**
P 7D; BXRXBA /Q	**A0**	a 9	**BDC8vv**	**9A7 i**	3PSD	4	**P@i x**	**f u U x v**	**xw**	**f P99EEA**
P 7D; BXRXBB /Q	**B0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC7B**
P 7D; BXRXBC /Q	**B0**	a 9	**BDC8vv**	**98; i**	3NiD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC7C**
P 7D; BXRXBD /Q	**B0**	a 9	**BDC8vv**	**9A7 i**	3PSD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC9>**
P 7D; BXRXBE /Q	**A0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC7D**
P 7D; BXRXC7 /Q	**A0**	a 9	**BDC8vv**	**98; i**	3NiD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC7E**
P 7D; BXRXC8 /Q	**A0**	a 9	**BDC8vv**	**9A7 i**	3PSD	4	**P@i x**	**f u U x v**	**xw**	**f P9CC87**
P 7D; BXRXCA /Q	**B0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P; 8E87**
P 7D; BXRXCB /Q	**B0**	a 9	**BDC8vv**	**98; i**	3NiD	4	**P@i x**	**f u U x v**	**xw**	**f P; 8E88**
P 7D; BXRXCC /Q	**B0**	a 9	**BDC8vv**	**9A7 i**	3PSD	4	**P@i x**	**f u U x v**	**xw**	**f P; 8E89**
P 7D; BXaTB> /Q	**A0**	a 9	**BDC8vv**	**97E498; i**	3NeS8NiD	4	**P@i x**	**f u U x v**	**xw**	**f P9; BD9**
P 7D; BXaTBA /Q	**A0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P9; BD8**
P 7D; BXaTBB /Q	**B0**	a 9	**BDC8vv**	**98; i**	3NiD	4	**P@i x**	**f u U x v**	**xw**	**f P; 7>; D**
P 7D; BXaTBC /Q	**B0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P; 7>; E**
P 7D; BXaTC7		a 9	**BDC8vv**	**98; i**	3NiD	4	**P@i x**	**f u U x v**	**xw**	**f P; 7>>9**
P 7D; BXaTC8		a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P; 7>>8**
P 7D; BXaTC9 /Q	**B0**	a 9	**BDC8vv**	**98; i**	3NiD	4	**P@i x**	**f u U x v**	**xw**	**f P; 8E8;**
P 7D; BXaTC; /Q	**B0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P; 8E8>**
P 7D; BXaTC> /Q	**B0**	a 9	**BDC8vv**	**8D> i**	3NVD	4	**P@i x**	**f u U x v**	**xw**	**f P; 8E8A**

85=5	3823:	TR	3823:
9546	3823:	ZMR 0	34237 36255
I UHXG	38237	ZMR @	35253
I UTYZKRRGZ@T	3: 238	ZMS 0	43238 36255
LUI R	3<237	ZMS @	35253

NUI R	3823:	aKI ZOU	3723:
ROUT Y I QZd	38237	a@aK	38243
ROUT Y I RGYYO	38237 38247	aURQYH_Y	34246
ROUT Y OTZKXI QZd	3: 248	b UXQKX	3: 238
S J	44243		

DC48; BA774AA

7D48; BA774; 7
7D48; BA7C4; 7 *mTm*

8>479CBD7477
8>479CBD8477

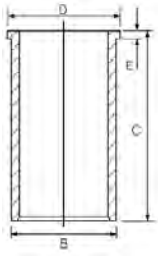
N 44483 **O** 54: 83 **P** 4481<8 **Q** 7183
N 44583 **O** 54: 83 **P** 4481<8 **Q** 7183

M 961=3
N4 4<17:
N 9883
O 41: 3
P 43683
77É<<

-43<79G434,

MWdf fb

6183 I Q V
5183 V
6183 I X V



DC48; BA774E7

7D48; BA774; 7
7D48; BA7C4; 7 *mTm*

M 961=3
N4 4<17:
N : : 193
O 41: 3
P 43683
77É<<

-43<7<0644,

MWWWZN df fb

6183 I Q V
5183 V
6183 I X V

DC48; BA774E8

7D48; BA774; 7
7D48; BA7C4; 7 *mTm*

M 961: 3
N4 4<17:
N : : 193
O 41: 3
P 4351<3
77É<<

-43<7<0644,

MWWWZN df fb

6183 I Q V
5183 V
6183 I X V

UK 8413583309 54:
UK 8413583309 54=
G C 961: 33/ J C 4351<33

P 7D9BaT a 9 **BDC8vv** **887 i** 3G\/D 4 **P@i x** **f P8E>>A**

NUI R	3<2<: 37237

DC49DAE774>7

7D49DAE77477

8>479CBD7477
8>479CBD8477

N 44483 **O** 54: 83 **P** 4481<8 **Q** 7183
N 44583 **O** 54: 83 **P** 4481<8 **Q** 7183

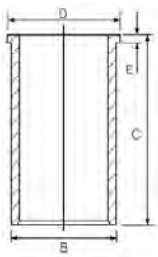
DD49DAE774>7
< 05<8=33073 .
47035: 9<3033

M : 51=3
N4 5468
N 9517<
P 4481=3
73É=3

-43<63H,

MWTMdf

6183 I X V
5183 V
7183 I X V



P 7D; BXQA87	a 9	BDC8vv	998499D i	3PDG8PGD 4	P6l x f u U x v xw	f P; 9E9B

DC48; BA774EA

N4	961=3
N4	4914 8
N	: 3185
O	41 3
P	436133
	75É<9

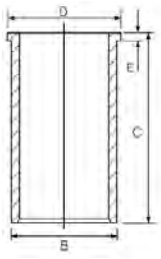
-43<76l 434,

WWdf f b

7D48; BA77487

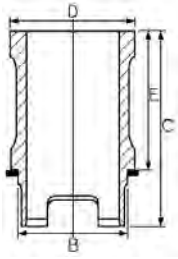
6133		I Q V
5183		V
6133		I X V

8>479CBD7477 N 444183 O 54: 133 P 4481<8 Q 7133
8>479CBD8477 N 445133 O 54: 133 P 4481<8 Q 7133



P 7D; BY 9	a 9	C7; 7vv	EE i	3GPV 4	P6l x	f PCB>>
P 7D>BTY 9	a 9	C9A7vv	88C i	3GaD 4	P6l x	f PCBA>
P 7D>BTY >9g	a 9	C9A9vv	88C i	3GaD 4	P6l x	f PDBAB
P 7D>BTY D8T	a 9	C9A9vv	88C i	3GaD 4	P6l x	f PDC>8
P 7D>BTY D9g	a 9	C9A9vv	88C i	3GaD 4	P6l x	f PDC>A
P 7D>BTY E8T	a 9	C9A9vv	88C i	3GaD 4	P6l x	f PCD8D
P 7D>BTY E8g	a 9	C9A7vv	88C i	3GaD 4	P6l x	f PCD99
P 7D>BTY EAg	a 9	C9A9vv	88C i	3GaD 4	P6l x	f PCD9C
P 7D>BTY Z	a 9	C9A9vv	88C i	3GaD 4	P6l x	f PCBA8
P 7D>BTY Z9	a 9	C9A9vv	88C488D i	3GaD8GaD 4	P6l x	f P8E7; C
P 7D>BTY ZD7	a 9	C9A9vv	8; 9 i	3GeD 4	P6l x	f PDCCE
P 7D>BTY k4788	a 9	C9A7vv	88C i	3GaD 4	P6l x	f PDCD8
P 7D>BTY kg478A	a 9	C9A7vv	88C i	3GaD 4	P6l x	f PCB9C
P 7D>BTY l 4788	a 9	C9A7vv	89; i	3Gae 4	P6l x	f PCC7C
P 7D>BTY l T	a 9	C9A9vv	89; i	3Gae 4	P6l x	f PC8BD
P 7D>BTY l Z478>	a 9	C9A9vv	89; i	3Gae 4	P6l x	f PCC79

8>47; 7; A7477 N 4451=: O 587133 P 44<133 Q 8133



Q 7D9> Q; 78 /Q7D9>0	S 9	>AD7vv	>C4AD i	3aS8ci 4	OZS6St	f P9ABD7
Q 7D9BQ; 78 /Q7D9B0	a 9	BDC8vv	C74DD i	3 V8GND 4	OZS6St f u U x v xw	f P9ABD8
Q 7D; > Q; 79	S 9	>AD7vv	A>4B9 i	3cP8eS 4	OZS6St	f P9AC77
Q 7D; > Q; 89	S 9	>AD7vv	; C4A; i	3/D8cN 4	OZS6St	f P9ABEE
Q 7D; BQ; 79	a 9	BDC8vv	CA4DA i	3GDN8GGa 4	OZS6St	f P9; C>E
Q 7D; BQ; 89	a 9	BDC8vv	AB4B> i	3ca8ec 4	OZS6St	f P9; C>D

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N <41 3
P 4341=3
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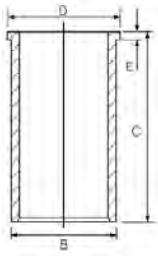

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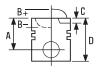

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WWdf f b

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I Q V
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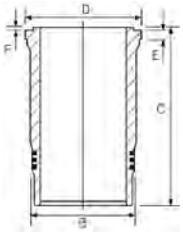

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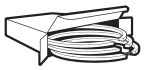

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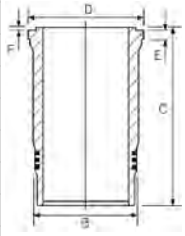

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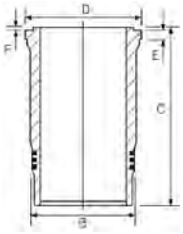

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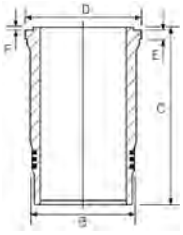

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WWdf f b

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6133x x I X
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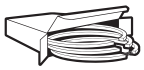

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P 97BB XRB7		a	9	**87A8Dvv**	**9;A i**	3PND	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9;BDE**
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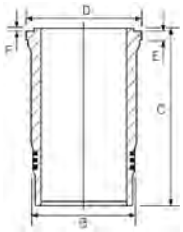

Qnvŵop° °pl w Ynswtp ßJtnsß'yr py pty Qnvŵßop° uztyß' Qnvŵ Qp wr° °pwr° I zx ' ´pyop wp r °l ´ytÜzyt

P 97BB XRB8 /Q	**B0**	a	9	**87A8Dvv**	**9E> i**	3SDD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9CC88**
P 97BB XRBC /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9CC89**
P 97BB XRCB /Q	**B0**	a	9	**87A8Dvv**	**9E> i**	3SDD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;8E98**
P 97BB XRCC /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;8E99**
P 97BB XRD7 /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;8E9>**
P 97BB XRD; /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;8E9B**
P 97BB XRDA /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;>DC8**
P 97BB XRE9 /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;D;CE**
P 97BB Xa T;8 /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;7AEE**
P 97BB Xa T;9 /Q	**B0**	a	9	**87A8Dvv**	**9E> i**	3SDD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;7B77**
P 97BB Xg T;7 /Q	**B0**	a	9	**87A8Dvv**	**;9> i**	3SSG	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P>88B8**
P 97BB Xg T;8 /Q	**B0**	a	9	**87A8Dvv**	**;A; i**	3SeD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P>88B9**
P 97BB Xg TA9 /Q	**B0**	a	9	**87A8Dvv**	**9BA i**	3PaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;7A8A**
P 97BB Xg TA; /Q	**B0**	a	9	**87A8Dvv**	**9E> i**	3SDD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;7A8B**
RQUT Y I QZd					3823:			TJ					39246	
RQUT Y I UGI N					34239			ZMY 0					39239	3=254
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DC4>>8B77477

M :91<3
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N 99133
O 5133
O 4193
P 456163
85É=9

WWZN df fb

7D4>>8B77477

6183 VaJ TZ
5183 TZ
6183 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

P 97BB XgT>8		a	9	**87A8Dvv**	**97B i**	3NeD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9;EB;**
P 97BB XgT>9		a	9	**87A8Dvv**	**9;A i**	3PND	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9;EB>**

P 97BBXgT>;	a	9	87A8Dvv	9AC49BA	i	3PVD8PaD	4	P@t	x	f	u	U x v	xw	f P9; EBA
P 97BBXgT>B	a	9	87A8Dvv	97B	i	3NeD	4	P@t	x	f	u	U x v	xw	f P9; BC>
P 97BBXgT>C	a	9	87A8Dvv	9; A	i	3PND	4	P@t	x	f	u	U x v	xw	f P9; BCA
P 97BBXgT>D	a	9	87A8Dvv	9BA	i	3PaD	4	P@t	x	f	u	U x v	xw	f P9; BCB

GaGTIQd	4323<	RQUTYIQd	3823:
Ipyßzwbyp´	432=<	TJ	39246
NUIR	3823:	TM	3823: 45247
RGTJKX	3623<	TR	3823:

DC4>9DB77487

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N4	55178
N	9<183
O	5183
P	456163
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-453<4 H49:,

WWdf fb

7D4>9DB77477

6183		IQV
6133		IXV
7133		IXV

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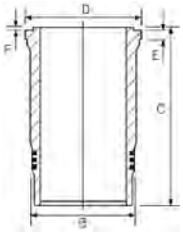
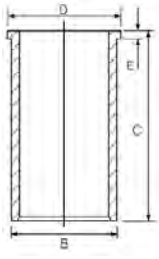


HzÄwnl 'InttÖ=3143nx 6 0ynwßop° °plw	azvßx py op´ Qzwupyx °wp =3143nx 6 Ynswp ßJtnsß°yr py pty	azvßx p op w nl @86 o° 'tº®zy =3143nx 6 0ynwßop° uztyß°	azwnl @bl o 'tº ß y =3143nx 6 0ynwÖp w° °pwu°	azvßx p nl x p´l 'tº®zyp =3143nx 6 I zx ´´pyop wp r°l ´ytÚzyt

P 98>B	a	9	EBB7vv	89;	i	3Gea	4	P@t	x				f PCBBB
P 98ABTY9	a	9	87;>>vv	8>848C;	i	3GiN8NPV	4	P@t	x				f P9; 8BA
P 98ABTY;	a	9	87;>>vv	8AD48BE	i	3NGV/8NPD	4	P@t	x				f PCBCA
P 98ABTYE	a	9	87;>>vv	8AD48BE	i	3NGV/8NPD	4	P@t	x				f PCC;>
P 98ABTYZ8	a	9	87;>>vv	8AD	i	3NGV	4	P@t	x				f PCC77
P 98ABTYZB	a	9	87;>>vv	8C9	i	3NPV	4	P@t	x				f PDCD;
P 98ABTZI	a	9	87;>>vv	8>848BE	i	3GiN8NPD	4	P@t	x				f P8E7BB
P 98ABYSZ	a	9	87;>>vv	8>848BE	i	3GiN8NPD	4	P@t	x				f P8E7BC
P 98ABYZI	a	9	87;>>vv	8>848BE	i	3GiN8NPD	4	P@t	x				f P8E7BD
P 98ABYfZ8	a	9	87;>>vv	8DD	i	3NVa	4	P@t	x	f	u	U x v	xw	f PCC8A
P 98ABYfk	a	9	87;>>vv	8DD	i	3NVa	4	P@t	x	f	u			f P8E88B
P 98ABYI	a	9	87;>>vv	8>848BE	i	3GiN8NPD	4	P@t	x					f P8E7BE
P 98ABYIZ	a	9	87;>>vv	8>848BE	i	3GiN8NPD	4	P@t	x					f P8E7C7
P 98ABYIZ4;8	a	9	87;>>vv	8>8	i	3GiN	4	P@t	x					f PCBEC

8>4799D;7477 **N** 4581=== **O** 5<183 **P** 465183 **Q**<183



P 9AAAY	V	9	E977vv	89;	i	3Gae	4	P@t	x				f PCC7D
P 9AAAYR	V	9	E977vv	89;	i	3Gae	4	P@t	x				f PCC7;
P 9AAAYk	V	9	E977vv	8>8	i	3GiN	4	P@t	x				f PCC87
P 9AAAYkR	V	9	E977vv	8>8	i	3GiN	4	P@t	x				f PCC7A
P 9AABY	a	9	887>Avv	8>C	i	3NDD	4	P@t	x				f PCC;7

P 9AABY k	a	9	887>Avv	8>C48E>	i	3NDD8NaS	4	P@t x	f PCC; ;
P 9AABY kR	a	9	887>Avv	8C948CC	i	3NPN8NSD	4	P@t x	f PCC; 8
P 9AABY kgT68CA	a	9	887>Avv	89E	i	3GcV	4	P@t x	f PCB8;
P 9AABY kgT68E9	a	9	887>Avv	8>8	i	3GI N	4	P@t x	f PCB7B
P 9AABY kgT69>7	a	9	887>Avv	8CC	i	3NSD	4	P@t x	f PCB7C
P 9AABY kgY	a	9	887>Avv	8B8	i	3NND	4	P@t x	f PC>; E
P 9ABAY d	V	9	EA87vv	8>8	i	3GI N	4	P@t x	f P9; 8BD
P 9ABAY gQ	V	9	EA87vv	8>8	i	3GI N	4	P@t x	f P9; 8BE
P 9ABBgT	a	9	88>8; vv	8AA	i	3NGG	4	P@t x	f PCB8B

YJ			372 7	372=7		YR00			392<7 372=6

8>4>A7; C7477

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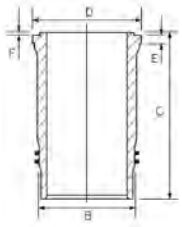

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P 9ABAY	V	9	EA87vv	8>8	i	3GI N	4	P@t x	f PCC88
P 9ABAY Q	V	9	EA87vv	D>48>8	i	3GGS8GI N	4	P@t x	f P8E7>7
P 9ABAY R	V	9	EA87vv	8>8	i	3GI N	4	P@t x	f PCC7B
P 9ABAY Rd	V	9	EA87vv	E948>8	i	3GNV8GI N	4	P@t x	f P8E7>8
P 9ABAY gT	V	9	EA87vv	E948>8	i	3GNV8GI N	4	P@t x	f P8E7>9
P 9ABAY gX	V	9	EA87vv	8>8	i	3GI N	4	P@t x	f PCC98
P 9ABBY	a	9	88>8; vv	8CC	i	3NSD	4	P@t x	f PCC; A
P 9ABBY Q	a	9	88>8; vv	89A48CC	i	3GcD8NSG	4	P@t x	f P8E>A8
P 9ABBY R	a	9	88>8; vv	8CC	i	3NSD	4	P@t x	f PCC; 9
P 9ABBY T	a	9	88>8; vv	8CC	i	3NSD	4	P@t x	f PC>8>
P 9ABBY gQ	a	9	88>8; vv	89A48CC	i	3GcD8NSG	4	P@t x	f P8E>A9
P 9ABBY gT	a	9	88>8; vv	8CC	i	3NSD	4	P@t x f u	f PC>7C
P 9ABBY gX	a	9	88>8; vv	8CC	i	3NSD	4	P@t x	f PCD7;
P 9ABBY gY	a	9	88>8; vv	8>C48CC	i	3NDD8NSG	4	P@t x	f PC>>7
P 9ABBY kR	a	9	88>8; vv	89A48CC	i	3NGG8NSG	4	P@t x	f P8E7>;

L=			342<6	452<9					

DC49D7977487

M	<=1<
N4	781<
N	7=183
P	4741<
	79É438

-458: 5,

MWTMdf

7D49D7977477

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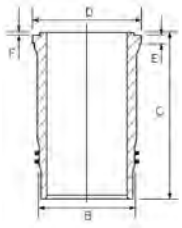
6183		V
8183		I X V

8>4>A7; C7477

N 473133 O 5: 3133 P 485133 Q 43138 R 4133



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Qrnwßop° °pl w	Ynswp ßJtnsß°yr py pty	Qrnwßop° uztyß°	Qrnwßöp wr° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt

P 9ABAY W	V	9	EA87vv	8BE	i	3NPD	4	P@t x f u	f P8E88C

P 9ABA Y Wg X	V	9	EA87vv	8BE i	3NPD	4	P@l x	f	u	f P8E7C9
P 9ABA Y f	V	9	EA87vv	8BE i	3NPD	4	P@l x	f	u	f P8E7C;
P 9ABB Y W	a	9	88>8; vv	9; A i	3PND	4	P@l x	f	u	f PCD78
P 9ABB Y WR	a	9	88>8; vv	9; A i	3PND	4	P@l x	f	u U x v xw	f PCCAD
P 9ABB Y WgT6; 97	a	9	88>8; vv	9; A i	3PND	4	P@l x	f	u U x v xw	f PCB; ;
P 9ABB Y Wg X	a	9	88>8; vv	9; A i	3PND	4	P@l x	f	u U x v xw	f PCD7>
P 9ABB Y XgT	a	9	88>8; vv	8E9 i	3NaD	4	P@l x	f	u U x v xw	f PCB; 9
P 9ABB Y XgY	a	9	88>8; vv	99C i	3PGD	4	P@l x	f	u U x v xw	f PCB9A
P 9ABB Y f	a	9	88>8; vv	97B i	3NeD	4	P@l x	f	u	f PCCEE
P 9ABB Y f Q	a	9	88>8; vv	8B949; A i	3NND8PND	4	P@l x	f	u	f P8E7C>
P 9ABB Y f R	a	9	88>8; vv	97B i	3NeD	4	P@l x	f	u	f PCC; D
P 9ABB Y f T	a	9	88>8; vv	98; i	3NiD	4	P@l x	f	u	f PC>8D
P 9ABB Y f Ta	a	9	88>8; vv	97B49; A i	3NeD8PND	4	P@l x	f	u	f PCC>>
P 9ABB Y f gT	a	9	88>8; vv	97B49; A i	3NeD8PND	4	P@l x	f	u	f PCB7;

GY 5<3	342<3	452<	YX	342 :	442<9
LI @2´tß	342<4	452<8	Y	442<5	342<9
YM	3=2<4				

DC49D7>77477

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N	8513 3
O	41: 3
P	4741<3
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6133		V
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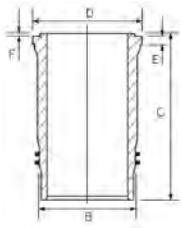
8>4>A7; C7477



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DE49D7>77477

< 05<3733033 .
4707836: 3033

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P 9A; 7 Y Q	GD	9	8AE>Avv	8AB49; A i	3NGN8PND	4	P@l x			f P8E>>B
P 9A; 7 Y R	GD	9	8AE>Avv	9; A i	3PND	4	P@l x			f PABA7
P 9A; 7 Y f Q	GD	9	8AEA; vv	99; 49E> i	3PDP8SDD	4	P@l x	f	u	f P8E7BA
P 9A; 7 Y f kR	GD	9	8AEA; vv	9E> i	3SDD	4	P@l x	f	u	f PCD8;
P 9A; 7 Y f kR6; B7	GD	9	8AE77vv	9BA i	3PaD	4	P@l x	f	u	f PCCB7
P 9A; 7 Y kR	GD	9	8AE>Avv	8AB49; A i	3NGN8PND	4	P@l x			f P8E7; D
P 9A; DY	e	9	89CB; vv	8DD i	3NVa	4	P@l x			f PCC>;
P 9A; DY Q	e	9	89CB; vv	8DD i	3NVa	4	P@l x			f P8E>>C
P 9A; DY R	e	9	89CB; vv	8DD i	3NVa	4	P@l x			f PCC; C
P 9A; DY f	e	9	89CB; vv	8CD49; A i	3NSN8PND	4	P@l x	f	u	f PCC>D
P 9A; DY f Q	e	9	89CB; vv	8CD49; A i	3NSN8PND	4	P@l x	f	u	f P8E7B>
P 9A>7 Y f	GD	9	8C>9Bvv	9DC4; 9> i	3Pi D8SSG	4	P@l x	f	u	f P8E>>D
P 9A>7 Y f R	GD	9	8C>9Bvv	; 9> i	3SSD	4	P@l x	f	u	f PCD8>
P 9A>9 Y XQ	GN	9	97E88vv	>974A8A i	3/cG8cDD	4	P@l x	f	u U x v xw	f P8E>>E
P 9A>9 Y f Q	GN	9	97E88vv	9D; 4>7A i	3PeV8WG	4	P@l x	f	u	f P8E>A7

8>4>A87E7477

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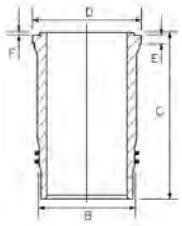

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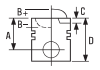

DC4>>; 977477

M : 9153
N4 55133
N : 6158
O 5133
P 4541<3
85É436

MWWWZN

7D4>>; 977477

6183 VaJ TZ
5183 TZ
6183 TZ

HzÄwotlx pßp´C=8x x	S°wpyo°´nsx p°°p´C=8x x	Jtlx ßpopwn°®ßßpC=8x x	Jtlx pßzopnxl´lC=8x x	Jtlx pßznlxp´lotnzx n°°ßtzypC=8 x x
0mv®op°°plw	Ynswp ßJtnsß°yrpypty	0mvßßop°uztyß°	0mvÖpw°°pw¤°	lzx ´´pyopwpr°l´ytÜtzyt
Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz

P 9BCB XR7B /Q	**A0**	a	9	**89>8Evv**	**;EC**	**i**	3/SD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P9; 8>A**
P 9BCB XR7D /Q	**A0**	a	9	**89>8Evv**	**;EC**	**i**	3/SD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P9A>B9**
P 9BCB XR88 /Q	**>0**	a	9	**89>8Evv**	**;EC**	**i**	3/SD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P8E87>**
P 9BCB XR8; /Q	**A0**	a	9	**89>8Evv**	**;EC**	**i**	3/SD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P97; C9**
P 9BCB XR8A /Q	**A0**	a	9	**89>8Evv**	**;EC**	**i**	3/SD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P9; 7DC**
P 9BCB XR8C		a	9	**89>8Evv**	**;EC**	**i**	3/SD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P9A>B7**
P 9BCB XR8E /Q	**>0**	a	9	**89>8Evv**	**;EC**	**i**	3/SD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P9AB8A**

ZMG	34239	ZMc O	39239	3=254
ZMY O	39239			

DC4>; 8777477

M : 9158
N4 53143
N : 4173
O 5133
P 4541<7
85É436

MWWWZN df

7D4>; 8777477

7183 MJI V
6183 I X V
7183 I X V

GDC LKZ-Ring

8A4>A87>7477
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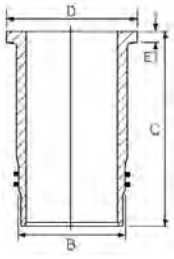

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P 9BCB XR;A /Q	**B0**	a	9	**89>8Evv**	**;A;**	**i**	3SeD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;8**
P 9BCB XR;B /Q	**B0**	a	9	**89>8Evv**	**;9>**	**i**	3SSD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;9**
P 9BCB XR>A /Q	**B0**	a	9	**89>8Evv**	**;A;**	**i**	3SeD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;;**
P 9BCB XR>B /Q	**B0**	a	9	**89>8Evv**	**;9>**	**i**	3SSD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;>**
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P 9BCB XR>D /Q	**B0**	a	9	**89>8Evv**	**;A;**	**i**	3SeD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;B**
P 9BCB XR>E /Q	**B0**	a	9	**89>8Evv**	**;9>**	**i**	3SSD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;C**
P 9BCB XRA7 /Q	**B0**	a	9	**89>8Evv**	**9E>**	**i**	3SDD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;D**
P 9BCB XRA> /Q	**B0**	a	9	**89>8Evv**	**;A;**	**i**	3SeD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E;E**
P 9BCB XRAA /Q	**B0**	a	9	**89>8Evv**	**;9>**	**i**	3SSD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E>7**
P 9BCB XRAB /Q	**B0**	a	9	**89>8Evv**	**;A;**	**i**	3SeD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E>8**
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P 9BCB XRAD /Q	**B0**	a	9	**89>8Evv**	**9E>**	**i**	3SDD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;8E>;**
P 9BCB Xa T;8 /Q	**B0**	a	9	**89>8Evv**	**;A;**	**i**	3SeD	4	**P0lx**	**f**	**u**	**U**	**x v**	**xw**	**f P;7>DA**

RQUT Y I UGI N	43248	ZMc O	39239	3=254
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DC4>>; 977477

M : 9153
N4 55133
N : 6158
O 5133
P 4541<3
85É436

MWWWZN

7D4>>; 977477

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5183 TZ
6183 TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
P 9BCB Xa T78 /Q	**>0** a 9 **89>8Evv** **; ; D i** 3SaD 4	**P Øl x f u U x v xw**	**f P8E879**
P 9BCB Xa T79 /Q	**>0** a 9 **89>8Evv** **; A; i** 3SeD 4	**P Øl x f u U x v xw**	**f P8E878**
P 9BCB Xa T7; /Q	**>0** a 9 **89>8Evv** **; ; D i** 3SaD 4	**P Øl x f u U x v xw**	**f P9; 7BD**
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P 9BCB Xa T87 /Q	**; 0** a 9 **89>8Evv** **; ; D i** 3SaD 4	**P Øl x f u U x v xw**	**f P9; 7CC**
P 9BCB Xa T9B /Q	**A0** a 9 **89>8Evv** **; 9> i** 3SSD 4	**P Øl x f u U x v xw**	**f P9; >77**
P 9BCB Xa T9C /Q	**A0** a 9 **89>8Evv** **; A; i** 3SeD 4	**P Øl x f u U x v xw**	**f P9; >78**

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M : 9158
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O 5133
P 4541<7
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GDC LKZ-Ring

8A4>A87>7477
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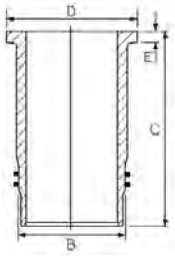

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MWWWZN

7D4>>; 977477

6183 VaJ TZ
5183 TZ
6183 TZ

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Ønvßop° °pl w	Ynswp ßJtnsß°yr py pty	Ønvßop° uztyß°	Ønvßp wr° °pwr°	l zx ' ´pyop wp r °l ´ytÜzyt
Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

P 9BCB Xa T9D /Q	**A0**	a	9	**89>8Evv**	**; C8 i**	3/DV	4	**P Øl x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; BCD**

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M : 9158
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GDC LKZ-Ring

8A4>A87>7477
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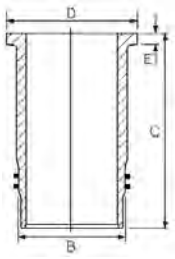

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P 9DBA XR69B7	V 9 **EEC; vv**	**8E8 i 3NaD** 4	**P@l x f u U x v xw**	**f PCCCB**
P 9DBA XRd	V 9 **EEC; vv**	**8E849; A i 3NaD8PND** 4	**P@l x f u U x v xw**	**f P9ADA8**
P 9DBA XRd78	V 9 **EEC; vv**	**8E849; A i 3NaD8PND** 4	**P@l x f u U x v xw**	**f P9ADA9**
P 9DBB WR	a 9 **88EBOvv**	**9BA i 3PaD** 4	**P@l x f u U x v xw**	**f PABA8**
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P 9DBB WaT; B7	a 9 **88EBOvv**	**9BA i 3PaD** 4	**P@l x f u U x v xw**	**f P8B>DC**
P 9DBB WgT6; B7 /Q 80	a 9 **88EBOvv**	**9BA i 3PaD** 4	**P@l x f u U x v xw**	**f PCAE8**
P 9DBB WgX	a 9 **88EBOvv**	**9BA i 3PaD** 4	**P@l x f u U x v xw**	**f PCCDB**
P 9DBB XR	a 9 **88EBOvv**	**9>; i 3PPD** 4	**P@l x f u U x v xw**	**f P9DE9B**
P 9DBB XR7>	a 9 **88EBOvv**	**997 i 3PDD** 4	**P@l x f u U x v xw**	**f PCCCE**
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P 9DBB XRm69E7	a 9 **88EBOvv**	**98; i 3Ni D** 4	**P@l x f u U x v xw**	**f PCCAC**
P 9DBB XRm6; ; 7	a 9 **88EBOvv**	**9>; i 3PPD** 4	**P@l x f u U x v xw**	**f PCCAE**
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P 9DBB Xg	a 9 **88EBOvv**	**9>; i 3PPD** 4	**P@l x f u U x v xw**	**f P9DE>A**
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P 9DBB Xg7D	a 9 **88EBOvv**	**9; 7 i 3PGP** 4	**P@l x f u U x v xw**	**f P9DE>E**
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P 9DBB XgT; ; 7	a 9 **88EBOvv**	**9>; i 3PPD** 4	**P@l x f u U x v xw**	**f PCAE;**
P 9DBB XgX; ; 7	a 9 **88EBOvv**	**9>; i 3PPD** 4	**P@l x f u U x v xw**	**f PCCD;**
P 9DBB XkQ>7	a 9 **88EBOvv**	**8E749E> i 3NVe8SDD** 4	**P@l x f u U x v xw**	**f P9CE9B**
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P 9DBB f	a 9 **88EBOvv**	**98; i 3Ni D** 4	**P@l x f u U x v xw**	**f PCAD7**
P 9DBB f aT	a 9 **88EBOvv**	**99E i 3PGG** 4	**P@l x f u U x v xw**	**f PCC>A**
P 9DBB f aT69E7	a 9 **88EBOvv**	**98; i 3Ni D** 4	**P@l x f u U x v xw**	**f PCC>B**
P 9DBB f aT6; 87	a 9 **88EBOvv**	**99E i 3PGG** 4	**P@l x f u U x v xw**	**f PCC>C**
P 9DBB f gT	a 9 **88EBOvv**	**99>499E i 3PDV8PGG** 4	**P@l x f u U x v xw**	**f PC8DB**
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P 9DBB f gT69E7	a 9 **88EBOvv**	**98; 499> i 3Ni D8PDV** 4	**P@l x f u U x v xw**	**f PCADE**

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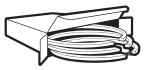

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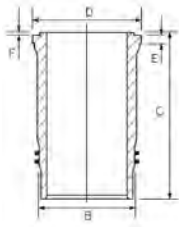

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P 9DBA XR7;	V 9	EEC; vv 9; A i 3PND 4	P@t x f u U x v xw	f PCCD7
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P 9DBB XaT9> /Q	80	a	9	88EBOvv	9;7 i	3PGD	4		P@t x	f	u	U	x	v	xw	f PCCA9
P 9DBB Xg78		a	9	88EBOvv	9C9 i	3PcD	4		P@t x	f	u	U	x	v	xw	f P98; 89
P 9DBB Xg7; /Q	80	a	9	88EBOvv	9C9 i	3PcD	4		P@t x	f	u	U	x	v	xw	f P98; 8;
P 9DBB Xg7>		a	9	88EBOvv	;7E i	3SND	4		P@t x	f	u	U	x	v	xw	f P9DE>C
P 9DBB XgT7A /Q	80	a	9	88EBOvv	9C9 i	3PcD	4		P@t x	f	u	U	x	v	xw	f P9DEA9
P 9DBB Xk		a	9	88EBOvv	8ED4;>> i	3Nai 8Sae	4		P@t x	f	u	U	x	v	xw	f P8E89D
P 9DBB XkR		a	9	88EBOvv	8ED49C> i	3Nai 8PcN	4		P@t x	f	u	U	x	v	xw	f PCCDA
P 9DBB XkRS		a	9	88EBOvv	9C> i	3PcN	4		P@t x	f	u	U	x	v	xw	f P9DEB8
P 9DBB XkaT		a	9	88EBOvv	9BA49C> i	3PaD8PcP	4		P@t x	f	u	U	x	v	xw	f PBC9D
P 9DBB Xkg		a	9	88EBOvv	9BA i	3PaD	4		P@t x	f	u	U	x	v	xw	f P9DEB9
P 9DBB XkgT		a	9	88EBOvv	9BA i	3PaD	4		P@t x	f	u	U	x	v	xw	f P9DEB;

I tßÖwyp´	3=2=3	S pr l °s°ßßwp	342=7
KUY	342=5	TM	3=2=7 382==
L=3	3: 2<9 452=<	YM	352=7 392=<
L=3 _yßp´qv´	352=3 382=7	YvÖwyp´	3=2=3
L5333	342=7	Y' I npwwyp´	3=2=3
NUI R	342<8	Y	372=6 392=<
PpßwyP´	3=2=3 3=2=6	Z´I y°wyp´	3=2=5
RQUT Y YZGX	342=6 3=2=9	R	372=5
S =3	3=2=4 382=8		

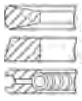
DC49D; 877477

M <=t 8
N4 5717 3
N : 8193
O 5138
P 4741t 8
79É438

MWdf

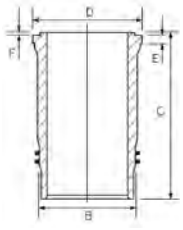
7D49D; 877477

6183 I X V
6133 V
8133 I X V



8A4>A9E97477
8>4>A9E97477
8A4>A9E; 7477
8>4>A9E; 7477
8A4>A77; 7477
8>4>A77; 7477

N 477183 **O** 5: 3183 **P** 4861<3 **Q** 4313: **R** 4183



DE49D; 877477
< 05<6433033 .
480785=53033

DE49D; 8774>7
< 05<6433033 .
480785=63033

9nwvop° °pl w	Ynswp ßJtnsß°yr py pty	9nwvßop° uztyß°	9nwvÖp w° °pww°	I zx ' ´pyop wp r °l ´ytÜzyt

P 9DBA XR7E		V	9	EEC; vv	9A7 i	3PSD	4		P@t x	f	u	U	x	v	xw	f PCCD>
P 9DBA XR98 /Q	90	V	9	EEC; vv	9A7 i	3PSD	4		P@t x	f	u	U	x	v	xw	f PCCBE
P 9DBA XR9> /Q	90	V	9	EEC; vv	98; i	3Ni D	4		P@t x	f	u	U	x	v	xw	f PCCBB
P 9DBA XgT7C /Q	90	V	9	EEC; vv	99D i	3PGD	4		P@t x	f	u	U	x	v	xw	f PCAD8
P 9DBA XgT7E /Q	90	V	9	EEC; vv	8E8 i	3NaD	4		P@t x	f	u	U	x	v	xw	f PCAE>
P 9DBB XR8> /Q	90	a	9	88EBOvv	9E>4;7E i	3SDD8SND	4		P@t x	f	u	U	x	v	xw	f P98; 7D
P 9DBB XR8B /Q	90	a	9	88EBOvv	9E>4;7E i	3SDD8SND	4		P@t x	f	u	U	x	v	xw	f PCCE8
P 9DBB XR8C /Q	90	a	9	88EBOvv	9B7 i	3PVS	4		P@t x	f	u	U	x	v	xw	f P98; 7E

P 9DBB XR97 /Q	90	a	9	88EBOvv	9E>4; 7E i	3SDD8SND	4	P@t x	f	u	U x v	xw	f PCCC8
P 9DBB XR9E /Q	90	a	9	88EBOvv	9E> i	3SDD	4	P@t x	f	u	U x v	xw	f P98; 87
P 9DBB XR; 7 /Q	90	a	9	88EBOvv	; 78 i	3SDi	4	P@t x	f	u	U x v	xw	f P98; 88
P 9DBB XR; > /Q	90	a	9	88EBOvv	99D i	3PGD	4	P@t x	f	u	U x v	xw	f P8>; 7D
P 9DBB XR; A /Q	90	a	9	88EBOvv	9BA i	3PaD	4	P@t x	f	u	U x v	xw	f P8>; 88
P 9DBB XR; B /Q	90	a	9	88EBOvv	99D i	3PGD	4	P@t x	f	u	U x v	xw	f P8B979
P 9DBB XR; C /Q	90	a	9	88EBOvv	9BA i	3PaD	4	P@t x	f	u	U x v	xw	f P8B97;
P 9DBB Xa T9; /Q	90	a	9	88EBOvv	9E> i	3SDD	4	P@t x	f	u	U x v	xw	f PCAE9
P 9DBB Xa T9A /Q	90	a	9	88EBOvv	99D i	3PGD	4	P@t x	f	u	U x v	xw	f PCCA;
P 9DBB Xa T9B /Q	90	a	9	88EBOvv	9AC i	3PVD	4	P@t x	f	u	U x v	xw	f PCAE7
P 9DBB Xg T98 /Q	90	a	9	88EBOvv	9AC i	3PVD	4	P@t x	f	u	U x v	xw	f P888BC
P 9DBB Xg T99 /Q	90	a	9	88EBOvv	8E8 i	3NaD	4	P@t x	f	u	U x v	xw	f P888; ;
P 9DBB Xg T9B /Q	90	a	9	88EBOvv	99D i	3PGD	4	P@t x	f	u			f P888; >

GOYp´tp	34237	TM	3=2=7
I pyßzwtyp´	342==	TR	442=8
KI Z	37235	T	3=2=9
KR	382=7 35234	X	372=< 35236
KUY	342=<	Yp´tp° 633	3=2=7 35235
L=3	372=7 452=:	YM	352=7 3<23<
L5333	342=7	Yß´wtyp´	3=2=9
NUI R	342=5	Y	372== 43234
R@JT Y I QZd	3<2=9	ZMG	37233
R@JT Y I UGI N	3=2=8	R	372=5
R@JT Y I US LUXZ	3=2=9	_XHCTU	342==
R@JT Y YZGX	3=2=8 35235		

DC49D; 8774D7

M <=t 8
N4 54193
N <4153
O 5143
P 4741t 8
79É438

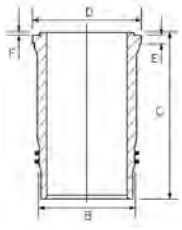
MWdf

7D49D; 877477

6183 I X V
6183 V
8183 I X V

8A4>A9E97477
8>4>A9E97477
8A4>A77; 7477
8>4>A77; 7477
8A4>A9E; 7477
8>4>A9E; 7477

N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4313: **R** 4183
N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4313: **R** 4183
N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4315: **R** 4183
N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4315: **R** 4183
N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4318: **R** 4183
N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4318: **R** 4183



DE49D; 8774D7
< 05<64330<3 .
480785=53033

DC49D; 8774DA

M <=188
N4 54193
N <4153
O 5143
P 474188
79É438

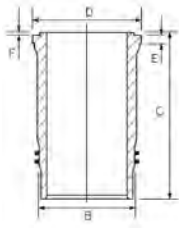
MWdf

7D49D; 877477

6183 I X V
6183 V
8183 I X V

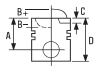
8A4>A9E97477
8>4>A9E97477

N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4313: **R** 4183
N 47783 **O** 5: 3183 **P** 4861<3 **Q** 4313: **R** 4183



DE49D; 8774DA
< 05<64330<8 .
480785=53033

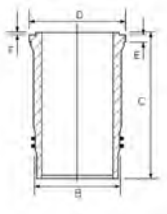
P 9DBA Xa T7C /Q	90	V	9	EEC; vv	8E849A7 i	3NaD8PSD	4	P@t x	f	u	U x v	xw	f P9ADAA
P 9DBA Xa T7E /Q	90	V	9	EEC; vv	99D i	3PGD	4	P@t x	f	u	U x v	xw	f P9ADAD



P 9DBB R69>7		a	9	88EBOvv	8CC i	3NSD	4	P6t x							f PCCCA
P 9DBB RS		a	9	88EBOvv	8DA i	3NVN	4	P6t x							f P9DE9>
P 9DBB Rd		a	9	88EBOvv	8CC498; i	3NSG8Ni D	4	P6t x							f P8E89C
P 9DBB WaT6;C;		a	9	88EBOvv	9C> i	3PcP	4	P6t x	f	u	U	x	v	xw	f PC>8A
P 9DBB XR78		a	9	88EBOvv	9BA i	3PaD	4	P6t x	f	u	U	x	v	xw	f P9DE9C
P 9DBB XRS7A/Q	90	a	9	88EBOvv	9E> i	3SDD	4	P6t x	f	u	U	x	v	xw	f P9DE;A
P 9DBB XaT;8/Q	90	a	9	88EBOvv	8E8 i	3NaD	4	P6t x	f	u	U	x	v	xw	f P9DE>9
P 9DBB aT		a	9	88EBOvv	8CC498; i	3NSG8Ni D	4	P6t x							f P9;C>A
P 9DBB g		a	9	88EBOvv	8B748D7 i	3NGe8NSV	4	P6t x							f P9DEB>
P 9DBB gT		a	9	88EBOvv	8CC48DB i	3NSG8NVP	4	P6t x							f PC>8E
P 9DBB gT69>7		a	9	88EBOvv	8CC i	3NSD	4	P6t x	f	u					f PCAOC
P 9DBB gY		a	9	88EBOvv	8A948CC i	3NDa8NSG	4	P6t x							f PC8C>
P 9DCB XR78/Q	90	a	9	89D8Bvv	;;D i	3SaD	4	P6t x	f	u	U	x	v	xw	f P9DEBA
P 9DCB XR7A/Q	;0	a	9	89D8Bvv	;CA i	3/GD	4	P6t x	f	u	U	x	v	xw	f P8B97B
P 9DCB XR88/Q	90	a	9	89D8Bvv	;;D i	3SaD	4	P6t x	f	u	U	x	v	xw	f P97B7;
P 9DCB XgQB7>		a	9	89D8Bvv	;CA i	3/GD	4	P6t x	f	u	U	x	v	xw	f P9CE;E
P 9DCB XgQB7A		a	9	89D8Bvv	;;D i	3SaD	4	P6t x	f	u	U	x	v	xw	f P9CE;D
P 9DCB XgQB7B		a	9	89D8Bvv	;78 i	3SDi	4	P6t x	f	u	U	x	v	xw	f P9CE;C

I tßÖwyp´	3=2=3	YvÖwyp´	3=2=3
L=3	342<< 392=:	YR	342<9 372=:
L5333	342=7	YR(0	382<6 372=:
NUI R	342 = 43239	Y'I npwtyp´	3=2=3
PpßÖwyp´	3=2=3 3=2=6	Y	342<9 372=6
S 0Yp´tp	342=9 45234	ZMG	392==
Yp´tp° 633	3=2=4 35235	Z´I y°wtyp´	3=2=3
YM	3=2<8 372=7	R	3=2<= 362=6

8A4>A77;7477 **N** 477183 **O** 5:3183 **P** 4861<3 **Q** 4315: **R** 4183
8>4>A77;7477 **N** 477183 **O** 5:3183 **P** 4861<3 **Q** 4315: **R** 4183
8A4>A9E97477 **N** 477183 **O** 5:3183 **P** 4861<3 **Q** 4313: **R** 4183
8>4>A9E97477 **N** 477183 **O** 5:3183 **P** 4861<3 **Q** 4313: **R** 4183
8A4>A9E;7477 **N** 477183 **O** 5:3183 **P** 4861<3 **Q** 4318: **R** 4183
8>4>A9E;7477 **N** 477183 **O** 5:3183 **P** 4861<3 **Q** 4318: **R** 4183



0mwßop° °pl w	Ynswtp ßJtnsß°yr py pty	0mwßop° uztyß°	0mwÖpwr° °pwtr°	I zx ' ´pyop wpr °l ´ytÚzyt

P 9DBB XR7A/Q	80	a	9	88EBOvv	9C9 i	3PcD	4	P6t x	f	u	U	x	v	xw	f PCCDD

L=3	352=3 452=:	L=3 _yßp´qW´	352=3 382=7

DC49D; 877477

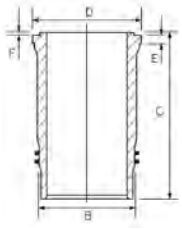
M <=t 8
N4 57173
N : 8193
O 5138
P 4741t 8
79É438

MWdf

7D49D; 877477

6183 I X V
6183 V
8183 I X V

8A4>A9E97477 N 477183 O 5: 3183 P 4861<3 Q 4313: R 4133
8>4>A9E97477 N 477183 O 5: 3183 P 4861<3 Q 4313: R 4133
8A4>A77; 7477 N 477183 O 5: 3183 P 4861<3 Q 4315: R 4133
8>4>A77; 7477 N 477183 O 5: 3183 P 4861<3 Q 4315: R 4133
8A4>A9E; 7477 N 477183 O 5: 3183 P 4861<3 Q 4318: R 4133
8>4>A9E; 7477 N 477183 O 5: 3183 P 4861<3 Q 4318: R 4133



DE49D; 877477
< 05<6433033 .
480785=53033

Qmvwop° °plw	Ynswp ßJtnsß°yr py pty	Qmvwßop° uztyß°	Qmvwöpwr° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt
P 9DBB XR9; /Q ; 0	a 9 88EBOvv	99D i 3PGD 4	PQt x f u U x v xw	f P8BA98
P 9DBB XR9> /Q ; 0	a 9 88EBOvv	9BA i 3PaD 4	PQt x f u U x v xw	f P8BA99
P 9DBB XR9A /Q ; 0	a 9 88EBOvv	;78 i 3SDi 4	PQt x f u U x v xw	f P8B>BC
P 9DBB XR9B /Q ; 0	a 9 88EBOvv	99D i 3PGD 4	PQt x f u U x v xw	f P8B97>
P 9DBB XR9C /Q ; 0	a 9 88EBOvv	9BA i 3PaD 4	PQt x f u U x v xw	f P8B97A
P 9DBB XR9D /Q ; 0	a 9 88EBOvv	;78 i 3SGD 4	PQt x f u U x v xw	f P8A7A7
P 9DBB XRS7C /Q ; 0	a 9 88EBOvv	;78 i 3SDi 4	PQt x f u U x v xw	f P9DE; C
P 9DBB Xa T9C /Q ; 0	a 9 88EBOvv	99D i 3PGD 4	PQt x f u U x v xw	f P8BCB7
P 9DBB Xa T9D /Q ; 0	a 9 88EBOvv	9BA i 3PaD 4	PQt x f u U x v xw	f P8BCB8
P 9DBB Xa T9E /Q ; 0	a 9 88EBOvv	;78 i 3SGD 4	PQt x f u U x v xw	f P8B>E;
P 9DBB Xa T; 9 /Q ; 0	a 9 88EBOvv	99D i 3PGD 4	PQt x f u U x v xw	f P8BC>B
P 9DBB Xa T; ; /Q ; 0	a 9 88EBOvv	9BA i 3PaD 4	PQt x f u U x v xw	f P8BC>C
P 9DBB Xa T; > /Q ; 0	a 9 88EBOvv	;78 i 3SGD 4	PQt x f u U x v xw	f P8B9EC
P 9DBB Xa T; A /Q ; 0	a 9 88EBOvv	8E8 i 3NaD 4	PQt x f u U x v xw	f P9DE>;
P 9DBB Xg T9; /Q ; 0	a 9 88EBOvv	8E8 i 3NaD 4	PQt x f u U x v xw	f P8BCB>
P 9DBB Xg T9> /Q ; 0	a 9 88EBOvv	99D i 3PGD 4	PQt x f u U x v xw	f P8BCBA
P 9DBB Xg T9A /Q ; 0	a 9 88EBOvv	9BA i 3PaD 4	PQt x f u U x v xw	f P8BCBB
P 9DBB Xg T9C /Q ; 0	a 9 88EBOvv	8E8 i 3NaD 4	PQt x f u U x v xw	f P9DEA;
P 9DBB Xg T9D /Q ; 0	a 9 88EBOvv	99D i 3PGD 4	PQt x f u U x v xw	f P9DEA>
P 9DBB Xg T9E /Q ; 0	a 9 88EBOvv	9BA i 3PaD 4	PQt x f u U x v xw	f P8D7>7
P 9DBB Xg T; 7 /Q ; 0	a 9 88EBOvv	;784;79 i 3SDi 8SGG 4	PQt x f u U x v xw	f P8BCBC
P 9DBB Xg TA8 /Q ; 0	a 9 88EBOvv	99D i 3PGD 4	PQt x f u U x v xw	f P9D8B;

9443	3423<	RQUT Y I UGI N	34233
9455	3423< 45246	RQUT Y YZGX	39233 3723:
GOYp´tp	34237	TJ	3<234 3723:
H´I ®z	3=234	TR	372== 43239
I pyßzwtyp´	38237	T	372== 36239
I tfÖwtyp´	38237	Yp´tp =	342=<
K5333	3<2=:	Yp´tp 533	34238
KI S	37235 4523:	YM	38233 3<23<
KI Z	37235	Yß´wtyp´	34235
K°´zwtyp´	3: 2=:	Y	372==
L5333	392=<	ZMG	37233
L 5333	432=<	Zz°´wtyp´	34236
NUI R	342=5	Z´pyowtyp´	3=237
RQUT Y I QZd	38237	ZOYp´tp	34238
RQUT Y I RGYYQ	38237 3623=	R	372== 38238

DC48>; D774; 7

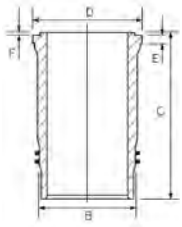
M <=t 8
N4 55t33
N <3t33
O 41=3
P 4741 8
79É438

MWdf

7D48>; D77477

7t33 I Q V
6t33 I X V
7t33 I X V

8A4>A9E97477 **N** 477t83 **O** 5: 3t33 **P** 4861<3 **Q** 4313: **R** 41t33
8>4>A9E97477 **N** 477t83 **O** 5: 3t33 **P** 4861<3 **Q** 4313: **R** 41t33
8A4>A77; 7477 **N** 477t83 **O** 5: 3t33 **P** 4861<3 **Q** 4315: **R** 41t33
8>4>A77; 7477 **N** 477t83 **O** 5: 3t33 **P** 4861<3 **Q** 4315: **R** 41t33
8A4>A9E; 7477 **N** 477t83 **O** 5: 3t33 **P** 4861<3 **Q** 4318: **R** 41t33
8>4>A9E; 7477 **N** 477t83 **O** 5: 3t33 **P** 4861<3 **Q** 4318: **R** 41t33



DE48>; D774; 7
< 0476<33063 .
480785=53033

DC48>; D774>7

M <=t88
N4 55t33
N <3t33
O 41=3
P 4741 8
79É438

MWdf

7D48>; D77477

7t33 I Q V
6t33 I X V
7t33 I X V

Ynswlp ßJtnsß?yr py pty

| | | |

DC487>; 77487

M <=188
N4 551t 3
N <3133
O 41=3
P 474188
79É438

MWdf

7D487>; 77477

7133 I Q V
6133 V
7133 I X V

Qrnvßop° °pl w	Ynswp ßJtnsß°yr py pty	Qrnvßop° uztyß°	Qrnvßÿp wr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt
P 9DCB XR79 /Q 90	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f PCCC;**
P 9DCB Xa T78 /Q 90	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P8B9>E**
P 9DCB Xg T78 /Q 90	a 9 **89D8Bvv**	**9E> i** 3SDD 4	**PØt x f u U x v xw**	**f P9DEBE**
P 9DCB Xg T79 /Q 90	a 9 **89D8Bvv**	**; 8B i** 3SPD 4	**PØt x f u U x v xw**	**f P9DEC7**

L5333	342=7	RQUT Y I UGI N	34233
NUI R	342=: 43239	YÞ ´wyp´	3=2=9

DC489>A77477

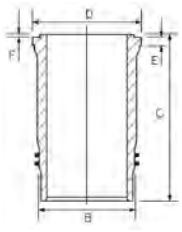
M : =158
N4 56143
N <415<
O 5143
P 467158
83É43:

MWdf f b

7D489>A77477

7133 I Q V
6133 V
7133 I X V

8A4>A9E97477 **N** 477183 **O** 5: 3133 **P** 4861<3 **Q** 4313: **R** 4133
8>4>A9E97477 **N** 477183 **O** 5: 3133 **P** 4861<3 **Q** 4313: **R** 4133
8A4>A77; 7477 **N** 477183 **O** 5: 3133 **P** 4861<3 **Q** 4315: **R** 4133
8>4>A77; 7477 **N** 477183 **O** 5: 3133 **P** 4861<3 **Q** 4315: **R** 4133
8A4>A9E; 7477 **N** 477183 **O** 5: 3133 **P** 4861<3 **Q** 4318: **R** 4133
8>4>A9E; 7477 **N** 477183 **O** 5: 3133 **P** 4861<3 **Q** 4318: **R** 4133



DE489>A77477
< 0457833033 .
480785=53033

DC489>A77497

M : <1<8
N4 56143
N <415<
O 5143
P 4661<8
83É43:

MWdf f b

7D489>A77477

7133 I Q V
6133 V
7133 I X V

Qrnvßop° °pl w	Ynswp ßJtnsß°yr py pty	Qrnvßop° uztyß°	Qrnvßÿp wr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt
P 9DCB XR7; /Q ; 0	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P8C7A7**
P 9DCB XR7> /Q ; 0	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P8A7A8**
P 9DCB XR7B /Q 90	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P8>; 8;**
P 9DCB XR7C /Q 90	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P8A7>E**
P 9DCB XR87 /Q 90	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P9DEBB**
P 9DCB XR8C	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P9DEBC**
P 9DCB Xa T79 /Q ; 0	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P8BA7E**
P 9DCB Xa T7; /Q ; 0	a 9 **89D8Bvv**	**; ; D i** 3SaD 4	**PØt x f u U x v xw**	**f P8B9ED**

I tÖ´typ´	38237	NUI R	34233 3<23=
K5333	3<2=:	RQUT Y I UGI N	34233
KI Z	37235	RQUT Y YZGX	39233 3723:
L5333	342=7	ZMG	37233
L 5333	432=<	Zz°´typ´	34236

DC48>; D77477

M : =158
N4 541 7
N <8138
O 41=3
P 46758
83É43:

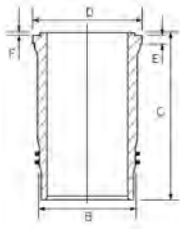
MWdf f b

7D48>; D77477

7133 I Q V
6133 I X V
7133 I X V

8A4>A9E97477
8>4>A9E97477
8A4>A77; 7477
8>4>A77; 7477
8A4>A9E; 7477
8>4>A9E; 7477

N 47783 **O** 5: 3133 **P** 4861<3 **Q** 4313: **R** 4133



DE48>; D77477
< 0476<33033 .
480785=53033

DC48>; D77487

M : =138
N4 541 7
N <8138
O 41=3
P 46738
83É43:

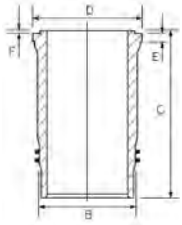
MWdf f b

7D48>; D77477

7133 I Q V
6133 I X V
7133 I X V

8A4>A9E97477
8>4>A9E97477

N 47783 **O** 5: 3133 **P** 4861<3 **Q** 4313: **R** 4133



DE48>; D77487
< 0476<33043 .
480785=53033

DC48>; D77497

M : <1<8
N4 541 7
N <8138
O 41=3
P 4661<8
83É43:

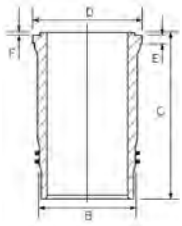
MWdf f b

7D48>; D77477

7133 I Q V
6133 I X V
7133 I X V

8A4>A9E97477
8>4>A9E97477

N 47783 **O** 5: 3133 **P** 4861<3 **Q** 4313: **R** 4133



DE48>; D77497
< 0476<33053 .
480785=53033

P 9DCB XR89 /Q	**; 0**	a	9	**89D8Bvv**	**; A;**	**i**	3SeD	4	**P**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8BD9A**
P 9DCB XR8; /Q	**; 0**	a	9	**89D8Bvv**	**; E7**	**i**	3/PD	4	**P**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8BD9B**
P 9DCB XR9A /Q	**90**	a	9	**89D8Bvv**	**; A;**	**i**	3SeD	4	**P**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8E88A**
P 9DCB XaT97 /Q	**; 0**	a	9	**89D8Bvv**	**; A;**	**i**	3SeD	4	**P**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8BCB9**
P 9DCB XaT98 /Q	**; 0**	a	9	**89D8Bvv**	**; E7**	**i**	3/PD	4	**P**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D7>8**

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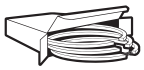
RQUT Y YZGX	3<237 3723:	ZMG	34234
YvÖtyp´	38237		



DC48>; D774A7

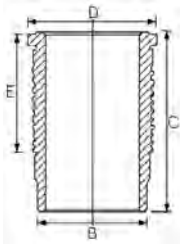
M : =158
N4 561 8
N : 9149
O 41=3
P 467158
85É436

WWdf f b

7D48>; D77477

7133 I Q V
6133 I X V
7133 I X V

8A4BC77A7477
8>4BC77A7477



N 477183 **O** 59<133 **P** 4861<3 **Q** <13:
N 477183 **O** 59<133 **P** 4861<3 **Q** <13:

DD48>; D774A7
< 0476<33083 .
4709: 3383033

DC48>; D774B7

M : =138
N4 561 8
N : 9149
P 467138
85É436

MWdf f b

7D48>; D77477

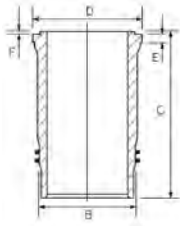
7133 I Q V
6133 I X V
7133 I X V

| | | |

P 9D>9 XkQ	GN	9	98E9Ovv	BB94C; A i	3 DD8GDDD	4	P@l x	f	u	U	x	v	xw	f P8E898
P 9D>9 Xl Q	GN	9	98E9Ovv	C; A4D7D i	3GDD8GDi	4	P@l x	f	u	U	x	v	xw	f P8E899
P 9D>9 XmQ	GN	9	98E9Ovv	C; A4D7D i	3GDD8GDi	4	P@l x	f	u	U	x	v	xw	f P8E89;
P 9D>9 Y Q	GN	9	98E9Ovv	9CA4; ; D i	3PcS8SaD	4	P@l x							f P8E897
P 9D>9 Y R	GN	9	98E9Ovv	; ; D i	3SaD	4	P@l x							Y bA>9;
P 9D>DXQ	e	9	8>B8Dvv	97B4A77 i	3NeD8aeD	4	P@l x							Y b9A>99
P 9D>DXQ>9;	e	9	8>B8Dvv	BB9 i	3 DD	4	P@l x	f	u	U	x	v	xw	f P9CE97
P 9D>DXkQ	e	9	8>B8Dvv	A77 i	3aeD	4	P@l x	f	u	U	x	v	xw	f P8E88D
P 9D>DXl Q	e	9	8>B8Dvv	A77 i	3aeD	4	P@l x	f	u	U	x	v	xw	f P8E88E
P 9D>DY	e	9	8>B8Dvv	97B i	3NeD	4	P@l x							f P8E7CA
P 9D>DY R	e	9	8>B8Dvv	97B i	3NeD	4	P@l x							Y bA>99
P 9D>DY T	e	9	8>B8Dvv	97B i	3NeD	4	P@l x							f P8E7CB
Q 9D>9 Q; 89	GN	9	98E9Ovv	9A749D7 i	3PSD8PeG	4	OZS6St							f P9D8C8
Q 9D>9 XQ; 89	GN	9	98E9Ovv	; B74>97 i	3Si D8VcG	4	OZS6St	f	u	U	x	v	xw	f P9CE9A
Q 9D>9 XQ; 99	GN	9	98E9Ovv	; D74>97 i	3VGc8VcG	4	OZS6St	f	u	U	x	v	xw	f P9CB; E
Q 9D>DXQ; 99	e	9	8>B8Dvv	9BA49EA i	3PaD8SDG	4	OZS6St	f	u	U	x	v	xw	f P9D8BB

K5333	38233	S GXCTK	
L=3	382< 392=9	ZMG	3=235
L5333	342=9	ZX_I Q) H_Y	

8>4>A9E87477



N 477183 **O** 586133 **P** 4861<3 **Q** 43138 **R** 4133

0fb´qp´pynp qßC 4781<x x	V´p°°tßÜC 478/<x x	Gü°ßpx pyß´p°° C 4781<x x	Kynl up l ´´p°t y C 4781<x x	0fb´qp´pyÜ otx zyß rrtzC4781<x x

P 9D>9 XQ979	GN	9	98E9Ovv	>>B4ADC i	3aDc8ci e	4	P@l x	f	u	U	x	v	xw	f P9ABD9
P 9D>9 XQ>7>	GN	9	98E9Ovv	EAB i	3GPDD	4	P@l x	f	u	U	x	v	xw	f P9CC79
P 9D>9 XQ>8>	GN	9	98E;7vv				P@l x	f	u	U	x	v	xw	Y b>A>9B
P 9D>9 XQ>8A	GN	9	98E;7vv				P@l x	f	u	U	x	v	xw	Y bAA>9B
P 9D>9 XQ>8B	GN	9	98E;7vv				P@l x	f	u	U	x	v	xw	Y bBA>9B
P 9D>9 XQ>8C	GN	9	98E;7vv				P@l x	f	u	U	x	v	xw	Y bCA>9B

ZX_I Q) H_Y

DC489>A774;7

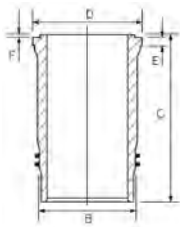
M <4158
N4 5:143
N <3153
O 4163
P 463133
79É438

MWWWZN df

7D489>A77477

7133 I Q V
6133 V
7133 I X V

8>4>A9E87477

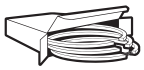


N 477183 **O** 586133 **P** 4861<3 **Q** 43138 **R** 4133

DD489>A774;7
< 0457833063 .
470785=43033

0fb´qp´pynp qßC 4781<x x	V´p°°tßÜC 478/<x x	Gü°ßpx pyß´p°° C 4781<x x	Kynl up l ´´p°t y C 4781<x x	0fb´qp´pyÜ otx zyß rrtzC4781<x x

Q 9DCBXgT78	a	9	89D8Bvv	99D i	3PGD	4	OZS6St	f	u	U	x	v	xw	f P9D9>;
Q 9DCBXgT79	a	9	89D8Bvv	99D i	3PGD	4	OZS6St	f	u	U	x	v	xw	f P8EEBB



Q9DCB XgT7;	a	9	**89D8Bvv**		**99D49; A i**		3PGD8PND	4	**OZS6St**	**f**	**u**	**U**	**x**	**v**	**xw**			**f P9; D7>**
Q9DCB XgT7>	a	9	**89D8Bvv**		**977 i**		3NcN	4	**OZS6St**	**f**	**u**	**U**	**x**	**v**	**xw**			**f P9A>AE**

GaGTIQZd	34246		RQUT Y I RGYYQ	4323:	3<243
NUI R	3823:		TM	3823:	45247
RQUT Y I QZd	3823:		TR	3823:	45247

DC4>; ; D77477

M	:<t3
N4	5<t8
N	=6176
P	4661t8
	83É43:

MWdf fb

7D4>; ; D77477

6183		IQ
6133		
7133		IX

ENGINE INDEX

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Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

		CCM	x		9
RBVM		GPi i	S	cP9cD	8
RBVN		GPi i	S	cP9cD	8
RkVM		GPee	S	ca9DD	A
Rl VM		GVi a	S	ci 9DD	D
Td8BPQ		GVi e	S	ce9DD	B
V>d		GNi i	S	cS9DD	9
V>f		GNi i	S	cS9DD	9
VVM/Q w t4Q0		GNi i	S	cS9DD	9
VVW		GNi i	S	cS9DD	9
VVY		GNi i	S	cS9DD	9
XA4hQ		NSee	S	ei 9DD	88
XR8C		Gi i i	S	ec9VD	87
XR8D		Gi i i	S	ec9VD	87
XRRC		Gi i i	S	ec9VD	87
d9		NGeS	S	ea9DD	E
dRAA		Gi i e	S	ea9DD	E
l B78		GVaD	S	cV9DD	>
l B>9		GVaD	S	cV9DD	>
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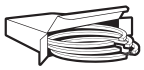
ml 4PQ		GSi e	S	ce9DD	C



RBVM	S	9	**8; EEvv**	**A7 i**	3ae	4	**P0t x**	**f u U x v xw**	**f P8DBE;**
RBVN	S	9	**8; EEvv**	**A7 i**	3ae	4	**P0t x**	**f u U x v xw**	**f P97EA8**

5 4l7 I J 37236 3923:

DC48; A; 77477
DC48; A; 7C477 *mT m*

M 751=7
N4 471 3
N 6: 149
O 4188
P 98177
58É93

MWdf f b

7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mT m*

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41=8 V
5183 I X V

8>4797CB7477 **N** : 91=8 **O** 469133 **P** : <178 **Q** 8158
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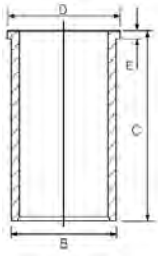

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V>f	S	9	**89EEvv**	**>> i**	3aD	4	**bx**		**f P9>BD8**
VVM/Q w t4Q0	S	9	**89EEvv**	**; C i**	3/D	4	**bx**		**f P9AD>A**
VVW	S	9	**89EEvv**	**; C i**	3/D	4	**bx**		**f P9>BCD**
VVY	S	9	**89EEvv**	**; C i**	3/D	4	**bx**		**f P9>BCE**

DC4CDA777477
DC4CDA77C477 *mT m*
DC4CDA788477 *Tmm*

M 5=173
P 861=3
4<É97

7D4CDA777477
7D4CDA77C477 *mT m*
7D4CDA788477 *Tmm*

4183 I X V
41 8 V
6183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

mV4hQ/Q >0	S	9	**8; >Evv**	**AA4BC i**	3:V8 G	4	**bx**		**f P9>D9D**

5 416 3: 23: 44247 5 416 S eX 34243 39248

DC4>9>B77477
DC4>9>B7C477 *mT m*

M 5: 173
N4 6163
N 86183
O 4153
P 79133
4<É8=

f b

7D4>9>B77477
7D4>9>B7C477 *mT m*

4133 I X
4133 V
5133 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

I B78	S	9	**8AB7vv**	**D74D8 i**	3GDi 8GGD	4	**P0t x**	**f u U x v xw**	**f P8DA89**
I B>9	S	9	**8AB7vv**	**D7 i**	3GDi	4	**P0t x**	**f u**	**f P; 89DD**

6 419 J OZ°´mz 39237 3923= 6 419 S eX I J 4523< 38246
6 419 S e0I J 4523< 38246

DC4>9>777477
DC4>9>77D477 *mT m*

M 741t 3
N4 4658
N 741<3
O 4153
P 9863
59É94

MWWWdf fb

7D4>9>777477
7D4>9>77C477 *mT m*
7D4>9>77D477 *mT m*

6133 I Q V
41=8 V
5183 I X V

LKZ-Ring

RkVM S 9 **8; DDvv** **AE4B9 i** 3eD8eS 4 **bx** **f P8DBEA**

5 417 35236 3923:

DC4>9B877477
DC4>9B87C477 *mT m*

M 5<58
N2 4158
P 8863
4=É83

7D4>9B877477
7D4>9B87C477 *mT m*

4153 TZ
4183 V
5183 TZ

Kw°ßz®w
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

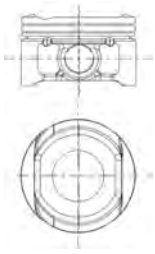
Td8BPQ S 9 **8AEDvv** **D7 i** 3GDi 4 **bx** **f P; 7D8C**

LGS ORGG aGT 419 3423: 3824<

DC4>; CC77477
DC4>; CC7C477 *mT m*

M 5<183
N4 71t 3
N 98133
N2 5153
O 41<3
P 7=153
4=É88

df



7D4>; CC77477
7D4>; CC7C477 *mT m*

4153 I X V
4153 V
5133 I X

Vf°ßzy ' ty ' ´p°° qßty nzy´zo Qzwpymzwüpy ty Vwp°pwptyr p' ´p ß GÉp °p´´ °°´ mtpwp H°wy opw t°ß y x zyß oz l ' ´p°t y py w mtpw Y' tyzßßz ty°p´ßz l °' tyß ypww mtpwv
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m1 4PQ S 9 **8>EDvv** **CB i** 3GDP 4 **bx** **f P9A789**

5 418 t 38243 39248

DC4>9>C77477
DC4>9>C7C477 *mT m*

M 591=3
O 4195
O 5163
P 78173
4=É8<

f b

7D4>9>C77477
7D4>9>C7C477 *mT m*

4153 I X V
4153 V
5183 TZ

Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

RI VM	S	9	**8AEBvv**	**C> i**	33DD	4	**bx**	**f P8DBE9**
5 419				35236	3923:			

DC48>8; 77477
DC48>8; 7C477 *mT m*

M 58138
P 7<143
4<É83

7D48>8; 77477
7D48>8; 7C477 *mT m*

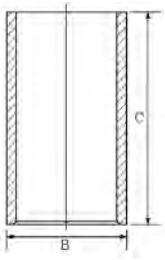
4153 TZ
4183 V
5183 I X

K\ºfz®w
Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

d9	S	9	**98D>vv**	**>C4A9 i**	3aS8cG	4	**P@t x**	**f P97; 7**
dRAA	S	9	**8EEDvv**	**AA4AB i**	3cV8ca	4	**P@t x**	**f P; 8A; ;**

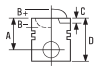
959 @a 513 J				382=7	392=:	K K5533 J	342=<	38236
959 @a 513 J MRc I zx ' ´pÉ				432=5	372=:	YVKI ZXUT 515 ZJ	3<2=9	432=8
HOYKX0K 515 J				362=8	432<=			

8>4787D>7477 **N** =3133 **O** 4: =1=9



XR8C	S	9	**8EEEvv**	**87>4887 i**	3GSG8GVD	4	**bx**	**f P8D97B**
XR8D	S	9	**8EEEvv**	**87> i**	3GSG	4	**bx**	**f P8D97C**
XRRC	S	9	**8EEEvv**	**87C i**	3GSa	4	**bx**	**f P8E97A**

8 513				35238	38243	9 513 S eX	3<23:	3: 246
9 513				39235	3<23:			



DC4>9; >77477
DC4>9; >7C477 *mT m*

M 5<183
N4 3168
N : 9183
P 84133
54É93

7D4>9; >77477
7D4>9; >7C477 *mT m*

4153 I X V
4153 V
5183 I X

Yfbppw Yfl sw Gntp´ Gnp´z Gnntl tz

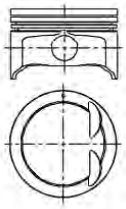
XA4hQ S 9 **9>DDvv** **88C489A i** 3GVi 8GcD 4 **bx** **f P9; C7B**

6 518	3623= 3=247	9 518 S eX	3<23: 3: 246
8 518	3=244	I c0: 518 S eX	3: 23= 36246
9 518mípl v	43245 3: 246		

DC4>9>A77477
DC4>9>A7C477 *mT m*

M 5<183
N4 9193
N : 61<3
O 5183
P 831: 3
53É88

f b



7D4>9>A77477
7D4>9>A7C477 *mT m*

4153 VaJ V
4153 V
5183 TZ

Yfbppw Yfl sw Gntp´ Gnp´z Gnntl tz

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		CCM	x		9
Y 8795E87		Gci c	S	ei 9DD	; 7
Y 8795E8E		Gci c	S	ei 9DD	; 7
Y 8795E97		Gi c	S	ei 9DD	; 8
Y 8795E98		Gi c	S	ei 9DD	; 8
Y 8795E99		Gi c	S	ei 9DD	; 8
Y 8795E9>		Gi c	S	ei 9DD	; 8
Y 8795E; D		Gi c	S	ei 9DD	; 7
Y 8795E; E		Gi c	S	ei 9DD	; 7
Y 8795EB8		Gi c	S	ei 9DD	; 8
Y 8795EB9		Gi c	S	ei 9DD	; 8
Y 8795EB;		Gi c	S	ei 9DD	; 8
Y 8795EB>		Gi c	S	ei 9DD	; 8
Y 8795EBA		Gi c	S	ei 9DD	; 7
Y 87; 5ED7		Ni aD	a	ee9/D	9E
Y 87; 5ED8		Ni aD	a	ee9/D	9E
Y 87; 5ED9		Ni aD	a	ee9/D	9E
Y 87; 5ED;		Ni aD	a	ee9/D	9E
Y 87; 5ED>		Ni aD	a	ee9/D	9E
Y 87; 5EDA		Ni aD	a	ee9/D	9E
Y 87; 5EDC		Ni aD	a	ee9/D	9E
Y 87>5E>8		Nci i	a	ei 9 D	; B
Y 87>5E>9		Nci i	a	ei 9 D	; B
Y 87>5E>;		Nci i	a	ei 9 D	; B
Y 87>5E>>		Nci i	a	ei 9 D	; B
Y 87>5E>A		Nci i	a	ei 9 D	; B
Y 87>5EE7		PGi i	a	ei 9 D	; C
Y 87>5EE8		PGi i	a	ei 9 D	; C
Y 87>5EE9		PGi i	a	ei 9 D	; C
Y 87>5EE>		PGi i	a	ei 9 D	; C
Y 87>5EEA		PGi i	a	ei 9 D	; C
Y 87>5EEB		PGi i	a	ei 9 D	; C
Y 8875E98		NcSa	a	ea9DD	8>
Y 8875E99		NcSa	a	ea9DD	8>
Y 8875E9;		NcSa	a	ea9DD	8>
Y 8875E9>		NcSa	a	ea9DD	8>
Y 8875E9B		NcSa	a	ea9DD	8>
Y 8875ED8		NcSa	a	ea9DD	8>
Y 8875ED9		NcSa	a	ea9DD	8>
Y 8875ED;		NcSa	a	ea9DD	8>
Y 8875ED>		NcSa	a	ea9DD	8>
Y 8875EDA		NcSa	a	ea9DD	8>
Y 8875EDB		NcSa	a	ea9DD	8>
Y 8875EDC		NcSa	a	ea9DD	8>
Y 8875EDD		NcSa	a	ea9DD	8>
Y 8875EDE		NcSa	a	ea9DD	8>
Y 8875EE7		NcSa	a	ea9DD	8>
Y 8885EC7		NNi V	S	i D9 D	; E
Y 8885EC;		NNi V	S	i D9 D	>7
Y 8885EC>		NNi V	S	i D9 D	; E
Y 8885ECA		NNi V	S	i D9 D	>7
Y 8885ECC		NNi V	S	i D9 D	>8
Y 8885ECD		NNi V	S	i D9 D	>7
Y 8885ECE		NNi V	S	i D9 D	>7
Y 8885ED7		NNi V	S	i D9 D	>8
Y 8885ED8		NNi V	S	i D9 D	>7
Y 8885ED9		NNi V	S	i D9 D	>7
Y 8885ED;		NNi V	S	i D9 D	>7
Y 8885ED>		NNi V	S	i D9 D	; E
Y 8895E>7		PGi i	a	ei 9 D	; D
Y 8895E>8		PGi i	a	ei 9 D	; D

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		CCM	x		9
Y 8895E>9		PGi	a	ei 9 D	; D
Y 8895E>;		PGi	a	ei 9 D	; D
Y 8895E>>		PGi	a	ei 9 D	; D
Y 8895E>A		PGi	a	ei 9 D	; D
Y 8895E>B		PGi	a	ei 9 D	; D
Y 8895E>C		PGi	a	ei 9 D	; D
Y 8895E>E		PGi	a	ei 9 D	; D
Y 8895EA8		PGi	a	ei 9 D	; D
Y 8895EA;		PGi	a	ei 9 D	; D
Y 8895EA>		PGi	a	ei 9 D	; D
Y 8895EAA		PGi	a	ei 9 D	; D
Y 88;5E>7		SNaa	e	ei 9 D	; D
Y 88;5E>8		SNaa	e	ei 9 D	; D
Y 88;5E>9		SNaa	e	ei 9 D	; D
Y 88;5E>;		SNaa	e	ei 9 D	; D
Y 88;5E>>		SNaa	e	ei 9 D	; D
Y 8B7 N7; /eY Mdf 0		Vi i	P	aP9VD	8
Y 8B7 N7> /eY Mdf 0		Vi i	P	aP9VD	8
Y 8B7 N7A /eY Mdf 0		Vi i	P	aP9VD	8
Y 8B85EC8		NNi V	S	i D9 D	>7
Y 9C85DB7		Gci a	S	eN9DD	>
Y 9C85DB8		Gci a	S	eN9DD	>
Y 9C85E>D		Gci a	S	eN9DD	A
Y 9C85EA7		Gci a	S	eN9DD	A
Y 9C85EA8		Gci a	S	eN9DD	A
Y 9C85EA>		Gci a	S	eN9DD	A
Y 9C85EAA		Gci a	S	eN9DD	A
Y 9C85EAB		Gci a	S	eN9DD	A
Y 9C85EAC		Gci a	S	eN9DD	A
Y 9C95E88		NSi a	a	ee9DD	97
Y 9C95E97		NSi a	a	ee9DD	97
Y 9C95E98		NSi a	a	ee9DD	97
Y 9C95E99		NSi a	a	ee9DD	97
Y 9C95E>7		Ni i a	a	ee9DD	97
Y 9C95E>8		Ni i a	a	ee9DD	97
Y 9C95E>9		Ni i a	a	ee9DD	97
Y 9C95E>;		Ni i a	a	ee9DD	97
Y 9C95E>>		Ni i a	a	ee9DD	97
Y 9C95E>A		Ni i a	a	ee9DD	97
Y 9C95E>B		Ni i a	a	ee9DD	97
Y 9C95E>C		Ni i a	a	ee9DD	97
Y 9C95E>E		Ni i a	a	ee9DD	97
Y 9C95EA9		Ni i a	a	ee9DD	97
Y 9C>5E97		Gi iG	S	eP9DD	B
Y >CBEE98 /Y >>CS0		GGi ac	a	GNe9DD	BA
Y >CBEE9A /Y >>CTS0		GGi ac	a	GNe9DD	BA
Y >CBEE9B /Y >>CTS0		GGi ac	a	GNe9DD	BA
Y >CBEE9C /Y >>CTS0		GGi ac	a	GNe9DD	BA
Y >CBE;7 /Q 9 Y >>C XMS0		GGi ac	a	GNe9DD	BA
aY ;8>5E77		PceS	S	i c9DD	>>
aY ;8>5E87		PceS	S	i c9DD	>>
aY ;8>5E8>		PceS	S	i c9DD	>>
aY ;8>5E8A		PceS	S	i c9DD	>>
aY ;8>5E8B		PceS	S	i c9DD	>>
aY ;8>5E8C		PceS	S	i c9DD	>>
aY ;8>5E8D		PceS	S	i c9DD	>>
aY ;8>5E8E		PceS	S	i c9DD	>>
aY ;8>5E97		PceS	S	i c9DD	>>
aY ;8>5E98		PceS	S	i c9DD	>>
aY ;8>5E99		PceS	S	i c9DD	>>

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	CCM	x		9
a Y ; 8>5E>7	PceS	S	i c9DD	>>
a Y ; 8>5E>8	PceS	S	i c9DD	>>
a Y ; 8>5E>9	PceS	S	i c9DD	>>
a Y ; 8>5E>;	PceS	S	i c9DD	>>
a Y ; 8>5E>>	PceS	S	i c9DD	>>
a Y ; 8>5E>A	PceS	S	i c9DD	>>
a Y ; 8>5E>B	PceS	S	i c9DD	>>
a Y ; 8>5E>C	PceS	S	i c9DD	>>
a Y ; 8>5E>D	PceS	S	i c9DD	>>
a Y ; 8>5E>E	PceS	S	i c9DD	>>
a Y ; 8>5EA7	PceS	S	i c9DD	>>
a Y ; 8>5EA8	PceS	S	i c9DD	>>
a Y ; 8>5EA;	PceS	S	i c9DD	>>
a Y ; 8>5EA>	PceS	S	i c9DD	>>
a Y ; 8>5EAB	PceS	S	i c9DD	>>
a Y ; 8>5EAC	PceS	S	i c9DD	>>
a Y ; 8>5EAD	PceS	S	i c9DD	>>
a Y ; 8>5EAE	PceS	S	i c9DD	>>
a Y ; 8>5EB7	PceS	S	i c9DD	>>
a Y ; 8>5EB8	PceS	S	i c9DD	>>
a Y ; 8>5EB9	PceS	S	i c9DD	>>
a Y ; 8>5EB;	PceS	S	i c9DD	>>
a Y ; 8>5EB>	PceS	S	i c9DD	>>
a Y ; 8>5EBA	PceS	S	i c9DD	>>
a Y ; 8>5EC7	PceS	S	i c9DD	>A
a Y ; ; A5E87	GGVeG	a	GNe9DD	BB
a Y ; ; A5E; 7	GGVeG	a	GNe9DD	BB
a Y ; ; A5E; 9	GGVeG	a	GNe9DD	BB
a Y ; >75E; 7	PceS	S	i c9DD	>>
a Y ; >75E; 9	PceS	S	i c9DD	>>
a Y ; >85E87	VacV	a	i c9DD	>>
a Y ; >85E88	VacV	a	i c9DD	>>
a Y ; >85E89	VacV	a	i c9DD	>>
a Y ; >85E8A	VacV	a	i c9DD	>>
a Y ; >85E8D	VacV	a	i c9DD	>>
a Y ; >85E8E	VacV	a	i c9DD	>>
a Y ; >85E; 8	VacV	a	i c9DD	>>
a Y ; >85E; 9	VacV	a	i c9DD	>>
a Y ; >85E; >	VacV	a	i c9DD	>>
a Y ; >85E; A	VacV	a	i c9DD	>>
a Y ; >85E; B	VacV	a	i c9DD	>>
a Y ; >85E; D	VacV	a	i c9DD	>>
a Y ; >85E>8	VacV	a	i c9DD	>>
a Y ; >85E>B	VacV	a	i c9DD	>>
a Y ; >85E>D	VacV	a	i c9DD	>>
a Y ; >85E>E	VacV	a	i c9DD	>>
a Y ; >85EEA	VacV	a	i c9DD	>>
a Y ; >; 5E87	PceS	S	i c9DD	>>
a Y ; >; 5E; 9	PceS	S	i c9DD	>>
a Y ; >; 5E; >	PceS	S	i c9DD	>>
a Y ; >>5E7A /a Y ; A90	VacV	a	i c9DD	>>
a Y ; >>5E89 /a Y ; A90	VacV	a	i c9DD	>>
a Y ; >>5E; 7 /a Y ; A90	VacV	a	i c9DD	>>
a Y ; >>5E; 9 /a Y ; A90	VacV	a	i c9DD	>>
a Y ; >>5E; ; /a Y ; A90	VacV	a	i c9DD	>>
a Y ; >>5E>7 /a Y ; A9 M0	VacV	a	i c9DD	>>
a Y ; >>5E>8 /a Y ; A9 M0	VacV	a	i c9DD	>>
a Y ; >>5E>; /a Y ; A90	VacV	a	i c9DD	>>
a Y ; >>5E>> /a Y ; A90	VacV	a	i c9DD	>>
a Y ; >>5E>A /a Y ; A90	VacV	a	i c9DD	>>

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a Y ; >>5E>B /a Y ; A90		VacV	a	i c9DD	>>
a Y ; >>5E>E		VacV	a	i c9DD	>>
a Y ; >>5EB; /a Y ; A90		VacV	a	i c9DD	>>
a Y ; >A5E87 /a Y ; AA0		GGVeG	a	GNe9DD	BB
a Y ; >A5E89 /a Y ; AA0		GGVeG	a	GNe9DD	BB
a Y ; >A5E8; /a Y ; AA0		GGVeG	a	GNe9DD	BC
a Y ; >A5E8> /a Y ; AA0		GGVeG	a	GNe9DD	BB
a Y ; >A5E8A /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5E8E /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5E; 9 /a Y ; AA0		GGVeG	a	GNe9DD	BB
a Y ; >A5E; ; /a Y ; AA0		GGVeG	a	GNe9DD	BB
a Y ; >A5E; B /a Y ; AA0		GGVeG	a	GNe9DD	BB
a Y ; >A5E; C /a Y ; AA0		GGVeG	a	GNe9DD	BB
a Y ; >A5E>8 /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5E>9 /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5E>A /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5E>B /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5E>C /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5E>E /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5EB7 /a Y ; AA M0		GGVeG	a	GNe9DD	BC
a Y ; >A5EC9 /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5EC; /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >A5ECA /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >C5E8A /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >C5E>9 /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; >C5E>; /a Y ; AA0		i aVG	V	GNe9DD	BB
a Y ; A95E78		VacV	a	i c9DD	>>
a Y ; A95E79		VacV	a	i c9DD	>>
a Y ; A95E7;		VacV	a	i c9DD	>>
a Y ; A95E7>		VacV	a	i c9DD	>>
a Y ; A95E7A		VacV	a	i c9DD	>>
a Y ; A95E7B		VacV	a	i c9DD	>>
a Y ; A95E7C		VacV	a	i c9DD	>>
a Y ; A95E7D		VacV	a	i c9DD	>>
a Y ; A95E7E		VacV	a	i c9DD	>>
a Y ; A95E87		VacV	a	i c9DD	>>
a Y ; A95E88		VacV	a	i c9DD	>>
a Y ; A95E89		VacV	a	i c9DD	>>
a Y ; A95E8;		VacV	a	i c9DD	>B
a Y ; A95E8>		VacV	a	i c9DD	>>
a Y ; A95E8A		VacV	a	i c9DD	>>
a Y ; A95E8B		VacV	a	i c9DD	>B
a Y ; A95E8C		VacV	a	i c9DD	>>
a Y ; A95E8D		VacV	a	i c9DD	>B
a Y ; A95E8E		VacV	a	i c9DD	>>
a Y ; A95E; 7		VacV	a	i c9DD	>>
a Y ; A95E; 8		VacV	a	i c9DD	>>
a Y ; A95E; 9		VacV	a	i c9DD	>>
a Y ; A95E; ;		VacV	a	i c9DD	>>
a Y ; A95E; >		VacV	a	i c9DD	>>
a Y ; A95E; A		VacV	a	i c9DD	>>
a Y ; A95E; B		VacV	a	i c9DD	>>
a Y ; A95E; C		VacV	a	i c9DD	>B
a Y ; A95E; D		VacV	a	i c9DD	>>
a Y ; A95E; E		VacV	a	i c9DD	>>
a Y ; A95E>9		VacV	a	i c9DD	>>
a Y ; A95E>;		VacV	a	i c9DD	>>
a Y ; A95E>>		VacV	a	i c9DD	>>
a Y ; A95E>A		VacV	a	i c9DD	>>
a Y ; A95E>B		VacV	a	i c9DD	>B

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a Y ; A95E>D	VacV	a	i c9DD	>>
a Y ; A95E>E	VacV	a	i c9DD	>B
a Y ; A95EA7	VacV	a	i c9DD	>B
a Y ; A95EA;	VacV	a	i c9DD	>>
a Y ; A95EA>	VacV	a	i c9DD	>>
a Y ; A95EAA	VacV	a	i c9DD	>>
a Y ; A95EAE /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A95EB;	VacV	a	i c9DD	>>
a Y ; A95EB>	VacV	a	i c9DD	>>
a Y ; A95EBA /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A95EBB /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A95EBC /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A95EBD	VacV	a	i c9DD	>B
a Y ; A95EBE	VacV	a	i c9DD	>>
a Y ; A95EC7	VacV	a	i c9DD	>>
a Y ; A95EC8	VacV	a	i c9DD	>>
a Y ; A95EC9	VacV	a	i c9DD	>>
a Y ; A95EC;	VacV	a	i c9DD	>>
a Y ; A95EC>	VacV	a	i c9DD	>>
a Y ; A95ECA	VacV	a	i c9DD	>>
a Y ; A95ECB	VacV	a	i c9DD	>>
a Y ; A95ECD /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A95ECE	VacV	a	i c9DD	>>
a Y ; A95ED7	VacV	a	i c9DD	>>
a Y ; A95ED8	VacV	a	i c9DD	>>
a Y ; A95ED9	VacV	a	i c9DD	>>
a Y ; A95ED;	VacV	a	i c9DD	>>
a Y ; A95ED>	VacV	a	i c9DD	>>
a Y ; A95EDA	VacV	a	i c9DD	>>
a Y ; A95EDB	VacV	a	i c9DD	>>
a Y ; A95EDC	VacV	a	i c9DD	>>
a Y ; A95EDD	VacV	a	i c9DD	>B
a Y ; A95EDE	VacV	a	i c9DD	>>
a Y ; A95EE7	VacV	a	i c9DD	>>
a Y ; A95EE8	VacV	a	i c9DD	>>
a Y ; A95EE9 /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A95EE;	VacV	a	i c9DD	>>
a Y ; A95EE>	VacV	a	i c9DD	>B
a Y ; A95EEB	VacV	a	i c9DD	>>
a Y ; A95EEC	VacV	a	i c9DD	>>
a Y ; A95EED	VacV	a	i c9DD	>>
a Y ; A95EEE /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E77 /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E78 /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E79 /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E7; /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E7> /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E7A /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E7C /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E7E /a Y ; A9 M0	VacV	a	i c9DD	>A
a Y ; A; 5E87 /a Y ; A9 M0	VacV	a	i c9DD	>A
a Y ; A; 5E88 /a Y ; A9 M0	VacV	a	i c9DD	>B
a Y ; A; 5E89 /a Y ; A9 M0	VacV	a	i c9DD	>B
a Y ; A; 5E8; /a Y ; A9 M0	VacV	a	i c9DD	>B
a Y ; A; 5E8> /a Y ; A9 M0	VacV	a	i c9DD	>B
a Y ; A; 5E8A /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E8B /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E8C /a Y ; A90	VacV	a	i c9DD	>>
a Y ; A; 5E99 /a Y ; A9 Y NeM0	VacV	a	i c9DD	>>
a Y ; A; 5E9; /a Y ; A9 Y NeM0	VacV	a	i c9DD	>>

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		CCM	x		9
a Y ; A; 5E; 7 /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E; 8 /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E; 9 /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E; ; /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E; > /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E; A /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E; B /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E; D /a Y ; A9 Y Ne MD		VacV	a	i c9DD	>>
a Y ; A; 5E>7 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5E>8 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5E>9 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5E>; /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5E>> /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5E>A /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5E>B /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5E>E /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EA7 /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EA8 /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EA9 /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EA; /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EA> /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EAC /a Y ; A9 MD		VacV	a	i c9DD	>>
a Y ; A; 5EAD /a Y ; A96; 0		VacV	a	i c9DD	>B
a Y ; A; 5EAE /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EB7 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EB8 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EB9 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EB; /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EB> /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EBA /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EBB /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EBC /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EBD /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EBE /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EC7 /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EC8 /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EC9 /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EC; /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EC> /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5ECA /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5ECB /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5ECC /a Y ; A9 MD		VacV	a	i c9DD	>A
a Y ; A; 5ECD /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5ED7 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5ED8 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5ED9 /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5ED; /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5ED> /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EDA /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EDE /a Y ; A90		VacV	a	i c9DD	>>
a Y ; A; 5EE8 /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A; 5EEA /a Y ; A9 MD		VacV	a	i c9DD	>>
a Y ; A; 5EEB /a Y ; A90		VacV	a	i c9DD	>A
a Y ; A; 5EEC /a Y ; A9 MD		VacV	a	i c9DD	>B
a Y ; A>5E77 /Q 90		Pi cN	S	i c9/D	>C
a Y ; A>5E78 /Q 9 a Y ; B> XMD		Pi cN	S	i c9/D	>C
a Y ; A>5E79 /Q 9 a Y ; B> XMD		Pi cN	S	i c9/D	>C
a Y ; A>5E7; /Q 9 a Y ; B> XMD		Pi cN	S	i c9/D	>C
a Y ; A>5E97 /Q 9 a Y ; B> XMD		Pi cN	S	i c9/D	>C
a Y ; A>5E98 /Q 9 a Y ; B> XMD		Pi cN	S	i c9/D	>C

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		CCM	x		9
a Y ; A>5E99 /Q	9 a Y ; B> XM0	Pi cN	S	i c9/D	>C
a Y ; A>5E9; /Q	9 a Y ; B> XM0	Pi cN	S	i c9/D	>C
a Y ; A>5E9> /Q	9 a Y ; B> XM0	Pi cN	S	i c9/D	>C
a Y ; A>5E9A /Q	9 a Y ; B> XM0	Pi cN	S	i c9/D	>C
a Y ; A>5E9B /Q	90	Pi cN	S	i c9/D	>C
a Y ; AA5E87		GGVeG	a	GNe9DD	BB
a Y ; AA5E88		GGVeG	a	GNe9DD	BB
a Y ; AA5E89		GGVeG	a	GNe9DD	BB
a Y ; AA5E8;		GGVeG	a	GNe9DD	BB
a Y ; AA5E8>		GGVeG	a	GNe9DD	BB
a Y ; AA5E8A		GGVeG	a	GNe9DD	BB
a Y ; AA5E8B		GGVeG	a	GNe9DD	BB
a Y ; AA5E8D		GGVeG	a	GNe9DD	BB
a Y ; AA5EB7		GGVeG	a	GNe9DD	BB
a Y ; AA5EB8		GGVeG	a	GNe9DD	BB
a Y ; AA5EB9		GGVeG	a	GNe9DD	BB
a Y ; AA5EB;		GGVeG	a	GNe9DD	BB
a Y ; AA5EB>		GGVeG	a	GNe9DD	BB
a Y ; AA5EBB		GGVeG	a	GNe9DD	BB
a Y ; AA5EBC		GGVeG	a	GNe9DD	BB
a Y ; AA5EBD		GGVeG	a	GNe9DD	BC
a Y ; AA5EBE		GGVeG	a	GNe9DD	BC
a Y ; AA5EC7		GGVeG	a	GNe9DD	BB
a Y ; AA5EC9		GGVeG	a	GNe9DD	BB
a Y ; AA5EC;		GGVeG	a	GNe9DD	BB
a Y ; AA5EC>		GGVeG	a	GNe9DD	BB
a Y ; AA5ECA		GGVeG	a	GNe9DD	BB
a Y ; AA5ECB		GGVeG	a	GNe9DD	BB
a Y ; AA5ECC		GGVeG	a	GNe9DD	BC
a Y ; AA5ECD		GGVeG	a	GNe9DD	BB
a Y ; AA5ECE		GGVeG	a	GNe9DD	BB
a Y ; AA5ED7		GGVeG	a	GNe9DD	BB
a Y ; AA5ED8		GGVeG	a	GNe9DD	BB
a Y ; AA5ED9		GGVeG	a	GNe9DD	BB
a Y ; AA5ED;		GGVeG	a	GNe9DD	BB
a Y ; AA5ED>		GGVeG	a	GNe9DD	BB
a Y ; AB5E78 /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E79 /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E7; /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E7> /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E7A /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E7B /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E7C /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E7D /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E7E /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E87 /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E88 /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E8; /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E8> /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E8A /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E8B /Q	8 a Y ; BB0	Vi Ve	a	i c9/D	>E
a Y ; AB5E>7 /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; AB5E>8 /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB5E>; /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB5E>> /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB5E>A /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB5E>B /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB5E>C /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB5E>D /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB5E>E /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8

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		CCM	x		9
a Y ; AB8EA8 /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB8EA9 /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB8EA; /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB8EAB /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB8EAD /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB8EAE /Q	8 a Y ; BB M0	Vi Ve	a	i c9/D	A8
a Y ; AB8ECC /Q	8 a Y ; BB XM0	Vi Ve	a	i c9/D	A9
a Y ; AB8ECD /Q	8 a Y ; BB XM0	Vi Ve	a	i c9/D	A9
a Y ; AB8ECE /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8ED7 /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8ED8 /a Y ; BB XM0		Vi Ve	a	i c9/D	>D
a Y ; AB8ED; /Q	8 a Y ; BB XM0	Vi Ve	a	i c9/D	A9
a Y ; AB8ED> /a Y ; BB XM0		Vi Ve	a	i c9/D	A7
a Y ; AB8EDA /a Y ; BB XM0		Vi Ve	a	i c9/D	A7
a Y ; AB8EDB /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EDC /Q	8 a Y ; BB XM0	Vi Ve	a	i c9/D	A9
a Y ; AB8EDD /Q	80	Vi Ve	a	i c9/D	A9
a Y ; AB8EDE /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EE7 /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EE8 /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EE9 /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EE; /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EE> /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EEA /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EEB /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EEC /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EED /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AB8EEE /a Y ; BB XM0		Vi Ve	a	i c9/D	A9
a Y ; AC8E77 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E78 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E79 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E7; /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E7> /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E7B /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E7C /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E7D /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E7E /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E87 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E8A /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E8B /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E8C /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E8D /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E8E /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E97 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E98 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E99 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E9> /Q	9 a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC8E9A /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E9B /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E9C /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E9E /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E; 7 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E; 8 /Q	9 a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC8E; 9 /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E; ; /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E; > /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E; A /a Y ; BB XM0		Vi Ve	a	i c9/D	>C
a Y ; AC8E; B /Q	9 a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC8E; C /Q	9 a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC8E; D /Q	90	Vi Ve	a	i c9/D	>C

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a Y ; AC3E>7 /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>8 /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>9 /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>; /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>> /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>A /Q 9 a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>B /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>C /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>D /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3E>E /Q 9 a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3EB8 /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3EB9 /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; AC3EB; /a Y ; BB XM0	Vi Ve	a	i c9/D	>C
a Y ; B75E88	ecND	a	GGV9DD	AE
a Y ; B75E89	ecND	a	GGV9DD	AE
a Y ; B75E8>	ecND	a	GGV9DD	AE
a Y ; B75E8A	ecND	a	GGV9DD	AE
a Y ; B75E8B	ecND	a	GGV9DD	AE
a Y ; B75E8C	ecND	a	GGV9DD	AE
a Y ; B75E8D	ecND	a	GGV9DD	AE
a Y ; B75E; 8	ecND	a	GGV9DD	AE
a Y ; B75E; ;	ecND	a	GGV9DD	AE
a Y ; B75E; >	ecND	a	GGV9DD	AE
a Y ; B75E; B	ecNV	a	GGV9DD	AE
a Y ; B75E; C	ecNV	a	GGV9DD	AE
a Y ; B75E; D	ecNV	a	GGV9DD	AE
a Y ; B75E; E	ecND	a	GGV9DD	AE
a Y ; B75E>7	ecNV	a	GGV9DD	AE
a Y ; B75E>8	ecNV	a	GGV9DD	AE
a Y ; B75E>9	ecNV	a	GGV9DD	AE
a Y ; B75E>;	ecNV	a	GGV9DD	AE
a Y ; B75E>>	ecNV	a	GGV9DD	AE
a Y ; B75E>B	ecNV	a	GGV9DD	AE
a Y ; B75E>C	ecNV	a	GGV9DD	AE
a Y ; B75E>D	ecNV	a	GGV9DD	AE
a Y ; B75E>E	ecNV	a	GGV9DD	AE
a Y ; B75EA>	ecNV	a	GGV9DD	AE
a Y ; B75EAA	ecNV	a	GGV9DD	AE
a Y ; B75EAB	ecNV	a	GGV9DD	AE
a Y ; B75EAE	ecNV	a	GGV9DD	AE
a Y ; B75EC>	ecNV	a	GGV9DD	AE
a Y ; B75ECB	ecNV	a	GGV9DD	AE
a Y ; B75ECD	ecNV	a	GGV9DD	AE
a Y ; B75ED7	ecND	a	GGV9DD	AE
a Y ; B75ED8	ecND	a	GGV9DD	AE
a Y ; B75ED>	ecND	a	GGV9DD	AE
a Y ; B75EDA	ecND	a	GGV9DD	AE
a Y ; B75EDB	ecND	a	GGV9DD	AE
a Y ; B95E7B	VacV	a	i c9DD	>A
a Y ; B95E7E	VacV	a	i c9DD	>A
a Y ; B95E87	VacV	a	i c9DD	>A
a Y ; B>5E78	Pi cN	S	i c9/D	>C
a Y ; B>5E7B	Pi cN	S	i c9/D	>D
a Y ; B>5E7C	Pi cD	S	i c9/D	>D
a Y ; B>5E7D	Pi cN	S	i c9/D	>D
a Y ; B>5E7E	Pi cN	S	i c9/D	>D
a Y ; B>5E88	Pi cN	S	i c9/D	>D
a Y ; B>5E89	Pi cN	S	i c9/D	>D
a Y ; B>5E8;	Pi cN	S	i c9/D	>D
a Y ; B>5E8D	Pi cD	S	i c9/D	>E

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			CCM	x		9
a Y ; B>5E8E			Pi cN	S	i c9/D	>E
a Y ; B>5E97			Pi cN	S	i c9/D	>E
a Y ; B>5E98 /Q	80		Pi cN	S	i c9/D	>E
a Y ; B>5EA7			Pi cN	S	i c9/D	A7
a Y ; B>5EA8			Pi cN	S	i c9/D	A7
a Y ; B>5EA9			Pi cN	S	i c9/D	A7
a Y ; B>5EA>			Pi cN	S	i c9/D	A7
a Y ; B>5EAC			Pi cN	S	i c9/D	A8
a Y ; B>5EAD			Pi cN	S	i c9/D	A8
a Y ; B>5EAE /Q	80		Pi cN	S	i c9/D	A8
a Y ; B>5ED7			Pi cN	S	i c9/D	A7
a Y ; B>5ED8			Pi cN	S	i c9/D	A7
a Y ; B>5ED>			Pi cN	S	i c9/D	A7
a Y ; B>5EDA			Pi cN	S	i c9/D	A9
a Y ; B>5EDC			Pi cN	S	i c9/D	A9
a Y ; BB5E78			Vi Ve	a	i c9/D	A8
a Y ; BB5E7A			Vi Ve	a	i c9/D	>D
a Y ; BB5E7B			Vi aD	a	i c9/D	>D
a Y ; BB5E7C			Vi Ve	a	i c9/D	>D
a Y ; BB5E7D			Vi Ve	a	i c9/D	>D
a Y ; BB5E7E			Vi aD	a	i c9/D	>D
a Y ; BB5E87			Vi Ve	a	i c9/D	>D
a Y ; BB5E89			Vi Ve	a	i c9/D	>D
a Y ; BB5E8;			Vi Ve	a	i c9/D	>D
a Y ; BB5E8>			Vi Ve	a	i c9/D	>D
a Y ; BB5E8C			Vi Ve	a	i c9/D	>D
a Y ; BB5E8D			Vi aD	a	i c9/D	>D
a Y ; BB5E8E			Vi Ve	a	i c9/D	>D
a Y ; BB5E; 7			Vi Ve	a	i c9/D	>D
a Y ; BB5E; 8			Vi Ve	a	i c9/D	>D
a Y ; BB5E; 9			Vi Ve	a	i c9/D	>D
a Y ; BB5E; ;			Vi Ve	a	i c9/D	>D
a Y ; BB5E; A			Vi Ve	a	i c9/D	>D
a Y ; BB5E; B			Vi aD	a	i c9/D	>D
a Y ; BB5E; C			Vi aD	a	i c9/D	>D
a Y ; BB5E; D			Vi Ve	a	i c9/D	>D
a Y ; BB5E; E			Vi Ve	a	i c9/D	>D
a Y ; BB5E>7			Vi Ve	a	i c9/D	>D
a Y ; BB5E>8 /Q	80		Vi Ve	a	i c9/D	A8
a Y ; BB5E>9 /Q	80		Vi Ve	a	i c9/D	A8
a Y ; BB5E>; /Q	80		Vi Ve	a	i c9/D	A8
a Y ; BB5E>>			Vi Ve	a	i c9/D	A7
a Y ; BB5E>A			Vi Ve	a	i c9/D	A7
a Y ; BB5E>B			Vi aD	a	i c9/D	A7
a Y ; BB5E>C			Vi Ve	a	i c9/D	A7
a Y ; BB5E>D			Vi Ve	a	i c9/D	A7
a Y ; BB5E>E			Vi Ve	a	i c9/D	A7
a Y ; BB5EA8			Vi aD	a	i c9/D	A7
a Y ; BB5EA9			Vi Ve	a	i c9/D	A7
a Y ; BB5EA;			Vi Ve	a	i c9/D	A7
a Y ; BB5EA>			Vi Ve	a	i c9/D	A7
a Y ; BB5EAA			Vi Ve	a	i c9/D	A7
a Y ; BB5EAB			Vi Ve	a	i c9/D	>C
a Y ; BB5EAC			Vi Ve	a	i c9/D	A7
a Y ; BB5EAD			Vi Ve	a	i c9/D	A7
a Y ; BB5EB7			Vi aD	a	i c9/D	A7
a Y ; BB5EB9			Vi aD	a	i c9/D	A7
a Y ; BB5EB;			Vi Ve	a	i c9/D	A7
a Y ; BB5EBA			Vi Ve	a	i c9/D	A7
a Y ; BB5EBB			Vi Ve	a	i c9/D	A7

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a Y ; BB8EBC	Vi Ve	a	i c9/D	A7
a Y ; BB8EBD	Vi Ve	a	i c9/D	A7
a Y ; BB8EBE	Vi Ve	a	i c9/D	A7
a Y ; BB8EC7	Vi Ve	a	i c9/D	A7
a Y ; BB8EC8	Vi Ve	a	i c9/D	A7
a Y ; BB8EC9	Vi Ve	a	i c9/D	A7
a Y ; BB8EC;	Vi Ve	a	i c9/D	A7
a Y ; BB8EC>	Vi Ve	a	i c9/D	A7
a Y ; BB8ECA	Vi Ve	a	i c9/D	A7
a Y ; BB8ECB	Vi Ve	a	i c9/D	A7
a Y ; BB8ECC	Vi Ve	a	i c9/D	A7
a Y ; BB8ECD	Vi Ve	a	i c9/D	A7
a Y ; BB8ECE	Vi Ve	a	i c9/D	A7
a Y ; BB8ED7	Vi aD	a	i c9/D	A7
a Y ; BB8ED8	Vi Ve	a	i c9/D	A7
a Y ; BB8ED;	Vi Ve	a	i c9/D	A7
a Y ; BB8ED>	Vi Ve	a	i c9/D	A7
a Y ; BB8EDD	Vi aD	a	i c9/D	A7
a Y ; BB8EE7	Vi Ve	a	i c9/D	A7
a Y ; BB8EE9	Vi Ve	a	i c9/D	A7
a Y ; BB8EE;	Vi Ve	a	i c9/D	A7
a Y ; BB8EE>	Vi Ve	a	i c9/D	A7
a Y ; BB8EEA	Vi Ve	a	i c9/D	A7
a Y ; BB8EEB	Vi Ve	a	i c9/D	A7
a Y ; BB8EEC /Q 80	Vi aD	a	i c9/D	A7
a Y ; BB8EEE /Q 80	Vi Ve	a	i c9/D	A9
a Y ; C75E7A /a Y ; B>0	Pi cN	S	i c9/D	>D
a Y ; C75EA7 /a Y ; B> M0	Pi cN	S	i c9/D	A7
a Y ; C75EA8 /a Y ; B> M0	Pi cN	S	i c9/D	A7
a Y ; C75EA9 /a Y ; B> M0	Pi cN	S	i c9/D	>D
a Y ; C95E7B /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C95E7C /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C95E; 7 /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C95EA7 /a Y ; B> M0	Vi Ve	a	i c9/D	A7
a Y ; C95EA8 /a Y ; B> M0	Vi Ve	a	i c9/D	A7
a Y ; C95EA; /a Y ; B> M0	Vi Ve	a	i c9/D	A7
a Y ; C95EAB /a Y ; B> M0	Vi Ve	a	i c9/D	A7
a Y ; C95EAD /a Y ; B> M0	Vi Ve	a	i c9/D	A7
a Y ; C95ED7 /a Y ; B> XM0	Vi Ve	a	i c9/D	A7
a Y ; C95ED8 /a Y ; B> XM0	Vi Ve	a	i c9/D	A7
a Y ; C8E7A /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C8E7B /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C8E7C /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C8E7D /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C8E7E /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C8E; 7 /a Y ; BB0	Vi Ve	a	i c9/D	>D
a Y ; C8E>8 /a Y ; BB XM0	Vi Ve	a	i c9/D	A7
a Y ; C8E>A /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8E>B /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8E>C /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EA7 /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EA8 /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EA; /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EA> /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EAA /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EAB /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EAC /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EAD /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EB8 /a Y ; BB M0	Vi Ve	a	i c9/D	A7
a Y ; C8EB9 /a Y ; BB M0	Vi Ve	a	i c9/D	A7

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a Y ; CB8EB; /a Y ; BB XM0		Vi Ve	a	i c9/D	A7
a Y ; CB8EB> /a Y ; BB M0		Vi Ve	a	i c9/D	A7
a Y ; CB8ED7 /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; CB8ED8 /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; CB8ED9 /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; CB8EDC /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; CB8EDD /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; CB8EDE /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; CB8EED /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; CB8EEE /a Y ; BB XM Y Nf O4g e M0		Vi Ve	a	i c9/D	>D
a Y ; D75E>9		Pi cN	S	i c9/D	A7
a Y ; D95E89		Vi Ve	a	i c9/D	>D
a Y ; D95E8;		Vi Ve	a	i c9/D	A7
a Y ; D95E8E		Vi Ve	a	i c9/D	A7
a Y ; D95EC8		Vi Ve	a	i c9/D	A7
a Y ; D>5E7B		Pi cN	S	i c9/D	>D
a Y ; D>5E7C		Pi cN	S	i c9/D	A7
a Y ; DB8EA7		Vi Ve	a	i c9/D	A7
a Y ; DB8EA8		Vi Ve	a	i c9/D	A7
a Y ; DB8EA9		Vi Ve	a	i c9/D	A7
a Y ; DB8ED7		Vi Ve	a	i c9/D	A7
a Y ; DB8ED8		Vi Ve	a	i c9/D	A7
a Y ; DB8ED;		Vi Ve	a	i c9/D	A7
a Y >785E7A		i VcN	a	GN/9DD	B7
a Y >785E7B		i VcN	a	GN/9DD	B7
a Y >785E7C		i VcN	a	GN/9DD	B7
a Y >785E7D		i VcN	a	GN/9DD	B7
a Y >785E7E		i VcN	a	GN/9DD	B7
a Y >785E89		i VcN	a	GN/9DD	B7
a Y >785E8;		i VcN	a	GN/9DD	B7
a Y >785E8>		i VcN	a	GN/9DD	B7
a Y >785E8A		i VcN	a	GN/9DD	B7
a Y >785E8B		i VcN	a	GN/9DD	B7
a Y >785E8C		i VcN	a	GN/9DD	B7
a Y >785E8D		i VcN	a	GN/9DD	B7
a Y >785E8E		i VcN	a	GN/9DD	B7
a Y >785E98		i VcN	a	GN/9DD	B7
a Y >785E99		i VcN	a	GN/9DD	B7
a Y >785E9;		i VcN	a	GN/9DD	B7
a Y >785E9A		i VcN	a	GN/9DD	B7
a Y >785E9B		i VcN	a	GN/9DD	B7
a Y >785E9C		i VcN	a	GN/9DD	B7
a Y >785E9D		i VcN	a	GN/9DD	B7
a Y >785EC7		i VcN	a	GN/9DD	B8
a Y >785EC9		i VcN	a	GN/9DD	B8
a Y >785EC;		i VcN	a	GN/9DD	B8
a Y >785EC> /Q	80	i VcN	a	GN/9DD	B9
a Y >785ECA /Q	80	i VcN	a	GN/9DD	B9
a Y >785ECC /Q	80	i VcN	a	GN/9DD	B9
a Y >785ECD /Q	80	i VcN	a	GN/9DD	B9
a Y >785ECE /Q	80	i VcN	a	GN/9DD	B9
a Y >785ED7 /Q	80	i VcN	a	GN/9DD	B9
a Y >785ED8 /Q	80	i VcN	a	GN/9DD	B9
a Y >785ED9 /Q	80	i VcN	a	GN/9DD	B9
a Y >785ED;		i VcN	a	GN/9DD	B;
a Y >785ED>		i VcN	a	GN/9DD	B8
a Y >785EDA		i VcN	a	GN/9DD	B8
a Y >785EDB		i VcN	a	GN/9DD	B8
a Y >785EDC		i VcN	a	GN/9DD	B8
a Y >785EDE		i VcN	a	GN/9DD	B8

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a Y >785EE7		i VcN	a	GNV9DD	B8
a Y >785EE8		i VcN	a	GNV9DD	B8
a Y >785EE9		i VcN	a	GNV9DD	B8
a Y >785EE;		i VcN	a	GNV9DD	B8
a Y >785EE>		i VcN	a	GNV9DD	B8
a Y >795E7A		GNeDD	e	GNV9DD	B7
a Y >795E7B		GNeDD	e	GNV9DD	B7
a Y >795E7C		GNeDD	e	GNV9DD	B7
a Y >795E87		GNeDD	e	GNV9DD	B7
a Y >795E89		GNeDD	e	GNV9DD	B7
a Y >795E8;		GNcaD	e	GNV9DD	B7
a Y >795E8>		GNeDD	e	GNV9DD	B7
a Y >795E8B		GNeDD	e	GNV9DD	B7
a Y >795E8C		GNcaD	e	GNV9DD	B7
a Y >795E8E		GNeDD	e	GNV9DD	B7
a Y >795E98		GNcaD	e	GNV9DD	B7
a Y >795E9;		GNeDD	e	GNV9DD	B7
a Y >795E9>		GNeDD	e	GNV9DD	B7
a Y >795E9A		GNcaD	e	GNV9DD	B7
a Y >795E9B		GNeDD	e	GNV9DD	B7
a Y >795E9C		GNeDD	e	GNV9DD	B7
a Y >795E9D		GNeDD	e	GNV9DD	B7
a Y >795EC7 /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EC8 /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EC9 /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EC; /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EC> /Q	80	GNcaP	e	GNV9DD	B9
a Y >795ECA /Q	80	GNcaP	e	GNV9DD	B9
a Y >795ECC /Q	80	GNcaP	e	GNV9DD	B9
a Y >795ECD /Q	80	GNcaP	e	GNV9DD	B9
a Y >795ED9 /Q	80	GNcaP	e	GNV9DD	B9
a Y >795ED; /Q	80	GNcaP	e	GNV9DD	B9
a Y >795ED> /Q	80	GNcaP	e	GNV9DD	B8
a Y >795EDA /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EDB /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EDC /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EDE /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EE7 /Q	80	GNcaP	e	GNV9DD	B9
a Y >795EEA		GNcaP	e	GNV9DD	B;
a Y >795EEB /Q	80	GNcaP	e	GNV9DD	B9
a Y >7; 5E87		GVi VP	GD	GNV9DD	B;
a Y >7; 5E8A		GVi VP	GD	GNV9DD	B7
a Y >7; 5E8B		GVi VP	GD	GNV9DD	B7
a Y >7; 5E8C		GVi VP	GD	GNV9DD	B7
a Y >7; 5E8D		GVi VP	GD	GNV9DD	B7
a Y >7; 5E8E		GVi VP	GD	GNV9DD	B7
a Y >7; 5E; 7		GVi VP	GD	GNV9DD	B7
a Y >7; 5E; 8		GVi VP	GD	GNV9DD	B7
a Y >7; 5E; 9		GVi VP	GD	GNV9DD	B7
a Y >7; 5E; ;		GVi VP	GD	GNV9DD	B;
a Y >7; 5E; >		GVi VP	GD	GNV9DD	B7
a Y >7; 5E; A		GVi VP	GD	GNV9DD	B;
a Y >7>		NDi GG	GN	GNV9DD	B7
a Y >7> M		NDi GG	GN	GNV9DD	B;
a Y >985E7A		GDi aS	a	GNe9DD	BD
a Y >985E7B		GDi aS	a	GNe9DD	BD
a Y >985E7C		GDi aS	a	GNe9DD	BD
a Y >985E7D		GDi aS	a	GNe9DD	BD
a Y >985E7E		GDi aS	a	GNe9DD	BD
a Y >985E87		GDi aS	a	GNe9DD	BD

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a Y >985EA8		GDi aS	a	GNe9DD	BE
a Y >995E78		GSaGe	e	GNe9DD	BE
a Y >995E7A		GSaGe	e	GNe9DD	BD
a Y >995E7B		GSaGe	e	GNe9DD	BD
a Y >995E7C		GSaGe	e	GNe9DD	BD
a Y >995E7D		GSaGe	e	GNe9DD	BD
a Y >995E7E		GSaGe	e	GNe9DD	BD
a Y >995E87		GSaGe	e	GNe9DD	BD
a Y >995E88		GSaGe	e	GNe9DD	BD
a Y >995E89		GSaGe	e	GNe9DD	BD
a Y >995E8;		GSaGe	e	GNe9DD	BD
a Y >995E8>		GSaGe	e	GNe9DD	BD
a Y >995E8A		GSaGe	e	GNe9DD	BD
a Y >995E8B		GSaGe	e	GNe9DD	BD
a Y >995E8C		GSaGe	e	GNe9DD	BD
a Y >995E8D		GSaGe	e	GNe9DD	BD
a Y >995E8E		GSaGe	e	GNe9DD	BD
a Y >995E97		GSaGe	e	GNe9DD	BD
a Y >995E98		GSaGe	e	GNe9DD	BD
a Y >995E99		GSaGe	e	GNe9DD	BD
a Y >995E9;		GSaGe	e	GNe9DD	BD
a Y >995EA8		GSaGe	e	GNe9DD	BE
a Y >995EA9		GSaGe	e	GNe9DD	BE
a Y >995EA;		GSaGe	e	GNe9DD	BE
a Y >995EA>		GSaGe	e	GNe9DD	BE
a Y >995EAA		GSaGe	e	GNe9DD	BE
a Y >995EAB		GSaGe	e	GNe9DD	BE
a Y >995EAC		GSaGe	e	GNe9DD	BE
a Y >995EAD		GSaGe	e	GNe9DD	BE
a Y >995EAE		GSaGe	e	GNe9DD	BE
a Y >995EB;		GSaGe	e	GNe9DD	BE
a Y >9; 5E78		GeNcP	GD	GNe9DD	C8
a Y >9; 5E7A		GeNcP	GD	GNe9DD	BD
a Y >9; 5E7B		GeNcP	GD	GNe9DD	BD
a Y >9; 5E7C		GeNcP	GD	GNe9DD	BD
a Y >9; 5E7D		GeNcP	GD	GNe9DD	BD
a Y >9; 5E7E		GeNcP	GD	GNe9DD	BD
a Y >9; 5EA7		GeNcP	GD	GNe9DD	BE
a Y >9>5E77		NGi Nc	GN	GNe9DD	BD
a Y >9>5E78		NGi Nc	GN	GNe9DD	BE
a Y >9C M		GGi ac	a	GNe9DD	BA
a Y >9C XM		GGi ac	a	GNe9DD	BA
a Y >9C5E7A		GGi ac	a	GNe9DD	BA
a Y >9C5E87		GGi ac	a	GNe9DD	BA
a Y >9C5E88		GGi ac	a	GNe9DD	BA
a Y >9C5EA7		GGi ac	a	GNe9DD	BA
a Y >9C5EA8		GGi ac	a	GNe9DD	BA
a Y >9C5EA9		GGi ac	a	GNe9DD	BA
a Y >9E5EA8		i i cP	V	GNe9DD	BA
a Y >9E5EA9		i i cP	V	GNe9DD	BA
a Y >9E5EA;		i i cP	V	GNe9DD	BA
a Y >9E5EAA		i i cP	V	GNe9DD	BA
a Y >>75E7C /Q	8 a Y >>90	GVDce	e	GPD9DD	DA
a Y >>75E7D /Q	8 a Y >>90	GVDce	e	GPD9DD	DA
a Y >>75E7E /a Y >>90		GVDce	e	GPD9DD	DB
a Y >>75E87 /Q	8 a Y >>90	GVDce	e	GPD9DD	DA
a Y >>75E88 /Q	8 a Y >>90	GVDce	e	GPD9DD	DA
a Y >>75E>7 /a Y >>9 M0		GSaGe	e	GNe9DD	D9
a Y >>75E>8 /a Y >>9 M0		GSaGe	e	GNe9DD	D9
a Y >>75E>9 /a Y >>9 M0		GSaGe	e	GNe9DD	D9

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		CCM	x		
a Y >>75E>; /a Y >>9 M0		GSaGe	e	GNe9DD	D9
a Y >>75E>A /Q 8 a Y >>9 M0		GSaGe	e	GNe9DD	D;
a Y >>75E>D /a Y >>9 M0		GSaGe	e	GNe9DD	C8
a Y >>75E>E /a Y >>9 M0		GSaGe	e	GNe9DD	C8
a Y >>75EC7 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EC8 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EC9 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EC; /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EC> /a Y >>9 XM0		GSaGe	e	GNe9DD	C8
a Y >>75ECA /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ECB /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ECD /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ECE /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ED7 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ED8 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ED9 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ED; /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75ED> /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EDA /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EDB /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EDC /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EDD /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EDE /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EE7 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>75EE8 /Q 8 a Y >>9 XM0		GSaGe	e	GNe9DD	C9
a Y >>8		GDi aS	a	GPD9DD	DA
a Y >>8 /Q 80		GGPDi	a	GPD9DD	DA
a Y >>85E7A		GGPDi	a	GPD9DD	DB
a Y >>85E7B		GGPDi	a	GPD9DD	DB
a Y >>85E7C		GGPDi	a	GPD9DD	DB
a Y >>85E7D		GGPDi	a	GPD9DD	DB
a Y >>85E7E		GGPDi	a	GPD9DD	DB
a Y >>85E88		GGPDi	a	GPD9DD	DB
a Y >>85E89		GGPDi	a	GPD9DD	DB
a Y >>85E8;		GGPDi	a	GPD9DD	DB
a Y >>85E8>		GGPDi	a	GPD9DD	DB
a Y >>85E8A		GGPDi	a	GPD9DD	DB
a Y >>85E8B		GGPDi	a	GPD9DD	DB
a Y >>85E8C		GGPDi	a	GPD9DD	DB
a Y >>85E8D		GGPDi	a	GPD9DD	DB
a Y >>85E8E		GGPDi	a	GPD9DD	DB
a Y >>85E97		GGPDi	a	GPD9DD	DB
a Y >>85E99 /Q 80		GGPDi	a	GPD9DD	DA
a Y >>85E9;		GGPDi	a	GPD9DD	DB
a Y >>85E9>		GGPDi	a	GPD9DD	DB
a Y >>85E9A		GGPDi	a	GPD9DD	DB
a Y >>85E9B		GGPDi	a	GPD9DD	DB
a Y >>85E9C		GGPDi	a	GPD9DD	DB
a Y >>85E; 9		GGPDi	a	GPD9DD	DB
a Y >>85E; ; /Q 80		GGPDi	a	GPD9DD	DA
a Y >>85EA7		GDi aS	a	GNe9DD	C7
a Y >>85EA8		GDi aS	a	GNe9DD	C7
a Y >>85EA9		GDi aS	a	GNe9DD	C8
a Y >>85EA;		GDi aS	a	GNe9DD	C7
a Y >>85EB7		GDi aS	a	GNe9DD	C7
a Y >>85EB8		GDi aS	a	GNe9DD	C7
a Y >>85EB9		GDi aS	a	GNe9DD	C7
a Y >>85ED7		GDi aS	a	GNe9DD	C9
a Y >>85ED8		GDi aS	a	GNe9DD	C7
a Y >>85ED9		GDi aS	a	GNe9DD	C7

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a Y >>85ED;			GDi aS	a	GNe9DD	C7
a Y >>85EDA			GDi aS	a	GNe9DD	C7
a Y >>85EDB /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EDC /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EDD /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EDE /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EE7 /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EE8 /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EE9 /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EE; /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EE> /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EEA /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EEB /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EEC /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EED /Q	80		GDi aS	a	GNe9DD	C9
a Y >>85EEE /Q	80		GDi aS	a	GNe9DD	C9
a Y >>9			GVDeD	e	GPD9DD	DA
a Y >>9 /Q	80		GVDeD	e	GPD9DD	DA
a Y >>9 M			GSaGe	e	GNe9DD	C8
a Y >>9 M/Q	80		GSaGe	e	GNe9DD	D;
a Y >>95E78			GSaGe	e	GNe9DD	C7
a Y >>95E7A			GVDce	e	GPD9DD	DB
a Y >>95E7B			GVDce	e	GPD9DD	DB
a Y >>95E7C			GVDce	e	GPD9DD	DB
a Y >>95E7D			GVDce	e	GPD9DD	DB
a Y >>95E7E			GVDce	e	GPD9DD	DB
a Y >>95E87			GVDce	e	GPD9DD	DB
a Y >>95E88			GVDce	e	GPD9DD	DB
a Y >>95E8>			GVDce	e	GPD9DD	DB
a Y >>95E8A			GVDce	e	GPD9DD	DB
a Y >>95E8B			GVDce	e	GPD9DD	DB
a Y >>95E8C			GVDce	e	GPD9DD	DB
a Y >>95E8D			GVDce	e	GPD9DD	DB
a Y >>95E8E			GVDce	e	GPD9DD	DB
a Y >>95E97			GVDce	e	GPD9DD	DB
a Y >>95E98			GVDce	e	GPD9DD	DB
a Y >>95E99			GVDce	e	GPD9DD	DB
a Y >>95E9;			GVDce	e	GPD9DD	DB
a Y >>95E9>			GVDce	e	GPD9DD	DB
a Y >>95E9A			GVDce	e	GPD9DD	DB
a Y >>95E9B			GVDce	e	GPD9DD	DB
a Y >>95E9C			GVDce	e	GPD9DD	DB
a Y >>95E9D			GVDce	e	GPD9DD	DB
a Y >>95E9E			GVDce	e	GPD9DD	DB
a Y >>95E; 7			GVDce	e	GPD9DD	DB
a Y >>95E; 8			GVDce	e	GPD9DD	DA
a Y >>95E; 9			GVDce	e	GPD9DD	DB
a Y >>95E; ;			GVDce	e	GPD9DD	DB
a Y >>95E; >			GVDce	e	GPD9DD	DB
a Y >>95E; A			GVDce	e	GPD9DD	DB
a Y >>95E; E			GVDce	e	GPD9DD	DB
a Y >>95E>7			GSaGe	e	GNe9DD	C7
a Y >>95E>8			GSaGe	e	GNe9DD	C7
a Y >>95E>9			GSaGe	e	GNe9DD	C7
a Y >>95E>;			GSaGe	e	GNe9DD	C7
a Y >>95E>>			GSaGe	e	GNe9DD	C7
a Y >>95E>A			GSaGe	e	GNe9DD	C7
a Y >>95E>B			GSaGe	e	GNe9DD	C7
a Y >>95EA7			GSaGe	e	GNe9DD	D>
a Y >>95EA8			GSaGe	e	GNe9DD	C7

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a Y >>95EA9		GSaGe	e	GNe9DD	D>
a Y >>95EA;		GSaGe	e	GNe9DD	C7
a Y >>95EA>		GSaGe	e	GNe9DD	C7
a Y >>95EAA		GSaGe	e	GNe9DD	C7
a Y >>95EAC		GSaGe	e	GNe9DD	C7
a Y >>95EAD		GSaGe	e	GNe9DD	C7
a Y >>95EAE		GSaGe	e	GNe9DD	C7
a Y >>95EB7		GSaGe	e	GNe9DD	C7
a Y >>95EB8		GSaGe	e	GNe9DD	C7
a Y >>95EB9		GSaGe	e	GNe9DD	D>
a Y >>95EB;		GSaGe	e	GNe9DD	C7
a Y >>95EB>		GSaGe	e	GNe9DD	C7
a Y >>95EBA		GSaGe	e	GNe9DD	C7
a Y >>95EBB		GSaGe	e	GNe9DD	C7
a Y >>95EBC		GSaGe	e	GNe9DD	C7
a Y >>95EBD		GSaGe	e	GNe9DD	C7
a Y >>95EC7		GSaGe	e	GNe9DD	C7
a Y >>95EC8		GSaGe	e	GNe9DD	C7
a Y >>95EC9		GSaGe	e	GNe9DD	C7
a Y >>95ECB		GSaGe	e	GNe9DD	C7
a Y >>95ECC		GSaGe	e	GNe9DD	D;
a Y >>95ECD		GSaGe	e	GNe9DD	D;
a Y >>95ED7		GSaGe	e	GNe9DD	C7
a Y >>95ED9		GSaGe	e	GNe9DD	C7
a Y >>95ED;		GSaGe	e	GNe9DD	C7
a Y >>95EDA		GSaGe	e	GNe9DD	C7
a Y >>95EDE		GSaGe	e	GNe9DD	C7
a Y >>95EE8		GSaGe	e	GNe9DD	C7
a Y >>95EE9		GSaGe	e	GNe9DD	C7
a Y >>95EE;		GSaGe	e	GNe9DD	C7
a Y >>95EE>		GSaGe	e	GNe9DD	C7
a Y >>95EEA /Q	80	GSaGe	e	GNe9DD	C9
a Y >>95EEB /Q	80	GSaGe	e	GNe9DD	C9
a Y >>95EEC /Q	80	GSaGe	e	GNe9DD	C9
a Y >>95EED /Q	80	GSaGe	e	GNe9DD	C9
a Y >>95EEE /Q	80	GSaGe	e	GNe9DD	C9
a Y >>; 5E77		GeeSe	GD	GPD9DD	DA
a Y >>; 5E78		GeNcP	GD	GNe9DD	C7
a Y >>; 5E7A		GeeSe	GD	GPD9DD	DB
a Y >>; 5E>7		GeNcP	GD	GNe9DD	C7
a Y >>; 5ED7		GeNcP	GD	GNe9DD	C7
a Y >>>		NNaGe	GN	GPD9DD	DB
a Y >>> XM		NGi Nc	GN	GNe9DD	C8
a Y >>>5E78		NGi Nc	GN	GNe9DD	C7
a Y >>A5E97 /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E98 /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E99 /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E9; /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E9> /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E9A /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E9B /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E9C /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E9E /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E; 7 /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E; 8 /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E; ; /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E; > /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E; A /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E; B /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;
a Y >>A5E; C /Q	9 a Y >>8 XM0	GDi aS	a	GNe9DD	C;

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CCM

x

9

a Y >>A3E; D /Q	9 a Y >>8 XMD	GDi aS	a	GNe9DD	C;
a Y >>A3E; E /Q	9 a Y >>8 XMD	GDi aS	a	GNe9DD	C;
a Y >>A3E>7 /Q	9 a Y >>8 XMD	GDi aS	a	GNe9DD	C;
a Y >>A3E>8 /Q	9 a Y >>8 XMD	GDi aS	a	GNe9DD	C;
a Y >>B3E97 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E99 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E9; /a Y >>9 XMD		GSaGe	e	GNe9DD	C;
a Y >>B3E9> /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E9A /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E9B /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E9C /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E9D /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E9E /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; 7 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; 8 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; 9 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; ; /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; > /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; A /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; B /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; D /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E; E /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E>7 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E>8 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E>9 /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E>; /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E>A /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E>B /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>B3E>D /Q	9 a Y >>9 XMD	GSaGe	e	GNe9DD	C;
a Y >>C		GGi ac	a	GNe9DD	BA
a Y >>C M5XM		GGi ac	a	GNe9DD	BA
a Y >>C XM		GGi ac	a	GNe9DD	BA
a Y >>C3E77		GGi ac	a	GNe9DD	BA
a Y >>C3E7A		GGi ac	a	GNe9DD	BA
a Y >>C3E7B		GGi ac	a	GNe9DD	BA
a Y >>C3E7C		GGi ac	a	GNe9DD	BA
a Y >>C3E7D		GGi ac	a	GNe9DD	BA
a Y >>C3E87		GGi ac	a	GNe9DD	BA
a Y >>C3E88		GGi ac	a	GNe9DD	BA
a Y >>C3E89		GGi ac	a	GNe9DD	BA
a Y >>C3E8; /Q	80	GGi ac	a	GNe9DD	BA
a Y >>C3E8> /Q	80	GGi ac	a	GNe9DD	BA
a Y >>C3E8A		GGi ac	a	GNe9DD	BA
a Y >>C3E8B		GGi ac	a	GNe9DD	BA
a Y >>C3E>C /Q	80	GGi ac	a	GNe9DD	BA
a Y >>C3E>D /Q	90	GGi ac	a	GNe9DD	BA
a Y >>C3E>E /Q	90	GGi ac	a	GNe9DD	BA
a Y >>C3EA7		GGi ac	a	GNe9DD	BA
a Y >>C3EA8		GGi ac	a	GNe9DD	BA
a Y >>C3EA9 /Q	80	GGi ac	a	GNe9DD	BA
a Y >>C3EA; /Q	80	GGi ac	a	GNe9DD	BA
a Y >>C3EA> /Q	80	GGi ac	a	GNe9DD	C>
a Y >>C3EAA /Q	80	GGi ac	a	GNe9DD	C>
a Y >>C3EAB /Q	80	GGi ac	a	GNe9DD	C>
a Y >>C3EAC /Q	80	GGi ac	a	GNe9DD	C>
a Y >>C3EAD /Q	80	GGi ac	a	GNe9DD	C>
a Y >>C3EAE /Q	80	GGi ac	a	GNe9DD	C>
a Y >>C3EB7 /Q	80	GGi ac	a	GNe9DD	BA
a Y >>C3EC7 /Q	90	GGi ac	a	GNe9DD	CA
a Y >>C3EC8 /Q	90	GGi ac	a	GNe9DD	CA

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a Y >>CEC9 /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEC; /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEC> /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CECA /Q	80	GGi ac	a	GNe9DD	CA
a Y >>CECB /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CECC /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CECD		GGi ac	a	GNe9DD	CA
a Y >>CECE /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CED7 /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CED8 /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CED9 /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CED; /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CED> /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CEDA /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CEDB /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CEDC /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CEDD /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEE7 /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEE8 /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEE9 /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEE; /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEE> /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEEA /Q	80	GGi ac	a	GNe9DD	C>
a Y >>CEEB /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEED /Q	90	GGi ac	a	GNe9DD	CA
a Y >>CEEE /Q	90	GGi ac	a	GNe9DD	CA
a Y >AC8E87 /Q	A0	GGi ac	a	GNe9DD	CB
a Y >AC8E8> /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E8A /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E8B /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E8C /Q	96;0	GGi ac	a	GNe9DD	CC
a Y >AC8E8D /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E8E /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E97 /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E99 /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E9; /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E9> /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E9A /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E9B /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E9C /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E9D /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E9E /Q	;0	GGi ac	a	GNe9DD	CD
a Y >AC8E;8 /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E;9 /Q	;0	GGi ac	a	GNe9DD	CC
a Y >AC8E;; /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E;> /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E;A /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E;B /Q	90	GGi ac	a	GNe9DD	CE
a Y >AC8E;C /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E;D /Q	90	GGi ac	a	GNe9DD	CE
a Y >AC8E;E /Q	90	GGi ac	a	GNe9DD	CE
a Y >AC8E>7 /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E>8 /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E>9 /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E>; /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E>> /Q	96;0	GGi ac	a	GNe9DD	CE
a Y >AC8E>A /Q	90	GGi ac	a	GNe9DD	CE
a Y >AC8E>B /Q	90	GGi ac	a	GNe9DD	CE
a Y >AC8E>C /Q	90	GGi ac	a	GNe9DD	CD
a Y >AC8E>D /Q	;0	GGi ac	a	GNe9DD	D7

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			CCM	x		9
a Y >AC3E>E /Q	90		GGi ac	a	GNe9DD	CE
a Y >AC3EA7 /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EA8 /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EA9 /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EA; /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EA> /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EAA /Q	;0		GGi ac	a	GNe9DD	CD
a Y >AC3EAB /Q	;0		GGi ac	a	GNe9DD	D7
a Y >AC3EAC /Q	;0		GGi ac	a	GNe9DD	D7
a Y >AC3EAD /Q	96;0		GGi ac	a	GNe9DD	CD
a Y >AC3EAE /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EB7 /Q	90		GGi ac	a	GNe9DD	CD
a Y >AC3EB8 /Q	;0		GGi ac	a	GNe9DD	D7
a Y >AC3EB9 /Q	;0		GGi ac	a	GNe9DD	CD
a Y >AC3EB> /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EBA /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EBB /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EBC /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EBD /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EBE /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EC; /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3EC> /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3ECB /Q	;0		GGi ac	a	GNe9DD	D7
a Y >AC3ECC /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AC3ED7 /Q	90		GGi ac	a	GNe9DD	D7
a Y >AC3ED8 /Q	;0		GGi ac	a	GNe9DD	D7
a Y >AC3ED> /Q	>0		GGi ac	a	GNe9DD	D7
a Y >AD3EB7 /Q	;0		GGi ac	a	GNe9DD	CC
a Y >AD3EC7 /Q	;0		GGi ac	a	GNe9DD	CC
a Y >AD3ED7 /Q	;0		GGi ac	a	GNe9DD	CC
a Y >AD3EE7			GGi ac	a	GNe9DD	CB
a Y >AD3EE8			GGi ac	a	GNe9DD	CB
a Y >B75E77 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E78 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E79 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E7; /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E7> /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E7A /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E7B /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E7C /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E7D /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E7E /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E87 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E88 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E89 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E8; /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E8> /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E8A /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E8B /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E8C /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E8D /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E8E /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E97 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E98 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E99 /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E9; /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E9A /Q	;0		GNeGa	a	GNe9DD	CD
a Y >B75E9B			GNeGa	a	GNe9DD	D8
a Y >B75E9C			GNeGa	a	GNe9DD	D8
a Y >B75E9E /Q	;0		GNeGa	a	GNe9DD	CD

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a Y >B75E; 8 /Q	; 0	GNeGa	a	GNe9DD	CD
a Y >B75E; 9		GNeGa	a	GNe9DD	D8
a Y >B75E; ;		GNeGa	a	GNe9DD	D8
a Y >B75E; >		GNeGa	a	GNe9DD	D8
a Y >B75E; A		GNeGa	a	GNe9DD	D8
a Y >B75E; B		GNeGa	a	GNe9DD	D8
a Y >B75E; C		GNeGa	a	GNe9DD	D8
a Y >B75E; D		GNeGa	a	GNe9DD	D8
a Y >B75E; E		GNeGa	a	GNe9DD	D8
a Y >B75E>7		GNeGa	a	GNe9DD	D8
a Y >B75E>8		GNeGa	a	GNe9DD	D8
a Y >B75E>9		GNeGa	a	GNe9DD	D8
a Y >B75E>;		GNeGa	a	GNe9DD	D8
a Y >B75E>>		GNeGa	a	GNe9DD	D8
a Y >B75E>A		GNeGa	a	GNe9DD	D8
a Y >B75E>B		GNeGa	a	GNe9DD	D8
a Y >B75E>C		GNeGa	a	GNe9DD	D8
a Y >B75E>D		GNeGa	a	GNe9DD	D8
a Y >B75E>E		GNeGa	a	GNe9DD	D8
a Y >B75EB8 /Q	; 0	GNeGa	a	GNe9DD	D8
a Y >B75ED9 /Q	; 0	GNeGa	a	GNe9DD	D8
a Y >B75ED; /Q	; 0	GNeGa	a	GNe9DD	D8
a Y >C75E7; /Q	B0	GDacc	a	GNV9DD	B>
a Y >C75E7> /Q	B0	GDacc	a	GNV9DD	B>
a Y >C75E7B /Q	B0	GDacc	a	GNV9DD	B>
a Y >C75E7D /Q	B0	GDacc	a	GNV9DD	B>
a Y >C75E87 /Q	B0	GDacc	a	GNV9DD	B>
a Y >C75E8; /Q	B0	GDacc	a	GNV9DD	B>
a Y >C75E98 /Q	B0	GDacc	a	GNV9DD	B>
a Y >C75E9; /Q	B0	GDacc	a	GNV9DD	B>
a Y >C85E77 /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E79 /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E7B /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E7E /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E8A /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E8E /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E99 /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E9B /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E; C /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E>> /Q	B0	GNeDi	a	GPN9DD	E9
a Y >C85E>B /Q	B0	GNeDi	a	GPN9DD	E9
a Y >CA5EA7 /a Y >>E M0		iicP	V	GNe9DD	BA
a Y >CA5EA8 /a Y >>E M0		iicP	V	GNe9DD	BA
a Y >CA5EA9 /a Y >>E M0		iicP	V	GNe9DD	BA
a Y >CA5EA; /a Y >>E M0		iicP	V	GNe9DD	BA
a Y >CA5EA> /a Y >>E M0		iicP	V	GNe9DD	BA
a Y >CA5EC> /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5ECB /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5ECC /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5ECD /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5ECE /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5ED9 /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5ED> /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5EDA /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5EDB /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5EDE /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5EE8 /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5EE> /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5EEC /a Y >>E XM0		iicP	V	GNe9DD	BA
a Y >CA5EED /a Y >>E XM0		iicP	V	GNe9DD	BA

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		CCM	x		9
a Y >CB8E8B /a Y >>C M0		GGi ac	a	GNe9DD	BA
a Y >CB8E8C /a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8EA7 /a Y >>C M0		GGi ac	a	GNe9DD	BA
a Y >CB8EC8 /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8EC9 /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8EC; /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8ECC /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8ECD /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8ECE /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8ED7 /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8ED8 /a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8ED9 /a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8ED; /Q 9 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8EDA /Q 8 a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8EDD /a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8EE8 /a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >CB8EE9 /a Y >>C XM0		GGi ac	a	GNe9DD	BA
a Y >D85E79		GDi aS	a	GNe9DD	C8
a Y >D85E7>		GDi aS	a	GNe9DD	C8
a Y >D95E89		GSaGe	e	GNe9DD	C8
a Y >D95E;7		GSaGe	e	GNe9DD	C8
a Y >D95E>7		GSaGe	e	GNe9DD	C8
a Y >D95E>8		GSaGe	e	GNe9DD	C8
a Y >DA5ED7		i i cP	V	GNe9DD	BA
a Y >DE5EB7 /Q 80		i i cP	V	GNe9DD	BA
a Y >DE5EB8 /Q 80		i i cP	V	GNe9DD	BA
a Y A985E>7 /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A985EA7 /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A985EA8 /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A99 XM /Q 90		GVi Ne	e	GPD9DD	E8
a Y A995E>7 /Q 9 a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A995E>8 /Q 9 a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A995E>9 /Q 9 a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A995E>; /Q 9 a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A995EA7 /Q 9 a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>85E97 /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E98 /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E99 /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E9; /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E9> /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E9A /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E9B /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E9C /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E9D /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E>7 /Q 96; a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E>8 /Q 96; a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85E>9 /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85E>; /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85E>> /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85E>A /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85E>B /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85E>C /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85E>D /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85E>E /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85EA7 /Q ; a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85EA8 /Q 96; a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85EA9 /Q 96; a Y A78 XM0		GGi Sa	a	GPD9DD	DC
a Y A>85EA; /Q >6A a Y A78 XM0		GGi Sa	a	GPD9DD	DE
a Y A>85EAE /Q >6A a Y A78 XM0		GGi Sa	a	GPD9DD	DE
a Y A>85EB7 /Q 9 a Y A78 XM0		GGi Sa	a	GPD9DD	DC

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		CCM	x		9
a Y A>85EC7 /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EC8 /Q	>6A a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EC9 /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EC; /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EC> /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85ECA /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85ECB /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85ECC /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85ECD /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85ECE /Q	>6A a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85ED7 /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85ED8 /Q	> a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EE7 /Q	A a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EE8 /a Y A78 XM0		GGi Sa	a	GPD9DD	E7
a Y A>85EE9 /Q	A a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EE> /Q	A a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EEA /a Y A78 XM0		GGi Sa	a	GPD9DD	DD
a Y A>85EEB /Q	A a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EEC /a Y A78 XM0		GGi Sa	a	GPD9DD	DE
a Y A>85EED /Q	A a Y A78 XM0	GGi Sa	a	GPD9DD	DE
a Y A>85EEE /a Y A78 XM0		GGi Sa	a	GPD9DD	DE
a Y A>95E97 /a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>95E98 /a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>95E99 /a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>95E9; /a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>95E9> /a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>95E9A /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y A>95E9B /a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>95E>7 /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95E>8 /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95E>9 /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95E>; /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95E>> /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95E>A /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95E>C /a Y A79 XM0		GVi Ne	e	GPD9DD	DC
a Y A>95E>D /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95EAB /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95EAC /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DD
a Y A>95EAD /Q	; a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y A>95EB7 /Q	A0	GVi Ne	e	GPD9DD	DE
a Y A>95EB8 /Q	A0	GVi Ne	e	GPD9DD	DE
a Y A>95EB9 /Q	A a Y A79 XM0	GVi Ne	e	GPD9DD	DE
a Y A>95EB; /Q	A a Y A79 XM0	GVi Ne	e	GPD9DD	DE
a Y A>95EB> /Q	A0	GVi Ne	e	GPD9DD	DE
a Y A>95EBA		GVi Ne	e	GPD9DD	DE
a Y A>95EBB /Q	A0	GVi Ne	e	GPD9DD	DE
a Y A>95EC7 /Q	A0	GVi Ne	e	GPD9DD	DE
a Y A>95EC8 /Q	A0	GVi Ne	e	GPD9DD	DE
a Y A>95EC9 /Q	A0	GVi Ne	e	GPD9DD	DE
a Y B78M8EC7		NNi i	S	ei 9DD	;;
a Y B785E77 /Q	90	NNi i	S	ei 9DD	;9
a Y B785E88		Gi i c	S	ec9DD	8A
a Y B785E89		Gi i c	S	ec9DD	8A
a Y B785E8;		Gi i c	S	ec9DD	8A
a Y B785E8A		Gi i c	S	ec9DD	8A
a Y B785E>7		NNi i	S	ei 9DD	;9
a Y B785E>8		NNi i	S	ei 9DD	;9
a Y B785E>9		NNi i	S	ei 9DD	;9
a Y B785E>;		NNi i	S	ei 9DD	;9
a Y B79M8EB9		NSi c	V	ec9DD	8D

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a Y B79MEE;		NSi c	V	ec9DD	8D
a Y B795E88		NSi c	V	ec9DD	8A
a Y B795E89		NSi c	V	ec9DD	8A
a Y B795E; 7		NSi c	V	ec9DD	8A
a Y B795E; 8		NSi c	V	ec9DD	8A
a Y B795E; D		NSi c	V	ec9DD	8A
a Y B795E; E		NSi c	V	ec9DD	8A
a Y B795E>7		NecS	V	ei 9DD	; 9
a Y B795E>8		NecS	V	ei 9DD	; 9
a Y B795E>9		NecS	V	ei 9DD	; 9
a Y B795E>B		NecS	V	ei 9DD	; 9
a Y B795E>C		NecS	V	ei 9DD	; 9
a Y B795E>D		NecS	V	ei 9DD	; 9
a Y B795EB8		NSi c	V	ec9DD	8D
a Y B795ED7		NecS	V	ei 9DD	; A
a Y B795ED8 /Q 90		NecS	V	ei 9DD	; A
a Y B795ED9 /a Y B79 PQ 9E XM0		NecS	V	ei 9DD	; A
a Y B795ED; /a Y B79 PQ 9E XM0		NecS	V	ei 9DD	; A
a Y B795ED>		NecS	V	ei 9DD	; A
a Y B795EDA		NecS	V	ei 9DD	; A
a Y B795EDB		NecS	V	ei 9DD	; A
a Y B795EDE /Q 90		NecS	V	ei 9DD	; A
a Y B795EE7		NSi c	V	ec9DD	8A
a Y B795EE8		NecS	V	ei 9DD	; 9
a Y B795EE>		NecS	V	ei 9DD	; 9
a Y B795EEA		NecS	V	ei 9DD	; 9
a Y B7; MEB7 /a Y B7; P ; 7 M0		Nia	a	ec9DD	8D
a Y B7; MEB; /a Y B7; P ; 7 M0		Nia	a	ec9DD	8D
a Y B7; MEC7 /a Y B7; P ; A M0		PSSi	a	ei 9DD	; ;
a Y B7; MEC8 /a Y B7; P ; A M0		PSSi	a	ei 9DD	; ;
a Y B7; MEC9 /a Y B7; P ; A M0		PSSi	a	ei 9DD	; ;
a Y B7; 5E89 /a Y B7; P ; 70		Nia	a	ec9DD	8A
a Y B7; 5E8; /a Y B7; P ; 70		Nia	a	ec9DD	8A
a Y B7; 5E; 8 /a Y B7; P ; 70		Nia	a	ec9DD	8A
a Y B7; 5EA7 /a Y B7; P ; 7 M0		Nia	a	ec9DD	8E
a Y B7; 5EB8 /a Y B7; P ; 7 M0		Nia	a	ec9DD	8D
a Y B7; 5EB9 /a Y B7; P ; 7 M0		Nia	a	ec9DD	8E
a Y B7>5E87		NGVV	S	ei 9DD	; >
a Y B7>5E89		NGVV	S	ei 9DD	; >
a Y B7>5E8A		Gi c	S	ec9DD	8B
a Y B7>5E8C		Gi c	S	ec9DD	8B
a Y B7A5E87		NSi c	V	ec9DD	8B
a Y B7A5E88		NSi c	V	ec9DD	8B
a Y B7A5E89		NSi c	V	ec9DD	8B
a Y B7A5EB7		NSi c	V	ec9DD	8E
a Y B7A5EB9		NSi c	V	ec9DD	8E
a Y B7B6E87		Nia	a	ec9DD	8B
a Y B7B6E89		Nia	a	ec9DD	8B
a Y B7B6EB8		Nia	a	ec9DD	8E
a Y B7B6EB9		Nia	a	ec9DD	8E
a Y B7B6EB>		Nia	a	ec9DD	8E
a Y B88M/B7 Wi OPL0		NGVG	S	ee9DD	9A
a Y B88XM/CA Wi OPL0		NGVG	S	ee9DD	99
a Y B885EB7		NGVG	S	ee9DD	98
a Y B885EB8		NGVG	S	ee9DD	99
a Y B885EB9		NGVG	S	ee9DD	9;
a Y B885ED7 /Q ; 0		NGVG	S	ee9DD	99
a Y B885ED8 /Q ; 0		NGVG	S	ee9DD	9;
a Y B885EDC /Q ; 0		NGVG	S	ee9DD	9>
a Y B895EB8		NaeV	V	ee9DD	9>

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	CCM	x		9
a Y B895EB9	NaeV	V	ee9DD	9>
a Y B895EB;	NaeV	V	ee9DD	9;
a Y B895EBA	NaeV	V	ee9DD	9>
a Y B895EBB	NaeV	V	ee9DD	9>
a Y B895EBC	NaeV	V	ee9DD	9>
a Y B895ED8	NaeV	V	ee9DD	9>
a Y B895ED; /Q ;0	NaeV	V	ee9DD	9>
a Y B8; 5EB7	PNNN	a	ee9DD	9;
a Y B8; 5EB8	PNNa	a	ee9DD	9;
a Y B8A	NGi c	S	ec9DD	8C
a Y B8A5E87	NGi c	S	ec9DD	8C
a Y B8A5E88	NGi c	S	ec9DD	8C
a Y B8A5E89 /a Y B8A P 990	NGi c	S	ec9DD	8C
a Y B8A5E8; /a Y B8A P 970	Gi ee	S	ec9DD	8C
a Y B8A5E8>	NGi c	S	ec9DD	8C
a Y B8A5E8A /a Y B8A P 970	Gi ee	S	ec9DD	8C
a Y B8A5E8B	NGi c	S	ec9DD	8C
a Y B8A5E8C /a Y B8A P 990	NGi c	S	ec9DD	8C
a Y B8A5E8D	NGi c	S	ec9DD	8C
a Y B8A5E8E	NGi c	S	ec9DD	8C
a Y B8A5E; 7	NGi c	S	ec9DD	8C
a Y B8A5E; 9	NGi c	S	ec9DD	8C
a Y B8A5E; B	NGi c	S	ec9DD	8C
a Y B8A5E; C	NGi c	S	ec9DD	8C
a Y B8A5E; D	NGi c	S	ec9DD	8C
a Y B8A5E; E	NGi c	S	ec9DD	8C
a Y B8A5E>7 /a Y B8A P 970	Gi ee	S	ec9DD	8C
a Y B8A5E>8 /a Y B8A P 990	NGi c	S	ec9DD	8C
a Y B8A5E>9	Gi ee	S	ec9DD	8C
a Y B8A5E>;	Gi ee	S	ec9DD	8C
a Y B8A5E>>	Gi ee	S	ec9DD	8C
a Y B8A5EB8	Gi ee	S	ec9DD	8C
a Y B8A5EB;	Gi ee	S	ec9DD	8C
a Y B8A5EB>	Gi ee	S	ec9DD	8C
a Y B8A5EBA	Gi ee	S	ec9DD	8C
a Y B8A5EBB	Gi ee	S	ec9DD	8C
a Y B8A5EBC	Gi ee	S	ec9DD	8C
a Y B8A5EBD	Gi ee	S	ec9DD	8C
a Y B8A5EBE	Gi ee	S	ec9DD	8C
a Y B8A5EC7	Gi ee	S	ec9DD	8C
a Y B8B	NPi i	S	i D9 D	>9
a Y B8B5E87	NPi i	S	i D9 D	>9
a Y B8B5E88	NSDS	S	i D9 D	>;
a Y B8B5E89 /a Y B8B P 9>0	NPi i	S	i D9 D	>9
a Y B8B5E8;	NPi i	S	i D9 D	>9
a Y B8B5E8>	NSDS	S	i D9 D	>9
a Y B8B5E8B /a Y B8B P 9>0	NSDS	S	i D9 D	>;
a Y B8B5E8C	NPi i	S	i D9 D	>9
a Y B8B5E8D	NPi i	S	i D9 D	>9
a Y B8B5E8E	NPi i	S	i D9 D	>;
a Y B8B5E; 7	NPi i	S	i D9 D	>9
a Y B8B5E; 9	NSDS	S	i D9 D	>;
a Y B8B5E; ;	NSDS	S	i D9 D	>;
a Y B8B5E; >	NSDS	S	i D9 D	>9
a Y B8B5E; B /a Y B8B P 9>0	NPi i	S	i D9 D	>9
a Y B8B5E; C	NPi i	S	i D9 D	>9
a Y B8B5E; D /a Y B8B P 9>0	NPi i	S	i D9 D	>9
a Y B8B5E; E	NPi i	S	i D9 D	>9
a Y B8B5E>7	NPi i	S	i D9 D	>9
a Y B8B5E>9	NSDS	S	i D9 D	>9

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		CCM	x		9
a Y B8B8E>;		NSDS	S	i D9 D	>9
a Y B8B8E>>		NPi i	S	i D9 D	>;
a Y B8B8EB7		NPi i	S	i D9 D	>;
a Y B8B8EB8		NSDS	S	i D9 D	>;
a Y B8B8EB9		NSDS	S	i D9 D	>9
a Y B8B8EB;		NPi i	S	i D9 D	>9
a Y B8C8E87 /a Y B8C P; 70		PDDV	V	i D9 D	>;
a Y B8C8E89 /a Y B8C P; 70		PDDV	V	i D9 D	>9
a Y B8C8E8;		Ni i e	V	i D9 D	>9
a Y B8C8E8E		PDDV	V	i D9 D	>9
a Y B8C8E; 8 /a Y B8C P; 70		Ni i e	V	i D9 D	>9
a Y B8C8E; 9 /a Y B8C P; 70		Ni i e	V	i D9 D	>9
a Y B8C8E; ; /a Y B8C P; 70		Ni i e	V	i D9 D	>;
a Y B8C8EA7 /a Y B8C P; 7 M0		Ni i e	V	i D9 D	>;
a Y B8C8EA8 /a Y B8C P; 7 M0		Ni i e	V	i D9 D	>;
a Y B8C8EA9 /a Y B8C P; 7 M0		Ni i e	V	i D9 D	>;
a Y B985E89		Gi i D	S	ec9DD	8C
a Y B985E8;		Gi i D	S	ec9DD	8C
a Y B985E8>		Gi ee	S	ec9DD	8C
a Y B985E8A		Gi ee	S	ec9DD	8C
a Y B985E8B		Gi ee	S	ec9DD	8C
a Y B985E8D		Gi ee	S	ec9DD	8C
a Y B985E8E		Gi ee	S	ec9DD	8C
a Y B985E; 7		Gi ee	S	ec9DD	8C
a Y B985E; 9		Gi i D	S	ec9DD	8C
a Y B995EA8 /d EY 0		GVi e	S	eD9DD	;
a Y B; E5E; E /Q >0		GSi P	P	eP9DD	C
a Y B>75E>7		Gi i G	S	eP9DD	C
a Y B>75E>8		Gi i G	S	eP9DD	C
a Y B>75E>9		Gi i G	S	eP9DD	C
a Y B>95D97		Ni ec	a	eP9DD	87
a Y B>95D; 7		Ni ec	a	eP9DD	87
a Y B>95D; 9		Ni ec	a	eP9DD	87
a Y B>95D; B		Ni ec	a	eP9DD	87
a Y B>95D; D		Ni ec	a	eP9DD	88
a Y B>95DA7		Ni ec	a	eP9DD	87
a Y B>95DA;		Ni ec	a	eP9DD	88
a Y B>95DA>		Ni ec	a	eP9DD	88
a Y B>95DAB		Ni ec	a	eP9DD	87
a Y B>95DAD		Ni ec	a	eP9DD	88
a Y B>95DB9		Ni ec	a	eP9DD	88
a Y B>95DBD		Ni ec	a	eP9DD	88
a Y B>95DC7		Ni ec	a	eP9DD	87
a Y B>95DC9		Ni ec	a	eP9DD	88
a Y B>95DD>		Ni ec	a	eP9DD	89
a Y B>95DEB		Ni ec	a	eP9DD	89
a Y B>95DED		Ni ec	a	eP9DD	89
a Y B>95DEE		Ni ec	a	eP9DD	89
a Y B>95E87		Ni ec	a	eP9DD	8;
a Y B>95E97		Ni ec	a	eP9DD	8;
a Y B>95E98		Ni ec	a	eP9DD	8;
a Y B>95E; 7		Ni ec	a	eP9DD	8;
a Y B>95E; 9		Ni ec	a	eP9DD	8;
a Y B>95E>7		Ni ec	a	eP9DD	8;
a Y B>95EA7		Ni ec	a	eP9DD	8;
a Y B>95EB7		Ni ec	a	eP9DD	8;
a Y B>95EB8		Ni ec	a	eP9DD	8;
a Y B>95EC7		Ni ec	a	eP9DD	8;
a Y B>95ECA		Ni ec	a	eP9DD	8;
a Y B>95EE7		Ni ec	a	eP9DD	8;

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		CCM	x		9
a Y B>95EE9		Ni ec	a	eP9DD	8;
a Y B>95EE;		Ni ec	a	eP9DD	8;
a Y B>B5D88		NGSe	S	ee9DD	9B
a Y B>B5D89		NGSe	S	ee9DD	9B
a Y B>B5D97		NGSe	S	ee9DD	9B
a Y B>B5D98		NGSe	S	ee9DD	9B
a Y B>B8EA8		NGSe	S	ee9DD	9C
a Y B>B8EB8		NGSe	S	ee9DD	9C
a Y B>B8EB9		NGSe	S	ee9DD	9C
a Y B>B8EB;		NGSe	S	ee9DD	9C
a Y B>B8EBB		NGSe	S	ee9DD	9C
a Y B>B8ED7		NGSe	S	ee9DD	9C
a Y B>B8ED8		NGSe	S	ee9DD	9C
a Y B>B8ED9 /Q	>0	NGSe	S	ee9DD	9C
a Y B>B8ED;		NGSe	S	ee9DD	9C
a Y B>B8ED>		NGSe	S	ee9DD	9C
a Y B>B8EDA		NGSe	S	ee9DD	9C
a Y B>B8EDB /Q	>0	NGSe	S	ee9DD	9D
a Y B>B8EDE		NGSe	S	ee9DD	9C
a Y B>B8EE7		NGSe	S	ee9DD	9C
a Y B>C8EB8		NaeV	V	ee9DD	9C
a Y B>C8ED8		NaeV	V	ee9DD	9C
a Y B>D8EB7		PNNN	a	ee9DD	9C
a Y B>D8EB8		PNNN	a	ee9DD	9C
a Y BA85E88		NGSP	S	eP9DD	D
a Y BA85E89		NGSP	S	eP9DD	D
a Y BA85E8;		NGSP	S	eP9DD	E
a Y BA85E8B		NGSP	S	eP9DD	E
a Y BA85E9>		NGSP	S	eP9DD	D
a Y BA85E9A		NGSP	S	eP9DD	E
a Y BA85E; 7		NGSP	S	eP9DD	E
a Y BA85E>7		NGSP	S	eP9DD	E
a Y BA85EA7		NGSP	S	eP9DD	E
a Y BA85EAA /Q	A6B0	NGSP	S	eP9DD	E
a Y BA85EAB		NGSP	S	eP9DD	E
a Y BA85EAC		NGSP	S	eP9DD	E
a Y BA85EB7		NGSP	S	eP9DD	D
a Y BA85EB8		NGSP	S	eP9DD	D
a Y BA85ED7		NGSP	S	eP9DD	D
a Y BB75EA7		ci i	P	aV9VD	9
a Y BB85E88		NNi i	S	ei 9DD	; 9
a Y BB85E>7		NNi i	S	ei 9DD	; 9
a Y BB95E88 /a Y BB9 P 9E0		NecS	V	ei 9DD	; 9
a Y E775E88 /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E89 /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E8; /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E8A /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E8B /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E8C /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E8D /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E8E /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E97 /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E98 /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E775E99 /Q	> a Y E7> XM0	SNSi	S	GDN9DD	A;
a Y E795E87 /Q	> a Y E7B XM0	aPcS	a	GDN9DD	A;
a Y E795E88 /Q	> a Y E7B XM0	aPcS	a	GDN9DD	A;
a Y E795E89 /Q	> a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E795E8; /Q	> a Y E7B XM0	aPcS	a	GDN9DD	A;
a Y E795E8> /Q	> a Y E7B XM0	aPcS	a	GDN9DD	A;
a Y E795E8A /Q	> a Y E7B XM0	aPcS	a	GDN9DD	A;

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			CCM	x		9
a Y E795E8B /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E8C /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E8D /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E8E /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E97 /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E98 /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E99 /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E9; /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E9> /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E9A /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E9B /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E9C /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E; 7 /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E; 8 /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E; 9 /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E; ; /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E; > /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E795E; B /Q	> a Y E7B XMD		aPcS	a	GDN9DD	A;
a Y E7>5E7; /Q	90		SNVD	S	GDN9DD	A>
a Y E7>5E7> /Q	90		SNVD	S	GDN9DD	A>
a Y E7>5E7A /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E7B /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E7C /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E7D /Q	90		SNVD	S	GDN9DD	A>
a Y E7>5E7E /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E87 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E88 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E89 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E8> /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E8A /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E8B /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E8C /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E8D /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E8E /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E97 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E98 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E99 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E9; /Q	90		SNVD	S	GDN9DD	A>
a Y E7>5E9> /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E9A /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E9B /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E9C /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5E9D /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5E9E /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; 7 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; 8 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; 9 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; ; /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; > /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; A /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; B /Q	; 0		SNVD	S	GDN9DD	A>
a Y E7>5E; C /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; D /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E; E /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E>7 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E>8 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E>9 /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5E>; /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E>> /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E>A /Q	90		SNSi	S	GDN9DD	A>

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			CCM	x		9
a Y E7>5E>B /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E>C /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5E>D /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5E>E /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5EA7 /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5EA8 /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EA9 /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EA; /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EA> /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5EAA /Q	; 0		SNVD	S	GDN9DD	A>
a Y E7>5EAB /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5EAC /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EAE /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5EB8 /Q	; 0		SNVD	S	GDN9DD	A>
a Y E7>5EB9 /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EB> /Q	; 0		SNSi	S	GDN9DD	AA
a Y E7>5EBA /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EBB /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EBC /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EBD /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EC7 /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EC9 /Q	; 0		SNSi	S	GDN9DD	A>
a Y E7>5EC; /Q	; 0		SNSi	S	GDN9DD	AA
a Y E7>5EC> /Q	90		SNSi	S	GDN9DD	A>
a Y E7>5ECA /Q	; 0		SNSi	S	GDN9DD	AA
a Y E7>5ECB /Q	; 0		SNSi	S	GDN9DD	AA
a Y E7>5ECC			SNSi	S	GDN9DD	AA
a Y E7>5ECD			SNSi	S	GDN9DD	AA
a Y E7>5ECE			SNSi	S	GDN9DD	AA
a Y E7>5ED7			SNSi	S	GDN9DD	AA
a Y E7>5ED8			SNSi	S	GDN9DD	AA
a Y E7B5E87 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E88 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E89 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E8; /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E8> /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E8A /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E8B /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E8C /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E8D /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E8E /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E97 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E98 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E99 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E9; /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E9> /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E9A /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B5E9B /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B5E9C /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B5E9D /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B5E9E /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; 7 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; 8 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; 9 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; ; /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; > /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; A /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B5E; B /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; C /Q	90		aPcS	a	GDN9DD	A>
a Y E7B5E; D /Q	; 0		aPcS	a	GDN9DD	A>

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			CCM	x		9
a Y E7B8E; E /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8E>7 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8E>8 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8E>> /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8E>A /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8E>B /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8E>C /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8E>D /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8E>E /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EA7 /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EA8			aPcS	a	GDN9DD	AA
a Y E7B8EA9 /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EA; /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EA> /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EAA /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EAB /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EAC /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EAD /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EAE /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EB7 /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EB8 /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EB9 /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EB; /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EB>			aPcS	a	GDN9DD	AA
a Y E7B8EBA			aPcS	a	GDN9DD	A>
a Y E7B8EBB /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EBC /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EBD /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EC7 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8EC8			aPcS	a	GDN9DD	A>
a Y E7B8EC; /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EC> /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ECA /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ECB /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ECC /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ECD /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ECE /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ED7 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ED8 /Q	90		aPcS	a	GDN9DD	A>
a Y E7B8ED9			aPcS	a	GDN9DD	AA
a Y E7B8ED; /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EDA /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EDB /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EDD /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EE8 /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EE9 /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EE; /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7B8EEA /Q	; 0		aPcS	a	GDN9DD	A>
a Y E7B8EED /Q	; 0		aPcS	a	GDN9DD	AA
a Y E7C8E87 /Q	9 a Y E7> XMD		SNVD	S	GDN9DD	A>
a Y E7C8E97 /Q	9 a Y E7> XMD		SNVD	S	GDN9DD	A>
a Y E7C8E; 7 /Q	9 a Y E7> XMD		SNSi	S	GDN9DD	A>
a Y E7C8E>7 /Q	9 a Y E7> XMD		SNVD	S	GDN9DD	A>
a Y E7C8E>8 /Q	9 a Y E7> XMD		SNSi	S	GDN9DD	A>
a Y E7C8EB7 /Q	9 a Y E7> XMD		SNVD	S	GDN9DD	A>
a Y E7C8EC7 /Q	9 a Y E7> XMD		SNVD	S	GDN9DD	A>
a Y E7C8ED7 /Q	9 a Y E7> XMD		SNSi	S	GDN9DD	A>
a Y E7C8EE7 /Q	9 a Y E7> XMD		SNVD	S	GDN9DD	A>
a Y E7E5E77 /a Y E7B8 XMD			aPcS	a	GDN9DD	A>
a Y E7E5E78 /a Y E7B8 XMD			aPcS	a	GDN9DD	A>

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	CCM	x		9
a Y E7E5E87 /a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E7E5E88 /a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E7E5E97 /a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E7E5E98 /a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E7E5EB7 /a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E7E5EC7 /a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E7E5EC8 /a Y E7B XM0	aPcS	a	GDN9DD	A>
a Y E9>5E8; /Q ;0	SeDG	S	GDa9DD	AB
a Y E9>5E8A /Q ;0	SeDG	S	GDa9DD	AB
a Y E9>5E8B /Q ;0	SeDG	S	GDa9DD	AB
a Y E9>5E8E /Q ;0	SeDG	S	GDa9DD	AB
a Y E9>5E97 /Q ;0	SeDG	S	GDa9DD	AB
a Y E9>5E9> /Q ;0	SeDG	S	GDa9DD	AB
a Y E9>5E9D	SeDG	S	GDa9DD	AB
a Y E9>5E; 9 /Q A0	SeDG	S	GDa9DD	AB
a Y E9B5E8; /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E8> /Q 90	cNDG	a	GDa9DD	AB
a Y E9B5E8A /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E8C /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E98 /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E9> /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E9B /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E9E /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E; 7 /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E; 9 /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E; ; /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E; A /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E; D /Q ;0	cNDG	a	GDa9DD	AB
a Y E9B5E>7	cNDG	a	GDa9DD	AB
a Y E9B5E>8 /Q >0	cNDG	a	GDa9DD	AB
a Y E9B5EBD	cNDG	a	GDa9DD	AB
a Y E9B5EBE	cNDG	a	GDa9DD	AB
a Y E;;5E88 /Q B a Y E;>XM0	VGPN	S	GGD9DD	AC
a Y E;;5E884E8;3E8A3E8B /a Y E;>XM0	VGPN	S	GGD9DD	AC
a Y E;;5E89 /Q B a Y E;>XM0	VGPN	S	GGD9DD	AC
a Y E;;5E8; /Q B a Y E;>XM0	VGPN	S	GGD9DD	AC
a Y E;;5E8A /Q B a Y E;>XM0	VGPN	S	GGD9DD	AC
a Y E;;5E8B /Q B a Y E;>XM0	VGPN	S	GGD9DD	AC
a Y E;;5EA8 /Q B a Y E;>XM0	VGPN	S	GGD9DD	AD
a Y E;;5EA83EA9 /a Y E;>XM0	VGPN	S	GGD9DD	AD
a Y E;;5EA9 /Q B a Y E;>XM0	VGPN	S	GGD9DD	AD
a Y E;>5E88 /Q B0	VGPN	S	GGD9DD	AD
a Y E;>5E89	VGPN	S	GGD9DD	AC
a Y E;>5E89 /Q B0	VGPN	S	GGD9DD	AC
a Y E;>5E8; /Q B0	VGPN	S	GGD9DD	AD
a Y E;>5EC8 /Q B0	VGPN	S	GGD9DD	AD
a Y E;>5EC9 /Q B0	VGPN	S	GGD9DD	AD
a Y E;>5EC> /Q B0	VGPN	S	GGD9DD	AC
a Y E;>5EC8 /Q B0	VGPN	S	GGD9DD	AC
a Y E;>5EC83ECD	VGPN	S	GGD9DD	AC
a Y E;>5ECD /Q B0	VGPN	S	GGD9DD	AC
a Y E;A5E88 /Q B a Y E;B0	cai e	a	GGD9DD	AD
a Y E;A5E884E8>3EA84EA> /a Y E;B XM0	VGPN	S	GGD9DD	AD
a Y E;A5E89 /Q B a Y E;B0	cai e	a	GGD9DD	AD
a Y E;A5E8; /Q B a Y E;B0	cai e	a	GGD9DD	AD
a Y E;A5E8> /Q B a Y E;B0	cai e	a	GGD9DD	AD
a Y E;A5EA8 /Q B a Y E;B0	cai e	a	GGD9DD	AD
a Y E;A5EA9 /Q B a Y E;B0	cai e	a	GGD9DD	AD
a Y E;A5EA; /Q B a Y E;B0	cai e	a	GGD9DD	AD
a Y E;A5EA> /Q B a Y E;B0	cai e	a	GGD9DD	AD

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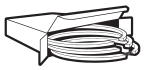
a Y E; B8E87		VGPN	S	GGD9DD	AD
a Y E; B8E87 /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8E89 /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8E8A /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8E8B /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8E8E /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8E8E3E9;		VGPN	S	GGD9DD	AD
a Y E; B8E9; /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8EC8 /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8EC9 /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8EC; /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8ECA		VGPN	S	GGD9DD	AD
a Y E; B8ECA /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8ECC		VGPN	S	GGD9DD	AD
a Y E; B8ECC /Q	B0	cai e	a	GGD9DD	AD
a Y E; B8ED7 /Q	B0	cai e	a	GGD9DD	AD
a Y E>85E87 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85E97 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85E98 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85E9E /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85E; 7 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85E>7 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85EB7 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85EC7 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85ED7 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85ED8 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85EE7 /Q	9 a Y A78 XM0	GGi Sa	a	GPD9DD	DC
a Y E>85EE8 /a Y A78 XM0		GGi Sa	a	GPD9DD	E7
a Y E>95E77 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95E87 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95E88 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95E89 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95E9A /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95E; 7 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95EB7 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95EBC /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95EC7 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95ED7 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y E>95EE7 /Q	9 a Y A79 XM0	GVi Ne	e	GPD9DD	DC
a Y >9>5E785A87		NGi Nc	GN	GNe9DD	BE



Y 8B7 N7; /eY Mdf 0	P	9	**AEEvv**	**>7 i**	3VV	4		**bx**	**f**	**u U x v**	**xw**	**f PEA97**
Y 8B7 N7> /eY Mdf 0	P	9	**AEEvv**	**; ; i**	3SV	4		**bx**	**f**	**u U x v**	**xw**	**f P8B>E7**
Y 8B7 N7A /eY Mdf 0	P	9	**AEEvv**	**>A i**	3aG	4		**bx**	**f**	**u U x v**	**xw**	**f P8B>E8**

YS GXZ 933 3: 2=<

DC48; BC77477
DC48; BC7A477 *mT*
DC48; BC7C477 *mT m*

7D48; BC77477
7D48; BC7A477 *mT*
7D48; BC7C477 *mT m*

M	5: 183		4153	I X
N4	518 8		4183	V
N	83183		5183	I X
P	76183			
	49É7<			

Yfppw YB sw Gntp´ Gnp´z Gnntl tz

aY BB75EA7	P	9	**CEEvv**	**; ; i**	3SV	4		**P@t x**	**f**	**u U x v**	**xw**	**f P9; CBA**

LUXZb U <33 I JO 3723:

DC48>7B77477

7D48>7B77477

M	69183		4183	I Q V
N4	44143		4183	V
N	6<t 3		5183	I X V
O	31=8			
O	31=8			
P	93183			
	56É86			
df				

aY B995EA8 /dEY 0	S	9	**8AEDvv**	**BA4D> i**	3ee8GGS	4		**P@t x**	**f**	**u U x v**	**xw**	**f P9EAED**

S GXI U VURU I I x ' p´ 493 I JO	36248	aQZU 444 I JO	43247
S GXI U VURU I I x ' p´ 4<3 I JO	36248	aQZU 444 I JO2444	43247
aQZU 43=I JO	43247	aQZU StÉ@z 43=I JO	43247
aQZU 43=I JO243=	43247	aQZU StÉ@z 444 I JO	43247

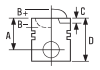
DC4>9>E77477
DC4>9>E7C477 *mT m*

7D4>9>E77477
7D4>9>E7C477 *mT m*

M	79183		5183	I Q V
N4	45168		418 8	V
N	79183		5183	I X V
O	3163			
P	: 3183			
	63É93			
MWWWdf f b				

Y 9C85DB7	S	9	**8CEBvv**	**8; A48A7 i**	3GeS8NDS	4		**bx**	**f**	**u U x v**	**xw**	**f P9; C9>**
Y 9C85DB8	S	9	**8CEBvv**	**8; A48A7 i**	3GeS8NDS	4		**bx**	**f**	**u U x v**	**xw**	**f P9A877**

I OI RGYY I 533 I MO	3423:	KOI RGYY K 583 I MO	3423= 45249
I OI RGYY I 583	39244	YRQ 533	35244
I OI RGYY I 583 I MO	3: 23= 3<247	YRQ 583	35244



KOI RGYY K 533 I MO 3<23= 45249

DC4>; 7B77477
DC4>; 7B7C477
3: 23=

7D4>; 7B77477
7D4>; 7B7C477

M	6313 3	4153		TZ
N4	7178	4183		V
O	3195	5133		I X
O	617<			
P	8313 3			
	53É89			

f b

Y8ppw	Y8 sw	Gntp´	Gnp´z	Gnntl tz

Y 9C85E>D	S 9	**8CEBvv**	**8>8 i**	3GI N	4	**bx**	**e**	**x v zxw**		**f P8C>; >**
Y 9C85EA7	S 9	**8CEBvv**	**89748; A i**	3GaP8GeS	4	**bx**	**e**	**x v zxw**		**f P97; AE**
Y 9C85EA>	S 9	**8CEBvv**	**8; A i**	3GeS	4	**bx**	**e**	**x v zxw**		**f P9879C**
Y 9C85EAA	S 9	**8CEBvv**	**8; A i**	3GeS	4	**bx**	**e**	**x v zxw**		**f P97DAD**
Y 9C85EAB	S 9	**8CEBvv**	**8; A i**	3GeS	4	**bx**	**e**	**x v zxw**		**f P998>8**
Y 9C85EAC	S 9	**8CEBvv**	**89748; A i**	3GaP8GeS	4	**bx**	**e**	**x v zxw**		**f P9; EE>**
Y 9C85EA8	S 9	**8CEBvv**	**88A i**	3GVa	4	**OZS**				**f P9; EEA**
I OI RGYY I 533			3423:	3<247		YVXOTZKX 6/803649			3=23<	
I OI RGYY I 563			38235	3823<		YVXOTZKX 6/803649 RMZ			3=23<	
I RI OI RGYY I RI 533			3823<	39244		YVXOTZKX 6/803649 TMZ			3=23<	
I RQ I RQ 533			43239	36243		YVXOTZKX 603549			3=23<	
KOI RGYY K 533			37239	3: 23=		YVXOTZKX 803849			3=23<	
YRQ 533			3423<	35244		YVXOTZKX 803849 TMZ			3=23<	

DC4>9CB77487

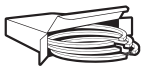
7D4>9CB77487

M	5=1=3	4153		TZ
N4	7194	4183		V
N	: 4153	5183		TZ
O	4133			
O	7133			
P	831=3			
	53É89			

TMf b

Y8ppw	Y8 sw	Gntp´	Gnp´z	Gnntl tz

Y 9C>5E97	S 9	**8EE8vv**	**88A49>A i**	3GVa8PPP	4	**bx**	**f**	**u U x v**	**xw**	**f P9D8CD**
I OI RGYY I 533			45246	3<24<		MRI 583 I TM			39248	3724=
I OI RGYY I 583			36247	3824<		MRI 633			3: 248	
I OI RGYY I 633			45246	4524<		MRI 633 p			4424=	
I OI RGYY I 633 p			3: 24=			MRI 683 p			34249	3724=
I OI RGYY I 683 p			35248	3<24<		MRK MRK 683 p			39253	
I RY I RY 593			34248	4524:		MRQOI RGYY 533			3<246	39248
KOI RGYY K 533			44245			MRQOI RGYY 583			3<246	39248
KOI RGYY K 533 TMZ			3: 246	45248		YRI 533			34249	
KOI RGYY K 583			44245			YRI 593			3824<	
KOI RGYY K 633			3: 249			YRI 633			34249	
KOI RGYY K 633 p			4424<			YRQ 533			37248	
KOI RGYY K 683 p			3: 249			YRQ 633			3: 248	
MRI 533			39249			aOI RGYY a 583			36247	
MRI 583			39248	3724=		aQZU 513			3=248	

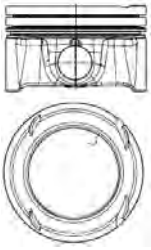


DC4>>7A77477

M	661<3
N4	: 153
N	: 8133
O	41: <
O	4196
P	8414 3
	53É87

-8<63LG444,

WW



7D4>>7A77477

4153		VaJ TZ
4153		VaJ V
5133		VaJ TZ

6 ' tpnp ° fbpwztwtyr Kw/° fzßsp´x tn Lz´T ´I wJK ' t° fßzy Yfbpw	60fbtwrp´ Yfß swswtyr L ´UK0Qzwrpy @zy T ´I w Yfß sw	Gyypl ° I ntp´ 6 ' t np° ' z°´ vts° twp Vz°´ wp° ' t° fßzyp° oœ´ tr typ T ´I w Gntp´	Ypr x pyßz op I nptßp op 6 ' tpÜ ° op I np´z VI ´I ' t° fßzyp° z´tr tyl wp° T ´I w Gnp´z	Ypr x pyßz ´I ° nstl zwtz 6 ' pÜÜt ty I nntl tz Vp´ ' t° fßzyt T ´I wJK Gnntl tz

a Y B; E5E; E /Q	**>0**	P	9	**8>E; vv**	**A74C7 i**	3ae8 V	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; CEE**
a Y B>75E>7		S	9	**8EE8vv**	**D7 i**	3GDI	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D8A8**
a Y B>75E>8		S	9	**8EE8vv**	**877487; i**	3GPa8GSD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D8A9**
a Y B>75E>9		S	9	**8EE8vv**	**B7 i**	3eN	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D8A;**

G0I RGYY G 493 I J O	3=237 39245	H0I RGYY H 4<3 I J O	36238	44244
G0I RGYY G 4<3 I J O	3=237 39245	H0I RGYY H 533 I J O	36238	44244
G0I RGYY G 533 I J O	3=237 39245			

DC4>9CA77477
DC4>9CA7C477 *mT m*

M	7819 8
N4	4719 8
N	7617 3
O	414<
O	4135
P	: 419 8
	63É99

+<673G734,

MWWWdf

7D4>9CA77477
7D4>9CA7C477 *mT m*

5133		I Q
5133		V
5133		I X V

a Y BA85E88		S	9	**98>; vv**	**89748A7 i**	3GaP8NDS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; C9C**
a Y BA85E89		S	9	**98>; vv**	**89748A7 i**	3GaP8NDS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; CA>**
a Y BA85E9>		S	9	**98>; vv**	**89748A7 i**	3GaP8NDS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; CD9**
a Y BA85EB7		S	9	**98>; vv**	**8A748A9 i**	3NDS8NDc	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9BA>E**
a Y BA85EB8		S	9	**98>; vv**	**8A7 i**	3NDS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9A9CC**
a Y BA85ED7		S	9	**98>; vv**	**8A7 i**	3NDS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9B; BE**

I 0I RGYY I 553 I J O	4323<	K0I RGYY K 633	45244 45249
I 0I RGYY I 583 I J O	3<23<	MRK 583 o	37248 4324<
I RY I RY 553	38247 4524:	MRQ0I RGYY 553 I J O	4523< 39248
I RY I RY 583	38247 4524:	MRQ0I RGYY 583 I J O	3=23= 39248
I RY I RY 583 I J O	37244 4524:	S 0I RGYY S R 583 I J O	39244 45248
K0I RGYY K 553	38247 45249	Y0I RGYY Y 583 I J O	34244 45246
K0I RGYY K 553 I J O	3423= 45249	YRI 583 o	34249 4324:
K0I RGYY K 583 I J O	3423= 45249	YRQ 583 I J O	34245

DC4>; ; >77487
DC4>; ; >7C487 *mT m*

M 7<183
N4 4658
N4 7133
N 7=173
O 4188
P :8183
63É99

-8<67=L749,

MWWWZN df fb

7D4>; ; >77477
7D4>; ; >7A477 *mT*
7D4>; ; >7C477 *mT m*

5133 MJI V
41:8 V
5133 I X V

GDC

HzÄwnl ' I ntfÖ 58185nx 6 458vb

azvix py op´ Qzwupyx °wp 58185nx 6

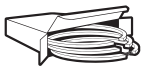
azvix p op w nl @8 o° ' t°ßzy 58185nx 6

azwnl @8ol o ' t°ß y 58185nx 6

azvix p nl x p´l ' t°ßzyp 58185nx 6

a Y BA85E8;	S	9	**98>; vv**	**DD487A i**	3GND8GSP	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9>>7C**
a Y BA85E8B	S	9	**98>; vv**	**877489A i**	3GPa8GcD	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9; CAA**
a Y BA85E9A	S	9	**98>; vv**	**877 i**	3GPa	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9; CD;**
a Y BA85E; 7	S	9	**98>; vv**	**D748; 7 i**	3GDi 8Gcc	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9BD8C**
a Y BA85E>7	S	9	**98>; vv**	**C74897 i**	3 V8GaP	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9A9D7**
a Y BA85EA7	S	9	**98>; vv**	**D>48>7 i**	3GGS8Gi D	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9E9A8**
a Y BA85EAA/Q A6B0	S	9	**98>; vv**	**C74897 i**	3 V8GaP	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9>A>A**
a Y BA85EAB	S	9	**98>; vv**	**C74897 i**	3 V8GaP	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9A9CE**
a Y BA85EAC	S	9	**98>; vv**	**DA4897 i**	3GGa8GaP	4	**P@i x**	**f**	**u**	**U x v**	**xw**	**f P9>A>>**

GOI RGYY G 4<3 I JO	39246	43247	YVXOTZKX 603549 I JO	39239	
GOI RGYY G 533 I JO	35247	3824<	YVXOTZKX 7/903744 I JO	37249	
GOI RGYY G 553 I JO	3=245	3824<	YVXOTZKX 7/903746 I JO	39239	
GOI RGYY G 553 o	3:248	3824<	YVXOTZKX 7/903747 I JO	38249	
HOI RGYY H 4<3 I JO	39246	3<247	YVXOTZKX 7/903748 I JO	39239	
HOI RGYY H 533 I JO	3<247	4524<	YVXOTZKX 7/903749 I JO	3623=	
HOI RGYY H 553 I JO	44244	4524<	YVXOTZKX 703744 I JO	3524<	
HOI RGYY H 553 o	3924<	4524<	YVXOTZKX 703747 I JO	3524<	
I OI RGYY I 4<3 I JO	37243	3<247	YVXOTZKX 803843 I JO	3623=	
I OI RGYY I 533 I JO	4423=	3<247	YVXOTZKX 803844 I JO	38249	
I RG I RG 533 I JO	3:247	3624=	YVXOTZKX 803846 I JO	39239	
I RG I RG 553 I JO	34246	3624=	YVXOTZKX 803847 I JO	38249	
I RG I RG 553 o	3:24<	3624=	YVXOTZKX 803848 I JO	39239	
KOI RGYY K 533 I JO	3423=	45249	YVXOTZKX 803849 I JO	39239	
MRGOI RGYY MRG 533 I JO	45246		aOI RGYY a 533 I JO	36247	
MRGOI RGYY MRG 553 I JO	45246		aOI RGYY a 553 I JO	36247	
MRGOI RGYY MRG 553 o	3:248		aOI RGYY a 583	36247	
MRQOI RGYY 533 I JO	3:243	39248	aGTU I JO515	3:243	
MRQOI RGYY 553 I JO	4523<	39248	aZU 443 I JO	3=243	3<247
S GXI U VURU I I x ' p´ 533 I JO	36248		aZU 446 I JO	3=243	
S GXI U VURU I I x ' p´ 553 I JO	36248		aZU 447 I JO	43247	
S GXI U VURU I I x ' p´ 583 I JO	36248		aZU 447 I JO2447	43247	
YVXOTZKX 6/803643 I JO	3623=		aZU 449 I JO	3=243	
YVXOTZKX 6/803644 I JO	39244		aZU 449 I JO2449	43247	
YVXOTZKX 6/803646 I JO	39239		aZU 44=I JO	43247	
YVXOTZKX 6/803647 I JO	38249		aZU 44=I JO244=	43247	
YVXOTZKX 6/803648 I JO	39246		aZU 2S@ZU 443 I JO	3=243	
YVXOTZKX 6/803649 I JO	3623=		aZU 2S@ZU 446 I JO	3=243	
YVXOTZKX 603543 I JO	3623=		aZU S tÉÞz 447 I JO	43247	
YVXOTZKX 603544 I JO	37249		aZU 2S@ZU 449 I JO	3=243	
YVXOTZKX 603546 I JO	39239		aZU S tÉÞz 449 I JO	43247	
YVXOTZKX 603547 I JO	37249		aZU S tÉÞz 44=	43247	



DC4>; ; >77477
DC4>; ; >7A477 *mT*
DC4>; ; >7C477 *mT m*

M 7<183
N4 46158
N 7=173
P : 8183
63É99

-8<67=V535,

MWWWdf

7D4>; ; >77477
7D4>; ; >7A477 *mT*
7D4>; ; >7C477 *mT m*

5183 MJI V
4t 8 V
5183 I X V

GDC

453vb

a Y B>95D97	a	9	**9EDOvv**	**8A748C7 i**	3NDS8NPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; D87**
a Y B>95D; 7	a	9	**9EDOvv**	**8BA48C7 i**	3NNS8NPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; CC9**
a Y B>95D; 9	a	9	**9EDOvv**	**8A748C7 i**	3NDS8NPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; CA8**
a Y B>95D; B	a	9	**9EDOvv**	**8C7 i**	3NPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; C9;**
a Y B>95DA7	a	9	**9EDOvv**	**8A748C7 i**	3NDS8NPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; CD8**
a Y B>95DAB	a	9	**9EDOvv**	**8C7 i**	3NPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; CE7**
a Y B>95DC7	a	9	**9EDOvv**	**8>748AC i**	3GI D8NGS	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>D87**

I OI RGYY I 633 I JO	34214	3<217	S OI RGYY S R633 I JO	35213	45214
I OI RGYY I 683 I JO	3<23:	3<217	S OI RGYY S R653 I JO	3: 238	3: 214
KOI RGYY K633 I JO	4423=	45219	S OI RGYY S R683 I JO	3=23=	45214
KOI RGYY K683	3423=	45218	XOI RGYY X 5<3 I JO	38239	45215
KOI RGYY K683 I JO	3423=	45218	XOI RGYY X633 I JO	3: 23=	45215
MROI RGYY MR653 I JO2683	4523=	3<215	XOI RGYY X653 I JO	34239	45215
MROI RGYY MR683 I JO	3=23=	45213	XOI RGYY X683 I JO	34239	45217
MRQOI RGYY 683 I JO	3: 23=	39218			

DC4>9C>774D7

M 78198
N4 48184
N 84143
O 4176
O 413:
P : 4198
63É99

-8<6: 30439,

MWWWdf fb

7D4>9C>77477
7D4>9C>7C477 *mT m*

5183 I Q V
5183 V
5183 I X V

LKZ-Ring

DC4>9C>774E7

M 78198
N4 48184
N 84143
O 4176
O 413:
P : 4198
63É99

-8<6: 30539,

MWWWdf fb

7D4>9C>77477
7D4>9C>7C477 *mT m*

5183 I Q V
5183 V
5183 I X V

LKZ-Ring

K°´z 8
Zz nÖwyop´ 40506
Zz nÖwyop´ 70809

I y eÖwyop´ 40506
I y eÖwyop´ 70809

°°´ nÖwyo´p 40506
°°´ nÖwyo´p 70809

py pwntwyo´z 40506
py pwntwyo´z 70809

I ntwyo´z 40506
I ntwyo´z 70809

a Y B>95D; D	a	9	9EDOvv	8DA48EA i	3NVN8NaV	4	P@t x	f	u	U	x	v	xw	f P9BAEE
a Y B>95DA;	a	9	9EDOvv	8DA48EA i	3NVN8NaV	4	P@t x	f	u	U	x	v	xw	f P9B7BA
a Y B>95DA>	a	9	9EDOvv	8DA48EA i	3NVN8NaV	4	P@t x	f	u	U	x	v	xw	f P9B7>A
a Y B>95DAD	a	9	9EDOvv	8DA48EA i	3NVN8NaV	4	P@t x	f	u	U	x	v	xw	f P9; CE8
a Y B>95DB9	a	9	9EDOvv	8E7 i	3NVe	4	P@t x	f	u	U	x	v	xw	f P9B7D9
a Y B>95DBD	a	9	9EDOvv	8E7 i	3NVe	4	P@t x	f	u	U	x	v	xw	f P9A7EE
a Y B>95DC9	a	9	9EDOvv	8>748EA i	3GI D8NaV	4	P@t x	f	u	U	x	v	xw	f P9A7ED

I RY I RY 683	35246	4524:	XOI RGYY X 5<3 I JO	38239 45245
I RY I RY 683 I JO	34244	3<247	XOI RGYY X 633 I JO	3: 23= 45245
I RY I RY 683 o	37248	4524:	XOI RGYY X 683 I JO	3<243 45247
KOI RGYY K 683	44245	45249	YOI RGYY Y 683	37244 45246
KOI RGYY K 683 I JO	36244	45248	YOI RGYY Y 683 HWpZpn	37244 45246

DC4>9C>77497

7D4>9C>77477
7D4>9C>7C477 *mTm*

M	7898
N4	4884
N	7: 843
O	4?7=
O	4866
P	: 4898
	63É98

5833 I QV
5833 V
5833 I XV

+<6: 3H443,

MWWWZN df f b

DuraBowl

DC4>9C>774;7

7D4>9C>77477
7D4>9C>7C477 *mTm*

M	7898
N4	4884
N	7: 843
O	4?7=
O	4866
P	: 4898
	63É98

5833 I QV
5833 V
5833 I XV

+<6: 3H543,

MWWWZN df f b

DuraBowl

Zz nÖuyop´ 4 06	I y eÖuyop´ 406	°°´ nÖuyo´p 406	py pwntuyo´z 406	I ntuyo´z 406
Zz nÖuyop´ 7 09	I y eÖuyop´ 709	°°´ nÖuyo´p 709	py pwntuyo´z 709	I ntuyo´z 709

a Y B>95DD>	a	9	9EDOvv	8; A i	3GeS	4	P@t x	f	u	U	x	v	xw	f P9AD>9
a Y B>95DEB	a	9	9EDOvv	8; A48>7 i	3GeS8GI D	4	P@t x	f	u	U	x	v	xw	f P9AD>8
a Y B>95DED	a	9	9EDOvv	8>748AA i	3GI D8NGG	4	P@t x	f	u	U	x	v	xw	f P9AD>;
a Y B>95DEE	a	9	9EDOvv	8>7 i	3GI D	4	P@t x	f	u	U	x	v	xw	f P; ADC9

MOI RGYY M5<3 I JO	3723=		YVXOTZKX 7/9O374<I JO	39239	38249
MOI RGYY M633 I JO	37243		YVXOTZKX 7/9O374=I JO	3623=	
YVXOTZKX 6/8O364<I JO	39239	4523=	YVXOTZKX 7O374=I JO	3524<	
YVXOTZKX 6/8O364=I JO	3623=		YVXOTZKX 7O374=I JOXb J	3524<	
YVXOTZKX 6/8O364=I JOXb J	3524<		YVXOTZKX 8O384<I JO	39239	4523=
YVXOTZKX 6O354<I JO	39239		YVXOTZKX 8O384=I JO	3623=	
YVXOTZKX 6O354=I JO	3623=				

DC4>9C>774B7

M 78198
N4 47198
N 76173
O 4166
O 417=
P :4198
63É99

+<6: 30634,

MWWWdf fb

7D4>9C>77477
7D4>9C>7C477 *mm*

5133 I Q V
5133 V
5133 I X V

LKZ-Ring

DC4>9C>774C7

M 78198
N4 47198
N 76173
O 4166
O 417=
P :4198
63É99

+<6: 30734,

MWWWdf fb

7D4>9C>77477
7D4>9C>7C477 *mm*

5133 I Q V
5133 V
5133 I X V

LKZ-Ring

Zz nÖwyop´ 406
Zz nÖwyop´ 709

Iy eÖwyop´ 406
Iy eÖwyop´ 709

°°´ nÖwyo´p 406
°°´ nÖwyo´p 709

py pwntwyo´z 406
py pwntwyo´z 709

I ntwyo´z 406
I ntwyo´z 709

aY B>95E87	a	9	9EDOvv	8BA i	3NNS	4		P@t x	f	u	U	x	v	xw		f P8D>8B
aY B>95E97	a	9	9EDOvv	8>74977 i	3Gi	D8NcN	4	P@t x	f	u	U	x	v	xw		f P8D>; 8
aY B>95E98	a	9	9EDOvv	8>748BA i	3Gi	D8NNS	4	P@t x	f	u	U	x	v	xw		f P8D>9D
aY B>95E;7	a	9	9EDOvv	8AA48C; i	3NGG8NPV		4	P@t x	f	u	U	x	v	xw		f P8E98;
aY B>95E;9	a	9	9EDOvv	8AA48C; i	3NGG8NPV		4	P@t x	f	u	U	x	v	xw		f P9;CB8
aY B>95E>7	a	9	9EDOvv	8>748C7 i	3Gi	D8NPG	4	P@t x	f	u	U	x	v	xw		f P8D8EC
aY B>95EA7	a	9	9EDOvv	8>748BA i	3Gi	D8NNS	4	P@t x	f	u	U	x	v	xw		f P8E97B
aY B>95EB7	a	9	9EDOvv	8BA i	3NNS	4		P@t x	f	u	U	x	v	xw		f P97;B8
aY B>95EB8	a	9	9EDOvv	8BA i	3NNS	4		P@t x	f	u	U	x	v	xw		f P97EDB
aY B>95EC7	a	9	9EDOvv	8BA i	3NNS	4		P@t x	f	u	U	x	v	xw		f P97C9E
aY B>95ECA	a	9	9EDOvv	8;A i	3GeS	4		P@t x	f	u	U	x	v	xw		f P9DCE7
aY B>95EE7	a	9	9EDOvv	8A748BA i	3NDS8NNS		4	P@t x	f	u	U	x	v	xw		f P998>D
aY B>95EE9	a	9	9EDOvv	8;A48>7 i	3GeS8GI	D	4	P@t x	f	u	U	x	v	xw		f P998>E
aY B>95EE;	a	9	9EDOvv	8;A i	3GeS	4		P@t x	f	u	U	x	v	xw		f P9ABB8

I 0I RGYY I 653 I JO	34238	3<247		S 0I RGYY S R 653 I JO		3:238	3:244
I 0I RGYY I 683 I JO	3<23:	34247		S 0I RGYY S R 683 I JO		3:23=	35248
I RQ I RQ 653 I JO	34238	36243		X0I RGYY X 5<3 I JO		38239	45245
I RY I RY 653 I JO	34238	45243		X0I RGYY X 633 I JO		3:23=	45245
I RY I RY 683 I JO	3723=	45243		X0I RGYY X 653 I JO		34239	45245
K0I RGYY K 5<3 I JO	36238	3:23=		X0I RGYY X 683 I JO		34239	45247
K0I RGYY K 5<3 Z I JO	36238	3:23=		Y0I RGYY Y 653 I JO		43238	45246
K0I RGYY K 633	3=23:	4523<		Y0I RGYY Y 683 I JO		3423=	45246
K0I RGYY K 653	3=23<	3623=		YVXOTZKX 6/80364<I JO		39239	4523=
K0I RGYY K 653 I JO	36238	4523<		YVXOTZKX 6/80364=I JO		3623=	
K0I RGYY K653 I JO	3=239	4523<		YVXOTZKX 60354<I JO		39239	
K0I RGYY K 653 Z I JO	36238	3:23=		YVXOTZKX 60354=I JO		3623=	
M0I RGYY M 5<3 I JO	3723=			YVXOTZKX 7/90374<I JO		39239	38249
M0I RGYY M 653 I JO	3=239			YVXOTZKX 7/90374=I JO		3623=	

MOI RGYY M683 I JO	3923= 45244	YVXOTZKX 80384< I JO	39239 4523=
MROI RGYY MR 653 I JO	3=239 4523=	YVXOTZKX 80384= I JO	3623=
MROI RGYY MR 683 I JO	3823= 3<245	aOGTU I JO613	36239
MRQOI RGYY 653 I JO	3923< 39248	aOZU 453 I JO	3: 239
SOI RGYY S R 5<3 I JO	3: 238 3: 23=	aOZU 2S OZU 453 I JO	3: 239
SOI RGYY S R 633 I JO	3: 23= 45244		

DC4>9C>77477
DC4>9C>7C477 *mTm*

M	7898
N4	4798
N	7673
O	47=
O	4766
P	:498
	63É98

-8<673L444,

MWWWdf

7D4>9C>77477
7D4>9C>7C477 *mTm*

5733		I QV
5733		V
5733		I XV

DC4>9C>77487
DC4>9C>7C487 *mTm*

M	7898
N4	4798
N	7673
O	47=
O	4766
P	:498
	63É98

-8<673L544,

MWWWdf

7D4>9C>77477
7D4>9C>7C477 *mTm*

5733		I QV
5733		V
5733		I XV

Zz nÖuyop´ 406	I y eÖuyop´ 406	°°´ nÖuyo´p 406	py pwntuyo´z 406	I ntuyo´z 406
Zz nÖuyop´ 709	I y eÖuyop´ 709	°°´ nÖuyo´p 709	py pwntuyo´z 709	I ntuyo´z 709

Y 8875E98	a 9	**9C>Bvv**	**88D i**	3GaD	4	**bx**		**f P988A**
Y 8875E99	a 9	**9C>Bvv**	**88A488D i**	3GVa8GaD	4	**bx**		**f P988B**
Y 8875E9;	a 9	**9C>Bvv**	**88A i**	3GVa	4	**bx**		**f P988C**
Y 8875E9>	a 9	**9C>Bvv**	**88A i**	3GVa	4	**bx**		**f P988D**
Y 8875E9B	a 9	**9C>Bvv**	**88A i**	3GVa	4	**bx**		**f P988E**
Y 8875ED8	a 9	**9C>Bvv**	**8; B i**	3GeV	4	**bx**		**f P9897**
Y 8875ED9	a 9	**9C>Bvv**	**8; 748; B i**	3Gcc8GeV	4	**bx**		**f P9898**
Y 8875ED;	a 9	**9C>Bvv**	**8; 748; B i**	3Gcc8GeV	4	**bx**		**f P9899**
Y 8875ED>	a 9	**9C>Bvv**	**87A48; B i**	3GeV	4	**bx**		**f P>BAE**
Y 8875EDA	a 9	**9C>Bvv**	**87848; B i**	3GPc8GeV	4	**bx**		**f P989>**
Y 8875EDB	a 9	**9C>Bvv**	**8; 748; B i**	3Gcc8GeV	4	**bx**		**f P989A**
Y 8875EDC	a 9	**9C>Bvv**	**8; B i**	3GeV	4	**bx**		**f P989B**
Y 8875EDD	a 9	**9C>Bvv**	**8; 748; B i**	3Gcc8GeV	4	**bx**		**f P989C**
Y 8875EDE	a 9	**9C>Bvv**	**8; B i**	3GeV	4	**bx**		**f P989D**
Y 8875EE7	a 9	**9C>Bvv**	**8; 748; B i**	3Gcc8GeV	4	**bx**		**f P989E**

2<5<3	3925 4429	4565<3 K	3529 442<8
2<5<3 I	3925 352:	4565<3 ZK	3=2: 442<8
2<5<3 I K	3925 342:	YOI RGYY 5<3 Y	3<25 3:2<8
2<5<3 K	3925 4429	YOI RGYY 5<3 YK/ YKR	3<25 3:2<8
4565<3	3529 3<2<4	YR 5<3 YR	3<27 3:2<8

456 5<3 I 362 : 452<3 YR 5<3 YRI 3<2 7 3=2<4
456 5<3 I K 362 : 442<8

DC48CBB77477
DC48CBB7C477 *mTm*
DC48CBB88477 *Tmm*

M 751t 3
N2 471=3
P <=193
56É9=

-8<947G,

GC 741=33

7D48CBB77477
7D48CBB7C477 *mTm*
7D48CBB88477 *Tmm*

41t 8 SURV
5183 V
7183 IXV

aY B785E88	S 9	**8EECvv**	**A;4AA i**	3cN8cV 4	**P@t x**		**f P997B**
aY B785E89	S 9	**8EECvv**	**A;4AA i**	3cN8cV 4	**P@t x**		**f P997C**
aY B785E8;	S 9	**8EECvv**	**AA i**	3cV 4	**P@t x**		**f P997D**
aY B785E8A	S 9	**8EECvv**	**AA i**	3cV 4	**P@t x**		**f PA9;C**
aY B795E88	V 9	**9>ECvv**	**BB4BE i**	3 D8 S 4	**P@t x**		**f P9988**
aY B795E89	V 9	**9>ECvv**	**BB4BE i**	3 D8 S 4	**P@t x**		**f P9989**
aY B795E;7	V 9	**9>ECvv**	**B94BE i**	3eS8 S 4	**P@t x**		**f P998;**
aY B795E;8	V 9	**9>ECvv**	**BE i**	3 S 4	**P@t x**		**f P998>**
aY B795E;D	V 9	**9>ECvv**	**BD i**	3 N 4	**P@t x**		**f P8CD8B**
aY B795E;E	V 9	**9>ECvv**	**BD i**	3 N 4	**P@t x**		**f PE>99**
aY B795EE7	V 9	**9>ECvv**	**B; i**	3ea 4	**P@t x**		**f P8CD8E**
aY B7;5E89 /aY B7; P;70	a 9	**9EEBvv**	**D74D; i**	3GDi8GGP 4	**P@t x**		**f P998D**
aY B7;5E8; /aY B7; P;70	a 9	**9EEBvv**	**D74D; i**	3GDi8GGP 4	**P@t x**		**f P998E**
aY B7;5E;8 /aY B7; P;70	a 9	**9EEBvv**	**D; i**	3GGP 4	**P@t x**		**f P9997**

457 533 J	452<7 392=6	4=3 J 518	372<8 3<2=6
457 533 ZJ	3=2<8 3<2=4	I OI RGYY I 533 J	362=6 38233
457 583 J	372<8 392=6	KOI RGYY K 533 J	392=6 392=8
457 583 ZJ	3=2<8 392=6	MOI RGYY 583 MJ	432< 382=6
457 633 J	452<7 392=6	MOI RGYY 633 MJ	3=2<= 3<2=6
457 633 ZJ	3=2<9 392=6	MOI RGYY M633 Jtp°pw	3=2=6 3<2=7
4=3 J 513	3<2<6 3<2=6	U 738	342<7

DC4C>;B77487
DC4C>;B7C487 *mTm*

M 771<8
N4 =138
O 4158
O 4138
P :71<8
59É88

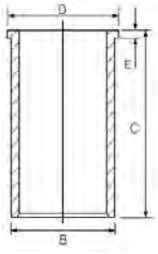
-8< 86H,

df

7D4C>;B77477
7D4C>;B7C477 *mTm*

5183 IXV
5183 V
6183 IXV

8>479B9>7477



N =3143 **O** 47<183 **P** =518: **Q** 71t 3

Izy´zor°topoty V f ßzy	Qzwnpyrpqs´ßp° Vwp°pw	Htpwpr°to polyo° w ' f ßzy	Htpwx zyßolpy pwf ßy	Htwpl x zyßß °°w f ßzyp
Izy´zorl ' 55148x	Vwp°pw°rpyl nfßyo 55148x	Jf ßynp pyßp mtpwp 55148x	Jf ßynt l opwntpw 55148x	Jf ßyÜ ol w/ mtpw/ 55148x

aY B7>5E8A	S 9	**8EECvv**	**BA4DA i**	3ee8GGa 4	**P@t x**		**f P>BCC**
aY B7>5E8C	S 9	**8EECvv**	**BA i**	3ee 4	**P@t x**		**f PE>9>**
aY B7A5E87	V 9	**9>ECvv**	**D; i**	3GGP 4	**P@t x**		**f P999D**

a Y B7A5E88	V 9	9>ECvv	D; i 33GP 4	P@l x	f P999E
a Y B7A5E89	V 9	9>ECvv	D; i 33GP 4	P@l x	f P>BCD
a Y B7B6E87	a 9	9EEBvv	877 i 3GPa 4	P@l x	f P99; 7
a Y B7B6E89	a 9	9EEBvv	877 i 3GPa 4	P@l x	f P>BD7

I Ol RGYY I 533 J	432=9 38233	KOl RGYY K 583 o	392=9 392=<
I Ol RGYY I 533 Z J	432=9 36234	KOl RGYY K 583 ZJ	392=6 392=9
I Ol RGYY I 583 J	382=6 38233	KOl RGYY K 583 Z J	392=9 3: 2=—
KOl RGYY K 533 J	342=9 36235	KOl RGYY K 633 J	3: 2=6 392=<
KOl RGYY K 583 J	3: 2=6 3: 2=—	KOl RGYY K 633 ZJ	392=6 392=9

DC4C>; B774; 7
DC4C>; B7C4; 7 *mT m*

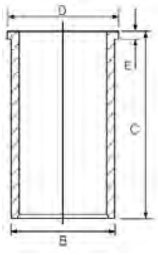
M	771=3
N4	7193
N2	4165
O	5159
O	5174
P	: 9155
	59É88

df

7D4C>; B77477
7D4C>; B7C477 *mT m*

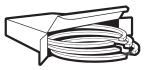
5183		I X V
5133		V
6133		I X V

8>479B9>7477



N =3143 O 47<183 P =518: Q 71 3

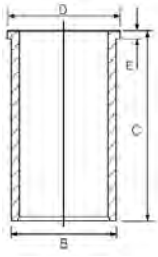
a Y B8A	S 9	98ECvv	>74>> i 3/V8aD 4	P@l x	f P99; 8
a Y B8A5E87	S 9	98ECvv	>> i 3aD 4	P@l x	f P99; 9
a Y B8A5E88	S 9	98ECvv	;; i 35V 4	P@l x	f PCEC7
a Y B8A5E89 /a Y B8A P 990	S 9	98ECvv	>> i 3aD 4	P@l x	f P99; ;
a Y B8A5E8; /a Y B8A P 970	S 9	8EDDvv	>7 i 3/V 4	P@l x	f P99; >
a Y B8A5E8>	S 9	98ECvv	>7 i 3/V 4	P@l x	f PCEC9
a Y B8A5E8A /a Y B8A P 970	S 9	8EDDvv	>74>> i 3/S8aD 4	P@l x	f P8CC; 9
a Y B8A5E8B	S 9	98ECvv	>7 i 3/V 4	P@l x	f P99D9;
a Y B8A5E8C /a Y B8A P 990	S 9	98ECvv	>> i 3aD 4	P@l x	f PABD;
a Y B8A5E8D	S 9	98ECvv	>7 i 3/V 4	P@l x	f P99D9>
a Y B8A5E8E	S 9	98ECvv	; D4>7 i 3/N8/S 4	P@l x	f P9DCDA
a Y B8A5E; 7	S 9	98ECvv	; D i 3/N 4	P@l x	f P99D9A
a Y B8A5E; 9	S 9	98ECvv	>> i 3aD 4	P@l x	f PCEDE
a Y B8A5E; B	S 9	98ECvv	; C i 3/D 4	P@l x	f P978A8
a Y B8A5E; C	S 9	98ECvv	>> i 3aD 4	P@l x	f P99; B
a Y B8A5E; D	S 9	98ECvv	>> i 3aD 4	P@l x	f P99D9B
a Y B8A5E; E	S 9	98ECvv	>> i 3aD 4	P@l x	f P99; C
a Y B8A5E>7 /a Y B8A P 970	S 9	8EDDvv	>74>> i 3/V8aD 4	P@l x	f P99; D
a Y B8A5E>8 /a Y B8A P 990	S 9	98ECvv	>>4>E i 3aD8ac 4	P@l x	f P99; E
a Y B8A5E>9	S 9	8EDDvv	>7 i 3/S 4	P@l x	f P99D9C
a Y B8A5E>;	S 9	8EDDvv	>7 i 3/V 4	P@l x	f P99>7
a Y B8A5E>>	S 9	8EDDvv	>7 i 3/V 4	P@l x	f P99>8
a Y B8A5EB8	S 9	8EDDvv	>> i 3aD 4	P@l x	f P99D9E
a Y B8A5EB;	S 9	8EDDvv	>; i 3/e 4	P@l x	f P99>9
a Y B8A5EB>	S 9	8EDDvv	>7 i 3/S 4	P@l x	f P99D; 7
a Y B8A5EBA	S 9	8EDDvv	>7 i 3/S 4	P@l x	f P99D; 8
a Y B8A5EBB	S 9	8EDDvv	>7 i 3/S 4	P@l x	f P99D; 9
a Y B8A5EBC	S 9	8EDDvv	>7 i 3/S 4	P@l x	f P99D; ;
a Y B8A5EBD	S 9	8EDDvv	>7 i 3/S 4	P@l x	f P99D; >
a Y B8A5EBE	S 9	8EDDvv	>7 i 3/S 4	P@l x	f P99D; A



a Y B8A5EC7	S 9	**8EDDvv**	**>; 4>B i**	3/e8aN 4	**P@t x**		**f P99>;**
a Y B985E89	S 9	**8EE7vv**	**>7 i**	3/S 4	**P@t x**		**f P99BD**
a Y B985E8;	S 9	**8EE7vv**	**; B4>7 i**	3/D8VS 4	**P@t x**		**f P99BE**
a Y B985E8>	S 9	**8EDDvv**	**; A i**	3Se 4	**P@t x**		**f P99C7**
a Y B985E8A	S 9	**8EDDvv**	**>7 i**	3/S 4	**P@t x**		**f P99D; C**
a Y B985E8B	S 9	**8EDDvv**	**9A49E i**	3PS8Pi 4	**P@t x**		**f PCEDB**
a Y B985E8D	S 9	**8EDDvv**	**>7 i**	3/V 4	**P@t x**		**f P99C8**
a Y B985E8E	S 9	**8EDDvv**	**>7 i**	3/S 4	**P@t x**		**f P99D; D**
a Y B985E;7	S 9	**8EDDvv**	**>7 i**	3/S 4	**P@t x**		**f P99D; E**
a Y B985E;9	S 9	**8EE7vv**	**>7 i**	3/V 4	**P@t x**		**f P99C9**

2< 533 J	3429< 342 :	NKTYI NKR 503539 J 515	352 6 452 :
2< 553 J	3429< 342 :	S H 513 J	372<< 372=9
456 533 J	3: 2 9 442<8	U 63=	3429< 452 7
456 553 J	342 9 362 =	Z52R R 738 J	342 5 452<3
NKI QLRUYYK 4=3 JI	39294 3<298	Z52R R 739 JM	3429< 452 7
NKI QLRUYYK 533 J	3: 298 3529<	_T(S UM	34299

8>47998E7477 **N** =3133 **O** 48<173 **P** =5133 **Q** 71 3



a Y B795EB8	V 9	**9>EOvv**	**E74E; i**	3GNN8GNa 4	**P@t x**	**f u**	**f P998B**
a Y B79M6EB9	V 9	**9>EOvv**	**E74E; i**	3GNa 4	**P@t x**	**f u**	**f P998C**
a Y B79M6EE;	V 9	**9>EOvv**	**E; i**	3GNa 4	**P@t x**		**f P8CD98**
a Y B7; 5EB8 /a Y B7; P ; 7 M0	a 9	**9EEBvv**	**87C4887 i**	3GSP8GSe 4	**P@t x**	**f u**	**f P9999**
a Y B7; M6EB7 /a Y B7; P ; 7 M0	a 9	**9EEBvv**	**877487D i**	3GPa8GSc 4	**P@t x**	**f u**	**f P9998**
a Y B7; M6EB; /a Y B7; P ; 7 M0	a 9	**9EEBvv**	**87A487D i**	3GSP8GSc 4	**P@t x**	**f u**	**f P999;**

457 583 ZJ Z°´mz	362<< 3: 2=6	4=3 Z°´mz0J 518	352<< 3<2=6
457 583 Z°´mz0J	3=2<< 392=6	K0I RGYY K 583 Z°´mz J	392=6 392=9
457 633 J	3=2<= 392=6	K0I RGYY K 583 Z°´mz0J	392=6 392=8
457 633 ZJ Z	392=5 382=6	K0I RGYY K 633 Z Z°´mz0J	392=6 392=9
457 633 Z Z°´mz0J	3=2<9 392=6	K0I RGYY K 633 Z°´mz0J	392=6 392=8
457 633 Z°´mz0J	3=2<9 392=6	Y0I RGYY 633 YJ R	3=2<8 452<

DC48D; ; 77477
DC48D; ; 7C477 *mT m*

M 771<8
N4 =143
O 4138
O 4158
P : 71<8
5<É: 3

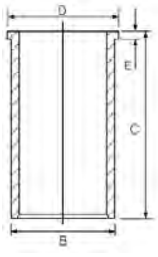
-8< 95V,

TMWWdf

7D48D; ; 77477
7D48D; ; 7C477 *mT m*

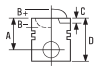
5183 VY V
5133 VY V
6133 I X V

8>479B9>7477 **N** =3143 **O** 47<183 **P** =518: **Q** 71 3



I zy´zo r°topo ty Vt°ßzy Qzwmpyr pq s´ßp° Vwp°pw Htpwpr°to p oly° wp 't°ßzy Htpwlx zyß ol py pwl t°ß y Htwpl x zyß ß °°w t°ßzyp

a Y B7; 5EA7 /a Y B7; P ; 7 M0	a 9	**9EEBvv**	**877487A i**	3GPa8GSP 4	**P@t x**	**f u**	**f P988>;**

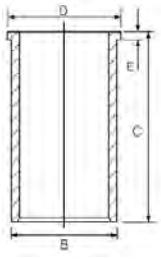


a Y B7; 5EB9 /a Y B7; P ; 7 MD	a	9	9EEBvv	87A i	3GSP	4	P6t x	f u			f P988>>
a Y B7A5EB7	V	9	9>EOvv	887 i	3GVD	4	P6t x	f u	U x v	xw	f P>BCE
a Y B7A5EB9	V	9	9>EOvv	887 i	3GVD	4	P6t x	f u	U x v	xw	f PEDE9
a Y B7B5EB8	a	9	9EEBvv	8; 7 i	3Gcc	4	P6t x	f u	U x v	xw	f PA9; D
a Y B7B5EB9	a	9	9EEBvv	8; 7 i	3Gcc	4	P6t x	f u	U x v	xw	f PE>8B
a Y B7B5EB>	a	9	9EEBvv	8; 7 i	3Gcc	4	P6t x	f u	U x v	xw	f PE>9A

I OI RGYY I 583 Z Z°´mzQJ	392=9	36234	KOI RGYY K 633 Z Z°´mzQJ	452=9	3: 2==
I OI RGYY I 583 Z°´mzQJ	432=8	38233	KOI RGYY K 633 Z°´mzQJ	452=9	3: 2==
KOI RGYY K 583 Z Z°´mzQJ	392=:	3: 2==	MOI RGYY M633 ZJ	3<2=9	3: 233
KOI RGYY K 583 Z°´mzQJ	392=:	3: 2==	YOI RGYY Y 633 Z°´mzQJ	382=9	432=<

8>479B9>7477

N =3143 O 47<183 P =518: Q 71 3



Y 9C95E88	a	9	9>EBvv	8A7 i	3NDS	4	bx				f P998>9
Y 9C95E97	a	9	9>EBvv	8A7 i	3NDS	4	bx				f P8D>9A
Y 9C95E98	a	9	9>EBvv	8A7 i	3NDS	4	bx				f P97; AC
Y 9C95E99	a	9	9>EBvv	8A7 i	3NDS	4	bx				f P998>;
Y 9C95E>7	a	9	9EEBvv	8C7 i	3NPG	4	bx				f P8D>97
Y 9C95E>8	a	9	9EEBvv	8C7 i	3NPG	4	bx				f P8D>9;
Y 9C95E>9	a	9	9EEBvv	8C7 i	3NPG	4	bx				f P8D>9C
Y 9C95E>;	a	9	9EEBvv	8C7 i	3NPG	4	bx				f P8D>; 7
Y 9C95E>>	a	9	9EEBvv	8C7 i	3NPG	4	bx				f P9; CAD
Y 9C95E>A	a	9	9EEBvv	8C748D7 i	3NPG8NSV	4	bx				f P97AC7
Y 9C95E>B	a	9	9EEBvv	8C748D7 i	3NPG8NSV	4	bx				f P9BEBB
Y 9C95E>C	a	9	9EEBvv	8C7 i	3NPG	4	bx				f P97; AB
Y 9C95E>E	a	9	9EEBvv	8C7 i	3NPG	4	bx				f P97DB;
Y 9C95EA9	a	9	9EEBvv	8B848C7 i	3NGI 8NPG	4	bx				f P9A989

I OI RGYY I 563	34238 3<247	KOI RGYY K 5<3 Z	36238 3: 23=
I OI RGYY I 583	3523< 45245	KOI RGYY K 633	3423= 45246
I OI RGYY I 5<3	34238 3<247	SOI RGYY S R 633	36243 45244
I OI RGYY I 633	3<23: 3<247	XOI RGYY X 5<3	3423: 45247
I RI OI RGYY I RI 563	3823< 39244	XOI RGYY X 633	3: 23= 45247
I RI OI RGYY I RI 583	3923= 39244	YOI RGYY Y 5<3	3<239 45246
I RQ I RQ 5<3	34238 36243	YOI RGYY Y 633	3<239 45246
I RY I RY 5<3	3: 23< 45243	YR 5<3	3623< 34245
I RY I RY 633	3723= 45243	YR 633	3723= 34245
KOI RGYY K 563	3=23: 4523<	YRQ 5<3	34238 35244
KOI RGYY K 563 Z	3823: 3: 23=	YRQ 633	3723= 35244
KOI RGYY K 5<3	36238 4523<		

DC4>>7E77477

M 631<8
N2 7174
O 416=
O 416=
P 89149
55É7:

+ 13<<94J437,

7D4>>7E77477

4183 TZ
41 8 V
5183 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

a Y B885EB7	S 9	**98A8vv**	**CA4E9 i**	3GDN8GNV 4	**P@t x f u U x v xw**		**f PEA9E**
I 0I RGYY I 533 I J O		362=< 38233		I 0I RGYY I 553 I J O		3=2=:	38233
I 0I RGYY I 533 Z I J O		362=< 36234		I 0I RGYY I 553 Z I J O		3=2=:	36234

DC488CE77487
DC488CE7C487 *mT m*
452==

M 75163
N4 46163
N 76143
O 517<
P : 5163
5<É9<

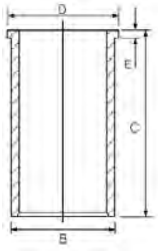
-8<<860443,

MWWWdf

7D488CE77477
7D488CE7C477 *mT m*

5183 I Q V
5133 V
6133 I X V

8>4797; 77477 **N** =4133 **O** 47: 133 **P** =6133 **Q** 8133



DC488CE77477
DC488CE7C477 *mT m*

M 75163
N4 461<3
N 76183
O 517<
P : 5163
63É: 3

-8<<8: 044<,

MWWWdf

7D488CE77477
7D488CE7C477 *mT m*

5183 I Q V
5133 V
6133 I X V

a Y B885EB8	S 9	**98A8vv**	**CA487A i**	3GDN8GSP 4	**P@t x f u U x v xw**		**f P8C77A**
a Y B885ED7 /Q ; 0	S 9	**98A8vv**	**B74E7 i**	3eN8GNN 4	**P@t x f u U x v xw**		**f P8>; A7**
a Y B88XM/CA Wl OPU0	S 9	**98A8vv**	**CA i**	3GDN 4	**P@t x f u U x v xw**		**f P8>; >E**
K0I RGYY K 533 I J O		392=< 36235		a0I RGYY a 533 I J O		362==	3: 236
K0I RGYY K 553 I J O		392=< 36235		a0I RGYY a 553		352==	3: 236
K0I RGYY K 553 I Jt		3: 2== 45235		a0I RGYY a 553 I J O		362==	3: 236
K0I RGYY K 553 Z I J O		392=< 36236		a@U 443 I J 0515		362==	3: 236
a0I RGYY a 533		362== 3: 236		a@U 445 I J 0515		362==	3: 236

DC488CE77487
DC488CE7C487 *mT m*
Kyr 1396<48

M 75163
N4 46163
N 76143
O 517<
P : 5163
5<É9<

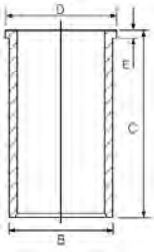
-8<<860443,

MWWWdf

7D488CE77477
7D488CE7C477 *mT m*

5183 I Q V
5133 V
6133 I X V

8>4797; 77477



N =4133 **O** 47: 133 **P** =6133 **Q** 8133

DC488CE77497
DC488CE7C497 *mT m*
Kyr 1396<49

M 75163
N4 461<3
N 76183
O 517<
P : 5163
63É: 3

-8<<87053=,

MWWWdf f b

7D488CE77477
7D488CE7C477 *mT m*

5183 I Q V
5133 V
6133 I X V

a Y B885EB9			S	9	**98A8vv**	**CA487A i**	3GDN8GSP	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8A>>E**
a Y B885ED8 /Q	**; 0**		S	9	**98A8vv**	**D74EA i**	3GDi 8GNi	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8CC9E**
a Y B895EB;			V	9	**9BDAvv**	**897 i**	3GaP	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C77E**
a Y B8; 5EB7			a	9	**; 999vv**	**8>A i**	3Gi c	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8A>B8**
a Y B8; 5EB8			a	9	**; 99Bvv**	**8>A i**	3Gi c	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8A>A>**

I 0I RGYY I 533 I J O							3=233	3<23:								YVXOTZKX 503544 I J O		37233	38239
I 0I RGYY I 553 I J O							38233	3<23:								YVXOTZKX 503546 I J O		37233	38239
K0I RGYY K 653 I J O							3: 2==	36235								YVXOTZKX 603644 I J O		37233	38239
K0I RGYY K 653 Z I J O							3: 2==	36236								YVXOTZKX 603646 I J O		37233	38239
S 0I RGYY S R 5: 3 I J O							452==	39238								YVXOTZKX 703744 I J O		37233	38239
Y0I RGYY Y 653 I J O							3<2==	3=235								YVXOTZKX 703746 I J O		37233	38239

DC488CE77477
DC488CE7C477 *mT m*
34236/ Kyr 133: 5<=

M 75163
N4 461<3
N 76183
O 517<
P : 5163
63É: 3

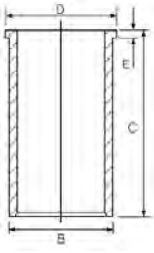
-8<<8: 044<,

MWWWdf

7D488CE77477
7D488CE7C477 *mT m*

5183 I Q V
5133 V
6133 I X V

8>4797; 77477



N =4133 **O** 47: 133 **P** =6133 **Q** 8133

DC488CE77497
DC488CE7C497 *mTm*
34236 / Kyr 133: 5=3

M 75163
N4 461<3
N 76183
O 517<
P : 5163
63É: 3

-8<<87053=,

MWWWdf fb

7D488CE77477
7D488CE7C477 *mTm*

5183 I Q V
5133 V
6133 I X V

aY B885EDC/Q ;0	S	9	**98A8vv**	**B7 i**	3eN	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P8CC; 7**
aY B895EB8	V	9	**9BDAvv**	**897489A i**	3GaP8GcD	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P8A>AA**
aY B895EB9	V	9	**9BDAvv**	**897489A i**	3GaP8GcD	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P8A>A8**
aY B895EBA	V	9	**9BDAvv**	**88A4897 i**	3GVa8GaP	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P988>A**
aY B895EBB	V	9	**9BDAvv**	**88A i**	3GVa	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P8BDEA**
aY B895EBC	V	9	**9BDAvv**	**897489A i**	3GaP8GcD	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P8C; 9;**
aY B895ED8	V	9	**9BDAvv**	**887488A i**	3GVD8GVa	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P8CC; 8**
aY B895ED; /Q ;0	V	9	**9BDAvv**	**88A i**	3GVa	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P9AB>E**

GI I KRU	38236		YVXOTZKX 503549 I J O		37233	38239
I OI RGYY I 5: 3 I J O	45233	3<23:	YVXOTZKX 60363<I J O		37233	38239
I RQ I RQ 5: 3 I J O	43235	3823=	YVXOTZKX 603649 I J O		37233	38239
KOI RGYY K 5: 3 I J O	3: 2==	45235	YVXOTZKX 70373<I J O		37233	38239
KOI RGYY K 5: 3 Z I J O	3: 2==	36236	YVXOTZKX 703749 I J O		37233	38239
MOI RGYY M5: 3 I J O	43234		YVXOTZKX 803949 I J O		37234	38239
YVXOTZKX 50353<I J O	37233	38239				

DC488CE77497
DC488CE7C497 *mTm*

M 75163
N4 461<3
N 76183
O 517<
P : 5163
63É: 3

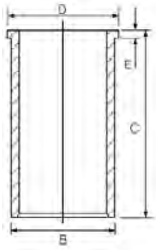
-8<<87053=,

MWWWdf fb

7D488CE77477
7D488CE7C477 *mTm*

5183 I Q V
5133 V
6133 I X V

8>4797; 77477

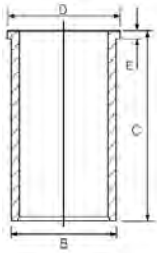


N =4133 **O** 47: 133 **P** =6133 **Q** 8133

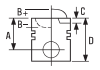
aY B88M/B7 Wi OPU0	S	9	**98A8vv**	**B7 i**	3eN	4		**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**				**f P8>; >D**

aQZU 43<I J O515	362==	3: 236

8>4797; 77477



N =4133 **O** 47: 133 **P** =6133 **Q** 8133



a Y B>B8D88	S	9	98>Dvv	877489A i	3GPa8GcD	4	P@t x	f	u	U	x	v	xw	f P97; B7
a Y B>B8D89	S	9	98>Dvv	877 i	3GPa	4	P@t x	f	u	U	x	v	xw	f P99BE>
a Y B>B8D97	S	9	98>Dvv	877 i	3GPa	4	P@t x	f	u	U	x	v	xw	f P97; B9
a Y B>B8D98	S	9	98>Dvv	877489A i	3GPa8GcD	4	P@t x	f	u	U	x	v	xw	f P97; ; >

I OI RGYY I 533 I JO	3423: 4523=	KOI RGYY K 553 I JO	36236 3: 23=
I OI RGYY I 553 I JO	3423: 4423<	KOI RGYY K 553 Z I JO	36236 3: 23=
KOI RGYY K 533 I JO	37239 3: 23=		

DC48; B>774; 7
DC48; B>7C4; 7 *mT m*

M	7716 3
N4	461<3
N	7: 133
O	515=
P	: 7163
	63É: 3

-8<<=5M436,

MWWWdf f b

7D48; B>77487

5183		MJI V
5133		I X V
6133		I X V

GDC

HzÄwnl ' I nt0Ö 551483nx 6 | azv@x py op´ Qzwupyx °wp 551483nx 6 | azv@x p op w nl @8 o° ' t°ßzy 551483nx 6 | azv@nl @8ol o ' t°ß y 551483nx 6 | azv@x p nl x p´l ' t°ßzyp 551483nx 6

a Y B>B8EA8	S	9	98>Dvv	CA4E7 i	3GDN8GNN	4	P@t x							f P8D89E
a Y B>B8EB8	S	9	98>Dvv	8774887 i	3GPa8GVD	4	P@t x	f	u	U	x	v	xw	f P8C77C
a Y B>B8EB9	S	9	98>Dvv	CA4887 i	3GDN8GVD	4	P@t x	f	u	U	x	v	xw	f P8CA>9
a Y B>B8EB;	S	9	98>Dvv	E74887 i	3GNN8GVD	4	P@t x	f	u	U	x	v	xw	f P8CA>;
a Y B>B8EBB	S	9	98>Dvv	8774887 i	3GPa8GVD	4	P@t x	f	u	U	x	v	xw	f P99D>>
a Y B>B8ED7	S	9	98>Dvv	C74887 i	3 V8GVD	4	P@t x	f	u	U	x	v	xw	f P9>AC;
a Y B>B8ED8	S	9	98>Dvv	C7 i	3 V	4	P@t x	f	u	U	x	v	xw	f P97ED>
a Y B>B8ED9 /Q >0	S	9	98>Dvv	D74887 i	3GDi 8GVD	4	P@t x	f	u	U	x	v	xw	f P8D9DE
a Y B>B8ED;	S	9	98>Dvv	BA4D7 i	3ee8GDi	4	P@t x	f	u	U	x	v	xw	f P97E98
a Y B>B8ED>	S	9	98>Dvv	BA i	3ee	4	P@t x	f	u	U	x	v	xw	f P998>7
a Y B>B8EDA	S	9	98>Dvv	D7 i	3GDi	4	P@t x	f	u	U	x	v	xw	f P97C; 7
a Y B>B8EDE	S	9	98>Dvv	887 i	3GVD	4	P@t x	f	u	U	x	v	xw	f P9B9AC
a Y B>B8EE7	S	9	98>Dvv	887 i	3GVD	4	P@t x	f	u	U	x	v	xw	f P9; B8D
a Y B>C8EB8	V	9	9BDAvv	89748; 7 i	3GaP8Gcc	4	P@t x	f	u	U	x	v	xw	f P8C77D
a Y B>C8ED8	V	9	9BDAvv	B748; 7 i	3eN8Gcc	4	P@t x	f	u	U	x	v	xw	f P988>9
a Y B>D8EB7	a	9	; 999vv	8A7 i	3NDS	4	P@t x	f	u	U	x	v	xw	f P8C8DC
a Y B>D8EB8	a	9	; 999vv	8; 748A7 i	3Gcc8NDS	4	P@t x	f	u	U	x	v	xw	f P8C; 9D

I OI RGYY I 533 I JO	36236 3823<	YVXOTZKX 6083 53= I JO	39239
I OI RGYY I 553 I JO	35236 3823<	YVXOTZKX 6083 544 I JO	39239 4523=
I RI OI RGYY I RI 533 I JO	3823< 39244	YVXOTZKX 6083 548 I JO	39239 4523=
I RI OI RGYY I RI 553 I JO	3823< 39244	YVXOTZKX 6083 649 I JO	37233 38239
I RQ I RQ 553 I JO	34238 3823=	YVXOTZKX 7/903 744 I JO	3923= 4524<
KOI RGYY K 533 I JO	3: 235 4523<	YVXOTZKX 7/903 748 I JO	39239 4523=
KOI RGYY K 553 I JO	36235 3: 23=	YVXOTZKX 703 749 I JO	37233 38239
KOI RGYY K 553 Z I JO	36236 3: 23=	YVXOTZKX 803 83= I JO	39239 4523=
KOI RGYY K 5: 3 I JO	36235 3: 23=	YVXOTZKX 803 844 I JO	39239 4523=
KOI RGYY K 5: 3 Z I JO	36236 3: 23=	YVXOTZKX 803 848 I JO	39239 4523=
KOI RGYY K 5<3 I JO	38237 4523<	a@GTU I JO 513	3=236
KOI RGYY K 5<3 Z I JO	38237 3: 23=	a@GTU I JO 515	3=236
KOI RGYY K 653 I JO	44235 4523<	a@ZU 43= I JO	3=236
KOI RGYY K 653 Z I JO	36236 3: 23=	a@ZU 444 I JO	3=236
YOI RGYY Y 653 I JO	3=235 3<238	a@ZU 448 I JO	3=236
YVXOTZKX 6/803 63= I JO	39239	a@ZU 2S @ZU 43= I JO	3=236
YVXOTZKX 6/803 644 I JO	39239 4523=	a@ZU 2S @ZU 444 I JO	3=236
YVXOTZKX 6/803 648 I JO	39239 4523=	a@ZU 2S @ZU 448 I JO	3=236

DC48; B>77477
DC48; B>7C477 *mTm*

M 75163
N4 47143
N 79133
O 515=
P : 5163
63É: 3

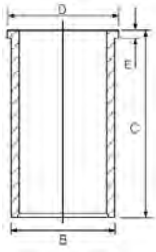
-8<<87043<,

WWdf fb

7D48; B>77477
7D48; B>7C477 *mTm*

5183 I QV
5133 V
6133 I XV

8>4797; 77477



N =4133 **O** 47: 133 **P** =6133 **Q** 8133

aY B>B8EDB/Q >0	S 9	98>Dvv	EA4887 i 3GNi 8GV/D 4	P@t x f u U x v xw	f P9; B97
YVXOTZKX 6/803646 I JO		39239		YVXOTZKX 7/903748 I JO	39239 4523=
YVXOTZKX 6/803648 I JO		39239	4523=	YVXOTZKX 803846 I JO	39239
YVXOTZKX 603546 I JO		39239	4523=	YVXOTZKX 803848 I JO	39239 4523=
YVXOTZKX 603548 I JO		39239	4523=		

DC4>9DC77477
DC4>9DC7C477 *mTm*

M 75163
N4 47143
N 79133
O 5136
O 41t <
P : 5163
63É: 3

+<<9: G0434,

WWZN df fb

7D4>9DC77477
7D4>9DC7C477 *mTm*

5183 MJI V
5133 I XV
5133 I XV

GDC KZ-Ring

Y 87; 5ED7	a 9	9EB7vv	8; D i 3Gee 4	bx	f P97EE
Y 87; 5ED8	a 9	9EB7vv	8; 948; D i 3GeD8Gee 4	bx	f PE>; B
Y 87; 5ED9	a 9	9EB7vv	8; 948; D i 3GeD8Gee 4	bx	f PE>>>
Y 87; 5ED;	a 9	9EB7vv	8; 948; D i 3Gci 8Gee 4	bx	f PE>; C
Y 87; 5ED>	a 9	9EB7vv	8>7 i 3GI D 4	bx	f P987;
Y 87; 5EDA	a 9	9EB7vv	8; 9 i 3GeD 4	bx	f P987>
Y 87; 5EDC	a 9	9EB7vv	89A489D i 3GcD8GcS 4	bx	f P987A

457 633 I K	362< 382=6	MJI RGYY 633 MK	3=2<= 3=2=:
457 633 K	342=8 392=6	MJI RGYY M633	392=6 3<2=:
457 633 ZK	342=9 392=6	YJI RGYY 633 YK/ YKR	3=2=8 392=4
KJI RGYY K 633	392=6 392=8	YR 633 YR	3=2=8 3<2=6
KJI RGYY K 633 Z	392=6 392=9		

DC48D; 777477
DC48D; 77C477 *mTm*

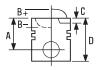
M 66133
N4 51t 3
O 31<5
O 5135
P 96133
55É85

-8<=75G23<=79G,

7D48D; 777477
7D48D; 77C477 *mTm*

4183 I QV
41t 8 V
6133 I XV

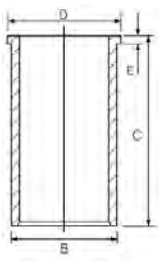
H0C 61633



Y 8795E87	S	9	**8CEOvv**	**D7 i**	3GDi 4	**bx**	**f P97B8**
Y 8795E8E	S	9	**8CEOvv**	**CC i**	3GDV 4	**bx**	**f P97B9**
Y 8795E; D	S	9	**8EEOvv**	**B; i**	3ea 4	**bx**	**f P99C78**
Y 8795E; E	S	9	**8EEOvv**	**C>4D7 i**	3GDD8GDi 4	**bx**	**f P97BE**
Y 8795EBA	S	9	**8EEOvv**	**D74DA i**	3GDi 8GGa 4	**bx**	**f P97D7**

456 533	392<3	442<8	4=3 K 41<	372=3 3<2=6
456 533 Z	442<3	442<8	MOI RGYY 533 MK	342=3 3: 2=6

8>479A>D7477 **N** =5135 **O** 49813 3 **P** =8138 **Q** 7143



Y 8795E97	S	9	**8EEOvv**	**C>4D7 i**	3GDD8GDi 4	**bx**	**f P97B;**
Y 8795E98	S	9	**8EEOvv**	**B; 4CC i**	3ea8GDV 4	**bx**	**f P97B>**
Y 8795E99	S	9	**8EEOvv**	**CA4D7 i**	3GDN8GDi 4	**bx**	**f P97BA**
Y 8795E9>	S	9	**8EEOvv**	**CA4CC i**	3GDN8GDV 4	**bx**	**f P>BA;**
Y 8795EB8	S	9	**8EEOvv**	**D; 4E; i**	3GGP8GNa 4	**bx**	**f PA7A7**
Y 8795EB9	S	9	**8EEOvv**	**D; 4E7 i**	3GGV8GNN 4	**bx**	**f P>BAA**
Y 8795EB;	S	9	**8EEOvv**	**DC4E7 i**	3GGe8GNN 4	**bx**	**f P97CD**
Y 8795EB>	S	9	**8EEOvv**	**D7 i**	3GDi 4	**bx**	**f P8CC9;**

456 533	392<3	442<8	457 533 ZK	3=2<< 3<2=5
456 533 Z	442<3	442<8	4=3 513	432<5 382=3
457 533	452<8	432=5	4=3 K 513	432<5 3<2=6
457 533 I K	362=3	452=5	MOI RGYY 533 M	3: 2<5 3<2<=
457 533 K	3=2<<	3<2=6	MOI RGYY 533 MK	3: 2<5 3<2<=
457 533 Z	3=2<8	382=3		

DC48CEA77487
DC48CEA7C487 *mT m*

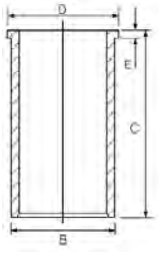
M 76153
N 83133
O 5148
O 4195
P : =t 3
55É89

-8<=7423<=6: G,

7D48CEA77477
7D48CEA7A477 *mT*
7D48CEA7C477 *mT m*

41t 8 I X V
5133 V
6183 I X V

8>479A>D7477 **N** =5135 **O** 49813 3 **P** =8138 **Q** 7143



Yßb Vt°ßzy yz nzx m°°ßzy nl @ßÖ
I zy´zo r l ' 55133x x
G C 751=33/ J C : 31=33/ H0 C 41433

Yßb QzwmpyOvptyp S °wp
Vwp°pw/°r pyl mfß yo 55133x x

Vt°ßzy op nzyßp' ´p°°tzy/ °l y° nl @ß
Jt°ß ynp pyßp mtpwp 55133x x

Vt°ß y p°ß yol ´ °ty nzynl @tol o
Jt°ß yntl opwmtpw 55133x x

Vt°ßzyt °ß yol ´o °pyÜ nl @ß ot nzx mf°ßzyp
otl x pßz p°ßp´yz

a Y B785E77 /Q 90	S	9	**99EEvv**	**B9 i**	3eV 4	**P@l x**	**f P8B8DA**
a Y B785E>7	S	9	**99EEvv**	**AD4B7 i**	3ci 8eN 4	**P@l x**	**f P9987**
a Y B785E>8	S	9	**99EEvv**	**AD4B7 i**	3ci 8eN 4	**P@l x**	**f PD7>8**
a Y B785E>9	S	9	**99EEvv**	**AD i**	3ci 4	**P@l x**	**f PA; ED**
a Y B785E>;	S	9	**99EEvv**	**AD4B7 i**	3ci 8eN 4	**P@l x**	**f PA>77**
a Y B795E>7	V	9	**9DC>vv**	**C74C9 i**	3 V8i e 4	**P@l x**	**f P998A**
a Y B795E>8	V	9	**9DC>vv**	**BA4C7 i**	3ee8i V 4	**P@l x**	**f PD78;**

a Y B795E>9	V 9	9DC>vv	C74C9 i 3 V8 e 4	P@t x	f P97A>
a Y B795E>B	V 9	9DC>vv	C7 i 3 V 4	P@t x	f P8CD8C
a Y B795E>C	V 9	9DC>vv	C9 i 3 e 4	P@t x	f P8CD8D
a Y B795E>D	V 9	9DC>vv	C8 i 3 c 4	P@t x	f PD78>
a Y B795EE8	V 9	9DC>vv	C7 i 3 V 4	P@t x	f P8CD97
a Y B795EE>	V 9	9DC>vv	C9 i 3 e 4	P@t x	f P8CD99
a Y B795EEA	V 9	9DC>vv	C9 i 3 e 4	P@t x	f P9DCD>
a Y BB85E88	S 9	99EEvv	AC4AD i 3cc8ci 4	P@t x	f PDE>9
a Y BB85E>7	S 9	99EEvv	AD i 3ci 4	P@t x	f P9DCE8
a Y BB95E88 /a Y BB9 P 9E0	V 9	9DC>vv	C7 i 3 V 4	P@t x	f P99C77

M0I RGYY 5=3 MJ2M5=3 J	392=6 3: 283	Z4 543 J 51<	432<< 352=9
S H 433 516 J	442=— 34236	Z4 543 J 51=	442<< 352=9
S H 433 51=J	43234 38238	Z4 63<J 516	442<< 352=9
S H 473 51=J	442=— 38238	Z4 643 J 51=	392<= 352=9
U 433	342=7	Z42ZT 73<J	442<< 392=8
U 738	342=7	Z42ZT 743 J	442<< 392=8
YVXOTZKX 5083<J	342=8 37283	Z52RT4 83<J	362<= 452=7
YVXOTZKX 6083<J	352=8 37283	Z52RT4 J°x ' Z´°nv 83<J	362<= 452=7
YVXOTZKX 6083<J 516	352=8 37283	Z´px z	3=2=<
YVXOTZKX 7083<J	352=9 38289	_TOS UM	442=5
Z4 53<J 516	432<< 352=9	aQZU 43<J 516	352=9 3: 236

DC4C>; 877487
DC4C>; 87C487 *mTm*
DC4C>; 897487 *mTm*

M 77198
N4 <158
O 4158
O 4183
P :7198
59É95

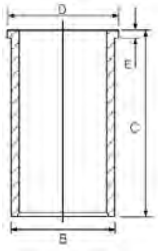
-8<=86053=,

MWdf

7D4C>; 877477
7D4C>; 87C477 *mTm*
7D4C>; 897477 *mTm*

5183		I X V
5183		V
6183		I X V

8>479B; D7477
8>479C987477



N =4183 **O** 489183 **P** =9188 **Q** 71t 3
N =4183 **O** 489183 **P** =7188 **Q** 71t 3

I zy´zo r°topo ty Vt°ßzy | Qzwnpyr pq s´ßp° Vwp°pw | Htpwpr°to p oly° wp 't°ßzy | Htpwlx zyßl ol py pwl t°ßy | Htwpl x zyßl ß °°w t°ßzyp

a Y B78M8EC7	S 9	99EEvv	C9 i 3 e 4	P@t x f u U x v xw	f P>BC>
a Y B7; M8EC7 /a Y B7; P ; AM0	a 9	;>>Evv	877 i 3GPa 4	P@t x f u	f P999>
a Y B7; M8EC8 /a Y B7; P ; AM0	a 9	;>>Evv	8774887 i 3GPa8GVD 4	P@t x f u	f P999A
a Y B7; M8EC9 /a Y B7; P ; AM0	a 9	;>>Evv	877 i 3GPa 4	P@t x f u	f P999B

M0I RGYY 683 MZ°´mzQJ	3=2=4 3=2=:	a0I RGYY a 563	3<2=9 352=—
M0I RGYY 683 Z°´mz MJ	3=2=4 3<2=9	a0I RGYY a 563 ZJ	3=2=9 3: 236
M0I RGYY M653 I J O	3=2=9 3<2=—	aQZU 443 J 516	362=: 3: 236
Y0I RGYY Y 683 Z°´mzQJ	342=6 432=<	aQZU 443 ZJ 516	352=9 3: 236

DC4C>; 8774>7
DC4C>; 87C4>7 *mTm*

M 77198
N4 <158
O 4138
O 4158
P :7198
5<É:3

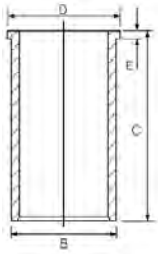
-8<=<4,

WWdf

7D4C>; 877477
7D4C>; 87C477 *mTm*
7D4C>; 897477 *mTm*

5183		I X V
5183		V
6183		I X V

8>479B; D7477
8>479C987477



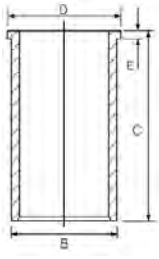
N =4183 **O** 489183 **P** =9188 **Q** 71t 3
N =4183 **O** 489183 **P** =7188 **Q** 71t 3

Nüral® FITTED WITH GOETZE® RINGS

a Y B7>5E87	S	9	98AAvv	AA4C7 i	3cV8 V	4	P@t x			f P999C
a Y B7>5E89	S	9	98AAvv	AA4C7 i	3cV8 V	4	P@t x			f P>BCB

I OI RGYY I 553 J	3<2=6	38233	KOI RGYY K 553 J	392=8	36235
I OI RGYY I 553 Z J	392=9	36234			

8>479C987477 N =4183 O 489183 P =7188 Q 71t 3



a Y B795ED7	V	9	9DC>vv	CA4E7 i	3GDN8GNN	4	P@t x	f u U x v	xw	f PD7; 9
a Y B795ED8 /Q 90	V	9	9DC>vv	DA4E7 i	3GGa8GNN	4	P@t x	f u U x v	xw	f P8>BC7
a Y B795ED9 /a Y B79 PQ 9E XM0	V	9	9DC>vv	EA i	3GNi	4	P@t x	f u U x v	xw	f P>BCA
a Y B795ED; /a Y B79 PQ 9E XM0	V	9	9DC>vv	DD i	3GND	4	P@t x	f u U x v	xw	f P89E87
a Y B795ED>	V	9	9DC>vv	E7 i	3GNN	4	P@t x	f u U x v	xw	f PABD9
a Y B795EDA	V	9	9DC>vv	E7 i	3GNN	4	P@t x	f u U x v	xw	f PB797
a Y B795EDB	V	9	9DC>vv	CA4E7 i	3GDN8GNN	4	P@t x	f u		f PE>AE
a Y B795EDE /Q 90	V	9	9DC>vv	DA4E7 i	3GGa8GNN	4	P@t x	f u U x v	xw	f P8>BC9

KOI RGYY K 5=3 ZJ	3: 2=9	3: 2==	YVXOTZKX 703745 J	352=9	38239
KOI RGYY K 5=3 Z Z°´mz0J	392=9	3: 2==	YVXOTZKX 703747 J	382=:	38239
KOI RGYY K 5=3 Z°´mz0J	362=9	3: 2==	_T@$ UM	3: 2=9	
MOI RGYY M5=3 ZJ	3: 2=:		_c433	342==	
YVXOTZKX 503543 J	342=:	37233	aGX0J 845 J	3=2=9	45243
YVXOTZKX 503545 J	352=8	37233	aGX0J 945 J	3=2=9	45243
YVXOTZKX 603643 J	342=:	3<235	aGX0J <45 J	3=2=9	45243
YVXOTZKX 603643 J 51=	352=8	37233	aGX0J J°x ' Z´°nv 945 J	3=2=9	45243
YVXOTZKX 603645 J 51=	352=8	3<235	aGX0J J°x ' Z´°nv <45 J	3=2=9	45243
YVXOTZKX 703743 J	352=9	38239	aGX0J U <45	3=2=9	45243

DC4C>; 877477
DC4C>; 87C477 *mT m*

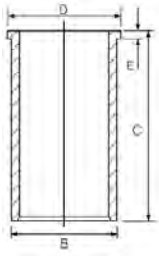
M	771t 8
N4	491t 6
N	75133
O	3193
O	3163
P	: 4158
	5<É: 3

-8<=<3I ,
MWWWdf

7D4C>; 877477
7D4C>; 87C477 *mT m*
7D4C>; 897477 *mT m*

5183		I X V
5133		V
6133		I X V

8>479B; D7477 N =4183 O 489183 P =9188 Q 71t 3
8>479C987477 N =4183 O 489183 P =7188 Q 71t 3



DC4C>; 87C4A7 *mT m*

M	7788
N4	491t 7
N	75133
O	3163
O	3193
P	:7188
	5<É: 3

-8<=<3I ,

WWdf

7D4C>; 877477
7D4C>; 87C477 *mT m*
7D4C>; 897477 *mT m*

5183		I X V
5133		V
6133		I X V

Y 87>5E>8	a	9	**9CEEvv**	**8>9 i**	3GI P	4		**bx**	**f P987B**
Y 87>5E>9	a	9	**9CEEvv**	**8>948>A i**	3GI P8GI c	4		**bx**	**f P987C**
Y 87>5E>;	a	9	**9CEEvv**	**8>948A7 i**	3GI P8NDS	4		**bx**	**f P987D**
Y 87>5E>>	a	9	**9CEEvv**	**8>948>A i**	3GI P8GI c	4		**bx**	**f P987E**
Y 87>5E>A	a	9	**9CEEvv**	**8>9 i**	3GI P	4		**bx**	**f PE>9;**

457 5<3 K	432=5	392=6	K0I RGYY K 5<3 Z	392=6	392=9
457 5<3 ZK	432=5	392=6	Y0I RGYY 633 YK 51<	342=6	432=<
I 0I RGYY I 5<3	382=6	38233	Y0I RGYY Y 5<3	352=6	432=<
K0I RGYY K 5<3	392=6	392=:	YR 5<3	3<2=6	43234

DC49DCA77497
DC49DCA7C497 *mT m*

M	6516<
N4	5187
N	8=133
O	4153
P	8<18<
	55É89

-8=35=,

7D49DCA77477
7D49DCA7A477 *mT*
7D49DCA7C477 *mT m*

4183		TZ
41t 8		V
6133		I X V

G C 6513: 8/ J C 8<13: 8
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y 87>5EE7	a	9	**;8EEvv**	**8B948C7 i**	3NND8NPG	4		**bx**	**f P9889**
Y 87>5EE8	a	9	**;8EEvv**	**8B948C7 i**	3NND8NPG	4		**bx**	**f P988;**
Y 87>5EE9	a	9	**;8EEvv**	**8B9 i**	3NND	4		**bx**	**f P988>**
Y 87>5EE>	a	9	**;8EEvv**	**8C7 i**	3NPG	4		**bx**	**f P889A7**
Y 87>5EEA	a	9	**;8EEvv**	**8B9 i**	3NND	4		**bx**	**f P>BAD**
Y 87>5EEB	a	9	**;8EEvv**	**8AA i**	3NGG	4		**bx**	**f P889A8**

457 653 I K	432=5	382=6	M0I RGYY M653	3=2=7	452=:
457 653 K	432=5	392=6	Y0I RGYY 633 YK/ YKR2Y653	362=4	432=<
457 653 ZK	432=5	392=6	Y0I RGYY Y 653	432=8	3<2=<
K0I RGYY K 653	392=6	362=<	YR 653	3=2=6	43234
K0I RGYY K 653 Z	392=6	392=9	YR YR 653	3=2=7	452=:
M0I RGYY 653 MK	3=2=7	442=:			

DC49DCA774; 7
DC49DCA7A4; 7 *mT*
DC49DCA7C4; 7 *mT m*

M	64145
N4	4153
N	: 7133
O	4193
O	5183
P	89143
	55É89

-8=357,

7D49DCA77477
7D49DCA7A477 *mT*
7D49DCA7C477 *mT m*

4183		TZ
41:8		V
6133		I X V

Kw°Bz®w
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y 8895E>7	a	9	**;8EEvv**	**8B748B9**	**i**	3NGe8NND	4	**bx**		**f PE>7C**
Y 8895E>8	a	9	**;8EEvv**	**8B748BA**	**i**	3NGe8NNS	4	**bx**		**f PE>8D**
Y 8895E>9	a	9	**;8EEvv**	**8B7**	**i**	3NGe	4	**bx**		**f PEDED**
Y 8895E>;	a	9	**;8EEvv**	**8BA**	**i**	3NNS	4	**bx**		**f P88>E>**
Y 8895E>>	a	9	**;8EEvv**	**8BA**	**i**	3NNS	4	**bx**		**f P88>E8**
Y 8895E>A	a	9	**;8EEvv**	**8AD**	**i**	3NGV	4	**bx**		**f PEDDD**
Y 8895E>B	a	9	**;8EEvv**	**8B7**	**i**	3NGe	4	**bx**		**f P8A>A9**
Y 8895E>C	a	9	**;8EEvv**	**8B7**	**i**	3NGe	4	**bx**		**f P8>CC;**
Y 8895E>E	a	9	**;8EEvv**	**8BA**	**i**	3NNS	4	**bx**		**f P8BDE>**
Y 8895EA8	a	9	**;8EEvv**	**8>748B7**	**i**	3GI D8NGe	4	**bx**		**f P8D>;A**
Y 8895EA;	a	9	**;8EEvv**	**8B7**	**i**	3NGe	4	**bx**		**f P8CA;A**
Y 8895EA>	a	9	**;8EEvv**	**8BA**	**i**	3NNS	4	**bx**		**f P8C;;8**
Y 8895EAA	a	9	**;8EEvv**	**8B7**	**i**	3NGe	4	**bx**		**f P8BDDA**
Y 88;5E>7	e	9	**>9BBvv**	**97A**	**i**	3Nci	4	**bx**		**f PEDDE**
Y 88;5E>8	e	9	**>9BBvv**	**97A**	**i**	3Nci	4	**bx**		**f P88>E9**
Y 88;5E>9	e	9	**>9BBvv**	**8EE**	**i**	3NcG	4	**bx**		**f P87E>E**
Y 88;5E>;	e	9	**>9BBvv**	**97A**	**i**	3Nci	4	**bx**		**f P87E>C**
Y 88;5E>>	e	9	**>9BBvv**	**97A499A**	**i**	3Nci 8PDa	4	**bx**		**f P88>DE**

I OI RGYY I 76 GS M	3<2=: 36234	S OI RGYY S R 763	352=< 39238
I OI RGYY I 653	38233 3823<	YOI RGYY Y 653	432=< 3<238
I RQ I RQ 653	392=: 36243	YOI RGYY Y 763	432=< 3<238
I RQ I RQ 763	3:2=< 39235	YR 653	382=< 43234
KOI RGYY K 653	392=: 4523<	YRQ 653	36233 37237
KOI RGYY K 653 Z	452=9 3:23=	aCGTU 615	3=236
KOI RGYY K 763	392=: 36235	aCZU 44=	3=236
KOI RGYY K 763 Z	392=: 36236	aCZU 455	3=236
MOI RGYY M653	3:2=: 3<237	aCZU 2S CZU 44=	3=236
S OI RGYY S R 653	352=< 3<235	aCZU 2S CZU 455	3=236

DC488E777477

M	64163
N4	5175
N	981<5
O	41<5
P	86163
	55É85

-8=377,

7D488E777477

4183		TZ
41:8		V
6133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y 8885EC7	S	9	**99EAvv**	**887 i**	3GVD	4		**bx**			**f P>BB>**
Y 8885EC>	S	9	**99EAvv**	**887 i**	3GVD	4		**bx**			**f P>BBB**
Y 8885ED>	S	9	**99EAvv**	**E9487A i**	3GNV8GSP	4		**bx**			**f P8CDA7**

I OI RGYY I 563	392=9	392=:	YVXOTZKX 503547 TMZ	352=8	38239
I OI RGYY I 563 Z	392=9	392=<	YVXOTZKX 603647	352=8	38239
KOI RGYY K 563	392=8	392=:	YVXOTZKX 603647 TMZ	352=8	38239
KOI RGYY K 563 Z	392=9	392=:	YVXOTZKX 703747	352=8	38239
YVXOTZKX 503547	352=8	38239	YVXOTZKX 703747 TMZ	352=8	38239

DC487E877477
DC487E87C477 *mTm*
452=8

M 6313 3
N2 51=3
O 4133
P 8: 1=3
55É89

-8=45<,

7D487E877477
7D487E87C477 *mTm*

41 3 3 TZ
41 1 8
61 3 3 TZ

DC487E877487
DC487E87C487 *mTm*
342=9

M 6313 3
N4 4143
N : 3133
O 31<8
P 8813 3
55É89

-8=463,

7D487E877477
7D487E87C477 *mTm*

41 3 3 TZ
41 1 8
61 3 3 TZ

H. C 41 33
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y 8885EC;	S	9	**99EAvv**	**8; D48>9 i**	3Gee8GI P	4		**bx**	**e**	**x v zxw**	**f P>BBA**
Y 8885ECA	S	9	**99EAvv**	**8; D48>9 i**	3Gee8GI P	4		**bx**	**e**	**x v zxw**	**f P>BBC**
Y 8885ECD	S	9	**99EAvv**	**87A i**	3GSP	4		**bx**			**f P>BBD**
Y 8885ECE	S	9	**99EAvv**	**EA487A i**	3GNi 8GSP	4		**bx**			**f PA9>8**
Y 8885ED8	S	9	**99EAvv**	**8>; 48>A i**	3GI S8GI c	4		**bx**	**e**	**x v zxw**	**f P8C8CC**
Y 8885ED9	S	9	**99EAvv**	**8>A i**	3GI c	4		**bx**	**e**	**x v zxw**	**f P8BDD>**
Y 8885ED;	S	9	**99EAvv**	**8>; 48>A i**	3GI S8GI c	4		**bx**	**e**	**x v zxw**	**f P8>CA7**
Y 8B85EC8	S	9	**99EAvv**	**E74887 i**	3GSP8GVD	4		**bx**			**f P9; 8D>**

I OI RGYY I 563	432=8	45235	YVXOTZKX 503547 TMZ	352=8	38239
I OI RGYY I 563 Z	392=:	3=233	YVXOTZKX 603647	352=8	38239
I RQ I RQ 563	392=:	39235	YVXOTZKX 603647 TMZ	352=8	38239
S H 433 516 t	442==	38238	YVXOTZKX 703747	352=8	38239
S H 473 516 t	442==	38238	YVXOTZKX 703747 TMZ	352=8	38239
YRQ 563	3=2=9	37237	aOI RGYY a 563	3<2=9	3: 236
YVXOTZKX 503547	352=8	38239	aQZU 447 516	452=9	3: 236

DC487E877487
DC487E87C487 *mT m*

M 6313 3
N4 414 3
N : 313 3
O 31<8
P 8813 3
55É89

-8=463,

7D487E877477
7D487E87C477 *mT m*

4183 TZ
41 8
6133 TZ

Yßppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

Y 8885ECC	S	9	**99EAvv**	**887 i**	3GVD	4	**bx**	**f P87E>D**
Y 8885ED7	S	9	**99EAvv**	**87A i**	3GSP	4	**bx**	**f P99C7;**

S Ol RGYY S R 563 352=< 39238 aQZU 447 516 452=9 3: 236
aOl RGYY a 563 3<2=9 3: 236

DC487E877477
DC487E87C477 *mT m*

M 6313 3
N2 51=3
O 4133
P 8: 1=3
55É89

-8=45<,

7D487E877477
7D487E87C477 *mT m*

4183 TZ
41 8
6133 TZ

H. C 41 33
Yßppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

a Y B8B	S	9	**9; EEvv**	**>84AA i**	3/a8cV	4	**P6l x**	**f P99>>**
a Y B8B6E87	S	9	**9; EEvv**	**>D4A; i**	3aV8cN	4	**P6l x**	**f P99>A**
a Y B8B6E89 /a Y B8B P 9>0	S	9	**9; EEvv**	**>B4A; i**	3aP8cN	4	**P6l x**	**f PE>; 9**
a Y B8B6E8;	S	9	**9; EEvv**	**A; i**	3cN	4	**P6l x**	**f P99>C**
a Y B8B6E8>	S	9	**9>7>vv**	**A; i**	3cN	4	**P6l x**	**f PD7>7**
a Y B8B6E8C	S	9	**9; EEvv**	**>D i**	3aV	4	**P6l x**	**f P99>E**
a Y B8B6E8D	S	9	**9; EEvv**	**; A4>D i**	3Se8aV	4	**P6l x**	**f P9DCDB**
a Y B8B6E; 7	S	9	**9; EEvv**	**>> i**	3aD	4	**P6l x**	**f PABCC**
a Y B8B6E; >	S	9	**9>7>vv**	**>D i**	3aV	4	**P6l x**	**f P99A7**
a Y B8B6E; B /a Y B8B P 9>0	S	9	**9; EEvv**	**A; i**	3cN	4	**P6l x**	**f P99A8**
a Y B8B6E; C	S	9	**9; EEvv**	**>D4A; i**	3aV8cN	4	**P6l x**	**f P99A9**
a Y B8B6E; D /a Y B8B P 9>0	S	9	**9; EEvv**	**A; i**	3cN	4	**P6l x**	**f P8CC; ;**
a Y B8B6E; E	S	9	**9; EEvv**	**A; i**	3cN	4	**P6l x**	**f P99A;**
a Y B8B6E>7	S	9	**9; EEvv**	**A; i**	3cN	4	**P6l x**	**f P99D; B**
a Y B8B6E>9	S	9	**9>7>vv**	**; D i**	3/N	4	**P6l x**	**f PCEE8**
a Y B8B6E>;	S	9	**9>7>vv**	**>> i**	3aD	4	**P6l x**	**f PCEE9**
a Y B8B6EB9	S	9	**9>7>vv**	**; ; 4A; i**	3SV8cN	4	**P6l x**	**f P9DCDD**
a Y B8B6EB;	S	9	**9; EEvv**	**>84B8 i**	3/a8eP	4	**P6l x**	**f P99AC**
a Y B8C6E89 /a Y B8C P; 70	V	9	**; 77Avv**	**AE4BA i**	3eD8ee	4	**P6l x**	**f P99B7**
a Y B8C6E8;	V	9	**9EEDvv**	**BA i**	3ee	4	**P6l x**	**f P99B8**
a Y B8C6E8E	V	9	**; 77Avv**	**; E i**	3/P	4	**P6l x**	**f P9DCDE**
a Y B8C6E; 8 /a Y B8C P; 70	V	9	**9EEDvv**	**BA i**	3ee	4	**P6l x**	**f P99B9**

a Y B8C3E; 9 /a Y B8C P; 70	V 9	9EEDvv	BA i 3ee 4	P0t x	f P8CC>;
456 573 J		352 9 442-8	Z4 53= J 51=	452-5	342-3
456 573 Z J		3=2 : 452-8	Z4 63: J 517	372 :	342-3
456 633 J		352 9 442-8	Z4 63=J 613	432-5	342-3
456 633 Z J		3=2 : 442-8	Z4 73: J 517	372-4	3: 2-5
M0I RGYY 573 MJ		362 = 3<2<=	Z42ZT 73: J	3: 2-4	342<=
M0I RGYY 633 MJ		442 = 452=4	Z42ZT 73=J	372-5	342<=
S H 517 J		342-6 342-9	Z52R R 73: J	342 8	452<<
S H J		352<< 352-9	Z52RT4 83: J	372-9	372<=
U 63=		342 8 452<<	Z52RT4 J°x ' Z´°nv 83: JQ	372-9	372<=
Z4 53: J 517		372 : 342-3	_T(S UM	382<<	

DC48CBC77477
DC48CBC7D477 *mTm*

M 7<168
N4 <t 8
O 4148
P : =198
59É: 7

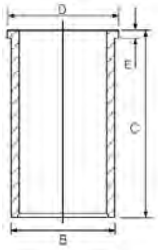
-8=438N23=446l ,

df

7D48CBC77477
7D48CBC7C477 *mTm*
7D48CBC7D477 *mTm*

6133 SURV
5133 V
7133 I X V

8>4798; A7477 **N** =7133 **O** 48<173 **P** =9133 **Q** 71 3

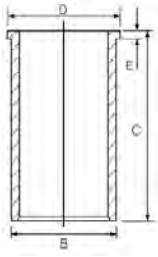


Hz´p C =31=3x x | Hzs´°yr C =31=3x x | Gw°l rp C =31=3x x | Zl x l z opwot x pßz C =31=3x x | Gwp°°l rtz C =31=3x x

a Y B8B3E88	S 9	9>7>vv	; D i 3/N 4	P0t x	f PABCA
a Y B8B3E8B /a Y B8B P 9>0	S 9	9>7>vv	>D i 3aV 4	P0t x	f P99>D
a Y B8B3E8E	S 9	9; EEvv	; D4>D i 3/N8aV 4	P0t x	f P9DCDC
a Y B8B3E; 9	S 9	9>7>vv	>> i 3aD 4	P0t x	f PB78A
a Y B8B3E; ;	S 9	9>7>vv	>> i 3aD 4	P0t x	f P8BEED
a Y B8B3E>>	S 9	9; EEvv	>> i 3aD 4	P0t x	f P8BE; C
a Y B8B3EB7	S 9	9; EEvv	A; i 3cN 4	P0t x	f P99AA
a Y B8B3EB8	S 9	9>7>vv	A; i 3cN 4	P0t x	f P99AB
a Y B8C3E87 /a Y B8C P; 70	V 9	; 77Avv	AE i 3eD 4	P0t x	f P99AE
a Y B8C3E; ; /a Y B8C P; 70	V 9	9EEDvv	BA i 3ee 4	P0t x	f P9BAA7
a Y B8C3EA7 /a Y B8C P; 7 M0	V 9	9EEDvv	DA i 3GGa 4	P0t x f u	f P99B;
a Y B8C3EA8 /a Y B8C P; 7 M0	V 9	9EEDvv	E9 i 3GNV 4	P0t x f u	f P99B>
a Y B8C3EA9 /a Y B8C P; 7 M0	V 9	9EEDvv	E9 i 3GNV 4	P0t x f u	f P99BA

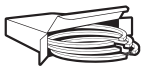
2<573 J	3<2 6 342 :	456 633 Z°´mz0J	3<2<4 3: 2-8
2<573 J 613	3<2 7 442 9	Y0I RGYY 633 YJ	3=2-3 452-8
456 633 I Z°´mz0J	3=2<4 3: 2-8	_T(S UM	342 : 382<<
456 633 Z Z°´mz0J	432-3 442-8		

8>4798; A7477 **N** =7133 **O** 48<173 **P** =9133 **Q** 71 3



a Y ; 8>5E77	S 9	; CD>vv	>B4B; i 3aP8ea 4	P0t x	f P99C; ;
a Y ; 8>5E87	S 9	; CD>vv	B; 4B; i 3eV8ea 4	P0t x	f PABE8

a Y ; 8>5E8>	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99A>B
a Y ; 8>5E8A	S 9	; CD>vv	B; i 3eV 4	P@l x	f P8BAAC
a Y ; 8>5E8B	S 9	; CD>vv	>7 i 3/S 4	P@l x	f PCEC8
a Y ; 8>5E8C	S 9	; CD>vv	>D4AA i 3aa8cV 4	P@l x	f PCEC;
a Y ; 8>5E8D	S 9	; CD>vv	A; i 3cN 4	P@l x	f P99A>A
a Y ; 8>5E8E	S 9	; CD>vv	A; i 3cN 4	P@l x	f P99A>C
a Y ; 8>5E97	S 9	; CD>vv	AA i 3cV 4	P@l x	f P9D999
a Y ; 8>5E98	S 9	; CD>vv	>D i 3aV 4	P@l x	f P9D99;
a Y ; 8>5E99	S 9	; CD>vv	AC i 3ce 4	P@l x	f P9DADA
a Y ; 8>5E>7	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99A>D
a Y ; 8>5E>8	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99A>E
a Y ; 8>5E>9	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AA7
a Y ; 8>5E>;	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AA8
a Y ; 8>5E>>	S 9	; CD>vv	B; i 3eV 4	P@l x	f PB79D
a Y ; 8>5E>A	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AA9
a Y ; 8>5E>B	S 9	; CD>vv	B; i 3eV 4	P@l x	f P9979
a Y ; 8>5E>C	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AA;
a Y ; 8>5E>D	S 9	; CD>vv	B; i 3eV 4	P@l x	f P997;
a Y ; 8>5E>E	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AA>
a Y ; 8>5EA7	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AAA
a Y ; 8>5EA8	S 9	; CD>vv	; A4BB i 3Se8l D 4	P@l x	f P99AAB
a Y ; 8>5EA;	S 9	; CD>vv	AE i 3eD 4	P@l x	f PCECA
a Y ; 8>5EA>	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AAC
a Y ; 8>5EAB	S 9	; CD>vv	>D i 3aV 4	P@l x	f P8BEEE
a Y ; 8>5EAC	S 9	; CD>vv	A; i 3cN 4	P@l x	f P8C777
a Y ; 8>5EAD	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AAD
a Y ; 8>5EAE	S 9	; CD>vv	B; i 3eV 4	P@l x	f P997>
a Y ; 8>5EB7	S 9	; CD>vv	; A4B9 i 3Se8eS 4	P@l x	f P99AAE
a Y ; 8>5EB8	S 9	; CD>vv	B; i 3eV 4	P@l x	f P8BAA9
a Y ; 8>5EB9	S 9	; CD>vv	B; i 3eV 4	P@l x	f P8BAA;
a Y ; 8>5EB;	S 9	; CD>vv	B; i 3eV 4	P@l x	f P8BAA>
a Y ; 8>5EB>	S 9	; CD>vv	B; i 3eV 4	P@l x	f P8BAAA
a Y ; 8>5EBA	S 9	; CD>vv	B; i 3eV 4	P@l x	f P8BAAB
a Y ; >75E; 7	S 9	; CD>vv	B; i 3ea 4	P@l x	f P9D9C8
a Y ; >75E; 9	S 9	; CD>vv	B9 i 3eS 4	P@l x	f P9D>B7
a Y ; >85E87	a 9	ABCAvv	C> i 3GDG 4	P@l x	f P9D>B;
a Y ; >85E88	a 9	ABCAvv	D8 i 3GGD 4	P@l x	f P9D>B>
a Y ; >85E89	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>BA
a Y ; >85E8A	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>BC
a Y ; >85E8D	a 9	ABCAvv	BB i 3 D 4	P@l x	f P9D>BD
a Y ; >85E8E	a 9	ABCAvv	C> i 3GDG 4	P@l x	f P9D>C9
a Y ; >85E; 8	a 9	ABCAvv	C> i 3GDG 4	P@l x	f P9D>BE
a Y ; >85E; 9	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>C;
a Y ; >85E; >	a 9	ABCAvv	B9 i 3eS 4	P@l x	f P9D>CB
a Y ; >85E; A	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>CC
a Y ; >85E; B	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>CD
a Y ; >85E; D	a 9	ABCAvv	BB i 3 D 4	P@l x	f P9D>D7
a Y ; >85E>8	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>D9
a Y ; >85E>B	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>D>
a Y ; >85E>D	a 9	ABCAvv	EB i 3GPG 4	P@l x	f P9D>DB



a Y ; >85E>E	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9D>DC
a Y ; >85EEA	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9D>DE
a Y ; >; 5E87	S	9	; CD>vv	B9 i	3eS	4	P@i x		f P9D>E8
a Y ; >; 8E; 9	S	9	; CD>vv	B; i	3ea	4	P@i x		f P9D>E9
a Y ; >; 8E; >	S	9	; CD>vv	B; i	3ea	4	P@i x		f P9D>E;
a Y ; >>5E7A /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DADC
a Y ; >>5E89 /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DADD
a Y ; >>5E; 7 /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DADE
a Y ; >>5E; 9 /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DAE8
a Y ; >>5E; ; /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DAE9
a Y ; >>5E>7 /a Y ; A9 MD	a	9	ABCAvv	EB i	3GPG	4	P@i x	f u	f P9; 8C>
a Y ; >>5E>8 /a Y ; A9 MD	a	9	ABCAvv	EB i	3GPG	4	P@i x	f u	f P9D9C9
a Y ; >>5E>; /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DAE;
a Y ; >>5E>> /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DAE>
a Y ; >>5E>A /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DAEA
a Y ; >>5E>B /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DAEB
a Y ; >>5E>E	a	9	ABCAvv	EB i	3GPG	4	P@i x	f u	f P99C; A
a Y ; >>5EB; /a Y ; A90	a	9	ABCAvv	EB i	3GPG	4	P@i x		f P9DAEC
a Y ; A95E78	a	9	ABCAvv	EA4EB i	3GN8GPG	4	P@i x		f P8BB9B
a Y ; A95E79	a	9	ABCAvv	A9 i	3cD	4	P@i x		f PCEC>
a Y ; A95E7;	a	9	ABCAvv	BB i	3 D	4	P@i x		f PCECC
a Y ; A95E7>	a	9	ABCAvv	E; i	3GNa	4	P@i x		f P8BB9C
a Y ; A95E7A	a	9	ABCAvv	EB i	3GPD	4	P@i x		f PCEBB
a Y ; A95E7B	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f PAC77
a Y ; A95E7C	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f PAC79
a Y ; A95E7D	a	9	ABCAvv	D84EB i	3GGD8GPG	4	P@i x		f PAC78
a Y ; A95E7E	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f P8BB7B
a Y ; A95E87	a	9	ABCAvv	C> i	3GDD	4	P@i x		f P8BB8A
a Y ; A95E88	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f P8BB7C
a Y ; A95E89	a	9	ABCAvv	EB4EC i	3GPD8GPN	4	P@i x		f P8BB9D
a Y ; A95E8>	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f PCE98
a Y ; A95E8A	a	9	ABCAvv	E; i	3GNa	4	P@i x		f PCE99
a Y ; A95E8C	a	9	ABCAvv	E; i	3GNa	4	P@i x		f P8BB9E
a Y ; A95E8E	a	9	ABCAvv	>D i	3aV	4	P@i x		f PCED>
a Y ; A95E; 7	a	9	ABCAvv	EB i	3GPD	4	P@i x		f P8BB; 7
a Y ; A95E; 8	a	9	ABCAvv	EB i	3GPD	4	P@i x		f P8BB; 8
a Y ; A95E; 9	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f P8BB7D
a Y ; A95E; ;	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f P8BB7E
a Y ; A95E; >	a	9	ABCAvv	EB i	3GPD	4	P@i x		f P8BB; 9
a Y ; A95E; A	a	9	ABCAvv	EB i	3GPD	4	P@i x		f P8BB; ;
a Y ; A95E; B	a	9	ABCAvv	EB i	3GPD	4	P@i x		f PD8AD
a Y ; A95E; D	a	9	ABCAvv	EB i	3GPD	4	P@i x		f PAC; D
a Y ; A95E; E	a	9	ABCAvv	EB i	3GPD	4	P@i x		f P8BB; >
a Y ; A95E>9	a	9	ABCAvv	C> i	3GDD	4	P@i x		f P8BB8B
a Y ; A95E>;	a	9	ABCAvv	D8 i	3GGD	4	P@i x		f P8BB87
a Y ; A95E>>	a	9	ABCAvv	E; i	3GNa	4	P@i x		f P8BB; A
a Y ; A95E>A	a	9	ABCAvv	EB i	3GPD	4	P@i x		f P8BB; C
a Y ; A95E>D	a	9	ABCAvv	E; i	3GNa	4	P@i x		f P8BB; D
a Y ; A95EA;	a	9	ABCAvv	E; i	3GNa	4	P@i x		f P8BB; E
a Y ; A95EA>	a	9	ABCAvv	E; i	3GNa	4	P@i x		f P8BB>7

a Y ; A95EAA	a	9	ABCAvv	E;	i	3GNa	4	P@l x	f P8C789
a Y ; A95EAE /a Y ; A90	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f P99C; C
a Y ; A95EB;	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PB7C8
a Y ; A95EB>	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PAC8>
a Y ; A95EBA /a Y ; A90	a	9	ABCAvv	BE	i	3 S	4	P@l x	f P99C; D
a Y ; A95EBB /a Y ; A90	a	9	ABCAvv	CE	i	3GDc	4	P@l x	f P99C; E
a Y ; A95EBC /a Y ; A90	a	9	ABCAvv	C>	i	3GDG	4	P@l x	f P99C>7
a Y ; A95EBE	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PD7DE
a Y ; A95EC7	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB88
a Y ; A95EC8	a	9	ABCAvv	C>	i	3GDD	4	P@l x	f P8BB8C
a Y ; A95EC9	a	9	ABCAvv	C>	i	3GDD	4	P@l x	f P8BB8D
a Y ; A95EC;	a	9	ABCAvv	C>	i	3GDD	4	P@l x	f P8BB8E
a Y ; A95EC>	a	9	ABCAvv	C>	i	3GDD	4	P@l x	f P8BB97
a Y ; A95ECA	a	9	ABCAvv	C>	i	3GDD	4	P@l x	f P8BB98
a Y ; A95ECB	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB89
a Y ; A95ECD /a Y ; A90	a	9	ABCAvv	EB	i	3GPG	4	P@l x	f P99C>8
a Y ; A95ECE	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB8;
a Y ; A95ED7	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f P8C78A
a Y ; A95ED8	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB99
a Y ; A95ED9	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB8>
a Y ; A95ED;	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB9;
a Y ; A95ED>	a	9	ABCAvv	AE	i	3eD	4	P@l x	f PCECB
a Y ; A95EDA	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB9>
a Y ; A95EDB	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f PB7; C
a Y ; A95EDC	a	9	ABCAvv	E;	i	3GNa	4	P@l x	f P8C78;
a Y ; A95EDE	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BB9A
a Y ; A95EE7	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f PB7; B
a Y ; A95EE8	a	9	ABCAvv	E;	i	3GNa	4	P@l x	f P8C78>
a Y ; A95EE9 /a Y ; A90	a	9	ABCAvv	E;	i	3GNa	4	P@l x	f P99C>9
a Y ; A95EE;	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PCDE8
a Y ; A95EEB	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PB9D8
a Y ; A95EEC	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PAC8;
a Y ; A95EED	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PB7>C
a Y ; A95EEE /a Y ; A90	a	9	ABCAvv	CE	i	3GDc	4	P@l x	f P99C>;
a Y ; A; 5E77 /a Y ; A90	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f P8BBA8
a Y ; A; 5E78 /a Y ; A90	a	9	ABCAvv	C>	i	3GDD	4	P@l x	f PCECE
a Y ; A; 5E79 /a Y ; A90	a	9	ABCAvv	B9	i	3eS	4	P@l x	f PABCD
a Y ; A; 5E7; /a Y ; A90	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BBA9
a Y ; A; 5E7> /a Y ; A90	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f PABEC
a Y ; A; 5E7A /a Y ; A90	a	9	ABCAvv	C>	i	3GDD	4	P@l x	f PCEDD
a Y ; A; 5E7C /a Y ; A90	a	9	ABCAvv	E9	i	3GNV	4	P@l x	f PCED9
a Y ; A; 5E8A /a Y ; A90	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BBA;
a Y ; A; 5E8B /a Y ; A90	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P8BBA>
a Y ; A; 5E8C /a Y ; A90	a	9	ABCAvv	EB	i	3GPD	4	P@l x	f P8BBAA
a Y ; A; 5E99 /a Y ; A9 Y NeM0	a	9	ABCAvv	DD	i	3GND	4	P@l x	f P9B; A9
a Y ; A; 5E9; /a Y ; A9 Y NeM0	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P9B; A;
a Y ; A; 5E; 7 /a Y ; A9 Y NeM0	a	9	ABCAvv	B9	i	3eS	4	P@l x	f P9B; A>
a Y ; A; 5E; 8 /a Y ; A9 Y NeM0	a	9	ABCAvv	D8	i	3GGD	4	P@l x	f P9B; AB
a Y ; A; 5E; 9 /a Y ; A9 Y NeM0	a	9	ABCAvv	DD	i	3GND	4	P@l x	f P9B; AA
a Y ; A; 5E; ; /a Y ; A9 Y NeM0	a	9	ABCAvv	DD	i	3GND	4	P@l x	f P9B; AC

a Y ; A; 5E; > /a Y ; A9 Y NeMD	a	9	ABCAvv	DD i	3GND	4	P@t x			f P9B; AD
a Y ; A; 5E; A /a Y ; A9 Y NeMD	a	9	ABCAvv	DD i	3GND	4	P@t x			f P9B; AE
a Y ; A; 5E; B /a Y ; A9 Y NeMD	a	9	ABCAvv	D8 i	3GGD	4	P@t x			f P9B; B7
a Y ; A; 5E; D /a Y ; A9 Y NeMD	a	9	ABCAvv	DD i	3GND	4	P@t x			f P9B; B9
a Y ; A; 5E>7 /a Y ; A90	a	9	ABCAvv	D8 i	3GGD	4	P@t x			f PB78B
a Y ; A; 5E>8 /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f P8BBAB
a Y ; A; 5E>9 /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PAC7E
a Y ; A; 5E>; /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PAC9C
a Y ; A; 5E>> /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PAC9D
a Y ; A; 5E>A /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PAC87
a Y ; A; 5E>B /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PB7>>
a Y ; A; 5E>E /a Y ; A90	a	9	ABCAvv	D8 i	3GGD	4	P@t x			f P8BEE>
a Y ; A; 5EAC /a Y ; A9 MD	a	9	ABCAvv	E9 i	3GNV	4	P@t x	f u		f P8BEEA
a Y ; A; 5EB7 /a Y ; A90	a	9	ABCAvv	DD i	3GND	4	P@t x			f PCED7
a Y ; A; 5EB8 /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PCEED
a Y ; A; 5EB9 /a Y ; A90	a	9	ABCAvv	C7 i	3 V	4	P@t x			f PCECD
a Y ; A; 5EB; /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PABE7
a Y ; A; 5EB> /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PB9D>
a Y ; A; 5EBA /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PAC8A
a Y ; A; 5EBB /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PB79C
a Y ; A; 5EBC /a Y ; A90	a	9	ABCAvv	C> i	3GDG	4	P@t x			f P8BBAC
a Y ; A; 5EBD /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f P8BBAD
a Y ; A; 5EBE /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f P8BBAE
a Y ; A; 5ED7 /a Y ; A90	a	9	ABCAvv	D8 i	3GGD	4	P@t x			f PCEEB
a Y ; A; 5ED8 /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PB7; >
a Y ; A; 5ED9 /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f PB7>D
a Y ; A; 5ED; /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f P8C78B
a Y ; A; 5ED> /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f P8C78C
a Y ; A; 5EDA /a Y ; A90	a	9	ABCAvv	C7 i	3 V	4	P@t x			f P8CDAB
a Y ; A; 5EDE /a Y ; A90	a	9	ABCAvv	EB i	3GPD	4	P@t x			f P8BBB;
a Y ; A; 5EEA /a Y ; A9 MD	a	9	ABCAvv	E9 i	3GNV	4	P@t x	f u		f PCEEE

GMR -Xz°yoTz°p,	3429:	Z52R	3429< 452=8
LVT -LwBTz°p,	3: 2< 3: 2=:	Z52RJ°x ' Z´°nv R93<J	352<7 452<<
RU	3=2 6 342<	Z52RJ°x ' Z´°nv RQU 83<JM	3=2 5 392<<
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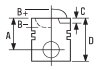

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df

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6383 I X V
6383 V
6383 V
8383 I X V
8383 V

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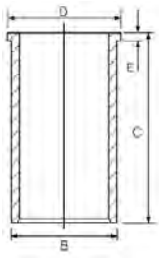

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DC48CDD88477 *Tmm*

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N4 5383
N 8883
P 4481 3
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df

7D48CDD77477
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6383 I X V
6383 V
6383 V
8383 I X V

G C 971<33/ J C 4481633
G C 971933/ J C 4481433
Lz´ 8 ´tyr ' t°ßzy
G C 971=33/ J C 4481733

L ´ opy Qzwpy x t38 Xtyr py

Vz°´ wp ' t°ßzy op 8 I yypl °É

Vl ´l pw t°ß y op 8 I ytwr°

Vp´ °y ' t°ßzyp opt 8 I ypwtv

a Y ; 8>5EC7	S 9	; CD>vv	B; i 3eV 4	P6t x	f u			f P8CDA9
a Y ; A; 5E7E /a Y ; A9 MD	a 9	ABCAvv	89>489A i 3Gae8GcD 4	P6t x	f u			f PD7E8
a Y ; A; 5E87 /a Y ; A9 MD	a 9	ABCAvv	89> i 3Gae 4	P6t x	f u			f PD8B9
a Y ; A; 5ECC /a Y ; A9 MD	a 9	ABCAvv	89> i 3Gai 4	P6t x	f u			f P99G>>
a Y ; A; 5EEB /a Y ; A90	a 9	ABCAvv	A84EB i 3ai 8GPG 4	P6t x				f P9DBAA
a Y ; B95E7B	a 9	ABCAvv	8>8 i 3Gi N 4	P6t x	f u	U x v	xw	f PACA7
a Y ; B95E7E	a 9	ABCAvv	8>8 i 3Gi N 4	P6t x	f u	U x v	xw	f PB7D7
a Y ; B95E87	a 9	ABCAvv	8>8 i 3Gi N 4	P6t x	f u	U x v	xw	f P8BBEE

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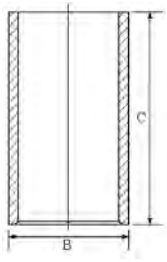
8>47899B7477 **N** 4331 **O** 5571



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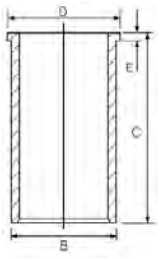

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aY ;A95E8D	a	9	ABCAvv	887	i	3GVD	4	P@t x f u	f P8BB>8
aY ;A95E;C	a	9	ABCAvv	887	i	3GVD	4	P@t x f u	f P8BB>>
aY ;A95E>B	a	9	ABCAvv	887	i	3GVD	4	P@t x f u	f P8BB>A
aY ;A95E>E	a	9	ABCAvv	88A	i	3GVa	4	P@t x f u	f P8BB>B
aY ;A95EA7	a	9	ABCAvv	887	i	3GVD	4	P@t x f u	f P8BB>C
aY ;A95EBD	a	9	ABCAvv	88A	i	3GVa	4	P@t x f u	f P8BB>D
aY ;A95EDD	a	9	ABCAvv	EB	i	3GPD	4	P@t x f u	f P8BB>E
aY ;A95EE>	a	9	ABCAvv	887	i	3GVD	4	P@t x f u	f P8BBA7
aY ;A;5E88 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PD7E7
aY ;A;5E89 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PD8AE
aY ;A;5E8; /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PD7EC
aY ;A;5E8> /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f P8BBB9
aY ;A;5EA7 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PAC88
aY ;A;5EA8 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PAC>C
aY ;A;5EA9 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PB7>A
aY ;A;5EA; /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PB7E9
aY ;A;5EA> /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PD7EB
aY ;A;5EAD /aY ;A96;0	a	9	ABCAvv	887	i	3GVD	4	P@t x f u	f PCEE7
aY ;A;5EAE /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PD77E
aY ;A;5EC7 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PAC89
aY ;A;5EC8 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PB7B7
aY ;A;5EC9 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f P8BBB7
aY ;A;5EC; /aY ;A9 MD	a	9	ABCAvv	E9	i	3GNV	4	P@t x f u	f PCED8
aY ;A;5EC> /aY ;A9 MD	a	9	ABCAvv	89C	i	3GcN	4	P@t x f u	f P8BBB8
aY ;A;5ECA /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f PB;98
aY ;A;5ECB /aY ;A9 MD	a	9	ABCAvv	887	i	3GVD	4	P@t x f u	f P8CDB7
aY ;A;5ECD /aY ;A9 MD	a	9	ABCAvv	89C	i	3GcN	4	P@t x f u	f P8BBB>
aY ;A;5EE8 /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f P8BBBA
aY ;A;5EEC /aY ;A9 MD	a	9	ABCAvv	89>	i	3Gae	4	P@t x f u	f P8BBBB

GMR-Xz°yoTz°p,	342 7	362=	TM	3<2 6	3=2=9
NVT-RzyrTz°p,	342<6	452<<	Z52R	342 5	452=8
RV	442 9	452<7	_TCS UM	342 :	3=2<<
S HQZXGI	3: 2<3	452<			

DC48CD977497
DC48CD97C497 *mT m*
DC48CD988497 *Tmm*

M 9853
N4 5333
N 8833
O 553
P 4383
69É<6

df

7D48CD977487
7D48CD97C487 *mT m*
7D48CD988487 *Tmm*

553 I Q V
553x x I Q V
733 I X V

8>4798DA7477 **N** 4343 **O** 5553 **P** 4363 **Q** 883
8>479AD77477 **N** 4333 **O** 5553 **P** 4363 **Q** 853
8>479AD78477 **N** 4343 **O** 5553 **P** 4373 **Q** 853
8>479AD79477 **N** 4353 **O** 5553 **P** 4383 **Q** 853
8>479AD7>477 **N** 4363 **O** 5553 **P** 4393 **Q** 853
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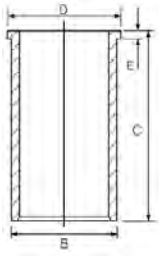

G C 971=33/ J C 4371=33
G C 971933/ J C 4371933

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a Y ; A>5E78 /Q	9 a Y ; B> XM0	S	9	; EC9vv	CC i	3GDV	4	P@l x	f	u	U x v	xw	f PD7D>
a Y ; A>5E79 /Q	9 a Y ; B> XM0	S	9	; EC9vv	CC i	3GDV	4	P@l x	f	u	U x v	xw	f PABEA
a Y ; A>5E7; /Q	9 a Y ; B> XM0	S	9	; EC9vv	CC i	3GDV	4	P@l x	f	u	U x v	xw	f PD7D;
a Y ; A>5E97 /Q	9 a Y ; B> XM0	S	9	; EC9vv	87; i	3GSD	4	P@l x	f	u	U x v	xw	f PD7AE
a Y ; A>5E98 /Q	9 a Y ; B> XM0	S	9	; EC9vv	87; i	3GSD	4	P@l x	f	u	U x v	xw	f PD7BB
a Y ; A>5E99 /Q	9 a Y ; B> XM0	S	9	; EC9vv	87; i	3GSD	4	P@l x	f	u	U x v	xw	f PD7B8
a Y ; A>5E9; /Q	9 a Y ; B> XM0	S	9	; EC9vv	87; i	3GSD	4	P@l x	f	u	U x v	xw	f PD7AC
a Y ; A>5E9> /Q	9 a Y ; B> XM0	S	9	; EC9vv	87; i	3GSD	4	P@l x	f	u	U x v	xw	f PD7DA
a Y ; A>5E9A /Q	9 a Y ; B> XM0	S	9	; EC9vv	87; i	3GSD	4	P@l x	f	u	U x v	xw	f PD7DC
a Y ; A>5E9B /Q	90	S	9	; EC9vv	87; i	3GSD	4	P@l x	f	u	U x v	xw	f P99C>A
a Y ; AC5E77 /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD7BE
a Y ; AC5E78 /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PAC7D
a Y ; AC5E79 /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PAC>7
a Y ; AC5E7; /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PAC>9
a Y ; AC5E7> /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f P8BA9D
a Y ; AC5E7B /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD7EA
a Y ; AC5E7C /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD8; D
a Y ; AC5E7D /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD7C>
a Y ; AC5E7E /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PAC7B
a Y ; AC5E87 /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PB7>8
a Y ; AC5E8A /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD8>C
a Y ; AC5E8B /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD7CA
a Y ; AC5E8C /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD7CE
a Y ; AC5E8D /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PB7>;
a Y ; AC5E8E /a Y ; BB XM0		a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw	f PD87B
a Y ; AC5E97 /a Y ; BB XM0		a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f PAC97
a Y ; AC5E98 /a Y ; BB XM0		a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f PAC>;
a Y ; AC5E99 /a Y ; BB XM0		a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f PD8BB
a Y ; AC5E9> /Q	9 a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f P8>BDD
a Y ; AC5E9A /a Y ; BB XM0		a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f PD8EB
a Y ; AC5E9B /a Y ; BB XM0		a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f P8BE; 8
a Y ; AC5E9C /a Y ; BB XM0		a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f PAC9;
a Y ; AC5E9E /a Y ; BB XM0		a	9	AEADvv	8AA i	3NGG	4	P@l x	f	u	U x v	xw	f PD88;

a Y ; AC3E; 7 /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f PD8BD
a Y ; AC3E; 8 /Q 9 a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f P8BD97
a Y ; AC3E; 9 /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f PB7AB
a Y ; AC3E; ; /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f PD88A
a Y ; AC3E; > /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f P8C7EC
a Y ; AC3E; A /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f P8C7ED
a Y ; AC3E; B /Q 9 a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f P8BD98
a Y ; AC3E; C /Q 9 a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f P8BD99
a Y ; AC3E; D /Q 90	a	9	AEADvv	8AA i	3NGG	4	P0i x	f	u	U x v	xw	f P99C>D
a Y ; AC3E>7 /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PAC>B
a Y ; AC3E>8 /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PD8BE
a Y ; AC3E>9 /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PD88B
a Y ; AC3E>; /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PAC9A
a Y ; AC3E>> /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PB7AD
a Y ; AC3E>A /Q 9 a Y ; BB XM0	a	9	AEADvv	8CC i	3NSG	4	P0i x	f	u	U x v	xw	f P8>BE7
a Y ; AC3E>B /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PD89A
a Y ; AC3E>C /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PD8C7
a Y ; AC3E>D /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f PB7CC
a Y ; AC3E>E /Q 9 a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0i x	f	u	U x v	xw	f P8BD9;
a Y ; AC3EB8 /a Y ; BB XM0	a	9	AEADvv	89A i	3GcD	4	P0i x	f	u	U x v	xw	f PB7C;
a Y ; AC3EB9 /a Y ; BB XM0	a	9	AEADvv	89A i	3GcD	4	P0i x	f	u	U x v	xw	f PB7C>
a Y ; AC3EB; /a Y ; BB XM0	a	9	AEADvv	89A i	3GcD	4	P0i x	f	u	U x v	xw	f PB7E7
a Y ; B>5E78	S	9	; EC9vv	D; i	3GGP	4	P0i x	f	u			f P98>B>
a Y ; BB3EAB	a	9	AEADvv	877 i	3GPa	4	P0i x	f	u			f PB; 97

RQ2RT5	342<7	4523 8		Z52RT4 : 47 J	392=7	452=7	
S Q	452<	3=2=9		Z52RT4 <44 J	372<9	452=7	
Z52RT4 93= J	392=7	452=7		Z52RT4 <47 J	442<	452=7	
Z52RT4 944 J	392=7	452=7		Z52RT4 J°x ' Z´°nv 944 JQ	392=7	452=7	
Z52RT4 : 44 J	372<9	452=7		_TCS UM	342<<		

DC4C>77774; 7

M 96133
N4 56133
N 87133
P 43<<33
69É<6

df f b

7D4C>7777477
7D4C>777C477 *mT m*

5133 S U R V
5133 I X V
7133 I X V

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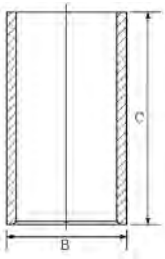

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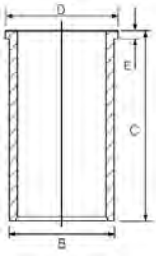

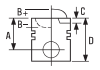

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a Y ; B>5E7B	S	9	; EC9vv	BB i	3 D	4	P@l x			f PD7>D
a Y ; B>5E7C	S	9	; EC7vv	BB i	3 D	4	P@l x			f PD7A9
a Y ; B>5E7D	S	9	; EC9vv	A7 i	3ae	4	P@l x			f P8CDA;
a Y ; B>5E7E	S	9	; EC9vv	A7 i	3ae	4	P@l x			f P8CDA>
a Y ; B>5E88	S	9	; EC9vv	B; 4BB i	3ea8 D	4	P@l x			f PD7D8
a Y ; B>5E89	S	9	; EC9vv	BB i	3 D	4	P@l x			f P8BD7>
a Y ; B>5E8;	S	9	; EC9vv	BB i	3 D	4	P@l x			f PD7>>
a Y ; BB8E7A	a	9	AEADvv	877 i	3GPa	4	P@l x	f u U x v	xw	f PABED
a Y ; BB8E7B	a	9	AEB7vv	877 i	3GPa	4	P@l x			f PAC>D
a Y ; BB8E7C	a	9	AEADvv	877 i	3GPa	4	P@l x			f PAC8B
a Y ; BB8E7D	a	9	AEADvv	D8 i	3GGD	4	P@l x			f P8CDAD
a Y ; BB8E7E	a	9	AEB7vv	877 i	3GPa	4	P@l x			f PB7CD
a Y ; BB8E87	a	9	AEADvv	877 i	3GPa	4	P@l x			f PD7BA
a Y ; BB8E89	a	9	AEADvv	C> i	3GDD	4	P@l x			f P8CDAC
a Y ; BB8E8;	a	9	AEADvv	877 i	3GPa	4	P@l x			f P8C877
a Y ; BB8E8>	a	9	AEADvv	877 i	3GPa	4	P@l x			f PB7>E
a Y ; BB8E8C	a	9	AEADvv	877 i	3GPa	4	P@l x			f PCDDC
a Y ; BB8E8D	a	9	AEB7vv	877 i	3GPa	4	P@l x			f PAC; E
a Y ; BB8E8E	a	9	AEADvv	877 i	3GPa	4	P@l x			f P8BD7D
a Y ; BB8E; 7	a	9	AEADvv	877 i	3GPa	4	P@l x			f PD7E>
a Y ; BB8E; 8	a	9	AEADvv	877 i	3GPa	4	P@l x			f PAC8C
a Y ; BB8E; 9	a	9	AEADvv	877 i	3GPa	4	P@l x			f PD7BD
a Y ; BB8E; ;	a	9	AEADvv	877 i	3GPa	4	P@l x			f PD877
a Y ; BB8E; A	a	9	AEADvv	877 i	3GPa	4	P@l x			f PB7A7
a Y ; BB8E; B	a	9	AEB7vv	877 i	3GPa	4	P@l x			f PD8; A
a Y ; BB8E; C	a	9	AEB7vv	877 i	3GPa	4	P@l x			f PB7C9
a Y ; BB8E; D	a	9	AEADvv	877 i	3GPa	4	P@l x			f P8BD7E
a Y ; BB8E; E	a	9	AEADvv	D8 i	3GGD	4	P@l x			f PCEE;
a Y ; BB8E>7	a	9	AEADvv	877 i	3GPa	4	P@l x			f PB7>7
a Y ; C75E7A /a Y ; B>0	S	9	; EC9vv	BB i	3 D	4	P@l x			f P9DBB>
a Y ; C75EA9 /a Y ; B> M0	S	9	; EC9vv	D7 i	3GDi	4	P@l x	f u		f P9DBBC
a Y ; C95E7B /a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P@l x			f P9; 977
a Y ; C95E7C /a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P@l x			f P9; 978
a Y ; C95E; 7 /a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P@l x			f P9; 979
a Y ; C8E7A /a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P@l x			f P9; 77B
a Y ; C8E7B /a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P@l x			f P9; 77E
a Y ; C8E7C /a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P@l x			f P9; 788
a Y ; C8E7D /a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P@l x			f P9; 787
a Y ; C8E7E /a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P@l x			f P9; 789
a Y ; C8E; 7 /a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P@l x			f P9; 78>
a Y ; C8ED7 /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	89C i	3GcP	4	P@l x	f u U x v	xw	f P9; 7>7
a Y ; C8ED8 /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	8>9 i	3Gi P	4	P@l x	f u U x v	xw	f P9; 7>8
a Y ; C8ED9 /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	8>9 i	3Gi P	4	P@l x	f u U x v	xw	f P9; 7>9
a Y ; C8EDC /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	89C i	3GcP	4	P@l x	f u U x v	xw	f P9; 7>A
a Y ; C8EDD /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	8>9 i	3Gi P	4	P@l x	f u U x v	xw	f P9; 7>B
a Y ; C8EDE /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	8>9 i	3Gi P	4	P@l x	f u U x v	xw	f P9; 7>C
a Y ; C8EED /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	8; > i	3GeN	4	P@l x	f u U x v	xw	f P9; 7>D
a Y ; C8EEE /a Y ; BB XMY Nf O4g eM0	a	9	AEADvv	8; > i	3GeN	4	P@l x	f u U x v	xw	f P9; 7>E
a Y ; D95E89	a	9	AEADvv	877 i	3GPa	4	P@l x			f P99CD;
a Y ; D>5E7B	S	9	; EC9vv	BB4877 i	3 D8GPc	4	P@l x	f u		f P9; 8EE

HOYp´tpº	3: 2<7	Z52RT4 93=J	372<9 452=7
LVT +LwßTzºp,	452<8 45234	Z52RT4 : 3=J	372<9 452=7
NVT +RzyrTzºp,	372<= 35234	Z52RT4 <3=J	372<9 452=7
RQ2RT5	342<7 45238	Z52RT4 I I mÄtßs pyr typ <3=JZ	372<9 452=7
S HOZXGI	352< 452=4	Z52RT4 J°x ' Z´°nv 93=JQ	372<9 452=7
TM	372<7 362=4	Z52RT4 J°x ' Z´°nv : 3=JQ	372<9 452=7
U 634	392<9 382<	Z52RT4 J°x ' Z´°nv <3=JQ	372<9 452=7
U 735	352<9 452=4	Z52RT4 U 93=J	3: 2< 452=5
UL	342<6	_TßUM	3=2<<

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DC4C>777C4>7 *mT m*

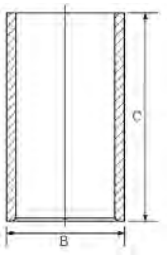
M 951<3
N4 551t 3
N 7<183
P 43: 1<3
69É<5

df

7D4C>7777487
7D4C>777C487 *mT m*

5183 I Q V
5183 I X V
7183 I X V

8>47899B7477 **N** 43317 3 **O** 55718 3



8>479AD77477 **N** 43317 3 **O** 55513 3 **P** 43613 3 **Q** 8153
8>479AD78477 **N** 43413 3 **O** 55513 3 **P** 43713 3 **Q** 8153
8>479AD79477 **N** 43513 3 **O** 55513 3 **P** 43813 3 **Q** 8153
8>479AD7>477 **N** 43613 3 **O** 55513 3 **P** 43913 3 **Q** 8153
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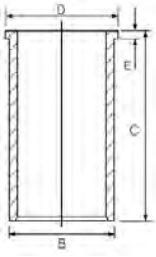
8>479ADD;477 **N** 43613 3 **O** 55513 3 **P** 43913 3 **Q** 71t 8



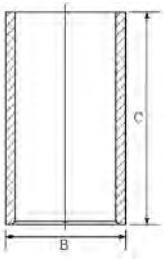
G C 9518 33/ J C 43: 1833

a Y ; AB8E78 /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PAC7>
a Y ; AB8E79 /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD7B>
a Y ; AB8E7; /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD7E;
a Y ; AB8E7> /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD7ED
a Y ; AB8E7A /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD7B9
a Y ; AB8E7B /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD7BC
a Y ; AB8E7C /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD7EE
a Y ; AB8E7D /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD8; >
a Y ; AB8E7E /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD8; ;
a Y ; AB8E87 /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PD8; 9
a Y ; AB8E88 /Q	8 a Y ; BB0	a	9	AEADvv	EA i	3GN	4	P0t x	f PB7; E
a Y ; AB8E8; /Q	8 a Y ; BB0	a	9	AEADvv	877 i	3GPa	4	P0t x	f P8BD87
a Y ; AB8E8> /Q	8 a Y ; BB0	a	9	AEADvv	CA i	3GDN	4	P0t x	f PCEE>
a Y ; AB8E8A /Q	8 a Y ; BB0	a	9	AEADvv	EC i	3GPN	4	P0t x	f P8BD88
a Y ; AB8E8B /Q	8 a Y ; BB0	a	9	AEADvv	EC i	3GPN	4	P0t x	f P8C7EB
a Y ; B>5E8D		S	9	; EC7vv	B; i	3ea	4	P0t x	f PD7A;
a Y ; B>5E8E		S	9	; EC9vv	B; i	3ea	4	P0t x	f PABE9

a Y ; B>5E97	S	9	; EC9vv	B; i	3ea	4	P@l x	f PD7D9
a Y ; B>5E98 /Q 80	S	9	; EC9vv	B; i	3ea	4	P@l x	f PB79E

RQ2RT5	342<7 452=<	Z52RT4J°x ' Z´°nv 93=JQ	372<9 452=7
Z52RT4 93=J	372<9 452=7	Z52RT4J°x ' Z´°nv :3=JQ	372<9 452=7
Z52RT4 :3=J	372<9 452=7	Z52RT4J°x ' Z´°nv <3=JQ	372<9 452=7
Z52RT4 <3=J	372<9 452=7	_T($UM	342<<

8>47899B7477 **N** 433173 **O** 557133



8>4798DA7477 **N** 434133 **O** 555133 **P** 436183 **Q** 8183
8>479AD77477 **N** 433173 **O** 555133 **P** 436183 **Q** 8153
8>479AD78477 **N** 434133 **O** 555133 **P** 437133 **Q** 8153
8>479AD79477 **N** 435133 **O** 555133 **P** 438133 **Q** 8153
8>479AD7>477 **N** 436133 **O** 555133 **P** 439133 **Q** 8153
8>479ADD8477 **N** 434183 **O** 555133 **P** 437183 **Q** 718
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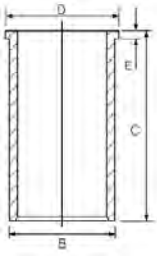


a Y ; AB8E>7 /Q 8 a Y ; BB MD	a	9	AEADvv	89E i	3GcV	4	P@l x f u	f PB7ED
a Y ; AB8ED> /a Y ; BB XMD	a	9	AEADvv	8AA i	3NGG	4	P@l x f u U x v xw	f PD8>D
a Y ; AB8EDA /a Y ; BB XMD	a	9	AEADvv	8A7 i	3NDS	4	P@l x f u U x v xw	f PD8DE
a Y ; B>5EA7	S	9	; EC9vv	DA i	3GGV	4	P@l x f u	f PABEB
a Y ; B>5EA8	S	9	; EC9vv	BB i	3D	4	P@l x f u	f P8CDAA
a Y ; B>5EA9	S	9	; EC9vv	DA i	3GGV	4	P@l x f u	f PB7;;
a Y ; B>5EA>	S	9	; EC9vv	DA i	3GGV	4	P@l x f u	f PD7>A
a Y ; B>5ED7	S	9	; EC9vv	877 i	3GPa	4	P@l x f u U x v xw	f PD7>C
a Y ; B>5ED8	S	9	; EC9vv	877 i	3GPa	4	P@l x f u U x v xw	f PD7DB
a Y ; B>5ED>	S	9	; EC9vv	877 i	3GPa	4	P@l x f u U x v xw	f PD7DD
a Y ; BB8E>>	a	9	AEADvv	89A i	3GcD	4	P@l x f u	f PAC7;
a Y ; BB8E>A	a	9	AEADvv	89A i	3GcD	4	P@l x f u	f PACAC
a Y ; BB8E>B	a	9	AEB7vv	89A i	3GcD	4	P@l x f u	f PAC>8
a Y ; BB8E>C	a	9	AEADvv	877 i	3GPa	4	P@l x f u	f PABCE
a Y ; BB8E>D	a	9	AEADvv	877488A i	3GPa8GVa	4	P@l x f u	f PB78C
a Y ; BB8E>E	a	9	AEADvv	E9488A i	3GNV8GVa	4	P@l x f u	f PB9CC
a Y ; BB8EA8	a	9	AEB7vv	89A i	3GcD	4	P@l x f u	f PAC>E
a Y ; BB8EA9	a	9	AEADvv	88B489E i	3GVe8GcV	4	P@l x f u	f PACBB
a Y ; BB8EA;	a	9	AEADvv	89A i	3GcD	4	P@l x f u	f PAC8D
a Y ; BB8EA>	a	9	AEADvv	88A48;9 i	3GVa8GeD	4	P@l x f u	f P8CDB9

a Y ; BBEEAA	a	9	AEADvv	877 i	3GPa	4	P@i x	f	u			f PB9CB
a Y ; BBEEAC	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f P8BD8B
a Y ; BBEEAD	a	9	AEADvv	877 i	3GPa	4	P@i x	f	u			f P8CDB8
a Y ; BBEEB7	a	9	AEB7vv	89A i	3GcD	4	P@i x	f	u			f P8C878
a Y ; BBEEB9	a	9	AEB7vv	89A i	3GcD	4	P@i x	f	u			f PAC>A
a Y ; BBEEB;	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PD77B
a Y ; BBEEBA	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PCDDD
a Y ; BBEEBB	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PAC7C
a Y ; BBEEBC	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PABEE
a Y ; BBEEBD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PD7CC
a Y ; BBEEBE	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PD7D7
a Y ; BBEEC7	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PD87>
a Y ; BBEEC8	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PD87C
a Y ; BBEEC9	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f P8C889
a Y ; BBEEC;	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PB7; A
a Y ; BBEEC>	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PB7>9
a Y ; BBEECA	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PAC8E
a Y ; BBEECB	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PB7A9
a Y ; BBEECC	a	9	AEADvv	E9 i	3GNV	4	P@i x	f	u			f P8CDAE
a Y ; BBEECD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PB9CE
a Y ; BBEECE	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f PB7E8
a Y ; BBEED7	a	9	AEB7vv	8>D i	3NDG	4	P@i x	f	u	U x v	xw	f PD8>8
a Y ; BBEED8	a	9	AEADvv	8>D i	3NDG	4	P@i x	f	u	U x v	xw	f P8BD8C
a Y ; BBEED;	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f PD8A7
a Y ; BBEED>	a	9	AEADvv	8A748AC i	3NDS8NGS	4	P@i x	f	u	U x v	xw	f PD77C
a Y ; BBEEDD	a	9	AEB7vv	8>D48A7 i	3NDG8NDS	4	P@i x	f	u	U x v	xw	f PAC>>
a Y ; BBEEE7	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f P8BD8D
a Y ; BBEEE9	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f PAC99
a Y ; BBEEE;	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f PD88>
a Y ; BBEEE>	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f PB7AA
a Y ; BBEEEA	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f PD8BC
a Y ; BBEEEB	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f P8BD8E
a Y ; BBEEEC /Q 80	a	9	AEB7vv	8>D48A7 i	3NDG8NDS	4	P@i x	f	u	U x v	xw	f PB7CA
a Y ; C75EA7 /a Y ; B> MD	S	9	; EC9vv	DA i	3GGa	4	P@i x	f	u			f P9DBBA
a Y ; C75EA8 /a Y ; B> MD	S	9	; EC9vv	DA i	3GGa	4	P@i x	f	u			f P9DBBB
a Y ; C95EA7 /a Y ; B> MD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f P9DBBE
a Y ; C95EA8 /a Y ; B> MD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f P9DBC8
a Y ; C95EA; /a Y ; B> MD	a	9	AEADvv	877 i	3GPa	4	P@i x	f	u			f P9DBC9
a Y ; C95EAB /a Y ; B> MD	a	9	AEADvv	89A48; A i	3GcD8GeS	4	P@i x	f	u			f P9DBC;
a Y ; C95EAD /a Y ; B> MD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u			f P9DBC>
a Y ; C95ED7 /a Y ; B> XMD	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f P9DBD7
a Y ; C95ED8 /a Y ; B> XMD	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f P9DBD8
a Y ; CBE>8 /a Y ; BB XMD	a	9	AEADvv	8A7 i	3NDS	4	P@i x	f	u	U x v	xw	f P9; 78A
a Y ; CBE>A /a Y ; BB MD	a	9	AEADvv	89A48; A i	3GcD8GeS	4	P@i x	f	u	U x v	xw	f P9; 78B
a Y ; CBE>B /a Y ; BB MD	a	9	AEADvv	8; 848; A i	3Gce8GeS	4	P@i x	f	u	U x v	xw	f P9; 78C
a Y ; CBE>C /a Y ; BB MD	a	9	AEADvv	8; 8 i	3Gce	4	P@i x	f	u	U x v	xw	f P9; 78D
a Y ; CBEA7 /a Y ; BB MD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u	U x v	xw	f P9; 78E
a Y ; CBEA8 /a Y ; BB MD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u	U x v	xw	f P9; 797
a Y ; CBEA; /a Y ; BB MD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u	U x v	xw	f P9; 799
a Y ; CBEA> /a Y ; BB MD	a	9	AEADvv	89A i	3GcD	4	P@i x	f	u	U x v	xw	f P9; 79;

a Y ; CB8EAA /a Y ; BB M0	a	9	AEADvv	89A48; A i	3GcD8GeS	4	P@l x	f	u					f P9; 79>
a Y ; CB8EAB /a Y ; BB M0	a	9	AEADvv	89A48; A i	3GcD8GeS	4	P@l x	f	u	U x v	xw			f P9; 79A
a Y ; CB8EAC /a Y ; BB M0	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw			f P9; 79B
a Y ; CB8EAD /a Y ; BB M0	a	9	AEADvv	89A48; A i	3GcD8GeS	4	P@l x	f	u	U x v	xw			f P9; 79C
a Y ; CB8EB8 /a Y ; BB M0	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw			f P9; 79D
a Y ; CB8EB9 /a Y ; BB M0	a	9	AEADvv	89A48; A i	3GcD8GeS	4	P@l x	f	u					f P9; 79E
a Y ; CB8EB; /a Y ; BB XM0	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw			f P9; 7; 7
a Y ; CB8EB> /a Y ; BB M0	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u	U x v	xw			f P9; 7; 8
a Y ; D75E>9	S	9	; EC9vv	DA i	3GGa	4	P@l x	f	u					f P99CCC
a Y ; D95E8;	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u					f P99CD>
a Y ; D95E8E	a	9	AEADvv	8A7 i	3NDS	4	P@l x	f	u					f P99CDA
a Y ; D95EC8	a	9	AEADvv	8A7 i	3NDS	4	P@l x	f	u					f P99CDC
a Y ; D>5E7C	S	9	; EC9vv	DA i	3GGa	4	P@l x	f	u					f P99CDD
a Y ; DB8EA7	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u					f P99CE>
a Y ; DB8EA8	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u					f P99CEA
a Y ; DB8EA9	a	9	AEADvv	89A i	3GcD	4	P@l x	f	u					f P99CEB
a Y ; DB8ED7	a	9	AEADvv	8A7 i	3NDS	4	P@l x	f	u	U x v	xw			f P99CEC
a Y ; DB8ED8	a	9	AEADvv	8A7 i	3NDS	4	P@l x	f	u	U x v	xw			f P99CED
a Y ; DB8ED;	a	9	AEADvv	8A7 i	3NDS	4	P@l x	f	u	U x v	xw			f P99CEE

GMR -Xz°yoTz°p,	362<7	38233	UL	342<6	
LVT -LwßTz°p,	342<=	372==	UN	342 3	
NVT -RzyrTz°p,	372<=	45238	Z52RT4 : 44 J	372<9	452=7
RQ2RT5	342<7	452=<	Z52RT4 <44 J	372<9	452=7
S HQZXGl	352<5	452=4	Z52RT4 <47 J	442<	452=7
S Q	452<	3=2=9	Z52RT4 <47 JG	442<	452=7
TM	3<2 6	3=2=9	Z52RT4 J°x ' Z´°nv <44 JQ	372<9	452=7
U 634	352<9	382<	Z52RT4 U 944 J	3: 2<	452=5
U 6: 4	342=4	45235	Z52RT4 U 947 J	3: 2<	452=5
U 735	352<9	452=4	_T©UM	342<<	

DC4C>77774A7
DC4C>777C4A7 *mT m*

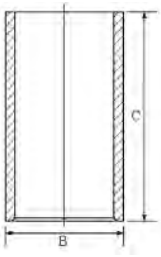
M 951<3
N4 55168
N 88183
P 43: 1<3
69É<5

df

7D4C>7777487
7D4C>777C487 *mT m*

5183 I Q V
5183 I X V
7183 I X V

8>47899B7477 **N** 43373 **O** 55783



8>479AD77477 **N** 43373 **O** 55583 **P** 43683 **Q** 8583
8>479AD78477 **N** 43483 **O** 55583 **P** 43783 **Q** 8583
8>479AD79477 **N** 43583 **O** 55583 **P** 43883 **Q** 8583
8>479AD7>477 **N** 43683 **O** 55583 **P** 43983 **Q** 8583
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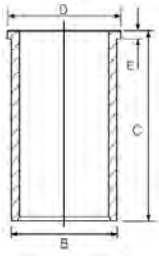

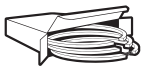

a Y ; AB8E>8 /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PAC7A
a Y ; AB8E>; /Q	8 a Y ; BB M0	a	9	AEADvv	898 i	3GaV	4	P0t x	f	u			f PD8>B
a Y ; AB8E>> /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD8; B
a Y ; AB8E>A /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD8; C
a Y ; AB8E>B /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PACAB
a Y ; AB8E>C /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD87;
a Y ; AB8E>D /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD7CD
a Y ; AB8E>E /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD87A
a Y ; AB8EA8 /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD7C;
a Y ; AB8EA9 /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f P8BE>8
a Y ; AB8EA; /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PB7DE
a Y ; AB8EAB /Q	8 a Y ; BB M0	a	9	AEADvv	88>488A i	3GVV8GVa	4	P0t x	f	u			f PB78D
a Y ; AB8EAD /Q	8 a Y ; BB M0	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f P8BD89
a Y ; AB8EAE /Q	8 a Y ; BB M0	a	9	AEADvv	898 i	3GaV	4	P0t x	f	u			f P8BD8;
a Y ; B>5EAC		S	9	; EC9vv	CC i	33DV	4	P0t x	f	u			f PABE;
a Y ; B>5EAD		S	9	; EC9vv	CC i	33DV	4	P0t x	f	u			f PB7; 7
a Y ; B>5EAE /Q	80	S	9	; EC9vv	CC i	33DV	4	P0t x	f	u			f P99CC;
a Y ; BB8E78		a	9	AEADvv	8; A48; B i	3GeS8GeV	4	P0t x	f	u			f P9DBB9
a Y ; BB8E>8 /Q	80	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD879
a Y ; BB8E>9 /Q	80	a	9	AEADvv	898 i	3GaV	4	P0t x	f	u			f PD7CB
a Y ; BB8E>; /Q	80	a	9	AEADvv	88B i	3GVe	4	P0t x	f	u			f PD7C7

RQ2RT5	342<7 452=<	Z52RT4 : 44 J	372<9 452=7
S Q	3: 2<= 3=2=9	Z52RT4 <44 J	372<9 452=7
UN	342 3	_TSUM	342<<

DC4C>7777487
DC4C>777C487 *mT m*

M 951<3
N4 56133
N 87163
P 43: 1<3
69É<6

df

7D4C>7777487
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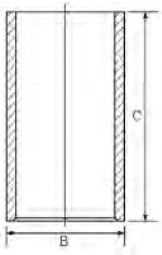
5183 I Q V
5183 I X V
7183 I X V

8>47899B7477 **N** 433173 **O** 557133



8>479AD77477 **N** 433173 **O** 555133 **P** 436183 **Q** 8153
8>479AD78477 **N** 434133 **O** 555133 **P** 437133 **Q** 8153
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8>479AD7>477 **N** 436133 **O** 555133 **P** 439133 **Q** 8153
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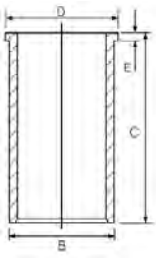
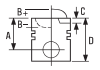


G C 9518133/ J C 43: 1833

a Y ; AB8ECC /Q	8 a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P0t x	f	u	U x v	xw	f P8BD8>
a Y ; AB8ECD /Q	8 a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P0t x	f	u	U x v	xw	f P8BD8A



a Y ; AB8ECE /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P6l x	f	u	U	x	v	xw	f PAC9B
a Y ; AB8ED7 /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P6l x	f	u	U	x	v	xw	f PD77A
a Y ; AB8ED; /Q 8 a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P6l x	f	u	U	x	v	xw	f PAC9>
a Y ; AB8EDB /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PD87D
a Y ; AB8EDC /Q 8 a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PD8>E
a Y ; AB8EDD /Q 80	a	9	AEADvv	8CC i	3NSG	4	P6l x	f	u	U	x	v	xw	f P99C>C
a Y ; AB8EDE /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P6l x	f	u	U	x	v	xw	f PB7AC
a Y ; AB8EE7 /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PD8BA
a Y ; AB8EE8 /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P6l x	f	u	U	x	v	xw	f PB9D9
a Y ; AB8EE9 /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PD8>7
a Y ; AB8EE; /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PD889
a Y ; AB8EE> /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PAC98
a Y ; AB8EEA /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PB7A>
a Y ; AB8EEB /a Y ; BB XM0	a	9	AEADvv	8AA i	3NGG	4	P6l x	f	u	U	x	v	xw	f PD887
a Y ; AB8EEC /a Y ; BB XM0	a	9	AEADvv	8AC i	3NGS	4	P6l x	f	u	U	x	v	xw	f PABD8
a Y ; AB8EED /a Y ; BB XM0	a	9	AEADvv	8; 9 i	3GeD	4	P6l x	f	u	U	x	v	xw	f PB78E
a Y ; AB8EEE /a Y ; BB XM0	a	9	AEADvv	8CC i	3NSD	4	P6l x	f	u	U	x	v	xw	f PD89>
a Y ; B>8EDA	S	9	; EC9vv	877487; i	3GPa8GSD	4	P6l x	f	u	U	x	v	xw	f PD78C
a Y ; B>8EDC	S	9	; EC9vv	877 i	3GPa	4	P6l x	f	u	U	x	v	xw	f PB7; 8
a Y ; BB8EEE /Q 80	a	9	AEADvv	8C7 i	3NPG	4	P6l x	f	u	U	x	v	xw	f PD89B

RQ2RT5	342<7 452=<	Z52RT4 <47 JG	442< 452=7
SQ	452< 3=2=9	_T(SUM	382<<

DC4C>7777497
DC4C>777C497 *mT m*

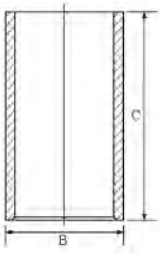
M	951<3
N4	5519 3
N	8719 8
P	43: 1<3
	69É<6

df f b

7D4C>7777487
7D4C>777C487 *mT m*

5183		I Q V
5183		I X V
7133		I X V

8>47899B7477 **N** 433173 **O** 557133



8>479AD77477 **N** 433173 **O** 555133 **P** 436183 **Q** 8153
8>479AD78477 **N** 434133 **O** 555133 **P** 437133 **Q** 8153
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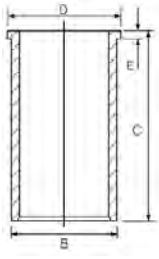

G C 951833/ J C 43: 1833

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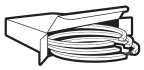
a Y E775E89 /Q > a Y E7> XM0	S	9	>9>Evv	88A i	3GVa	4	P6l x	f	u	U	x	v	xw	f P8DE8E
a Y E775E8; /Q > a Y E7> XM0	S	9	>9>Evv	8; 7 i	3Gcc	4	P6l x	f	u	U	x	v	xw	f P8DE97



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DC4>9DE77477

M 97173
N4 461=3
N :6156
P 435173
75É<3

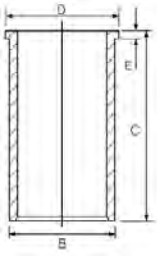
MWdf f b

7D4>9DE77477

6183 MJI V
5183 I X V
7183 I Q V

GDC LKZ-Ring

8>479DB87477



N 439183 O 553183 P 43=183 Q 9153

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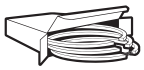

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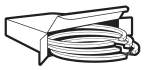

a Y E7E3EC7 /a Y E7B XM0	a	9	B; C>vv	97A i	3Nci	4	P0t x	f	u	U x v	xw	f P8BD>E
a Y E7E3EC8 /a Y E7B XM0	a	9	B; C>vv	97A i	3Nci	4	P0t x	f	u	U x v	xw	f P8BDA7

GI I KRU	38236	_TCS UM	36233	
GRRKMXU	34235 45246	aGX0U 946 J / 947 J	3=2=9	
GZKMU	342=< 43237	aGX0U 948 J / 949 J	3=2=<	
GZKMU 5	43237	aGX0U <46 J / <47 J	3=2=9	45246
GcUX	34235 43237	aGX0U <46 JG / <47 JG	3=2=9	45246
GcUX 5	43237	aGX0U <48 J	3=2=9	45246
HKGaKX	34238	aGX0U <48 J / <49 J	3=2=9	45246
HUcKX	34235 45246	aGX0U <48 JG / <49 JG	3=2=9	45246
HOYp´tp°	382—	aGX0U I I mÄtfs pyr typ <43 JZ	3=2=9	39239
I OZGXU -U 863,	342=<	aGX0U I I mÄtfs pyr typ <45 JZ	3=2=9	39239
I OZU -U 853,	392—	aGX0U I I mÄtfs pyr typ <47 JZ	3=2=9	39239
I UTKI ZU -U 678,	44234	aGX0U I I mÄtfs pyr typ <49 JZ	3=2=9	39239
KI UT0	342=<	aGX0U J°x ' Z´°nv 946 J / 947 J	3=2=9	45246
LVT -LwBTz°p,	3: 234 45238	aGX0U J°x ' Z´°nv 948 J / 949 J	3=2=<	
NKGad0J_Zd	34247 3<24=	aGX0U J°x ' Z´°nv <46 J / <47 J	3=2=9	45246
NVT -RzyrTz°p,	3: 234 45238	aGX0U J°x ' Z´°nv <46 JG / <47 JG	3=2=9	45246
RQ2RT5	362=9 452=<	aGX0U J°x ' Z´°nv <48 J / <49 J	3=2=9	
RU	342=3 36237	aGX0U J°x ' Z´°nv <48 JG / <49 JG	3=2=9	45246
UL	34234	aGX0U U <43	3=2=9	45243
UN	342 3	aGX0U U <47	3=2=9	45243
USI	35239	aGX0U U <48	3<2=9	45243
ZU_XCTU -U 843,	43236	eK_Y	3623<	
ZU_XU -U 833,	34234			

DC49DE; 77477

M	97173
N4	461=3
N	: 6133
P	435173
	73É: <

MWdf f b

7D49DE; 77477

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7133		I X V

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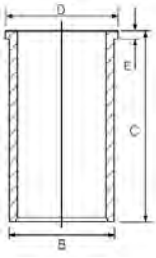

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DC49DE; 77487

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N	: 6133
P	435183
	75É<3

MWdf f b

7D49DE; 77477

6133		I Q V
5133		I X V
7133		I X V

UK G336 363 =: 57

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a Y E7>5EC; /Q ; 0	S	9	>9>Evv	8; 7 i	3Gcc	4	P0t x	f	u	U x v	xw	f P9>DAD
a Y E7>5ECA /Q ; 0	S	9	>9>Evv	CA4887 i	3GDN8GVD	4	P0t x	f	u	U x v	xw	f P9DCED
a Y E7>5ECB /Q ; 0	S	9	>9>Evv	8; 7 i	3Gcc	4	P0t x	f	u	U x v	xw	f P9>DAE
a Y E7>5ECC	S	9	>9>Evv	887 i	3GVD	4	P0t x	f	u	U x v	xw	f P9DCEE
a Y E7>5ECD	S	9	>9>Evv	8; 7 i	3Gcc	4	P0t x	f	u	U x v	xw	f P9DD77
a Y E7>5ECE	S	9	>9>Evv	889 i	3GVN	4	P0t x	f	u	U x v	xw	f P9DD78
a Y E7>5ED7	S	9	>9>Evv	8; 7 i	3Gcc	4	P0t x	f	u	U x v	xw	f P9DD79
a Y E7>5ED8	S	9	>9>Evv	887 i	3GVD	4	P0t x	f	u	U x v	xw	f P9DD7;

a Y E7B8E9A /Q	; 0	a	9	B; C>vv	8C7	i	3NPG	4		P@l	x	f	u	U	x	v	xw	f P8BE97
a Y E7B8E9B /Q	; 0	a	9	B; C>vv	97A	i	3Ncl	4		P@l	x	f	u	U	x	v	xw	f P8BE9;
a Y E7B8E9C /Q	; 0	a	9	B; C>vv	8C7	i	3NPG	4		P@l	x	f	u	U	x	v	xw	f P8BE98
a Y E7B8E9D /Q	; 0	a	9	B; C>vv	97A	i	3Ncl	4		P@l	x	f	u	U	x	v	xw	f P8BE9>
a Y E7B8E; A /Q	; 0	a	9	B; C>vv	8C7	i	3NPG	4		P@l	x	f	u	U	x	v	xw	f P8C; 9B
a Y E7B8E; E /Q	; 0	a	9	B; C>vv	8D7	i	3NSV	4		P@l	x	f	u	U	x	v	xw	f P8BE9B
a Y E7B8E>E /Q	; 0	a	9	B; C>vv	8D7	i	3NSV	4		P@l	x	f	u	U	x	v	xw	f P8CCCB
a Y E7B8EA7 /Q	; 0	a	9	B; C>vv	97A	i	3Ncl	4		P@l	x	f	u	U	x	v	xw	f P8CCCC
a Y E7B8EA8		a	9	B; C>vv	8C7	i	3NPG	4		P@l	x	f	u	U	x	v	xw	f P8CCCD
a Y E7B8EB7 /Q	; 0	a	9	B; C>vv	97A	i	3Ncl	4		P@l	x	f	u	U	x	v	xw	f P8C>>C
a Y E7B8EB9 /Q	; 0	a	9	B; C>vv	8D7	i	3NSV	4		P@l	x	f	u	U	x	v	xw	f P8C>B7
a Y E7B8EB; /Q	; 0	a	9	B; C>vv	8D7	i	3NSV	4		P@l	x	f	u	U	x	v	xw	f P8C>>E
a Y E7B8EB>		a	9	B; C>vv	8C748D7	i	3NPG8NSV	4		P@l	x	f	u	U	x	v	xw	f P8CD9;
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a Y E7B8ED9		a	9	B; C>vv	8C7	i	3NPG	4		P@l	x	f	u	U	x	v	xw	f P8CD; D
a Y E7B8ED; /Q	; 0	a	9	B; C>vv	8D7	i	3NSV	4		P@l	x	f	u	U	x	v	xw	f P8CD; E
a Y E7B8EE8 /Q	; 0	a	9	B; C>vv	8; 7497A	i	3Gcc8Ncl	4		P@l	x	f	u	U	x	v	xw	f P9DD7A
a Y E7B8EE9 /Q	; 0	a	9	B; C>vv	8D7	i	3NSV	4		P@l	x	f	u	U	x	v	xw	f P9DD7B
a Y E7B8EE; /Q	; 0	a	9	B; C>vv	97A	i	3Ncl	4		P@l	x	f	u	U	x	v	xw	f P9DD7C
a Y E7B8EED /Q	; 0	a	9	B; C>vv	8E8	i	3NaD	4		P@l	x	f	u	U	x	v	xw	f P9DD7E
a Y E7B8EED /Q	; 0	a	9	B; C>vv	8C948E>	i	3NPS8NaS	4		P@l	x	f	u	U	x	v	xw	f P9DD87

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GZKMJ	342=< 43237	ZU_XU -J 833,	34234
GZKMJ 5	43237	_TCS UM	36233
GcUX 5	43237	aGXQJ 94<J	3=239
I QZGXU -J 863,	342=<	aGXQJ <4<J	3=239
I UTKI ZU -J 678,	44234	aGXQJ <4<JG	3=239
KI UTQ	362=<	aGXQJ J°x ' Z´°nv 94<J	3=239
NKGadQJ_Zd	39245 4524=	aGXQJ J°x ' Z´°nv <4<J	3=239
NVT -RzyrTz°p,	382== 45244	aGXQJ J°x ' Z´°nv <4<JG	3=239
UN	342 3		

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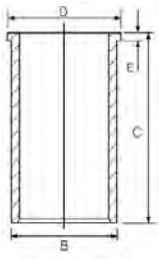


N 439133 **O** 553133 **P** 43=183 **Q** 9153

a Y E9>5E8; /Q	; 0	S	9	>D78vv	8B7	i	3NGe	4		P@l	x	f	u	U	x	v	xw	f P9A7>7
a Y E9>5E8A /Q	; 0	S	9	>D78vv	8>948B7	i	3Gl P8NGe	4		P@l	x	f	u	U	x	v	xw	f P8E8DA
a Y E9>5E8B /Q	; 0	S	9	>D78vv	8B7	i	3NGe	4		P@l	x	f	u	U	x	v	xw	f P8C8DA
a Y E9>5E8E /Q	; 0	S	9	>D78vv	8B7	i	3NGe	4		P@l	x	f	u	U	x	v	xw	f P8E8DC
a Y E9>5E97 /Q	; 0	S	9	>D78vv	8B7	i	3NGe	4		P@l	x	f	u	U	x	v	xw	f P8DE8C
a Y E9>5E9> /Q	; 0	S	9	>D78vv	8B7	i	3NGe	4		P@l	x	f	u	U	x	v	xw	f P8E8E8
a Y E9>5E9D		S	9	>D78vv	8B7	i	3NGe	4		P@l	x	f	u	U	x	v	xw	f P9DD8;
a Y E9>5E; 9 /Q	A0	S	9	>D78vv	8>A	i	3Gl c	4		P@l	x	f	u	U	x	v	xw	f P9DD8B
a Y E9B6E8; /Q	; 0	a	9	C978vv	9>7	i	3PNa	4		P@l	x	f	u	U	x	v	xw	f P8E8B7
a Y E9B6E8> /Q	90	a	9	C978vv	9>7	i	3PNa	4		P@l	x	f	u	U	x	v	xw	f P8E8B8

aY E9B8E8A /Q	;0	a	9	C978vv	9>7 i	3PNa	4	P@t x	f	u	U	x	v	xw	f P8E8B9
aY E9B8E8C /Q	;0	a	9	C978vv	9>7 i	3PNa	4	P@t x	f	u	U	x	v	xw	f P8E8B>
aY E9B8E98 /Q	;0	a	9	C978vv	9>7 i	3PNa	4	P@t x	f	u	U	x	v	xw	f P8E8BD
aY E9B8E9> /Q	;0	a	9	C978vv	9>7 i	3PNa	4	P@t x	f	u	U	x	v	xw	f P8E8BE
aY E9B8E9B /Q	;0	a	9	C978vv	99A i	3PDa	4	P@t x	f	u	U	x	v	xw	f P8E8C8
aY E9B8E9E /Q	;0	a	9	C978vv	99749>7 i	3Ni i8PNa	4	P@t x	f	u	U	x	v	xw	f P8E8C>
aY E9B8E;7 /Q	;0	a	9	C978vv	99A i	3PDa	4	P@t x	f	u	U	x	v	xw	f P8E8CA
aY E9B8E;9 /Q	;0	a	9	C978vv	99A i	3PDa	4	P@t x	f	u	U	x	v	xw	f P8E8CB
aY E9B8E;; /Q	;0	a	9	C978vv	99A i	3PDa	4	P@t x	f	u	U	x	v	xw	f P9DD;;
aY E9B8E;A /Q	;0	a	9	C978vv	9>7 i	3PNa	4	P@t x	f	u	U	x	v	xw	f P987DC
aY E9B8E;D /Q	;0	a	9	C978vv	97A i	3Nci	4	P@t x	f	u	U	x	v	xw	f P8E8CE
aY E9B8E>7		a	9	C978vv	99749>7 i	3Ni i8PNa	4	P@t x	f	u	U	x	v	xw	f P9DD;>
aY E9B8E>8 /Q	>0	a	9	C978vv	97A i	3Nci	4	P@t x	f	u	U	x	v	xw	f P9A>C9
aY E9B8EBD		a	9	C978vv	99A i	3PDa	4	P@t x	f	u	U	x	v	xw	f P9DD>8
aY E9B8EBE		a	9	C978vv	99A49>7 i	3PDa8PNa	4	P@t x	f	u	U	x	v	xw	f P9DD>9

GZKMU 5	43237	UN	382==
GcUX 5	43237	ZU_XU -U 833,	34234
HUcKX	34235	_TCS UM	3=235
KI UT0	43234	eKZXUY	3=23<

DC48>B>77477

M	9416 8
N4	4715 3
N	:913 3
P	==1 3
	75É<3

MWWWdf f b

7D48>B>77477

613 3		MJI V
513 3		I X V
713 3		I X V

GDC

HzÄwnl ' I ntÖ0 8: 1333nx 6 azvîx py op´ Qzwmpyx °wp 8: 1333nx 6 azvîx p op w nl@B o° ' t°ßzy 8: 1333nx 6 azwnl@bl o ' t°ß y 8: 1333nx 6 azvîx p nl x p´l ' t°ßzyp 8: 1333nx 6

aY E;;5E88 /Q	B aY E;>XM0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;DBBB
aY E;;5E884E8;3E8A3E8B /a Y E;>XM0		S	9	A8;9vv				P@t x	f	u	U	x	v	xw	Y b8C77>
aY E;;5E89 /Q	B aY E;>XM0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;DBBC
aY E;;5E8; /Q	B aY E;>XM0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;DBBD
aY E;;5E8A /Q	B aY E;>XM0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;DBBE
aY E;;5E8B /Q	B aY E;>XM0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;DBC7
aY E;>5E89		S	9	A8;9vv				P@t x	f	u	U	x	v	xw	Y b;C77>
aY E;>5E89 /Q	B0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;C7E;
aY E;>5EC> /Q	B0	S	9	A8;9vv	8C7 i	3NPG	4	P@t x	f	u	U	x	v	xw	f P9E;99
aY E;>5ECB /Q	B0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;C7EA
aY E;>5ECB3ECD		S	9	A8;9vv				P@t x	f	u	U	x	v	xw	Y bAC77>
aY E;>5ECD /Q	B0	S	9	A8;9vv	88A48C7 i	3GVa8NPG	4	P@t x	f	u	U	x	v	xw	f P;C7EB

OTJ_YZXOGR		_TCS UM738 NKGad	38246
_TCS UM	38246		

DC4>>>B77487

M : 31=3
N4 4: 188
N 9418 3
O 5163
P 44313 3
79É<3

-443=,

MWWWZN df f b

DuraBowl

7D4>>>B77477

6183 MJI V
5183 I X V
7133 MJI V

GDC LKZ-Ring

0n´pl°po ' zÄp´	0n´pl°po ' zÄp´	0n´pl°po ' zÄp´	0n´pl°po ' zÄp´	0n´pl°po ' zÄp´	
aY E; ; 5EA8 /Q	BaY E; > XMD	S 9	A8; 9vv	88A48C7 i 3GVa8NPG 4	P@l x f u U x v xw f P; DBC;
aY E; ; 5EA83EA9 /aY E; > XMD		S 9	A8; 9vv		P@l x f u U x v xw Y b9C77>
aY E; ; 5EA9 /Q	BaY E; > XMD	S 9	A8; 9vv	88A48C7 i 3GVa8NPG 4	P@l x f u U x v xw f P; DBC>
aY E; >5E88 /Q	B0	S 9	A8; 9vv	88A48; 7 i 3GVa8Gcc 4	P@l x f u U x v xw f P9D7EB
aY E; >5E8; /Q	B0	S 9	A8; 9vv	8AA48C7 i 3NGG8NPG 4	P@l x f u U x v xw f P9D7EC
aY E; >5EC8 /Q	B0	S 9	A8; 9vv	88A48; 7 i 3GVa8Gcc 4	P@l x f u U x v xw f P; >9A8
aY E; >5EC9 /Q	B0	S 9	A8; 9vv	8C7 i 3NPG 4	P@l x f u U x v xw f P; >9A9
aY E; A5E88 /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBAB
aY E; A5E884E8>3EA84EA> /aY E; B XMD		S 9	A8; 9vv		P@l x f u U x v xw Y bBC77>
aY E; A5E89 /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBAC
aY E; A5E8; /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBAD
aY E; A5E8> /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBAE
aY E; A5EA8 /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBB9
aY E; A5EA9 /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBB;
aY E; A5EA; /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBB>
aY E; A5EA> /Q	BaY E; B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; DBBA
aY E; B5E87		S 9	A8; 9vv		P@l x f u U x v xw Y bCC77>
aY E; B5E87 /Q	B0	a 9	CBEDvv	8CA4997 i 3NPe8Ni i 4	P@l x f u U x v xw f P; >E>A
aY E; B5E89 /Q	B0	a 9	CBEDvv	8CA4997 i 3NPe8Ni i 4	P@l x f u U x v xw f P9CB7E
aY E; B5E8A /Q	B0	a 9	CBEDvv	99749B7 i 3Ni i 8PVS 4	P@l x f u U x v xw f P; 79BA
aY E; B5E8B /Q	B0	a 9	CBEDvv	9; A49B7 i 3PND8PVS 4	P@l x f u U x v xw f P9CB87
aY E; B5E8E /Q	B0	a 9	CBEDvv	99749B7 i 3Ni i 8PVS 4	P@l x f u U x v xw f P; >E>B
aY E; B5E8E3E9;		S 9	A8; 9vv		P@l x f u U x v xw Y bDC77>
aY E; B5E9; /Q	B0	a 9	CBEDvv	99749B7 i 3Ni i 8PVS 4	P@l x f u U x v xw f P; AC>A
aY E; B5EC8 /Q	B0	a 9	CBEDvv	9774997 i 3VcN8Ni i 4	P@l x f u U x v xw f P; 99; 7
aY E; B5EC9 /Q	B0	a 9	CBEDvv	99749B7 i 3Ni i 8PVS 4	P@l x f u U x v xw f P; 999E
aY E; B5EC; /Q	B0	a 9	CBEDvv	997 i 3Ni i 4	P@l x f u U x v xw f P; 99; 8
aY E; B5ECA		S 9	A8; 9vv		P@l x f u U x v xw Y bEC77>
aY E; B5ECA /Q	B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; C878
aY E; B5ECC		S 9	A8; 9vv		P@l x f u U x v xw Y bEC77>48
aY E; B5ECC /Q	B0	a 9	CBEDvv	8CA49B7 i 3NPe8PVS 4	P@l x f u U x v xw f P; C879
aY E; B5ED7 /Q	B0	a 9	CBEDvv	99749B7 i 3Ni i 8PVS 4	P@l x f u U x v xw f P; >9AC

GI ZXUY S V7 2S V8	3: 244	OTZKMXU -U 883,	35246
GTZUY	3: 245 4524<	OTZU_XU	44246
GXUI Y	34246	Yp´tp° 733	34246
GZKMJ 6	37246	Yp´tp° 833	34247
KI UT0 5	37246	_TCS UM	38246

OTJ_YZX0GR

DC4>>>B77477

M	:31=3
N4	4:188
N	9418 3
O	5163
P	443133
	79É<3

-443==,

MWWWZN df f b

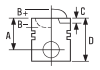
7D4>>>B77477

6183		MJI V
5183		I X V
7183		MJI V

GDC LKZ-Ring

HzÄwnl ' I ntfÖ8=16: 3nx 6	azvÞx py op´ Qzwnpyx °wp 8=16: 3nx 6	azvÞx p op w nl ®8 o° ' t°ßzy 8=16: 3nx 6	azwnl ®bl o ' t°ß y 8=16: 3nx 6	azvÞx p nl x p´l ' t°ßzyp 8=16: 3nx 6
aY ; B75E88	a 9 DC97vv	89A i 3GcD 4	P@l x f u U x v xw	f PCE79
aY ; B75E89	a 9 DC97vv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8DB
aY ; B75E8>	a 9 DC97vv	8>8 i 3GI N 4	P@l x	f PABAD
aY ; B75E8A	a 9 DC97vv	8>8 i 3GI N 4	P@l x	f PAEEB
aY ; B75E8B	a 9 DC97vv	89A i 3GcD 4	P@l x	f PABAE
aY ; B75E8C	a 9 DC97vv	89A i 3GcD 4	P@l x	f PAEEC
aY ; B75E8D	a 9 DC97vv	89A i 3GcD 4	P@l x	f PCDE>
aY ; B75E; 8	a 9 DC97vv	8>8 i 3GI N 4	P@l x	f PB9BE
aY ; B75E; ;	a 9 DC97vv	89A i 3GcD 4	P@l x	f PB9C7
aY ; B75E; >	a 9 DC97vv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8DD
aY ; B75E; B	a 9 DC9Avv	89A i 3GcD 4	P@l x	f P8BBDD
aY ; B75E; C	a 9 DC9Avv	89C i 3GcN 4	P@l x	f P8BBDE
aY ; B75E; D	a 9 DC9Avv	89C i 3GcN 4	P@l x	f P8BBE7
aY ; B75E; E	a 9 DC97vv	89A i 3GcD 4	P@l x	f PD8EA
aY ; B75E>7	a 9 DC9Avv	89C i 3GcN 4	P@l x	f P8BBE8
aY ; B75E>8	a 9 DC9Avv	8>8 i 3GI N 4	P@l x	f P8BBED
aY ; B75E>9	a 9 DC9Avv	89C i 3GcN 4	P@l x	f P8BBE9
aY ; B75E>;	a 9 DC9Avv	89C i 3GcN 4	P@l x	f P8BBE;
aY ; B75E>>	a 9 DC9Avv	89C i 3GcN 4	P@l x	f P8BBE>
aY ; B75E>B	a 9 DC9Avv	89C i 3GcN 4	P@l x	f P8BBEA
aY ; B75E>C	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8DE
aY ; B75E>D	a 9 DC9Avv	89A i 3GcD 4	P@l x	f P8BBEB
aY ; B75E>E	a 9 DC9Avv	89A i 3GcD 4	P@l x	f P8BBEC
aY ; B75EA>	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8E7
aY ; B75EAA	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8E8
aY ; B75EAB	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8E9
aY ; B75EAE	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8E;
aY ; B75EC>	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8E>
aY ; B75ECB	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8EA
aY ; B75ECD	a 9 DC9Avv	89A48>8 i 3GcD8GI N 4	P@l x	f P9; 8EB
aY ; B75ED7	a 9 DC97vv	8>8 i 3GI N 4	P@l x	f P8C797
aY ; B75ED8	a 9 DC97vv	8>8 i 3GI N 4	P@l x	f P8C798
aY ; B75ED>	a 9 DC97vv	8A> i 3NGD 4	P@l x f u	f P8C799
aY ; B75EDA	a 9 DC97vv	8>8 i 3GI N 4	P@l x f u	f P8C79>
aY ; B75EDB	a 9 DC97vv	8A> i 3NGD 4	P@l x f u	f P8C79;

U 635 3829= 452 7 UL 342<6



DC48CB>7C477 *mT m*

M	<8163
N4	5513 3
N	9813 3
O	31 t 3
P	4661 63
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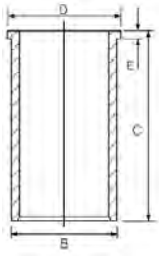
df

7D48CB>77487

6183		SURV
6133		SUV
8183		IXV

8>479>9>8477



N 454133 **O** 586183 **P** 459133 **Q** 9133

a Y >785E7A	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PAC; 7**
a Y >785E7B	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PB7B9**
a Y >785E7C	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f P8BE>9**
a Y >785E7D	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f P8BE>;**
a Y >785E7E	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PACBC**
a Y >785E89	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PCDEA**
a Y >785E8;	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f P8BE>>**
a Y >785E8>	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PAC9E**
a Y >785E8A	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PB7B8**
a Y >785E8B	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PB7EE**
a Y >785E8C	a 9	**EAC9vv**	**8DD i**	**3Wa**	4	**P@ x**	**f u**	**f P8BE>E**
a Y >785E8D	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PD88D**
a Y >785E8E	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PEAEB**
a Y >785E98	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f P8BE>A**
a Y >785E99	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f P8BE>B**
a Y >785E9;	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PB7D8**
a Y >785E9A	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PD99E**
a Y >785E9B	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PEAEC**
a Y >785E9C	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f PEAED**
a Y >785E9D	a 9	**EAC9vv**	**8>8 i**	**3G N**	4	**P@ x**		**f P8BE>D**
a Y >795E7A	e 9	**89D77vv**	**8DD i**	**3Wa**	4	**P@ x**		**f PD8CE**
a Y >795E7B	e 9	**89D77vv**	**8DD i**	**3Wa**	4	**P@ x**		**f PAD8>**
a Y >795E7C	e 9	**89D77vv**	**8DD i**	**3Wa**	4	**P@ x**		**f PCDEB**
a Y >795E87	e 9	**89D77vv**	**8CB i**	**3NSD**	4	**P@ x**		**f PACA9**
a Y >795E89	e 9	**89D77vv**	**8DD i**	**3Wa**	4	**P@ x**		**f PACAD**
a Y >795E8;	e 9	**89CB7vv**	**8CC i**	**3NSD**	4	**P@ x**		**f P8CD7;**
a Y >795E8>	e 9	**89D77vv**	**8CB i**	**3NSD**	4	**P@ x**		**f PD9; 7**
a Y >795E8B	e 9	**89D77vv**	**8DD i**	**3Wa**	4	**P@ x**		**f PACED**
a Y >795E8C	e 9	**89CB7vv**	**8CC i**	**3NSD**	4	**P@ x**		**f P8CD7>**
a Y >795E8E	e 9	**89D77vv**	**8CB i**	**3NSD**	4	**P@ x**		**f PD8A>**
a Y >795E98	e 9	**89CB7vv**	**8CC i**	**3NSD**	4	**P@ x**		**f P8CD7A**
a Y >795E9;	e 9	**89D77vv**	**8CB i**	**3NSD**	4	**P@ x**		**f PD8D;**
a Y >795E9>	e 9	**89D77vv**	**8DD i**	**3Wa**	4	**P@ x**		**f PB9E8**
a Y >795E9A	e 9	**89CB7vv**	**8DD i**	**3Wa**	4	**P@ x**		**f P8CD7B**
a Y >795E9B	e 9	**89D77vv**	**8DD i**	**3Wa**	4	**P@ x**		**f PB9EB**
a Y >795E9C	e 9	**89D77vv**	**8CB i**	**3NSD**	4	**P@ x**		**f PEB7B**
a Y >795E9D	e 9	**89D77vv**	**8CB i**	**3NSD**	4	**P@ x**		**f PEB7C**
a Y >7; 5E8A	GD 9	**8AEA; vv**	**9; B i**	**3PND**	4	**P@ x**		**f PD8D7**
a Y >7; 5E8B	GD 9	**8AEA; vv**	**9; A i**	**3PND**	4	**P@ x**		**f PAD8B**
a Y >7; 5E8C	GD 9	**8AEA; vv**	**9; B i**	**3PND**	4	**P@ x**		**f P8BEA;**

a Y >7; 5E8D	GD	9	8AEA; vv	9; A i	3PND	4	P@t x		f PCDEC
a Y >7; 5E8E	GD	9	8AEA; vv	9; B i	3PND	4	P@t x		f P8BEA>
a Y >7; 5E; 7	GD	9	8AEA; vv	9; B i	3PND	4	P@t x		f P8BEAA
a Y >7; 5E; 8	GD	9	8AEA; vv	9; A i	3PND	4	P@t x		f PACAE
a Y >7; 5E; 9	GD	9	8AEA; vv	9; A i	3PND	4	P@t x		f PB8; ;
a Y >7; 5E; >	GD	9	8AEA; vv	9; B i	3PND	4	P@t x		f P8BEAC
a Y >7>	GN	9	97E88vv	8D>49; B i	3NVD8PND	4	P@t x		Y b; D8B

I tfÖwyp´	372 6	U 636	432 7 392<6
OTJ_YZXÖR		Yp´tp° 533	342 :
TM	3<2 6 3=2=9	Z´I y°wyp´	452<<

DC48CBD77477

M	< 158
N4	56183
N	98133
P	46: 158
	79É=:

MWdf

7D48CBD77487

6133		I X V
6133		V
9133		I X V

8>4>A8BB7477
8>4>A9; 87477
8A4>AD887477
8>4>AD887477

N 473133 **O** 586133 **P** 485133 **Q** 4313: **R** 4133
N 473133 **O** 586133 **P** 485133 **Q** 4313: **R** 4133
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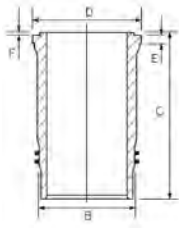

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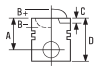
7 UÖ´tyr C NZ353	7 Xtyr otnsß°yr py C NZ353	7 Pztyß° ßz´t¿°p° C NZ353	7 P°yß° ß´tnl° ' I ´I C NZ353	7 Mzx x tyt I z´´poz C NZ353
Qmvßop° °pl w	Ynswp ßJtnsß°yr py pty	Qmvßop° uztyß°	QmvÖp w° °pw°	I zx ' ´pyop w r °I ´ytÜzyt

a Y >785EC7	a	9	EAC9vv	98; i	3N D	4	P@t x	f	u	U x v	xw	f PCE; D
a Y >785EC9	a	9	EAC9vv	9; 7 i	3PGP	4	P@t x	f	u	U x v	xw	f PACCC
a Y >785EC;	a	9	EAC9vv	977 i	3NcN	4	P@t x	f	u	U x v	xw	f PAC; ;
a Y >785ED>	a	9	EAC9vv	8D7 i	3NSV	4	P@t x	f	u	U x v	xw	f PD89C
a Y >785EDA	a	9	EAC9vv	977 i	3NcN	4	P@t x	f	u	U x v	xw	f PACA;
a Y >785EDB	a	9	EAC9vv	9; 7 i	3PGP	4	P@t x	f	u	U x v	xw	f PD8EE
a Y >785EDC	a	9	EAC9vv	9; 7 i	3PGP	4	P@t x	f	u	U x v	xw	f PB8B;
a Y >785EDE	a	9	EAC9vv	977 i	3NcN	4	P@t x	f	u	U x v	xw	f PB7BD
a Y >785EE7	a	9	EAC9vv	8D7 i	3NSV	4	P@t x	f	u	U x v	xw	f P8BEA7
a Y >785EE8	a	9	EAC9vv	977 i	3NcN	4	P@t x	f	u	U x v	xw	f PB7DB
a Y >785EE9	a	9	EAC9vv	977 i	3NcN	4	P@t x	f	u	U x v	xw	f P8C88;
a Y >785EE;	a	9	EAC9vv	9; 7 i	3PGP	4	P@t x	f	u	U x v	xw	f PB88;
a Y >785EE>	a	9	EAC9vv	8D7 i	3NSV	4	P@t x	f	u	U x v	xw	f PB7D>
a Y >795ED> /Q 80	e	9	89CB; vv	9D7 i	3PeG	4	P@t x	f	u	U x v	xw	f P889BD

S Q	452< 3=2=9	U 737	3=2=4 432==
U 637	3<2=5	YQ	3: 2< 3=2=9
U 673	342=4 452=8		



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N	991<7
P	465178
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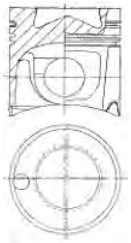
-458<4K,

MWTMdf fb



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6133		SUR
6133		SUV
7133		IXV

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8>4>A8BB7477
8>4>A9; 87477

N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
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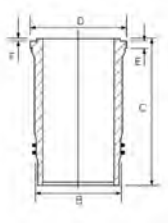

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48078<443033

Yßpw	Yß sw	Gntp´	Gnp´z	Gnntl tz
Ojnvßop° °pl w	Ynswlp ßJtnsß°yr py pty	Ojnvßop° uztyß°	Ojnvßöp wr° °pwr°	l zx ' ´pyop wp r °l ´ytÜtzyt
7 UO'tyr C NZ353	7 Xtyr otnsß°yr py C NZ353	7 Pztyß° ßz´tz°p° C NZ353	7 P°yß° ß ´tnl ° ' l ´l C NZ353	7 Mzx x tyt l l z´´poz C NZ353

a Y >785EC> /Q	80	a	9	EAC9vv	977	i	3NcN	4	P6t	x	f	u	U	x	v	xw	f PCE; E
a Y >785ECA /Q	80	a	9	EAC9vv	8D7	i	3NSV	4	P6t	x	f	u	U	x	v	xw	f PACA8
a Y >785ECC /Q	80	a	9	EAC9vv	977	i	3NcN	4	P6t	x	f	u	U	x	v	xw	f PAD78
a Y >785ECD /Q	80	a	9	EAC9vv	977	i	3NcN	4	P6t	x	f	u	U	x	v	xw	f PB7BA
a Y >785ECE /Q	80	a	9	EAC9vv	9; 7	i	3PGP	4	P6t	x	f	u	U	x	v	xw	f PACD7
a Y >785ED7 /Q	80	a	9	EAC9vv	977	i	3NcN	4	P6t	x	f	u	U	x	v	xw	f PB9E;
a Y >785ED8 /Q	80	a	9	EAC9vv	9; 7	i	3PGP	4	P6t	x	f	u	U	x	v	xw	f PB8B9
a Y >785ED9 /Q	80	a	9	EAC9vv	9; 7	i	3PGP	4	P6t	x	f	u	U	x	v	xw	f P8C87;
a Y >795EC7 /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PCE>7
a Y >795EC8 /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PACD;
a Y >795EC9 /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PACD>
a Y >795EC; /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PAD; 9
a Y >795EC> /Q	80	e	9	89CB; vv	9D749EA	i	3PeG8SDG	4	P6t	x	f	u	U	x	v	xw	f P8CD7C
a Y >795ECA /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PAD8D
a Y >795ECC /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PAD9B
a Y >795ECD /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PACDB
a Y >795ED9 /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PAD; 7
a Y >795ED; /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PB8D9
a Y >795EDA /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PAD7B
a Y >795EDB /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PB8A8
a Y >795EDC /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PB8CD
a Y >795EDE /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PAD7C
a Y >795EE7 /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PB8A;
a Y >795EEB /Q	80	e	9	89CB; vv	9D7	i	3PeG	4	P6t	x	f	u	U	x	v	xw	f PB898

KOYp´tp	342=3 452=9	U 737	3=2=4 432==
S Q	452< 3=2=9	YQ	3: 2< 3=2=9
U 736	3=236	ZU_XOYS U -U 683,	3<2=8

DC48CB777477

M < 163
N4 58133
N 9<153
P 466163
79É435

MWTMdf fb

7D48CB777487

6133 S UR
6133 I Q V
7133 I X V

8A4>AD887477
8>4>AD887477
8>4>A8BB7477
8>4>A9; 87477

N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
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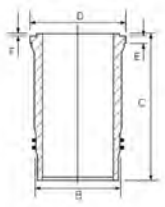

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Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
Ømvßop° °pl vß	Ynswtp ßJtnsß°yr py pty	Ømvßop° uztyß°	Ømvß Öp wr° °pwr°	l zx ' ´pyop wp r °l ´ytÜzyt
7 UO´tyr C NZ353	7 Xtyr otnsß°yr py C NZ353	7 Pztyß° ßz´t¿°p° C NZ353	7 P°yß° ß ´tnl ° ' l ´l C NZ353	7 Mzx x tyt l l z´´poz C NZ353

a Y >785ED;	a	9	**EAC9vv**	**8D7 i**	3NSV	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P8C87>**
a Y >795EEA	e	9	**89CB; vv**	**9D7 i**	3PeG	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P889BC**
a Y >7; 5E87	GD	9	**8AEA; vv**	**8D>49; B i**	3NVD8PNG	4	**P Øl x**					**f P9DBEB**
a Y >7; 5E; ;	GD	9	**8AEA; vv**	**9B8 i**	3PVV	4	**P Øl x**					**f P8BEAB**
a Y >7; 5E; A	GD	9	**8AEA; vv**	**9; B i**	3PND	4	**P Øl x**					**f PB9EE**
a Y >7> M	GN	9	**97E88vv**	**; DB i**	3/NV	4	**P Øl x**	**f**	**u**			**Y b>9B9**

l tfÖwyp´	372 6	U 673	3<2=5 3<2=8
ØTJ_YZXØGR		YvÖwyp´	342 =
TM	3<2 6 3=2=6		

8>4>A8BB7477
8>4>A9; 87477
8A4>AD887477
8>4>AD887477

N 473133 **O** 586133 **P** 485133 **Q** 4313: **R** 4133
N 473133 **O** 586133 **P** 485133 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
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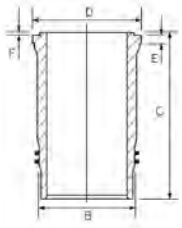

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Ømvßop° °pl vß	Ynswtp ßJtnsß°yr py pty	Ømvßop° uztyß°	Ømvß Öp wr° °pwr°	l zx ' ´pyop wp r °l ´ytÜzyt

a Y >C75E7; /Q	**B0**	a	9	**87BCCvv**	**9>74; 8A i**	3PNa8SNe	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P9EB79**
a Y >C75E7> /Q	**B0**	a	9	**87BCCvv**	**9>74; ; A i**	3PNa8SVa	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P; A777**
a Y >C75E7B /Q	**B0**	a	9	**87BCCvv**	**9>74; CA i**	3PNa8VGD	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P9CB7A**
a Y >C75E7D /Q	**B0**	a	9	**87BCCvv**	**9>74; 8A i**	3PNa8SNe	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P; 79B>**
a Y >C75E87 /Q	**B0**	a	9	**87BCCvv**	**9>74; ; A i**	3PNa8SVV	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P9D7D>**
a Y >C75E8; /Q	**B0**	a	9	**87BCCvv**	**9>74; ; A i**	3PNa8SVa	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P; ; E88**
a Y >C75E98 /Q	**B0**	a	9	**87BCCvv**	**9>74; ; A i**	3PNa8SVa	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P; A77C**
a Y >C75E9; /Q	**B0**	a	9	**87BCCvv**	**9>74; ; A i**	3PNa8SVa	4	**P Øl x**	**f**	**u**	**U x v**	**xw**	**f P; A77E**

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GTZUY	3: 245 4524<	Yp´tp° 733	3<249
GXUI Y	34246	Yp´tp° 833	34246

DC4>>>A77477

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N4	47155
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N	=<183
O	6183
P	438183
	88É<5

-€935: L39,

MWWWf b

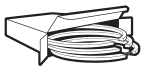
7D4>>>A77477

6183		MJI
5183		I X V
6183		I Q V

GDC LKZ-Ring

HzÄwnl ' I ntfÖ: 8t 73nx 6 S zyzYßppw Yßppw	azv9x py op´ Qzwppyx °wp : 8t 73nx 6 YßI sw	azv9x p op w nl @B o° ' t°ßzy : 8t 73nx 6 Gntp´	azwnl @bl o ' t°ß y : 8t 73nx 6 Gnp´z	azv9x p nl x p´l ' t°ßzyp : 8t 73nx 6 Gnntl tz

Y >CBEE98 /Y >>CS0		a	9	88EBOvv	8CA i	3NPe	4		bx		f	u U x v	xw	f P99C9E
Y >CBEE9A /Y >>CTS0		a	9	88EBOvv	8CC i	3NSG	4		bx		f	u U x v	xw	f P99C; 7
Y >CBEE9B /Y >>CTS0		a	9	88EBOvv	8CC i	3NSG	4		bx		f	u U x v	xw	f P99C; 8
Y >CBEE9C /Y >>CTS0		a	9	88EBOvv	8CC i	3NSG	4		bx		f	u U x v	xw	f P99C; 9
Y >CBEE; 7 /Q	9 Y >>C EXMS0	a	9	88EBOvv	9>7 i	3PNa	4		bx		f	u U x v	xw	f P8C>E7
a Y >>CE8B		a	9	88EBOvv	8DA i	3NVN	4		bx					f P8BEDC
a Y >9CE7A		a	9	88EBOvv	8A7 i	3NDS	4		P@l x					f PCEA8
a Y >9CE87		a	9	88EBOvv	8CC i	3NSD	4		P@l x					f PABC8
a Y >9CE88		a	9	88EBOvv	8CC i	3NSD	4		P@l x					f PB787
a Y >9CEA7		a	9	88EBOvv	97B i	3NeD	4		P@l x		f	u		f PCE>B
a Y >9CEA8		a	9	88EBOvv	97B i	3NeD	4		P@l x		f	u		f P8BEB>
a Y >9CEA9		a	9	88EBOvv	97B i	3NeD	4		P@l x		f	u		f P8BEBA
a Y >9CM		a	9	88EBOvv	97B i	3NeD	4		P@l x		f	u		Y bC7BA
a Y >9CXM		a	9	88EBOvv					P@l x		f	u U x v	xw	Y bBC7C
a Y >9E5EA8		V	9	EEC; vv	8CA i	3NPV	4		P@l x		f	u U x v	xw	f PD8B>
a Y >9E5EA9		V	9	EEC; vv	8CA i	3NPV	4		P@l x		f	u U x v	xw	f P8DD8D
a Y >9E5EA;		V	9	EEC; vv	8DB i	3NVD	4		P@l x		f	u		f PACAA
a Y >9E5EAA		V	9	EEC; vv	8DB i	3NVD	4		P@l x		f	u U x v	xw	f PB7DD
a Y >>C		a	9	88EBOvv	8>C i	3NDD	4		P@l x					Y bC7BC
a Y >>CE77		a	9	88EBOvv	8>C i	3NDD	4		P@l x					f P9DC99
a Y >>CE7A		a	9	88EBOvv	8A748CC i	3NDS8NSG	4		P@l x					f PCE>C
a Y >>CE7B		a	9	88EBOvv	8CC48D> i	3NSD8NVD	4		P@l x					f PABC>
a Y >>CE7C		a	9	88EBOvv	8CC48D> i	3NSD8NVD	4		P@l x					f PABC9
a Y >>CE7D		a	9	88EBOvv	8CC48D> i	3NSD8NVD	4		P@l x					f PB788
a Y >>CE87		a	9	88EBOvv	8CC48D> i	3NSD8NVD	4		P@l x					f PCEAB
a Y >>CE88		a	9	88EBOvv	8A748AC i	3NDS8NGS	4		P@l x					f PCEAC
a Y >>CE89		a	9	88EBOvv	8D> i	3NVD	4		P@l x					f PCEB8
a Y >>CE8; /Q	80	a	9	88EBOvv	8A748AC i	3NDS8NGS	4		P@l x					f PCE>D
a Y >>CE8> /Q	80	a	9	88EBOvv	8A748AC i	3NDS8NGS	4		P@l x					f PCEAD
a Y >>CE8A		a	9	88EBOvv	8DA i	3NVN	4		P@l x					f P8BEDB
a Y >>CE>C /Q	80	a	9	88EBOvv	997 i	3Ni i	4		P@l x		f	u U x v	xw	f P99D7A
a Y >>CE>D /Q	90	a	9	88EBOvv	997 i	3Ni i	4		P@l x		f	u U x v	xw	f P99D7B
a Y >>CE>E /Q	90	a	9	88EBOvv	8AC i	3NGS	4		P@l x		f	u U x v	xw	f P99D7C
a Y >>CEA7		a	9	88EBOvv	97B i	3NeD	4		P@l x		f	u		f PABC;
a Y >>CEA8		a	9	88EBOvv	97B i	3NeD	4		P@l x		f	u		f PB789
a Y >>CEA9 /Q	80	a	9	88EBOvv	97B i	3NeD	4		P@l x		f	u		f P8BEDD



aY >>CEA; /Q 80	a	9	88EBOvv	97B	i	3NeD	4	P@	x	f	u							f P8BEDE
aY >>CEB7 /Q 80	a	9	88EBOvv	8D>	i	3NVD	4	P@	x	f	u	U	x	v	xw			f P99D7D
aY >>CM6XM	a	9	88EBOvv	97B	i	3NeD	4	P@	x	f	u							Y bC77>
aY >>CXM	a	9	88EBOvv					P@	x	f	u	U	x	v	xw			Y bBC7A
aY >CA5EA7 /aY >>EM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u							f P9; 9>7
aY >CA5EA8 /aY >>EM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u							f P9; 9>8
aY >CA5EA9 /aY >>EM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u							f P9; 9>9
aY >CA5EA; /aY >>EM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u							f P9; 9>;
aY >CA5EA> /aY >>EM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u							f P9; 9>>
aY >CA5EC> /aY >>EXM0	V	9	EEC; vv	97A	i	3Nci	4	P@	x	f	u							f P9DCB8
aY >CA5ECB /aY >>EXM0	V	9	EEC; vv	97A	i	3Nci	4	P@	x	f	u							f P9DCB9
aY >CA5ECC /aY >>EXM0	V	9	EEC; vv	97A	i	3Nci	4	P@	x	f	u							f P9DCB;
aY >CA5ECD /aY >>EXM0	V	9	EEC; vv	9; A	i	3PND	4	P@	x	f	u							f P9DCB>
aY >CA5ECE /aY >>EXM0	V	9	EEC; vv	9; A	i	3PND	4	P@	x	f	u	U	x	v	xw			f P9; 9>A
aY >CA5ED9 /aY >>EXM0	V	9	EEC; vv	998	i	3PDD	4	P@	x	f	u	U	x	v	xw			f P9; 9>B
aY >CA5ED> /aY >>EXM0	V	9	EEC; vv	99>	i	3PDV	4	P@	x	f	u	U	x	v	xw			f P9DCBA
aY >CA5EDA /aY >>EXM0	V	9	EEC; vv	99>	i	3PDV	4	P@	x	f	u	U	x	v	xw			f P9DCBB
aY >CA5EDB /aY >>EXM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u	U	x	v	xw			f P9DCBC
aY >CA5EDE /aY >>EXM0	V	9	EEC; vv	998	i	3PDD	4	P@	x	f	u	U	x	v	xw			f P9DCBD
aY >CA5EE8 /aY >>EXM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u	U	x	v	xw			f P9DCBE
aY >CA5EE> /aY >>EXM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u	U	x	v	xw			f P9DCC7
aY >CA5EEC /aY >>EXM0	V	9	EEC; vv	8D>499>	i	3NVD8PDV	4	P@	x	f	u	U	x	v	xw			f P9DCC8
aY >CA5EED /aY >>EXM0	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u	U	x	v	xw			f P9DCC9
aY >CB5E8B /aY >>CM0	a	9	88EBOvv	98; 49>B	i	3Ni D8PPV	4	P@	x	f	u							f P9; D7C
aY >CB5E8C /aY >>CXM0	a	9	88EBOvv	9DC4; 87	i	3Pi D8SNN	4	P@	x	f	u	U	x	v	xw			f P9; D7B
aY >CB5EA7 /aY >>CM0	a	9	88EBOvv	98A	i	3N N	4	P@	x	f	u							f P9; D7E
aY >CB5EC8 /Q 9 aY >>CXM0	a	9	88EBOvv	9B>	i	3PVi	4	P@	x	f	u	U	x	v	xw			f P9; 99C
aY >CB5EC9 /Q 9 aY >>CXM0	a	9	88EBOvv	9B>	i	3PVi	4	P@	x	f	u	U	x	v	xw			f P9; 99D
aY >CB5EC; /Q 9 aY >>CXM0	a	9	88EBOvv	9B>	i	3PVi	4	P@	x	f	u	U	x	v	xw			f P9; 99E
aY >CB5ECC /Q 9 aY >>CXM0	a	9	88EBOvv	9B>	i	3PVi	4	P@	x	f	u	U	x	v	xw			f P9; 9; 7
aY >CB5ECD /Q 9 aY >>CXM0	a	9	88EBOvv	9B>	i	3PVi	4	P@	x	f	u	U	x	v	xw			f P9; 9; 8
aY >CB5ECE /Q 9 aY >>CXM0	a	9	88EBOvv	9B>	i	3PVi	4	P@	x	f	u	U	x	v	xw			f P9; 9; 9
aY >CB5ED7 /Q 9 aY >>CXM0	a	9	88EBOvv	9AC	i	3PVD	4	P@	x	f	u	U	x	v	xw			f P9; 9; ;
aY >CB5ED8 /aY >>CXM0	a	9	88EBOvv	9AC	i	3PVD	4	P@	x	f	u	U	x	v	xw			f P9; 9; >
aY >CB5ED9 /aY >>CXM0	a	9	88EBOvv	9AC	i	3PVD	4	P@	x	f	u	U	x	v	xw			f P9; 9; A
aY >CB5ED; /Q 9 aY >>CXM0	a	9	88EBOvv	9AC49B7	i	3PVD8PVS	4	P@	x	f	u	U	x	v	xw			f P9; 9; B
aY >CB5EDA /Q 8 aY >>CXM0	a	9	88EBOvv	9B8	i	3PVV	4	P@	x	f	u	U	x	v	xw			f P9; 9; C
aY >CB5EDD /aY >>CXM0	a	9	88EBOvv	9AC	i	3PVD	4	P@	x	f	u	U	x	v	xw			f P9; 9; D
aY >CB5EE8 /aY >>CXM0	a	9	88EBOvv	9AC	i	3PVD	4	P@	x	f	u	U	x	v	xw			f P9; 9; E
aY >CB5EE9 /aY >>CXM0	a	9	88EBOvv	9AC	i	3PVD	4	P@	x	f	u	U	x	v	xw			f P9; D7A
aY >DA5ED7	V	9	EEC; vv	998	i	3PDG	4	P@	x	f	u	U	x	v	xw			f P9DCC>
aY >DE5EB7 /Q 80	V	9	EEC; vv	8AA	i	3NGG	4	P@	x	f	u	U	x	v	xw			f P99D97
aY >DE5EB8 /Q 80	V	9	EEC; vv	8D>	i	3NVD	4	P@	x	f	u	U	x	v	xw			f P99D98

GMR-Xz°yoTz°p,	382=3	38238	U 6: 4	342=4	45235
HGY@ KTMOTK			U 733	34235	45239
I OZGXU-U 863,	37233		U 738	452<7	
I UTKI ZU-U 678,	44234		U 73:	362<	44234
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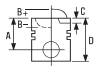

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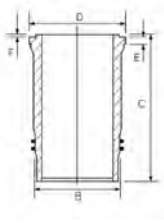
N 477183 **O** 5: 3183 **P** 4861<3 **Q** =1=5 **R** 4183



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a Y ; ; A5E87	a 9	88AD8vv	8CB i 3NPi 4	P0l x	f P9D>AC
a Y ; ; A5E; 7	a 9	88AD8vv	8A> i 3NDi 4	P0l x	f P9D>AD
a Y ; ; A5E; 9	a 9	88AD8vv	8CB i 3NPi 4	P0l x	f P9D>AE
a Y ; >A5E87 /a Y ; AA0	a 9	88AD8vv	8CC i 3NSG 4	P0l x	f P9DAEE
a Y ; >A5E89 /a Y ; AA0	a 9	88AD8vv	8CC i 3NSG 4	P0l x	f P9DB77
a Y ; >A5E8> /a Y ; AA0	a 9	88AD8vv	87; 48; A i 3GSD8GeS 4	P0l x	f P9DB79
a Y ; >A5E8A /a Y ; AA0	V 9	EBA8vv	8>8 i 3GI N 4	P0l x	f P9DB7;
a Y ; >A5E8E /a Y ; AA0	V 9	EBA8vv	88>489C i 3GW/8GcP 4	P0l x	f P9DB7>
a Y ; >A5E; 9 /a Y ; AA0	a 9	88AD8vv	8>C i 3NDD 4	P0l x	f P9DB7A
a Y ; >A5E; ; /a Y ; AA0	a 9	88AD8vv	8; C i 3Gea 4	P0l x	f P9DB7B
a Y ; >A5E; B /a Y ; AA0	a 9	88AD8vv	8A> i 3NDi 4	P0l x	f P9DB7C
a Y ; >A5E; C /a Y ; AA0	a 9	88AD8vv	8CC i 3NSG 4	P0l x	f P9DB7D
a Y ; >A5E>8 /a Y ; AA0	V 9	EBA8vv	89A i 3GcD 4	P0l x	f P9DB; B
a Y ; >A5E>9 /a Y ; AA0	V 9	EBA8vv	8>8 i 3GI N 4	P0l x	f P9DB; C
a Y ; >A5E>A /a Y ; AA0	V 9	EBA8vv	89A i 3GcD 4	P0l x	f P9DB; D
a Y ; >A5E>B /a Y ; AA0	V 9	EBA8vv	8>8 i 3GI N 4	P0l x	f P9DB; E
a Y ; >A5E>C /a Y ; AA0	V 9	EBA8vv	8; 9 i 3GeD 4	P0l x	f P9DB>7
a Y ; >A5E>E /a Y ; AA0	V 9	EBA8vv	8A7 i 3NDS 4	P0l x	f P9DB>8
a Y ; >A5EC9 /a Y ; AA0	V 9	EBA8vv	8>; i 3GI S 4	P0l x	f P9DB>;
a Y ; >A5EC; /a Y ; AA0	V 9	EBA8vv	8>C i 3NDD 4	P0l x	f P9DB>>
a Y ; >A5ECA /a Y ; AA0	V 9	EBA8vv	8>; i 3GI S 4	P0l x	f P9DB>A
a Y ; >C5E8A /a Y ; AA0	V 9	EBA8vv	8>8 i 3GI N 4	P0l x	f P9DBA9
a Y ; >C5E>9 /a Y ; AA0	V 9	EBA8vv	8>C i 3NDD 4	P0l x	f P9DBA;
a Y ; >C5E>; /a Y ; AA0	V 9	EBA8vv	8>C i 3NDD 4	P0l x	f P9DBA>
a Y ; AA5E87	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f P8BBBD
a Y ; AA5E88	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f P8BBBE
a Y ; AA5E89	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f P8BBC7
a Y ; AA5E8;	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f P8BBC8
a Y ; AA5E8>	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f P8BBC9
a Y ; AA5E8A	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f PCDE9
a Y ; AA5E8B	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f P99C>B
a Y ; AA5E8D	a 9	88AD8vv	8BE i 3NPD 4	P0l x	f P8BBC;
a Y ; AA5EB7	a 9	88AD8vv	8CB i 3NSD 4	P0l x	f PAD8;
a Y ; AA5EB8	a 9	88AD8vv	8AA i 3NGD 4	P0l x	f P8BBCA
a Y ; AA5EB9	a 9	88AD8vv	8CC i 3NSD 4	P0l x	f P8BBCB
a Y ; AA5EB;	a 9	88AD8vv	8CB i 3NSD 4	P0l x	f PAD89
a Y ; AA5EB>	a 9	88AD8vv	8CC i 3NSD 4	P0l x	f P8BBCC
a Y ; AA5EBB	a 9	88AD8vv	8AA i 3NGD 4	P0l x	f P8BBCD

a Y ; AA5EBC	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f PCDE;
a Y ; AA5EC7	a	9	88AD8vv	8E8	i	3NaD	4	P@t x	f P8BBCE
a Y ; AA5EC9	a	9	88AD8vv	8; B	i	3GeV	4	P@t x	f P8BBD7
a Y ; AA5EC;	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f P8BBD8
a Y ; AA5EC>	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f P8BBD9
a Y ; AA5ECA	a	9	88AD8vv	8CB	i	3NSD	4	P@t x	f PB8B7
a Y ; AA5ECB	a	9	88AD8vv	8CB	i	3NSD	4	P@t x	f PB8AE
a Y ; AA5ECD	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f P8BBD>
a Y ; AA5ECE	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f P8BBDA
a Y ; AA5ED7	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f P8BBDB
a Y ; AA5ED8	a	9	88AD8vv	8D>	i	3NVD	4	P@t x	f P8BBDC
a Y ; AA5ED9	a	9	88AD8vv	8D>	i	3NVD	4	P@t x	f P8BBC>
a Y ; AA5ED;	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f PAD88
a Y ; AA5ED>	a	9	88AD8vv	8CC	i	3NSD	4	P@t x	f PB8AD

GMR-Xz°yoTz°p,	342 6		U 697		342<8
NVT-RzyrTz°p,	342 9	382=:	Z52R	342B=	342=8

DC48CBE77477
DC48CBE88477 *Trim*

M =3159
N4 5: 133
N : 3133
O 4143
P 494159
7<É43<

df

7D48CBE774; 7

6183 I Q V
6183 V
6183 V
9183 I X V

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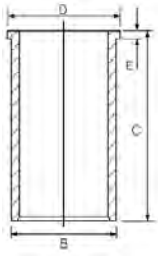

GC =3193/HOC 591<33/J C 4941393

a Y ; >A5E8; /a Y ; AA0	a	9	88AD8vv	987	i	3Nea	4	P@t x	f u	f P9DB78
a Y ; >A5EB7 /a Y ; AA M0	a	9	88AD8vv	987	i	3Nea	4	P@t x	f u	f P9DB>9
a Y ; AA5EBD	a	9	88AD8vv	8E8	i	3NaD	4	P@t x		f P9; 8DA
a Y ; AA5EBE	a	9	88AD8vv	97B	i	3NeD	4	P@t x	f u	f PD989
a Y ; AA5ECC	a	9	88AD8vv	97A	i	3NcV	4	P@t x	f u	f P8BBD;

NVT-RzyrTz°p,	372=6	372=<	Z52R	342B=	342=8

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8>479ADE8477 N 467139 O 5< 183 P 46<133 Q 8183
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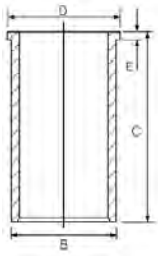


a Y >985E7A	a	9	87EB>vv	8AE	i	3NGa	4	P@t x	f PACEE
a Y >985E7B	a	9	87EB>vv	8AE	i	3NGa	4	P@t x	f PD897
a Y >985E7C	a	9	87EB>vv	8AE	i	3NGa	4	P@t x	f PB8; E

a Y >985E7D	a	9	87EB>vv	8AE i	3NGa	4	P@l x		f PCDED
a Y >985E7E	a	9	87EB>vv	8AE i	3NGa	4	P@l x		f P8C7AB
a Y >985E87	a	9	87EB>vv	8AE i	3NGa	4	P@l x		f P8BEAD
a Y >995E7A	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PACB7
a Y >995E7B	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PB7E;
a Y >995E7C	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PAD7A
a Y >995E7D	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PCE77
a Y >995E7E	e	9	8>B8Dvv	8D> i	3NVD	4	P@l x		f PD8AC
a Y >995E87	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PB8; 9
a Y >995E88	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PB8>7
a Y >995E89	e	9	8>B8Dvv	8D> i	3NVD	4	P@l x		f PD9; 8
a Y >995E8;	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PB8>E
a Y >995E8>	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PAD9D
a Y >995E8A	e	9	8>B8Dvv	8D> i	3NVD	4	P@l x		f P8BEAE
a Y >995E8B	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f P8C388
a Y >995E8C	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f P8879E
a Y >995E8D	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f P8BEB7
a Y >995E8E	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PAD98
a Y >995E97	e	9	8>B8Dvv	8D> i	3NVD	4	P@l x		f PD9>E
a Y >995E98	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f PB8C;
a Y >995E99	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f P8BEB8
a Y >995E9;	e	9	8>B8Dvv	97B i	3NeD	4	P@l x		f P8BEB9
a Y >9; 5E7A	GD	9	8D9C; vv	9B8 i	3PVV	4	P@l x		f PACB9
a Y >9; 5E7B	GD	9	8D9C; vv	9B8 i	3PVV	4	P@l x	f u	f PB89B
a Y >9; 5E7C	GD	9	8D9C; vv	9B8 i	3PVV	4	P@l x	f u	f PB9DE
a Y >9; 5E7D	GD	9	8D9C; vv	9B8 i	3PVV	4	P@l x	f u	f PB7EB
a Y >9; 5E7E	GD	9	8D9C; vv	9B8 i	3PVV	4	P@l x		f P8BEB;
a Y >9>E77	GN	9	98E9Cvv	; 7E i	3SND	4	P@l x		f P8DD8A

I tÖtyp´	372 6	U 636	342<3 3=2<
Ppßtyp´	3=2=3 3=2=6	UN	342 3
TM	3<2 6 3=2=9	YQ	3: 2< 3=2=9
U 635	44297 452 8	e0Yp´tp	342<4 452=5

DC48D8C77477

M <4168
N4 57143
N : 3133
P 459168
79É==

+45<47K,

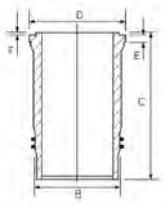
df

7D48D8C77477

6133 SURV
6133 SUV
7133 IXV

8A4>A88B7477
8>4>A88B7477
8A4>A97; 7477
8>4>A97; 7477

N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133



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DE48D8C774B8
< 04<4: 33033 .
480785363033

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a Y >985EA8	a	9	87EB>vv	8D> i	3NVD	4	P@l x	f u	f PCDEE
a Y >995E78	e	9	8>B8Dvv	9>; 49CB i	3PPD8PcV	4	P@l x	f u	f P8DEC;
a Y >995EA8	e	9	8>B8Dvv	9>; i	3PPD	4	P@l x	f u	f PCE78
a Y >995EA9	e	9	8>B8Dvv	9>; i	3PPD	4	P@l x	f u	f PACB8
a Y >995EA;	e	9	8>B8Dvv	9CB i	3PcV	4	P@l x	f u U x v xw	f PACB;

a Y >995EA>	e 9	8>B8Dvv	9>; i	3PPD 4	P@t x f u		f PB7EA
a Y >995EAA	e 9	8>B8Dvv	9CB i	3PcV 4	P@t x f u U x v xw		f PAD77
a Y >995EAB	e 9	8>B8Dvv	9>; i	3PPD 4	P@t x f u		f PB8; >
a Y >995EAC	e 9	8>B8Dvv	9>; i	3PPD 4	P@t x f u		f PEB8;
a Y >995EAD	e 9	8>B8Dvv	9>; i	3PPD 4	P@t x f u		f PEB8>
a Y >995EAE	e 9	8>B8Dvv	9CB i	3PcV 4	P@t x f u		f PB8>8
a Y >995EB;	e 9	8>B8Dvv	9>; i	3PPD 4	P@t x f u		f P8879D
a Y >9; 5EA7	GD 9	8D9C; vv	; BD i	3/DD 4	P@t x f u U x v xw		f PAD9C
a Y >9>5E78	GN 9	98E9Cvv	>>8 i	3aDD 4	P@t x f u U x v xw		f P8DD8B
a Y >9>5E785A87	GN 9	98E9Cvv	>>8 i	3aDD 4	P@t x f u U x v xw		f P8DD8C

I tfÖwyp´	442=4	YQ	3: 2< 3=2=9
TM	3<2 6 3=2=9	YvÖwyp´	3=2=3
U 636	3<2<3 372<=		

DC48CE; 774C7

M	<4168
N4	5873
N	: 3133
P	459168
	79É438

-45<57I ,

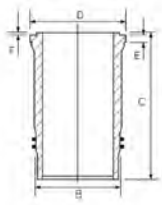
MWdf

7D48CE; 77487

6133		S UR
6133		I X V
7133		I X V

8A4>A88B7477
8>4>A88B7477
8A4>A97; 7477
8>4>A97; 7477

N 477183 O 586133 P 4861<3 Q 4313: R 4133
N 477183 O 586133 P 4861<3 Q 4313: R 4133
N 477183 O 586133 P 4861<3 Q =1=5 R 4133
N 477183 O 586133 P 4861<3 Q =1=5 R 4133



DE48CE; 774C7
< 04: =6330: 3 .
4807844930 33

DE48CE; 774C8
< 04: =6330: 3 .
4807853630 33

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
Gjmvßop° °pl vß	Ynswtp ßJtnsß°yr py pty	Gjmvßop° uztyß°	Gjmvßp wr° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt

a Y >>85EA7	a 9	87EB>vv	8E84977 i	3NaD8NcN 4	P@t x f u		f PABB8
a Y >>85EA8	a 9	87EB>vv	9>; i	3PPD 4	P@t x f u U x v xw		f PD8DC
a Y >>85EA;	a 9	87EB>vv	8E84977 i	3NaD8NcN 4	P@t x f u		f PAEEE
a Y >>85EB7	a 9	87EB>vv	9>; 49A7 i	3PPD8PSD 4	P@t x f u U x v xw		f PACC9
a Y >>85EB8	a 9	87EB>vv	9A7 i	3PSD 4	P@t x f u U x v xw		f P8BEC;
a Y >>85EB9	a 9	87EB>vv	9>; 49>E i	3PPD8PSD 4	P@t x f u U x v xw		f PB87>
a Y >>85ED8	a 9	87EB>vv	9>; 49>E i	3PPD8PSD 4	P@t x f u U x v xw		f PB87;
a Y >>85ED9	a 9	87EB>vv	9A7 i	3PSD 4	P@t x f u U x v xw		f PAD9>
a Y >>85ED;	a 9	87EB>vv	9>; 49>E i	3PPD8PSD 4	P@t x f u U x v xw		f PB; 99
a Y >>85EDA	a 9	87EB>vv	9A7 i	3PSD 4	P@t x f u U x v xw		f PB8CB
a Y >>95E78	e 9	8>B8Dvv	; 974; B9 i	3SPV8Si N 4	P@t x f u U x v xw		f P9DC8D
a Y >>95E>7	e 9	8>B8Dvv	9B7 i	3PVS 4	P@t x f u		f P8C8; 8
a Y >>95E>8	e 9	8>B8Dvv	9BE i	3Paa 4	P@t x f u		f P8BECD
a Y >>95E>9	e 9	8>B8Dvv	9B749BE i	3PVS8Paa 4	P@t x f u		f PACC>
a Y >>95E>;	e 9	8>B8Dvv	9BE i	3Paa 4	P@t x f u		f PACE;
a Y >>95E>>	e 9	8>B8Dvv	9B749BE i	3PVS8Paa 4	P@t x f u		f PACC;
a Y >>95E>A	e 9	8>B8Dvv	9BE i	3Paa 4	P@t x f u		f PAD9E
a Y >>95E>B	e 9	8>B8Dvv	9BB i	3Paa 4	P@t x f u		f PAD; 8
a Y >>95EA8	e 9	8>B8Dvv	; 97 i	3SPV 4	P@t x f u U x v xw		f PACBA
a Y >>95EA;	e 9	8>B8Dvv	; 974; 9E i	3SPV8SSc 4	P@t x f u U x v xw		f PAD8E
a Y >>95EA>	e 9	8>B8Dvv	9BE i	3Paa 4	P@t x f u		f P87EC9
a Y >>95EAA	e 9	8>B8Dvv	9BE i	3Paa 4	P@t x f u		f P87EC;
a Y >>95EAC	e 9	8>B8Dvv	9BB49BE i	3Paa8Paa 4	P@t x f u		f PB8D;

a Y >>95EAD	e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@l x	f	u		f PB9E7
a Y >>95EAE	e	9	8>B8Dvv	9BE i	3Paa	4	P@l x	f	u		f PB8B8
a Y >>95EB7	e	9	8>B8Dvv	9B749BE i	3PVS8PaV	4	P@l x	f	u		f PABB;
a Y >>95EB8	e	9	8>B8Dvv	9B749BE i	3PVS8PaV	4	P@l x	f	u		f PB778
a Y >>95EB;	e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@l x	f	u		f PAD79
a Y >>95EB>	e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@l x	f	u		f PB8>B
a Y >>95EBA	e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@l x	f	u		f PB9E9
a Y >>95EBB	e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@l x	f	u		f PB; 77
a Y >>95EBC	e	9	8>B8Dvv	9BE i	3Paa	4	P@l x	f	u		f P8CD7E
a Y >>95EBD	e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@l x	f	u		f PB8>C
a Y >>95EC7	e	9	8>B8Dvv	9B7 i	3PVS	4	P@l x	f	u		f P8C8; 9
a Y >>95EC8	e	9	8>B8Dvv	9BE i	3Paa	4	P@l x	f	u		f PACEA
a Y >>95EC9	e	9	8>B8Dvv	9BE i	3Paa	4	P@l x	f	u		f PB8; 8
a Y >>95ECB	e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@l x	f	u		f PB; 9;
a Y >>95ED7	e	9	8>B8Dvv	; 97 i	3SPV	4	P@l x	f	u	U x v xw	f PB8BE
a Y >>95ED9	e	9	8>B8Dvv	; 974; B9 i	3SPV8Si N	4	P@l x	f	u	U x v xw	f PACEB
a Y >>95ED;	e	9	8>B8Dvv	; 9E i	3SSc	4	P@l x	f	u	U x v xw	f PD9>D
a Y >>95EDA	e	9	8>B8Dvv	; 974; B9 i	3SPV8Si N	4	P@l x	f	u	U x v xw	f PACCA
a Y >>95EDE	e	9	8>B8Dvv	; B9 i	3Si N	4	P@l x	f	u	U x v xw	f PAD8C
a Y >>95EE8	e	9	8>B8Dvv	; B9 i	3Si N	4	P@l x	f	u	U x v xw	f P8C8; C
a Y >>95EE9	e	9	8>B8Dvv	; 974; B9 i	3SPV8Si N	4	P@l x	f	u	U x v xw	f PB; 78
a Y >>95EE;	e	9	8>B8Dvv	; B9 i	3Si N	4	P@l x	f	u	U x v xw	f PD9AE
a Y >>95EE>	e	9	8>B8Dvv	; B9 i	3Si N	4	P@l x	f	u	U x v xw	f PB8BA
a Y >>; 5E78	GD	9	8D9C; vv	; ; 8 i	3SVD	4	P@l x	f	u		f P9DC98
a Y >>; 5E>7	GD	9	8D9C; vv	; >7 i	3SaN	4	P@l x	f	u		f PD98>
a Y >>; 5ED7	GD	9	8D9C; vv	>89 i	3/aD	4	P@l x	f	u	U x v xw	f PD9A>
a Y >>>5E78	GN	9	98E9Cvv	; >>4>99 i	3Sae8VcS	4	P@l x	f	u		f P; BE; A

S Q	452< 3=2=9	U 663	342=3
TM	3<2 6 3=2=9	Yp´tp° 633	3=2=4 3523 5
U 636	442=8 3=2=5	YQ	3: 2< 3=2=9

DC48CE; 774BA
352=4/ Kyr 1955<56

M <4168
N4 5: 183
N 99193
P 459168
79É438

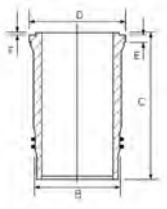
MWTMZN df

7D48CE; 77487

6133 S UR
6133 I X V
7133 I X V

8A4>A88B7477
8>4>A88B7477
8A4>A97; 7477
8>4>A97; 7477

N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133



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< 04: =633098 .
480784493033

DE48CE; 774BB
< 04: =633098 .
480785363033

DC48CE; 774DA
362=4 / Kyr 1955<57

M <4178
N4 5: 183
N 99193
P 459178
79É438

TMWWdf fb

7D48CE; 77487

6133 S UR
6133 I X V
7133 I X V

8A4>A88B7477
8>4>A88B7477
8A4>A97; 7477
8>4>A97; 7477

N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
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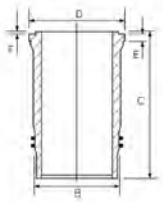

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DE48CE; 774DB
< 04: =6330<8 .
480785363033

DC48CE; 774E7
362=4 / Kyr 1955<57

M <4168
N4 5: 183
N 9914:
P 459168
79É438

-45<5: G534,

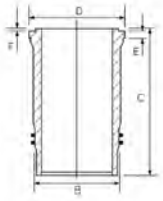
MWTMdf fb

7D48CE; 77487

6133 S UR
6133 I X V
7133 I X V

8A4>A88B7477
8>4>A88B7477
8A4>A97; 7477
8>4>A97; 7477

N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** 4313: **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133



DE48CE; 774E7
< 04: =6330=3 .
480784493033

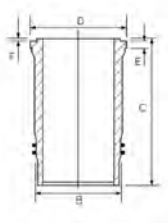
DE48CE; 774E8
< 04: =6330=3 .
480785363033

ap´°tzy Ätßs ozx po n´zÄy mzÄw	ap´°tzy x tßK´spmf´yr ty op´ S°wp	ap´°tzy l®n o x p op nsl x míp l ´´zyot	ap´°t y nzy nl mpÜ nzy®pÉl
Yßppw	Yßsw	Gntp´	Gnp´z
Qynwßop° °pl w	Ynswp ßJtnsß°yr py pty	Qynwßop° uztyß°	Qynwß°p w° °pw°

a Y >9; 5E78	GD	9	8D9C; vv	8D>4>8D i	3NVD8Vae	4	P Øt x						f P9DC7C
a Y >>75E>D /a Y >>9 MD	e	9	8>B8Dvv	9BE i	3Paa	4	P Øt x		f	u			f P8C89;
a Y >>75E>E /a Y >>9 MD	e	9	8>B8Dvv	9A7 i	3PSD	4	P Øt x		f	u			f P8C89>
a Y >>75EC> /a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P Øt x		f	u	U x v	xw	f P8C89A
a Y >>85EA9	a	9	87EB>vv	8E8 i	3NaD	4	P Øt x		f	u			f P8C89D
a Y >>9 M	e	9	8>B8Dvv	9BE i	3Paa	4	P Øt x		f	u			Y bC77B
a Y >>> XM	GN	9	98E9Cvv	>CD4B87 i	3/PD8ePD	4	P Øt x		f	u	U x v	xw	Y bBB>9
a Y >D85E79	a	9	87EB>vv	8AE i	3NGa	4	P Øt x						f P8CD8>
a Y >D85E7>	a	9	87EB>vv	8AE i	3NGa	4	P Øt x						f P8CD8A
a Y >D95E89	e	9	8>B8Dvv	97B i	3NeD	4	P Øt x						f P99D8B
a Y >D95E; 7	e	9	8>B8Dvv	97B i	3NeD	4	P Øt x						f P99D8C
a Y >D95E>7	e	9	8>B8Dvv	9BE i	3Paa	4	P Øt x		f	u			f P99D8D
a Y >D95E>8	e	9	8>B8Dvv	9BE i	3Paa	4	P Øt x		f	u			f P99D8E

Nüral® FITTED WITH GOETZE® RINGS

8A4>A88B7477 N 477183 O 586133 P 4861<3 Q 4313: R 4133
8>4>A88B7477 N 477183 O 586133 P 4861<3 Q 4313: R 4133
8A4>A97; 7477 N 477183 O 586133 P 4861<3 Q =1=5 R 4133
8>4>A97; 7477 N 477183 O 586133 P 4861<3 Q =1=5 R 4133



Ømvßop° °pl ßw	Ynswßp ßJtnsß°yr py pty	Ømvßop° uztyß	Ømvß°pwr° °pwr°	I zx ' ´pyop wpr °l ´ytÛzyt	
a Y >>75EC7 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f PACEC
a Y >>75EC8 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; C7 i 3/DP 4	P6ßx f u U x v xw		f PACDD
a Y >>75EC9 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f P8BEBD
a Y >>75EC; /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; C7 i 3/DP 4	P6ßx f u U x v xw		f PB89>
a Y >>75ECA /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; C7 i 3/DP 4	P6ßx f u U x v xw		f PAD; ;
a Y >>75ECB /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; C7 i 3/DP 4	P6ßx f u U x v xw		f PD99C
a Y >>75ECD /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f PACDC
a Y >>75ECE /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f PB8; D
a Y >>75ED7 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f PB8CE
a Y >>75ED8 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; C7 i 3/DP 4	P6ßx f u U x v xw		f PB8A9
a Y >>75ED9 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; C7 i 3/DP 4	P6ßx f u U x v xw		f PB8DA
a Y >>75ED; /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; C7 i 3/DP 4	P6ßx f u U x v xw		f PB; 7B
a Y >>75ED> /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f PB; 7A
a Y >>75EDA /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f PD9AB
a Y >>75EDB /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f P8BEBE
a Y >>75EDC /Q	8 a Y >>9 XMD	e 9 8>B8Dvv 9D7 i 3PeG 4	P6ßx f u U x v xw		f P8BEC7
a Y >>75EDD /Q	8 a Y >>9 XMD	e 9 8>B8Dvv 9D7 i 3PeG 4	P6ßx f u U x v xw		f P8C89B
a Y >>75EDE /Q	8 a Y >>9 XMD	e 9 8>B8Dvv 9D7 i 3PeG 4	P6ßx f u U x v xw		f P8BEC8
a Y >>75EE7 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv 9D7 i 3PeG 4	P6ßx f u U x v xw		f PD99A
a Y >>75EE8 /Q	8 a Y >>9 XMD	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f PB899
a Y >>85ED7		a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PCE>;
a Y >>85EDB /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PACCE
a Y >>85EDC /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PACD9
a Y >>85EDD /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PAD9A
a Y >>85EDE /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PAC; B
a Y >>85EE7 /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PB8CC
a Y >>85EE8 /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PB88D
a Y >>85EE9 /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PB; 79
a Y >>85EE; /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PB7BE
a Y >>85EE> /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f P8BEC>
a Y >>85EEA /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f P8BECA
a Y >>85EEB /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f PB88B
a Y >>85EEC /Q	80	a 9 87EB>vv 9; 7 i 3PGP 4	P6ßx f u U x v xw		f P8BECB
a Y >>85EED /Q	80	a 9 87EB>vv 9; 7 i 3PGP 4	P6ßx f u U x v xw		f PD999
a Y >>85EEE /Q	80	a 9 87EB>vv 9A7 i 3PSD 4	P6ßx f u U x v xw		f P8BECC
a Y >>95EEA /Q	80	e 9 8>B8Dvv ; 97 i 3SPV 4	P6ßx f u U x v xw		f P8BECE
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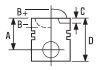
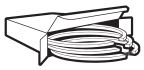

a Y >>95EEC /Q	80	e	9	8>B8Dvv	; C7	i	3/DP	4	P@t	x	f	u	U	x	v	xw	f PAD87
a Y >>95EED /Q	80	e	9	8>B8Dvv	; C7	i	3/DP	4	P@t	x	f	u	U	x	v	xw	f PB8AC
a Y >>95EEE /Q	80	e	9	8>B8Dvv	; C7	i	3/DP	4	P@t	x	f	u	U	x	v	xw	f P8CD87

NVT -RzyrTz°p,	442=4 45238	U 736	34236
S prIwyp´	342=6	U 737	342=4 452==
S Q	452=< 3=2=9	YQ	3: 2=< 3=2=9
U 637	342=3	ZU_XOYS U -U 683,	3<2=8
U 673	342=4 392=8	Z´I y°wyp´	452=<

DC48CE; 7748A

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N4 57163
N 991=3
P 459168
79É438

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7D48CE; 77487

6133 S UR
6133 I X V
7133 I X V

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8>4>A97; 7477
8A4>A88B7477
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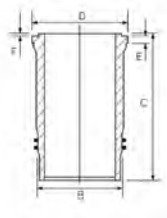

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4807853630 33

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Gynvßop° °pl w	Ynswp ßJtnsß°yr py pty	Gynvßop° uztyß°	GynvßÖp wr° °pwr°	I zx ' ´pyop wp r °I ´ytÜzyt

a Y >>A5E97 /Q	9 a Y >>8 XMD	a	9	87EB>vv	9A7	i	3PSD	4	P@t	x	f	u	U	x	v	xw	f PACD8
a Y >>A5E98 /Q	9 a Y >>8 XMD	a	9	87EB>vv	9A7	i	3PSD	4	P@t	x	f	u	U	x	v	xw	f PD977
a Y >>A5E99 /Q	9 a Y >>8 XMD	a	9	87EB>vv	9A7	i	3PSD	4	P@t	x	f	u	U	x	v	xw	f PD9A9
a Y >>A5E9; /Q	9 a Y >>8 XMD	a	9	87EB>vv	9A7	i	3PSD	4	P@t	x	f	u	U	x	v	xw	f PAC; C
a Y >>A5E9> /Q	9 a Y >>8 XMD	a	9	87EB>vv	8D7	i	3NSV	4	P@t	x	f	u	U	x	v	xw	f PACA>
a Y >>A5E9A /Q	9 a Y >>8 XMD	a	9	87EB>vv	8D7	i	3NSV	4	P@t	x	f	u	U	x	v	xw	f PD8EC
a Y >>A5E9B /Q	9 a Y >>8 XMD	a	9	87EB>vv	977	i	3NcN	4	P@t	x	f	u	U	x	v	xw	f PACCB
a Y >>A5E9C /Q	9 a Y >>8 XMD	a	9	87EB>vv	977	i	3NcN	4	P@t	x	f	u	U	x	v	xw	f PD9; A
a Y >>A5E9E /Q	9 a Y >>8 XMD	a	9	87EB>vv	9; 7	i	3PGP	4	P@t	x	f	u	U	x	v	xw	f PACCD
a Y >>A5E; 7 /Q	9 a Y >>8 XMD	a	9	87EB>vv	9; 7	i	3PGP	4	P@t	x	f	u	U	x	v	xw	f PB8B>
a Y >>A5E; 8 /Q	9 a Y >>8 XMD	a	9	87EB>vv	9; 7	i	3PGP	4	P@t	x	f	u	U	x	v	xw	f PB9ED
a Y >>A5E; ; /Q	9 a Y >>8 XMD	a	9	87EB>vv	977	i	3NcN	4	P@t	x	f	u	U	x	v	xw	f PB7C7
a Y >>A5E; > /Q	9 a Y >>8 XMD	a	9	87EB>vv	9A7	i	3PSD	4	P@t	x	f	u	U	x	v	xw	f P87EBE
a Y >>A5E; A /Q	9 a Y >>8 XMD	a	9	87EB>vv	98;	i	3N D	4	P@t	x	f	u	U	x	v	xw	f P87EC7
a Y >>A5E; B /Q	9 a Y >>8 XMD	a	9	87EB>vv	977	i	3NcN	4	P@t	x	f	u	U	x	v	xw	f PB87E
a Y >>A5E; C /Q	9 a Y >>8 XMD	a	9	87EB>vv	9; 7	i	3PGP	4	P@t	x	f	u	U	x	v	xw	f PB889
a Y >>A5E; D /Q	9 a Y >>8 XMD	a	9	87EB>vv	8D7	i	3NSV	4	P@t	x	f	u	U	x	v	xw	f PB7DC
a Y >>A5E; E /Q	9 a Y >>8 XMD	a	9	87EB>vv	9A7	i	3PSD	4	P@t	x	f	u	U	x	v	xw	f PB88C
a Y >>A5E>7 /Q	9 a Y >>8 XMD	a	9	87EB>vv	977	i	3NcN	4	P@t	x	f	u	U	x	v	xw	f PB8>D
a Y >>A5E>8 /Q	9 a Y >>8 XMD	a	9	87EB>vv	8D7	i	3NSV	4	P@t	x	f	u	U	x	v	xw	f PB9DD
a Y >>B5E97 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	; E7	i	3/PD	4	P@t	x	f	u	U	x	v	xw	f PACDE
a Y >>B5E99 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	; 97	i	3SPV	4	P@t	x	f	u	U	x	v	xw	f PD97C
a Y >>B5E9; /a Y >>9 XMD		e	9	8>B8Dvv	; 97	i	3SPV	4	P@t	x	f	u	U	x	v	xw	f P8BE; A
a Y >>B5E9> /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7	i	3PeG	4	P@t	x	f	u	U	x	v	xw	f PACDA
a Y >>B5E9A /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7	i	3PeG	4	P@t	x	f	u	U	x	v	xw	f PB897
a Y >>B5E9B /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7	i	3PeG	4	P@t	x	f	u	U	x	v	xw	f PAD; >
a Y >>B5E9C /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7	i	3PeG	4	P@t	x	f	u	U	x	v	xw	f PD97;
a Y >>B5E9D /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7	i	3PeG	4	P@t	x	f	u	U	x	v	xw	f PAD7D
a Y >>B5E9E /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7	i	3PeG	4	P@t	x	f	u	U	x	v	xw	f PB8AA

a Y >>B8E; 7 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7 i	3PeG	4	P@t x	f	u	U	x	v	xw	f PB8DB
a Y >>B8E; 8 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7 i	3PeG	4	P@t x	f	u	U	x	v	xw	f PD9AC
a Y >>B8E; 9 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;E7 i	3/PD	4	P@t x	f	u	U	x	v	xw	f PD9B7
a Y >>B8E; ; /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;E7 i	3/PD	4	P@t x	f	u	U	x	v	xw	f PAD97
a Y >>B8E; > /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7 i	3PeG	4	P@t x	f	u	U	x	v	xw	f P87EC>
a Y >>B8E; A /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f P8BED9
a Y >>B8E; B /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f PD9>C
a Y >>B8E; D /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	9D7 i	3PeG	4	P@t x	f	u	U	x	v	xw	f P87ECA
a Y >>B8E; E /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f PAD;A
a Y >>B8E>7 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f PB8DC
a Y >>B8E>8 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f P8BED;
a Y >>B8E>9 /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f PAD7E
a Y >>B8E>; /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f PD97>
a Y >>B8E>A /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;E7 i	3/PD	4	P@t x	f	u	U	x	v	xw	f PB8C8
a Y >>B8E>B /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;E7 i	3/PD	4	P@t x	f	u	U	x	v	xw	f PB89A
a Y >>B8E>D /Q	9 a Y >>9 XMD	e	9	8>B8Dvv	;97 i	3SPV	4	P@t x	f	u	U	x	v	xw	f PB8AB

S Q	452< 3=2=9	Yp´tp° 633	3=2=4
U 736	34236	YQ	3: 2< 3=2=9
U 737	3=2=4 432==	ZU_XOYS U -U 683,	3<2=8
UN	342 3		

DC48CE; 7747A

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N4 57133
N : 5193
P 459168
79É438

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MWWWdf f b

7D48CE; 77487

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6133 I X V
7133 I X V

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8A4>A88B7477
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N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
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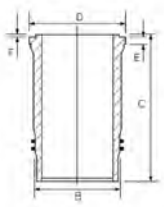

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6133 SUR
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8A4>A97; 7477
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N 477183 **O** 586133 **P** 4861<3 **Q** =1=5 **R** 4133
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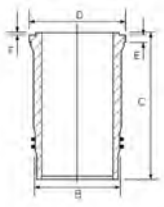

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Qmvßop° °pl vv	Ynswlp ßJ tnsß°yr py pty	Qmvßop° uztyß°	Qmvßöp vw° °pvw°	I zx ' ´pyop vp r °l ´ytÚzyt

a Y >>C8EA> /Q	80	a	9	88EBOvv	8D> i	3NVD	4	P@t x	f	u					f P87ECB
a Y >>C8EAA /Q	80	a	9	88EBOvv	8D> i	3NVD	4	P@t x	f	u					f P87ECC
a Y >>C8EAB /Q	80	a	9	88EBOvv	8D> i	3NVD	4	P@t x	f	u					f PCE>E
a Y >>C8EAC /Q	80	a	9	88EBOvv	8D> i	3NVD	4	P@t x	f	u					f PCEAE
a Y >>C8EAD /Q	80	a	9	88EBOvv	8D> i	3NVD	4	P@t x	f	u					f PCEB9
a Y >>C8EAE /Q	80	a	9	88EBOvv	8D> i	3NVD	4	P@t x	f	u					f PCEA>

a Y >>CED7 /Q	80	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P8877D
a Y >>CED8 /Q	80	a	9	88EBOvv	997 i	3PDD	4	P@t	x	f	u	U	x	v	xw	f PCEA7
a Y >>CED9 /Q	80	a	9	88EBOvv	997 i	3PDD	4	P@t	x	f	u	U	x	v	xw	f P8CD88
a Y >>CED; /Q	80	a	9	88EBOvv	997 i	3PDD	4	P@t	x	f	u	U	x	v	xw	f P8CD89
a Y >>CED> /Q	80	a	9	88EBOvv	997 i	3PDD	4	P@t	x	f	u	U	x	v	xw	f PCEAA
a Y >>CEDA /Q	80	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P87EDB
a Y >>CEDB /Q	80	a	9	88EBOvv	997 i	3PDD	4	P@t	x	f	u	U	x	v	xw	f PCEB7
a Y >>CEDC /Q	80	a	9	88EBOvv	997 i	3PDD	4	P@t	x	f	u	U	x	v	xw	f PCEB;
a Y >>CEEA /Q	80	a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u					f P8CD8;

U 738	442=8	U 73<	342=4 452=<
U 73:	362< 44234		

DC48CE; 77497

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N	: 8133
P	46=1<8
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MWTMdf

7D48CE; 77487

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6133		I X V
7133		I X V

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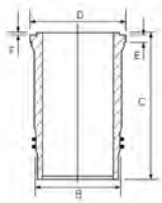

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N 477183 **O** 5: 3133 **P** 4861<3 **Q** =1=5 **R** 4133

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480789=<3033

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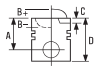
Gjmvßop° °plw	Ynswp ßJtnsß°yrpy pty	Gjmvßop° uztyß°	Gjmvßp wr° °pwr°	I zx ' ´pyop wr °l ´ytÜzyt

a Y >>CEC7 /Q	90	a	9	88EBOvv	8AC i	3NGS	4	P@t	x	f	u	U	x	v	xw	f P87ECD
a Y >>CEC8 /Q	90	a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u	U	x	v	xw	f P87ECE
a Y >>CEC9 /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P87ED7
a Y >>CEC; /Q	90	a	9	88EBOvv	8AC i	3NGS	4	P@t	x	f	u	U	x	v	xw	f P87ED8
a Y >>CEC> /Q	90	a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u	U	x	v	xw	f P87ED9
a Y >>CECA /Q	80	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P8877C
a Y >>CECB /Q	90	a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u	U	x	v	xw	f P87ED;
a Y >>CECC /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P8877E
a Y >>CECD		a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u	U	x	v	xw	f P87ED>
a Y >>CECE /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P87EDA
a Y >>CEDD /Q	90	a	9	88EBOvv	997 i	3PDD	4	P@t	x	f	u	U	x	v	xw	f P8BEE7
a Y >>CEE7 /Q	90	a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u	U	x	v	xw	f P87EDC
a Y >>CEE8 /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P87EDD
a Y >>CEE9 /Q	90	a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u	U	x	v	xw	f P87EDE
a Y >>CEE; /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P87EE7
a Y >>CEE> /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P8BEE8
a Y >>CEEB /Q	90	a	9	88EBOvv	8D> i	3NVD	4	P@t	x	f	u	U	x	v	xw	f P99D87
a Y >>CEED /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P88787
a Y >>CEEE /Q	90	a	9	88EBOvv	997 i	3Ni	4	P@t	x	f	u	U	x	v	xw	f P9; 8DC

U 738	452=7	U 73<	342=4 452=<
U 73:	362< 44234		



DC48CE; 774A7

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N4 561<<
N : 8148
P 46=1-6
79É438

MWTMdf fb

7D48CE; 77487

6133 SUR
6133 IXV
7133 IXV

8A4>ABED7477
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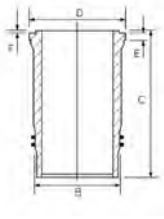

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a Y >AC8E87 /Q A0	a 9 **88EBOvv**	**9B74; 9; i** 3PVS8SPi 4	**P6l x f u U x v xw**	**f P9A>BC**
a Y >AD8EE7	a 9 **88EBOvv**	**99749B7 i** 3Ni i8PVS 4	**P6l x f u U x v xw**	**f P9DC; 8**
a Y >AD8EE8	a 9 **88EBOvv**	**9EA4; CA i** 3SDG8VGD 4	**P6l x f u U x v xw**	**f P9DC; 9**
GcUX 5	43237	ZU_XU -U 833,	36245	
MXGT aCGRK	3423:			

8; 4>A87C7477
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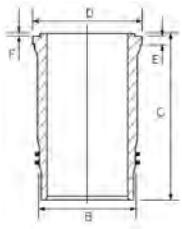

N 477183 **O** 599163 **P** 488183 **Q** 43145 **R** 4143

Gmvïop° GyßlOzwïs Xtyr -Ł´p Xtyr , 4607843: 3033/I wz I ®twlmp °p'l ´I ßpWÖ Xpwpq9183x x Gmvïop° °pl ïv	Kyßs vßLp°p´´tyr 4607843: 3033/I °ns ptyÜpwy p´s vWns Kyßlw°ß°yr 9183x x Ynswlp ßJtnsß°yr py pty	I zyßpyßwp °prx pyß´I mwp°´ 4607843: 3033 -et°'zytmwp r lwpx pyß Rp´pwpq9183x x Gmvïßop° uztyß°	GmvïÖp wï°prx pyßz´l °nl oz´ 4607843: 3033/ßl x mt y ot°'zytmwp'z´ °p'l ´l oz Xpwp®nt y 9183x x GmvïÖp wr° °pwr°	Gmvïop I ypwr Xl °nstl zwz 4607843: 3033/ ot°'zytmtWl ynsp °p'l ´l ßl x pyßp Xtwlp®z 9183x x I zx ´´pyop wp r°l ´ytÜzyt
a Y >AC8E8> /Q ;0	a 9 **88EBOvv**	**9A7 i** 3PSD 4	**P6l x f u U x v xw**	**f P97; ; A**
a Y >AC8E8A /Q ;0	a 9 **88EBOvv**	**9BA i** 3PaD 4	**P6l x f u U x v xw**	**f P97; 7;**
a Y >AC8E8B /Q ;0	a 9 **88EBOvv**	**9BA i** 3PaD 4	**P6l x f u U x v xw**	**f P97; 7>**
a Y >AC8E8C /Q 96;0	a 9 **88EBOvv**	**9B74; 8A i** 3PVS8SNe 4	**P6l x f u U x v xw**	**f P97; 9>**
a Y >AC8E8D /Q ;0	a 9 **88EBOvv**	**9B74; 8A i** 3PVS8SNe 4	**P6l x f u U x v xw**	**f P97; 7A**
a Y >AC8E8E /Q ;0	a 9 **88EBOvv**	**;8A i** 3SNe 4	**P6l x f u U x v xw**	**f P97; 7B**
a Y >AC8E97 /Q ;0	a 9 **88EBOvv**	**9D7 i** 3PeG 4	**P6l x f u U x v xw**	**f P97; 7C**
a Y >AC8E99 /Q ;0	a 9 **88EBOvv**	**;974; 9A i** 3SPV8SSN 4	**P6l x f u U x v xw**	**f P97; 7D**
a Y >AC8E9; /Q ;0	a 9 **88EBOvv**	**9D7 i** 3PeG 4	**P6l x f u U x v xw**	**f P97; 7E**
a Y >AC8E9> /Q ;0	a 9 **88EBOvv**	**9D7 i** 3PeG 4	**P6l x f u U x v xw**	**f P97; 87**
a Y >AC8E9A /Q ;0	a 9 **88EBOvv**	**9BA i** 3PaD 4	**P6l x f u U x v xw**	**f P97; 88**
a Y >AC8E9B /Q ;0	a 9 **88EBOvv**	**9BA i** 3PaD 4	**P6l x f u U x v xw**	**f P97; 89**
a Y >AC8E9C /Q ;0	a 9 **88EBOvv**	**9EA i** 3SDG 4	**P6l x f u U x v xw**	**f P97; ; B**
a Y >AC8E9D /Q ;0	a 9 **88EBOvv**	**9D7 i** 3PeG 4	**P6l x f u U x v xw**	**f P97; 8;**
a Y >AC8E; 8 /Q ;0	a 9 **88EBOvv**	**9D7 i** 3PeG 4	**P6l x f u U x v xw**	**f P97; 8A**
a Y >AC8E; 9 /Q ;0	a 9 **88EBOvv**	**9BA i** 3PaD 4	**P6l x f u U x v xw**	**f P97; 8B**
a Y >AD8EB7 /Q ;0	a 9 **88EBOvv**	**9B7 i** 3PVS 4	**P6l x f u U x v xw**	**f P8CBBD**
a Y >AD8EC7 /Q ;0	a 9 **88EBOvv**	**9EA i** 3SDG 4	**P6l x f u U x v xw**	**f P8CBBE**
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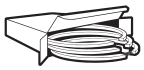

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N	=6148	
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MWWWdf fb

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7133		I Q

8A4>A7; D7477
8>4>A7; D7477
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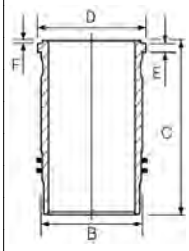

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4707836<3033

Yßppw Qmvßop° °pl w _°p 5 UO´tyr° I yo 4 Zzx ml v ´tyr / °pß NR83: : I s´zx p ' w/ßpo z°ß°top otl x pßp´	Yß sw Ynswp ßJtnsß°yr py pty St39p´Äpyopy>5 UO´tyr° . 4 Zzx ml vOXtyr / NR83: : G° py @´ns´zx ß	Gntp´ Qmvßop° uztyß° G °ßwp´ I °°°t>5 UOXtyr° . 4 Zzx ml v ´tyr / NR83: : Jtl x ßp pÉß´tp°´ns´zx	Gnp´z Qmvß p wr° °pwr° _ßwU´ ß x mt y>5 UO´tyr° . 4 Zzx ml v ´tyr / NR83: : Jt x pßz pÉß´tz´ n´zx I oz	Gnntl tz I zx ' ´pyop wr °l ´ytÜzyt _°l ´p l ynsp 5 UO´tyr° . 4 Zzx ml v ´tyr / NR83: : Z´l ßß x pyßz ot n´zx I ß°´l °°w

a Y >AC3E9E /Q	; 0	a	9	88EBOvv	9BA i	3PaD	4	P@t x	f	u	U x v	xw	f P97; 8>
a Y >AC3E>C /Q	90	a	9	88EBOvv	9B74; 8A i	3PVS8SNe	4	P@t x	f	u	U x v	xw	f P97; 97
a Y >AC3EAA /Q	; 0	a	9	88EBOvv	9B74; 8A i	3PVS8SNe	4	P@t x	f	u	U x v	xw	f P97; 9;
a Y >AC3EAD /Q	96; 0	a	9	88EBOvv	9; 74; 8A i	3PGP8SNe	4	P@t x	f	u	U x v	xw	f P97; >7
a Y >AC3EB7 /Q	90	a	9	88EBOvv	9B74; 8A i	3PVS8SNe	4	P@t x	f	u	U x v	xw	f P97; 99
a Y >AC3EB9 /Q	; 0	a	9	88EBOvv	9B74; 8A i	3PVS8SNe	4	P@t x	f	u	U x v	xw	f P9; 9A;
a Y >B75E77 /Q	; 0	a	9	89D8Bvv	; 9> i	3SSG	4	P@t x	f	u	U x v	xw	f P9; 9AA
a Y >B75E78 /Q	; 0	a	9	89D8Bvv	9B8 i	3PVV	4	P@t x	f	u	U x v	xw	f P9; 9AB
a Y >B75E79 /Q	; 0	a	9	89D8Bvv	9CB i	3PcV	4	P@t x	f	u	U x v	xw	f P9; 9AC
a Y >B75E7; /Q	; 0	a	9	89D8Bvv	9CB i	3PcV	4	P@t x	f	u	U x v	xw	f P9; 9AD
a Y >B75E7> /Q	; 0	a	9	89D8Bvv	; 7B i	3SGa	4	P@t x	f	u	U x v	xw	f P9; 9AE
a Y >B75E7A /Q	; 0	a	9	89D8Bvv	; 7B i	3SGa	4	P@t x	f	u	U x v	xw	f P9; 9B7
a Y >B75E7B /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9B8
a Y >B75E7C /Q	; 0	a	9	89D8Bvv	; ; B i	3SVc	4	P@t x	f	u	U x v	xw	f P9; 9B9
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a Y >B75E7E /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9B>
a Y >B75E87 /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9BA
a Y >B75E88 /Q	; 0	a	9	89D8Bvv	; 7B4; ; B i	3SGa8SVc	4	P@t x	f	u	U x v	xw	f P9; 9BB
a Y >B75E89 /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9BC
a Y >B75E8; /Q	; 0	a	9	89D8Bvv	; 7B4; ; B i	3SGa8SVc	4	P@t x	f	u	U x v	xw	f P9; 9BD
a Y >B75E8> /Q	; 0	a	9	89D8Bvv	; 7B4; ; B i	3SGa8SVc	4	P@t x	f	u	U x v	xw	f P9; 9BE
a Y >B75E8A /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9C7
a Y >B75E8B /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9C8
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a Y >B75E8D /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9C;
a Y >B75E8E /Q	; 0	a	9	89D8Bvv	; 7B4; ; B i	3SGa8SVc	4	P@t x	f	u	U x v	xw	f P9; 9C>
a Y >B75E97 /Q	; 0	a	9	89D8Bvv	; 7B4; ; B i	3SGa8SVc	4	P@t x	f	u	U x v	xw	f P9; 9CA
a Y >B75E98 /Q	; 0	a	9	89D8Bvv	; 7B4; ; B i	3SGa8SVc	4	P@t x	f	u	U x v	xw	f P9; 9CB
a Y >B75E99 /Q	; 0	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P@t x	f	u	U x v	xw	f P9; 9CC
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a Y >B75E9E /Q	; 0	a	9	89D8Bvv	; 7B4; ; B i	3SGa8SVc	4	P@t x	f	u	U x v	xw	f P9; 9D7

a Y >B75E; 8 /Q	**; 0**	a	9	**89D8Bvv**	**; 7B4; ; B i**	3SGa8SVc	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P9; 9D8**

GI ZXUY S V7 2S V8	34245	U 733	34235 45239
GcUX 5	43237	ZU_XU -U 833,	34243

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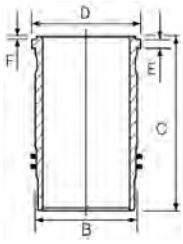

I s´zx p ' wßpo z°ß top otl x pßp´ _°p 5 UO´tyr° I yo 4 Zzx mI v ´tyr / °pß NR83: : 0ynwßop° °pl w	G° py ®p´ns´zx ß S tß®´Ápyopy:5 UO´tyr° . 4 Zzx mI vOXtyr / NR83: : Ynswlp ßJ tnsß°yr py pty	Jtl x ßp pÉß´tp°´ns´zx G °ßwp´ I °°°t>5 UOXtyr° . 4 Zzx mI v ´tyr / NR83: : 0ynwßop° uztyß°	Jt x pßz pÉßp´tz´ n´zx I oz _ßwÜ´ ß x mt y>5 UO´tyr° . 4 Zzx mI v ´tyr / NR83: : 0ynwÖp w° °pw°	Z´I ß x pyßz ot n´zx I ß°I °°w _°I ´p I ynsp 5 UO´tyr° . 4 Zzx mI v ´tyr / NR83: : I zx ' ´pyop wp r °I ´ytÜzyt

a Y >AC3E; ; /Q	**96; 0**	a	9	**88EBOvv**	**9B7 i**	3PVS	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CBB9**
a Y >AC3E; > /Q	**96; 0**	a	9	**88EBOvv**	**997 i**	3Ni i	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8C>C;**
a Y >AC3E; A /Q	**96; 0**	a	9	**88EBOvv**	**8DA i**	3NVN	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CA79**
a Y >AC3E; B /Q	**90**	a	9	**88EBOvv**	**; 77 i**	3SDe	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CBA;**
a Y >AC3E; C /Q	**96; 0**	a	9	**88EBOvv**	**9B74; 8A i**	3PVS8SNe	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8B>DE**
a Y >AC3E; D /Q	**90**	a	9	**88EBOvv**	**; 77 i**	3SDe	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CB>A**
a Y >AC3E; E /Q	**90**	a	9	**88EBOvv**	**9B7 i**	3PVS	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P97; 8C**
a Y >AC3E>7 /Q	**96; 0**	a	9	**88EBOvv**	**9B7 i**	3PVS	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CBA>**
a Y >AC3E>8 /Q	**96; 0**	a	9	**88EBOvv**	**8DA4; 77 i**	3NVN8SDe	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CB>8**
a Y >AC3E>9 /Q	**96; 0**	a	9	**88EBOvv**	**8DA49B7 i**	3NVN8PVS	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8C>>D**
a Y >AC3E>; /Q	**96; 0**	a	9	**88EBOvv**	**8DA49B7 i**	3NVN8PVS	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CBBB**
a Y >AC3E>> /Q	**96; 0**	a	9	**88EBOvv**	**9B74; 8A i**	3PVS8SNe	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P8CB>>**
a Y >AC3E>A /Q	**90**	a	9	**88EBOvv**	**9B7 i**	3PVS	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P97; 8D**
a Y >AC3E>B /Q	**90**	a	9	**88EBOvv**	**997 i**	3Ni i	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P97; 8E**
a Y >AC3E>E /Q	**90**	a	9	**88EBOvv**	**997 i**	3Ni i	4	**P6t x**	**f**	**u**	**U**	**x**	**v**	**xw**					**f P97; 98**

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GcUX 5	43237	YNJ	45248
I QZGXU -U 863,	342=<	ZU_XQYS U -U 683,	34236
I UTKI ZU -U 678,	44234	ZU_XU -U 833,	43234
NVT -RzyrTz°p,	3=2=5	ZXGaKMU -U 8<3,	432==
U 736	3=236		

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N <=183
P 46<133
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MWWWdf fb

7D488AD77477

6133 I Q
6133 I X V
7133 I X V

8A4>A7; D7477 **N** 477183 **O** 599163 **P** 488193 **Q** 43145 **R** 4143
8>4>A7; D7477 **N** 477183 **O** 599163 **P** 488193 **Q** 43145 **R** 4143
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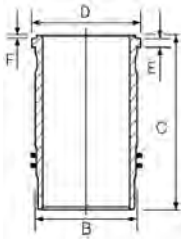

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Yßpw 0ynwop° °pl w _°p 5 UO´tyr° I yo 4 Zzx mI v ´tyr / °pß NR83: : I s´zx p ' wßpo z°ß top otl x pßp´	Yß sw Ynswlp ßJ tnsß°yr py pty S tß®´Ápyopy:5 UO´tyr° . 4 Zzx mI vOXtyr / NR83: : G° py ®p´ns´zx ß	Gntp´ 0ynwßop° uztyß° G °ßwp´ I °°°t>5 UOXtyr° . 4 Zzx mI v ´tyr / NR83: : Jtl x ßp pÉß´tp°´ns´zx	Gnp´z 0ynwÖp w° °pw° _ßwÜ´ ß x mt y>5 UO´tyr° . 4 Zzx mI v ´tyr / NR83: : Jt x pßz pÉßp´tz´ n´zx I oz	Gnntl tz I zx ' ´pyop wp r °I ´ytÜzyt _°I ´p I ynsp 5 UO´tyr° . 4 Zzx mI v ´tyr / NR83: : Z´I ß x pyßz ot n´zx I ß°I °°w

Nüral® FITTED WITH GOETZE® RINGS

| | | |

a Y >B75E; E	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P6l x	f	u	U x v	xw	f P9DC>>
a Y >B75E>7	a	9	89D8Bvv	;7B4;;B i	3SGa8SVc	4	P6l x	f	u	U x v	xw	f P9DC>A
a Y >B75E>8	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P6l x	f	u	U x v	xw	f P9DC>B
a Y >B75E>9	a	9	89D8Bvv	;7B4;;B i	3SGa8SVc	4	P6l x	f	u	U x v	xw	f P9DC>C
a Y >B75E>;	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P6l x	f	u	U x v	xw	f P9DC>D
a Y >B75E>>	a	9	89D8Bvv	;7B4;;B i	3SGa8SVc	4	P6l x	f	u	U x v	xw	f P9DC>E
a Y >B75E>A	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P6l x	f	u	U x v	xw	f P9DCA7
a Y >B75E>B	a	9	89D8Bvv	;7B4;;B i	3SGa8SVc	4	P6l x	f	u	U x v	xw	f P9DCA8
a Y >B75E>C	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P6l x	f	u	U x v	xw	f P9DCA9
a Y >B75E>D	a	9	89D8Bvv	;7B4;;B i	3SGa8SVc	4	P6l x	f	u	U x v	xw	f P9DCA;
a Y >B75E>E	a	9	89D8Bvv	9B849CB i	3PVV8PcV	4	P6l x	f	u	U x v	xw	f P9DCA>
a Y >B75EB8 /Q ;0	a	9	89D8Bvv	;7B4;9>i	3SGa8SSG	4	P6l x	f	u	U x v	xw	f P9DCAA
a Y >B75ED9 /Q ;0	a	9	89D8Bvv	;9>4;;B i	3SSG8SVc	4	P6l x	f	u	U x v	xw	f P9DCAB
a Y >B75ED; /Q ;0	a	9	89D8Bvv	;9>4;;B i	3SSG8SVc	4	P6l x	f	u	U x v	xw	f P9DCAC

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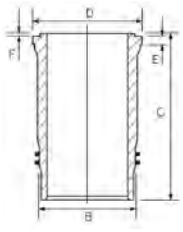

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a Y >>75E>7 /a Y >>9 M0	e	9	8>B8Dvv	9A7 i	3PSD	4	P6l x	f	u			f PD8E>
a Y >>75E>8 /a Y >>9 M0	e	9	8>B8Dvv	9A7 i	3PSD	4	P6l x	f	u			f PACE>
a Y >>75E>9 /a Y >>9 M0	e	9	8>B8Dvv	9A7 i	3PSD	4	P6l x	f	u			f PB8;7
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P	459168
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6133		I X V
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N 477183 O 586133 P 4861<3 Q 4313: R 4133

8>4>A88B7477
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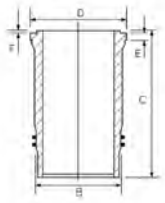

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a Y >>75E>A /Q 8 a Y >>9 M0	e	9	8>B8Dvv	9A7 i	3PSD	4	P6l x	f	u			f P8BEBC
a Y >>95ECC	e	9	8>B8Dvv	9A7 i	3PSD	4	P6l x	f	u			f PD98E
a Y >>95ECD	e	9	8>B8Dvv	9A7 i	3PSD	4	P6l x	f	u			f PD98B

aY >>9 M/Q	80	e	9	8>B8Dvv	9A7 i	3PSD	4	P@t x	f u	Y bC77D
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7D48CE; 77487

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N 47783 O 58633 P 4861<3 Q 4313: R 4133
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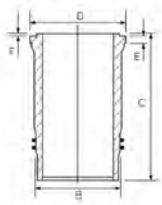

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aY >>95EA7		e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@t x	f u	f PACB>
aY >>95EA9		e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@t x	f u	f PB8; A
aY >>95EB9		e	9	8>B8Dvv	9B749BE i	3PVS8Paa	4	P@t x	f u	f PD98A
TM				3<2 6 3=2=9		YQ			3: 2<	3=2=9

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MWTMZN df

7D48CE; 77487

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8A4>A88B7477
8>4>A88B7477
8A4>A97; 7477
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N 47783 O 58633 P 4861<3 Q 4313: R 4133
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N 47783 O 58633 P 4861<3 Q =1=5 R 4133
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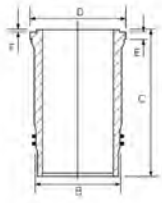

DE48CE; 774BA
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480784493033

DE48CE; 774BB
< 04: =633098 .
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Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz
Gmvŵop° °plŵ	Ynswp ßJtnsß°yrpy pty	Gmvŵßop° uztyß°	GmvŵÖpwr° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt

aY >>75E7C/Q	8 aY >>90	e	9	8A7CDvv	8EA i	3NaV	4	P@t x		f P8BEBB
aY >>75E7D/Q	8 aY >>90	e	9	8A7CDvv	97B i	3NeD	4	P@t x		f P8C88D
aY >>75E87/Q	8 aY >>90	e	9	8A7CDvv	98D i	3N a	4	P@t x		f P8C88E
aY >>75E88/Q	8 aY >>90	e	9	8A7CDvv	98D i	3N a	4	P@t x		f P8C897
aY >>8		a	9	87EB>vv				P@t x		Y b8BC79
aY >>8/Q	80	a	9	88; 7Evv	8A8 i	3NDV	4	P@t x		Y b8C787
aY >>85E99/Q	80	a	9	88; 7Evv	8A8 i	3NDV	4	P@t x		f PCE>9
aY >>85E; ;/Q	80	a	9	88; 7Evv	8A8 i	3NDV	4	P@t x		f PD8E8
aY >>9		e	9	8A7D7vv	8E8498D i	3NaD8N a	4	P@t x		Y bC788
aY >>9/Q	80	e	9	8A7D7vv	8EA i	3NaV	4	P@t x		Y b8C788
aY >>95E; 8		e	9	8A7CDvv	8EA i	3NaV	4	P@t x		f PCE>A
aY >>; 5E77		GD	9	8DD>Dvv	; ; 8 i	3SVD	4	P@t x		f P9DC97
OTJ_YZX0GR						U 737			3=2=4	342=5

SQ 452<< 3<2=7 UN 342 3

8A4>AB; ; 7477
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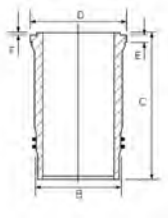

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a Y >>75E7E/a Y >>90	e 9	8A7CDvv	8EA i 3NaV 4	P6l x	f PD8E9
a Y >>85E7A	a 9	88; 7Evv	8BA i 3NNS 4	P6l x	f PAC; 8
a Y >>85E7B	a 9	88; 7Evv	8A7 i 3NDS 4	P6l x	f PD8D>
a Y >>85E7C	a 9	88; 7Evv	8A7 i 3NDS 4	P6l x	f PD8DA
a Y >>85E7D	a 9	88; 7Evv	8B748BA i 3NGe8NNS 4	P6l x	f PABB7
a Y >>85E7E	a 9	88; 7Evv	8B748BA i 3NGe8NNS 4	P6l x	f PAEED
a Y >>85E88	a 9	88; 7Evv	8B748BA i 3NGe8NNS 4	P6l x	f PB9C8
a Y >>85E89	a 9	88; 7Evv	8BA i 3NNS 4	P6l x	f PB8>9
a Y >>85E8;	a 9	88; 7Evv	8BA i 3NNS 4	P6l x	f PB7B;
a Y >>85E8>	a 9	88; 7Evv	8BA i 3NNS 4	P6l x	f PB878
a Y >>85E8A	a 9	88; 7Evv	8BA i 3NNS 4	P6l x	f PD898
a Y >>85E8B	a 9	88; 7Evv	8A; i 3NDe 4	P6l x	f PACBD
a Y >>85E8C	a 9	88; 7Evv	8B7 i 3NGe 4	P6l x	f PD899
a Y >>85E8D	a 9	88; 7Evv	8BA i 3NNS 4	P6l x	f P87EBD
a Y >>85E8E	a 9	88; 7Evv	8A748BA i 3NDS8NNS 4	P6l x	f P8BEC9
a Y >>85E97	a 9	88; 7Evv	8A; i 3NDe 4	P6l x	f PB877
a Y >>85E9;	a 9	88; 7Evv	8B7 i 3NGe 4	P6l x	f PAC; 9
a Y >>85E9>	a 9	88; 7Evv	8B7 i 3NGe 4	P6l x	f PB8>;
a Y >>85E9A	a 9	88; 7Evv	8B7 i 3NGe 4	P6l x	f PB7B>
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a Y >>85E; 9	a 9	88; 7Evv	8A8 i 3NDV 4	P6l x	f PD8E7
a Y >>95E7A	e 9	8A7CDvv	8E8 i 3NaD 4	P6l x	f PD8DB
a Y >>95E7B	e 9	8A7CDvv	98D i 3Ni a 4	P6l x	f PACBE
a Y >>95E7C	e 9	8A7CDvv	98; 498D i 3Ni D8Ni a 4	P6l x	f PACC8
a Y >>95E7D	e 9	8A7CDvv	987 i 3Nea 4	P6l x	f PACE7
a Y >>95E7E	e 9	8A7CDvv	987 i 3Nea 4	P6l x	f PACE8
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a Y >>95E88	e 9	8A7CDvv	98D i 3Ni a 4	P6l x	f P87EC8
a Y >>95E8>	e 9	8A7CDvv	8EA i 3NaV 4	P6l x	f PAC; >
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a Y >>95E8B	e 9	8A7CDvv	98D i 3Ni a 4	P6l x	f PB8C>
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a Y >>95E98	e 9	8A7CDvv	8EA i 3NaV 4	P6l x	f PB8>>

aY >>95E99	e 9	8A7CDvv	8EA i	3NaV 4	P@t x			f PACC7
aY >>95E9;	e 9	8A7CDvv	987 i	3Nea 4	P@t x			f PB89C
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aY >>95E;E	e 9	8A7CDvv	98;498D i	3NiD8Na 4	P@t x			f PB;8E
aY >>;5E7A	GD 9	8DD>Dvv	9C8 i	3Pai 4	P@t x			f P8BED8
aY >>>	GN 9	99B8Dvv			P@t x			Y bBB>8

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SQ	452< 3=2=9	U 737	3=2=4 342=5
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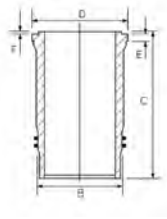

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aY A985EA7 /Q	9 aY A78 XMD	a 9	88E>Bvv	9B7 i	3PVS 4	P@t x	f u U x v	xw	f P8CBC8
aY A985EA8 /Q	9 aY A78 XMD	a 9	88E>Bvv	;;A i	3SVa 4	P@t x	f u U x v	xw	f P9DCCB
aY A995E>7 /Q	9 aY A79 XMD	e 9	8AE9Dvv	>97 i	3/cG 4	P@t x	f u U x v	xw	f P8BD77
aY A995E>8 /Q	9 aY A79 XMD	e 9	8AE9Dvv	>8; i	3/aN 4	P@t x	f u U x v	xw	f P8CBC9
aY A995E>9 /Q	9 aY A79 XMD	e 9	8AE9Dvv	;B9 i	3Sia 4	P@t x	f u U x v	xw	f P8CBC;
aY A995E>; /Q	9 aY A79 XMD	e 9	8AE9Dvv	;B9 i	3Sia 4	P@t x	f u U x v	xw	f P8CBC>
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aY A>85E97 /Q	9 aY A78 XMD	a 9	88E>Bvv	9;7 i	3PGP 4	P@t x	f u U x v	xw	f PCDC9
aY A>85E98 /Q	9 aY A78 XMD	a 9	88E>Bvv	;8A i	3SNe 4	P@t x	f u U x v	xw	f PEBC;
aY A>85E99 /Q	9 aY A78 XMD	a 9	88E>Bvv	9B7 i	3PVS 4	P@t x	f u U x v	xw	f PCDC;
aY A>85E9; /Q	9 aY A78 XMD	a 9	88E>Bvv	9E74;77 i	3PiS8SDe 4	P@t x	f u U x v	xw	f PCDC>
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aY A>85E9B /Q	9 aY A78 XMD	a 9	88E>Bvv	9;7 i	3PGP 4	P@t x	f u U x v	xw	f PCDCE
aY A>85E9C /Q	9 aY A78 XMD	a 9	88E>Bvv	9B7 i	3PVS 4	P@t x	f u U x v	xw	f PEBCE
aY A>85E9D /Q	9 aY A78 XMD	a 9	88E>Bvv	;8A i	3SNe 4	P@t x	f u U x v	xw	f P8CBCE
aY A>85E>7 /Q	96; aY A78 XMD	a 9	88E>Bvv	9;749;A i	3PGP8PND 4	P@t x	f u U x v	xw	f P8BDEC
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a Y A>85EA8 /Q	96; a Y A78 XM0	a	9	88E>Bvv	9; 749; A i	3PGP8PND	4	P0l x	f	u	U	x	v	xw	f P8CBD>
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a Y A>95E97 /a Y A79 XM0		e	9	8AE9Dvv	; E7 i	3/PD	4	P0l x	f	u	U	x	v	xw	f PCDCC
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a Y A>95E99 /a Y A79 XM0		e	9	8AE9Dvv	>97 i	3/cG	4	P0l x	f	u	U	x	v	xw	f PCDCD
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a Y E>85E87 /Q	9 a Y A78 XM0	a	9	88E>Bvv	9; 7 i	3PGP	4	P0l x	f	u	U	x	v	xw	f P8CBE;
a Y E>85E97 /Q	9 a Y A78 XM0	a	9	88E>Bvv	9B7 i	3PVS	4	P0l x	f	u	U	x	v	xw	f P8BCE;
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a Y E>85E9E /Q	9 a Y A78 XM0	a	9	88E>Bvv	9E7 i	3Pi S	4	P0l x	f	u	U	x	v	xw	f P8BCE>
a Y E>85E; 7 /Q	9 a Y A78 XM0	a	9	88E>Bvv	; 77 i	3SDe	4	P0l x	f	u	U	x	v	xw	f P8BCEA
a Y E>85E>7 /Q	9 a Y A78 XM0	a	9	88E>Bvv	; 8A i	3SNe	4	P0l x	f	u	U	x	v	xw	f P8BCEB
a Y E>85EB7 /Q	9 a Y A78 XM0	a	9	88E>Bvv	9; 7 i	3PGP	4	P0l x	f	u	U	x	v	xw	f P8BCEC
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a Y E>85ED7 /Q	9 a Y A78 XM0	a	9	88E>Bvv	9E7 i	3Pi S	4	P0l x	f	u	U	x	v	xw	f P8CBEA
a Y E>85ED8 /Q	9 a Y A78 XM0	a	9	88E>Bvv	9E74; 8A i	3Pi S8SNe	4	P0l x	f	u	U	x	v	xw	f P8CBEB
a Y E>85EE7 /Q	9 a Y A78 XM0	a	9	88E>Bvv	; 8A i	3SNe	4	P0l x	f	u	U	x	v	xw	f P8BCEE
a Y E>95E77 /Q	9 a Y A79 XM0	e	9	8AE9Dvv	; A7 i	3Sca	4	P0l x	f	u	U	x	v	xw	f P8CBEC
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a Y E>95E9A /Q	9 a Y A79 XM0	e	9	8AE9Dvv	>77 i	3/SS	4	P0l x	f	u	U	x	v	xw	f P8CC77
a Y E>95E; 7 /Q	9 a Y A79 XM0	e	9	8AE9Dvv	>97 i	3/cD	4	P0l x	f	u	U	x	v	xw	f P8BD79
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a Y E>95EBC /Q	9 a Y A79 XM0	e	9	8AE9Dvv	; C74; D7 i	3/DP8VGc	4	P0l x	f	u	U	x	v	xw	f P8CC79
a Y E>95EC7 /Q	9 a Y A79 XM0	e	9	8AE9Dvv	; E7 i	3/cD	4	P0l x	f	u	U	x	v	xw	f P8CC7;
a Y E>95ED7 /Q	9 a Y A79 XM0	e	9	8AE9Dvv	>97 i	3/cD	4	P0l x	f	u	U	x	v	xw	f P8BD7;
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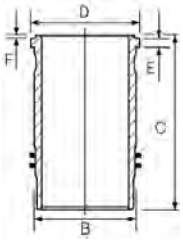

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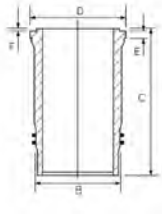

UK 874 363 3357

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a Y A>85E>; /Q	; a Y A78 XM0	a	9	88E>Bvv	9B749BA i	3PVS8PaD	4	P@t x	f	u	U x v	xw	f P8BE77
a Y A>85E>> /Q	; a Y A78 XM0	a	9	88E>Bvv	9E74;77 i	3Pi S8SDe	4	P@t x	f	u	U x v	xw	f P8BE78
a Y A>85E>A /Q	; a Y A78 XM0	a	9	88E>Bvv	9E74;77 i	3Pi S8SDe	4	P@t x	f	u	U x v	xw	f P8BE79
a Y A>85E>B /Q	; a Y A78 XM0	a	9	88E>Bvv	;8A4;97 i	3SNe8SPV	4	P@t x	f	u	U x v	xw	f P8BE7;
a Y A>85E>C /Q	; a Y A78 XM0	a	9	88E>Bvv	;8A4;97 i	3SNe8SPV	4	P@t x	f	u	U x v	xw	f P8BE7>
a Y A>85E>D /Q	; a Y A78 XM0	a	9	88E>Bvv	;;A4;AA i	3SVa8SeP	4	P@t x	f	u	U x v	xw	f P8BE8;
a Y A>85E>E /Q	; a Y A78 XM0	a	9	88E>Bvv	;;A4;AA i	3SVa8SeP	4	P@t x	f	u	U x v	xw	f P8BE8>
a Y A>85EA7 /Q	; a Y A78 XM0	a	9	88E>Bvv	9B74;77 i	3PVS8SDe	4	P@t x	f	u	U x v	xw	f P8CBD9
a Y A>85EEA /a Y A78 XM0		a	9	88E>Bvv	;;A i	3SVa	4	P@t x	f	u	U x v	xw	f P9ABEB
a Y A>95E>7 /Q	; a Y A79 XM0	e	9	8AE9Dvv	;A74;CA i	3Sca8VGD	4	P@t x	f	u	U x v	xw	f P8BE7E
a Y A>95E>8 /Q	; a Y A79 XM0	e	9	8AE9Dvv	;C7 i	3/DP	4	P@t x	f	u	U x v	xw	f P8BE88
a Y A>95E>9 /Q	; a Y A79 XM0	e	9	8AE9Dvv	;E74;EA i	3/PD8VPc	4	P@t x	f	u	U x v	xw	f P8BE7B
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a Y A>95E>D /Q	; a Y A79 XM0	e	9	8AE9Dvv	;974;C7 i	3SPV8VDP	4	P@t x	f	u	U x v	xw	f P8CBAA
a Y A>95EAB /Q	; a Y A79 XM0	e	9	8AE9Dvv	>>D i	3aDi	4	P@t x	f	u	U x v	xw	f P8CBE8
a Y A>95EAC /Q	; a Y A79 XM0	e	9	8AE9Dvv	>>D i	3aDi	4	P@t x	f	u	U x v	xw	f P8CBE9

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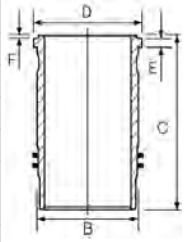

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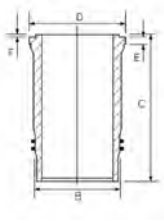
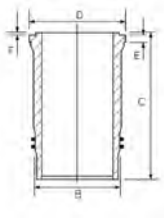
		8A4>ADAD7477 8>4>ADAD7477 	N 483133 O 58<133 P 497143 Q 43145 R 4143 N 483133 O 58<133 P 497143 Q 43145 R 4143	DE48; B777477 < 0469333033 . 48078<8<3033
DC48; B777487 M : <168 N4 49183 N =51<3 P 44=168 85É435 -46383K, MWWWZN df fb 	7D48; B777477 6133 I Q 6133 I X V 7133 I Q V LKZ-Ring	8A4>ADAD7477 8>4>ADAD7477 	N 483133 O 58<133 P 497143 Q 43145 R 4143 N 483133 O 58<133 P 497143 Q 43145 R 4143	DE48; B777487 < 0469333043 . 48078<8<3033

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a Y A>85EC7 /Q	> a Y A78 XM0	a	9	88E>Bvv	9; A i	3PND	4	P6t x	f	u	U x v	xw	f P8E9A7
a Y A>85EC8 /Q	>6A a Y A78 XM0	a	9	88E>Bvv	9; A i	3PND	4	P6t x	f	u	U x v	xw	f P98778
a Y A>85EC9 /Q	> a Y A78 XM0	a	9	88E>Bvv	9BA i	3PaD	4	P6t x	f	u	U x v	xw	f P8E9A8
a Y A>85EC; /Q	> a Y A78 XM0	a	9	88E>Bvv	9BA i	3PaD	4	P6t x	f	u	U x v	xw	f P98799
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a Y A>95EBB /Q	A0	e	9	8AE9Dvv	; A74; C7 i	3Sca8VDP	4	P@t x	f	u	U	x	v	xw	f P9A87;
a Y A>95EC7 /Q	A0	e	9	8AE9Dvv	>>D i	3aDi	4	P@t x	f	u	U	x	v	xw	f P9DCCE
a Y A>95EC8 /Q	A0	e	9	8AE9Dvv	>>D i	3aDi	4	P@t x	f	u	U	x	v	xw	f P9DCD7
a Y A>95EC9 /Q	A0	e	9	8AE9Dvv	>7A4>D7 i	3/VG8aVP	4	P@t x	f	u	U	x	v	xw	f P9DCD8

GI ZXUY S V5 2S V6	37236	ZU_X0YS U -U 683,	34236
Yp´tp° 733	43234	ZXGaKMU -U 8<3,	432==

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N4 4: 193
N < 133
P 44=188
85É435

-46398J536,

MWWWZN df f b

7D4>97E77477

6133 MJI
6133 I X V
7133 MJI V

GDC LKZ-Ring

8A4>A7CE7477
8>4>A7CE7477
8A4>A8997477
8>4>A8997477
8; 4>A8997477

N 48453 **O** 58<133 **P** 49743 **Q** 43145 **R** 4143
N 48453 **O** 58<133 **P** 49743 **Q** 43145 **R** 4143
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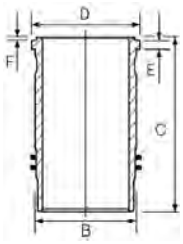

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< 0753=33033 .
47078: =3033

DE4>97E774; 7
< 0753=33033 .
480784553033

DC4>97E77487

M : <168
N4 4: 193
N < 133
P 44=168
85É435

-46398J536,

MWWWZN df f b

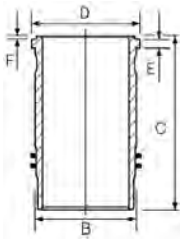
7D4>97E77477

6133 MJI
6133 I X V
7133 MJI V

GDC LKZ-Ring

8A4>A7CE7477
8>4>A7CE7477

N 48453 **O** 58<133 **P** 49743 **Q** 43145 **R** 4143
N 48453 **O** 58<133 **P** 49743 **Q** 43145 **R** 4143



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47078: =3033

UK 874 363 3957

Yßpw
Ynswp ßJtnsß°yr py pty
Kyßs vßLp°p´´tyr 460784553033/I °ns ptyÜpwy p´s vßtns

Yßsw
Gmvßop° uztyß°
I zyßpyßwp °prx pyß´I mwp°´ 460784553033 -et°' zytmwp rl wpx pyß

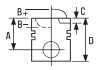
Gntp´
Gmvßop° °pl w
Gmvßop° Gy8ÖVzw°s Xtyr -Lt´p Xtyr, 460784553033/I wz I ®twmwp °p' l ´I ßpvÖ

Gnp´z
Gmvßop° °pwar°
Gmvßop pwºprx pyßz ´I °nl oz´ 460784553033/ß x mt y ot°' zytmwp ' z´ °p' l ´I oz

Gnntl tz
I zx ' ´pyop wp r °l ´ytÜzyt
Gmvßop I ypwar XI °nstl zwz 460784553033/ ot°' zytmtwl ynsp °p' l ´I ßx pyßp

a Y A>85EE8 /a Y A78 XMD		a	9	88E>Bvv	; 77 i	3SDe	4	P@t x	f	u	U	x	v	xw	f P9ABDB
a Y E>85EE8 /a Y A78 XMD		a	9	88E>Bvv	9B74; 8A i	3PVS8SNe	4	P@t x	f	u	U	x	v	xw	f P9DDAA

GI ZXUY S V5 2S V6	37236



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N4 471=:
N 443133
P 44=188
85É435

-46398J635,

MWWWZN df fb

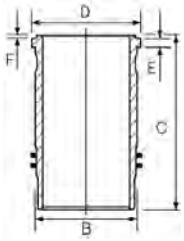
7D4>97E77477

6133 MJI
6133 I X V
7133 MJI V

GDC LKZ-Ring

8A4>A8997477
8>4>A8997477
8; 4>A8997477
8A4>A7CE7477
8>4>A7CE7477

N 484153 O 58<133 P 497153 Q 43145 R 4143
N 484153 O 58<133 P 497153 Q 43145 R 4143
N 484153 O 58<133 P 497143 Q 43145 R 4143
N 484153 O 58<133 P 497143 Q 43145 R 4143



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< 0753=33083 .
480784553033

UK 874 363 774:
UK 874 363 3957

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
UK 874 363 756:				
Ømvºop° Gyß0/zwº s Xtyr -Ł´p Xtyr , 460784553033/l °ns	Kyßs wºLp°p´´tyr 460784553033/l °ns	l zyßpyßwp°prx pyß´l nwp°´ 460784553033	ØmvºÖp pwºprx pyßz´l °nl oz´ 460784553033/ß x mt y otº'' zytmwl ynsp °p' l ´l ßx pyßp	Ømvºop l ypwz Xl °nstl zwz 460784553033/ otº'' zytmwl ynsp °p' l ´l ßx pyßp
Ømvºop° °pl w	Ynswp ßJtnsßºyr py pty	Ømvßop° uztyßº	ØmvºÖp wz° °pwz°	l zx ''´pyop wp r°l ´ytÚzyt

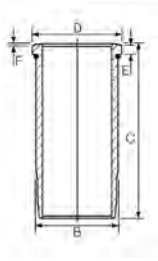
| | | | |

a Y	>C85E8E /Q	B0	a	9	89D7Evv	; 874; CA i	3SNN8VGD	4	P@t x	f	u	U x v	xw	f P; A787
a Y	>C85E99 /Q	B0	a	9	89D7Evv	; 874; E7 i	3SNN8VPD	4	P@t x	f	u	U x v	xw	f P; A789
a Y	>C85E9B /Q	B0	a	9	89D7Evv	; 874; E7 i	3SNN8VPD	4	P@t x	f	u	U x v	xw	f P; A78;
a Y	>C85E; C /Q	B0	a	9	89D7Evv	; 7B4; CA i	3SGa8VGD	4	P@t x	f	u	U x v	xw	f P; A78A
a Y	>C85E>> /Q	B0	a	9	89D7Evv	; 874; CA i	3SNN8VGD	4	P@t x	f	u	U x v	xw	f P; A797
a Y	>C85E>B /Q	B0	a	9	89D7Evv	; 874; CA i	3SNN8VGD	4	P@t x	f	u	U x v	xw	f P; A799

GI ZXUY S V7 2S V8	3: 214	Yp´tp° 733	34236
GTZUY	3: 215 45241<	Yp´tp° 833	34245
GXUI Y	34246		

8A4B877B7477

N 4741=: **O** 58913 3 **P** 48=133 **Q** : 133 **R** 4133



Qmv®op° Gyß0Vzw®s Xtyr -Lt´p Xtyr ,
Qmv®op° °pl w®
Xpwtpq<1=x x

Kyßs w® v®nsw®Ü tyr
Ynswtp ßJtnsß°yr py pty
Kyßw°ß°yr <1=8x x

I zyßtpyßwp °pr x pyß´l mwp°´
Qmv®ßop° uztyß°
Rp´pwtpq<1=8x x

Qmv®Üp pw°pr x pyß´l °nl oz´
Qmv®Üp w°° °pw°°
Xpwp@nt y <1=8x x

Qmv®op I ypw°´l °nstl zw®
I zx ' ´pyop wp r °l ´ytÜzyt
Xtwtp@t <1=8x x

ENGINE INDEX

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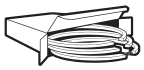
Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

	CCM	x		9
8> W>R	GPi a	S	cV9DD	>
8B W>R/Wex Øt 0	GVee	S	eD9DD	A
8DS	Gci e	S	eD9NV	D
8D W>R/Wex Øt 0	Gci a	S	eD9DD	A
8D W>W/hhO0	Gci a	S	eD9DD	B
97 f 9Z	Gi S	S	eS9SV	87
9A W>R	NSi c	a	eD9DD	C
M2 eQdlQe	GNcV	S	cD9aN	9
MeQdlQe	GNcV	S	cD9aN	8
MeQdlQe /a x u xw 8; D70	GPeD	S	cP9VD	;
N eQdlQe	Gci e	S	eD9NV	D
O eQdlQe	Ni GN	a	eP9PN	E



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DC4A98C7C477 *Tm m*
DC4A98C88477 *Tm m*
DC4A98C8>477 *Tm m*

7D4A98C77477
7D4A98C7C477 *Tm m*
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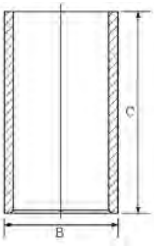

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N4	81: 7	417<	V
P	8: 157	7133	V
	54É89		

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DC4A9>87C477 *Tm m*
DC4A9>888477 *Tm m*
DC4A9>88>477 *Tm m*

7D4A9>877477
7D4A9>87C477 *Tm m*
7D4A9>888477 *Tm m*
7D4A9>88>477 *Tm m*

M	6<t 7	4183	TZ
N4	81: 7	4183	V
P	8<t 7	6133	V
	54É89		

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Yp8° zywÖ Qzwmpy y°´ty S zßz´° ßÜpy Ü° p´°pßÜpy Vt°ßzy ´px 'wnp´ oly° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp nzx 'wß z 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜl ßz °zwx pyßp nzx 'wß z

M2eQdlQe S 9 **89CAvv** **bx** **Yb9E;>49**

SMSKZXU4633 342<5 452<

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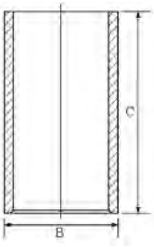

M	6<t 7	4183	TZ
N4	81: 7	4183	V
P	8<t 7	6133	V
	54É89		

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Yp8° zywÖ Qzwmpy y°´ty S zßz´° ßÜpy Ü° p´°pßÜpy Vt°ßzy ´px 'wnp´ oly° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp nzx 'wß z 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜl ßz °zwx pyßp nzx 'wß z

MeQdlQe/a x u xw 8;D70 S 9 **8;D7vv** **bx** **Yb88D748**

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N4 9154
P 8<169
54É97

7D4A9BB77477

4183 I X V
4183 V
7133 I X V

8> W>R S 9 **8; EBvv** **CB i** 3GDP 4 **bx** **f P8DDBB**

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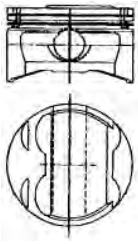
P 791: =
4<É7<



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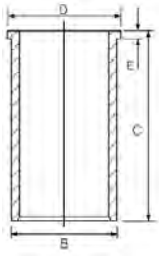
4133
4153
5133 TZ

8>4C877; 7477 **N** <7143 **O** 45=183 **P** < 183 **Q** 83133



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470: 43363033

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8B W>R /Wex Ø 0 S 9 **8ADDvv** **CE4DB i** 3GDc8GGc 4 **bx** **f P8CAEC**

8D W>R /Wex Ø 0 S 9 **8CEBvv** **DB4877 i** 3GGc8GPa 4 **bx** **f P8D9; >**

KcVXKYY 41<	36236	38238	S MeX 453	39234	37238
S ML 419	35233	36235	S MeY 419	44234	43238
S ML 41<t49a	362=8	36235	S MeY 453	3: 234	43238
S MZL 448	36235	4523=	S MeZ 41<49a	34236	3: 238
S MZL 453	36235	4523=	S MeZ041<49a	34236	3: 238
S MZL 468	36235	4523=			

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M 551: 3
N4 3186
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O 5198
P 78198
4<É86

f b

7D4A99C77477

4133 I X
4153 V
5133 I X

8>4C87797477 **N** <7143 **O** 45=183 **P** < 183 **Q** 83133

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470: 43353033

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8D W>W/hhO0 S 9 **8CEBvv** **87C488D i** 3GSa8GaD 4 **bx** **f P8D9; A**

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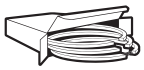
S ML 41<t aal	362=8	36235			



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O	4133
P	78198
	4<É86

f b

7D4A99C77477

4133		I X
4153		V
5133		I X

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N <7143 **O** 45=183 **P** < 183 **Q** 83133

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

9A W>R	a 9	**9>ECvv**	**88D48>7 i**	3GaD8GI D 4	**bx**	**f P8D9; B**
S M: 83 518		3=244	45249	S MeZ 4<3	35235	43238
S MeY 4<3		3: 234	43238	S MeZ04<3	35235	43238
S MeZ 493		39234	3: 238	S MeZ 4=3	39234	3: 238
S MeZ0493		43234	3: 238	S MeZ04=3	43234	3: 238

DC4A98B77477

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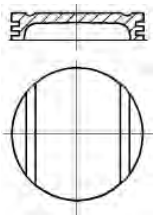
P	83163
	4<É86



7D4A98B77477

4153		I X
4183		
5183		I X

8>4C87797477

N <7143 **O** 45=183 **P** < 183 **Q** 83133

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8DS	S 9	**8CEDvv**	**BD4C8 i**	3 N8i c 4	**bx**	**f P; ; 99A**
N eQdlQe	S 9	**8CEDvv**			**bx**	**Y b88D>**
S MH 41<		38295	452<3	S MH MZ 41<	3: 298	442<3
S MH MZ		34296	452<3			

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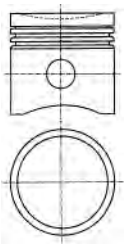
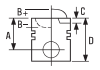
N4	61t 9
P	94139
	54É8:



418<		
418<		
418<		
61=9		



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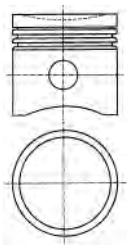
DC4A9AE7E477 *Tm m*
DC4A9AE88477 *Tm m*
DC4A9AE8>477 *Tm m*

7D4A9AE7C477 *Tm m*
7D4A9AE7E477 *Tm m*
7D4A9AE88477 *Tm m*
7D4A9AE8>477 *Tm m*

M	75149	418= V
N4	61 9	418= V
N	97183	7133 V
P	94144	
	54É8:	



Ysz´ß°vt´ßop°try
Vty´pßtypo mÖnt´nW°
Vt°ßzy ' ty ' ´p°° qßty nzy´zo

Q°´Ü°nsl qß °°q s´°yr
HzWßpy x tßYtnsp´°yr°nW° r psl Wßpy
Qzwnpymzwßpy ty Vwp°pwptyr p' ´p ß

G ú' p nz°´ßp
GÉp´pßpy° ' l ´nt´nW°
GÉp°p´´ °°´ mtpwp

J t°pyz op q wol nz´ß
H°wy ´pßpytoz ' z´ l ytwæ° op ´pßpynt y
H°wy opw t°ß y x zyß oz l ' ´p°t y py w mtpw

G x l yßpwæ nz´ßz
Y' tyzßßz ßl ßpy°ßz ol qp´x t
Y' tyzßßz ty°p´ßz l °' tyß ypww mtpw

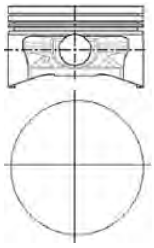
O eQd lQe a 9 **9E89vv** **bx** **Y b88DB48**

S M 51=	3429< 452 3	S M MZ	3429< 452 3

DC4A; 7877477
DC4A; 787C477 *Tm m*
DC4A; 787E477 *Tm m*

7D4A; 7877477
7D4A; 787C477 *Tm m*
7D4A; 787E477 *Tm m*

M	7: t 6	41=< V
P	< 164	41=< V
	55É: 5	41=< V
		71 7
		71 9 V



Vt°ßzy° ßz mp´p' wnpo ty Kyr typ Yp ß zyW

Qzwnpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy

Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´

Vt°ßzyp° op´p' °p°ßz ' l ´l up°r z° op x zßz´p° °zwx pyßp

0W t°ßzyp ' ° p°°p´p ´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wßz

97 f 9Z S 9 **8EE>vv** **C>4D; i** 3GDG8GGP 4 **P t x f u U x v xw** **f P9>88;**

KcVXKYY 513 ZJ	36236	38238	S MeY 513 ZJ	34237	43238
S MeX 513 ZJ	39234	37238			

DC488ED77477
DC488ED7C477 *mT m*

7D488ED77477
7D488ED7C477 *mT m*

M	7: 1=:	6133 VY
N4	4: 133	5133 V
N	6<133	6133 I X
P	: 91=:	
	63É: 3	

MWdf f b

48 opr´pp b por p Zz' Xtyr

480M l o Qptwmp´´tyr

Ypr x pyßßl ' Üztol wl yr wp 48 op r´ °1

Gytwæ °°' p´tz´ py n° l op 48 r´l oz°

Ypr x pyßz ßl ' pÜtz nzy tymwyl Üzyp ql ynst C 48

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8ZP /Q ; 6>0		GPaS	S	cP9DD	9
8ZP4fh /Q ; 6>0		GPaS	S	cP9DD	9
ETm/PhBf QP>0		GVaD	S	cV9DD	;
EE T /MeQdlQe0		iie	S	aS9Va	8
N; CO8AM		GSia	P	eS9DD	87
N>CO97 N /Q B0		GiiV	S	eS9DD	88
Z89 N8> M		GPic	S	cc9DD	>
Z89 N8BM		GVie	S	cc9DD	A
Z8> N8BM		GVie	S	cc9DD	B
Z8BN8BM		GVie	S	cc9DD	A
Z8DN8BM		GVie	S	cc9DD	C
Z>CO97 M		GiiV	S	eS9DD	89
i 87 N8BM		GVie	S	cc9DD	D
i 88 N8BM		GVie	S	cc9DD	E

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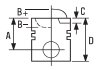


EE T /MeQdlQe0 S 9 **EEDvv** **9E4; i** 3Pi 8SV 4 **bx** **f P9BEB7**

S CTO4333 4329: 392=6

DC4A99>77477

M 6713=
N4 71=6
P 981 :
49É89

7D4A99>77477
7D4A99>7C477 *Tm m*

418< V
418< V
7133 I X V

Vt°ßzy° ßz mp´p' wnpo ty Kyr typ Ypß' zyŵ | Qzwupy y°´ ty S zßz´° ßÜby Ü' p´°pßÜby | Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´ | Vt°ßzyp° op´p' °p°ßz ' l ´l up°rz° op x zßz´p° °zwx pyßp | 0V t°ßzyp ' ° p°°p´p ´tx ' tl ÜÜl ßz °zwx pyßp nzx ' wßz

Vty ´pßtypo mÖnt´nw ° | Hzwby x tßYtnsp´°yr°nw ° r psl wby | GÉp ´pßby° ' l ´nt´nw ° | H°wy ´pßbytoz ' z´ l ytwa° op ´pßbynt y | Y' tyzßz ßl ßby°ßz ol op´x t

8ZP /Q ; 6>0 S 9 **8; B>vv** **AA4BA i** 3cV8ee 4 **P6t x f u U x v xw** **f P8DABA**

8ZP4f h /Q ; 6>0 S 9 **8; B>vv** **AA4BA i** 3cV8ee 4 **P6t x f u U x v xw** **f P997ED**

S CTOUyp J 39236 3=239

DC4>9>877477
DC4>9>87C477 *mT m*

M 741=7
N4 471 3
N 69183
O 31=3
O 31=3
P 97168
5: É8=

WWdf

7D4>9>877477
7D4>9>87C477 *mT m*

4183 TZ
4183 I X V
6133 TZ

Yßpw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

ETm/PhBf QP>0 S 9 **8AB7vv** **BB4D7 i** 3 D8GDi 4 **P6t x f u U x v xw** **f P97ED9**

S CTOI R_HS GT I zz' p´ J 4323: 35243 S CTOUyp J 3923= 3: 243
S CTOI zz' p´ J 44239 3=243

DC4>9>777477
DC4>9>77D477 *mT m*

M 741 3
N4 46158
N 741<3
O 4153
P 98163
59É94

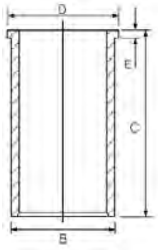
MWWdf f b

7D4>9>777477
7D4>9>77C477 *mT m*
7D4>9>77D477 *mT m*

6133 I Q V
41=8 V
5183 I X V

LKZ-Ring

8>4797E77477



N : <133 **O** 475133 **P** : =183 **R** 8133

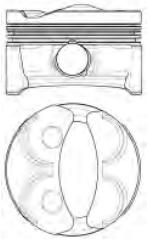
Z89 N8> M S 9 **8; EOvv** **AA4C7 i** 3cV8 V 4 **bx** **f P9>A>C**

S CTOI R_HS GT Uyp 3623= 35243 S CTOUyp RVM 3623= 36243
S CTOUyp 44239 36243

DC4>>>D774>7

M 631<3
N4 6143
N 88166
N2 6153
O 81<<
O 6187
P 831<8
4<133É76133

f b



7D4>>>D77487
7D4>>>D7C487 *mT m*

4153 VaJ V
4183 V
5133 TZ

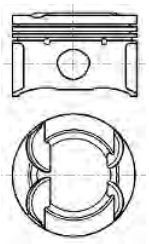
Yfppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

Z89 N8B M	S	9	**8AEDvv**	**DA4E7 i**	3GGa8GNN	4	**bx**				**f P97DE;**
Z8B N8B M	S	9	**8AEDvv**	**AA4E7 i**	3:V8GNN	4	**bx**				**f P9AAB;**
S OT0419 I zz' p´				43247	38248			S OT0I zz' p´		3=239	39248
S OT0I R_HS GT I zz' p´				4323:	39247			S OT0I U_TZXdS GT I zz' p´		3<243	43249
S OT0I R_HS GT Uyp				36243	39247			S OT0I U_TZXdS GT Uyp		3<243	43249
S OT0I R_HaGT I zz' p´				45245	39247			S OT0Uyp		3=23=	39248
S OT0I R_HaGT Uyp				45245	39247			S OT0VGI KS GT I zz' p´		3724 5	3=249

DC4>>>D77487
DC4>>>D7C487 *mT m*

M 5: 183
N4 5133
N 8: 183
O 61=:
O 81=8
P 7: 183
4<É76

f b



7D4>>>D77487
7D4>>>D7C487 *mT m*

4153 VaJ V
4183 V
5133 TZ

Yfppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

Z8> N8B M	S	9	**8AEDvv**	**89748>8 i**	3GaP8GI N	4	**bx**	**f u U x v xw**			**f P9>A>B**
S OT0I R_HS GT I zz' p´ Y				3<23:	39247			S OT0I zz' p´ Y Pzsy I zz' p´ b z´v°		4423 9	35243
S OT0I zz' p´ Y				43239	39248						

DC4>>>D774; 7

M 5<183
O 5143
P 83145
53É7<

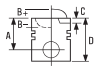
f b

7D4>>>D77487
7D4>>>D7C487 *mT m*

4153 VaJ V
4183 V
5133 TZ

Yfppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

Z8D N8B M	S	9	**8AEDvv**	**E748B7 i**	3GNN8NGe	4	**bx**	**f u U x v xw**			**f P9AAB>**
S OT0I R_HS GT I zz' p´ Y				4323:	39247			S OT0I U_TZXdS GT I zz' p´		44245	43249
S OT0I zz' p´ Y				4323:	39248			S OT0I U_TZXdS GT I zz' p´ Y		3<243	43249
S OT0I zz' p´ Y Pl b				45243	37248			S OT0VGI KS GT I zz' p´		44245	3=249
S OT0I zz' p´ Y Pzsy I zz' p´ b z´v°				34245	44246			S OT0VGI KS GT I zz' p´ Y		36245	43249



DC4>>>D774A7
DC4>>>D7C4A7

M	5<183
N4	6183
N2	51t 3
O	6183
O	6183
P	84153
	53É7<

TMdf f b

7D4>>>D77487
7D4>>>D7C487 *mT m*

4153		VaJ V
4183		V
5133		TZ

Yfppw Yfl sw Gntp´ Gnp´z Gnntl tz

i 87 N8BM S 9 **8AEDvv** **BB4DA i** 3 D8GGa 4 **bx** **f P8DAB;**

S OTOI zz' p´	39234 3: 23<	S OT0Uyp	39234 4423:

DC4>; ; A77477
DC4>; ; A7A477 *mT*
DC4>; ; A7C477 *mT m*

M	571=3
P	78138
	4=É87

f b

7D4>; ; A77477
7D4>; ; A7A477 *mT*
7D4>; ; A7C477 *mT m*

4153		TZ
4153		V
5183		I X

Yfppw Yfl sw Gntp´ Gnp´z Gnntl tz

i 88 N8BM S 9 **8AEDvv** **89748B7 i** 3GaP8NGe 4 **bx** **e x v zxw** **f P8DAB>**

S OTOI zz' p´ Y	36235 4423:	S OT0Y b z´v°	44236 39238
S OT0Pzsy I zz' p´ b z´v°	3: 237 4423:	S OT0b z´v°	44236 3=239

DC4>9; ; 77477
DC4>9; ; 7C477 *mT m*
36233 4423:

M	59183
N4	3198
N	89143
P	7: 133
	54É83

MWf b

7D4>9; ; 77477
7D4>9; ; 7C477 *mT m*

4153		V
4153		I X
5183		I X

Yfppw Yfl sw Gntp´ Gnp´z Gnntl tz

N; CO8AM P 9 **8>EBvv** **C74DA i** 3 V8GGa 4 **P x f u** **f P9DE8A**

S OTOI R_HS GT Uyp J	35248	S OT0I U_TZXdS GT Uyp J	3: 24:
S OTOI zz' p´ J	43246	S OT0Uyp J	35247

DC4>>EC774;7
DC4>>EC7C4;7

7D4>>EC77487

M	7518 3	4183 MJI
N4	4714 8	4183 V
N	7:18 3	5133 IX
P	9818 3	
	59É93	

MWWWdf fb

HSb H7: _RZ_K4 0UK <8<3795139
Yfbpw

HSb H7: _RZ_K4 0UK <8<3795139
Yfi sw

HSb H7: _RZ_K4 0UK <8<3795139
Gntp´

HSb H7: _RZ_K4 0UK <8<3795139
Gnp´z

HSb H7: _RZ_K4 0UK <8<3795139
Gnntl tz

N>CO97 N /Q B0	S 9	8EEAvv	87748>7 i	3GPa8GI D 4	P@t x f u	f P; B7AD
SCTOI R_HS GT I zz' p´ J		45247		SCTOI U_TZXdS GT I zz' p´ J		43249
SCTOI R_HS GT I zz' p´ YJ		35248		SCTOI U_TZXdS GT I zz' p´ YJ		43249
SCTOI zz' p´ YJ		38248				

DC4>>EC774;7
DC4>>EC7C4;7

7D4>>EC77487

M	7518 3	4183 MJI
N4	4714 8	4183 V
N	7:18 3	5133 IX
P	9818 3	
	59É93	

MWWWdf fb

DC4>>EC774>7
DC4>>EC7C4>7

7D4>>EC77487

M	7518 3	4183 MJI
N4	4714 8	4183 V
N	7:18 3	5133 IX
P	9818 3	
	59É93	

MWWWdf fb

HSb H7: _RZ_K4 0UK <8<3795139
Yfbpw

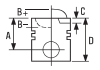
HSb H7: _RZ_K4 0UK <8<3795139
Yfi sw

HSb H7: _RZ_K4 0UK <8<3795139
Gntp´

HSb H7: _RZ_K4 0UK <8<3795139
Gnp´z

HSb H7: _RZ_K4 0UK <8<3795139
Gnntl tz

Z>CO97 M	S 9	8EEAvv	D9487A i	3GGN8GSP 4	P@t x f u U x v xw	f P9A7B7
SCTOI R_HS GT I zz' p´ J		35244 39247		SCTOI U_TZXdS GT I zz' p´ J		36244 43249
SCTOI R_HS GT I zz' p´ YJ		35244 39247		SCTOI U_TZXdS GT I zz' p´ YJ		36244 43249
SCTOI R_HaGT I zz' p´ J		45245 39247		SCTOVGI KS GT I zz' p´ J		36245 3=249
SCTOI zz' p´ J		35244 38248		SCTOVGI KS GT I zz' p´ YJ		36245 3=249
SCTOI zz' p´ YJ		3923= 38248				



DC4>; 9977477
DC4>; 997A477 *mT*
DC4>; 997C477 *mT m*

M 7: 183
N4 47183
N 7: 183
P : 6133
65É96

-8<73HH,

MWWWdf fb

7D4>; 9977477
7D4>; 997A477 *mT*
7D4>; 997C477 *mT m*

41 8 MJI V
41 8 V
5133 I X

GDC LKZ-Ring

UK 4458 : <4 5969

Nüral® FITTED WITH GOETZE® RINGS

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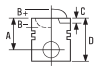
		CCM	x		9
>P; 7		PNi c	S	GDD9DD	87
>P; 8		PNi e	S	GDD9DD	87
>P; 8f		PNi e	S	GDD9DD	87
>PAA		NPSc	S	i G8GD	A
>PAA4f		NPSc	S	i G8GD	B
>PAB/Dh0		NScc	S	i G8GD	A
>PAB/89h0/Q	; 0	NScc	S	i G8GD	A
>PAB4Tb /Q	>0	NScc	S	i G8GD	C
>PAB4f		NScc	S	i G8GD	D
>PAB4f P		NScc	S	i G8GD	A
>TW		NGci	S	eV9DD	>
>TZ		NGci	S	eV9DD	>
>b874f 9 /Q	A0	Ni i e	S	i V9eD	E
>b874f B/Q	A0	Ni i e	S	i V9eD	E
NWP		Gi ae	S	eG9DD	9
Td8BPQ		GVi e	S	ce9DD	8
a Y >AC4f 9 /Q	; 0	GGi ac	a	GNe9DD	88
a Y >AC4f ; /Q	; 0	GGi ac	a	GNe9DD	88
a Y >AC4f A/Q	A0	GGi ac	a	GNe9DD	88
a Y B; E3E; E/Q	>0	GSi P	P	eP9DD	;



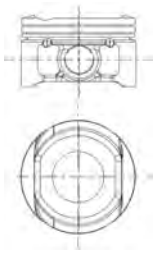
Td8BPQ S 9 **8AEDvv** **D7 i** 3GDi 4 **bx** **f P9BAED**

JKR0 G J6 419 44244 RGTI KX a0D419 3423:

DC4>; CC77477
DC4>; CC7C477 *mTm*

M 5<183
N4 71t3
N 98133
N2 5153
O 41<3
P 7=153
4=É88

df



7D4>; CC77477
7D4>; CC7C477 *mTm*

4153 I X V
4153 V
5133 I X

Vt°ßzy 'ty ''p°° qßty nzy´zo | Qzwpymzwüpy ty Vwp°pwptyr p'´p ß | GÉp°p´´ °°´ mtpwp | H°wy opwl t°ß y x zyßl oz l ''p°t y py w mtpwl | Y'tyzßz ty°p´ßz l °'tyßl ypwlv mtpwlv
Yßppw | Yßl sw | Gntp´ | Gnp´z | Gnntl tz

NWP S 9 **8EBDvv** **87; i** 3GSD 4 **P0t x f u U x v xw** **f P998B9**

RGTI KX a0D513 J0DU 3423<

DC48; EA77477
DC48; EA7C477 *mTm*

M 781<6
N4 4:1<3
N 6<133
P 9<1<3
59É99

-8:=34P,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mTm*

4t18 I Q V
5133 V
6133 I X V

HzÄwnl 'lntßÖ56t8nx6 GC 781883/J C 9<1883 | azvßx py op´ Qzwpyx °wp 56t8nx6 | azvßx p op w nl @86 o°'t°ßzy 56t8nx6 | azvßnl @8bl o 't°ßy 56t8nx6 | azvßx p nl x p´l 't°ßzyp 56t8nx6

aY B; E5E; E/Q >0 P 9 **8>E; vv** **A74C7 i** 3/e8 V 4 **P0t x f u U x v xw** **f P9C9Q;**

I URZ 418 JtJ 3<237 39245 I URZ a0418 J0DU 3<237 39245

DC4>9CA77477
DC4>9CA7C477 *mTm*

M 78198
N4 47198
N 76173
O 414<
O 4135
P :4198
63É99

+<673G734,

MWWWdf

7D4>9CA77477
7D4>9CA7C477 *mTm*

5133 I Q
5133 V
5133 I X V

LKZ-Ring

>TW S 9 **98CEvv** **88A i** 3GVa 4 **P0t x f u U x v xw** **f P9>D77**

>TZ S 9 **98CEvv** **88A i** 3GVa 4 **P0t x f u U x v xw** **f P9>>>7**

U_ZRGTJKX 0D515 J0DU 3<23: 44245

DC4>; BC77487
DC4>; BC7D487 *mTm*

M	7<t3
N4	4617:
N	85173
O	316<
P	:71t4
	63É9<

-8<83NG45:,

MWWWdf fb

7D4>; BC77477
7D4>; BC7D477 *mTm*

5183		MJI V
5133		V
5133		I Q

GDC LKZ-Ring

Lz´ 'tºßzy° Ätßs I 5716x x nzy´zo r I ' x pl°°´po l ß' ty npyßp wyp

L´Qzwnpy x tßptypx Vwp°pw°r pyl mfß yo @zy 57/6 S S / rpx p°°py l y op´ Qzwnpynzwlpy0S tßp

Vz°´'tºßzy° l @pn°y nl´ßop mtpwp op 57/6 x x x p°°´ l° np yßp op wi Ép mtpwp0'tºßzy

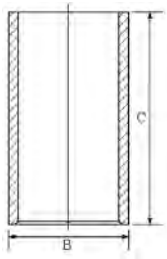
Vl´l 'tºßzyp° nzy°yl otºß yntl op 'l°z op mtpwpy pwnpyß z opwnf'wy op 57/6x x

Vp´'tºßzyt nzy 'l°°l r r tz mtpwlw ot 57/6 x x x tº°´l ßz°°wil °°p qz´z°'tyzßz

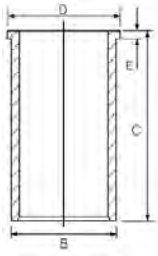
>PAA	S	9	**9; >Ovv**	**>D4B9 i**	3aV8eS	4	**P@t x**		**f PA; ; 8**
>PAB/Dh0	S	9	**9>COvv**	**A8487> i**	3ai 8GSG	4	**P@t x**	**f u**	**f P99E;**
>PAB/89h0/Q ; 0	S	9	**9>COvv**	**A84DA i**	3ai 8GGa	4	**P@t x**		**f PD9DD**
>PAB4f P	S	9	**9>COvv**	**BB4C; i**	3 D8i	4	**P@t x**	**f u U x v xw**	**f P99E>**

I l yßp´-LK6/LK7, a	3=2=5	3=2=9	R633 2JKR0G 0518	3423 8	3923:
JKR0G 2YVGI KMKGX 518	382=8	3823 3	R633 2JKR0G 0518 J	442<9	372=7
R533 516 J	432<5	432<9	R633 0518 J	442<9	3523 9
R533 518 J	432<9	4523:	R733 518 ZJ	382=8	3823 3
R533 518 ZJ	392=9	4523:	VGPKXU 0518 ZJ	452=3	3723 3
R533 2ZX0ZUT 518 J	3<244	45248	VGPKXU 0518 ZJtl	452=3	392=6
R633 2JKR0G 0516 J	372=6	432<9	VGPKXU YVUXZ 0518 ZJtl	3423<	45245

8>478AAE7477 **N** =7146 **O** 49718 3

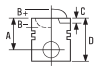


8>4797B77477 **N** =7197 **O** 498143 **P** =91=4 **Q** 8139



>PAA4f	S	9	**9; >Ovv**	**B94C7 i**	3eS8i V	4	**P@t x**	**f u**	**f P99E9**

MGRGTZ 0a 516 Z°´mz0J	3=2=3	382<7	VGPKXU 0516 ZJ	452<5	372<9
R533 516 J	3=2=5	452<8			



DC49DC8774; 7
DC49DC87C4; 7 *mTm*

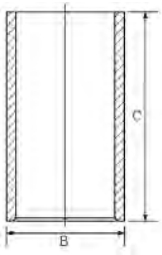
M	7<t3
N4	6143
O	5163
P	<<t3
	5=É:8

df

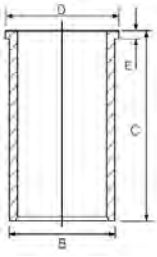
7D49DC877477
7D49DC87C477 *mTm*

5183		SUV
5133		IXV
7133		IXV

8>478AAE7477 **N** =7146 **O** 497183



8>4797B77477 **N** =7197 **O** 498143 **P** =91=4 **Q** 8139



UK>SJ4366=4

>PAB4Tb /Q >0 S 9 **9>COvv** **E>48;; i** 3GNe8GeG 4 **P@t x f u U x v xw** **f P9>7AA**

R533 2ZX@UT 518 JtJ	44238	45248	VGPKXU YVUXZ @0518 J@0U	3:23<
R533 2ZX@UT 518 J@0U	44238	45248	VGPKXU YVUXZ @@0518 J@0U	3<248

DC4>>; A77477
DC4>>; A7C477 *mTm*

M	7<158
N4	4<1=3
N	77133
O	5133
O	5183
P	:<158
	65É:8

MWWWdf fb

7D4>>; A77477
7D4>>; A7C477 *mTm*

5188		TZ
5138		IX
7133		TZ

DC4>>; A77487
DC4>>; A7C487 *mTm*

M	7<158
N4	4<1=3
N	77133
O	5133
O	5183
P	:<158
	65É:8

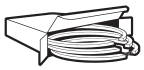
MWWWdf fb

7D4>>; A77477
7D4>>; A7C477 *mTm*

5188		TZ
5138		IX
7133		TZ

Zz nÖuyop´4)5	Iy eÖuyop´4)5	°°´nÖuyo´p4)5	py pwntuyo´z4)5	Intuyo´z4)5
UK>4443G894				
Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz
Zz nÖuyop´6)7	Iy eÖuyop´6)7	°°´nÖuyo´p6)7	py pwntuyo´z6)7	Intuyo´z6)7

>PAB4f S 9 **9>COvv** **B94887 i** 3eS8GVD 4 **P@t x f u U x v xw** **f P>BD9**



R533 518	3<2=5 432=9	VGPKXU I RGYY0 518 ZJ	3: 234
R533 518 J 0U	34237 4523:	VGPKXU 0518 ZJ	382=9 452=4
R533 518 ZJ	392=3 4523:	VGPKXU 00518 ZJ tl	362=4 3<2==
R533 518 ZJ tl	3<234 3=238	VGPKXU 00518 ZJ t	37233 45239
R 633 00518 ZJ	352<: 38237	VGPKXU YVUXZ 0518 ZJ	442=:
R733 5833 ZJ	382=8 39238	VGPKXU YVUXZ aGT 0518 ZJ	452== 3423<

DC4>>>977477
DC4>>>97C477 *mT m*

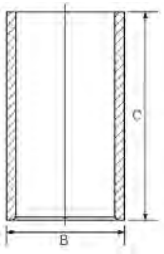
M 7<t 3
N4 4173
P : <t 3
65É: 8

MWTMWWdf fb

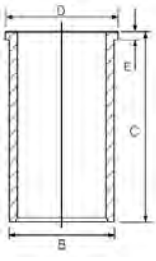
7D4>>>977487
7D4>>>97C487 *mT m*

5183		I X
5133		I X V
7133		TZ

8>478AAE7477 **N** =7146 **O** 497183



8>4797B77477 **N** =7197 **O** 498143 **P** =91=4 **Q** 8139



DC4>>>977487
DC4>>>97C487 *mT m*

M 7<t 3
N4 4173
P : <t 3
65É: 8

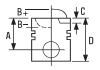
MWTMWWdf fb

7D4>>>977487
7D4>>>97C487 *mT m*

5183		I X
5133		I X V
7133		TZ

Vt°ßzy° ßz mp ´p' wnpo ty Kyr typ Ypß° zyvÜ	Qzwnpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy	Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´	Vt°ßzyp° op ´p' °p°ßz ' l ´l up°rz° op x zßz´p° °zwx pyßp	0V t°ßzyp ' ° p°°p´p ´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wßz
Zz nÖwyop´ 4) 5	I y eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwntwyo´z 4) 5	I ntwyo´z 4) 5
UK>SJ49<5=6				
Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
Zz nÖwyop´ 6) 7	I y eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwntwyo´z 6) 7	I ntwyo´z 6) 7

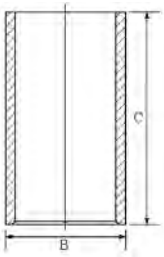
| | | | |



>P; 7	S 9	**; 9EOvv**	**B> i**	3ec 4	**P@t x**		**f PD9BD**
>P; 8	S 9	**; 9EDvv**	**C8 i**	3 a 4	**P@t x**		**f PD9E;**
>P; 8f	S 9	**; 9EDvv**	**DB i**	3GGc 4	**P@t x f u**		**f PD9BE**

I lyßp´	342<3 452=:	I lyßp´ -LK6/ LK7, a	3: 2<9 3<2=5
I lyßp´ -LK4/ LK5, @a	3: 2 = 452<8	I lyßp´ -LK8/ LK9, a0	3: 2<9

8>4787EC7477 **N** 437183 **O** 4=9183



a Y >AC4f 9 /Q ; 0	a 9	**88EBOvv**	**9BA i**	3PaD 4	**P@t x f u U x v xw**		**f P9C7C8**
a Y >AC4f ; /Q ; 0	a 9	**88EBOvv**	**9EA i**	3SDG 4	**P@t x f u U x v xw**		**f P9C7BD**
a Y >AC4f A /Q A0	a 9	**88EBOvv**	**; ; A i**	3SVV 4	**P@t x f u U x v xw**		**f P9C7C7**

LOYp´tpº SQ5	3: 244	L°°z	3: 244

DC4>9C777477

M <8133
N4 4: t 3
N < 133
P 468133
85É436

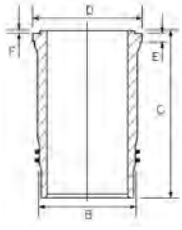
WWZN df fb

7D4>9C777477

6133 MJI
6133 I X
7133 MJI V

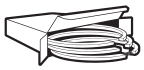
GDC LKZ-Ring

8A4>A87C7487 **N** 477183 **O** 599163 **P** 488183 **Q** 43145 **R** 4143



DE4>9C777477
< 075: 333033 .
4807843: 3043

Yßppw	Yßl sw	Gntp´	Gnp´z	Gnntl tz
@nvÜop° °pl vÜ	Ynswlp ßJtnsß°yr py pty	@nvÜßop° uztyß°	@nvÜÖp vw°°pwr°	I zx ´´pyop vp r°l ´ytÚtzyt
@nvÜop° GyßtOVzwÜs Xtyr -Lt´p Xtyr , 4607843: 3033/ l vÜz l @tvlmvp °p' l ´l ßpvÜ	KyßS vßLp°p´´tyr 4607843: 3033/ l °ns ptyÜbvy p´s vßlns	I zyßtpyßvp °pr x pyß´l nvp°´ 4607843: 3033 -et°' zytmvp r l vpx pyß	@nvÜÖp pvÜpr x pyßz´l °nl oz´ 4607843: 3033/ ßl x nt y ot°' zytmvp ' z´ °p' l ´l oz	@nvÜop I ypvwr Xl °nstl zwz 4607843: 3033/ ot°' zytmtvl ynsp °p' l ´l ßl x pyßp
Xpvlpq9183x x	KyßlvªßPyr 9183x x	Rp´pvlpq9183x x	Xpvpq@nt y 9183x x	Xtvlp@z 9183x x



P 99B49	N	9	**97D7vv**	**9C4;7 i**	3Pc8SG	4	**P@l x**	**f P8D7B7**
P 99B4;	P	9	**;897vv**	**;;4>> i**	35V8aD	4	**P@l x**	**f P8D7B8**
P 99B4>	S	9	**>8B7vv**	**>>4B> i**	3aD8ec	4	**P@l x**	**f PBEE;**
P 99B4B	a	9	**B9;>vv**	**BB488> i**	3 D8GVV	4	**P@l x**	**f P8D7B9**

Ll´x p´	342 5	Ll @´t3	342 3

DC49CEB77487

M	9313
N4	5313
N	9513
P	4463
	68É<5

7D49CEB77477

613		I X V
513		
513		
713		I X V

ENGINE INDEX

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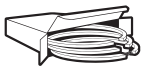
Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

		CCM	x		9
B8>5787		GGPS	N	eV9DD	8
B8A5777		NNcD	S	eV9DD	8
D79A578		GVVi	N	i V9DD	9
D79A579		GcNe	N	GDD9DD	;
D7; A578 6D7; A5785BA		NPPe	P	i V9DD	9
D7; A579		NVi N	P	GDD9DD	;
D7; A57>		NcSe	P	GDP9DD	A
D7; A57A		Ni PD	P	GDS9DD	C
D7; A57B		NcDe	P	GDD9DD	>
D7>A578		PGGi	S	i V9DD	9
D7>A579		PSVV	S	GDD9DD	;
D7>A57>		Paaa	S	GDP9DD	A
D7>A57A		Pi De	S	GDS9DD	C
D7>A57B		PaGP	S	GDD9DD	>
D7>A59A		Pi De	S	GDS9DD	D
D7AA57>		SVeP	V	GDP9DD	A
D7AA57A		SeeN	V	GDS9DD	C
D7B8 X		VSi i	a	GDP9DD	B
D7B857A		VSGi	a	GDS9DD	E
D7BA579		VGeS	a	GDD9DD	;
D7BA57>		VSi i	a	GDP9DD	A
D7BA57A		VeaG	a	GDS9DD	C
D7BA57B		VSND	a	GDD9DD	>
D7BA59>		VSi i	a	GDP9DD	B
D7BA59A		VeaP	a	GDS9DD	D
D987579		GPci e	a	GPc9DD	8E
D98A599		GPci e	a	GPc9DD	97
D>B7598		i VDD	a	GND9DD	8D
D98A595A97		GPci e	a	GPc9DD	97
D; BA57A5A77		eGDN	a	GGV9DD	8B
D; BA57A5AE7		eGDN	a	GGV9DD	8B
D; BA59A5A776A79		eGDN	a	GGV9DD	8C
D; BA59A5A786A7; 6A; ;		eGDN	a	GGV9DD	8C
D; BA59A5AE7		eGDN	a	GGV9DD	8B
D>B75985779		i VDD	a	GND9DD	8D
D>B75985 7>9		i VDD	a	GND9DD	8D
D>B75985B79		i VDD	a	GND9DD	8D
D>B75985B7B		i VDD	a	GND9DD	8D
D>B75985C7D		i VDD	a	GND9DD	8D
D>B75985C87		i VDD	a	GND9DD	8D
O7;		Si SG	S	GGD9DD	87
O7; 6976986>8		SVaN	S	GGD9DD	88
OZ;		PcDa	P	GGD9DD	87
Oa ; 48; a f		VSDG	S	GGV9DD	8A
Ob ; 6877		cSGN	a	GGD9DD	87
SQZQeUe AB>7		SSDD	S	GGG8cc	89
SQZQeUe BB>7		VDDD	S	GGG8cc	8;
SQZQeUe CC>7		VDDD	S	GGG8cc	8>
SQZQeUe CD>7		aaDD	a	GGG8cc	89
SQZQeUe D9>73D; >7		cVDD	a	GGG8cc	8;



B8>5787	N 9	88; >vv		P@t x	Y b>89E
B8A5777	S 9	99C7vv		P@t x	Y b>89C

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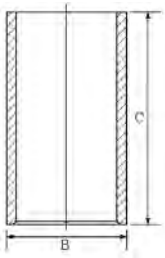
8>47887; 8477 N =3137 O 4: <133



D79A578	N 9	8AAEvv		P@t x	Y bABE48
D7; A578 6D7; A5785BA	P 9	9; ; Dvv		P@t x	Y b>77B
D7>A578	S 9	; 88Evv		P@t x	Y bAC8

GMK0_RZ_XGR

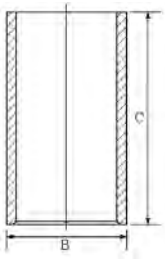
DC497C977477
DC497C97D477 *mT m*

M 8=193
N4 5613
N 7515
P 4341
65É<7

7D497C977477
7D497C97D477 *mT m*

5183 I X V
5183 V
8183 I X V

8>4787B97477 N =133 O 4< 133
8>47887B8477 N =143 O 4< 133



D79A579	N 9	8C9Dvv		P@t x	Y bAC; 48
D7; A579	P 9	9AE9vv	; ; 4>7 i 35V8VS 4	P@t x	Y b; >CA
D7>A579	S 9	; >AAvv	>>4A7 i 3aD8ae 4	P@t x	Y b; >CB
D7BA579	a 9	A8D>vv		P@t x	Y b; >CC

GMK0_RZ_XGR

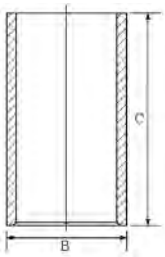
DC497BD77477
DC497BD7D477 *mT m*

M 8=193
N4 561 3
N 7: 133
P 4341
65É<7

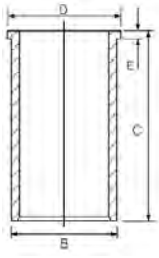
7D497BD77477
7D497BD7D477 *mT m*

5183 I X V
5183 V
8183 I X V

8>47878C7477 N 43613 O 4< 133
8>4788798477 N 43619 O 4< 133
8>4788799477 N 43613 O 4< 133



		8>4798A>7477	N 436133 O 4<133 P 437133 Q8133



DC497BD77487	7D497BD77477		
	7D497BD7D477 *mTm*		
M 8=193	5183 I X V		
N4 561:3	5183 V		
N 7817 3	8183 I X V		
P 434148			
65É<7			

DC4CD8E774;7	7D4CD8E77487		
DC4CD8E7D4;7 *mTm*	7D4CD8E7D487 *mTm*		
M 8=193	5183 I Q V		
N4 561:3	5183 V		
N 7:143	7133 I X V		
P 434148			
67É<7			

Vt°ßzy Ätßs npyßlwnzx m°°ßzy nslx mp´1	Qzwmpy x tßÜpyßl wp´ ap´mipyy°yr°vl x x p´1	Vt°ßzy nslx mip op nzx m°°ßzy npyßl wp1	Vt°ß y nzy n x l´l op nzx m°°ßt y npyßl w

D7;A57B	P	9	9C7Dvv	;;4>7 i	3SV8VS	4	P@t x	Y b>77D48
D7>A57B	S	9	;B8;vv				P@t x	Y b>78;
D7BA57B	a	9	A>97vv				P@t x	Y b>78C

GMK0_RZ_XGR

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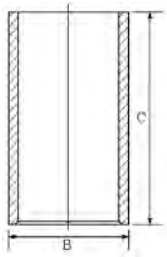
DC4CD8E7D487 *mTm*	7D4CD8E7D477 *mTm*	8>4787CD8477	N 436139 O 4=9133
		8>4787CD9477	N 436143 O 4=9133
M 98148	5183 S U R V		
N4 551:3	5183 V		
P 43<183	7133 I X V		
6<É<8			



D7;A57>	P	9	9C>Dvv				P@t x	Y b>77C48
D7>A57>	S	9	;BBBvv				P@t x	Y b;>D;48
D7AA57>	V	9	>AD;vv				P@t x	Y b;>D>48

D7BA57>	a 9	A>EEvv	P x	Y b; >DB

GMK0_RZ_XGR

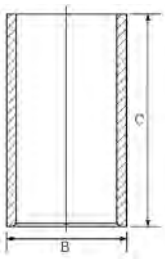
DC4CD9777477
DC4CD977D477 *mT m*

M 8=193
N4 551 3
N 83133
P 434148
67É=3

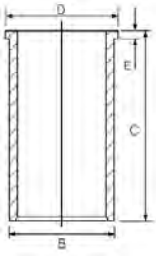
7D4CD9777477
7D4CD977D477 *mT m*

5183 S URV
5183 V
7183 I X V

8>47878D7477 **N** 43: 133 **O** 4< 133
8>47878D8477 **N** 43: 139 **O** 4< 133
8>47878D9477 **N** 43: 143 **O** 4< 133



8>479; AA8477 **N** 43: 139 **O** 4< 133 **P** 443133 **Q** 8133



D7B8 X	a 9	A>EEvv	P x	Y b9; >DC48
D7BA59>	a 9	A>EEvv	P x f u	Y b; >DC

GMK0_RZ_XGR

DC4CD; E77477

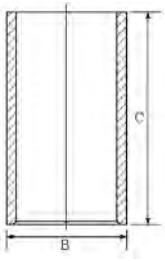
M 8=194
N4 55183
N 86163
P 434148
67É=3

df

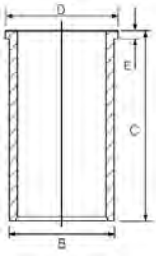
7D4CD; E77477

6183 S URV
5183 V
7183 I X

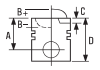
8>47878D7477 **N** 43: 133 **O** 4< 133
8>47878D8477 **N** 43: 139 **O** 4< 133
8>47878D9477 **N** 43: 143 **O** 4< 133



8>479; AA8477 **N** 43: 139 **O** 4< 133 **P** 443133 **Q** 8133



D7; A57A	P 9	9E; 7vv	P x	Y b>7; 9
D7>A57A	S 9	; E7Dvv	P x	Y b>789



D7AA57A	V 9	>DD9vv	P6i x	Y b>78>
D7BA57A	a 9	ADB8vv	P6i x	Y b>78B

GMK0_RZ_XGR

DC49>CD77477

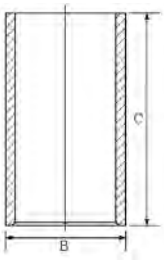
M 98148
N4 55183
N 85153
P 43<183
6<É<8

f b

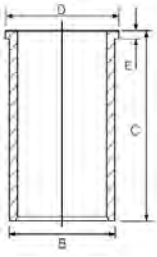
7D49>CD77477
7D49>CD7D477 *mT m*

5183 SURV
5183 V
7183 IXV

8>4787E>7477 N 43: 133 O 4=<183
8>4787E>8487 N 43: 143 O 4=<183



8>4798; B8477 N 43: 135 O 4=<183 P 4431< Q8183
8>4798; B9477 N 43: 147 O 4=<183 P 4431< Q8183
8>4798; B; 477 N 43: 177 O 4=<183 P 4431< Q8183
8>4798>E8477 N 43: 134 O 4=<183 P 43=1< Q8183
8>4798>E9477 N 43: 138 O 4=<183 P 43=1< Q8183
8>4798>E;477 N 43: 14: O 4=<183 P 43=1< Q8183
8>4798>E>477 N 43: 17: O 4=<183 P 43=1< Q8183



D7>A59A	S 9	;E7Dvv			P6i x	f u	Y bE9>9
D7BA59A	a 9	ADB;vv	E>4887 i	3GNe8GVD 4	P6i x	f u	Y b>78D

GMK0_RZ_XGR

DC49>>A774>7

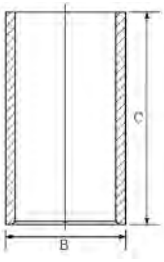
M 98148
N4 55183
N 87178
P 43<183
6<É<=

MWdf

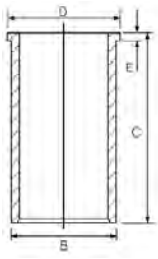
7D49>>A77477

6183 IXV
5183 V
7183 IXV

8>4787E>7477 N 43: 133 O 4=<183
8>4787E>8487 N 43: 143 O 4=<183



		8>4798; B8477 8>4798; B9477 8>4798; B; 477 8>4798>E8477 8>4798>E9477 8>4798>E; 477 8>4798>E>477	N 43: 135 O 4=<133 P 4431< Q8133 N 43: 147 O 4=<133 P 4431< Q8133 N 43: 177 O 4=<133 P 4431< Q8133 N 43: 134 O 4=<133 P 43=1< Q8133 N 43: 138 O 4=<133 P 43=1< Q8133 N 43: 14: O 4=<133 P 43=1< Q8133 N 43: 17: O 4=<133 P 43=1< Q8133



D7B857A	a 9	A>8Evv	P@t x	Y b8; >DA

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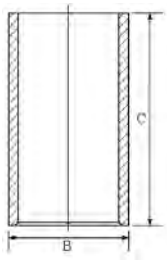
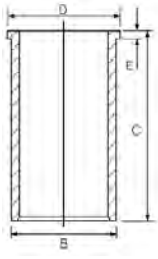
DC49>CD77487 M 98148 N4 55183 N 85133 P 43<183 6<É<8 df f b	7D49>CD77477 7D49>CD7D477 *mT m* 5183 SURV 5183 V 7133 I X V	8>4787E>7477 8>4787E>8487	N 43: 133 O 4=<133 N 43: 143 O 4=<133



8>4798; B8477 8>4798; B9477 8>4798; B; 477 8>4798>E8477 8>4798>E9477 8>4798>E; 477 8>4798>E>477	N 43: 135 O 4=<133 P 4431< Q8133 N 43: 147 O 4=<133 P 4431< Q8133 N 43: 177 O 4=<133 P 4431< Q8133 N 43: 134 O 4=<133 P 43=1< Q8133 N 43: 138 O 4=<133 P 43=1< Q8133 N 43: 14: O 4=<133 P 43=1< Q8133 N 43: 17: O 4=<133 P 43=1< Q8133		



O7;	S 9	>E>8vv	P@t x	Y b8>79E
OZ;	P 9	; C7Bvv	P@t x	Y b>79D48
Ob ; 6877	a 9	C>89vv	P@t x	Y b88; 87

GMX0_RZ_XGR

DC497CA77487	**7D497CA77477**	**8>4B889A7477**	**DD497CA77487**
M : 3153 **N4** 5<133 **N** 88133 **P** 473153 73É=7	5183 I X V 5183 V 5183 V 8133 I X V	**N** 44<133 **O** 56: 133 **P** 45=183 **Q** 4: 3133 **R** 4133	< 053: 833043 . 470944583033
DC497CA774; 7 **df**	**7D497CA77477**	**8>4B889A7477**	**DD497CA774; 7**
M : 3153 **N4** 5<133 **N** 88133 **P** 473153 73É=7	5183 I X V 5183 V 5183 V 8133 I X V	**N** 44<133 **O** 56: 133 **P** 45=183 **Q** 4: 3133 **R** 4133	< 053: 833063 . 470944583033

O7; 6976986>8	S 9	**>AB9vv**	**P@i x**	**Y b88; 7C**

GMK0_RZ_XGR

DC497CA77477	**7D497CA77477**	**8>4B889A7477**	**DD497CA77477**
M : 8153 **N4** 5: 183 **N** 84133 **P** 483153 73É=7	5183 I X V 5183 V 5183 V 8133 I X V	**N** 44<133 **O** 56: 133 **P** 45=183 **Q** 4: 3133 **R** 4133	< 053: 833033 . 470944583033

SQZQel AB>7	S 9	**>>77vv**	**P@i x**	**Y bBCB;**
SQZQel CD>7	a 9	**BB77vv**	**P@i x**	**Y bBCB>**

GMK0_RZ_XGR

DC4A98; 77477 **DC4A98; 7C477** *Tm m*	**7D4A98; 77477** **7D4A98; 7C477** *Tm m*	**8>4787D97477**
M <31<8 **N4** 4<183 **N** 941<8 **P** 467153 6<É<= **df f b**	516< I X 516< 71 9 I X	**N** 447173 **O** 538193

SQZQel BB>7	S 9	**A777vv**	**P@i x**	**Y bBCBA**
SQZQel D9>73D; >7	a 9	**CA77vv**	**P@i x**	**Y bBCBB**

GMK0_RZ_XGR

DC4A98; 77487

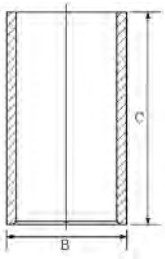
M : 6158
N4 5419:
N 941<3
P 459193
6<É<=

df f b

7D4A98; 77477
7D4A98; 7C477 *Tm m*

516< I X
516<
71: 9 I X

8>4787D97477 **N** 447173 **O** 538193



SQZQeUé CC>7 S 9 **A777vv** **PQi x f u** **Y bBCBC**

GMXQ_RZ_XGR

DC4A98>77477
DC4A98>7C477 *Tm m*

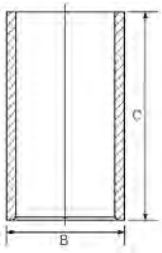
M : 51=3
N4 4=<9
N 941<3
P 459163
74É=8

df f b

7D4A98>77477
7D4A98>7C477 *Tm m*

6133 I X
516<
71: 9 I X

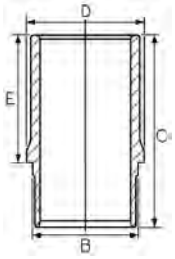
8>4787D97477 **N** 447173 **O** 538193



Oa; 48; a f S 9 **A>78vv** **PQi x** **Y b>7; 748**

GMXQ_RZ_XGR

8>4B; ; DB7477 **N** 455133 **O** 568133 **P** 45=1=3 **Q** 49: 133
8>4BD>D>7477 **N** 455133 **O** 568133 **P** 45=t 3 **Q** 49: 133



D; BA57A5A77 a 9 **D879vv** **PQi x** **Y b; >E>**
D; BA57A5AE7 a 9 **D879vv** **PQi x** **Y b8; >E>**
D; BA59A5AE7 a 9 **D879vv** **PQi x f u** **Y b8E87C**

GMXQ_RZ_XGR

DC4A9; 777477

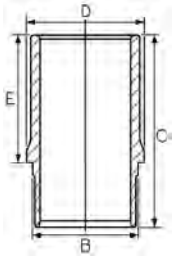
M : 9183
N4 5=173
N 87133
P 473183
75É=:

df

7D4A9; 777477

5183 I X V
5183 V
7133 I X V

8>4BD>D>7477 **N** 455133 **O** 568133 **P** 45=t 3 **Q** 49: 133



DD4A9; 777477
< 0856333033 .
4709<7<73033

D; BA9A5A776A79	a 9	D879vv			P@i x f u	Y bE87C
D; BA9A5A786A7; 6A; ;	a 9	D879vv			P@i x f u	Y b9E87C

GMK0_RZ_XGR

DC49>AA77477

M : 9183
N4 5=133
N 8=163
P 473183
75É=:

df

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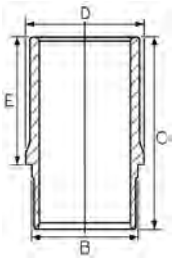
6133 I X V
5183 V
7133 I X V

8>4BD>D>7477



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< 0578833033 .
4709<7<73033

DC49>AA77487

M : 9183
N4 5: t 3
N 8=133
P 473183
75É=:

df

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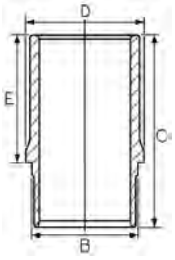
6133 I X V
5183 V
7133 I X V

8>4BD>D>7477



N 455133 **O** 568133 **P** 45=t 3 **Q** 49: 133

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< 0578833043 .
4709<7<73033

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D>B75985>9	a 9	EA77vv	8CC i	3NSD 4	P@i x f u	Y b>8; 74B
D>B75985879	a 9	EA77vv	8CC i	3NSD 4	P@i x f u	Y b>8; 74C
D>B75985B7B	a 9	EA77vv	8CC i	3NSD 4	P@i x f u	Y b>8; 74D
D>B75985C7D	a 9	EA77vv	8CC i	3NSD 4	P@i x f u	Y b>8; 74E
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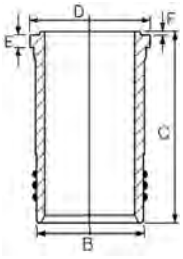

N 467133 **O** 583133 **P** 4771<3 **Q** 43135 **R** 4133

T@3topo	T@3tp´ß	T@3°´	T@3°´l oz	T@3°´l @z

D987579	a 9	8; CEDvv	P@i x	Y b87B7848

GMK0_RZ_XGR

DC497CD77477

M =5133
N4 65173
N 9: 133
P 49: 133
7<É44:

df

7D497CD774;7

7133 I X V
6133 V
6133 V
8133 I X V

8>4798AB7487 N 476133 O 5<5133 P 47: 133 Q 9139
8>4798AB8487 N 476138 O 5<5133 P 47: 133 Q 9139
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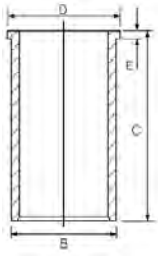

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D98A5995A97	a 9	8; CEDvv	P@t x f u	Y bE88B4;

GMX0_RZ_XGR

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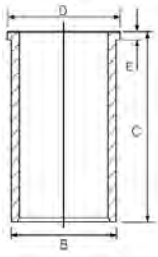

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NB4B7f U4T		Vi eV	a	GDD9DD	9C
NB4B7f U4X		Vi eV	a	GDD9DD	9C
P>R C89		GGSi	S	ai 9DD	8
PCR CB>		GGSi	S	ai 9DD	9
REc CB7		GecD	S	eD9DD	8;
REc CB9		GecD	S	eD9DD	8;
REc CC9		GecD	S	eD9DD	8;
REc CC>		GecD	S	eD9DD	8;
SEf C99		NGee	S	ec9DD	97
SEf CA7		NGee	S	ec9DD	97
SEg B;9 /Q	>0	NSaS	S	ei 9DD	98
SEg BA7 /Q	>0	NSaS	S	ei 9DD	98
SEg C97 /Q	;0	NSaS	S	ei 9DD	99
SEg C;7 /Q	;0	NSaS	S	ei 9DD	99
T>N >7D		ei e	P	cN9ND	;
Td8BPQ		GVi e	S	ce9DD	87
W>Y		GVi e	S	ci 9VD	88
W>Y CA9		GVi e	S	ci 9VD	88
WCY C87		GVi e	S	ci 9VD	89
WEW		GSaG	S	ca9DD	>
WEW9C7		GSaG	S	ca9DD	>
WEW9CB		GSaG	S	ca9DD	>
WEW9E9		GSaG	S	ca9DD	>
WEWB7D/Q	A0	GSaG	S	ca9DD	A
WEWB;B/Q	A0	GSaG	S	ca9DD	A
WEWC77		GSaG	S	ca9DD	B
WEWC79		GSaG	S	ca9DD	B
WEWC7>/Q	;0	GSaG	S	ca9DD	B
WEWC7D		GSaG	S	ca9DD	B
WEWC87		GSaG	S	ca9DD	B
WEWC8>		GSaG	S	ca9DD	B
WEWC8B		GSaG	S	ca9DD	B
WEWC8D		GSaG	S	ca9DD	C
WEWC99 /Q	;0	GSaG	S	ca9DD	B
WEWC9D		GSaG	S	ca9DD	C
WEWC;9		GSaG	S	ca9DD	D
WEWCB>		GSaG	S	ca9DD	D
WEWCC9		GSaG	S	ca9DD	A
WEWDE9 /Q	>0	GSaG	S	ca9DD	A
WEWDEB/Q	A0	GSaG	S	ca9DD	A
XP97		GiVN	S	eV9DD	8D
XP97UIX		GiVN	S	eV9DD	8D
Y Ed		GiiV	S	eS9DD	8B
Y Ed B;7		GiiV	S	eS9DD	8C
Y Ed CB7		GiiV	S	eS9DD	8B
Y Ed CD7 /Q	>0	GiiV	S	eS9DD	8B
Y Ed CD9		GiiV	S	eS9DD	8B
Y Ef		NNii	S	eV9DD	8E
Y Ef BC7 /Q	A0	NNii	S	eV9DD	8E
Y Ef BC9 /Q	A0	NNii	S	eV9DD	8E
Y Ef BCB/Q	>0	NNii	S	eV9DD	8E
Y Ef BCD		NNii	S	eV9DD	8E
Y Ef BD7		NNii	S	eV9DD	8E
Y Ef BDB/Q	A0	NNii	S	eV9DD	8E
Y Ef BE7 /Q	A0	NNii	S	eV9DD	8E
Y Ef BE9 /Q	>0	NNii	S	eV9DD	8E
Y Ef BE>/Q	>0	NNii	S	eV9DD	8E
Y Ef BEB/Q	>0	NNii	S	eV9DD	8E
Y Ef BED/Q	A0	NNii	S	eV9DD	8E
Y Ef C79 /Q	A0	NNii	S	eV9DD	8E

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			CCM	x		9
Y Ef DC7 /Q	A0		NNi i	S	eV9DD	8E
Y Ef DD7 /Q	A0		NNi i	S	eV9DD	8E
dEY			GVi e	S	eD9DD	8>
dEY >8;			GVi e	S	eD9DD	8>
dEY >A9			GVi e	S	eD9DD	8>
dP9D			NeNa	a	eV9DD	8D
eP97			Gi i G	S	eP9DD	8A
eP99			NGaS	S	eP9DD	8A
eP9;			NNei	S	ei 9DD	9;
eP9A			NSee	S	ei 9DD	9;
eP; ;			PNSa	a	eP9DD	8A
eP; ; f			PNSa	a	eP9DD	8A
f P8A /f g PA0			GVNc	S	cc9DD	E
f P9A			NSi S	S	i N9 D	9A
f P9C			NaaP	S	i a9DD	9B
f P9CQf U			NaaS	S	i a9DD	9B
f P9Cf			NaaS	S	i a9DD	9B
f P9Cf U			NaaS	S	i a9DD	9B
f P>9			SGai	a	i a9DD	9B
f P>9f			SGai	a	i a9DD	9B
l P9APPf U			NSee	S	ei 9DD	9>

P>RC89 S 9 **88>Evv** **AA i** 3:V 4 **bx** **f P8DED>**

Q_HOYZGX 415 49a 37239

DC4>A7777477
DC4>A777C477 *mT m*

M 591t 3
N4 4143
N 93163
P 771t 3
4<É87

7D4>A7777487
7D4>A777C487 *mT m*

4153 TZ
4183 V
5183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

PCRCB> S 9 **88>Evv** **>> i** 3aD 4 **bx** **f P99; CA**

Q_HOYZGX 415 3<236

DC487>877477
DC487>87C477 *mT m*

M 5: 133
P 83183
4<É85

7D487>877477
7D487>87C477 *mT m*

4183 I X V
4183 V
5183 I X V

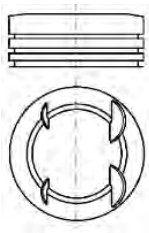
T>N >7D P 9 **DEDvv** **BB i** 3 D 4 **bx** **f u U x v xw** **f P; >8; C**

S 0 XG a 31= 0M0Z 45249

DC4>A7>77487

M 6457: x x
N4 71t 37x x
N 94187x x
O 51=5: x x
O 3178: x x
P 7<t 7
4=1=É76133

f b



7D4>A7>77477

4153 VaJ TZ
4183 V
5183 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

WEW S 9 **8>B8vv** **>D4D8 i** 3aV8GGD 4 **P6t x** **f u U x v xw** **f P; 8BC9**
WEW9C7 S 9 **8>B8vv** **CD4D8 i** 3GDa8GGD 4 **P6t x** **f u U x v xw** **f P; 9C87**
WEW9CB S 9 **8>B8vv** **B94BB i** 3eS8i D 4 **P6t x** **f u U x v xw** **f P9; DCC**
WEW9E9 S 9 **8>B8vv** **CB4CD i** 3GDP8GDa 4 **P6t x** **f u U x v xw** **f P9>BCA**

I _HK 418 ol t	4323=	V_RYGX 418 ol t	43247
Q0 QY 418 J	3424= 38253	WGYNWG02WGYNWG0. 5 0418 ol t	44239 37247
Q_HOYZGX ol t<8	37239 4323=	ZKXXGTU 418 ol t	3<246 38253
S 0 XG 00418 ol t	39238 39243	Z00G 418 ol t	3423: 39246
S 0 XG 0a 418 J	34244	aKXYG 00418 ol t	3<244 38253
TUZK 418 ol t	36239 3=245		

DC489; >774>7
DC489; >7C4>7 *mT m*

M	741t 3
N4	46183
N	7: 133
O	3176
O	3158
P	99133
	59É93

+98: Q 34,

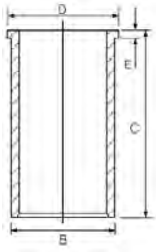
MWWWdf f b

7D489; >774; 7
7D489; >7A4; 7 *mT*
7D489; >7C4; 7 *mT m*

5183		I Q V
5183		V
5183		I X V

LKZ-Ring

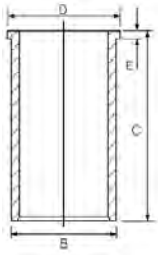
8>4797BA7477 **N** : =143 **O** 475133 **P** <4133 **Q** 8133



WEWB7D/Q	**A0**	S	9	**8>B8vv**	**B;4BB**	**i**	3ea8	D	4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9E>99**
WEWB;B/Q	**A0**	S	9	**8>B8vv**	**D8**	**i**	33GD		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9E>97**
WEWCC9		S	9	**8>B8vv**	**B;4CB**	**i**	3ea8GDP		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9D77B**
WEWDE9/Q	**>0**	S	9	**8>B8vv**	**BB**	**i**	3 D		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P;8B97**
WEWDEB/Q	**A0**	S	9	**8>B8vv**	**D8**	**i**	33GD		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P;889;**

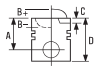
P_QK 418 ol t	39243	Ta533 418 ol t 443	37244
P_QK ol t	39243	Ta533 2KaGRG 418 ol t <8	3: 243
TUZK 418 ol t	39246	Ta533 2KaGRG 418 ol t =3	37244
Ta533 418 ol t <8	35243	Ta533 2KaGRG 418 ol t 443	37244
Ta533 418 ol t =3	37244	WGYNWGOD 418 ol t	44246

8>4797BA7477 **N** : =143 **O** 475133 **P** <4133 **Q** 8133



WEWC77		S	9	**8>B8vv**	**>C4A7**	**i**	3aS8ae		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P98;BD**
WEWC79		S	9	**8>B8vv**	**B7**	**i**	3eN		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9;DCD**
WEWC7>/Q	**;0**	S	9	**8>B8vv**	**>C4>D**	**i**	3aS8aV		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P8CBB7**
WEWC7D		S	9	**8>B8vv**	**>D4A7**	**i**	3aV8ae		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9B9E8**
WEWC87		S	9	**8>B8vv**	**>94>A**	**i**	3Vc8aG		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9B7BB**
WEWC8>		S	9	**8>B8vv**	**>94>A**	**i**	3Vc8aG		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9B7BC**
WEWC8B		S	9	**8>B8vv**	**A74A8**	**i**	3ae8ai		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9EA;C**
WEWC99/Q	**;0**	S	9	**8>B8vv**	**B7**	**i**	3eN		4	**P0**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P97EC8**

GRS KXG 0D 418 ol t	34236 3=239	S 0 XG 0D 418 ol t	34236 39243
Q_H0YZGX 418 ol t	3<236	S 0 XG Qa 418 J	44243 38253
Q_H0YZGX 418 ol t : 3	3=238 4323=	TUZK 418 ol t	36239 39245



DC489; >77477
DC489; >7C477 *mT m*

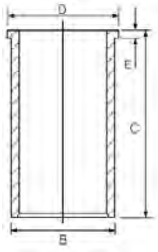
M	7419=
N4	461t 3
N	6=t 3
O	3193
P	99138
	58É93

df f b

7D489; >77477
7D489; >7C477 *mT m*

5133		I Q V
5133		V
5183		TZ

8>4797BA7477



N : =143 **O** 475133 **P** <4133 **Q** 8133

DC489; >77487
DC489; >7C487 *mT m*

M	741<5
N4	461t 3
N	6=t 3
O	3193
P	99138
	59É93

-88: 1836,

df f b

7D489; >77477
7D489; >7C477 *mT m*

5133		I Q V
5133		V
5183		TZ

WEWC8D S 9 **8>B8vv** **A74B9 i** 3ae8eS 4 **P@t x f u U x v xw** **f P; AABA**

WEWC9D S 9 **8>B8vv** **C>4CD i** 3GDG8GDa 4 **P@t x f u U x v xw** **f P9>BBE**

Q_HOYZGX ol t<8 37239 4323=

DC489; >77497
DC489; >7C497 *mT m*

M	741t 3
N4	47133
N	6=t 3
O	3176
O	3158
P	99133
	59É93

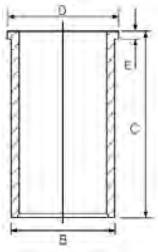
-8: 98: 0434,

MWWWdf f b

7D489; >77477
7D489; >7C477 *mT m*

5133		I Q V
5133		V
5183		TZ

8>4797BA7477



N : =143 **O** 475133 **P** <4133 **Q** 8133

WEWC; 9 S 9 **8>B8vv** **CD i** 3GDa 4 **P@t x f u U x v xw** **f P9EBD9**

WEWCB> S 9 **8>B8vv** **CD i** 3GDa 4 **P@t x f u U x v xw** **f P9EBD>**

WGYNWG0418 JI O 3523:

DC489; >774; 7
DC489; >7C4; 7 *mT m*

M	741t 3
N4	451<3
N	7=133
O	3176
O	3158
P	99133
	59É93

-8: 98: 0734,

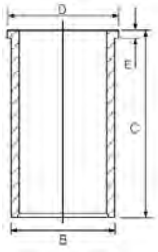
MWWWdf f b

7D489; >774; 7
7D489; >7A4; 7 *mT*
7D489; >7C4; 7 *mT m*

5133		I Q V
5133		V
5183		I X V

LKZ-Ring

8>4797BA7477



N : =143 **O** 475133 **P** <4133 **Q** 8133

f P8A/f g PA0 S 9 **8A9Ovv** **>9 i** 3/c 4 **P@t x** **f P8B; 8B**

S 0 XG 00418 J 352=< 35236

DC4; 9AD77477
DC4; 9AD7B477 *mT m*

M	7316:
N4	4198
P	99165
	56É93

MWdf

7D4; 9AD77477
7D4; 9AD7B477 *mT m*

5133		I Q V
4t 8		V
6133		I X V

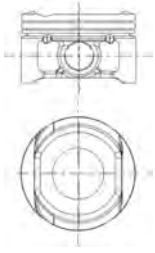
Td8BPQ S 9 **8AEDvv** **B>487A i** 3ec8GSP 4 **bx** **f P8DBCC**

GJ 419	4523<		TUZK 419	36239	
GRS KXG 419	37247		TUZK 419 T0YS U Y	39246	
HR_KH0XJ YdRVNd 2YdRVNd 00419	3<245		TV533 419	4323<	
I _HK 419 49a	3<23=		Ta533 419 49a	35243	
P_QK 419	39243		Ta533 2KaGR0G 419 49a	3: 243	
P_QK 419 I aZI	3<247		WGYNWGO2WGYNWGO. 5 0419	3523:	45246
P_QK 419 RVM	34245		WGYNWGO2WGYNWGO. 5 0419 I aZI	36246	37247
P_QK I aZI	36246		WGYNWGO2WGYNWGO. 5 0419 RVM	44243	45246
Q0 QY 419	37249		YKTZXG a00419	38246	
R@aOTG 2MXGTJ R@aOTG 419	3523:		Z0UG 419	3<238	
S 0 XG I . I 00419 493 YX	3<238		Z0UG 419 I aZI	3<245	
S 0 XG 00493 YX	38238	39243	aKXYG 0419	3=23<	39246
S 0 XG @a 419	3=244		aKXYG 00419	3<244	

DC4>; CC77477
DC4>; CC7C477 *mT m*

M	5<183
N4	71t 3
N	98133
N2	5153
O	41<3
P	7=153
	4=É88

df



7D4>; CC77477
7D4>; CC7C477 *mT m*

4153		I X V
4153		V
5133		I X

Vt°ßzy ' ty ' ´p°° dßty nzy´zo QzwmpymzwÜpy ty Vwp°pwptyr p' ´p ß GÉp°p´´ °°´ mtpwp H°wy opw t°ß y x zyß oz l ' ´p°t y py w mtpw Y' tyzßz ty°p´ßz l °' tyß ypww mtpww

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

W>Y	S 9	**8AEDvv**	**CA4D8 i** 3GDN8GGD 4	**bx**	**f P; 8; ED**
W>Y CA9	S 9	**8AEDvv**	**C7 i** 3V 4	**bx**	**f P98; ED**

GVX0U 419	3: 23< 45243	TV533 419	4323<
HR_KHOXJ YdRVNd 00419	45245	VRGZOTG 419	39234 45243
Q_HOYZGX 419 49a	3<236 4323=	ZKXXGTU 419	43246 38253

DC487>9774; 7

7D487>977477
7D487>97C477 *mTm*

M	641t 3	4183	I X V
N4	4163	4183	V
O	4193	5183	I X
P	88133		
	53É95		

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

WCY C87	S 9	**8AEDvv**	**B>4CB i** 3ec8GDP 4 **bx** **f P>8; DA**

GVX0U 419	4323=	TV533 419	4323<

DC487>977477
DC487>97C477 *mTm*

7D487>977477
7D487>97C477 *mTm*

M	641<3	4183	I X V
N2	5188	4183	V
P	89163	5183	I X
	4=É96		

DC487>977487
DC487>97C487 *mTm*

7D487>977477
7D487>97C477 *mTm*

M	641<3	4183	I X V
N2	5188	4183	V
P	89163	5183	I X
	4=É96		

Zz nÔtyop´ 4) 5	I y eÔtyop´ 4) 5	°°´ nÔtyo´p 4) 5	py pwntdyo´z 4) 5	I ntdyo´z 4) 5
Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
Zz nÔtyop´ 6) 7	I y eÔtyop´ 6) 7	°°´ nÔtyo´p 6) 7	py pwntdyo´z 6) 7	I ntdyo´z 6) 7

REc CB7	S 9	**8DC7vv**	**C> i** 3GDG 4	**P6t x f u U x v xw**	**f P97ED7**
REc CB9	S 9	**8DC7vv**	**B7 i** 3eN 4	**P6t x f u U x v xw**	**f P97EE8**
REc CC9	S 9	**8DC7vv**	**B7 i** 3eN 4	**P6t x f u U x v xw**	**f P8E; CD**
REc CC>	S 9	**8DC7vv**	**B7 i** 3eN 4	**P6t x f u U x v xw**	**f P9BA>D**

OTZKXYZGX ol t<3	37235 3<239	VXCS GYZGX ol t<3	36234
VXCS GYZGX 41=ol t<3	3: 235	VXCS GYZGX ol t433	36234
VXCS GYZGX 41=ol t433	3: 235		

DC4878A77477
DC4878A7C477 *mTm*

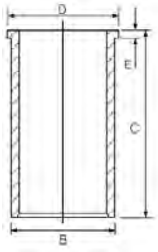
M	7:139
N4	4:1<3
N	6<133
O	31:8
P	::133
	5<É93

MWdf fb

7D4878A77477
7D4878A7C477 *mTm*

5133		SUV
5133		V
6133		IXV

8>47979D7477 **N** <6133 **O** 488133 **P** <8133 **Q** 8133



dEY	S	9	**8AEDvv**	**C7487C**	**i**	3	V8GSa	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9D7D7**
dEY >8;	S	9	**8AEDvv**	**C74DE**	**i**	3	V8GNG	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P;>;8>**
dEY >A9	S	9	**8AEDvv**	**E9488D**	**i**	3	GNV8GaD	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P;>;8A**

Ta633 419 ont=8	3=249	Ta633 419 olt 478	3=249
Ta633 419 ont 453	3=249	WGYNWGOO419 olt	44246
Ta633 419 ont 458	3=249	WGYNWGO2WGYNWG0. 5 0419 olt	43244 37247
Ta633 419 olt 458	3=249	c0ZXG0R olt	37247
Ta633 419 ont 478	3=249	c0ZXG0R 00419 olt	37247

DC4>9>E77477
DC4>9>E7C477 *mTm*

M	79133
N4	45168
N	79183
O	3163
P	:3183
	63É93

MWWdf fb

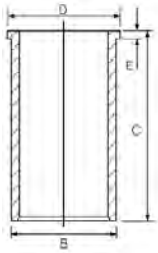
7D4>9>E77477
7D4>9>E7C477 *mTm*

5133		IQV
4:18		V
5133		IXV

eP97	S	9	**8EE8vv**	**>>**	**i**	3	aD	4	**P**	**x**							**f P9EB8>**
eP99	S	9	**98B>vv**	**>B4>C**	**i**	3	aP8aS	4	**P**	**x**							**f P9A89**
eP;;	a	9	**;9>Bvv**	**C7**	**i**	3	V	4	**P**	**x**							**f P9A8A**
eP;;f	a	9	**;9>Bvv**	**D84DD**	**i**	3	GGD8GND	4	**P**	**x**	**f**	**u**					**f P9A8B**

:53 515 J	3=2<3	452<6		VGZXUR 0024 616 ZJ	342<7	452<	
NUSd 615 J	432=6	432=:		VGZXUR 0025 615 J	3<2<<	392=3	
VGZXUR MX a 615 J	382=<	39234		V0Q_V 515 J	342=5	3=2<7	
VGZXUR 0024 615 J	442=	3<2<<		_XaGT 515 J	442<3	3:2<6	
VGZXUR 0024 615 ZJ	3:2<6	3<2<<		_XaGT 615 J	352=5	372=:	
VGZXUR 0024 616 J	392<3	452<		_XaGT 615 ZJ	352=5	372=:	

8>47988B7477 **N** <133 **O** 4:8183 **P** =51=9 **Q** 8133
8>47988C7477 **N** <134 **O** 4:8183 **P** =6133 **Q** 8144



Y Ed	S	9	**8EEAvv**	**88748; 7 i**	3GVD8Gcc	4	**P@i x**	**f u U x v**	**xw**		**f P99DE9**
Y Ed CB7	S	9	**8EEAvv**	**89C48; 7 i**	3GcP8Gcc	4	**P@i x**	**f u U x v**	**xw**		**f P97ED8**
Y Ed CD7 /Q >0	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@i x**	**f u U x v**	**xw**		**f P97DE7**
Y Ed CD9	S	9	**8EEAvv**	**BB i**	3 D	4	**P@i x**	**f u U x v**	**xw**		**f P9>BBD**

VXS GYZGX 513 ol t=3	3=239	WGYNWGO2WGYNWGO. 5 0513 ol t	3523: 37247
VXS GYZGX 513 ol t448	3=239	cOZXGOR ol t	34244 35247
VXS GYZGX ol t=3	3=239	cOZXGOR 0513 ol t	3923: 44246
VXS GYZGX ol t453	3=239	cOZXGOR 0513 ol t	43249

DC4>99777477
DC4>9977C477 *mTm*

7D4>99777477
7D4>9977C477 *mTm*

M 7: 1=5
N4 471=3
N 7=13:
O 3173
O 3173
P : 9133
65É98

MWWdf fb

5183 SURV
5133 SURV
5133 IXV

Y Ed B;7	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@i x**	**f u U x v**	**xw**		**f P9BC;7**

VXS GYZGX 513 ol t=3	3=239	VXS GYZGX ol t=3	3=239
VXS GYZGX 513 ol t448	3=239	VXS GYZGX ol t453	3=239

DC4>99777487
DC4>9977C487 *mTm*

7D4>99777477
7D4>9977C477 *mTm*

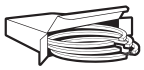
M 7<133
N4 47133
N 83133
P : 9133
65É98

WWdf fb

5183 SURV
5133 SURV
5133 IXV

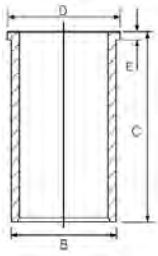
XP97	S	9	**8EA9vv**	**>; 4A8 i**	3/e8ai	4	**P@i x**				**f P9>D9**
XP97UX	S	9	**8EA9vv**	**>C4>E i**	3aS8ac	4	**P@i x**				**f P9>DD**
dP9D	a	9	**9D9Bvv**	**BB4BE i**	3 D8 S	4	**P@i x**				**f P>C88**

HR_KHOXJ 513 J	342<3	452=3	VGZXUR 0025 51<J	362<=	362=9
HUHHd 513 JRc	442<	442=7	YKXKTG 513	3: 2=5	3=2=7
HUHHd 513 Jc	442<	442=7	YKXKTG 513 J	392=4	3=234
I KJX0 51<J	3: 2<8	3<2=:	YQdROTK 513 J	3<2<4	3: 2<7
I KJX0 51<ZJ	392=4	432=8	ZXGJK 513 J	442=9	432=<
I XKb 51<J	392=6	3<236	_XaGT 513 J	352=5	3=2=7
MRUX0G 51<ZJ	392=4	432=8	aGTKZZK 513 J	442=5	452=8
RG_XKR 513 J	372<4	432<7	aGTKZZK I GXMJ 513 J	342=9	38234
RG_XKR 51<J	342<8	452<=			



8>4797; A7477
8>4797; A8477

N <<193 O 483133 P =3183 Q7183
N =3133 O 483133 P =5133 Q7183



Y Ef		S	9	99EEvv	C>489A i	3GDD8GcD	4	P0t x	f	u	U x v	xw	f P; 8BBE
Y Ef BC7 /Q	A0	S	9	99EEvv	C>4E9 i	3GDG8GNV	4	P0t x	f	u	U x v	xw	f P9BA>;
Y Ef BC9 /Q	A0	S	9	99EEvv	C>4E9 i	3GDG8GNV	4	P0t x	f	u	U x v	xw	f P9BCBD
Y Ef BCB /Q	>0	S	9	99EEvv	C>4E9 i	3GDG8GNV	4	P0t x	f	u	U x v	xw	f P9BCBE
Y Ef BCD		S	9	99EEvv	87C i	3GSa	4	P0t x	f	u	U x v	xw	f P9BCC7
Y Ef BD7		S	9	99EEvv	E9487C i	3GNV8GSV	4	P0t x	f	u	U x v	xw	f P9BCC8
Y Ef BDB /Q	A0	S	9	99EEvv	E9 i	3GNV	4	P0t x	f	u	U x v	xw	f P9BCC9
Y Ef BE7 /Q	A0	S	9	99EEvv	C>4E9 i	3GDG8GNV	4	P0t x	f	u	U x v	xw	f P9BA>>
Y Ef BE9 /Q	>0	S	9	99EEvv	BB4E9 i	3 D8GNV	4	P0t x	f	u	U x v	xw	f P9BCC;
Y Ef BE> /Q	>0	S	9	99EEvv	87C i	3GSa	4	P0t x	f	u	U x v	xw	f P9BCC>
Y Ef BEB /Q	>0	S	9	99EEvv	E9487C i	3GNV8GSa	4	P0t x	f	u	U x v	xw	f P9BCCA
Y Ef BED /Q	A0	S	9	99EEvv	E9487C i	3GNV8GSa	4	P0t x	f	u	U x v	xw	f P9BCCB
Y Ef C79 /Q	A0	S	9	99EEvv	8774897 i	3GPa8GaP	4	P0t x	f	u	U x v	xw	f P; 9C>A
Y Ef DC7 /Q	A0	S	9	99EEvv	C>4E9 i	3GDD8GNV	4	P0t x	f	u	U x v	xw	f P; 8BC7
Y Ef DD7 /Q	A0	S	9	99EEvv	887 i	3GVD	4	P0t x	f	u	U x v	xw	f P; 7CD;

Ta733 ol t433	44214 3=249	Ta733 ol t478	44214
Ta733 ol t443	39247	Ta733 ol t478 Xb J	44214
Ta733 ol t458	44214 3=249	Ta733 ol t483	35247
Ta733 ol t458 Xb J	44214 3=249	Ta733 ol t483 Xb J	35247 3=249
Ta733 ol t468	39247	Ta733 ol t493	39247 3=249
Ta733 ol t468 Xb J	39247 39249	Ta733 ol t498	39247 3=249

DC4>; A977477
DC4>; A97C477 *mTm*

M	7<183
N4	49153
N	83133
O	3178
P	:9133
	65É98

MWWWdf f b

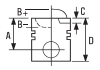
7D4>; A977477
7D4>; A97C477 *mTm*

5183		MJI V
5133		SUV
5133		IXV

GDC

SEf C99		S	9	98DDvv	BB i	3 D	4	P0t x	f	u	U x v	xw	f P8E; CE
SEf CA7		S	9	98DDvv	BB i	3 D	4	P0t x	f	u	U x v	xw	f P9; DDB

OTZKXYZGX ol 0=3	3: 235



DC489C>77477
DC489C>7C477 *mTm*

M	87186	
N4	4:183	
N	73173	
O	5133	
P	<7153	
	64É98	

MWdf fb

7D489C>77477
7D489C>7C477 *mTm*

6133		VY V
418		V
5183		V

SEg B;9/Q	**>0**	S	9	**9>B>vv**	**DD487C**	**i**	3GND8GSa	4	**P@[x**	**f**	**u**	**U**	**x**	**v**	**xw**	**fP9>BBA**
SEg BA7/Q	**>0**	S	9	**9>B>vv**	**C>4DD**	**i**	3GDG8GND	4	**P@[x**	**f**	**u**	**U**	**x**	**v**	**xw**	**fP9;DCA**

OZKXYZGX ol t433	37239 36244	VX@S GYZGX 518 ol t483	3=239
OZKXYZGX ol t453	3<239	VX@S GYZGX ol t483	3=239
OZKXYZGX ol t483	3<239		

DC48;CA774;7
DC48;CA7C4;7 *mTm*

M	8613:
N4	49143
N4	71=3
N	7<133
O	5133
O	4193
P	<613=
	64É98

MWdf fb

7D48;CA77477
7D48;CA7C477 *mTm*

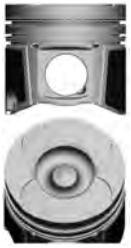
6133		SU V
418		V
5183		V

SEg C97/Q	**;0**	S	9	**9>B>vv**	**C;4D>**	**i**	3i8GGS	4	**P@[x**	**f**	**u**	**U**	**x**	**v**	**xw**	**fP98787**
SEg C;7/Q	**;0**	S	9	**9>B>vv**	**EE**	**i**	3GPV	4	**P@[x**	**f**	**u**	**U**	**x**	**v**	**xw**	**fP8DC79**

OZKXYZGX ol t433	44236	VX@S GYZGX 518 ol t473	3:235
OZKXYZGX ol t448	37235	VX@S GYZGX ol t473	3:236

DC48;CA77487
DC48;CA7C487 *mTm*

M	86136
N4	4:1<8
N	76153
O	4198
O	41=3
P	<613=
	64É98



MWdf fb

7D48;CA77487
7D48;CA7C487 *mTm*

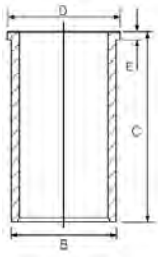
5183		SU V
418		V
5183		IX V

eP9;		S	9	**99DEvv**	**A74AB**	**i**	3ae8ca	4	**P@[x**							**fP9A8;**
eP9A		S	9	**9>DDvv**	**>A4AC**	**i**	3aG8cc	4	**P@[x**							**fP9A8>**

:53518J	3=2<6 452<9	TGaGXG 518J	3=2<8 352<<
IGHQOTM	392=: 3623:	V0Q_V516J	372<6 3<2<<
IGHYZGX 516ZJ	342<5 392=5	V0Q_V518J	372<6 352=<

I GHYZGX 518 J	352=6	452=3	_XaGT 516 J	442=5	442=<
I KJX0 516 J	382=7	3<2=<			

8>47988A7477 **N** =513< **O** 4: 5133 **P** =: 1= **Q** 8145



I P9APPf U S 9 **9>DDvv** **CB48>7 i** 3GDP8G D 4 **P0t x f u U x v xw** **f P8CBA7**					
HGYYGXG 518 JI t	442=	3<236	TV633 TGaGXG 518 ol t	3: 238	
I GHYZGX 5<144 JI 065144 JI 068144 JI 0518	3=239	45246	TV633 TGaGXG 518 JI O	3=253	
I GHYZGX 5<145 JI 065145 JI 067145 JI 068145 JI 0518	3=239	45246	TV633 V0Q_V 518 ol t	3723<	
I GHYZGX 671443 JI 0518	3423:	37245	Ta683 518 ol t	39245	
I GHYZGX 68146 JI 078146 JI 0518	3=239	45245	Ta683 2I GXGaGT 518 ol t	38245	
I GHYZGX 68147 JI 078147 JI 0518	3=239	45246	VGZNLOTJKX 0518 ol t	34238	
S_XGTU 0518 ol t	34243	3=247	V0Q_V 518 ol t	36235	
TGaGXG 518 J	44234		V0Q_V 518 Jt	36235	45243
TGaGXG 518 ol t	4424:		VXKYGMK 518 J	362=<	45236
TGaGXG 518 JJZt	34248		YGTO518 ol t	34238	
TGaGXG 518 Jt	35235		YKXKTG 518 JI t YMc	392==	3=238
TV633 TGaGXG 518 J	3=23<				

DC4>A9B77477
DC4>A9B7C477 *mT m*
34236 3423<

M	7<k8
N4	4<143
N	76133
O	31t 8
O	4153
P	<3143
	5<É94

MWWWdf fb

7D4>A9B77477
7D4>A9B7C477 *mT m*

5139		I Q V
5133		I X V
6133		TZ

DC4>; B877477
DC4>; B87C477 *mT m*
34238 34243

M	7<k3
N4	4=153
N	77163
P	: 61k3
	5<É: 4

MWWWdf fb

7D4>; B877477
7D4>; B87C477 *mT m*

5133		TZ
5133		V
6133		TZ

DC4>; B8774; 7
DC4>; B87C4; 7 *mT m*

M	7<1<8
N4	4: 173
N	7: 173
O	4145
O	31 8
P	: 61<3
	5<É: 4

MWWWdf f b

7D4>; B877477
7D4>; B87C477 *mT m*

5133		TZ
5133		V
6133		TZ

G53430aQ848 483s'
Yf9ppw
G53430KH64G 4: 3s'
G53430Kl 33H

Yf9 sw

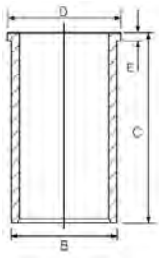
Gntp´

Gnp´z

Gnntl tz

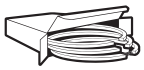
f P9A	S 9	9>E>vv	AA4C8 i	3cV8i c 4	P9f x f u U x v xw	f P>C8>
GZRGY 0051 J	432=6	432=<		TGaGXG 518 J	342=9	3623<
I GHYZGX 518 J	3: 2=5	45233		TGaGXG 518 ZJ	352=<	43234
I GHYZGX 518 ZJ	432<5	3=2=6		V0Q_V 518 J	3<2<	37238
NUS d 518 ZJ	382=5	432=8		_XaGT 518 J	452<<	382=<

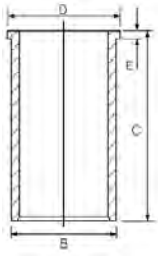
8>4797897477 **N** =9134 **O** 48=1<= **P** 4341<8 **Q** 8133



f P9C	S 9	9BB; vv	AD4C; i	3ci 8i 4	P9f x	f P9A; 9
f P9CQf U	S 9	9BB>vv	E94EB i	3GNV8GPG 4	P9f x f u U x v xw	f PEDEB
f P9Cf	S 9	9BB>vv	B84C> i	3eP8GDG 4	P9f x f u	f P9A; ;
f P9Cf U	S 9	9BB>vv	E84E9 i	3GNS8GNV 4	P9f x f u U x v xw	f PE>CD
f P>9	a 9	>8BEvv	DA4EE i	3GGa8GPV 4	P9f x	f P9A; A
f P>9f	a 9	>8BEvv	DA488D i	3GGa8GaD 4	P9f x f u U x v xw	f P87; BD

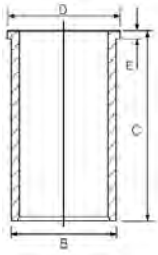
GZRGY 0051 ZJtl	3: 2=9	43237	VGZXURMX a 715 ZJt	39239
I GHYZGX 51 ZJ	352<6	452=5	VGZXUR0024 715 J	342<< 3=233
I GHYZGX K =3165/ =315</ =8165/ =815<	432=<	43239	VGZXUR0025 715 J	342<< 452=:
I GHYZGX K =8165	37235	39237	V0Q_V 51 J	3<2< 37238
NUS d 51 ZJ	432=6	432=8	V0Q_V 51 ZJ	3=2< 43234
TGaGXG 51 J	3=2<	45234	YGT051 ZJ	342=9 452==
TGaGXG 51 ZJ	342=:	43234	ZKXXGTU 051 ZJ	352=< 352=9
VGZNLOTJKX 051 J	382=5	432=8	ZKXXGTU 0051 ZJ	352=6 34235
VGZNLOTJKX 0051 ZJ	3=2=:	45237	ZKXXGTU 0051 ZJt	382=9 3=23:
VGZXURMX 0a 715 J	442<<	392=:	ZXGJK 51 ZJ	442=< 3=237
VGZXURMX a 51 ZJ	382=<	39234	_J Yp´tp° S Q4	34236 4523=
VGZXURMX a 715	38246		_XaGT 51 J	362< 3=2=6
VGZXURMX a 715 J	382=<	3=23:	_XaGT 51 ZJ	432=7 3<233
VGZXURMX a 715 ZJ	392=:			



		8>4797887477 	**N** =:3< **O** 49313 3 **P** 43813 6 **Q** 813=

NB4B7f U4T	a	9	**AEDAvv**	**8A8 i**	3NDV	4	**P**	**f u**	**f P9D9D9**
NB4B7f U4X	a	9	**AEDAvv**	**88C i**	33Vi	4	**P**	**f u**	**f PD; 9E**

GZRKUT 3=236

DC4; 9AB77487 **M** : 3138 **N4** 53147 **N** 85133 **P** 43<133 6<É<6 **df f b**	**7D4; 9AB77477** 6183 S U V 5183 V 7133 I X V	**8>479A; D7487** 	**N** 43756 **O** 55977 **P** 43: 77 **Q** 61<9	**DD4; 9AB77487** < 0658933043 . 4703586<3043
DC4; 9AB774; 7 **M** : 3135 **N4** 4=17< **N4** 4315< **N** 881<3 **P** 43<193 6<É<6 **df f b**	**7D4; 9AB77477** 6183 S U V 5183 V 7133 I X V			

U´trtyl wmzÄwop°try Utrtyl wYns °°pwdp°try I zynp'ßzy op nzwJtrtyl w Jt°p z l °pynz op Utrtyl w Jt°pryz ntzßzw Utrtyl w

ENGINE INDEX

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	CCM	x		9
8; e	GNi c	S	cV9DD	8;
8; eN	GNi c	S	cV9DD	8;
8> Zh	GPei	S	cc9aD	8A
8B P	GVi e	S	eD9DD	9D
8B PM	GVi e	S	eD9DD	9D
8B eh	GVi e	S	ci 9DD	8C
8C P />QQ80	Gaea	S	ci 9DD	9A
8D eQ	Gci a	S	eS9eD	>A
8D eQT	Gci a	S	eS9eD	>A
8D eh	Gci a	S	eS9eD	>A
97 ZQ	Gi i e	S	ea9DD	>C
97 kQ	Gi i e	S	ea9DD	>D
98 P	NDae	S	ee9DD	A8
9; P	NNaD	S	i N9DD	AA
9; Pf d	NNaD	S	i N9DD	AA
9; f P	NNaD	S	i N9DD	AA
9; l P	NNaD	S	i N9DD	AA
9; l Pf	NNaD	S	i N9DD	AA
9A f Pe /hY >8N0	NSi i	S	i N9DD	AB
D8>759; 59ADA6; C77 /e yØ 0	NeDD	S	i S9SD	AD
D8>75>; 59ADA6; C776; E77 /e yØ 0	NeDD	S	i S9SD	AD
M89 kQX	GNNi	S	cP9SD	D
M89 kQd	GNNi	S	cP9SD	D
M8; Pf Q	GNSe	S	ai 9aD	8
M8; Pf d /Q A0	GNSe	S	ai 9aD	8
M8; RP /Q A0	GNSe	S	ai 9aD	9
M8> ZQX /Q Axv Rx 0	GPaS	S	cN9VD	B
M8> ZQf /Q A0	GPaS	S	cN9VD	B
M8> kQd	GPi e	S	cP9SD	E
M8B XQf /Q A0	GVi e	S	ci 9DD	8D
M8B kQd /Q A0	GVi e	S	ci 9DD	8E
M97 Pf /Q A0	Gi Va	S	eP9DD	; C
M97 Pf O /Q A0	Gi Va	S	eP9DD	; C
M97 Pf T /Q A0	Gi Va	S	eP9DD	; C
M97 Pf V /Q A0	Gi Va	S	eP9DD	; C
M97 Pf X /Q A0	Gi Va	S	eP9DD	; C
N 87 kRX /Q B0	i i i	P	cS9DD	89
N 87 kRf /Q B0	i i i	P	cS9DD	89
N 8> ZQV /Q B0	GPaS	S	cN9VD	B
N 8> ZQX /Q B0	GPaS	S	cN9VD	B
N 8> ZQf /Q B0	GPaS	S	cN9VD	B
N 8> kQX	GPi e	S	cP9SD	87
N 8B Pf /PhBPf QP0	GVaD	S	cV9DD	8>
N 8B Pf /PhBRP0	GVaD	S	cV9DD	8>
N 8B Pf T	GVi e	S	ci 9cD	9C
N 8B Pf T /PhBRO0	GVaD	S	cV9DD	8>
O 8; Z	GNi c	S	cV9DD	8;
O 8> Zm	GPei	S	cc9aD	8A
O 8B Zm	GVi e	S	ci 9DD	97
O 8B eQ	GVi e	S	ci 9DD	8C
O 8B kQ /Qv xv0	GVi e	S	ci 9DD	98
O 8D kQ /Qv xv0	Gci i	S	eG9aD	; ;
O 8D kQX /Qv xv0	Gci i	S	eG9aD	; ;
O 97 ZQ	Gi i e	S	ea9DD	>C
O 97 kQ	Gi i e	S	ea9DD	>D
O 9A kQ /Qv xv0	NSi e	a	eG9aD	; >
O 99;	NNPe	S	ee9DD	A9
P 87 kRX /Q B0	i i i	P	cS9DD	89
P 8> ZQf /Q B0	GPaS	S	cN9VD	B
P 8B Pf T	GVi e	S	ci 9cD	9C

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		CCM	x		9
P 8B Pf Z		GVi e	S	ci 9cD	9C
Q 8B Zm		GVi e	S	ci 9DD	97
Q 8B eQ		GVi e	S	ci 9DD	8C
RDc B77		GecD	S	eD9DD	9E
RDc B7B		GecD	S	eD9DD	9E
REc CB7		GecD	S	eD9DD	;7
REc CB9		GecD	S	eD9DD	;7
REc CC7		GecD	S	eD9DD	;7
REc CC9		GecD	S	eD9DD	;7
REc CC>		GecD	S	eD9DD	;7
R 87 kRX /Q	B0	iii	P	cS9DD	89
SEf C97		NGee	S	ec9DD	A7
SEf C99		NGee	S	ec9DD	A7
SEf CA7		NGee	S	ec9DD	A7
SEg B;9 /Q	>0	NSaS	S	ei 9DD	A;
SEg BA7 /Q	>0	NSaS	S	ei 9DD	A;
SEg C97 /Q	;0	NSaS	S	ei 9DD	A>
SEg C9> /Q	;0	NSaS	S	ei 9DD	A>
SEg C;7 /Q	;0	NSaS	S	ei 9DD	A>
SEg CA7		NSaS	S	ei 9DD	A>
SEg CA> /Q	;0	NSaS	S	ei 9DD	A>
Y Ed B;7		GiiV	S	eS9DD	;E
Y Ed BE9 /Q	A0	GiiV	S	eS9DD	;E
Y Ed CD7 /Q	>0	GiiV	S	eS9DD	>7
Y Ed CD9		GiiV	S	eS9DD	>7
Y Ed CD>		GiiV	S	eS9DD	>7
Y Ed CDB /Q	>0	GiiV	S	eS9DD	>7
Y Ed CDD		GiiV	S	eS9DD	>7
Y Ef BC7 /Q	A0	NNie	S	eV9DD	>B
Y Ef BC9 /Q	A0	NNie	S	eV9DD	>B
Y Ef BCB /Q	>0	NNie	S	eV9DD	>B
Y Ef BCD		NNie	S	eV9DD	>B
Y Ef BD7		NNie	S	eV9DD	>B
Y Ef BDB /Q	A0	NNie	S	eV9DD	>B
Y Ef BE7 /Q	A0	NNie	S	eV9DD	>B
Y Ef BE9 /Q	>0	NNie	S	eV9DD	>B
Y Ef BE> /Q	>0	NNie	S	eV9DD	>B
Y Ef BEB /Q	>0	NNie	S	eV9DD	>B
Y Ef BED /Q	A0	NNie	S	eV9DD	>B
Y Ef C79		NNie	S	eV9DD	>B
Y Ef DC7		NNie	S	eV9DD	>B
Y Ef DCB		NNie	S	eV9DD	>B
Y Ef DD7		NNie	S	eV9DD	>B
Y Ef DEB		NNie	S	eV9DD	>B
Y Ef DED		NNie	S	eV9DD	>B
dEY >7D		GVie	S	eD9DD	;8
dEY >8;		GVie	S	eD9DD	;8
dEY >A7		GVie	S	eD9DD	;8
dEY >A9		GVie	S	eD9DD	;8
eDg CAD		NVDD	S	iP9DD	AC
eDg CD7		NVDD	S	iP9DD	AC
eDg CD9		NVDD	S	iP9DD	AC
eEi C77		NeDD	S	iS9SD	AD
eEi C79		NeDD	S	iS9SD	AD
k 87 kQ /Qv	xv0	icP	P	cN9VD	A
k 89 kQ /Qv	xv0	GGii	S	cN9VD	C
k 8> Zm		GPei	S	cc9aD	8A
k 8> em		GPei	S	cc9aD	8A
k 8B em		GVie	S	ci 9DD	97
k 8B emd		GVie	S	ci 9DD	99

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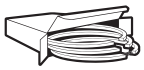
		CCM	x		9
k 8B kQ /Qv xv0		GVi e	S	ci 9DD	98
k 8B kQX /Qv xv0		GVi e	S	ci 9DD	98
k 8C P />QQ80		Gaea	S	ci 9DD	9A
k 8D kQ /Qv xv0		Gci i	S	eG9aD	; ;
k 8D kQ8 /Qv xv0		Gci a	S	eD9VD	; 9
k 97 Pf T		Gi i V	S	eS9DD	>8
k 97 Pf X		Gi i V	S	eS9DD	>9
k 99 Pf T		NGcG	S	eS9DD	>;
k 9A kQ /Qv xv0		NSi e	a	eG9aD	; >
l 8; Pf /Q ; 6>0		GNSe	S	ai 9aD	;
l 8B kQ /Qv xv0		GVi e	S	ci 9DD	9;
l 8C Pf		Gaea	S	ci 9DD	9B
l 8C Pf X		Gaea	S	ci 9DD	9B
l 97 Pf T		Gi i V	S	eS9DD	>>
l 97 Pf V		Gi Va	S	eP9DD	; C
l 97 Pf X		Gi i V	S	eS9DD	>9
l 99 Pf T		NGcN	S	eS9DD	>;
l 99 Pf d		NGcN	S	eS9DD	>;
m87 kQ /Qv xv0		i cP	P	cN9VD	A
m89 kQ /Qv xv0		GGi i	S	cN9VD	C
m89 kQb		GNNi	S	cP9SD	88
m8; Pf /Q >0		GNSe	S	ai 9aD	;
m8; Pf Q /Q >0		GNSe	S	ai 9aD	9
m8; Pf T /Q >0		GNSe	S	ai 9aD	>
m8> kQ /Qv xv0		GPei	S	cc9aD	8B
m8> kQb /Qv xv0		GPaS	S	cP9SD	87
m8B XQf		GVi e	S	ci 9DD	8D
m8B eQ		GVi e	S	ci 9DD	9;
m8B kQ /Qv xv0		GVi e	S	ci 9DD	9;
m8B kQb		GVi e	S	ci 9DD	9>
m8B kQd		GVi e	S	ci 9DD	8E
m8D kQ /Qv xv0		Gci a	S	eD9VD	; 9
m8D kQX /Qv xv0		Gci a	S	eD9VD	; 9
m8E Pf		Gi GD	S	eN9DD	; A
m8E Pf T /Q >0		Gi GD	S	eN9DD	; B
m8E Pf V		Gi GD	S	eN9DD	; B
m8E Pf X /Q >0		Gi GD	S	eN9DD	; A
m97 PY		Gi i G	S	eP9DD	; D
m97 PY T		Gi i G	S	eP9DD	; D
m97 Pf V		Gi Va	S	eP9DD	; C
m97 e		Gi i G	S	eP9DD	; D
m99 eQ /Qv xv0		NGi e	S	ea9DD	>E



M8; Pf Q	S 9	**89>Dvv**	**C7 i 3 V 4**	**P Qt x f u U x v xw**			**f P9; DD8**
M8; Pf d /Q A0	S 9	**89>Dvv**	**C7 i 3 V 4**	**P Qt x f u U x v xw**			**f P9>; CD**
GYZXG P 416 I JZO		4523=	43248	S KXQaG H S Va 416 I JZO		39243	44247
GYZXG P 416 I JZt		43245	43248	S KXQaG H aGT 416 I JZt		34246	44247
I UXYG J 416 I JZO		3923=	3<247				

DC4>; AC77487
DC4>; AC7B487 *mTm*

7D4>; AC77477
7D4>; AC7B477 *mTm*

M	73176
N4	451:3
N	6:133
O	4148
O	31=3
P	95176
	56É8:

MWWWdf

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t6sz°ßYßz' 2Yß´ßZpnsyzwrrÖ | L´LIs´Üp°rpzsypYß´ßYßz' L°yvßzy | Vz°´®stn°wº yzy ¿°t' o°°ß´ß) °ßz' | Vl´l @ps n°w° °ty qfynt y °ß´ßDPßz' | Vp´@tnzw°pyÜ wqfyÜzypYß´ßDYßz'

M8; RP /Q A0	S 9	**89>Dvv**	**AA4C7 i 3:V8 V 4**	**P Qt x f u U x v xw**			**f P9B8D9**
m8; Pf Q /Q >0	S 9	**89>Dvv**	**C7 i 3 V 4**	**P Qt x f u U x v xw**			**f P9>; CB**
I US HU HzoÖZS Va 416 I JZO		35245		I UXYG J 416 I JZO		3923=	3<247
I US HU Zz°´416 I JZO		35245					

DC4>; AC77477
DC4>; AC7B477 *mTm*

7D4>; AC77477
7D4>; AC7B477 *mTm*

M	73176
N4	451:3
N	6:133
O	4148
O	31=3
P	95176
	56É8:

MWWWdf

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t6s Yßz' 2Yß´ßZpnsyzwrrÖ | L´LIs´Üp°rpx t6Yß´ßYßz' L°yvßzy | Vz°´®stn°wº ¿°t' o°°ß´ß) °ßz' | Vl´l @ps n°w° nzy qfynt y °ß´ßDPßz' | Vp´@tnzwnzy wqfyÜzypYß´ßDYßz'

I 8; Pf /Q ;6>0	S 9	**89>Dvv**	**A8 i 3:D 4**	**P Qt x f u U x v xw**			**f P977D>**
m8; Pf /Q >0	S 9	**89>Dvv**	**A84AE i 3:D8eD 4**	**P Qt x f u U x v xw**			**f P8C>CC**
GMDRG 416 I JZO		3<236	4523:	I UXYG I 416 I JZO49a		3:238	39239
I US HU HzoÖZS Va 416 I JZO49a		3<238		S KXQaG G S Va 416 I JZO		37238	38243
I US HU Zz°´416 I JZO49a		39237	34244	ZQWXG 416 I JZO		39237	45243
I UXYG I 416 I JZO		39236	4523=				

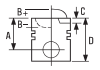
DC48; CB77477
DC48; CB7B477 *mTm*

7D48; CB77477
7D48; CB7B477 *mTm*

M	73176
N4	45173
N	6:133
O	4133
O	4153
P	96176
	56É8:

MWdf fb

5133		I Q V
4183		V
5133		V



m8; Pf T /Q >0	S 9	89>Dvv	BB4C> i 3 D8GDG 4	P@ x f u U x v xw	f P8DBA;
GYZXG N 416 I JZO		3<238	GYZXG N MZI 416 I JZO	37238	43243
GYZXG N 416 I JZt		3523: 43243	I UXYG J 416 I JZO	3: 239	39244

DC4>9AB77477
DC4>9AB7B477 *mT m*
DC4>9AB7D477 *mT m*

M	73176
N4	45174
N	6<133
O	31=4
O	31=4
P	95176
	56É88

-89=66,

MWWWdf f b

7D4>9AB77477
7D4>9AB7B477 *mT m*
7D4>9AB7D477 *mT m*

5133		I Q V
4183		T Z
5133		I X V

k 87 kQ /Qv xv0	P 9	EC; vv	>7 i 3/S 4	bx	f PAA89
m87 kQ /Qv xv0	P 9	EC; vv	>; i 3/e 4	bx	f P8>77D
GMTRG 413 45a		3=233 4523:	I UXYG I 413	3=233	39236
I UXYG H 413 t 45a		442=9 3=233			

DC4879C77477
DC4879C7C477 *mT m*

M	57133
N4	4153
N	89133
O	4158
P	78133
	4<É84

7D4879C77477
7D4879C7C477 *mT m*

4153		T Z
4183		V
5133		I X

Y@ppw Y@ sw Gntp´ Gnp´z Gnntl tz

M8> ZQX /Q Axv Rx 0	S 9	8; B>vv	DD i 3GND 4	bx	f u U x v xw	f P9>9B>
M8> ZQf /Q A0	S 9	8; B>vv	87; i 3GSD 4	bx	f u U x v xw	f P9; DD9
N 8> ZQV /Q B0	S 9	8; B>vv	C> i 3GDG 4	bx	f u U x v xw	f P9EC; C
N 8> ZQX /Q B0	S 9	8; B>vv	DD i 3GND 4	bx	f u U x v xw	f P9D9B>
N 8> ZQf /Q B0	S 9	8; B>vv	87; 4887 i 3GSD8GVD 4	bx	f u U x v xw	f P9D9B;
P 8> ZQf /Q B0	S 9	8; B>vv	87; i 3GSD 4	bx	f u U x v xw	f P; AB97

GYZXG P 417 RVM	45244	OTYOMTOG G 417 RVM	3: 245 36241
GYZXG P 417 Z°´mz	4523=	S KX@aG H S Va 417	39243 36241
GYZXG P MZI 417	43244	S KX@aG H S Va 417 RVM	39244 36241
I GYI GJG 417	37246 3724<	S UQQG 2S UQQG c 417	39245
I GYI GJG 417 Z°´mz	36246 3724<	S UQQG 2S UQQG c 417 RVM	37246
I UXYG J 417	3: 245 3<247	eGLOXG ZU_XKX I 417	43244
I UXYG K 417 Z°´mz	3=247 3924=	eGLOXG ZU_XKX I 417 RVM	43244
OTYOMTOG G 417	37244 36241		

DC4>; C>77487
DC4>; C>7C487 *mT m*

M 581<
N4 51=3
N 871t <
O 5143
O 41<
P 7714<
4<É7<

TMdf f b

4153 JRI TZ
4153 V
5133 TZ

7D4>; C>77477
7D4>; C>7C477 *mT m*

I I´nzMtop
Yfppw | Yfi sw | Gntp´ | Gnp´z | Gnntl tz

k 89 kQ /Qv xv0	S 9	**88EEvv**	**>D i**	3aV 4	**bx**			**f PEA7D**
m89 kQ /Qv xv0	S 9	**88EEvv**	**AA i**	3cV 4	**bx**			**f P8>77E**
GMDRG 415 49a		3=233	4523:		I UXYG H 415 t 49a		362=<	3=233
GYZXG M 415		3=2=<	3<233		I UXYG I 415		3=233	4523=
GYZXG M 415 49a		352=<	34238		I UXYG I 415 49a		3=233	3: 236

DC4879C77487
DC4879C7C487 *mT m*

M 57133
O 4158
P 78133
4<É84

4153 TZ
4183 V
5133 I X

7D4879C77477
7D4879C7C477 *mT m*

Yfppw | Yfi sw | Gntp´ | Gnp´z | Gnntl tz

M89 kQX	S 9	**899Evv**	**A8 i**	3ai 4	**bx**			**f P9>; C8**
M89 kQd	S 9	**899Evv**	**B84B; i**	3eP8ea 4	**bx**			**f P9>; C9**
GJGS 415		43245	3524=		I UXYG J 415 RVM		39244	3<247
I UXYG J 415		4523=	3<247					

DC4>9EA774>7
DC4>9EA7C4>7 *mT m*

M 591=3
N 87193
N2 3198
O 4168
O 61=8
P 7<188
4<É86

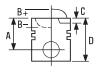
TMf b

4153 TZ
4153 V
5133 I X

7D4>9EA77477
7D4>9EA7C477 *mT m*

Yfppw | Yfi sw | Gntp´ | Gnp´z | Gnntl tz

M8> kQd	S 9	**8; EDvv**	**C> i**	3GDG 4	**bx f u U x v xw**			**f P9; DAA**
GJGS 417		43245	3524=		I UXYG J 417		4523=	3<247
GYZXG P 417		4523=	43248		S KX@aG H S Va 417		39243	3624:
GYZXG P MZI 417		43244	43248		S KX@aG H aGT 417 KI UZKI		34246	3624:



DC4>9EA774; 7
DC4>9EA7C4; 7 *mT m*

M	581<3	
N4	4193	
O	41=3	
O	61<6	
P	791<3	
	4<É86	

f b

7D4>9EA77477
7D4>9EA7C477 *mT m*

4153		TZ
4153		V
5133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

N 8> kQX	S 9	**8; EDvv**	**B>4BB i**	3ec8 D 4	**bx**	**f P9EBB;**
m8> kQb /Qv xv0	S 9	**8; B>vv**	**BB i**	3 D 4	**bx**	**f P8C>CB**

GJGS 417	43245	3524=	I UXYG 417	3: 233	45236
GJGS 417 RVM	3: 246	4424<	I UXYG I 417	39236	39245
GYZXG M417	3=23:	4523=	I UXYG J 417	3: 239	3<247
GYZXG MI RGYY0 I I´I ®y 417	4323:	3: 23=	I UXYG J 417 RVM	3<239	45244
GYZXG N 417	36237		I UXYG K 417	3=247	
GYZXG N 417 KnzZpn	45237	45245	I UXYG K 417 RVM	36248	
GYZXG N 417 RVM	3<23=	43243	S KX0aG G S Va 417 49a	3: 237	38243
GYZXG N MZI 417	36238	43243	S KX0aG G S Va 417 49a RVM	3: 237	38243
I US HU Hzo0ÖS Va 417 49a	3<238		Z0MKG 417	39237	45243
I US HU Zz°´ 417	43237	45244			

DC4>9EA77477
DC4>9EA7C477 *mT m*

M	56133	
N4	4158	
N	86183	
O	4166	
O	4168	
P	77133	
	4<É7=	

7D4>9EA77477
7D4>9EA7C477 *mT m*

4153		TZ
4153		V
5133		I X

KW°fz®w
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m89 kQb	S 9	**899Evv**	**AA4AE i**	3cV8eD 4	**bx**	**f P8D789**

GMDRG 415 49a	3: 237	4523:	I UXYG J 415	3: 239	3<247
GYZXG N 415	3<238	43243	I UXYG J 415 RVM	3<239	3<247
I UXYG I 415	3: 237	4523=			

DC4>9EA77487
DC4>9EA7C487 *mT m*

M	57133	
N2	3186	
O	4179	
O	417=	
P	78166	
	4=É83	

f b

7D4>9EA77477
7D4>9EA7C477 *mT m*

4153		TZ
4153		V
5133		I X

KW°fz®w
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

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N 87 kRX /Q	**B0**	P 9	**EEEvv**	**BB4CC i**	3 D8GDV 4	**bx**	**f u U x v**	**xw**	**f P9EADA**
N 87 kRf /Q	**B0**	P 9	**EEEvv**	**DA i**	33GV 4	**bx**	**f u U x v**	**xw**	**f P9EADB**
P 87 kRX /Q	**B0**	P 9	**EEEvv**	**BB4CC i**	3 D8GDV 4	**bx**	**f u U x v**	**xw**	**f P; AB89**
R 87 kRX /Q	**B0**	P 9	**EEEvv**	**BB i**	3 D 4	**bx**	**f u U x v**	**xw**	**f P; AB8;**

GJGS 413	3: 247 44241<	GYZXG Q 413 Z°´mz	39248
GYZXG Q 413	3824<	I UXYG K 413	3=247

DC4>A; 977477
DC4>A; 97C477 *mTm*
3: 247

M 5: 183
N4 5183
O 419<
O 51<4
P 79133
4=É7:

TMfb

7D4>A; 977477
7D4>A; 97C477

4153		VaJ
4153		V
5133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8; e		S 9	**89EOvv**	**>94AA i**	3/c8cV 4	**bx**			**f P>C9A**
8; eN		S 9	**89EOvv**	**A8 i**	3cD 4	**bx**			**f P>C9B**
O 8; Z		S 9	**89EOvv**	**>> i**	3aD 4	**bx**			**f P>CD8**

GYI UTG H 416 Y	3<2 = 3<2<4	QGJKZZ J 416 Y	3<2 = 3<2<7
GYI UTG I 416 Y	3=2<4 3<2<<	QGJKZZ K 416	342<8 452<
I UXYG G 416	352<9 372<=	QGJKZZ K 416 t I I ß	3=2<8 3<2=4
I UXYG G 416 t	3=2<9 3=2=3	QGJKZZ K 416 Y	3=2<7 352=6
I UXYG G 416 Y	3=2<5 432<=	QGJKZZ K I zx mz 416 Y	342<9 452<=
I UXYG G ZX 416	3=2<8 432<	S GTZG H 416 Y	3<2<4 3<2<9
I UXYG G ZX 416 Y	3=2<5 432<	S GTZG H I I 416 Y	3<2 = 3<2<9
QGJKZZ J 416 T	3<2 = 3<2<7		

DC4; 7B; 7C477 *mTm*
DC4; 7B; 88477 *Trnm*

M 681<3
N4 6193
O 8163
O 8163
P 95173
53É98

7D4; 7B; 77477
7D4; 7B; 7C477 *mTm*
7D4; 7B; 88477 *Trnm*

4183		I X V
4183		V
7133		I X V

Vtºßzyº ßz mp´p' wnpo ty Kyr typ Ypß zywÖ Qzwnpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy Vtºßzy ´px ' wnp´ ol y° wp° x zßp°´ Vtºßzyp° op´p' °pºßz ' I ´I wp°rz° op x zßz´p° °zwx pyßp 0V tºßzyp ' ° pººp´p´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wpßz

N 8B Pf /PhBPf QP0		S 9	**8AB7vv**	**BD i**	3 N 4	**P0t x**	**f u U x v**	**xw**	**f P; DC9B**
N 8B Pf /PhBRP0		S 9	**8AB7vv**	**C; i**	3 i 4	**P0t x**	**f u U x v**	**xw**	**f P; >C>7**
N 8B Pf T /PhBRO0		S 9	**8AB7vv**	**DA4DD i**	33Ga8GND 4	**P0t x**	**f u U x v**	**xw**	**f P; >C>9**

I US HU HzoÖZS Va 419 J	3924<	MKGTJRGTJ 2MKGTJRGTJ c 419 Z°´mz J	3924:
I XUYYRGTJ c 2I XUYYRGTJ 419 Z°´mz J	3624:		

DC4>A; 877477
DC4>A; 87C477 *mT m*

7D4>A; 877477
7D4>A; 87C477 *mT m*

M	741 3
N4	4618
N	7813
P	961 3

MWWWdf f b

5133		I Q
41=8		V
5133		I X

8> Zh	S 9	**8; DEvv**	**A; 4AA i**	3cN8cV 4	**bx**		**f P>C9D**
O 8> Zm	S 9	**8; DEvv**	**>74>> i**	3/S8aD 4	**bx**		**f P>CD9**
k 8> Zm	S 9	**8; DEvv**	**>> i**	3aD 4	**bx**		**f P8>D9D**
k 8> em	S 9	**8; DEvv**	**>74>> i**	3/S8aD 4	**bx**		**f PD>7A**
GYZXG L 417		3=2=4	3=2=6		I UXYG G ZX 417 Y	3=2<=	362=6
GYZXG L 417 t		3=2=4	34238		I UXYG H 417 t	362=6	3=233
I US HU HzoÖ2S Va 417		3: 2=7	43234		QGJ KZZ K 417 t	342=3	3<2=4
I UXYG 417		3<2=7	3: 235		QGJ KZZ K 417 Y	342=3	352=6
I UXYG G 417 t		342=8	362=6		QGJ KZZ K I zx mz 417 t	3<2=4	3: 2=7
I UXYG G 417 Y		342=3	362=6		QGJ KZZ K I zx mz 417 Y	3: 2<=	3<2=4
I UXYG G ZX 417 t		432<=	362=6		aKI ZXG G 417 Y	372<<	392=5

DC4; 7C877497
DC4; 7C87C497 *mT m*

7D4; 7C877477
7D4; 7C87C477 *mT m*

M	6513
N4	6173
P	8518
	4<É88

4183		I X V
4183		V
6133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m8> kQ/Qv xv0	S 9	**8; DEvv**	**BB i**	3 D 4	**bx**		**f P8>E97**
GYZXG M417		3=2=<	37238		GYZXG MI RGYY0 I I´I ®y 417 49a	3: 237	3=23:
GYZXG M417 49a		352=<	3: 23=		I UXYG 417	3: 233	45243
GYZXG M417 RVM		352=<	34238		I UXYG I 417	3=233	4523=
GYZXG MI RGYY0 417 49a		38237	3: 23=				

DC48>>977477
DC48>>97C477 *mT m*

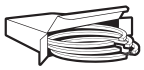
7D48>>977477
7D48>>97C477 *mT m*

M	6463
N2	5178
P	8818
	4<É88

4153		TZ
4183		V
5133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8Beh	S 9	**8AEDvv**	**B7 i**	3eN 4	**bx**		**f P>C>7**



O 8BeQ	S 9	**8AEDvv**	**C> i** 3GDG 4		**bx**		**f P>CDC**
Q 8BeQ	S 9	**8AEDvv**	**C>4CA i** 3GDD8GDN 4		**bx**		**f P>D88**
GYI UTG I 419		3=2=9	3<2<<	QGJKZZ K 419 t		3: 2<=	352=6
GYZXG L 419 t		362=5	452=7	QGJKZZ K 419 Y		3=2=9	3<2=4
GYZXG L 419 Yt		362=5	452=7	QGJKZZ K I zx mz 419		3=2=9	452=4
I UXYG G 419 MYO		382<<	362=5	aKI ZXG G 419		3=2<<	382=6
I UXYG G 419 MYOI ß		352=5	362=6	aKI ZXG G 419 Y		3=2<<	382=6
QGJKZZ K 419		3=2=9	3<2=4	aKI ZXG H 419 MR		3=2=8	3<2=9

DC4; 7BE77487
DC4; 7BE7C487 *mTm*

M 5<183
N4 4193
N 8=183
N2 3173
P 7<173
4<É88

7D4; 7BE77477
7D4; 7BE7C477 *mTm*

4153 I X
4183 V
6183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

M8BXQf /Q A0	S 9	**8AEDvv**	**8; 9 i** 3GeD 4		**bx**	**f u U x v**	**xw**		**f P99ADE**
m8BXQf	S 9	**8AEDvv**	**8; 9 i** 3GeD 4		**bx**	**f u U x v**	**xw**		**f P8E; 8;**
GYZXG N 419 Z°´mz		3523:	43243	I UXYG J 419 Z				3523:	3<247
GYZXG N MZI 419 Z°´mz		3523:	43243	OTYOMTOG G 419 Z°´mz				3: 23<	3624:
GYZXG P 419 Z°´mz		4523=		S KX0aG G S Va 419 Z°´mz				3=238	38243
GYZXG P MZI 419		43244							

DC4>; AA77477
DC4>; AA7C477 *mTm*

M 5: 183
N2 3193
P 78143
4=É86

TMfb

7D4>; AA77477
7D4>; AA7C477 *mTm*

4153 TZ
4153 V
5183 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

M8BkQd /Q A0	S 9	**8AEDvv**	**D>4DA i** 3GGS8GGa 4		**bx**				**f P99ADC**
m8BkQd	S 9	**8AEDvv**	**DA i** 3GGa 4		**bx**				**f P977B7**
GYZXG N 419		45239		OTYOMTOG G 419				3: 23<	3624:
GYZXG N 419 KnzZpn		43239	45243	S UQQG 2S UQQG c 419				3924=5	
GYZXG N 419 RVM		3<23=	43243	eGLOXG 2eGLOXG LGS ORd H 419				3423<	37248
GYZXG N MZI 419		45239	43243	eGLOXG 2eGLOXG LGS ORd H 419L°pw				3<23<	45245
GYZXG P 419		4523=							

DC4>; A; 77477
DC4>; A; 7C477 *mT m*

M	591t 3
N	851=9
N2	4153
O	41=3
O	51t 3
P	7=1=3
	4=É79

7D4>; A; 77477
7D4>; A; 7C477 *mT m*

4153		TZ
4153		V
5133		TZ

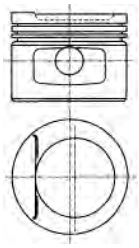
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

O 8BZm	S	9	**8AEDvv**	**AA4B7**	**i**	3cV8eN	4	**bx**	**f P>CDA**
Q8BZm	S	9	**8AEDvv**	**AA4BA**	**i**	3cV8ee	4	**bx**	**f P>D87**
k 8Bem	S	9	**8AEDvv**	**A9**	**i**	3cG	4	**bx**	**f P9C; >**

GYI UTG I 419 t	3=2<	3<2<<	QGJ KZZ K 419 t I I ß	3=2<9	352=6
GYI UTG I 419 t I I ß	3=2<9	3<2<<	QGJ KZZ K I zx mz 419 t	3<2=4	3: 2=7
GYZXG L 419 t	3=2=4	3=2=<	aKI ZXG G 419	3<2<<	392=7
I UXYG G 419 MYO	3<2<<	3=2=5	aKI ZXG G 419 t	3=2<<	442=8
QGJ KZZ K 419 t	3=2<9	3=2=6	aKI ZXG G 419 t I I ß	3=2<<	442=8

DC4; 7BE77477
DC4; 7BE7C477 *mT m*

M	5<133
N4	51t 3
N	96133
N2	3173
P	7<173
	4<É88



7D4; 7BE77477
7D4; 7BE7C477 *mT m*

4153		I X
4183		V
6133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

O 8BkQ/Qv xv0	S	9	**8AEDvv**	**D7**	**i**	3GDi	4	**bx**	**f P>CDE**
k 8BkQ/Qv xv0	S	9	**8AEDvv**	**CD**	**i**	3GDa	4	**bx**	**f P9C; A**
k 8BkQX/Qv xv0	S	9	**8AEDvv**	**C>**	**i**	3GDG	4	**bx**	**f P>D97**

GYZXG L 419 t 49a	3<2=7	34238	Z0MKG 419 49a	3: 2=7	3<2=<
GYZXG M419 49a	352=<	34238	aKI ZXG H 419 t 49a	432=8	3: 235
GYZXG M419 RVM	362=<	34238	eGLQXG G S Va 419 49a	372==	39238
I UXYG H 419 MY049a	362=6	3=233	eGLQXG G S Va 419 RVM	372==	39238
I UXYG H 419 t 49a	3=2=7	3=233			

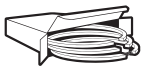
DC4; 7CD77487
DC4; 7CD7C487 *mT m*

M	5<133
N4	31<3
N	93153
O	41=3
O	5148
P	7<133
	4<É88

7D4; 7CD77477
7D4; 7CD7C477 *mT m*
7D4; 7CD88477 *Tmm*

4153		I X
4183		V
5183		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz



k 8Bemd	S 9	8AEDvv	AA i 3cV 4	bx	f P>D8E
GYZXG L 419 t		3=2=4 34238	QGJ KZZ 419	362=8 38233	
GYZXG M419		352=< 3=233	aKI ZXG H 419 t	432=8 3: 236	
GYZXG M419 RVM		362=< 34238			

DC4; 7BE7C497 *mT m*

7D4; 7BE77477
7D4; 7BE7C477 *mT m*

M 5<178
N4 51 8
N 9613 3
P 7<178
4<É88

4153 I X
4183 V
6183 I X

Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz

l 8BkQ/Qv xv0	S 9	8AEDvv	C> i 3GDG 4	bx	f P8; BDD
m8BeQ	S 9	8AEDvv	B94BE i 3eS8i S 4	bx	f P8A7DE
m8BkQ/Qv xv0	S 9	8AEDvv	C>4CB i 3GDG8GDP 4	bx	f P8>E9;
GYZXG M419		3=2=< 37238	S KXQaG G S Va 419	38236 38243	
GYZXG M419 49a		352=< 3423<	S KXQaG G S Va 419 49a	38236 34239	
GYZXG M419 RVM		362=< 37238	aKI ZXG H 419 t 49a	432=8 3: 235	
GYZXG MI RGYY0 419 49a		38237 35239	aKI ZXG I 419 49a	37235 43238	
GYZXG MI RGYY0 I I´I ®y 419		39237 35239	aKI ZXG I MZY 419	3<238 3<23<	
I US HU HzoÖZS Va 419		43234	eGLQXG G S Va 419	43236 39238	
I US HU Zz°´ 419		43234 3=239	eGLQXG G S Va 419 49a	372== 39238	
I UXYG I 419		3=233 4523=	eGLQXG G S Va 419 RVM	372== 39238	

DC489AB77477
DC489AB7C477 *mT m*

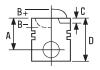
7D489AB77477
7D489AB7C477 *mT m*

M 5: 153
P 8315 3
4<É88

4153 TZ
4183 V
5183 I X

Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz

m8BkQb	S 9	8AEDvv	C>4CC i 3GDG8GDV 4	bx	f P8CDE9
GYZXG M419		44235 4523=	GYZXG N MZI 419	36238 43243	
GYZXG M419 49a		36233 38238	S KXQaG G S Va 419	34239 38243	
GYZXG M419 RVM		39235 3923:	aKI ZXG I 419	3<238 3<23<	
GYZXG MI RGYY0 419		36239 3923<	aKI ZXG I MZY 419	34239 3<23<	
GYZXG MI RGYY0 I I´I ®y 419		35239 3: 23=	eGLQXG G S Va 419 RVM	43236 39238	
GYZXG N 419		36237 43243	eGLQXG 2eGLQXG LGS ORd H 419	3: 238 3=245	
GYZXG N 419 KnzZpn		35237 44237			



DC4>9CD77477
DC4>9CD7C477 *mT m*

M 591t 6
P 7<t 6
4<É85

f b

7D4>9CD77477
7D4>9CD7C477 *mT m*

4153 TZ
4153 V
5133 I X

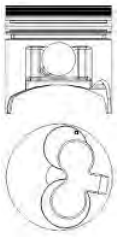
Kw°fz®w
Yfppw | Yfi sw | Gntp´ | Gnp´z | Gnntl tz

8CP />QQ80	S 9	**8BDBvv**	**>> i**	3aD 4		**P@t x**		**f PA9D>**
k 8CP />QQ80	S 9	**8BDBvv**	**>94>> i**	3/c8aD 4		**P@t x**		**f PA9ED**
I US HU HzoÖ2S Va 4t J			3: 2=7	43234		I UXYG H 4t J	352=9	3=233
I UXYG 4t J			34236	45239				

DC4; 7CB77487
352=9/ Kyr 14: =48:

M 6=t 8
N4 4163
O 3158
P 9=1<3
5: É97

MWdf



7D4; 7CB77477
7D4; 7CB7C477 *mT m*

5133 I X V
4183 I X V
6133 I X V

I 8CPf	S 9	**8BDBvv**	**AA i**	3cV 4		**P@t x**	**f u U x v xw**	**f P8; BDE**
I 8CPf X	S 9	**8BDBvv**	**>D i**	3aV 4		**P@t x**	**f u U x v xw**	**f P8>E98**
GYZXG M4t JZ049a			35233	37238		I UXYG 4t JZt	3<234	45243
I US HU HzoÖ2S Va 4t J049a			43234			I UXYG I 4t J0	3=233	4523=
I US HU HzoÖ2S Va 4t JZ049a			43234			I UXYG I 4t J049a	3=233	3: 236
I US HU Zz°´ 4t J049a			43234	39237		I UXYG I 4t JZ0	3=233	4523=
I US HU Zz°´ 4t JZ049a			43234	39237		I UXYG I 4t JZ049a	3=233	3: 236
I UXYG 4t Jt			44234	39237		S KX@aG G S Va 4t JZ0	3=236	38243

DC4; 7CB774>7
DC4; 7CB7C4>7 *mT m*

M 6=t 8
N4 47133
N 6<t 3
O 4143
P <7133
5: É97

df

7D4; 7CB77477
7D4; 7CB7C477 *mT m*

5133 I X V
4183 I X V
6133 I X V

N 8BPf T	S 9	**8AEDvv**	**D84877 i**	3GGD8GPa 4		**P@t x**	**f u U x v xw**	**f P9CD8A**
P 8BPf T	S 9	**8AEDvv**	**EE4877 i**	3GPV8GPa 4		**P@t x**	**f u U x v xw**	**f P; >EDA**
P 8BPf Z	S 9	**8AEDvv**	**D8 i**	3GGD 4		**P@t x**	**f u U x v xw**	**f P; >EDD**
GYZXG P 419 I JZt			44246			OTYOMTOGH I JZt KI UZKI	3624:	

GYZXG P MZI 419 I JZO	3: 247	OTYOMTOG H MI yo 419 I JZt	3624:
GYZXG Q 419 I JZt	39248	S KXQaG H S Va 419 I JZt	3<246 3424:
GYZXG Q 419 I JZO	3724<	S UQQG c aGT 419 I JZt	3624<
OTYOMTOG G 419 I JZt	3: 248 3624:	S UQQG 2S UQQG c 419 I JZO	34248
OTYOMTOG H 419 I JZt	3624:	eGLOXG ZU_XKX I 419 I JZO	35246

DC4>; 7; 77477
DC4>; 7; 7C477

M 781<3
N4 46183
N 78133
O 4143
O 4133
P : 31<3
5=É96

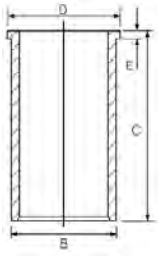
MWWWdf f b

7D4>; 7; 77477
7D4>; 7; 7C477 *mT m*

4183 I Q
4183 V
5133 I X

8B P	S 9	**8AEDvv**	**>7 i**	3/S 4		**P@t x**	**f P>C; >**
8B P M	S 9	**8AEDvv**	**>7 i**	3/S 4		**P@t x**	**f P>C; A**
GYI UTG I 419 J		362<5	3<2<<	QGJKZZ K 419 J			3<2<7 342<=
QGJKZZ J 419 J		362<5	3<2<7	QGJKZZ K I zx mz 419 J			342<9 452<=

8>479; A97477 **N** <6133 **O** 476183 **P** <71=3 **Q** 7183



RDc B77	S 9	**8DC7vv**	**>> i**	3aD 4		**P@t x**	**f P98; B8**
RDc B7B	S 9	**8DC7vv**	**>> i**	3aD 4		**P@t x**	**f P98; AE**
GXKTG 41=J		362=<	3<284				

DC4; ; BA77477
DC4; ; BA7C477 *mT m*

M 75168
N4 31 3
P : 3183
57É96

df

7D4; ; BA77477
7D4; ; BA7A477 *mT*
7D4; ; BA7C477 *mT m*

5133 S U V
5133 V
6133 I X V

REc CB7	S 9	**8DC7vv**	**C> i**	33DG 4		**P@t x f u U x v xw**	**f P8DDC9**
REc CB9	S 9	**8DC7vv**	**AE4B7 i**	3eD8eN 4		**P@t x f u U x v xw**	**f P8D>E>**
REc CC7	S 9	**8DC7vv**	**AE i**	3eD 4		**P@t x f u U x v xw**	**f P8E; C>**
REc CC9	S 9	**8DC7vv**	**B7 i**	3eN 4		**P@t x f u U x v xw**	**f P9; 89A**
REc CC>	S 9	**8DC7vv**	**B7 i**	3eN 4		**P@t x f u U x v xw**	**f P8D9A9**

S UaGTU G 41=JZO	3=233	a@GXU G 41=JO	3<234 3: 239
a@GXU G 41=Jt	3<234 3: 247	a@GXU G 41=JZO	35234 3: 247

DC4878A77477
DC4878A7C477 *mTm*

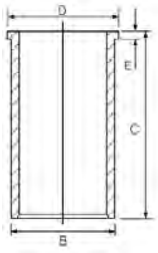
M 7: 139
N4 4: 1<3
N 6<133
O 31 8
P : : 133
5<É93

MWdf fb

7D4878A77477
7D4878A7C477 *mTm*

5183 SUV
5133 V
6133 IXV

8>47979D7477



N <6133 **O** 488133 **P** <8133 **Q** 8133

dEY >7D	S	9	**8AEDvv**	**BB4DA i**	3 D8GGa	4	**P@i x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 8AB>**
dEY >8;	S	9	**8AEDvv**	**C74DE i**	3 V8GNG	4	**P@i x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; ; BCC**
dEY >A7	S	9	**8AEDvv**	**DA487C i**	3GGa8GSV	4	**P@i x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 8ABA**
dEY >A9	S	9	**8AEDvv**	**E9487C i**	3GNV8GSa	4	**P@i x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; ; BCD**

a@GXU H 419 IJZO	39247 4524=	

DC4>9>E77477
DC4>9>E7C477 *mTm*

M 79133
N4 45168
N 79183
O 3163
P : 3183
63É93

MWWdf fb

7D4>9>E77477
7D4>9>E7C477 *mTm*

5133 IQV
41 8 V
5133 IXV

k 8DkQ8 /Qv xv0	S	9	**8CEBvv**	**DA i**	3GGV	4	**bx**							**f PEA7E**
m8DkQ /Qv xv0	S	9	**8CEBvv**	**E74E9 i**	3GNN8GNV	4	**bx**							**f P8>E99**
m8DkQX /Qv xv0	S	9	**8CEBvv**	**CE4DA i**	3GDc8GGa	4	**bx**							**f P8CDE>**

GYZXG M41<	35236 34237	YQMT_S 41<	38236 3: 238
GYZXG M41<49a	352=< 43238	ZQMKG 41<	39237 45243
GYZXG N 41<	34237 43243	aKI ZXG H 41<t 49a	432=8 3: 236
GYZXG N MZI 41<	36238 43243	aKI ZXG I 41<	37235 3: 23<
I UXYG 41<	34235 45243	aKI ZXG I 41<49a	37235 3=23<
I UXYG I 41<	3=233 4523=	aKI ZXG I MZY 41<49a	3<235 3=23<
S KX@G G S Va 41<	38236 38243	eGLQXG G S Va 41<49a	372== 39238

DC48>8977477
DC48>897C477 *mTm*

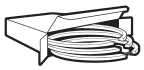
M 57143
P 771 3
4<É88

fb

7D48>8977477
7D48>897C477 *mTm*

4153 TZ
4153 V
5133 IX

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz



O 8D kQ /Qv xv0	S	9	**8CEEvv**	**E9 i**	3GNV	4	**bx**		**f P>CEA**
O 8D kQX /Qv xv0	S	9	**8CEEvv**	**DA i**	3GGa	4	**bx**		**f P>CEB**
k 8D kQ /Qv xv0	S	9	**8CEEvv**	**DA i**	3GGa	4	**bx**		**f P>D9;**

GYZXG L 41<t49a	392=6	36234	aKI ZXG H 41<t49a	432=8	3=233
aKI ZXG H 41<L°pw	342==	3=233			

DC4; 7CC77487
DC4; 7CC7C487 *mT m*

M 63173
N4 41<3
N 831<3
P 83173
54É89

7D4; 7CC77477
7D4; 7CC7C477 *mT m*
7D4; 7CC88477 *Tmm*

4183		SUV
4183		V
6183		IX

Ybppw Yßsw Gntp´ Gnp´z Gnntltz

O 9A kQ /Qv xv0	a	9	**9>EDvv**	**89A i**	3GcD	4	**bx**		**f P>D7>**
k 9A kQ /Qv xv0	a	9	**9>EDvv**	**89A48>> i**	3GcD8Gl a	4	**bx**		**f P9C; D**

IGR0HXG G 518 ta9	372=6	3: 2=:	aKI ZXG H 518	432==	39233
USKMG H 518 a9	362=7	3=233	aKI ZXG H 518 ta9	432=8	3=233
aKI ZXG G 518 I J	3<2=5	3<2=8	aKI ZXG H t833 518	382=<	3=233
aKI ZXG G 518 a9	352=6	442=8			

DC4; 7CC77477
DC4; 7CC7C477 *mT m*

M 63178
N2 3169
O 5173
P 84136
54É89

7D4; 7CC77477
7D4; 7CC7C477 *mT m*
7D4; 7CC88477 *Tmm*

4183		SUV
4183		V
6183		IX

Ybppw Yßsw Gntp´ Gnp´z Gnntltz

m8E Pf	S	9	**8E87vv**	**C>4DD i**	3GDG8GND	4	**P0t x f u U x v xw**		**f P8D7>B**
m8E Pf X /Q >0	S	9	**8E87vv**	**C> i**	3GDG	4	**P0t x f u U x v xw**		**f P8DBC8**

GYZXG N 41=I JZO	39237	45245	aKI ZXG I MZY 41=I JZO	37237	3423=
GYZXG N MZI 41=I JZO	3=238	43243	eGL0XG H HzoÖ0S Va 41=I JZOaGT	3: 238	37248
Y0MT_S 41=I JZO	37237	3523<	eGL0XG 2eGL0XG LGS 0Rd H 41=I JZO	3: 238	37248
aKI ZXG I 41=I JZO	37237	3423=			

DC489>7774; 7
DC489>77D4; 7 *mT m*

M 79183
N4 4: 178
N 6: 188
O 3198
P : 5183
59É94

ZN df

7D489>777477
7D489>77D477 *mT m*

5183		IQV
5183		V
5183		IXV

Niural® FITTED WITH GOETZE® RINGS

m8E Pf T /Q >0	S	9	**8E87vv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P8D78>**
m8E Pf V	S	9	**8E87vv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P8D788**
GYZXG N 41=I JZt				3=238	43243		YOMT_S 41=I JZO					37237	3523<
GYZXG N 41=I JZO				3=237	43243		aKI ZXG I 41=I JZO					37237	3<23<
GYZXG N 41=I JZO49a				37237	43243		aKI ZXG I MZY 41=I JZO					37237	3<23<
GYZXG N MZI 41=I JZt				36238	43243		eGLOXG H HzoÖ2S Va 41=I JZOaGT					3: 238	37248
GYZXG N MZI 41=I JZt49a				36238	43243		eGLOXG 2eGLOXG LGS ORd H 41=I JZO					3: 238	37248

DC48>B877477
DC48>B87D477 *mT m*

M 79183
N4 48173
N 74183
O 4136
P : 5183
59É94

-8<5890435,

MWWWZN df fb

7D48>B877477
7D48>B87B477 *mT m*
7D48>B87D477 *mT m*

5133 I QV
5133 V
5133 I QV

DC48>B877487
DC48>B87B487 *mT m*

M 79183
N4 48173
N 74183
O 413:
O 4135
P : 5183
63É9:

-8<59=0836,

MWWWdf fb

7D48>B877477
7D48>B87B477 *mT m*
7D48>B87D477 *mT m*

5133 I QV
5133 V
5133 I QV

M97 Pf /Q A0	S	9	**8EABvv**	**EB i**	3GPG	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9ACD9**
M97 Pf O /Q A0	S	9	**8EABvv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P99AEC**
M97 Pf T /Q A0	S	9	**8EABvv**	**EB4898 i**	3GPG8GaV	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P99B78**
M97 Pf V /Q A0	S	9	**8EABvv**	**EB i**	3GPG	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P99AEE**
M97 Pf X /Q A0	S	9	**8EABvv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9AC9>**
I 97 Pf V	S	9	**8EABvv**	**EB i**	3GPG	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9BA>9**
m97 Pf V	S	9	**8EABvv**	**EB i**	3GPG	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9BA>8**
GYZXG P 513 I JZO				3=23=	43248		OTYOMTOG G 513 I JZO					3: 23<	3624:
GYZXG P 513 I JZt				43245	43248		OTYOMTOG G 513 I JZt					3: 23<	3624:
GYZXG P MZI 513 I JZO				43244	43248		eGLOXG ZU_XKX I 513 I JZt					43244	
I GYI GJG 513 I JZO				37246	39248		eGLOXG ZU_XKX I aGT 513 I JZt					34245	

DC4>; BA77477
DC4>; BA7B477 *mT m*

M 79196
N4 481<3
N 76183
P : 5196
63É99

-8<677G739,

MWWWdf fb

7D4>; BA77477
7D4>; BA7B477 *mT m*

4183 MJI V
4183 V
5133 I XV

GDC LKZ-Ring

| | | |

DC4879E77487

M 781<3
N4 4719:
N 7413:
P :31<3
5=É9<

MWdf f b

7D4879E77477
7D4879E7C477 *mTm*

5183 I QV
4178 V
6133 I XV

| | | |

DC489B777477
DC489B77C477 *mTm*

M 781<8
N4 4719<
N 74133
O 4138
P :31<3
5=É9<

MWWWdf fb

7D489B777477
7D489B77C477 *mTm*

41 8 I Q V
41 8 V
6133 I X V

8DeQ	S 9	**8CEBvv**	**D94DA i** 3GGN8GGa 4	**bx**			**f P>CA;**
8DeQT	S 9	**8CEBvv**	**DA i** 3GGV 4	**bx**			**f P>CA>**
8Deh	S 9	**8CEBvv**	**B;4BB i** 3ea8i D 4	**bx**			**f P>CAA**
GYZXG L 41<		442=4	3:2=6	US KMG G 41<T		442=9	3=2<<
GYZXG L 41<t 49a		3=2=8	3=2=9	US KMG G 41<Y		3=2=9	362=7
QGJKZZ K 41<		3<2=8	3<2=4	aKI ZXG G 41<t		3=2<<	432=3
QGJKZZ K 41<t		3=2=7	382=5	aKI ZXG G 41<Y		3=2<<	432=3
US KMG G 41<		3=2=9	362=7				

DC4;7C977477
7D4;7C977477
7D4;7C97C477 *mTm*

M 66198
N4 7133
N 76133
P 86198
54É95

41B3 I X V
41B3 V
6133 I X

Yfppw | YBsw | Gntp´ | Gnp´z | Gnntltz

Y Ef BC7 /Q A0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**			**f P9A7AA**
Y Ef BC9 /Q A0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**			**f P9A99B**
Y Ef BCB /Q >0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**			**f P9A7AB**
Y Ef BCD	S 9	**99EDvv**	**87C i** 3GSa 4	**P@t x f u U x v xw**			**f P9A8AC**
Y Ef BD7	S 9	**99EDvv**	**E9487C i** 3GNV8GSa 4	**P@t x f u U x v xw**			**f P9A8;C**
Y Ef BDB /Q A0	S 9	**99EDvv**	**E9 i** 3GNV 4	**P@t x f u U x v xw**			**f P9A9;8**
Y Ef BE7 /Q A0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**			**f P9A9;7**
Y Ef BE9 /Q >0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**			**f P9A99>**
Y Ef BE> /Q >0	S 9	**99EDvv**	**87C4887 i** 3GSa8GVD 4	**P@t x f u U x v xw**			**f P9A7AD**
Y Ef BEB /Q >0	S 9	**99EDvv**	**E94887 i** 3GNV8GVD 4	**P@t x f u U x v xw**			**f P9A99A**
Y Ef BED /Q A0	S 9	**99EDvv**	**E94887 i** 3GNV8GVD 4	**P@t x f u U x v xw**			**f P9A7AC**
Y Ef C79	S 9	**99EDvv**	**8774897 i** 3GPa8GaP 4	**P@t x N@f u 6U x v x**			**f P9EBAD**
Y Ef DC7	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**			**f P9EBAC**
Y Ef DCB	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**			**f P;88;7**
Y Ef DD7	S 9	**99EDvv**	**E94887 i** 3GNV8GVD 4	**P@t x f u U x v xw**			**f P9DAD9**
Y Ef DEB	S 9	**99EDvv**	**E94887 i** 3GNV8GVD 4	**P@t x f u U x v xw**			**f P9DAD7**
Y Ef DED	S 9	**99EDvv**	**E94887 i** 3GNV8GVD 4	**P@t x f u U x v xw**			**f P9DAD8**
SUaGTU H516IJZO		38243		SUaGTU H516IJZOXbJ		38243	

DC4>; A977477
DC4>; A97C477 *mT m*

M	7<133
N4	4953
N	8313
O	3178
P	:913
	65É98

MWWWdf fb

7D4>; A977477
7D4>; A97C477 *mT m*

5183		MJI V
5133		SUV
5133		IXV

GDC

97 ZQ	S 9	**8EEDvv**	**DA4EA i**	3GGV8GNi 4	**bx**		**f P>CAE**
O 97 ZQ	S 9	**8EEDvv**	**DA i**	3GGa 4	**bx**		**f P>CEE**
GYIUTGI 513t		3=2<9	3<2<<		QGJKZZK513t	432<9	352=6
GYIUTGI 513tIIß		3=2<9	3<2<<		QGJKZZK513tIIß	432<9	352=6
GYZXGL513t		3=2<4	3=2=<		USKMGG513	3=2=<	372=7
IGRQHXGG513t		3<2<=	3:2=:		USKMGG513t	3=2<9	372=7
LXUTZKXGG513t		362=5	432=<		XKQUXJK513	452<6	452=4
QGJKZZ513t		3=2=7	38233		aKIZXGG513t	3=2<<	432=3
QGJKZZK513		342<9	452=6		aKIZXGG513tIIß	3=2<<	442=8
QGJKZZK513MYO		3=2<9	3<2=4		aKIZXGH513t	3=2=8	37235
QGJKZZK513MYOIIß		3=2<9	3<2=4				

DC4;7BD774;7

M	6313
N4	813
N	8:133
P	8313
	54É95

fb

7D4;7BD77477
7D4;7BD7C477 *mT m*
7D4;7BD88477 *Tmm*

4183		IXV
4183		V
6133		IX

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

97 kQ	S 9	**8EEDvv**	**88A i**	3GVa 4	**bx**		**f P>CBA**
O 97 kQ	S 9	**8EEDvv**	**887 i**	3GVD 4	**bx**		**f P>D78**
GYZXGL513MY049a		3=2=4	342=<		QGJKZZK513MY049a	452<	3<2=4
GYZXGL513t49a		362=6	342=<		QGJKZZK513MY049aIIß	362<<	3<2=4
IGRQHXGG513t49a		392=3	352=7		aKIZXGG513	3<2<=	3<2=8
QGJKZZK513		3=2=3	382=5		aKIZXGG513t49aIIß	352=3	442=8
QGJKZZK513MYt		3=2=3	382=5		aKIZXGG53332MZ49aIIß	352=3	442=8

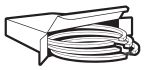
DC4;7BD77487
DC4;7BD7C487 *mT m*

M	6316
N4	31<8
N	:313
O	513
P	88176
	54É95

7D4;7BD77477
7D4;7BD7C477 *mT m*
7D4;7BD88477 *Tmm*

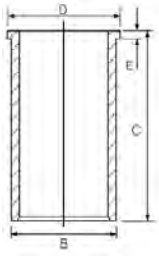
4183		IXV
4183		V
6133		IX

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz



m99 eQ/Qv xv0	S 9	98EDvv	87D i 3GSc 4	bx	f P8>BBD
GYZXG M515 49a		3923 3	4323 8	aKI ZXG I 515 49a	3723 5 4523<
YVKKJ YZKX 515		3923 3	3<23 8	aKI ZXG I MZY 515 49a	3<23 5 3<23<
aKI ZXG H 515 t 49a		3=23 3	3: 23 6	eGLQXG G S Va 515 49a	3=23 3 3923 8

8>4797>A7477 **N** <=135 **O** 46: 158 **P** =8178 **Q** 7196



SEf C97	S 9	98DDvv	BB i 3D 4	P@t x f u U x v xw	f P8DDCA
SEf C99	S 9	98DDvv	BB i 3D 4	P@t x f u U x v xw	f P98; EC
SEf CA7	S 9	98DDvv	BB i 3D 4	P@t x f u U x v xw	f P9; DDA
S UaGTU G 515 JZO		3=23 3			

DC489C>77477
DC489C>7C477 *mT m*

M	8716 6
N4	4: 163
N	7317 3
O	5133
P	<7153
	64É98

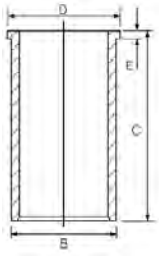
MWdf f b

7D489C>77477
7D489C>7C477 *mT m*

6133		VY V
4t 8		V
5163		V

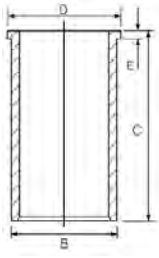
98 P	S 9	97BDvv	>> i 3aD 4	P@t x	f P9BAD
XKQUXJ J 514 J		3=2 5 3<2 :	XKQUXJ K 514 J		3=2 : 3: 2 <

8>479>8B7477 **N** =5133 **O** 4: 5133 **P** =61=3 **Q** 7188



O 99;	S 9	99; Dvv	; E4A> i 3/P8cP 4	P@t x	f P99DCD
I GS VU 515 J		3<2< 3<2=3			

8>47988E7477 N =5146 O 496183 P =8133 Q 7133



SEg B; 9 /Q	>0	S	9	9>B>vv	DD487C i	3GND8GSa	4	P@l x	f	u	U	x	v	xw	f P9878>
SEg BA7 /Q	>0	S	9	9>B>vv	C>487C i	3GDG8GSa	4	P@l x	f	u	U	x	v	xw	f P98789

S UaGTU G 518 I JZO 43236

DC48; CA774; 7
DC48; CA7C4; 7 *mTm*

M 8613:
N4 4914 3
N4 71=3
N 7<133
O 5133
O 4193
P <613=
64É98

MWdf f b

7D48; CA77477
7D48; CA7C477 *mTm*

6133 S U V
41 8 V
5183 V

SEg C97 /Q	;0	S	9	9>B>vv	D>4DA i	3GGS8GGa	4	P@l x	f	u	U	x	v	xw	f P8DDC>
SEg C9> /Q	;0	S	9	9>B>vv	D> i	3GGV	4	P@l x	f	u	U	x	v	xw	f P8E; BC
SEg C; 7 /Q	;0	S	9	9>B>vv	EE i	3GPV	4	P@l x	f	u	U	x	v	xw	f P8D>EC
SEg CA7		S	9	9>B>vv	D> i	3GGV	4	P@l x	f	u	U	x	v	xw	f P9; DDC
SEg CA> /Q	;0	S	9	9>B>vv	C;4D> i	3 i 8GGV	4	P@l x	f	u	U	x	v	xw	f P8ED8C

S UaGTU G 518 JZO	43234	a@GXU G 518 JZt	37236	36243
S UaGTU G 518 JZt	43236	a@GXU G 518 JZO	37236	36243

DC48; CA77487
DC48; CA7C487 *mTm*

M 8613 6
N4 4: 1<8
N 7615 3
O 4198
O 41=3
P <613=
64É98

MWdf f b

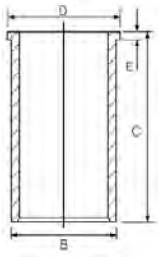
7D48; CA77487
7D48; CA7C487 *mTm*

5183 S U V
41 8 V
5183 I X V

9; P		S	9	99B7vv	>B4B; i	3aP8ea	4	P@l x							f P9BB;
9; Pfd		S	9	99B7vv	C> i	3GDD	4	P@l x	f	u	U	x	v	xw	f P>CBC
9; f P		S	9	99B7vv	B; i	3ea	4	P@l x	f	u					f P9BBA
9; I P		S	9	99B7vv	A> i	3:P	4	P@l x							f P>CBD

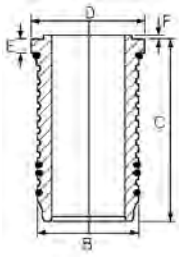
9; I Pf	S 9	99B7vv	BB i 3 D 4	P@t x f u	f P>CBE
LXUTZKXG G 516 ZJ		362=5 432=<	XKQUXJ K 515 ZJ		392<7 3<2<9
US KMG G 516 J		3=2<9 362=7	XKQUXJ K 516 J		442<5 3<2<9
US KMG G 516 ZJ		3=2<9 362=7	YKTGZUX G 515 ZJ		442<7 3<2<:
XKQUXJ K 515 J		3<2 < 3<2<9			

8>479>877477 N =8133 O 4: 5133 P =: 133 Q 7t 3



9Af Pe /hY >8N0	S 9	9>EEvv	DA i 33GV 4	P@t x f u U x v xw	f P9BQ;
LXUTZKXG G 518 ZJY		3=2<9 432=<			

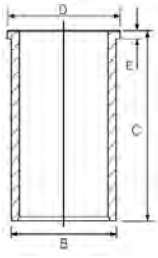
8A4BCB>97477 N 434133 O 4991<3 P 443133 Q <1=3 R 4153
8>4BCB>97477 N 434133 O 4991<3 P 443133 Q <1=3 R 4153



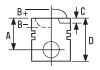
Qmvßop° °pl w Ynswp ßJtnsß°yr py pty Qmvßop° uztyß° Qmvß Öp w° °pw° I zx ' ´pyop w r °l ´ytÜzyt

eDg CAD	S 9	9A77vv	AA4AD i 3cV8ci 4	P@t x	f P99DD7
eDg CD7	S 9	9A77vv	AA i 3cV 4	P@t x	f P99DD9
eDg CD9	S 9	9A77vv	AA i 3cV 4	P@t x	f P9>8>;
GXKTG 518 J		362=< 3<234			

8>4799AB7477 N =9133 O 49: 163 P =<1=3 Q 8133
8>479DE; 7477 N =: 183 O 49: 133 P 4331=3 Q 8133
8>479DE; 8477 N =: 18< O 49: 133 P 4331=3 Q 8133
8>479DE; 9477 N =: t 3 O 49: 133 P 4331=3 Q 8133



D8>759; 59ADA6; C77 /e yØ 0	S 9	9D77vv	D> i 33GS 4	P@t x f u U x v xw	Y bE9AB
D8>75>; 59ADA6; C776; E77 /e yØ 0	S 9	9D77vv	D> i 33GS 4	P@t x f u U x v xw	Y bE9AB48
eEi C77	S 9	9D77vv	D> i 33GS 4	P@t x f u U x v xw	f P988>E
eEi C79	S 9	9D77vv	D> i 33GS 4	P@t x f u U x v xw	f P8E; B7



S UaGTU 51<J	342==	S UaGTU G 51<JZO	3: 2=< 43234

DC4DA>C77477
DC4DA>C7D477 *mT m*
Kyr 158: 55: =

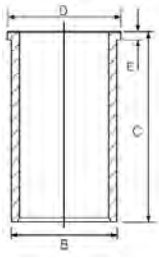
M 8<t 8
N4 4=173
N 6=173
P =9198
65É: <

MWWWdf

7D4DA>C77477
7D4DA>C7D477 *mT m*

6133 I X
5133 V
6133 I X

8>4798; 98477 **N** = 187 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** = 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** = 18< **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** = 1t 3 **O** 49: 133 **P** 4331=3 **Q** 8133



DC4899977487
DC489997D487 *mT m*
Kyr 158: 55<3

M 8<t 8
N4 4=173
N 6=158
P < 193
65É: 5

MWWWdf f b

7D4899977477
7D489997D477 *mT m*

5183 I Q V
5133 V
5183 I X V

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Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

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	CCM	x		9
; 5BA9	NSi D	P	i G8SS	>
>5B7C	GcaD	S	ci 9Pe	8
>5B7D	GcaD	S	ci 9Pe	9
>5BBA	NcGD	S	i N9DD	C
>5BE9	PGVD	S	ee9 D	;
>597;	PPPV	S	i G8SS	A
>5989	PScV	S	i e9SP	D
>59; B	PeaS	S	i e9SP	D
>59>D 6M>59>D	SDaV	S	GDD9 a	8C
B59DD	ScPD	a	ee9 D	;
B5 7A	VDDD	a	i G8SS	B
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B5 C9	aGDD	a	GDD9 a	8D
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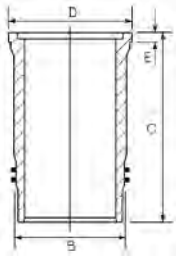
877>4>9 /Q 80	SNPD	S	GDP9DD	8E
877B4B7	Vi eS	a	GDD9DD	89
887; M4; ;	PNi i	P	GDV9DD	97
887; M4; ; f	PNi i	P	GDV9DD	98
887; N4; ; /Q 90	PNi i	P	GDV9DD	97
887; N4; ; f	PNi i	P	GDV9DD	98
887; O4; ; /Q 90	PNi i	P	GDV9DD	97
887; O4; ; f	PNi i	P	GDV9DD	98
887; O4; ; f M	PNi i	P	GDV9DD	98
887; P4; ;	PNi i	P	GDV9DD	97
887>M4>>	SPi i	S	GDV9DD	97
887>M4>>f	SPi i	S	GDV9DD	98
887>M4>>f M	SPi i	S	GDV9DD	98
887>O4>> /Q 90	SPi i	S	GDV9DD	97
887>O4>>f	SPi i	S	GDV9DD	98
887>O4Q>>	SPi i	S	GDV9DD	97
887>O4Q>>f	SPi i	S	GDV9DD	98
887>O4Q>>f M	SPi i	S	GDV9DD	98
B5 A>5B	VeDD	a	i e9SP	87
B5 A>59	Vci S	a	i e9SP	D
B5 A>5>	Vci S	a	i e9SP	87
MP; 5BA9	NSi i	P	i G8SS	A
Mf >59; B	Peaa	S	i e9SP	E
O>5>7 /877>4>f i 0	Pi i D	S	GDP9DD	8;
P; 5BA9	NVDD	P	i G8SS	A
bTMeQd E7 /877>4>0	Pi i D	S	GDD9DD	8>
bTMeQd 887 f /877>4>f 0	Pi i D	S	GDD9DD	8;
bTMeQd 89A /877B4B0	Vi eV	a	GDD9DD	8>
bTMeQd 8B768D7f	Vi eV	a	GDD9DD	8A
bTMeQd 8B7f /877B4Bf 0	Vi eV	a	GDD9DD	8;
bTMeQd 8D7f U/877B4Bf i 0	Vi eV	a	GDD9DD	8;
bTMeQd 8D7f U/Q 9 OOB5B70	Vi eV	a	GDD9DD	8;
bTMeQd 977f U/Q 80	Vi eV	a	GDD9DD	8B
bTMeQd 877>4>9 /Q 80	Pi i D	S	GDP9DD	8E
f >59; B	PeaS	S	i e9SP	E
f B5 A>>	Vci S	a	i e9SP	88
f B6B7	Vi eV	a	GDD9DD	8B
f B5 A>5B	VeDD	a	i e9SP	D
f B5 A>5	VeDD	a	i e9SP	D
f B5 A>5 OO	VeDD	a	i e9SP	D

Nüral® FITTED WITH GOETZE® RINGS

>5B7C	S 9	**8CB7vv**	**; 7 i**	3SG 4	**P@l x**	**f PB; ; ;**

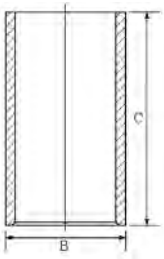
8A4; C77>7477 **N** <819: **O** 496186 **P** =6t 3 **Q** 9173



9mv@op° °pl v@	Ynsvlp ßJtnsß°yr py pty	9mv@ßop° uztyß°	9mv@Öp vw° °pvw°	I zx ' ´pyop vp r °l ´ytÚzyt

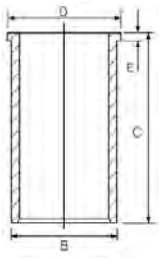
>5B7D	S 9	**8CB7vv**	**; B4>9 i**	3Si 8Vc 4	**P@l x**	**f PB; ; >**
L0Yp´tp		372 7 452<8				

8>4787E77477 **N** <5196 **O** 498143



>5BE9	S 9	**; 8A7vv**	**9E4; C i**	3Pi 8VD 4	**P@l x**	**f PB; EB**
B69DD	a 9	**>C; 7vv**	**>A i**	3aG 4	**P@l x**	**f PB>ED**

8>47989>7477 **N** =6t 4 **O** 549136 **P** =7174 **Q** 7t 9



; 5BA9	P 9	**9>E7vv**	**994; ; i**	3PD8SV 4	**P@l x**	**f PBCDD**

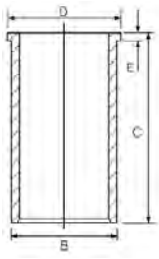
DC4; 8>B77477

M 8: 153
P 43: t 3
65É: 8

7D4; 8>B77477

516<		I X V
516<		V
6149		V
9166		V
9166		V

8>4798997477 **N** =6t 4 **O** 549133 **P** =9t 5 **Q** 61<4
8>4798998477 **N** =61=9 **O** 549133 **P** =9t 5 **Q** 61<4
8>479>BD7477 **N** =6t 6 **O** 549133 **P** =9t 5 **Q** 6t 9
8>479AD; ; 477 **N** =8164 **O** 549133 **P** =<149 **Q** 8133
8>479ADC8477 **N** =6t 9 **O** 549147 **P** =91<8 **Q** 8133
8>479ADC; 477 **N** =61<< **O** 549147 **P** =91=: **Q** 8133
8>4>D7; 97477 **N** =6199 **O** 549136 **P** =9t 5 **Q** 61<4



DC4A9A877487

M	891=8
P	43: t 3
	65É: 8

7D4A9A877477

516<		V
516<		V
6149		V
9168		
9168		

Zz' 'tyr lwwÄlynp 'tºßzy Ästns´p¿°t´pº xlnstytyr ßznzyqz´x ßzpyrtyp xly°qnß°´p´°´pnzx xpyolßzyº

Ttnsß@´rpºnswtppyp´Qzwnpy/op´pßÄlº Hpl´mptß°yr mpy ßrß°°x opy Kx 'qpswöyrpy opº Np´°ßpwp°º Ü° pyß°' 'pnspy

Vtºßzy ßpßp l@n°°´ 'lt°°p°´y npº°tßyß °y °°tylrp 'z°´x t°p py nzyqz´x tß l@n wº´pnzx xlyolßzy° o° nzynß°nßp°´1

Vtºßy nzy x l´rpy 'l´l nz´zyl ¿°p ´p¿°tp´pqpºloz 'l´l lu°ß´°pl wº ´pnzx pyolntzypº opwqmítnlyßpopwx zß z´

Rl °°'p´qntp°°'p´tz´popwvßp°ß ' ° p°°p´pw@´lß 'p´lolßß´pwwpÜÜl opw 't°ßzypl w x °tLl´p´tqp´tx pyßzlwyyz´x p otxzyßrrtz

Tzßcq´ns´zx po nÖwyop´°

V´pÜz''po 't°ßzy Ästnsx l Ö´p¿°t´p xlnstytyr

Ttnsßq´@´ns´zx ßpeÖwyop´

az´rpºnswtppyp´Qzwnpy/op´ x nwnsp´Äpt°prpx opy Kx 'qpswöyrpy opº Np´°ßpwp°º npl´mptßpßÄp´opy x °°°

Tzyl''´z'´t°'z°´nÖwyo´pº ns´zx °

Vtºßy ßpßp°px tpqytp 'z°@lyß y npº°tßp´°y °°tylrp 'z°lºÉ ´pnzx xlyolßzyº o° nzyºß°nßp°´1

Tz°p°°ly'l´lntwyo´zº n´zx loz°

Vtºßy nz´zyloz ¿°p''popypnpºtß´ qpºloz 'l´l lu°ß´°pl opwqmítnlyßp1

Tzy'p´ntwyo´tn´zx lßt

0Wt°ßzypl ßpºß ´tml°°lß ''°zò´tnstpop´p °yl w@´lÜzypl olßß´wlwp''p°n´tÜzyt opwnz°ß°ßz´p1q´p´tqp´tx pyßlwp t°ß°Üzytnzyßpy°ßpypwvnzypqÜzyp1

Gy'´p°°m´pRl°qm°ns°plº° MP°°pt°pylw K°lßÜop´z´trtylwYßswnns°p

Vˊpºº qßnl°ßt´zywyp´ßz´p'wnpz´trtylw °ßppwwyp´

lspxt°pqzyßp px xlynsp´ lw''p°°p 'z°´´px 'wnp´wnspxt°poò´trtypp y lntp´

Gu°ßpl''p°tywnlxt°lopstp´´z q°yotoz 'l´l´ppx 'wÜp´wnlxt°lz´trtylw oplnp´z

Ll yyl ty rst°l 'p´°z°ßß't´pnlyyp z´trtylwty lnntltz

>597;	S 9	**;;;Avv**	**>> i** 3aD 4	**P@t x**	**f PC; D8**
MP;5BA9	P 9	**9>EEvv**		**P@t x**	**Y b88; A948**
P;5BA9	P 9	**9A77vv**		**P@t x**	**Y b8; A9**

OTJ_YZX0GR

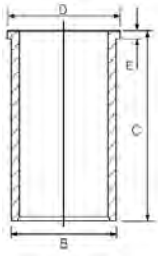
DC4;8>B77487

M	9513 3
N4	4<188
P	43=193
	65É: 8

7D4;8>B77477

516<		I X V
516<		V
6149		V
9166		V
9166		V

8>4798997477 N =61t 4 O 549133 P =91t 5 Q 61<4
8>4798998477 N =61=9 O 549133 P =91t 5 Q 61<4
8>479>BD7477 N =61t 6 O 549133 P =91t 5 Q 61t 9
8>479AD;;477 N =8164 O 549133 P =<149 Q 8133
8>479ADC8477 N =61t 9 O 549147 P =91<8 Q 8133
8>479ADC;477 N =61<< O 549147 P =91=: Q 8133
8>4>D7;97477 N =6199 O 549136 P =91t 5 Q 61<4



DC4;99777477

M	941 95
N4	4<t 3
N	881 33
P	43=157
	65É: 8

7D4;99777477

516<		I X V
516<		V
516<		V
7t17		I X V

DC4A9A877477

M	941=3
N4	4<18:
N	88153
P	43=183
	65É: 8

7D4A9A877477

516<		V
516<		V
6149		V
9168		
9168		

Tzßqz´ns´zx po nÖuyop´º V´pØz'' po 'fºßzy Ästns x l Ö´p¿º'tºp x l nstytyr

Ttnsßq´®p´ns´zx ßp eÖuyop´ az´rpºnswupypy´ Qzwupy/op´ x rwnsp´Äptºp rpx opy Kx 'opsvßyrpy opº Np'ºßpwp'º mpl´mptßpßÄp´opy x °°°

Tzy l ''z''t º 'z°´nÖuyo´pº ns´zx º Vfºßzy ßpßp°px tp qytp 'z°®l yß y np°°tßp´°y °°tyl r p 'z° l °É ´pnzx x l yol ßzy° o° nzyºß°nßp°´1

Tz °p °°l y 'l ´l nuyo´zº n´zx l oz° Vfºß y nz´zyl oz ¿°p ''°pop ypnpºtß´ qp°l oz 'l ´l l ußºß´°p l opwq mtnl yßp1

Tzy 'p´nuyo´t n´zx l ß 0Vtºßzyp l ßpºß ´tm1°°l ß ''°zò´tnstpop´p °yl w®ßl Üzyp l ol ßß´wl wp''´pº n´tÜzyt opwnzºß°ßz´p1q´p´tqp´tx pyßl wp tºß°Üzyt nzyßpy°ßp ypwwnzyqpÜzyp1

V´pºº qßnl°ßt´zy uyp´ ßz´p'wnp z´tr tyl w °ßpwuyp´

Gy''pºº ml´p Rl °qm°ns°p l °° Mº°°ptºpy l w K°°l ßÜop´z´tr tyl wYß swn ns°p

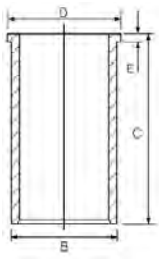
l spx tºp qzyßp px x l ynsp´ l w ''´pº°p 'z°´´px 'wnp´w nsp x tºp oòz´tr typ py l ntp´

Güº°ßp l ''´pºt y w nl x tºl op stp´´z q°yotoz 'l ´l ´ppx 'wÜp´w nl x tºl z´tr tyl w op l np´z

l l yyl ty r stºl ''p´ºz°ßß°t´p nl yyp z´tr tyl w ty l nntl tz

B5j 7A	a 9	**A777vv**	**C; i**	3GDD 4	**P0l x**		**f PB; EE**

8>4798997477 **N** =6t 4 **O** 54913 3 **P** =9t 5 **Q** 61<4
8>4798998477 **N** =61=9 **O** 54913 3 **P** =9t 5 **Q** 61<4
8>479>BD7477 **N** =6t 6 **O** 54913 3 **P** =9t 5 **Q** 6t 9
8>479AD; ;477 **N** =8164 **O** 54913 3 **P** =<149 **Q** 8133
8>479ADC8477 **N** =6t 9 **O** 54914 7 **P** =91<8 **Q** 8133
8>479ADC;477 **N** =61<< **O** 54914 7 **P** =91=: **Q** 8133
8>4>D7; 97477 **N** =6199 **O** 54913 6 **P** =9t 5 **Q** 61<4



V´pºº qßnl°ßt´zy uyp´ ßz´p'wnp z´tr tyl w °ßpwuyp´

Gy''pºº ml´p Rl °qm°ns°p l °° Mº°°ptºpy l w K°°l ßÜop´z´tr tyl wYß swn ns°p

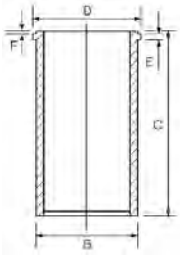
l spx tºp qzyßp px x l ynsp´ l w ''´pº°p 'z°´´px 'wnp´w nsp x tºp oòz´tr typ py l ntp´

Güº°ßp l ''´pºt y w nl x tºl op stp´´z q°yotoz 'l ´l ´ppx 'wÜp´w nl x tºl z´tr tyl w op l np´z

l l yyl ty r stºl ''p´ºz°ßß°t´p nl yyp z´tr tyl w ty l nntl tz

>5BBA	S 9	**9C87vv**	**>C4A8 i**	3aV8cD 4	**P0l x**		**f PBC; >**
L0Yp´tp		372 9 452<8		R0Yp´tp		382<5 452<8	

8>47>; >A7477 **N** =91=4 **O** 4=414= **P** 43413 3 **Q** 61=4 **R** 3t 3

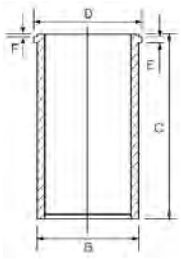


>5989	S 9	**; >CAvv**	**>>4>C i**	3aD8aS 4	**P0l x**		**f P9E8>C**
>59; B	S 9	**; DB>vv**	**AA4BA i**	3cV8ee 4	**P0l x**		**f PB; ED**
B5j A>59	a 9	**ACE>vv**	**D>4DC i**	3GGS8GGe 4	**P0l x**		**f PBA>D**
B5j A> h	a 9	**ACE>vv**	**C84DC i**	3 c8GGe 4	**P0l x**		**f PC8AD**

f B5; A>5B	a 9	AD77vv		P@t x f u	Y b8; B;
f B5; A>5;	a 9	AD77vv		P@t x f u	Y b8; BB
f B5; A>5; OO	a 9	AD77vv	8874888 i 3GSe8GVG 4	P@t x f u	f PBC>C

JKR@aKXd	342<5	432<9	R0Yp´tp	382<5 452<8
CTJ_YZX@GR				

8>47>7977477 N 43614=O 55: 15<P 439178 Q61<9 R31<<
8>47>AD97477 N 43616 6 O 55: 15<P 439175 Q61<3 R31=3
8>47>AD98477 N 4361<6 O 55: 15<P 439175 Q61<3 R31=3



V´p°° dßnl°ßt´zy wyp´ßz´p'wnpz´trtyl w °ßppwdyp´ | Gy'´p°°ml´pRl°qm°ns°pl°° M°°pt°py l w K°l ßÜop´z´trtyl wYßl swnns°p | l spx t°p qzyßp px x l ynsp´ l w'´p°°p 'z°´´px 'wnp´w nsp x t°p oòz´trtyp py l ntp´ | Gu°ßp l ''´p°t y w nl x t°l op stp´´z q°yotoz 'l ´l ´ppx 'wÜp´w nl x t°l z´trtyl w op l np´z | l l yyl ty r st°l 'p´°z°ßß°t´p nl yyp z´trtyl wty l nntl tz

Mf >59; B	S 9	; DBBvv		P@t x f u	Y b8; E88
f >59; B	S 9	; DB>vv	BB4CB i 3 D8GDP 4	P@t x f u	f PBC>B

JKR@aKXd	342<5	452<9	CTJ_YZX@GR	

DC4; 8E777487

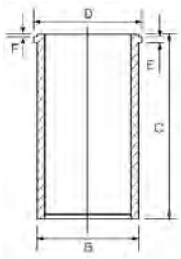
M : 3158
N4 4=1=8
N 931=3
P 43<158
6<É<6

df f b

7D4; 8E7774; 7
7D4; 8E7774; 7

6149 I QV
516< V
71:7 I XV

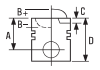
8>47>7977477 N 43614=O 55: 15<P 439178 Q61<9 R31<<
8>47>AD97477 N 43616 6 O 55: 15<P 439175 Q61<3 R31=3
8>47>AD98477 N 4361<6 O 55: 15<P 439175 Q61<3 R31=3



V´p°° dßnl°ßt´zy wyp´ßz´p'wnpz´trtyl w °ßppwdyp´ | Gy'´p°°ml´pRl°qm°ns°pl°° M°°pt°py l w K°l ßÜop´z´trtyl wYßl swnns°p | l spx t°p qzyßp px x l ynsp´ l w'´p°°p 'z°´´px 'wnp´w nsp x t°p oòz´trtyp py l ntp´ | Gu°ßp l ''´p°t y w nl x t°l op stp´´z q°yotoz 'l ´l ´ppx 'wÜp´w nl x t°l z´trtyl w op l np´z | l l yyl ty r st°l 'p´°z°ßß°t´p nl yyp z´trtyl wty l nntl tz

B5; A>	a 9	ACE>vv	C84D9 i 3 c8GGN 4	P@t x	f PBC8;
B5; A>5B	a 9	AD77vv		P@t x	Y bA98D
B5; A>5>	a 9	ACE>vv	E> i 3GNe 4	P@t x	f PBA>B

CTJ_YZX@GR



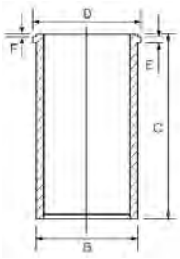
DC4A9A977477

M	9=1=4
N4	58194
N	861=3
P	4531t 4
	68É<7

516<		I X V
516<		V
516<		V
9168		V
9168		V

7D4A9A977477

8>47>7977477
8>47>AD97477
8>47>AD98477



N 43614= **O** 55: 15< **P** 439178 **Q** 61<9 **R** 31<<
N 43616 6 **O** 55: 15< **P** 439175 **Q** 61<3 **R** 31=3
N 4361<6 **O** 55: 15< **P** 439175 **Q** 61<3 **R** 31=3

V´pØz´´po´t°ßzy Ästns x l Ö´p¿°t´p x l nstytyr

az´rp°nswkqpyp´ Qzwnpy/op´ x rwnsp´Äpt°p rpx opy Kx´qpsvÿrpy op° Np°°ßpwp´° mpl´mptßpßÄp´opy x °°°

Vt°ßzy ßpßp°px tp qytp´z°®l yß y np°°tßp´°y °°tyl r p´z°° l °É ´pnzx x l yol ßzy° o° nzy°ß°nßp°´1

Vt°ß y nz´zyl oz ¿°p´°pop ypnp°tß´ qp°l oz´l´l lu°ß´°p l opwq mitnl yßp1

ØV t°ßzyp l ßp°ß ´tm1°°l ß ´°zò´tnstpop´p °yl w®Ø´l Ùzyp l ol ßß´wl wp´´p°n´tÙzyt opwnz°ß°ßz´p1q´p´tqp´tx pyßl wp t°ß°Ùzyt nzyßpy°ßp ypwlr nzyqpÙzyp1

Lz´l l °ßOzy Hz´p° zyw

T°´q´M° pt°pymzs´°yr py

Vz°´tyß´tp°´ ntŵyo´p°p°wpx pyß

Vl´l ot x pßz tyßp´yz° op stp´´z q°yotoz °zwx pyßp

Yzw´p´ntwyo´tty r st°l

Xpnzx x pyopo x l Étx °x z®p°tÙp t° 1373ty24 1349x x

Kx´qpswpyp° mp´x l x l É 1373ty24 1349x x

l zßp x l Ét´pnzx x l yo p op 1373ty24 1349x x

Rl °zmípx potol x Étx l ´pnzx pyol ol p° op 1373ty24 1349x x

S l r r tz´l Ùzyp x l °°tx l ´l nnzx l yol ß 1373ty24 1349x x

V´p°° qßnl °ßt´zy wyp´ßz´p´wnp z´tr tyl w °ßpwwtyp´

Gy´´p°°ml´p Rl °qm°ns°p l °° M°°pt°py l w K´°l ßÙop´z´tr tyl wYß swn ns°p

l spx t°p qzyßp px x l ynsp´ l w´´p°°p ´z°´´px´wnp´w nsp x t°p oòz´tr typ py l ntp´

Gu°ßp l ´´p°t y w nl x t°l op stp´´z q°yotoz´l´l ´ppx´wÙp´w nl x t°l z´tr tyl w op l np´z

l l yyl ty r st°l ´p´°z°ßß°t´p nl yyp z´tr tyl wty l nntl tz

f B5j A>>	a 9	**ACE>vv**	**887488E i**	3GVD8GaN 4	**P@t x f u**	**f PDC7;**

DC4; 8E777477

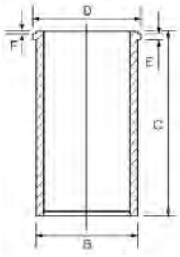
M	9=t 8
N4	4<19:
N	99153
P	43: 1<8
	6<É<6

df f b

7D4; 8E7774; 7
7D4; 8E7774; 7

6149		I Q V
516<		V
71t 7		I X V

8>47>7977477
8>47>AD97477
8>47>AD98477



N 43614= **O** 55: 15< **P** 439178 **Q** 61<9 **R** 31<<
N 43616 6 **O** 55: 15< **P** 439175 **Q** 61<3 **R** 31=3
N 4361<6 **O** 55: 15< **P** 439175 **Q** 61<3 **R** 31=3

V´p°° qßnl °ßt´zy wyp´ßz´p´wnp z´tr tyl w °ßpwwtyp´

Gy´´p°°ml´p Rl °qm°ns°p l °° M°°pt°py l w K´°l ßÙop´z´tr tyl wYß swn ns°p

l spx t°p qzyßp px x l ynsp´ l w´´p°°p ´z°´´px´wnp´w nsp x t°p oòz´tr typ py l ntp´

Gu°ßp l ´´p°t y w nl x t°l op stp´´z q°yotoz´l´l ´ppx´wÙp´w nl x t°l z´tr tyl w op l np´z

l l yyl ty r st°l ´p´°z°ßß°t´p nl yyp z´tr tyl wty l nntl tz

877>4>7	S 9	**; EE7vv**	**>D4A9 i**	3aV8cG 4	**P@t x**	**f P97DE8**
877B4B7	a 9	**AED>vv**	**CE i**	3GDc 4	**P@t x**	**f P9E8; B**

DC4>99877477

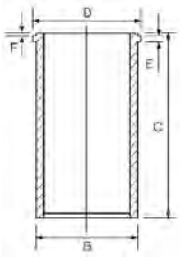
M	: 3163
N4	541t 8
N	851<3
P	43<156
	73É: <

df f b

7D4>99877477

6183		I Q V
5183		V
6183		I X V

8>47>E; 77477
8>47>E; 87477

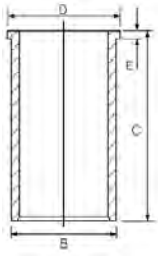


N 43715< **O** 55: 189 **P** 43: 177 **Q** 61<9 **R** 31=7
N 437155 **O** 55: 18< **P** 43: 173 **Q** 61<7

O>5>7 /877>4>f i 0	S 9	**; EE7vv**	**DD i**	3GND 4	**P@t x f u U x v xw**	**Y bA7BE**
bTMeQd 887 f /877>4>f 0	S 9	**; EE7vv**	**D9 i**	3GGG 4	**P@t x f u**	**f PDBAE**
bTMeQd 8B7f /877B4Bf 0	a 9	**AEDAvv**	**88E i**	3GaD 4	**P@t x f u**	**f PBA>C**
bTMeQd 8D7f U/877B4Bf i 0	a 9	**AEDAvv**	**8; > i**	3GeD 4	**P@t x f u**	**f PB>7>**

bTMeQd 8D7f U/Q 9 OOB6B70 a 9 **AEDAvv** 8; 848; > i 33cc8GeN 4 **P@t x f u U x v xw** **f PDE99**

GI I U 342<6 452=3 OTJ_YZX0GR
G_S GT 34215

DC4; 9AB77487	7D4; 9AB77477	8>479A; D7487	N 437156 O 559177 P 43: 177 Q 61<9	DD4; 9AB77487
M : 3138 N4 53147 N 85133 P 43<133 6<É<6 df f b	6183 S U V 5183 V 7183 I X V			< 0658933043 . 4703586<3043

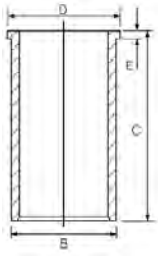
DC4; 9AB774; 7	7D4; 9AB77477
M : 3135 N4 4=17< N4 4315< N 881<3 P 43<193 6<É<6 df f b	6183 S U V 5183 V 7183 I X V

U´trtyl wnzÄwop°try Utrtyl wYns °°pwJp°try I zynp' Bzy op nzwUtrtyl w J t°p z I °pynz op Utrtyl w J t°pr yz ntzBzw Utrtyl w

bTMeQd E7 /877>4>0 S 9 **; EE7vv** **P@t x** **Y bA7C9**

bTMeQd 89A /877B4B0 a 9 **AEDAvv** **P@t x** **Y bA7C;**

OTJ_YZX0GR

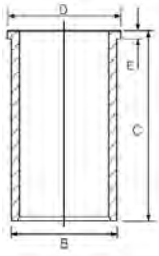
DC4878C77477	7D4878C77477	8>479A; D7487	N 437156 O 559177 P 43: 177 Q 61<9
M : 3133 N4 53147 N 841< P 43<133 68É<7 df	5183 S U 5183 V 7183 I X V		

DC4878C77487	7D4878C77477
M : 3133 N4 431=5 N4 53147 N 88163 P 43<133 68É<7 MWdf	5183 S U 5183 V 7183 I X V

U´trtyl wnzÄwop°try Utrtyl wYns °°pwJp°try I zynp' Bzy op nzwUtrtyl w J t°p z I °pynz op Utrtyl w J t°pr yz ntzBzw Utrtyl w

bTMeQd 8B768D7f a 9 **AEDAvv** 88E i 3GaD 4 **P@t x** **f PB>89**

				8>479A; D7487		N 437156 O 559177 P 43: 177 Q 61<9	



bTMeQd 977f U/Q	80	a 9	AEDAvv	8>D i	3NDG 4	P@l x f u	Y bB; BB
f B8B7		a 9	AEDAvv	8A> i	3NGD 4	P@l x f u	Y bB; BA

CTJ_YZXCGR

DC4; 9AB77477

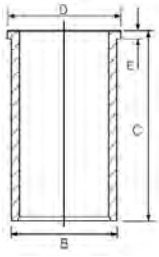
M	: 3163
N4	541t 8
N	851<3
P	43<156
	73É: <

df f b

7D4; 9AB77477

6183		S U V
5183		V
7183		I X V

				8>479A; D7487		N 437156 O 559177 P 43: 177 Q 61<9	



>59>D 6M>59>D		S 9	>7BAvv	A; 4B8 i	3cN8eP 4	P@l x	Y b9B; B>

CTJ_YZXCGR

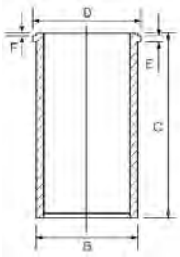
DC4; 8D777477

M	9=1=5
N4	531t 5
N	94178
P	4531t 5
	68É<7

7D4; 8D777487

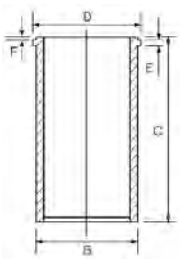
516<		I X V
516<		V
516<		
9166		I X V

				8>47>7897477		N 437158 O 55: 15< P 43: 177 Q 61<9 R 31t 9	
				8>47>78E7477		N 437153 O 55: 15< P 43: 177 Q 61<9 R 31<6	
				8>47>88>7477		N 437168 O 55: 15< P 43: 177 Q 61<3 R 31=3	
				8>47>8B87477		N 43715< O 55: 15< P 43: 16< Q 61<3 R 31=3	



B5; C9		a 9	B877vv	DC i	33Ge 4	P@l x	f P97879

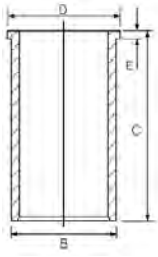
				8>47>7897477		N 437158 O 55: 15< P 43: 177 Q 61<9 R 31t 9	
				8>47>78E7477		N 437153 O 55: 15< P 43: 177 Q 61<9 R 31<6	
				8>47>88>7477		N 437168 O 55: 15< P 43: 177 Q 61<3 R 31=3	
				8>47>8B87477		N 43715< O 55: 15< P 43: 16< Q 61<3 R 31=3	



877>4>9 /Q 80	S	9	**>9; 7vv**	**>A4AE i**	3aG8eD	4	**P@I x**	**f P9; E7A**
bT MeQd 877>4>9 /Q 80	S	9	**; EE7vv**				**P@I x**	**Y b8B; B>**

I RGYY0	36235	aCYQUT	37235
OTJ_YZXOGR			

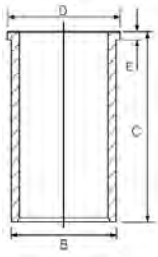
8>4797AE7477 **N** 43: 138 **O** 55<133 **P** 443138 **Q** 7133



887; M4; ;	P	9	**; 9EEvv**	**9D4; A i**	3Pe8Se	4	**P@I x**	**Y b8B; BA**
887; N4; ; /Q 90	P	9	**; 9EEvv**	**>; i**	3Ve	4	**P@I x**	**f P9; E7>**
887; O4; ; /Q 90	P	9	**; 9EEvv**	**>84>; i**	3Va8Ve	4	**P@I x f u**	**f P8C9C;**
887; P4; ;	P	9	**; 9EEvv**	**; C4>8 i**	3VD8Va	4	**P@I x**	**f P8EEB8**
887>M4>>	S	9	**>; EEvv**	**A74B> i**	3ae8ec	4	**P@I x**	**f P9EADE**
887>O4>> /Q 90	S	9	**>; EEvv**	**A74B> i**	3ae8ec	4	**P@I x f u**	**f P8C9CA**
887>O4Q>>	S	9	**>; EEvv**	**B> i**	3ec	4	**P@I x f u**	**f P8C9CB**

533 Yp´tp°	45246	OTJ_YZXOGR	
G Yp´tp°	39243	Yp´tp° 93	44244
H Yp´tp°	34247	ZKI NTULGXS	3423=
I Yp´tp°	34247	aCYQUT	3<237

8>4797DC7477 **N** 43<133 **O** 55: 133 **P** 43=183 **Q** 8133



887; M4; ; f	P	9	**; 9EEvv**				**P@I x f u**	**Y b9B; BA**
887; N4; ; f	P	9	**; 9EEvv**	**>E i**	3ac	4	**P@I x f u**	**Y b; B; BA**
887; O4; ; f	P	9	**; 9EEvv**	**AA i**	3cV	4	**P@I x f u**	**f P8C9C>**
887; O4; ; f M	P	9	**; 9EEvv**				**P@I x f u U x v xw**	**Y b>B; BA**
887>M4>>f	S	9	**>; EEvv**	**C>4D8 i**	3GDG8GGD	4	**P@I x f u**	**Y bAB; BA**
887>M4>>f M	S	9	**>; EEvv**				**P@I x f u U x v xw**	**Y bBB; BA**
887>O4>>f	S	9	**>; EEvv**	**BD4C> i**	3 N8GDG	4	**P@I x f u**	**f P8C9CC**
887>O4Q>>f	S	9	**>; EEvv**	**C> i**	3GDG	4	**P@I x f u**	**f P8C9CD**
887>O4Q>>f M	S	9	**>; EEvv**	**C>4EC i**	3GDG8GPN	4	**P@I x f u**	**f P8C9D8**

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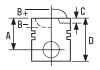
VUb KXS UTJ OGR	3523=		



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M	: 3147
N4	5513 3
N	8814 3
P	43<133
	73É: <

df f b

7D4>9B977477

6183		I Q V
5183		V
6183		I X V

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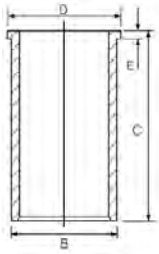

N 43<133 **O** 55: 133 **P** 43=183 **Q** 8133

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	CCM	x		9
D8>75>; Z /Q ; e yØ 0	NeDD	S	i S9SD	AD
OdPE;	NVDD	S	i P9DD	A;
OdPE; X	NVDD	S	i P9DD	A;
PVA/f EM0	NSSa	S	i N9DD	A8
PVAf /f DM8f Tm0	NSSa	S	i N9DD	A9
PWAMf Q/f TI 0	NSSa	S	i N9DD	A9
Pf 8Cf QP>	NcNG	a	eG9DD	9E
Pf 97O /Q A0	Ni i P	a	eS9DD	; A
Ph>O /DTd0	GPi e	S	cP9cD	B
Ph>f P /DTf 0	GPi e	S	cP9cD	C
Ph>f P /DTk0/Q ; 6>0	GPi e	S	cP9cD	C
Ph>f P /DTm0	GPi e	S	cP9cD	C
Ph>f QP /DTe0/Q >0	GPi e	S	cP9cD	D
Ph>f QP> /DTI 0	GPi i	S	cP9cD	D
PhBMf QP> /ETk0/Q >0	GVaD	S	cV9DD	8A
PhBNf QP> /ETf 0/Q >0	GVaD	S	cV9DD	8B
PhBNf QP> /ETi 0/Q >0	GVaD	S	cV9DD	8B
PhBO /ETO0	GVaD	S	cV9DD	8B
PhBO /ETP0/Q A0	GVaD	S	cV9DD	8B
PhBO /ETX0/Q A0	GVaD	S	cV9DD	8B
PhBO /ETd0/Q A0	GVaD	S	cV9DD	8B
PhBOf QP /ETP0	GVaD	S	cV9DD	8B
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PhBPf QPY /ETV0/Q >0	GVaD	S	cV9DD	8B
PhBPgY /ETT0	GVaD	S	cV9DD	8B
PhBQf QPY /ETW0/Q >0	GVaD	S	cV9DD	8B
PhBRO /NTm0	GVaD	S	cV9DD	8C
PhBRP /NTI 0	GVaD	S	cV9DD	8C
PhBf QP> /ETI 0/Q >0	GVaD	S	cV9DD	8A
PhBf QP> /ETm0/Q >0	GVaD	S	cV9DD	8A
PhBgO /ETY 0	GVaD	S	cV9DD	8B
PhBgf QP> /ETg0	GVaD	S	cV9DD	8A
Pi D/i Vm0	Geae	S	eN9ND	; 7
Pi DN /i VI 0	Geae	S	eN9ND	; 7
Pi 87Mf QP /dTe0	Gi c	S	eV9DD	; C
Pi 87Mf QP /dTm0	Gi c	S	eV9DD	; C
Pi 87Mf QP> /dTY 0	Gi c	S	eV9DD	; D
Pi 87Mf QP> /dTf 0	Gi c	S	eV9DD	; D
Pi 87Mf QP> /dTi 0	Gi c	S	eV9DD	; D
Pi 87Nf QP /dTk0	Gi c	S	eV9DD	; C
Pi 87Nf QP /dTm0	Gi c	S	eV9DD	; C
Pi 87Nf QP2 /dTm0	Gi c	S	eV9DD	; C
Pi 87Nf QP> /dTR0	Gi c	S	eV9DD	; E
Pi 87Nf QP> /dTd0	Gi c	S	eV9DD	; E
Pi 87ON /dTP0	Gi c	S	eV9DD	; B
Pi 87 O TI NdUP /dTO0/Q A0	Gi c	S	eV9DD	; B
Pi 87Of QP /dTm0	Gi c	S	eV9DD	; C
Pi 87Of QP> /dTM0	Gi c	S	eV9DD	; B
Pi 87Of QP> /dTP0	Gi c	S	eV9DD	; B
Pi 87Of QP> /dTQ0/Q A0	Gi c	S	eV9DD	; B
Pi 87Of QP> /dTT0/Q A0	Gi c	S	eV9DD	; B
Pi 87RO /MTi 0	Gi c	S	eV9DD	>7
Pi 87RP /MTh0	Gi c	S	eV9DD	>7
Pi 87RP /MTk0/Q A0	Gi c	S	eV9DD	>7
Pi 87f P /dTh0	Gi c	S	eV9DD	; C
Pi 87f P /dTI 0	Gi c	S	eV9DD	; C
Pi 87gf P /dTh0	Gi c	S	eV9DD	; C
Pi 87gf QP> /dTW0/Q >0	Gi c	S	eV9DD	; E
Pi 89Nf QP> />Tb0	NGci	S	eV9DD	>8

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Pi 89Nf QP> />Td0		NGci	S	eV9DD	>8
Pi 89Nf QP> />Te0/Q >0		NGci	S	eV9DD	>8
Pi 89Nf QP> />Tf 0/Q >0		NGci	S	eV9DD	>8
Pi 89O />TX0/Q A0		NGci	S	eV9DD	>9
Pi 89Y f QP> />TW0		NGci	S	eV9DD	>8
Pi 89Y f QP> />TZ0		NGci	S	eV9DD	>8
Pi 89f QP> />Tk6>Ti 0		NGci	S	eV9DD	>;
Pi 89f QP> />Tm0		NGci	S	eV9DD	>;
QN9Y /TY l 0		GGi	P	cV9DD	E
QOA/ZRb0		GVec	S	ce9VD	9>
QOAR		GVec	S	ce9VD	9>
QOAR/ZRV 0		GVec	S	ce9VD	9>
QZ AA		NSi e	S	i S9DD	AA
Qb;		GPi c	S	cc9DD	8D
Qb; /DRd0		GPi c	S	cc9DD	8D
Qb; /DRe0		GPi c	S	cc9DD	8D
Qb; O		GPi c	S	cc9DD	8D
QbB/ARi 0		GVi e	S	cc9DD	8E
QbB/Q >0		GVi e	S	cc9DD	8E
QbBO /ART0		GVi e	S	cc9DD	97
QbBO /ARe0		GVi e	S	cc9DD	97
QbBON /ARW0		GVi e	S	cc9DD	97
QbBOPf /ARM0		GVi e	S	cc9DD	98
QbBOPf /ARh0		GVi e	S	cc9DD	98
QbBOPf k /ARg0/Q >0		GVi e	S	cc9DD	8E
QbBPf /ARd0		GVi e	S	cc9DD	99
QbBPf /ARf 0		GVi e	S	cc9DD	98
QbBRPf /ASm0/Q >0		GVi e	S	cc9DD	98
QbBRPf Y /ASl 0/Q >0		GVi e	S	cc9DD	98
Qf C7		NSi a	S	i S9DD	AB
R8; Pf QA/RTm0/Q A0		GNSe	S	ai 9aD	8
R9DP /D8>75B; 0/Q 9 e yØ 0		NeDD	S	i S9SD	AE
R9DPf Od /D8>75>; e 0/Q ; e yØ 0		NeDD	S	i S9SD	AD
R; 7Pf /R8OQ7>D8P 0/Q >0		Ni i	S	i V9eD	B7
R; 7Pf Q/R8OQ7>D8P 0/Q >0		Ni i	S	i V9eD	B7
R; 7Pf Q/R8OQ; >D8Q 0/Q A0		Ni i	S	i V9eD	B8
R; 7Pf Q/R8OQ; >D8Z 0/Q A0		Ni i	S	i V9eD	B8
RS; 7Pf /R8OQ7>D8P 0/Q >0		Ni i	S	i V9eD	B7
b99Pf Q/>TS0/Q >0		NGi e	S	ea9DD	>>
b99Pf Q/>TT0/Q >0		NGi e	S	ea9DD	>>
b99Pf Q/>TV0/Q >0		NGi e	S	ea9DD	>>
b99Pf Q/>Tg0/Q >0		NGi e	S	ea9DD	>A
b99Pf Q/>Th0/Q >0		NGi e	S	ea9DD	>B
beM/OdPE; 0		NVDD	S	i P9DD	A;
f g8 /T8M6T8N6T; M0		GGNS	S	cN9DD	;
f g8M/TRk0		GGNS	S	cN9DD	>
f g8Vb /TRk0		GGNS	S	cN9DD	>
f g8Vb /TRm0		GGNS	S	cN9DD	>
f g8Y /TPl 0		GGNS	S	cN9DD	;
f g8Y /TPm0		GGNS	S	cN9DD	;
f g; /WAM0		GPaD	S	cV9DD	87
f g; M/W8P0		GPaG	S	cV9DD	87
f g; M/WBP0		GPaD	S	cV9DD	87
f g; M/WBQ0		GPaD	S	cV9DD	87
f g; M/WBR0		GPaD	S	cV9DD	87
f g; M/WRf 0		GPaD	S	cV9DD	87
f g; M/WRh0		GPaD	S	cV9DD	87
f g; M/WRi 0		GPaD	S	cV9DD	87
f g; Ob /WM l 0		GPaG	S	cV9DD	87
f g; RV96m/WRm0		GPaG	S	cV9DD	87

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		CCM	x		9
f g; Vb /WRi 0		GPaD	S	cV9DD	88
f g; Vb /WRk0		GPaG	S	cV9DD	88
f g; Vb4X>		GPaD	S	cV9DD	89
f g; Y /WPI 0		GPaG	S	cV9DD	87
f g; Y /WPm0		GPaG	S	cV9DD	87
f g; Y O /WPk0		GPaG	S	cV9DD	87
f g; e /W9N0		GPaD	S	cV9DD	87
f g AV> /ZRk0		GVec	S	ce9VD	9A
f g AVb /ZRf 0		GVec	S	ce9VD	9A
f g AVb /ZRm0		GVec	S	ce9VD	9B
f g AVb> /ZBM0		GVec	S	ce9VD	9B
f g AVb> /ZRg0		GVec	S	ce9VD	9A
f g AVb>N /ZRd0		GVec	S	ce9VD	9A
f g E		i VS	S	cD9DD	9
f g EY /OPI 0		i VS	S	cD9DD	9
f g EY /OPm0		i VS	S	cD9DD	9
f g; 9		GPaG	S	cV9DD	87
f g PA /hVk0		GVNc	S	cc9DD	9;
f g PA /hVI 0		GVNc	S	cc9DD	9;
g9A6BC; /OdPE; Xe 0		NVDD	S	i P9DD	A>
kP9		NPDS	S	i S9DD	AB
kP9 /8; >0		NPDS	S	i S9DD	AC
kP9b 6kPE>		NPDS	S	i S9DD	AC
kP9e		NPDS	S	i S9DD	AB
kP9e /8>C0		NPDS	S	i S9DD	AB
kP; /8AA0		NSi e	S	i S9DD	AA
kP; b		NSi c	S	i S9DD	AA
kP; f		NSi c	S	i S9DD	AB
kP; f /8A9M0		NSi e	S	i S9DD	AB
kP; f Q		NSi e	S	i S9DD	AB
kP; f Q /8A9N0		NSi e	S	i S9DD	AB
kP >5DD		Gi Se	S	ee9DD	>E
kPDD		Gi Se	S	ee9DD	>E
kPE7		NGGN	S	i D9DD	A7
kPb >5DD /Uwx	kPb0	Gi Sa	S	ee9DD	>E
kPb >5E7 /Uwx	kPb0	NGGN	S	i D9DD	A7
kPb B8E7 /Uwx	kPb0	PGae	a	i D9DD	A7
kPb DD /Uwx	kPb0	Gi Sa	S	ee9DD	>E
kPb E7 /Uwx	kPb0	NGGN	S	i D9DD	A7
kZ8		Gi cG	S	ee9DD	>C
kZ8 /87B0		Gi cG	S	ee9DD	>C
kZ8M /87BQ0		Gi cG	S	ee9DD	>D
kZ8b		Gi cG	S	ee9DD	>C
kZ8f		Gi cG	S	ee9DD	>C
kZ8f /8C70		Gi cG	S	ee9DD	>C
kZ8f /8C7N0		Gi cG	S	ee9DD	>C
kZ8f M		Gi cG	S	ee9DD	>C
kZ8f M /8C7O0		Gi cG	S	ee9DD	>D
kZ9 /87C0		Gi cG	S	ee9DD	>C
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kgAV /8D70		GVeD	S	eP9DD	;9
kgAV /8D7M0		GVeD	S	eP9DD	;9
kgAV /NBN0		GVeD	S	eP9DD	;9
kgAVb /NRm0		GVeD	S	eP9DD	;8
kgAY /NPm0		GVeD	S	eP9DD	;9
kgAY 9m /NPI 0		GVeD	S	eP9DD	;9
kgAY ;m /NPI 0		GVeD	S	eP9DD	;9
kgAe /8C80		GVeD	S	eP9DD	;8
kgCVN /XRk0		GcaN	S	eP9DD	;9
kgCVb /XRi 0		GcaN	S	eP9DD	;9

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kgCVb /XRm0		GcaN	S	eP9DD	;9
kgCVb> /XRl 0		GcaN	S	eP9DD	;9
kgEV8 /PRm0		Gl DV	S	eP9DD	;9
kgEV9 /PBM0		Gl DV	S	eP9DD	;9
kgEV> /PBO6PRi 0		Gl DV	S	eP9DD	;9
kgEV> /PRi 0		Gl DV	S	eP9DD	;9
kgEVM/PBN0		Gl DV	S	eP9DD	;9
kgEVMm/PWm0		Gl DV	S	eP9DD	;9
kgEY /PPm0		Gl DV	S	eP9DD	;9
kgEe /P9N0		Gl DV	S	eP9DD	;9
kgA8O /N8M0		GVeD	S	eP9DD	;8
kgA8O /N8P0		GVeD	S	eP9DD	;9
kgA8O /N8Q0		GVeD	S	eP9DD	;9
kgA9O6W/N9M0		GVeD	S	eP9DD	;9
kgE9O		Gl DV	S	eP9DD	;9
kgE9O /P9M0		Gl DV	S	eP9DD	;9
kgE9O /P9O0		Gl DV	S	eP9DD	;9
kgPC/8B80/kgPC0		Gcai	S	eD9DD	9C
kgPC/8B8M0/kgPC0		Gcai	S	eD9DD	9C
kgPC/MEM0/kgPC0		Gcai	S	eD9DD	9C
kgPCf /kgPC0		Gcai	S	eD9DD	9D
kgPCfQ/MDM0/kgPC0		Gcai	S	eD9DD	9D
kgPCfQ/MDN0/kgPC0		Gcai	S	eD9DD	9D
kgPCfQ/MVm0/kgPC0		Gcai	S	eD9DD	9D
kgPE		Gl DV	S	eP9DD	;;
kgPE/8B90		Gl DV	S	eP9DD	;;
kgPE/PEM0		Gl DV	S	eP9DD	;;
kgPE/PVm0		Gl DV	S	eP9DD	;;
kgPEM/PEN0		Gl DV	S	eP9DD	;;
kgPEM/PEN0/kgPE0		Gl DV	S	eP9DD	;;
kgPEM/PEN6PVl 0		Gl DV	S	eP9DD	;;
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kgPENeP /PTh0/kgPE0		Gl DV	S	eP9DD	;>
kgPEeP /PTi 0		Gl DV	S	eP9DD	;>
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kgPEfQ/PTk0		Gl DV	S	eP9DD	;>
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kgPEgfR/PDO0		Gl DV	S	eP9DD	;>
ki ; /87E0		GGNS	S	cN9DD	A
ki ;e		GGNS	S	cN9DD	A
ki ;e /8980		GGNS	S	cN9DD	A
ki C/87ER0		GGNS	S	cN9DD	A
ki C/87EZ0		GGNS	S	cN9DD	A
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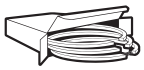
kmA/89E0		GNGl	S	cV9DD	8>



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DC4>; AC77477
DC4>; AC7B477 *mTm*

M	7316
N4	451t 3
N	6: 133
O	4148
O	31=3
P	9516
	56É8:

MWWWdf

7D4>; AC77477
7D4>; AC7B477 *mTm*

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t@s Yf@z' 2/ß´ßZpnsyzwrr Ö | L´LI s´Üp°r p x t@YßßY@z' L°yvßzy | Vz°´®stn°wp° ¿°t' o° °ß´ß) °@z' | Vl´I @ps n°w° nzy q'ynt y °ß´ß0°@z' | Vp´@tnzwnzy w q'yÜzyp Yß´ß0Y@z'

f gE	S 9	EA>vv	;; i 3SV 4	bx	f P9CD;
f gEY /OPI 0	S 9	EA>vv	;94; i 3SS8SV 4	bx	f P>D>8
f gEY /OPm0	S 9	EA>vv	;C i 3/D 4	bx	f PE>7A
439 0413		3<2=4 372=9	538 413		3<2=3 372=8
439 00413		372=9 36234	538 00413		3<2< 3=2=<
439 00413 t		372=9 36234			

DC48A>977477
DC48A>97B477 *mTm*
DC48A>97D477 *mTm*

M	661=3
N4	3183
N	88133
P	8: 173
	4<É86

7D48A>977477
7D48A>97B477 *mTm*
7D48A>97D477 *mTm*

4183		I X V
4183		V
6133		I X

Yf@ppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

f g8 /T8M6T8N6T; M0	S 9	889>vv	>7 i 3/S 4	bx	f P9CAD
f g8Y /TPI 0	S 9	889>vv	>74>> i 3/S8aD 4	bx	f PE>7>
f g8Y /TPm0	S 9	889>vv	>> i 3aD 4	bx	f P>D; >
439 0414		3=2=4 372=9	639 414		382=6 38234
538 414		3<2< 382=:	63= 414		3=2<= 432=6
538 0414		3<2< 452=7	63= 00414		3=2<= 452=6
538 0414 I P		432<= 452=7	VGXZTKX 414		392=9 3=238
538 00414		432< 3=2=<			

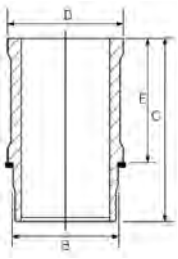
DC48A>; 77477

M	7388
N2	51=:
P	9788
	53É95

7D48A>; 77477
7D48A>; 7C477 *mTm*

4183		I X V
5133		V
6133		I X

8>4B; B>C7477



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< 0487633033 .
4709697: 3033

Yf@ppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

f g8M/TRk0	S	9	889>vv	>> i	3aD	4	bx	f P9AB>7
f g8Vb /TRk0	S	9	889>vv	>> i	3aD	4	bx	f P8>C9D
f g8Vb /TRm0	S	9	889>vv	>> i	3aD	4	bx	f PED>D

439 0414 t	382=9 3: 237	539 414	3: 235 3523:
539. 414	3423= 39246	539 414 t	3=2=< 3523:
539. 414 RVM	3723= 39246	VGXZTKX 414	392=9 43235

DC4>9B; 77477

M 5: t 3
N2 3143
P 7: 183
4<É88

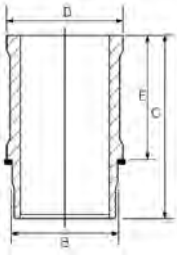
7D4>9B; 77477

4183		TZ
4183		V
5183		V

ki ; /87E0	S	9	889>vv	>9 i	3/c	4	bx	f P9DEA
ki ;e	S	9	889>vv	>D i	3aa	4	bx	f P89BDD
ki ;e /8980	S	9	889>vv	>E i	3ac	4	bx	f P9DEB
ki C/87ER0	S	9	889>vv	;C i	3/D	4	bx	f P9DEE
ki C/87EZ0	S	9	889>vv	;B i	3/D	4	bx	f P9E77

437 414	3=2 6 392<<	538 0414	352<6 432<
538 414	352<6 3: 2<	538 00414	432< 432=3

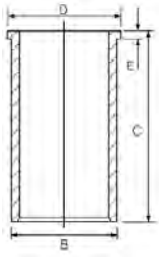
8>4B; B>C7477 **N** : =183 **O** 455133 **P** <=153 **Q** <8133



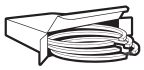
Ph>O /DTd0	S	9	8; EDvv	A7 i	3ae	4	P@t x f u U x v xw	f P9D89A

539. 417 NJt pnz : 3	3423= 39246	53<0417 NJt	36245
53: 417 NJt	35239	533<0417 NJt	39246
53<417 NJt 9<	43245		

8>4797CB7477 **N** : 91=8 **O** 469133 **P** : <178 **Q** 8158
8>4797CB8477 **N** : 91=8 **O** 469133 **P** : <178 **Q** 8158



Ph>f P /DTf0	S	9	8; EDvv	>7 i	3/S	4	P@t x f u U x v xw	f P9>E9>
Ph>f P /DTk0/Q ;6>0	S	9	8; EDvv	A7 i	3ae	4	P@t x f u U x v xw	f P8B; BD



Ph>f P /DTm0	S 9	8; EDvv	A74A9 i	3ae8cD 4	P@t x f u U x v xw	f P8CA7E
43: 417 NJt		3923 8	3824 7		53: 417 NJt	3523 9
539. 417 NJt pnz : 3		3423=	3924 6		63: 417 NJt	4323 4 3923 8
539 417 NJt		3=234	3623=		63: Yb 417 NJt	3723 5 3923 8
539 417 NJt pnz : 3		3=234			433: 417 NJt	3723 8

DC48; A; 77477
DC48; A; 7C477 *mT m*

M 751=7
N4 471 3
N 6: 149
O 4188
P 9817 7
58É93

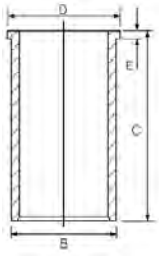
MWdf f b

7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mT m*

5183 I Q V
41=8 V
5183 I X V

8>4797CB7477
8>4797CB8477

N : 91=8 **O** 46913 3 **P** : <178 **Q** 8158
N : 91=8 **O** 46913 3 **P** : <178 **Q** 8158



Ph>f QP /DTe0/Q >0	S 9	8; EDvv	A7 i	3ae 4	P@t x f u U x v xw	f P9E8B>
Ph>f QP > /DTl 0	S 9	8; EEvv	BB i	3ei 4	P@t x f u U x v xw	Y b8E79;
539 417ZJ		3423 5			H0VKX 417 NJt	3523<
63: 417ZJ		3423 5			H0VKX ZKVKK 417 NJt	3723<

DC48; A; 77487

M 751=7
N4 4717 3
N 6: 148
O 4148
O 4148
P 9817 7
58É93

WWdf f b

7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mT m*

5183 I Q V
41=8 V
5183 I X V

QN9Y /TYl 0	P 9	88EEvv	A; i	3cN 4	bx	f P; 9; 9A
634 415 aZt : 5		4424 5				

DC4>>9E77477
DC4>>9E7C477 *mT m*

M 5<k8
N2 51 3
O 5198
O 4188
P 791<8
4: É84

TM

7D4>>9E77477
7D4>>9E7C477 *mT m*

4183 TZ
4183 V
5183 I X V

LKZ-Ring

Yfppw YB sw Gntp´ Gnp´z Gnntl tz

f g; /WAM0	S 9	8; B7vv	>C4A8 i	3aS8ai 4	bx	f P9B>89
f g; M/W8P0	S 9	8; B8vv	>E4A7 i	3ac8ae 4	bx	f P9CBB
f g; M/WBP0	S 9	8; B7vv	A; i	3cN 4	bx	f P9>E9D
f g; M/WBQ0	S 9	8; B7vv	A; i	3cN 4	bx	f P9>E; 7
f g; M/WBR0	S 9	8; B7vv	A; i	3cN 4	bx	f P9>E9E

f g; M/WRf 0	S 9	8; B7vv	A> i 3cP 4	bx	f P9>E; 8
f g; M/WRh0	S 9	8; B7vv	A>4B7 i 3cP8eN 4	bx	f P98888
f g; M/WRi 0	S 9	8; B7vv	AA4B7 i 3cV8eN 4	bx	f P9>E9C
f g; Ob /WM 0	S 9	8; B8vv	>> i 3aD 4	bx	f P9CBC
f g; RV96m/WRm0	S 9	8; B8vv	BE i 3 S 4	bx	f P>AABC
f g; Y /WPl 0	S 9	8; B8vv	AA4AD i 3cV8ci 4	bx	f P>D; B
f g; Y /WPm0	S 9	8; B8vv	AA i 3cV 4	bx	f P9CCA
f g; Y O /WPk0	S 9	8; B8vv	AA4AD i 3cV8ci 4	bx	f P9CCC
f g; e /W9N0	S 9	8; B7vv	B9 i 3eV 4	bx	f P9CCE
f g; 9	S 9	8; B8vv	A84AA i 3cD8cV 4	bx	f PDA7C

439 0417	3<2=4 372=9	53: Yb 417 RVM	3<23: 45245
439 0417 Rp S l y°	3=2=4 442=7	639 417	372=6 3: 234
538 0417	3<2< 392=7	639 417 YR	392=7 38234
538 0417 l P	362<= 452=7	63= 417	3=2<= 432=6
538 0417 l P l ß	342<= 3=2=6	63= 0417	3<2<< 3<2<=
538 00417	392< 3=2=<	63= 00417	3: 2<= 452=6
538 00417 l l ß	3<2< 3=2=6	738 0417	342< 3: 2=5
539. 417 t	3423= 3<246	738 00417	3<2=5 432=9
539 417	3: 235	433: 417	37238
539 417 l TM	38239 3=23:	H0VVKX 417	3523<
539 417 t	3=2=< 45245	H0VVKX ZKVKK 417	3723<
53: 417	35239 45248	VGXZTKX 417	392=9 45248
53: Yb 417	3923: 45245		

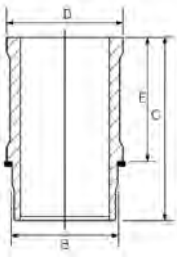
DC48A>>77477

M	73183
N4	4143
N	95133
P	97183
	53É95

7D48A>>77477
7D48A>>7C477 *mT m*

41 8		I X V
5133		V
6133		V

8A4B; BB77477
8>4B; BB77477



N: =183 **O** 467183 **P** <=153 **Q** =3133
N: =183 **O** 467183 **P** <=153 **Q** =3133

DD48A>>77477
< 0487733033 .
470969933033

0mv0op° °pl w	Ynswp ßJtnsß°yr py pty	0mvßop° uztyß°	0mvÖp wr° °pwr°	l zx ' ´pyop wp r °l ´ytÜzyt

f g; Vb /WRi 0	S 9	8; B7vv	>C4B7 i 3aS8eN 4	bx	f P8>C9E
f g; Vb /WRk0	S 9	8; B8vv	>E4AA i 3ac8cV 4	bx	f PA; EB

439 00417 t	382=9 3: 237	53: Yb 417	3<23< 34246
538 00417	3: 2<< 3=2=<	639 417	372=6 37235
539 417	3: 235	639 417 YR	392=7 38234
539 417 t	3=2=< 45245	63: 417	3<233 3=236
539 417 RVM	3: 235 3523:	VGXZTKX 417	392=9 45248
53: 417	3<23< 45247	VGXZTKX UX0M0T 417	3: 23< 45248

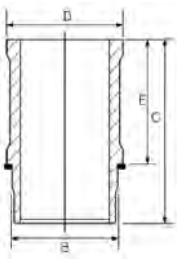
DC48; DE77487
34237

M	5: t 8
N4	4163
N	98133
P	7=t 8
	4<É8<

7D48; DE77477

4183		I Q V
4183		V
5183		V

8A4B; BB77477
8>4B; BB77477



N: =183 **O** 467183 **P** <=153 **Q** =3133
N: =183 **O** 467183 **P** <=153 **Q** =3133

DD48; DE77487
< 046<=33043 .
470969933033

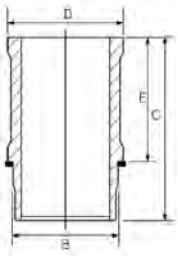
DC48; DE774; 7
34237

M 5: t 8
N2 314<
P 7=t 8
4<É89

7D48; DE77477

4183 I Q V
4183 V
5183 V

8A4B; BB77477
8>4B; BB77477



N : =183 **O** 467183 **P** <=153 **Q** =3183
N : =183 **O** 467183 **P** <=153 **Q** =3183

DD48; DE774; 7
< 046<=33063 .
4709699330 33

Qmvßop° °pl vß	Ynswtp ßJtnsß°yr py pty	Qmvßop° uzty ß°	Qmvß Öp wr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt
K°´z 7				

f g; Vb4X>	S 9	**8; B7vv**	**>D4AA i**	3aV8cV 4	**bx**	**f P8DA8D**
539 417 RVM		38239 3=23:		433: 417		37238

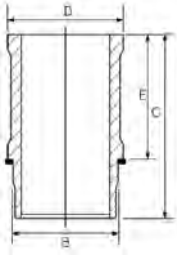
DC48; DE774; 7

M 5: t 8
N2 314<
P 7=t 8
4<É89

7D48; DE77477

4183 I Q V
4183 V
5183 V

8A4B; BB77477
8>4B; BB77477



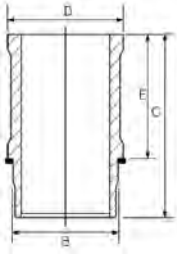
N : =183 **O** 467183 **P** <=153 **Q** =3183
N : =183 **O** 467183 **P** <=153 **Q** =3183

DD48; DE774; 7
< 046<=33063 .
4709699330 33

Qmvßop° °pl vß	Ynswtp ßJtnsß°yr py pty	Qmvßop° uzty ß°	Qmvß Öp wr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt

kl D/8A7N0	S 9	**8; B7vv**	**AD4AE i**	3ci 8eD 4	**bx**	**f P9E7A**
538 0417		352<6 432<		538 00417		3: 2<< 382<=
538 0417 I Z		372<9 452<<				

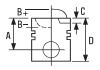
8A4B; BB77477
8>4B; BB77477



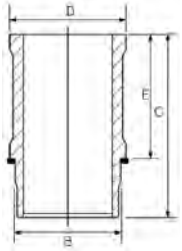
N : =183 **O** 467183 **P** <=153 **Q** =3183
N : =183 **O** 467183 **P** <=153 **Q** =3183

Qmvßop° °pl vß	Ynswtp ßJtnsß°yr py pty	Qmvßop° uzty ß°	Qmvß Öp wr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt

kmA/89E0	S 9	**898Evv**	**>9 i**	3/c 4	**bx**	**f P9E7B**
437 415		3<2 = 392<6				



8A4B; BC77477 N : =183 O 455133 P <=153 Q <5183



Qmv9op° °pl v	Ynswp ßJtnsß°yr py pty	Qmv9ßop° uztyß°	Qmv9Öpwr° °pwr°	I zx ' ´pyop wpr °l ´ytÚzyt
PhBMf QP> /ETk0/Q >0	S 9 8AB7vv	BB4BD i 3 D8i N 4	P@i x f u U x v xw	f P978>C
PhBf QP> /ETl 0/Q >0	S 9 8AB7vv	D7 i 3GDi 4	P@i x f u U x v xw	f P8CA7B
PhBf QP> /ETm0/Q >0	S 9 8AB7vv	D74D> i 3GDi 8GGS 4	P@i x f u U x v xw	f P8DA97
PhBgf QP> /ETg0	S 9 8AB7vv	BB i 3 D 4	P@i x f u U x v xw	f P9>BE;

539 419 NJt 443	38237	73: Yb 419 NJt	3<237 45243
53: 419 NJt	35239 43246	433: 419 NJt	3923:
53: I l 419 NJt	3523: 34248	633<419 NJt	3923= 3<249
53: Yb 419 NJt	3923: 45245	633<NJt 443	3923= 3<249
63: 419 NJt	37238 3623=	833<419 NJt	3=23= 3624:
63: 419 NJO=3	37238 3723<	KcVKXZ 419 NJt=3 49a	3423:
63: 419 NJt 443	35237 3623=	KcVKXZ ZKVKK 419 NJt=3 49a	3423: 36249
63: 419 NJO443	44236 4523:	VGXZTKX 419 NJt	3723<
63: Yb 419 NJt	37239 4323<	VGXZTKX 419 NJt 49a	3423=
63<I l 419 NJt	3523= 38245	VGXZTKX 419 NJt=3	3<238 45248
63<0419 NJt	3=23: 43247	VGXZTKX UX0MT 419 NJt=3	3<23< 45248
63<Yb 0419 NJt	3=23: 43247	VGXZTKX ZKVKK 419 NJt	3723<
73: 419 NJt 443	38237 45243		

DC4>9>777477
DC4>9>77D477 mTm

M 741t 3
N4 46158
N 741<3
O 4153
P 98163
59É94

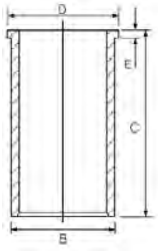
MWWWdf fb

7D4>9>777477
7D4>9>77C477 mTm
7D4>9>77D477 mTm

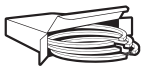
6133 I Q V
41=8 V
5183 I X V

LKZ-Ring

8>4797E77477 N : <183 O 475133 P : =183 R 8133



PhBNf QP> /ETf 0/Q >0	S 9 8AB7vv	AA i 3:V 4	P@i x f u U x v xw	f P9; A; C
PhBNf QP> /ETi 0/Q >0	S 9 8AB7vv	AA i 3:V 4	P@i x f u U x v xw	f P9>C78
PhBO /ETO0	S 9 8AB7vv	D94DA i 3GGN8GGa 4	P@i x f u U x v xw	f P; 9; 7C
PhBO /ETP0/Q A0	S 9 8AB7vv	D> i 3GGS 4	P@i x f u U x v xw	f P; 9; 97
PhBO /ETX0/Q A0	S 9 8AB7vv	D94DA i 3GGN8GGa 4	P@i x f u U x v xw	f P9BEDB
PhBO /ETd0/Q A0	S 9 8AB7vv	D94DA i 3GGN8GGa 4	P@i x f u U x v xw	f P9B>98
PhBOf QP /ETP0	S 9 8AB7vv	D> i 3GGS 4	P@i x f u U x v xw	f P9BDEB
PhBPf QP /ETR0/Q >0	S 9 8AB7vv	BB4BE i 3 D8i S 4	P@i x f u U x v xw	f P9BC87
PhBPf QP /ETb0/Q >0	S 9 8AB7vv	BB4BE i 3 D8i S 4	P@i x f u U x v xw	f P9C7B>
PhBPf QPY /ETV0/Q >0	S 9 8AB7vv	BD i 3 N 4	P@i x f u U x v xw	f P9CEBC
PhBPgY /ETT0	S 9 8AB7vv	BB i 3 D 4	P@i x f u U x v xw	f P9EC77
PhBQf QPY /ETW0/Q >0	S 9 8AB7vv	AA i 3:V 4	P@i x f u U x v xw	f P9CEBD
PhBgO /ETY0	S 9 8AB7vv	BB i 3 D 4	P@i x f u U x v xw	f P9EBEE



53: 419 NJt	4423= 36246	533<0419 NJt	36246
53: 419 NJt443	3<23= 45245	633<419 NJt	4523= 3<249
53: II 419 NJt	3<23= 43246	633<419 NJt448	35246 3<249
53: Yb 419 NJt	3<23= 45246	733<419 NJt	38245
53<419 NJt=5	36247	833<419 NJt	3<243 3624:
53<0419 p0NJt	3:248	833<0NJt	3<243 3624:
53<0419 NJt	36245	833<0NJt2p0NJt	36246 3624:
53<00419 NJO=3	4324=	KcVKXZ 419 NJt=3 <a	3423:
634 419 NJO=3	44245	KcVKXZ ZKVKK 419 NJt=3 <a	3423: 36249
63<419 p0NJt448	36248 39254	VGXZTKX 419 NJt	3723<
63<II 419 NJt	3923= 45247	VGXZTKX 419 NJt:8	3<238 3:23<
63<0419 NJt	4423= 43247	VGXZTKX 419 NJt=3	37243
63<00419 NJt	3=246 39254	VGXZTKX 419 NJO=5	4423= 45243
63<Yb 0419 NJt	4423= 43247	VGXZTKX 419 NJt=5	3=24<
63<Yb 00419 NJt	36247 39254	VGXZTKX UX0M0T 419 NJt:8	3<23< 45248
63<Yb 00419 NJt=5	36247 39254	VGXZTKX ZKVKK 419 NJt	3923<
73<419 NJt	44243	VGXZTKX ZKVKK 419 NJt:8	3923<
73<419 NJO	44249	VGXZTKX ZKVKK 419 NJt=3	37243
83<0419 NJt	44243 4524<	X0LZKX 419 NJt=3	3=24<
83<Yb 419 NJt	36246 4524<	X0LZKX 419 NJt=5	3=24<
83<Yb 0419 NJt	44243 4524<		

DC4>;;B77477
DC4>;;B7C477 *mTm*

M 741t8
N4 461<8
N 78133
P 98153
59É94

MWWWdf fb

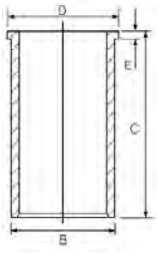
7D4>;;B77477
7D4>;;B7C477 *mTm*

5183 IQV
41=8 V
5133 IXV

LKZ-Ring

8>4797E77477

N:<133 **O** 475133 **P**:=183 **R** 8133



PhBRO/NTm0	S	9	**8AB7vv**	**DA4DDi**	33Ga8GND	4	**P0t x**	f	u	U	x	v	xw						**fP9DB97**
PhBRP/NTI0	S	9	**8AB7vv**	**C;4CAi**	3i8GDN	4	**P0t x**	f	u	U	x	v	xw						**fP;87C7**

53<419 HWp NJt433	39248	533<0419 453	3:247
53<0419 433	34248	633<419 433	44249
53<0419 453	44246	633<419 453	38247
634 419 433	37247	833<419	44247 3624:
63<00419 453	44246 39254	833<419 453	38247 3624:
63<00419 NJt	3=246 39254	833<00419 433	45249
63<00419 NJt433	37247 39254	833<00419 453	45249
63<Yb 00419	37247 39254	VGXZTKX 419 433	37248
63<Yb 00419 433	37247 39254	VGXZTKX 419 453	37248
63<Yb 00419 453	36247 39254	VGXZTKX 419 HWpNJO433	3=24<
63<Yb 00419 NJt	36247 39254	VGXZTKX ZKVKK 419 433	45247
83<0419 453	36247 4524<	VGXZTKX ZKVKK 419 453	45247
83<Yb 0419 453	36247 4524<	X0LZKX 419 433	3=24<
533<0419 433	34248		

DC4>A;877477
DC4>A;87C477 *mTm*

M 741t3
N4 46148
N 78183
P 961t3

MWWWdf fb

7D4>A;877477
7D4>A;87C477 *mTm*

5133 IQ
41=8 V
5133 IX

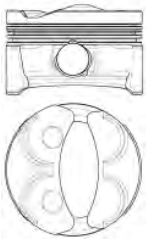
Qb;	S 9	**8; EOvv**	**C7 i** 3V 4	**bx**	**f P9>7BC**
Qb; /DRd0	S 9	**8; EOvv**	**C9 i** 3e 4	**bx**	**f P; 9; 8>**
Qb; /DRe0	S 9	**8; EOvv**	**C7 i** 3V 4	**bx**	**f P9>C9D**
Qb; O	S 9	**8; EOvv**	**C7 i** 3V 4	**bx**	**f P9BEEE**

53: 417 49a	3923: 43246	53<0417 aZt	36245
53: Yb 417 49a	3923: 43246	63<0417 49a	3=23: 43247
53<0417 MVR	43246	63<Yb 0417 49a	3=23: 43247

DC4>>>D774>7

M 631<3
N4 6143
N 88166
N2 6153
O 81<<
O 6187
P 831<8
4<133É76133

f b



7D4>>>D77487
7D4>>>D7C487 *mT m*

4153 VaJ V
4183 V
5133 TZ

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

QbB /ARi 0	S 9	**8AEDvv**	**DD i** 3GND 4	**bx**	**f P; 8EBE**
QbB /Q >0	S 9	**8AEDvv**	**D84DD i** 3GGD8GND 4	**bx**	**f P977DB**
QbBOPf k /ARg0/Q >0	S 9	**8AEDvv**	**8>C i** 3NDD 4	**bx f u U x v xw**	**f P9CEEE**

53: 419	3=23= 43246	63<I I 419 49a	3923= 45247
53: 419 49a aZt	3523: 45245	63<0419 49a	3=23: 43247
53: 419 aZt	3623: 45245	63<Yb 0419 49a	3=23: 43247
53: I I 419 49a	3523: 43246	633<419 aZt	3923= 3<249
53: Yb 419 49a	3923: 43246	833<419 49a	3=23= 3624:
53<0419 MZt	3<245		

DC4>>>D774A7
DC4>>>D7C4A7

M 5<183
N4 6183
N2 51 3
O 6183
O 6183
P 84153
53É7<

TMdf f b

7D4>>>D77487
7D4>>>D7C487 *mT m*

4153 VaJ V
4183 V
5133 TZ

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

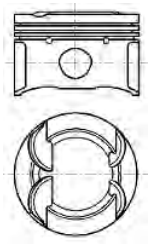
QbBO /ART0	S 9	**8AEDvv**	**DA i** 3GGa 4	**bx**	**f P; 9; 8E**
QbBO /ARe0	S 9	**8AEDvv**	**DD4DE i** 3GND8GNG 4	**bx**	**f P9A878**
QbBON /ARW0	S 9	**8AEDvv**	**C9 i** 3e 4	**bx**	**f P; 9; 7D**

53: 419 49a aZt	3523: 45245	83<0419 aZt	44243 4524<
53: I I 419 49a	3523: 43246	83<Yb 0419 aZt	44243 4524<
53: Yb 419 49a	3923: 43246	533<0419 aZt	36246
53<0419	36245	633<419 aZt	3923= 3<249
63<0419 49a	3=23: 43247	833<419 49a	3=23= 3624:
63<Yb 0419 49a	3=23: 43247	VGXZTKX 419	37243
73<419 afi	34245	VGXZTKX ZKVKK 419 aZt	3=23=

DC4>>>D77487
DC4>>>D7C487 *mm*

M 5:183
N4 5133
N 8:183
O 61=:
O 81=8
P 7:183
4<É76

f b



7D4>>>D77487
7D4>>>D7C487 *mm*

4153 VaJ V
4183 V
5133 TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
QbBOPf /ARM0	S 9 **8AEDvv**	**E9 i** 3GNV 4	**bx f u U x v xw**	**f P; >98B**
QbBOPf /ARh0	S 9 **8AEDvv**	**88A i** 3GVa 4	**bx f u U x v xw**	**f P; >97E**
QbBPf /ARf 0	S 9 **8AEDvv**	**87; i** 3GSD 4	**bx f u U x v xw**	**f P9>BEA**
QbBRPf /ASm0/Q >0	S 9 **8AEDvv**	**897489C i** 3GaP8GcP 4	**bx f u U x v xw**	**f P; 8D>C**
QbBRPf Y /ASl 0/Q >0	S 9 **8AEDvv**	**897489C i** 3GaP8GcP 4	**bx f u U x v xw**	**f P; >98C**

53: l l 419 49a Z°´mz	4323= 45246	83<0419 ZNV	44243 4524<
53<0419	36245	83<@419 ZNV 498	3=24<
53<0419 ZNV 498	36248	83<Yb 0419	35245 4524<
63<l l 419 49a	3923= 45247	83<Yb 0419 ZNV	44243 4524<
63<0419	3=23= 45243	83<Yb @419 ZNV 498	3=24<
63<0419 49a	3=23: 43247	533<0419 ZNV 498	35249
63<0419 ZNV 49a	4323= 43247	633<419 ZNV	3923= 3<249
63<@419 ZNV	3=246 39254	633<419 ZNV 498	38249
63<@419 ZNV 458	3=246 39254	633<419 Z°´mz	38247 3<249
63<Yb 0419 49a	3=23: 43247	833<419 49a	3=23= 3624:
63<Yb 0419 ZNV 49a	4323= 43247	833<419 ZNV 496	35245 3624:
63<Yb @419 ZNV 458	36247 39254	833<419 ZNV 498	35245 3624:
63<Yb @419 ZNV 488	36247 39254	833<@419 ZNV 498	45249
73<419 ZNV 493	34244	Xl e 419 49a	36243 45248

DC4>A; 777477
DC4>A; 77C477 *mm*

M 6314<
N4 6163
P 8314 6
53É7<

+<<<83,

7D4>A; 777477
7D4>A; 77C477 *mm*

4153 VaJ
4153 V
5133 I X

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
QbBPf /ARd0	S 9 **8AEDvv**	**88A i** 3GVa 4	**bx f u U x v xw**	**f P9>C79**

53: 419 49a Z°´mz	4323= 45245	53: l l 419 49a Z°´mz	4323= 45246

DC4>>>D774;7
3=239

M 5<183
O 5143
P 83145
53É7<

f b

7D4>>>D77487
7D4>>>D7C487 *mT m*

4153 VaJ V
4183 V
5133 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

f gPA/hVk0	S	9	8A9Ovv	>9 i	3/c	4	P6 x	f P8B8E;
f gPA/hVl 0	S	9	8A9Ovv	>74>; i	3/S8/e	4	P6 x	f P>D>9

439 0418 J	392=7 372=9	439 00418 J	382=9 3: 237

DC4;9AD77477
DC4;9AD7B477 *mT m*

M 7316:
N4 4198
P 99165
56É93

MWdf

7D4;9AD77477
7D4;9AD7B477 *mT m*

5133 I Q V
41 8 V
6133 I X V

QOA/ZRb0	S	9	8ADOvv	DA4E7 i	3GGV/8GNN	4	bx	f P9DAC>
QOAR	S	9	8ADOvv	DA i	3GGa	4	bx	f P; B; 8C
QOAR/ZRV 0	S	9	8ADOvv	DA i	3GGa	4	bx	f P; EC7C

53<0419	39246	63<0419	35245 45248
53<00419 aZt 448	4421=	63<00419 aZt 448	38248 39254
634 419 RVM	3: 247	63<Yb 00419 aZt	36247 39254
634 419 aZt 448	44245 4324:	73<419	34245

DC4>A9C77477
DC4>A9C7C477
3: 244

M 65168
N2 4173
O 5178
P 861 8
53É8:

f b

7D4>A9C77477
7D4>A9C7C477 *mT m*

4133 I Q
4153 V
5133 I X V

LKZ-Ring

<8vb
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

f gAV> /ZRk0	S	9	8ADOvv	DC4DD i	3GGe8GNN	4	bx	f P>D; E
f gAVb /ZRf 0	S	9	8ADOvv	C9 i	3 e	4	bx	f P; 9BD;
f gAVb> /ZRg0	S	9	8ADOvv	CD4E7 i	3GDa8GNN	4	bx	f P8ABBD
f gAVb>N /ZRd0	S	9	8ADOvv	BB i	3 D	4	bx	f P9>C77

439 0419 Y49	382=9 3: 237	63<0419 HtzLψÉ	3723< 43247
539 419	3: 233 3723=	63<Yb 0419	3623= 43247
539 419 49a	3: 233	738 0419	3<2=5 382=:
539 419 RVM	3: 235 3523:	433: 419 49a	37238
53: 419 49a	35239 45246	VGXZTKX 419	3=233
53: Yb 419	3<23< 45245	VGXZTKX 419 49a	3: 234 3623<
639 419	43233 37235	VGXZTKX UX0MT 419	3=244 45248
63: 419	3: 239 45245	VGXZTKX UX0MT 419 49a	3=244 45246
63: 419 49a	3<233 3723=	VGXZTKX ZKVKK 419 aZt	3723<
63: 419 HtzLψÉ	3=23: 3723=		

DC48; E>77477
DC48; E>7C477 *mT m*

M 65168
N2 4163
P 84163
53É8:

7D48; E>77477
7D48; E>7B477 *mT m*
7D48; E>7C477 *mT m*

4153 I Q V
4183 V
5183 V

f gAVb /ZRm0	S 9	**8ADCvv**	**BA4BB i**	3ee8 D 4	**bx**	**f P>D>7**
f gAVb> /ZBM0	S 9	**8ADCvv**	**CD4D; i**	3GDa8GGP 4	**bx**	**f P98A7;**

439 0419	392=6 372=9	53: Yb 419	3<23< 45246
439 0419 t	382=9 432==	639 419	382=6 38234
539 419 <a	382== 43236	639 419 YX	392=7 43233
539 419 t	3=2=< 45233	63: 419	3: 239 45245
53: 419	3423< 45246		

DC487; D77477
DC487; D7B477 *mT m*

M 65158
N4 4183
N 9<183
P 8: 183
53É95

7D487; D77477
7D487; D7B477 *mT m*

4183 I Q V
4183 V
6183 I X V

kgPC/8B80/kgPC0	S 9	**8CBEvv**	**>; 4>> i**	3/e8aD 4	**P0t x**	**f P989BD**
kgPC/8B8M0/kgPC0	S 9	**8CBEvv**	**>> i**	3aD 4	**P0t x**	**f P9DD9**
kgPC/MEM0/kgPC0	S 9	**8CBEvv**	**>; 4>> i**	3/e8aD 4	**P0t x**	**f P89; A8**

538 41t Jtp°pw	362=7 382=:	639 41<J	372=6 38234
538 41<J	352=6 3: 2=3	63=41<J	382< 432=6
538 041t Jtp°pw	3<2=6 432<	63=0041<J	432=4 432=6
538 0041t Jtp°pw	3: 2< 3=2=<	63=0041<Jtp°pw	3: 2<= 452=6
538 0041<Jtp°pw	3: 2< 3=2=<	738 041<J	372=3 3: 2=5
638 0041<J	442=5 452=<	VGXZTKX 41<J	392=9 45235

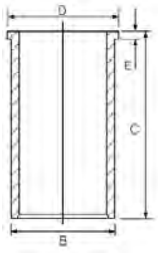
DC4;98A77487
DC4;98A7C487 *mTm*
DC4;98A87487 *mTm*

M 791<3
N4 5133
P <7183
58É:3

7D4;98A77477
7D4;98A7C477 *mTm*
7D4;98A87477 *mTm*

5133 I X V
5133 V
6133 I X V

8>479>C>7477 **N** <6183 **O** 48713 **P** <8t3 **Q** 7193
8>479>D;7477 **N** <6183 **O** 48713 **P** <9133 **Q** 7183



kgPCf /kgPC0	S 9	**8CBEvv**	**AD i**	3ci 4	**P@t x f u U x v xw**		**f P8D;E>**
kgPCf Q/MDM0/kgPC0	S 9	**8CBEvv**	**BB i**	3D 4	**P@t x f u U x v xw**		**f P9DD>**
kgPCf Q/MDN0/kgPC0	S 9	**8CBEvv**	**AC i**	3ce 4	**P@t x f u**		**f P87CDE**
kgPCf Q/MVm0/kgPC0	S 9	**8CBEvv**	**BB i**	3D 4	**P@t x f u U x v xw**		**f P9DDA**
538 41<JZ		3<2=3	452=7		738 041<J	432<	3:2=5
538 0041<ZJ		342=3	3=2=<		738 041<JZ	382=3	3:2=5
538 0041<cJZ		3<2=3	382=:		738 041<ZJ	432<<	3<2=5
63=0041<ZJ		3<2<=	452=6		738 041<Z°´mz Jtp°pw	362<<	452=5

DC4;9;B7C477 *mTm*

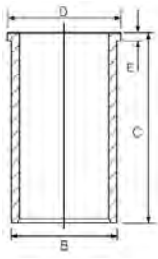
M 791<3
N4 5153
P <7183
5<É9<

MWdf

7D4;9;B77477
7D4;9;B7C477 *mTm*

6133 SURV
5133 V
6133 I X V

8>479>C>7477 **N** <6183 **O** 48713 **P** <8t3 **Q** 7193
8>479>D;7477 **N** <6183 **O** 48713 **P** <9133 **Q** 7183



Pf8CfQP>	a 9	**9C98vv**	**8A7 i**	3NDS 4	**P@t x f u U x v xw**		**f P8D8CA**
93:51t NJt		45237	3:244				

DC4>;9>77477
DC4>;9>7C477 *mTm*

M 7:133
N4 47138
N 77133
O 3183
P :4133
5=É95

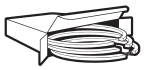
+<498K043<;

MVWWdf fb

7D4>;9>77477
7D4>;9>7C477 *mTm*

5133 I Q V
5133 V
5133 V

Pi D/i Vm0	S 9	**8DBDvv**	**A84A9 i**	3ai 8cN 4	**P@t x**		**f PEDBD**
Pi DN/i Vl 0	S 9	**8DBDvv**	**A8 i**	3ai 4	**P@t x**		**f P8;CDD**
539 41=J		3=2=<	3823:		KcVKXZ 41=J	392=<	45239
53:41=J		4323<	45245		KcVKXZ 41=J :3	452=<	45239
53:41=cYJ		4523:	45245		VGXZTKX 41=J	392=9	45248



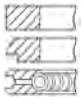
639 41=J | 3=2=< 3<236 | VGXZTKX UX0M0T 41=J | 3<23< 45248

DC487>777477
DC487>77D477 *mTm*

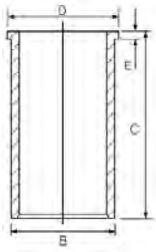
M 791<3
N4 4163
P : <133
58É98

7D487>777477
7D487>77D477 *mTm*

5133 I Q V
5133 V
6133 I X V



8>47979E7477



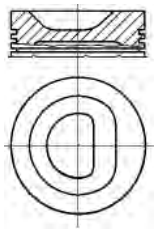
N <8133 **O** 487133 **P** < 133 **Q** 8133

DD487>777477
< 0437333033 .
4703535=3033

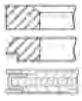
kgAVb /NRm0	S 9	**8AD7vv**	**BA4BD i**	3ee8i N 4	**bx**	**f P9DB;**
kgAe /8C80	S 9	**8AD7vv**	**BB4C8 i**	3 D8i c 4	**bx**	**f P9DBA**
kgA8O /N8M0	S 9	**8AD7vv**	**AA4AE i**	3cV8eD 4	**bx**	**f P9DAC**
538 0419		3<2<9 432<		63=0419		432<8 3:2<=
538 00419		432< 3=2=<		738 00419		3<2=5 382=:
638 419		442<5 452<<		739 419		442=8 38237
638 00419		432<5 452<<				

7D48A8977477

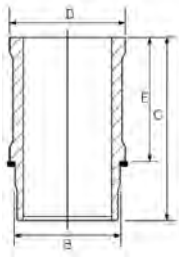
M 6:188
N4 5143
P 9:183
55É99



4t18 I X V
4t18 V
7133 I X



8A4B; >E87477
8>4B; >E87477



N <<133 **O** 474133 **P** =: 133 **Q** =8146
N <<133 **O** 474133 **P** =: 133 **Q** =8146

DE48A8977477
480967=43033

Vt°ßzy l ®twmpty Qtß3Ypßzyw
Yßppw
9mvßop° °pl w
_°p l wz 4 TH UOXtyr NX899

Qzwmpy y°´tx G°°px mw0p´s vßwns
Yß sw
Ynswp ßJtnsß3yr py pty
St®p´Äpyopy>4 TH UOXtyr NX899

Vt°ßzy ot°' zytmwp py vtß3°p°wpx pyß
Gntp´
9mvßop° uztyß3
G°ßwp´l °°°t>4 uztyßßz´t¿°p° NX899

Vt°ß y ot°' zytmwp py nzyu3yßz° °zwlx pyßp1
Gnp´z
9mvßÖp w° °pwm°
_ßwÜl´ß x mt y>4 TH u3yß ßz´tnl ° NX899

O' t°ßzyt°zyz ot°' zytmtw°zwr ty vtßx zßz´p
Gnntl tz
l zx ' ´pyop wp r°l ´ytÜzyt
_°l ´p l ynsp>4 TH UOXtyr NX899

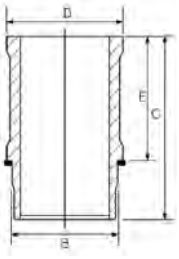
kgAOb /NMm0	S 9	**8AD7vv**	**A>4AA i**	3cS8cV 4	**bx**	**f P9DAE**
kgAV /8D70	S 9	**8AD7vv**	**CB i**	33DP 4	**bx**	**f P9DB9**
kgAV /8D7M0	S 9	**8AD7vv**	**CB4CC i**	33DS8GDV 4	**bx**	**f P9DB8**
kgAV /NBN0	S 9	**8AD7vv**	**CB i**	33DP 4	**bx**	**f P9DAD**
kgAY /NPm0	S 9	**8AD7vv**	**BA4BE i**	3ee8i S 4	**bx**	**f P9D; E**
kgAY 9m/NPl 0	S 9	**8AD7vv**	**BA4C8 i**	3ee8i c 4	**bx**	**f P>D>B**
kgAY ; m/NPl 0	S 9	**8AD7vv**	**BA4BB i**	3ee8i D 4	**bx**	**f P9DB>**
kgCVN /XRk0	S 9	**8CB9vv**	**BB i**	3 D 4	**bx**	**f P89C7D**
kgCVb /XRi 0	S 9	**8CB9vv**	**C; i**	3 i 4	**bx**	**f P9DBC**
kgCVb /XRm0	S 9	**8CB9vv**	**C>4CC i**	33DG8GDV 4	**bx**	**f P9DBB**
kgCVb> /XRl 0	S 9	**8CB9vv**	**CB4DB i**	33DP8GGc 4	**bx**	**f P>D>E**
kgEV8 /PRm0	S 9	**8E7Avv**	**C94CC i**	3 e8GDV 4	**bx**	**f P9DC7**
kgEV9 /PBM0	S 9	**8E7Avv**	**D74E; i**	33Di 8GNa 4	**bx**	**f P998AE**
kgEV> /PBO6PRi 0	S 9	**8E7Avv**	**87D488D i**	3GVe8GaD 4	**bx**	**f P9DC;**
kgEV> /PRi 0	S 9	**8E7Avv**	**87D i**	3GSc 4	**bx**	**f P9DCA**
kgEVM/PBN0	S 9	**8E7Avv**	**E>4EB i**	3GNe8GPG 4	**bx**	**f P9DC9**
kgEVMm/PWh0	S 9	**8E7Avv**	**DD4E; i**	3GND8GNa 4	**bx**	**f P9DCC**
kgEY /PPm0	S 9	**8E7Avv**	**D7 i**	33Di 4	**bx**	**f P9DCD**

kgEe /P9N0	S 9	**8E7Avv**	**CA i** 3GDN 4	**bx**	**f P9CC9**
kgA8O /N8P0	S 9	**8AD7vv**	**AA4AE i** 3cV8eD 4	**bx**	**f P9CB9**
kgA8O /N8Q0	S 9	**8AD7vv**	**A;4AE i** 3cN8eD 4	**bx**	**f P9DAB**
kgA9O6W/N9M0	S 9	**8AD7vv**	**BB4BD i** 3 D8 N 4	**bx**	**f P89>;7**
kgE9O	S 9	**8E7Avv**	**CA i** 3GDN 4	**bx**	**f P9DCE**
kgE9O /P9M0	S 9	**8E7Avv**	**CA i** 3GDN 4	**bx**	**f P9DBE**
kgE9O /P9O0	S 9	**8E7Avv**	**C7 i** 3V 4	**bx**	**f P9DC8**

538 0419	3<2=9 432<	63=0419 I ß	3=2=9 452<=
538 0419 I P	3<2=5 452=7	63=041=	432=8 3:2<=
538 0419 I ZO	362=9 432=3	63=041= MZO	432=8 3<2<=
538 0419 MZO	452=7 432<	63=0419	3:2<= 452=6
538 041=	382=9 3:2<	63=0041=	3<2<= 452=6
538 041= I Zt	3<2< 3:2=5	63=0041= MZO	3:2<= 452=6
538 041= I ZO	432< 452=7	63=0041= MZO49a	3<2<= 452=6
538 041= MZO	432<9 432<	738 0419	342< 452=5
538 0419	432< 3=2=<	738 0419 YXt	372<< 3:2=5
538 0419 MZO	432< 452<=	738 041=	392< 452=6
538 0041=	3<2=3 382=:	738 041= S 0049	392< 442=5
538 0041= MZO	432< 3=2=<	738 041= YVz´ßS 0049	392< 3:2=5
538 0041= MZO I ß	432< 3:2=7	738 0419	3<2=5 382=:
638 0419	442<9 452<<	738 0041<	3<2=5 442==
638 0041=	432=5 452<<	738 0041=	342=5 442=:
639 41<	342=6 45235	739 41<	432=9 43237
639 41<<a	342=7 3<2==	739 41<49a	442=8 43233
639 41<49a	362=: 43236	<39 41<	3:2=8 3<235
639 41<YZ	392=7 38234	KcVKXZ 41<	432=9 3=233
63=0419	432<8 3:2<=	VGXZTKX 41<	362=: 45235

8A4B;>E87477
8>4B;>E87477

N <<133 O 474133 P =:133 Q =8146
N <<133 O 474133 P =:133 Q =8146



9mv9op° °pl w _°p I wz 4 TH UOXtyr NX899	Ynswp ßJtnsß°yr py pty S t8Ö´Äpyopy>4 TH UOXtyr NX899	9mvßop° uztyß° G °ßwp´ I °°°t>4 uztyßßz´t¿°p° NX899	9mvÖp w° °pw° _ßwÜ´ ß x mt y>4 TH ú yß ßz´tnl ° NX899	I zx ´´pyop wp r °l ´ytÜzyt _°l ´p I ynsp>4 TH UOXtyr NX899

kgPE	S 9	**8E7Avv**	**>C4A9 i** 3aS8cG 4	**P6t x**	**f PD>CD**
kgPE /8B90	S 9	**8E7Avv**	**>C4>D i** 3aS8aV 4	**P6t x**	**f P9DDB**
kgPE /PEM0	S 9	**8E7Avv**	**>C i** 3aS 4	**P6t x**	**f P9CA>**
kgPE /PVm0	S 9	**8E7Avv**	**>C i** 3aS 4	**P6t x**	**f P9DE8**
kgPEM/PEN0	S 9	**8E7Avv**	**A84A9 i** 3ai 8cG 4	**P6t x**	**f P9D;>**
kgPEM/PEN0/kgPE0	S 9	**8E7Avv**	**A8 i** 3cD 4	**P6t x**	**f P9DD7**
kgPEM/PEN6PVI 0	S 9	**8E7Avv**	**A8 i** 3ai 4	**P6t x**	**f P87D9C**
kgPEM/PVI 0	S 9	**8E7Avv**	**>C4A9 i** 3aS8cG 4	**P6t x**	**f P9DDC**

538 41=J	3<2=3 3:2=5	63=041=J	392=9 3:2<=
538 0041=J tp°pw	3<2< 3=2=<	63=0041=J tp°pw	3:2<= 452=6
638 41=J	442=5 452<<	738 041=J	432<< 3<2=5
638 0041=J	432=5 3:2<<	738 041=J tp°pw	362<< 452=5
638 0041=J tp°pw	432=5 452<<	738 0041=J	3<2=5 442==
639 41=J	372=6 37235	HUcKX 41=J	362=7 37235
639 41=YRJ	392=7 38234	KcVKXZ 41=J	352=9 452=<

639 41=YZJ	352=7 382==	P8 41=J	3=2< 362=7
639 41=Zo	3: 2=8 3<233	VGXZTKX 41=J	382=9 45235
63=41=J	432=8 432=6		

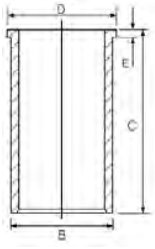
DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

M 791<3
N4 5153
P <7163
58É: 5

7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

5133 I X V
5133 V
6133 I X V

8>4797A; 7477 **N** <8193 **O** 486183 **P** <<183 **Q** 61=3



kgPENeP /PTh0/kgPE0	S 9	**8E7Avv**	**AA i**	3cV 4	**P@t x**	**f u**		**f PEDBC**
kgPEeP /PTi 0	S 9	**8E7Avv**	**AA i**	3cV 4	**P@t x**	**f u**	**U x v xw**	**f PE; BA**
kgPEf Q	S 9	**8E7Avv**	**BB4BE i**	3 D8 S 4	**P@t x**	**f u**	**U x v xw**	**f P8DEA;**
kgPEf Q/PDN0	S 9	**8E7Avv**	**BD4BE i**	3 N8 S 4	**P@t x**	**f u**	**U x v xw**	**f P9CA8**
kgPEf Q/PTk0	S 9	**8E7Avv**	**BB4BD i**	3 D8 N 4	**P@t x**	**f u**	**U x v xw**	**f P9DDE**
kgPEf Q/PTl 0	S 9	**8E7Avv**	**BB4BE i**	3 D8 P 4	**P@t x**	**f u**	**U x v xw**	**f P9DDD**
kgPEgf R/PDO0	S 9	**8E7Avv**	**BD i**	3 N 4	**P@t x**	**f u**		**f P9DE7**

639 41=J	352=7 37235	739 41=ZJ	432=8 43237
639 41=JZ	382=6 38234	<39 41=ZJ	3: 2=8 3<235
639 41=YXJZ	392=7 38234	<39 ZJ	3: 2=8 3<235
639 41=ZJ	352=: 37235	HUcKX 41=JZ	362=9 3=2=<
738 0041=ZJ	3<2=5 382=:	HUcKX 41=ZJ	362=7 37235
739 41=J	432=9 43237	KcVKXZ 41=ZJ	352=9 3=233

DC487AA77477
DC487AA7C477 *mT m*

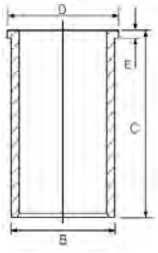
M 791t 8
N4 6183
P : 8133
5<É9<

MWTMdf fb

7D487AA77477
7D487AA7C477 *mT m*

6133 I Q
5133 TZ
6133 I X V

8>4797A; 7477 **N** <8193 **O** 486183 **P** <<183 **Q** 61=3



Pf 97O /Q A0	a 9	**9EE; vv**	**8CC i**	3NSG 4	**P@t x**	**N@f u**	**U x v xw**	**f P9; A9C**

73: 613 NJt	3923=

DC4>; E877487
DC4>; E87C487 *mTm*

M	79133
N4	48168
N	7: 195
P	: 3133
	63É96

-8<7=J073<G,

MWWWdf fb

ECOTOUCH

7D4>; E877487
7D4>; E87C487 *mTm*

41 8		MJI V
41 8		V
5133		I X V

GDC LKZ-Ring

Mpy 5 't°ßzy nl y mp´pßzqßßpo ty Mpy 4 pyrtyp°	Qzwmpy op´51Mpyp´lßzy v yypy ty Szßz´py op´41Mpyp´lßzy ylnsrp´ °ßpß Äp´opy	Rp° 't°ßzy° op 5 x p r y ´lßzy 'p°®pyß ßp x zyß° °°´ op° x zßp°´° op 4 x p r y ´lßzy	Kw't°ß y op w°pr°yol rpyp´lnt y °p '°pop x zyß´py w° x zßz´p° op ''tx p´l rpyp´lnt y	tw't°ßzyp ot°pnzyol rpyp´lÜzyp '° p°°p´p x zyßßz yptx zßz´tot ''tx l rpyp´lÜzyp
K°´z 9				
Lz´ Mpy 5 pyrtyp°	L ´Szßz´py op´51Mpyp´lßzy	Vz°´x zßp°´° op 5 x p r y ´lßzy	Vl´l x zßz´p° op °pr°yol rpyp´lnt y	Vp´tx zßz´tot°pnzyol rpyp´lÜzyp

Pi 87ON /dTP0		**S 9**	**8EEOvv**	**877 i**	**3GPa**	4	**P@t x**	**f u U x v**	**xw**	**f P; >ED7**
Pi 87 O TI NdUP /dTO0/Q	**A0**	**S 9**	**8EEOvv**	**89748>C i**	**3GaP8NDD**	4	**P@t x**	**f u U x v**	**xw**	**f P9DC87**
Pi 87Of QP> /dTM0		**S 9**	**8EEOvv**	**87; i**	**3GSD**	4	**P@t x**	**f u U x v**	**xw**	**f P; AA; 8**
Pi 87Of QP> /dTP0		**S 9**	**8EEOvv**	**877 i**	**3GPa**	4	**P@t x**	**f u U x v**	**xw**	**f P; 8>D9**
Pi 87Of QP> /dTQ0/Q	**A0**	**S 9**	**8EEOvv**	**8774887 i**	**3GPa8GVD**	4	**P@t x**	**f u U x v**	**xw**	**f P9AB; ;**
Pi 87Of QP> /dTT0/Q	**A0**	**S 9**	**8EEOvv**	**897 i**	**3GaP**	4	**P@t x**	**f u U x v**	**xw**	**f P9; A; B**

63<Il 513 NJt	3923= 45247	633<NJt	3923= 3<249
63<0513 NJt	43244 43247	633<NJt 483	3923= 3<249
63<Yb 0513 NJt	3923= 43247	833<513 NJt	3=23= 3624:
73: 513 NJt	3923=	833<513 NJt 469 2469	35245 3624:
73: Yb 513 NJt	3923= 45243	833<513 NJt 483	3923= 3624:
83<0513 NJt	44243 4524<	833<0NJt 469	35245 3624:
83<Yb 513 NJt	36246 4524<	833<0NJt 483	3923= 3624:
83<Yb 0513 NJt	44243 4524<	833<0NJt 498	3923= 3624:
83<Yb 0513 NJt XcN	44243 4524<	KcVKXZ 513 NJt 498	3=23=
<3: 513 NJt	3923=	KcVKXZ ZKVKK 513 NJt 498	3=23=
633<513 NJt	3923= 3<249	Xl e 513 NJt	36243 45248
633<513 NJt 483	3923= 3<249		

DC4>>; 877477
DC4>>; 87D477 *mTm*

M	791 3
N4	461 4
N	83173
O	3178
P	: 71 4
	63É9<

-8<83N055<,

MWWWdf fb

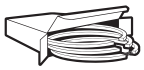
7D4>>; 877477
7D4>>; 87D477 *mTm*

5133		MJI V
5133		V
5133		I X V

GDC LKZ-Ring

HzÄwnl 'lntßÖ59165nx 6	azv@x py op´Qzwmpyx °wp 59165nx 6	azv@x p op w nl®8 o° 't°ßzy 59165nx 6	azvlnl®bl o 't°ß y 59165nx 6	azv@x p nl x p´l 't°ßzyp 59165nx 6

Pi 87Mf QP /dTe0		**S 9**	**8EEOvv**	**CE i**	**3GDc**	4	**P@t x**	**f u U x v**	**xw**	**f P97>8C**
Pi 87Mf QP /dTm0		**S 9**	**8EEOvv**	**CE4D7 i**	**3GDc8GDi**	4	**P@t x**	**f u U x v**	**xw**	**f P87C9C**
Pi 87Nf QP /dTk0		**S 9**	**8EEOvv**	**BE i**	**3 S**	4	**P@t x**	**f u U x v**	**xw**	**f P8CA8A**
Pi 87Nf QP /dTm0		**S 9**	**8EEOvv**	**D7 i**	**3GDi**	4	**P@t x**	**f u U x v**	**xw**	**f P9E; 88**
Pi 87Nf QP2 /dTm0		**S 9**	**8EEOvv**	**D7 i**	**3GDi**	4	**P@t x**	**f u U x v**	**xw**	**f P; ; C98**
Pi 87Of QP /dTm0		**S 9**	**8EEOvv**	**D7 i**	**3GDi**	4	**P@t x**	**f u U x v**	**xw**	**f P; 7D; ;**



Pi 87f P /dTh0	S	9	**8EEOvv**	**B9 i**	3eS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9>E88**
Pi 87f P /dTI 0	S	9	**8EEOvv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P89ABE**
Pi 87gf P /dTh0	S	9	**8EEOvv**	**B9 i**	3eS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CA89**

539 513 NJt	3: 235	3523:	739 513 NJ0443	392=<	37237
539 513 NJ0=3	452==	3=23=	739 513 NJt443	3<234	43237
53: 513 NJt	4523:	45245	93: 513 NJ0	38233	3=238
53: Yb 513 NJt	4323<	45245	93: 513 NJt	36234	3=237
639 513 NJt	3<2=<	39233	<39 513 NJ0	3<2==	3<235
639 513 NJ0=3	392==	45235	<39 NJt	392==	35236
63: 513 NJt	3=239	36245	HUcKX 513 NJt	45234	39239
63: 513 NJ0=3	36235	3723<	HUcKX 513 NJ0	3<234	37235
63: 513 NJt=3	3<233	3623:	KcVKXZ 513 NJ0	3: 233	45239
63: 513 NJ0443	36235	4523=	KcVKXZ 513 NJt	43233	43239
63: 513 NJt443	3<233	3623:	VGXZTKX 513 NJt	37233	3: 23<
63: Yb 513 NJt	34236	4523=	VGXZTKX 513 NJ0	35233	3: 23<
739 513 NJ0=3	352==	43237			

DC488>C77477
DC488>C7D477 *mTm*

7D488>C77477
7D488>C7D477 *mTm*

M	79t 8
N4	4<163
N	6<133
O	4133
P	<3t 8
	5<É: 3

MWdf fb

6133 I QV
5133 V
6133 I XV

Pi 87MfQP> /dTY 0	S	9	**8EEOvv**	**CE i**	3GDc	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97CE7**
Pi 87MfQP> /dTf 0	S	9	**8EEOvv**	**CE4D7 i**	3GDc8GDI	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97CDE**
Pi 87MfQP> /dTi 0	S	9	**8EEOvv**	**CE4D7 i**	3GDc8GDI	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CA87**

<39 513 NJ049a	3<2==	3<235	KcVKXZ 513 NJt	43233	43239
<3: 513 NJt	39235		KcVKXZ 513 NJ049a	3: 233	45239
KcVKXZ 513 NJ0	3: 233	45239			

DC488>C77487
DC488>C7D487 *mTm*

7D488>C77477
7D488>C7D477 *mTm*

M	79t 6
N4	4<1<3
N	6=1<3
O	419:
P	: 5t 3
	5<É9<

-8<84: 0436,

MWWdf fb

6133 I QV
5133 V
6133 I XV

Pi 87NfQP> /dTR0	S	9	**8EEOvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9BCE>**
Pi 87NfQP> /dTd0	S	9	**8EEOvv**	**877487; i**	3GPa8GSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CA7C**
Pi 87gfQP> /dTW0/Q >0	S	9	**8EEOvv**	**CE4DD i**	3GDc8GND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8ED8>**

63: 513 NJt468	43236	3723=	83<Yb 513 NJt	36246	4524<
63: Yb 513 NJt	37237	4423:	83<Yb 0513 NJt	44243	4524<
63<I I 513 NJt	3723=	45247	93: 513 NJ0	3=238	3: 244
63<0513 NJt	3=23:	43247	<3: 513 NJ0	39239	
63<Yb 0513 NJt	3=23:	43247	<3: 513 NJt	35239	

73: 513 NJt	43238	KcVKXZ 513 NJt 453	3423:
73: 513 NJt 468	38237 45243	KcVKXZ 513 NJt 473	3423:
73: Yb 513 NJt	3923= 45243	KcVKXZ ZKVKK 513 NJt 453	3423: 36249
83<0513 NJt	44243 4524<	KcVKXZ ZKVKK 513 NJt 473	3423:

DC488>C774>7
DC488>C7D4>7 *mTm*

M	791t3
N4	4817 3
N	771<3
O	318:
P	: 51t4
	5<É: 3

-8<8: 3043=,

MWWWdf fb

7D488>C77477
7D488>C7D477 *mTm*

6183	IQV
5133	V
6133	IXV

Pi 87RO/MTi 0 S 9 **8EEOvv** **8;948;; i** 3Gci8GeG 4 **P6t x f u U x v xw** **fP;7D7B**
Pi 87RP/MTh0 S 9 **8EEOvv** **877 i** 3GPa 4 **P6t x f u U x v xw** **fP;8>D>**
Pi 87RP/MTk0/Q A0 S 9 **8EEOvv** **8774887 i** 3GPa8GVD 4 **P6t x f u U x v xw** **fP9DB8>**

63<0513	44246 39254	633<513 469	44249
63<0513 MZ	39247 39254	633<513 NJt 483	3923= 3<249
63<Yb 0513 MZ	3924: 39254	833<513 NJt 469 2469	35245 3624:
63<Yb 0513 MZ NJt 4<3 2	39247 39254	833<513 NJt 483	3923= 3624:
83<0513	37247 4524<	833<0513	45249
83<0513 NJt	44243 4524<	833<0513 469	45249
83<Yb 0513	37247 4524<	KcVKXZ 513	37249
83<Yb 0513 NJt	44243 4524<	ZXGaKRRKX 513	37249
633<513	38249		

DC4>>; 877487
DC4>>; 87D487 *mTm*

M	7913 3
N4	451t4
N4	71=3
N	8416 3
P	: 5133
	63É: 5

MWWWdf fb

7D4>>; 877477
7D4>>; 87D477 *mTm*

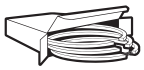
5133	MJI V
5133	V
5133	IXV

GDC LKZ-Ring

HzÄwnl 'Inf0Ö5614<nx 6 azwx pyop´Qzwapyx °wp 5614<nx 6 azwx popwvnl@8 o° 't°ßzy 5614<nx 6 azwnl@8olo 't°ß y 5614<nx 6 azwx pnlx p´l 't°ßzyp 5614<nx 6

Pi 89Nf QP>/>Tb0 S 9 **98CEvv** **897 i** 3GaP 4 **P6t x f u U x v xw** **fP9>C9E**
Pi 89Nf QP>/>Td0 S 9 **98CEvv** **897 i** 3GaP 4 **P6t x f u U x v xw** **fP9>E8>**
Pi 89Nf QP>/>Te0/Q >0 S 9 **98CEvv** **89A i** 3GcD 4 **P6t x f u U x v xw** **fP9>E8A**
Pi 89Nf QP>/>Tf0/Q >0 S 9 **98CEvv** **89A i** 3GcD 4 **P6t x f u U x v xw** **fP9779D**
Pi 89Y f QP>/>TW0 S 9 **98CEvv** **88A i** 3GVa 4 **P6t x f u U x v xw** **fP9>E8B**
Pi 89Y f QP>/>TZ0 S 9 **98CEvv** **88A i** 3GVa 4 **P6t x f u U x v xw** **fP9>C9C**

73: 515 NJt	36239 45243	<3: 515 NJt	39239
73: 515 NJt 4: 3	36239 45243	733: 515 NJt	3523: 36246
93: 515 NJt	38239 39243	733: NJt 488	3523: 36246



DC4>; BC77487
DC4>; BC7D487 *mTm*

M 7<t3
N4 4617:
N 8517 3
O 316<
P :71t4
63É9<

-8<83NG45:,

MWWWdf fb

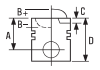
7D4>; BC77477
7D4>; BC7D477 *mTm*

5183 MJI V
5183 V
5183 I Q

GDC LKZ-Ring

Lz´'tºßzyº Ätßs l 5716x x nzy ´zo r l' x pl º°´po l ß' ty npyßp wyp	L ´Qzwnpy x tßptypx Vwp°pw°r pyl mfß yo @zy 57/6 S S / r px p°°py l y op´ Qzwnpynzwlpy0S tßp	Vz°´'tºßzyº l @n °y nl ´ßop mtpwp op 57/6 x x x p°°´ l ° np yßp op wl Ép mtpwp0'tºßzy	Vl ´l 'tºßzypº nzy °yl otºß yntl op 'l °z op mtpw py pwnpyß z opwnfwy op 57/6x x	Vp´'tºßzytnzy 'l °°l r r tz mtpw/ ot 57/6 x x x tº°´l ßz °°wl °°p qz´z º' tyzßßz

| | | |



DC4>9CC774A7
DC4>9CC7C4A7 *mT m*

M 7<175
N4 4914:
N 7=137
P :71<5
63É9:

-8<9<6093:,

MWWWdf fb

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5133 I Q V
5133 V
5133 TZ

--- I G_Z0IT 0I NKI QHUb RJ0SKZKX ---
--- GI NZ_TM0S _RJKTJ_XI NS KYYKX HKXVX LKT ---
-- GßpyßzyÜ®p°twpÜ®p´tdp´ψotlx ßp´o° nzw-
-- V´pnl°nt y0®p´tdpnl pwotx pßz opw m°wy --
-- IßpyÜzyp nzyßzwv´potlx pßz nlx p´l otnzx m°°ßzyp- -

Yßppw Yß sw Gntp´ Gnp´z Gnntltz

b99Pf Q/>Tg0/Q >0 S 9 **98EDvv** **DD i** 3GND 4 **P%x f u U x v xw** **f P9>>C7**

HUcKX 515 NJt453 37239

DC4>9CC77487
DC4>9CC7C487 *mT m*

M 7617 5
N4 481<8
N 791=3
P 9=1<5
63É9:

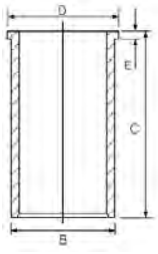
+<97<H438,

WWdf fb

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5133 I Q V
5133 V
5133 TZ

8>4798897477



N <=133 **O** 489133 **P** =31=3 **Q** 8133

Yßppw Yß sw Gntp´ Gnp´z Gnntltz

b99Pf Q/>Th0/Q >0 S 9 **98EDvv** **C> i** 3GDG 4 **P%x f u U x v xw** **f P9>>BE**

HUcKX 515 NJt433 37239

DC4>9CC774;7
DC4>9CC7C4;7 *mT m*

M 7617 5
N4 481<8
N 791=3
P 9=1<5
63É9:

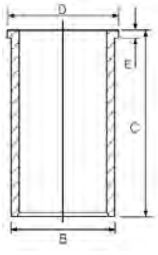
-8<983G438,

df f b

7D4>9CC77477
7D4>9CC7A477 *mT*
7D4>9CC7C477 *mT m*

5133 I Q V
5133 V
5133 TZ

8>4798897477



N <=133 **O** 489133 **P** =31=3 **Q** 8133

Yßppw Yß sw Gntp´ Gnp´z Gnntltz

kZ8	S 9	**8EC8vv**	**B>4CE i**	3ec8GDc 4	**bx**	**f P9D;;**
kZ8 /87B0	S 9	**8EC8vv**	**BD4C8 i**	3P8 c 4	**bx**	**f P9D;7**
kZ8b	S 9	**8EC8vv**	**AC i**	3ce 4	**bx**	**f PDA79**
kZ8f	S 9	**8EC8vv**	**AA4B; i**	3cV8ea 4	**bx**	**f P99>DB**
kZ8f /8C70	S 9	**8EC8vv**	**AD i**	3ci 4	**bx**	**f P9D;C**
kZ8f /8C7N0	S 9	**8EC8vv**	**AA i**	3cV 4	**bx**	**f P9D;B**
kZ8f M	S 9	**8EC8vv**	**B94C9 i**	3eS8 e 4	**bx**	**f PD>E7**
kZ9 /87C0	S 9	**8EC8vv**	**CA4CD i**	3GDN8GDa 4	**bx**	**f P9D;8**

837 513 362 4 382=8 P8 513 3=2<4 342=7

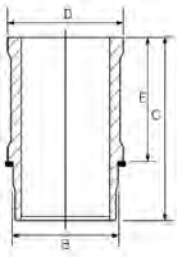
837 513 ZO 342 4 392<6 P8 513 Y°' p´ 3=2<4 3<2=3
838 513 382 = 452<8 P= 513 362<3 392<

M 6<58
N2 3198
P : 41<8
56É: 7

7D4; 8BE77477
7D4; 8BE7C477 *mT m*

41B3 I X V
51B3 V
71B3 I X

8>4B; BA77477



N =6133 **O** 4681 3 **P** 4341=3 **Q** <=1=<

DE4; 8BE77477
4709698330B3

Vt°ßzy l ®twmp ty QtßYpßzyŵ
Yßppw
Ømvßop° °pl w

Qzwmpy y°´ tx G°°px mŵp´s vßwns
Yß sw
Ynswp ßJtnsß°yr py pty

Vt°ßzy ot°' zytmwp py vtß°p°wpx pyß
Gntp´
Ømvßop° uztyß°

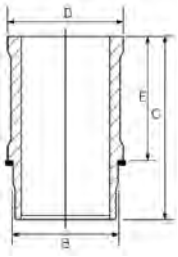
Vt°ß y ot°' zytmwp py nzyu°yßz° °zwlx pyßp1
Gnp´z
ØmvßÛp w° °pwr°

O' t°ßzyt°zyz ot°' zytmtw°zwr ty vtßx zßz´p
Gnntl tz
l zx ' ´pyop wp r°l ´ytÜzyt

kZ8M/87BQ0	S	9	**8EC8vv**	**C9 i**	3 e 4	**bx**	**f P>D>A**
kZ8f M/8C7O0	S	9	**8EC8vv**	**B9 i**	3eV 4	**bx**	**f PBD7>**

838 513 3=2<8 3=2=8

8>4B; BA77477

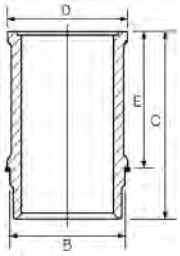


N =6133 **O** 4681 3 **P** 4341=3 **Q** <=1=<

kP >5DD	S	9	**8E>Dvv**	**>74>8 i**	3/S8Va 4	**P0t x**	**f P9D7C**
kPDD	S	9	**8E>Dvv**	**>> i**	3aD 4	**P0t x**	**f P9; D79**
kPb >5DD/U wx kPb0	S	9	**8E>Bvv**	**; B4>B i**	3Si 8aP 4	**P0t x**	**f P99>CC**
kPb DD/U wx kPb0	S	9	**8E>Bvv**	**>7 i**	3/V 4	**P0t x**	**f PD>EE**

837 41=J 362 6 452<= P: 41=J 3<29< 3: 2 <

8>4B77>97477



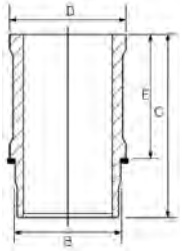
N =9133 **O** 4: 6133 **P** 43916B **Q** 45=133

_°p l wz NZ355 St36p´Äpyopy>NZ355 G°ßwp´l °°°t>NZ355 _ßwÜ´ß x mt y>NZ355 _°l ´p l ynsp NZ355

kPE7	S	9	**9889vv**	**>D4>E i**	3aV8ac 4	**P0t x**	**f P9D7D**
kPb >5E7 /U wx kPb0	S	9	**9889vv**	**>; 4AA i**	3/e8cV 4	**P0t x**	**f P98>>7**
kPb B5E7 /U wx kPb0	a	9	**; 8BDvv**	**CD i**	33Da 4	**P0t x**	**f P99>CD**
kPb E7 /U wx kPb0	S	9	**9889vv**	**>9 i**	3/c 4	**P0t x**	**f PDA77**

837 514 J 352 4 3: 2<9 P: 514 J 3<29< 3: 2 :

8>4B7>7B7477 N =9133 O 4: 6133 P 439163 Q 45=133



PVA/f EM0	S 9	9>>Bvv	B; i 3ea 4	P@t x	f P>D; 7
HUcKX 518 J		362=7 37235			

DC4889>77477
DC4889>7C477 *mT m*

7D4889>77477
7D4889>7C477 *mT m*

M 7=1=3
N4 6133
P <3133
67É8<

5158 I Q V
5133 V
5133 I X V

MWf b

PVAf /f DM6f Tm0	S 9	9>>Bvv	CB i 3GDP 4	P@t x f u U x v xw	f P>D; 8
PWAMf Q/f TI 0	S 9	9>>Bvv	EA i 3GNi 4	P@t x f u U x v xw	f P9C>D
938 518 Z°´mz Jtp°pw		3: 2=7 3=2==	HUcKX 518 ZJ		362=7 37235

DC4; 9B; 77477
DC4; 9B; 7C477 *mT m*

7D4; 9B; 77477
7D4; 9B; 7C477 *mT m*

M 7=1<7
N4 5163
P <5133
67É9<

6133 VY V
41 8 I X V
6183 I X V

MWTMWWdf f b

G C 7=17: 3/ H C <41933

OdPE;	S 9	9A77vv	A> i 3cP 4	P@t x	f P988BD
OdPE; X	S 9	9A77vv	C7 i 3 V 4	P@t x f u	f P8DDCB
beM/OdPE; 0	S 9	9A77vv	A> i 3cP 4	P@t x	f P9C>C
P8 518 J		3=2<4 362=7	P8 518 JZ		3=2<4 342=7

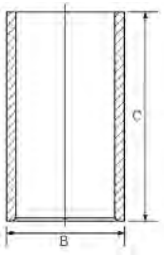
DC48A9C77477
DC48A9C7C477 *mTm*

M 851t8
N4 :163
P <1t8
63É:<

7D48A9C77477
7D48A9C7C477 *mTm*

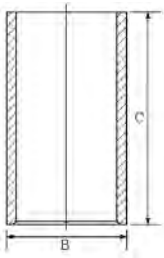
5183 SURV
5183 V
7183 IXV

8>478; >D8477 **N**=9143 **O** 496133



g9A6BC; /OdPE; Xe 0	S 9	9A77vv	C7 i 3V 4	P@t x f u	f P>D9E
P8 518 JZ		3=2<4 3<2=3	P8 518 ZJ		432=3 362=7

8>478; >D8477 **N**=9143 **O** 496133



QZ AA	S 9	9>EDvv	A;4AB i 3:N8ca 4	P@t x	f PBBDA
kP; /8AA0	S 9	9>EDvv	A84AA i 3:D8cV 4	P@t x	f P9D7;
kP;b	S 9	9>EOvv	A;4AA i 3:N8cV 4	P@t x	f PDA7A
837 518 J		3<2=3 432=	P=518 J		3:2=5 392<
838 518 Jtp°pw		392<4 452=6			

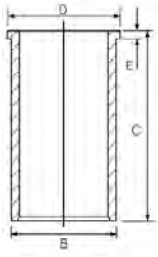
DC4;8DC77487
DC4;8DC7B487 *mTm*
452=6

M 87133
N4 41<3
P =9175
63É:=

7D4;8DC77487
7D4;8DC7B487 *mTm*
7D4;8DC7D487 *mTm*
7D4;8DC88487 *Tmm*

5183 IXV
5183 V
7183 IXV

8>4797BB7477 **N**=:133 **O** 4:3193 **P** =183 **Q**7133
8>4798A97477 **N**=<133 **O** 4:3193 **P** 433133 **Q**9133

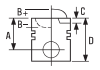


DC4;8DC774;7
DC4;8DC874;7 *mTm*
342=7

M 87133
N4 41t8
P =4175
63É:=

7D4;8DC77487
7D4;8DC7B487 *mTm*
7D4;8DC7D487 *mTm*
7D4;8DC88487 *Tmm*

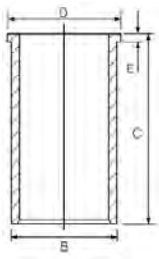
5183 IXV
5183 V
7183 IXV



Qf C7	S	9	**9>EBvv**	**C8**	**i**	3a	4	**P6t x**	**f u**	**f PBBDB**
kP9	S	9	**9; 7>vv**	**A8**	**i**	3ai	4	**P6t x**		**f P99>C;**
kP9e	S	9	**9; 7>vv**	**AE**	**i**	3eD	4	**P6t x**	**f u**	**f P99>C>**
kP9e /8>C0	S	9	**9; 7>vv**	**AE**	**i**	3eD	4	**P6t x**	**f u**	**f P9D79**
kP; f	S	9	**9>EOvv**	**C7**	**i**	3V	4	**P6t x**	**f u U x v xw**	**f P99>CA**
kP; f /8A9M0	S	9	**9>EDvv**	**BB**	**i**	3D	4	**P6t x**	**f u**	**f P9D7A**
kP; f Q	S	9	**9>EDvv**	**D8**	**i**	3GGD	4	**P6t x**	**f u U x v xw**	**f P99>CB**
kP; f Q /8A9N0	S	9	**9>EDvv**	**CC**	**i**	3GDV	4	**P6t x**	**f u U x v xw**	**f P9D7B**

838 516 J	382 = 3=2<7	838 518 Z°´nz Jtp°pw	432<6 452=6
838 516 Jtp°pw	372<5 392<9	937 516 ZJ	3=2 = 382<6
838 516 Z°´nz Jtp°pw	3=2<3 392<9	937 518 ZJ	3<2<6 452<9
838 518 J	432<8 3<2=4		

8>4797BB7477 **N** = 133 **O** 4: 3193 **P** ==183 **Q** 7133
8>4798A97477 **N** =<133 **O** 4: 3193 **P** 433133 **Q** 9133



kP9 /8; >0	S	9	**9; 7>vv**	**A8**	**i**	3ai	4	**P6t x**		**f P9D77**
kP9b 6kPE>	S	9	**9; 7>vv**	**>E**	**i**	3ac	4	**P6t x**		**f PDA7>**

837 516 J	3: 2 8 452<=	P= 516 J	362<3 3: 2<5

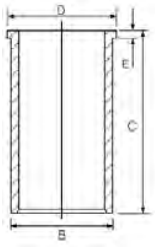
DC4; 8DC77477
DC4; 8DC7B477 *mT m*
DC4; 8DC7D477 *mT m*
DC4; 8DC88477 *Tmm*

M 8: 175
N4 5133
P ==1=3
63É: =

7D4; 8DC77487
7D4; 8DC7B487 *mT m*
7D4; 8DC7D487 *mT m*
7D4; 8DC88487 *Tmm*

5133 I X V
5133 V
7133 I X V

8>4797BB7477 **N** = 133 **O** 4: 3193 **P** ==183 **Q** 7133
8>4798A97477 **N** =<133 **O** 4: 3193 **P** 433133 **Q** 9133



Vt°ßzyº ßz mp´p'wnpo ty Kyr typ Ypß? zyŵ Qzwnpy y°´ ty S zßz´º ßÜby Ü°p´°pßÜby Vt°ßzy ´px 'wnp´ol yº wº x zßb°´ Vt°ßzypº op´p'°pºßz 'l´l wº°rzº op x zßz´p° °zwx pyßp 0Vt°ßzyp'° p°°p´p´tx 'tl ÜÜlßz °zwx pyßp nzx 'wßz

D8>75>; Z /Q ; e yØ 0	S	9	**9D77vv**	**87C**	**i**	3GSa	4	**P6t x**	**f u U x v xw**	**f P9>E9;**
R9DPf Od /D8>75>; e 0/Q ; e yØ 0	S	9	**9D77vv**	**E94E>**	**i**	3GNV8GNe	4	**P6t x**	**f u U x v xw**	**f P8CA8>**

HUcKX 51<NJt	43233 3=23=	HUcKX 51<NJ0	44233 37235

DC4899977477
DC489997D477 *mTm*

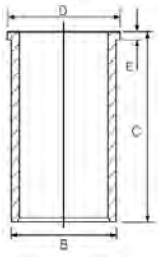
M	8<t3
N4	5416 3
N	6=173
P	<193
	65É:5

MWWWdf fb

7D4899977477
7D489997D477 *mTm*

5183		I Q V
5183		V
5183		I X V

8>4798; 98477 **N**=:187 **O** 49:133 **P** 4331=3 **Q** 8183
8>479DE; 7477 **N**=:183 **O** 49:133 **P** 4331=3 **Q** 8183
8>479DE; 8477 **N**=:18< **O** 49:133 **P** 4331=3 **Q** 8183
8>479DE; 9477 **N**=:13 **O** 49:133 **P** 4331=3 **Q** 8183



R9DP /D8>75B; 0/Q	**9 e yØ 0**	S 9	**9D77vv**	**B> i**	3ec 4	**PØ x**		**f P9>E8C**
HUcKX 51<J			342== 35235					

DC487D977477
DC487D97D477 *mTm*

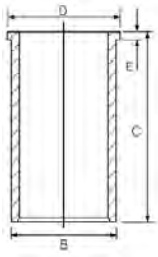
M	8813 3
N4	51<3
P	=313 3
	65É9<

MWTMdf fb

7D487D977477
7D487D97D477 *mTm*

6183		I X V
5183		V
5183		I X V

8>4798; 98477 **N**=:187 **O** 49:133 **P** 4331=3 **Q** 8183
8>479DE; 7477 **N**=:183 **O** 49:133 **P** 4331=3 **Q** 8183
8>479DE; 8477 **N**=:18< **O** 49:133 **P** 4331=3 **Q** 8183
8>479DE; 9477 **N**=:13 **O** 49:133 **P** 4331=3 **Q** 8183



R;7Pf /R8OQ7>D8P 0/Q	**>0**	S 9	**9EEEvv**	**88A48;7 i**	3GVa8Gcc 4	**PØ x**	**f u U x v xw**	**f P9E9AC**
R;7Pf Q/R8OQ7>D8P 0/Q	**>0**	S 9	**9EEEvv**	**88A48;7 i**	3GVa8Gcc 4	**PØ x**	**f u U x v xw**	**f P;;DB;**
RS;7Pf /R8OQ7>D8P 0/Q	**>0**	S 9	**9EEEvv**	**88B i**	3GVe 4	**PØ x**	**f u U x v xw**	**f P9>BEC**
HUcKX 613 NJt			37239			HUcKX 613 NJt 493		37239

DC4>98B77477

7D4>98B77477
7D4>98B7B477 *mTm*

M	9613 3
N4	4913 3
N	8313 3
P	=613 3
	69É<3

MWWWdf fb

5183		I Q V						
5183		V						
5183		I X V						

R;7Pf Q/R8OQ;>D8Q 0/Q	**A0**	S 9	**9EEEvv**	**8;7 i**	3Gcc 4	**PØ x**	**f u U x v xw**	**f P;;DB7**
R;7Pf Q/R8OQ;>D8Z 0/Q	**A0**	S 9	**9EEEvv**	**87C i**	3GSa 4	**PØ x**	**f u U x v xw**	**f P;;DB9**
HUcKX 613 NJt 478			37243			HUcKX 613 NJt 4:8		36244

DC4>98B77487

M	9613 3
N4	4913 3
N	8615 3
P	=617 3
	69É<3

MWWWdf fb

7D4>98B77487

5183		MJI V
5133		V
5183		I QV

GDC LKZ-Ring

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	CCM	x		9
89E	GNGe	S	cV9DD	D
BC75D77	eSV	S	Ve9DD	8
BDD79	GGDe	S	cD9DD	>
BDD7;	GGDe	S	cD9DD	>
BDD87	GGDe	S	cD9DD	>
BDDC88	GGDe	S	cD9DD	>
BDDC89	GGDe	S	cD9DD	>
BDDC8;	GGDe	S	cD9DD	>
BDD88	GGDe	S	cD9DD	>
C8947847;	PPND	S	i e9DD	>A
C8947847>	PPND	S	i e9DD	>A
C8>	PPND	S	i e9DD	>A
C97489	PVi D	S	GDN9DD	>B
CEC497	VSi G	a	GDN9DD	>E
CEC498	VSi G	a	GDN9DD	>E
CEC49B	VSi G	a	GDN9DD	>E
CED487	VSi G	a	GDN9DD	A7
CED497	VSi G	a	GDN9DD	A7
D77 78	eSV	S	Ve9DD	8
D77 7A	eSV	S	Ve9DD	8
D77 C7A	eSV	S	Ve9DD	8
D77 C87	eSV	S	Ve9DD	8
D7759	eSV	S	Ve9DD	8
D>CC77	GPi c	S	ca9DD	87
D>CC78	GPi c	S	ca9DD	87
D>CC89	GPi c	S	ca9DD	87
D>CC97	GPi c	S	ca9DD	87
D8>747C/e yØ 0	NVDD	S	i P9DD	; B
D8>749CUPe	NVDD	S	i P9DD	; B
D8>74>C	NVDD	S	i P9DD	; E
D8>759C/e yØ 0	NVDD	S	i P9DD	; D
D8>75>;Z5jADA/Q ; e yØ 0	NeDD	S	i S9SD	>;
D8>757C9A;7	NVDD	S	i P9DD	; B
D8>757C9ADA/Q 80	NVDD	S	i P9DD	; B
D8>757C9C77	NVDD	S	i P9DD	; B
D8>757C9C78/e yØ 0	NVDD	S	i P9DD	; B
D8>757C9C87/e yØ 0	NVDD	S	i P9DD	; B
D8>757C5jC77/Q 80	NVDD	S	i P9DD	; B
D8>75985 9;A/ea RUY 95>f P0	NSSV	S	i P9DD	; C
D8>759;59ADA/Q 9e yØ 0	NeDD	S	i S9SD	>8
D8>759C9AB7	NVDD	S	i P9DD	; E
D8>759C9ABA/e yØ 0	NVDD	S	i P9DD	; B
D8>759C9AD9	NVDD	S	i P9DD	; D
D8>759C9ADA	NVDD	S	i P9DD	; B
D8>759C9C77	NVDD	S	i P9DD	; D
D8>75>;59ADA/Q 9e yØ 0	NeDD	S	i S9SD	>8
D8>75>;5jC77/Q 9e yØ 0	NeDD	S	i S9SD	>8
D8>75>;5D59ADB/Q 9e yØ 0	NeDD	S	i S9SD	>8
D8>75>;5D5jADB/Q ; e yØ 0	NeDD	S	i S9SD	>9
D8>75>;5D5jADD/Q ; e yØ 0	NeDD	S	i S9SD	>9
D8>75>;5e59ADA/Q ; e yØ 0	NeDD	S	i S9SD	>;
D8>75>;5e5jADA/Q ; e yØ 0	NeDD	S	i S9SD	>;
D8>75>C9A;7UPd/e yØ 0	NVDD	S	i P9DD	; E
D8>75>C9A;A	NVDD	S	i P9DD	; E
D8>75>C9ADA/Q 80	NVDD	S	i P9DD	; E
D8>75>C9AE7/Q 80	NVDD	S	i P9DD	; E
D8>75>C9C77/Q 80	NVDD	S	i P9DD	; E
D8>75>C9C98/Q 80	NVDD	S	i P9DD	; E
D8>75>C9CDA/Q 80	NVDD	S	i P9DD	; E
D8>75B859;77	NSSV	S	i P9DD	>7

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		CCM	x		9
D8>75B859; A		NSSV	S	i P9DD	>7
D8>75B859>7 /e yØ 0		NSSV	S	i P9DD	>7
D8>75B; 59ADA /Q 9 e yØ 0		NeDD	S	i S9SD	>>
D8>75BC59A77		NVDD	S	i P9DD	>7
D8>75BC59AA7		NVDD	S	i P9DD	>7
D8>75BC59AD7 /Q 90		NVDD	S	i P9DD	; B
D8>75BC59ADA /Q 90		NVDD	S	i P9DD	; B
N8N C7C		eSV	S	Ve9DD	8
O8Q /BDD5780		GGDe	S	cD9DD	>
O8Q C77		GGDe	S	cD9DD	>
O8Q C8A		GGDe	S	cD9DD	>
O8Q CA7		GGDe	S	cD9DD	>
O8Q CA9		GGDe	S	cD9DD	>
O8Q CA>		GGDe	S	cD9DD	>
O8Q CAB		GGDe	S	cD9DD	>
O8Q CB7		GGDe	S	cD9DD	>
O8Q CB9		GGDe	S	cD9DD	>
O8Q CB>		GGDe	S	cD9DD	>
O8Q CE9		GGDe	S	cD9DD	>
O8V C77		GPi c	S	ca9DD	87
O8V C8A		GPi c	S	ca9DD	87
O8V C>9		GPi c	S	ca9DD	87
O8V CBD		GPi c	S	ca9DD	87
O8V CD7		GPi c	S	ca9DD	87
O9V C77		GPi c	S	ca9DD	87
O9V C8;		GPi c	S	ca9DD	87
O9V C8C		GPi c	S	ca9DD	87
O9V C8D		GPi c	S	ca9DD	87
O9V CAC		GPi c	S	ca9DD	87
O9V CC9		GPi c	S	ca9DD	87
O9V CD9		GPi c	S	ca9DD	87
O9V CD>		GPi c	S	ca9DD	87
O; S C77		GNPi	S	cS9DD	C
O; S C79		GNPi	S	cS9DD	C
O; S C87		GNPi	S	cS9DD	C
O; S C89		GNPi	S	cS9DD	C
O; S C97		GNPi	S	cS9DD	C
O; S CA7		GNPi	S	cS9DD	C
O; V C77		GPi c	S	ca9DD	87
O; V C79		GPi c	S	ca9DD	87
O; V C87		GPi c	S	ca9DD	87
O; V CB7		GPi c	S	ca9DD	87
O; V CB9		GPi c	S	ca9DD	87
P>R C79		GGSi	S	ai 9DD	9
P>R C7>		GGSi	S	ai 9DD	9
P>R C7B		GGSi	S	ai 9DD	9
P>R C7D /Q ; 0		GGSi	S	ai 9DD	9
P>R C89		GGSi	S	ai 9DD	9
P>R C8>		GGSi	S	ai 9DD	9
P>R C8B		GGSi	S	ai 9DD	9
P>R C99		GGSi	S	ai 9DD	9
P>R C9D		GGSi	S	ai 9DD	9
P>R C; 7		GGSi	S	ai 9DD	9
P>R C; 9		GGSi	S	ai 9DD	9
P>R C>7		GGSi	S	ai 9DD	9
P>R C>9		GGSi	S	ai 9DD	9
P>R CB>		GGSi	S	ai 9DD	9
P>R CC9		GGSi	S	ai 9DD	9
P>R CE7		GGSi	S	ai 9DD	9
PCR C77		GGSi	S	ai 9DD	;

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PCR C79	GGSi	S	ai 9DD	;
PCR C7;	GGSi	S	ai 9DD	;
PCR C7>	GGSi	S	ai 9DD	;
PCR C7B	GGSi	S	ai 9DD	;
PCR C87	GGSi	S	ai 9DD	;
PCR C97	GGSi	S	ai 9DD	;
PCR C99	GGSi	S	ai 9DD	;
PCR C9B	GGSi	S	ai 9DD	;
PCR C; 7	GGSi	S	ai 9DD	;
PCR C>B	GGSi	S	ai 9DD	;
PCR CB>	GGSi	S	ai 9DD	;
PCR CBB /Q >0	GGSi	S	ai 9DD	;
POU>4N /Q ; 0	SGND	S	GDN9DD	>C
POU>4O /Q ; 0	SGND	S	GDN9DD	>C
POUB M/Q ; 0	aGcc	a	GDN9DD	>C
POUBi /Q ; 0	aGcc	a	GDN9DD	>C
POU88O /Q ; 0	GGGDD	a	GNP9DD	B9
POU88Q /Q ; 0	GGGDD	a	GNP9DD	B;
PkUA	SeDD	S	GDe9DD	A>
PkUC	cNDD	a	GDe9DD	A>
PkU88 /Q ; 6>0	GDeDD	a	GNP9DD	B>
PkU89 /Q ; 0	GNGPD	a	GPG8DD	BD
PkU8; /Q >6A0	GNeDD	a	GPG8DD	BE
QBV C77	GPi D	S	cV9eD	E
QBV C78	GPi D	S	cV9eD	E
QBV C; >	GPi D	S	cV9eD	E
QBV C; D	GPi D	S	cV9eD	E
QCV B9>	GPi D	S	cV9eD	E
QCV B9B	GPi D	S	cV9eD	E
QCV B; >	GPi D	S	cV9eD	E
QCV B; A	GPi D	S	cV9eD	E
QCV C8D	GPi D	S	cV9eD	E
QCV C8E	GPi D	S	cV9eD	E
QCV C97	GPi D	S	cV9eD	E
QCV C9>	GPi D	S	cV9eD	E
QCV C9B	GPi D	S	cV9eD	E
QCV C9D	GPi D	S	cV9eD	E
QCV C>9	GPi D	S	cV9eD	E
QCV CA>	GPi D	S	cV9eD	E
QCV CB>	GPi D	S	cV9eD	E
QCV CC;	GPi D	S	cV9eD	E
QCV CD7	GPi D	S	cV9eD	E
RDY C77	GVi a	S	ce9DD	8D
RDY C97	GVi a	S	ce9DD	8D
RDY C; 7	GVi a	S	ce9DD	8D
RDY C; B	GVi a	S	ce9DD	8D
RDY CB7	GVi a	S	ce9DD	8D
RDc B7B	GecD	S	eD9DD	9;
RDc B97	GecD	S	eD9DD	9;
RDc B; 7	GecD	S	eD9DD	9>
RDc B; 9	GecD	S	eD9DD	9>
RDc B>7	GecD	S	eD9DD	9;
RDc B>>	GecD	S	eD9DD	9;
RDc B>B	GecD	S	eD9DD	9;
RDc BB9	GecD	S	eD9DD	9>
RDc BCB	GecD	S	eD9DD	9;
RDc BCD	GecD	S	eD9DD	9;
RDc BD9	GecD	S	eD9DD	9;
RDc BEB	GecD	S	eD9DD	9;

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RDc C7B		GecD	S	eD9DD	9;
RDc C87		GecD	S	eD9DD	9;
RDc C8>		GecD	S	eD9DD	9;
RDc C99		GecD	S	eD9DD	9;
RDc C9>		GecD	S	eD9DD	9;
RDc C; 7		GecD	S	eD9DD	9;
RDc C; 9		GecD	S	eD9DD	9;
RDc C>9		GecD	S	eD9DD	9;
RDc CC>		GecD	S	eD9DD	9;
RDc CCB		GecD	S	eD9DD	9;
REc BA7		GecD	S	eD9DD	9A
REc BB>		GecD	S	eD9DD	9A
REc BC7		GecD	S	eD9DD	9A
REc BC>		GecD	S	eD9DD	9A
REc C87		GecD	S	eD9DD	9B
REc C8C		GecD	S	eD9DD	9B
REc C8D		GecD	S	eD9DD	9B
REc C; 7		GecD	S	eD9DD	9B
REc C; 8		GecD	S	eD9DD	9B
REc C; 9		GecD	S	eD9DD	9B
REc C; ;		GecD	S	eD9DD	9B
REc C; >		GecD	S	eD9DD	9B
REc C; B		GecD	S	eD9DD	9B
REc C; D		GecD	S	eD9DD	9B
REc C>7		GecD	S	eD9DD	9B
REc C>>		GecD	S	eD9DD	9B
REc C>D		GecD	S	eD9DD	9B
REc CA7		GecD	S	eD9DD	9A
REc CA9		GecD	S	eD9DD	9B
REc CA>		GecD	S	eD9DD	9B
REc CAB		GecD	S	eD9DD	9A
REc CAD		GecD	S	eD9DD	9A
REc CAE		GecD	S	eD9DD	9A
REc CB7		GecD	S	eD9DD	9B
REc CB9		GecD	S	eD9DD	9B
REc CC7		GecD	S	eD9DD	9B
REc CC9		GecD	S	eD9DD	9B
REc CC>		GecD	S	eD9DD	9B
REc CD7		GecD	S	eD9DD	9B
REc CD9		GecD	S	eD9DD	9B
REc CE7		GecD	S	eD9DD	9B
REc CEB		GecD	S	eD9DD	9B
REc D77		GecD	S	eD9DD	9A
REc D7D		GecD	S	eD9DD	9A
REc D89		GecD	S	eD9DD	9A
REc D8B		GecD	S	eD9DD	9A
REc D8D		GecD	S	eD9DD	9A
REc D97		GecD	S	eD9DD	9A
REc D9B		GecD	S	eD9DD	9A
REc DC7		GecD	S	eD9DD	9C
REc DC9		GecD	S	eD9DD	9C
SEf B7A/Q	>0	NGee	S	ec9DD	; 9
SEf B7B/Q	>0	NGee	S	ec9DD	; 9
SEf B7C		NGee	S	ec9DD	; ;
SEf B>9		NGee	S	ec9DD	; 9
SEf B>A/Q	>0	NGee	S	ec9DD	; 9
SEf C77		NGee	S	ec9DD	; 9
SEf C79/Q	; 0	NGee	S	ec9DD	; 9
SEf C7;		NGee	S	ec9DD	; 9
SEf C7>		NGee	S	ec9DD	; 9

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		CCM	x		9
SEf C7B		NGee	S	ec9DD	; 9
SEf C7C		NGee	S	ec9DD	; 9
SEf C87		NGee	S	ec9DD	; ;
SEf C97		NGee	S	ec9DD	; ;
SEf C99		NGee	S	ec9DD	; ;
SEf C>9 /Q	; 0	NGee	S	ec9DD	; 9
SEf C>; /Q	; 0	NGee	S	ec9DD	; 9
SEf CA7		NGee	S	ec9DD	; ;
SEg B; 9 /Q	>0	NSaS	S	ei 9DD	; >
SEg BA7 /Q	>0	NSaS	S	ei 9DD	; >
SEg C97 /Q	; 0	NSaS	S	ei 9DD	; A
SEg C9> /Q	; 0	NSaS	S	ei 9DD	; A
SEg C; 7 /Q	; 0	NSaS	S	ei 9DD	; A
SEg CA7 /Q	; 0	NSaS	S	ei 9DD	; A
SEg CA> /Q	; 0	NSaS	S	ei 9DD	; A
T>N >77		ei e	P	cN9ND	A
T>N >78		ei e	P	cN9ND	A
T>N >7D		ei e	P	cN9ND	A
T>N >A;		ei e	P	cN9ND	A
TAR >77 /Q	A6B0	GGi c	S	cN9ND	B
TAR >79 /Q	A6B0	GGi e	S	cN9ND	B
TAR >7; /Q	A6B0	GGi c	S	cN9ND	B
TAR >7> /Q	A6B0	GGi e	S	cN9ND	B
TAR >7D /Q	A6B0	GGi c	S	cN9ND	B
TAR >89 /Q	A6B0	GGi c	S	cN9ND	B
W>Y B8B		GVi e	S	ci 9/D	8E
W>Y BE7		GVi e	S	ci 9/D	8E
W>Y BEC		GVi e	S	ci 9/D	8E
W>Y BED		GVi e	S	ci 9/D	8E
W>Y C77		GVi e	S	ci 9/D	8E
W>Y C78		GVi e	S	ci 9/D	8E
W>Y C7>		GVi e	S	ci 9/D	8E
W>Y C7B		GVi e	S	ci 9/D	8E
W>Y C7C		GVi e	S	ci 9/D	8E
W>Y C7D		GVi e	S	ci 9/D	8E
W>Y C7E		GVi e	S	ci 9/D	8E
W>Y C87		GVi e	S	ci 9/D	8E
W>Y C88		GVi e	S	ci 9/D	8E
W>Y C89		GVi e	S	ci 9/D	8E
W>Y C8>		GVi e	S	ci 9/D	8E
W>Y C8B		GVi e	S	ci 9/D	8E
W>Y C97		GVi e	S	ci 9/D	8E
W>Y C9>		GVi e	S	ci 9/D	8E
W>Y C; 7		GVi e	S	ci 9/D	8E
W>Y C; 9		GVi e	S	ci 9/D	8E
W>Y C; >		GVi e	S	ci 9/D	8E
W>Y C; B		GVi e	S	ci 9/D	8E
W>Y C>7		GVi e	S	ci 9/D	8E
W>Y C>9		GVi e	S	ci 9/D	8E
W>Y C>;		GVi e	S	ci 9/D	8E
W>Y C>> /Q	>0	GVi e	S	ci 9/D	8E
W>Y C>A /Q	>0	GVi e	S	ci 9/D	8E
W>Y C>D		GVi e	S	ci 9/D	8E
W>Y CA7		GVi e	S	ci 9/D	8E
W>Y CA9		GVi e	S	ci 9/D	8E
W>Y CA;		GVi e	S	ci 9/D	8E
W>Y CA>		GVi e	S	ci 9/D	8E
W>Y CB7		GVi e	S	ci 9/D	8E
W>Y CB9		GVi e	S	ci 9/D	8E
W>Y CB>		GVi e	S	ci 9/D	8E

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		CCM	x		9
W>Y CBD		GVi e	S	ci 9/D	8E
W>Y CCB		GVi e	S	ci 9/D	8E
W>Y CDD		GVi e	S	ci 9/D	8E
W>Y CE7		GVi e	S	ci 9/D	8E
W>Y D;7/Q	>0	GVi e	S	ci 9/D	8E
W>Y D;8/Q	>0	GVi e	S	ci 9/D	8E
W>Y D;>/Q	>0	GVi e	S	ci 9/D	8E
W>Y DAB/Q	>0	GVi e	S	ci 9/D	8E
WCV C87		GPi D	S	ci 9/D	97
WCV C8>		GPi D	S	ci 9/D	97
WCY C79		GVi e	S	ci 9/D	98
WCY C7;		GVi e	S	ci 9/D	98
WCY C87		GVi e	S	ci 9/D	98
WCY C97		GVi e	S	ci 9/D	98
WCY C;9/Q	>0	GVi e	S	ci 9/D	99
WCY C>>		GVi e	S	ci 9/D	98
WCY C>A		GVi e	S	ci 9/D	98
WCY C>B		GVi e	S	ci 9/D	98
WCY CE7		GVi e	S	ci 9/D	98
WEW9CB		GSaG	S	ca9DD	88
WEWB7D		GSaG	S	ca9DD	88
WEWB89		GSaG	S	ca9DD	89
WEWB;B/Q	A0	GSaG	S	ca9DD	88
WEWC77/Q	;0	GSaG	S	ca9DD	8;
WEWC79/Q	;0	GSaG	S	ca9DD	8;
WEWC7>/Q	;0	GSaG	S	ca9DD	8;
WEWC7B		GSaG	S	ca9DD	8;
WEWC7D		GSaG	S	ca9DD	8;
WEWC87/Q	;0	GSaG	S	ca9DD	8;
WEWC89/Q	;0	GSaG	S	ca9DD	8>
WEWC8>/Q	>0	GSaG	S	ca9DD	8;
WEWC8B		GSaG	S	ca9DD	8;
WEWC8D/Q	>0	GSaG	S	ca9DD	8>
WEWC99/Q	;0	GSaG	S	ca9DD	8;
WEWC9>/Q	>0	GSaG	S	ca9DD	8>
WEWC9D/Q	;0	GSaG	S	ca9DD	8>
WEWC9E/Q	;0	GSaG	S	ca9DD	8>
WEWC;9/Q	>0	GSaG	S	ca9DD	8A
WEWC;>		GSaG	S	ca9DD	8>
WEWC>7/Q	>0	GSaG	S	ca9DD	8;
WEWC>9/Q	A0	GSaG	S	ca9DD	8B
WEWCA7/Q	;0	GSaG	S	ca9DD	8;
WEWCA9/Q	;0	GSaG	S	ca9DD	8;
WEWCB7/Q	>0	GSaG	S	ca9DD	8>
WEWCB9/Q	>0	GSaG	S	ca9DD	8;
WEWCB>/Q	>0	GSaG	S	ca9DD	8A
WEWCBB/Q	>0	GSaG	S	ca9DD	8>
WEWCBD/Q	>0	GSaG	S	ca9DD	8;
WEWCC7/Q	A0	GSaG	S	ca9DD	89
WEWCC9		GSaG	S	ca9DD	88
WEWCD7/Q	>0	GSaG	S	ca9DD	8A
WEWCD9/Q	A0	GSaG	S	ca9DD	89
WEWCE7		GSaG	S	ca9DD	8;
WEWCE9		GSaG	S	ca9DD	8;
WEWCE>		GSaG	S	ca9DD	8;
WEWCEB		GSaG	S	ca9DD	8;
WEWD77		GSaG	S	ca9DD	88
WEWD79/Q	>0	GSaG	S	ca9DD	8>
WEWD7>/Q	>0	GSaG	S	ca9DD	8A
WEWD7B/Q	>0	GSaG	S	ca9DD	8A

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			CCM	x		9
WEWD7D/Q	A0		GSaG	S	ca9DD	89
WEWD89			GSaG	S	ca9DD	88
WEWD8>/Q	A0		GSaG	S	ca9DD	8B
WEWD8B/Q	A0		GSaG	S	ca9DD	89
WEWD97			GSaG	S	ca9DD	89
WEWD;7			GSaG	S	ca9DD	88
WEWD;9/Q	>0		GSaG	S	ca9DD	8A
WEWD;>			GSaG	S	ca9DD	89
WEWD;B/Q	A0		GSaG	S	ca9DD	89
WEWD;C/Q	A0		GSaG	S	ca9DD	8B
WEWD>7			GSaG	S	ca9DD	88
WEWD>B/Q	A0		GSaG	S	ca9DD	8C
WEWDD>/Q	A0		GSaG	S	ca9DD	88
WEWDEB			GSaG	S	ca9DD	88
WEWRD;7			GSaG	S	ca9DD	88
WEWS C9>			GSaG	S	ca9DD	8>
WEWb C;9			GSaG	S	ca9DD	8A
Y Ed B87			GiV	S	eS9DD	9E
Y Ed B8A			GiV	S	eS9DD	9E
Y Ed B;7			GiV	S	eS9DD	9E
Y Ed BE9/Q	A0		GiV	S	eS9DD	9E
Y Ed C77			GiV	S	eS9DD	;7
Y Ed C98			GiV	S	eS9DD	;7
Y Ed C99			GiV	S	eS9DD	;7
Y Ed C9>			GiV	S	eS9DD	;7
Y Ed C>7			GiV	S	eS9DD	;7
Y Ed C>9			GiV	S	eS9DD	;7
Y Ed C>>			GiV	S	eS9DD	;7
Y Ed C>B			GiV	S	eS9DD	;7
Y Ed C>D			GiV	S	eS9DD	;7
Y Ed CA7			GiV	S	eS9DD	;7
Y Ed CB7			GiV	S	eS9DD	;7
Y Ed CB8			GiV	S	eS9DD	;7
Y Ed CB9			GiV	S	eS9DD	;7
Y Ed CB;			GiV	S	eS9DD	;7
Y Ed CD7/Q	>0		GiV	S	eS9DD	;7
Y Ed CD9			GiV	S	eS9DD	;7
Y Ed CD>			GiV	S	eS9DD	;7
Y Ed CDB/Q	>0		GiV	S	eS9DD	;7
Y Ed CDD			GiV	S	eS9DD	;7
Y Ed D77			GiV	S	eS9DD	;7
Y Ed D79			GiV	S	eS9DD	;7
Y Ed D7>			GiV	S	eS9DD	;7
Y Ed D7A/Q	>0		GiV	S	eS9DD	;7
Y Ed D7E			GiV	S	eS9DD	;7
Y Ed D8A			GiV	S	eS9DD	;7
Y Ed D8B			GiV	S	eS9DD	;7
Y Ed D8C			GiV	S	eS9DD	;7
Y Ed D97			GiV	S	eS9DD	;7
Y Ed D9>			GiV	S	eS9DD	;7
Y Ed D9D			GiV	S	eS9DD	9E
Y Ed D;7			GiV	S	eS9DD	;7
Y Ed D;9			GiV	S	eS9DD	;7
Y Ed D>>			GiV	S	eS9DD	9E
Y Ed D>B			GiV	S	eS9DD	9E
Y Ed DA>			GiV	S	eS9DD	9E
Y Ed DAB			GiV	S	eS9DD	9E
Y Ed DAC			GiV	S	eS9DD	9E
Y Ed DAD			GiV	S	eS9DD	9E
Y Ed DAE			GiV	S	eS9DD	9E

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		CCM	x		9
Y Ed DB9		GiiV	S	eS9DD	9E
Y Ed DB>		GiiV	S	eS9DD	9E
Y Ed DBA		GiiV	S	eS9DD	9E
Y Ed DBB		GiiV	S	eS9DD	9E
Y Ef BC7 /Q	A0	NNie	S	eV9DD	;8
Y Ef BC9 /Q	A0	NNie	S	eV9DD	;8
Y Ef BCB /Q	>0	NNie	S	eV9DD	;8
Y Ef BCD		NNie	S	eV9DD	;8
Y Ef BD7		NNie	S	eV9DD	;8
Y Ef BDB /Q	A0	NNie	S	eV9DD	;8
Y Ef BE7 /Q	A0	NNie	S	eV9DD	;8
Y Ef BE9 /Q	>0	NNie	S	eV9DD	;8
Y Ef BE> /Q	>0	NNie	S	eV9DD	;8
Y Ef BEB /Q	>0	NNie	S	eV9DD	;8
Y Ef BED /Q	A0	NNie	S	eV9DD	;8
Y Ef C79 /Q	A0	NNie	S	eV9DD	;8
Y Ef DC7 /Q	>6A0	NNii	S	eV9DD	;8
Y Ef DC9 /Q	>6A0	NNie	S	eV9DD	;8
Y Ef DD7 /Q	A0	NNie	S	eV9DD	;8
Y Ef DD9 /Q	>0	NNie	S	eV9DD	;8
Y Ef DE7 /Q	A0	NNie	S	eV9DD	;8
Y Ef DEB /Q	>0	NNie	S	eV9DD	;8
Y Ef DED /Q	A0	NNie	S	eV9DD	;8
Y MOWQ5f QOT M6>B /Q	90	GNDDD	a	GNS9DD	BB
Y MOWQ5f QOT N6>B /Q	90	GNDDD	a	GNS9DD	BB
Y MOWQ5f QOT O6>B /Q	90	GNDDD	a	GNS9DD	BB
Y Pe 7B5j A5>7		GNDNS	a	GPV9DD	C7
Y UPd 7>5795B M6> /Q	90	SGGe	S	GDN9DD	>D
Y UPd 7>5795B N6> /Q	90	SGGe	S	GDN9DD	>D
Y UPd 7B57959		VSiG	a	GDN9DD	A8
Y UPd 7B57959 N		VSiG	a	GDN9DD	A8
Y UPd 7B57959 O		VSiG	a	GDN9DD	A8
Y UPd 7B57959 P		VSiG	a	GDN9DD	A8
Y UPd 7B5795B		aGcc	a	GDN9DD	A9
Y UPd 7B5795B P		aGcc	a	GDN9DD	A;
Y UPd 7B5795B T		aGcc	a	GDN9DD	A;
Y UPd 7B5795B h /Q	80	aGcc	a	GDN9DD	A;
Y UPd 7B5795B h6> /Q	90	aGcc	a	GDN9DD	A9
Y UPd 7B5795B h6>8 /Q	90	aGcc	a	GDN9DD	A9
Y UPd 7B5795B k /Q	80	aGcc	a	GDN9DD	A;
Y UPd 7B5795B c		aGcc	a	GDN9DD	A;
Y UPd 7B5795B g /Q	80	aGcc	a	GDN9DD	A;
Y UPd 7B5795B g6> /Q	90	aGcc	a	GDN9DD	A9
Y UPd 7B5795B i /Q	80	aGcc	a	GDN9DD	A;
Y UPd 7B5795B i 6> /Q	90	aGcc	a	GDN9DD	>D
Y UPd 7B5795B l 6>8 /Q	90	aGcc	a	GDN9DD	A9
Y UPd 7B5975>A		iccG	a	GND9DD	AA
Y UPd 7B5975>A M		iePi	a	GND9DD	AB
Y UPd 7B5975>A M9		iePi	a	GND9DD	AC
Y UPd 7B5975>A N; /Q	80	iePi	a	GND9DD	AD
Y UPd 7B5975>A O		iePi	a	GND9DD	AB
Y UPd 7B5975>A O6> /Q	90	iePi	a	GND9DD	AC
Y UPd 7B5975>A P		iePi	a	GND9DD	AE
Y UPd 7B5975>A P; /Q	80	iePi	a	GND9DD	AD
Y UPd 7B5975>A P6>8 /Q	90	iePi	a	GND9DD	AC
Y UPd 7B5975>A PP /Q	80	iePi	a	GND9DD	B7
Y UPd 7B5975>A Q		iePi	a	GND9DD	AD
Y UPd 7B5975>A Q9 /Q	80	iePi	a	GND9DD	AD
Y UPd 7B5975>A Q; /Q	80	iePi	a	GND9DD	AE
Y UPd 7B5975>A Q6>8 /Q	90	iePi	a	GND9DD	AD

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		CCM	x		9
Y UPd 7B8975>A T		i ePi	a	GND9DD	AD
Y UPd 7B8975>A U>8 /Q	90	i ePi	a	GND9DD	AA
Y UPd 7B8975>A Y >8 /Q	90	i ePi	a	GND9DD	AC
Y UPd 7B89; 5AB M6; /Q	90	GGGNN	a	GNP9DD	BA
Y UPd 7B89; 5AB M6>8 /Q	90	GGGNN	a	GNP9DD	BA
Y UPd 7B89; 5AB N6>8 /Q	90	GGGNN	a	GNP9DD	BA
Y UPd 7B89>5BA		GGi VV	a	GNS9DD	BC
Y UPd 7B89>5BA M6>9 /Q	90	GGi VV	a	GNS9DD	BC
Y UPd 7B89>5BA N6>9 /Q	90	GGi VV	a	GNS9DD	BC
Y UPd 7B89>5BA O6>9 /Q	90	GGi VV	a	GNS9DD	BC
Y UPd 7B5; A5>7		GNDNS	a	GPV9DD	C7
Y UPd 7B5; A5>7 O		GNDNS	a	GPV9DD	C7
Y UPd 7B5; A5>7 S		GNDNS	a	GPV9DD	C8
Y UPd 7B5; A5>7 T		GNDNS	a	GPV9DD	C8
Y UPd 7B5; A5>7 V8 /Q	80	GNDNS	a	GPV9DD	C;
Y UPd 7B5; A5>7 V6; /Q	80	GNDNS	a	GPV9DD	C9
Y UPd 7B5; A5>7 X8		GNDNS	a	GPV9DD	C;
Y UPd 7B5; A5>7 Y ; /Q	80	GNDNS	a	GPV9DD	C9
Y UPd 7B5; A5>7 Z6; /Q	80	GNDNS	a	GPV9DD	C9
Y UPd 7B5; A5>7 b6>8 /Q	90	GNDNS	a	GPV9DD	C;
Y UPe 7B5795B9		VSi G	a	GDN9DD	A8
Y UPe 7B5795B9 N		VSVP	a	GDN9DD	A8
Y UPe 7B5795B9 O		VSi G	a	GDN9DD	A8
Y UPe 7B5795B9 P6;		VSi G	a	GDN9DD	A8
Y UPe 7B8975; 7		eeNN	a	GND9DD	AA
Y UPe 7B8975; 7 Z		eeNN	a	GND9DD	AA
Y UPe 7B8975; 7 Z8		eeNN	a	GND9DD	AA
Y UPe 7B8975>A N		i ePi	a	GND9DD	AD
Y UPe 7B5; A5>7		GNDNS	a	GPV9DD	C>
Y UPe 7B5; A5>7 N		GNDNS	a	GPV9DD	C>
Y UPe 7B5; A5>7 P		GNDNS	a	GPV9DD	CA
Y UTd 7B8975>A M>8 /Q	90	i ePi	a	GND9DD	AC
Y Ubd 7B8975>A M;		i eSD	a	GND9DD	AB
Y Ubd 7B8975>A O;		i eSD	a	GND9DD	AB
Y Ube 7B8975; 7		eeND	a	GND9DD	AA
Y Ube 7B8975>A		i eSD	a	GND9DD	B8
Y Ube 7B8975>A M		i eSD	a	GND9DD	B8
Y Ube 7B8975>A N		i eSD	a	GND9DD	B8
Y Ube 7B8975>A O		i eSD	a	GND9DD	B8
dEY >79		GVi e	S	eD9DD	9D
dEY >7>		GVi e	S	eD9DD	9D
dEY >7D		GVi e	S	eD9DD	9D
dEY >7E		GVi e	S	eD9DD	9D
dEY >8;		GVi e	S	eD9DD	9D
dEY >8>		GVi e	S	eD9DD	9D
dEY >A7		GVi e	S	eD9DD	9D
dEY >A9		GVi e	S	eD9DD	9D
dEY >A;		GVi e	S	eD9DD	9D
eDg C97 /ea RUY 95>P0		NSSV	S	i P9DD	>7
eDg C99 /ea RUY 95>P0		NSSV	S	i P9DD	>7
eDg C; 7 /ea RUY 95>P0		NSSV	S	i P9DD	>7
eDg C; 8		NSSV	S	i P9DD	>7
eDg C>9		NVDD	S	i P9DD	>7
eDg C>D		NSSV	S	i P9DD	>7
eDg CA7		NVDD	S	i P9DD	>7
eDg CA9		NVDD	S	i P9DD	>7
eDg CAD		NVDD	S	i P9DD	>7
eDg CD7		NVDD	S	i P9DD	>7
eDg CD9		NVDD	S	i P9DD	>7
eEg C79		NVDD	S	i P9DD	; E

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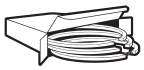
		CCM	x		9
eEg C8>		NVDD	S	i P9DD	; E
eEg C>7		NVDD	S	i P9DD	; E
eEi C77		NeDD	S	i S9SD	>8
eEi C79		NeDD	S	i S9SD	>8



BC75D77	S	9	**D>Avv**	**8E49B**	**i**	**3Na8PV**	**4**	**bx**	**f P99>DE**
D77 78	S	9	**D>Avv**	**9A**	**i**	**3PS**	**4**	**bx**	**f P; 79>**
D7757 9	S	9	**D>Avv**	**9849B**	**i**	**3Ni 8PV**	**4**	**bx**	**f P98; D;**
D77 7A	S	9	**D>Avv**	**9949A**	**i**	**3PD8PS**	**4**	**bx**	**f P; 79A**
D77 C7A	S	9	**D>Avv**	**8E49B**	**i**	**3Na8PV**	**4**	**bx**	**f P>DA9**
D77 C87	S	9	**D>Avv**	**9B49C**	**i**	**3Pa8Pc**	**4**	**bx**	**f P; 79D**
N8N C7C	S	9	**D>Avv**	**98**	**i**	**3Ni**	**4**	**bx**	**f P>DAA**

7 31<	4329 5 452<<	JG_VNOTK 31<	3629 3 3629 5
7 HzoÖ2S Va 31<	3=299 3: 2<=	XUJKU 7 31<	3<2 4 442<4
8 31<	432 5 452<7	XUJKU 9 31<	382 3 3<2 6
9 31<	432 = 372<3		

DC4; ; ; ; 77477

M 63183
P 97183
49É83

7D4; ; ; ; 77477

41 8 I X V
5183 V
6183 V

P>RC79	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P8B9C9**
P>RC7>	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P8B9C;**
P>RC7B	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P9897A**
P>RC7D/Q ; 0	S	9	**88>Evv**	**>>**	**i**	**3aD**	**4**	**bx**	**f P8E78>**
P>RC89	S	9	**88>Evv**	**A74AA**	**i**	**3ae8cV**	**4**	**bx**	**f P8B8DB**
P>RC8>	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P8B8DC**
P>RC8B	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P8C9C7**
P>RC99	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P8EBC8**
P>RC9D	S	9	**88>Evv**	**A>4AA**	**i**	**3cP8cV**	**4**	**bx**	**f P9897B**
P>RC; 7	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P9897C**
P>RC; 9	S	9	**88>Evv**	**A; 4AA**	**i**	**3cN8cV**	**4**	**bx**	**f P9; A9D**
P>RC>7	S	9	**88>Evv**	**>D4AA**	**i**	**3aV8cV**	**4**	**bx**	**f P8D>98**
P>RC>9	S	9	**88>Evv**	**AA4AD**	**i**	**3cV8ci**	**4**	**bx**	**f P9>DEA**
P>RCB>	S	9	**88>Evv**	**>; 4AD**	**i**	**3/e8ci**	**4**	**bx**	**f P8DA; 7**
P>RCC9	S	9	**88>Evv**	**AA4AB**	**i**	**3cV8ca**	**4**	**bx**	**f P97>>>**
P>RCE7	S	9	**88>Evv**	**AA**	**i**	**3cV**	**4**	**bx**	**f P9E89;**

I RQU 0415 49a	3923 4 3<249	SUJ_Y 2MXGTJ SUJ_Y 415	45237
I RQU 00415	4323 8 45247	SUJ_Y 2MXGTJ SUJ_Y 415 49a	4323<
I RQU 00415 49a	3923 8 45247	YGTJKXU2/ZKVb Gd 00415 49a	45246
I RQU 0a 415 49a	44245	ZNGRGG 0415 49a	37235
I RQU 0a 415 RVM 49a	44245 39248	ZNGRGG 00415 49a	3=23< 39247
QGTMJU 415 49a	39234	ZNGRGG 00415 RVM	34243 45246
QGTMJU KÉ´p°° 415 49a	43234	ZNGRGG 00415 49a	45246
RUMGT 00415 49a	45246	ZNGRGG 00415 RVM	36247
RUMGT 00415 49a RVM	45246	Zb OTMJ 0415	34234 39245
RUMGT2/ZKVb Gd 00415	44246	Zb OTMJ 0415 49a	34234 3923:
RUMGT2/ZKVb Gd 00415 49a RVM	44246	Zb OTMJ 00415 49a	3623:

DC4>A7777477
DC4>A777C477 *mT m*

M 591 3
N4 4143
N 93163
P 771 3
4<É87

4153 TZ
4183 V
5183 I X

7D4>A7777487
7D4>A777C487 *mT m*

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

PCR C77	S	9	**88>Evv**	**>74>> i**	3/S8aD	4	**bx**	**f PAA97**
PCR C78	S	9	**88>Evv**	**>74>> i**	3/S8aD	4	**bx**	**f PAA98**
PCR C79	S	9	**88>Evv**	**>;4>> i**	3/e8aD	4	**bx**	**f P8B9C>**
PCR C7;	S	9	**88>Evv**	**>;4>> i**	3/e8aD	4	**bx**	**f P8B9CA**
PCR C7>	S	9	**88>Evv**	**>;4>> i**	3/e8aD	4	**bx**	**f P8B9CB**
PCR C7B	S	9	**88>Evv**	**>;4>> i**	3/e8aD	4	**bx**	**f P8D8CD**
PCR C87	S	9	**88>Evv**	**>;4>> i**	3/e8aD	4	**bx**	**f PEB9>**
PCR C97	S	9	**88>Evv**	**>; i**	3/e	4	**bx**	**f P8>;9D**
PCR C99	S	9	**88>Evv**	**>;4>> i**	3/e8aD	4	**bx**	**f P8B;9B**
PCR C9B	S	9	**88>Evv**	**>; i**	3/e	4	**bx**	**f P8>;9E**
PCR C;7	S	9	**88>Evv**	**>74>; i**	3/S8Ve	4	**bx**	**f PAA99**
PCR C>B	S	9	**88>Evv**	**>; i**	3/e	4	**bx**	**f P8C9BC**
PCR CB>	S	9	**88>Evv**	**>; i**	3/e	4	**bx**	**f P97E7;**
PCR CBB/Q >0	S	9	**88>Evv**	**>; i**	3/e	4	**bx**	**f P8EBC7**

I RQJ 0415	342=9 3=2=<	QGTMJU KÉ¹´p°° 415	3<2=:
I RQJ 00415	3=2=<	ZNGRQG 0415	3523=< 43236
I RQJ 00415 RVM	3=2=< 3923=	Zb OTMJ 0415	382=9 3923:
QGTMJU 415	3<2=:	Zb OTMJ 0415 RVM	43236 3923:

DC487>877477
DC487>87C477 *mT m*

M 5: 133
P 83183
4<É85

4183 I X V
4183 V
5183 I X V

7D487>877477
7D487>87C477 *mT m*

BDD79	S	9	**887Dvv**	**>8 i**	3/a	4	**bx**	**f P;789**
BDD7;	S	9	**887Dvv**	**9A4;E i**	3PS8/P	4	**bx**	**f P99>E9**
BDD87	S	9	**887Dvv**	**9A4;E i**	3PS8/P	4	**bx**	**f P98;D9**
BDD88	S	9	**887Dvv**	**9A4;E i**	3PS8/P	4	**bx**	**f P9D8D7**
BDDC88	S	9	**887Dvv**	**9A i**	3PS	4	**bx**	**f P;78>**
BDDC89	S	9	**887Dvv**	**9A4;A i**	3PS8Se	4	**bx**	**f P;78A**
BDDC8;	S	9	**887Dvv**	**;; i**	3SV	4	**bx**	**f P;78;**
O8Q/BDD5780	S	9	**887Dvv**	**9A4;E i**	3PS8/P	4	**bx**	**f P99>E7**
O8QC77	S	9	**887Dvv**	**;A4;B i**	3Se8Si	4	**bx**	**f P;877**
O8QC8A	S	9	**887Dvv**	**;A i**	3Se	4	**bx**	**f P;879**

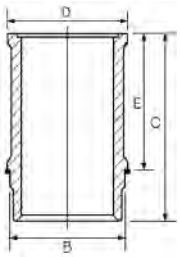
O8Q CA7	S 9	**887Dvv**	**; ; 4; A i**	3SV8Se 4	**bx**				**f P; 87B**
O8Q CA9	S 9	**887Dvv**	**; ; 4; > i**	3SV8Sa 4	**bx**				**f P; 87C**
O8Q CA>	S 9	**887Dvv**	**; ; 4; > i**	3SV8Sa 4	**bx**				**f P; 87D**
O8Q CAB	S 9	**887Dvv**	**; ; i**	3SV 4	**bx**				**f P; 87E**
O8Q CB7	S 9	**887Dvv**	**; ; i**	3SV 4	**bx**				**f P; 887**
O8Q CB9	S 9	**887Dvv**	**; ; 4; B i**	3SV8Si 4	**bx**				**f P; 888**
O8Q CB>	S 9	**887Dvv**	**; B i**	3Si 4	**bx**				**f P; 889**
O8Q CE9	S 9	**887Dvv**	**; ; i**	3SV 4	**bx**				**f P; 88;**

7 414	352 < 392=3	44 414	362=6 392=9
7 HzoÖ2S Va 414	432 9 3: 2<=	I RQU O414	342=4 3=2=<
8 414	3=2=3 452=8	KYZGLKZZK 414	3529 5 452=4
9 414	3=2 3 372=<	XGVQJ HzoÖ2S Va 414	3: 2=8 372=8
< 414	44295 432 5	XUJKU 8 414	442=4 452=<
= 414	3=2=4 382=<	XUJKU 9 414	3=2 6 442=4
43 414	38299 432 5	Y_VKX 8 414	432=7 452=9

M 73133
P 9<133
4<É95

7D4; ; >B77477

41 8 I X V
5133 V
6133 I X



N : 8133 **O** 468133 **P** <81 3 **Q** =71=3

DE4; ; >B77477

Vt°Bzy l ®tWmp ty QtßYpßzyŵ Yßppw Ømvßop° °pl w Rtyp´ l ®tWmp ty QtßYpßzyŵ

Qzwmpy y°´ tx G°°px mŵp´s vßWns Yß sw Ynswp ßJtnsß°yr py pty eÖWyop´w°qm°ns°p y°´ ty G°°px mtp° ®p´q r m´

Vt°Bzy ot°' zytmwp py vtß°p°wpx pyß Gntp´ Ømvßop° uztyß° I spx t°p ot°' zytmwp py vtß°p°wpx pyß

Vt°ß y ot°' zytmwp py nzyu°yBz° °zwlx pyßp1 Gnp´z Ømvß©p w°° °pww° I l x t°l ° ot°' zytmwp py nzyu°yBz° °zwlx pyßp1

O' t°Bzyt°zyz ot°' zytmtW°zwr ty vtßx zBz´p Gnntl tz I zx ' ´pyop wp r °l ´ytÜzyt I tWyo´z ot°' zytmtwp °zwr ty vtßx zBz´p

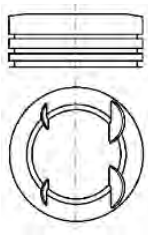
T>N >77	P 9	**DEDvv**	**BB i**	3 D 4	**bx**	**f u U x v xw**			**f P; 9; 7>**
T>N >78	P 9	**DEDvv**	**BB4D7 i**	3 D8GDi 4	**bx**	**f u U x v xw**			**f P; 9; 7B**
T>N >7D	P 9	**DEDvv**	**AB4BB i**	3ca8i D 4	**bx**	**f u U x v xw**			**f P; >8; D**
T>N >A;	P 9	**DEDvv**	**BD i**	3 N 4	**bx**	**f u**			**f P; CBA7**

I GVZ_X O31=ZI p =3	39246	ZNGRQG O31=ZI p	39247
I RQU Qa 31=ZI p : 8	3824<	Zb OTMJ O31=ZI p =3	3=247
I RQU Qa 31=ZI p =3	44245	Zb OTMJ O31=ZI p =8	3624=
RUMGT O0ZI p =3	3524: 45253	Zb OTMJ O31=ZI p 443	44249
YGTJKXU2YZKVb Gd O0ZI p =3	3=248		

DC4>A7>77487

M 64157: x x
N4 71 37x x
N 94187x x
O 51=5: x x
O 3178: x x
P 7<t 7
4=1=É76133

f b



7D4>A7>77477

41 3 VaJ TZ
4133 V
5133 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

TAR >77 /Q	**A6B0**	S 9	**88ECvv**	**D>4DA i**	3GGS8GGa 4	**bx**	**f u U x v xw**		**f P9BBDD**
TAR >79 /Q	**A6B0**	S 9	**88EDvv**	**DA i**	3GGa 4	**bx**	**f u U x v xw**		**f P9C8C;**
TAR >7; /Q	**A6B0**	S 9	**88ECvv**	**D; 4DD i**	3GGP8GND 4	**bx**	**f u U x v xw**		**f P; 98; D**

TAR>7>/Q	**A6B0**	S 9	**88EDvv**	**EC i**	3GPN 4	**bx**	**f u U x v xw**	**f P9CEDE**
TAR>7D/Q	**A6B0**	S 9	**88EOvv**	**C>4EC i**	3GDG8GPN 4	**bx**	**f u U x v xw**	**f P; 9>8A**
TAR>89/Q	**A6B0**	S 9	**88EOvv**	**D>4EC i**	3GGV8GPN 4	**bx**	**f u U x v xw**	**f P; ; >8E**

I GVZ_X 0415 Z	39246	QGTMJU 2MKGTJ QGTMJU 0415 ZI p 448	3: 246
I GVZ_X 0415 ZI p	3524<	S KMGTK I I 415 ZI p	3=245
I GVZ_X 0415 ZI p 453	39246	S KMGTK 0415 ZI p	36245
I R0U @a 415 ZI p 453	36246	S KMGTK @a 415 ZI p 433	44248
MKGTJ YI T0 0415 ZI p	37245	S KMGTK @a 415 ZI p 463	44248
MKGTJ YI T0 @a 415 ZI p 448	3=249	S KMGTK @a 415 Znp 463	43249
MKGTJ YI T0 @a 415 ZI p 463	3=249	YI T0 0415 ZI p	37245
QGJPGX 415 ZI p 463	39248	YI T0 @a 415 ZI p 448	3=249
QGTMJU KÉ' ´p°° 415 ZI p 448	3: 246	YI T0 @a 415 ZI p 463	3=249

DC4>A7>77477
36245

M 64158
N4 8133
N 8: 133
O 5183
O 414<
P 7=133
53É7:

df f b

7D4>A7>77477

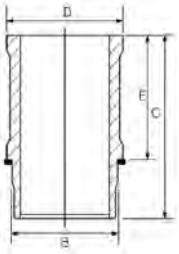
4153 VaJ TZ
4183 V
5133 TZ

=5vb
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

O; S C77	S 9	**89; Evv**	**>7 i**	3/V 4	**bx**	**f P; 8C9**
O; S C79	S 9	**89; Evv**	**>7 i**	3/V 4	**bx**	**f PAA8A**
O; S C87	S 9	**89; Evv**	**>7 i**	3/V 4	**bx**	**f P; 8C;**
O; S C89	S 9	**89; Evv**	**>7 i**	3/V 4	**bx**	**f P8BA>A**
O; S C97	S 9	**89; Evv**	**>7 i**	3/S 4	**bx**	**f P8>; 8>**
O; S CA7	S 9	**89; Evv**	**>7 i**	3/S 4	**bx**	**f P99; AB**

I R0U 0415	392=7 352=<	XGVQJ HzoÖ2S Va 415	3=2=4 362=<
KcVXKYY 415	3: 2=8 432==	Zb CTMJ 0415	362=6 432=9

8>4B; 7897477

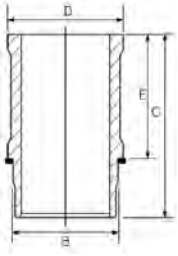


N : <193 **O** 468133 **P** <<153 **Q** =71=3

89E	S 9	**898Dvv**	**>94>; i**	3/c8/e 4	**bx**	**f P; 77C**

47 415	382 9	452<6	

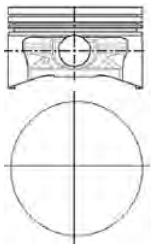
8A4B; BC77477 **N** : =183 **O** 455133 **P** <=153 **Q** <5183



Ojnvßop° °pl vß	Ynsvkp ßJtnsß°yr py pty	Ojnvßßop° uztyß°	Ojnvß Öp wr° °pwr°	I zx ' ´pyop wp r °I ´ytÜzyt
QBV C77	S 9 **8; E7vv**	**AC4AE i** 3ce8eD 4	**bx**	**f P; 8D;**
QBV C78	S 9 **8; E7vv**	**AC4AE i** 3ce8eD 4	**bx**	**f P; 8D>**
QBV C; >	S 9 **8; E7vv**	**>; 4>> i** 3aD8aD 4	**bx**	**f P; 8DE**
QBV C; D	S 9 **8; E7vv**	**>; i** 3aD 4	**bx**	**f P; 8E7**
QCV B9>	S 9 **8; E7vv**	**A9 i** 3cG 4	**bx**	**f PAA9B**
QCV B9B	S 9 **8; E7vv**	**AA i** 3cV 4	**bx**	**f P8B; B9**
QCV B; >	S 9 **8; E7vv**	**AA i** 3cV 4	**bx**	**f P8C9C8**
QCV B; A	S 9 **8; E7vv**	**AA i** 3cV 4	**bx**	**f P8C9C9**
QCV C8D	S 9 **8; E7vv**	**AD i** 3ci 4	**bx**	**f P; 97A**
QCV C8E	S 9 **8; E7vv**	**AD i** 3ci 4	**bx**	**f P; 97B**
QCV C97	S 9 **8; E7vv**	**>; 4AE i** 3/e8eD 4	**bx**	**f P; 97C**
QCV C9>	S 9 **8; E7vv**	**A>4AE i** 3cP8eD 4	**bx**	**f P; 97D**
QCV C9B	S 9 **8; E7vv**	**AA4AE i** 3cV8eD 4	**bx**	**f PAA7D**
QCV C9D	S 9 **8; E7vv**	**AD4AE i** 3ci 8eD 4	**bx**	**f P; 97E**
QCV C>9	S 9 **8; E7vv**	**AA i** 3cV 4	**bx**	**f P; 989**
QCV CA>	S 9 **8; E7vv**	**AA4AE i** 3cV8eD 4	**bx**	**f P; 988**
QCV CB>	S 9 **8; E7vv**	**AA i** 3cV 4	**bx**	**f P>DAD**
QCV CC;	S 9 **8; E7vv**	**AA4AE i** 3cV8eD 4	**bx**	**f P; 98;**
QCV CD7	S 9 **8; E7vv**	**AA i** 3cV 4	**bx**	**f PEB9;**

4=0417	342<< 452=5	S KMGTK 0417	3=2=9 3<236
4=00417	342=5 452=<	S KMGTK 0417 p	342=9 3<236
I R0U 0417	342=4 3=2=<	S KMGTK 0417 Knz	342=9 362==
I R0U 00417	3=2=< 38238	S KMGTK Ynpytn 417 t	342=: 3=2==
QGTMJU 417	3<2=:	XGVOJ HzoÖ2S Va 417	3=2=4 362=<
QGTMJU KÉ' ´p°° 417	3<2=: 3923<	XGVOJ HzoÖ2S Va 417 XT	3=2=4 3<2=6

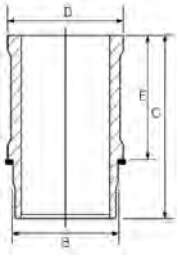
M 641t 3
P 851t 3
4=É93



7D4; ; B>77477
7D4; ; B>7C477 *mÏm*

4183		I X V
41t 8		V
6133		V

N <3193 **O** 463133 **P** =3153 **Q** =4183



DE4; ; B>77487

Vt°ßzy I ®tWvmp ty QtßYpßzyvÖ Ojnvßop° °pl vß Rtyp´ I ®tWvmp ty QtßYpßzyvÖ	Qzwnpy y°´ tx G°°px mvÖp´s vÖWns Ynsvkp ßJtnsß°yr py pty eÖWyop´vW°qm°ns°p y°´ ty G°°px mWp° ®p´q r m´	Vt°ßzy ot°' zytmwp py vtß°p°wpx pyß Ojnvßßop° uztyß° I spx t°p ot°' zytmwp py vtß°p°wpx pyß	Vt°ß y ot°' zytmwp py nzyu°yßz° °zwlx pyßp1 Ojnvß Öp wr° °pwr° I I x t°I ° ot°' zytmwp py nzyu°yßz° °zwlx pyßp1	O' t°ßzyt °zyz ot°' zytmtW°zwr ty vtßx zß´p I zx ' ´pyop wp r °I ´ytÜzyt I twyo´z ot°' zytmtwp °zwr ty vtßx zß´p

D>CC77	S 9	**8; EOvv**	**; A i** 3Se 4	**bx**	**f P; 7BC**
D>CC78	S 9	**8; EOvv**	**; A i** 3Se 4	**bx**	**f P; 7C9**

D>CC89	S 9	8; EOvv	>94>; i 3/e8Vi 4	bx			f P; 7BD
D>CC97	S 9	8; EOvv	>C i 3aS 4	bx			f PA7A>
O8VC77	S 9	8; EOvv	; A4; B i 3Se8VD 4	bx			f P; 899
O8VC8A	S 9	8; EOvv	>> i 3aD 4	bx			f P; 89;
O8VC>9	S 9	8; EOvv	>; 4>> i 3/e8aD 4	bx			f P; 89A
O8VCBD	S 9	8; EOvv	; E4>> i 3/P8aD 4	bx			f P; 89D
O8VCD7	S 9	8; EOvv	>; i 3/e 4	bx			f P; 8; 7
O9VC77	S 9	8; EOvv	A94A; i 3cG8cN 4	bx			f P; 8; C
O9VC8;	S 9	8; EOvv	>B i 3aP 4	bx			f P; 8; D
O9VC8C	S 9	8; EOvv	A; i 3cN 4	bx			f P; 8>8
O9VC8D	S 9	8; EOvv	>E4A7 i 3ac8ae 4	bx			f P; 8>;
O9VCAC	S 9	8; EOvv	>E4A7 i 3ac8ae 4	bx			f P; 8>C
O9VCC9	S 9	8; EOvv	>; 4>> i 3/e8aD 4	bx			f P; 8A>
O9VCD9	S 9	8; EOvv	>E i 3ac 4	bx			f P; 8AD
O9VCD>	S 9	8; EOvv	>> i 3aD 4	bx			f P; 8B8
O; VC77	S 9	8; EOvv	>; 4>> i 3/e8aD 4	bx			f P>DAB
O; VC79	S 9	8; EOvv	>; 4>> i 3/e8aD 4	bx			f P; 8CA
O; VC87	S 9	8; EOvv	>; 4>> i 3/e8aD 4	bx			f P; 8CB
O; VCB7	S 9	8; EOvv	>; 4>> i 3/e8aD 4	bx			f P; 8CE
O; VCB9	S 9	8; EOvv	>; 4>> i 3/e8aD 4	bx			f P; 8D7

8 417	342<5 452<8	L_KMJ 417 ZR2MZR	352<3 432<8
=417	3=2<4 452<<	XGVOJ HzoÖ2S Va 417	3: 2<8 3<2<4
44 417	362<6 452<<	XGVOJ HzoÖ2S Va 417 I I ß	3<2<< 362=<
4<417	372 < 3: 2<9	Y_VKX 8 417	432<7 3<2<3
4=0417	3: 2<< 382=6	Y_VKX 8 417 I I ß	432<8 452=9
4=0417 I I ß	342<= 372=5	ZXGL0 417	362<3 392=4
4=00417	372=5 452=8		

DC4; ; ; A77477

M 6: 183
P 97183
53É9:

7D4; ; ; A77477
7D4; ; ; A7C477 *mT m*

41 8 I X V
5183 V
7183 I X

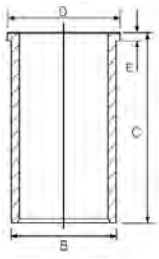
Y8ppw Y8 sw Gntp´ Gnp´z Gnntl tz

WEW9CB	S 9	8>B8vv	B9 i 3eS 4	P8l x f u U x v xw			f P9; DCB
WEWB7D	S 9	8>B8vv	AA4BB i 3cV8l D 4	P8l x f u U x v xw			f P9CBD9
WEWB; B /Q A0	S 9	8>B8vv	D8 i 3GGD 4	P8l x f u U x v xw			f P9D997
WEWCC9	S 9	8>B8vv	B; 4CB i 3ea8GDP 4	P8l x f u U x v xw			f P9; A>E
WEWD77	S 9	8>B8vv	A74B; i 3cV8ea 4	P8l x f u U x v xw			f P998E;
WEWD89	S 9	8>B8vv	B74BB i 3eN8l D 4	P8l x f u U x v xw			f P9>EBC
WEWD; 7	S 9	8>B8vv	B74BB i 3eN8l D 4	P8l x f u U x v xw			f P9ABE;
WEWD>7	S 9	8>B8vv	A7 i 3ae 4	P8l x f u U x v xw			f P998E>
WEWDD> /Q A0	S 9	8>B8vv	BB i 3 D 4	P8l x f u U x v xw			f P9CBEC
WEWDEB	S 9	8>B8vv	D8 i 3GGD 4	P8l x f u U x v xw			f P; ; B; D
WEWRD; 7	S 9	8>B8vv	B; i 3ea 4	P8l x f u U x v xw			f P9; ABB

I GVZ_X 0418 ol t	39246	QGTMJU KÉ' ´p°° 418 ol t 443	3=246
I GVZ_X 0418 ol t=3	39246	QGTMJU 2MKGTJ QGTMJU 00418 ol t : 3	3523<

I RQU 00418 ol t	39238 45245	QGTMJU 2MKGTJ QGTMJU 00418 ol t : 8	44245
I RQU Qa 418 ol t	44245	QGTMJU 2MKGTJ QGTMJU 00418 ol t <8	3523<
I RQU Qa 418 ol t =3	44245	QGTMJU 2MKGTJ QGTMJU 00418 ol t =3	3923<
J_YZKX 418 ol t	39244	QGTMJU 2MKGTJ QGTMJU 00418 ol t 443	36246
LR_KTI K 418 ol t	35243	RUJMd 418 ol t	34248
MKGTJ YI T0 00418 ol t	3723=	S KMGTK 00418 ol t	4423<
QGTMJU KÉ´ ´p°° 418 ol t : 3	3523<	S UJ_Y 2MKGTJ S UJ_Y 418 ol t	45237
QGTMJU KÉ´ ´p°° 418 ol t : 8	3=243	YGTJKXU2YZKVb Gd 00418 ol t	45246
QGTMJU KÉ´ ´p°° 418 ol t <8	3523<	YI T0 00418 ol t	3723=
QGTMJU KÉ´ ´p°° 418 ol t =3	3923=	ZNGRGG 00418 ol t	45246

8>4797BA7477 **N** : =143 **O** 475133 **P** <4133 **Q** 8133



WEWB89		S	9	**8>B8vv**	**AA4BB**	i	3cV8i D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9CBD;**
WEWCC7 /Q	**A0**	S	9	**8>B8vv**	**AA4BA**	i	3cV8ee	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9ABE8**
WEWCD9 /Q	**A0**	S	9	**8>B8vv**	**D8**	i	33GD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9CEE7**
WEWD7D /Q	**A0**	S	9	**8>B8vv**	**AA4BB**	i	3cV8i D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9B9AD**
WEWD8B /Q	**A0**	S	9	**8>B8vv**	**D74D8**	i	33Di 8GGD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P; AC8B**
WEWD97		S	9	**8>B8vv**	**AA4B;**	i	3cV8ea	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9ABE9**
WEWD; >		S	9	**8>B8vv**	**BB**	i	3 D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9; C>9**
WEWD; B /Q	**A0**	S	9	**8>B8vv**	**CD4D8**	i	33Da8GGD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9; C>;**

I RQU 00418 ol t	3<243 45247	RUMGT 00418 ol t	45246
I RQU Qa 418 ol t : 8	44245	RUMGT2YZKVb Gd 00418 ol t	45246
JUQQKX 418 ol t	45246	S KMGTK I I 418 ol t	39243
LR_KTI K 418 ol t	35243	S KMGTK 00418 ol t	4423<
MKGTJ YI T0 00418 ol t	3723=	S UJ_Y 2MKGTJ S UJ_Y 418 ol t : 8	43243
QGTMJU HK HUV 418 ol t	3923= 45245	S UJ_Y 2MKGTJ S UJ_Y 418 ol t =3	43243
QGTMJU KÉ´ ´p°° 418 ol t : 8	3=243	YGTJKXU2YZKVb Gd 00418 ol t	3424:
QGTMJU KÉ´ ´p°° 418 ol t =3	3923=	YI T0 00418 ol t	3723=
QGTMJU KÉ´ ´p°° 418 ol t 443	3=243	YI T0 00aGT 418 ol t	3723=
QGTMJU 2MKGTJ QGTMJU 00418 ol t : 8	44245	ZNGRGG 00418 ol t	3423=
QGTMJU 2MKGTJ QGTMJU 00418 ol t =3	3923<	ZNGRGG 00418 ol t	45246
QGTMJU 2MKGTJ QGTMJU 00418 ol t 443	3=243	Zb CTMJU 00418 ol t	43243 3=247
RGM_TG 00418 ol t	4323: 45248	Zb CTMJU 00418 ol t : 8	43243
RGZQ_JK 418 ol t	3: 243	Zb CTMJU 00418 ol t =3	43243
RUMGT 0418 ol t	39244		

DC489; >774>7
DC489; >7C4>7 *mT m*

M	741t 3
N4	46183
N	7: 133
O	3176
O	3158
P	99133
	59É93

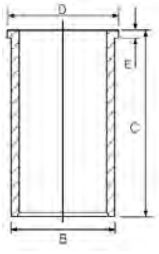
+98: Q 34,
MWWWdf f b

7D489; >774; 7
7D489; >7A4; 7 *mT*
7D489; >7C4; 7 *mT m*

5133		I Q V
5133		V
5183		I X V

LKZ-Ring

8>4797BA7477 **N** : =143 **O** 475133 **P** <4133 **Q** 8133



WEWC77 /Q	;0	S	9	8>B8vv	>A4A7	i	3aG8ae	4	P@ x	f u U x v	xw	f P8B98E
WEWC79 /Q	;0	S	9	8>B8vv	>A4B7	i	3aG8eN	4	P@ x	f u U x v	xw	f P8B;>>
WEWC7> /Q	;0	S	9	8>B8vv	>94>D	i	3/c8aV	4	P@ x	f u U x v	xw	f P8B;>;
WEWC7B		S	9	8>B8vv	>D4B7	i	3aV8eN	4	P@ x	f u U x v	xw	f P97EC>
WEWC7D		S	9	8>B8vv	>D4A7	i	3aV8ae	4	P@ x	f u U x v	xw	f P9B7>C
WEWC87 /Q	;0	S	9	8>B8vv	B7	i	3eN	4	P@ x	f u U x v	xw	f P8C>DD
WEWC8> /Q	>0	S	9	8>B8vv	>C4A7	i	3aS8ae	4	P@ x	f u U x v	xw	f P988C;
WEWC8B		S	9	8>B8vv	>A4B7	i	3aG8eN	4	P@ x	f u U x v	xw	f P998CE
WEWC99 /Q	;0	S	9	8>B8vv	B74B;	i	3eN8ea	4	P@ x	f u U x v	xw	f P8BA;>
WEWC>7 /Q	>0	S	9	8>B8vv	>C	i	3aS	4	P@ x	f u U x v	xw	f P97>>B
WEWCA7 /Q	;0	S	9	8>B8vv	AC4BA	i	3ce8ee	4	P@ x	f u U x v	xw	f P988;;
WEWCA9 /Q	;0	S	9	8>B8vv	>C4A7	i	3aS8ae	4	P@ x	f u U x v	xw	f P988;>
WEWCB9 /Q	>0	S	9	8>B8vv	A7	i	3ae	4	P@ x	f u U x v	xw	f P97E99
WEWCBD /Q	>0	S	9	8>B8vv	>D4A7	i	3aV8ae	4	P@ x	f u U x v	xw	f P8DA;B
WEWCE7		S	9	8>B8vv	>D	i	3aV	4	P@ x	f u U x v	xw	f P98>;D
WEWCE9		S	9	8>B8vv	A7	i	3ae	4	P@ x	f u U x v	xw	f P98>;E
WEWCE>		S	9	8>B8vv	>D4A7	i	3aV8ae	4	P@ x	f u U x v	xw	f P9;CEA
WEWCEB		S	9	8>B8vv	B;	i	3ea	4	P@ x	f u U x v	xw	f P9B7D7

I R@J @@418 ol t	39234	S KMGTK @@418 ol t	3=235 45243
I R@J @@418 ol t	38238 45245	S UJ_Y 2MKGTJ S UJ_Y 418 ol t	3=237
J_YZKX 418 ol t	35245	S UJ_Y 2MKGTJ S UJ_Y 418 ol t=3	43243
QGTMJU 418 ol t	45234	YI T@ @@418 ol t	39236 38239
QGTMJU KÉ´p°° 418 ol t	45234	ZNGRG6 @@418 ol t	39234
RUMGT KcVXKYY 418 ol t	3723:	ZNGRG6 @@418 ol t	3=23<
RUMGT @@418 ol t	37239	Zb OTMJ @@418 ol t	3623: 3=247

DC489; >77477
DC489; >7C477 *mT m*

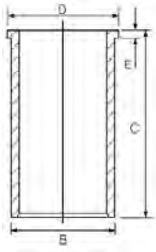
M 7419=
N4 461t 3
N 6=t 3
O 3193
P 99138
58É93

df f b

7D489; >77477
7D489; >7C477 *mT m*

5133 I Q V
5133 V
5183 TZ

8>4797BA7477



N : =143 **O** 475133 **P** <4133 **Q** 8133

DC489; >77487
DC489; >7C487 *mT m*

M 741<5
N4 461t 3
N 6=t 3
O 3193
P 99138
59É93

-88: 1836,

df f b

7D489; >77477
7D489; >7C477 *mT m*

5133 I Q V
5133 V
5183 TZ

WEWC89 /Q	;0	S	9	8>B8vv	C>	i	3GDD	4	P@ x	f u U x v	xw	f P8D>8E
WEWC8D /Q	>0	S	9	8>B8vv	B74B9	i	3eN8eS	4	P@ x	f u U x v	xw	f P988C8
WEWC9> /Q	>0	S	9	8>B8vv	B;	i	3ea	4	P@ x	f u U x v	xw	f P97EDD
WEWC9D /Q	;0	S	9	8>B8vv	C>4CD	i	3GDG8GDa	4	P@ x	f u U x v	xw	f P97C7B
WEWC9E /Q	;0	S	9	8>B8vv	C>	i	3GDG	4	P@ x	f u U x v	xw	f P97C7C

| | | |

WEWC>9/Q A0	S 9	8>B8vv	A7 i 3ae 4	P@t x f u U x v xw			f P;;>CC
WEWD8>/Q A0	S 9	8>B8vv	A7 i 3ae 4	P@t x f u U x v xw			f P;;>CD
WEWD;C/Q A0	S 9	8>B8vv	D8 i 3GGD 4	P@t x f u U x v xw			f P9B9>B

LR_KTIK 418 olt	35243	SKMGTK@0418 olt	3423=
MXGTJYI T0 @0418 olt	3723=	YI T0 @0418 olt	3723=
SKMGTKII 418 olt	39243	YI T0 @aGT 418 olt	3723=

DC489;>774A7
DC489;>7C4A7 *mTm*

M	741t7
N4	46183
N	7:133
O	3176
O	3158
P	99133
	59É93

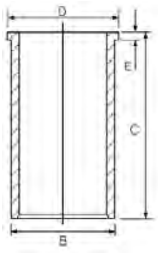
+98<0835,

MWdf fb

7D489;>774;7
7D489;>7A4;7 *mT*
7D489;>7C4;7 *mTm*

5133		IQV
5133		V
5183		IXV

8>4797BA7477 **N**:=143 **O** 475133 **P** <4133 **Q** 8133



WEWD>B/Q A0	S 9	8>B8vv	C74D8 i 3V8GGD 4	P@t x f u U x v xw			f P9>ACE

MXGTJYI T0 @0418 olt	44243	SKMGTK@0418 olt	3523=
RGM_TG 418 olt	36245 45248	YI T0 @0418 olt	44243
RGM_TG@0418 olt	4323: 45248	YI T0 @aGT 418 olt	34246
RUJMd 418 olt	37248 4524=	YI T0 @a 418 olt=8	3=249

DC489;>774>7
DC489;>7C4>7 *mTm*

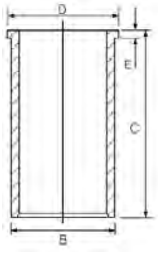
M	741t3
N4	46183
N	7:133
O	3176
O	3158
P	99133
	59É93

+98:0:34,

MWWWdf fb

7D489;>774;7
7D489;>7A4;7 *mT*
7D489;>7C4;7 *mTm*

5133		IQV
5133		V
5183		IXV



DC489;>774A7
DC489;>7C4A7 *mTm*

M	741t7
N4	46183
N	7:133
O	3176
O	3158
P	99133
	59É93

+98<0835,

MWdf fb

7D489;>774;7
7D489;>7A4;7 *mT*
7D489;>7C4;7 *mTm*

5133		IQV
5133		V
5183		IXV

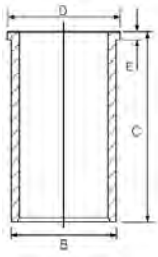
RDY C77	S 9	8AEBvv	>7 i 3W 4	P@t x			f P;9D9
RDY C97	S 9	8AEBvv	>7 i 3W 4	P@t x			f P;9D;
RDY C;7	S 9	8AEBvv	>7 i 3W 4	P@t x			f P;9D>

RDY C; B S 9 8AEBvv >7 i 3VV 4 P@t x f P; 9DA

RDY CB7 S 9 8AEBvv >7 i 3VV 4 P@t x f P; 9DB

=419 J	432=5 452<<	XGVQI HzoÕ2S Va 419 J	362=9 3<2=<
44 419 J	3<2=6 452<<	Y_VKX 8 419 J	432=7 452=9

8>479; C; 7477 O 47=133 P <6183 Q 7183



W>Y B8B	S	9	8AEDvv	CA4CC i	3GDN8GDV	4	bx f P9CBEA
W>Y BE7	S	9	8AEDvv	CA4DA i	3GDN8GGa	4	bx f P998DC
W>Y BEC	S	9	8AEDvv	CB4D9 i	3GDP8GGN	4	bx f P9; DEC
W>Y BED	S	9	8AEDvv	CC4D9 i	3GDV8GGN	4	bx f P9; DED
W>Y C77	S	9	8AEDvv	CE4DA i	3GDc8GGa	4	bx f P8; ; 7D
W>Y C78	S	9	8AEDvv	CE4DA i	3GDc8GGa	4	bx f P8; ; 7E
W>Y C7>	S	9	8AEDvv	CE4D7 i	3GDc8GDI	4	bx f P8B; >B
W>Y C7B	S	9	8AEDvv	BE4D9 i	3 S8GGN	4	bx f P988E;
W>Y C7C	S	9	8AEDvv	CE4D8 i	3GDc8GGD	4	bx f P9BA9;
W>Y C7D	S	9	8AEDvv	CA4DA i	3GDN8GGa	4	bx f P8B; >A
W>Y C7E	S	9	8AEDvv	CA4CE i	3GDN8GDc	4	bx f P988E>
W>Y C87	S	9	8AEDvv	CB4CE i	3GDP8GDc	4	bx f P8B98>
W>Y C88	S	9	8AEDvv	CE i	3GDc	4	bx f P8B98A
W>Y C89	S	9	8AEDvv	CA4D7 i	3GDc8GDI	4	bx f P988B;
W>Y C8>	S	9	8AEDvv	CE i	3GDc	4	bx f P988B>
W>Y C8B	S	9	8AEDvv	D9 i	3GGN	4	bx f P98977
W>Y C97	S	9	8AEDvv	CE i	3GDc	4	bx f P8B9BE
W>Y C9>	S	9	8AEDvv	CE i	3GDc	4	bx f P8B9C7
W>Y C; 7	S	9	8AEDvv	C74D8 i	3 V8GGD	4	bx f P988EA
W>Y C; 9	S	9	8AEDvv	BB4D9 i	3 D8GGD	4	bx f P97E88
W>Y C; >	S	9	8AEDvv	AD4BB i	3ci 8i D	4	bx f P97E89
W>Y C; B	S	9	8AEDvv	CE4DB i	3GDc8GGc	4	bx f P98978
W>Y C>7	S	9	8AEDvv	CE4D8 i	3GDc8GGD	4	bx f P8D>>A
W>Y C>9	S	9	8AEDvv	BB4DB i	3 D8GGc	4	bx f P97E8;
W>Y C>;	S	9	8AEDvv	BB4DB i	3 D8GGc	4	bx f P97E8>
W>Y C>> /Q >0	S	9	8AEDvv	AA4DA i	3cV8GDc	4	bx f P8EBC>
W>Y C>A /Q >0	S	9	8AEDvv	CE i	3GDc	4	bx f P8EBCA
W>Y C>D	S	9	8AEDvv	CE4DB i	3GDc8GGc	4	bx f P88ABC
W>Y CA7	S	9	8AEDvv	C7 i	3 V	4	bx f P8C>DE
W>Y CA9	S	9	8AEDvv	C7 i	3 V	4	bx f P8B; C7
W>Y CA;	S	9	8AEDvv	C7 i	3 V	4	bx f P8C>E>
W>Y CA>	S	9	8AEDvv	ED i	3GPP	4	bx f P988CB
W>Y CB7	S	9	8AEDvv	D84D; i	3GGD8GGP	4	bx f P8BA; 9
W>Y CB9	S	9	8AEDvv	CC4D8 i	3GDV8GGD	4	bx f P98979
W>Y CB>	S	9	8AEDvv	D94DA i	3GGN8GGa	4	bx f P97E8B
W>Y CBD	S	9	8AEDvv	CA4DA i	3GDN8GGa	4	bx f P9897;

W>Y CCB	S	9	**8AEDvv**	**CE4DA**	i	3GDc8GGa	4	**bx**	**f P9BA9A**
W>Y CDD	S	9	**8AEDvv**	**CC**	i	3GDV	4	**bx**	**f P9897>**
W>Y CE7	S	9	**8AEDvv**	**D9**	i	3GGN	4	**bx**	**f P8DDED**
W>Y D;7/Q >0	S	9	**8AEDvv**	**C74DA**	i	3V8GGa	4	**bx**	**f P9;AD8**
W>Y D;8/Q >0	S	9	**8AEDvv**	**CD4CE**	i	3GDV8GDc	4	**bx**	**f P9BA9B**
W>Y D;>/Q >0	S	9	**8AEDvv**	**CD**	i	3GDa	4	**bx**	**f P9B89D**
W>Y DAB/Q >0	S	9	**8AEDvv**	**CC**	i	3GDV	4	**bx**	**f P9BA9D**

4=0419	3:2=< 39234	RUMGT 419 49a	34243 3<246
I R0U 0419	38233 35243	RUMGT 0419	3723:
I R0U 0419 49a	3=2=< 4523<	S KMGTK 0419	362== 3=233
J_YZKX 419 49a	34244	S KMGTK 0419 49a	342== 3<23<
MXGTJ YI T0 0419	39239 4423<	S KMGTK 0419 RVM	43233 3<235
QGTMJU 419	3=239	S prIyp O@y 419	37234 3:236
QGTMJU 419 49a	39234	S KMGTK 0419	3<236
QGTMJU HK HUV 419	3523= 45245	S KMGTK 0419 49a	44235
QGTMJU KÉ'´p°° 419	3523< 4523=	S KMGTK 0419 RVM 49a	34239 3<23=
QGTMJU KÉ'´p°° 419 49a	43234	S KMGTK Ynpytn 419 49a	372=< 432==
QGTMJU KÉ'´p°° 419 49a LRKc	3523<	S UJ_Y 2MXGTJ S UJ_Y 419	45237
QGTMJU KÉ'´p°° 419 49a RVM	3523<	YGTJKXU2YZKVb Gd 0419	4523:
QGTMJU KÉ'´p°° 419 YI p	4324=	YGTJKXU2YZKVb Gd 0419 49a	37247
QGTMJU 2MXGTJ QGTMJU 0419 49a	3523<	YI T0 OSVa 419	3=2== 3=236
QGTMJU 2MXGTJ QGTMJU 0419 49a LRKc	3523<	YI T0 0419	3<236 4423<
QGTMJU 2MXGTJ QGTMJU 0419 49a RVM	4523<	YI T0 0419 49a	43238 4423<
RGM_TG 0419 49a	442=: 36234	ZNGRQG 0419	34237 4523<
RGM_TG 0419	36234 4523:	ZNGRQG 0419 49a	3:233 3523=
RGM_TG 0419 49a	36234 4523:	ZNGRQG 0419 G°ßspyß¿°p	44237 3523=
RGM_TG 0419 RVM	36234 38238	ZNGRQG 0419 49a	3=23<

DC487>9774;7

M	641:3
N4	4163
O	4193
P	88133
	53É95

7D487>977477
7D487>97C477 *mT m*

4183		I X V
4183		V
5183		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

WCV C87	S	9	**8;E7vv**	**AA**	i	3cV	4	**bx**	**f P8D8;D**
WCV C8>	S	9	**8;E7vv**	**A;**	i	3cN	4	**bx**	**f P9;A;7**

RUMGT 0417	3=237	YGTJKXU2YZKVb Gd 0417	3523=
RUMGT 0417 RVM	3523< 43246	YGTJKXU2YZKVb Gd 0417 RVM	3523=

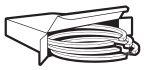
DC487>9774>7
DC487>97C4>7 *mT m*

M	681<6
P	8<133
	4=É95

7D487>977477
7D487>97C477 *mT m*

4183		I X V
4183		V
5183		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz



WCY C79	S 9	**8AEDvv**	**BB i** 3 D 4	**bx**	**f P>DCB**
WCY C7;	S 9	**8AEDvv**	**BB i** 3 D 4	**bx**	**f P>DCC**
WCY C87	S 9	**8AEDvv**	**B>4CB i** 3ec8GDP 4	**bx**	**f P8D8; E**
WCY C97	S 9	**8AEDvv**	**AA i** 3cV 4	**bx**	**f P>DCD**
WCY C>>	S 9	**8AEDvv**	**BB i** 3 D 4	**bx**	**f P8>; ; 9**
WCY C>A	S 9	**8AEDvv**	**BB i** 3 D 4	**bx**	**f P8>; ; ;**
WCY C>B	S 9	**8AEDvv**	**A>4C; i** 3 D8GDD 4	**bx**	**f P97E8D**
WCY CE7	S 9	**8AEDvv**	**BB i** 3 D 4	**bx**	**f P>DCE**

4=0419	432=9 39234	S KMGTK 0419 t	342=9 362==
I R0U 0419	3=2=< 38238	S KMGTK 0419 RVM	3<2=8 362==
QGTMJU 419	3=2== 39234	S KMGTK Ynpytn 419 p	432=9 432==
QGTMJU KÉ' ´p°° 419	3=2== 39234	S KMGTK Ynpytn 419 t	342=< 3=2==
RUMGT KcVXKYY 419	3723:	YGTJKXU2YZKVb Gd 0419	4523:
RUMGT 0419	3=237	YGTJKXU2YZKVb Gd 0419	38248
S KMGTK 0419 p	342=9 3<236	ZNGRGG 0419	362=<

DC487>977477
DC487>97C477 *mT m*

M 641<3
N2 5188
P 89163
4=É96

7D487>977477
7D487>97C477 *mT m*

4183		I X V
4183		V
5183		I X

DC487>977487
DC487>97C487 *mT m*

M 641<3
N2 5188
P 89163
4=É96

7D487>977477
7D487>97C477 *mT m*

4183		I X V
4183		V
5183		I X

Zz nÔuyop´ 4) 5	I y eÔuyop´ 4) 5	°°´ nÔuyo´p 4) 5	py pwntuyo´z 4) 5	I ntuyo´z 4) 5
Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz
Zz nÔuyop´ 6) 7	I y eÔuyop´ 6) 7	°°´ nÔuyo´p 6) 7	py pwntuyo´z 6) 7	I ntuyo´z 6) 7

WCY C;9 /Q >0	S 9	**8AEDvv**	**B> i** 3ec 4	**bx**	**f P9; A; 9**
RUMGT 419 t		3:237			

DC4>>; C77477
DC4>>; C7C477 *mT m*

M 5<164
P 851<4
4=É95

7D4>>; C77477
7D4>>; C7C477 *mT m*

4183		I Q V
4183		V
5183		I X

Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz

Nüral® FITTED WITH GOETZE® RINGS

RDc B7B	S 9	8DC7vv	>> i 3aD 4	P@l x	f PEBE7
RDc B97	S 9	8DC7vv	>C i 3aS 4	P@l x	f P>DBC
RDc B>7	S 9	8DC7vv	>7 i 3/S 4	P@l x	f PAA87
RDc B>>	S 9	8DC7vv	>74BB i 3/S8i D 4	P@l x	f P988>B
RDc B>B	S 9	8DC7vv	>C4BB i 3aS8i D 4	P@l x	f P989A9
RDc BCB	S 9	8DC7vv	>D i 3aV 4	P@l x	f P9; DEA
RDc BCD	S 9	8DC7vv	>74>D i 3/S8aV 4	P@l x	f P97; E7
RDc BD9	S 9	8DC7vv	>7 i 3/S 4	P@l x	f P8BA>>
RDc BEB	S 9	8DC7vv	>74>D i 3/S8aV 4	P@l x	f P989AA
RDc C7B	S 9	8DC7vv	>C4>D i 3aS8aV 4	P@l x	f P; 9DC
RDc C87	S 9	8DC7vv	>C i 3aS 4	P@l x	f P; 9DD
RDc C8>	S 9	8DC7vv	>C4>D i 3aS8aV 4	P@l x	f P; 9DE
RDc C99	S 9	8DC7vv	>C4>D i 3aS8ac 4	P@l x	f P; 9E7
RDc C9>	S 9	8DC7vv	>C4>D i 3aS8ac 4	P@l x	f P; 9E8
RDc C;7	S 9	8DC7vv	>C4>D i 3aS8aV 4	P@l x	f P>DBD
RDc C;9	S 9	8DC7vv	>C4>D i 3aS8aV 4	P@l x	f P>DBE
RDc C>9	S 9	8DC7vv	>C4>D i 3aS8aV 4	P@l x	f P; 9EA
RDc CC>	S 9	8DC7vv	>C4>D i 3aS8ac 4	P@l x	f P; 9ED
RDc CCB	S 9	8DC7vv	>C4>D i 3aS8ac 4	P@l x	f P; 9EE

4=041=J	342=< 452=5	S KMGTK 041=	3=2=8 3=233
4=@041=J	362=5 452=8	S KMGTK 041=J	3=2=9 3<236
54 41=J	362=9 3<2=7	S KMGTK 041=J Knz	342=9 3<236
I R@J 041=J	342=4 3=2=<	XGVQJ 41=J	3=2=7 362=<
I R@J 041=XTJ	372=9 352=<	XGVQJ HzoÖ2S Va 41=J	3=2=4 362=<
KcVXKYY 41=J	3: 2=8 432==	ZXGL@ 41=J	392=: 36234

DC4; ; BA77477
DC4; ; BA7C477 *mT m*

M 75168
N4 31 3
P : 3183
57É96

df

7D4; ; BA77477
7D4; ; BA7A477 *mT*
7D4; ; BA7C477 *mT m*

5133 S U V
5133 V
6133 I X V

RDc B;7	S 9	8DC7vv	>C4>D i 3aS8aV 4	P@l x	f PEB9B
RDc B;9	S 9	8DC7vv	>C4>D i 3aS8aV 4	P@l x	f P8C>;8
RDc BB9	S 9	8DC7vv	>74>D i 3/S8aV 4	P@l x	f PEB9A

I R@J 041=J	382=9 352=<	QGTMJU KÉ' ´p°° 41=J	3=2== 39236
I R@J @041=J	3=2=<	QGTMJU KÉ' ´p°° J 88 41=	3<2=:
QGTMJU 41=XcKJ	3=2== 39234	QGTMJU KÉ' ´p°° J 98 41=	3<2=:
QGTMJU J 88 41=	3<2=:	ZNGR@ 041=J	352=< 38234
QGTMJU J 98 41=	3<2=: 39234		

DC4; ; BA77487
DC4; ; BA7C487 *mT m*
Kyr 1= 4538

M 75158
N4 418<
P : 3183
57É96

7D4; ; BA77477
7D4; ; BA7A477 *mT*
7D4; ; BA7C477 *mT m*

5183 SUV
5183 V
6183 IXV

| | | |

REc C; D	S	9	8DC7vv	AE4CE	i	3eD8GDc	4	P@i	x	f	u	U	x	v	xw	f P988; C
REc C>7	S	9	8DC7vv	CA	i	3GDN	4	P@i	x	f	u	U	x	v	xw	f P8B; >8
REc C>>	S	9	8DC7vv	AE	i	3eD	4	P@i	x	f	u	U	x	v	xw	f P8B; B8
REc C>D	S	9	8DC7vv	C>4CE	i	3GDG8GDc	4	P@i	x	f	u	U	x	v	xw	f P988; D
REc CA9	S	9	8DC7vv	C>4CC	i	3GDG8GDV	4	P@i	x	f	u	U	x	v	xw	f P988; E
REc CA>	S	9	8DC7vv	C>4CE	i	3GDG8GDc	4	P@i	x	f	u	U	x	v	xw	f P97D>8
REc CB7	S	9	8DC7vv	B74CA	i	3eN8GDN	4	P@i	x	f	u	U	x	v	xw	f P8BA9E
REc CB9	S	9	8DC7vv	B7	i	3eN	4	P@i	x	f	u	U	x	v	xw	f P8DBE8
REc CC7	S	9	8DC7vv	AE	i	3eD	4	P@i	x	f	u	U	x	v	xw	f P8ABDD
REc CC9	S	9	8DC7vv	B7	i	3eN	4	P@i	x	f	u	U	x	v	xw	f P8B; 7>
REc CC>	S	9	8DC7vv	B7	i	3eN	4	P@i	x	f	u	U	x	v	xw	f P8E; C7
REc CD7	S	9	8DC7vv	AE	i	3eD	4	P@i	x	f	u	U	x	v	xw	f P8B; ; E
REc CD9	S	9	8DC7vv	AE4B9	i	3eD8eS	4	P@i	x	f	u	U	x	v	xw	f P8C>ED
REc CE7	S	9	8DC7vv	AE4B9	i	3eD8eS	4	P@i	x	f	u	U	x	v	xw	f P8B; AD
REc CEB	S	9	8DC7vv	CA	i	3GDN	4	P@i	x	f	u	U	x	v	xw	f P9>EC9

I R0J 0041=oZt	452== 38238	S KMGTK 041=JZt	35233 3=233
I R0J 0041=JZt	35233 38234	S pr l yp O@y 41=ol t	37234 3: 236
QGTMJU 41=ol t	43234	S pr l yp O@y 41=JZO	37234 3: 236
QGTMJU 41=oZt	35233	S KMGTK Ynpytn 41=oZt	372=: 3=2==
QGTMJU KÉ' ´p°° 41=ol t	43234	S KMGTK Ynpytn aGT 41=JZt	372=: 3=2==
QGTMJU KÉ' ´p°° 41=oZt	35233	YI T0 OS Va 41=ol t	3=2== 3<236
RGM_TG 041=ol t	3=2== 36234	YI T0 OS Va 41=ol tXc7	44233 3<236
RGM_TG 041=oZt	432=: 36234	YI T0 OS Va 41=oZt	3=2== 3<236
RGM_TG 0041=ol t	36234 4523:	YI T0 OaGT 41=JZt	3=2== 37234
RGM_TG 0041=ol O	39234 38238	ZXGL0 0041=ol t	36234
S GYZKX 0041=ol t<3	44234	ZXGL0 0041=ol t<3	36234 43239
S GYZKX 0041=oZO	3=233	ZXGL0 0041=ol O<3	36234 43239
S KMGTK 041=ol t	362== 3<236	ZXGL0 0041=ol t433	36234 43239
S KMGTK 041=JI t	362== 3<236	ZXGL0 0041=ol O433	36234 43239
S KMGTK 041=oZt	362=: 3<236		

DC4878A77477
DC4878A7C477 *mTm*

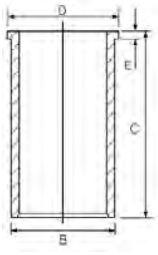
M	7: 139
N4	4: 1<3
N	6<133
O	31 8
P	: : 133
	5<É93

MWdf fb

7D4878A77477
7D4878A7C477 *mTm*

5183		S U V
5133		V
6133		I X V

8>47979D7477



N <6133 **O** 488133 **P** <8133 **Q** 8133

REc DC7	S	9	8DC7vv	EB	i	3GPG	4	P@i	x	f	u	U	x	v	xw	f P9; B8C
REc DC9	S	9	8DC7vv	EB	i	3GPG	4	P@i	x	f	u	U	x	v	xw	f P9; AAA

MXGTJ YI T0 0041=ol t	3523=	YI T0 00041=ol t	3523=
S KMGTK I I 41=ol t	39243	YI T0 00aGT 41=ol t	34246
S KMGTK 00041=ol t	4423<		

DC4>99; 77487
DC4>99; 7C487 *mTm*

M 7:133
N4 46158
N 7<133
O 3168
P :3133
5<É97

MWWWdf fb

7D4>99; 77477
7D4>99; 7C477 *mTm*

5133 SUV
5133 V
6133 IXV

dEY >79	S	9	**8AEDvv**	**EBi**	3GPD	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9B9EC**
dEY >7>	S	9	**8AEDvv**	**EBi**	3GPD	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9B9ED**
dEY >7D	S	9	**8AEDvv**	**BB4DAi**	3D8GGa	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;99EB**
dEY >7E	S	9	**8AEDvv**	**EBi**	3GPD	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;8;BD**
dEY >8;	S	9	**8AEDvv**	**C74DEi**	3V8GNG	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;9EEA**
dEY >8>	S	9	**8AEDvv**	**EBi**	3GPD	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;99ED**
dEY >A7	S	9	**8AEDvv**	**DD487Ci**	3GND8GSV	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;99EC**
dEY >A9	S	9	**8AEDvv**	**E94897i**	3GNV8GaP	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;8;BE**
dEY >A;	S	9	**8AEDvv**	**E9488Di**	3GNV8GaD	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;;8>8**

KYVGIKa419olt463	39218	YIT0@aGT419olt	34216
KYVGIKa419olt493	39218	YIT0@a419olt463	3=219
LR_KTIK419olt	3:217	YIT0@a419olt493	3=219
MKGTJYIT0@@419olt	37214	ZGROYSGT419olt463	44218
MKGTJYIT0@a419olt463	3=219	ZGROYSGT419olt493	39218
MKGTJYIT0@a419olt493	3=219	ZXGL0@@419olt=3	38217
QGJPGX419olt463	39218	ZXGL0@@419olt=8	3:218
QURKUY@@419olt463	37219	ZXGL0@@419olt448	38217
SKMGTKII419olt	37214	ZXGL0@@419olt453	38217
SKMGTK@@419olt	37214	ZXGL0@@419olt458	3:218
SKMGTK@a419olt463	44218	ZXGL0@@419olt473	38217
SKMGTK@a419olt498	44218	ZXGL0@@419olt478	3:218
YIT0@@419olt	37214		

DC4>9>E77477
DC4>9>E7C477 *mTm*

M 79133
N4 45168
N 79183
O 3163
P :3183
63É93

MWWWdf fb

7D4>9>E77477
7D4>9>E7C477 *mTm*

5133 IQV
4t8 V
5133 IXV

YEdB87	S	9	**8EEAvv**	**88D4897i**	3GaD8GaP	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9;AAC**
YEdB8A	S	9	**8EEAvv**	**887i**	3GVD	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9;AAE**
YEdB;7	S	9	**8EEAvv**	**BB4D>i**	3D8GGS	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9BC9E**
YEdBE9/Q A0	S	9	**8EEAvv**	**D>i**	3GGS	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9BABE**
YEdD9D	S	9	**8EEAvv**	**8;8i**	3Gce	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;8>CC**
YEdD>>	S	9	**8EEAvv**	**89Ci**	3GcP	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9BA;;**
YEdD>B	S	9	**8EEAvv**	**887i**	3GVD	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P9BA;>**
YEdDA>	S	9	**8EEAvv**	**EB489Ci**	3GPG8GcP	4	**P@t**	**x**	**f**	**u**	**U x v**	**xw**	**f P;8>CD**

Y Ed DAB	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9B9>E**
Y Ed DAC	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P; 8>CE**
Y Ed DAD	S	9	**8EEAvv**	**EB489C i**	3GPG8GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P; 8>D7**
Y Ed DAE	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P; 8>D8**
Y Ed DB9	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9B9AA**
Y Ed DB>	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9B9AB**
Y Ed DBA	S	9	**8EEAvv**	**887489C i**	3GVD8GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9B9A7**
Y Ed DBB	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9B9A8**

KYVGI K@a 513 ol t	34239	RGZ@Z_JK 513 ol t 483	35244
MKGTJ YI T0 @0513 ol t	3523=	RGZ@Z_JK 513 ol t 4: 8	38244
QURKUY 0513 ol t	3=23<	S KMGTK I I 513 ol t	39243
RGM_TG 513 ol t	3=23< 45248	S KMGTK @0513 ol t	3723=
RGM_TG 513 ol t MZ	3=23< 45248	YI T0 @0513 ol t	3523=
RGM_TG @0513 ol t	4323: 45248	ZXGL0 @0513 ol t =3	3<239
RGM_TG @0513 ol t MZ	3623< 45248	ZXGL0 @0513 ol t 448	3<239

DC4>99777487
DC4>9977C487 *mT m*

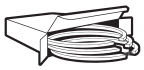
M 7<133
N4 47133
N 83133
P :9133
65É98

WWdf f b

7D4>99777477
7D4>9977C477 *mT m*

5183 SURV
5133 SURV
5133 I X V

Y Ed C77	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P97C7D**
Y Ed C98	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; A79**
Y Ed C99	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; A7;**
Y Ed C9>	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P998EA**
Y Ed C>7	S	9	**8EEAvv**	**EB4887 i**	3GPG8GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P8EBD7**
Y Ed C>9	S	9	**8EEAvv**	**EB4887 i**	3GPG8GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; A7>**
Y Ed C>>	S	9	**8EEAvv**	**EB4887 i**	3GPG8GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; A7A**
Y Ed C>B	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; A7B**
Y Ed C>D	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; A7C**
Y Ed CA7	S	9	**8EEAvv**	**EB4887 i**	3GPG8GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; A7D**
Y Ed CB7	S	9	**8EEAvv**	**EB489C i**	3GPG8GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P8EBD8**
Y Ed CB8	S	9	**8EEAvv**	**EB489C i**	3GPG8GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; DEE**
Y Ed CB9	S	9	**8EEAvv**	**EB489C i**	3GPG8GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; E77**
Y Ed CB;	S	9	**8EEAvv**	**EB489C i**	3GPG8GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; E78**
Y Ed CD7 /Q >0	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P8EC8>**
Y Ed CD9	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9; 87E**
Y Ed CD>	S	9	**8EEAvv**	**D> i**	3GGS	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9A8>8**
Y Ed CDB /Q >0	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9>EBB**
Y Ed CDD	S	9	**8EEAvv**	**D> i**	3GGS	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9A8>9**
Y Ed D77	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P998EB**
Y Ed D79	S	9	**8EEAvv**	**EB4887 i**	3GPG8GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P998EC**
Y Ed D7>	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9B8; >**
Y Ed D7A /Q >0	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9B9>>**
Y Ed D7E	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P998ED**
Y Ed D8A	S	9	**8EEAvv**	**887489C i**	3GVD8GcP	4	**P@l x**	**f**	**u**	**U x v**	**xw**	**f P9BA; 8**



Y Ed D8B	S	9	**8EEAvv**	**89C48; 9 i**	3GcP8GeD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P998EE**
Y Ed D8C	S	9	**8EEAvv**	**89C i**	3GcP	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9B8; A**
Y Ed D97	S	9	**8EEAvv**	**8; 8 i**	3Gce	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9BA; 9**
Y Ed D9>	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9B7C;**
Y Ed D;7	S	9	**8EEAvv**	**89C48; 7 i**	3GcP8Gcc	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9997B**
Y Ed D;9	S	9	**8EEAvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9997C**

KYVGI K@a 513 ol t	34239	RGZQZ_JK 513 ol t 483	35244
MKGTJ YI T0 00513 ol t	3=238 4423<	RGZQZ_JK 513 ol t 4: 8	38244
QURKUY 0513 ol t	3=23<	S KMGTK 00513 ol t	3=238
RGM_TG 513 ol t	3=23< 45248	YI T0 00513 ol t	3=238 4423<
RGM_TG 513 ol t MZ	3=23< 45248	ZXGL0 00513 ol t=3	3<239
RGM_TG 00513 ol t	3<238 4523:	ZXGL0 00513 ol t 448	3<239
RGM_TG 00513 ol t	4323: 45248	aKR YGZQY 513 ol t	3<238
RGM_TG 00513 ol t MZ	3623< 45248		

DC4>99777477
DC4>9977C477 *mTm*

M 7: 1=5
N4 471=3
N 7=13:
O 3173
O 3173
P : 9133
65É98

MWWWdf fb

7D4>99777477
7D4>9977C477 *mTm*

5183 S URV
5133 S URV
5133 I X V

Y Ef BC7 /Q A0	S	9	**99EDvv**	**C>4E9 i**	3GDG8GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>9BE**
Y Ef BC9 /Q A0	S	9	**99EDvv**	**C>4E9 i**	3GDG8GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9A8A>**
Y Ef BCB /Q >0	S	9	**99EDvv**	**C>4E9 i**	3GDG8GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>9BD**
Y Ef BCD	S	9	**99EDvv**	**87C i**	3GSa	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9A8AD**
Y Ef BD7	S	9	**99EDvv**	**E9487C i**	3GNV8GSV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>9EA**
Y Ef BDB /Q A0	S	9	**99EDvv**	**E9 i**	3GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9A8A8**
Y Ef BE7 /Q A0	S	9	**99EDvv**	**C>4E9 i**	3GDG8GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>9C7**
Y Ef BE9 /Q >0	S	9	**99EDvv**	**C>4EB i**	3GDG8GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>9C8**
Y Ef BE> /Q >0	S	9	**99EDvv**	**87C4887 i**	3GSa8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>9C9**
Y Ef BEB /Q >0	S	9	**99EDvv**	**E94887 i**	3GNV8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9A8A7**
Y Ef BED /Q A0	S	9	**99EDvv**	**E94887 i**	3GNV8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9>9C;**
Y Ef C79 /Q A0	S	9	**99EDvv**	**EB4897 i**	3GPa8GaP	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P;9;7;**
Y Ef DC7 /Q >6A0	S	9	**99EEvv**	**C>4E9 i**	3GDD8GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9ECAA**
Y Ef DC9 /Q >6A0	S	9	**99EDvv**	**E9 i**	3GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P;D;77**
Y Ef DD7 /Q A0	S	9	**99EDvv**	**E94887 i**	3GNV8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9ECAB**
Y Ef DD9 /Q >0	S	9	**99EDvv**	**E94EB i**	3GNV8GPG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P;D;C9**
Y Ef DE7 /Q A0	S	9	**99EDvv**	**C>4E9 i**	3GDD8GNV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9ECAD**
Y Ef DEB /Q >0	S	9	**99EDvv**	**E94887 i**	3GNV8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9ECAE**
Y Ef DED /Q A0	S	9	**99EDvv**	**E94887 i**	3GNV8GVD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P9ECAC**

S GYZKX 00516 ol t 433	35243	S GYZKX 00516 ol t 468	3: 247
S GYZKX 00516 ol t 433 Xb J	35243	S GYZKX 00516 ol t 478	35243
S GYZKX 00516 ol t 443	3=247	S GYZKX 00516 ol t 478 Xb J	35243
S GYZKX 00516 ol t 458	35243	S GYZKX 00516 ol t 483	43245
S GYZKX 00516 ol t 458 Xb J	35243	S GYZKX 00516 ol t 483 Xb J	36246
S GYZKX 00516 ol t 463	36245	S GYZKX 00516 ol t 498	3: 247

DC4>; A977477
DC4>; A97C477 *mTm*

M	7<133
N4	4953
N	8313
O	3178
P	:913
	65É98

MWWWdf fb

7D4>; A977477
7D4>; A97C477 *mTm*

5183		MJI V
5133		SUV
5133		IXV

GDC

SEf B7A/Q >0	S 9	**98DDvv**	**879 i** 3GPi 4	**P@t x f u U x v xw**	**f P8EBD9**
SEf B7B/Q >0	S 9	**98DDvv**	**CD4879 i** 3GDa8GPi 4	**P@t x f u U x v xw**	**f P9897E**
SEf B>9	S 9	**98DDvv**	**EA4887 i** 3GN 8GVD 4	**P@t x f u U x v xw**	**f P9; 8CC**
SEf B>A/Q >0	S 9	**98DDvv**	**879 i** 3GPi 4	**P@t x f u U x v xw**	**f P988ED**
SEf C77	S 9	**98DDvv**	**D; 4887 i** 3GGP8GVD 4	**P@t x f u U x v xw**	**f P97ECD**
SEf C79/Q ;0	S 9	**98DDvv**	**D; 4887 i** 3GGP8GVD 4	**P@t x f u U x v xw**	**f P8B9DD**
SEf C7;	S 9	**98DDvv**	**887 i** 3GVD 4	**P@t x f u U x v xw**	**f P8B; CC**
SEf C7>	S 9	**98DDvv**	**887 i** 3GVD 4	**P@t x f u U x v xw**	**f P97ECA**
SEf C7B	S 9	**98DDvv**	**8794887 i** 3GPi 8GVD 4	**P@t x f u U x v xw**	**f P97ECB**
SEf C7C	S 9	**98DDvv**	**8794887 i** 3GPi 8GVD 4	**P@t x f u U x v xw**	**f P97ECC**
SEf C>9/Q ;0	S 9	**98DDvv**	**887 i** 3GVD 4	**P@t x f u U x v xw**	**f P8C7B9**
SEf C>;/Q ;0	S 9	**98DDvv**	**887 i** 3GVD 4	**P@t x f u U x v xw**	**f P8C7B;**

KYVGI K@0515 ol t 43233 43235 RGM_TG@0515 ol t 43234 4523:
KYVGI K@a515 ol t 44235 aKRYGZ@Y515 ol t 39235

DC489C>77487
DC489C>7C487 *mTm*

M	8786
N4	4:83
N	7373
O	413
O	5133
P	<753
	64É98

MWWWdf fb

7D489C>77477
7D489C>7C477 *mTm*

6133		VY V
418		V
5183		V

SEf B7C	S 9	**98DDvv**	**8794887 i** 3GPi 8GVD 4	**P@t x f u U x v xw**	**f P9; DEB**
SEf C87	S 9	**98DDvv**	**DA4EA i** 3GGV8GPD 4	**P@t x f u U x v xw**	**f P8B; 87**
SEf C97	S 9	**98DDvv**	**BB i** 3D 4	**P@t x f u U x v xw**	**f P8>E9D**
SEf C99	S 9	**98DDvv**	**BB i** 3D 4	**P@t x f u U x v xw**	**f P8B; 79**
SEf CA7	S 9	**98DDvv**	**BB i** 3D 4	**P@t x f u U x v xw**	**f P8E7DD**

KYVGI K@0515 ol t 3:233 43235 aKRYGZ@Y515 ol t 3=237
SGYZKX@0515 ol O=3 3=233

DC489C>77477
DC489C>7C477 *mTm*

M 8716:
N4 4:1:3
N 7317:
O 513:
P <713=
64É98

MWdf fb

7D489C>77477
7D489C>7C477 *mTm*

613: VY V
41:8 V
513= V

SEg B;9/Q >0 S 9 **9>B>vv** **DD487C i** 3GND8GSa 4 **P@t x f u U x v xw** **f P9878;**
SEg BA7/Q >0 S 9 **9>B>vv** **C>4DD i** 3GDG8GND 4 **P@t x f u U x v xw** **f P98788**

S GYZKX 0518 ol t 3<239

DC48;CA774;7
DC48;CA7C4;7 *mTm*

M 861:
N4 4914:
N4 71=3
N 7<13:
O 513:
O 419:
P <613=
64É98

MWdf fb

7D48;CA77477
7D48;CA7C477 *mTm*

613: SUV
41:8 V
513= V

SEg C97/Q ;0 S 9 **9>B>vv** **D> i** 3GGV 4 **P@t x f u U x v xw** **f P8B;7;**
SEg C9>/Q ;0 S 9 **9>B>vv** **D>4DA i** 3GGV/8GGa 4 **P@t x f u U x v xw** **f P8E;BB**
SEg C;7/Q ;0 S 9 **9>B>vv** **EE i** 3GPV 4 **P@t x f u U x v xw** **f P8D9CA**
SEg CA7/Q ;0 S 9 **9>B>vv** **D> i** 3GGV 4 **P@t x f u U x v xw** **f P8E;AE**
SEg CA>/Q ;0 S 9 **9>B>vv** **C;4DA i** 3i8GGV 4 **P@t x f u U x v xw** **f P8E7DA**

S GYZKX 0518 ol t 43237 35245 S GYZKX 0518 ol t 453 43234
S GYZKX 0518 ol t 433 43236 ZXGL0 0518 ol t 468 36234 43239

DC48;CA77487
DC48;CA7C487 *mTm*

M 8613:
N4 4:1<8
N 7615:
O 419:
O 41=3
P <613=
64É98

MWdf fb

7D48;CA77487
7D48;CA7C487 *mTm*

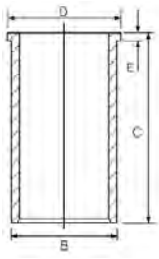
513= SUV
41:8 V
513= IXV

D8>747C/e yØ 0 S 9 **9A77vv** **AA i** 3cV 4 **P@t x** **f PDA9>**
D8>757C89A;7 S 9 **9A77vv** **AB i** 3ca 4 **P@t x** **f P;>8C**
D8>757C89ADA/Q 80 S 9 **9A77vv** **AA i** 3cV 4 **P@t x** **f P898E9**
D8>757C89C77 S 9 **9A77vv** **AA i** 3cV 4 **P@t x** **f P99;DA**

D8>757C59C78 /e yØ 0	S 9	9A77vv	AA i 3:V 4	P@t x f u				Y bE878
D8>757C59C87 /e yØ 0	S 9	9A77vv	AA i 3:V 4	P@t x f u				Y bE87848
D8>757C5; C77 /Q 80	S 9	9A77vv	AA i 3:V 4	P@t x f u U x v xw				f P99; DB
D8>759C59ABA /e yØ 0	S 9	9A77vv	CD i 3GDa 4	P@t x f u				f P898EC
D8>759C59ADA	S 9	9A77vv	CD i 3GDa 4	P@t x f u				f P898EA
D8>749C UPe	S 9	9A77vv	CD i 3GDa 4	P@t x f u				f PDA; 7
D8>75BC59AD7 /Q 90	S 9	9A77vv	AA i 3:V 4	P@t x				f P; >; ;
D8>75BC59ADA /Q 90	S 9	9A77vv	AA i 3:V 4	P@t x f u U x v xw				f P898E;

S GYZKX 518J — ZXGL0 518 J — 382<= 3623 4

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>759859; A /ea RUY 95>f P0	S 9	9>>Avv	BD4C8 i 3 N8 a 4	P@t x f u				f P; >8D

=3 518 ZJ — 372<9 3=2=3 — H=3 518 ZJ — 3<2=3 342=5

DC49>A9774; 7

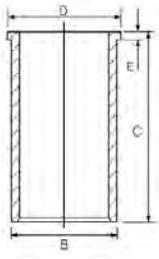
M 8=198
N4 471<3
N 841=3
P =: 198
65É: 8

df

7D49>A977477
7D49>A97D477 *mT m*

6133 I X V
5133 V
6133 I X V

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>759C/e yØ 0	S 9	9A77vv	CD i 3GDa 4	P@t x f u				f PDA9E
D8>759C59AD9	S 9	9A77vv	E9 i 3GNV 4	P@t x f u				f P; >9>
D8>759C59C77	S 9	9A77vv	BD4C8 i 3 N8GDP 4	P@t x f u				f P98; E9

H=3 518 ZJ — S GYZKX 518 ZJ

DC49>A9774>7

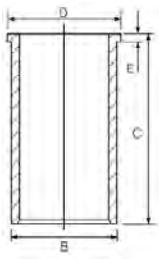
M 8<1 8
N4 4: 1=3
N 6<133
P =91 8
65É: 8

df

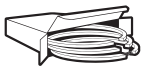
7D49>A977477
7D49>A97D477 *mT m*

6133 I X V
5133 V
6133 I X V

8>4798; C8477 N =9134 O 4: 4133 P =<1=5 Q 8133
8>4798; C9477 N =9138 O 4: 4133 P =<1=5 Q 8133



D8>759C59AB7	S 9	9A77vv	BE i 3 S 4	P@t x f u				f PDB9;



D8>74>C	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f PDA; ;
D8>75>C9A; 7 UPd /e yØ 0	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f P; >9A
D8>75>C9A; A	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f P; >9B
D8>75>C9ADA /Q 80	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f P; >9D
D8>75>C9AE7 /Q 80	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f P898EE
D8>75>C9C77 /Q 80	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f P99; EA
D8>75>C9C98 /Q 80	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f P99; EB
D8>75>C9CDA /Q 80	S	9	9A77vv	DA	i	33Ga	4	P@t	x	f	u	U	x	v	xw	f P99; EC
eEg C79	S	9	9A77vv	BE4C9	i	3 S8 e	4	P@t	x	f	u					f P89C; 8
eEg C8>	S	9	9A77vv	BE	i	3 S	4	P@t	x	f	u					f P89C; 9
eEg C>7	S	9	9A77vv	BE	i	3 S	4	P@t	x	f	u					f P89C9D

S GYZKX 0518 JZ	442<= 352=<	S GYZKX 068 5/8 ZJ	3<2<= 3: 2=<
S GYZKX 05<068 5/8 ZJ	3<2<= 3: 2=<		

DC4A97977477

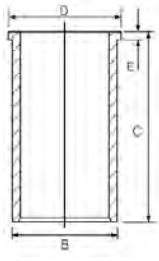
M 8<t 8
N4 4<173
N 6<133
P =91 8
65É: <

MWWWZN df

7D4A97977477

6133 I X
5133 V
6133 I X V

8>4798; C8477 **N** =9134 **O** 4: 4133 **P** =<1=5 **Q** 8133
8>4798; C9477 **N** =9138 **O** 4: 4133 **P** =<1=5 **Q** 8133



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D8>75B859>7 /e yØ 0	S	9	9>>Avv	A8	i	3ai	4	P@t	x	f	u	U	x	v	xw	f P89DC8
D8>75B859; 77	S	9	9>>Avv	A9	i	3cG	4	P@t	x							f P; >9E
D8>75BC89A77	S	9	9A77vv	AA	i	3cV	4	P@t	x							f P; >; 8
D8>75BC89AA7	S	9	9A77vv	AA	i	3cV	4	P@t	x							f P89DC9
eDg C97 /ea RUY 95>P0	S	9	9>>Avv	A8	i	3ai	4	P@t	x							f P; >8;
eDg C99 /ea RUY 95>P0	S	9	9>>Avv	A8	i	3ai	4	P@t	x							f P; >8>
eDg C; 7 /ea RUY 95>P0	S	9	9>>Avv	A9	i	3cG	4	P@t	x							f P89DC;
eDg C; 8	S	9	9>>Avv	A74A;	i	3ae8cN	4	P@t	x							f P89C; 7
eDg C>9	S	9	9A77vv	AA	i	3cV	4	P@t	x							f PA>>9
eDg C>D	S	9	9>>Avv	AA	i	3cV	4	P@t	x							f P89C; A
eDg CA7	S	9	9A77vv	AA	i	3cV	4	P@t	x							f PAABB
eDg CA9	S	9	9A77vv	AA	i	3cV	4	P@t	x							f PAABC
eDg CAD	S	9	9A77vv	AA4AD	i	3cV8ci	4	P@t	x							f PEBDE
eDg CD7	S	9	9A77vv	AA	i	3cV	4	P@t	x							f P8B; 9D
eDg CD9	S	9	9A77vv	AA	i	3cV	4	P@t	x							f P8B; 9E

S GYZKX 0517 J	3: 2<3 352=<	S GYZKX 05<068 517 J	3<2<3 3<2<=
S GYZKX 0518 J	3: 2<3 432<=	S GYZKX 05<068 518 J	3=2<3 3: 2=<
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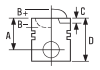

		8>4799AB7477	N =9133 O 49: 163 P =<t=3 Q 8133
		8>479DE; 7477	N = 183 O 49: 133 P 4331=3 Q 8133
		8>479DE; 8477	N = 18< O 49: 133 P 4331=3 Q 8133
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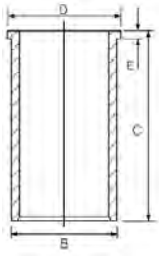

D8>75>; 59ADA/Q	9 e yØ 0	S	9	9D77vv	CB i	3GDP	4	P@t x	f	u U x v	xw	f P898E>
D8>75>; 59ADA/Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P@t x	f	u U x v	xw	f P898ED
D8>75>; 5j C77/Q	9 e yØ 0	S	9	9D77vv	E7 i	3GNN	4	P@t x	f	u U x v	xw	f P99; E>
D8>75>; 5D59ADB/Q	9 e yØ 0	S	9	9D77vv	CD i	3GDa	4	P@t x	f	u U x v	xw	f P8>7E7
eEi C77		S	9	9D77vv	D> i	3GGS	4	P@t x	f	u U x v	xw	f P8E; B9
eEi C79		S	9	9D77vv	D> i	3GGS	4	P@t x	f	u		f P8; >7D

S GYZKX 0051<oZ0 3: 2=< 43234

DC4899977487
DC489997D487 *mT m*
342=<

M	8<t 8
N4	4=173
N	6=158
P	< 193
	65É: 5

MWWWdf fb

7D4899977477
7D489997D477 *mT m*

5183		I Q V
5133		V
5183		I X V

		8>4798; 98477	N = 187 O 49: 133 P 4331=3 Q 8133
		8>479DE; 7477	N = 183 O 49: 133 P 4331=3 Q 8133
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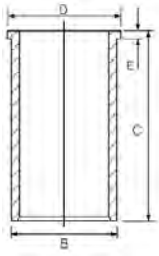

D8>75>; 5D5j ADB/Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P@t x	f	u U x v	xw	f P8C8E>
D8>75>; 5D5j ADD/Q	; e yØ 0	S	9	9D77vv	CD i	3GDa	4	P@t x	f	u U x v	xw	f P8C8EA

		8>4798; 98477	N = 187 O 49: 133 P 4331=3 Q 8133
		8>479DE; 7477	N = 183 O 49: 133 P 4331=3 Q 8133
		8>479DE; 8477	N = 18< O 49: 133 P 4331=3 Q 8133
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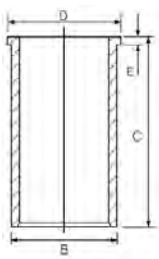

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D8>75>; 5e59ADA/Q	; e yØ 0	S	9	9D77vv	E94E> i	3GNV8GNe	4	P@t x	f	u U x v	xw	f P8>7E8

D8>75>; 5e5; ADA/Q ; e yØ 0	S 9	9D77vv	E94E> i	3GNV8GNe 4	P@t x f u U x v xw	f P8C8EB

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DC489997D477 *mTm*

7D4899977477
7D489997D477 *mTm*

8>4798; 98477 **N** =: 187 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =: 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =: 18< **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =: 1t 3 **O** 49: 133 **P** 4331=3 **Q** 8133

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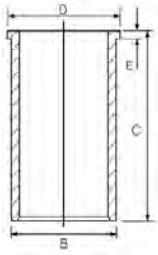
N4 5416 3
N 6=173
P < 193
65É: 5

MWWWdf fb

5183 I Q V
5183 V
5183 I X V



D8>75B; 59ADA/Q 9 e yØ 0	S 9	9D77vv	B;4B> i	3ea8ec 4	P@t x	f P8>7DE

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DC487D97D477 *mTm*

7D487D977477
7D487D97D477 *mTm*

8>4798; 98477 **N** =: 187 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =: 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =: 18< **O** 49: 133 **P** 4331=3 **Q** 8133
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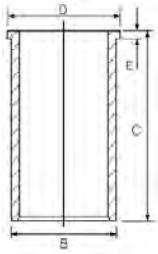
N4 51<3
P =3133
65É9<

MWTMdf fb

6183 I X V
5183 V
5183 I X V



C8947847;	S 9	;;97vv	A; i	3cN 4	P@t x	f P;78E
C8947847>	S 9	;;97vv	A> i	3cP 4	P@t x	f P;797
C8>	S 9	;;97vv			P@t x	Y b>;AE

OTJ_YZX0GR

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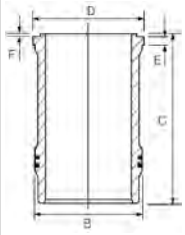

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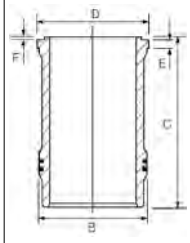
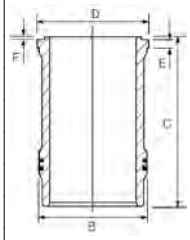
		8>49BAE>7477 	N 447133 O 5531t 3 P 4531t 3 Q <133 R 31t 3	
Vsz°' sl ßpo	Vsz°' sl ßp´ß	Vsz°' sl ß	Lz°q ß oz	Lz°q ß ßz
POUb>4N /Q ;0	S 9	>897vv	889 i 3GV/N 4	P@t x f u U x v xw	f P8Q;;;
POUb>4O /Q ;0	S 9	>897vv	89D i 3GcS 4	P@t x f u U x v xw	f P8Q;;A
POUBM/Q ;0	a 9	B8CCvv	8EA i 3NaV 4	P@t x f u U x v xw	f P8Q;;E
POUBi /Q ;0	a 9	B8CCvv	8AD i 3NGV 4	P@t x f u U x v xw	f P8Q;;D
SQR_S		34233	VXKS Q S		372=9

DC4>;A777477 M :4153 N4 541=3 N 93133 O 31<3 P 43<163 75É<7 df	7D4>;A777477 6183 I Q 5183 I X 7133 I X	8A4>D77E7477 	N 447133 O 54<133 P 455183 Q <133 R 31<3	DE4>;A777477 <0768333033. 4807<33=3033
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YUPd 7>5795@BM6> /Q 90	S 9	>88Dvv	877 i 3GPa 4	P@t x f u U x v xw	f P8>A7E
YUPd 7>5795@BN6> /Q 90	S 9	>88Dvv	887 i 3GVD 4	P@t x f u U x v xw	f P8>A87
YUPd 7B5795@Bi 6> /Q 90	a 9	B8CCvv	8A> i 3NDi 4	P@t x f u U x v xw	f P8>A88
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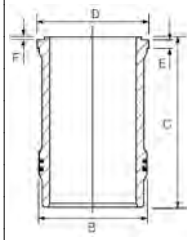
DC4A99E77477 M :4156 N4 531<6 N 93133 O 31<8 P 438153 75É<7 df	7D4A99E77477 6183 S U 5183 I X 7133 I X	8A4>D77E7477 8A49BAEB7477 8>49BAEB7477 	N 447133 O 54<133 P 455183 Q <133 R 31<3 N 447133 O 567133 P 455183 Q <133 R 31<3 N 447133 O 567163 P 455183 Q <133 R 31<3	DE4A99E77477 <0855=33033. 4807<33=3033
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CEC497	a 9	A>E8vv	EA4ED i 3GN 8GPP 4	P@t x f u	f PDB7C
CEC498	a 9	A>E8vv	CB i 3GDP 4	P@t x	f PDBAD
CEC49B	a 9	A>E8vv	ED i 3GPP 4	P@t x f u	f PDAE;
SQRQTKX		3=2<6 3=2=3			

DC4; >BA77477

M : : 1<3
N4 6<173
P 4641: 3
69É<9

df

7D4; >BA77487

6133 I X V
5133 V
8133 I X V

8A49BAEB7477
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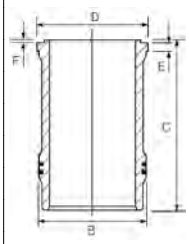

N 447133 **O** 567133 **P** 455133 **Q** <133 **R** 31<3
N 447133 **O** 567163 **P** 455133 **Q** <133 **R** 31<3
N 447133 **O** 568163 **P** 454133 **Q** <133 **R** 31<3

DE4; >BA77487
< 0679833033 .
480598=93033

Qrnvßop° °pl vß
Vsz°' sl ßpo

Ynsvtp ßJtnsß°yr py pty
Vsz°' sl ßp´ß

Qrnvßop° uztyß°
Vsz°' sl ß

Qrnvß Öp vw° °pvw°
Lz°q ß oz

I zx ' ´pyop vp r °l ´ytÜzyt
Lz°q ß ßz

CED487	a 9	**A>E8vv**	**88; i** 3GV/S 4	**P Øt x f u**		**f PB987**
CED497	a 9	**A>E8vv**	**88; i** 3GV/S 4	**P Øt x f u**		**f PDB7B**
S QJ RO TKX		382<6 3: 2<9				

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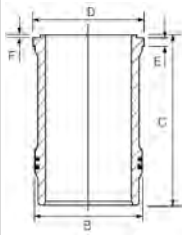

N 447133 **O** 568163 **P** 454133 **Q** <133 **R** 31<3
N 447133 **O** 567133 **P** 455133 **Q** <133 **R** 31<3
N 447133 **O** 567163 **P** 455133 **Q** <133 **R** 31<3

Vsz°' sl ßpo
Qrnvßop° °pl vß

Vsz°' sl ßp´ß
Ynsvtp ßJtnsß°yr py pty

Vsz°' sl ß
Qrnvßop° uztyß°

Lz°q ß oz
Qrnvß Öp vw° °pvw°

Lz°q ß ßz
I zx ' ´pyop vp r °l ´ytÜzyt

Y UPd 7B795B9	a 9	**A>E8vv**	**89D48; > i** 3GcP8GeN 4	**P Øt x f u U x v xw**		**f PDA>C**
Y UPd 7B795B9 N	a 9	**A>E8vv**	**88C i** 3GVi 4	**P Øt x f u U x v xw**		**f PDB>>**
Y UPd 7B795B9 O	a 9	**A>E8vv**	**89848; ; i** 3GcD8GeG 4	**P Øt x f u U x v xw**		**f PAEDA**
Y UPd 7B795B9 P	a 9	**A>E8vv**	**89C48; > i** 3GcN8GeN 4	**P Øt x f u U x v xw**		**f PDAD;**
Y UPe 7B795B9	a 9	**A>E8vv**	**87C i** 3GSV 4	**P Øt x f u**		**f PDA>A**
Y UPe 7B795B9 N	a 9	**A>A; vv**	**88; 488C i** 3GV/S8GVi 4	**P Øt x f u**		**f PDB7D**
Y UPe 7B795B9 O	a 9	**A>E8vv**	**EC487; i** 3GPN8GSD 4	**P Øt x f u**		**f PDB8A**
Y UPe 7B795B9 P Ø	a 9	**A>E8vv**	**887 i** 3GVD 4	**P Øt x f u**		**f P8>7BD**
M		382<6 352=3		S QJ RO TKX		432<5 382=9

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M : <158
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N 89133
O 4173
P 456158
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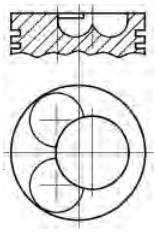

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5133 I X
7133 I X

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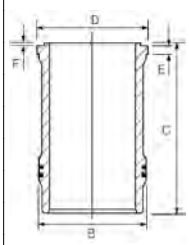

N 447133 **O** 567133 **P** 455133 **Q** <133 **R** 31<3
N 447133 **O** 567163 **P** 455133 **Q** <133 **R** 31<3
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< 0855=33073 .
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< 0855=33073 .
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Vsz°' sl ßpo

Ynsvtp ßJtnsß°yr py pty
Vsz°' sl ßp´ß

Qrnvßop° uztyß°
Vsz°' sl ß

Qrnvß Öp vw° °pvw°
Lz°q ß oz

I zx ' ´pyop vp r °l ´ytÜzyt
Lz°q ß ßz

Y UPd 7B57959B	a	9	**B8COvv**	**8AE i**	3NGa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8>7>E**
Y UPd 7B57959B h6> /Q 90	a	9	**B8COvv**	**8; 9 i**	3GeD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8>A7D**
Y UPd 7B57959B h6>8 /Q 90	a	9	**B8COvv**	**8; 9 i**	3GeD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P899>D**
Y UPd 7B57959B g6> /Q 90	a	9	**B8COvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8997D**
Y UPd 7B57959B I 6>8 /Q 90	a	9	**B8COvv**	**8D> i**	3NVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PDB; E**

S QIROTKX	3=2< 34233	VXKS Q_S	372=9
S QIR_S	34233	V´px t°x	352=9 45234

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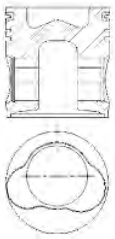
M : 4156
N4 531<6
N 93133
O 31<8
P 43<153
75É<7

df



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6183 S U
5183 I X
7133 I X

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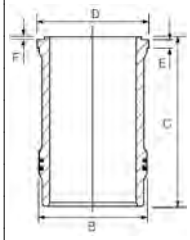

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HzÄwnl ' I ntßÖ 84169nx 6
Ø nvßop° °pl w
Vsz°' sl ßpo

azvßx py op´ Qzwppyx °wp 84169nx 6
Ynswp ßJtnsß°yr py pty
Vsz°' sl ßp´ß

azvßx p op w nl @ß o° ' t°ßzy 84169nx 6
Ø nvßop° uztyß°
Vsz°' sl ß

azvßnl @ßol o ' t°ß y 84169nx 6
Ø nvßÖp w° °pw°
Lz°q ßoz

azvßx p nl x p´l ' t°ßzyp 84169nx 6
I zx ' ´pyop w r °l ´ytÚzyt
Lz°q ßßz

Y UPd 7B57959B P	a	9	**B8COvv**	**8BB i**	3NNa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PADB9**
Y UPd 7B57959B T	a	9	**B8COvv**	**8; ; 48>> i**	3GeG8Gl a	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PAB>A**
Y UPd 7B57959B h /Q 80	a	9	**B8COvv**	**89E48; 9 i**	3GcV8GeD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PDB8D**
Y UPd 7B57959B k /Q 80	a	9	**B8COvv**	**8BB i**	3NNa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PDA; B**
Y UPd 7B57959B c	a	9	**B8COvv**	**8; C48>7 i**	3Gea8Gl D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PDAD>**
Y UPd 7B57959B g /Q 80	a	9	**B8COvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PDB8B**
Y UPd 7B57959B i /Q 80	a	9	**B8COvv**	**8A8 i**	3NDV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PDADC**

I	382=3 432=<	S GcZKX	432=5 382=8
M	352=3 3=2=4	S QIROTKX	3=2< 34233
S GTGMKX	3=2=4 432=9		

DC4A99E774;7

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O 3183
P 43<153
75É<7

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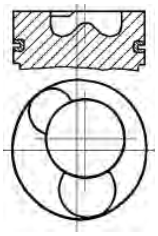

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5183 I X
7133 I X

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8A49BAEB7477
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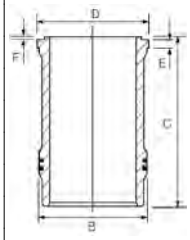

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< 0855=33063 .
4807<33=3033

Ø nvßop° °pl w
Vsz°' sl ßpo

Ynswp ßJtnsß°yr py pty
Vsz°' sl ßp´ß

Ø nvßop° uztyß°
Vsz°' sl ß

Ø nvßÖp w° °pw°
Lz°q ßoz

I zx ' ´pyop w r °l ´ytÚzyt
Lz°q ßßz

PkUA	S	9	**>D77vv**	**88D48B9 i**	3GaD8NND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8E78A**
PkUC	a	9	**C977vv**	**8CC49>C i**	3NSD8PSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8E78B**

S QIR_S	38239	VXKS Q_S 5	43238

DC4>; 7777477

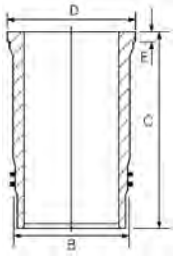
M : 31=3
N4 4=193
N 9718 3
P 43: 1<3
78É<9

WWdf f b

7D4>; 7777477

6183 I Q
5183
6183 I X

8A4>D7>A7477



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< 0763333033 .
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Y UPd 7B8975>A	a 9 **EOC8vv**	**98>4999 i** 3Ni G8PDN 4	**P@t x f u U x v xw**	**f PD>8>**
Y UPd 7B8975>AU-8 /Q 90	a 9 **ED; Evv**	**8DD i** 3NVa 4	**P@t x f u U x v xw**	**f P898E8**
Y UPe 7B8975; 7	a 9 **DD99vv**	**8AE48BE i** 3NGa8NPD 4	**P@t x f u**	**f PDAEA**
Y UPe 7B8975; 7 Z	a 9 **DD99vv**	**8A; i** 3NDe 4	**P@t x f u**	**f PDA; A**
Y UPe 7B8975; 7 Z8	a 9 **DD99vv**	**8B9 i** 3NND 4	**P@t x f u**	**f PDADB**
Y Ube 7B8975; 7	a 9 **DD97vv**	**8BB i** 3NNV 4	**P@t x f u**	**f PDB9B**
GMUXG	342=9	S GTGMKX	3=2=4 362=6	
I	452<6 382=4	ZH	392<3	
M	442<6 352=3			

8A4>D77A7477
8A4>D77C7477
8>4>D77C7477

N 4681 3 **O** 5941 3 **P** 47: 163 **Q**=15< **R** 31=3
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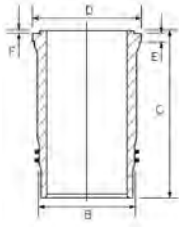

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Y UPd 7B8975>AM	a 9 **ED; Evv**	**8E9 i** 3NaD 4	**P@t x f u U x v xw**	**f PDAE8**
Y UPd 7B8975>AO	a 9 **ED; Evv**	**97B4987 i** 3NeD8NeV 4	**P@t x f u U x v xw**	**f PDAD7**
Y Ubd 7B8975>AM;	a 9 **ED>7vv**	**999 i** 3PDN 4	**P@t x f u U x v xw**	**f PDB; A**
Y Ubd 7B8975>AO;	a 9 **ED>7vv**	**8A9 i** 3NDa 4	**P@t x f u**	**f PDB9E**
S towtyp´	342=8 452=3	VX		342< 452<=

DC48; 8A77477

M <61<3
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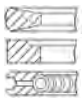
P 4671<3
83É=:

MWdf

7D48; 8A77487

6158 I X V
6133 I X V
7133 I X V



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8>4>D77C7477
8A4>D77A7477

N 4681 3 **O** 5941 3 **P** 47: 163 **Q**=168 **R** 31<3
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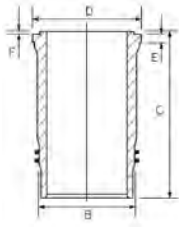

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4807<33: 3033

DE48; 8A774; 7
< 0464833033 .
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B 5=3 I a

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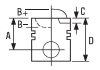
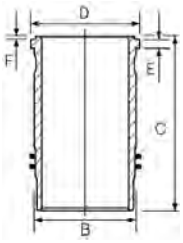
Niural® FITTED WITH GOETZE® RINGS



YUPd 7B8975>AM9		a	9	**ED; Evv**	**979 i**	3NcV	4		**P@t x**	**f u U x v**	**xw**		**f PDACE**
YUPd 7B8975>AO6> /Q	**90**	a	9	**ED; Evv**	**8DD i**	3NVa	4		**P@t x**	**f u U x v**	**xw**		**f P8C>98**
YUPd 7B8975>AP6>8 /Q	**90**	a	9	**ED; Evv**	**98E4998 i**	3Ne8PDD	4		**P@t x**	**f u U x v**	**xw**		**f PDB>8**
YUPd 7B8975>AY>8 /Q	**90**	a	9	**ED; Evv**	**9A7 i**	3PSD	4		**P@t x**	**f u U x v**	**xw**		**f P989;8**
YUTd 7B8975>AM>8 /Q	**90**	a	9	**ED; Evv**	**8DA i**	3NVN	4		**P@t x**	**f u U x v**	**xw**		**f P989BE**

GXKY	372=< 45236	S GcZKX	352=9 392=:
LX4	342<6	VXKS Q_S	372=9
ORGJK	372=<	V´px t°x	352=9 45234
QKXGc	392=:	ZXGl KX	342=4

8A4>A78E7477 **N** 468133 **O** 5891t 8 **P** 47: 183 **Q** =16< **R** 3t 8



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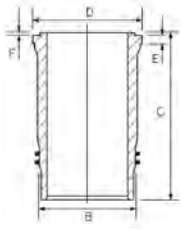
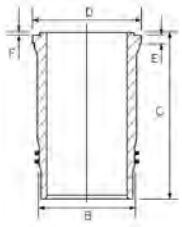
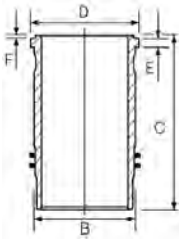
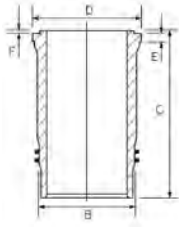
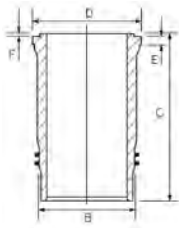


Qmv@op° °pl @w Ynswp ßJtnsß°yr py pty Qmv@ßop° uztyß° Qmv@Öp wr° °pwr° I zx ' ´pyop wp r °l ´ytÚzyt

YUPd 7B8975>AN; /Q	**80**	a	9	**ED; Evv**	**8EA i**	3NaV	4		**P@t x**	**f u U x v**	**xw**		**f PDAE9**
YUPd 7B8975>AP; /Q	**80**	a	9	**ED; Evv**	**999 i**	3PDN	4		**P@t x**	**f u U x v**	**xw**		**f PDA;E**
YUPd 7B8975>AQ		a	9	**ED; Evv**	**9>749>E i**	3PNa8PPi	4		**P@t x**	**f u U x v**	**xw**		**f PADB7**
YUPd 7B8975>AQ9 /Q	**80**	a	9	**ED; Evv**	**9>E i**	3PPi	4		**P@t x**	**f u U x v**	**xw**		**f PDA>7**
YUPd 7B8975>AQ6>8 /Q	**90**	a	9	**ED; Evv**	**9>E i**	3PPe	4		**P@t x**	**f u U x v**	**xw**		**f PDB>9**
YUPd 7B8975>AT		a	9	**ED; Evv**	**99C49>7 i**	3PGD8PNa	4		**P@t x**	**f u U x v**	**xw**		**f PB97E**
YUPe 7B8975>AN		a	9	**ED; Evv**	**8E94979 i**	3NaD8NcV	4		**P@t x**	**f u**			**f PDA;C**

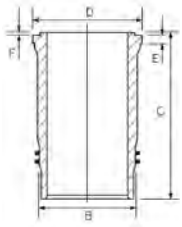
I	432<5 432=<	S I yl r p´	342=7 452=:
LX4	342<6	S GcZKX	432=5 392=:
M	432<5 3=2=4	S I Ébp´	342=7 452=:
QKXGc	392=:	VXKS Q_S	372=9
S GPUX	382=4 432=9	X	382=< 382=4
S GTGMKX	3=2=4 432=9		

DC4; ; CA77477 **M** <61<3 **N4** 551t 3 **N** : 7t33 **O** 4143 **O** 31<3 **P** 4671<3 83É=: **MWdf**	**7D4; ; CA77477** 6t83 I Q V 6t33 I X V 7t33 I X V	**8A4>D77D7477** **8>4>D77D7477** 	**N** 468t33 **O** 594t33 **P** 47: 163 **Q** =16< **R** 31t 3 **N** 468t33 **O** 594t33 **P** 47: 163 **Q** =16< **R** 31t 3	**DE4; ; CA77477** < 066: 833033 . 4807<33<3033
		8A4>A78E7477 	**N** 468t33 **O** 5891t 8 **P** 47: 183 **Q** =16< **R** 31t 8	**DE4; ; CA774>7** < 066: 833033 . 4807834=3033
		8A4>D77C7477 **8>4>D77C7477** 	**N** 468t33 **O** 594t33 **P** 47: 163 **Q** =168 **R** 31<3 **N** 468t33 **O** 594t33 **P** 47: 163 **Q** =168 **R** 31<3	
DC4; ; CA77487 **M** <61<3 **N4** 56168 **N** : 3t33 **O** 4143 **P** 4671<3 83É=: **MWdf**	**7D4; ; CA77477** 6t83 I Q V 6t33 I X V 7t33 I X V	**8A4>D77D7477** **8>4>D77D7477** 	**N** 468t33 **O** 594t33 **P** 47: 163 **Q** =16< **R** 31t 3 **N** 468t33 **O** 594t33 **P** 47: 163 **Q** =16< **R** 31t 3	**DE4; ; CA77487** < 066: 833043 . 4807<33<3033

5=3 I a D
Qjmvßop° °pl w Ynswp ßJtnsß°yr py pty Qjmvßop° uztyß° Qjmvß Öp w° °pwr° I zx ' ´pyop wp r °l ´ytÜzyt

| | | |

		8A4>D77D7477 8>4>D77D7477	**N** 468133 **O** 594133 **P** 47: 163 **Q** =16< **R** 31 3 **N** 468133 **O** 594133 **P** 47: 163 **Q** =16< **R** 31 3	



Ymwop° °pl w | Ynswp ßJtnsß°yr py pty | Ymwßop° uztyß° | Ymwöp wr° °pwr° | I zx ' ´pyop wp r °l ´ytÜtzyt

Y UPd 7B8975>APP /Q 80 a 9 **ED; Evv** 999 i 3PDN 4 **P6t x f u U x v xw** **f P9E87C**

DC4; ; CA77477

M <61<3
N4 551 3
N : 7133
O 4143
O 31<3
P 4671<3
83É=:

MWdf

7D4; ; CA77477

6183 I Q V
6133 I X V
7133 I X V

DC4; ; CA77487

M <61<3
N4 56168
N : 3133
O 4143
P 4671<3
83É=:

MWdf

7D4; ; CA77477

6183 I Q V
6133 I X V
7133 I X V

5=3 I a D

Y Ube 7B8975>A a 9 **ED>7vv** 8; C48DB i 3Gea8NVP 4 **P6t x f u U x v xw** **f PDB; 7**
Y Ube 7B8975>AM a 9 **ED>7vv** 89E i 3GcV 4 **P6t x f u U x v xw** **f PDB; 8**
Y Ube 7B8975>AN a 9 **ED>7vv** 8CB48DB i 3NSD8NVP 4 **P6t x f u U x v xw** **f PDB; B**
Y Ube 7B8975>AO a 9 **ED>7vv** 8>> i 3Gl a 4 **P6t x f u** **f PDB; 9**

VX 342< 452=3

DC4; ; CA774A7

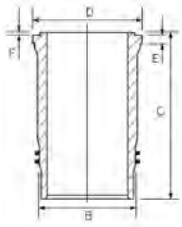
M <61<3
N4 56167
N : 7133
O 4143
O 31<3
P 4671<3
83É=:

MWdf

7D4; ; CA77477

6183 I Q V
6133 I X V
7133 I X V

8A4>D77C7477 8>4>D77C7477	**N** 468133 **O** 594133 **P** 47: 163 **Q** =168 **R** 31<3 **N** 468133 **O** 594133 **P** 47: 163 **Q** =168 **R** 31<3	**DE4; ; CA774A7** < 066: 833083 . 4807<33: 3033



Ymwop° °pl w | Ynswp ßJtnsß°yr py pty | Ymwßop° uztyß° | Ymwöp wr° °pwr° | I zx ' ´pyop wp r °l ´ytÜtzyt

POU88O /Q ; 0 a 9 **88877vv ; 7; i** 3SGN 4 **P Øt x f u U x v xw** **f P8BDD7**

QKXGc 34234 VXKS Q S 3<233

DC48; AA77487

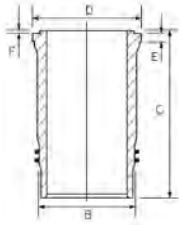
M : <17<
N4 57133
N : 5193
O 4193
P 44717<
83É435

f b

7D48; AA77487

6133 I Q
6133 I X
7133 I X

8>4>A7E97477 **N** 4671=4 **O** 58: 133 **P** 47: 173 **Q** =16< **R** 31t 3



DE48; AA77487
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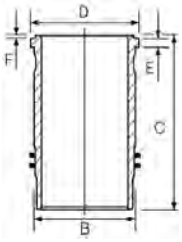

Qrnvïop° °pl w Ynswp ßJtnsß°yr py pty Qrnvïßop° uztyß° Qrnvï Öp w° °pw° I zx ' ´pyop wp r °l ´ytÜzyt

POU88Q /Q ; 0 a 9 **88877vv 9BB49BD i** 3PaN8PaS 4 **P Øt x f u U x v xw** **f P8BDCE**

ORÖGJK 36239 VXKS Q S 3<233
QKXGc 34234 V´px t°x 34235 4523:

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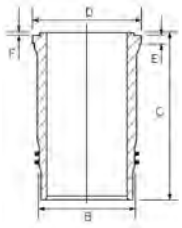
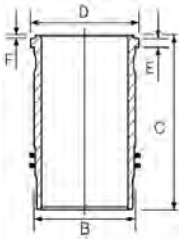


8A4>A7997477 **N** 46815 3 **O** 5891t 8 **P** 47: 183 **Q** =174 **R** 31t 8



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PkU88 /Q ; 6>0 a 9 **87D77vv 9>; 4; ; E i** 3PPD8SaD 4 **P Øt x f u** **f P8E78C**

QKXGc 43238 VXKS Q S 5 43238

DC4>; DD77477

M : <173
N4 4: 133
N <6193
O 4133
O 4133
P 4441 3
87É: 6

WWf b

7D4>; DD77477

6183 VaJ
5183 I X V
6133 TZ

8A4>D7>>7477
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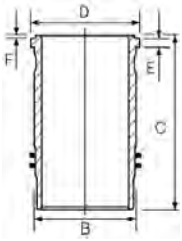

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N 46=133 **O** 57=188 **P** 47=133 **Q** 44153 **R** 31<8

DE4>; DD77477
< 076<<33033 .
4807<3773033

S zyzYßppw
K°´z 728
Yßppw
Ømvßop° °pl vß

Yßl sw
Ynswlp ßJ tnsß°yr py pty

Gntp´
Ømvßop° uztyß°

Gnp´z
ØmvßÖp vw° °pwv°

Gnntl tz
I zx ' ´pyop vp r °l ´ytÚzyt

Y UPd 7B89; 5AB M6; /Q	**90**	a	9	**88899vv**	**9AA i**	3PSc	4	**P6l x**	**f**	**u**	**U x v**	**xw**	**f P8CA9D**
Y UPd 7B89; 5AB M6>8 /Q	**90**	a	9	**88899vv**	**9D7 i**	3PeG	4	**P6l x**	**f**	**u**	**U x v**	**xw**	**f PDB>;**
Y UPd 7B89; 5AB N6>8 /Q	**90**	a	9	**88899vv**	**9DD i**	3Pi N	4	**P6l x**	**f**	**u**	**U x v**	**xw**	**f P8997C**

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QKXGc	392=:	VXKS Q_S 5	43238 3<23:

DC48; AA77477

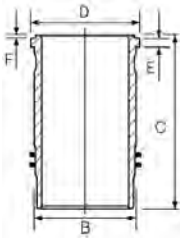
M : <163
N4 57133
N : 8133
O 4153
P 453163
83É=:

MWZN df f b

7D48; AA77487

6183 I Q
6133 I X
7133 I X

8A4>A7997477



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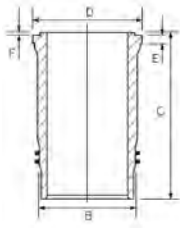

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Ynswlp ßJ tnsß°yr py pty

Ømvßop° uztyß°

ØmvßÖp vw° °pwv°

I zx ' ´pyop vp r °l ´ytÚzyt

Y MOWQ5f QOT M6>B /Q	**90**	a	9	**89777vv**	**9EA i**	35DG	4	**P6l x**	**f**	**u**	**U x v**	**xw**	**f P8>CC7**
Y MOWQ5f QOT N6>B /Q	**90**	a	9	**89777vv**	**;9> i**	35SG	4	**P6l x**	**f**	**u**	**U x v**	**xw**	**f P8>CC8**
Y MOWQ5f QOT O6>B /Q	**90**	a	9	**89777vv**	**;>C4; A; i**	35cN85eD	4	**P6l x**	**f**	**u**	**U x v**	**xw**	**f P8>CC9**

S GMT_S	38233

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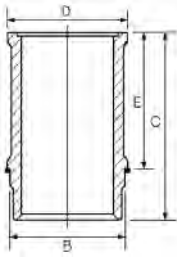
M =61=6
N4 59153
N : 9198
O 5174
P 4771=6
8: É=:

MWf b

7D4>9EB77487

614: I Q V
516< I X V
71 5 I X V

8>4C>78; 7477



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Y UPd 7B89>3BA	a 9	**88EAAvv**	**9DC4>89 i**	3Pi D8VaD 4	**P@t x f u U x v xw**	**f P9E877**
Y UPd 7B89>3BA M6>9 /Q 90	a 9	**88EAAvv**	**9DC i**	3Pi D 4	**P@t x f u U x v xw**	**f P898>D**
Y UPd 7B89>3BA N6>9 /Q 90	a 9	**88EAAvv**	**; 8B i**	3SPD 4	**P@t x f u U x v xw**	**f P898DD**
Y UPd 7B89>3BA O6>9 /Q 90	a 9	**88EAAvv**	**; >B i**	3ScG 4	**P@t x f u U x v xw**	**f P898DE**

S GMT_S 3=2=9

DC4>9EB77477

M =61=6
N4 59163
N <5145
O 5174
O 5174
P 475163
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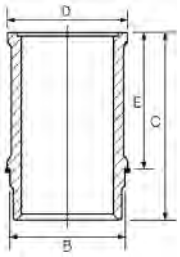
MW

7D4>9EB77487

614: I Q V
516< I X V
71 5 I X V

8>4C>78; 7477



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470: 73463033

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PkU89 /Q ; 0	a 9	**898; 7vv**	**; 9>4; A; i**	3SSG8SeD 4	**P@t x f u U x v xw**	**f P8E7D;**

S GMT_S 43237 37239

DC489; 977477

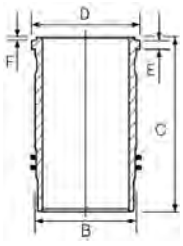
M < 155
N4 4: 143
N <<1=8
P 46: 178
88É43:

df f b

7D489; 977477

7133 I Q V
6133 V
7133 TZ

8A4>A7AE7477
8>4>A7AE7477



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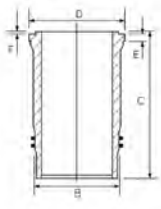

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DC489; 977487 **M** < 173 **N4** 4: 154 **N** <=133 **P** 4581 3 88É43: **MWf b**	**7D489; 977477** 7133 I Q V 6133 V 7133 TZ	**8A4>A7AE7477** **8>4>A7AE7477**	**N** 477133 **O** 5: 51<3 **P** 48=193 **Q** 44153 **R** 31=3 **N** 477133 **O** 5: 51<3 **P** 48=193 **Q** 44153 **R** 31=3	**DE489; 977487** < 0456533043 . 4807838=3033
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PkU8; /Q >6A0	a	9	**89D77vv**	**; 9; 4; D9 i**	3SSD8VND	4	**P%t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P8E7D>**
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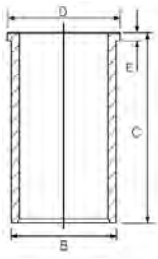
S zyzYßppw Yßppw Ømwºop° °pl w	Yßl sw Ynswp ßJ tnsß°yr py pty			Gntp´ Ømwßop° uztyß°			Gnp´z Ømwºp w° °pw°						Gnntl tz l zx ' ´pyop wp r °l ´ytÚzyt		
Y Pe 7B5j A5>7	a	9	**8979>vv**	**8CC497D i**	3NSG8NeP	4	**P%t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f PDBBD**
Y UPd 7B5j A5>7	a	9	**8979>vv**	**97B499B i**	3NeD8PDc	4	**P%t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P8EEBA**
Y UPd 7B5j A5>7 O	a	9	**8979>vv**	**99>499D i**	3PDV8PGD	4	**P%t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f PDB>A**
X				432<3 362<=		ZHN								342 :	392<3

		8>4797;;7477 8>4797A87477 8>479C977477	N 476133 O 5<9133 P 47=133 Q:173 N 476133 O 5<9133 P 47:133 Q:133 N 476158 O 5<9133 P 47=133 Q:173



Y UPd 7B5 A5>7 S	a	9	**8979>vv**	**9>;49AE i**	3PPD8PVN	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f P89979**
Y UPd 7B5 A5>7 T	a	9	**8979>vv**	**9B>49CE i**	3PVi 8PeD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f PDA8B**
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S GMT_S				3=2=3 392=5			X							362=9	382=4

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M =3163
N4 581<8
N :<133
O 31<3
P 4:3143
88É445

MWdf

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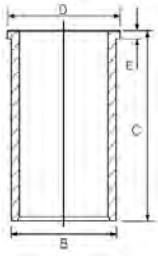
6133 V
7133 I X V

8>4797;;7477 N 476133 O 5<9133 P 47=133 Q:173



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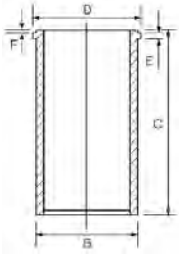

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Y UPd 7B5 A5>7 Z6;/Q 80	a	9	**8979>vv**	**9D;i**	3PeV	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**		**f PDA8D**
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S GMT_S				352=5 452=9											

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M =3173
N4 541<3
N :<133
O 31=3
P 47=173
88É43<

ZN df

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7133 I X V

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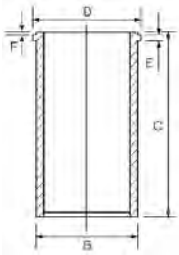

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Y UPd 7B5j A5>7 X8		a	9	**8979>vv**	**9D; i**	3PeV	4	**P%l x**	**f**	**u**	**U x v**	**xw**	**f PDA8C**
Y UPd 7B5j A5>7 b6>8 /Q	**90**	a	9	**8979>vv**	**;7A i**	3SGV	4	**P%l x**	**f**	**u**	**U x v**	**xw**	**f P898DC**

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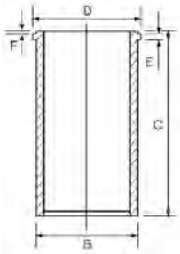

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Y UPe 7B5j A5>7 N		a	9	**8979>vv**	**99A i**	3PDa	4	**P%l x**	**f**	**u**	**U x v**	**xw**	**f P9E88;**

DC4; ; A; 77477

M =3163
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N : <133
O 31<3
P 4: 3143
88É448

MWdf

7D4; ; A; 77477

6183 I X V
6133 V
9133 I X V

Y UPe 7B5j A5>7 P		a	9	**8979>vv**	**97D i**	3NeP	4	**P%l x**	**f**	**u**			**f PDA>9**

I	372<9 432=5		

DC4; ; A; 77477

M =3163
N4 5=143
N : <133
O 31<3
P 4: 3143
88É448

MWdf

7D4; ; A; 77477

6183 I X V
6133 V
9133 I X V

8>4797; ; 7477
N 476133 **O** 5<9133 **P** 47=133 **Q** : 173

8>4797A87477
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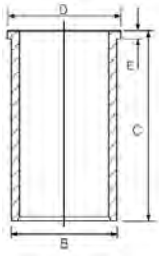

DD4; ; A; 77477
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470353663033

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Indeks silnika • МоДель ДВИгателЯ • دليل المحرك

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; 5AX OMdNgdQff ad		PVNe	e	ee9ea	8;
88 P		PVNe	e	ee9ea	8;
88 W9P		GGGi	S	cV9DD	>
88 W>R		GGGi	S	cV9DD	>
89 M9N		GNcV	S	cD9aN	9
89 TQ		GNcV	S	cD9aN	9
89 TX		GNcV	S	cD9aN	9
89 X/977f PØ		NSi a	S	i D9Sc	8B
8> W9M		GPi a	S	cV9DD	A
8> W9P		GPi a	S	cV9DD	A
8> W9R		GPi a	S	cV9DD	A
8> W>O		GPi a	S	cV9DD	A
8> W>P		GPi a	S	cV9DD	A
8> W>R		GPi a	S	cV9DD	A
8> W>Y		GPi a	S	cV9DD	A
8B W>R/Wex Øt 0		GVee	S	eD9DD	C
8D W>R/Wex Øt 0		Gci a	S	eD9DD	C
8D W>W/hhO0		Gci a	S	eD9DD	D
8E X/; 77f PØ		NSi a	S	i D9Sc	8C
97 f 9Z /X eQdUQe0		Gi iS	S	eS9SV	89
97 f 9d /X eQdUQe0		Gi iS	S	eS9SV	89
98 X/; 77f PØ		NSi V	S	i D9Sc	8C
99 P		PVPG	e	ee9ea	8>
9> P		PVNe	e	ee9ea	8>
9A P		PVNe	e	ee9ea	8>
9A W>R		NSi c	a	eD9DD	E
; 7 M		PVNe	e	ee9ea	8>
; 8 M		PVNe	e	ee9ea	8>
; 8 P		PVNe	e	ee9ea	8;
; D M		PVNe	e	ee9ea	8;
; E M		PVNe	e	ee9ea	8;
>E9 > eTUdS		NVDD	S	i N9DD	8D
99DB		NNea	S	i D9Sc	8A
M2 eQdUQe /89 M9P0		GNcV	S	cD9aN	;
M2 eQdUQe /89 M9Q0		GNcV	S	cD9aN	;
M2 eQdUQe /89 T0		GNcV	S	cD9aN	;
MeQdUQe /EE T0		i i e	S	aS9Va	8
Td >E9 TU		NPi P	S	i N9DD	8D
Td >E9 Tf		NPi P	S	i N9DD	8D
Wh B		NSi c	a	eD9DD	E
Y >Cd		Gi VG	S	eS9DD	88
fgPA		GVNc	S	cc9DD	B
hY 4Td >E95>		NPi P	S	i N9DD	8D
kgPE		Gi DV	S	eP9DD	87

MeQdlUQe /EE T0 S 9 **EEDvv** **9B4; > i** 3PV8Sa 4 **bx** **f P9CBDE**

S CT04333 3<2=3 392=6 S CT0IS UQK 413 3=2=9 3=2=6

DC4A99>77477

M 6713=
N4 71=6
P 981t :
49É89

7D4A99>77477
7D4A99>7C477 *Tm m*

418< V
418< V
7133 I X V

DC4A9>; 7C487 *Tm m*
DC4A9>; 88487 *Tm m*
DC4A9>; 8>487 *Tm m*

M 661<9
P 861t =
49É84

7D4A9>; 77487
7D4A9>; 7C487 *Tm m*
7D4A9>; 88487 *Tm m*
7D4A9>; 8>487 *Tm m*

4183 I Q V
4183 V
6133 V

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyŵ | Qzwupy y°´ ty S zßz´° ßŰpy Ü° p´°pßŰpy | Vt°ßzy ´px 'wnp´ol y° up° x zßp°´ | Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwlx pyßp | 0V t°ßzyp'° p°°p´p´tx 'tl ÜŰlßz °zwlx pyßp nzx 'wpßz

Vty´pß typo nÖnt´nW° | Hzwŭpy x t8Ytnsp´°yr°nW° rpsl wßpy | GÉp´pßpy°'l´nt´nW° | H°wy´pßpytoz 'z´l ytwu° op´pßpynt y | Y'tyzßz ßl ßßpy°ßz ol cp´x t
Vt°ßzy 'ty''p°° qß3ty nzy´zo | Qzwupymzwŭpy ty Vup°pwptyr p'´p ß | GÉp°p´´ °°´ mtpwp | H°wy opw t°ß y x zyß oz l ''p°t y py w mtpw | Y'tyzßz ty°p´ßz l °'tyß ypwlv mtpw

89 M9N S 9 **89CAvv** **;C i** 3/D 4 **bx** **f P>DD7**

89 TQ S 9 **89CAvv** **>E4A8 i** 3ac8ai 4 **bx** **f P9BE; B**

89 TX S 9 **89CAvv** **>>4A7 i** 3aD8ae 4 **bx** **f P99E7A**

433 2S KZXU 446 372=3 382=5 S CT04633 372=5 44233
S GKYZXU 416 3=2=3 342=8 S UTZKMU 416 432=7 432<<
S KZXU 416 372=3 382=5

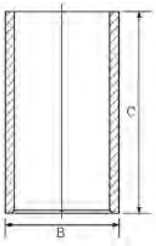
DC4A98C77477
DC4A98C7C477 *Tm m*
DC4A98C88477 *Tm m*
DC4A98C8>477 *Tm m*

M 6: 157
N4 81t 7
P 8: 157
54É89

7D4A98C77477
7D4A98C7C477 *Tm m*
7D4A98C88477 *Tm m*
7D4A98C8>477 *Tm m*

417< V
417< V
7133 V

8>4787DE7477



N : 613= **O** 4741 5<

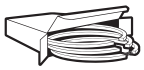
Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß? zyŵ | Qzwupy y°´ ty S zßz´° ßŰpy Ü° p´°pßŰpy | Vt°ßzy ´px 'wnp´ol y° up° x zßp°´ | Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwlx pyßp | 0V t°ßzyp'° p°°p´p´tx 'tl ÜŰlßz °zwlx pyßp nzx 'wpßz

M2 eQdlUQe /89 M9P0 S 9 **89CAvv** **;E i** 3/P 4 **bx** **f P;>C;**

M2 eQdlUQe /89 M9Q0 S 9 **89CAvv** **>B i** 3aP 4 **bx** **f P;>DC**

M2 eQdlUQe /89 T0 S 9 **89CAvv** **>C4>D i** 3aS8aV 4 **bx** **f P99;B>**

S CT0416 l zz'p´ 342=5 432=9 S CT04633 342=5 44233

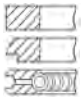


DC4A9>877477
DC4A9>87C477 *Tm m*
DC4A9>888477 *Tm m*
DC4A9>88>477 *Tm m*

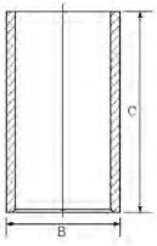
M 6<t 7
N4 81t 7
P 8<t 7
54É89

7D4A9>877477
7D4A9>87C477 *Tm m*
7D4A9>888477 *Tm m*
7D4A9>88>477 *Tm m*

41B3 TZ
41B3 V
61B3 V



8>4787DE7477

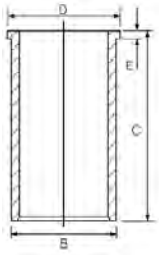


N : 613= **O** 4741 5<

Vt°ßzy° ßz mp´p' wmpo ty Kyr typ Ypß° zyw0 | Qzwmpy y°´ty S zßz´° ß0by Ü° p´°pß0by | Vt°ßzy ´px ' wmp´ ol y° wp° x zßp°´ | Vt°ßzyp° op´p' °p°ßz ' l ´l wp°rz° op x zßz´p° °zwx pyßp | 0W t°ßzyp ' ° p°°p´p´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wpßz

88 W9P	S	9	**888Evv**	**>> i**	3aD	4	**bx**		**f P>DD>**
88 W5R	S	9	**888Evv**	**AA i**	3cV	4	**bx**		**f P8D; BA**
58 0414				3=2==	3923 4		433 2S KZXU 444 l 2R2Y	362=3	452=<
58 0414 49a				3423 7	3823 8		533 0547	342=<	3623 3
433 444				372=7	432=:				

8>4C877; 7477

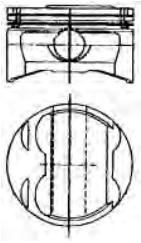


N <7143 **O** 45=183 **P** < 183 **Q** 8318 3

8> W9M	S	9	**8; EBvv**	**AA i**	3cV	4	**bx**		**f P; >CC**
8> W9P	S	9	**8; EBvv**	**AA i**	3cV	4	**bx**		**f P; >CD**
8> W9R	S	9	**8; EBvv**	**AA i**	3cV	4	**bx**		**f PE>EE**
8> W5O	S	9	**8; EBvv**	**BB4C7 i**	3 D8 V	4	**bx**		**f P; >D7**
8> W5P	S	9	**8; EBvv**	**BB i**	3 D	4	**bx**		**f P; >DD**
8> W5R	S	9	**8; EBvv**	**CB i**	33DP	4	**bx**		**f P; >D8**
8> W5Y	S	9	**8; EBvv**	**B9 i**	3eS	4	**bx**		**f P8D9; 8**
58 l US S KXI K 417				3423 6	4523 8		533 0547 417t 49a	342=6	442==
58 0417 49a				432==	3823 8		533 0547 MYt2Yt	342=3	432=8
78 0417				3523 3	3823 8		533 0547 t	442=8	3623 3
433 447				372=7	432=<		533 0547 Yt	442=8	3623 3
433 2S KZXU 447 MYt				432=7	432=8		533 0547 Yt2MPt	432<=	432=8
433 2S KZXU 447 MZ049a				362=3	452=<		733 0747	342=6	452==
433 2S KZXU 447 MZ0MZ 49a l l ß				362=3	452=<		733 0747 MYr02Y0	372=3	372=8
433 2S KZXU 447 Y2R2MZG				362=3	452=<		733 0747 MYr02Y0l l ß	432=5	372=8
533 0417				342=9	452=:		733 0747 Yt	382=8	3623 3
533 0547				3=2=6	452=8		YZXKKZb 0YK 417	3<236	3823 8
533 0547 417				372=3	442==				

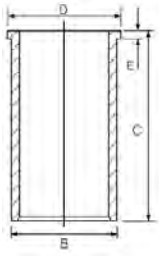
DC4A97A77477
342=8

M 561<7
P 791t =
4<É7<



7D4A97A77477

4133
4153
5133 TZ



8>4C877; 7477

N <7143 **O** 45=183 **P** < 183 **Q** 83133

DD4A97A77477
< 0853833033 .
470: 43363033

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

f gPA S 9 **8A9Cvv** **>9 i** 3/c 4 **P@t x** **f P; >E7**

433 2S KZXU 448 J 452=7 452=<

DC4; 9AD77477
DC4; 9AD7B477 *mT m*

M 7316:
N4 4198
P 99165
56É93

MWdf

7D4; 9AD77477
7D4; 9AD7B477 *mT m*

5133 I Q V
41t 8 V
6133 I X V

8B W>R/Wex @t 0 S 9 **8ADDvv** **D74DB i** 3GDi 8GGc 4 **bx** **f PE; AD**

8D W>R/Wex @t 0 S 9 **8CEBvv** **DA4DD i** 3GGa8GND 4 **bx** **f PE>D;**

8D W>R/Wex @t 0 S 9 **8CEBvv** **DD i** 3GND 4 **bx** **f P88B7C**

58 0419 49a	432== 38238	533 00549 419t 49a	342=9 442==
58 041< 49a	432== 38238	533 00549 Yt	442=8 392==
78 0419	35233 38238	533 0054< Yt	3<2== 36233
78 041<	35233 38238	733 00749 Yt	382=8 36233
: 8 41<	352== 38238	I U_VK 419 49 a	362=9 442==
: 8 041<	3<234 38238	YZXKKZb 0YK 419	34237 38238
533 549	342=9 452=<	YZXKKZb 0YK 41<	3<236 38238

DC4A99C77477

M 551t 3
N4 3186
N 9<153
O 5198
P 78198
4<É86

f b

7D4A99C77477

4133 I X
4153 V
5133 I X

8>4C87797477

N <7143 **O** 45=183 **P** < 183 **Q** 83133

DD4A99C77477
< 0855: 33033 .
470: 43353033

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8D W>W/hhO0 S 9 **8CEBvv** **87C4887 i** 3GSa8GVD 4 **bx** **f P; A77**

58 041< 49a	35233 38238	733 41<t	392=9 442=<
533 0054< Q at	442=8 36233	I U_VK 41< 49 a	362=9 442==

DC4A99C77487

M 551t 3
N4 3186
N 9<133
O 4133
P 78198
4<É86

f b

7D4A99C77477

4133 I X
4153 V
5133 I X

8>4C87797477

N <7143 **O** 45=183 **P** < 183 **Q** 83183

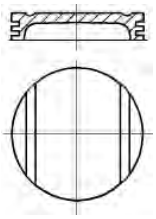
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

9A W>R	a	9	**9>EOvv**	**89E48; 7 i**	3GcV8Gcc	4	**bx**	**f PE>E9**
Wh B	a	9	**9>EOvv**	**89E i**	3GcV	4	**bx**	**f P88B7D**

: 8 518 a9		352—	38238	<33 518 Yt		352=9	432=<
: 8 0518 a9		3<234	38238	<33 <58 Yt		372=9	352—
<33 518		352=9	432=<	<33 <58 Yt R°É		372=9	352—

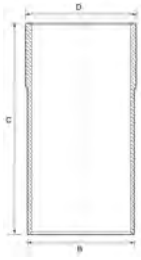
DC4A98B77477

M 5: 168
O 4153
P 83163
4<É86



7D4A98B77477

4153 I X
4183
5183 I X



8>4C87797477

N <7143 **O** 45=183 **P** < 183 **Q** 83183

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

kg PE	S	9	**8E7Avv**	**>C4A9 i**	3aS8cG	4	**P@t x**	**f P; 999>**

533 0054<J		3=2=4	432=8	733 0074<J		3=2=4	372=8

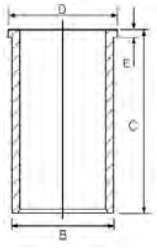
DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

M 791<3
N4 5153
P <7163
58É: 5

7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

5133 I X V
5133 V
6133 I X V

8>4797A; 7477



N <8193 **O** 486183 **P** <<183 **Q** 61=3

Y >Cd	S	9	**8EA8vv**	**DA i**	3GGa	4	**P@t x f u U x v xw**	**f P88B7E**

: 8 0513 I JZ		3<234	38238				

DC488>>77477
DC488>>7A477 *mT*

M 7: 133
N4 4813 8
N 741 3
O 4163
P : 4133
63É99

-8<7850R493,

WWdf

7D488>>77477
7D488>>7A477 *mT*

6133 I Q V
5133 V
6133 I X V

UK 4458 557 : 6<6

97 f 9Z /X eQdlQe0	S	9	**8EE>vv**	**C>4D; i**	3GDG8GGP	4	**P@t x**	**f u U x v xw**			**f PE>EB**
97 f 9d /X eQdlQe0	S	9	**8EE>vv**	**B; i**	3ea	4	**P@t x**	**f u U x v xw**			**f PE>EC**
58 I US S KXI K 513 tJZ				3423 6	4523 8		733 0 0753 J			442=8	3623 3
58 0513 tJZ				432==	3823 8		733 0 0753 Jt			382=8	3623 3
78 0513 tJZ				3523 3	3823 8		933 0953 Yot			382=7	392==
533 0 0553 J2YJ				442=8	3623 3		I Ja 513 tJZ			3623 6	3723 8
533 0 0553 YJt				442=8	3623 3		YZXKKZb 0YK 513 ZJ			3<236	3823 8

DC488ED77477
DC488ED7C477 *mT m*

M 7: 1=:
N4 4: 133
N 6<133
P : 91=:
63É: 3

MWdf f b

7D488ED77477
7D488ED7C477 *mT m*

6133 VY
5133 V
6133 I X

48 opr´pp b por p Zz' Xtyr | 480M l o Qptwmp´´tyr | Ypr x pyßßl ' Üztol wl yr w 48 op r´ °1 | Gytwr °°' p´tz´ py n° l op 48 r´l oz° | Ypr x pyßz ßl ' pÜz nzy tynwyl Üzyp dl ynst C 48

; 5AX OMdNgdQf f a d	e	9	**; A9Dvv**				**bx**				**Y b9BD; 48**
88 P	e	9	**; A9Dvv**	**E; i**	3GNa	4	**bx**				**f P; >E>**
; 8 P	e	9	**; A9Dvv**	**87C i**	3GSa	4	**bx**				**f PE>D>**
; D M	e	9	**; A9Dvv**	**88A i**	3GVa	4	**bx**				**f PEA78**
; E M	e	9	**; A9Dvv**	**88A i**	3GVa	4	**bx**				**f PEA77**
533306833 6833				392 9	432<9		6833			342 :	452<9

DC4A97877477
DC4A9787C477 *Tm m*

M 7: 16:
N4 8159
N : 4145
P : : 13=
55É: 6

7D4A97877477
7D4A9787C477 *Tm m*

418< I X V
418< V
71 6 V

99 P	e	9	**; A; 8vv**	**88; i**	3GVS	4	**bx**				**f P; >ED**

9> P	e 9	; A9Dvv	897 i	3GaP 4	bx f P; >EB
9A P	e 9	; A9Dvv	897 i	3GaP 4	bx f P; >EA
; 7 M	e 9	; A9Dvv	8>9 i	3G1 P 4	bx f P; >CB
; 8 M	e 9	; A9Dvv	8>9 i	3G1 P 4	bx f P; >CA

533306833 6833 atfbp°°p 432<5 432<9

DC4A97877487
DC4A9787C487 *Tm m*

M 7: 14:
N4 5169
N : 4145
P : : 13=
55É: 6

7D4A97877477
7D4A9787C477 *Tm m*

418< I X V
418< V
71t 6 V

99DB S 9 **99DBvv** bx **Y b8A; ;**

<3 S v 0 342B< 45295 <3 V7 342B< 45295

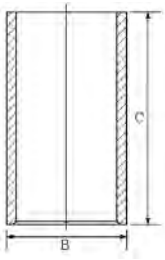
DC49B; 87C477 *Tm m*

M 8<185
P ==1=5
58É: 9

7D49B; 877477
7D49B; 87C477 *Tm m*

41t = I X V
41t = V
71t 7 V

8>4787E97477 **N** =7183 **O** 4=4169



DC49B; 877487
DC49B; 87C487 *Tm m*

M 8717<
N4 31=4
P <=156
58É: 9

7D49B; 877477
7D49B; 87C477 *Tm m*

41t = I X V
41t = V
71t 7 V

89 X /977f PØ0 S 9 **9>EBvv** **D; i** 3GGP 4 **PØ1 x f u U x v xw** **f P; >B8**

5733 518 ZJ0 342<=

DC4A9>>77477

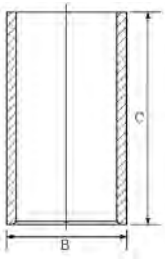
M 88173
N4 4<1<8
N 6=183
P =41=3
63É: :

df f b

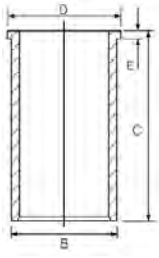
7D4A9>>77477

5183 I X V
5183 V
6183 I X V

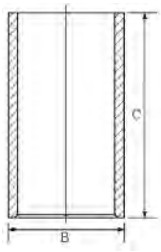
8>4787E97477 **N** =7183 **O** 4=4169



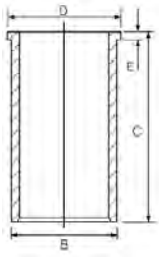
		8>479>C87477	**N** =7185 **O** 4=4169 **P** ==t 3 **Q** 71t 9		



8E X /; 77f PØ	S 9	**9>EBvv**	**D; 4E7 i** 3GGP8GNN 4	**PØt x**	**f u U x v xw**		**f PE>D9**
98 X /; 77f PØ	S 9	**9>EAvv**	**D; i** 3GGP 4	**PØt x**	**f u U x v xw**		**f P8A8BD**
J0YI UaKXd 0518 ZJ0		392=7 432=9					

DC4A98D77497 **DC4A98D7C497** *Tm m* **DC4A98D88497** *Tm m*		**7D4A98D77497** **7D4A98D7C497** *Tm m* **7D4A98D88497** *Tm m*		**8>4787E97477**	**N** =7183 **O** 4=4169		
M 8817 3 **N4** 4<178 **N** 6=133 **P** =41=3 63É: :		6133 5183 6133	I X				
df f b							

				8>479>C87477	**N** =7185 **O** 4=4169 **P** ==t 3 **Q** 71t 9		



>E9 > eTUdlS	S 9	**9A77vv**	**DC i** 3GGe 4	**PØt x**			**f P; A79**
Td >E9 TU	S 9	**9; E; vv**	**D84D> i** 3GGD8GGS 4	**PØt x**	**f u U x v xw**		**f P99; BA**
Td >E9 Tf	S 9	**9; E; vv**	**BC i** 3 G 4	**PØt x**	**f u U x v xw**		**f P99; BB**
hY 4Td >E95>	S 9	**9; E; vv**	**DE i** 3GNG 4	**PØt x**	**f u U x v xw**		**f P; A7;**
<33 <58 J2YJ		342=3 352==		533306833 5733 ZJ		382<5	432<9
<33 <58 YJ		3=2=6 352==					

				8A4BCB>97477	**N** 434183 **O** 4991<3 **P** 443183 **Q** <1=3 **R** 4153		
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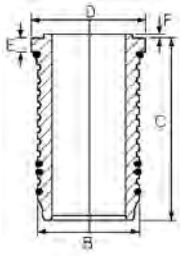

Niural® FITTED WITH GOETZE® RINGS

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		CCM	x		9
MBB XQf /Q	A0	GVi e	S	ci 9DD	8
M97 Pf T /Q	A0	Gi Va	S	eP9DD	B
N9ADU		NSi e	a	eG8aD	;
P99; X		NGcG	S	eS9DD	C
k99 Pf T		NGcG	S	eS9DD	C
l 99 Pf T		NGcG	S	eS9DD	C
m8DkQ		Gci a	S	eD9VD	9
m8EPf		Gi GD	S	eN9DD	A
m8EPf T		Gi GD	S	eN9DD	>
m8E Pf V		Gi GD	S	eN9DD	>

Nüral® FITTED WITH GOETZE® RINGS

M8B XQf /Q A0 S 9 **8AEDvv** **8; 9 i** 3GeD 4 **bx** **f u U x v xw** **f P9>>>>**

=08 419 Z°´mz 38243 34245

DC4>; AA77477
DC4>; AA7C477 *mT m*

M	5: 183	4153	TZ
N2	3193	4153	V
P	78143	5133	TZ
	4=É86		

TMf b

7D4>; AA77477
7D4>; AA7C477 *mT m*

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m8DkQ S 9 **8CEBvv** **E7 i** 3GNN 4 **bx** **f P8D7CE**

=06 41<t 34237 35248

DC48>8977477
DC48>897C477 *mT m*

M	57143	4153	TZ
P	771t 3	4153	V
	4<É88	5133	I X

f b

7D48>8977477
7D48>897C477 *mT m*

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

N9ADU a 9 **9>EDvv** **89A489C i** 3GcD8GcP 4 **bx** **f P; A9B**

=33 00518 452=6 452=< =33 00518 057 a9 3: 2=6 352=<

DC4; 7CC77477
DC4; 7CC7C477 *mT m*

M	63178	4183	S U V
N2	3169	4183	V
O	5173	6133	I X
P	84136		
	54É89		

7D4; 7CC77477
7D4; 7CC7C477 *mT m*
7D4; 7CC88477 *Tmm*

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m8EPf T S 9 **8E87vv** **887 i** 3GVD 4 **P%t x** **f u U x v xw** **f P8D7D>**

m8E Pf V S 9 **8E87vv** **DD i** 3GND 4 **P%t x** **f u U x v xw** **f P9>D8E**

=06 41=ZtJ 3=237 35248 =08 41=ZtJ 34239 4523=

DC48>B877477
DC48>B87D477 *mTm*

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N4	4817 3
N	7418 3
O	413 6
P	: 518 3
	59É94

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MWWWZN df fb

7D48>B877477
7D48>B87B477 *mTm*
7D48>B87D477 *mTm*

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518 3		V
518 3		I Q V

DC48>B877487
DC48>B87B487 *mTm*

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N	7418 3
O	413:
O	4135
P	: 518 3
	63É9:

-8<59=0836,

MWWWdf fb

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7D48>B87B477 *mTm*
7D48>B87D477 *mTm*

518 3		I Q V
518 3		V
518 3		I Q V

m8EPf S 9 **8E87vv** **DD i** 3GND 4 **P i x f u U x v xw** **f P8D7DB**

=06 41= ZtJ 3=237 35248

DC489>7774; 7
DC489>77D4; 7 *mTm*

M	7918 3
N4	4: 178
N	6: 188
O	3198
P	: 518 3
	59É94

ZN df

7D489>777477
7D489>77D477 *mTm*

518 3		I Q V
518 3		V
518 3		I X V

M97 Pf T /Q A0 S 9 **8EABvv** **88D i** 3GaD 4 **P i x f u U x v xw** **f P9>77;**

=08 513 ZtJ 38243 34245

DC4>; BA77477
DC4>; BA7B477 *mTm*

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N4	481<3
N	7618 3
P	: 519 6
	63É99

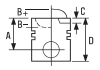
-8<677G739,

MWWWdf fb

7D4>; BA77477
7D4>; BA7B477 *mTm*

418 3		MJI V
418 3		V
518 3		I X V

GDC KZ-Ring



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PO E579 /Q ; PO E0	ei cS	a	GGV9DD	8
PO E57; /Q ; PO E0	ei cS	a	GGV9DD	8
PO E57> /Q ; PO E0	ei cS	a	GGV9DD	8
PO E57A /Q ; PO E0	ei cS	a	GGV9DD	8
PO E57B /PO E0	ei cS	a	GGV9DD	8
PO E588 /Q ; 0	eeac	V	GNc9DD	B
PO E589 /Q ; 0	eeac	V	GNc9DD	B
PO E58; /Q ; 0	eeac	V	GNc9DD	B
PO E58B /Q >0	eeac	V	GNc9DD	C
PO E58C /Q >0	eeac	V	GNc9DD	C
PO E58D /Q >0	eeac	V	GNc9DD	C
PO E58E /Q ; 0	eeac	V	GNc9DD	B
PO E597 /Q ; PO E0	eeac	V	GNc9DD	B
PO E598 /PO E0	eeac	V	GNc9DD	B
PO 88578 /Q ; PO 880	GDaDD	a	GNc9DD	E
PO 88579 /Q ; PO 880	GDaDD	a	GNc9DD	B
PO 8857; /Q ; PO 880	GDaDD	a	GNc9DD	E
PO 8857> /Q ; PO 880	GDaDD	a	GNc9DD	B
PO 8857C /Q 9 PO 880	GDaDD	a	GNc9DD	E
PO 8857D /Q ; PO 880	GDaDD	a	GNc9DD	E
PO 8857E /Q ; PO 880	GDaDD	a	GNc9DD	B
PO 89578 /Q ; PO 890	GGcGa	a	GNc9DD	87
PO 89579 /Q 9 PO 890	GGcGa	a	GNc9DD	88
PO 8957; /Q ; PO 890	GGcGa	a	GNc9DD	87
PO 8957B /Q ; PO 890	GGcGa	a	GNc9DD	88
PO 8957E /Q ; PO 890	GGcGa	a	GNc9DD	87
PO 89587 /Q > PO 890	GGcGa	a	GNc9DD	89
PO 8958; /Q > PO 890	GGcGa	a	GNc9DD	89
PO 8958> /Q ; PO 890	GGcDV	a	GNc9DD	88
PO 8958A /PO 890	GGcDV	a	GNc9DD	8;
PO 8958C /Q ; PO 890	GGcDV	a	GNc9DD	88
PO 8958D /Q A PO 890	GGcDV	a	GNc9DD	8;
PO 89599 /Q A PO 890	GGcDV	a	GNc9DD	8;
PO 8959; /Q > PO 890	GGcDV	a	GNc9DD	8;
PO 8959> /Q > PO 890	GGcDV	a	GNc9DD	8;
PO 8959B /Q > PO 890	GGcDV	a	GNc9DD	8;
PO 8;57A /Q A PO 8;0	GNcSN	a	GPD9DD	9;
PO 8;57B /Q A PO 8;0	GNcSN	a	GPD9DD	9;
PO 8;57C /Q A PO 8;0	GNcSN	a	GPD9DD	9;
PO 8;587 /Q A PO 8;0	GNcSN	a	GPD9DD	9;
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PO 8B579 /Q ; PO 8B0	GVaDD	e	GNc9DD	87
PO 8B57; /Q ; PO 8B0	GVaDD	e	GNc9DD	88
PO 8B57> /Q ; PO 8B0	GVaDD	e	GNc9DD	88
PO 8B57A /Q > PO 8B0	GVaDD	e	GNc9DD	8C
PO 8B57B /Q > PO 8B0	GVaDD	e	GNc9DD	8C
PO 8B57D /Q > PO 8B0	GVaDD	e	GNc9DD	8C
PO 8B57E /Q A PO 8B0	GVaDD	e	GNc9DD	8;
PO 8B58C /Q A PO 8B0	GVaDD	e	GNc9DD	8C
PO 8B58D /Q A PO 8B0	GVaDD	e	GNc9DD	8C
PO 8B58E /Q A PO 8B0	GVaDD	e	GNc9DD	8C
PO 8B599 /PO 8B0	GVaDD	e	GNc9DD	8C
PZ D578 /PZ D0	cci D	a	GGV9DD	9
PZ D57A X78 5X7>	ceDD	a	GGV9DD	9
PZ E578 /PZ E0	eSca	a	GGV9DD	;
PZ 88578 /PZ 880	GGDNG	a	GNc9DD	D
PZ 88578 N87 /PZ 880	GGDND	a	GNc9DD	D
PZ 88578 O 7E /PZ 880	GGDNG	a	GNc9DD	D

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PZ 8857> O 78 /PZ 880		GGDND	a	GNc9DD	D
PZ 8857B/PZ 880		GGDNG	a	GNc9DD	D
PZ 8857C/PZ 880		GGDND	a	GNc9DD	D
PZ 8857D/PZ 880		GGDND	a	GNc9DD	D
PZ 8857DN78 /PZ 880		GGDNG	a	GNc9DD	D
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Pe D578 /Pe D0		cci D	a	GGV9DD	9
Pe D57A/Pe D0		cci D	a	GGV9DD	9
Pe D57B/Pe D0		cci D	a	GGV9DD	9
Pe E578 /Pe E0		eSca	a	GGV9DD	>
Pe E579 /Pe E0		eSca	a	GGV9DD	>
Pe E57A/Q 8 Pe E0		eSca	a	GGV9DD	;
Pe E57B/Pe E0		eSca	a	GGV9DD	;
Pe E57D/Pe E0		eSca	a	GGV9DD	;
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Pe 88 6P88 /P 880		GGDND	a	GNc9DD	D
Pe 88578 /Pe 880		GGDND	a	GNc9DD	D
Pe 88578 N 7B/Pe 880		GGDND	a	GNc9DD	D
Pe 88579 /Pe 880		GGDND	a	GNc9DD	D
Pe 8858> /Pe 880		GGDND	a	GNc9DD	D
Pe 8858A/Pe 880		GGDND	a	GNc9DD	D
Pe 8858AN /Pe 880		GGDND	a	GNc9DD	D
Pe 8858D/Pe 880		GGDND	a	GNc9DD	D
Pe 88599 /Pe 880		GGDND	a	GNc9DD	8A
Pe 8859; /Pe 880		GGDND	a	GNc9DD	8A
Pe 885; > /Pe 880		GGDNG	a	GNc9DD	D
Pe 88508 /Pe 880		GGDNG	a	GNc9DD	D
Pe 88508 O /Pe 880		GGDNG	a	GNc9DD	D
Pe 88509 /Pe 880		GGDND	a	GNc9DD	D
Pe 885C; /Pe 880		GGDNG	a	GNc9DD	D
Pe 885C> /Pe 880		GGDNG	a	GNc9DD	D
Pe 885CA/Pe 880		GGDNG	a	GNc9DD	8A
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Pe 8> XN 7A/Pe 8>0		GSNi D	e	GNc9DD	8D
Pe 8> XN 7D/Pe 8>0		GSNi D	e	GNc9DD	8D
Pe 8>578 /Pe 8>0		GSGee	e	GNc9DD	8D
Pe 8>578 X 78 /Pe 8>0		GSGi D	e	GNc9DD	8D
Pe 8>579 /Pe 8>0		GSGee	e	GNc9DD	8D
Pe 8>57B/Pe 8>0		GSGee	e	GNc9DD	8D
Pe 8>57BX786X796X7; /Pe 8>0		GSGi D	e	GNc9DD	8D
Pe 8>57C/Pe 8>0		GSGee	e	GNc9DD	8D
Pe 8>57CX78		GSGi D	e	GNc9DD	8D
Pe 8>57CX79		GSGi D	e	GNc9DD	8D
Pe 8>5>B		GSGeG	e	GNc9DD	8E
Pe D78 XN8>		ceDD	a	GGV9DD	9
Pe D78 XN8A		ceDD	a	GGV9DD	9
Pe D78 XN8B		ceDD	a	GGV9DD	9
PeO E578 /PeO E0		eSca	a	GGV9DD	>
PeO E579 /PeO E0		eSca	a	GGV9DD	>
PeO E57C/Q 8 PeO E0		eSca	a	GGV9DD	;
PeO E57D/Q 8 PeO E0		eSca	a	GGV9DD	;
PeO E57E/Q 9 PeO E0		eSca	a	GGV9DD	;
PeO E5B7 /Q 8 PeO E0		eSca	a	GGV9DD	;
PeO E5B8 /Q 9 PeO E0		i DDD	a	GGV9DD	A
PeO E5B9 /Q 9 PeO E0		i DDD	a	GGV9DD	A
PeO E5B; /Q 9 PeO E0		i DDD	a	GGV9DD	A
PeO E5BA/Q 9 PeO E0		i DDD	a	GGV9DD	A
PeO 88578 /PeO 880		GGDNG	a	GNc9DD	D
PeO 88579 /PeO 880		GGDND	a	GNc9DD	D

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PeO 8857D /PeO 880		GGDNG	a	GNc9DD	8B
PeO 8858 7 /PeO 880		GGDNG	a	GNc9DD	8B
PeO 8858 9 /PeO 880		GGDNG	a	GNc9DD	D
PeO 8858; /PeO 880		GGDNG	a	GNc9DD	D
PeO 8858B /PeO 880		GGDNG	a	GNc9DD	D
PeO 8858C /PeO 880		GGDNG	a	GNc9DD	D
PeO 8858D /PeO 880		GGDNG	a	GNc9DD	D
PeO 88598 /Q	8 PeO 880	GGDNG	a	GNc9DD	8A
PeO 88599 /Q	8 PeO 880	GGDNG	a	GNc9DD	8A
PeO 8859; /Q	8 PeO 880	GGDNG	a	GNc9DD	8A
PeO 885; A /PeO 880		GGDNG	a	GNc9DD	8A
PeO 885; B /PeO 880		GGDNG	a	GNc9DD	8A
PeO 885; E /Q	8 PeO 880	GGDNG	a	GNc9DD	8A
PeO 885C7 /Q	9 PeO 880	GGDNG	a	GNc9DD	8A
PeO 885C7 Z /Q	90	GGDND	a	GNc9DD	8B
PeO 885C7 e /Q	90	GGDND	a	GNc9DD	8B
PeO 885C8 /PeO 880		GGDNG	a	GNc9DD	8A
PeO 885C> /Q	8 PeO 880	GGDNG	a	GNc9DD	8A
PeO 885CA /Q	8 PeO 880	GGDNG	a	GNc9DD	8A
PeO 885CE /Q	9 PeO 880	GGDDD	a	GNc9DD	8A
PeO 885D8 /PeO 880		GGDNG	a	GNc9DD	8A
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PeO 89579 /Q	9 PeO 890	GGcGa	a	GNc9DD	87
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PeO 8957A /Q	9 PeO 890	GGcGa	a	GNc9DD	88
PeO 8>		GSGi D	e	GNc9DD	8D
PeO 8>578 /PeO 8>0		GSGee	e	GNc9DD	8D
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PeO 8>57; /PeO 8>0		GSGee	e	GNc9DD	97
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PeO 8>57B /PeO 8>0		GSGee	e	GNc9DD	8E
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PeO 8>57E /Q	8 PeO 8>0	GSGee	e	GNc9DD	98
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PeO 8>58; /Q	9 PeO 8>0	GSGee	e	GNc9DD	99
PeO 8>58A /Q	; Pe 8>0	GSGee	e	GNc9DD	99
PeO 8>58B /Q	9 PeO 8>0	GSGee	e	GNc9DD	98
PeO 8>58;		GSGeG	e	GNc9DD	8E
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PeUD578 X78		ceDD	a	GGV9DD	9
PeUD578 X7>		ceDD	a	GGV9DD	9
PeU88578 /PeU880		GGDNG	a	GNc9DD	D
PeU8>5>C /PeU8>0		GSGi D	e	GNc9DD	8E
PeU8>5A7 /PeU8>0		GSGi D	e	GNc9DD	8E
PeU8>587 /PeU8>0		GSGi D	e	GNc9DD	8E
PeU8>588 /PeU8>0		GSGi D	e	GNc9DD	8E
PeU8>58; /PeU8>0		GSGi D	e	GNc9DD	8E
Pf 89579 /Q	; Pf 890	GGcDV	a	GNc9DD	87
Pf 8957; /Q	> Pf 890	GGcDV	a	GNc9DD	89
Pf 8957B /Q	> Pf 890	GGcDV	a	GNc9DD	8;
Pf 8957D /PO 890		GGcDV	a	GNc9DD	88
Pf 89587 /Q	> Pf 890	GGcDV	a	GNc9DD	8;
Pf 89588 /Q	> Pf 890	GGcDV	a	GNc9DD	89
Pf 89589 /Q	> Pf 890	GGcDV	a	GNc9DD	89
Pf 8958> /Pf 890		GGcDV	a	GNc9DD	C
Pf 8958C /Q	> Pf 890	GGcDV	a	GNc9DD	89
Pf 8958D /Q	; Pf 890	GGcDV	a	GNc9DD	C

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Pf O 8857 8 /Q	**8 Pf O 880**		GGDNG	a	GNc9DD	**8A**
Pf O 8857 9 /Q	**9 Pf O 880**		GGDNG	a	GNc9DD	**8A**

| | | |

8>4; C>EE7477

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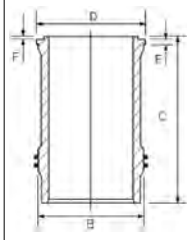

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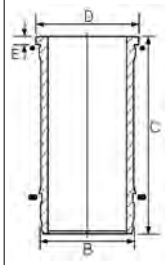
N 45: 1=3 **O** 59813 **P** 4731<5 **Q** 43159 **R** 31<6



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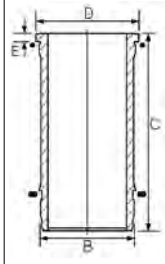
Pe E578 /Pe E0	a 9	**D>CBvv**	**8D748DA i**	3NSV8NVN	4	**P0t x**	**f u**		**f PDD>>**
Pe E579 /Pe E0	a 9	**D>CBvv**	**8BC48DA i**	3NNc8NVN	4	**P0t x**	**f u**		**f PDD>A**
PeO E578 /PeO E0	a 9	**D>CBvv**	**979 i**	3NcV	4	**P0t x**	**f u**	**U x v xw**	**f PDD>D**
PeO E579 /PeO E0	a 9	**D>CBvv**	**97C i**	3NeN	4	**P0t x**	**f u**	**U x v xw**	**f PDD>E**

5 0°p´tp°	342<8 452<<	6 0°p´tp°	362<< 452=9

8A4B7DDE7477

N 45: 1=3 **O** 59813 **P** 4731<5 **Q** 43159 **R** 31<6



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PeO E5B8 /Q 9 PeO E0	a 9	**E777vv**	**8B848B9 i**	3NGi8NND	4	**P0t x**	**f u**	**U x v xw**	**f PDDA>**
PeO E5B9 /Q 9 PeO E0	a 9	**E777vv**	**8E8 i**	3NaD	4	**P0t x**	**f u**	**U x v xw**	**f PDDAA**
PeO E5B; /Q 9 PeO E0	a 9	**E777vv**	**99D i**	3PGD	4	**P0t x**	**f u**	**U x v xw**	**f PDDA;**
PeO E5BA /Q 9 PeO E0	a 9	**E777vv**	**99D i**	3PGD	4	**P0t x**	**f u**	**U x v xw**	**f P89E7D**

6 0°p´tp°	342=3 452=<	7 0°p´tp° mf°	3<2=: 3<23:
7 0°p´tp°	342=9 3723<		

DC487E977477

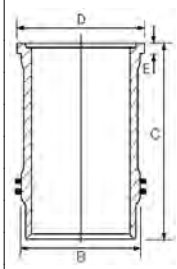
M <6176
N4 5313
N : 4183
O 3193
P 4631=8
83É=5

MWdf f b

7D487E977477

6149 I Q V
516< V
6183 I X V

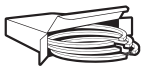
8A4B77797477



N 464133 **O** 58: 183 **P** 4731 7 **Q** <13: **R** 314<

DE487E9774; 7
< 043=533033 .
480933353033

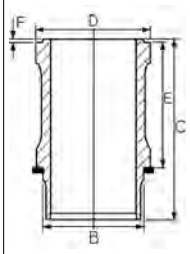
0mv®op° °pl w	Ynswp ßJtnsß°yr py pty	0mvßop° uzty8°	0mvÖpwr° °pwr°	I zx ' ´pyop wp r°l ´ytÜzyt



PO E588 /Q ; 0	V	9	**DDBOvv**	**99D i**	3PGD	4	**P@t x f u U x v xw**						**f P8D7>D**
PO E589 /Q ; 0	V	9	**DDBOvv**	**8ED i**	3NcD	4	**P@t x f u U x v xw**						**f P8D7>C**
PO E58; /Q ; 0	V	9	**DDBOvv**	**8BE i**	3NPD	4	**P@t x f u U x v xw**						**f P8D7>A**
PO E58E /Q ; 0	V	9	**DDBOvv**	**8BE i**	3NPD	4	**P@t x f u U x v xw**						**f P; 7; 87**
PO E597 /Q ; PO E0	V	9	**DDBOvv**	**8ED48EE i**	3Nai 8NcG	4	**P@t x f u U x v xw**						**f P9877B**
PO E598 /PO E0	V	9	**DDBOvv**	**8ED499D i**	3Nai 8PGD	4	**P@t x f u U x v xw**						**f P; 7; 8D**
PO 88579 /Q ; PO 880	a	9	**87B77vv**	**9CE i**	3Pci	4	**P@t x f u U x v xw**						**f P89CC9**
PO 8857> /Q ; PO 880	a	9	**87B77vv**	**9CE i**	3Pci	4	**P@t x f u U x v xw**						**f P8A>8B**
PO 8857E /Q ; PO 880	a	9	**87B77vv**	**9CE i**	3PeD	4	**P@t x f u U x v xw**						**f P8C>A9**

7 0°p´tp°	342=9 3723<	Q 0°p´tp° m²°	43239
7 0°p´tp° m²°	3<2=: 3<23:	T 0°p´tp° m²°	43246
L 0°p´tp°	4523=	V/MX/Z 0°p´tp°	36237

8A4889D77477 **N** 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8
8>4889D77477 **N** 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8
8A4AC77A7477 **N** 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<3
8A4AC77B7477 **N** 46=183 **O** 5: 3183 **P** 484133 **Q** 4=715: **R** 31=:

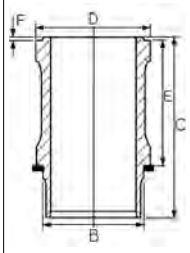


Xpwtpq<158x x Ky ßWv°ß°yr <158x x Rp´pwtpq<158x x Xpwp@nt y <158x x Xtwtp@ <158x x
Qrnvßop° °pl w Ynswtp ßJtnsß°yr py pty Qrnvßop° uztyß° Qrnvßp wr° °pwr° l zx ''´pyop wp r°l´ytÜzyt

PO E5BB /Q >0	V	9	**DDBOvv**	**8BE i**	3NPD	4	**P@t x f u U x v xw**						**f P8DB>8**
PO E5BC /Q >0	V	9	**DDBOvv**	**8ED48EE i**	3NcD8NcG	4	**P@t x f u U x v xw**						**f P8DB>9**
PO E5BD /Q >0	V	9	**DDBOvv**	**99D i**	3PGD	4	**P@t x f u U x v xw**						**f P8DB>;**
Pf 895B> /Pf 890	a	9	**88C7Avv**	**;7E i**	3SND	4	**P@t x f u U x v xw**						**f P97DCB**
Pf 895BD /Q ; Pf 890	a	9	**88C7Avv**	**;9> i**	3SSD	4	**P@t x f u U x v xw**						**f P97DCC**

Q 0°p´tp°	36239	US T0 QZd	3: 23<
Q 0°p´tp° m²°	43239	US T RKT Q	3=239
T 0°p´tp° m²°	3523:	V/MX/Z 0°p´tp°	36237

8A4AC77A7477 **N** 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<3
8A4AC77B7477 **N** 46=183 **O** 5: 3183 **P** 484133 **Q** 4=715: **R** 31=:



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P 88 d 9; /P 880	a	9	**88797vv**	**8>; i**	3GI V	4	**P@t x**						**f PDD7A**
PZ 88578 /PZ 880	a	9	**88798vv**	**8>E48A; i**	3NDP8NDe	4	**P@t x**						**f PDD7B**
PZ 88578 N87 /PZ 880	a	9	**88797vv**	**8AA i**	3NGG	4	**P@t x**						**f PADC9**
PZ 88578 O 7E /PZ 880	a	9	**88798vv**	**8AD i**	3NGV	4	**P@t x**						**f PDD; B**
PZ 8857> N87 /PZ 880	a	9	**88797vv**	**8AA i**	3NGG	4	**P@t x**						**f PB997**

PZ 8857> O 78 /PZ 880	a	9	88797vv	8AD i	3NGV	4	P6t x	f	u						f PDD; C
PZ 8857B /PZ 880	a	9	88798vv	8; > i	3GeN	4	P6t x								f PDDCA
PZ 8857C/PZ 880	a	9	88797vv	8; E i	3Gei	4	P6t x								f PDD7D
PZ 8857D/PZ 880	a	9	88797vv	8A7 i	3NDS	4	P6t x								f PDDDB
PZ 8857DN78 /PZ 880	a	9	88798vv	8>E i	3NDP	4	P6t x								f PDDDE
Pe 88578 /Pe 880	a	9	88797vv	8D>4979 i	3NVD8NcV	4	P6t x	f	u						f PADC>
Pe 88578 N 7B /Pe 880	a	9	88797vv	979 i	3NcV	4	P6t x	f	u						f PDCEE
Pe 88579 /Pe 880	a	9	88797vv	97B49>A i	3NeD8PPP	4	P6t x	f	u	U	x	v	xw		f PDDB>
Pe 8858> /Pe 880	a	9	88797vv	97B49>A i	3NeD8PPP	4	P6t x	f	u	U	x	v	xw		f PB999
Pe 8858A /Pe 880	a	9	88797vv	99>49>A i	3PDV8PPP	4	P6t x	f	u	U	x	v	xw		f PDD7;
Pe 8858AN /Pe 880	a	9	88797vv	99> i	3PDV	4	P6t x	f	u	U	x	v	xw		f PDD78
Pe 8858D /Pe 880	a	9	88797vv	9A> i	3PSV	4	P6t x	f	u	U	x	v	xw		f PDDAC
Pe 8858; > /Pe 880	a	9	88798vv	99D i	3PGD	4	P6t x	f	u	U	x	v	xw		f PDDBE
Pe 88508 /Pe 880	a	9	88798vv	8DE i	3NVc	4	P6t x	f	u						f PDDC;
Pe 88508 O /Pe 880	a	9	88798vv	8DE i	3NVc	4	P6t x	f	u						f PADCD
Pe 88509 /Pe 880	a	9	88797vv	9; 7 i	3PGP	4	P6t x	f	u						f PDDAD
Pe 8850; /Pe 880	a	9	88798vv	99D49; 7 i	3PGD8PGP	4	P6t x	f	u						f PDDAE
Pe 8850> /Pe 880	a	9	88798vv	8E> i	3NaS	4	P6t x	f	u						f PDD97
Pe 88 6P88 /P 880	a	9	88797vv	8>748>E i	3Gi D8NDP	4	P6t x								f PDCE>
PeO 88578 /PeO 880	a	9	88798vv	9; 7 i	3PGP	4	P6t x	f	u	U	x	v	xw		f PDD88
PeO 88579 /PeO 880	a	9	88797vv	9BC i	3PaP	4	P6t x	f	u	U	x	v	xw		f PDDB7
PeO 8857> /PeO 880	a	9	88798vv	8DE49>A i	3NVc8PPP	4	P6t x	f	u	U	x	v	xw		f PDDBD
PeO 88589 /PeO 880	a	9	88798vv	9A> i	3PSV	4	P6t x	f	u	U	x	v	xw		f PDDB8
PeO 8858; /PeO 880	a	9	88798vv	9BC i	3PaP	4	P6t x	f	u	U	x	v	xw		f PDDCD
PeO 8858B /PeO 880	a	9	88798vv	9; E i	3PNV	4	P6t x	f	u	U	x	v	xw		f PDDCE
PeO 8858C/PeO 880	a	9	88798vv	9; A49; C i	3PND8PNN	4	P6t x	f	u	U	x	v	xw		f PDDD7
PeO 8858D/PeO 880	a	9	88798vv	9BC i	3PaP	4	P6t x	f	u	U	x	v	xw		f PDD9B
PeU88578 /PeU880	a	9	88798vv	8E8 i	3NaD	4	P6t x	f	u						f PDDC>

5 0°p´tp°	342<4 3<2=4	Ppßtyp´	3=2=3 3=2=6
6 0°p´tp°	382< 452=<	YvÖtyp´	3=2=3 3=2=6
6 0°p´tp° m²°	342<<	Y' I npwtyp´	3=2=3
I tßÖtyp´	3=2=3	Z´I y°wtyp´	3=2=3 3=2=5

8A4>A7DA7477 **N** 473133 **O** 5=4133 **P** 4861<3 **Q** <153 **R** 31<3
8>4>A7DA7477 **N** 473133 **O** 5=4133 **P** 4861<3 **Q** <153 **R** 31<3
8A4>AD8E7477 **N** 46=1=6 **O** 5=4133 **P** 4861<3 **Q** : 1=7 **R** 31<3
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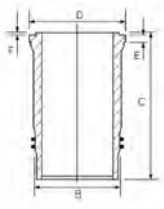

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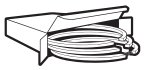
PO 88578 /Q ; PO 880	a	9	87B77vv	9A7 i	3PSD	4	P6t x	f	u	U	x	v	xw		f P89CBE
PO 8857; /Q ; PO 880	a	9	87B77vv	9A7 i	3PSD	4	P6t x	f	u	U	x	v	xw		f P8A>8A
PO 8857C/Q 9 PO 880	a	9	87B77vv	9>949>; i	3PNi 8PPD	4	P6t x	f	u	U	x	v	xw		f P9877A
PO 8857D/Q ; PO 880	a	9	87B77vv	9A7 i	3PSD	4	P6t x	f	u	U	x	v	xw		f P8C>A8

7 0°p´tp°	342=9 3723<	Q 0°p´tp° m²°	36243



7 0°p´tp° m°°	3<2=: 3<23:	V/MVX/Z 0°p´tp°	3623 7

DC48>; B774A7

M =5137
N4 5414 8
N : 8143
P 469137

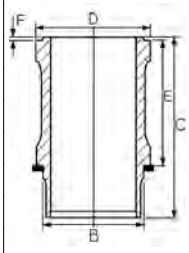
MWdf f b

7D48>; B77487

6183 I Q V
516< V
6183 I X

8A4889D77477
8>4889D77477
8A4AC77A7477
8A4AC77B7477

N 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8
N 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8
N 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<3
N 46=183 **O** 5: 3183 **P** 484133 **Q** 4=715: **R** 31=:



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Kyßlw°ß°yr <158x x
Ynswtp ßJtnsß°yr py pty

Rp´pwtpq<158x x
Ynvßop° uztyß°

Xpwp@nt y <158x x
Ynvßop° °pwr°

Xtwtp@ <158x x
I zx ''´pyop wp r°l´ytÜzyt

PO 89578 /Q ; PO 890	a 9	**88C8Bvv**	**;7E i**	3SND 4	**P@t x f u U x v xw**	**f P8A>8D**
PO 8957; /Q ; PO 890	a 9	**88C8Bvv**	**;7D i**	3SND 4	**P@t x f u U x v xw**	**f P8BDA9**
PO 8957E /Q ; PO 890	a 9	**88C8Bvv**	**;7E i**	3SND 4	**P@t x f u U x v xw**	**f P99; BC**
PO 8B579 /Q ; PO 8B0	e 9	**8AB77vv**	**;A; i**	3SeD 4	**P@t x f u U x v xw**	**f P8A>9D**
PeO 89578 /Q 9 PeO 890	a 9	**88C8Bvv**	**9E> i**	3SDD 4	**P@t x f u U x v xw**	**f PDDE9**
PeO 89579 /Q 9 PeO 890	a 9	**88C8Bvv**	**9BA i**	3PaD 4	**P@t x f u U x v xw**	**f PDDE;**
PeO 8957; /Q 9 PeO 890	a 9	**88C8Bvv**	**9BA4;9A i**	3PaD8SSN 4	**P@t x f u U x v xw**	**f P99; C8**
Pf 89579 /Q ; Pf 890	a 9	**88C7Avv**	**;>A4;>B i**	3ScD8ScD 4	**P@t x f u U x v xw**	**f P8B>EA**

7 0°p´tp°	382=8 3723<	Q 0°p´tp° m°°	3923: 3<246
7 0°p´tp° m°°	3<2=: 4523=	V/MVX/Z 0°p´tp°	3423<

DC48>; B77477

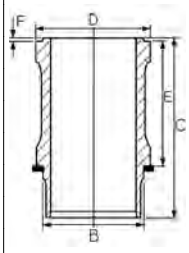
M <8154
N4 5514 8
N : <133
P 458154
87É439

7D48>; B77487

6183 I Q V
516< V
6183 I X

8A4889D77477
8>4889D77477

N 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8
N 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8



DE48>; B77477
< 0476933033 .
480445<33033

DC48>; B774;7

M <8137
N4 5514 8
N : <133
P 45=137
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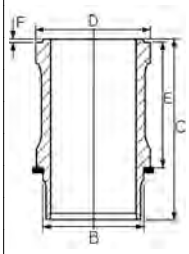
MWdf f b

7D48>; B77487

6183 I Q V
516< V
6183 I X

8A4889D77477
8>4889D77477

N 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8
N 46<183 **O** 5: 4145 **P** 483133 **Q** 4=715: **R** 31<8



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< 0476933063 .
480445<33033

G´ßn°w@po 'f°ßzy
Ynvßop° °pl w
Xpwtpq<158x x
Tzßßz´p' wnp vtß°pßÄtßs l´ßn°w@po 'f°ßzy

Vpyopwßnsl q@vzwnpy
Ynswtp ßJtnsß°yr py pty
Kyßlw°ß°yr <158x x
Ttnsßx t@Vpyopwßnsl q@vzwnpy p´°pßÜpy

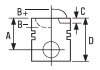
Vf°ßzy l´ßn°w
Ynvßop° uztyß°
Rp´pwtpq<158x x
Tp'l°´px 'wnp´ wp vtßl@pn°y 'f°ßzy l´ßn°w

Vf°ß y l´ßn°wloz
Ynvßop° °pwr°
Xpwp@nt y <158x x
Tz°°°ßß°t´ pwvtß'z´°y 'f°ß y l´ßn°wloz

Vf°ßzyp l´ßnzwß z
l zx ''´pyop wp r°l´ytÜzyt
Xtwtp@ <158x x
Tzy 'p´°z°ßß°Üzyp°pßnzy 'f°ßzyp l´ßnzwß z

PO 89579 /Q 9 PO 890	a 9	**88C8Bvv**	**9E> i**	3SDD 4	**P@t x f u U x v xw**	**f P987D7**

Nüral® FITTED WITH GOETZE® RINGS



PO 8957B /Q	; PO 890	a	9	88C8Bvv	; 7E i	3SND	4	P6t x	f	u	U	x	v	xw	f P97DCA
PO 895B> /Q	; PO 890	a	9	88C7Avv	; 7E i	3SND	4	P6t x	f	u	U	x	v	xw	f P8C>A;
PO 895BC /Q	; PO 890	a	9	88C7Avv	9CE i	3Pci	4	P6t x	f	u	U	x	v	xw	f P97DC;
PO 8B578 /Q	; PO 8B0	e	9	8AB77vv	>9B4>9C i	3/eD8VeG	4	P6t x	f	u	U	x	v	xw	f P8A>9E
PO 8B57; /Q	; PO 8B0	e	9	8AB77vv	>9B i	3/eD	4	P6t x	f	u	U	x	v	xw	f P8C>AD
PO 8B57> /Q	; PO 8B0	e	9	8AB77vv	; BD i	3/DD	4	P6t x	f	u	U	x	v	xw	f P8C>AC
PeO 8957A /Q	9 PeO 890	a	9	88C8Bvv	; 7E i	3SND	4	P6t x	f	u	U	x	v	xw	f P89DC7
Pf 8957D/PO 890		a	9	88C7Avv	; 9>4; 9> i	3SSD8SSG	4	P6t x	f	u	U	x	v	xw	f P8BC8B

7 0°p´tp°	342=9 3723<	UST0KcVXKYY	4423:
7 0°p´tp° mf°	3<2=: 4523=	V/MfX/Z 0°p´tp°	36237
Q 0°p´tp° mf°	36239		

DC48>; B77477

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N	: <133
P	458154
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7D48>; B77487

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516<		V
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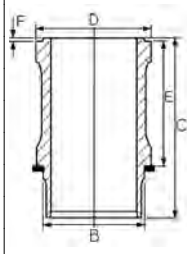

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480445<33033

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9nvßop° °pl w	Ynswp ßJtnsß°yr py pty	9nvßop° uzty8°	9nvßÖp wr° °pwr°	I zx ''pyop wp r°l´ytÜzyt
Xpwpq<158x x	Kyßlw°ß°yr <158x x	Rp´pwpq<158x x	Xpwp@nt y <158x x	Xtwp@ <158x x

PO 8957 /Q	> PO 890	a	9	88C8Bvv	9A7 i	3PSD	4	P6t x	f	u	U	x	v	xw	f P8DB>>
PO 895B; /Q	> PO 890	a	9	88C8Bvv	9CE49D7 i	3Pci 8PeG	4	P6t x	f	u	U	x	v	xw	f P8DB>A
Pf 8957; /Q	> Pf 890	a	9	88C7Avv	; >A4; >A i	3Sai 8ScD	4	P6t x	f	u	U	x	v	xw	f P8DB>D
Pf 89588 /Q	> Pf 890	a	9	88C7Avv	; 7E i	3SND	4	P6t x	f	u	U	x	v	xw	f P8C>A>
Pf 89589 /Q	> Pf 890	a	9	88C7Avv	; 7E i	3SND	4	P6t x	f	u	U	x	v	xw	f P8DB>B
Pf 895BC/Q	> Pf 890	a	9	88C7Avv	; A; i	3SeD	4	P6t x	f	u	U	x	v	xw	f P97DCD

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Q 0°p´tp° mf°	36239		

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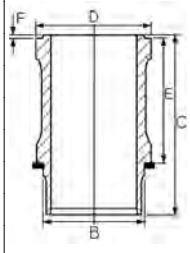

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9nvßop° °pl w	Ynswp ßJtnsß°yr py pty	9nvßop° uzty8°	9nvßÖp wr° °pwr°	I zx ''pyop wp r°l´ytÜzyt

PO 8958A /PO 890		a	9	88C7Avv	; 7E i	3SND	4	P6t x	f	u	U	x	v	xw	f P8DB>C
PO 8958D /Q	APO 890	a	9	88C7Avv	9CE i	3Pci	4	P6t x	f	u	U	x	v	xw	f P97DC>
PO 89599 /Q	APO 890	a	9	88C7Avv	; 7E i	3SND	4	P6t x	f	u	U	x	v	xw	f P9; BE>

PO 8959; /Q	> PO 890	a	9	88C7Avv	;7E i	3SND	4	P@t x	f	u	U x v xw	f P9; BED
PO 8959> /Q	> PO 890	a	9	88C7Avv	9CE49D7 i	3Pci 8PeG	4	P@t x	f	u	U x v xw	f P9; BEE
PO 8959B /Q	> PO 890	a	9	88C7Avv	9A7 i	3PSD	4	P@t x	f	u	U x v xw	f P9; C77
PO 8B57E /Q	APO 8B0	e	9	8AB77vv	;BD i	3/DD	4	P@t x	f	u	U x v xw	f P8DBA8
Pf 8957B /Q	> Pf 890	a	9	88C7Avv	;>A i	3ScD	4	P@t x	f	u	U x v xw	f P8C>AA
Pf 8957B7 /Q	> Pf 890	a	9	88C7Avv	;9> i	3SSG	4	P@t x	f	u	U x v xw	f P9E7CE

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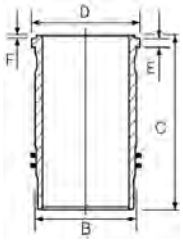

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4808: 3363033

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Xpwpq<158x x	KyßMv°ß°yr <158x x	Rp ´pwpq<158x x	Xpwp@nt y <158x x	Xwp@ <158x x

Pe 88 MSd6UZP 8ECDJ		a	9	88797vv	8D>4979 i	3NVD8NcV	4	P@t x	f	u		Y bA8ED

ZX_I Q) H_Y

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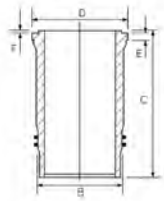

N 46=1=6 O 5=4133 P 4861<3 Q : 1=7 R 31<3
N 46=1=6 O 5=4133 P 4861<3 Q : 1=7 R 31<3

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Pe 88599 /Pe 880		a	9	88797vv	9D7 i	3PeG	4	P@t x	f	u		f PC>; B
Pe 8859; /Pe 880		a	9	88797vv	9BB i	3PaN	4	P@t x	f	u		f PC8D7
Pe 885CA /Pe 880		a	9	88798vv	99D49; 7 i	3PGD8PGP	4	P@t x	f	u		f PDD98
PeO 88598 /Q	8 PeO 880	a	9	88798vv	9; A49BB i	3PND8PaN	4	P@t x	f	u	U x v xw	f PDD89
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PeO 8859; /Q	8 PeO 880	a	9	88798vv	9BB i	3PaN	4	P@t x	f	u	U x v xw	f PDD8>
PeO 885;A /PeO 880		a	9	88798vv	9; A49BB i	3PND8PaN	4	P@t x	f	u	U x v xw	f PDD8A
PeO 885;B /PeO 880		a	9	88798vv	9; A49BC i	3PND8PaP	4	P@t x	f	u	U x v xw	f PDD8B
PeO 885;E /Q	8 PeO 880	a	9	88798vv	9AD i	3PVG	4	P@t x	f	u	U x v xw	f PDDD9
PeO 885C7 /Q	9 PeO 880	a	9	88798vv	9D7 i	3PeG	4	P@t x	f	u	U x v xw	f PDDD>
PeO 885C8 /PeO 880		a	9	88798vv	9; A49BB i	3PND8PaN	4	P@t x	f	u	U x v xw	f PDDC9
PeO 885C> /Q	8 PeO 880	a	9	88798vv	9; A49BB i	3PND8PaN	4	P@t x	f	u	U x v xw	f P99; BE
PeO 885CA /Q	8 PeO 880	a	9	88798vv	9; A49BB i	3PND8PaN	4	P@t x	f	u	U x v xw	f P99; C7
PeO 885CE /Q	9 PeO 880	a	9	88777vv	9A7 i	3PSD	4	P@t x	N@f	u	U x v xw	f P89CBD
PeO 885D8 /PeO 880		a	9	88798vv	9A74; 7A i	3PSD8SGV	4	P@t x	f	u	U x v xw	f P8C9DB
Pf O 88578 /Q	8 Pf O 880	a	9	88798vv	9EA i	3SDG	4	P@t x	f	u	U x v xw	f PDDD;
Pf O 88579 /Q	9 Pf O 880	a	9	88798vv	9EA i	3SDG	4	P@t x	f	u	U x v xw	f PDDDA

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516< V
71t 7 I X V

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N 473133 **O** 5=4133 **P** 487133 **Q** : 1=7 **R** 31=3
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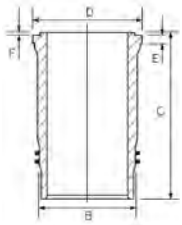

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PeO 8857D /PeO 880	a	9	**88798vv**	**99D49D7 i**	3PGD8PeG	4	**P@t x**	**f u U x v**	**xw**	**f PDD9;**
PeO 8857 /PeO 880	a	9	**88798vv**	**9A7 i**	3PSD	4	**P@t x**	**f u U x v**	**xw**	**f PDDCC**
PeO 8857 Z /Q 90	a	9	**88797vv**	**9D7 i**	3PeG	4	**P@t x**	**f u U x v**	**xw**	**Y b; A7D>**
PeO 8857 e /Q 90	a	9	**88797vv**	**9D7 i**	3PeG	4	**P@t x**	**f u U x v**	**xw**	**Y b; A7D>48**

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N : 9133
O 51=9
P 489159
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MWdf f b

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516< V
71t 7 I X V

8A4>AD8E7477
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N 46=1=6 **O** 5=4133 **P** 4861<3 **Q** : 1=7 **R** 31<3
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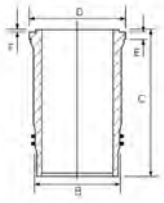

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PO 8B57A /Q > PO 8B0	e	9	**8AB77vv**	**>89 i**	3/aD	4	**P@t x**	**f u U x v**	**xw**	**f P8DB>E**
PO 8B57B /Q > PO 8B0	e	9	**8AB77vv**	**; BD i**	3/DD	4	**P@t x**	**f u U x v**	**xw**	**f P8DBA7**
PO 8B57D /Q > PO 8B0	e	9	**8AB77vv**	**>AB i**	3aND	4	**P@t x**	**f u U x v**	**xw**	**f P8DBA9**
PO 8B58C /Q APO 8B0	e	9	**8AB77vv**	**>AB i**	3aND	4	**P@t x**	**f u U x v**	**xw**	**f P97DD8**
PO 8B58D /Q APO 8B0	e	9	**8AB77vv**	**>89 i**	3/aD	4	**P@t x**	**f u U x v**	**xw**	**f P97DD7**
PO 8B58E /Q APO 8B0	e	9	**8AB77vv**	**; BD i**	3/DD	4	**P@t x**	**f u U x v**	**xw**	**f P97DCE**
PO 8B599 /PO 8B0	e	9	**8AB77vv**	**; BD i**	3/DD	4	**P@t x**	**f u U x v**	**xw**	**f P9D8; D**

V/M/X/Z 0°p´tp°	36237

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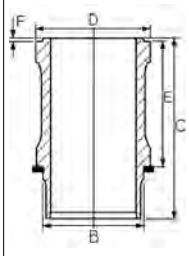

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PeO 8>57B/PeO 8>0	e	9	8>8DDvv	9EC4;7E i	3SDS8SND	4	P@t x	f	u	U	x	v	xw	fPDE78
PeO 8>5B;	e	9	8>8D8vv	;>7 i	3SaN	4	P@t x	f	u	U	x	v	xw	Yb8;DBB
PeU8>5>C/PeU8>0	e	9	8>8E7vv	;>8 i	3SaS	4	P@t x	f	u	U	x	v	xw	fP8E8>E
PeU8>5A7/PeU8>0	e	9	8>8E7vv	;>8 i	3SaS	4	P@t x	f	u	U	x	v	xw	fP8E8A7
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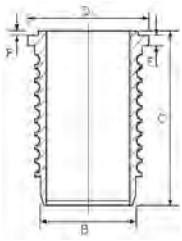

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PeO 8>57D/Q 8 PeO 8>0	e	9	8>8DDvv	;7E4;;8 i	3SND8SVD	4	P@t x	f	u	U	x	v	xw	fPDE7D
PeO 8>587/Q 8 PeO 8>0	e	9	8>8DDvv	;;;4;>B i	3SVP8ScG	4	P@t x	f	u	U	x	v	xw	fPDE87

6 0°p´tp° 342<< 452=9

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O 51<5
P 47919:
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7D4EB9777477

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516< V
71:7 I X V

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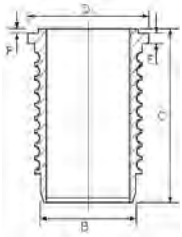

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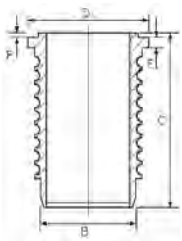
Kyßlv°ß°yr 45133x x | Qmvßop° uztyß°
Rp´pwtpq45133x x | Qmv®Öp wr° °pwr°
Xpwp®nt y 45133x x | I zx ' ´pyop wp r°l ´ytÚzyt
Xtwtp@z 45133x x

PeO 8>57E/Q 8 PeO 8>0	e	9	8>8DDvv	;BD i	3/DD	4	P@t x	f	u	U	x	v	xw	fPDE7E
PeO 8>5BB/Q 9 PeO 8>0	e	9	8>8DDvv	;BD i	3/DD	4	P@t x	f	u	U	x	v	xw	fPDE89

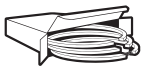
6 0°p´tp° 362<< 452=9

8A4BCE;97477

N 46=1=5 O 5:8158 P 4881:=Q 4313=R 3179



Xpwtpq45133x x | Kyßlv°ß°yr 45133x x | Rp´pwtpq45133x x | Xpwp®nt y 45133x x | Xtwtp@z 45133x x
Qmv®op° °pl ŵ | Ynswtp ßJtnsß°yr py pty | Qmvßop° uztyß° | Qmv®Öp wr° °pwr° | I zx ' ´pyop wp r°l ´ytÚzyt



PeO 8>5B; /Q	9 PeO 8>0	e	9	8>8DDvv	;E7 i	3/PD	4	P@t x	f	u	U x v xw	f PDE88
PeO 8>5BA/Q	; Pe 8>0	e	9	8>8DDvv	;;D i	3SaD	4	P@t x	f	u	U x v xw	f PDE8>

7 0°p´tp° 3=2=8 3723<

DC48>; B774B7

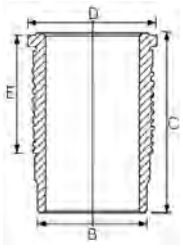
M =719:
N4 4=18=
N <6133
O 51=5
P 47919:
83É435

MWTMZN df f b

7D48>; B77487

6183 I QV
516< V
6183 I X

8A4BC77C7477



N 46=183 O 5: 8183 P 4881=3 Q 43143 R 3173

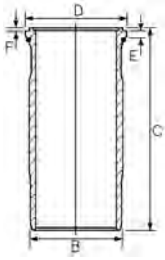
DE48>; B774B7
< 0476933093 .
4809: 33: 3033

Qrnv@op° °pl w@ Ynsw@p ßJtnsß°yr py pty Qrnv@ßop° uztyß° Qrnv@Öp w@° °pw@r° I zx ' ´pyop w@r°l ´ytÜzyt

PO 8; 57A/Q	APO 8; 0	a	9	89C>9vv	9E> i	3SDD	4	P@t x	f	u	U x v xw	f P97DD9
PO 8; 57B/Q	APO 8; 0	a	9	89C>9vv	9BA i	3PaD	4	P@t x	f	u	U x v xw	f P97DDC
PO 8; 57C/Q	APO 8; 0	a	9	89C>9vv	;A; i	3SeD	4	P@t x	f	u	U x v xw	f P97DDB
PO 8; 5B7/Q	APO 8; 0	a	9	89C>9vv	;9> i	3SSG	4	P@t x	f	u	U x v xw	f P97DD>

QX@GX I KTZ_Xd 3: 23= US T0KcVXKYY 4423:
QX@GX VH 36239 V/MX/Z 0°p´tp° 37237
Q 0°p´tp° m°° 3=23=

8A4AC77E7477



N 473133 O 5: 3133 P 4831=3 Q 7183 R 3153

Qrnv@op° Gyß10Vzw@s Xtyr -Lt´p Xtyr, Kyßs w@ wmnsw@Ü tyr Izyß1pyßw@°prx pyßz´l°nl oz´ Qrnv@op l ypw@r´l°nstl zw@z
Qrnv@op° °pl w@ Ynsw@p ßJtnsß°yr py pty Qrnv@ßop° uztyß° Qrnv@Öp w@° °pw@r° I zx ' ´pyop w@r°l ´ytÜzyt

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		CCM	x		9
8i		GPi e	S	cV9DD	C
8l		Gei a	S	ci 9VD	8C
8m		Gei a	S	ci 9VD	8D
9Q		Gl eS	S	eN9VD	; D
D8>>5B8		NSSV	S	i P9DD	>A
M889 MA577C9Y 7975MM57E		i DP	S	aV9DD	8
MMg		GDSP	S	cV9DD	C
MMh		GNcN	S	cV9DD	C
MMm		Gei a	S	ci 9VD	8E
MNR		Gl eS	S	eN9VD	; E
MNe		GceG	S	eG8DD	9B
MOO		GceG	S	eG8DD	9C
MPl		Gl eS	S	eN9VD	; D
MPm		GceG	S	eG8DD	9B
MQQ		GVi e	S	ca9VD	E
MQR		Gei a	S	ci 9VD	8C
MQT		GVi V	S	eG8DD	9D
MQk		GPi D	S	ca9VD	87
MQl		Gei a	S	ci 9VD	8D
MRT		GPi D	S	ca9VD	88
MRW		GPi D	S	ca9VD	88
MRZ		Gei a	S	ci 9VD	8D
MRf		GVi V	S	eG8DD	9D
MSS		Gl eS	S	eN9VD	; D
MSZ		GceG	S	eG8DD	9E
MSb		Gei a	S	ci 9VD	97
MSd		Gei a	S	ci 9VD	8D
MTN		GcGa	S	ci 9VD	98
MTR		Gei a	S	ci 9VD	8D
MTg		Gei a	S	ci 9VD	8D
MTi		GPi D	S	ca9VD	88
MVT		GceG	S	eG8DD	; 7
MVc		GceG	S	eG8DD	; 7
MWX		GVi V	S	eG8DD	9D
MWg		GcGa	S	ci 9VD	98
MWh		GPi D	S	ca9VD	87
MXT		Gei a	S	ci 9VD	8D
MXY		GVi e	S	ca9VD	E
MXm		GVi V	S	eG8DD	; 8
MY R		GSNN	P	ci 9VD	8A
MZg		Gei a	S	ci 9VD	99
MZk		GPi D	S	ca9VD	87
MbQ		GPi D	S	ca9VD	88
MbR		GVi V	S	eG8DD	9D
MbS		GceG	S	eG8DD	9E
Mbb		GceG	S	eG8DD	; 7
Mbc		GPi D	S	ca9VD	87
Mc Y		Gei a	S	ci 9VD	97
Mc c		GPi D	S	ca9VD	88
Mc k		GceG	S	eG8DD	; 7
MdX		Gei a	S	ci 9VD	9;
Mdl		GceG	S	eG8DD	; 9
Meh		Gei a	S	ci 9VD	8D
Mel		Gei a	S	ci 9VD	97
Mem		Gei a	S	ci 9VD	9;
Mf P		Gei a	S	ci 9VD	99
MgM		GPi D	S	ca9VD	88
MgN		GPi D	S	ca9VD	88
Mgc		GceG	S	eG8DD	; 9
Mgd		GVi V	S	eG8DD	9D

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		CCM	x		9
Mgl		Gei a	S	ci 9/D	9>
MhS		Gei a	S	ci 9/D	8D
M O		GceG	S	eG8DD	;7
Mkb		GPi D	S	ca9/D	88
Mkd		Gei a	S	ci 9/D	99
M b		GceG	S	eG8DD	;7
M c		Gei a	S	ci 9/D	97
Mmc		GGi e	P	ca9/D	D
Mmh		Gi ae	S	eG8DD	;;
NNl		GPi D	S	ca9/D	88
NNm		GPi D	S	ca9/D	88
NOM		GPi D	S	ca9/D	88
NRc		GVi V	S	eG8DD	;8
NSg /Q	>0	GVi V	S	eG8DD	;8
NVN		Gei a	S	ci 9/D	99
NVk		GceG	S	eG8DD	;9
NWO		Gei a	S	ci 9/D	99
NWP		Gi ae	S	eG8DD	;;
NWl		GPi D	S	ca9/D	89
NXd		Gi eS	S	eN9/D	>7
NXe		Gei a	S	ci 9/D	99
NXf		Gei a	S	ci 9/D	9;
NXl		Gi eS	S	eN9/D	>7
NY Q		GGi e	P	ca9/D	D
NY Y		Gi ae	S	eG8DD	;>
NY Z		Gi ae	S	eG8DD	;;
NY e		GSNN	P	ci 9/D	8A
NY f		Gei a	S	ci 9/D	99
NZY		GSNN	P	ci 9/D	8A
NZh		GSNN	P	ci 9/D	8A
Nbk		Gei a	S	ci 9/D	98
Ndf		Gi ae	S	eG8DD	;>
NeQ/Q	>6A0	GVi V	S	eG8DD	;8
NeR/Q	90	GVi V	S	eG8DD	;8
Nf N		Gei a	S	ci 9/D	98
NgW		Gei a	S	ci 9/D	9;
NhW		Gei a	S	ci 9/D	9>
Nhl		Gi eS	S	eN9/D	>7
Nhm		Gi eS	S	eN9/D	>7
Ni M		Gi eS	S	eN9/D	>8
Ni Q		Gi eS	S	eN9/D	>8
NkQ		Gei a	S	ci 9/D	99
NkR		Gei a	S	ci 9/D	99
NkV		Gei a	S	ci 9/D	99
Nki		GPi D	S	ca9/D	89
OMSM		Gi ae	S	eG8DD	;A
OMSO		Gi ae	S	eG8DD	;A
OMTM		Gi ae	S	eG8DD	;A
OMhM		GPi D	S	ca9/D	8;
OMhQ		GPi D	S	ca9/D	8;
OMhR		GPi D	S	ca9/D	8;
OMkM/Q	A0	GPi D	S	ca9/D	8>
OMkO		GPi D	S	ca9/D	8>
OMl M		GVi e	S	ci 9/D	8B
OMl N		GVi e	S	ci 9/D	8B
OMl O		GVi e	S	ci 9/D	8B
ONPN		Gi ae	S	eG8DD	;A
ONmM		GGi c	S	cG8DD	9
ONmN		GGi c	S	cG8DD	9
OOmM		Gi eS	S	eN9/D	>9

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			CCM	x		9
OOmN			Gi eS	S	eN9/D	>9
OPMM			Gci e	S	eN9/D	>;
OPTM			Gci e	S	eN9/D	>;
OPTN			Gci e	S	eN9/D	>;
OPZP			Gi eS	S	eN9/D	>9
OQSM			Gi ae	S	eG8DD	; A
ORRM			Gi ae	S	eG8DD	; B
ORRN			Gi ae	S	eG8DD	; B
ORRQ			Gi ae	S	eG8DD	; B
ORSN			Gi ae	S	eG8DD	; B
ORSO			Gi ae	S	eG8DD	; B
ORTO			Gi ae	S	eG8DD	; B
ORTP			Gi ae	S	eG8DD	; B
ORVM			Gi ae	S	eG8DD	; B
ORi M			GGi i	P	ci 9/D	8B
OSSN/Q	A0		GPi D	S	ca9/D	89
OSXN			Gi ae	S	eG8DD	; B
OTSM			GVi V	S	eG8DD	; 8
OTI M/Q	A6B0		i i i	P	cS9/D	>
OTI N/Q	A6B0		i i i	P	cS9/D	>
OTI O/Q	A6B0		i i i	P	cS9/D	>
OVOM			Gi ae	S	eG8DD	; B
OVOO			Gi ae	S	eG8DD	; B
OVmM			GGi c	S	cG8DD	;
OVmN/Q	A0		GGi c	S	cG8DD	;
OVmO			GGi c	S	cG8DD	;
OVmP			GGi c	S	cG8DD	;
OWRO/Q	A0		Gi ae	S	eG8DD	; C
OXON			Gi ae	S	eG8DD	; B
OXTM/Q	A0		GVi e	S	ci 9/D	9A
OXTN/Q	A0		GVi e	S	ci 9/D	9A
OXZM			GVi e	S	ci 9/D	8B
OY NM/Q	A0		GPi V	S	cS9/D	A
OZgN			GPi D	S	ca9/D	8;
OZi N			GPi D	S	ca9/D	8;
ObSM			i i i	P	cS9/D	>
OdNO/Q	A0		Gi ae	S	eG8DD	; C
OdWN/Q	A6B0		GVi e	S	ci 9/D	9A
OdXN/Q	B0		Gi ae	S	eG8DD	; C
OdY N/Q	B0		Gi ae	S	eG8DD	; C
OdhM/Q	A0		Gi ae	S	eG8DD	; C
OdhO/Q	A0		Gi ae	S	eG8DD	; C
Of TM			GPi D	S	ca9/D	8;
Of TQ			GPi D	S	ca9/D	8;
Of TR			GPi D	S	ca9/D	8;
Of VN			GPi D	S	ca9/D	8;
Of VO			GPi D	S	ca9/D	8;
OghO/Q	B0		Gi ae	S	eG8DD	; C
OkY M/Q	B QM9DD0		GVi e	S	ci 9/D	9A
OkeM/Q	A0		GPi V	S	cS9/D	A
OkkM/Q	B0		GVi e	S	ci 9/D	9A
OkkN/Q	B0		GVi e	S	ci 9/D	9A
Ol hM/Q	B0		GGi c	S	cG8DD	;
Ol hN			GGi c	S	cG8DD	;
OmOM/Q	B0		GPi V	S	cS9/D	A
PMPM/Q	B0		GSi V	S	cS9/D	B
PRXM/Q	B0		Gi ae	S	eG8DD	; C
PTRM/Q	B0		GSi e	S	cS9/D	B
PbOM/Q	B0		GSi V	S	cS9/D	B
YZ			GNcN	S	cV9DD	C

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		CCM	x		9
aY B8A5E89 /aY B8AP 990		NGi c	S	ec9DD	**>>**
db		GceG	S	eG9DD	**9C**

M889 MA5770Y 7975MM67E	S 9	**E7; vv**	**9E4; i** 36D8SV 4	**bx**		**f P97EBE**
45: 31=		372 5 452<5				

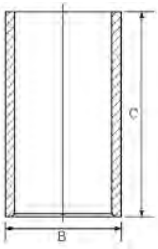
DC497ED77477
DC497ED7B477 *mT m*
DC497ED7D477 *mT m*

M 631 8
P 9458
53É87

41 8 I X V
5133 V
61=7 V

7D497ED77477
7D497ED7B477 *mT m*
7D497ED7D477 *mT m*

8>4788778477



N 9<137 **O** 448133

ONmM	S 9	**88EOvv**	**B; i** 3ea 4	**bx**	**f u U x v xw**	**f P9; E9C**
ONmN	S 9	**88EOvv**	**CC i** 3GDV 4	**bx**	**f u U x v xw**	**f P9; E7D**

GRZKG 415 ZYO	37243	RKUT 415 ZYO	35243 45245
GRZKG cR 415 ZYO	37243	ZURKJU @ 415 ZYO	3: 245 39248
@H@G @ 415 ZYO	3=243 38248		

DC4>>; E77487

M 5<1=3
P 7813 3
4=É75

TM

7D4>>; E77487

4133 TZ
4153 V
5133 TZ

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OVmM	S 9	**88EOvv**	**CC i** 3GDV 4	**bx**	**f u U x v xw**	**f P9C9A9**
OVmN /Q A0	S 9	**88EOvv**	**B; i** 3ea 4	**bx**	**f u U x v xw**	**f P9C9A8**
OVmO	S 9	**88EOvv**	**BB i** 3 D 4	**bx**	**f u U x v xw**	**f P; 88AB**
OVmP	S 9	**88EOvv**	**D8 i** 3GGD 4	**bx**	**f u U x v xw**	**f P; 8; A9**
OI hM/Q B0	S 9	**88EOvv**	**B; i** 3ea 4	**bx**	**f u U x v xw**	**f P; 7D79**
OI hN	S 9	**88EOvv**	**D8 i** 3GGD 4	**bx**	**f u U x v xw**	**f P9E977**

@H@G @ 415 ZYO	38248 3924:	RKUT YZ 415 ZYO	34246 3<24<
RKUT 415 ZYO	45245 3<253	ZURKJU @ 415 ZYO	38248 3824:

DC4>>9; 77487

M 5<133
N2 31 3
O 6185
O 6185
P 7783
4: É7=

-8: 457G434,

MWTMf b

7D4>>9; 77487

4153 TZ
4153 I X V
5133 TZ

Kl´wp´ 'f°ßzy° ßz mp´p' wnpo ty Kyr typ °pß' zyw	L´ sp´p Qzwnpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy	V´px tp' 'f°ßzy ´px 'wnp´ ol y° wp up° x zßp°´	Vf°ßzyp° x ° l yßr °z° ' l ´l °p´ ´ppx ' woz° py u°pr z op x zßz´p ° °zwx pyßp	l zy t 'f°ßzyp ot @nnstl @p´°tzyp ypnp°° l ´tz °z°ßß'f´p ß' ßß vw °p´tp
Kw°ßz®w				
Lz´ T ´l wJK 'f°ßzy	L ´ UKQQzwnpy @y T ´l w	Vz°´ wp° 'f°ßzyp° oòz´tr typ T ´l w	Vl ´l ' f°ßzyp° z´tr tyl wp° T ´l w	Vp´ 'f°ßzyt T ´l wJK
Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OTI M/Q	**A6B0**	P 9	**EEEvv**	**>> i**	3aD 4	**bx**			**f P9B; 87**
OTI N/Q	**A6B0**	P 9	**EEEvv**	**AA i**	3cV 4	**bx**			**f P9B; 88**
OTI O/Q	**A6B0**	P 9	**EEEvv**	**>D i**	3aV 4	**bx**			**f P; >DDE**
ObSM		P 9	**EEEvv**	**A7 i**	3ae 4	**bx**			**f P9C9B>**

CHQeG Qa 413	38248 3924:	S tt 413	43244 3: 24=
CHQeG a 413	3424:		

DC4>>; B77477

M 5: 155
N4 3189
N 8<13:
O 514=
P 7515 5
4: É6=

f b

ECOTOUGH

7D4>>; B77477

4133 TZ
4153 V
5133 I X

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz					

OY NM/Q	**A0**	S 9	**8; EAvv**	**E7 i**	3GNN 4	**bx**	**f u U x v**	**xw**	**f P9C9A;**
OkeM/Q	**A0**	S 9	**8; EAvv**	**E7 i**	3GNN 4	**bx**	**f u U x v**	**xw**	**f P9D89>**
OmOM/Q	**B0**	S 9	**8; EAvv**	**E9 i**	3GNV 4	**bx**	**f u U x v**	**xw**	**f P9E; 7B**

RKUT 417 ZYO	3=245 3<253	ZURKJU Qa 417 ZYO	38248 3724=

DC4>>EA77477

M 6413 3
N4 4158
N 8613:
O 51=3
O 7173
4=É7:

f b

7D4>>EA77477

4153 TZ
4153 I X V
5133 TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz					

PMPM/Q	**B0**	S 9	**8>EAvv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P; >DD8**
PTRM/Q	**B0**	S 9	**8>EDvv**	**EB i**	3GPG 4	**bx**	**f u U x v**	**xw**	**f P; BC9C**
PbOM/Q	**B0**	S 9	**8>EAvv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P; CE7A**

GXUTG 418 ZYO	3: 24:	RKUT 418 ZMDI TM	3<253
GZKI G 418 ZYO	3: 24<	RKUT 418 ZYO	3=24<
CHQeG a 418 ZYO	3: 24:	ZGXXGI U 418 ZYOGI Z	3=24<
RKUT 418 ZMt	4324<		

DC4>A; A77477

M 631<3x x
N4 8133x x
N 941: 3x x
O 5163x x
O 6183x x
P 7<1=3x x
4=133É83133

df f b

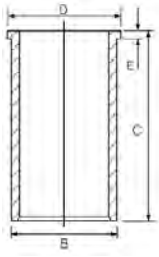
7D4>A; A77477

4153 VaJ
4153x x I X
5133x x TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz					

MVg	S 9	**87>; vv**	**; ; i**	3SV 4	**bx**		**f P>DE9**
MVh	S 9	**89C9vv**	**>7 i**	3/S 4	**bx**		**f P>DE;**
8i	S 9	**8; EDvv**	**; A i**	3Se 4	**P@l x**		**f PE>79**
Y Z	S 9	**89C9vv**	**; ; i**	3SV 4	**P@l x**		**f PE>78**
I UXJUHG 416		352=6	3<2=7		ZKXXG 416 J	362=3	452=7
CH@G C0413		362=6	3=2=9		ZKXXG 417 J	432=3	452=8
CH@G C0416 t		362=6	3<2==				

8>479A7C7477 **N** : <133 **O** 466133 **P** <4133 **Q** 7183



Mmc	P 9	**88EDvv**	**>C i**	3aS 4	**bx**		**f P8B>AE**
NY Q	P 9	**88EDvv**	**>C i**	3aS 4	**bx**		**f P97A87**
I UXJUHG 415		43235	39239		CH@G C0415	35235	39239

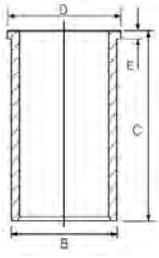
DC4>>CD77477
DC4>>CD7C477 *mT m*

M	5=15:
N4	7183
N	95133
O	5149
O	415:
P	8315:
	4: É79

7D4>>CD77477
7D4>>CD7C477 *mT m*

4153		TZ
4183		V
5183		I X

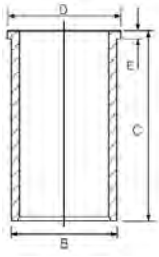
8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D; B7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71t 3



Yßppw b tßs ´pnp°°p° zy n´l yv°sl cß°top	Yß sw S tßv°´mpvÄpwpy°ptßrpy G°°°'l´°yr py	Gntp´ G@n @bopx pyß n ß @bpmip¿°ty	Gnp´z l zy p°nzß o°´l° py w nl´l opwntr p l w	Gnntl tz l zy ytnnstp°°wwß l wp´z x zß´p	

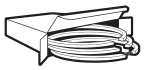
MQQ	S 9	**8AEDvv**	**AA i**	3cV8 D 4	**bx**		**f P87DBC**
MXY	S 9	**8AEDvv**	**AA i**	3cV 4	**bx**		**f P89E>E**
I UXJUHG 419 t		352=6	45235		OTI G 419	442=<	44236
CH@G C0419 t		362=6	35235		OTI G 419 t	392=:	3=233

8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D; B7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71t 3



b tßs ´pnp°°p° zy n´l yv°sl cß°top	S tßv°´mpvÄpwpy°ptßrpy G°°°'l´°yr py	G@n @bopx pyß n ß @bpmip¿°ty	l zy p°nzß o°´l° py w nl´l opwntr p l w	l zy ytnnstp°°wwß l wp´z x zß´p	

MQk	S 9	**8; E7vv**	**>> i**	3aD 4	**bx**		**f PAA; 9**
MWh	S 9	**8; E7vv**	**>> i**	3aD 4	**bx**		**f P89A8;**



MZk	S	9	**8; E7vv**	**>7 i**	3/S	4	**bx**	**f P89A8>**
Mbc	S	9	**8; E7vv**	**>> i**	3aD	4	**bx**	**f P89A8A**

GXUYG 417	382=:	39237	452=: 372==
I UXJUHG 417	452=:	372==	3=2=6 35235
I UXJUHG 417 t	392=7	45235	442=8 39236

DC4A79D77477
DC4A79D7C477 *mT m*

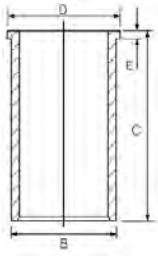
7D4A79D77477
7D4A79D7C477 *mT m*

8>4798AC8477
8>479D; B7477

N : =189 **O** 475133 **P** <5183 **Q** 7183
N : =183 **O** 478133 **P** <4183 **Q** 7t 3

M 5<168
O 81=8
P 83168
4: É85

4153		TZ
4183		V
5183		I X



G C 5<1433/ J C 831433

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
b tßs ´pnp°°p° zy n´I yv°sI cß°top	Stßv°´mpwÄpwpy°ptßrpy G°°°'I ´°yr py	G€pn €bpx pyß° n ß €bvpmíp¿°ty	I zy p°nzßo°´I ° py w nl ´I opwntr p I w	I zy ytnnstp°°wlv8z I wp´z x z8z´p

MRT	S	9	**8; E7vv**	**C> i**	3EDG	4	**bx**	**f PAA; >**
MRW	S	9	**8; E7vv**	**C> i**	3EDG	4	**bx**	**f P8; DE;**
MTi	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8AA9E**
MbQ	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8; 9BD**
Mbc	S	9	**8; E7vv**	**C> i**	3EDD	4	**bx**	**f P8AA9D**
MgM	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8B8EC**
MgN	S	9	**8; E7vv**	**C> i**	3EDD	4	**bx**	**f P8B8>7**
Mkb	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8B8; >**
NNl	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8B>B7**
NNm	S	9	**8; E7vv**	**C> i**	3EDD	4	**bx**	**f P8BA>8**
NOM	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8B>; >**

GXUYG 417 49a	34233	39237	€H€G €0417 t 49a 392=: 35235
I UXJUHG 417	35233	3: 233	€H€G €0417 49a 35235 4423=
I UXJUHG 417 49a	392==	4423=	€TI G 417 49a 37233 39236
I UXJUHG 417 t 49a	3=2=9	43235	RKUT 417 49a 442== 39239
€H€G €0417 49a	38233	35235	ZURKJU €0417 49a 34233 38235

DC488B877477
DC488B87C477 *mT m*

7D488B877477
7D488B87C477 *mT m*

M 5<1=5
N4 41=<
N 941=3
O 5165
P 7=1=5
4: É87

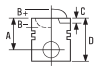
4153		TZ
4183		V
5183		I X

G C 5<19: 3/ J C 7=19: 3

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

NWl	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8DCA7**
Nki	S	9	**8; E7vv**	**B; i**	3ea	4	**bx**	**f P8E>9C**
OSSN /Q A0	S	9	**8; E7vv**	**B; i**	3eV	4	**bx**	**f P9; 8; B**

GRZKG 417 49a	38239	€H€G €a 417	3623< 38248
GRZKG cR 417 49a	43239	€H€G €a 417 RVM	3623< 38244



I UXJUHG 417 49a	3=235 4423=	RKUT 417 49a	39239 45245
OH@G C0417 49a	35235 4423=	ZURKJU C0417 49a	38239 3823=

DC4>; BE77477
DC4>; BE7C477 *mT m*
37238

M	5<1=5
N4	515<
N	94147
O	413:
O	4137
P	791=5
	4: É78

-8: 9: 80537,

f b

7D4>; BE77477
7D4>; BE7C477 *mT m*

4153		TZ
4153		V
5133		I X

ECOTOUGH

Vt°fzy° fz mp´p'wnpo ty Kyr typ Ypß? zyw	Qzwmpy y°´ty Szfz´° ßÜpy Ü° p´°pßÜpy	Vt°fzy ´px 'wmp´ol y° up° x zfp°´	Vt°fzypº op´p'°p°fz'l´l up°rz° op x zfz´p° °zwx pyfp	0Vt°fzyp'° p°°p´p´tx 'tl ÜÜlfz °zwx pyfp nzx 'wpfz
Yfppw	Yfl sw	Gntp´	Gnp´z	Gnntl tz
OMhM	S 9 **8; E7vv**	**887 i** 3GVD 4	**bx**	**f u - e x vetDzxw**	**f P9>>>E**
OMhQ	S 9 **8; E7vv**	**8; 9 i** 3GeD 4	**bx**	**f u - e x vetDzxw**	**f P9; 7EA**
OMhR	S 9 **8; E7vv**	**887 i** 3GVD 4	**bx**	**f u - e x vetDzxw**	**f P9; 7EB**
OZgN	S 9 **8; E7vv**	**887 i** 3GVD 4	**bx**	**f u - e x vetDzxw**	**f P9B; ; D**
OZi N	S 9 **8; E7vv**	**887 i** 3GVD 4	**bx**	**f u - e x vetDzxw**	**f P9AC79**
Of TM	S 9 **8; E7vv**	**887 i** 3GVD 4	**bx**	**f u - e x vetDzxw**	**f P9CA9C**
Of TQ	S 9 **8; E7vv**	**8; 9 i** 3GeD 4	**bx**	**f u - e x vetDzxw**	**f P9BE8B**
Of TR	S 9 **8; E7vv**	**887 i** 3GVD 4	**bx**	**f u - e x vetDzxw**	**f P9BE97**
Of VN	S 9 **8; E7vv**	**887 i** 3GVD 4	**bx**	**f u - e x vetDzxw**	**f P9BE8E**
Of VO	S 9 **8; E7vv**	**8; 9 i** 3GeD 4	**bx**	**f u - e x vetDzxw**	**f P9BE8D**

GRNGS HXG 417 ZYO	39243 37248	OH@G C0417 ZYOI °'´l	3923= 38248
OH@G C0417 ZYO	3423= 38248		

DC4>; ; E77487
DC4>; ; E7C487 *mT m*

M	5=133
N4	9173
N2	41<8
O	4133
O	61<3
P	7<133
	4=É87

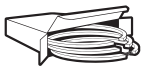
d f

7D4>; ; E77477
7D4>; ; E7C477 *mT m*

4153		TZ
4183		V
5133		TZ

Vt°fzy° fz mp´p'wnpo ty Kyr typ Ypß? zyw	Qzwmpy y°´ty Szfz´° ßÜpy Ü° p´°pßÜpy	Vt°fzy ´px 'wmp´ol y° up° x zfp°´	Vt°fzypº op´p'°p°fz'l´l up°rz° op x zfz´p° °zwx pyfp	0Vt°fzyp'° p°°p´p´tx 'tl ÜÜlfz °zwx pyfp nzx 'wpfz
Kw°fz®w Yfppw	Yfl sw	Gntp´	Gnp´z	Gnntl tz
OMkM/Q A0	S 9 **8; E7vv**	**E7 i** 3GNN 4	**bx**	**f u U x v xw**	**f P9C99;**
OMkO	S 9 **8; E7vv**	**E9 i** 3GNV 4	**bx**	**f u U x v xw**	**f P97>DD**

GRZKG 417 ZYO	4423:	ZURKJU C0417 ZYO	4423: 3823=
GRZKG cR 417 ZYO	4423:	ZURKJU C@ 417 ZYO	3: 245 39248
RKUT 417 ZYO	4423: 45245		



DC4>9EE77477
DC4>9EE7C477 *mTm*

M 5=153
N4 7183
O 6193
P 7<153
4=É85

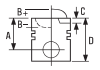
TM

7D4>9EE77477
7D4>9EE7C477 *mTm*

4153 TZ
4153 V
5183 TZ

Kw°fz®w
Yfppw | Yfi sw | Gntp´ | Gnp´z | Gnntl tz

| | | |



DC4>; 9E77477
DC4>; 9E7A477 *mT*
DC4>; 9E7C477 *mT m*

M	7863
N4	431t 3
N4	71t 3
N	7=133
P	9: 1<3
	59É99

-8: =3S G0437,

WWdf f b

7D4>; 9E77477
7D4>; 9E7A477 *mT*
7D4>; 9E7C477 *mT m*

41t 8		MJI V
5133		V
6133		I X V

GDC LKZ-Ring

HzÄwnl ' I ntßÖ4=t 8nx 6 azwx py op´ Qzwmpyx °wp 4=t 8nx 6 azwx p op w nl @8 o° ' t°ßzy 4=t 8nx 6 azwnl @8ol o ' t°ß y 4=t 8nx 6 azwx p nl x p´l ' t°ßzyp 4=t 8nx 6

8I	S	9	**8DEBvv**	**>C4A7 i**	3aS8ae	4	**P@t x**	**f P>DE8**
MQR	S	9	**8DEBvv**	**>C i**	3aS	4	**P@t x**	**f PE; C;**

I UXJUHG 41=J	352=6 3<2=9	OTI G 41=J	442=8 39236
0H@G 0041=J	372=6 3<2=9	ZURKJU 041=J	382=4 362==

DC4EE78774>7
DC4EE787A4>7 *mT*
DC4EE787C4>7 *mT m*
DC4EE78884>7 *Tmm*

M	6=198
N4	41=3
P	981t 3
	57É97

-8: =78,

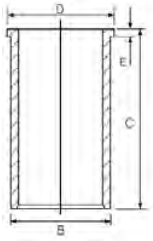
MWdf

G C 6=1733

7D4EE7877477
7D4EE787A477 *mT*
7D4EE787C477 *mT m*
7D4EE7888477 *Tmm*

41t 8		I X V
5133		V
6133		I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71t 3

8m	S	9	**8DEBvv**	**BB i**	3D	4	**P@t x f u U x v xw**	**f PAA9C**
MQI	S	9	**8DEBvv**	**>C i**	3aS	4	**P@t x**	**f PAA; A**
MRZ	S	9	**8DEBvv**	**D8 i**	33GD	4	**P@t x f u U x v xw**	**f PAA; 8**
MSd	S	9	**8DEBvv**	**BB i**	3D	4	**P@t x f u U x v xw**	**f P8; 9CD**
MTR	S	9	**8DEBvv**	**D8 i**	33GD	4	**P@t x f u U x v xw**	**f P89A89**
MTg	S	9	**8DEBvv**	**BB i**	3D	4	**P@t x f u U x v xw**	**f PAA9D**
MXT	S	9	**8DEBvv**	**BB i**	3D	4	**P@t x f u U x v xw**	**f P8; 9C9**
Meh	S	9	**8DEBvv**	**D8 i**	33GD	4	**P@t x f u U x v xw**	**f P8; 9C;**
MhS	S	9	**8DEBvv**	**D8 i**	33GD	4	**P@t x f u U x v xw**	**f P9; DD>**

GRNGS HXG 41=ZJO	372=9 36243	0H@G 0041=ZJO	3<2=9 35235
GRNGS HXG ZJO	362=9 36243	OTI G 41=YJO	442=8 39236
I UXJUHG 41=YJO	3<2=9 392==	OTI G 41=ZJO	3=2=9 39236
I UXJUHG 41=ZJO	3<2=9 45235	RKUT 41=ZJO	442== 39239
I UXJUHG aGX0J 41=ZJO	3<233 45235	ZURKJU 041=ZJO	3<2=8 362==
0H@G 0041=YJO	3<2=9 3<2==	ZURKJU 0041=ZJO	432=< 3: 237

DC488>E774B7
DC488>E7C4B7 *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P 9<1<3
59É99

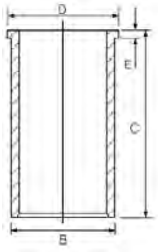
-8: =< ,

MWWWZN df

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71 3



DC488>E774C7
DC488>E7C4C7 *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P 9<1<3
59É99

-8: =< G,

MWWWZN df

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

DC488>E774E7
DC488>E7C4E7 *mT m*
DC488>E774EA
DC488>E7C4EA *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P : 41<3
59É99

MWZN df

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

Zz nÖuyop´ 4) 5
HzÄ vnl ' I ntÖ 56187nx 6
GC 781883/ J C 9<1883
Zz nÖuyop´ 6) 7
GC 781883/ J C : 41883

I y eÖuyop´ 4) 5
azvïx p y op´ Qzvmpyx °vwp 56187nx 6

°°´ nÖuyo´p 4) 5
azvïx p op vw nl @B o° ' t°ßzy 56187nx 6

py pvwntuyo´z 4) 5
azvïnl @bl o ' t°ß y 56187nx 6

I ntuyo´z 4) 5
azvïx p nl x p´I ' t°ßzyp 56187nx 6

I y eÖuyop´ 6) 7

°°´ nÖuyo´p 6) 7

py pvwntuyo´z 6) 7

I ntuyo´z 6) 7

MVm	S 9	8DEBvv	AA i 3cV 4	P@t x f u	f P>DE>
I UXJUHG 41=ZJ		352=6	3<2=9	ZURKJU 041=ZJ	382=4 362==
0H@G 0041=ZJ		362=6	3<2=9		

DC4EE7877487
DC4EE787C487 *mT m*
DC4EE7888487 *Tmm*

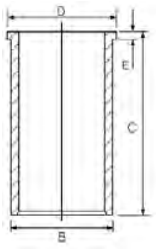
M 78198
N4 41=3
P : 41 3
59É99

MWTMdf

7D4EE7877477
7D4EE787A477 *mT*
7D4EE787C477 *mT m*
7D4EE7888477 *Tmm*

41 8 I X V
5133 V
6133 I X V

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71 3



GC 781763

MSb	S 9	8DEBvv	A7 i	3ae	4	P@t x	f P8>D7D
McY	S 9	8DEBvv	A7 i	3ae	4	P@t x	f P8; 9C8
Mel	S 9	8DEBvv	>C i	3aS	4	P@t x	f P8B>B8
M c	S 9	8DEBvv	>C i	3aS	4	P@t x	f P8B8ED

I UXJUHG 41=YJO	392== 4423=	OTI G 41=YJO	442=8 39236
0H@G 0041=YJO	3<2== 35235	RKUT 41=YJO	442== 39239
0H@G 0041=YJO	35235 45238		

DC488>E77497
DC488>E7C497 *mTm*

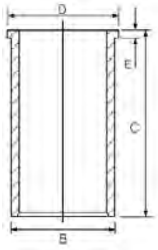
M 6=1<3
N4 4:t 8
N 6<133
O 4133
P 931<3
57É8<

-8: =8=043=,

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t 8 I QV
5133 V
6133 I X V

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71t 3



DC488>E774;7
DC488>E7C4;7 *mTm*

M 6=1<3
N4 4:t 8
N 6<133
O 4133
P 931<3
57É8<

-8: =8=G43=,

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

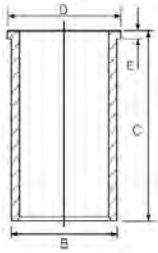
41t 8 I QV
5133 V
6133 I X V

Zz nÖuyop´4) 5	I y eÖuyop´4) 5	°°´nÖuyo´p4) 5	py pwntuyo´z4) 5	I ntuyo´z4) 5
HzÄwnl 'I ntfÖ56193nx 6	azvÞx py op´Qzwupyx °wp 56193nx 6	azvÞx p op w nl @B o° 't°Þzy 56193nx 6	azvÞnl @bl o 't°ß y 56193nx 6	azvÞx p nl x p´l 't°Þzyp 56193nx 6
G C 6=1883/J C 931883				
Zz nÖuyop´6) 7	I y eÖuyop´6) 7	°°´nÖuyo´p6) 7	py pwntuyo´z6) 7	I ntuyo´z6) 7

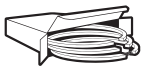
MTN	S 9	8C8Bvv	>9 i	3Vc	4	P@t x	f PE>7;
MWg	S 9	8C8Bvv	>> i	3aD	4	P@t x	f P8; DEB
Nbk	S 9	8DEBvv	88D i	3GaD	4	P@t x f u U x v xw	f P8CB>7
Nf N	S 9	8DEBvv	887 i	3GVD	4	P@t x f u U x v xw	f P97B9A

GRNGS HXG 41=ZJO	38238 3823:	OH@G 0041=ZJOI °'´I X	36237 3523<
GXUYG 41t YJO	3<2=: 39237	OTI G 41t J	3=2=9 39236

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71t 3



MZg	S 9	8DEBvv	BB i	3 D	4	P@t x f u U x v xw	f P8>E88
MfP	S 9	8DEBvv	C> i	3GDD	4	P@t x f u U x v xw	f P8B>B9
Mkd	S 9	8DEBvv	C> i	3GDD	4	P@t x f u U x v xw	f P8DC;E
NVN	S 9	8DEBvv	CC i	3GDV	4	P@t x f u U x v xw	f P8C;AB



NWO	S 9	**8DEBvv**	**CC i** 3GDV 4	**P@t x f u U x v xw**		**f P8C; AA**
NXe	S 9	**8DEBvv**	**CC i** 3GDV 4	**P@t x f u U x v xw**		**f P8D9BD**
NY f	S 9	**8DEBvv**	**C> i** 3GDG 4	**P@t x f u U x v xw**		**f P97>EA**
NkQ	S 9	**8DEBvv**	**CC i** 3GDV 4	**P@t x f u U x v xw**		**f P8ED8E**
NkR	S 9	**8DEBvv**	**BB i** 3 D 4	**P@t x f u U x v xw**		**f P97DBB**
NkV	S 9	**8DEBvv**	**BB i** 3 D 4	**P@t x f u U x v xw**		**f P97D>7**

GRNGS HXG 41=ZJO	372=9 36243	OH@G G@041=ZJO	35235 4423=
GRNGS HXG ZJO	362=9 36243	OH@G G@a 41=ZJO	3623< 39243
GRZKG 41=ZJO	37237	RKUT 41=ZJO	3: 238 45243
GRZKG cR 41=ZJO	43239 45243	ZURKJU G@041=ZJO	3<238 38239
I UXJUHG 41=ZJO	3=235 4423=	ZURKJU G@041=ZJO	43237 3823=

DC488>E774BA
DC488>E7C4BA *mTm*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<1<3
59É99

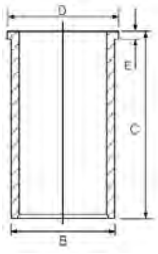
-8: =34J0634,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41 8 I Q V
51 33 V
61 33 I X V

8>479CEA7477



N <5133 **O** 485133 **P** <8133 **Q** 71 3

DC488>E774BB
DC488>E7C4BB *mTm*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<1<3
59É99

-8: =34J0635,

MWWWZN df f b

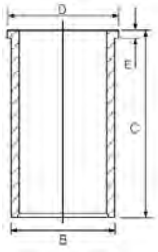
7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41 8 I Q V
51 33 V
61 33 I X V

Zz nÖwyop´ 4) 5	I y eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwnwyo´z 4) 5	I nwyo´z 4) 5
HzÄ vnl ' I ntÖ 551<8nx 6	azvx p yop´ Qzvwpyx °wp 551<8nx 6	azvx p op vv nl 8B o° ' t°Bzy 551<8nx 6	azvnl 8bl o ' t°B y 551<8nx 6	azvx p nl x p´I ' t°Bzyp 551<8nx 6
G C 781883/ J C 9<1883				
Zz nÖwyop´ 6) 7	I y eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwnwyo´z 6) 7	I nwyo´z 6) 7

MdX	S 9	**8DEBvv**	**887 i** 3GVD 4	**P@t x f u U x v xw**		**f P8ACBD**
Mem	S 9	**8DEBvv**	**EB4889 i** 3GPD8GVN 4	**P@t x f u U x v xw**		**f P8B>B;**
NXf	S 9	**8DEBvv**	**EB i** 3GPG 4	**P@t x f u U x v xw**		**f P97A8B**
NgW	S 9	**8DEBvv**	**88D i** 3GaD 4	**P@t x f u U x v xw**		**f P99BBC**

GRNGS HXG 41=ZJO	44235 4423<	OH@G G@041=ZJOPzÖI XI np´	3: 236 39237
I UXJUHG 41=ZJO	43235 4423=	RKUT 41=ZJO	3=233 39239
OH@G G@041=ZJO	35235 4423=	ZURKJU G@041=ZJO	43233 38239
OH@G G@041=ZJOI °' I X	36237 3523<		

DC488>E7749A **DC488>E7C49A** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*	**8>479CEA7477** 	**N** <5183 **O** 485133 **P** <8183 **Q** 71t 3

M 781<3
N4 4: 1=3
N 6<133
O 4143
P 9<1<3
59É99

-8: =9=Q434,

MWWWZN df f b

41t 8 I Q V
5133 V
6133 I X V

DC488>E774;A **DC488>E7C4;A** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*		

M 781<3
N4 4: 1=3
N 6<133
O 4143
P 9<1<3
59É99

-8: =9=Q435,

MWWWZN df f b

41t 8 I Q V
5133 V
6133 I X V

DC488>E774>A **DC488>E7C4>A** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*		

M 781<3
N4 4: 183
N 6<133
O 4143
P 9<1<3
59É99

-8: =34l 438,

MWWWZN df f b

41t 8 I Q V
5133 V
6133 I X V

DC488>E774>B **DC488>E7C4>B** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*		

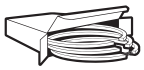
M 781<3
N4 4: 183
N 6<133
O 4143
P 9<1<3
59É99

-8: =34l 439,

MWWWZN df f b

41t 8 I Q V
5133 V
6133 I X V

Zz nÖuyop´ 4) 5 HzÄ wnl 'I ntßÖ 57193nx 6 G C 781883/J C 9<1883	I y eÖuyop´ 4) 5 azvßx py op´ Qzwpyx °wp 57193nx 6	°°´ nÖuyo´p 4) 5 azvßx p op wnl @8 o° 't°ßzy 57193nx 6	py pwntuyo´z 4) 5 azvßnl @8ol o 't°ß y 57193nx 6	I ntuyo´z 4) 5 azvßx p nl x p´l 't°ßzyp 57193nx 6
Zz nÖuyop´ 6) 7 HzÄ wnl 'I ntßÖ 57138nx 6	I y eÖuyop´ 6) 7 azvßx py op´ Qzwpyx °wp 57138nx 6	°°´ nÖuyo´p 6) 7 azvßx p op wnl @8 o° 't°ßzy 57138nx 6	py pwntuyo´z 6) 7 azvßnl @8ol o 't°ß y 57138nx 6	I ntuyo´z 6) 7 azvßx p nl x p´l 't°ßzyp 57138nx 6



| | | |

DC488>E774AB
DC488>E7C4AB *mT m*
3=235

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

M	781<3
N4	4: 193
N	6<133
O	4143
P	9<193
	59É99

-8: =34J435,

MWWWZN df fb

41 8		I Q V
5133		V
6133		I X V

Lz´°top l yr wpo tyupnßzy yzÜÜwp	T°´q´°ns´r l yr pz´oypßp Kty°'´tßÜb °py	Vz°´m°°p odtyupnßzy wß´l wp l yr°wt´p	Vl´l w mz¿°twv op tyÖpnnt y wßp´l w l yr°w´	Vp´tvwßz l yr zwßz opww°r pwwr zwz
Zz nÖwyop´4) 5	l y eÖwyop´4) 5	°°´nÖwyo´p4) 5	py pwntwyo´z4) 5	l ntwyo´z4) 5
GC 781883/J C 9<1883				
Zz nÖwyop´6) 7	l y eÖwyop´6) 7	°°´nÖwyo´p6) 7	py pwntwyo´z6) 7	l ntwyo´z6) 7
Lz´ypÄp´op°try °ßl trsßtyupnßzy yzÜÜwp	L´yp°p´p G°°q s´°yr py/ot´pvß pty°'´tßÜpyop J °py	Vz°´m°°p odtyupnßzy o´ztßp nzynp'ßzy 'w°´npyßp	Vl´l pwx °´pntpyßp ot°p z op mz¿°twv op tyÖpnnt y ot´pnß	Vp´Ü 't´pnpyßp ''´zrpßÜzyp opww°r pwwr zwz yzy l yr z wßz
HzÄ wnl 'l ntßÖ56193nx 6	azv0x py op´Ozwnpyx °wp 56193nx 6	azv0x p op w nl ®ß o°'t°ßzy 56193nx 6	azv0nl ®bl o 't°ß y 56193nx 6	azv0x p nl x p´l 't°ßzyp 56193nx 6

OXTM/Q	**A0**	S	9	**8AEDvv**	**CC**	i	3GDV	4	**P0t**	x	f u U x v	xw	**f P9C9AD**
OXTN/Q	**A0**	S	9	**8AEDvv**	**BB**	i	3 D	4	**P0t**	x	f u U x v	xw	**f P9C9B;**
OdWN/Q	**A6B0**	S	9	**8AEDvv**	**D8**	i	3GGD	4	**P0t**	x	f u U x v	xw	**f P9CEAD**
OkYM/Q	**BQM9DD0**	S	9	**8AEDvv**	**DA**	i	3GGV	4	**P0t**	x	f u U x v	xw	**f P; 8; A;**
OkkM/Q	**B0**	S	9	**8AEDvv**	**BB**	i	3 D	4	**P0t**	x	f u U x v	xw	**f P; AA>A**
OkkN/Q	**B0**	S	9	**8AEDvv**	**D8**	i	3GGD	4	**P0t**	x	f u U x v	xw	**f P; 8A98**

RKUT 419 ZJO	3=245	3<253	ZURKJU 0a 419 ZJO	38248	3724=
RKUT YZ 419 ZJO	3=246	3<253			

DC4>>>877477
DC4>>>87A477 *mT*
DC4>>>87C477 *mT m*

7D4>>>877477
7D4>>>87A477 *mT*
7D4>>>87C477 *mT m*

M	78163
N4	44133
N	7=133
P	9<163
	59É99

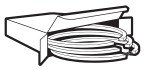
MWWWdf fb

41 8		MJI V
5133		V
5133		I X V

GDC LKZ-Ring

MNe		S	9	**8CD8vv**	**BB**	i	3 D	4		**bx**			**f P; ACB**
MPm		S	9	**8CD8vv**	**BB**	i	3 D	4		**bx**			**f PE; D>**

l UXJUHG 41<t	352=6	3=235	ZURKJU 041<t	442=6	452=9
0H@G 041<t	362=6	3<2==			



DC487E>774A7
DC487E>7C4A7 *mT m*

M	6515 3	4183	VY V
N4	7173	41t 8	V
N	881t 3	6133	I X V
N2	4163		
P	9518 3		
	53É8:		

-8<463K0434,

7D487E>77487
7D487E>7C487 *mT m*

Vt°ßzy° ßz mp´p' wnpo ty Kyr typ Ypß° zyŵ Qzwnpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´ Vt°ßzyp° op´p' °p°ßz ' I ´I up°rz° op x zßz´p° °zwx pyßp ÜVt°ßzyp ' ° p°°p´p´tx ' tl ÜÜlßz °zwx pyßp nzx ' wpßz

G C 641=33/ J C 9515 33

MOO	S	9	**8CD8vv**	**BB i**	3 D	4	**bx**	**f P8DCA9**
db	S	9	**8CD8vv**	**BA i**	3ee	4	**bx**	**f P; AEB**

I UXJUHG 41<t	352=6	3=235	ZURKJU 041<t	382=4	452=9
OH@G 0041<t	362=6	3<2==			

DC487EC77487
DC487EC7A487 *mT*
DC487EC7C487 *mT m*

M	6515 3	4183	I X V
N4	<143	41t 8	V
N	891<3	6133	I X V
N2	4143		
P	9516 3		
	53É87		

-8<4640455,

7D487EC77477
7D487EC7A477 *mT*
7D487EC7C477 *mT m*

MQT	S	9	**8AEAvv**	**C> i**	3GDG	4	**bx**	**f P89>DD**
MRf	S	9	**8AEAvv**	**C> i**	3GDG	4	**bx**	**f PAA; B**
MWX	S	9	**8AEAvv**	**C>4CB i**	3GDG8GDP	4	**bx**	**f P89A7E**
MbR	S	9	**8AEAvv**	**C> i**	3GDD	4	**bx**	**f P8; 9BE**
Mgd	S	9	**8AEAvv**	**C> i**	3GDG	4	**bx**	**f P8B977**

I UXJUHG 419 t	3: 2=9	45235	ZURKJU 0419 t	442=9	362==
OH@G 0419 t	372=9	35235	ZURKJU 0419	432=<	3: 237
RKUT 419	442==	39239			

DC487AE77477
DC487AE7C477 *mT m*

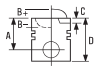
M	6513 3	4153	TZ
N4	5163	4183	V
N	9417 3	5133	I X
N2	31t 3		
P	861t 3		
	53É8:		

7D487AE77477
7D487AE7C477 *mT m*

G C 641t 33/ J C 861733

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

MSZ	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P89A87**



MbS	S	9	**8CD8vv**	**E9 i**	3GNV	4		**bx**	**f P8AA; 7**
RKUT 41<53a				442==	39239		ZURKJU 0041<53a		432=< 3:237

DC4A79E77477
DC4A79E7C477 *mT m*

M 65188
O 6193
P 89188
53É8=

-8<4=5,

MW

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I QV
41:8 V
5133 I XV

I zy´zo r l ' 5: 183x x
G C 651583/ J C 891583

Vwp°pw/°r pyl mfßyo 5: 183x x

Jt°ßynp pyßp mtpwp 5: 183x x

Jt°ßyntl opwmtpw/ 5: 183x x

Jt°ßyÜl ol w/ mtwp 5: 183x x

MVT	S	9	**8CD8vv**	**887 i**	3GVD	4		**bx f u U x v xw**	**f P8CDEE**
MVc	S	9	**8CD8vv**	**8;9 i**	3GeD	4		**bx f u U x v xw**	**f P8B8EE**
Mbb	S	9	**8CD8vv**	**8;9 i**	3GeD	4		**bx f u U x v xw**	**f P8;9C7**
Mc k	S	9	**8CD8vv**	**88A i**	3GVa	4		**bx f u U x v xw**	**f P8;9CA**
Mi O	S	9	**8CD8vv**	**887 i**	3GVD	4		**bx f u U x v xw**	**f P8>E7E**
Mi b	S	9	**8CD8vv**	**88A48;9 i**	3GVa8Gci	4		**bx f u U x v xw**	**f P8B978**
GRNGS HXG 41<Z 53a				432=:	36243		RKUT 41<53a Z		442== 39239
I UXJUHG 41<Z 53a I °' ´I				3:233	43235		RKUT 41<53a Z 7		442== 39239
0H@G 0041<Z 53a I °' ´I				3:233	35235		ZURKJU 0041<53aZ		3=233 3:237
0H@G 0041<Z 53a I °' ´I X				3:233	35235				

DC4A79E77487
DC4A79E7A487 *mT*
DC4A79E7C487 *mT m*

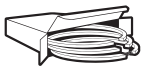
M 651:3
N4 5138
N :3133
P 861:3
53É8=

MW

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I QV
41:8 V
5133 I XV

MXm	S	9	**8AEAvv**	**CA i**	3GDN	4		**bx**	**f P999>9**
NRc	S	9	**8AEAvv**	**CA i**	3GDN	4		**bx**	**f P97B98**
NSg /Q >0	S	9	**8AEAvv**	**CA i**	3GDN	4		**bx**	**f P8C;A9**
NeQ /Q >6A0	S	9	**8AEAvv**	**CA i**	3GDN	4		**bx**	**f P8D9>A**
NeR /Q 90	S	9	**8AEAvv**	**CA i**	3GDN	4		**bx**	**f P8D9>B**
OTSM	S	9	**8AEAvv**	**CA i**	3GDN	4		**bx**	**f P99BCB**
GRZKG 419				36237			KcKU 419		3623= 3=243
GRZKG 419 RVM				3=23=			RKUT 419		3:238 3<246
GRZKG cR 419				43239			RKUT 419 RVM		4523= 45245
GRZKG cR 419 RVM				3=23=			ZURKJU 0041 9		43237 3823=



DC48>D; 77477
DC48>D; 7C477 *mT m*

M 5=13<
N4 51t 3
N 95163
P 831t 3
4=É75

f b

7D48>D; 77477
7D48>D; 7C477 *mT m*

4133 TZ
4153 V
5133 I X V

Mdl	S	9	**8CD8vv**	**8; 9 i**	3GeD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B8; B**
Mgc	S	9	**8CD8vv**	**8; 9 i**	3GeD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B8; A**
NVk	S	9	**8CD8vv**	**887 i**	3GVD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C; 97**

GHGG 0041<Z LX	45236	3823<	RKUT 41<53a Z 7	442== 39239
RKUT 41<53a Z	442==	39239	ZURKJU 0041<53aZ	3=233 3: 237

DC4A79E774; 7
DC4A79E7C4; 7 *mT m*

M 651t 3
O 41=3
P 861t 3
4=É7=

f b

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I Q V
41t 8 V
5133 I X V

Mrrh	S	9	**8EBDvv**	**877 i**	3GPa	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D9>C**
NWP	S	9	**8EBDvv**	**87; i**	3GSD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C; AC**
NY Z	S	9	**8EBDvv**	**89A i**	3GcD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8DECC**

GRZKG 513 ZJ O	36237		RKUT 513 ZJ O	3: 238 45245
GRZKG 513 ZJ 049a	36237		RKUT 513 ZJ 049a	3: 238 45245
GRZKG cR 513 ZJ O	44239	45246	ZURKJU 00513 ZJ O	3=237 3823=
GRZKG cR 513 ZJ 049a	43239		ZURKJU 00513 ZJ 049a	37237 3823=

DC48; EA77477
DC48; EA7C477 *mT m*

M 781<6
N4 4: 1<3
N 6<133
P 9<1<3
59É99

-8: =34P,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mT m*

41t 8 I Q V
5133 V
6133 I X V

NY Y	S	9	**8EBDvv**	**87; i**	3GSD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D9BE**
Ndf	S	9	**8EBDvv**	**87; i**	3GSD	4	**P0t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8E; DD**

GRNGS HXG 513 ZJ O	44238	36243	RKUT 513 ZJ O	43238 43243

GRZKG 513 ZJO	44238	ZURKJU 00513 ZJO	44238 3823=
GRZKG cR 513 ZJO	43239		

DC48; EA77487
DC48; EA7C487 *mTm*

M 781<6
N4 4: 183
N 6<133
O 31t 3
P 9<1<3
59É99

-8: =34J<66,

MWWWZN df fb

7D48; EA77477
7D48; EA7C477 *mTm*

41t 8 I QV
5133 V
6133 I X V

DC48; EA77497
DC48; EA7C497 *mTm*

M 781<6
N4 4: 183
N 6<133
O 31t 3
P 9<1<3
59É99

-8: =34J<67,

MWWWZN df fb

7D48; EA77477
7D48; EA7C477 *mTm*

41t 8 I QV
5133 V
6133 I X V

Zz nÖuyop´ 4) 5 HzÄwnl 'Intß0 56163nx 6 G C 781883 Zz nÖuyop´ 6) 7	Iy eÖuyop´ 4) 5 azvßx py op´ Qzwupyx °wp 56163nx 6 Iy eÖuyop´ 6) 7	°°´ nÖuyo´p 4) 5 azvßx p op w nl @8 o° 't°ßzy 56163nx 6 °°´ nÖuyo´p 6) 7	py pwntuyo´z 4) 5 azvßnl @tol o 't°ß y 56163nx 6 py pwntuyo´z 6) 7	I ntuyo´z 4) 5 azvßx p nl x p´l 't°ßzyp 56163nx 6 I ntuyo´z 6) 7

OMSM	S	9	**8EBDvv**	**87A i**	3GSP	4	**P@t x**	**f**	**u U x v**	**xw**	**f P999>;**
OMSO	S	9	**8EBDvv**	**DD i**	3GND	4	**P@t x**	**f**	**u U x v**	**xw**	**f P99BBE**
OMTM	S	9	**8EBDvv**	**89A i**	3GcD	4	**P@t x**	**f**	**u U x v**	**xw**	**f P999>>**
ONPN	S	9	**8EBDvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u U x v**	**xw**	**f P9>; 9C**
OQSM	S	9	**8EBDvv**	**89A i**	3GcD	4	**P@t x**	**f**	**u U x v**	**xw**	**f P99BC>**

GRZKG 513 ZJO	36239	RKUT 513 ZJO	38239 45245
GRZKG cR 513 ZJO	3923: 45246	ZURKJU 00513 ZJO	34239 3823=
KcKU 513 ZJO	4523< 38246		

DC4>; 9; 77477
DC4>; 9; 7C477 *mTm*

M 781<3
N4 451t 3
N 831<<
P 9<1<3
59É99

-8: =34M535,

MWWWZN df fb

7D4>; 9; 77477
7D4>; 9; 7C477 *mTm*

41t 8 MJI V
5133 V
6133 I X V

GDC LKZ-Ring

UK 36R 43: 398M/Mpy 4 pyr typ zyw@ 3<0765633033 UK>36R4=<484G	UK 36R 43: 398M/y°´q´Szß´py op´ Mpyp'Ißzy 4	T UK 36R 43: 398M/°yt¿°px pyB'z°´ Szßp°´opr y ´Ißzy 4	UK 36R 43: 398M/Mpyp´Int y 4 °zw x zß´	Yzw x zß´p Mpyp´Ißzy 4

ORRM	S	9	**8EBDvv**	**877 i**	3GPa	4	**P@t x**	**f**	**u U x v**	**xw**	**f P9A>7>**
ORRN	S	9	**8EBDvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u U x v**	**xw**	**f P9>>A7**

ORRQ	S	9	**8EBDvv**	**DA i**	3GGa	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9A>7;**
ORSN	S	9	**8EBDvv**	**89A i**	3GcD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9>>A8**
ORSO	S	9	**8EBDvv**	**8;7 i**	3Gcc	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9CA9E**
ORTO	S	9	**8EBDvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9>;9B**
ORTP	S	9	**8EBDvv**	**87A i**	3GSP	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9;AD9**
ORVM	S	9	**8EBDvv**	**89A i**	3GcD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9>;;;**
OSXN	S	9	**8EBDvv**	**89A i**	3GcD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9B>ED**
OVOM	S	9	**8EBDvv**	**87A i**	3GSP	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9B>EC**
OVOO	S	9	**8EBDvv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9C78;**
OXON	S	9	**8EBDvv**	**87; i**	3GSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9A879**

GRNGS HXG 513 ZJO	39243	KcKU 513 ZJO	4523< 38246
GRZKG 513 ZJ049a	36237	OHQGQa 513 ZJO	34243 38248
GRZKG cR 513 ZJO	3923: 39246	RKUT 513 ZJO	38239 45245
GRZKG cR 513 ZJ049a	43239	RKUT 513 ZJ049a	3:238 45245

DC4>;9;77487
DC4>;9;7C487 *mTm*

M 781<3
N4 4614 3
N 831<<
P 9<1<3
59É99

-8: =34M553,

MWWWZN df fb

7D4>;9;77487
7D4>;9;7C487 *mTm*

4t8 MJI V
5t33 SUV
6t33 IXV

GDC LKZ-Ring

UK 36R 43: 398Y/Mpy 5 pyrtyp zyŵ

GC 781833
UywŵqßBz 'f°Bzy° p¿°t®wpyßBz UK 36R 43: 398 GM/36R 43: 3 98 Y

3<07656330 43 UK>36R4=<484I

UK 36R 43: 398Y/y°´q´Szßz´pyop´ Mpyp´lßzy5

T°´q´UKQzwpy 36R 43: 398 GM°yo 36R 43: 398 Y

T UK 36R 43: 398Y/°yt¿°px pyß'z°´ Szßp°´opr y´lßzy5

Yp°wpx pyßIol'ß l°É'f°Bzy° ¿°t®wpyßP UK 36R 43: 398 GMpß36R 43: 398 Y

UK 36R 43: 398M/Mpyp´Int y5°zwr x zßz´

Ilmtoz°zwlx pyßplwr°'f°Bzyp° p¿°t®wpyßp°l UK 36R 43: 398 GMÖ36R 43: 398 Y

Yzwrx zßz´p Mpyp´lßzy5

Golßßz°zwlyßz It'f°Bzytp¿°t®wpyßt UKI 36R 43: 398 GMp36R 43: 398 Y

OWRO/Q A0	S	9	**8EBDvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9C9B7**
OdNO/Q A0	S	9	**8EBDvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9E8E>**
OdXN/Q B0	S	9	**8EBDvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9E8E9**
OdYN/Q B0	S	9	**8EBDvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9C9B8**
OdhM/Q A0	S	9	**8EBDvv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9CEB7**
OdhO/Q A0	S	9	**8EBDvv**	**87A i**	3GSP	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P9CEAE**
OghO/Q B0	S	9	**8EBDvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;8>9D**
PRXM/Q B0	S	9	**8EBDvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**		**f P;;7EC**

GRNGS HXG 513 ZJO	38248	RKUT 513 ZJO	43245 3<253
GRNGS HXG ZJO	38248	RKUT YZ 513 ZJO	37246 3<24<
GZKI G 513 ZJO	43249		

DC4>>CA77487

M 781<3
N4 451=3
N 831<<
P 9<1<3
59É99

MWWWZN df fb

7D4>>CA77477
7D4>>CA7C477 *mTm*

4t8 MJI V
5t33 V
5t33 IXTZ

GDC LKZ-Ring

UK 37R 43: 398G
KG5<<Kyrtyp dx tŵ 5347D

UK 37R 43: 398G
KG5<<Szßz´pydx twp

UK 37R 43: 398G
Llx twpopx zßp°°KG5<<

UK 37R 43: 398G
Llx twlopx zßz´p° KG5<<

UK 37R 43: 398G
Szßz´tdx trwl KG5<<

9Q	S	9	**8ED>vv**	**DA i**	3GGV	4	**bx**		**f P; AC7**
MPI	S	9	**8ED>vv**	**DA i**	3GGV	4	**bx**		**f PE; DB**
MSS	S	9	**8ED>vv**	**DA i**	3GGV	4	**bx**		**f PAA; C**

GRNGS HXG 513	362=9	36243	OH@G 0513 t	362=6	3<2==
GRNGS HXG 513 t	372=9	36243	ZURKJU 0513 t	382=4	362==
I UXJUHG 513 t	352=6	392==			

DC4A78D77497
DC4A78D7C497 *mT m*

M	631=3
N4	81 3
N	97133
N2	31=3
P	841<3
	54É88

-8<574H0436,

7D4A78D77477
7D4A78D7C477 *mT m*

4153		VY
4183		V
5133		I X V

G C 631933/ J C 841833

MNR	S	9	**8ED>vv**	**887 i**	3GVD	4	**bx**		**f P>DEA**

I UXJUHG 513 t 49a	3<2=9	392==	ZURKJU 0513 t 49a	442=6	362==
OH@G 0513 t 49a	3<2=9	3<2==			

DC4A78D774>7

M	64193
O	6153
P	84193
	54É89

-8<56<G,

7D4A78D77477
7D4A78D7C477 *mT m*

4153		VY
4183		V
5133		I X V

NXd	S	9	**8ED>vv**	**887 i**	3GVD	4	**bx**		**f P8C; A;**
NXI	S	9	**8ED>vv**	**887 i**	3GVD	4	**bx**		**f P8C; A>**
Nhl	S	9	**8ED>vv**	**887 i**	3GVD	4	**bx**		**f P8D9BB**
Nhm	S	9	**8ED>vv**	**887 i**	3GVD	4	**bx**		**f P8D9BC**

GRZKG 513 LYO	38237	3623=	RKUT 513 LYO	3: 238	38243
GRZKG cR 513 LYO	43239	3623=	ZURKJU 0513 LYO	43237	3823=

DC4>; A877477

M	5=16<
N2	45179
P	8=1<8
	4=É77

-8<573H634,

f b

7D4>; A877487

4153		VaJ TZ
4183		
5133		I X

KwºBz@w
YBppw YB sw Gntp´ Gnp´z Gnntl tz

Ni M	S	9	**8ED>vv**	**8>C i**	3NDD	4	**bx**	**f u U x v xw**	**f P8E>9>**
Ni Q	S	9	**8ED>vv**	**8>C i**	3NDD	4	**bx**	**f u U x v xw**	**f P999>B**

GRZKG 513 ZLYO	37239 3823=	RKUT 513 ZLYO	38238 3623=
GRZKG cR 513 ZLYO	43239 3823=	ZURKJU 00513 ZLYO	44238 3823=
KcKU 513 ZLYO	3623= 38246		

DC4>; DA77477
DC4>; DA7C477 *mT m*

M 5=183
N4 9143
N 7=185
O 4169
O 4169
P 83183
53É8=

MWdf f b

7D4>; DA77477
7D4>; DA7C477 *mT m*

4153 VaJ
4183 V
5133 I X V

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OOmM	S 9	**8ED>vv**	**8>C i**	3NDD 4	**bx**	**f u U x v xw**		**f P9>BAB**
OOmN	S 9	**8ED>vv**	**8AA i**	3NGG 4	**bx**	**f u - e x v zxw**		**f P99BC9**
OPZP	S 9	**8ED>vv**	**8AA i**	3NGG 4	**bx**	**f u U x v xw**		**f P9>; 97**

GRNGS HXG 513 ZYO	44243 38245	KcKU 513 ZLYO	38243 38246
GRZKG cR 513 ZLYO	3823=	RKUT 513 ZLYO	3923= 45245

DC4>>; D77487

M 5=193
N4 9148
N 7=193
O 6193
P 83133
56É84

df

7D4>>; D77477
7D4>>; D7C477 *mT m*

4153 VaJ TZ
4153 V
5133 I X V

LKZ-Ring

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OPMM	S 9	**8CEDvv**	**88D i**	3GaD 4	**bx**	**f u U x v xw**		**f P98AE7**
OPTM	S 9	**8CEDvv**	**DD i**	3GND 4	**bx**	**f u U x v xw**		**f P9>; 8C**
OPTN	S 9	**8CEDvv**	**88D i**	3GaD 4	**bx**	**f u U x v xw**		**f P9>; 8E**

GRNGS HXG 41< ZYO	44245 37248	KcKU 41< ZYO	38243 38246
GRZKG 41< ZLYO	3423:	RKUT 41< ZYO	3923: 45245
GRZKG cR 41< ZLYO	3423:	ZURKJU 00041< ZLYO	3423: 3823=

DC4>>; D77477
DC4>>; D7C477 *mT m*

M 5=<8
N4 71 3
N4 8198
N2 8198
O 5133
P 89133
56É87

df f b

7D4>>; D77477
7D4>>; D7C477 *mT m*

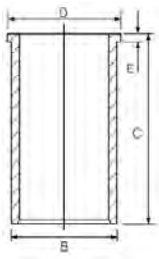
4153 VaJ TZ
4153 V
5133 I X V

LKZ-Ring

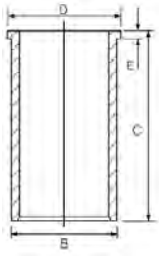
Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

aY B8A5E89 /aY B8AP 990	S 9	**98ECvv**	**>> i**	3aD 4	**P0t x**			**f P98; C>**

465 515 J		382 = 452<5	
		8>47998E7477	**N** =3133 **O** 48<173 **P** =5133 **Q** 71 3



D8>>5B8	S 9	**9>>Avv**	**A94AA i**	3cN8cV 4	**P@i x**		**f P; AEC**
464 517 J tp°pw			392 < 452<9				
			8>4799AB7477		**N** =9133 **O** 49: 163 **P** =<1=3 **Q** 8133		



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	CCM	x		9
MPd	GceG	S	eG8DD	97
MQQ	GVi e	S	ca9/D	C
MQR	Gei a	S	ci 9/D	8>
MQT	GVi V	S	eG8DD	98
MQl	Gei a	S	ci 9/D	8A
MSZ	GceG	S	eG8DD	97
MSb	Gei a	S	ci 9/D	8B
MSd	Gei a	S	ci 9/D	8A
MSg	GceG	S	eG8DD	99
MTR	Gei a	S	ci 9/D	8A
MWX	GVi V	S	eG8DD	98
MXT	Gei a	S	ci 9/D	8A
MY R	GSNN	P	ci 9/D	89
Mc Y	Gei a	S	ci 9/D	8B
Mdk	GceG	S	eG8DD	9;
Mdm	GceG	S	eG8DD	99
Meh	Gei a	S	ci 9/D	8A
Mel	Gei a	S	ci 9/D	8B
Mem	Gei a	S	ci 9/D	8C
Mf P	Gei a	S	ci 9/D	8D
MgM	GPi D	S	ca9/D	D
MgN	GPi D	S	ca9/D	D
MgY	GceG	S	eG8DD	9;
Mgc	GceG	S	eG8DD	9;
MhN	Gei a	S	ci 9/D	8D
MhR	Gei a	S	ci 9/D	8C
Mhg	GVi V	S	eG8DD	9>
Mf	GceG	S	eG8DD	9;
Mk	Gei a	S	ci 9/D	8C
Mkb	GPi D	S	ca9/D	D
Mkd	Gei a	S	ci 9/D	8D
Mmc	GGi e	P	ca9/D	B
Mmh	Gi ae	S	eG8DD	9A
NNl	GPi D	S	ca9/D	D
NNm	GPi D	S	ca9/D	D
NOM	GPi D	S	ca9/D	D
NRc	GVi V	S	eG8DD	9>
NSg /Q >0	GVi V	S	eG8DD	9>
NVN	Gei a	S	ci 9/D	8D
NWO	Gei a	S	ci 9/D	8D
NWP	Gi ae	S	eG8DD	9A
NWl	GPi D	S	ca9/D	E
NXd	Gi eS	S	eN9/D	; 7
NXe	Gei a	S	ci 9/D	8D
NXf	Gei a	S	ci 9/D	8C
NXk	Gi eS	S	eN9/D	; 7
NXl	Gi eS	S	eN9/D	; 7
NY Q	GGi e	P	ca9/D	B
NY Y	Gi ae	S	eG8DD	9B
NY Z	Gi ae	S	eG8DD	9A
NY b	Gi ae	S	eG8DD	9B
NY e	GSNN	P	ci 9/D	89
NZY	GSNN	P	ci 9/D	89
NZh	GSNN	P	ci 9/D	89
NeQ /Q >6A0	GVi V	S	eG8DD	9>
NeR /Q 90	GVi V	S	eG8DD	9>
Nee	Gi ae	S	eG8DD	9B
Nei	Gei a	S	ci 9/D	8D
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		CCM	x		
Nhl		Gi eS	S	eN9/D	; 7
Nhm		Gi eS	S	eN9/D	; 7
Ni M		Gi eS	S	eN9/D	; 8
NkQ		Gei a	S	ci 9/D	8D
Nki		GPi D	S	ca9/D	E
OMhQ		GPi D	S	ca9/D	87
OMkM/Q	A0	GPi D	S	ca9/D	88
OMkO		GPi D	S	ca9/D	88
OM M		GVi e	S	ci 9/D	8;
OM N		GVi e	S	ci 9/D	8;
OM O		GVi e	S	ci 9/D	8;
ONNN		Gi ae	S	eG8DD	9C
ONPN		Gi ae	S	eG8DD	9C
ONmM		GGi c	S	cG8DD	8
ONmN		GGi c	S	cG8DD	8
OOmM		Gi eS	S	eN9/D	; 9
OPMM		Gci e	S	eN9/D	; ;
OPMN		Gci e	S	eN9/D	; ;
OPPM		GPi D	S	ca9/D	E
OQSM		Gi ae	S	eG8DD	9C
ORRN		Gi ae	S	eG8DD	9D
ORSN		Gi ae	S	eG8DD	9D
ORTM		Gi ae	S	eG8DD	9D
ORTO		Gi ae	S	eG8DD	9D
ORTR		Gi ae	S	eG8DD	9D
ORVM		Gi ae	S	eG8DD	9D
ORi M		GGi i	P	ci 9/D	8;
OSSM		GPi D	S	ca9/D	E
OSSN		GPi D	S	ca9/D	E
OTSM		GVi V	S	eG8DD	9>
OTI M/Q	A6B0	i i i	P	cS9/D	;
OTI N/Q	A6B0	i i i	P	cS9/D	;
OVmM/Q	B0	GGi c	S	cG8DD	9
OVmN/Q	A0	GGi c	S	cG8DD	9
OVmO		GGi c	S	cG8DD	9
OVmP		GGi c	S	cG8DD	9
OWRO/Q	A0	Gi ae	S	eG8DD	9E
OXOM		Gi ae	S	eG8DD	9D
OXON		Gi ae	S	eG8DD	9D
OXTM/Q	A0	GVi e	S	ci 9/D	8E
OXTN/Q	A0	GVi e	S	ci 9/D	8E
OXVM		Gi ae	S	eG8DD	9D
OXZM		GVi e	S	ci 9/D	8;
OXbM		GPi D	S	ca9/D	E
ObSM		i i i	P	cS9/D	;
OdWM/Q	B0	GVi e	S	ci 9/D	8E
OdWN/Q	A6B0	GVi e	S	ci 9/D	8E
OdXN/Q	B0	Gi ae	S	eG8DD	9E
OdYN/Q	B0	Gi ae	S	eG8DD	9E
OdhO		Gi ae	S	eG8DD	9E
OfTQ		GPi D	S	ca9/D	87
OggM		Gi ae	S	eG8DD	9E
OggN		Gi ae	S	eG8DD	9E
OkYM		GVi e	S	ci 9/D	8E
OkkM/Q	B0	GVi e	S	ci 9/D	8E
OkkN/Q	B0	GVi e	S	ci 9/D	8E
OlhM/Q	B0	GGi c	S	cG8DD	9
OlhN		GGi c	S	cG8DD	9
OmOM/Q	B0	GPi V	S	cS9/D	>
PMPM/Q	B0	GSi V	S	cS9/D	A

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		CCM	x		9
POkM		GVi e	S	ci 9/D	8E
POmM		GVi e	S	ci 9/D	8E
PReM		Gi ae	S	eG9DD	9E
PReN		Gi ae	S	eG9DD	9E
PTRM/Q	B0	GSi e	S	cS9/D	A
PbOM/Q	B0	GSi V	S	cS9/D	A

ONmM	S	9	**88EOvv**	**B; i**	3ea	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9; E9D**
ONmN	S	9	**88EOvv**	**CC i**	3GDV	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9; AD;**

LGHGG 00415 ZYO	36243 45247	XGVQJ 415 ZYO	3: 245 38248
UI ZGaGG 00415 ZYO	35243 39246	XUUS YZKX 415 ZYO	36243 38248
XGVQJ 415 RVM	3: 245 38248	dKZO415 ZYO	3=23= 38248

DC4>>; E77487 | **7D4>>; E77477**

M 5<1=3
P 78133
4=É75

TM

4133 TZ
4153 V
5133 TZ

Yfppw Yfl sw Gntp´ Gnp´z Gnntl tz

OVmM/Q	**B0**	S	9	**88EOvv**	**CC i**	3GDV	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9CD7B**
OVmN/Q	**A0**	S	9	**88EOvv**	**B; i**	3ea	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9CD7A**
OVmO		S	9	**88EOvv**	**BB i**	3 D	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9ED>B**
OVmP		S	9	**88EOvv**	**D8 i**	3GGD	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9ED>C**
OI hM/Q	**B0**	S	9	**88EOvv**	**B; i**	3ea	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P; >C>C**
OI hN		S	9	**88EOvv**	**D8 i**	3GGD	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P; 8; AA**

LGHGG 00415 ZYO	3<247	XGVQJ 415 ZYO	38248 4524=
UI ZGaGG 00415 ZYO	44245 3524:	dKZO415 ZYO	38248 4524:

DC4>>9; 77487 | **7D4>>9; 77487**

M 5<133
N2 31 3
O 6185
O 6185
P 77183
4: É7=

-8: 457G434,

MWTMf b

4153 TZ
4153 I X V
5133 TZ

Kl´wp´ 'tºßzyº ßz mp´p'wnpo ty Kyr typ ºpß' zywß

L´ sp´p Qzwnpy y°´ ty S zßz´º flÜpy Üº p´ºpßÜpy

V´px tp' 'tºßzy ´px 'wnp´ ol yº wp up° x zßp°´

Vtºßzypº x º I yßr °zº 'I ´I °p´ ´ppx 'wozº py ü'pr z op x zßz´p º ºzwx pyßp

I zy t 'tºßzyp ot®nnstl ®p´°tzyp ypnpº°I ´tz °zº ßß' t´p ß' ßß vw º°p´tp

Kw°ßz®w
Lz´T ´I wUK 'tºßzy
Yfppw

L ´UKOQzwnpy ®ay T ´I w
Yfl sw

Vz°´wpº 'tºßzypº oòz´tr typ T ´I w
Gntp´

Vl´I 'tºßzypº z´tr tyI wpº T ´I w
Gnp´z

Vp' 'tºßzyt T ´I wUK
Gnntl tz

OTI M/Q	**A6B0**	P	9	**EEEvv**	**>> i**	3aD	4	**bx**				**f P9B; 9;**
OTI N/Q	**A6B0**	P	9	**EEEvv**	**AA i**	3cV	4	**bx**				**f P9B; 9A**
ObSM		P	9	**EEEvv**	**A7 i**	3ae	4	**bx**				**f P9CD8C**

I QZOMU 413	43244 3<24=	LGHGG 00413	3<247
I QZOMU 413 I TM	44245 3<24=		

DC4>>; B77477

M 5: 155
N4 3189
N 8<13:
O 514=
P 75155
4: É6=

f b

ECOTOUGH

7D4>>; B77477		
4133		TZ
4153		V
5133		I X

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OmOM/Q	**B0**	S	9	**8; EAvv**	**E9 i**	3GNV	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 8; B7**

LGHG 00417 ZYOX8	3524< 39254	Y_VKXH 00417 ZYO	36248
QUJ GW417 ZYO	43249	dKZO417 ZYO	38248 4524:
XGVQJ 417 ZYO	38248		

DC4>>EA77477

M 64133
N4 4158
N 8613:
O 51=3
O 7173
4=É7:

f b

7D4>>EA77477		
4153		TZ
4153		I X V
5133		TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

PMPM/Q	**B0**	S	9	**8>EAvv**	**887 i**	3GVD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; >DDA**
PTRM/Q	**B0**	S	9	**8>EDvv**	**EB i**	3GPG	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; C>8B**
PbOM/Q	**B0**	S	9	**8>EAvv**	**887 i**	3GVD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; CE7>**

LGHG 0a 418 ZYO	44254	UI ZGaG 0a 418 ZYO	4424=
QGS 0W 418 ZYO	3: 24=	UI ZGaG 0a 418 ZYOMDZKI	39253
QGXUW 418 ZYO	3: 24:	YI GRG 418 ZYO	3524=
QUJ GW 418 ZYO	3: 24<	Y_VKXH 00418 ZYO	3524:
UI ZGaG 00418 ZYO	3524: 43253	Y_VKXH 00418 ZYt	3524:
UI ZGaG 00418 ZYOMDZKI	3424= 43253		

DC4>A; A77477

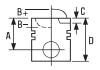
M 631<3x x
N4 8133x x
N 941: 3x x
O 5163x x
O 6183x x
P 7<1=3x x
4=133É83133

df f b

7D4>A; A77477		
4153		VaJ
4153x x		I X
5133x x		TZ

Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

Mmc		P	9	**88EDvv**	**>C i**	3aS	4	**bx**						**f P8C7C7**
NY Q		P	9	**88EDvv**	**>C i**	3aS	4	**bx**						**f P8DD; B**



LGHGG 0415 34236 3623< XUUS YZKX 415 38239 3423:

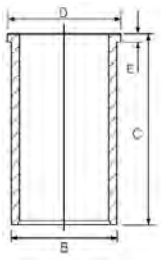
DC4>>CD77477
DC4>>CD7C477 *mTm*

M 5=15:
N4 7133
N 95133
O 5149
O 415:
P 8315:
4: É79

7D4>>CD77477
7D4>>CD7C477 *mTm*

4153 TZ
4183 V
5183 I X

8>4798AC8477 **N** : =189 **O** 47513 **P** <5183 **Q** 7183
8>479D; B7477 **N** : =183 **O** 47813 **P** <4183 **Q** 71:3



Yßppw
b tßs´pnp°°p° zy n´l yv°sl cß°top

Yßsw
S tßv°´mpvÄpwpy°ptßrpy G°°°'l´°yrpy

Gntp´
G@n @bpx pyß n ß @bpmíp¿°ty

Gnp´z
l zy p°nzßo°´l° py w nl´l opwntr p l w

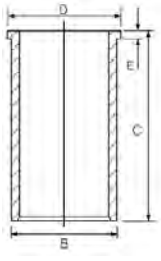
Gnntl tz
l zy ytnnstp°°wWz l wp´z x zß´p

MQQ	S 9	8AEDvv	AA i 3:V 4	bx	f P8; ; E>

LKR0 GG 419 392=< 45234
LKR0 GG 0419 392=: 37235
LKR0 GG 0419 MRc 3<2=8 362=<

LKR0 GG 0419 Rc 3<2=8 362=<
LKR0 GG 00419 342=< 39234
UI ZGaGG 0419 3=2=9 3=237

8>4798AC8477 **N** : =189 **O** 47513 **P** <5183 **Q** 7183
8>479D; B7477 **N** : =183 **O** 47813 **P** <4183 **Q** 71:3



b tßs´pnp°°p° zy n´l yv°sl cß°top

S tßv°´mpvÄpwpy°ptßrpy G°°°'l´°yrpy

G@n @bpx pyß n ß @bpmíp¿°ty

l zy p°nzßo°´l° py w nl´l opwntr p l w

l zy ytnnstp°°wWz l wp´z x zß´p

Mg M	S 9	8; E7vv	AA i 3:V 4	bx	f P8A; C>
Mg N	S 9	8; E7vv	C> i 3GDD 4	bx	f P8A; CA
Mkb	S 9	8; E7vv	AA i 3:V 4	bx	f P8B7A7
NNl	S 9	8; E7vv	AA i 3:V 4	bx	f P8C>C8
NNm	S 9	8; E7vv	C> i 3GDD 4	bx	f P8C>C9
NOM	S 9	8; E7vv	AA i 3:V 4	bx	f P8C>EA

LGHGG 0417 49a 432== 3623<
UI ZGaGG 0417 49a 3<233 45243

UI ZGaGG 00417 38237 38239

DC488B877477
DC488B87C477 *mTm*

M 5<1=5
N4 41=<
N 941=3
O 5165
P 7=1=5
4: É87

7D488B877477
7D488B87C477 *mTm*

4153 TZ
4183 V
5183 I X

G C 5<19:3/J C 7=19:3

Yßppw

Yßsw

Gntp´

Gnp´z

Gnntl tz

NWl	S 9	8; E7vv	AA i 3:V 4	bx	f P8DBEB

NgP	S 9	**8; E7vv**	**AE i**	3eD 4	**bx**	**f P978E7**
Nki	S 9	**8; E7vv**	**B; i**	3ea 4	**bx**	**f P8E7DE**
OPPM	S 9	**8; E7vv**	**B; i**	3ea 4	**bx**	**f P9B>EA**
OSSM	S 9	**8; E7vv**	**AE i**	3eD 4	**bx**	**f P9>D; D**
OSSN	S 9	**8; E7vv**	**B; i**	3eV 4	**bx**	**f P9>ED7**
OXbM	S 9	**8; E7vv**	**B; i**	3eV 4	**bx**	**f P9B>EB**

LGHG 0417	38237 4523:	UI ZGaG 0417	39237 39246
LGHG 0417 49a	432== 3623<	XUUS YZKX 417	3=239 38248
LGHG 0417	3423: 45247	XUUS YZKX 417 RVM	36243 38248
LGHG 0417 RVM	3423: 44247		

DC4>; BE77477
DC4>; BE7C477 *mT m*
37238

7D4>; BE77477
7D4>; BE7C477 *mT m*

M	5<1=5	4153	TZ
N4	515<	4153	V
N	94147	5133	I X
O	413:		
O	4137		
P	791=5		
	4: É78		

-8: 9: 80537,

f b

ECOTOUGH

Vtº ßzyº ßz mp´p' wnpo ty Kyr typ Ypß? zyw0	Qzwmpy y°´ty S zß z´º ß0ßpy Ü? p´ºpß0ßpy	Vtº ßzy ´px ' wnp´ ol y° wp° x zßp°´	Vtº ßzypº op´p' °pºß z ' l ´l wp°rz° op x zßz´pº °zwx pyßp	0W tº ßzyp ' ° p°°p´p ´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wpßz
Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OMhQ	S 9	**8; E7vv**	**8; 9 i**	3GeD 4	**bx**	**f u - e x v zxw**	**f P9>98C**
Of TQ	S 9	**8; E7vv**	**8; 9 i**	3GeD 4	**bx**	**f u - e x v zxw**	**f P9C; B8**

LGHG 0417 ZYOXY	38243 45247		

DC4>; ; E77487
DC4>; ; E7C487 *mT m*

7D4>; ; E77477
7D4>; ; E7C477 *mT m*

M	5=133	4153	TZ
N4	9173	4183	V
N2	41<8	5133	TZ
O	4133		
O	61<3		
P	7<133		
	4=É87		

df

Vtº ßzyº ßz mp´p' wnpo ty Kyr typ Ypß? zyw0	Qzwmpy y°´ty S zß z´º ß0ßpy Ü? p´ºpß0ßpy	Vtº ßzy ´px ' wnp´ ol y° wp° x zßp°´	Vtº ßzypº op´p' °pºß z ' l ´l wp°rz° op x zßz´pº °zwx pyßp	0W tº ßzyp ' ° p°°p´p ´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wpßz
Kwº ßz®w				
Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OMkM/Q A0	S 9	**8; E7vv**	**E7 i**	3GNN 4	**bx**	**f u U x v xw**	**f P98AE9**
OMkO	S 9	**8; E7vv**	**E9 i**	3GNV 4	**bx**	**f u U x v xw**	**f P99BCC**

UI ZGaG 0417 ZYO	4423< 39246	Y_VKXH 0417 ZYO	3: 23< 38248
XGVQI 417 ZYO	3: 245 39248	dKZ0417 ZYO	39243 38248

DC4>9EE77477
DC4>9EE7C477 *mTm*

M 5=153
N4 7183
O 6193
P 7<153
4=É85

TM

7D4>9EE77477
7D4>9EE7C477 *mTm*

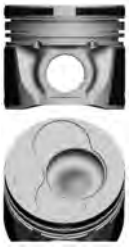
4153 TZ
4153 V
5133 TZ

Kw°ßz®w Yßppw	Yßsw	Gntp´	Gnp´z	Gnntltz	
MY R	P 9 **8>99vv**	**AA i** 3:V 4	**P@t x f u U x v xw**		**f P8C; >D**
NY e	P 9 **8>99vv**	**AE i** 3eD 4	**P@t x f u U x v xw**		**f P8E7E9**
NZY	P 9 **8>99vv**	**A8 i** 3:D 4	**P@t x f u U x v xw**		**f P8DC>7**
NZh	P 9 **8>99vv**	**AE i** 3eD 4	**P@t x f u U x v xw**		**f P8DC>8**
LGHGG0417 ZJO		37236 3623<	XUUS YZKX 417 ZJO	3:239	36243
LGHGG0417 ZJO		3423: 36243			

DC488>E774D7
DC488>E7C4D7 *mTm*

M 7813
N4 4:198
N 6<133
O 4143
P 9=13
59É96

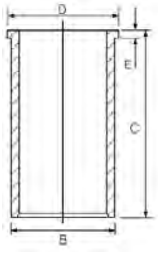
MWWWZN df fb



7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71t3

DC488>E774DA
DC488>E7C4DA *mTm*

M 7813
N4 4:198
N 6<133
O 4143
P 9=13
59É96

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

Zz nÖuyop´4) 5 HzÄwnl 'InttÖ56t8nx6 Zz nÖuyop´6	Iy eÖuyop´4) 5 azvßx py op´ Qzwupyx °wp56t8nx6 Iy eÖuyop´6	°°´nÖuyo´p4) 5 azvßx p op w nl @B o° 't°ßzy56t8nx6 °°´nÖuyo´p6	py pwntuyo´z4) 5 azwnl @bl o 't°ßy56t8nx6 py pwntuyo´z6	I ntuyo´z4) 5 azvßx p nl x p´l 't°ßzyp56t8nx6 I ntuyo´z6	
OM M	S 9 **8AEDvv**	**AA i** 3:V 4	**P@t x f u U x v xw**		**f P9>98B**
OM N	S 9 **8AEDvv**	**BB i** 3D 4	**P@t x f u U x v xw**		**f P9;E9E**
OM O	S 9 **8AEDvv**	**CC i** 33DV 4	**P@t x f u U x v xw**		**f P99BCD**
ORi M	P 9 **88EEvv**	**AA i** 3:V 4	**P@t x f u U x v xw**		**f P9>9B8**
OXZM	S 9 **8AEDvv**	**CC i** 33DV 4	**P@t x f u U x v xw**		**f P9ACB>**
LGHGG0415 ZJO		38243 45247	XUUS YZKX 415 ZJO	36243	38248
LGHGG0419 ZJO		36243 45247	XUUS YZKX 419 ZJO	36243	38248
UI ZGaGG0419 ZJO		3923= 37246	Y_VKXH 0419 ZJO	3=243	38248
XGVQJ 419 ZJO		43244 4524=	dKZ0419 ZJO	44243	38248

DC4>; 9E77477
DC4>; 9E7A477 *mT*
DC4>; 9E7C477 *mT m*

M	7816 3
N4	431t 3
N4	71t 3
N	7=133
P	9: 1<3
	59É99

-8: =3S G0437,

WWdf f b

7D4>; 9E77477
7D4>; 9E7A477 *mT*
7D4>; 9E7C477 *mT m*

4t 8		MJI V
5133		V
6133		I X V

GDC LKZ-Ring

HzÄwnl 'l ntfÖ4=t 8nx 6 | azŵx py op´ Qzwnpyx °wp 4=t 8nx 6 | azŵx p op w nl@ß o° ' t°ßzy 4=t 8nx 6 | azwnl@bl o ' t°ß y 4=t 8nx 6 | azŵx p nl x p´l ' t°ßzyp 4=t 8nx 6

MQR	S 9	**8DEBvv**	**>C i**	3aS 4	**P@t x**		**f P8; ; EA**
LKR0 @G 41=J		362=<	45234	LKR0 @G 041=J		342=<	39234
LKR0 @G 041=J		432=8	37235				

DC4EE78774>7
DC4EE787A4>7 *mT*
DC4EE787C4>7 *mT m*
DC4EE78884>7 *Tmm*

M	6=198
N4	41=3
P	981t 3
	57É97

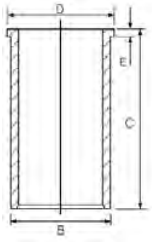
-8: =78,

MWdf

7D4EE7877477
7D4EE787A477 *mT*
7D4EE787C477 *mT m*
7D4EE7888477 *Tmm*

4t 8		I X V
5133		V
6133		I X V

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71t 3



GC 6=1733

MQI	S 9	**8DEBvv**	**>C i**	3aS 4	**P@t x**		**f P8DC9E**
MSd	S 9	**8DEBvv**	**BB i**	3 D 4	**P@t x**	**f u U x v xw**	**f P8CE7A**
MTR	S 9	**8DEBvv**	**D8 i**	33GD 4	**P@t x**	**f u U x v xw**	**f P8CE87**
MXT	S 9	**8DEBvv**	**BB i**	3 D 4	**P@t x**	**f u U x v xw**	**f P8B7E7**
Meh	S 9	**8DEBvv**	**D8 i**	33GD 4	**P@t x**	**f u U x v xw**	**f P8B7E8**
UI ZGa@G 041=ZJO			3=2=9	36243			

DC488>E774B7
DC488>E7C4B7 *mT m*

M	781<3
N4	4: 198
N	6<133
O	4143
P	9<1<3
	59É99

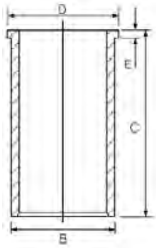
-8: =<,

MWWWZN df

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

4t 8		I Q V
5133		V
6133		I X V

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71t 3



DC488>E774C7
DC488>E7C4C7 *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P 9<13
59É99

-8: =< G,

MWWWZN df

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 I Q V
5133 V
6133 I X V

DC488>E774E7
DC488>E7C4E7 *mTm*
DC488>E774EA
DC488>E7C4EA *mTm*

M 781<3
N4 4:198
N 6<133
O 4143
P :41<3
59É99

MWZN df

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 I Q V
5133 V
6133 I X V

Zz nÖuyop´4) 5
HzÄwnl'lntÖ56187nx 6
GC 781883/JC 9<1883
Zz nÖuyop´6) 7
GC 781883/JC :41883

Iy eÖuyop´4) 5
azvÜx py op´Qzwupyx °wp 56187nx 6
Iy eÖuyop´6) 7

°°´nÖuyo´p4) 5
azvÜx p op w nl ®B o°'t°ßzy 56187nx 6
°°´nÖuyo´p6) 7

py pwntuyo´z4) 5
azvÜnl ®tol o't°ßy 56187nx 6
py pwntuyo´z6) 7

Intuyo´z4) 5
azvÜx p nl x p´l't°ßzyp 56187nx 6
Intuyo´z6) 7

MSb	S	9	**8DEBvv**	**A7**	**i**	3ae	4	**P@l x**	**f P8B>9>**
McY	S	9	**8DEBvv**	**A7**	**i**	3ae	4	**P@l x**	**f P8B7DE**
Mel	S	9	**8DEBvv**	**>C**	**i**	3aS	4	**P@l x**	**f P8A;CB**

LGHGG041=YJO	442== 3623<	UIZGaGG041=YJO	392=: 45236
UIZGaGG041=J	3<233 45236		

DC488>E77497
DC488>E7C497 *mTm*

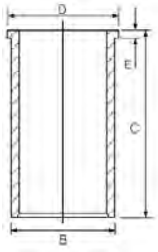
M 6=1<3
N4 4:1:8
N 6<133
O 4133
P 931<3
57É8<

-8: =8=043=;

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41:8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71:3

DC488>E774;7
DC488>E7C4;7 *mTm*

M 6=1<3
N4 4:1t8
N 6<133
O 4133
P 931<3
57É8<

-8: =8=G43=,

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

Zz nÖwyop´4) 5	Iy eÖwyop´4) 5	°°´nÖwyo´p4) 5	py pwnwyo´z4) 5	Inwyo´z4) 5
HzÄvnl'Inf0Ö56193nx 6	azvÜx py op´QzwnpyxÜ°wp 56193nx 6	azvÜx p op vÜ wnl®8 o°'t°ß zy 56193nx 6	azvÜnl®8 o l o 't°ß y 56193nx 6	azvÜx p nl x p'l 't°ßzyp 56193nx 6
G C 6=1883/J C 931883				
Zz nÖwyop´6) 7	Iy eÖwyop´6) 7	°°´nÖwyo´p6) 7	py pwnwyo´z6) 7	Inwyo´z6) 7

Mem	S	9	**8DEBvv**	**EB i**	3GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C7;B**
MhR	S	9	**8DEBvv**	**EB i**	3GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8D9;E**
M k	S	9	**8DEBvv**	**EB i**	3GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B>7;**
NXf	S	9	**8DEBvv**	**EB i**	3GPD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97A8C**

LGH@G 041=ZJ0XY	39236	3623<	Y_VKXH 041=ZJ0	45234	3623<
UI ZGa@G 041=ZJ0	3=235	3=237			

DC488>E749A
DC488>E7C49A *mTm*
3=235

M 781<3
N4 4:1=3
N 6<133
O 4143
P 9<1<3
59É99

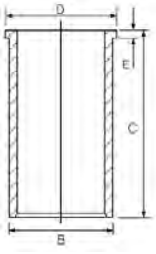
-8: =9=Q434,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71t3

DC488>E774;A
DC488>E7C4;A *mTm*
3=235

M 781<3
N4 4:1=3
N 6<133
O 4143
P 9<1<3
59É99

-8: =9=Q435,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

DC488>E774>A
DC488>E7C4>A *mT m*
3=235

M 781<3
N4 4: 183
N 6<133
O 4143
P 9<1<3
59É99

-8: =34I 438,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41: 8 I Q V
5133 V
6133 I X V

DC488>E774>B
DC488>E7C4>B *mT m*
3=235

M 781<3
N4 4: 183
N 6<133
O 4143
P 9<1<3
59É99

-8: =34I 439,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41: 8 I Q V
5133 V
6133 I X V

Zz nÖuyop´ 4) 5 HzÄ wnl 'I nt6Ö 57193nx 6 G C 781883/ J C 9<1883	I y eÖuyop´ 4) 5 azv9x py op´ Qzwupyx °wup 57193nx 6	°°´ nÖuyo´p 4) 5 azv9x p op w nl @86 o° 'tº8zy 57193nx 6	py pwntuyo´z 4) 5 azv9nl @8bl o 'tº8ß y 57193nx 6	I ntuyo´z 4) 5 azv9x p nl x p´l 'tº8zyp 57193nx 6
Zz nÖuyop´ 6) 7 HzÄ wnl 'I nt6Ö 57138nx 6	I y eÖuyop´ 6) 7 azv9x py op´ Qzwupyx °wup 57138nx 6	°°´ nÖuyo´p 6) 7 azv9x p op w nl @86 o° 'tº8zy 57138nx 6	py pwntuyo´z 6) 7 azv9nl @8bl o 'tº8ß y 57138nx 6	I ntuyo´z 6) 7 azv9x p nl x p´l 'tº8zyp 57138nx 6

Mf P	S	9	**8DEBvv**	**C> i**	3GDD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8A; CC**
MhN	S	9	**8DEBvv**	**C> i**	3GDG	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C7; C**
Mkd	S	9	**8DEBvv**	**C> i**	3GDD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P978EA**
NVN	S	9	**8DEBvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C>EE**
NWO	S	9	**8DEBvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8C>EC**
NXe	S	9	**8DEBvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8E7E8**
Nei	S	9	**8DEBvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9777>**
NkQ	S	9	**8DEBvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97A8;**

LGHGG 041=ZJO	34233 3623<	XUUS YZKX 41=ZJO	36239 36243
LGHGG 0041=ZJO	3723: 36243	Y_VKXH 041=ZJO	3<235 43238
UI ZGaGG 041=ZJO	3<233 45243	Y_VKXH 0041=ZJO	3623< 44243
UI ZGaGG 0041=ZJO	39237 45243		

DC488>E774BA
DC488>E7C4BA *mT m*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<1<3
59É99

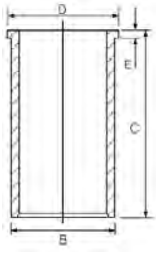
-8: =34J 0634,

MWWWZN df f b

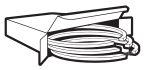
7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41: 8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485183 **P** <8183 **Q** 71: 3



DC488>E774BB
DC488>E7C4BB *mT m*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<1<3
59É99

-8: =34J0635,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

Zz nÖwyop´ 4) 5 HzÄ vnl ' I ntÖÖ 551<8nx 6 GC 781883/ J C 9<1883	I y eÖwyop´ 4) 5 azŵx py op´ Qzwmpyx °wp 551<8nx 6	°°´ nÖwyo´p 4) 5 azŵx p op w nl @B o° ' t°ßzy 551<8nx 6	py pwntwyo´z 4) 5 azŵnl @bl o ' t°ß y 551<8nx 6	I ntwyo´z 4) 5 azŵx p nl x p´I ' t°ßzyp 551<8nx 6
Zz nÖwyop´ 6) 7	I y eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwntwyo´z 6) 7	I ntwyo´z 6) 7

OXT M/Q	**A0**	S	9	**8AEDvv**	**CC i**	3GDV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9CD87**
OXT N /Q	**A0**	S	9	**8AEDvv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9CEC9**
OdWM/Q	**B0**	S	9	**8AEDvv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; E>B8**
OdWN /Q	**A6B0**	S	9	**8AEDvv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9DA>;**
OkY M		S	9	**8AEDvv**	**DA i**	3GGV	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 8; B8**
OkkM/Q	**B0**	S	9	**8AEDvv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; A89>**
OkkN /Q	**B0**	S	9	**8AEDvv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 8; C9**
POkM		S	9	**8AEDvv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 8BA9**
POmM		S	9	**8AEDvv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P; 8BA8**

UI ZGaGG 0D419 ZJO	44245	43253	Y_VKXH 0D419 ZJO	36248
XGVQJ 419 ZJO	38248	4524=		

DC4>>>877477
DC4>>>87A477 *mT*
DC4>>>87C477 *mT m*

M 78163
N4 44133
N 7=133
P 9<163
59É99

MWWWdf f b

7D4>>>877477
7D4>>>87A477 *mT*
7D4>>>87C477 *mT m*

41 8 MJI V
5133 V
5133 I X V

GDC LKZ-Ring

MPd	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P97D7A**
MSZ	S	9	**8CD8vv**	**E9 i**	3GNV	4	**bx**	**f P8CE7;**

UI ZGaGG 041<	3=2=9	3: 233	UI ZGaGG 041< 53a	3: 2=< 3: 233

DC4A79E77477
DC4A79E7C477 *mT m*

M 65188
O 6193
P 89188
53É8=

-8<4=5,

MW

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I Q V
41 8 V
5133 I X V

I zy´zo r l ' 5: 183x x GC 651583/ J C 891583	Vwp°pw°r pyl m°ß yo 5: 183x x	J t°ß ynp pyßp mtpwp 5: 183x x	J t°ß ynt l opwntpw 5: 183x x	J t°ß yÜ ol w mtwp 5: 183x x

MQT	S 9	**8AEAvv**	**C> i**	3GDG 4		**bx**		**f P89EA7**
MWX	S 9	**8AEAvv**	**C> i**	3GDG 4		**bx**		**f P89EA8**

Ul ZGaGG 0419 352=: 4523:

DC487AE77477
DC487AE7C477 *mT m*

7D487AE77477
7D487AE7C477 *mT m*

M 6513 3
N4 5163
N 9417 3
N2 31: 3
P 861: 3
53É8:

4153 TZ
4183 V
5133 I X

G C 64: 33/ J C 86733
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

MSg	S 9	**8CD8vv**	**887 i**	3GVD 4		**bx**	**f u U x v xw**	**f P8; ; EB**
Mdm	S 9	**8CD8vv**	**887 i**	3GVD 4		**bx**	**f u U x v xw**	**f P8B7; 7**

Ul ZGaGG 041<Z 3<2=: 45243

DC4A79E77487
DC4A79E7A487 *mT*
DC4A79E7C487 *mT m*

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

M 651: 3
N4 5138
N : 3133
P 861: 3
53É8=

MW

4183 I Q V
41: 8 V
5133 I X V

Mdk	S 9	**8CD8vv**	**887 i**	3GVD 4		**bx**	**f u U x v xw**	**f P8B7BE**
MgY	S 9	**8CD8vv**	**887 i**	3GVD 4		**bx**	**f u U x v xw**	**f P8B7C7**
Mgc	S 9	**8CD8vv**	**8; 9 i**	3GeD 4		**bx**	**f u U x v xw**	**f P8B9CE**
Mf	S 9	**8CD8vv**	**887 i**	3GVD 4		**bx**	**f u U x v xw**	**f P8B; BA**

Ul ZGaGG 041<Z 3<2=: 45243 Y_VKXH 041<Z 45234 3623<
Ul ZGaGG OXY 41<Z 38234 34239

DC4A79E774; 7
DC4A79E7C4; 7 *mT m*

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

M 651: 3
O 41=3
P 861: 3
4=É7=

f b

4183 I Q V
41: 8 V
5133 I X V

Mhg	S 9	**8AEAvv**	**CA i**	3GDN 4		**bx**		**f P8B7BD**
NRc	S 9	**8AEAvv**	**CA i**	3GDN 4		**bx**		**f P8CE89**
NSg /Q >0	S 9	**8AEAvv**	**CA i**	3GDN 4		**bx**		**f P8C>EB**

NeQ/Q	**>6A0**	S	9	**8AEAvv**	**CA i**	3GDN	4	**bx**	**f P97DED**
NeR/Q	**90**	S	9	**8AEAvv**	**CA i**	3GDN	4	**bx**	**f P97DEE**
OTSM		S	9	**8AEAvv**	**CA i**	3GDN	4	**bx**	**f P99BE8**

UI ZGaGG 0419	3=283 45243	UI ZGaGG 0419 RVM	3<23= 44245
UI ZGaGG 0419	39237 39246		

DC48>D; 77477
DC48>D; 7C477 *mT m*

M 5=18<
N4 51t 3
N 95163
P 831t 3
4=É75

f b

7D48>D; 77477
7D48>D; 7C477 *mT m*

4183		TZ
4153		V
5183		I X V

Yfppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

Mrrh		S	9	**8EBDvv**	**877 i**	3GPa	4	**P0t x f u U x v xw**	**f P97E7E**
NWP		S	9	**8EBDvv**	**87; i**	3GSD	4	**P0t x f u U x v xw**	**f P8CA77**
NY Z		S	9	**8EBDvv**	**89A i**	3GcD	4	**P0t x f u U x v xw**	**f P97C; A**

UI ZGaGG 0513 ZJ0	35237 38243	UI ZGaGG 0513 ZJ0XY	37239 35246
UI ZGaGG 0513 ZJ049a	35237 38246	Y_VKXH 0513 ZJ049a	3423= 38248

DC48; EA77477
DC48; EA7C477 *mT m*

M 781<6
N4 4: 1<3
N 6<183
P 9<1<3
59É99

-8: =34P,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mT m*

4t 8		I Q V
5183		V
6183		I X V

HzÄwnl ' l ntfÖ 561t 8nx 6
GC 781883/ J C 9<1883

azvîx py op´ Qzwmpyx °wp 561t 8nx 6 | azvîx p op w nl @8 o° ' t°ßzy 561t 8nx 6 | azwnl @bl o ' t°ß y 561t 8nx 6 | azvîx p nl x p´l ' t°ßzyp 561t 8nx 6

NY Y		S	9	**8EBDvv**	**87; i**	3GSD	4	**P0t x f u U x v xw**	**f P8E; 8A**
NY b		S	9	**8EBDvv**	**87; i**	3GSD	4	**P0t x f u U x v xw**	**f P97E>A**
Nee		S	9	**8EBDvv**	**87; i**	3GSD	4	**P0t x f u U x v xw**	**f P8E; 8C**

UI ZGaGG 0513 ZJ0	44238 38243	Y_VKXH 0513 ZJ0	3623< 38243
Y_VKXH 0513 ZJ0	43238 3623<		

DC48; EA77487
DC48; EA7C487 *mT m*

M 781<6
N4 4: 183
N 6<133
O 31t 3
P 9<1<3
59É99

-8: =34J <66,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mT m*

4t 8		I Q V
5183		V
6183		I X V

DC48; EA77497
DC48; EA7C497 *mTm*

M	781<6
N4	4:183
N	6<133
O	31:3
P	9<1<3
	59É99

-8: =34J<67,

MWWWZN df fb

7D48; EA77477
7D48; EA7C477 *mTm*

41:8		IQV
5133		V
6133		IXV

Zz nÖuyop´4) 5	Iy eÖuyop´4) 5	°°´nÖuyo´p4) 5	py pwntuyo´z4) 5	Intuyo´z4) 5
HzÄwnl 'Intfß56163nx6	azvßx py op´Qzwupyx °wp 56163nx6	azvßx p op wlnl®6 o° 'tºßzy 56163nx6	azvßnl®bl o 'tºßy 56163nx6	azvßx p nl x p´l 'tºßzyp 56163nx6
G C 781883				
Zz nÖuyop´6) 7	Iy eÖuyop´6) 7	°°´nÖuyo´p6) 7	py pwntuyo´z6) 7	Intuyo´z6) 7

ONNN	S 9	**8EBDvv**	**89A i**	3GcD 4	**P@t x**	**f u U x v xw**	**f P97E>>**
ONPN	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@t x**	**f u U x v xw**	**f P9; ADB**
OQSM	S 9	**8EBDvv**	**89A i**	3GcD 4	**P@t x**	**f u U x v xw**	**f P97E7A**

UI ZGaGG 00513 ZJ OXY	37239 35246	dKZO513 ZJ O	3823= 4524:
Y_VKXH 00513 ZJ O	3:23< 38248		

DC4>; 9; 77477
DC4>; 9; 7C477 *mTm*

M	781<3
N4	451:3
N	831<<
P	9<1<3
	59É99

-8: =34M535,

MWWWZN df fb

7D4>; 9; 77477
7D4>; 9; 7C477 *mTm*

41:8		MJI V
5133		V
6133		IXV

GDC LKZ-Ring

UK 36R 43: 398M/Mpy 4 pyr typ zyw	UK 36R 43: 398M/y°´q´Szß´py op´ Mpyp´Ißzy 4	T UK 36R 43: 398M/°yt¿°px pyß'z°´ Szßp°´opr y ´Ißzy 4	UK 36R 43: 398M/Mpyp´Int y 4 °zw x zß´	Yzwx zß´p Mpyp´Ißzy 4
3<0765633033 UK>36R4=<484G				

ORRN	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@t x**	**f u U x v xw**	**f P9; ADE**
ORSN	S 9	**8EBDvv**	**89A i**	3GcD 4	**P@t x**	**f u U x v xw**	**f P9; AE8**
ORTM	S 9	**8EBDvv**	**D8 i**	3GGD 4	**P@t x**	**f u U x v xw**	**f P9; AD>**
ORTO	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@t x**	**f u U x v xw**	**f P9; ADC**
ORTR	S 9	**8EBDvv**	**D8 i**	3GGD 4	**P@t x**	**f u U x v xw**	**f P9; ADA**
ORVM	S 9	**8EBDvv**	**89A i**	3GcD 4	**P@t x**	**f u U x v xw**	**f P9; ADD**
OXOM	S 9	**8EBDvv**	**D8 i**	3GGD 4	**P@t x**	**f u U x v xw**	**f P9>D; E**
OXON	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@t x**	**f u U x v xw**	**f P9>AED**
OXVM	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@t x**	**f u U x v xw**	**f P9; AE7**

UI ZGaGG 00513 ZJ O	36243 39246	Y_VKXH 00513 ZJ O49a	3423= 38248
UI ZGaGG 00513 ZJ O49a	35237 38246	dKZO513 ZJ O	3823= 4524:
Y_VKXH 00513 ZJ O	3:23< 38248		

DC4>; 9; 77487
DC4>; 9; 7C487 *mTm*

M 781<3
N4 4613
N 831<<
P 9<1<3
59É99

-8: =34M553,

MWWWZN df fb

7D4>; 9; 77487
7D4>; 9; 7C487 *mTm*

4t 8 MJI V
5133 SUV
6133 IXV

GDC LKZ-Ring

UK 36R 43: 398Y/Mpy 5 pyrtyp zyw
GC 7813
Uyw dßfz 't°fzy° p¿°t@wpyßfz UK 36R 43: 398 GM/36R 43: 3 98 Y
3<07656330 43 UK>36R4=<484I

UK 36R 43: 398Y/y°´ q ´S zfz´py op´ Mpyp´I fzy 5
T°´ q ´UK Qzwmpy 36R 43: 398 GM°yo 36R 43: 398 Y

UK 36R 43: 398Y/°yt¿°px pyß' z°´ Szfp°´ op r y ´I fzy 5
Yp°wpx pyßI ol ' ß I °É ' t°fzy° ¿°t@wpyfp UK 36R 43: 398 GMpß36R 43: 398 Y

UK 36R 43: 398M/Mpyp´I nt y 5 °zw x zfz´
I I mtoz °zwlx pyßp I w° ' t°fzyp° p¿°t@wpyfp° I UK 36R 43: 398 GMÖ36R 43: 398 Y

Yzw x zfz´p Mpyp´I fzy 5
Gol ßI fz °zwl yfz I t ' t°fzyt p¿°t@wpyft UK I 36R 43: 398 GMp 36R 43: 398 Y

OWRO /Q A0	S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t x f u U x v xw**		**f P9CD88**
OdXN /Q B0	S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t x f u U x v xw**		**f P; 8BA;**
OdY N /Q B0	S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t x f u U x v xw**		**f P; 7AD9**
OdhO	S	9	**8EBDvv**	**87A**	i	3GSP	4	**P@t x f u U x v xw**		**f P9CEC7**
OggM	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P@t x f u U x v xw**		**f P; >7EB**
OggN	S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t x f u U x v xw**		**f P; 8; B>**
PReM	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P@t x f u U x v xw**		**f P; >7BB**
PReN	S	9	**8EBDvv**	**887**	i	3GV/D	4	**P@t x f u U x v xw**		**f P; >C; A**

QGXUW513 ZJO	3: 24<	Y_VKXH 0513 ZJO	36248
UI ZGaG 0513 ZJO	44245 43253	dKZO513 ZJO	4423= 4524:
UI ZGaG a 513 ZJO	39253		

DC4>>CA77487

M 781<3
N4 451=3
N 831<<
P 9<1<3
59É99

MWWWZN df fb

7D4>>CA77477
7D4>>CA7C477 *mTm*

4t 8 MJI V
5133 V
5133 IXTZ

GDC LKZ-Ring

UK 37R 43: 398G
KG5<< Kyr typ d x tw
5347D

UK 37R 43: 398G
KG5<< S zfz´pyd x twp

UK 37R 43: 398G
LI x twp op x zfp°´° KG5<<

UK 37R 43: 398G
LI x tw op x zfz´p° KG5<<

UK 37R 43: 398G
S zfz´t d x trw KG5<<

NXd	S	9	**8ED>vv**	**887**	i	3GV/D	4	**bx**		**f P8D879**
NXk	S	9	**8ED>vv**	**887**	i	3GV/D	4	**bx**		**f P97; E;**
NXl	S	9	**8ED>vv**	**887**	i	3GV/D	4	**bx**		**f P8D878**
Nhk	S	9	**8ED>vv**	**887**	i	3GV/D	4	**bx**		**f P97; E>**
Nhl	S	9	**8ED>vv**	**887**	i	3GV/D	4	**bx**		**f P97A8D**
Nhm	S	9	**8ED>vv**	**887**	i	3GV/D	4	**bx**		**f P97A8E**

UI ZGaG 0513 LYO	44237 3723=	

DC4>; A877477

M	5=16<
N2	45179
P	8=1<8
	4=É77

-8-<573H634,

f b

7D4>; A877487

4153		VaJ TZ
4183		
5133		I X

Kw°ß:®w

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

Ni M	S	9	**8ED>vv**	**8>C i**	3NDD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97; EA**

UI ZGaGG 00513 ZLYO	43238	35246

DC4>; DA77477
DC4>; DA7C477 *mT m*

M	5=183
N4	9143
N	7=185
O	4169
O	4169
P	83183
	53É8=

MWdf f b

7D4>; DA77477
7D4>; DA7C477 *mT m*

4153		VaJ
4183		V
5133		I X V

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OOmM	S	9	**8ED>vv**	**8>C i**	3NDD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P998C8**

UI ZGaGG 00513 ZLYO	43238	35246	Y_VKXH 00513 ZLYO	38243 38248

DC4>>; D77487

M	5=193
N4	9148
N	7=193
O	6193
P	83183
	56É84

df

7D4>>; D77477
7D4>>; D7C477 *mT m*

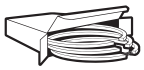
4153		VaJ TZ
4153		V
5133		I X V

LKZ-Ring

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

OPMM	S	9	**8CEDvv**	**88D i**	3GaD	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97E>;**
OPMN	S	9	**8CEDvv**	**889 i**	3GVN	4	**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>AEC**

UI ZGaGG 0041< ZYO	3923:	39246	dKZ041< ZYO	3823= 4524:
Y_VKXH 0041< ZYO	3623<	38248		



DC4>>; D77477
DC4>>; D7C477 *mT m*

M	5=k8
N4	71t 3
N4	8198
N2	8198
O	5133
P	8913 3
	56É87

df f b

7D4>>; D77477
7D4>>; D7C477 *mT m*

4153		VaJ TZ
4153		V
5133		I X V

YfbppwYß swGntp´Gnp´zGnntl tz

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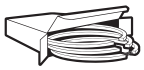
		CCM	x		9
Y 8B7 QBMX N7;		Vi i	P	aP9/D	8
Y 8B7 QBMX N7>		Vi i	P	aP9/D	8
Y 8B7 QBMX N7A		Vi i	P	aP9/D	8
Y 8B75E87		Vi i	P	aP9/D	8
Y 8B75E97		ai e	P	aa9/D	;
Y 8B75E98		ai e	P	aa9/D	;
Y 8B75E99		ai e	P	aa9/D	;
Y 8B75E9;		ai e	P	aa9/D	;
a Y B; E5E; E /Q	>0	GSi P	P	eP9DD	>
a Y BB75EA7		ci i	P	aV9/D	9
a Y BB75EA8		ci i	P	aV9/D	9



Y 8B75E87	P	9	**AEEvv**	**;;4AA**	**i**	3SV8cV	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P9B879**
Y 8B7 QBMX N7;	P	9	**AEEvv**	**>7**	**i**	3/V	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P99E79**
Y 8B7 QBMX N7>	P	9	**AEEvv**	**;;**	**i**	3SV	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P99E7;**
Y 8B7 QBMX N7A	P	9	**AEEvv**	**>A**	**i**	3aG	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P99E78**

I GHXQU 319	36233	34237	LUXZb U 319	34237	3523:
I QZdQI U_VK 319	3: 2=<	34237	LUXZb U 319 H´I m°°	34237	45239
I XUYYHRGJK 319	39235	45236			

DC48; BC77477
DC48; BC7A477 *mT*
DC48; BC7C477 *mT m*

7D48; BC77477
7D48; BC7A477 *mT*
7D48; BC7C477 *mT m*

M	5: 183	4153		I X
N4	518 8	4183		V
N	83183	5183		I X
P	76183			
	49É7<			

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

aY BB75EA7	P	9	**CEEvv**	**;;**	**i**	3SV	4		**PQt x**	**f**	**u**	**U x v**	**xw**	**f P97E>B**
aY BB75EA8	P	9	**CEEvv**	**>7**	**i**	3/S	4		**PQt x**	**f**	**u**	**U x v**	**xw**	**f P9>>CA**

LUXZb U 31<I Jt	3423:

DC48>7B77477

7D48>7B77477

M	6913 3	4183		I Q V
N4	44143	4183		V
N	6<t 3	5183		I X V
O	31=8			
O	31=8			
P	93183			
	56É86			
df				

Y 8B75E97	P	9	**BEDvv**	**;;4AA**	**i**	3SV8cV	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P9B87;**
Y 8B75E98	P	9	**BEDvv**	**>A4B7**	**i**	3aG8eN	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P99877**
Y 8B75E99	P	9	**BEDvv**	**>A4B7**	**i**	3aG8eN	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P9B; 78**
Y 8B75E9;	P	9	**BEDvv**	**C>**	**i**	3GDG	4		**bx**	**f**	**u**	**U x v**	**xw**	**f P9B87>**

I GHXQU 31t	34236	34237	XUGJYZKX 31t	37236	44238
I QZdQI U_VK 31t	34236	34237	XUGJYZKX 31t H´I m°°	45236	44238
LUXZb U 31t	34237	3423:			

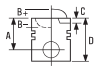
DC4>9C877477
DC4>9C87A477 *mT*
DC4>9C87C477 *mT m*

7D4>9C877477
7D4>9C87A477 *mT*
7D4>9C87C477 *mT m*

M	5815 3	4153		TZ
N4	6163	4153		TZ
N	87183	5183		TZ
P	741t 3			
	49É85			
f b				

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Niiral® FITTED WITH GOETZE® RINGS



aY B; E5E; E /Q >0	P 9	8>E; vv	A74C7 i	3/e8 V 4	P@i x	f u U x v xw	f P9; D77
LUXLU_X 418 I JO		3=237 39239					

DC4>9CA77477
DC4>9CA7C477 *mT m*

M 78198
N4 47198
N 76173
O 414<
O 4135
P : 4198
63É99

+<673G734,

MWWWdf

7D4>9CA77477
7D4>9CA7C477 *mT m*

5133		I Q
5133		V
5133		I X V

LKZ-Ring

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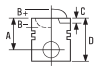
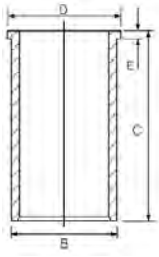
		CCM	x		9
PO9;		NNPe	S	ee9DD	8
Y 87>5E>9		Nci i	a	ei 9 D	A
Y 87>5E>A		Nci i	a	ei 9 D	A
Y 87>5EE9		PGi i	a	ei 9 D	B
Y 87>5EEA		PGi i	a	ei 9 D	B
Y 8885EC7		NNi V	S	i D9 D	C
Y 8885EC>		NNi V	S	i D9 D	C
Y 8B85EC7		NNi V	S	i D9 D	C
Y 8B85EC>		NNi V	S	i D9 D	C
Y N4a Y BB9 /a Y BB9 P 9E0		NecS	V	ei 9DD	;
a Y B785E>7		NNi i	S	ei 9DD	9
a Y B795E>7		NecS	V	ei 9DD	9
a Y B795ED7		NecS	V	ei 9DD	>
a Y BB85E>7		NNi i	S	ei 9DD	9
a Y BB95E>7 /a Y BB9 P 9E0		NecS	V	ei 9DD	9
a Y BB95ED; /a Y BB9 P 9E XM0		NecS	V	ei 9DD	;
kP; b		NSi c	S	i S9DD	E
kP; f 6f Q		NSi e	S	i S9DD	D

Nüral® FITTED WITH GOETZE® RINGS



PO9;	S 9	**99; Dvv**	**A7 i** 3ae 4	**P@t x**	**f P; B88**
QUXGTJU 515 J		452<< 452=9			

8>47988E7477 **N** =5146 **O** 496183 **P** =8133 **Q** 7133



aY B785E>7	S 9	**99EEvv**	**AC4AE i** 3cc8eD 4	**P@t x**	**f P; B89**
aY B795E>7	V 9	**9DC>vv**	**C7 i** 3V 4	**P@t x**	**f P; B8;**
aY BB85E>7	S 9	**99EEvv**	**AD i** 3ci 4	**P@t x**	**f P98; C;**
aY BB95E>7 /aY BB9 P 9E0	V 9	**9DC>vv**	**C7 i** 3V 4	**P@t x f u U x v xw**	**f P98; C9**
0YZGTG 51=J		432=5 382=8		QUXGTJU 516 J	452=9 392=<
0YZGTG 51=ZJ		432=5 382=8		S_YYU 516 J	362=6 372==

DC4C>; 877487
DC4C>; 87C487 *mTm*
DC4C>; 897487 *mTm*

M 77198
N4 <158
O 4158
O 4183
P :7198
59É95

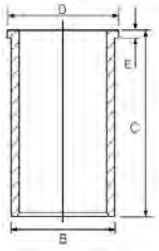
-8<=86053=;

MWdf

7D4C>; 877477
7D4C>; 87C477 *mTm*
7D4C>; 897477 *mTm*

5183 I X V
5133 V
6133 I X V

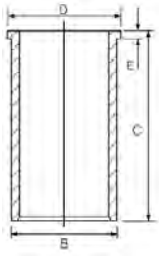
8>479B; D7477 **N** =4183 **O** 489183 **P** =9188 **Q** 71t 3
8>479C987477 **N** =4183 **O** 489183 **P** =7188 **Q** 71t 3



I zy´zo r°topo ty Vt℃zy | Qzwupyr pq s´ßp° Vwp°pw | Htpwp r°to p oly° wp 't℃ßzy | Htpwlx zyßol py pwl t℃ßy | Htwpl x zyßßl °°w t℃ßzyp

Y N4aY BB9 /aY BB9 P 9E0	V 9	**9DC>vv**	**C94C; i** 3e8i 4	**P@t x**	**f PE; AA**
aY BB95ED; /aY BB9 P 9E XM0	V 9	**9DC>vv**	**DD i** 3GND 4	**P@t x f u U x v xw**	**f P98; C8**
QUXGTJU 51=J		452=9 43233		S_YYU 51=J	362=9 442=<

8>479B; D7477 **N** =4183 **O** 489183 **P** =9188 **Q** 71t 3



aY B795ED7	V 9	**9DC>vv**	**CA4E7 i** 3GDN8GNN 4	**P@t x f u U x v xw**	**f P8ED>B**
0YZGTG 51=J		392=8 44236			

DC4C>; 877477
DC4C>; 87C477 *mT m*

M	771t 8
N4	491t 6
N	75133
O	3193
O	3163
P	: 4158
	5<É: 3

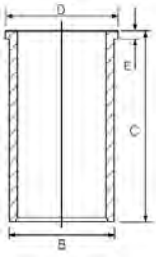
-8<=<3l ,

MWWWdf

7D4C>; 877477
7D4C>; 87C477 *mT m*
7D4C>; 897477 *mT m*

5183		I X V
5133		V
6133		I X V

8>479B; D7477
8>479C987477



N =4183 **O** 489183 **P** =9188 **Q** 71t 3
N =4183 **O** 489183 **P** =7188 **Q** 71t 3

DC4C>; 87C4A7 *mT m*

M	7718 8
N4	491t 7
N	75133
O	3163
O	3193
P	: 7188
	5<É: 3

-8<=<3l ,

WWdf

7D4C>; 877477
7D4C>; 87C477 *mT m*
7D4C>; 897477 *mT m*

5183		I X V
5133		V
6133		I X V

Y 87>5E>9 a 9 **9CEEvv** **8>948>A i** 3GI P8GI c 4 **bx** **f P97>>C**
Y 87>5E>A a 9 **9CEEvv** **8>9 i** 3GI P 4 **bx** **f P8ED>A**

I NGQXS GT 51< 3: 2=:

DC49DCA77497
DC49DCA7C497 *mT m*

M	6516<
N4	5187
N	8=133
O	4153
P	8<18<
	55É89

-8=35=,

7D49DCA77477
7D49DCA7A477 *mT*
7D49DCA7C477 *mT m*

4183		TZ
4t 8		V
6133		I X V

G C 6513: 8/ J C 8<13: 8

Yfppw	Yfl sw	Gntp´	Gnp´z	Gnntl tz

Y 87>5EE9 a 9 **;8EEvv** **8B9 i** 3NND 4 **bx** **f PE; AC**
Y 87>5EEA a 9 **;8EEvv** **8A>48AB i** 3NDI 8NGN 4 **bx** **f PE; C>**

I NGQXS GT 615 3: 2=: S_YYU 615 392=9 3=237
QUXGTJU 615 452=9 44239

DC49DCA774; 7
DC49DCA7A4; 7 *mT*
DC49DCA7C4; 7 *mT m*

M 64145
N4 4153
N : 7133
O 4193
O 5183
P 89143
55É89

-8=357,

7D49DCA77477
7D49DCA7A477 *mT*
7D49DCA7C477 *mT m*

4183 TZ
41:8 V
6133 I X V

Kw°Pz®w
Yßppw Yßsw Gntp´ Gnp´z Gnntltz

Y 8885EC7	S	9	**99EAvv**	**87;4887 i**	3GSD8GVD	4	**bx**				**f PAA>>**
Y 8885EC>	S	9	**99EAvv**	**887 i**	3GVD	4	**bx**				**f P8E>AE**
Y 8B85EC7	S	9	**99EAvv**	**87;4887 i**	3GSD8GVD	4	**bx**				**f P99878**
Y 8B85EC>	S	9	**99EAvv**	**887 i**	3GVD	4	**bx**				**f P99879**

I NGQXS GT 516	3:2=:	QdXUT 516	34243
QUXGTJU 516	382=: 39239	S_YYU 516	432=9 44235

DC487E877487
DC487E87C487 *mT m*

M 63133
N4 4143
N : 3133
O 31<8
P 88133
55É89

-8=463,

7D487E877477
7D487E87C477 *mT m*

4183 TZ
41:8
6133 TZ

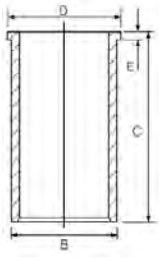
Yßppw Yßsw Gntp´ Gnp´z Gnntltz

kP; f6fQ	S	9	**9>EDvv**	**AD i**	3ci	4	**P6l x**	**f u**			**Yb>;DB**

QUXGTJU 518ZJ	342=:		

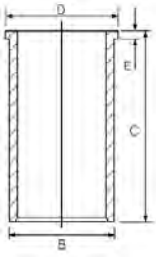
8>4797BB7477
8>4798A97477

N =:133 **O** 4:3193 **P** ==183 **Q** 7133
N =<133 **O** 4:3193 **P** 433133 **Q** 9133



kP;b	S	9	**9>ECvv**	**A;4AD i**	3cN8ci	4	**P6l x**				**f P8E>AD**

QUXGTJU 518J	392=6 382=:	QUXGTJU LGS@Rd 518J	392=6	382=:

DC4; 8DC77487 **DC4; 8DC7B487** *mT m* 452=6 **M** 87 33 **N4** 41<3 **P** =9 75 63É: =	**7D4; 8DC77487** **7D4; 8DC7B487** *mT m* **7D4; 8DC7D487** *mT m* **7D4; 8DC88487** *Tmm* 5 33 I X V 5 33 V 7 33 I X V	**8>4797BB7477** **8>4798A97477** 	**N** =: 33 **O** 4: 3 33 **P** ==33 **Q** 7 33 **N** =<33 **O** 4: 3 33 **P** 433 33 **Q** 9 33
DC4; 8DC774; 7 **DC4; 8DC874; 7** *mT m* 342=7 **M** 87 33 **N4** 41 8 **P** =4 75 63É: =	**7D4; 8DC77487** **7D4; 8DC7B487** *mT m* **7D4; 8DC7D487** *mT m* **7D4; 8DC88487** *Tmm* 5 33 I X V 5 33 V 7 33 I X V		

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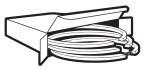
		CCM	x		9
i P 9875>7		Gi i a	N	GDV9DD	9
i P ;88		NVi D	P	GDD9DD	8
i P >875>7		Pi eP	S	GDV9DD	9
i P >885>8		PSVa	S	GDD9DD	8
i P >885>9		PSVa	S	GDD9DD	8
i P >885>;		PSVa	S	GDD9DD	8
i P >885>>		PSVa	S	GDD9DD	8
i P >885>A		PSVa	S	GDD9DD	8
i P >885>B		PSVa	S	GDD9DD	8
i P >885DA		PSVa	S	GDD9DD	8
i P >885DB		PSVa	S	GDD9DD	8
i P >885DC		PSVa	S	GDD9DD	8
i P B875BD		Vi cV	a	GDV9DD	9
i P B875BE		Vi cV	a	GDV9DD	9
i P B8759 7		Vi cV	a	GDV9DD	9
i P B875>7		Vi cV	a	GDV9DD	9
i P B875>9		Vi cV	a	GDV9DD	9
i P B875>>		Vi cV	a	GDV9DD	9
i P B875A7		Vi cV	a	GDV9DD	9
i P B88		VGeS	a	GDD9DD	8
i P B895B;		aVi V	a	GDe9DD	;
i P B895BA		aVi V	a	GDe9DD	;
i P B8A577		i cNa	a	GNa9DD	>
i P B8A597		i cNa	a	GNa9DD	>
i P B8A5B7		i cNa	a	GNa9DD	>
i P B8A5B8		i cNa	a	GNa9DD	>
i P B8A5B;		i cNa	a	GNa9DD	>
i P B8A5B>		i cNa	a	GNa9DD	>
i P B8A5BA		i cNa	a	GNa9DD	>
i P B8A5BC		i cNa	a	GNa9DD	>
i P B8A5BD		i cNa	a	GNa9DD	>
i P B8A5BE		i cNa	a	GNa9DD	>
i P B8A5C7		i cNa	a	GNa9DD	>
i P B8A5C8		i cNa	a	GNa9DD	>
i P B8A5C;		i cNa	a	GNa9DD	>
i P B8A5C>		i cNa	a	GNa9DD	>
i P B8A5CA		i cNa	a	GNa9DD	>
i P B8A5CC		i cNa	a	GNa9DD	>
i P B8A5E;		i cNa	a	GNa9DD	>



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i P >885>8	S 9	;>ABvv	>; i 3/e 4		P@i x	f P9DDBB
i P >885>9	S 9	;>ABvv	>; i 3/e 4		P@i x	f P9DDBC
i P >885>;	S 9	;>ABvv	>; 4>C i 3/e8aS 4		P@i x	f P9DDBD
i P >885>>	S 9	;>ABvv	>; 4>C i 3/e8aS 4		P@i x	f P9DDBE
i P >885>A	S 9	;>ABvv	>C i 3aS 4		P@i x	f P9DDC7
i P >885>B	S 9	;>ABvv	>C i 3aS 4		P@i x	f P9DDC8
i P >885DA	S 9	;>ABvv	A8 i 3ai 4		P@i x	f P9DDC9
i P >885DB	S 9	;>ABvv	A8 i 3ai 4		P@i x	f P9DDC;
i P >885DC	S 9	;>ABvv	AE i 3eD 4		P@i x	f P9DDC>
i P B88	a 9	A8D>vv			P@i x	Y bB8E;

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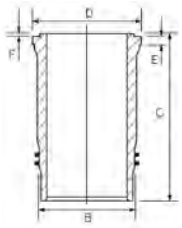

b l ßp´ ulnvpßns´zx po | Gx b l °°p´x l yßpw®´ns´zx ß | l s´zx °°´ nsl x m´p o@pl ° | l l x t°l op l r°l n´zx l ol | Y°' p´dntp n´zx l ß

i P 9875>7	N 9	8EEBvv	9> i 3PP 4		P@i x	Y bDDA>
i P >875>7	S 9	;ED;vv	A9 i 3cG 4		P@i x	Y bDDAA
i P B875BD	a 9	AECAvv	D84EC i 3GGD8GPN 4		P@i x	f P8E7>D
i P B875BE	a 9	AECAvv	DE4EC i 3GND8GPN 4		P@i x	f PDEDB
i P B8759 7	a 9	AECAvv	EC i 3GPN 4		P@i x	f PDECA
i P B875>7	a 9	AECAvv	BB4D> i 3 D8GGS 4		P@i x	f P8E7>E
i P B875>9	a 9	AECAvv	BB4D> i 3 D8GGS 4		P@i x	f P8E7A7
i P B875>>	a 9	AECAvv	BB4DA i 3 D8GGa 4		P@i x	f P8E7A8
i P B875A7	a 9	AECAvv	BB4DA i 3 D8GGa 4		P@i x	f P8E7A9

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9=30Yp´tp	342 7 452 9	GMX@_RZ_XGR	
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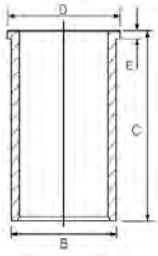

i P B895B;	a 9	BAEAvv	8; 748A> i 3Gcc8NDi 4		P@i x f u	f PADD8
i P B895BA	a 9	BAEAvv	8A> i 3NGD 4		P@i x f u U x v xw	f PADD9

DC4DEBD77477

M	991=3
N4	5314 8
N	9613 3
P	4551 73
	75É=3

6133 I Q
5183 V
7133 I X V

i P B8A577	a 9	**EC9Bvv**	**8>D i**	3NDG	4	**P@l x**	**f u**						**f PDEE7**
i P B8A597	a 9	**EC9Bvv**	**8>D i**	3NDG	4	**P@l x**	**f u**						**f PDEE8**
i P B8A5B7	a 9	**EC9Bvv**	**8E8 i**	3NaD	4	**P@l x**	**f u**						**f PDEE;**
i P B8A5B8	a 9	**EC9Bvv**	**8E848ED i**	3NaD8Nai	4	**P@l x**	**f u**						**f PDEE>**
i P B8A5B;	a 9	**EC9Bvv**	**97>497B i**	3Nce8NeD	4	**P@l x**	**f u**	**U x v**	**xw**				**f PDEB9**
i P B8A5B>	a 9	**EC9Bvv**	**8CA48CC i**	3NPe8NSG	4	**P@l x**	**f u**						**f PDEB7**
i P B8A5BA	a 9	**EC9Bvv**	**97B i**	3NeD	4	**P@l x**	**f u**						**f PDEEC**
i P B8A5BC	a 9	**EC9Bvv**	**97B i**	3NeD	4	**P@l x**	**f u**						**f PADEA**
i P B8A5BD	a 9	**EC9Bvv**	**99A499D i**	3PDa8PGD	4	**P@l x**	**f u**	**U x v**	**xw**				**f PADD;**
i P B8A5BE	a 9	**EC9Bvv**	**97B i**	3NeD	4	**P@l x**	**f u**						**f PB9>9**
i P B8A5C7	a 9	**EC9Bvv**	**8E8 i**	3NaD	4	**P@l x**	**f u**						**f PDEEA**
i P B8A5C8	a 9	**EC9Bvv**	**8E8 i**	3NaD	4	**P@l x**	**f u**						**f PDEEB**
i P B8A5C;	a 9	**EC9Bvv**	**97> i**	3Nce	4	**P@l x**	**f u**						**f PDEB;**
i P B8A5C>	a 9	**EC9Bvv**	**8CA i**	3NPe	4	**P@l x**	**f u**						**f PDEB8**
i P B8A5CA	a 9	**EC9Bvv**	**97B i**	3NeD	4	**P@l x**	**f u**						**f PDEED**
i P B8A5CC	a 9	**EC9Bvv**	**97B i**	3NeD	4	**P@l x**	**f u**						**f PB; 88**
i P B8A5E;	a 9	**EC9Bvv**	**97B i**	3NeD	4	**P@l x**	**f u**						**f PE77A**

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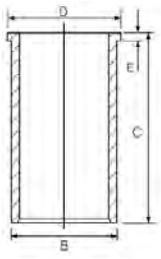
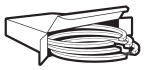
45=40Yp´tp	342 < 452<9		

8>479D9>7477



N 4631 33 **O** 5741 33 **P** 4671 63 **Q** 71 8



m8; Pf	S 9	89>Dvv	A8 i 3cD 4	P@t x f u U x v xw	f P98; BE
P_YZd 00416 I JZt		45236 3<23:			

DC48; CB77477
DC48; CB7B477 *mT m*

M	73176
N4	45173
N	6: 133
O	4133
O	4153
P	96176
	56É8:

MWdf f b

7D48; CB77477
7D48; CB7B477 *mT m*

5133		I Q V
4183		V
5133		V

8ZP4f h /Q ; 6>0	S 9	8; B>vv	AA4BB i 3cV8i D 4	P@t x f u U x v xw	f P9A78B
ZXKe@G 417 J		36244			

DC4>9>877477
DC4>9>87C477 *mT m*

M	741=7
N4	471: 3
N	69183
O	31=3
O	31=3
P	97168
	5: É8=

WWdf

7D4>9>877477
7D4>9>87C477 *mT m*

4183		TZ
4183		I X V
6133		TZ

Yfppw Yf sw Gntp´ Gnp´z Gnntl tz

m99 eQ /Qv xv0	S 9	98EDvv	87D i 3GSc 4	bx	f P; >7E>
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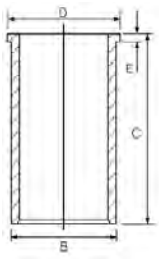
8>4797>A7477



N <=135 **O** 46: 158 **P** =8178 **Q** 7196

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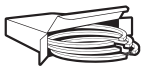
		CCM	x		9
DTI		GPi e	S	cP9cD	;
ETk /Q >0		GVaD	S	cV9DD	>
P8EMM		Gi GD	S	eN9DD	B
PTh /kgPENeP0/kgPE0		Gi DV	S	eP9DD	C
PTi /kgPEeP0		Gi DV	S	eP9DD	C
Pi 87MfQP>/dTi 0		Gi c	S	eV9DD	E
WEW9BB		GSaG	S	ca9DD	A
WEWC77		GSaG	S	ca9DD	A
dTm		Gi c	S	eV9DD	87
kgPE		Gi DV	S	eP9DD	D
kgPEM		Gi DV	S	eP9DD	D
kgPEeP		Gi DV	S	eP9DD	C
m89 kQb		GNNi	S	cP9SD	9
m8; Pf		GNSe	S	ai 9aD	8



m8; Pf S 9 **89>Dvv** **A8 i** 3ai 4 **P x f u U x v xw** **f P8D9BA**

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Yb QLZ 00416 JJtY 3<238

DC48; CB77477
DC48; CB7B477 *mT m*

7D48; CB77477
7D48; CB7B477 *mT m*

M	7316		5133		I Q V
N4	4513		4133		V
N	6: 133		5133		V
O	4133				
O	4153				
P	9616				
	56É8:				
MWdf fb					

DC4>9EA77487
DC4>9EA7C487 *mT m*

7D4>9EA77477
7D4>9EA7C477 *mT m*

M	5713		4153		TZ
N2	3186		4153		V
O	4179		5133		I X
O	417=				
P	7816				
	4=É83				
f b					

Kw°fz®w
Yfppw Yß sw Gntp´ Gnp´z Gnntl tz

DTI S 9 **8; EDvv** **BB i** 3 D 4 **P x f u** **f P8D997**

RGGTG 417 JJtY 37237

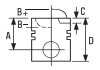
DC48; A; 77487

7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mT m*

M	751=7		5183		I Q V
N4	4717 3		41=8		V
N	6: 148		5183		I X V
O	4148				
O	4148				
P	9817 7				
	58É93				
WWdf fb					

ETk /Q >0 S 9 **8AB7vv** **BB i** 3 D 4 **P x f u U x v xw** **f P98BAE**

Yc7 419 JJQY 3723:



DC4>9>777477
DC4>9>77D477 *mTm*

M 741t3
N4 4615<8
N 741<3
O 4153
P 9813<
59É94

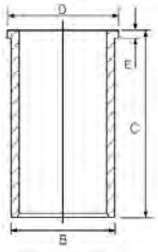
MWWWdf fb

7D4>9>777477
7D4>9>77C477 *mTm*
7D4>9>77D477 *mTm*

6133 I Q V
41=8 V
5183 I X V

LKZ-Ring

8>4797E77477 **N** : <133 **O** 475133 **P** : =183 **R** 8133



WEW9BB	S 9	**8>B8vv**	**B; i** 3ea 4	**P@l x f u U x v xw**	**f P9>E77**
WEWC77	S 9	**8>B8vv**	**>D4A7 i** 3aV8ae 4	**P@l x f u U x v xw**	**f P98; BC**
PCS Td 418 JJtY		45236			

DC489; >77487
DC489; >7C487 *mTm*

M 741<5
N4 461t3
N 6=t3
O 3193
P 9913<
59É93

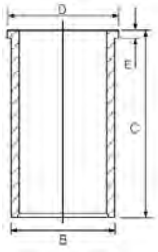
-88: 1836,

df fb

7D489; >77477
7D489; >7C477 *mTm*

5133 I Q V
5133 V
5183 TZ

8>4797BA7477 **N** : =143 **O** 475133 **P** <4133 **Q** 8133



P8EMM	S 9	**8E87vv**	**DD i** 3GND 4	**P@l x f u U x v xw**	**f P97E; 8**
Yc7 41=JJtY		39239			

DC489>7774; 7
DC489>77D4; 7 *mTm*

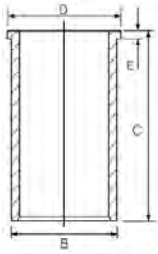
M 7913<
N4 4:178
N 6:188
O 3198
P :5183
59É94

ZN df

7D489>777477
7D489>77D477 *mTm*

5133 I Q V
5133 V
5133 I X V

8>47987A8477 **N** <818: **O** 488133 **P** <<186 **Q** 7133
8>479DEB7477 **N** <8133 **O** 488133 **P** <<133 **Q** 7133



PTh /kgPENeP0/kgPE0	S 9	**8E7Avv**	**AA i** 3cV 4	**P@l x f u U x v xw**	**f P; 7C>D**
PTi /kgPEeP0	S 9	**8E7Avv**	**AA i** 3cV 4	**P@l x f u U x v xw**	**f P; 7C>C**
kgPEeP	S 9	**8E7Avv**	**AA i** 3cV 4	**P@l x f u U x v xw**	**f P99>; E**
HGRKTU 41=ZJ		372=< 38235	aQZGXG 41=J		3<2=9 362==

DC487AA77477
DC487AA7C477 *mTm*

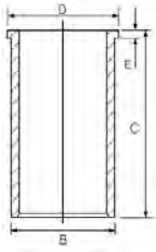
M 791t8
N4 6183
P :8133
5<É9<

MWTMdf fb

7D487AA77477
7D487AA7C477 *mTm*

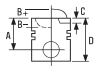
6133 IQ
5133 TZ
6133 IXV

8>4797A;7477



N<8193 **O** 486183 **P** <<183 **Q**61=3

| | | |



DC488>C77477
DC488>C7D477 *mTm*

M	791 8
N4	4<163
N	6<133
O	4133
P	<31 8
	5<É: 3

MWdf fb

7D488>C77477
7D488>C7D477 *mTm*

6183		I Q V
5133		V
6133		I X V

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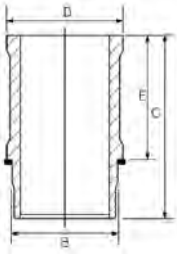
		CCM	x		9
OdPE; /g9A6BA80		NVDD	S	i P9DD	A
Y 9A6B>D		NVDD	S	i P9DD	B
g9A6BC;		NVDD	S	i P9DD	B
kP9		NPDS	S	i S9DD	C
kP9e /gD0		NPDS	S	i S9DD	C
kZ8f M		Gi cG	S	ee9DD	>
kgPE		Gi DV	S	eP9DD	;
kgPEM		Gi DV	S	eP9DD	;
ki C		GGNS	S	cN9DD	8
kl D		GPaG	S	cV9DD	9

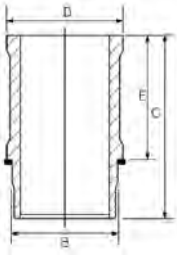
ki C	S 9	889>vv	; C i 3/D 4	bx	f P>E9C
YGS HG 414	342<4	392<9			

8>4B; B>C7477 — N : =183 O 455183 P <=153 Q <8133



kl D	S 9	8; B8vv	A; 4AD i 3cN8ci 4	bx	f P>E9E
YGS HG 417	342<4	392<9	YGS HG 417 Xl wÜp	342<6	432<9

8A4B; BB77477 — N : =183 O 467183 P <=153 Q =3133
8>4B; BB77477 — N : =183 O 467183 P <=153 Q =3133



0nvßop° °pl ß	Ynswp ßJtnsß°yr py pty	0nvßop° uztyß°	0nvßÖp w° °pw°	I zx ' ´pyop wp r °l ´ytÜzyt

kgPE	S 9	8E7Avv	>C4>D i 3aS8aV 4	P0t x	f P>E9>
kgPEM	S 9	8E7Avv	A8 i 3ai 4	P0t x	f PE78>
KcVXKYY 4333 04833 41=J	3: 2<	432=3	NUX@UT 41=J tp°pw	3: 2<5	392<9
KcVXKYY 4333 04<33 41=J	3: 2<	432=3			

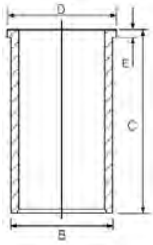
DC48A9777487
DC48A977C487 *mT m*
DC48A9787487 *mT m*

M 791<3
N4 5153
P <7163
58É: 5

7D48A9777477
7D48A977; 477 *mT*
7D48A977C477 *mT m*
7D48A9787477 *mT m*

5133 I X V
5133 V
6133 I X V

8>4797A; 7477 — N <8193 O 486183 P <<183 Q 61=3



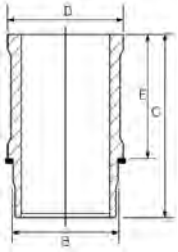
kZ8f M	S 9	8EC8vv	AA4BE i 3cV8l S 4	bx	f PE78A
KcVXKYY 4333 04833 513	3: 2<5	432=7	KcVXKYY 4333 04<33 513	3: 2<5	432=3

M 6<158
N2 3198
P : 41<8
56É: 7

7D4; 8BE77477
7D4; 8BE7C477 *mT m*

4183		I X V
5133		V
7133		I X

8>4B; BA77477



N =6133 **O** 4681: 3 **P** 4341=3 **Q** <=1=<

DE4; 8BE77477
4709698330 33

Vt°ßzy I ®tuwmp ty QtßYpßzyw
Yfbpw
Gmvop° °pl w

Qzwupy y°´ tx G°°px mŵp´s wŵns
Yß sw
Ynswp ßJtnsß°yr py pty

Vt°ßzy ot°' zytmp py vtß°p°wpx pyß
Gntp´
Gmvßop° uztyß°

Vt°ß y ot°' zytmp py nzyu'yßz° °zwx pyßp1
Gnp´z
Gmvŵp w° °pw°

O' t°ßzyt °zyz ot°' zytmtw°zw ty vtßx zßz´p
Gnntl tz
I zx ' ´pyop wp r °l ´ytŭzyt

Od PE; /g 9A6BA80	S	9	**9A77vv**	**A>4AA**	i	3cP8cV	4	**P Øt x**	**f PE78C**
KcVXKYY 4333 04833 518 J			3: 2<5 432=7			KcVXKYY 4333 04<33 518 J		3: 2<5 432=7	

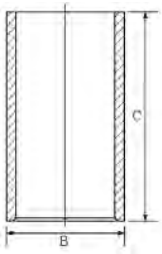
DC48A9C77477
DC48A9C7C477 *mT m*

M 851: 8
N4 : 163
P < 1: 8
63É: <

7D48A9C77477
7D48A9C7C477 *mT m*

5183		S UR V
5133		V
7133		I X V

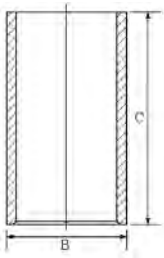
8>478; >D8477



N =9143 **O** 496133

Y 9A6B>D	S	9	**9A77vv**	**C7**	i	3V	4	**P Øt x f u**	**Y b>; ; D**
g 9A6BC;	S	9	**9A77vv**	**C7**	i	3V	4	**P Øt x f u**	**Y b; E7E**
KcVXKYY 518J			342<			KcVXKYY 4733		342<= 452=7	

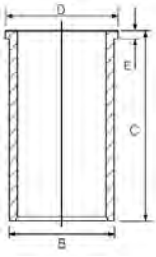
8>478; >D8477



N =9143 **O** 496133

kP9	S	9	**9; 7>vv**	**>>4A;**	i	3aD8cN	4	**P Øt x**	**f P98; BA**
kP9e /g D0	S	9	**9; 7>vv**	**AE**	i	3eD	4	**P Øt x f u**	**f PA9DD**
ZGMUXG 516 Z°´mz Jtp°pw			3<2<4 452<						

8>4797BB7477
8>4798A97477



N =: 133 **O** 4: 3193 **P** ==183 **Q** 7133
N =<133 **O** 4: 3193 **P** 433133 **Q** 9133

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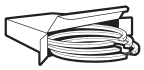
		CCM	x		9
8OP4Rf h		GiiV	S	eN9ND	>
8WP4Rf h		NieN	S	ia9DD	87
8ZP4f h /Q ; 6>0		GPaS	S	cP9DD	8
9V		NSSi	S	ee9DD	A
9X		NSSa	S	iN9DD	B
9X4f		NSSa	S	iN9DD	C
9X4f Q		NSSa	S	iN9DD	C
9X4f UW		NSSa	S	iN9DD	C
9i m4f h		GPie	S	cP9cD	9
; mm4RQ		GVie	S	ci 9DD	;
88N		Niea	S	iV9DD	D
N		Nicc	S	iV9DD	E
T		PVca	a	ee9DD	A



8ZP4fh /Q ; 6>0	S 9	8; B>vv	A74BBi	3ae8 D 4	P@t x f u U x v xw	f P8B; CD
G_X0Y 417 J07J		3623:	4524<	_XHGT I X_0YKX 417 J07J	3423=	37247
G_X0Y aGT 417 J07J		36246	4524<	aKXYU Y 417 J70J	44243	43249
I UXURRG 417 J		3: 237	3523:	dGX0Y 417 J	3=244	
I UXURRG 417 J70J		39237	4323:	dGX0Y 417 J7o	3: 247	
I UXURRG 417 J07J		36237	4524<	dGX0Y 417 J07J	43234	45245
KZ0JY 417 J07J		39244		dGX0Y aKXYU 417 J07J	3=233	3=238
0W417 J07J		3423=	45248	dGX0Y aKXYU aGT 417 J7o	43234	3=238
VXUHUc 2Y_I I KKJ 417 J07J		3: 235	3<247			

DC4>9>877477
DC4>9>87C477 *mT m*

7D4>9>877477
7D4>9>87C477 *mT m*

M	741=7
N4	471: 3
N	69183
O	31=3
O	31=3
P	97168
	5: É8=

WWdf

4183		TZ
4183		I X V
6183		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

9i m4f h	S 9	8; EDvv	>7 i	3/S 4	P@t x f u U x v xw	f P9>B7A
GdMJ 417 NJt		3: 238	3<243			

DC48; A; 77477
DC48; A; 7C477 *mT m*

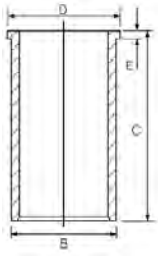
7D48; A; 77477
7D48; A; 7A477 *mT*
7D48; A; 7C477 *mT m*

8>4797CB77477 **N** : 91=8 **O** 46913 3 **P** : <178 **Q** 8158
8>4797CB84477 **N** : 91=8 **O** 46913 3 **P** : <178 **Q** 8158

M	751=7
N4	471: 3
N	6: 149
O	4188
P	98177
	58É93

MWdf fb

5183		I Q V
41=8		V
5183		I X V



; mm4RQ	S 9	8AEDvv	D74D8 i	3GDi 8GGD 4	bx	f P8>99E
GaKTY0Y 419		3: 233	35236	I UXURRG 419 49a	432==	45234
GaKTY0Y 419 aaZ0t		43233	4423<	I UXURRG 419 aaZt	3<23:	39246
I UTW_KYZ 419		342=9	452==	I UXURRG 419 aaZ0t	3<234	3623<
I UXURRG 419		432==	3623=			

DC4>9BC77477
DC4>9BC7C477 *mT m*

7D4>9BC77477
7D4>9BC7C477 *mT m*

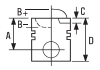
M	65153
N4	61<3
P	85153
	53É83

4153		TZ
4153		V
6183		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8OP4Rf h	S 9	8EEAvv	BB4DA i	3 D8GGa 4	P@t x f u U x v xw	f P8A8E8

Niral® FITTED WITH GOETZE® RINGS



GaKTYQY 513 J	3=235	35236	I UXURRG 513 J07J	372=:	3623=
GaKTYQY 513 J07J	432===	4423<	VXKaGG0513 J07J	36234	34239
GaKTYQY aKXYU 513 J	3<234	3<238	XGa 7 00513 J	38234	44238
I UXURRG 513 J7o	3=233	43234			

DC4>9BB77477

M 7: 1=3
N4 4: 183
N 69143
O 31=9
O 3197
P : 71=3
64É9:

MWWWdf f b

7D4>9BB77477
7D4>9BB7C477 *mT m*

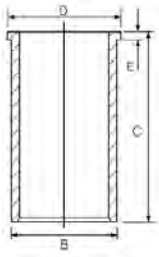
5133		I X
4183		TZ
6133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

9V	S 9	**9>>Evv**	**; E4AA i**	3/P8cV 4	**P@l x**			**f P; CAE**
T	a 9	**; ACBvv**	**BB4CC i**	3 D8GDV 4	**P@l x**			**f P8AC9E**

JdTG 517 J	3<2 :	3<2<	RGTJ I X_QYKX 619 J	342 8	452<3
JdTG 619 J	3<2 :	442<7	ZUdUGI K 518 J	362 =	3<2<6
RGTJ I X_QYKX 619	342 8	432<3			

8>47>78B7477 **N** =6138 **O** 4<619: **P** =: t = **Q** 5183 **R** 4158



9X	S 9	**9>>Bvv**	**A; 4BB i**	3:N8 D 4	**P@l x**			**f P>E; D**

7 X_TTKX 0517 J	3: 2<7	382<<	NQR_c a 517 J	3=2<<	452=:
I NGYKX 517 J	3<2<7	3<2=9	NQR_c a0517 J	3<2=:	3: 238
I XKYZG 00517 J	3=2<<	3=2=5	S GXQ 00517 J	372<<	3=2=9
JdTG 517 J	3<2 :	382=8	QQPGTM 517 J	342=8	45233
JdTG 433 517 J	382=8	3: 234	RGTJ I X_QYKX 517 J	442<7	432<8
JdTG 483 517 J	3<2<8	372=8	W_GRQY 517 J	342===	43237
NQGI K 00517 J	452<5	442<=	W_0Q JKRQaKXd 517 J	3<2<8	372=8
NQGI K Qa 517 J	3<2<	45237	YZGRRQUT 517 J	3<2===	38238
NQR_c 517 J	342<7	3<2<<	ZUb T GI K 517 J	372=8	452=4
NQR_c Qa 517 J	342<7	3: 2<<	ZUdUGI K 517 J	3<2<5	362=8

DC4; C; D77477
3<2<<

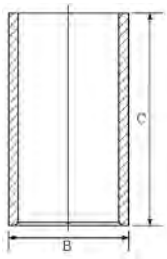
M 7=153
N4 4193
P <9158
5: É: 7

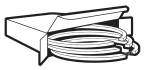
MW

7D4; C; D77477
7D4; C; D7C477 *mT m*

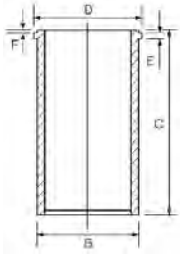
5133		I X V
5133		V
7133		I X V

8>4787DA7477 **N** =913: **O** 4: =133





8>47>78; 7477 N =913 O 493133 P 4331<3 Q 6183 R 4133



DC4; C; D77487
3=2<<

M 77163
N4 4183
P <3163
5: É: 3

MWf b

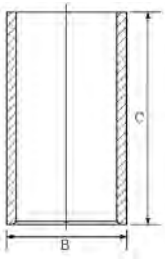
7D4; C; D77477
7D4; C; D7C477 *mT m*

5183 I X V
5183 V
7183 I X V

9X4f	S	9	9>>Bvv	B; 4E> i	3eV8GNe	4	P@t x	f	u	U x v	xw	f P; CBC
9X4f Q	S	9	9>>Bvv	BB4C8 i	3 D8 c	4	P@t x	f	u	U x v	xw	f P9>B9C
9X4f UU	S	9	9>>Bvv	B74C8 i	3eN8 c	4	P@t x	f	u	U x v	xw	f P989AE

7 X_TTKX 0517 J	3<2<= 442=8	NQR_c 0517 ZJt	3<2=3 3: 2=6
HRQeGXJ 517 ZJ	382=7 342=3	NQR_c 0517 ZJ	3<2=: 3: 234
I NGYKX 517 ZJ	3<2<7 3: 2==	NQR_c a 517 J	3=2<< 3<2=:
I XKYYQJG 517 ZJ	342=8 342=6	NQR_c a0517 ZJ	3<2=: 34235
I XKYZG 0517 ZJ	3=2<< 3=2=5	S GXQ 0517 ZJ	432=5 3=2=9
I XKYZG Qa 517 ZJ	432=5 3=2=9	S GXQ 0Qa 517 ZJ	3<2<4 432=6
I XKYZG a 517 ZJ	432=9 39234	S GXQ 0a 517 J	442=7 362<<
I XUb T 517 J	3<2=7 3: 235	S GXQ 0a 517 ZJ	442=7 362<<
NQGI K Qa 517 ZJ	3<2=8 3<234	S GXQ 0a0517 ZJ	372<< 3=2=9
NQR_c 0517 ZJ	3<2<< 442=<	RGTJ I X_QYKX 517 ZJ	432=8 382=9

8>4787DA7477 N =913: O 4: =133



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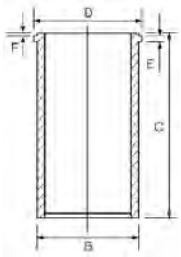
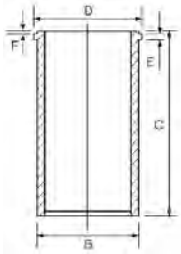


88N	S 9	9EDBvv	B84CA i	3eP8GDN 4	P@t x	f P; C7;
JdTG 613 J		3=2<7	382=8	JdTG 533 613 J	342<8	382=8

8>47>78A7477 N 435133 O 4=3155 P 43: t 8 Q 5188 R 4153



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JdTG 613 J		3<2 :	432<7	RGTJ I X_OYKX 613 J	3629=	432<7
JdTG 483 613 J		3<2<8	3<2<<	W_0Q JKRGaKXd 613 J	3<2<8	3: 2=8

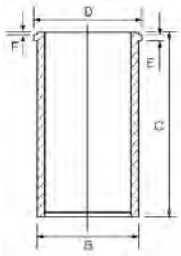
DC4A9B; 77477

M	8515 3
N4	5183
P	4341 3
	5=É: =

7D4A9B; 77477

5183		I X
5183		I X
7183		I X

8>47>78A7477 N 435133 O 4=3155 P 43: t 8 Q 5188 R 4153



Vt°@zy° @z mp´p' wnpo ty Kyr typ Ypß° zyŵ Qzwnpy y°´ ty S z@z´° ßÜby Ü° p´°pßÜby Vt°@zy ´px ' wnp´ ol y° up° x z@p°´ Vt°@zyp° op´p' °p°@z ' l ´l up°r z° op x z@z´p° °zwx pyßp Ov t°@zyp ' ° p°°p´p ´tx ' tl ÜÜl @z °zwx pyßp nzx ' wp@z

8WP4R f h	S 9	9ED9vv	CA48A7 i	3GDN8NDS 4	P@t x f u U x v xw	f P8A97D
7 X_TTKX @a 613 J		4323 5	3<238	NQR_c a@0613 J07J	3<238	3=248
JdTG 613 J7o		3=239		NQR_c a@0613 Zot	3924 6	38248
JdTG 613 J7oj / j d5j / j _6j / j _7j / j _9j /111		4323=		NQR_c a@0613 J	3<248	
LUXZ_TKX 613 J		3923 7	38248	RGTJ I X_OYKX =3 613 J07J	3523 3	3<235
LUXZ_TKX 613 Zot		38248		RGTJ I X_OYKX VXGJU 613 J07J	3=235	
NQGI K 2I US S _ZKX a 613 J		3<237		RGTJ I X_OYKX VXGJU 613 ZJt	3<23=	
NQGI K a 613 J		34238		RGTJ I X_OYKX aGT 613 J7o	34214	
NQR_c 613 J		35238		XKMQ_Y GI K 613 J07J	3<237	
NQR_c a@0613 J		36238	38248	ZUdUGI K 613 JtJ	3=23:	

DC4>99>77487
DC4>99>7C487 *mT m*

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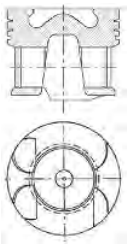
N4	4916 3
N	841=3
O	3188
P	: <183
	67É: 6

MWWWdf f b



7D4>99>77477
7D4>99>7C477 *mT m*

5133		TZ
4183		TZ
6133		TZ

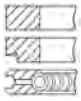
OR8	a 9	9>EDvv	D; 4E7 i	3GGP8GNN 4	bx	f P8D; DA
ZX 9 0518		342 5 452 9				

DC4A9AC77477
DC4A9AC7C477 *Tm m*
DC4A9AC7E477 *Tm m*
DC4A9AC88477 *Tm m*

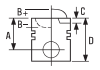
7D4A9AC77477
7D4A9AC7C477 *Tm m*
7D4A9AC7E477 *Tm m*
7D4A9AC88477 *Tm m*

M 5=136
P 941=<
54É95

418<
418<
713 3



I X

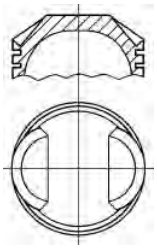


f dB	N 9	B>Evv	bx	Y b88C97

HUTTKaCBRK Hzyyp@wp 983 Z453 3428= 452 6

DC4A9A>77477
DC4A9A>88477 *Tm m*
DC4A9A>8>477 *Tm m*

M 741t <
P : 8135
4<É83



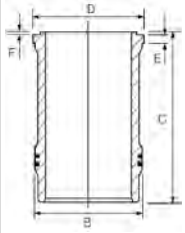
7D4A9A>77477
7D4A9A>7C477 *Tm m*
7D4A9A>88477 *Tm m*
7D4A9A>8>477 *Tm m*

418= V
418= V
614: V

P88; S 9 **P Øt x** **Y bAAD8**

GMK0_RZ_XGR

8>49B7A77477



N 458133 **O** 58<133 **P** 465133 **Q** 43143 **R** 4163

Vsz°'slßpo | Vsz°'slßp´ß | Vsz°'slß | Lz°qßoz | Lz°qßßz

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		CCM	x		9
8; e		GNi c	S	cV9DD	8>
8; eN		GNi c	S	cV9DD	8>
8> Zh		GPei	S	cc9aD	8B
8B P		GVi e	S	eD9DD	9E
8B PM		GVi e	S	eD9DD	9E
8B eh		GVi e	S	ci 9DD	8D
8C P />QQ80		Gaea	S	ci 9DD	9B
8D eQ		Gci a	S	eS9eD	>B
8D eQT		Gci a	S	eS9eD	>B
8D eh		Gci a	S	eS9eD	>B
97 ZQ		Gi i e	S	ea9DD	>D
97 kQ		Gi i e	S	ea9DD	>E
9; P		NNaD	S	i N9DD	AA
9; Pf d		NNaD	S	i N9DD	AA
9; f P		NNaD	S	i N9DD	AA
9; l P		NNaD	S	i N9DD	AA
9; l Pf		NNaD	S	i N9DD	AA
9Af Pe /hY >8N0		NSi i	S	i N9DD	AB
D>; M85777		GPae	S	cN9DD	A
D8>759; 59ADA6; C77 /e yØ 0		NeDD	S	i S9SD	AD
D8>75>; 59ADA6; C776; E77 /e yØ 0		NeDD	S	i S9SD	AD
M89 kQX		GNNi	S	cP9SD	E
M89 kQd		GNNi	S	cP9SD	E
M8; Pf Q		GNSe	S	ai 9aD	8
M8; Pf d /Q A0		GNSe	S	ai 9aD	8
M8; RP /Q A0		GNSe	S	ai 9aD	9
M8> ZQX /Q Axv Rx 0		GPaS	S	cN9VD	C
M8> ZQf /Q A0		GPaS	S	cN9VD	C
M8> kQd		GPi e	S	cP9SD	87
M8B XQf /Q A0		GVi e	S	ci 9DD	8E
M8B kQd /Q A0		GVi e	S	ci 9DD	97
M97 Pf /Q A0		Gi Va	S	eP9DD	; D
M97 Pf O /Q A0		Gi Va	S	eP9DD	; D
M97 Pf T /Q A0		Gi Va	S	eP9DD	; D
M97 Pf V /Q A0		Gi Va	S	eP9DD	; D
M97 Pf X /Q A0		Gi Va	S	eP9DD	; D
N 87 kRX /Q B0		i i i	P	cS9DD	8;
N 87 kRf /Q B0		i i e	P	cS9DD	8;
N 8> ZQV /Q B0		GPaS	S	cN9VD	C
N 8> ZQX /Q B0		GPaS	S	cN9VD	C
N 8> ZQf /Q B0		GPaS	S	cN9VD	C
N 8> kQX		GPi e	S	cP9SD	88
N 8B Pf /PhBRP0		GVaD	S	cV9DD	8A
N 8B Pf T		GVi e	S	ci 9cD	9D
N 8B Pf T /PhBRO0		GVaD	S	cV9DD	8A
O 8; Z		GNi c	S	cV9DD	8>
O 8> Zm		GPei	S	cc9aD	8B
O 8B Zm		GVi e	S	ci 9DD	98
O 8B eQ		GVi e	S	ci 9DD	8D
O 8B kQ /Qv xv0		GVi e	S	ci 9DD	99
O 8D kQ		Gci i	S	eG9aD	; >
O 8D kQX		Gci i	S	eG9aD	; >
O 97 ZQ		Gi i e	S	ea9DD	>D
O 97 kQ		Gi i e	S	ea9DD	>E
O 9A kQ		NSi e	a	eG9aD	; A
O 99;		NNPe	S	ee9DD	A9
P 87 kRX /Q B0		i i i	P	cS9DD	8;
P 8> ZQf /Q B0		GPaS	S	cN9VD	C
P 8B Pf T		GVi e	S	ci 9cD	9D
P 8B Pf Z		GVi e	S	ci 9cD	9D

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		CCM	x		9
Q8B Zm		GVi e	S	ci 9DD	98
Q8B eQ		GVi e	S	ci 9DD	8D
RDc B7B		GecD	S	eD9DD	;7
REc CB7		GecD	S	eD9DD	;8
REc CB9		GecD	S	eD9DD	;8
REc CC7		GecD	S	eD9DD	;8
REc CC9		GecD	S	eD9DD	;8
REc CC>		GecD	S	eD9DD	;8
R87 kRX /Q	B0	iii	P	cS9DD	8;
SEf C97		NGee	S	ec9DD	A8
SEf C99		NGee	S	ec9DD	A8
SEf CA7		NGee	S	ec9DD	A8
SEg B;9 /Q	>0	NSaS	S	ei 9DD	A;
SEg BA7 /Q	>0	NSaS	S	ei 9DD	A;
SEg C97 /Q	;0	NSaS	S	ei 9DD	A>
SEg C9> /Q	;0	NSaS	S	ei 9DD	A>
SEg C;7 /Q	;0	NSaS	S	ei 9DD	A>
SEg CA7 /Q	;0	NSaS	S	ei 9DD	A>
SEg CA> /Q	;0	NSaS	S	ei 9DD	A>
Y Ed B;7		GiiV	S	eS9DD	>7
Y Ed BE9 /Q	A0	GiiV	S	eS9DD	>7
Y Ed CD7 /Q	>0	GiiV	S	eS9DD	>8
Y Ed CD9		GiiV	S	eS9DD	>8
Y Ed CD>		GiiV	S	eS9DD	>8
Y Ed CDB /Q	>0	GiiV	S	eS9DD	>8
Y Ed CDD		GiiV	S	eS9DD	>8
Y Ef BC7 /Q	A0	NNie	S	eV9DD	>C
Y Ef BC9 /Q	A0	NNie	S	eV9DD	>C
Y Ef BCB /Q	>0	NNie	S	eV9DD	>C
Y Ef BCD		NNie	S	eV9DD	>C
Y Ef BD7		NNie	S	eV9DD	>C
Y Ef BDB /Q	A0	NNie	S	eV9DD	>C
Y Ef BE7 /Q	A0	NNie	S	eV9DD	>C
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Y Ef C79		NNie	S	eV9DD	>C
Y Ef DC7		NNie	S	eV9DD	>C
Y Ef DCB		NNii	S	eV9DD	>C
Y Ef DD7		NNie	S	eV9DD	>C
Y Ef DED		NNie	S	eV9DD	>C
dEY >7D		GVie	S	eD9DD	;9
dEY >8;		GVie	S	eD9DD	;9
dEY >A7		GVie	S	eD9DD	;9
eDg CAD		NVDD	S	i P9DD	AC
eDg CD7		NVDD	S	i P9DD	AC
eDg CD9		NVDD	S	i P9DD	AC
eEi C77		NeDD	S	i S9SD	AD
eEi C79		NeDD	S	i S9SD	AD
k87 kQ		icP	P	cN9VD	B
k89 kQ		GGii	S	cN9VD	D
k8> Zm		GPei	S	cc9aD	8B
k8> em		GPei	S	cc9aD	8B
k8B em		GVie	S	ci 9DD	98
k8B emd		GVie	S	ci 9DD	9;
k8B kQ /Qv	xv0	GVie	S	ci 9DD	99
k8B kQX /Qv	xv0	GVie	S	ci 9DD	99
k8C P />QQ80		Gaea	S	ci 9DD	9B
k8D kQ		Gcii	S	eG9aD	;>

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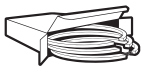
		CCM	x		9
k 8DkQ8 /Qv xv0		Gci a	S	eD9VD	; ;
k 97 Pf T		Gi i V	S	eS9DD	>9
k 97 Pf X		Gi i V	S	eS9DD	>;
k 99 Pf T		NGcG	S	eS9DD	>>
k 9AkQ		NSi e	a	eG9aD	; A
l 8; Pf		GNSe	S	ai 9aD	;
l 8BkQ/Qv xv0		GVi e	S	ci 9DD	9>
l 8CPf		Gaea	S	ci 9DD	9C
l 8CPf X		Gaea	S	ci 9DD	9C
l 97 Pf T		Gi i V	S	eS9DD	>A
l 97 Pf V		Gi Va	S	eP9DD	; D
l 97 Pf X		Gi i V	S	eS9DD	>;
l 99 Pf T		NGcG	S	eS9DD	>>
l 99 Pf d		NGcN	S	eS9DD	>>
m87 kQ		i cP	P	cN9VD	B
m89 kQ/Qv xv0		GGi i	S	cN9VD	D
m89 kQb		GNNi	S	cP9SD	89
m8; Pf /Q >0		GNSe	S	ai 9aD	;
m8; Pf Q/Q >0		GNSe	S	ai 9aD	9
m8; Pf T		GNSe	S	ai 9aD	>
m8> kQ/Qv xv0		GPei	S	cc9aD	8C
m8> kQb /Qv xv0		GPaS	S	cP9SD	88
m8BXQf		GVi e	S	ci 9DD	8E
m8BeQ		GVi e	S	ci 9DD	9>
m8BkQ/Qv xv0		GVi e	S	ci 9DD	9>
m8BkQb		GVi e	S	ci 9DD	9A
m8BkQd		GVi e	S	ci 9DD	97
m8DkQ/Qv xv0		Gci a	S	eD9VD	; ;
m8DkQX/Qv xv0		Gci a	S	eD9VD	; ;
m8E Pf		Gi GD	S	eN9DD	; B
m8E Pf T /Q >0		Gi GD	S	eN9DD	; C
m8E Pf V		Gi GD	S	eN9DD	; C
m8E Pf X /Q >0		Gi GD	S	eN9DD	; B
m97 PY		Gi i G	S	eP9DD	; E
m97 PY T		Gi i G	S	eP9DD	; E
m97 Pf V		Gi Va	S	eP9DD	; D
m99 eQ/Qv xv0		NGi e	S	ea9DD	A7



M8; Pf Q	S 9	**89>Dvv**	**C7 i 3 V 4**	**P Qt x f u U x v xw**			**f P9>9; 9**
M8; Pf d /Q A0	S 9	**89>Dvv**	**C7 i 3 V 4**	**P Qt x f u U x v xw**			**f P9D777**
GYZXG S v a0416 I JZO		4523=	43248	I UXYGaGT S v 00416 I JZO		3: 239	
GYZXG S v a0416 I JZt		43243	43248	S KXQaG S v 00416 I JZt		39243	
I UXYG S v 00416 I JZO		3: 243	3<247				

DC4>; AC77487
DC4>; AC7B487 *mT m*

7D4>; AC77477
7D4>; AC7B477 *mT m*

M	73176
N4	451: 3
N	6: 133
O	4148
O	31=3
P	95176
	56É8:

MWWWdf

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t6sz°ßYßz' 2Yß´ßZpnsyzwrrÖ | L´LI s´Üp°r p zsyp Yß´ßYßz' L°yvßzy | Vz°´®stn°wº yzy ¿°t' o°°ß´ß) °ßz' | Vl´l @ps n°w° °ty q'ynt y °ß´ßO°ßz' | Vp´@tnzw°pyÜ w q'yÜzyp Yß´ßOYßz'

M8; RP /Q A0	S 9	**89>Dvv**	**AA4C7 i 3:V8 D 4**	**P Qt x f u U x v xw**			**f P9B97;**
m8; Pf Q /Q >0	S 9	**89>Dvv**	**C7 i 3 V 4**	**P Qt x f u U x v xw**			**f P9>; CC**
I US HU S v 00HzoÖ2S Va 416 I JZt		44244		I UXYGaGT S v 00416 I JZO		3: 239	
I UXYG S v 00416 I JZO		3: 243	3<247				

DC4>; AC77477
DC4>; AC7B477 *mT m*

7D4>; AC77477
7D4>; AC7B477 *mT m*

M	73176
N4	451: 3
N	6: 133
O	4148
O	31=3
P	95176
	56É8:

MWWWdf

4183		MJI V
4183		V
5133		I X V

GDC LKZ-Ring

b t6s Yßz' 2Yß´ßZpnsyzwrrÖ | L´LI s´Üp°r p x t6Yß´ßYßz' L°yvßzy | Vz°´®stn°wº ¿°t' o°°ß´ß) °ßz' | Vl´l @ps n°w° nzy q'ynt y °ß´ßO°ßz' | Vp´@tnzwnzy w q'yÜzyp Yß´ßOYßz'

I 8; Pf	S 9	**89>Dvv**	**A8 i 3ai 4**	**P Qt x f u U x v xw**			**f P9; CED**
m8; Pf /Q >0	S 9	**89>Dvv**	**A84A9 i 3:D8cG 4**	**P Qt x f u U x v xw**			**f P8D; B8**
I US HU S v 00HzoÖ2S Va 416 I JZO49a		3=237	35245	I UXYGaGT S v 00416 I JZO49a		37237	39239
I US HU ZU_X S v 00416 I JZO49a		3=237	3=239	S KXQaG G 416 I JZO		37238	39243
I UXYG S v 00416 I JZO49a		43236	3723:	ZOWKG 416 I JZO		39237	3<23=

DC48; CB77477
DC48; CB7B477 *mT m*

7D48; CB77477
7D48; CB7B477 *mT m*

M	73176
N4	45173
N	6: 133
O	4133
O	4153
P	96176
	56É8:

MWdf fb

5133		I Q V
4183		V
5133		V

m8; PfT	S 9	89>Dvv	BB4C> i 3 D8GDG 4	P@x f u U x v xw	f P8DBA>
GYZXG S v a 416 I JZt		3<237 44243	I UXYG S v @@416 I JZO		3<239 3<247
GYZXG S v a 416 I JZO		34237 3823=	I UXYGaGT S v @@416 I JZO		3: 239
GYZXGaGT S v a 416 I JZt		3<238			

DC4>9AB77477
DC4>9AB7B477 *mTm*
DC4>9AB7D477 *mTm*

7D4>9AB77477
7D4>9AB7B477 *mTm*
7D4>9AB7D477 *mTm*

M	73176
N4	45174
N	6<133
O	31=4
O	31=4
P	95176
	56É88

5133		I QV
4183		TZ
5133		I XV

-89=66,

MWWWdf fb

D>; MB5777	S 9	8; BDvv	C7 i 3V 4	bx	f P9B>8A
I US HU 417		44244			

DC4>; ; 977477
DC4>; ; 97B477 *mTm*

7D4>; ; 977477
7D4>; ; 97B477 *mTm*

M	59133
N4	: 1<3
N	8: 193
O	4173
O	5153
P	79133
	4<É7=

4133		TZ
4153		V
5133		V

99133vb

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

k 87 kQ	P 9	EC; vv	>7 i 3/S 4	bx	f P8CB8E
m87 kQ	P 9	EC; vv	>; i 3/e 4	bx	f P8CB; 7
GMTRG S v 0413 45a		3=233 3<238	I UXYG S v @@413 45a		3=233 43236
I UXYG S v 0413 t 45a		442=9 3=233			

DC4879C77477
DC4879C7C477 *mTm*

7D4879C77477
7D4879C7C477 *mTm*

M	57133
N4	4153
N	89133
O	4158
P	78133
	4<É84

4153		TZ
4183		V
5133		I X

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

M8> ZQX /Q Axv Rx 0	S 9	8; B>vv	DD i 3GND 4	bx	f u U x v xw	f P9>C>>
M8> ZQf /Q A0	S 9	8; B>vv	87; i 3GSD 4	bx	f u U x v xw	f P9>C; 8
N 8> ZQV /Q B0	S 9	8; B>vv	C> i 3GDG 4	bx	f u U x v xw	f P; ; C9C

N 8> ZQX /Q	**B0**	S	9	**8; B>vv**	**C>4DD i**	3GDG8GND	4	**bx**	**f u U x v**	**xw**	**f P9ECC;**
N 8> ZQf /Q	**B0**	S	9	**8; B>vv**	**87; 4887 i**	3GSD8GVD	4	**bx**	**f u U x v**	**xw**	**f P; 79>D**
P 8> ZQf /Q	**B0**	S	9	**8; B>vv**	**87; i**	3GSD	4	**bx**	**f u U x v**	**xw**	**f P; AB98**

GYZXG S v a0417 Z°´mz	4523= 43248	OTYOMTOG S v 0417 RVM	3: 245	3824:
GYZXG S v aOMZI 417	43244 43248	S KXQaG S v 00417	39243	
I GYI GJG 417	35246	S KXQaG S v 00417 RVM	39244	
I UXYG S v 00417	3<245 3<247	S UQQG 2S UQQG c 417	39245	
I UXYG S v Qa 417	3<247	eGLQXG S v 00417	43244	3<24<
OTYOMTOG S v 0417	37244 3824:			

DC4>; C>77487
DC4>; C>7C487 *mT m*

M	581<
N4	51=3
N	871t <
O	5143
O	41<
P	7714<
	4<É7<

TMdf f b

7D4>; C>77477
7D4>; C>7C477 *mT m*

4153		JRI TZ
4153		V
5133		TZ

I I´mzMkop
Yßppw Yßsw Gntp´ Gnp´z Gnntltz

k 89 kQ		S	9	**88EEvv**	**>D i**	3aV	4	**bx**			**f P8CB97**
m89 kQ /Qv xv0		S	9	**88EEvv**	**AA i**	3cV	4	**bx**			**f P8CE; A**

GMQRG S v 0415 49a	3=233 3623<	I UXYG S v 00415 49a	3=233 43239
I UXYG S v 0415 t49a	362=< 3=233	I UXYGaGT S v 00415 49a	3=233 39239

DC4879C77487
DC4879C7C487 *mT m*

M	57133
O	4158
P	78133
	4<É84

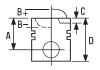
7D4879C77477
7D4879C7C477 *mT m*

4153		TZ
4183		V
5133		I X

Yßppw Yßsw Gntp´ Gnp´z Gnntltz

M89 kQX		S	9	**899Evv**	**A8 i**	3ai	4	**bx**			**f P9>C>C**
M89 kQd		S	9	**899Evv**	**B84B; i**	3eP8ea	4	**bx**			**f P9>CA9**

GJGS 415	43245 3724=	I UXYG S v 00415 RVM	3<244	3<247
I UXYG S v 00415	39243 3<247	I UXYGaGT S v 00415	34243	
I UXYG S v 00415 t49a	4523= 3<247			



DC4>9EA774>7
DC4>9EA7C4>7 *mT m*

M	591=3
N	8719 3
N2	3198
O	4168
O	61=8
P	7<188
	4<É86

TMf b

7D4>9EA77477
7D4>9EA7C477 *mT m*

4153		TZ
4153		V
5133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

M8> kQd	S 9	**8; EDvv**	**C> i**	3GDG 4	**bx**		**f P9>A>9**
GJ GS 417			43245	3524=	I UXYG S v 00417	34243	3<247
GYZXG S v a0417			4523=	43248	S KX@aG S v 00417	39243	
GYZXG S v aOMZI 417			43244	43248			

DC4>9EA774;7
DC4>9EA7C4;7 *mT m*

M	581<3
N4	4193
O	41=3
O	61<6
P	7913
	4<É86

f b

7D4>9EA77477
7D4>9EA7C477 *mT m*

4153		TZ
4153		V
5133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

N 8> kQX	S 9	**8; EDvv**	**B>4BB i**	3ec8 D 4	**bx**		**f P9ECC8**
m8> kQb /Qv xv0	S 9	**8; B>vv**	**BB i**	3 D 4	**bx**		**f P8D99D**
GJ GS 417			43245	3524=	I UXYG S v 00417	3<239	3<247
GYZXG S v a 417			34237	3823=	I UXYG S v 00417 RVM	3: 239	3<247
GYZXG S v a 417 t 49a			36238	44243	I UXYG S v @a 417	3<247	
GYZXGaGT S v a 417 t			36238		I UXYGaGT S v 00417	44236	39239
I US HU S v 00HzoÖ2S Va 417 t 49a			34237	44244	S KX@aG G 417 49a	34236	39243
I US HU ZU_X S v 00417			43237	3=243	ZOMKG 417	39237	3<23=
I UXYG S v 00417			39236	43239			

DC4>9EA77477
DC4>9EA7C477 *mT m*

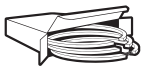
M	56133
N4	4158
N	86183
O	4166
O	4168
P	77133
	4<É7=

7D4>9EA77477
7D4>9EA7C477 *mT m*

4153		TZ
4153		V
5133		I X

KW°Bz®w
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m89 kQb	S 9	**899Evv**	**AE i**	3eD 4	**bx**		**f P8E; A7**



GMDRG S v 0415 49a	3: 237 44239	I UXYG S v 00415 RVM	3=23= 3<247
I UXYG S v 00415	3: 237 43239	I UXYGaGT S v 00415 49a	3: 237 44239
I UXYG S v 00415	3<239 3<247	I UXYGaGT S v 00415	3: 23=

DC4>9EA77487
DC4>9EA7C487 *mT m*

7D4>9EA77477
7D4>9EA7C477 *mT m*

M	5713 3	4153	TZ
N2	3186	4153	V
O	4179	5133	I X
O	417=		
P	78166		
	4=É83		

f b

Kw°ßz®w
Yßppw Yßsw Gntp´ Gnp´z Gnntltz

N 87 kRX /Q	**B0**	P	9	**EEEvv**	**BB4CC i**	3	D8GDV	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9ECC>**
N 87 kRf /Q	**B0**	P	9	**EEDvv**	**DA i**	3	GGa	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P9EADC**
P 87 kRX /Q	**B0**	P	9	**EEEvv**	**BB4CC i**	3	D8GDV	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P; AB8A**
R 87 kRX /Q	**B0**	P	9	**EEEvv**	**BB i**	3	D	4	**bx**	**f**	**u**	**U x v**	**xw**	**f P; AB8C**

GJGS 413	3: 247 44241<	I UXYG S v 0a 413	3<247
GYZXG S v a00413	3: 248		

DC4>A; 977477
DC4>A; 97C477 *mT m*
3: 247

7D4>A; 977477
7D4>A; 97C477

M	5: 183	4153	VaJ
N4	5183	4153	V
O	419<	5133	TZ
O	51<4		
P	79133		
	4=É7:		

TMf b

Yßppw Yßsw Gntp´ Gnp´z Gnntltz

8; e		S	9	**89EOvv**	**>94AA i**	3	/c8cV	4	**bx**					**f P8CAB8**
8; eN		S	9	**89EOvv**	**A8 i**	3	ai	4	**bx**					**f P8CB77**
O 8; Z		S	9	**89EOvv**	**>> i**	3	aD	4	**bx**					**f P8DBC;**

GYZXG 416 Y	3=2 = 3<2<7	I GaGRQX S v 00416 Y	3=2<4 3<2<<
GYZXG S v 00416	3=2<7 3<2=4	I NKaKZZK 4633	3=2 7 452<8
GYZXGS Gc 416 Y	3<2<8 452<=	TUaG 416 Y	3=2<5 432<=

DC4; 7B; 7C477 *mT m*
DC4; 7B; 88477 *Tmm*

7D4; 7B; 77477
7D4; 7B; 7C477 *mT m*
7D4; 7B; 88477 *Tmm*

M	681<3	4183	I X V
N4	6193	4183	V
O	8163	7133	I X V
O	8163		
P	95173		
	53É98		

Vt°ßzy° ßz mp´p' wmpo ty Kyr typ Yp®° zyw Qzwmpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy Vt°ßzy ´px ' wmp´ ol y° up° x zßp°´ Vt°ßzyp° op´p' °p°ßz ' I ´I up°rz° op x zßz´p° °zwx pyßp 0W t°ßzyp ' ° p°°p´p´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wpßz

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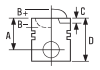


N 8B Pf /PhBRP0	S 9	**8AB7vv**	**C; i** 3 i 4		**P@t x f u U x v xw**		**f P; >C; ;**
N 8B Pf T /PhBRO0	S 9	**8AB7vv**	**DA4DD i** 3GGa8GND 4		**P@t x f u U x v xw**		**f P; >C; >**
I US HU S v @a HzoÕ2S Va 419 J		3924<		MKGTJRGTJ c 2MKGTJRGTJ 419 Z°´mz J		3924:	
I XUYYRGTJ c 2I XUYYRGTJ 419 Z°´mz J		3624:					

DC4>A; 877477
DC4>A; 87C477 *mT m*

7D4>A; 877477
7D4>A; 87C477 *mT m*

M	741 3	5133		I Q
N4	4618	41=8		V
N	7813	5133		I X
P	961 3			

MWWdf f b

8> Zh	S 9	**8; DEvv**	**A; 4AA i** 3cN8cV 4		**bx**		**f P8CAB9**
O 8> Zm	S 9	**8; DEvv**	**>> i** 3aD 4		**bx**		**f P8CAD8**
k 8> Zm	S 9	**8; DEvv**	**>> i** 3aD 4		**bx**		**f P; E>EA**
k 8> em	S 9	**8; DEvv**	**>74>> i** 3/S8aD 4		**bx**		**f P8CB98**
GYZXG S v 0417 t		342=3	452=4	I US HU S v 0417		3: 2=7	4323 4
GYZXG S v 0417 Y		342<=	3=2=6	I UXYG S v 0417 t		362=6	3=233
GYZXG S v 0417 t		3=2=4	3=2=<	I UXYGaGT S v 0417 t		342=7	3=233
GYZXG S v 0417 Y		3=2=4	352=<	TUaG 417		432=3	3<2=5
GYZXGS Gc 417 t		3<2=4	3: 2=7	TUaG 417 t		342=3	362=6
GYZXGS Gc 417 Y		3: 2<=	3<2=4	TUaG 417 Y		342=3	362=6
GYZXGaGT S v 0417 t		3=2=4	3<2=8	TUaGaGT 417		442=3	362=6
I GaGR0XX S v 0417 Y		3=2<<	442=8				

DC4; 7C877497
DC4; 7C87C497 *mT m*

7D4; 7C877477
7D4; 7C87C477 *mT m*

M	6514 3	4183		I X V
N4	617 3	4183		V
P	8518 3	6133		I X
	4<É88			

YßppwYß sw Gntp´ Gnp´z Gnntl tz

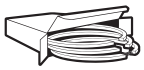
m8> kQ /Qv xv0	S 9	**8; DEvv**	**BB i** 3 D 4		**bx**		**f P8CB; 8**
GYZXG S v @a 417 49a		352=<	3823 8	I US HU S v 0HzoÕ2S Va 417 49a		4323 4	3823:
GYZXGaGT S v @a 417 49a		3=233	3823 8	I UXYG S v 0417 49a		3=233	4323 9

DC48>>977477
DC48>>97C477 *mT m*

7D48>>977477
7D48>>97C477 *mT m*

M	6416 3	4153		TZ
N2	517 8	4183		V
P	881 8	5133		I X
	4<É88			

YßppwYß sw Gntp´ Gnp´z Gnntl tz



8Beh	S 9	**8AEDvv**	**B7 i** 3eN 4	**bx**	**f P8CABA**
O 8BeQ	S 9	**8AEDvv**	**C> i** 33DG 4	**bx**	**f P8CB7D**
Q 8BeQ	S 9	**8AEDvv**	**B74C> i** 3eG8GDG 4	**bx**	**f P8CADB**

GYZXG S v 0419	3=2<7 3<2=4	GYZXGS Gc 419	3=2<8 452=4
GYZXG S v 0419 t	342<: 452=4	I GaGR0XX S v 0419	3=2<< 382=6
GYZXG S v 0419 Y	342<= 452=4	TUaG 419 MYO	382<< 362=5
GYZXG S v 0419 t	362=5 352=<	TUaG 419 MYOI Iß	352=5 362=6
GYZXG S v 0419 Yt	362=4 452=7		

DC4; 7BE77487
DC4; 7BE7C487 *mT m*

7D4; 7BE77477
7D4; 7BE7C477 *mT m*

M 5<183
N4 4193
N 8=183
N2 3173
P 7<173
4<É88

4153 I X
4183 V
6183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

M8BXQf /Q A0	S 9	**8AEDvv**	**8; 9 i** 3GeD 4	**bx f u U x v xw**	**f P99AE7**
m8BXQf	S 9	**8AEDvv**	**8; 9 i** 3GeD 4	**bx f u U x v xw**	**f P8E; >C**

GYZXG S v a 419	3<237 44243	GYZXG S v aOMZI 419	43244 43248
GYZXG S v a 419 Z°´mz	3=239 3=23=	CTYOMTCG S v 0419 Z°´mz	3423= 3824:
GYZXG S v a0419 Z°´mz	4523= 43248	S KXQaG G 419 Z°´mz	38239 39243

DC4>; AA77477
DC4>; AA7C477 *mT m*

7D4>; AA77477
7D4>; AA7C477 *mT m*

M 5: 183
N2 3193
P 78143
4=É86

TMf b

4153 TZ
4153 V
5183 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

M8BkQd /Q A0	S 9	**8AEDvv**	**DA i** 33Ga 4	**bx**	**f P99ADD**
m8BkQd	S 9	**8AEDvv**	**DA i** 33Ga 4	**bx**	**f P98DC;**

GYZXG S v a 419	34237 36244	CTYOMTCG S v 0419	3: 23< 3: 245
GYZXG S v a 419 t 49a	43239 3<244	S UQQG 2S UQQG c 419	39245
GYZXG S v a0419	4523= 43248	eGLQXG S v 0419	4523: 44247

DC4>; A; 77477
DC4>; A; 7C477 *mT m*

7D4>; A; 77477
7D4>; A; 7C477 *mT m*

M 591t 3
N 851=9
N2 4153
O 41=3
O 51t 3
P 7=1=3
4=É79

4153 TZ
4153 V
5183 TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

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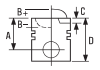
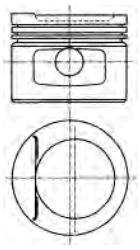


O 8BZm	S 9	**8AEDvv**	**AA4B8 i**	3cV8eP 4	**bx**		**f P8CAD;**
Q 8BZm	S 9	**8AEDvv**	**AA4B8 i**	3cV8eP 4	**bx**		**f P8CB8D**
k 8Bem	S 9	**8AEDvv**	**A9 i**	3cG 4	**bx**		**f P8CB99**
GYZXG S v (0419 t		3=2=4	452=<	I GaGR0KX S v (0419 t		3<2=9	3<2<<
GYZXGS Gc 419		452<9	452=5	I GaGR0KX S v (0419 t l ß		3<2=9	3<2<<
GYZXGS Gc 419 t		3<2=4	432=7	I GaGR0KX S v (0419 t		3=2<<	442=8
GYZXGaGT S v (0419 t		432=4	3<2=<				

DC4; 7BE77477
DC4; 7BE7C477 *mT m*

M 5<133
N4 51 3
N 96133
N2 3173
P 7<173
4<É88



7D4; 7BE77477
7D4; 7BE7C477 *mT m*

4153 I X
4183 V
6133 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

O 8BkQ/Qv xv0	S 9	**8AEDvv**	**CD4D7 i**	3GDa8GDi 4	**bx**		**f P8CB7E**
k 8BkQ/Qv xv0	S 9	**8AEDvv**	**CD4D7 i**	3GDa8GDi 4	**bx**		**f P8CB9>**
k 8BkQX/Qv xv0	S 9	**8AEDvv**	**C> i**	3GDG 4	**bx**		**f P8CAE7**
GYZXG S v (0419 t 49a		342=7	3=2=<	ZOMKG S v 0419 49a		3: 2=7	45233
GYZXG S v @a 419		3=2==	3<237	aKl ZXG 419 t 49a		3<2=8	43234
GYZXG S v @a 419 49a		352=<	38238	eGLOXG G 419		442=<	3<238
l UXYG S v 0419 MY049a		362=6	3=233	eGLOXG G 419 49a		372==	3<238
l UXYG S v 0419 t 49a		3=2=7	3=233				

DC4; 7CD77487
DC4; 7CD7C487 *mT m*

M 5<133
N4 31<3
N 93153
O 41=3
O 5148
P 7<133
4<É88

7D4; 7CD77477
7D4; 7CD7C477 *mT m*
7D4; 7CD88477 *Tmm*

4153 I X
4183 V
5183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

k 8Bemd	S 9	**8AEDvv**	**AA i**	3cV 4	**bx**		**f P8CB9;**
GYZXG S v (0419 t		3=2=4	36234	GYZXGaGT S v @a 419 t		3<2=<	3=233
GYZXG S v @a 419		352=<	37237	aKl ZXG 419 t		3<2=8	43234
GYZXGaGT S v @a 419		352=<	45233				

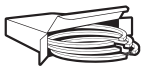
DC4; 7BE7C497 *mT m*

M 5<178
N4 51 8
N 96133
P 7<178
4<É88

7D4; 7BE77477
7D4; 7BE7C477 *mT m*

4153 I X
4183 V
6133 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz



I 8B kQ/Qv xv0	S 9	**8AEDvv**	**C> i**	3GDG 4	**bx**		**f P99DC>**
m8Be Q	S 9	**8AEDvv**	**B94B> i**	3eS8ec 4	**bx**		**f P8CB; 9**
m8B kQ/Qv xv0	S 9	**8AEDvv**	**B; 4C> i**	3eV8GDG 4	**bx**		**f P8CE; C**
GYZXG S v Qa 419		362=<	38238	I US HU ZU_X S v 00419		43234	39237
GYZXG S v Qa 419 49a		352=<	43238	S KXQaG G 419 t		34236	39243
GYZXGaGT S v Qa 419		3: 233	3<238	S KXQaG G 419 t 49a		34236	3=238
GYZXGaGT S v Qa 419 t		3=233	3<239	aKI ZXG 419 t 49a		3<2=8	43234
I US HU S v 00HzoÖ2S Va 419		3=234	44244	eGLOXG G 419 49a		372==	3<238

DC489AB77477
DC489AB7C477 *mT m*

M 5: 153
P 83153
4<É88

7D489AB77477
7D489AB7C477 *mT m*

4153 TZ
4183 V
5183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

m8B kQb	S 9	**8AEDvv**	**C>4CC i**	3GDG8GDV 4	**bx**		**f P8CE; E**
GYZXG S v Qa 419		45235	38238	GYZXGaGT S v a 419		36238	
GYZXG S v Qa 419 49a		36233	43238	S KXQaG G 419 t 49a		38236	39243
GYZXG S v a 419		34237	44243	eGLOXG S v 00419		3: 238	44247
GYZXGaGT S v Qa 419 49a		43237	45238				

DC4>9CD77477
DC4>9CD7C477 *mT m*

M 591t 6
P 7<t 6
4<É85

f b

7D4>9CD77477
7D4>9CD7C477 *mT m*

4153 TZ
4153 V
5183 I X

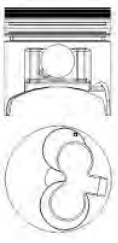
Kw°fz®w
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

8CP />QQ80	S 9	**8BDBvv**	**>> i**	3aD 4	**P@t x**		**f P99D>A**
k 8CP />QQ80	S 9	**8BDBvv**	**>> i**	3aD 4	**P@t x**		**f P99DC9**
I US HU S v 041t J		3: 2=7	43234	I UXYG S v 041t J		342=7	3=23=

DC4; 7CB77487
352=9/ Kyr 14: =48:

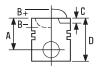
M 6=t 8
N4 4163
O 3158
P 9=1<3
5: É97

MWdf



7D4; 7CB77477
7D4; 7CB7C477 *mT m*

5183 I X V
4183 I X V
6183 I X V



I 8CPf	S	9	**8BDBvv**	**AA i**	3:V	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8D; D7**
I 8CPf X	S	9	**8BDBvv**	**>D i**	3aV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8D; D8**

GYZXG S v @a 41t JZO49a	35233	38238	I UXYG S v @041t JO49a	3<233 3=239
GYZXGaGT S v @a 41t JZO49a	37234	3<239	I UXYG S v @041t JZO49a	3<233 3=239
I US HU S v @0HzoÖZS Va 41t JO49a	3=234	44244	I UXYGaGT S v @041t JO49a	3=233 39239
I US HU S v @0HzoÖZS Va 41t JZO49a	43234	44244	I UXYGaGT S v @041t JZO49a	3=233 39239
I US HU ZU_X S v @041t JO49a	3=234	39237	S KX@aG G 41t JZO	39236 39243
I US HU ZU_X S v @041t JZO49a	43234	35245		

DC4; 7CB774>7
DC4; 7CB7C4>7 *mTm*

M 6=1t 8
N4 47133
N 6<1t 3
O 4143
P <7133
5: É97

df

7D4; 7CB77477
7D4; 7CB7C477 *mTm*

5133 I X V
4183 I X V
6133 I X V

N 8BPf T	S	9	**8AEDvv**	**DD4877 i**	3GND8GPa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9CD8B**
P 8BPf T	S	9	**8AEDvv**	**877 i**	3GPa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P; >ED>**
P 8BPf Z	S	9	**8AEDvv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P; >EDE**

GYZXG S v a0419 I JZt	44246	43248	OTYOMTOG S v @0419 J	3624:
GYZXG S v aOMZI 419 I JZt	3: 247	43248	S KX@aG S v @0419 I JZt	3<246
GYZXG S v a@0419 I JZt	3: 248		S UQQG 2S UQQG c 419 I JZt	34248
OTYOMTOG S v 0419 I JZO	3: 248	3824:	eGLOXG S v @0419 I JZt	36246 3<24<
OTYOMTOG S v 0419 I JZt	3: 248	3824:		

DC4>; 7; 77477
DC4>; 7; 7C477

M 781<3
N4 46183
N 78133
O 4143
O 4133
P : 31<3
5=É96

MWWWdf f b

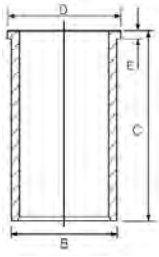
7D4>; 7; 77477
7D4>; 7; 7C477 *mTm*

4183 I Q
4183 V
5133 I X

8BP	S	9	**8AEDvv**	**>7 i**	3/S	4	**P@t x**					**f P8CAB;**
8BPM	S	9	**8AEDvv**	**>7 i**	3/S	4	**P@t x**					**f P8CB78**

GYZXG 419 J	352<5	3<2<9	I GaGR@XX S v @0419 J	362<5 3<2<<
GYZXG S v @0419 J	3=2<7	3<2=4	I GaGR@XX S v @04933J	362<5 3<2<<
GYZXGS Gc 419 J	382<9	392=3		

8>479; A97477



N <6133 **O** 476183 **P** <71=3 **Q** 7183

RDc B7B	S 9	**8DC7vv**	**>> i**	3aD 4	**P@t x**	**f P98; AD**
GXKTG 41=J		362=<	3<234			

DC4; ; BA77477
DC4; ; BA7C477 *mT m*

M 75168
N4 31: 3
P : 3183
57É96

df

7D4; ; BA77477
7D4; ; BA7A477 *mT*
7D4; ; BA7C477 *mT m*

5183 S U V
5183 V
6183 I X V

REc CB7	S 9	**8DC7vv**	**C> i**	33DG 4	**P@t x f u U x v xw**	**f P8E; CA**
REc CB9	S 9	**8DC7vv**	**AE4B7 i**	3eD8eN 4	**P@t x f u U x v xw**	**f P988>D**
REc CC7	S 9	**8DC7vv**	**AE i**	3eD 4	**P@t x f u U x v xw**	**f P8E; A8**
REc CC9	S 9	**8DC7vv**	**B7 i**	3eN 4	**P@t x f u U x v xw**	**f P8E; B;**
REc CC>	S 9	**8DC7vv**	**B7 i**	3eN 4	**P@t x f u U x v xw**	**f P8E; A9**
S UaGTU S v 041=JZO		3=233	38243	a@GXU G 41=JZO		3<234 45239
a@GXU G 41=JO		3<234	3: 247			

DC4878A77477
DC4878A7C477 *mT m*

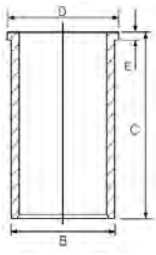
M 7: 139
N4 4: 1<3
N 6<133
O 31: 8
P : : 133
5<É93

MWdf f b

7D4878A77477
7D4878A7C477 *mT m*

5183 S U V
5183 V
6183 I X V

8>47979D7477



N <6133 **O** 488133 **P** <8133 **Q** 8133

dEY >7D	S 9	**8AEDvv**	**BB4DA i**	3 D8GGa 4	**P@t x f u U x v xw**	**f P; 7EA7**
dEY >8;	S 9	**8AEDvv**	**C74DE i**	3 V8GNG 4	**P@t x f u U x v xw**	**f P; ; BDD**
dEY >A7	S 9	**8AEDvv**	**DA487C i**	33Ga8GSa 4	**P@t x f u U x v xw**	**f P; 7EA8**
a@GXU H 419 I JZt		38247		a@GXU H 419 I JZO		3<249

DC4>9>E77477
DC4>9>E7C477 *mT m*

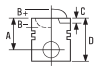
M 79133
N4 45168
N 79183
O 3163
P : 3183
63É93

MWWdf f b

7D4>9>E77477
7D4>9>E7C477 *mT m*

5183 I Q V
41: 8 V
5183 I X V

k 8DkQ8 /Qv xv0	S 9	**8CEBvv**	**DA i**	33Ga 4	**bx**	**f P8CB9B**
m8DkQ /Qv xv0	S 9	**8CEBvv**	**DC4E9 i**	33Ge8GNV 4	**bx**	**f P8CB; ;**
m8DkQX /Qv xv0	S 9	**8CEBvv**	**D84DA i**	33GD8GGa 4	**bx**	**f P8CEDC**
GYZXG S v @ 41<49a		352=<	43238	aKI ZXG 41<		3=233 3: 236



GYZXG S v a 41<		34237	44243	aKI ZXG 41<t 49a		432=8	3: 236
I UXYG S v 0041< 49a		3<233	3=239	aKI ZXG S v 0041< 49a		37235	3: 23<
S KX@G G 41<t 49a		38236	39243	aKI ZXG S v 0MZY 41< 49a		3<235	3: 23<
YOMT_S 41<		39236	3: 238	eGLOXG G 41<		3=233	3<238
ZOMXG 41<		39237	3<23=	eGLOXG G 41< 49a		382==	3<238

DC48>8977477
DC48>897C477 *mT m*

M 57143
P 771t 3
4<É88

f b

7D48>8977477
7D48>897C477 *mT m*

4153 TZ
4153 V
5133 I X

Yfppw Yfl sw Gntp´ Gnp´z Gnntl tz

O 8DkQ	S	9	**8CEEvv**	**E9 i**	3GNV	4	**bx**	**f P8CB88**
O 8DkQX	S	9	**8CEEvv**	**DA i**	3GGa	4	**bx**	**f P8CB; B**
k 8DkQ	S	9	**8CEEvv**	**DA i**	3GGa	4	**bx**	**f P8CB9A**

GYZXG S v 0041<	3=2=7	3<2=9	GYZXG S v 0041<t 49a	392=6	352=<
GYZXG S v 0041< 49a	442=7	36234	aKI ZXG 41<t 49a	3=2=8	3=233

DC4; 7CC77487
DC4; 7CC7C487 *mT m*

M 63173
N4 41<3
N 831<3
P 83173
54É89

7D4; 7CC77477
7D4; 7CC7C477 *mT m*
7D4; 7CC88477 *Tmm*

4183 SUV
4183 V
6133 I X

Yfppw Yfl sw Gntp´ Gnp´z Gnntl tz

O 9AkQ	a	9	**9>EDvv**	**89A i**	3GcD	4	**bx**	**f P8CB; A**
k 9AkQ	a	9	**9>EDvv**	**89A48>; i**	3GcD8GI S	4	**bx**	**f P8CB; >**

I GR@HXG 518 ta9	372=6	3: 2=<	aKI ZXG 518 tMYt	362=<	3: 233
I GaGR@XX S v 0D518 a9	3<2<<	392=7	aKI ZXG 518 ta9	3=2=8	3<233
US KMG 518 a9	362=7	3=233			

DC4; 7CC77477
DC4; 7CC7C477 *mT m*

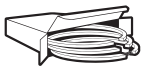
M 63178
N2 3169
O 5173
P 84136
54É89

7D4; 7CC77477
7D4; 7CC7C477 *mT m*
7D4; 7CC88477 *Tmm*

4183 SUV
4183 V
6133 I X

Yfppw Yfl sw Gntp´ Gnp´z Gnntl tz

m8E Pf	S	9	**8E87vv**	**DD i**	3GND	4	**P@t x f u U x v xw**	**f P8DBAE**



m8E Pf X /Q >0	S 9	8E87vv	C> i 33DD 4	P@t x f u U x v xw	f P978>E
GYZXG S v a 41=I JZt		3<237 44243	aKI ZXG S v 0041=I JZO	37235	3=23<
GYZXG S v a 41=I JZO		34237 3823=	aKI ZXG S v 0MZY 41=I JZO	3<235	3: 23<
GYZXGaGT S v a 41=I JZt		36238 44244	eGL0XG S v 0041=I JZO	3: 238	44247
Y0MT_S 41=I JZO		37237 3623<			

DC489>7774; 7
DC489>77D4; 7 *mTm*

M 79183
N4 4: 178
N 6: 188
O 3198
P : 5183
59É94

ZN df

7D489>777477
7D489>77D477 *mTm*

5133 I Q V
5133 V
5133 I X V

m8E Pf T /Q >0	S 9	8E87vv	887 i 3GVD 4	P@t x f u U x v xw	f P8D78B
m8E Pf V	S 9	8E87vv	DD i 33ND 4	P@t x f u U x v xw	f P8D78C
GYZXG S v a 41=I JZt		3<237 44243	Y0MT_S 41=I JZ049a	37237	3623<
GYZXG S v a 41=I JZO		34237 3823=	aKI ZXG S v 0041=I JZ049a	37237	3823=
GYZXG S v a 41=I JZ049a		34237 3823=	aKI ZXG S v 0MZY 41=I JZ049a	37237	3: 23<
GYZXG S v a 41=I JZt 49a		3<237 3623=	eGL0XG S v 0041=I JZO	3: 238	44247
GYZXGaGT S v a 41=I JZt		36238 44244			

DC48>B877477
DC48>B87D477 *mTm*

M 79183
N4 48173
N 74183
O 4136
P : 5183
59É94

-8<5890435,
MWWWZN df f b

7D48>B877477
7D48>B87B477 *mTm*
7D48>B87D477 *mTm*

5133 I Q V
5133 V
5133 I Q V

DC48>B877487
DC48>B87B487 *mTm*

M 79183
N4 48173
N 74183
O 413:
O 4135
P : 5183
63É9:

-8<59=0836,
MWWWdf f b

7D48>B877477
7D48>B87B477 *mTm*
7D48>B87D477 *mTm*

5133 I Q V
5133 V
5133 I Q V

M97 Pf /Q A0	S 9	8EABvv	EB i 33PG 4	P@t x f u U x v xw	f P9ACD8
M97 Pf O /Q A0	S 9	8EABvv	D8 i 33GD 4	P@t x f u U x v xw	f P99AED
M97 Pf T /Q A0	S 9	8EABvv	88D4898 i 3GaD8GaV 4	P@t x f u U x v xw	f P99B7;
M97 Pf V /Q A0	S 9	8EABvv	EB i 33PG 4	P@t x f u U x v xw	f P99B77

M97 Pf X /Q A0	S	9	**8EABvv**	**D8 i**	3GGD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9ACD7**
I 97 Pf V	S	9	**8EABvv**	**EB i**	3GPG	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9C9; D**
m97 Pf V	S	9	**8EABvv**	**EB i**	3GPG	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9ACD;**

GYZXG S v a0513 I JZt	4523= 43248	OTYOMTOGS v 0513 I JZO	3: 23< 3824:
GYZXG S v a0MZI 513 I JZt	43244 43248	eGLOXG S v 00513 I JZt	43244 3<24<
I GYI GJG 513 I JZO	35246		

DC4>; BA77477
DC4>; BA7B477 *mT m*

7D4>; BA77477
7D4>; BA7B477 *mT m*

M	7916
N4	481<3
N	7613
P	: 516
	63É99

-8-<677G739,

MWWWdf f b

4183	MJI V
4183	V
5133	I X V

GDC LKZ-Ring

m97 PY	S	9	**8EE8vv**	**E; i**	3GNa	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9>C>8**
m97 PY T	S	9	**8EE8vv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8E98E**

GTZGXG G 513 I JZt	3<239 37248	GTZGXG G 513 I JZO	3<239 37248

DC4DCE977477
DC4DCE97C477 *mT m*

7D4DCE977477
7D4DCE97C477 *mT m*

M	7916
N4	461=8
N	791 3
P	: 516
	5<É9:

MWWWdf f b

5133	I X V
5133	V
6133	TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y Ed B; 7	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9AB>A**
Y Ed BE9 /Q A0	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P; 9DEC**

a@aGXU G 513 I JZO	34239 3: 247		

DC4>99777487
DC4>9977C487 *mT m*

7D4>99777477
7D4>9977C477 *mT m*

M	7<133
N4	47133
N	83133
P	: 9133
	65É98

WWdf f b

5183	S UR V
5133	S UR V
5133	I X V

Y Ed CD7 /Q >0	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97DDE**
Y Ed CD9	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P98DDE**
Y Ed CD>	S	9	**8EEAvv**	**D> i**	3GGS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P98E7>**
Y Ed CDB /Q >0	S	9	**8EEAvv**	**BB4D> i**	3 D8GGS	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9AB>C**

Y Ed CDD	S 9	8EEAvv	D> i 33GS 4	P@t x f u U x v xw	f P9AB>>
a@aGXU G 513 I JZO		34239 3: 247			

DC4>99777477
DC4>9977C477 *mT m*

M	7: 1=5
N4	471=3
N	7=13:
O	3173
O	3173
P	: 9133
	65É98

MWWWdf fb

7D4>99777477
7D4>9977C477 *mT m*

5183		SURV
5133		SURV
5133		IXV

k 97 Pf T	S 9	8EEAvv	C> i 33DG 4	P@t x f u U x v xw	f P8CAE9
US KMG 513 JZO49a		342=< 3=233	aKI ZXG 513 JZt 49a	392=: 43234	
aKI ZXG 513 JZO49a		3<2=8 43234			

DC4879E77487

M	781<3
N4	4719 4
N	74133
P	: 31<3
	5=É9<

MWdf fb

7D4879E77477
7D4879E7C477 *mT m*

5183		IQV
41t 8		V
6133		IXV

k 97 Pf X	S 9	8EEAvv	B7 i 3eN 4	P@t x f u U x v xw	f P8CB9C
I 97 Pf X	S 9	8EEAvv	B7 i 3eN 4	P@t x f u U x v xw	f P8CE9B
GYZXG S v @a 513 JO		352=< 38238	aKI ZXG 513 JO49a	3<2=8 43234	
GYZXGaGT S v @a 513 JO		3<2=< 3<239	eGL@XG G 513 JO49a	432== 3<238	
aKI ZXG 513 Jt 49a		3<2=8 43234			

DC4879D77487
DC4879D7C487 *mT m*

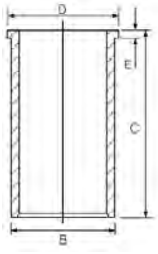
M	781<3
N4	471<7
N	74133
O	4133
P	: 31<3
	5=É9<

MWdf fb

7D4879D77477
7D4879D7C477 *mT m*

5183		IQV
41t 8		V
6133		IXV

8>4879D77477 **N** < 133 **O** 493133 **P** =3133 **Q** 7183



k 99 Pf T	S 9	98C8vv	DA i 33Ga	P@t x f u U x v xw	f P8CE8B
I 99 Pf T	S 9	98C8vv	DA4DD i 33Ga8GND 4	P@t x f u U x v xw	f P8CE9D
I 99 Pf d	S 9	98C9vv	E9 i 33NV 4	P@t x f u U x v xw	f P8CB9E
LXUTZKXG S v @0515 JZO		432=< 43237	aKI ZXG 515 JZO49a	3<2=8 43234	
US KMG 515 JZO49a		3<233 3: 236	aKI ZXG S v @0515 JZO49a	37235 4323<	
Y@MT_S 515 JZO		38236 3823<	aKI ZXG S v @MZY 515 JZO49a	3<235 3: 23<	
Y@TZXG 515 JZO		3: 2=: 372==			

DC489B777487
DC489B77C487 *mT m*

M	781<3
N4	4719:
N	76133
O	4138
P	:31<3
	5=É9<

MWWWdf fb

7D489B777477
7D489B77C477 *mT m*

41 8		I Q V
41 8		V
6133		I X V

I 97 Pf T	S 9	**8EEAvv**	**C> i** 3GDG 4	**P@l x f u U x v xw**			**f P8CE9>**
GYZXG S v @a 513 JZO49a		352=<	38238	aKI ZXG 513 JZt 49a		392=:	43234
GYZXGaGT S v @a 513 JZO		37237	3<239	aKI ZXG S v @0513 JZO49a		37235	4323<
Y@MT_S 513 JZO		38236	37237	aKI ZXG S v @0MZY 513 JZO49a		3<235	3: 23<
aKI ZXG 513 JZO49a		3<2=8	43234	eGL@XG G 513 JZO49a		372==	3<238

DC489B777477
DC489B77C477 *mT m*

M	781<8
N4	4719<
N	74133
O	4138
P	:31<3
	5=É9<

MWWWdf fb

7D489B777477
7D489B77C477 *mT m*

41 8		I Q V
41 8		V
6133		I X V

8DeQ	S 9	**8CEBvv**	**D94DA i** 3GGN8GGa 4	**bx**			**f P8CB7>**
8DeQT	S 9	**8CEBvv**	**DA i** 3GGV 4	**bx**			**f P8CAC7**
8Deh	S 9	**8CEBvv**	**BB i** 3 D 4	**bx**			**f P8CAC8**
GYZXG S v @041<		342<9	452=3	I GXRZUT S v @041<Y		3=2<9	362=7
GYZXG S v @041<MZK		3=2<7	3<2=4	I GaGR@XX S v @041<t		3=2<4	3<2<<
GYZXG S v @041<t		3=2<8	3<2=4	I GaGR@XX S v @04<33t		362<8	432<<
GYZXG S v @041<t 49a		3=2=8	352=<	I GaGR@XX S v @041<		3=2<<	3<2=8
I GXRZUT S v @041<t		3=2<9	362=7	I GaGR@XX S v @041<t I I ß		362=3	442=8

DC4; 7C977477

M	66198
N4	7133
N	76133
P	86198
	54É95

7D4; 7C977477
7D4; 7C97C477 *mT m*

4183		I X V
4183		V
6133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Y Ef BC7 /Q A0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@l x f u U x v xw**			**f P9>C>E**
Y Ef BC9 /Q A0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@l x f u U x v xw**			**f P9A8AA**
Y Ef BCB /Q >0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@l x f u U x v xw**			**f P9>C>D**
Y Ef BCD	S 9	**99EDvv**	**87C i** 3GSa 4	**P@l x f u U x v xw**			**f P9A8AB**
Y Ef BD7	S 9	**99EDvv**	**E9487C i** 3GNV8GSa 4	**P@l x f u U x v xw**			**f P9A8; D**

Y Ef BDB /Q A0	S 9	**99EDvv**	**E9 i** 3GNV 4	**P@t x f u U x v xw**		**f P9A8A9**
Y Ef BE7 /Q A0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**		**f P9A87A**
Y Ef BE9 /Q >0	S 9	**99EDvv**	**C>4E9 i** 3GDG8GNV 4	**P@t x f u U x v xw**		**f P9A87B**
Y Ef BE> /Q >0	S 9	**99EDvv**	**87C4887 i** 3GSa8GVD 4	**P@t x f u U x v xw**		**f P9>CA7**
Y Ef BEB /Q >0	S 9	**99EDvv**	**E9487C i** 3GNV8GSa 4	**P@t x f u U x v xw**		**f P9A8>E**
Y Ef BED /Q A0	S 9	**99EDvv**	**E9487C i** 3GNV8GSa 4	**P@t x f u U x v xw**		**f P9>CA8**
Y Ef C79	S 9	**99EDvv**	**8774897 i** 3GPa8GaP 4	**P@t x N@f u U x v xw**		**f P9EDEA**
Y Ef DC7	S 9	**99EDvv**	**C>4D8 i** 3GDD8GGD 4	**P@t x f u U x v xw**		**f P9EDEC**
Y Ef DCB	S 9	**99EEvv**	**E9 i** 3GNV 4	**P@t x f u U x v xw**		**f P; 88; 8**
Y Ef DD7	S 9	**99EDvv**	**87C4887 i** 3GSV8GVD 4	**P@t x f u U x v xw**		**f P; 8B>9**
Y Ef DED	S 9	**99EDvv**	**E94887 i** 3GNV8GVD 4	**P@t x f u U x v xw**		**f P; >>B9**
S UaGTU S v 00516 I JZO		38243		S UaGTU S v 0@aGT 516 I JZO		38243
S UaGTU S v 00516 I JZOXb J		38243		S UaGTU S v 0@aGT 516 I JZOXb J		38243

DC4>; A977477
DC4>; A97C477 *mT m*

M 7<183
N4 49153
N 83183
O 3178
P : 9183
65É98

MWWWdf f b

7D4>; A977477
7D4>; A97C477 *mT m*

5183 MJI V
5183 S U V
5183 I X V

GDC

97 ZQ	S 9	**8EEDvv**	**DA i** 3GGa 4	**bx**		**f P8CB; C**
O 97 ZQ	S 9	**8EEDvv**	**DA i** 3GGV 4	**bx**		**f P8CAD>**
GYZXG S v 00513		3=2=9	3<2=4	I GaGR0XX S v 00513 t	3=2=9	3<2=<
GYZXG S v 00513 t		342=<	452=4	I GaGR0XX S v 00513 t l l ß	3=2=9	3<2=<
GYZXG S v 00513 t l l ß		342=4	3<2=6	I GaGR0XX S v 00513 t	3=2=<	432=5
GYZXG S v 00513 t		3=2=4	3=2=<	I GaGR0XX S v 00513 t l l ß	3=2=<	442=8
I GR0HXG 513 t		392=3	3: 2=:	LXUTZKXG S v 0513	372=8	3<2=<
I GXRZUT S v 00513		3=2=9	362=7	LXUTZKXG S v 0513 t	362=5	432=<

DC4; 7BD774; 7

M 63173
N4 8133
N 8: 183
P 83173
54É95

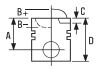
f b

7D4; 7BD77477
7D4; 7BD7C477 *mT m*
7D4; 7BD88477 *Tmm*

4183 I X V
4183 V
6183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

97 kQ	S 9	**8EEDvv**	**88A i** 3GVa 4	**bx**		**f P8CB7A**
O 97 kQ	S 9	**8EEDvv**	**887 i** 3GVD 4	**bx**		**f P8CADA**
GYZXG S v 0041=		362=<	3<2=4	I GR0HXG 513 t 49a	392=3	352=7
GYZXG S v 00513 MZK 49a		382=<	3<2=4	I GaGR0XX S v 00513 MYt	3=2=<	3<2=5
GYZXG S v 00513 t 49a		3=2=4	352=<	I GaGR0XX S v 00513 t 49a	3=2=<	442=8



DC4; 7BD77487
DC4; 7BD7C487 *mT m*

M 63176
N4 31<8
N : 3183
O 5153
P 88176
54É95

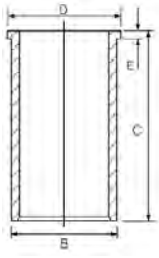
7D4; 7BD77477
7D4; 7BD7C477 *mT m*
7D4; 7BD88477 *Tmm*

4183 I X V
4183 V
6133 I X

Yßppw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

m99 eQ/Qv xv0	S	9	**98EDvv**	**87B487D i**	3GSS8GSc	4	**bx**	**f P8CBD;**
GYZXG S v Qa 515 49a			36233	43238	aKl ZXG S v 0DMZY 515 49a		3<235	3: 23<
aKl ZXG 515 t 49a			3<2=8	3: 236	ac553 515 t		3=233	3: 238
aKl ZXG S v 00515 49a			34235	4323<	eGLQXG G 515 49a		442=<	3<237

8>4797>A7477 **N** <=135 **O** 46: 158 **P** =8178 **Q** 7196



SEf C97	S	9	**98DDvv**	**BB i**	3D	4	**P@i x f u U x v xw**	**f P8E; A;**
SEf C99	S	9	**98DDvv**	**BB i**	3D	4	**P@i x f u U x v xw**	**f P8E; AB**
SEf CA7	S	9	**98DDvv**	**BB i**	3D	4	**P@i x f u U x v xw**	**f P8E; AA**
S UaGTU S v 0515 JZO				3=233	38243			

DC489C>77477
DC489C>7C477 *mT m*

M 87186
N4 4: 183
N 73173
O 5133
P <7153
64É98

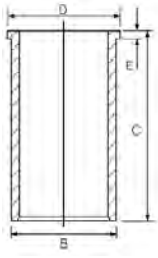
MWdf f b

7D489C>77477
7D489C>7C477 *mT m*

6133 VY V
41:8 V
5183 V

O 99;	S	9	**99; Dvv**	**; E4A> i**	3/P8cP	4	**P@i x**	**f P99DCE**
HXGaG 515 J				452<<	3=2=9			

8>47988E7477 N =5146 O 496183 P =8133 Q 7133



SEg B;9 /Q	>0	S 9	9>B>vv	DD487C i	3GND8GSa	4	P@t x	f u U x v	xw	f P9>CAA
SEg BA7 /Q	>0	S 9	9>B>vv	C>487C i	3GDG8GSa	4	P@t x	f u U x v	xw	f P9>C;C

SUaGTU Sv 0518 IJZO 43234 45243

DC48;CA774;7
DC48;CA7C4;7 *mTm*

M	8613:
N4	4914 3
N4	71=3
N	7<133
O	5133
O	4193
P	<613= 64É98

MWdf fb

7D48;CA77477
7D48;CA7C477 *mTm*

6133		SUV
418		V
5183		V

SEg C97 /Q	;0	S 9	9>B>vv	D>4DA i	3GGV8GGa	4	P@t x	f u U x v	xw	f P8E;AD
SEg C9> /Q	;0	S 9	9>B>vv	D> i	3GGV	4	P@t x	f u U x v	xw	f P8E;BD
SEg C;7 /Q	;0	S 9	9>B>vv	EE i	3GPV	4	P@t x	f u U x v	xw	f P8DC78
SEg CA7 /Q	;0	S 9	9>B>vv	D> i	3GGV	4	P@t x	f u U x v	xw	f P8E;BA
SEg CA> /Q	;0	S 9	9>B>vv	C;4D> i	3i8GGV	4	P@t x	f u U x v	xw	f P8E;BE

SUaGTU Sv 0518	44236 45239	a@aGXU G518 IJZO	37236	3:239
SUaGTU Sv 0518 IJZO	44236 45239	a@aGXU G518 JZO	3:236	3:247
SUaGTU Sv 0518 JZO	34234 38243			

DC48;CA77487
DC48;CA7C487 *mTm*

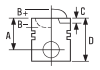
M	8613 6
N4	4:1<8
N	7615 3
O	4198
O	41=3
P	<613= 64É98

MWdf fb

7D48;CA77487
7D48;CA7C487 *mTm*

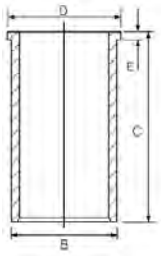
5183		SUV
418		V
5183		IXV

9;P		S 9	99B7vv	>D4A9 i	3aV8cG	4	P@t x			f P8CACA
9;Pfd		S 9	99B7vv	C> i	3GDD	4	P@t x	f u U x v	xw	f P8CACB
9;fP		S 9	99B7vv	B; i	3ea	4	P@t x	f u		f P8CACC
9;IP		S 9	99B7vv	A> i	3cP	4	P@t x			f P8CE8>



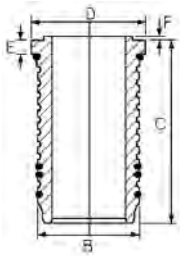
9; I Pf	S 9	**99B7vv**	**BB i** 3 D 4	**P@t x**	**f u U x v xw**		**f P8CACE**
I GXRZUT S v 00516 J		3=2<3	3<2<9	I GXRZUT S v 00516 ZJ		3<2<<	362=7
I GXRZUT S v 00516 ZJ		3=2<6	3<2<9	LXUTZKXG S v 0516 ZJ		3=2=4	392=<
I GXRZUT S v 00516 J		3=2<9	362=7	YKTGZUX 515 ZJ		442<7	3<2<

8>479>87477 **N** =8133 **O** 4: 5133 **P** =: 133 **Q** 71 3



9Af Pe /hY >8N0	S 9	**9>EEvv**	**DA i** 33GV 4	**P@t x**	**f u U x v xw**		**f P99DA7**
LXUTZKXG S v 0518 ZJY		442=4	432=<				

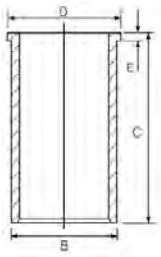
8A4BCB>97477 **N** 434183 **O** 4991<3 **P** 443133 **Q** <1=3 **R** 4153
8>4BCB>97477 **N** 434183 **O** 4991<3 **P** 443133 **Q** <1=3 **R** 4153



0mv@op° °pl w	Ynswp ßJtnsß?yr py pty	0mv@ßop° uztyß?	0mv@Öp wr° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt

eDg CAD	S 9	**9A77vv**	**AA4AD i** 3cV8ci 4	**P@t x**			**f P99DD;**
eDg CD7	S 9	**9A77vv**	**AA i** 3cV 4	**P@t x**			**f P99DD>**
eDg CD9	S 9	**9A77vv**	**AA i** 3cV 4	**P@t x**			**f P99DDA**
GXKTG 518 J		362=<	3<234				

8>4799AB7477 **N** =9133 **O** 49: 163 **P** =<1=3 **Q** 8133
8>479DE; 7477 **N** =: 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =: 18< **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =: 1: 3 **O** 49: 133 **P** 4331=3 **Q** 8133



D8>759; 59ADA6; C77 /e yØ 0	S 9	**9D77vv**	**D> i** 33GS 4	**P@t x**	**f u U x v xw**		**Y bE9AB4;**
D8>75>; 59ADA6; C776; E77 /e yØ 0	S 9	**9D77vv**	**D> i** 33GS 4	**P@t x**	**f u U x v xw**		**Y bE9AB49**
eEi C77	S 9	**9D77vv**	**D> i** 33GS 4	**P@t x**	**f u U x v xw**		**f P988A7**
eEi C79	S 9	**9D77vv**	**D> i** 33GS 4	**P@t x**	**f u U x v xw**		**f P8E; B8**

S UaGTU 51<J	342==	S UaGTU S v 051<ZJ0	432=< 43234
S UaGTU S v 051<JZ0	432=< 43234		

DC4DA>C77477
DC4DA>C7D477 *mT m*
Kyr 158: 55: =

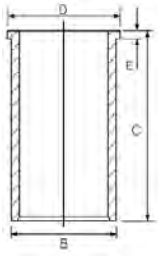
M 8<t 8
N4 4=173
N 6=173
P =9198
65É: <

MWWWdf

7D4DA>C77477
7D4DA>C7D477 *mT m*

6133 I X
5133 V
6133 I X

8>4798; 98477 **N** =: 187 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 7477 **N** =: 183 **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 8477 **N** =: 18< **O** 49: 133 **P** 4331=3 **Q** 8133
8>479DE; 9477 **N** =: t 3 **O** 49: 133 **P** 4331=3 **Q** 8133



DC4899977487
DC489997D487 *mT m*
Kyr 158: 55<3

M 8<t 8
N4 4=173
N 6=158
P < 193
65É: 5

MWWWdf fb

7D4899977477
7D489997D477 *mT m*

5133 I Q V
5133 V
5133 I X V

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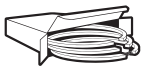
		CCM	x		9
Td>E9TfU		NVDD	S	i N9DD	9
d >9APaTO		NSi i	S	i N9DD	;
dMB;7PaTO/Q	A0	Ni ec	a	eP9DD	8
hY ;E9Tf		Gcci	P	i N9DD	9
hY >E9Td		NSi i	S	i N9DD	9
hY >E9Te		NVDD	S	i N9DD	9
hY >E9Tf		NPi P	S	i N9DD	9



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DC4>>EE77477

M	7916
N4	481<3
O	414:
O	4155
P	:516
	63133É98133

MWWWdf fb

7D4>>EE77477

5133		MJI V
5133		V
5133		I Q V

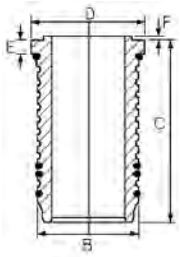
GDC LKZ-Ring

Td>E9TfU	S 9	9A77vv	DA i 3GGa 4	P@t x f u	Y b>7A;
hY ;E9Tf	P 9	8CCEvv		P@t x f u	Y b>7>E
hY >E9Td	S 9	9>EEvv		P@t x f u	Y bE8C849
hY >E9Te	S 9	9A77vv		P@t x f u	Y bE8C848
hY >E9Tf	S 9	9;E;vv		P@t x f u	Y b>7>C

OTJ_YZXOGR

8A4BCB>97477 N 4341<3 O 4991<3 P 4431<3 Q <1=3 R 4153

8>4BCB>97477 N 4341<3 O 4991<3 P 4431<3 Q <1=3 R 4153



Qmv@op° °plw	Ynswp ßJtnsß°yrpy pty	Qmv@ßop° uztyß°	Qmv@Öp w° °pw°	I zx ' ´pyop w r°l ´ytÜzyt

d >9APaTO	S 9	9>EEvv	87A489A i 3GSP8GcD 4	P@t x f u U x v xw	f P8DB;;

DC4>9E977477

M	8813
N4	4<13
N	7713
P	<613
	65É9<

MWWWdf fb

7D4>9E977477

5113		MJI V
4113		V
5113		TZ

GDC

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		CCM	x		9
N 87		GGDe	S	cD9DD	8
N 87 Q		GGDe	S	cD9DD	8
N 8> a Q		GPi c	S	ca9DD	>
N 8>5 Q		GPi c	S	ca9DD	>
N 8>5> e		GPi c	S	ca9DD	>
N >8B> f /Q	A0	GVi a	S	ci 9DD	E
N >8B> f 9 /Q	A0	GVi a	S	ci 9DD	E
N >8B> f ; /Q	A0	GVi a	S	ci 9DD	E
N >8B> f > /Q	A0	GVi a	S	ci 9DD	E
N >97> e;		Gi i i	S	ec9VD	89
PBM3D7 /Q	; 0	VSeD	a	i e9SP	8>
PBM987 /Q	; 0	VSeD	a	i e9SP	8>
PBM9; 7 /Q	; 0	VSeD	a	i e9SP	8>
PBM9A7 /Q	; 0	VSeD	a	i e9SP	8>
PBN /Q	; 0	VSeD	a	i e9SP	8>
PCO98A /Q	90	cPDD	a	GDc9DD	99
PCO9A7 /Q	90	cPDD	a	GDc9DD	99
PCO9CA /Q	90	cPDD	a	GDc9DD	99
PCO9E7 /Q	90	cPDD	a	GDc9DD	99
PCO; 87 /Q	90	cPDD	a	GDc9DD	99
PCP QMQ9 /Q	90	cGSa	a	GDe9DD	9;
PCP QOQ9 /Q	90	cGSa	a	GDe9DD	9;
PCP QQQ9 /Q	90	cGSa	a	GDe9DD	9;
PCP XMQ9 /Q	90	cGSa	a	GDe9DD	9;
PCP XNQ9 /Q	90	cGSa	a	GDe9DD	9;
PCQ9>7 /Q	>0	cGSa	a	GDe9DD	9>
PCQ9D7 /Q	>6A0	cGSa	a	GDe9DD	9>
PCQ9E7 /Q	>0	cGSa	a	GDe9DD	9>
PCQ; 97 /Q	>6A0	cGSa	a	GDe9DD	9>
PCR9>7 /Q	A0	cGSa	a	GDe9DD	9>
PCR9B7 /Q	A0	cGSa	a	GDe9DD	9>
PCR9E7 /Q	A0	cGDD	a	GDe9DD	9>
PCR; 77 /Q	A0	cGDD	a	GDe9DD	9>
PCR; >7 /Q	A0	cGDD	a	GDe9DD	9>
PEM9B7 /Q	; 0	i PaS	a	GND9DD	9A
PEM; 77 /Q	; 0	i PaS	a	GND9DD	9A
PEM; >7 /Q	; 0	i PaS	a	GND9DD	9A
PEM; D7 /Q	; 0	i PaS	a	GND9DD	9A
PEN9B7 /Q	>6A0	i PaS	a	GND9DD	9B
PEN; 77 /Q	>0	i PaS	a	GND9DD	9B
PEN; 87 /Q	>6A0	i PaS	a	GND9DD	9B
PEN; >7 /Q	>0	i PaS	a	GND9DD	9B
PEN; B7 /Q	>6A0	i PaS	a	GND9DD	9B
PEN; D7 /Q	>0	i PaS	a	GND9DD	9B
P87M; 97		i aDD	a	GND9aV	9D
P87M; B7		i aDD	a	GND9aV	9D
P87N; 97 /Q	90	i aDD	a	GND9aV	9D
P87N; B7 /Q	90	i aDD	a	GND9aV	9D
P88M>; 7 /Q	; 0	GDeSD	a	GNP9DD	; E
P88N>; 7 /Q	>6A0	GDeSD	a	GNP9DD	; E
P88O; ; 7 /Q	A0	GDeSD	a	GNP9DD	; E
P88O; C7 /Q	A0	GDeSD	a	GNP9DD	; E
P88O>87 /Q	A0	GDeSD	a	GNP9DD	; E
P89 /Q	90	GNGDD	a	GPG9DD	>>
P89M; >7 /Q	90	GNGDD	a	GPG9DD	>A
P89M; D7 /Q	90	GNGDD	a	GPG9DD	>B
P89M>97 /Q	90	GNGDD	a	GPG9DD	>C
P89O; >7 /Q	90	GNGDD	a	GPG9DD	>D
P89O; D7		GNGDD	a	GPG9DD	>D
P89O>97		GNGDD	a	GPG9DD	>E

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		CCM	x		9
P89O>B7		GNGDD	a	GPG9DD	>E
P89P; >7 /Q	; 0	GNGDD	a	GPG9DD	>D
P89P; D7 /Q	; 0	GNGDD	a	GPG9DD	>E
P89P>97 /Q	; 0	GNGDD	a	GPG9DD	>E
P89P>B7 /Q	; 0	GNGDD	a	GPG9DD	>E
P89PA77 /Q	; 0	GNGDD	a	GPG9DD	>E
P89R; E7 /Q	>0	GNGDD	a	GPG9DD	A7
P89R>; 7 /Q	>0	GNGDD	a	GPG9DD	A7
P8; M; B7 /Q	A0	GNeDD	a	GPG9DD	A8
P8; M>77 /Q	A0	GNeDD	a	GPG9DD	A8
P8; M>>7 /Q	A0	GNeDD	a	GPG9DD	A8
P8; M>D7 /Q	A0	GNeDD	a	GPG9DD	A8
P8; MA97 /Q	A0	GNeDD	a	GPG9DD	A8
P8; O; D7 /Q	A0	GNeDD	a	GPG9DD	A9
P8; O>97 /Q	A0	GNeDD	a	GPG9DD	A9
P8; O>B7 /Q	A0	GNeDD	a	GPG9DD	A9
P8; OA77 /Q	A0	GNeDD	a	GPG9DD	A9
P8; OA>7 /Q	A0	GNeDD	a	GPG9DD	A9
P8; T>>7 /Q	A0	GNeDD	a	GPG9DD	A;
P 8B		GVi a	S	ce9DD	D
P8BM		GaGND	a	GSS9DD	AC
P8BM>C7 /Q	90	GaGND	a	GSS9DD	AC
P8BMA97		GaGND	a	GSS9DD	AC
P8BNA97		GaGND	a	GSS9DD	AC
P 97		Gi ea	V	ca9V/D	A
P 9>		NPeP	a	ca9V/D	B
P 9> f		NPeP	a	ca9V/D	C
P 9> f U0		NPeP	a	ca9V/D	C
P; E/>59; B0		Peaa	S	i e9Se	8C
PB7M		VSeD	a	i e9SP	8;
PC7N		acPD	a	GDS9ccV	8D
P877M		i aDD	a	GND9aV	9C
P877N		i aDD	a	GND9aV	9C
P877NTO		i aDD	a	GND9aV	9C
P877NdO		i aDD	a	GND9aV	9C
P >8B9 f		GVaD	S	cV9DD	9
P >8B> f		GVaD	S	cV9DD	;
P >8E9 f ;		GecD	S	eD9DD	87
P >8E9 f >		GecD	S	eD9DD	87
P >97> f		Gi i c	S	eV9DD	88
PT87M/Q	90	i aDD	a	GND9aV	9D
PT87M9>A /Q	90	i aDD	a	GND9aV	9D
PT87M9DA /Q	90	i aDD	a	GND9aV	9D
PT87M; B7 /Q	90	i aDD	a	GND9aV	9D
PT89P; >7 /Q	; 0	GNGDD	a	GPG9DD	>D
PT89P; D7 /Q	; 0	GNGDD	a	GPG9DD	A>
PT89P>97 /Q	; 0	GNGDD	a	GPG9DD	AA
PT89Q; >7		GNGDD	a	GPG9DD	AB
PT89Q; D7 /Q	>0	GNGDD	a	GPG9DD	AB
PT89Q>97 /Q	>6A0	GNGDD	a	GPG9DD	AB
PT89Q>B7 /Q	>0	GNGDD	a	GPG9DD	AB
TP877M		i aDD	a	GND9aV	9C
TP877P		i aDD	a	GND9aV	9C
Y PC7		acPD	a	GDS9ccV	8D
Y P877M		i aDD	a	GND9aV	9C
Y P877N		i aDD	a	GND9aV	9C
f MP8B; 7S		GaGND	a	GSS9DD	AD
f MP8B; 7SQ		GaGND	a	GSS9DD	AD
f MP8B; 7b		GaGND	a	GSS9DD	AD
f MP8B; 8S		GaGND	a	GSS9DD	AD

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		CCM	x		9
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f MY PC7		acPD	a	GDS9ccV	8D
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f MY P897N		GGi eD	a	GPD9GcV	>7
f MY P898		GGi eD	a	GPD9GcV	>7
f PB7M		VSeD	a	i e9SP	8;
f PB7N		VSeD	a	i e9SP	8A
f PB7O		VSeD	a	i e9SP	8A
f PB7P		VSeD	a	i e9SP	8A
f PB7PS		VSeD	a	i e9SP	8A
f PB8N		VSeD	a	i e9SP	8A
f PB8R		VSeD	a	i e9SP	8A
f PB8RN		VSeD	a	i e9SP	8A
f PB8S		VSeD	a	i e9SP	8A
f PB8SM		VSeD	a	i e9SP	8A
f PB8SN		VSeD	a	i e9SP	8A
f PB8SO		VSeD	a	i e9SP	8A
f PB8SQ		VSeD	a	i e9SP	8A
f PB8Se		VSeD	a	i e9SP	8A
f PB; Q		VSeD	a	i e9SP	8B
f PB; Qe		VSeD	a	i e9SP	8B
f PC7M		acPD	a	GDS9ccV	8D
f PC7N		acPD	a	GDS9ccV	8D
f PC7O		acPD	a	GDS9ccV	8D
f PC7Q		acPD	a	GDS9ccV	8D
f PC7Qe		acPD	a	GDS9ccV	8D
f PC7R		acPD	a	GDS9ccV	8D
f PC7Re		acPD	a	GDS9ccV	8D
f PC7S		acPD	a	GDS9ccV	8D
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f PC8M		acPD	a	GDS9ccV	8E
f PC8Q		acPD	a	GDS9ccV	8E
f PC8R		acPD	a	GDS9ccV	8E
f PC8RM		acPD	a	GDS9ccV	97
f PC8RO		acPD	a	GDS9ccV	97
f PC8RP		acPD	a	GDS9ccV	8E
f PC8Rc		acPD	a	GDS9ccV	8E
f PC8Re		acPD	a	GDS9ccV	8E
f PC8Rec		acPD	a	GDS9ccV	8E
f PC8S		acPD	a	GDS9ccV	8E
f PC; Q/Q	80	acPD	a	GDS9ccV	98
f PC; QM		acPD	a	GDS9ccV	98
f PC; QN		acPD	a	GDS9ccV	98
f PC; Qe		acPD	a	GDS9ccV	98
f P877M		iaDD	a	GND9aV	9E
f P877MTO		iaDD	a	GND9aV	9E
f P877MdO		iaDD	a	GND9aV	9E
f P877N		iaDD	a	GND9aV	;7
f P877NS		iaDD	a	GND9aV	;7
f P877OTO		iaDD	a	GND9aV	;8
f P877R		iaDD	a	GND9aV	;8
f P877S		iaDD	a	GND9aV	;8
f P877SM		iaDD	a	GND9aV	;8

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f P877SS		i aDD	a	GND9aV	;8
f P878		i aDD	a	GND9aV	;9
f P878R		i aDD	a	GND9aV	;8
f P878RM		i aDD	a	GND9aV	;8
f P878RO		i aDD	a	GND9aV	;8
f P878RP		i aDD	a	GND9aV	;8
f P878S		i aDD	a	GND9aV	;8
f P878SM		i aDD	a	GND9aV	;8
f P878SN		i aDD	a	GND9aV	;8
f P878SQ		i aDD	a	GND9aV	;8
f P879R		i aDD	a	GND9aV	;;
f P879RMc		i aDD	a	GND9aV	9D
f P879RNc		i aDD	a	GND9aV	;>
f P879ROc		i aDD	a	GND9aV	9D
f P879RP /Q	80	i aDD	a	GND9aV	;;
f P879RPc		i aDD	a	GND9aV	;;
f P879RQc		i aDD	a	GND9aV	9D
f P879RR		i aDD	a	GND9aV	;;
f P879RSc		i aDD	a	GND9aV	9D
f P879RT		i aDD	a	GND9aV	;;
f P879RX /Q	80	i aDD	a	GND9aV	9D
f P879RY		i aDD	a	GND9aV	9D
f P879Rc		i aDD	a	GND9aV	9D
f P879Re		i aDD	a	GND9aV	9D
f P879Rf		i aDD	a	GND9aV	9D
f P87; P87 /Q	90	i aDD	a	GND9aV	;A
f P87; Q /Q	80	i aDD	a	GND9aV	;B
f P87; QM /Q	80	i aDD	a	GND9aV	;B
f P87; Qe /Q	80	i aDD	a	GND9aV	;B
f P87; WNQ /Q	80	i aDD	a	GND9aV	;B
f P87; WR /Q	80	i aDD	a	GND9aV	;B
f P897M		GGi eD	a	GPD9GcV	>7
f P897O		GGi eD	a	GPD9GcV	>7
f P897P		GGi eD	a	GPD9GcV	>7
f P897Q		GGi eD	a	GPD9GcV	>7
f P897R		GGi eD	a	GPD9GcV	>7
f P897RM		GGi eD	a	GPD9GcV	>7
f P897RN		GGi eD	a	GPD9GcV	>7
f P897RO		GGi eD	a	GPD9GcV	>7
f P897Rf c		GGi eD	a	GPD9GcV	>7
f P897S		GGi eD	a	GPD9GcV	>7
f P897SM		GGi eD	a	GPD9GcV	>7
f P897SS		GGi eD	a	GPD9GcV	>7
f P898R		GGi eD	a	GPD9GcV	>7
f P898RP		GGi eD	a	GPD9GcV	>7
f P898RT		GGi eD	a	GPD9GcV	>8
f P898RW		GGi eD	a	GPD9GcV	>7
f P898S		GGi eD	a	GPD9GcV	>7
f P898SP		GGi eD	a	GPD9GcV	>7
f P899		GGi eD	a	GPD9GcV	>9
f P899QP		GGi eD	a	GPD9GcV	>7
f P899R		GGi eD	a	GPD9GcV	>9
f P899RM		GGi eD	a	GPD9GcV	>9
f P899RMc		GGi eD	a	GPD9GcV	>7
f P899RNc		GGi eD	a	GPD9GcV	>7
f P899ROc		GGi eD	a	GPD9GcV	>7
f P899RT /Q	80	GGi eD	a	GPD9GcV	>7
f P899RW		GGi eD	a	GPD9GcV	>9
f P899RX		GGi eD	a	GPD9GcV	>7

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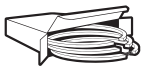
		CCM	x		9
f P899Rd		GGi eD	a	GPD9GcV	>9
f P899Re		GGi eD	a	GPD9GcV	>9
f P899WNQ		GGi eD	a	GPD9GcV	>7
f P899WQ		GGi eD	a	GPD9GcV	>9
f P8B; Qe		GaGND	a	GSS9DD	AE
f TP877M		i aDD	a	GND9aV	9C
f TP877N		i aDD	a	GND9aV	9E
f TP877P		i aDD	a	GND9aV	9E
f TP877PN		i aDD	a	GND9aV	; C
f TP877PO		i aDD	a	GND9aV	; C
f TP877PP		i aDD	a	GND9aV	; C
f TP877Q		i aDD	a	GND9aV	; C
f TP877QM		i aDD	a	GND9aV	; C
f TP877QN		i aDD	a	GND9aV	; C
f TP877QO		i aDD	a	GND9aV	; C
f TP877QP		i aDD	a	GND9aV	; C
f TP877QQ		i aDD	a	GND9aV	; C
f TP877QW		i aDD	a	GND9aV	; C
f TP878		i aDD	a	GND9aV	; 9
f TP878N		i aDD	a	GND9aV	9E
f TP878S		i aDD	a	GND9aV	; C
f TP878SN		i aDD	a	GND9aV	; C
f TP878SO		i aDD	a	GND9aV	; C
f TP878SP		i aDD	a	GND9aV	; C
f TP878WN		i aDD	a	GND9aV	; C
f TP878WO		i aDD	a	GND9aV	; C
f TP878WQ		i aDD	a	GND9aV	; C
f TP878WR		i aDD	a	GND9aV	; 9
f TP879WM		i aDD	a	GND9aV	; D
f TP879WN /Q	80	i aDD	a	GND9aV	; D
f TP879WP		i aDD	a	GND9aV	9D
f TP879WR		i aDD	a	GND9aV	; D
f TP879WW		i aDD	a	GND9aV	; D
f TP87; WN		i aDD	a	GND9aV	; B
f TP87; WP		i aDD	a	GND9aV	; B
f UP877		i aDD	a	GND9aV	; 9
f UP897R		GGi eD	a	GPD9GcV	>7
f UP898N		GGi eD	a	GPD9GcV	>;
f UP898WS		GGi eD	a	GPD9GcV	>;
f UP898Wb		GGi eD	a	GPD9GcV	>;
f UP898XS		GGi eD	a	GPD9GcV	>;
f UP898Xb		GGi eD	a	GPD9GcV	>;
f UP898b		GGi eD	a	GPD9GcV	>;
f Y PC7		acPD	a	GDS9ccV	8D
f Y P877M		i aDD	a	GND9aV	9E
f Y P879		i Vi i	a	GND9aV	9C
f Y P879M/Y t Øx0		i Vi i	a	GND9aV	; D
f Y P879O /Y t Øx0		i Vi i	a	GND9aV	; D
f Y P897M		GGi eD	a	GPD9GcV	>7
f i P898S		GGi eD	a	GPD9GcV	>;
f i P8B; 7S		GaGND	a	GSS9DD	AD
f i P8B; 7b		GaGND	a	GSS9DD	AD



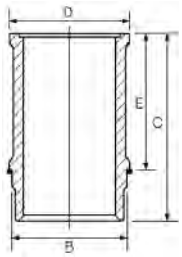
N 87	S 9	**887Dvv**	**; ; i**	35V 4	**bx**	**f P; ED7**
N 87 Q	S 9	**887Dvv**	**; ; 4; A i**	35V8Se 4	**bx**	**f P98; 9A**

99 JR 414 3<2 8 442 =

7D4; ; >B77477

41 8		I X V
5133		V
6133		I X

M 73133
P 9<133
4<É95



N : 8133 **O** 468133 **P** <81 3 **Q** =71<3

DE4; ; >B77477

Vt°ßzy I ®tuvmp ty QtßYpßzyvÜ
Yßppw
Ømvßop° °pl vÜ
Rtyp´ I ®tuvmp ty QtßYpßzyvÜ

Qzwpy y°´ tx G°°px mÜp´s vÜns
Yß sw
Ynsvp ßJtnsß°yr py pty
eÖtyop´vl°qm°ns°p y°´ ty G°°px mtp°
®p´q r m´

Vt°ßzy ot°' zytmp py vtß°p°wpx pyß
Gntp´
Ømvßop° uzty ß°
I spx t°p ot°' zytmp py vtß°p°wpx pyß

Vt°ß y ot°' zytmp py nzyu°yßz° °zwx pyßp1
Gnp´z
Ømvßp wr° °pwr°
I l x t°l ° ot°' zytmp py nzyu°yßz° °zwx pyßp1

O' t°ßzyt °zyz ot°' zytmtv°zwr ty vtßx zßz´p
Gnntl tz
I zx ' ´pyop wp r °l ´ytÜzyt
I tvyo´z ot°' zytmtp °zwr ty vtßx zßz´p

P >8B9 f	S 9	**8AB7vv**	**D> i**	33GS 4	**P@t x f u U x v xw**	**f P9; ED8**
I 63 J 5		43243	45245	a73 419 J 52	3=246	45248
Y73 00J 5		43243	45245	a73 J 5	36245	45249
Y93 002J 5		34244	45248	a83 J 5	34243	45245
Y<3 00419		39244	34247	a93 0419	35244	45248
Y<3 00J 5		34247	45249	a: 3 00419 2J 5	37244	45248

DC4>; ; B77477
DC4>; ; B7C477 *mT m*

7D4>; ; B77477
7D4>; ; B7C477 *mT m*

8>4797E77477

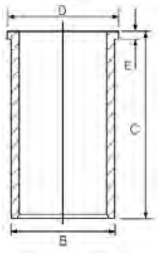
N : <133 **O** 475133 **P** : =183 **R** 8133

M 741 8
N4 461<8
N 78133
P 98153
59É94

MWWWdf f b

5183	I Q V
41=8	V
5133	I X V

LKZ-Ring



P >8B> f	S 9	**8AB7vv**	**D74D8 i**	3GDi 8GGD 4	**P@t x f u U x v xw**	**f P97D>E**
I 63 419 J		43239	45245	a83 419 J	34238	45245
Y73 00419 J		34238	45245	a: 3 00419 J	3: 23=	45244
Y<3 00419 J		34243	45244			

DC4>9>777477
DC4>9>77D477 *mT m*

7D4>9>777477
7D4>9>77C477 *mT m*
7D4>9>77D477 *mT m*

M 741 3
N4 46158
N 741<3
O 4153
P 98163
59É94

MWWWdf f b

6133	I Q V
41=8	V
5183	I X V

LKZ-Ring

N 8>5; Q	S 9	**8; EOvv**	**>B4A; i**	3aP8cN 4	**bx**	**f P; EDD**
N 8>5> e	S 9	**8; EOvv**	**A74A; i**	3ae8cN 4	**bx**	**f PA8>9**
N 8> a Q	S 9	**8; EOvv**	**A8 i**	3ai 4	**bx**	**f P9; >>A**

6730693 417 3<2 8 452<<

DC4; ; ; A77477

M 6: 183
P 97183
53É9:

7D4; ; ; A77477
7D4; ; ; A7C477 *mT m*

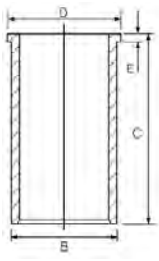
41: 8 I X V
5183 V
7183 I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

P 97 V 9 **8EDBvv** **A7 i** 3ae 4 **P%t x** **f P; ED;**

573 513 J 3=2 < 432<3

8>4798AC8477 **N**: =189 **O** 475183 **P** <5183 **Q** 7183
8>479D; B7477 **N**: =183 **O** 478183 **P** <4183 **Q** 71: 3



b tßs ´pnp°°p° zy n´l yv°sl dß°top S tßv°´npvÄ pwpy°ptß3r py G°°°'l ´°yr py G%n %bopx pyß n ß %bpmíp¿°ty l zy p°nzßo°´l° py w nl ´l opwntr p l w l zy ytnnstp°°wwß%z l wp´z x zß%´p

P 9> a 9 **9; D; vv** **AD4B8 i** 3ci 8eP 4 **P%t x** **f P; ED>**

573 517 J	3=2<4	452<7	: 73 517 Jtp°pw	3<2<7	3: 2=5
573 517 Jtp°pw	3<2 <	3<2=6	: 93 517 J	342<5	3: 2=5
593 517 J	3=2 =	452<4	=73 517 J	3<2=3	3: 2=8

DC487EA77477
DC487EA7A477 *mT*
DC487EA7C477 *mT m*
DC487EA88477 *Tmm*

M 741: 3
N4 4193
P : 41: 3
57É97

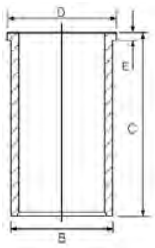
-8: 966,

df

7D487EA77477
7D487EA7A477 *mT*
7D487EA7C477 *mT m*
7D487EA88477 *Tmm*

41: 8 I X V
5183 V
6183 I X V

8>4798AC8477 **N**: =189 **O** 475183 **P** <5183 **Q** 7183
8>479D; B7477 **N**: =183 **O** 478183 **P** <4183 **Q** 71: 3



Tz ztWpßn°ßz°ß Usyp G°°°'l ´°yr q ´Q swW´tßÜb °p Yl y° pynznsp py ml° op u'p'p'z°´wp 'l°°l r p op w 'f°°pßßp o ös°twp°z°° ''p°°tzy Yty p°nzßo°´l Ypyü 'l°°l r r tz 'p´°'°ÜÜß%´p zwz

G C 741783
b tßs ´pnp°°p° zy n´l yv°sl dß°top S tßv°´npvÄ pwpy°ptß3r py G°°°'l ´°yr py G%n %bopx pyß n ß %bpmíp¿°ty l zy p°nzßo°´l° py w nl ´l opwntr p l w l zy ytnnstp°°wwß%z l wp´z x zß%´p

P 9>f a 9 **9; D; vv** **CE4D; i** 3GDc8GGP 4 **P%t x f u** **f P; EDA**

P 9>f UO a 9 **9; D; vv** **DA4EA i** 3GGV8GPD 4 **P%t x f u U x v xw** **f P; EDB**

: 73 517 ZJ	3<2<7	452=3	=73 517 ZJ	382=4	362=8
: 73 517 Z°´nz0Jtp°pw	3=2=8	3: 2=5	=73 517 ZJ 0%p´nzzwp´	3<2=3	452=7
: 93 517 J	3=2=5	452<8	=73 517 Z°´nz Jtp°pw	3<2=3	452=7

: 93 517 ZJ	372<6 3: 2=5	=73 0517 ZJ	3<2=7 432=<
: 93 517 ZJtl	3=2=< 3<2=3	=93 517 ZJ	3=2=4 3: 2=7
: 93 517 Z°´mz Jtp°pw	3<2=5 3: 2=5	=93 517 Zot	3=2=3 3<2=6
: <3 517 J	372=9 3: 2=3		

DC487ED77487
DC487ED7C487 *mTm*
DC487ED88487 *Tmm*

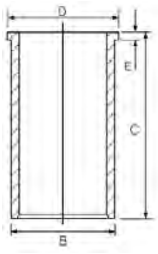
M 741: 3
N4 4193
P : 41: 3
57É97

MWTMdf fb

7D487ED77477
7D487ED7C477 *mTm*
7D487ED88477 *Tmm*

41: 8 I X V
5133 I X V
6133 I X V

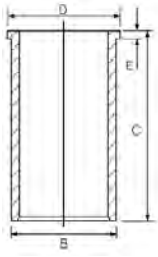
8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D; B7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71: 3



GC 741783
b tßs´pnp°°p° zy n´l yv°sl cß°top | St3v°´npwÄpwpy°pt3r py G°°°'l´°yr py | G®pn ®bpx pyß° n ß ®typmíp¿°ty | l zy p°nzß o°´l ° py w nl´l opwntr p l w | l zy ytnnstp°°wwßz l wp´z x zßz´p

P 8B	S 9	**8AEBvv**	**>7 i**	3/S 4		**P@t x**				**f P; ED8**
6730693 419 Jtp°pw			3<2<7 3: 2=4							

8>479; C; 7477 **O** 47=133 **P** <6183 **Q** 7183



N >8B> f /Q A0	S 9	**8AEBvv**	**8; 948>C i**	3GeD8NDD 4		**bx**	**f u U x v xw**			**f P9>BC;**
N >8B> f 9 /Q A0	S 9	**8AEBvv**	**8; 9 i**	3GeD 4		**bx**	**f u U x v xw**			**f P9B7B8**
N >8B> f ; /Q A0	S 9	**8AEBvv**	**887 i**	3GVD 4		**bx**	**f u U x v xw**			**f P9>BC>**
N >8B> f > /Q A0	S 9	**8AEBvv**	**DD i**	3GND 4		**bx**	**f u U x v xw**			**f P9CEE8**

Y93 0DZ6	37243 45248	a73 Z7	37247 45248
Y93 0DZ7	37243 45248	a73 Z7 MZJt	36245 45249
Y93 0DZ7L	37244 45248	a93 0Z6	3=243 45248
Y<3 0DZ7	43243 37247	a93 0Z7	3=243 45248
Y<3 0DZ7L	38244 34247	a93 0Z7L	37244 45248
a73 Z5 MZJt	37246 45249	a: 3 0DZ7	43243 45248
a73 Z6 MZJt	36245 45249	a: 3 0DZ7L	34244 45248

DC4>A9D774; 7
DC4>A9D7C4; 7 *mTm*

M 68133
N4 44183
N 861: 3
O 6176
O 519:
P 87133
54É7=

fb

7D4>A9D77487
7D4>A9D7C487 *mTm*

41:3 VaJ V
41:3 V
5133 TZ

Rl ßp´pyr typ/nspnv´tyr ßstnvyp°° | Y' ßp´p´S zßz´/Xtyr otnvp''´ cpy | S zßp°´°w ´tp°´/®´tdp´w'l t°°p°´o° °pr x pyß | S zßz´'z°ßp´tz´/nzx''zm ´p°'p°z´ °pr x pyßz° | S zßz´p°°nnp°°t@z/nzyßzwv´p°'p°°z´p °pr x pyßz

Yßpw | Yß sw | Gntp´ | Gnp´z | Gnntl tz

P >8E9 f ;	S 9	**8DC7vv**	**DA i**	3GGa 4	**P@t x**	**f u**	**f P8CEEC**
P >8E9 f >	S 9	**8DC7vv**	**CA i**	3GDN 4	**P@t x**	**f u**	**f P8CEEB**

Y73 041=J0	3: 233 45236	a73 41=J0	3: 233 39237

DC4878A77477
DC4878A7C477 *mT m*

M 7: 139
N4 4: 1<3
N 6<133
O 31 8
P : : 133
5<É93

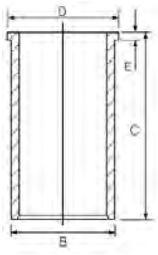
MWdf f b

7D4878A77477
7D4878A7C477 *mT m*

5183 SUV
5133 V
6133 IXV

8>47979D7477

N <6133 **O** 488133 **P** <8133 **Q** 8133



P >97> f	S 9	**8EECvv**	**877 i**	3GPa 4	**P@t x**	**f u U x v xw**	**f P8DEE;**

I 63 513 J	43239 45245	Y<3 00513 ZJt	3523< 36244
I : 3 00513 J	3423< 4323=	a83 513 J	37237 45243
Y73 0513 J	45235 39237	a: 3 00513 J	4323: 45248
Y73 00513 J	34237 45243		

DC488>C774>7
DC488>C7D4>7 *mT m*

M 791 3
N4 48173
N 771<3
O 318:
P : 51 4
5<É: 3

-8<8: 3043=,

MWWdf f b

7D488>C77477
7D488>C7D477 *mT m*

6183 IQV
5133 V
6133 IXV

N >97> e;	S 9	**8EEEvv**	**87C i**	3GSa 4	**bx**		**f P8EBAE**

I 63 513	43239 45245	a83 513	43239 45245
Y73 00513	43239 45245	a: 3 00513	4323: 45244
Y<3 00513	3423< 3=245		

DC4>9; >77477
DC4>9; >7C477 *mT m*

M 5<183
N4 3168
N : 9183
P 84133
54É93

7D4>9; >77477
7D4>9; >7C477 *mT m*

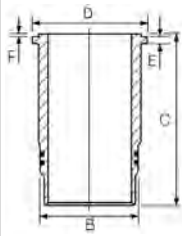
4153 IXV
4153 V
5183 IX

Y@ppw Y@ sw Gntp´ Gnp´z Gnntl tz

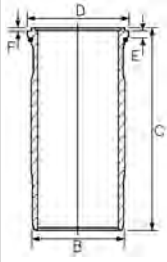
PB7M	a 9	**A>D7vv**	**DD i**	3GND 4	**P@t x**		**f PE8>B**
f MY PB7	a 9	**A>D7vv**	**88; i**	3GVS 4	**P@t x**	**f u**	**Y b9; BB8**
f PB7M	a 9	**A>D7vv**	**8; 9 i**	3GeD 4	**P@t x**	**f u**	**f PE7EA**

L9	362 8 352<9	ZX_I Q) H_Y	

8>4>77A87477 **N** 443133 **O** 567183 **P** 44=143 **Q** 44194 **R** 31t 7

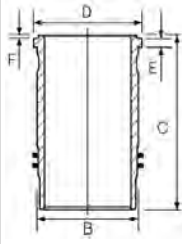


8A4>ADE77477 **N** 443133 **O** 56: 153 **P** 44=143 **Q** =199 **R** 6193

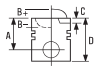


Qmvŵop° °pl w	Ynswp ßJtnsß°yr py pty	Qmvŵßop° uztyß°	Qmvŵöp w° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt
PBMBD7 /Q ; 0	a 9 **A>D7vv**	**8; 9 i** 3GeD 4	**P@t x f u U x v xw**	**f PE98E**
PBMB87 /Q ; 0	a 9 **A>D7vv**	**8A> i** 3NGD 4	**P@t x f u U x v xw**	**f PE997**
PBMB; 7 /Q ; 0	a 9 **A>D7vv**	**8BE i** 3NPD 4	**P@t x f u U x v xw**	**f PE99C**
PBMBA7 /Q ; 0	a 9 **A>D7vv**	**8D> i** 3NVD 4	**P@t x f u U x v xw**	**f PE99D**
PBN /Q ; 0	a 9 **A>D7vv**	**8; 948D> i** 3GeD8NVD 4	**P@t x f u U x v xw**	**f P8C; BC**
H9		442=4	LR9	3=2<8 3<233
LR		36233		

8A4>A78; 7477 **N** 444163 **O** 5671 8 **P** 44=13< **Q** =174 **R** 4138



Qmvŵop° °pl w	Ynswp ßJtnsß°yr py pty	Qmvŵßop° uztyß°	Qmvŵöp w° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt
f PB7N	a 9 **A>D7vv**	**89D48; 9 i** 3GcS8GeD 4	**P@t x f u**	**f PE7EB**
f PB7O	a 9 **A>D7vv**	**87D488; i** 3GSc8GVS 4	**P@t x f u**	**f PE8>C**
f PB7P	a 9 **A>D7vv**	**87D488; i** 3GSc8GVS 4	**P@t x f u U x v xw**	**f P9; ; ; B**
f PB7PS	a 9 **A>D7vv**	**87D488; i** 3GSc8GVS 4	**P@t x f u U x v xw**	**f P9; ; ; C**
f PB8N	a 9 **A>D7vv**	**8; 9 i** 3GeD 4	**P@t x f u**	**Y bA7>7**
f PB8R	a 9 **A>D7vv**	**8A748A9 i** 3NDS8NDc 4	**P@t x f u U x v xw**	**f PE99A**
f PB8RN	a 9 **A>D7vv**	**8A; i** 3NDa 4	**P@t x f u U x v xw**	**f PE988**
f PB8S	a 9 **A>D7vv**	**87D48A9 i** 3GSc8NDc 4	**P@t x f u U x v xw**	**f PE998**
f PB8SM	a 9 **A>D7vv**	**889 i** 3GVN 4	**P@t x f u**	**f PE999**
f PB8SN	a 9 **A>D7vv**	**8; 848; 9 i** 3Gci 8GeD 4	**P@t x f u**	**f PB9>E**
f PB8SO	a 9 **A>D7vv**	**8; 9 i** 3GeD 4	**P@t x f u**	**f PE99B**
f PB8SQ	a 9 **A>D7vv**	**8; 7 i** 3GcV 4	**P@t x f u**	**f PE987**



f PB8Se a 9 **A>D7vv** **8; 848; 9 i** 3GciGeD 4 **P@t x f u** **f PAE79**

L9 3=28 432<9 ZX_IQ) H_Y
LR9 3=2<8 3<233

DC4>7AA77487

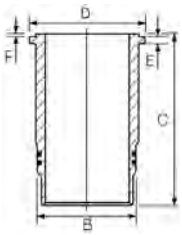
M : =173
N4 541 :
N 8: 133
P 457173
73É: :

df

7D4>7AA77487

516< I X V
6149 V
71 7 I X V

8>4>77A87477



N 443133 **O** 567183 **P** 44=143 **Q** 44194 **R** 31 7

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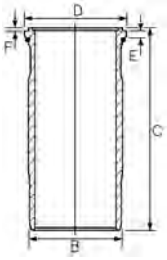

N 443133 **O** 56: 153 **P** 44=143 **Q** =199 **R** 6193

DE4>7AA774; 7
< 0738833043 .
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f PB; Q a 9 **A>D7vv** **8; 9 i** 3GeD 4 **P@t x f u U x v xw** **f PE99;**

f PB; Qe a 9 **A>D7vv** **8A> i** 3NGD 4 **P@t x f u U x v xw** **f PE99>**

H9 442=4 LR9 3=2<8 3<233

DC48>9A77477

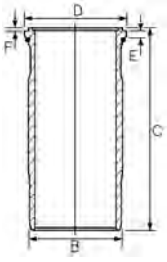
M : =173
N4 53163
N 86143
P 457173
73É: :

MWdf

7D48>9A77477

6183 S UR
5183
6183 I X

8A4>AE; >7477



N 444183 **O** 56: 174 **P** 44=144 **Q** =199 **R** 6193

DE48>9A774; 7
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48078=673033

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P; E />59; B0 S 9 **; DBBvv** **P@t x** **Y b8; B7**

ZX_IQ) H_Y

8>47>7977477
8>47>AD97477
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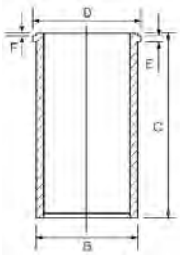


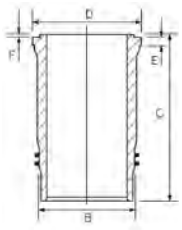
N 43614= **O** 55: 15< **P** 439178 **Q** 61<9 **R** 31<<
N 436166 **O** 55: 15< **P** 439175 **Q** 61<3 **R** 31=3
N 4361<6 **O** 55: 15< **P** 439175 **Q** 61<3 **R** 31=3

V´p°° qßnl °ßt´zy wtyp´ ßz ´p' wnp z´tr tyl w °ßpwwtyp´ Gy' ´p°°m ´p Rl °qm°ns°p l °° M°°pt°py l w K°l ßÜop´ z´tr tyl wWß swn ns°p l spx t°p qzyßp px x l ynsp´ l w ' ´p°°p ' z°´ ´px ' wnp´ w nsp x t°p oòz´tr typ py l ntp´ Gü°ßp l ' ´p°t y w nl x t°l op stp´´z q'yotoz ' l ´l ´ppx ' wÜp´ w nl x t°l z´tr tyl w op l np´z l l yyl ty r st°l ' p´ °z°ßß°t´p nl yyp z´tr tyl wtty l nntl tz

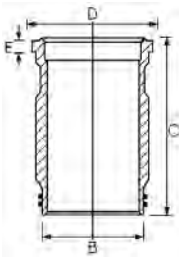
PC7N	a 9	**BC; 7vv**	**887 i**	3GVD 4	**P@t x**		**f PE89E**
Y PC7	a 9	**BC; 7vv**	**879487B i**	3GPi 8GSV 4	**P@t x**		**Y bB9B8**
f MY PC7	a 9	**BC; 7vv**	**97B i**	3NeD 4	**P@t x**	**f u**	**Y bB9B;**
f PC7M	a 9	**BC; 7vv**	**8; B i**	3GeV 4	**P@t x**	**f u**	**f PE8; 8**
f PC7N	a 9	**BC; 7vv**	**8A9 i**	3NDc 4	**P@t x**	**f u**	**f PE8; 9**
f PC7O	a 9	**BC; 7vv**	**8>E48A9 i**	3NDN8NDc 4	**P@t x**	**f u**	**f PE97D**
f PC7Q	a 9	**BC; 7vv**	**8A> i**	3NGD 4	**P@t x**	**f u**	**f PE8; ;**
f PC7Qe	a 9	**BC; 7vv**	**8AA48BB i**	3NGG8NNa 4	**P@t x**	**f u**	**f PE9A7**
f PC7R	a 9	**BC; 7vv**	**8AC48D7 i**	3NGS8NSV 4	**P@t x**	**f u**	**f PE8>D**
f PC7Re	a 9	**BC; 7vv**	**8AC48D7 i**	3NGS8NSV 4	**P@t x**	**f u**	**f PE8A7**
f PC7S	a 9	**BC; 7vv**	**8>C48D7 i**	3NDD8NSV 4	**P@t x**	**f u**	**f PE8A8**
f PC7T	a 9	**BC; 7vv**	**8AC i**	3NGP 4	**P@t x**	**f u**	**f PE7EC**
f PC7TM	a 9	**BC; 7vv**	**8>; i**	3GI S 4	**P@t x**	**f u**	**f PE8; 7**
f Y PC7	a 9	**BC; 7vv**	**88748>C i**	3GVD8NDD 4	**P@t x**	**f u**	**Y bB9B9**

L: 3<2 < 452<8 S GXOTK
L<3 3<298 452 7 T: 342 6 3=2<3

8>4AC; 8>7477 **N** 44: 133 **O** 58: 133 **P** 45: 133 **Q** 44199 **R** 3t 7



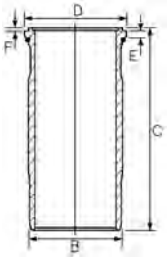
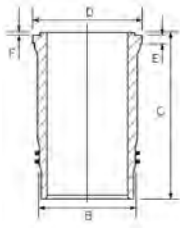
8A4>ACAE7477 **N** 4491=9 **O** 5891t = **P** 4591=< **Q** 44199 **R** 3t 9



Qrnvßop° °pl w Ynswp ßJtnsß°yr py pty Qrnvßop° uztyß° Qrnvß Öp wr° °pwr° I zx ' ´pyop wp r °l ´ytÜzyt

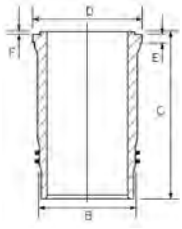
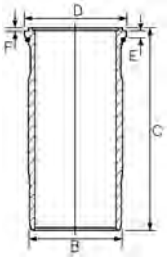
f PC8M	a 9	**BC; 7vv**	**8BE i**	3NND 4	**P@t x**	**f u U x v xw**	**f P9; ; ; A**
f PC8MOQ	a 9	**BC; 7vv**	**8BE i**	3NND 4	**P@t x**	**f u U x v xw**	**f P9; ; ; >**
f PC8MS	a 9	**BC; 7vv**	**8BE i**	3NND 4	**P@t x**	**f u U x v xw**	**f P9; ; ; ;**
f PC8MSb	a 9	**BC; 7vv**	**8BE i**	3NND 4	**P@t x**	**f u U x v xw**	**f P9; ; ; 9**
f PC8Mb	a 9	**BC; 7vv**	**8BE i**	3NND 4	**P@t x**	**f u U x v xw**	**f P9; ; ; 8**
f PC8MbN	a 9	**BC; 7vv**	**8BE i**	3NND 4	**P@t x**	**f u U x v xw**	**f P9; ; ; 7**
f PC8M	a 9	**BC; 7vv**	**8BE i**	3NND 4	**P@t x**	**f u U x v xw**	**f P9; ; 9E**
f PC8Q	a 9	**BC; 7vv**	**8D7 i**	3NSV 4	**P@t x**	**f u U x v xw**	**Y bA88;**
f PC8R	a 9	**BC; 7vv**	**8BE48D7 i**	3NND8NSV 4	**P@t x**	**f u U x v xw**	**f PAE7;**
f PC8RP	a 9	**BC; 7vv**	**8D7 i**	3NSV 4	**P@t x**	**f u U x v xw**	**f PE9; 9**
f PC8Rc	a 9	**BC; 7vv**	**8BE48C; i**	3NND8NPV 4	**P@t x**	**f u U x v xw**	**f PB9A7**
f PC8Re	a 9	**BC; 7vv**	**8CD48D> i**	3NSN8NVD 4	**P@t x**	**f u U x v xw**	**f PAE7>**
f PC8Rec	a 9	**BC; 7vv**	**8BE48D> i**	3NPD8NVD 4	**P@t x**	**f u U x v xw**	**f PB9A8**
f PC8S	a 9	**BC; 7vv**	**8CD48D> i**	3NSN8NVD 4	**P@t x**	**f u U x v xw**	**f P9B9BA**

LR: 3=2<8 3=2=< ZX_I Q) H_Y

DC4A78>77477 **M** <<178 **N4** 531=8 **N** 98133 **O** 413< **P** 474138 78É<9 **WWdf f b**	**7D4A78>77477** 516< 6149 71:7 SURV I X V I X V	**8A4>ADE87477** 	**N** 4491=7 **O** 58=178 **P** 45: 134 **Q** =199 **R** 6193	**DE4A78>77477** < 0834733033 . 48078<=43033
		8>4>AE7A7477 	**N** 4491=9 **O** 58=178 **P** 45: 133 **Q** =199 **R** 618=	

Qmvßop° °pl ßv Xpwlpq4<158x x	Ynswlp ßJtnsß°yr py pty Kyßlv°ß°yr 4<158x x	Qmvßop° uztyß° Rp´pwlpq4<158x x	Qmvß Öp vw° °pww° Xpwp®nt y 4<158x x	I zx ' ´pyop wp r °l ´ytÜzyt Xtwlp@z 4<158x x

f PC8RM	a	9	**BC; 7vv**	**8C; i**	3NPa	4	**P@z x**	**f u U x v**	**xw**	**f PE989**
f PC8RO	a	9	**BC; 7vv**	**8C; i**	3NPa	4	**P@z x**	**f u U x v**	**xw**	**f PE98;**

	8>4>AE7A7477 	**N** 4491=9 **O** 58=178 **P** 45: 133 **Q** =199 **R** 618=
	8A4>ADE87477 	**N** 4491=7 **O** 58=178 **P** 45: 134 **Q** =199 **R** 6193

Xpwlpq4<158x x Qmvßop° °pl ßv	Kyßlv°ß°yr 4<158x x Ynswlp ßJtnsß°yr py pty	Rp´pwlpq4<158x x Qmvßop° uztyß°	Xpwp®nt y 4<158x x Qmvß Öp vw° °pww°	Xtwlp@z 4<158x x I zx ' ´pyop wp r °l ´ytÜzyt

f PC; Q/Q 80	a	9	**BC; 7vv**	**8BE i**	3NPD	4	**P@z x**	**f u U x v**	**xw**	**f PE9; ;**
f PC; QM	a	9	**BC; 7vv**	**8B7 i**	3NGV	4	**P@z x**	**f u U x v**	**xw**	**f PE9; >**
f PC; QN	a	9	**BC; 7vv**	**8D> i**	3NVD	4	**P@z x**	**f u U x v**	**xw**	**f PE9; A**
f PC; Qe	a	9	**BC; 7vv**	**8E8 i**	3NaD	4	**P@z x**	**f u U x v**	**xw**	**f PE9; B**

LR: 3=2<8 432==

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M <<178
N4 53143
N 94133
O 5138
O 6138
P 465178
78É<5

df fb

7D4A79C77477

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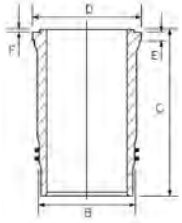
7133 IXV

8>4>AE7A7477

N 4491=9 **O** 58=178 **P** 45: 133 **Q** =199 **R** 618=



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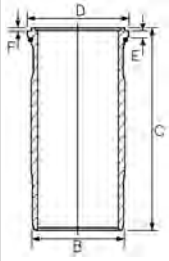
N 4491=7 **O** 58=178 **P** 45: 134 **Q** =199 **R** 6193



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PCO98A/Q	**90**	a	9	**C;77vv**	**8AD**	**i**	3NGV	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8DC9A**
PCO9A7/Q	**90**	a	9	**C;77vv**	**8D>**	**i**	3NVD	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P88CC7**
PCO9CA/Q	**90**	a	9	**C;77vv**	**979**	**i**	3NcV	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9E8EC**
PCO9E7/Q	**90**	a	9	**C;77vv**	**98;**	**i**	3NiD	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P88CC8**
PCO;87/Q	**90**	a	9	**C;77vv**	**99D**	**i**	3PGD	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8BC9B**

: : 33 342=< LS: 3<2=< 45234

DC48>8E77477

M <<17<
N4 53163
N 94133
O 5133
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P 467178
7: É<8

WWdf fb

7D48>8E77477

6183 IQV
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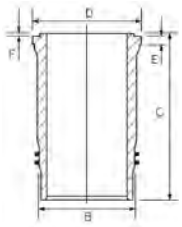
N 44: 133 **O** 5891<3 **P** 45=173 **Q** =173 **R** 31=8



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DE48>8E77477
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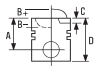
Ojnvßop° °pl w	Ynswtp ßJtnsß°yr py pty	Ojnvßop° uztyß°	OjnvÖp w° °pw°	I zx ' ´pyop wp r°I ´ytÜzyt

PCP QMQ9/Q	**90**	a	9	**C8>Bvv**	**8>;48A;**	**i**	3GI S8NDe	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P;;8>D**
PCP QOQ9/Q	**90**	a	9	**C8>Bvv**	**8>;48A;**	**i**	3GI S8NDe	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P;;8A8**
PCP QQQ9/Q	**90**	a	9	**C8>Bvv**	**89A48;>**	**i**	3GcD8GeN	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P;;8A9**
PCP XMQ9/Q	**90**	a	9	**C8>Bvv**	**8BA**	**i**	3NNS	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P;;8A;**
PCP XNQ9/Q	**90**	a	9	**C8>Bvv**	**8AA**	**i**	3NGG	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P;;8A>**



DC48; BE77487

M : 4148
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N 97133
P 43<133
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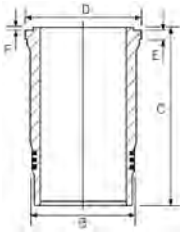
MWdf fb

7D48; BE77477

6133 I QV
5133 V
6183 I XV

8A4>D77>7477
8>4>D77>7477



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Qmwop° °pl w	Ynswp ßJtnsß°yr py pty	Qmwßop° uztyß°	Qmwöp wr° °pwr°	I zx ' ´pyop wp r °l ´ytÜzyt
PCQ9>7 /Q >0	a 9 C8>Bvv	8CC i 3NSD 4	P®t x f u U x v xw	f P8DEBA
PCQ9D7 /Q >6A0	a 9 C8>Bvv	97B i 3NeD 4	P®t x f u U x v xw	f P8DEB>
PCQ9E7 /Q >0	a 9 C8>Bvv	98; i 3Ni D 4	P®t x f u U x v xw	f P97>B7
PCQ; 97 /Q >6A0	a 9 C8>Bvv	9; A i 3PND 4	P®t x f u U x v xw	f P8DEB;
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PCR9B7 /Q A0	a 9 C8>Bvv	8E8 i 3NaD 4	P®t x f u U x v xw	f P98B98
PCR9E7 /Q A0	a 9 C877vv	98; i 3Ni D 4	P®t x f u U x v xw	f P98B9;
PCR; 77 /Q A0	a 9 C877vv	998 i 3PDG 4	P®t x f u U x v xw	f P98B9>
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: 733	34245	KRQZK 5	38236
<733	3623< 45249	LK	38239
< 33	342==	LK Q0	38245
<=33	3: 243 45246	LR Q0	38239
=433	39245 44249	LR QQ0	38246
=733	4323< 3524:	URdS V_Y	4323=
H9	342=4 45239	VN TQt 5	34236
H:	342=<	aRK	3423= 45247
I KTZXU	342=<		

DC4>; 7777477

M : 31=3
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WWdf fb

7D4>; 7777477

6133 I Q
5133
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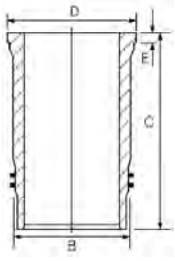
8A4>D7>A7477



N 453133 **O** 55<133 **P** 4641 3 **Q** <139

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4807<3783033

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PEM9B7 /Q ; 0	a 9 E; B>vv	8E8 i 3NaD 4	P®t x f u U x v xw	f P8BCD7
PEM; 77 /Q ; 0	a 9 E; B>vv	998499> i 3PDD8PDV 4	P®t x f u U x v xw	f P8BCD8
PEM; >7 /Q ; 0	a 9 E; B>vv	9A749A8 i 3PSD8PSG 4	P®t x f u U x v xw	f P8BCD9
PEM; D7 /Q ; 0	a 9 E; B>vv	9CE i 3PeD 4	P®t x f u U x v xw	f P8BCD;

<633	34239	G	34238 45245
=633	34239	LS	3=238
=733	34239	LS =	45234 3=238

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M <8178
N4 4719 3
N : : 133
P 463133
87É=9

MWWWdf fb

7D48>9777477

7133 I Q V
6133 V
6133 TZ

8A4>D79; 7477

N 46=133 **O** 57=188 **P** 47=133 **Q** 45138 **R** 31<8

DD48>9777477
< 0475333033 .
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HzÄwnl ' l ntÖ8: 133nx 6
Yfbpw
Qrnvßop° °pl w

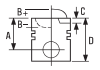
azvßx p y op´ Qzwrpyx °wp 8: 133nx 6
Yfß sw
Ynswp ßJtnsß°yr py pty

azvßx p op w nl ®ß o° ' t°fßzy 8: 133nx 6
Gntp´
Qrnvßbop° uztyß°

azvwnl ®bl o ' t°ß y 8: 133nx 6
Gnp´z
Qrnvßp wr° °pwr°

azvßx p nl x p´l ' t°fßzyp 8: 133nx 6
Gnntl tz
l zx ' ´pyop wp r °l ´ytÜzyt

| | | |



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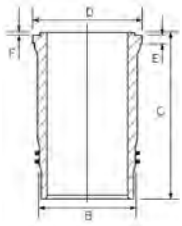
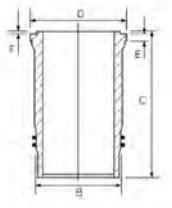


P87M; 97	a	9	EB77vv	9; A i	3PND	4	P@t x	f	u		f PE9B;
P87M; B7	a	9	EB77vv	9BA i	3PaD	4	P@t x	f	u		f P897>C
P87N; 97 /Q 90	a	9	EB77vv	9; A i	3PND	4	P@t x	f	u	U x v xw	f P8B9; A
P87N; B7 /Q 90	a	9	EB77vv	9BA i	3PaD	4	P@t x	f	u	U x v xw	f P8B9; B
PT87M/Q 90	a	9	EB77vv	8D749BA i	3NSV8PaD	4	P@t x	f	u	U x v xw	Y b>A7>;
PT87M9>A/Q 90	a	9	EB77vv	8D7 i	3NSV	4	P@t x	f	u	U x v xw	f P9E8D8
PT87M9DA/Q 90	a	9	EB77vv	987 i	3NeV	4	P@t x	f	u	U x v xw	f P9E8D9
PT87M; B7 /Q 90	a	9	EB77vv	9BA i	3PaD	4	P@t x	f	u	U x v xw	f P9E8D;
f P879RMc	a	9	EB77vv	998 i	3PDG	4	P@t x	f	u	U x v xw	f PE8B8
f P879ROc	a	9	EB77vv	997 i	3Ni i	4	P@t x	f	u	U x v xw	f PE8B;
f P879RQc	a	9	EB77vv	8E8 i	3NaD	4	P@t x	f	u	U x v xw	f PE8BA
f P879RSc	a	9	EB77vv	97A i	3Nci	4	P@t x	f	u	U x v xw	f PE8BC
f P879RX/Q 80	a	9	EB77vv	9; > i	3PGe	4	P@t x	f	u		f PE8BE
f P879RY	a	9	EB77vv	9; 749A9 i	3PGP8PSP	4	P@t x	f	u	U x v xw	f PE8C7
f P879Rc	a	9	EB77vv	9; > i	3PGe	4	P@t x	f	u		Y bA89B
f P879Re	a	9	EB77vv	9A7 i	3PSD	4	P@t x	f	u	U x v xw	f PE9B>
f P879Rf	a	9	EB77vv	99D i	3PGD	4	P@t x	f	u	U x v xw	f PE9B9
f TP879WP	a	9	EB77vv	9A9 i	3PSP	4	P@t x	f	u	U x v xw	f PE88D

H43	342<8 3<244	LS 43	372== 3=236
L43	342< 452=8	TR	342<=
LR43	3=2<8 3=2=<	ZX_I Q) H_Y	

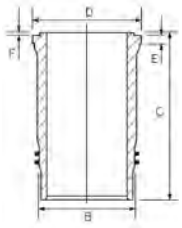
8A4>AE7>7477 N 467133 O 5< 158 P 47: 133 Q 44186 R 617:
8>4>AE7>7477 N 467133 O 5< 158 P 47: 133 Q 44186 R 617:
8A4>AE9; 7477 N 4661<5 O 5< 163 P 47: 133 Q 44183 R 6183



f P877M	a	9	EB77vv	8CB48E7 i	3NPi 8NVe	4	P@t x	f	u		f PE8A9
f P877MTO	a	9	EB77vv				P@t x	f	u		Y bA88D
f P877MdO	a	9	EB77vv				P@t x	f	u		Y bA88E
f TP877N	a	9	EB77vv				P@t x	f	u		Y bA8BB48
f TP877P	a	9	EB77vv	8AA48CC i	3NGG8NSG	4	P@t x	f	u		f PE88E
f TP878N	a	9	EB77vv	8BE48E8 i	3NPD8NaD	4	P@t x	f	u		f P9; ; 9>

f Y P877M	a 9	**EB77vv**		**P x f u**	**Y bA7>D**
H_Y			L<3		3<298 392 :
L43		342 9 452=6	ZX_I Q) H_Y		

8>4>A7A97477 **N** 467133 **O** 5=7133 **P** 47: 133 **Q** 441: **R** 31t <



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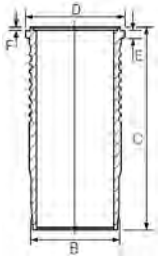

8A4BC; 977477 **N** 467133 **O** 5=9183 **P** 47: 133 **Q** 44185 **R** 617<
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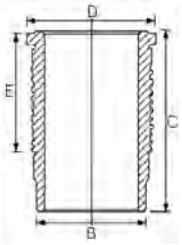

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Ynswlp ßJtnsß°yr py pty
Gx b l °°p´x l yßpwßp´ns´zx ß

Qmvßop° uztyß°
l s´zx °°´ nsl x mípo0pl °

Qmvß0p w° °pw°
l l x t°l op l r°l n´zx l ol

l zx ' ´pyop wp r°l ´ytÜzyt
Y°' p´qntp n´zx l ß

f P877N	a 9	**EB77vv**	**97B4997 i** 3NeD8N i 4	**P x f u**	**f PE8A;**
f P877NS	a 9	**EB77vv**	**97C i** 3NeN 4	**P x f u**	**f P98; ; C**
L43		342 9 452=6	T43		342 6 452=<

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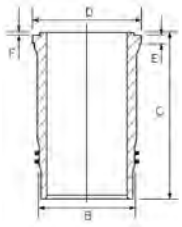

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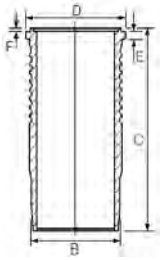

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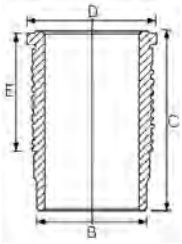

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a 9 EB77vv	977 i 3NcN 4	P@l x f u	f P98; ; D
a 9 EB77vv	977 i 3NcN 4	P@l x f u	f P98; ; E
a 9 EB77vv	8E94979 i 3NaG8NcV 4	P@l x f u	f PE8A>
a 9 EB77vv	977 i 3NcN 4	P@l x f u	f PE8AA
a 9 EB77vv		P@l x f u	Y bA7>C
a 9 EB77vv	98A4997 i 3Ni N8Ni i 4	P@l x f u U x v xw	f PE8AB
a 9 EB77vv	997 i 3Ni i 4	P@l x f u U x v xw	f PE8AC
a 9 EB77vv	998 i 3PDG 4	P@l x f u U x v xw	f PE9; C
a 9 EB77vv	9974999 i 3Ni i 8PDN 4	P@l x f u U x v xw	f PE9; D
a 9 EB77vv	8E94979 i 3NaG8NcV 4	P@l x f u	f PE8AD
a 9 EB77vv	977 i 3NcN 4	P@l x f u U x v xw	f PE8AE
a 9 EB77vv	8DA4977 i 3NVN8NcN 4	P@l x f u U x v xw	f PE9A9
a 9 EB77vv	977 i 3NcN 4	P@l x f u U x v xw	f P98; >7

L43	342 9 452<	TR	342<= 452=5
LR43	3=2<8 3=2=<	ZX_I Q) H_Y	
T43	342 6 452=<		

DC4>7C877477

M	43=173
N4	56148
N	: 9133
O	41<<
P	49973
	85É439

df

7D4>7C877487

516<		I X V
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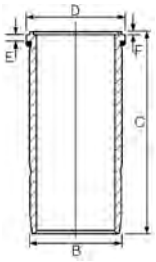
71 7		I X V

8A4>AE; A7477 **N** 4661<5 **O** 5=: 133 **P** 47: 135 **Q** 44185 **R** 6183



DE4>7C877477
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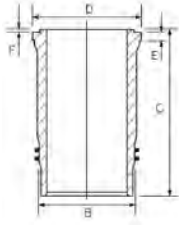
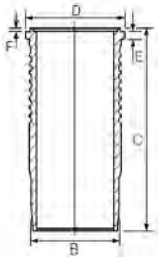
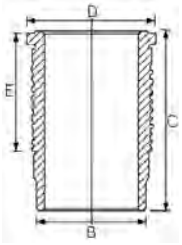
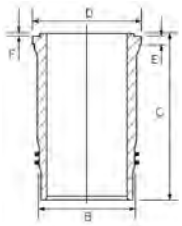
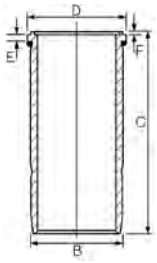
48078=683033

		8>4>AD8C7477 	**N** 4661<9 **O** 5=9158 **P** 47:133 **Q** 44186 **R** 617:
		8A4BCCB97477 	**N** 4661<5 **O** 5=917= **P** 47:135 **Q** 44185 **R** 6183
		8A4BC; 977477 **8>4BC; 977477** 	**N** 467133 **O** 5=9183 **P** 47:133 **Q** 44185 **R** 617 **N** 467133 **O** 5=9183 **P** 47:133 **Q** 44185 **R** 617<

Qmvßop° °pl w b l ßp´ ulnvpßns´zx po	Ynswp ßJtnsß°yr py pty Gx b l °°p´x l yßpwßp´ns´zx ß	Qmvßop° uztyß° l s´zx °°´nsl x mip opl °	Qmvßp wr° °pwr° l l x t°l op l r°l n´zx l ol	l zx ' ´pyop wp r°l ´ytÜzyt Y°' p´qntp n´zx l ß
f P877SN	a 9 **EB77vv**	**97C4997 i** 3NeD8PDD 4	**PQl x f u**	**Y b; C9;**
f P878	a 9 **EB77vv**	**977 i** 3NcN 4	**PQl x f u U x v xw**	**Y bB99C**
f TP878	a 9 **EB77vv**	**97; 499D i** 3Ncca8PGD 4	**PQl x f u U x v xw**	**Y bB99D**
f TP878WR	a 9 **EB77vv**	**99D i** 3PGD 4	**PQl x f u U x v xw**	**Y bA8B8**
f UP877	a 9 **EB77vv**		**PQl x f u U x v xw**	**Y bB9BA**

H_Y ZX_l Q) H_Y

		8>4>AD8C7477 	**N** 4661<9 **O** 5=9158 **P** 47:133 **Q** 44186 **R** 617:

		8A4>AE; A7477	**N** 4661<5 **O** 5=: 133 **P** 47: 135 **Q** 44185 **R** 6183	
				
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		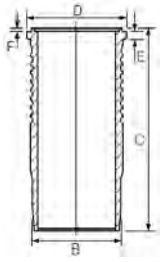		
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		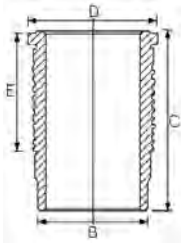		

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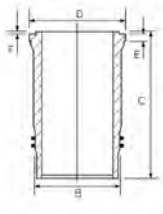
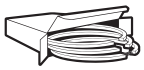
f P879R	a	9	**EB77vv**	**9; 749; > i**	3PGP8PGe	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PE8B7**
f P879RP /Q 80	a	9	**EB77vv**	**9; > i**	3PGe	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P98; >8**
f P879RPc	a	9	**EB77vv**	**9; 949; > i**	3PGa8PGe	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PE8B>**
f P879RR	a	9	**EB77vv**	**9; 749; > i**	3PGP8PGe	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PE8BB**
f P879RT	a	9	**EB77vv**	**98749; > i**	3Nea8PGe	4	**P0l x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f PE8BD**

L43	342<	452=8	TR		342=3
LR43	3=2<8	352=9			

DC4>; 8; 77477 **M** =5188 **N4** 55153 **N** : 9133 **O** 41=8 **P** 464138 85É=< **ZN** 	**7D4>; 8; 77477** 6133 I Q V 6149 I X V 71 7 I X V	**8A4>AE7>7477** **8>4>AE7>7477** **8A4>AE9; 7477** 	**N** 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617: **N** 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617: **N** 4661<5 **O** 5< 163 **P** 47: 133 **Q** 44183 **R** 6183	**DE4>; 8; 77477** < 0764633033 . 48078=373033

G´ßn°wßpo ' t°ßzy 0mvWop° °pl w	Vpyopwßnsl qßvzwnpy Ynswp ßJtnsß°yr py pty	Vt°ßzy l ´ßn°w 0mvWßop° uztyß°	Vt°ß y l ´ßn°wloz 0mvWÖp w° °pw°	Vt°ßzyp l ´ßnzwßz l zx ' ´pyop wp r °l ´ytÜzyt

Niiral® FITTED WITH GOETZE® RINGS



f P879RNc	a 9	**EB77vv**	**99D i**	3PGD 4	**P@t x f u U x v xw**	**f PE8B9**
L43		432< 452=7				

DC4>; 8; 77477

M =5188
N4 55153
N : 9133
O 41=8
P 464138
85É=<

ZN

7D4>; 8; 77477

6133 I Q V
6149 I X V
71:7 I X V

8A4>AE7>7477
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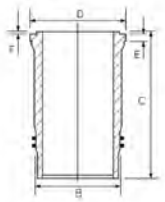
8A4>AE9; 7477



N 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617:
N 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617:
N 4661<5 **O** 5< 163 **P** 47: 133 **Q** 44183 **R** 6183

G´ßn°wßpo ' t°ßzy
Qnvßop° °pl w

Vpyopwvns l qßvzwnpy
Ynswp ßJtnsß°yr py pty

Vt°ßzy l ´ßn°w
Qnvßop° uztyß°

Vt°ß y l ´ßn°wvoz
Qnvßûp w° °pwn°

Vt°ßzyp l ´ßnzwßz
l zx ' ´pyop wp r °l ´ytûzyt

f P87; P87 /Q 90	a 9	**EB77vv**	**9BA i**	3PaD 4	**P@t x f u U x v xw**	**Y b; A7>;**
ZX_I Q) H_Y						

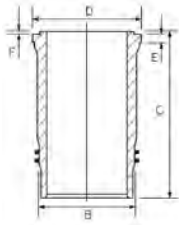
M =5193
N4 55183
N 97133
O 5143
P 46: 193
85É=<

df f b

7D48; BD77477

7133 S U R V
6149 T Z V
71:7 I X V

8A4>AE9; 7477
8A4>AE7>7477
8>4>AE7>7477



N 4661<5 **O** 5< 163 **P** 47: 133 **Q** 44183 **R** 6183
N 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617:
N 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617:

DE48; BD77487
48078=563033

Vt°ßzy l ®twmwp ty QtßYpßzyvÛ
Qnvßop° °pl w

Qzwnpy y°´tx G°°px mvÛp´s vßwns
Ynswp ßJtnsß°yr py pty

Vt°ßzy ot°' zytmwp py vtß°p°wpx pyß
Qnvßop° uztyß°

Vt°ß y ot°' zytmwp py nzyu°yßz° °zwlx pyßp1
Qnvßûp w° °pwn°

O' t°ßzyt°zyz ot°' zytmtw°zwr ty vtßx zßz´p
l zx ' ´pyop wp r °l ´ytûzyt

f P87; Q /Q 80	a 9	**EB77vv**	**98749; A i**	3Nea8PND 4	**P@t x f u U x v xw**	**f PAE77**
f P87; QM /Q 80	a 9	**EB77vv**	**9; A i**	3PND 4	**P@t x f u U x v xw**	**f P98; >9**
f P87; Qe /Q 80	a 9	**EB77vv**	**98749; A i**	3Nea8PND 4	**P@t x f u U x v xw**	**f PB9>C**
f P87; WNQ /Q 80	a 9	**EB77vv**	**98749; A i**	3Nea8PND 4	**P@t x f u U x v xw**	**f P8E7B9**
f P87; WR /Q 80	a 9	**EB77vv**	**98749; A i**	3Nea8PND 4	**P@t x f u U x v xw**	**f P8E7B;**
f TP87; WN	a 9	**EB77vv**	**987 i**	3Nea 4	**P@t x f u**	**f PE7ED**
f TP87; WP	a 9	**EB77vv**	**9A7 i**	3PSD 4	**P@t x f u**	**f PE7EE**
H43		342<< 45236		LR43		3=2<8 3=2=<
L43		342< 452=8		TR		342=3

M =5183
N4 541<3
N 9: 173
O 5133
P 477183
85É=<

MWdf

7D4A79B77477

6183 S U R V
6149 I X V
71:7 I X V

8A4>AE9; 7477
8A4>AE7>7477
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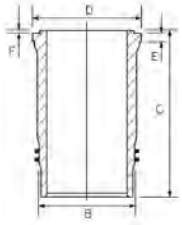


N 4661<5 **O** 5< 163 **P** 47: 133 **Q** 44183 **R** 6183
N 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617:
N 467133 **O** 5< 158 **P** 47: 133 **Q** 44186 **R** 617:

DE4A79B77477
48078=563033

Vt°ßzy l ®twmwp ty QtßYpßzyvÛ
Qnvßop° °pl w

Qzwnpy y°´tx G°°px mvÛp´s vßwns
Ynswp ßJtnsß°yr py pty

Vt°ßzy ot°' zytmwp py vtß°p°wpx pyß
Qnvßop° uztyß°

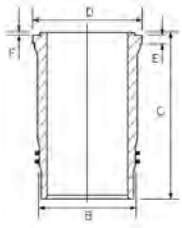
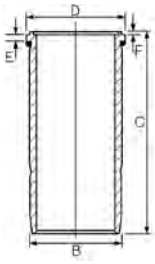
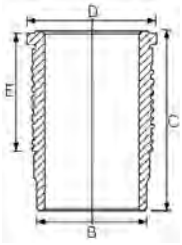
Vt°ß y ot°' zytmwp py nzyu°yßz° °zwlx pyßp1
Qnvßûp w° °pwn°

O' t°ßzyt°zyz ot°' zytmtw°zwr ty vtßx zßz´p
l zx ' ´pyop wp r °l ´ytûzyt

Nüral® FITTED WITH GOETZE® RINGS

f TP877PN	a	9	EB77vv	8B7497;	i	3NGe8Nca	4	P@l x	f u U x v	xw	f PE897
f TP877PO	a	9	EB77vv	8B7497;	i	3NGe8Nca	4	P@l x	f u U x v	xw	f PE87>
f TP877PP	a	9	EB77vv	97;	i	3Nca	4	P@l x	f u		f PE87A
f TP877Q	a	9	EB77vv	8B7497;	i	3NGe8Nca	4	P@l x	f u U x v	xw	f PE8; C
f TP877QM	a	9	EB77vv	8; ; 48D7	i	3GeD8NSV	4	P@l x	f u		f PE87B
f TP877QN	a	9	EB77vv	8B7497;	i	3NGe8Nca	4	P@l x	f u		f PE87C
f TP877QO	a	9	EB77vv	8B7497;	i	3NGe8Nca	4	P@l x	f u		f PE87D
f TP877QP	a	9	EB77vv	8B7497;	i	3NGe8Nca	4	P@l x	f u U x v	xw	f PE87E
f TP877QQ	a	9	EB77vv	989	i	3Nee	4	P@l x	f u		f PE887
f TP877QW	a	9	EB77vv	8CE	i	3NSP	4	P@l x	f u		f PE888
f TP878S	a	9	EB77vv	97;	i	3NcV	4	P@l x	f u		Y bA8BD
f TP878SN	a	9	EB77vv	8B7	i	3NGe	4	P@l x	f u		f PE889
f TP878SO	a	9	EB77vv	8D7	i	3NSV	4	P@l x	f u		f PE88;
f TP878SP	a	9	EB77vv	8B7497;	i	3NGe8Nca	4	P@l x	f u		f PE88>
f TP878WN	a	9	EB77vv	987	i	3Nea	4	P@l x	f u U x v	xw	f PE88A
f TP878WO	a	9	EB77vv	99D	i	3PGD	4	P@l x	f u U x v	xw	f PE88B
f TP878WQ	a	9	EB77vv	9; A	i	3PND	4	P@l x	N@f u U x v	xw	f PE88C

H43 342 < ZX_I Q) H_Y
H_Y

		8>4>AD8C7477 	**N** 4661<9 **O** 5=9158 **P** 47: 133 **Q** 44186 **R** 617:	**DE4>7C877497** < 073: 433043 . 4809: : 953033
		8A4>AE; A7477 	**N** 4661<5 **O** 5=: 133 **P** 47: 135 **Q** 44185 **R** 6183	
		8A4BC; 977477 **8>4BC; 977477** 	**N** 467133 **O** 5=9183 **P** 47: 133 **Q** 44185 **R** 617< **N** 467133 **O** 5=9183 **P** 47: 133 **Q** 44185 **R** 617<	

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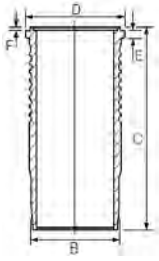
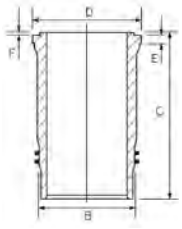


Ojnvßop° °pl w b l ßp´ ul nvpßns´zx po	Ynswp ßJtnsß³yr py pty Gx b l °°p´x l yßpwßp´ns´zx ß	Ojnvßop° uztyß³ l s´zx °°´ nsl x mípoopl °	Ojnvßop wr° °pwr° l l x t°l op l r°l n´zx l ol	l zx ' ´pyop wp r°l ´ytÜzyt Y°' p´qntp n´zx l ß
f TP879WM	a 9 **EB77vv**	**987 i** 3Nea 4	**P0t x f u U x v xw**	**f P9; ; 9A**
f TP879WN /Q 80	a 9 **EB77vv**	**987 i** 3Nea 4	**P0t x f u U x v xw**	**f P9; ; 9B**
f TP879WR	a 9 **EB77vv**	**8D74987 i** 3NSV8Nea 4	**P0t x f u U x v xw**	**f PE898**
f TP879WV	a 9 **EB77vv**	**8AD i** 3NGV 4	**P0t x f u U x v xw**	**f PE8; D**
f Y P879M/Y t Øx0	a 9 **EAEEvv**	**8AD4977 i** 3NGV8NcN 4	**P0t x f u U x v xw**	**Y bDDAE**
f Y P879O /Y t Øx0	a 9 **EAEEvv**	**8AD4977 i** 3NGV8NcN 4	**P0t x f u U x v xw**	**Y bDDAE48**

H43	342 < 45236	URdS VCGT	342=5 45233
S GXCTK			

8>4>AD8C7477 **N** 4661<9 **O** 5=9158 **P** 47: 133 **Q** 44186 **R** 617:



P88M>; 7 /Q ; 0	a 9 **87D>7vv**	**; 8C i** 3SPG 4	**P0t x f u U x v xw**	**f P9DAC9**
P88N>; 7 /Q >6A0	a 9 **87D>7vv**	**; 8B i** 3SPD 4	**P0t x f u U x v xw**	**f P9; ; C;**
P88O; ; 7 /Q A0	a 9 **87D>7vv**	**9>; i** 3PPD 4	**P0t x f u U x v xw**	**f P99; C;**
P88O; C7 /Q A0	a 9 **87D>7vv**	**9C9 i** 3PcD 4	**P0t x f u U x v xw**	**f P99; C>**
P88O>87 /Q A0	a 9 **87D>7vv**	**; 79 i** 3SGD 4	**P0t x f u U x v xw**	**f P99; CB**

=733	44249 36253	LS c	37243
H44	34244	LS c (00	35253
LS	3=238	aTS	3<249

DC4>; DD77477

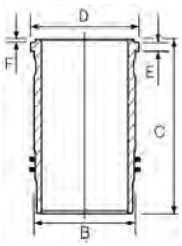
M : <173
N4 4: 133
N <6193
O 4133
O 4133
P 4441: 3
87É: 6

WWf b

7D4>; DD77477

6183 VaJ
5183 I X V
6133 TZ

8A4>D7>>7477
8>4>D7>>7477 **N** 46=133 **O** 57=188 **P** 47=133 **Q** 44153 **R** 31<8



N 46=133 **O** 57=188 **P** 47=133 **Q** 44153 **R** 31<8

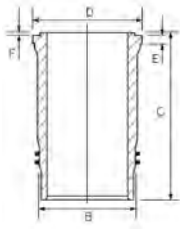
DE4>; DD77477
< 076<<33033 .
4807<3773033

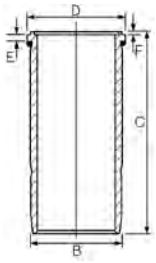
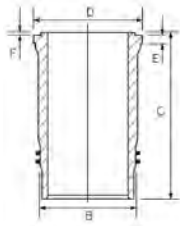
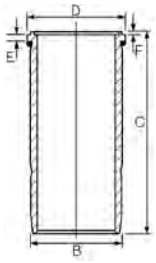
S zyzYßppw K°´z 728 Yßppw Ojnvßop° °pl w	Yß sw Ynswp ßJtnsß³yr py pty	Gntp´ Ojnvßop° uztyß³	Gnp´z Ojnvßp wr° °pwr°	Gnntl tz l zx ' ´pyop wp r°l ´ytÜzyt

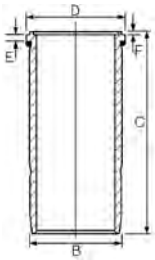
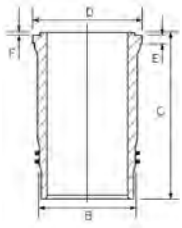
f MY P897M	a	9	88ED7vv	99A49>;	i	3PDa8PPD	4	P@	x	f	u		Y bA8; ;
f MY P897N	a	9	88ED7vv					P@	x	f	u		Y bA8; >
f MY P898	a	9	88ED7vv	98C4; 87	i	3N V8SND	4	P@	x	f	u		Y bB9BB
f P897M	a	9	88ED7vv	9>;	i	3PPD	4	P@	x	f	u		f PE97B
f P897O	a	9	88ED7vv	9B7	i	3PVS	4	P@	x	f	u		f PE8C8
f P897P	a	9	88ED7vv	9C;	i	3PcG	4	P@	x	f	u		f PE8C9
f P897Q	a	9	88ED7vv	99A49C;	i	3PDa8PcG	4	P@	x	f	u		f PE8C;
f P897R	a	9	88ED7vv	9BA	i	3PaD	4	P@	x	f	u	U x v xw	f PE8C>
f P897RM	a	9	88ED7vv	98;	i	3N i D	4	P@	x	f	u	U x v xw	f PE9A>
f P897RN	a	9	88ED7vv	99B49BA	i	3PDc8PaD	4	P@	x	f	u	U x v xw	f PE9AA
f P897RO	a	9	88ED7vv	9BA	i	3PaD	4	P@	x	f	u	U x v xw	f PE8CA
f P897Rf c	a	9	88ED7vv	997	i	3N i	4	P@	x	f	u	U x v xw	f PE8CB
f P897S	a	9	88ED7vv	99B49>;	i	3PDc8PPD	4	P@	x	f	u		f PE8CC
f P897SM	a	9	88ED7vv	99C	i	3PDe	4	P@	x	f	u		f PE8CD
f P897SS	a	9	88ED7vv					P@	x	f	u		Y bA8; D
f P898R	a	9	88ED7vv	9C949D;	i	3PcD8PeV	4	P@	x	f	u	U x v xw	f PE8CE
f P898RP	a	9	88ED7vv	9D;	i	3PeV	4	P@	x	f	u	U x v xw	f PE8D7
f P898RW	a	9	88ED7vv	9D7	i	3PeG	4	P@	x	f	u	U x v xw	f PE8D9
f P898S	a	9	88ED7vv	9; A49>;	i	3PND8PPD	4	P@	x	f	u		f PE8D;
f P898SP	a	9	88ED7vv	9>;	i	3PPD	4	P@	x	f	u		f PE8>;
f P899QP	a	9	88ED7vv	; 774; 87	i	3SDe8SNN	4	P@	x	f	u	U x v xw	f PE8DA
f P899RMc	a	9	88ED7vv	9DC	i	3Pi D	4	P@	x	f	u	U x v xw	f PE8DD
f P899RNc	a	9	88ED7vv	9DC	i	3Pi D	4	P@	x	f	u	U x v xw	f PE8DE
f P899ROc	a	9	88ED7vv	9DC	i	3Pi D	4	P@	x	f	u	U x v xw	f PE8E7
f P899RT /Q 80	a	9	88ED7vv	9B9	i	3PVa	4	P@	x	f	u	U x v xw	f PE899
f P899RX	a	9	88ED7vv	9E8	i	3Pi a	4	P@	x	f	u	U x v xw	f PE89;
f P899WNQ	a	9	88ED7vv	99B49BA	i	3PDc8PaD	4	P@	x	f	u	U x v xw	f P9; ; >7
f UP897R	a	9	88ED7vv					P@	x	f	u		Y bA7>A
f Y P897M	a	9	88ED7vv	99A49>;	i	3PDa8PPD	4	P@	x				Y bA8; 9

H45	342=5	T45	342<4 3=2=4
L45	342 9 452=8	TR	342<= 452=5
L<3	432 3 392 :	ZX_I Q) H_Y	
S GXOK			

8>4>A7A; 7477	N 477133 O 644133 P 48: 193 Q 46185 R 31t 9
8>4>AB777477	N 477133 O 644133 P 48: 193 Q 43185 R 31t 9
8A4>ACEB7477	N 4761<= O 644133 P 48: 195 Q 43188 R 31<9
8A4>AD8D7477	N 4761<< O 646133 P 48: 195 Q 43185 R 615<
8>4>AD8D7477	N 4761<< O 646133 P 48: 195 Q 43185 R 615<
8A4>AE7; 7477	N 4761=4 O 643185 P 48: 18< Q 46188 R 319<



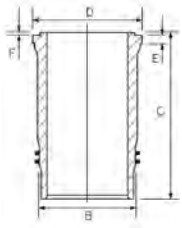
		8A4>ADD>7477 	**N** 4761<8 **O** 646158 **P** 48:195 **Q** 43185 **R** 6158	
Vsz°'slßpo Lz´nÖuyop´ mvnv yz17:3463 zyvÖ Qmvßop° °pl vß	Vsz°'slßp´ß T°´q´eÖuyp´mvnv0T´17:3463 Ynsvßp ßJtnsß°yr py pty	Vsz°'slß Vz°´vp mvn0nÖuyo´p° y 7:3463 °yt¿°px pyß Qmvßop° uztyß°	Lz°qlßoz Yzvr'l´l mv¿°p op ntuyo´z° y 7:3463 Qmvß Öp vr° °pvr°	Lz°qlßßz Yzvr'p´x zyzmvrnnz ntuyo´ty 7:3463 l zx'´pyop vp r°l´ytÜzyt
f P898RT	a 9	**88ED7vv**	**9;9 i** 3PGV 4	**P@t x f u U x v xw** **f PE8D8**
		8>4>AB777477 **8A4>ACEB7477** **8A4>AD8D7477** **8>4>AD8D7477** 	**N** 47733 **O** 644133 **P** 48:193 **Q** 43185 **R** 31t9 **N** 4761<= **O** 644133 **P** 48:195 **Q** 43188 **R** 31<9 **N** 4761<< **O** 646133 **P** 48:195 **Q** 43185 **R** 615< **N** 4761<< **O** 646133 **P** 48:195 **Q** 43185 **R** 615<	
		8A4>ADD>7477 	**N** 4761<8 **O** 646158 **P** 48:195 **Q** 43185 **R** 6158	
Lz´nÖuyop´ mvnv yz17:3463 zyvÖ Qmvßop° °pl vß	T°´q´eÖuyp´mvnv0T´17:3463 Ynsvßp ßJtnsß°yr py pty	Vz°´vp mvn0nÖuyo´p° y 7:3463 °yt¿°px pyß Qmvßop° uztyß°	Yzvr'l´l mv¿°p op ntuyo´z° y 7:3463 Qmvß Öp vr° °pvr°	Yzvr'p´x zyzmvrnnz ntuyo´ty 7:3463 l zx'´pyop vp r°l´ytÜzyt
f P899	a 9	**88ED7vv**	**;7E i** 3SND 4	**P@t x f u U x v xw** **f PE8D>**
f P899R	a 9	**88ED7vv**	**9AC49B9 i** 3PVD8PVa 4	**P@t x f u** **f PE8DB**
f P899RM	a 9	**88ED7vv**	**9C9 i** 3PcD 4	**P@t x f u** **f PE8DC**
f P899RW	a 9	**88ED7vv**	**9DC49E8 i** 3Pi D8Pi a 4	**P@t x f u U x v xw** **f PE8E8**
f P899Rd	a 9	**88ED7vv**	**9B949E8 i** 3PVa8Pi a 4	**P@t x f u U x v xw** **f PE8E;**
f P899Re	a 9	**88ED7vv**	**9DC49E8 i** 3Pi V8Pi a 4	**P@t x f u U x v xw** **f PE8E>**
f P899WQ	a 9	**88ED7vv**	**9E7 i** 3Pi S 4	**P@t x f u U x v xw** **f P9;;;E**
L45		342< 452=8	TR	342<=

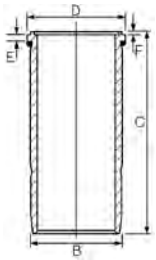
M 447153 **N4** 58173 **N** : =133 **O** 5193 **P** 4: 8153 88É447 **df**	**7D4>7AB77487** 516< I X V 6149 I X V 71 7 I X V	**8A4>ADD>7477** 	**N** 4761<8 **O** 646158 **P** 48: 195 **Q** 43185 **R** 6158	**DE4>7AB774B7** 48078<<73033
		8>4>A7A; 7477 **8>4>AB777477** **8A4>ACEB7477** **8A4>AD8D7477** **8>4>AD8D7477** **8A4>AE7; 7477** 	**N** 477133 **O** 644133 **P** 48: 193 **Q** 46185 **R** 31 9 **N** 477133 **O** 644133 **P** 48: 193 **Q** 43185 **R** 31 9 **N** 4761<= **O** 644133 **P** 48: 195 **Q** 43188 **R** 31<9 **N** 4761<< **O** 646133 **P** 48: 195 **Q** 43185 **R** 6151 **N** 4761<< **O** 646133 **P** 48: 195 **Q** 43185 **R** 6151 **N** 4761=4 **O** 643185 **P** 48: 18< **Q** 46188 **R** 319<	

Vt°ßzy l ®tw/mp ty QtßYpßzyŵ Qmvßop° °pl w Vsz°' sl ßpo Lz´ nÖwyop´ mwnv yz17: 3463 zyŵ	Qzwmpy y°´ tx G°°px mŵp´s vÄwns Ynswp ßJtnsß°yr py pty Vsz°' sl ßp´ß T°´ q ´ eÖwyp´mwnv0T´17: 3463	Vt°ßzy ot°' zytmp py vtß°p°wpx pyß Qmvßop° uztyß° Vsz°' sl ß Vz°´ wp mwn0nÖwyo´p° y 7: 3463 °yt¿°px pyß	Vt°ß y ot°' zytmp py nzyu°yßz° °zwlx pyßp1 Qmvßop wr° °pwr° Lz°q ß ßoz Yzwr ' l ´l mwz¿°p op ntwyo´z° y 7: 3463	O´t°ßzyt°zyz ot°' zytmvW°zwr ty vtßx zßz´p l zx ' ´pyop wp r°l ´ytÜzyt Lz°q ß ßz Yzwr ' p´ x zyzmwnnz ntwyo´t y 7: 3463

f UP898N	a	9	**88ED7vv**	**98C4; 7A i**	3Ni V8SGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**Y b9B9BC**
f UP898WS	a	9	**88ED7vv**	**98C4; 7A i**	3Ni V8SGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**Y b; B9BC**
f UP898Wb	a	9	**88ED7vv**	**98C4; 7A i**	3Ni V8SGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**Y b>B9BC**
f UP898XS	a	9	**88ED7vv**	**98C4; 7A i**	3Ni V8SGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**Y bB9BC**
f UP898Xb	a	9	**88ED7vv**	**98C4; 7A i**	3Ni V8SGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**Y b8B9BC**
f UP898b	a	9	**88ED7vv**	**98C4; 7A i**	3Ni V8SGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**Y bAB9BC**
f i P898S	a	9	**88ED7vv**	**98C4; 7A i**	3Ni V8SGV	4	**P0t x**	**f**	**u**	**U x v**	**xw**	**Y bBB9BC**

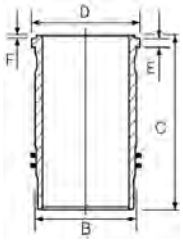
ZX_I Q) H_Y

	8>4>AB777477 **8A4>ACEB7477** 	**N** 477133 **O** 644133 **P** 48: 193 **Q** 43185 **R** 31 9 **N** 4761<= **O** 644133 **P** 48: 195 **Q** 43188 **R** 31<9

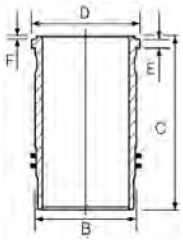
		8A4>ADD>7477 	**N** 4761<8 **O** 646158 **P** 48: 195 **Q** 43185 **R** 6158	
Lz´ nÔuyop´ mwnv yz17: 3463 zyw̃	T°´ q ´ eÔuyp´mwnv0T´17: 3463	Vz°´ wp mwnOnÔuyo´p° y 7: 3463 °yt¿°px pyß	Yzw 'l´l mw¿°p op ntuyo´z° y 7: 3463	Yzw 'p´x zyzmwnnz ntuyo´t y 7: 3463
Qrnv̈op° °pl v̈	Ynsvp ßJtnsß°yr py pty	Qrnv̈ßop° uztyß°	Qrnv̈Öp w° °pw°	I zx ' ´pyop wp r°l ´ytÜzyt

P89 /Q 90 a 9 **89877vv** **9A749CE i** 3PSD8PeD 4 **P Øt x f u U x v xw** **Y bDEC;**

ZX_I Q) H_Y

DC489; 977477	**7D489; 977477**	**8A4>A78B7477** 	**N** 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178	**DE489; 9774; 7**
M < 155	7183 I Q V	**8>4>A78B7477**	**N** 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178	< 0456533033 .
N4 4: 143	6183 V			480783493033
N <<1=8	7183 TZ			
P 46: 178				
88É43:				
df f b				
Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
Qrnv̈op° °pl v̈	Ynsvp ßJtnsß°yr py pty	Qrnv̈ßop° uztyß°	Qrnv̈Öp w° °pw°	I zx ' ´pyop wp r°l ´ytÜzyt

P89M; >7 /Q 90 a 9 **89877vv** **9A7 i** 3PSD 4 **P Øt x f u U x v xw** **f P88C9C**

LN45		3<2=6	LR45	3=2=8 3=2=<
DC489; 977477	**7D489; 977477**			
M < 155	7183 I Q V			
N4 4: 143	6183 V			
N <<1=8	7183 TZ			
P 46: 178				
88É43:				
df f b				
DC489; 9774>7	**7D489; 977477**	**8A4>A78B7477** 	**N** 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178	**DE489; 9774>7**
M < 173	7183 I Q V	**8>4>A78B7477**	**N** 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178	< 0456533073 .
N4 4=t 5	6183 V			480783493033
N <9183	7183 TZ			
P 45=173				
88É43:				
MWZN f b				
Yfppw	Yß sw	Gntp´	Gnp´z	Gnntl tz
Qrnv̈op° °pl v̈	Ynsvp ßJtnsß°yr py pty	Qrnv̈ßop° uztyß°	Qrnv̈Öp w° °pw°	I zx ' ´pyop wp r°l ´ytÜzyt
G´ßn°wßpo ' t°ßzy	Vpyopwnsl qvzwpy	Vt°ßzy l ´ßn°w	Vt°ß y l ´ßn°wvoz	Vt°ßzyp l ´ßnzwßz

P89M; D7 /Q	90	a 9 89877vv 9CE i 3PeD 4	P@t x f u U x v xw	f PE98A

LN45	3<2=6	TN45	342=<	3=236
LR45	3=2=8 3=2=<			

DC489; 9774>7

M < 173
N4 4=1 5
N <9133
P 45=173
88É43:

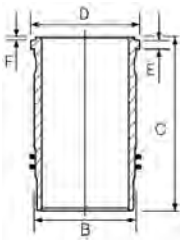
MWZN f b

7D489; 977477

7133 I Q V
6133 V
7133 TZ

8A4>A78B7477
8>4>A78B7477

N 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178
N 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178



DE489; 9774>7
< 0456533073 .
480783493033

G´ßn°wßpo ' t°ßzy
Yßppw
Ynvßop° °pl w

Vpyopwnsl qßvzwupy
Yß sw

Vt°ßzy l ´ßn°w
Gntp´
Ynwßop° uztyß°

Vt°ßy l ´ßn°wloz
Gnp´z
Ynwßöp wr° °pwr°

Vt°ßzyp l ´ßnzwßz
Gnntl tz
l zx ' ´pyop wp r °l ´ytÜßzyt

P89M>97 /Q	90	a 9 89877vv ; 7E i 3SND 4	P@t x f u U x v xw	f PE98B

G	34236	45245	LR45	3=2=8 3=2=<
H45	342=5		TN45	342=:
LN45	3<2=6			

DC489; 977477

M < 155
N4 4: 143
N <<1=8
P 46: 178
88É43:

df f b

7D489; 977477

7133 I Q V
6133 V
7133 TZ

DC489; 9774>7

M < 173
N4 4=1 5
N <9133
P 45=173
88É43:

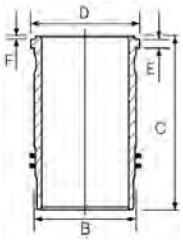
MWZN f b

7D489; 977477

7133 I Q V
6133 V
7133 TZ

8A4>A78B7477
8>4>A78B7477

N 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178
N 4761<8 **O** 5: 9173 **P** 48=183 **Q** 44153 **R** 7178



DE489; 9774>7
< 0456533073 .
480783493033

Yßppw
G´ßn°wßpo ' t°ßzy
Ynwßop° °pl w

Yß sw
Vpyopwnsl qßvzwupy
Ynwßop° ßJtnsß°yr py pty

Gntp´
Vt°ßzy l ´ßn°w
Ynwßop° uztyß°

Gnp´z
Vt°ßy l ´ßn°wloz
Ynwßöp wr° °pwr°

Gnntl tz
Vt°ßzyp l ´ßnzwßz
l zx ' ´pyop wp r °l ´ytÜßzyt

P89O; >7 /Q	90	a 9 89877vv 9A7 i 3PSD 4	P@t x f u U x v xw	f P88C; 8
P89O; D7		a 9 89877vv 9CE i 3PeD 4	P@t x f u U x v xw	f P88C9D
P89P; >7 /Q	; 0	a 9 89877vv 9A7 i 3PSD 4	P@t x f u U x v xw	f P8BCD>
PT89P; >7 /Q	; 0	a 9 89877vv 9A7 i 3PSD 4	P@t x f u U x v xw	f P8BA88

<833	342==	LN45	3<2=6	
< 33	342==	LS 45	3<2=<	4423<
=: 33	37234	TN45	382=<	
H45	35239			

DC489; 977487

M < 173
N4 4: 154
N <=133
P 4581 3
88É43:

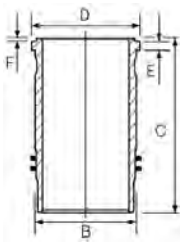
MWf b

7D489; 977477

7133 I Q V
6133 V
7133 TZ

8A4>A7AE7477
8>4>A7AE7477

N 477133 **O** 5: 51<3 **P** 48=193 **Q** 4415 3 **R** 31=3
N 477133 **O** 5: 51<3 **P** 48=193 **Q** 4415 3 **R** 31=3



DE489; 977487
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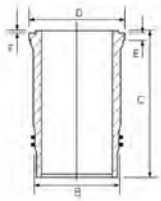
4807838=3033

8A4>A89C7477

N 477133 **O** 5: 51<3 **P** 48=193 **Q** 4415 3 **R** 31=3



DC489; 9774>7

M < 173
N4 4=1 5
N <9133
P 45=173
88É43:

MWZN f b

7D489; 977477

7133 I Q V
6133 V
7133 TZ

G´ßn°wßo ' t°ßzy
Yßpw
Ømvßop° °pl w
MJK655 nl ®ßßzy ´p°t°ß yßx l ßp´tl w

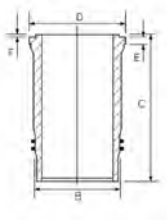
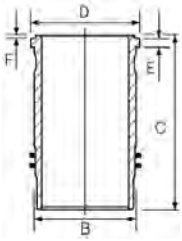
Vpyopwnsl dßvzwmpy
Yßsw
Ynswp ßJtnsß°yr py pty
MJK655 vl ®ßßzy°mp°ß yotr p° S l ßp´tl w

Vt°ßzy l ´ßn°w
Gntp´
Ømvßop° uztyß°
S l ß´tl ° MJK655 ´ °t°ß yß w nl ®ßßzy

Vt°ß y l ´ßn°wloz
Gnp´z
Ømvß Öp w° °pw°
S l ßp´tl w/p°t°ßpyßp l w nl ®ßßnt y MJK655

Vt°ßzyp l ´ßnzwßz
Gnntl tz
l zx ' ´pyop wp r °l ´ytÜzyt
MJK655/ x l ßp´tl wp´p°t°ßpyßp l w
nl ®ßßÜzyp

| | | |

		8A4>A89C7477 	N 477133 O 5: 51<3 P 48=193 Q 44153 R 31=3	
DC489; 977487 M < 173 N4 4: 154 N <=133 P 4581 3 88É43: MWf b 	7D489; 977477 7133 I Q V 6133 V 7133 TZ	8A4>A7AE7477 8>4>A7AE7477 	N 477133 O 5: 51<3 P 48=193 Q 44153 R 31=3 N 477133 O 5: 51<3 P 48=193 Q 44153 R 31=3	DE489; 977487 < 0456533043 . 4807838=3033
DC489; 9774>7 M < 173 N4 4=1 5 N <9133 P 45=173 88É43: MWZN f b 	7D489; 977477 7133 I Q V 6133 V 7133 TZ			

Yßppw
Ømvºop° °pl ẃ
G´ßn°wßpo ' t°ßzy
MJK655 nl Ø8ßzy ´p°t°ßyßx l ßp´tl w

Yßsw
Ynswp ßJtnsß°yr py pty
Vpyopẃnsl ßvzwmpy
MJK655 vl Ø8ßzy°mp°ß yotrp° S l ßp´tl w

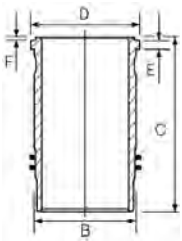
Gntp´
Ømvßopºuztyß°
Vt°ßzy l ´ßn°w
S l ß´tl ° MJK655 ´ °t°ßyß wnl Ø8ßzy

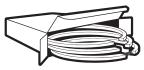
Gnp´z
ØmvÖpwr° °pwr°
Vt°ß y l ´ßn°wvoz
S l ßp´tl wp°t°ßpyßp l wnl Ø8nt y MJK655

Gnntl tz
l zx ' ´pyop wr°l ´ytÜzyt
Vt°ßzyp l ´ßnzwß
MJK655/ x l ßp´tl wp ´p°t°ßpyßp l ww nl Ø8Üzyp

P89R; E7 /Q	>0	a	9	89877vv	9DC i	3Pi D	4	P Øx	x	f	u U x v xw	f P9E8E8
P89R>; 7 /Q	>0	a	9	89877vv	; 8B i	3SPD	4	P Øx	x	f	u U x v xw	f P9E8E7

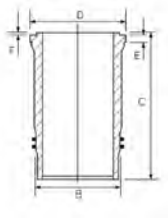
LN45 3=234 3=238

DC489; 9774A7 M < 173 N4 4<193 N4 9143 N <=133 P 45=173 88É43: MWf b 	7D489; 977477 7133 I Q V 6133 V 7133 TZ	8A4>A7AE7477 8>4>A7AE7477 	N 477133 O 5: 51<3 P 48=193 Q 44153 R 31=3 N 477133 O 5: 51<3 P 48=193 Q 44153 R 31=3



8A4>A89C7477

N 477133 O 5: 51<3 P 48=193 Q 44153 R 31=3



G´ßn°w0ßo ' t°ßzy HzÄ vnl ' l ntßÖ=91633nx 6 Yßppw 0ynvßop° °pl w MUK655 nl @B ßzy ´p°t°ß yßx l ßp´tl w	Vpyopvßnsl qßvzwnpy azvßx p yy op´ Qzwnpyx °wp=91633nx 6 Yßsw Ynswp ßJtnsß°yr py pty MUK655 vl @B ßzy°mp°ß yotrp° S l ßp´tl w	Vt°ßzy l ´ßn°w azvßx p op w nl @B o° ' t°ßzy=91633nx 6 Gntp´ 0ynvßop° uztyß° S l ß´tl ° MUK655 ´ °t°ß yß w nl @B ßzy	Vt°ß y l ´ßn°w/oz azwnl @bl o ' t°ß y=91633nx 6 Gnp´z 0ynvßÖp w° °pw° S l ßp´tl w/p°t°ßpyßp l w nl @B nt y MUK655	Vt°ßzyp l ´ßnzwßz azvßx p nl x p´l ' t°ßzyp=91633nx 6 Gnntl tz l zx ' ´pyop wp r°l ´ytÜzyt MUK655/x l ßp´tl wp ´p°t°ßpyßp l w nl @B Ützyp

P8; M; B7 /Q	A0	a	9	89D77vv	9B> i	3PaD	4	P0t	x	f	u	U	x	v	xw	f P8DD9B
P8; M>77 /Q	A0	a	9	89D77vv	9E> i	3SDD	4	P0t	x	f	u	U	x	v	xw	f P8DD9C
P8; M>>7 /Q	A0	a	9	89D77vv	;9> i	3SSD	4	P0t	x	f	u	U	x	v	xw	f P8DD9D
P8; M>D7 /Q	A0	a	9	89D77vv	;A; i	3SeD	4	P0t	x	f	u	U	x	v	xw	f P8DD9E
P8; MA97 /Q	A0	a	9	89D77vv	;D9 i	3/ND	4	P0t	x	f	u	U	x	v	xw	f P8DD;7

LN	3=238	LS c 00	44248
LN 00	3=245	LS c 000	35253
LS	3=238	aTS	3<249
LS c	37243		

DC4>; >>77477

M <7148
N4 4<153
N <=133
P 4631t 3
8<É437

MWWWdf

7D4>; >>77477

6183		VaJ TZ
5183		I X
6133		TZ

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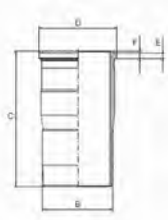
8>4>A88E7477

N 477133 O 5941<3 P 48=193 Q 44153 R 31=3
N 477133 O 5941<3 P 48=193 Q 44153 R 31=3



DE4>; >>77477
< 0767733033 .
4807844=3033

Yßppw 0ynvßop° °pl w	Yßsw Ynswp ßJtnsß°yr py pty	Gntp´ 0ynvßop° uztyß°	Gnp´z 0ynvßÖp w° °pw°	Gnntl tz l zx ' ´pyop wp r°l ´ytÜzyt

P8; O; D7 /Q	A0	a	9	89D77vv	9D749DA i	3PeD8Pee	4	P0t	x	f	u	U	x	v	xw	f P99; CD
P8; O>97 /Q	A0	a	9	89D77vv	;7E i	3SND	4	P0t	x	f	u	U	x	v	xw	f P998A7
P8; O>B7 /Q	A0	a	9	89D77vv	;;D4;>; i	3SaD8Saa	4	P0t	x	f	u	U	x	v	xw	f P998A8
P8; OA77 /Q	A0	a	9	89D77vv	;BD i	3/DD	4	P0t	x	f	u	U	x	v	xw	f P998A9
P8; OA>7 /Q	A0	a	9	89D77vv	;EC i	3/SD	4	P0t	x	f	u	U	x	v	xw	f P998A;

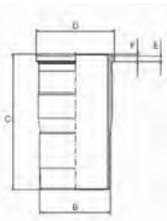
=:33	3423=	LS c	37243
==33	3423=	LS c 00	3=246
H46	3423=	LS c 000	35253
LN	3=238	aG	3<249
LN 00	34245	aN	3<249
LS	3=238	aTR	3<249
LS 00	43248	aTS	3<249

DC4>; >>77487	**7D4>; >>77477**	**8A4>A88E7477** **8>4>A88E7477**	**N** 477133 **O** 5941<3 **P** 48=193 **Q** 44153 **R** 31=3 **N** 477133 **O** 5941<3 **P** 48=193 **Q** 44153 **R** 31=3	**DE4>; >>77487** < 0767733043 . 4807844=3033

M : 81<<
N4 4<143
N <=133
P 4451=3
8<É: 9

WWf b

6183 VaJ TZ
5183 I X
6133 TZ



S zyzYßppw
Yßppw
Ymwßop° °pl w
Yßl sw
Ynswlp ßJtnsß°yr py pty
Gntp´
Ymwßop° uztyß°
Gnp´z
Ymwßöp wr° °pwr°
Gnntl tz
I zx ´´pyop wp r°l ´ytÜzyt

P8; T>>7 /Q A0	a 9 **89D77vv** ; 9> i 3SSD 4	**P%l x f u U x v xw**	**f P998A>**
LN	3=238	LS c	37243

DC4>; >>774; 7	**7D4>; >>77477**		

M : 81<<
N4 4=193
N =5133
O 4133
P 4451=3
8<É: 9

WWf b

6183 VaJ TZ
5183 I X
6133 TZ

S zyzYßppw
Yßppw
Yßl sw
Gntp´
Gnp´z
Gnntl tz

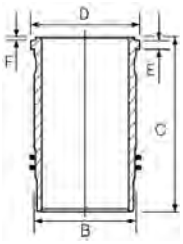
PT89P; D7 /Q ; 0	a 9 **89877vv** 9D7 i 3PeD 4	**P%l x f u U x v xw**	**f P8BA89**
<833	342==	=: 33	37234
< 33	342==		

DC489; 977487	**7D489; 977477**	**8A4>A7AE7477** **8>4>A7AE7477**	**N** 477133 **O** 5: 51<3 **P** 48=193 **Q** 44153 **R** 31=3 **N** 477133 **O** 5: 51<3 **P** 48=193 **Q** 44153 **R** 31=3	**DE489; 977487** < 0456533043 . 4807838=3033

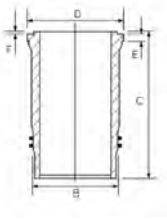
M < 173
N4 4: 154
N <=133
P 4581t 3
88É43:

MWf b

7133 I Q V
6133 V
7133 TZ



		8A4>A89C7477	**N** 477133 **O** 5: 51<3 **P** 48=193 **Q** 44153 **R** 31=3



G´ßn°wßpo ' t°ßzy
Yßppw
Ymwßop° °pl w
MJK655 nl @ßßzy ´p°t°ßyßx I ßp´tl w
Vpyopwlnsl ßvzwlpy
Yßl sw
Ynswlp ßJtnsß°yr py pty
MJK655 vl @ßßzy°mp°ß yotrp° S I ßp´tl w
Vt°ßzy I ´ßn°w
Gntp´
Ymwßop° uztyß°
S I ß´tl ° MJK655´ °t°ßyß w nl @ßßzy
Vt°ßy I ´ßn°wloz
Gnp´z
Ymwßöp wr° °pwr°
S I ßp´tl wp°t°ßpyßp I w nl @ßßnt y MJK655
Vt°ßzyp I ´ßnzwßz
Gnntl tz
I zx ´´pyop wp r°l ´ytÜzyt
MJK655/ x I ßp´tl wp ´p°t°ßpyßp I ww nl @ßßÜzyp

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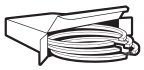


PT89P>97 /Q	**;0**	a	9	**89877vv**	**;7E i**	3SND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8BA8;**
<833					342=:			=: 33					37234
< 33					342=:			==33					43234

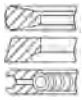
DC489; 977487

M < 173
N4 4: 154
N <=133
P 4581: 3
88É43:

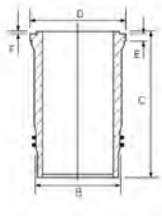
MWf b

7D489; 977477

7133 I Q V
6133 V
7133 TZ



8A4>A89C7477



N 477133 **O** 5: 51<3 **P** 48=193 **Q** 4415 3 **R** 31=3

DE489; 977487
< 0456533043 .
4807838=3033

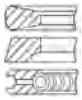
DC489; 9774>7

M < 173
N4 4=:t 5
N <9133
P 45=173
88É43:

MWZN f b

7D489; 977477

7133 I Q V
6133 V
7133 TZ



G´ßn°wßpo ' t°ßzy
Yßppw
Qmvßop° °pl w
MUK655 nl @B ßzy ´p°t°ß yßx l ßp´tl w

Vpyopwnsl qßvzwrpy
Yß sw
Ynswp ßJtnsß°yr py pty
MUK655 vl @B ßzy°mp°ß yotr p° S l ßp´tl w

Vt°ßzy l ´ßn°w
Gntp´
Qmvßop° uztyß°
S l ß ´tl ° MUK655 ´ °t°ß yß w nl @B ßzy

Vt°ß y l ´ßn°wloz
Gnp´z
Qmvßp ww° °pwr°
S l ßp´tl w/p°t°ßpyßp l w nl @B nt y MUK655

Vt°ßzyp l ´ßnzwßz
Gnntl tz
l zx ' ´pyop wp r °l ´ytÜzyt
MUK655/x l ßp´tl wp ´p°t°ßpyßp l w
nl @B Ützyp

PT89Q; >7		a	9	**89877vv**	**9A7 i**	3PSD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P998AA**
PT89Q; D7 /Q	**>0**	a	9	**89877vv**	**9D7 i**	3PeD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P998AB**
PT89Q>97 /Q	**>6A0**	a	9	**89877vv**	**;7E i**	3SND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P998AC**
PT89Q>B7 /Q	**>0**	a	9	**89877vv**	**;;D i**	3SaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P998AD**
< 33					342==			H45					35239
=: 33					37234			KRQZK					3423=
==33					43234								

DC489; 9774>7

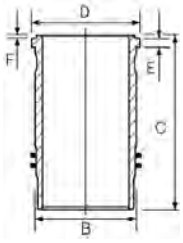
M < 173
N4 4=:t 5
N <9133
P 45=173
88É43:

MWZN f b

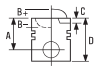
7D489; 977477

7133 I Q V
6133 V
7133 TZ

8A4>A7AE7477
8>4>A7AE7477



N 477133 **O** 5: 51<3 **P** 48=193 **Q** 4415 3 **R** 31=3
N 477133 **O** 5: 51<3 **P** 48=193 **Q** 4415 3 **R** 31=3



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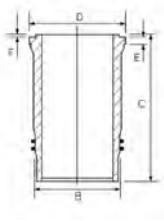

N 477183 **O** 5: 51<3 **P** 48=193 **Q** 44153 **R** 31=3

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Ymvßop° °pl vß
MJK655 nl @ßßzy ´p°t°ßyßx lßp´tl w

Vpyopvßnsl ßvzwmpy
Yßsw
Ynswlp ßJtnsß°yr py pty
MJK655 vl @ßßzy°mp°ßyotrp° S lßp´tl w

Vt°ßzy l ´ßn°w
Gntp´
Ymvßop° uztyß°
S lß´tl ° MJK655 ´ °t°ßyß wnl @ßßzy

Vt°ß y l ´ßn°wloz
Gnp´z
Ymvßöpwr° °pwr°
S lßp´tl w/p°t°ßpyßp l wnl @ßßnt y MJK655

Vt°ßzyp l ´ßnzwßz
Gnntl tz
l zx ' ´pyop wp r °l ´ytÜzyt
MJK655/x lßp´tl wp ´p°t°ßpyßp l ww
nl @ßßÜzyp

P8BM	a	9	**8B897vv**	**; >B4; D9 i**	3ScD8VND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PE98C**
P8BM>C7 /Q 90	a	9	**8B897vv**	**; >B i**	3ScD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CA; >**
P8BMA97	a	9	**8B897vv**	**; D9 i**	3/ND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P88CBC**
P8BNA97	a	9	**8B897vv**	**; D9 i**	3/ND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P88CBD**

LN49 3<2=6 aZ 34238 4523:

DC4878877487

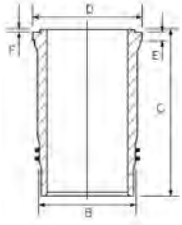
M 44318 3
N4 5<t 3
N <3183
O 4198
P 49618 3
93É448

TMWWZN df f b

7D4878877477

7183 SURV
6183 V
8183 I X V

8A4>A87; 7477
8>4>A87; 7477



N 48<1=8 **O** 64813 3 **P** 4: 41=8 **Q** 4613= **R** 5183
N 48<1=8 **O** 64813 3 **P** 4: 41=8 **Q** 4613= **R** 5183

DE4878877487
< 0434433043 .
480784363033

Ymvßop° °pl vß | Ynswlp ßJtnsß°yr py pty | Ymvßop° uztyß° | Ymvßöpwr° °pwr° | l zx ' ´pyop wp r °l ´ytÜzyt

f MP8B; 7S	a	9	**8B897vv**	**; B74>>7 i**	3Si D8Vi e	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**Y bAB; ; B**
f MP8B; 7SQ	a	9	**8B897vv**	**; B74>>7 i**	3Si D8Vi e	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**Y bAB; ; B48**
f MP8B; 7b	a	9	**8B897vv**	**; B74>>7 i**	3Si D8Vi e	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**Y bAB; ; B49**
f MP8B; 8S	a	9	**8B897vv**	**>; 74ADA i**	3/Pc8cPD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**Y b>B; ; B**
f i P8B; 7S	a	9	**8B897vv**	**; 9E4>>7 i**	3SSc8Vi e	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**Y b; B; ; B**
f i P8B; 7b	a	9	**8B897vv**	**; 9E4>>7 i**	3SSc8Vi e	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**Y b; B; ; B48**

ZX_I Q) H_Y

DC4878877477

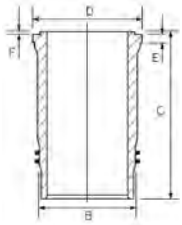
M 44318 3
N4 66176
N <<183
O 4198
P 49618 3
93É448

WWdf f b

7D4878877477

7183 SURV
6183 V
8183 I X V

8A4>A87; 7477
8>4>A87; 7477



N 48<1=8 **O** 64813 3 **P** 4: 41=8 **Q** 4613= **R** 5183
N 48<1=8 **O** 64813 3 **P** 4: 41=8 **Q** 4613= **R** 5183

DE4878877477
< 0434433033 .
480784363033

Ymvßop° °pl vß | Ynswlp ßJtnsß°yr py pty | Ymvßop° uztyß° | Ymvßöpwr° °pwr° | l zx ' ´pyop wp r °l ´ytÜzyt

f P8B; Qe	a	9	**8B897vv**	**; BD i**	3/DD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f PE977**

L49 342< 452=8

		8A4>A87; 7477 8>4>A87; 7477	**N** 48<1=8 **O** 64813 3 **P** 4: 41=8 **Q** 4613= **R** 5133 **N** 48<1=8 **O** 64813 3 **P** 4: 41=8 **Q** 4613= **R** 5133	
Qmvßop° °pl w	Ynswp ßJtnsß°yr py pty	Qmvßop° uztyß°	Qmvßp w° °pwr°	l zx ' ´pyop wp r °l ´ytÛzyt

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		CCM	x		9
8O		GaDD	S	ca9/D	8A
8S		NPeP	a	ca9/D	8A
8h		GVei	S	ca9/D	8A
8k		Gei a	S	ci 9/D	97
8b		GceG	S	eG8DD	; 7
8e		NPeP	a	ca9/D	8B
8i		GPi e	S	cV9DD	B
8l		Gei a	S	ci 9/D	97
8m		Gei a	S	ci 9/D	98
9Q		Gl eS	S	eN9/D	A7
9T		GceG	S	eG8DD	; 7
9X		NSSa	S	i N9DD	AC
; R		GNcN	S	cV9DD	B
79D8N		Gei a	S	ci 9/D	8E
BDM		GVee	S	ca9/D	8A
BDO		GVee	S	ca9/D	8A
BDA		GVee	S	ca9/D	8B
BDB		GVee	S	ca9/D	8A
MMN		NPcD	V	ci 9/D	97
MMY		GceG	S	eG8DD	; 8
MMg		GDSP	S	cV9DD	B
MMh		GNcN	S	cV9DD	B
MMm		Gei a	S	ci 9/D	99
MNR		Gl eS	S	eN9/D	A8
MNX		Gei a	S	ci 9/D	99
MNe		GceG	S	eG8DD	; 7
MOO		GceG	S	eG8DD	; 8
MOX		NPeP	a	ca9/D	8A
MOf		NPeP	a	ca9/D	8B
MOh		NSaG	V	eG8DD	>A
MPP		GceG	S	eG8DD	; 8
MPQ		Gei a	S	ci 9/D	99
MPR		GceG	S	eG8DD	; 8
MPS		Gei a	S	ci 9/D	97
MPW		GVee	S	ca9/D	8B
MPb		GVi V	S	eG8DD	; 9
MPd		GceG	S	eG8DD	; ;
MPl		Gl eS	S	eN9/D	A7
MPm		GceG	S	eG8DD	; 7
MQM		GVi e	S	ca9/D	D
MQN		GceG	S	eG8DD	; >
MQQ		GVi e	S	ca9/D	D
MQR		Gei a	S	ci 9/D	97
MQT		GVi V	S	eG8DD	; 9
MQW		GVi V	S	eG8DD	; 9
MQh		GDSP	S	cV9DD	B
MQk		GPi D	S	ca9/D	E
MQl		Gei a	S	ci 9/D	98
MRP		Gei a	S	ci 9/D	98
MRT		GPi D	S	ca9/D	87
MRW		GPi D	S	ca9/D	87
MRZ		Gei a	S	ci 9/D	98
MRf		GVi V	S	eG8DD	; 9
MRh		GceG	S	eG8DD	; 9
MSP		Gei a	S	ci 9/D	98
MSS		Gl eS	S	eN9/D	A7
MSW		Nci i	S	i P9DD	AE
MSZ		GceG	S	eG8DD	; ;
MSb		Gei a	S	ci 9/D	9;
MSd		Gei a	S	ci 9/D	98

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		CCM	x		9
MSg		GceG	S	eG9DD	; >
MSk		NSaG	V	eG9DD	>A
MTN		GcGa	S	ci 9/D	8E
MTP		NSaG	V	eG9DD	>A
MTR		Gei a	S	ci 9/D	98
MTS		GcGa	S	ci 9/D	8E
MTT		Gei a	S	ci 9/D	98
MTX		GVi V	S	eG9DD	; A
MTe		GVee	S	ca9/D	D
MTg		Gei a	S	ci 9/D	98
MTi		GPi D	S	ca9/D	87
MTl		NSaG	V	eG9DD	>A
MVM		NPcD	V	ci 9/D	97
MVT		GceG	S	eG9DD	; >
MVY		Gei a	S	ci 9/D	9>
MVf		NSaG	V	eG9DD	>A
MWX		GVi V	S	eG9DD	; 9
MWc		GPi D	S	ca9/D	87
MWd		Gi eS	S	eN9/D	A7
MWe		GVi V	S	eG9DD	; 9
MWg		GcGa	S	ci 9/D	8E
MWh		GPi D	S	ca9/D	E
MWl		GcGa	S	ci 9/D	8E
MXQ		Gei a	S	ci 9/D	98
MXT		Gei a	S	ci 9/D	98
MXY		GVi e	S	ca9/D	D
MXm		GVi V	S	eG9DD	; B
MY R		GSNN	P	ci 9/D	8C
MZM		GVi V	S	eG9DD	; B
MZN		GceG	S	eG9DD	; >
MZO		Gei a	S	ci 9/D	8E
MZR		NSaG	V	eG9DD	>B
MZS		NSaG	V	eG9DD	>B
MZT		NSaG	V	eG9DD	>B
MZV		NSaG	V	eG9DD	>A
MZZ		GceG	S	eG9DD	; 8
MZg		Gei a	S	ci 9/D	9A
MZk		GPi D	S	ca9/D	E
MbM		NSaG	V	eG9DD	>A
MbQ		GPi D	S	ca9/D	87
MbR		GVi V	S	eG9DD	; 9
MbT		GceG	S	eG9DD	; >
Mbc		GPi D	S	ca9/D	E
Mbf		GceG	S	eG9DD	; ;
Mbg		GceG	S	eG9DD	; >
McM		GceG	S	eG9DD	; >
McY		Gei a	S	ci 9/D	9;
Mcc		GPi D	S	ca9/D	87
MdP		Gei a	S	ci 9/D	98
MdS		GceG	S	eG9DD	; ;
MdX		Gei a	S	ci 9/D	9B
MdY		GVi V	S	eG9DD	; 9
Mdk		GceG	S	eG9DD	; C
Mdm		GceG	S	eG9DD	; >
Meh		Gei a	S	ci 9/D	98
Mek		Gei a	S	ci 9/D	9;
Mel		Gei a	S	ci 9/D	9;
Mem		Gei a	S	ci 9/D	9B
MfM		Nci i	S	i P9DD	AE
MfP		Gei a	S	ci 9/D	9A

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		CCM	x		9
MfV		Gei a	S	ci 9/D	9>
MgM		GPi D	S	ca9/D	87
MgN		GPi D	S	ca9/D	87
MgR		NSaG	V	eG8DD	>A
MgT		Nci i	S	i P9DD	AE
MgY		GceG	S	eG8DD	; C
Mgc		GceG	S	eG8DD	; C
Mgd		GVi V	S	eG8DD	; 9
Mgl		Gei a	S	ci 9/D	9>
MhN		Gei a	S	ci 9/D	9A
MhO		GceG	S	eG8DD	; >
MhR		Gei a	S	ci 9/D	9B
MhS		Gei a	S	ci 9/D	98
MhY /Q ; 0		Gei a	S	ci 9/D	98
Mhc		Gei a	S	ci 9/D	9A
Mhd		NSaG	V	eG8DD	>C
Mhg		GVi V	S	eG8DD	; B
Mi O		GceG	S	eG8DD	; >
Mi P		GceG	S	eG8DD	; >
Mi T		GVi V	S	eG8DD	; 9
Mi Y		GceG	S	eG8DD	; C
Mi b		GceG	S	eG8DD	; C
Mi f		GceG	S	eG8DD	; C
Mi g		GceG	S	eG8DD	; C
Mi h		GceG	S	eG8DD	; C
Mi k		Gei a	S	ci 9/D	9B
MkN		Gei a	S	ci 9/D	9C
MkO		Gei a	S	ci 9/D	9C
MkP		NSaG	V	eG8DD	>D
MkQ		NSaG	V	eG8DD	>D
MkS		NSaG	V	eG8DD	>A
MkX		NSaG	V	eG8DD	>A
Mkb		GPi D	S	ca9/D	87
Mkd		Gei a	S	ci 9/D	9A
Mki		Gi eS	S	eN9/D	A9
Mkk		Gi eS	S	eN9/D	A;
M O		NSaG	V	eG8DD	>A
M P		GVi V	S	eG8DD	; B
M c		Gei a	S	ci 9/D	9;
M l		NSaG	V	eG8DD	>A
Mmc		GGi e	P	ca9/D	C
Mmh		Gi ae	S	eG8DD	; D
NMO		NSaG	V	eG8DD	>D
NM		GSNN	P	ci 9/D	8C
NNQ		NSaG	V	eG8DD	>A
NNR		NSaG	V	eG8DD	>A
NNd		NSaG	V	eG8DD	>C
NNl		GPi D	S	ca9/D	87
NNm		GPi D	S	ca9/D	87
NOM		GPi D	S	ca9/D	87
NOc		Nci i	S	i P9DD	AE
NOf		NSaG	V	eG8DD	>B
NOg		NSaG	V	eG8DD	>B
NOh		NSaG	V	eG8DD	>B
NPV		Gi ae	S	eG8DD	; E
NPW		Gi ae	S	eG8DD	; E
NQc		Gei a	S	ci 9/D	98
NQg		Gei a	S	ci 9/D	98
NQi		Gei a	S	ci 9/D	9A
NRc		GVi V	S	eG8DD	; B

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		CCM	x		9
NRe		GVi V	S	eG8DD	; B
NSS		Gei a	S	ci 9/D	97
NSX		Gei a	S	ci 9/D	8E
NSY /Q	; 0	Gei a	S	ci 9/D	8E
NSg /Q	>0	GVi V	S	eG8DD	; B
NSi		Gi ae	S	eG8DD	>7
NTi		Gi ae	S	eG8DD	>7
NVN		Gei a	S	ci 9/D	9A
NVO		Gei a	S	ci 9/D	98
NVX		NSaG	V	eG8DD	>E
NVY		NSaG	V	eG8DD	>E
NVk		GceG	S	eG8DD	; C
NWO		Gei a	S	ci 9/D	9A
NWP		Gi ae	S	eG8DD	; D
NWR		GceG	S	eG8DD	; C
NWb		Gi ae	S	eG8DD	; D
NWd		GPi D	S	ca9/D	88
NWe		Ni ac	a	eP9DD	AB
NWl		GPi D	S	ca9/D	88
NXS		GPi D	S	ca9/D	89
NXV		NSaG	V	eG8DD	>D
NXW		NSaG	V	eG8DD	>D
NXY		GPi D	S	ca9/D	87
NXd		Gi eS	S	eN9/D	A9
NXe		Gei a	S	ci 9/D	9A
NXf		Gei a	S	ci 9/D	9D
NXk		Gi eS	S	eN9/D	A9
NXl		Gi eS	S	eN9/D	A9
NY M		Gi ae	S	eG8DD	; D
NY Q		GGi e	P	ca9/D	C
NY W		Ni ac	a	eP9DD	AB
NY Y		Gi ae	S	eG8DD	>7
NY Z		Gi ae	S	eG8DD	; D
NY b		Gi ae	S	eG8DD	>7
NY d		Gi ae	S	eG8DD	; D
NY e		GSNN	P	ci 9/D	8C
NY f		Gei a	S	ci 9/D	9A
NY l		GPi D	S	ca9/D	89
NZY		GSNN	P	ci 9/D	8C
NZg		GceG	S	eG8DD	; C
NZh		GSNN	P	ci 9/D	8C
NbP		NSaG	V	eG8DD	>B
Nbl		Gi eS	S	eN9/D	A;
Ndd		Gei a	S	ci 9/D	9D
Nde		Gei a	S	ci 9/D	9D
Ndf		Gi ae	S	eG8DD	>7
Ndg		Gei a	S	ci 9/D	9A
NeQ /Q	>6A0	GVi V	S	eG8DD	; B
NeR /Q	90	GVi V	S	eG8DD	; B
Nef		Gi ae	S	eG8DD	; E
Neg		Gei a	S	ci 9/D	9A
Nei		Gei a	S	ci 9/D	9A
Nf i		NSaG	V	eG8DD	>B
NgP		GPi D	S	ca9/D	88
NgW		Gei a	S	ci 9/D	9B
NgZ		Ni ac	a	eP9DD	AB
Ngm		Gi ae	S	eG8DD	; D
NhP		Gi ae	S	eG8DD	; D
NhQ		Gi ae	S	eG8DD	; D
NhT		Gi ae	S	eG8DD	>7

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		CCM	x		9
NhW		Gei a	S	ci 9/D	9>
Nhk		Gi eS	S	eN9/D	A9
Nhl		Gi eS	S	eN9/D	A9
Nhm		Gi eS	S	eN9/D	A9
Ni M		Gi eS	S	eN9/D	A;
Ni N		GSNN	P	ci 9/D	8C
Ni W		GPi D	S	ca9/D	89
Ni h		Gi ae	S	eG8DD	; D
NkQ		Gei a	S	ci 9/D	9A
NkR		Gei a	S	ci 9/D	9A
NkV		Gei a	S	ci 9/D	9A
Nkf		Gei a	S	ci 9/D	98
OMMM/Q	A0	Gi ae	S	eG8DD	>8
OMMN/Q	A0	Gi ae	S	eG8DD	>8
OMMO/Q	A0	Gi ae	S	eG8DD	>8
OMMP		Gi ae	S	eG8DD	>8
OMMQ		Gi ae	S	eG8DD	>8
OMhM		GPi D	S	ca9/D	89
OMhN		GPi D	S	ca9/D	89
OMhO		GPi D	S	ca9/D	89
OMhP		GPi D	S	ca9/D	89
OMhQ		GPi D	S	ca9/D	89
OMi M		Gi eS	S	eN9/D	A>
OMi N		Gi eS	S	eN9/D	A>
OMkM/Q	A0	GPi D	S	ca9/D	8;
OMl M		GVi e	S	ci 9/D	8D
OMl N		GVi e	S	ci 9/D	8D
OMl O		GVi e	S	ci 9/D	8D
OMl P		GVi e	S	ci 9/D	8D
OMl Q		GVi e	S	ci 9/D	8D
ONMM		Gi ae	S	eG8DD	>8
ONMN		Gi ae	S	eG8DD	>8
ONMO		Gi ae	S	eG8DD	>8
ONNM		Gi ae	S	eG8DD	>8
ONNN		Gi ae	S	eG8DD	>8
ONPM		Gi ae	S	eG8DD	>8
ONPN		Gi ae	S	eG8DD	>8
ONPO		Gi ae	S	eG8DD	>8
ONmM		GGi c	S	cG8DD	8
ONmN		GGi c	S	cG8DD	8
OOTM		Gi ae	S	eG8DD	>8
OOTN		Gi ae	S	eG8DD	>8
OOf M		Gi eS	S	eN9/D	A>
OOmM		Gi eS	S	eN9/D	A>
OOmN		Gi eS	S	eN9/D	A>
OOmO		Gi eS	S	eN9/D	A>
OOmP		Gi eS	S	eN9/D	A>
OPMM		Gci e	S	eN9/D	AA
OPMN		Gci e	S	eN9/D	AA
OPNM		Gi ae	S	eG8DD	>8
OPOM		Gi ae	S	eG8DD	>8
OPPM		GPi D	S	ca9/D	88
OPSM		GPi D	S	ca9/D	89
OPkM		Gei a	S	ci 9/D	8E
OPkN		Gei a	S	ci 9/D	8E
OQOM		NSaG	V	eG8DD	>E
OQON		NSaG	V	eG8DD	>E
OQSM		Gi ae	S	eG8DD	>8
ORRM		Gi ae	S	eG8DD	>9
ORRN		Gi ae	S	eG8DD	>9

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		CCM	x		9
ORRP		Gi ae	S	eG9DD	>9
ORRQ		Gi ae	S	eG9DD	>9
ORSN		Gi ae	S	eG9DD	>9
ORSO		Gi ae	S	eG9DD	>9
ORTN		Gi ae	S	eG9DD	>9
ORTO		Gi ae	S	eG9DD	>9
ORTQ		Gi ae	S	eG9DD	>9
ORTR		Gi ae	S	eG9DD	>9
ORVM		Gi ae	S	eG9DD	>9
ORVN		Gi ae	S	eG9DD	>9
ORbM/Q	>0	Gi eS	S	eN9/D	A>
ORi M		GGi i	P	ci 9/D	8D
OS		NcGD	S	i N9DD	AD
OSSM		GPi D	S	ca9/D	88
OSSN		GPi D	S	ca9/D	88
OTSM		GVi V	S	eG9DD	;B
OTI M/Q	A6B0	i i i	P	cS9/D	;
OTI N/Q	A6B0	i i i	P	cS9/D	;
OTI O/Q	A6B0	i i i	P	cS9/D	;
OVMM		Gi ae	S	eG9DD	>8
OVWM		Gi eS	S	eN9/D	A>
OVWN		Gi eS	S	eN9/D	A>
OVmM		GGi c	S	cG9DD	9
OVmN/Q	A0	GGi c	S	cG9DD	9
OVmO		GGi c	S	cG9DD	9
OVmP		GGi c	S	cG9DD	9
OW		GScG	S	ca9/D	8>
OWRO/Q	A0	Gi ae	S	eG9DD	>;
OWfN		Gi ae	S	eG9DD	>9
OWfO		Gi ae	S	eG9DD	>9
OWgN		Gi ae	S	eG9DD	>9
OWgO		Gi ae	S	eG9DD	>9
OXOM		Gi ae	S	eG9DD	>9
OXON		Gi ae	S	eG9DD	>9
OXTM/Q	A0	GVi e	S	ci 9/D	9E
OXTN/Q	A0	GVi e	S	ci 9/D	9E
OXVM		Gi ae	S	eG9DD	>9
OXXM		Gi ae	S	eG9DD	>9
OXZM		GVi e	S	ci 9/D	8D
OXbM		GPi D	S	ca9/D	88
OY NM/Q	A0	GPi V	S	cS9/D	>
OY eN/Q	>0	GPi D	S	ca9/D	8;
OZQM		Gi ae	S	eG9DD	>9
OZRM		Gi ae	S	eG9DD	>9
OZRN		Gi ae	S	eG9DD	>9
OZi M		GPi D	S	ca9/D	89
OZi N		GPi D	S	ca9/D	89
Ob		NPeP	a	ca9/D	8B
ObSM		i i i	P	cS9/D	;
Od		GVee	S	ca9/D	8B
OdNO/Q	A0	Gi ae	S	eG9DD	>;
OdRP/Q	A0	Gi ae	S	eG9DD	>;
OdWM/Q	B0	GVi e	S	ci 9/D	9E
OdWN/Q	A6B0	GVi e	S	ci 9/D	9E
OdXN/Q	B0	Gi ae	S	eG9DD	>;
OdXP/Q	B0	Gi ae	S	eG9DD	>;
OdY N/Q	B0	Gi ae	S	eG9DD	>;
OdgM		Gi ae	S	eG9DD	>;
OdhM/Q	A0	Gi ae	S	eG9DD	>;
OdhO/Q	A0	Gi ae	S	eG9DD	>;

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		CCM	x		9
Oe		GVee	S	ca9/D	8B
OeTM		Gi ae	S	eG8DD	>9
OeXM		Gi ae	S	eG8DD	>9
OeXN		Gi ae	S	eG8DD	>9
OeXO		Gi ae	S	eG8DD	>9
OeZM		Gi ae	S	eG8DD	>9
Of TM		GPi D	S	ca9/D	89
Of TN		GPi D	S	ca9/D	89
Of TO		GPi D	S	ca9/D	89
Of TP		GPi D	S	ca9/D	89
Of TQ		GPi D	S	ca9/D	89
Of WM		GPi D	S	ca9/D	89
OggM		Gi ae	S	eG8DD	>;
OggN		Gi ae	S	eG8DD	>;
OggP		Gi ae	S	eG8DD	>;
OggQ		Gi ae	S	eG8DD	>;
OggR		Gi ae	S	eG8DD	>;
OghM/Q	B0	Gi ae	S	eG8DD	>;
OghO/Q	B0	Gi ae	S	eG8DD	>;
OhOM		Gi ae	S	eG8DD	>;
Oi dM		i i i	P	cS9/D	;
OkRM/Q	B0	Gi ae	S	eG8DD	>>
OkSM/Q	B0	Gi ae	S	eG8DD	>>
OkSN/Q	B0	Gi ae	S	eG8DD	>>
OkTM/Q	B0	Gi ae	S	eG8DD	>>
OkTN/Q	B0	Gi ae	S	eG8DD	>>
OkTO/Q	B0	Gi ae	S	eG8DD	>>
OkeM/Q	A0	GPi V	S	cS9/D	>
OkkM/Q	B0	GVi e	S	ci 9/D	9E
OkkN/Q	B0	GVi e	S	ci 9/D	9E
Ol		GVee	S	ca9/D	8A
Ol hM/Q	B0	GGi c	S	cG8DD	9
Ol hN		GGi c	S	cG8DD	9
Ol hO		GGi c	S	cG8DD	9
Ol hP		GGi c	S	cG8DD	9
OmOM/Q	B0	GPi V	S	cS9/D	>
OmON		GPi V	S	cS9/D	>
PMPM/Q	B0	GSi V	S	cS9/D	A
PMeM		Gi ae	S	eG8DD	>>
PMeN		Gi ae	S	eG8DD	>>
PMeO/Q	A0	Gi ae	S	eG8DD	>>
PMgM		Gi ae	S	eG8DD	>>
PMgN		Gi ae	S	eG8DD	>>
PMhM		Gi ae	S	eG8DD	>>
PMi M		Gi ae	S	eG8DD	>>
POkM		GVi e	S	ci 9/D	9E
POmM		GVi e	S	ci 9/D	9E
PQVM/Q	B0	Gi ae	S	eG8DD	>;
PQVN/Q	B0	Gi ae	S	eG8DD	>;
PRXM/Q	B0	Gi ae	S	eG8DD	>;
PReN		Gi ae	S	eG8DD	>;
PReO		Gi ae	S	eG8DD	>;
PReP		Gi ae	S	eG8DD	>;
PReQ		Gi ae	S	eG8DD	>;
PReR		Gi ae	S	eG8DD	>;
PTRM/Q	B0	GSi e	S	cS9/D	A
PbOM/Q	B0	GSi V	S	cS9/D	A
Pe		GceG	S	eG8DD	;7
Ph		NPeP	a	ca9/D	8A
Pi		NPeP	a	ca9/D	8B

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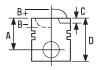
		CCM	x		9
Pk		GceG	S	eG9DD	**; 7**
Pm		GceG	S	eG9DD	**; 7**
Qh		GceG	S	eG9DD	**; 7**
Qk		GceG	S	eG9DD	**; 7**
SW		GNcN	S	cV9DD	**B**
Sg		GceG	S	eG9DD	**; 7**
Sk		GceG	S	eG9DD	**; 7**
Sm		GceG	S	eG9DD	**; 7**
TW		GNcN	S	cV9DD	**B**
Tf		GceG	S	eG9DD	**; 7**
Th		GceG	S	eG9DD	**; 7**
Tm		GDSP	S	cV9DD	**B**
VT		GceG	S	eG9DD	**; 7**
VW		GVee	S	ca9VD	**8B**
VZ		GceG	S	eG9DD	**; 8**
Vb		GVee	S	ca9VD	**8B**
Vd		GVee	S	ca9VD	**8A**
Vh		GceG	S	eG9DD	**; 7**
Vk		GVei	S	ca9VD	**8A**
Wf		GceG	S	eG9DD	**; 7**
Y Q		GVee	S	ca9VD	**8B**
Y R		GVee	S	ca9VD	**8A**
Y Z		GNcN	S	cV9DD	**B**
Zm		GNcN	S	cV9DD	**B**
bN		GceG	S	eG9DD	**; 7**
bR		GceG	S	eG9DD	**; 7**
dM		GVee	S	ca9VD	**8A**
dT		GceG	S	eG9DD	**; 7**
db		GceG	S	eG9DD	**; 8**
dh		GceG	S	eG9DD	**; 7**
eN		GVee	S	ca9VD	**8A**
l V		GScG	S	ca9VD	**8>**
mN		GScG	S	ca9VD	**8>**
mO		GScG	S	ca9VD	**8>**



ONmM	S 9	**88EOvv**	**B; i** 3ea 4	**bx**	**f u U x v xw**		**f P9>; 89**
ONmN	S 9	**88EOvv**	**CC i** 33DV 4	**bx**	**f u U x v xw**		**f P9; A97**

HKKZRK 415 ZYO	3: 244 3: 24=	MURL aGT a0415 ZYt	3=23= 38247
I GJJd Q0HzoÖ2S Va 415 ZYO	3=243 38248	PKZZG Qa 415 ZYO	43243 4524:
I GJJd Q0S Va 415 ZYO	3=243 38248	VURU 415 ZYt HwpS zßzy	4423= 38247
MURL a0415 ZYO	4423< 38249	VURU a 415 ZYO	4423=
MURL a0415 ZYt	38243 44245	ZU_XGT 415 ZYO	38243 38248
MURL a0415 ZYt HwpS zßzy	3823= 44245	ZU_XGT aGT 415 ZYO	38243 38248
MURL VR_Y 415 ZYt	4423= 3<247	aKTZU 415 ZYO	34243
MURL VR_Y a 415 ZYO	4423= 45246		

DC4>>; E77487

M 5<1=3
P 7813 3
4=É75

TM

7D4>>; E77477

4133 TZ
4153 V
5133 TZ

Yßppw Yßl sw Gntp´ Gnp´z Gnntl tz

OVmM	S 9	**88EOvv**	**CC i** 33DV 4	**bx**	**f u U x v xw**		**f P9C8DE**
OVmN /Q A0	S 9	**88EOvv**	**B; i** 3ea 4	**bx**	**f u U x v xw**		**f P9C8E7**
OVmO	S 9	**88EOvv**	**BB i** 3 D 4	**bx**	**f u U x v xw**		**f P9EBB8**
OVmP	S 9	**88EOvv**	**D8 i** 33GD 4	**bx**	**f u U x v xw**		**f P9EAC8**
Ol hM/Q B0	S 9	**88EOvv**	**B; i** 3ea 4	**bx**	**f u U x v xw**		**f P9E9>B**
Ol hN	S 9	**88EOvv**	**D8 i** 33GD 4	**bx**	**f u U x v xw**		**f P9E9>A**
Ol hO	S 9	**88EOvv**	**B9 i** 3eS 4	**bx**	**f u U x v xw**		**f P; 89; C**
Ol hP	S 9	**88EOvv**	**CC i** 33DV 4	**bx**	**f u U x v xw**		**f P; 8D7B**

HKKZRK 415 ZYO49a	45247 3: 24=	MURL a0D415 ZYt HwpS zßzy	3<245 3624:
I GJJd HzoÖ2S Va 415 ZYO	39248	MURL aGT a0D415 ZYt HwpS zßzy	37246 3624:
I GJJd Qa HzoÖ2S Va 415 ZYO	39248 3=253	PKZZG Qa 415 ZYO49a	3<247 4524:
I GJJd Qa S Va 415 ZYO	39248 3=253	VURU 415 ZYO	34247
I GJJd S Va 415 ZYO	39248	VURU a 415 ZYO	34247
MURL a0415 ZYO49a	44246 38249	VURU a 415 ZYO49a	35247 4324:
MURL a0D415 ZYO	3<245 3<253	ZU_XGT 415 ZYO	38248

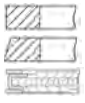
DC4>>9; 77487

M 5<133
N2 31 3
O 6185
O 6185
P 7713 3
4: É7=

-8: 457G434,

MWTMf b

7D4>>9; 77487



4153 TZ
4153 I X V
5133 TZ

Kl´wp´ 'tºßzyº ßz mp´p'wnpo ty Kyr typ ºpß' zywß

Kwºßz®w
Lz´T ´I wUK 'tºßzy
Yßppw

L´ sp´p Qzwnpy y°´ty S zßz´º ßÜpy Üº p´ºpßÜpy

L´UKQQzwnpy ®y T ´I w
Yßl sw

V´px tp´ 'tºßzy ´px 'wnp´ ol yº wp up° x zßpº´

Vz°´wpº 'tºßzypº oòz´trtyp T ´I w
Gntp´

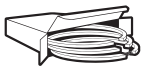
Vtºßzypº x ° I yßr°z° 'I ´I °p´ ´ppx 'wvozº py uºpr z op x zßz´p ° °zwx pyßp

Vl ´I 'tºßzypº z´trtyl wpº T ´I w
Gnp´z

I zy t 'tºßzyp ot®nnstl ®p´°tzyp ypnpº°I ´tz °z°ßß't´p ß' ßß wº°p´tp

Vp´ 'tºßzyt T ´I wUK
Gnntl tz

OTI M/Q A6B0	P 9	**EEEvv**	**>> i** 3aD 4	**bx**			**f P9B9; D**
OTI N /Q A6B0	P 9	**EEEvv**	**AA i** 3cV 4	**bx**			**f P9B9; E**



OTI O /Q	**A6B0**	P	9	**EEEvv**	**>D i**	3aV	4	**bx**	**f P; >DCA**
ObSM		P	9	**EEEvv**	**A7 i**	3ae	4	**bx**	**f P9C987**
Oi dM		P	9	**EEEvv**	**AA i**	3cV	4	**bx**	**f P; 8>89**

RUGJ _V 413	45247 3<253	VURU a 413	34247
RUGJ _V 413 HwpS zßzy	38249 4424=	VURU a0413	3924: 3<254
VURU 413	34247	_V! 413	3<244

DC4>>; B77477

M	5: 155
N4	3189
N	8<13:
O	514=
P	7515 5
	4: É6=

f b

ECOTOUGH

7D4>>; B77477

4133		TZ
4153		V
5133		I X

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

OY NM/Q	**A0**	S	9	**8; EAvv**	**E7 i**	3GNN	4	**bx**	**f u U x v xw**		**f P9C8E8**
OkeM/Q	**A0**	S	9	**8; EAvv**	**E7 i**	3GNN	4	**bx**	**f u U x v xw**		**f P9C8E;**
OmOM/Q	**B0**	S	9	**8; EAvv**	**E9 i**	3GNV	4	**bx**	**f u U x v xw**		**f P9E9>D**
OmON		S	9	**8; EAvv**	**E9 i**	3GNV	4	**bx**	**f u U x v xw**		**f P; 89; D**

I GJJd HzoÖ2S Va 417 ZYO	38248	MURL aGT a0417 ZYt HwpS zßzy	38246 3624:
I GJJd 0a HzoÖ2S Va 417 ZYO	38248 3=253	PKZZG 0a 417 ZYO	3<247
I GJJd 0a S Va 417 ZYO	38248 3=253	VGYYGZ H< 417 ZYO	44247
I GJJd S Va 417 ZYO	38248	VURU a 417 ZYt	38249
MJRL a0417 ZYO	44246 38249	YI 0XUI I U 00417 ZYO	44246 4424:
MJRL a00417 ZYO	44245 3<253	Z0M_GT 417 ZYO	34249
MJRL a00417 ZYt HwpS zßzy	38246 3624:		

DC4>>EA77477

M	6413 3
N4	4158
N	8613:
O	51=3
O	7173
	4=É7:

f b

7D4>>EA77477

4153		TZ
4153		I X V
5133		TZ

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

PMPM/Q	**B0**	S	9	**8>EAvv**	**887 i**	3GVD	4	**bx**	**f u U x v xw**		**f P; >A9>**
PTRM/Q	**B0**	S	9	**8>EDvv**	**EB i**	3GPG	4	**bx**	**f u U x v xw**		**f P; C8CC**
PbOM/Q	**B0**	S	9	**8>EAvv**	**887 i**	3GVD	4	**bx**	**f u U x v xw**		**f P; D>A7**

GXZKUT 418 ZYO	4424:	VGYYGZ H< 418 ZYO	3<24<
GXZKUT YNUUZOTMHXGQK 418 ZYt	3<253	VURU a0418 ZYO	4324< 3<254
I GJJd a HzoÖ2S Va 418 ZM0I TM	3925 5	ZG0MU 418 ZYO	3=254
I GJJd a S Va 418 ZM0I TM	3925 5	Z0I XUYY 418 ZYO	34253
MJRL a0418 ZM0	4424< 3<253	Z0M_GT 418 ZYO	3=24<
MJRL a0418 ZYO	3724: 3<253	ZU_XGT 418 ZYO	4424<
MJRL a00418 ZM0	3=253	Z0XUI 418 ZYO	4424:
MJRL a00418 ZYO	3: 24=		

DC4>A; A77477

M	631<3x x
N4	8133x x
N	941 3x x
O	5163x x
O	6183x x
P	7<1=3x x
	4=133É83133

df f b

7D4>A; A77477

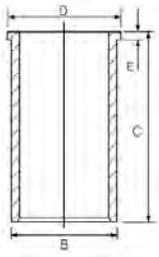
4153		VaJ
4153x x		I X
5133x x		TZ

Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

; R	S	9	**89C9vv**	**AA4AC i**	3cV8ce	4	**bx**	**f P>EBD**
MVg	S	9	**87>; vv**	**; ; i**	3SV	4	**bx**	**f P>EC8**
MVh	S	9	**89C9vv**	**>7 i**	3VV	4	**bx**	**f PA8AE**
MQh	S	9	**87>; vv**	**; ; i**	3SV	4	**bx**	**f P>798**
SW	S	9	**89C9vv**	**AA i**	3cV	4	**bx**	**f P>7E>**
TW	S	9	**89C9vv**	**>7 i**	3VV	4	**bx**	**f PA788**
Tm	S	9	**87>; vv**	**; ; 4; C i**	3SV8VD	4	**bx**	**f PA789**
Zm	S	9	**89C9vv**	**>7 i**	3VV	4	**bx**	**f P>8; B**
8i	S	9	**8; EDvv**	**; A i**	3Se	4	**P@i x**	**f P>EAE**
Y Z	S	9	**89C9vv**	**; ; i**	3SS	4	**P@i x**	**f P>8; 9**

JKXHd 416	3=2=5	452<7	VURU I RGYY0 413	342<8 3=2=7
MJRL 0416	3<2<6	3: 2<9	VURU I RGYY0 416	342<8 3: 2<
MJRL 0413	3<2<8	432=4	VURU I RGYY0 416 I ß	3: 2< 3=2=7
MJRL 0416	3<2<6	3: 2=3	VURU I RGYY0 416 J	3<2<9 452<<
MJRL 0416 I ß	392<9	452=5	VURU I RGYY0 417 J	432=3 3=2=7
PKZZG 0416	342<7	392<	VURU 0413	3<2<8 342=5
PKZZG 0416 I ß	392<	452=4	VURU 0413 I ß	3<2<= 3=2=7
VURU 413	3<2<8	452==	VURU 0416	3=2=5 3<2=7
VURU 413 I ß	3<2<=	3=2=7	VURU 0416 I ß	3: 2< 3=2=7
VURU 416	3=2=5	3=2=7	VURU 0416 J	3<2<9 3: 2=3
VURU 416 I ß	3: 2<	3=2=7	VURU 0417 J	432=3 3=2=7
VURU 416 J	3<2<9	3<2=3	VURU 0078 413	432=7 3=2=9
VURU 417 J	3<2=3	3=2=7	YI QXUI I U 416	3<2<6 3: 2<7

8>479A7C7477 **N** : <133 **O** 466133 **P** <4133 **Q** 7133

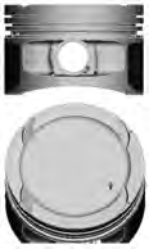


Mmc	P	9	**88EDvv**	**>C i**	3aS	4	**bx**	**f P8B; ; ;**
NY Q	P	9	**88EDvv**	**>C i**	3aS	4	**bx**	**f P8D8AB**

VURU 415 45a	43234	3: 23:

DC4>>CD77477
DC4>>CD7C477 *mT m*

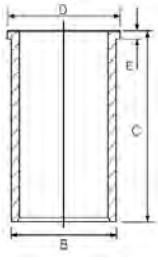
M 5=15:
N4 7133
N 95133
O 5149
O 415:
P 8315:
4: É79



7D4>>CD77477
7D4>>CD7C477 *mT m*

4153 TZ
4183 V
5183 I X

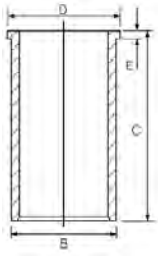
8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D;E7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71 3



Yßppw b tßs´pnp°°p° zy n´l yv°sl cß°top	Yß sw S tßv°´mpvÄpwpy°ptßr py G°°°'l´°yr py	Gntp´ G@pn @opx pyß° n ß @upmíp¿°ty	Gnp´z l zy p°nzßo°´l° py w nl´l opwntr p l w	Gnntl tz l zy ytnnstp°°wwß2 l wp´z x zß2´p
MQM	S 9 **8AEDvv**	**AA i** 3cV 4	**bx**	**f P>78E**
MQQ	S 9 **8AEDvv**	**AA i** 3cV 4	**bx**	**f P>ED8**
MTe	S 9 **8ADDvv**	**AA i** 3cV 4	**bx**	**f P89E>D**
MXY	S 9 **8AEDvv**	**AA i** 3cV 4	**bx**	**f P8AB87**

l GJJd 00419	392=9 45233	VURU 419	382=: 3=234
l GJJd 00HzoÕ2S Va : 8 419	442=8 3=233	VURU 00: 8 419	432=7 432==
l GJJd 00S Va 419	392=: 3=233	VURU 00I RGYY0 : 8 419	442=8 3=234
MJRL 00419	3=2=5 3<2=:	aKTZU 419	3=2=5 3=2=<

8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D;E7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71 3



b tßs´pnp°°p° zy n´l yv°sl cß°top	S tßv°´mpvÄpwpy°ptßr py G°°°'l´°yr py	G@pn @opx pyß° n ß @upmíp¿°ty	l zy p°nzßo°´l° py w nl´l opwntr p l w	l zy ytnnstp°°wwß2 l wp´z x zß2´p
MQk	S 9 **8;E7vv**	**>74>> i** 3/S8aD 4	**bx**	**f P>ED>**
MWh	S 9 **8;E7vv**	**>> i** 3aD 4	**bx**	**f PEBDD**
MZk	S 9 **8;E7vv**	**>7 i** 3/S 4	**bx**	**f P8AB8;**
Mbc	S 9 **8;E7vv**	**>> i** 3aD 4	**bx**	**f P8AB8>**

l GJJd 00HzoÕ2S Va 93 417	442=8 34237	VURU 0093 417	3: 2=8 432==
l GJJd 00S Va 417	442=8 39236	VURU 00I RGYY0 87 417	342=< 3<2==
MJRL 00417	3<2=4 372==	VURU 00I RGYY0 93 417	452=8 3=234
VURU 417	382=: 3=234	aKTZU 417	442=4 3=2=<
VURU 0088 417	3<2=8 432==		

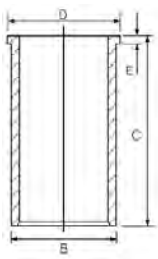
DC4A79D77477
DC4A79D7C477 *mT m*

M 5<168
O 81=8
P 83168
4: É85

7D4A79D77477
7D4A79D7C477 *mT m*

4153 TZ
4183 V
5183 I X

8>4798AC8477 **N** : =189 **O** 475133 **P** <5183 **Q** 7183
8>479D;E7477 **N** : =183 **O** 478133 **P** <4183 **Q** 71 3



G C 5<1433/J C 831433

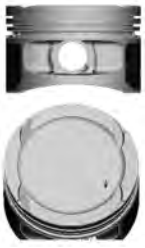
Yßppw b tßs´pnp°°p° zy n´l yv°sl cß°top	Yß sw S tßv°´mpvÄpwpy°ptßr py G°°°'l´°yr py	Gntp´ G@pn @opx pyß° n ß @upmíp¿°ty	Gnp´z l zy p°nzßo°´l° py w nl´l opwntr p l w	Gnntl tz l zy ytnnstp°°wwß2 l wp´z x zß2´p

MRT	S	9	**8; E7vv**	**C> i**	3GDD	4	**bx**	**f P>EDB**
MRW	S	9	**8; E7vv**	**C> i**	3GDG	4	**bx**	**f P8979D**
MTi	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f PE>A;**
MWc	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f PE>A>**
MbQ	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8; >BD**
Mc c	S	9	**8; E7vv**	**C> i**	3GDG	4	**bx**	**f P8; >BE**
MgM	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8; CC8**
MgN	S	9	**8; E7vv**	**C> i**	3GDG	4	**bx**	**f P8; CC9**
Mkb	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8A>C>**
NNl	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8B; ; A**
NNm	S	9	**8; E7vv**	**C> i**	3GDG	4	**bx**	**f P8BA>7**
NOM	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8B; DB**
NXY	S	9	**8; E7vv**	**B8 i**	3eP	4	**bx**	**f P987CB**

HUXG 417 49a	3=234	38238	MJRL aGT @a 417	38233	39239
HUXG 0417 49a	36233	38238	R_VU 0417 49a	3=2=<	3: 238
I GJ Jd @0HzoÖ2S Va 417	3<233	34237	TKb HKKZRK 417	44234	3=243
I GJ Jd @0S Va 417 49a	3<233	34237	VURU 417	39233	4423=
I GJ Jd @0HzoÖ2S Va 417	36237	38239	VURU 417 49a	432==	3823<
I GJ Jd @0S Va 417	36237	38239	VURU @0433 417 49a	372=9	432==
MJRL @a 417 49a	432=:	39239	VURU @0I RGYY0 : 8 417 49a	432==	3=234
MJRL a 417 49a	43236	38239	VURU @a 417	44235	37245
MJRL VR_Y a 417 49a	34238	44239			

DC488B877477
DC488B87C477 *mT m*

M 5<1=5
N4 41=<
N 941=3
O 5165
P 7=1=5
4: É87



7D488B877477
7D488B87C477 *mT m*

4153 TZ
4183 V
5183 I X

G C 5<19: 3/ J C 7=19: 3

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

NWd	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8D9C8**
NWl	S	9	**8; E7vv**	**AA i**	3cV	4	**bx**	**f P8D8A>**
NgP	S	9	**8; E7vv**	**AE4B7 i**	3eD8eN	4	**bx**	**f P8DE7E**
OPPM	S	9	**8; E7vv**	**B; i**	3ea	4	**bx**	**f P9ACDE**
OSSM	S	9	**8; E7vv**	**AE i**	3eD	4	**bx**	**f P97CE8**
OSSN	S	9	**8; E7vv**	**B; i**	3eV	4	**bx**	**f P9; 87;**
OXbM	S	9	**8; E7vv**	**B; i**	3eV	4	**bx**	**f P9B; ; B**

I GJ Jd @0HzoÖ2S Va 417	38239	3<243	VURU 417	38239	38247
I GJ Jd @0S Va 417	38239	3<243	VURU 417 49a	43234	4423=
LUc 417	37238	4523=	VURU @a 417	44235	37245
MJRL a 417	3923:	3: 23=	VURU a 417	3623=	
MJRL a 417 49a	38239	4423<	VURU a@U 417	35243	
MJRL a0417	4323<	3: 246	aKTZU 417 49a	35247	
MJRL VR_Y a 417 49a	38239	45246			

DC4>; BE77477
DC4>; BE7C477 *mT m*
37238

M	5<1=5
N4	515<
N	94147
O	413:
O	4137
P	791=5
	4: É78

-8: 9: 80537,

f b

7D4>; BE77477
7D4>; BE7C477 *mT m*

4153		TZ
4153		V
5133		I X

ECOTOUGH

Vt°ßzy° ßz mp ´p' wnpo ty Kyr typ Ypß° zywÖ	Qzwmpy y°´ ty S zßz´° ßÜpy Ü° p´°pßÜpy	Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´	Vt°ßzyp° op ´p' °p°ßz ' l ´l up°rz° op x zßz´p° °zwx pyßp	ÖVt°ßzyp ' ° p°°p´p ´tx ' tl ÜÜlßz °zwx pyßp nzx ' wpßz
Yßppw	Yß sw	Gntp´	Gnp´z	Gnntl tz

NXS	S	9	**8; E7vv**	**89A i**	3GcD	4	**bx**	**f u - e x v zxw**			**f P8D>C7**
NY l	S	9	**8; E7vv**	**87; i**	3GSD	4	**bx**	**f u - e x v zxw**			**f P8DE87**
Ni W	S	9	**8; E7vv**	**887 i**	3GVD	4	**bx**	**f u U x v xw**			**f P97C; >**
OMhM	S	9	**8; E7vv**	**887 i**	3GVD	4	**bx**	**f u - e x v zxw**			**f P99>A9**
OMhN	S	9	**8; E7vv**	**89A i**	3GcD	4	**bx**	**f u U x v xw**			**f P998C;**
OMhO	S	9	**8; E7vv**	**87; i**	3GSD	4	**bx**	**f u U x v xw**			**f P998C>**
OMhP	S	9	**8; E7vv**	**88D i**	3GaD	4	**bx**	**f u - e x v zxw**			**f P97CE9**
OMhQ	S	9	**8; E7vv**	**8; 9 i**	3GeD	4	**bx**	**f u - e x v zxw**			**f P9>777**
OPSM	S	9	**8; E7vv**	**887 i**	3GVD	4	**bx**	**f u - e x v zxw**			**f P99999**
OZi M	S	9	**8; E7vv**	**88D i**	3GaD	4	**bx**	**f u - e x v zxw**			**f P9>D; >**
OZi N	S	9	**8; E7vv**	**887 i**	3GVD	4	**bx**	**f u - e x v zxw**			**f P9C78C**
Of TM	S	9	**8; E7vv**	**887 i**	3GVD	4	**bx**	**f u - e x v zxw**			**f P9BAC;**
Of TN	S	9	**8; E7vv**	**89A i**	3GcD	4	**bx**	**f u U x v xw**			**f P9BB9E**
Of TO	S	9	**8; E7vv**	**87; i**	3GSD	4	**bx**	**f u U x v xw**			**f P9BB>;**
Of TP	S	9	**8; E7vv**	**88D i**	3GaD	4	**bx**	**f u - e x v zxw**			**f P9BAC>**
Of TQ	S	9	**8; E7vv**	**8; 9 i**	3GeD	4	**bx**	**f u - e x v zxw**			**f P9C; AA**
Of WM	S	9	**8; E7vv**	**88D i**	3GaD	4	**bx**	**f u - e x v zxw**			**f P9BBEA**

HKKZRK 417 ZYO	43214	3: 219	VGYYGZ H: 417 ZYO	3<213 45217
I I H: 417 ZYO	44214	45219	VURU 417 MZt	38213 38217
KUY 417 ZYO	3823<	3<218	VURU a 417 MZO	38213
MJRL a 417 ZYO	44238	3: 23=	YI OXUI I U 417 ZYt	3923< 38217
MJRL aO417 ZYO	4323<	38219	YI OXUI I U OO417 ZYO	3823< 4421:
MJRL aO417 ZYt	4323<	44215	YNGXGT 417 ZYO	38213
MJRL VR_Y 417 ZYt	3423=	3=215	YNGXGT aGT 417 ZYO	38213 44218
MJRL VR_Y a 417 ZYO	38239	45216	ZOM_GT 417 ZYO	3=23: 3: 21<
MJRL aGT aO417 ZYt	3: 23=	43215	ZOM_GT aGT 417 ZYO	3823< 3: 21<
PKZZG OO417 ZYO	3: 239	43213	ZU_XGT 417 ZYO	35239 38218
PKZZG Oa 417 ZYO	37214		ZU_XGT aGT 417 ZYO	38213 38218
VGYYGZ H9 417 ZYO	3423=	44213	ZU_XGT aGT 417 ZYt	38213 38218

DC4>; ; E77487
DC4>; ; E7C487 *mT m*

M 5=133
N4 9173
N2 41<8
O 4133
O 61<3
P 7<133
4=É87

df

7D4>; ; E77477
7D4>; ; E7C477 *mT m*

4153 TZ
4183 V
5133 TZ

Vt°ßzy° ßz mp´p'wnpo ty Kyr typ Ypß' zyw Qzwnpy y°´ty S zßz´° ßÜpy Ü° p´°pßÜpy Vt°ßzy ´px 'wnp´ol y° up° x zßp°´ Vt°ßzyp° op´p'°p°ßz 'l´l up°rz° op x zßz´p° °zwx pyßp Ov t°ßzyp '° p°°p´p´tx 'tl ÜÜl ßz °zwx pyßp nzx 'wßz

Kw°ßz®w
Yßppw Yßl sw Gntp´ Gnp´z Gnntl tz

OMkM/Q	**A0**	S	9	**8; E7vv**	**E7**	**i**	**33NN**	4	**bx**	**f u U x v xw**	**f P97B7B**
OY eN /Q	**>0**	S	9	**8; E7vv**	**E7**	**i**	**33NN**	4	**bx**	**f u U x v xw**	**f P9A>BD**

KUY 417 ZYO	4423: 3<248	PKZZG Ga 417 ZYO	38244
MJRL a 417 ZYO	3823: 3: 23=	VGYYGZ H9 417 ZYO	3823: 44243
MJRL aO417 ZYO	4323< 38249	VGYYGZ H: 417 ZYO	3<243 45247
MJRL aOZYt	4323< 44245	VGYYGZ H: 417 ZYt HwpS zßzy	3<243 45247
MJRL VR_Y 417 ZYt	3423= 3<247	YI OXUI I U 417 ZYt	3<23< 38247
MJRL VR_Y a 417 ZYO	3923: 45246	YI OXUI I U 00417 ZYO	3<23< 4424:
MJRL aGT aO417 ZYt	3: 23= 38247	ZOM_GT 417 ZYO	3<243 3: 24<
PKZZG 00417 ZYO	3823: 43243	ZOM_GT aGT 417 ZYO	3<243 38244

DC4>9EE77477
DC4>9EE7C477 *mT m*

M 5=153
N4 7183
O 6193
P 7<153
4=É85

TM

7D4>9EE77477
7D4>9EE7C477 *mT m*

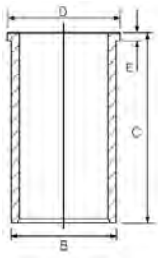
4153 TZ
4153 V
5133 TZ

Kw°ßz®w
Yßppw Yßl sw Gntp´ Gnp´z Gnntl tz

I V		S	9	**8>C8vv**	**AA**	**i**	**3cV**	4	**bx**		**f PA7; ;**
mN		S	9	**8>C8vv**	**AA**	**i**	**3cV**	4	**bx**		**f PA7; C**
mO		S	9	**8>C8vv**	**AC4B;**	**i**	**3cV**	4	**bx**		**f PA8>8**
OW		S	9	**8>C8vv**	**; C**	**i**	**3/D**	4	**P@l x**		**f P>7>B**

MJRL O418 J	3<2 9 3: 2<3	VGYYGZ H4 418 J	352 : 452<5
PKZZG O418 J	3<2 < 3: 2<3	YI OXUI I U 418	352 7 3<2 8
VGYYGZ H4 418	382 6 452 8		

8>479; >C7477 **N**: =183 **O** 475133 **P** <5183 **Q** 71:3
8>479>BC7477 **N**: =183 **O** 478133 **P** <4183 **Q** 71:3
8>479D; B7477 **N**: =183 **O** 478133 **P** <4183 **Q** 71:3



Vsz°'slßpo btßs´pnp°°p°zyn´lyv°slß°top	Vsz°'slßp´ß St3v°´mpwÄpwpy°pt3rpyG°°°'l´°yrpy	Vsz°'slß G@pn @bpxpyß?nß@upmíp¿°ty	Lz°qßßoz lzypºnzßo°´l°pywvnl´lopwntrplw	Lz°qßßz lzytnnstp°°wlßzlwp´zxzßz´p
8O	S 9 **8B77vv**	**A8** i 3ai 4	**P@t x f u**	**f P8; >DE**
8S	a 9 **9; D; vv**	**BD** i 3 P 4	**P@t x f u**	**f P; EE;**
8h	S 9 **8ADEvv**	**>>** i 3aD 4	**P@t x f u**	**f P; EEB**
BDM	S 9 **8ADDvv**	**>A** i 3aG 4	**P@t x f u**	**f P99B8A**
BDO	S 9 **8ADDvv**	**A7** i 3ae 4	**P@t x f u**	**f P99B8B**
BDB	S 9 **8ADDvv**	**>A** i 3aG 4	**P@t x**	**f P99B8>**
MOX	a 9 **9; D; vv**	**C7** i 3 V 4	**P@t x f u**	**f P>789**
Ol	S 9 **8ADDvv**	**A8** i 3cD 4	**P@t x f u**	**f P>7A9**
Ph	a 9 **9; D; vv**	**CA4D7** i 3GDN8GDI 4	**P@t x f u**	**f P>7B8**
Vd	S 9 **8ADDvv**	**A8** i 3cD 4	**P@t x f u**	**f P>898**
Vk	S 9 **8ADEvv**	**A8** i 3cD 4	**P@t x f u**	**f PA78D**
Y R	S 9 **8ADDvv**	**A8** i 3cD 4	**P@t x f u**	**f P>8; 7**
dM	S 9 **8ADDvv**	**AE** i 3eD 4	**P@t x f u U x v xw**	**f PA79>**
eN	S 9 **8ADDvv**	**AE** i 3eD 4	**P@t x f u U x v xw**	**f PA79D**

MJRL 0419 ZJ	362=5 3: 2=8	RZ 73088 0517 ZJ	3<2 < 392=9
MJRL 00419 ZJ	3<2=6 432=4	VGYYGZ H5 419 ZJ	372=5 362=<
0RZ0Y 419 ZJ	3<2=< 452=<	VGYYGZ H62H7 419 ZJ	3<2=< 432=6
PKZZG 0419 ZJ	362=5 352=7	YGTZGTG 419 ZJ	452=4 452=7
PKZZG 00419 ZJ	342=7 432=4	YGaK0XU 0419 J	3<2=4 3: 2=9
RZ 5<068 0517 ZJ	452=5 392=9	ZXGTYVUXZKX 00419 ZJ	3<2=7 3: 2=5

DC487ED77487
DC487ED7C487 *mTm*
DC487ED88487 *Tmm*

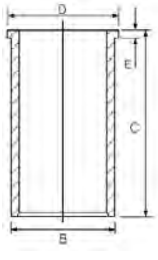
M 741:3
N4 4193
P :41:3
57É97

MWTMdf fb

7D487ED77477
7D487ED7C477 *mTm*
7D487ED88477 *Tmm*

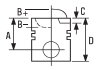
41:8 I X V
5183 I X V
6183 I X V

8>4798AC8477 **N**: =189 **O** 475133 **P** <5183 **Q** 7183
8>479D; B7477 **N**: =183 **O** 478133 **P** <4183 **Q** 71:3



GC 741783

btßs´pnp°°p°zyn´lyv°slß°top	St3v°´mpwÄpwpy°pt3rpyG°°°'l´°yrpy	G@pn @bpxpyß?nß@upmíp¿°ty	lzypºnzßo°´l°pywvnl´lopwntrplw	lzytnnstp°°wlßzlwp´zxzßz´p
8e	a 9 **9; D; vv**	**A8** i 3cD 4	**P@t x**	**f P>EAD**
BDA	S 9 **8ADDvv**	**;B** i 3Si 4	**P@t x**	**f P99B8;**
MOf	a 9 **9; D; vv**	**A8** i 3cD 4	**P@t x**	**f P>78>**
MPW	S 9 **8ADDvv**	**>7** i 3/S 4	**P@t x**	**f P99B8E**
Ob	a 9 **9; D; vv**	**AA** i 3cV 4	**P@t x**	**f P>7>C**



Od	S 9	**8ADDvv**	**; E4>7 i** 3/N8/S 4	**P@I x**	**f P>EE9**
Oe	S 9	**8ADDvv**	**; C i** 3/D 4	**P@I x**	**f P>7>D**
Pi	a 9	**9; D; vv**	**AA4AC i** 3cV8ce 4	**P@I x**	**f P>7B9**
VW	S 9	**8ADDvv**	**; E4>7 i** 3/N8/S 4	**P@I x**	**f PA78;**
Vb	S 9	**8ADDvv**	**>7 i** 3/S 4	**P@I x**	**f P>897**
Y Q	S 9	**8ADDvv**	**; C4>7 i** 3/D8/VV 4	**P@I x**	**f P>89E**

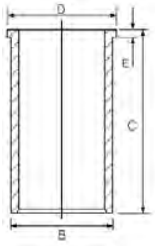
I GJJd 0419 J	3<2<5 3: 2=5	RZ 73088 0517 J	452 < 392=9
MURL 0419 J	3<2<3 3: 2<6	VGYYGZ H4 419 J	352 = 3: 2<4
MURL @0419 J	3<2<6 432=4	VGYYGZ H5 419 J	3<2<3 362<<
PKZZG 0419 J	3<2<3 352<7	YGTZGTG 419 J	3<2<4 452<7
PKZZG @0419 J	342<7 432=4	ZXGTYVUXZKX @0419 J	342<4 3: 2<
RZ 5<068 0517 J	452 < 392=9		

DC487EA77477
DC487EA7A477 *mT*
DC487EA7C477 *mT m*
DC487EA88477 *Tmm*

7D487EA77477
7D487EA7A477 *mT*
7D487EA7C477 *mT m*
7D487EA88477 *Tmm*

8>4798AC8477
8>479D; B7477

N : =189 **O** 475133 **P** <5183 **Q** 7183
N : =183 **O** 478133 **P** <4183 **Q** 7t 3



M 741t 3
N4 4193
P : 41t 3
57É97

-8: 966,

df

41t 8 I X V
5133 V
6133 I X V

Tz ztWqpßn°ßz°ß
Usyp G°°°'l´°yr q´Q swvW´t6Ub °p
Yly° pynznsp py ml° op u'p'p'z°´wp 'l°°lrp op w'f°°pßßpo os°twp°z°° ''p°°tzy
Yty p°nzßo°´l
Ypyül 'l°°lrrtz 'p´°'°ÜÜlßz´p zwz

G C 741783
b t6s´pnp°°p° zy n´l yv°sl cß°top
St6v°´mpvÄpwpy°pt6rpy G°°°'l´°yr py
G6@n @bopx pyf? n ß @bpmip¿°ty
l zy p°nzßo°´l° py w nl´l opwntr p l w
l zy ytnnstp°°wWßz l wp´z x zß´p

MY R	P 9	**8>99vv**	**AA i** 3cV 4	**P@I x f u U x v xw**	**f P89ADE**
NM	P 9	**8>99vv**	**AA i** 3cV 4	**P@I x f u U x v xw**	**f P8B; ; B**
NY e	P 9	**8>99vv**	**AE i** 3eD 4	**P@I x f u U x v xw**	**f P8D8AC**
NZY	P 9	**8>99vv**	**A8 i** 3cD 4	**P@I x f u U x v xw**	**f P8D8AE**
NZh	P 9	**8>99vv**	**AE i** 3eD 4	**P@I x f u U x v xw**	**f P8D8AD**
Ni N	P 9	**8>99vv**	**A8 i** 3cD 4	**P@I x f u U x v xw**	**f P97A8>**

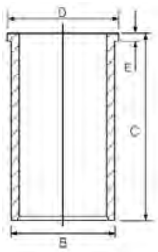
LUc 417 ZJO	37238 4523=	VURU @417 ZJO	3: 236 39238
R_VU 0417 ZJO	342== 3: 238	VURU @417 ZJt	34236 4523:
VURU 417 ZJO	432== 4423=		

DC488>E774D7
DC488>E7C4D7 *mT m*

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

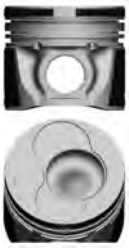
8>479CEA7477

N <5183 **O** 485133 **P** <8183 **Q** 7t 3



M 781<3
N4 4: 198
N 6<133
O 4143
P 9=1<3
59É96

MWWWZN df f b



41t 8 I Q V
5133 V
6133 I X V

DC488>E774DA
DC488>E7C4DA *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P 9=1<3
59É96

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
513 3 V
613 3 I X V

Zz nÖuyop´ 4) 5
HzÄvnl ' I ntfÖ 561 8nx 6
Zz nÖuyop´ 6

I y eÖuyop´ 4) 5
azvÞx py op´ Qzwpyx °wp 561 8nx 6
I y eÖuyop´ 6

°°´ nÖuyo´p 4) 5
azvÞx p op w nl®ß o° ' t°ßy 561 8nx 6
°°´ nÖuyo´p 6

py pwntuyo´z 4) 5
azwnl®bl o ' t°ß y 561 8nx 6
py pwntuyo´z 6

I ntuyo´z 4) 5
azvÞx p nl x p´l ' t°ßyp 561 8nx 6
I ntuyo´z 6

OMI M	S	9	**8AEDvv**	**AA i**	3cV	4	**P®t x**	**f**	**u**	**U x v**	**xw**	**f P9; 87A**
OMI N	S	9	**8AEDvv**	**BB i**	3 D	4	**P®t x**	**f**	**u**	**U x v**	**xw**	**f P99B; D**
OMI O	S	9	**8AEDvv**	**CC i**	33DV	4	**P®t x**	**f**	**u**	**U x v**	**xw**	**f P99B; E**
OMI P	S	9	**8AEDvv**	**CA i**	33DN	4	**P®t x**	**f**	**u**	**U x v**	**xw**	**f P9>; B>**
OMI Q	S	9	**8AEDvv**	**AA i**	3cV	4	**P®t x**	**f**	**u**	**U x v**	**xw**	**f P9>; BA**
ORi M	P	9	**88EEvv**	**AA i**	3cV	4	**P®t x**	**f**	**u**	**U x v**	**xw**	**f P9; B87**
OXZM	S	9	**8AEDvv**	**CC i**	33DV	4	**P®t x**	**f**	**u**	**U x v**	**xw**	**f P9AC7>**

HKKZRK 419 ZJO	4324	3: 249	PKZZG 00419 ZJO	3923= 4324 3
I GJJd HzoÖ2S Va 419 ZJO	3824	8	PKZZG a 419 ZJO	3724 3 3: 248
I GJJd 00HzoÖ2S Va 419 ZJO	3<243	3824 8	VGYYGZ H9 419 ZJO	3<23= 4424 3
I GJJd 00S Va 419 ZJO	3<243	3824 8	VGYYGZ H: 419 ZJO	3<243 4524 7
I GJJd a HzoÖ2S Va 419 ZJO	3824	8 3=253	VGYYGZ H: 419 ZJt HvÞpS zßzy	3<243 4524 7
I GJJd a S Va 419 ZJO	3824	8 3=253	VURU 415 ZJt HvÞpS zßzy	4323= 3824 7
I GJJd S Va 419 ZJO	3824	8	VURU 419 ZJt	3923= 3824 7
MJRL a0419 ZJO	3523=	3824 9	VURU 419 ZJt HvÞpS zßzy	3923= 3824 7
MJRL a0419 ZJt	3523=	4424 5	VURU a 415 ZJO	4323=
MJRL a0419 ZJt HvÞpS zßzy	3823=	4424 5	VURU a 419 ZJO	3923=
MJRL VR_Y 419 ZJt	3523=	3<247	ZU_XGT 419 ZJO	3824 3 3824 8
MJRL VR_Y a 419 ZJO	3523=	4524 6	ZU_XGT aGT 419 ZJO	3824 3 3824 8
MJRL aGT a0419 ZJt	4523=	4324 5	aKTZU 419 ZJO	3: 243 3<247
MJRL aGT a0419 ZJt HvÞpS zßzy	3: 23=	3824 7		

DC4>; 9E77477
DC4>; 9E7A477 *mT*
DC4>; 9E7C477 *mT m*

M 7816 3
N4 431t 3
N4 71t 3
N 7=133
P 9: 1<3
59É99

-8: =3S G0437,

WWdf fb

7D4>; 9E77477
7D4>; 9E7A477 *mT*
7D4>; 9E7C477 *mT m*

41 8 MJI V
513 3 V
613 3 I X V

GDC LKZ-Ring

HzÄvnl ' I ntfÖ 4=t 8nx 6

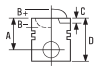
azvÞx py op´ Qzwpyx °wp 4=t 8nx 6

azvÞx p op w nl®ß o° ' t°ßy 4=t 8nx 6

azwnl®bl o ' t°ß y 4=t 8nx 6

azvÞx p nl x p´l ' t°ßyp 4=t 8nx 6

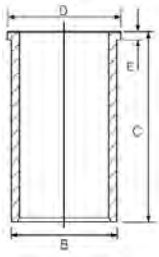
79D8N	S	9	**8DEBvv**	**>; i**	3/e	4	**P®t x**	**f P99B7E**
MTN	S	9	**8C8Bvv**	**>9 i**	3/c	4	**P®t x**	**f P8A79D**
MTS	S	9	**8C8Bvv**	**>94>> i**	3/c8aD	4	**P®t x**	**f P8897C**
MWg	S	9	**8C8Bvv**	**>> i**	3aD	4	**P®t x**	**f PEA8;**
MWl	S	9	**8C8Bvv**	**>9 i**	3/c	4	**P®t x**	**f PEBDC**



MZO	S 9	**8DEBvv**	**>> i**	3aD 4	**P6l x**		**f P97>E8**
NSX	S 9	**8DEBvv**	**; C i**	3/D 4	**P6l x**		**f P9ADC7**
NSY /Q ;0	S 9	**8DEBvv**	**9E i**	3SD 4	**P6l x**		**f P9ADC8**
OPkM	S 9	**8DEBvv**	**AA i**	3cV 4	**P6l x**	**f u**	**f P9; 9E8**
OPkN	S 9	**8DEBvv**	**9E i**	3SD 4	**P6l x**	**f u**	**f P9; 9E9**

I GJJd 00HzoÖ2S Va 41t YJO	3: 2=9 3=233	VURU 0041t YJO	372=: 432=—
I GJJd 00S Va 41t YJO	3: 2=9 3=233	VURU 0093 41t YJO	3<2=: 432=—
R_VU 041t YJO	3=2=< 3: 238	VURU 00I RGYY0 8: 41t YJO	3: 2=: 3=234
VURU 41t YJO	3<2=: 3=234		

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71t 3



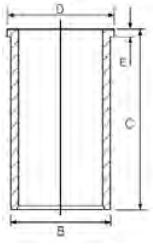
8k	S 9	**8DEBvv**	**>>4>A i**	3aD8aG 4	**P6l x**		**f P; EEC**
8l	S 9	**8DEBvv**	**>C4A7 i**	3aS8ae 4	**P6l x**		**f P>EB7**
MVN	V 9	**9; C7vv**	**AC i**	3ce 4	**P6l x**		**f P>777**
MPS	S 9	**8DEBvv**	**>; i**	3/e 4	**P6l x**		**f P977ED**
MQR	S 9	**8DEBvv**	**>C i**	3aS 4	**P6l x**		**f P>797**
MVM	V 9	**9; C7vv**	**AA i**	3cV 4	**P6l x**		**f P887>E**
NSS	S 9	**8DEBvv**	**>C i**	3aS 4	**P6l x**		**f P98; >E**

I GJJd HzoÖ2S Va 41=J	352=< 3923=	VGYYGZ H62H7 41=J	382<=: 432=6
I GJJd 0041=J	392=9 45233	VURU 41=J	432=— 3=234
I GJJd 00HzoÖ2S Va 41=J	442=8 34237	VURU 0097 41=J	432=7 432=—
I GJJd 00S Va 41=J	442=8 34237	VURU 00I RGYY0 97 4/=J	342=9 432=9
I GJJd 00S Va 41=J	43238 3923=	YGaKQXU 0041=J	352=< 35235
I GJJd S Va 41=J	43238 3923=	YGaKQXU 0041=J	3: 235 3=238
MJRL 0041=	3<2=6 352=—	ZXGTYVUXZKX Qa 41=J	3: 2=3 452=8
MJRL 0041=J	442=4 372=—	ZXGTYVUXZKX Qa 517 J	3: 2=3 37236
MJR 0041=J	39235 39239	ZXGTYVUXZKX VI °°pyr p´ aGT 517 ZJO	3=2=5 452=7
MJR Qa 41=J	3: 238 45243	aKTZU 41=J	442=4 3=2=<
VGXGZO0041=J	3<235	aUdGMK 41=J	392=9 3=234

DC4EE78774>7
DC4EE787A4>7 *mT*
DC4EE787C4>7 *mT m*
DC4EE78884>7 *Tmm*

7D4EE7877477
7D4EE787A477 *mT*
7D4EE787C477 *mT m*
7D4EE7888477 *Tmm*

8>479CEA7477 **N** <5183 **O** 485133 **P** <8183 **Q** 71t 3



M 6=198
N4 41=3
P 981t 3
57É97

-8: =78,

MWdf

41t 8 I X V
5133 V
6133 I X V

G C 6=1733

8m	S 9	**8DEBvv**	**BB i**	3D 4	**P6l x**	**f u U x v xw**	**f P>EB8**
MQI	S 9	**8DEBvv**	**>C4>D i**	3aS8aV 4	**P6l x**		**f P>EDA**

MRP	S	9	8DEBvv	AD	i	3ci	4	P@t	x	f u f P8B8D>
MRZ	S	9	8DEBvv	D8	i	33GD	4	P@t	x	f u U x v xw f P>EDC
MSP	S	9	8DEBvv	>C	i	3aS	4	P@t	x	f PE; C9
MSd	S	9	8DEBvv	BB	i	3 D	4	P@t	x	f u U x v xw f PE; B>
MTR	S	9	8DEBvv	D8	i	33GD	4	P@t	x	f u U x v xw f PECDD
MTT	S	9	8DEBvv	BB	i	3 D	4	P@t	x	f u U x v xw f P87E9C
MTg	S	9	8DEBvv	BB4BC	i	3 D8 G	4	P@t	x	f u U x v xw f P>EE7
MXQ	S	9	8DEBvv	BB	i	3 D	4	P@t	x	f u U x v xw f PEA89
MXT	S	9	8DEBvv	BB4BC	i	3 D8 G	4	P@t	x	f u U x v xw f PE>AA
MdP	S	9	8DEBvv	>>	i	3aD	4	P@t	x	f P977EE
Meh	S	9	8DEBvv	D8	i	33GD	4	P@t	x	f u U x v xw f P8; CC;
MhS	S	9	8DEBvv	D8	i	33GD	4	P@t	x	f u U x v xw f P8>EDD
MhY /Q ; 0	S	9	8DEBvv	B;	i	3ea	4	P@t	x	f u f P8DC7A
NQc	S	9	8DEBvv	;;	i	35V	4	P@t	x	f P97877
NQg	S	9	8DEBvv	>;	i	3Ve	4	P@t	x	f u f P97878
NVO	S	9	8DEBvv	A;	i	3cN	4	P@t	x	f u U x v xw f P99>A;
Nkf	S	9	8DEBvv	;7	i	35G	4	P@t	x	f u f P9ADBE

HUXG 41=ZJO	382=	38238	VURU 41=YJO	382=9	3=234
HUXG O41=ZJO	432=<	38238	VURU 41=ZJO	382=:	3=234
I GJJd 00HzoÖ2S Va 41=YJO	442=8	34237	VURU 0097 41=YJO	3: 2=9	432=
I GJJd 00HzoÖ2S Va 41=ZJO	3=2=9	34237	VURU 00I RGYY0 41=YJO	392=9	3=234
I GJJd 00S Va 41=YJO	442=8	34237	VURU 00I RGYY0 41=ZJO	342=:	3<2=
I GJJd 00S Va 41=ZJO	432=9	34237	VURU 00I RGYY0 97 41=YJO	452=8	3<2=
MJRL 0041=YJO	3: 2=8	372=	VURU 00I RGYY0 =3 41=ZJO	3=2=9	3=234
MJRL 0041=ZJO	3<2=4	452=	VURU 00I RGYY0 443 41=ZJO	392=<	34235
MJRL 0a 41=ZJO	3<2=:	38239	YNGXGT 41=ZJO	3=2=8	36243
MJRL aGT 0a 41=ZJO	382=	38239	YNGXGT aGT 41=ZJO	3=2=9	38236
TKb HKKZRK 41=ZJO	342=<	39237	Z´px z	3=2=<	
VGYYGZ H62H7 41=ZJO	432=6	382=:	aKTZU 41=YJO	372=:	3=2=<
VGYYGZ H8 41=ZJO	432=9	44233	aKTZU 41=ZJO	3=2=6	3=2=<
VGYYGZ H8 41=ZJO27x z0zy	392=:	3<233	aUdGMK 41=ZJO	3=2=	3=234

DC488>E774B7
DC488>E7C4B7 *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P 9<1<3
59É99

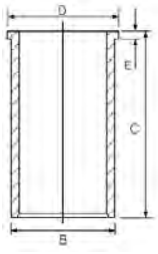
-8: =< ,

MWWWZN df

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41t 8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71 3

DC488>E774C7
DC488>E7C4C7 *mT m*

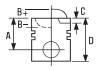
M 781<3
N4 4: 198
N 6<133
O 4143
P 9<1<3
59É99

-8: =< G,

MWWWZN df

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41t 8 I Q V
5133 V
6133 I X V



DC488>E774E7
DC488>E7C4E7 *mT m*
DC488>E774EA
DC488>E7C4EA *mT m*

M 781<3
N4 4: 198
N 6<133
O 4143
P : 41<3
59É99

MWZN df

7D488>E77477
7D488>E7C477 *mT m*
7D488>E884477 *Tmm*

41: 8 I Q V
5133 V
6133 I X V

Zz nÖuyop´ 4) 5
HzÄ wnl ' l ntfÖ 56187nx 6
G C 781883/ J C 9<1883
Zz nÖuyop´ 6) 7
G C 781883/ J C : 41883

I y eÖuyop´ 4) 5
azv0x py op´ Ozwupyx °wup 56187nx 6

I y eÖuyop´ 6) 7

°°´ nÖuyo´p 4) 5
azv0x p op w nl 86 o° ' t°ßy 56187nx 6

°°´ nÖuyo´p 6) 7

py pwntuyo´z 4) 5
azv0nl 8bl o ' t°ß y 56187nx 6

py pwntuyo´z 6) 7

I ntuyo´z 4) 5
azv0x p nl x p´l ' t°ßzyp 56187nx 6

I ntuyo´z 6) 7

MVm	S 9	**8DEBvv**	**AA i**	3cV 4	**P0t x**	**f u**	**f P>EC9**
MNX	S 9	**8DEBvv**	**A7 i**	3ae 4	**P0t x**	**f u**	**f P>77E**
MPQ	S 9	**8DEBvv**	**AB i**	3ca 4	**P0t x**	**f u**	**f P977EC**

I GRQLUXTG Z7 I I x ' p´ 41=ZJ	3: 2=7 37235	MJRL 0a 41=ZJ	432=: 3=2==
MJRL 0041=J	3<2=4 3: 2=8	VGYYGZ H62H7 41=ZJ	362=4 382=:
MJRL 0041=ZJ	3: 2=6 372==	ZXGTYVUXZKX 0a 41=ZJ	432=5 37236
MJRL 0041=ZJ/MZJ	442=4 3<2=:	aKTZU 41=ZJ	442=4 3=2=<

DC4EE7877487
DC4EE787C487 *mT m*
DC4EE7888487 *Tmm*

M 7819 8
N4 41=3
P : 41: 3
59É99

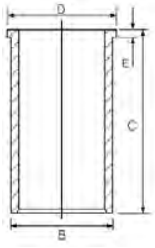
MWTMdf

G C 781763

7D4EE7877477
7D4EE787A477 *mT*
7D4EE787C477 *mT m*
7D4EE7888477 *Tmm*

41: 8 I X V
5133 V
6133 I X V

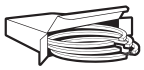
8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71: 3

MSb	S 9	**8DEBvv**	**A7 i**	3ae 4	**P0t x**	**f PE>A9**
McY	S 9	**8DEBvv**	**A7 i**	3ae 4	**P0t x**	**f P88; A8**
Mek	S 9	**8DEBvv**	**>C i**	3aS 4	**P0t x**	**f P8A>EA**
Mel	S 9	**8DEBvv**	**>C i**	3aS 4	**P0t x**	**f P8B; ; D**
M c	S 9	**8DEBvv**	**>C i**	3aS 4	**P0t x**	**f P8BDB;**

HUXG O41=YJO	432=< 38238	MJRL aGT 0a 41=YJO	382== 38239
I GJJd 00HzoÖ2S Va 41=YJO	442=8 34237	VURU 41=YJO	3<2== 4423=
I GJJd 00S Va 41=YJO	442=8 34237	VURU 00I RGYY0 9<41=YJO	3<2== 34235
MJRL 0a 41=YJO	3<2=: 39239	VURU 0a 41=YJO	3=235 37245



DC488>E77497
DC488>E7C497 *mTm*

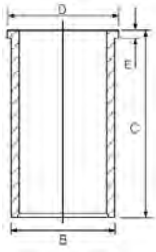
M 6=1<3
N4 4:1t8
N 6<133
O 4133
P 931<3
57É8<

-8: =8=043=,

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71t3

DC488>E774;7
DC488>E7C4;7 *mTm*

M 6=1<3
N4 4:1t8
N 6<133
O 4133
P 931<3
57É8<

-8: =8=G43=,

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

41t8 I Q V
5133 V
6133 I X V

Zz nÖwyop´4) 5 | Iy eÖwyop´4) 5 | °°´nÖwyo´p4) 5 | py pwnwyo´z4) 5 | Inwyo´z4) 5
HzÃvnl'Int0056193nx6 | azvîx py op´QzwnpyX °wp 56193nx6 | azvîx p op vlvnl®B o°'t°ßzy 56193nx6 | azvînl®bol o't°ßy 56193nx6 | azvîx p nl x p´l't°ßzyp 56193nx6
GC6=1883/JC 931883
Zz nÖwyop´6) 7 | Iy eÖwyop´6) 7 | °°´nÖwyo´p6) 7 | py pwnwyo´z6) 7 | Inwyo´z6) 7

| | | |

DC488>E7748A
DC488>E7C48A *mT m*
3=235

M 781<3
N4 4: 1<3
N 6<133
O 4163
P 9<1<3
59É99

-ϑ: =9=R0435,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41: 8 I Q V
5133 V
6133 I X V

DC488>E774AA
DC488>E7C4AA *mT m*
3=235

M 781<3
N4 4: 193
N 6<133
O 4143
P 9<1<3
59É99

-ϑ: =34J434,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41: 8 I Q V
5133 V
6133 I X V

DC488>E774AB
DC488>E7C4AB *mT m*
3=235

M 781<3
N4 4: 193
N 6<133
O 4143
P 9<193
59É99

-ϑ: =34J435,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41: 8 I Q V
5133 V
6133 I X V

| | | |

NY f	S	9	**8DEBvv**	**C> i**	33DG	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97>E>**
Ndg	S	9	**8DEBvv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8C>BD**
Neg	S	9	**8DEBvv**	**AA i**	3cV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8DCAA**
Nei	S	9	**8DEBvv**	**CC i**	33DV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8DCC8**
NkQ	S	9	**8DEBvv**	**CC i**	33DV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8DE7D**
NkR	S	9	**8DEBvv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8DE7C**
NkV	S	9	**8DEBvv**	**BB i**	3 D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97>E;**

HUXG 41=ZJ0	3=233 38238	VGYYGZH8 41=ZJ0	35233 44233
HUXG 041=ZJ0	3=233 38238	VGYYGZH818 41=ZJ0	44233 38238
I GJJd 00HzoÖ2S Va 41=ZJ0	37237 3<243	VGYYGZH9 41=ZJ0	36238 44243
I GJJd 00S Va 41=ZJ0	37237 3<243	VURU 41=ZJ0	43234 4423=
MJRL @a 41=ZJ0	3=233 39239	VURU @a 41=ZJt	3=235
MJRL a 41=ZJ0	43236 3: 23=	VURU @a 41=ZJ0	3: 236 45243
MJRL VR_Y a 41=ZJ0	34238 3423=	YNGXGT 41=ZJ0	3=2=8 36243
MJRL ZJ0	44236 35239	YNGXGT aGT 41=ZJ0	3=2=9 38236
MJRL aGT @a 41=ZJ0	35233 39239	ZU_XGT 41=ZJ0	35236 38243
PKZZG 00041=ZJ0	3<238 43243	ZU_XGT aGT 41=ZJ0	3<236 38243
TKb HKKZRK 41=ZJ0	35234 3=243		

DC488>E774BA
DC488>E7C4BA *mT m*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<1<3
59É99

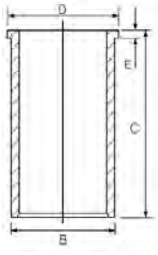
-8: =34J0634,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71 3

DC488>E774BB
DC488>E7C4BB *mT m*

M 781<3
N4 4: 153
N 6<133
O 4143
P 9<1<3
59É99

-8: =34J0635,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mT m*
7D488>E88477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

Zz nÖwyop´ 4) 5	I y eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwnwyo´z 4) 5	I nwyo´z 4) 5
HzÄ wnl ' I ntfÖ 551<8nx 6	azwx py op´ Qzwnpyx °wp 551<8nx 6	azwx p op wr nl @8 o° ' t°ßzy 551<8nx 6	azwnl @bl o ' t°ß y 551<8nx 6	azwx p nl x p´l ' t°ßzyp 551<8nx 6
GC 781883/ J C 9<1883				
Zz nÖwyop´ 6) 7	I y eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwnwyo´z 6) 7	I nwyo´z 6) 7

MdX	S	9	**8DEBvv**	**887 i**	3GVD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8A>D>**
Mem	S	9	**8DEBvv**	**EB i**	33PD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8B9; 8**
MhR	S	9	**8DEBvv**	**EB i**	33PD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8A8A;**
Mi k	S	9	**8DEBvv**	**EB i**	33PD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8A8A>**
NgW	S	9	**8DEBvv**	**88D i**	3GaD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P9E7A8**

HUXG 41=ZJ0	44233 38238	VGYYGZH818 41=ZJ0	44233 38238
HUXG 041=ZJ0	38233 38238	VURU 41=ZJ0	44236 4423=
MJRL @a 41=ZJ0	35233 39239	YNGXGT 41=ZJ0	44235 36243
MJRL aGT @a 41=ZJ0	37234 38239	YNGXGT aGT 41=ZJ0	44235 38236

DC488>E7749A **DC488>E7C49A** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*	**8>479CEA7477**	**N** <5183 **O** 485133 **P** <8183 **Q** 71t 3
M 781<3 **N4** 4: 1=3 **N** 6<133 **O** 4143 **P** 9<1<3 59É99 -8: =9=0434, **MWWWZN df f b**	41t 8 I Q V 5133 V 6133 I X V		
DC488>E774; A **DC488>E7C4; A** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*		
M 781<3 **N4** 4: 1=3 **N** 6<133 **O** 4143 **P** 9<1<3 59É99 -8: =9=0435, **MWWWZN df f b**	41t 8 I Q V 5133 V 6133 I X V		
DC488>E774>A **DC488>E7C4>A** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*		
M 781<3 **N4** 4: 183 **N** 6<133 **O** 4143 **P** 9<1<3 59É99 -8: =34l 438, **MWWWZN df f b**	41t 8 I Q V 5133 V 6133 I X V		
DC488>E774>B **DC488>E7C4>B** *mT m* 3=235	**7D488>E77477** **7D488>E7C477** *mT m* **7D488>E88477** *Tmm*		
M 781<3 **N4** 4: 183 **N** 6<133 **O** 4143 **P** 9<1<3 59É99 -8: =34l 439, **MWWWZN df f b**	41t 8 I Q V 5133 V 6133 I X V		

Zz nÖuyop´ 4) 5 HzÄ wnl ' l ntfÖ 57193nx 6 G C 781883/ J C 9<1883	l y eÖuyop´ 4) 5 azvÞx py op´ Qzwpyx °wp 57193nx 6	°°´ nÖuyo´p 4) 5 azvÞx p op w nl @6 o° ' t°ßzy 57193nx 6	py pwntuyo´z 4) 5 azvÞnl @6 o ' t°ß y 57193nx 6	l ntuyo´z 4) 5 azvÞx p nl x p´l ' t°ßzyp 57193nx 6
Zz nÖuyop´ 6) 7 HzÄ wnl ' l ntfÖ 57138nx 6	l y eÖuyop´ 6) 7 azvÞx py op´ Qzwpyx °wp 57138nx 6	°°´ nÖuyo´p 6) 7 azvÞx p op w nl @6 o° ' t°ßzy 57138nx 6	py pwntuyo´z 6) 7 azvÞnl @6 o ' t°ß y 57138nx 6	l ntuyo´z 6) 7 azvÞx p nl x p´l ' t°ßzyp 57138nx 6

MkN	S 9	**8DEBvv**	**CC i**	3GDV 4	**P@t x f u U x v xw**				**f P8BDBC**
MkO	S 9	**8DEBvv**	**B; i**	3eV 4	**P@t x f u U x v xw**				**f P8BDD8**
I GR0LUXTG Z8 I l x ' p´ 41=ZJ0			3823:	4423=	ZXGTYVUXZKX a 41=ZJ0			37236	4423=
S_RZ@aGT a 41=ZJ0			37236	4423=					

DC488>E774>A
DC488>E7C4>A *mTm*
3=235

M 781<3
N4 4:183
N 6<133
O 4143
P 9<1<3
59É99

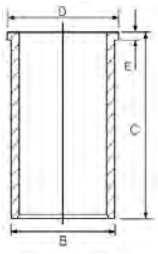
-8: =34I 438,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

4t 8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71t 3

DC488>E774>B
DC488>E7C4>B *mTm*
3=235

M 781<3
N4 4:183
N 6<133
O 4143
P 9<1<3
59É99

-8: =34I 439,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

4t 8 I Q V
5133 V
6133 I X V

Zz nÖwyop´ 4) 5	I y eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwnwyo´z 4) 5	I nwyo´z 4) 5
HzÄvnl ' I ntÖ 57138nx 6	azvÜx p y op´ Qzwnpyx °wp 57138nx 6	azvÜx p op w nl @B o° ' t°ßzy 57138nx 6	azvÜnl @bl o ' t°ß y 57138nx 6	azvÜx p nl x p´l ' t°ßzyp 57138nx 6
GC 781883/ J C 9<1883				
Zz nÖwyop´ 6) 7	I y eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwnwyo´z 6) 7	I nwyo´z 6) 7

NXf	S 9	**8DEBvv**	**EB i**	3GPD 4	**P@t x f u U x v xw**				**f P8C>BC**
Ndd	S 9	**8DEBvv**	**B9 i**	3eS 4	**P@t x f u U x v xw**				**f P978AE**
Nde	S 9	**8DEBvv**	**CA i**	3GDN 4	**P@t x f u U x v xw**				**f P8DEE>**
I GR0LUXTG Z8 I l x ' p´ 41=ZJ0			3823:	4423=	VURU 41=ZJ0			44236	4423=
S_RZ@aGT a 41=ZJ0			34239	4423=	ZXGTYVUXZKX a 41=ZJ0			34239	4423=

DC488>E774>A
DC488>E7C4>A *mTm*

M 781<3
N4 4:183
N 6<133
O 4143
P 9<1<3
59É99

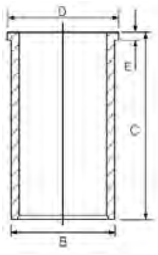
-8: =34I 438,

MWWWZN df f b

7D488>E77477
7D488>E7C477 *mTm*
7D488>E88477 *Tmm*

4t 8 I Q V
5133 V
6133 I X V

8>479CEA7477



N <5183 **O** 485133 **P** <8183 **Q** 71t 3

DC488>E774>B
DC488>E7C4>B *mT m*

M 781<3
N4 4: 183
N 6<133
O 4143
P 9<1<3
59É99

-8: =34I 439,

MWWWZN df fb

7D488>E77477
7D488>E7C477 *mT m*
7D488>E884477 *Tmm*

41 8 I Q V
5133 V
6133 I X V

Zz nÖuyop´ 4) 5
HzÄ wnl ' I ntfÖ 57138nx 6
G C 781883/ J C 9<1883
Zz nÖuyop´ 6) 7

I y eÖuyop´ 4) 5
azvÞx py op´ Qzwupyx °wp 57138nx 6
I y eÖuyop´ 6) 7

°°´ nÖuyo´p 4) 5
azvÞx p op w nl @6 o° ' t°ßzy 57138nx 6
°°´ nÖuyo´p 6) 7

py pwntuyo´z 4) 5
azvÞnl @bl o ' t°ß y 57138nx 6
py pwntuyo´z 6) 7

I ntuyo´z 4) 5
azvÞx p nl x p´l ' t°ßzyp 57138nx 6
I ntuyo´z 6) 7

OXTM/Q	**A0**	S	9	**8AEDvv**	**CC**	i	3GDV	4	**P@t x f u U x v xw**	**f P9C8EA**
OXTN/Q	**A0**	S	9	**8AEDvv**	**BB**	i	3 D	4	**P@t x f u U x v xw**	**f P9CEB8**
OdWM/Q	**B0**	S	9	**8AEDvv**	**BB**	i	3 D	4	**P@t x f u U x v xw**	**f P9CEB9**
OdWN/Q	**A6B0**	S	9	**8AEDvv**	**D8**	i	3GGD	4	**P@t x f u U x v xw**	**f P9CEB;**
OkkM/Q	**B0**	S	9	**8AEDvv**	**BB**	i	3 D	4	**P@t x f u U x v xw**	**f P9D7EA**
OkkN/Q	**B0**	S	9	**8AEDvv**	**D8**	i	3GGD	4	**P@t x f u U x v xw**	**f P9D7ED**
POkM		S	9	**8AEDvv**	**DD**	i	3GND	4	**P@t x f u U x v xw**	**f P9ED>8**
POmM		S	9	**8AEDvv**	**DD**	i	3GND	4	**P@t x f u U x v xw**	**f P;9CC9**

MURL a@0419 ZJ O	3<245	3: 24<	VGYYGZ H< 419 ZJ O	3<247	
MURL a@0419 ZJ t HwÞpS z@zy	3<245	3624:	ZU_XGT 419 ZJ O	38248	38249
MURL aGT a@0419 ZJ t HwÞpS z@zy	38246	3624:			

DC4>>>877477
DC4>>>87A477 *mT*
DC4>>>87C477 *mT m*

M 78163
N4 44133
N 7=133
P 9<163
59É99

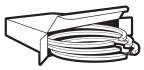
MWWWdf fb

7D4>>>877477
7D4>>>87A477 *mT*
7D4>>>87C477 *mT m*

41 8 MJ I V
5133 V
5133 I X V

GDC LKZ-Ring

8b		S	9	**8CD8vv**	**C9**	i	3e	4	**bx**	**f P; EEA**
9T		S	9	**8CD8vv**	**C9**	i	3e	4	**bx**	**f P>EBA**
MNe		S	9	**8CD8vv**	**B;4BB**	i	3ea8 D	4	**bx**	**f P>ECA**
MPm		S	9	**8CD8vv**	**B;4BB**	i	3ea8 D	4	**bx**	**f P>ED7**
Pe		S	9	**8CD8vv**	**BB**	i	3 D	4	**bx**	**f P>EEB**
Pk		S	9	**8CD8vv**	**D9**	i	3GGN	4	**bx**	**f P>7B;**
Pm		S	9	**8CD8vv**	**D9**	i	3GGN	4	**bx**	**f P>EED**
Qh		S	9	**8CD8vv**	**D9**	i	3GGN	4	**bx**	**f P>7BE**
Qk		S	9	**8CD8vv**	**BB**	i	3 D	4	**bx**	**f PA777**
Sg		S	9	**8CD8vv**	**BB**	i	3 D	4	**bx**	**f PA77C**
Sk		S	9	**8CD8vv**	**BB**	i	3 D	4	**bx**	**f P>877**
Sm		S	9	**8CD8vv**	**D9**	i	3GGN	4	**bx**	**f P>879**
Tf		S	9	**8CD8vv**	**C>4CC**	i	3GDD8GDS	4	**bx**	**f P>87E**



Th	S 9	**8CD8vv**	**BB i** 3 D 4	**bx**	**f P>888**
VT	S 9	**8CD8vv**	**BB4CA i** 3 D8GDN 4	**bx**	**f P>88C**
Vh	S 9	**8CD8vv**	**BB i** 3 D 4	**bx**	**f PA78C**
Wf	S 9	**8CD8vv**	**D9 i** 3GGN 4	**bx**	**f P>89>**
bN	S 9	**8CD8vv**	**D9 i** 3GGN 4	**bx**	**f PE; BC**
bR	S 9	**8CD8vv**	**CA4CE i** 3GDN8GDc 4	**bx**	**f P>8; E**
dT	S 9	**8CD8vv**	**B9 i** 3eS 4	**bx**	**f PA79B**
dh	S 9	**8CD8vv**	**CA4CC i** 3GDN8GDV 4	**bx**	**f P>8A8**

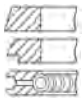
I GJJd 041<	3<2<8 3: 2<5	PKZZG 041<	3<2<5 352<7
LUc 41<	432<3 452<6	PKZZG 0041<	342<7 452<5
MJRL 041<	3<2<5 372<6	PKZZG 0041< I I ß	342<: 432<4
MJRL 041< MZO	3<2<5 452<6	VGYYGZ H5 41<	342<6 362<<
MJRL 0041<	3<2<7 452<5	VGYYGZ H62H7 41<	352<< 382<:
MJRL 0041< MZO	3<2<6 432<4	VURU 41<	342<8 3=234
MJRL 0041< MZOI I ß	342<: 432<4	VURU 00I RGYY0 =3 41<	342<: 3=234
MJRL 0041< t I I ß	3<2<: 432<4	YGTZGTG 41<	342<6 452<=
MJRL 00041<	3<2<4 452<=	YI 0XUI I U 41<	3<2<5 3: 2<5
MJRL 0a 41<	392<< 39235	aKTZU 41<	442<4 3=2<<

DC487E>774A7
DC487E>7C4A7 *mT m*

M	6515 3
N4	7173
N	881t 3
N2	4163
P	9518 3
	53É8:

-8<463K0434,

7D487E>77487
7D487E>7C487 *mT m*



41 8 3		VY V
41t 8		V
61 3 3		I X V

Vt°ßzy° ßz mp´p' wnpo ty Kyr typ Yp8° zyw0 Qzwnpy y°´ ty S zßz´° ß0py Ü° p´°pß0py Vt°ßzy ´px ' wnp´ ol y° up° x zßp°´ Vt°ßzyp° op´p' °p°ßz ' I ´I up°r z° op x zßz´p° °zwx pyßp 0V t°ßzyp ' ° p°°p´p´tx ' tl ÜÜ ßz °zwx pyßp nzx ' wpßz

G C 641=33/ J C 951533

MMY	S 9	**8CD8vv**	**AA i** 3cV 4	**bx**	**f P>77>**
MOO	S 9	**8CD8vv**	**BB4BC i** 3 D8 G 4	**bx**	**f P>788**
MPP	S 9	**8CD8vv**	**B; 4CA i** 3ea8GDN 4	**bx**	**f P8A>EB**
MPR	S 9	**8CD8vv**	**A7 i** 3ae 4	**bx**	**f P98; A;**
MZZ	S 9	**8CD8vv**	**AA i** 3cV 4	**bx**	**f P87D>C**
VZ	S 9	**8CD8vv**	**BB4CB i** 3 D8GDP 4	**bx**	**f PA78>**
db	S 9	**8CD8vv**	**BA4BB i** 3ee8 D 4	**bx**	**f PA79C**

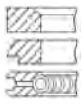
LUc 41<	3=2<9 452<3	PKZZG 0041< I I ß	3<2<: 432<4
MJRL 0041< t	3<2<: 3: 2<4	VGYYGZ H5 41<	342<6 362<<
MJRL 0041< t I I ß	3<2<: 432<4	VGYYGZ H62H7 41<	352<< 382<:
MJRL 00041<	3<2<4 372<=	VURU 00I RGYY0 =3 41<	342<: 3=234
MJRL 0a 41<	392<< 39235	YGTZGTG 41<	3=2<6 452<8
PKZZG 0041<	3<2<: 452<<	aKTZU 41<	442<4 3=2<<

DC487EC77487
DC487EC7A487 *mT*
DC487EC7C487 *mT m*

M	6515 3
N4	<143
N	891<3
N2	4143
P	9516 3
	53É87

-8<4640455,

7D487EC77477
7D487EC7A477 *mT*
7D487EC7C477 *mT m*



41 8 3		I X V
41t 8		V
61 3 3		I X V

MPb	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P8B9A;**
MQT	S 9	**8AEAvv**	**C> i**	3GDD 4	**bx**		**f PE>A7**
MQW	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P>ED9**
MRf	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P>EDD**
MRh	S 9	**8CD8vv**	**D9 i**	3GGN 4	**bx**		**f P9D7>E**
MWX	S 9	**8AEAvv**	**C>4CB i**	3GDD8GDP 4	**bx**		**f PE>A8**
MWe	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f PEEE8**
MbR	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P89D>D**
MdY	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P8B9AA**
Mgd	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P8AB88**
M T	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P8A>BA**

HUXG 419	382= 38238	VURU 419	382=: 43237
HUXG O419	432=< 38238	VURU 41<	342== 45236
MURL @@419	3: 2=7 372==	VURU @@I RGYY@ 419	382=9 3=234
MURL @a 419	3<2=: 38237	VURU @@I RGYY@ 41<	3<233 3: 235
TKb HKKZRK 419	432== 3=233	VURU @@I RGYY@ 433 419	452=8 3=234
VGYYGZ H62H7 419	3: 2=7 3<2=9	aKTZU 419	432=7 3=2=<
VGYYGZ H8 419	432=9 44233		

DC487AE77477
DC487AE7C477 *mT m*

M 65133
N4 5163
N 94173
N2 31: 3
P 861: 3
53É8:

7D487AE77477
7D487AE7C477 *mT m*

4153		TZ
4183		V
5133		I X

G C 641: 33/ J C 861733
Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

MPd	S 9	**8CD8vv**	**E9 i**	3GNV 4	**bx**		**f PAAAC**
MSZ	S 9	**8CD8vv**	**E9 i**	3GNV 4	**bx**		**f PE; B;**
Mbf	S 9	**8CD8vv**	**E9 i**	3GNV 4	**bx**		**f P88>EC**
MdS	S 9	**8CD8vv**	**E9 i**	3GNV 4	**bx**		**f P8B9; C**

HUXG 41<	382== 38238	VGYYGZ H8 41<27x zßzy	452=9 44233
HUXG O41<	432=< 38238		
MURL @a 41<	3<2=: 39239		

DC4A79E77477
DC4A79E7C477 *mT m*

M 65188
O 6193
P 89188
53É8=

-8<4=5,
MW

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183		I Q V
41: 8		V
5133		I X V

I zy´zo r l ' 5: 183x x
G C 651583/ J C 891583
Vwp°pw/°r pyl mfßyo 5: 183x x Jt°ß ynp pyßp mtpwp 5: 183x x Jt°ß yntl opwntpw/ 5: 183x x Jt°ß yÜ ol w/ mtwp 5: 183x x

MQN	S 9	**8CD8vv**	**8874889 i**	3GVD8GVN 4	**bx**	**f u U x v xw**	**f PAAAD**
MSg	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v xw**	**f PE>AB**

MVT	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P87DDC**
MZN	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B9AB**
MbT	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P8; >>8**
Mbg	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B9AC**
McM	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P99B97**
Mdm	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P8B; DA**
MhO	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P8A>BC**
M O	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P8>E8>**
M P	S	9	**8CD8vv**		**887**	**i**	3GV/D	4		**bx**		**f**	**u**	**U**	**x**	**v**	**xw**	**f P97B9D**

HUXG 41<Z	38233	38238	TKb HKKZRK 41<Z	432==	3=243
HUXG O41<Z	38233	38238	VGYYGZ H8 41<Z	432=9	44233
MJRL Qa 41<Z	3<2=:	39239	YNGXGT 41<Z 53a	3=2=:	36243

DC4A79E77487
DC4A79E7A487 *mT*
DC4A79E7C487 *mT m*

M 651t 3
N4 5138
N : 3133
P 861t 3
53É8=

MW

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183		I Q V
41t 8		V
5133		I X V

MTX S 9 **8AEAvv** **C> i** 33DG 4 **bx** **f PAAAB**

VGYYGZ H8 419 432=9 44233

DC487AE77477
DC487AE7C477 *mT m*
Kyr 1<J c 733 333

M 6513 3
N4 5163
N 9417 3
N2 31t 3
P 861t 3
53É8:

7D487AE77477
7D487AE7C477 *mT m*

4153		TZ
4183		V
5133		I X

DC48>D; 77477
DC48>D; 7C477 *mT m*
Kyr 1<J c 733 334

M 5=13<
N4 51t 3
N 95163
P 831t 3
4=É75

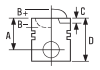
f b

7D48>D; 77477
7D48>D; 7C477 *mT m*

4183		TZ
4153		V
5133		I X V

G C 641t 33/ J C 861733
Yfppw Yfi sw Gntp´ Gnp´z Gnntl tz

Niural® FITTED WITH GOETZE® RINGS



MXm	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8A8>D**
MZM	S 9	**8AEAvv**	**C> i**	3GDG 4	**bx**		**f P8B9A>**
Mhg	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8A>CA**
M P	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8A>BB**
NRc	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8D8; C**
NRe	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8BC>;**
NSg /Q >0	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8C7BC**
NeQ /Q >6A0	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8D999**
NeR /Q 90	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P8D99;**
OTSM	S 9	**8AEAvv**	**CA i**	3GDN 4	**bx**		**f P998D7**

HUXG 419	3<233 38238	MJRL VR_Y a 419	38238 45246
HUXG O419	3<233 38238	PKZZG 00419	3=237 43243
I GJJd 00HzoÖ2S Va 419	37237 38248	TKb HKKZRK 419	39233 3=243
I GJJd 00S Va 419	37237 38248	VGYYGZ H8 419	432=9 44233
MJRL 0a 419	3<233 39239	VGYYGZ H818 419	44233 38238
MJRL a 419	34237 3: 23=	VGYYGZ H9 419	38238 44243
MJRL aO419	4323< 3: 246	ZU_XGT 419	3: 236 38243

DC48>D; 77477
DC48>D; 7C477 *mT m*

M 5=13<
N4 51t 3
N 95163
P 831t 3
4=É75

f b

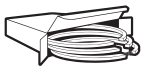
7D48>D; 77477
7D48>D; 7C477 *mT m*

4133 TZ
4153 V
5133 I X V

Yßppw Yß sw Gntp´ Gnp´z Gnntl tz

Mdk	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P8A>DA**
MgY	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P8A>DB**
Mgc	S 9	**8CD8vv**	**8; 948>9 i**	3GciGiP 4	**bx**	**f u U x v**	**xw**	**f P8B>97**
Mi Y	S 9	**8CD8vv**	**89A i**	3GcD 4	**bx**	**f u U x v**	**xw**	**f P8B>9;**
Mi b	S 9	**8CD8vv**	**8; 9 i**	3Gci 4	**bx**	**f u U x v**	**xw**	**f P8E9A;**
Mi f	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P8A8>E**
Mi g	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P8A>BD**
Mi h	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P8A>BE**
NVk	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P8DCEE**
NWR	S 9	**8CD8vv**	**887 i**	3GVD 4	**bx**	**f u U x v**	**xw**	**f P987C8**
NZg	S 9	**8CD8vv**	**8; 9 i**	3GeD 4	**bx**	**f u U x v**	**xw**	**f P987C9**

HUXG 41<Z	38233 38238	TKb HKKZRK 41<Z	432== 3=243
HUXG 41<Z°´mz	34238 45247	VGYYGZ H818 41<	44236 38238
HUXG O41<Z	38233 38238	VGYYGZ H818 41<Z	35234 44238
MJRL 0a 41<MZO	3423: 45243	VGYYGZ H818 41<Z 53a	44233 38238
MJRL 0a 41<Z	3<2=: 39239	VURU 41<MZO	3=238 4423=
MJRL 0a 41<Z MZO	3<234 39238		



DC4A79E774; 7
DC4A79E7C4; 7 *mT m*

M 651t 3
O 41=3
P 861t 3
4=É7=

f b

7D4A79E77477
7D4A79E7A477 *mT*
7D4A79E7C477 *mT m*

4183 I Q V
4t 8 V
5183 I X V

Mmh	S	9	**8EBDvv**	**877**	**i**	3GPa	4	**P**	**x**	**f u U x v xw**		**f P8BDB9**
NWP	S	9	**8EBDvv**	**87;**	**i**	3GSD	4	**P**	**x**	**f u U x v xw**		**f P8C7D7**
NWb	S	9	**8EBDvv**	**87;**	**i**	3GSD	4	**P**	**x**	**f u U x v xw**		**f P8D8; A**
NY M	S	9	**8EBDvv**	**877**	**i**	3GPa	4	**P**	**x**	**f u U x v xw**		**f P8D99A**
NY Z	S	9	**8EBDvv**	**89A**	**i**	3GcD	4	**P**	**x**	**f u U x v xw**		**f P8D>C8**
NY d	S	9	**8EBDvv**	**89A**	**i**	3GcD	4	**P**	**x**	**f u U x v xw**		**f P8D8DD**
Ngm	S	9	**8EBDvv**	**897**	**i**	3GaP	4	**P**	**x**	**f u U x v xw**		**f P97>EE**
NhP	S	9	**8EBDvv**	**E7**	**i**	3GNN	4	**P**	**x**	**f u U x v xw**		**f P8DA>9**
NhQ	S	9	**8EBDvv**	**E7**	**i**	3GNN	4	**P**	**x**	**f u U x v xw**		**f P8DA>;**
Ni h	S	9	**8EBDvv**	**DD**	**i**	3GND	4	**P**	**x**	**f u U x v xw**		**f P97>ED**

MJRL a 513 ZJ0	43236	3: 23=	VGYYGZ H9 513 ZJ0	36238 44243
MJRL a 513 ZJ049a	43236	3: 23=	VGYYGZ H9 513 ZJ049a	36238 44243
MJRL VR_Y a 513 ZJ0	38238	45246	ZU_XGT 513 ZJ0	35236 38243
MJRL VR_Y a 513 ZJ049a	34238	45246	ZU_XGT 513 ZJ049a	3<236 38243
PKZZG 00513 ZJ0	3=238	43243	ZU_XGT aGT 513 ZJ0	35236 38243
PKZZG 00513 ZJ049a	3<238	43243	ZU_XGT aGT 513 ZJt	3<236 38243

DC48; EA77477
DC48; EA7C477 *mT m*

M 781<6
N4 4: 1<3
N 6<183
P 9<1<3
59É99

-8: =34P,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mT m*

4t 8 I Q V
5183 V
6183 I X V

HzÄwnl ' I ntfÖ561t 8nx 6
GC 781883/ J C 9<1883

azŵx py op´ Qzwmpyx °wmp 561t 8nx 6

azŵx p op w nl @B o° ' t°ßzy 561t 8nx 6

azwnl @bl o ' t°ß y 561t 8nx 6

azŵx p nl x p´l ' t°ßzyp 561t 8nx 6

NPV	S	9	**8EBDvv**	**A8**	**i**	3cD	4	**P**	**x**			**f P8C; AD**
NPW	S	9	**8EBDvv**	**AA**	**i**	3cV	4	**P**	**x**			**f P8C; AE**
Nef	S	9	**8EBDvv**	**A8**	**i**	3cD	4	**P**	**x**			**f P97A78**

I GJJd 00HzoÖ2S Va 513 YJ0	36237	3<243	MJRL a 513 YJ0	34237 4423<
I GJJd 00S Va 513 YJ0	36237	3<243		

DC48; EA774; 7
DC48; EA7C4; 7 *mTm*

M	6: 1<3
N4	4: 168
N	6<133
O	31 3
P	8<1<3
	55É93

-8<4350538,

MWdf fb

7D48; EA77477
7D48; EA7C477 *mTm*

41 8		I QV
5133		V
6133		I XV

DC48; EA774>7
DC48; EA7C4>7 *mTm*

M	6: 1<3
N4	4: 168
N	6<133
O	31 3
P	8<1<3
	55É93

-8<4350539,

MWdf fb

7D48; EA77477
7D48; EA7C477 *mTm*

41 8		I QV
5133		V
6133		I XV

Zz nÔtyop´ 4) 5
HzÄ wnl 'l ntfÕ 57183nx 6
Zz nÔtyop´ 6) 7

l y eÔtyop´ 4) 5
azvix py op´ Qzwpyx °wp 57183nx 6
l y eÔtyop´ 6) 7

°°´ nÔtyo´p 4) 5
azvix p op w nl Gß o° 't°ßzy 57183nx 6
°°´ nÔtyo´p 6) 7

py pwntyo´z 4) 5
azvlnl Gßol o 't°ß y 57183nx 6
py pwntyo´z 6) 7

l ntyo´z 4) 5
azvix p nl x p´l 't°ßzyp 57183nx 6
l ntyo´z 6) 7

NSi	S	9	**8EBDvv**	**877**	**i**	3GPa	4	**P6l**	**x**	**f u U x v xw**	**f P8DA; E**
NTi	S	9	**8EBDvv**	**877**	**i**	3GPa	4	**P6l**	**x**	**f u U x v xw**	**f P998CC**
NY Y	S	9	**8EBDvv**	**87;**	**i**	3GSD	4	**P6l**	**x**	**f u U x v xw**	**f P8D>D9**
NY b	S	9	**8EBDvv**	**87;**	**i**	3GSD	4	**P6l**	**x**	**f u U x v xw**	**f P8D8; B**
Ndf	S	9	**8EBDvv**	**87;**	**i**	3GSD	4	**P6l**	**x**	**f u U x v xw**	**f P8E87A**
NhT	S	9	**8EBDvv**	**877**	**i**	3GPa	4	**P6l**	**x**	**f u U x v xw**	**f P97A97**

l GJ Jd 00HzoÖ2S Va 513 ZJO	3=23:	3<243	VGYYGZ H818 513 ZJO	45236 38238
l GJ Jd 00S Va 513 ZJO	3=23:	3<243	VGYYGZ H9 513 ZJO	36238 3823=
KUY 513 ZJO	39239	3823<	YNGXGT 513 ZJO	44238 36243
MJRL a 513 ZJO	45237	3: 23=	ZU_XGT 513 ZJO	45238 38243
MJRL VR_Y a 513 ZJO	45238	38244	ZU_XGT aGT 513 ZJt	45238 38243
PKZZG 00513 ZJO	43238	43243		

DC48; EA77487
DC48; EA7C487 *mTm*

M	781<6
N4	4: 183
N	6<133
O	31 3
P	9<1<3
	59É99

-8: =34J<66,

MWWZN df fb

7D48; EA77477
7D48; EA7C477 *mTm*

41 8		I QV
5133		V
6133		I XV

DC48; EA77497
DC48; EA7C497 *mÏm*

M 781<6
N4 4: 183
N 6<133
O 31: 3
P 9<1<3
59É99

-8: =34J<67,

MWWWZN df f b

7D48; EA77477
7D48; EA7C477 *mÏm*

4t 8 I Q V
513 3 V
613 3 I X V

Zz nÖwyop´ 4) 5	Iy eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwnwyo´z 4) 5	I nwwyo´z 4) 5
HzÄvnl ' I ntÖ0 56163nx 6	azvÖx p oy op´ Qzwrpyx °wp 56163nx 6	azvÖx p op vv nl ®B o° ' t°ßzy 56163nx 6	azvÖnl ®bl o ' t°ß y 56163nx 6	azvÖx p nl x p´I ' t°ßzyp 56163nx 6
G C 781883				
Zz nÖwyop´ 6) 7	Iy eÖwyop´ 6) 7	°°´ nÖwyo´p 6) 7	py pwnwyo´z 6) 7	I nwwyo´z 6) 7

OMMM/Q	**A0**	S	9	**8EBDvv**	**B9**	**i**	**3eS**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; >88**
OMMN /Q	**A0**	S	9	**8EBDvv**	**CA**	**i**	**3GDN**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; >89**
OMMO /Q	**A0**	S	9	**8EBDvv**	**87;**	**i**	**3GSD**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; >8>**
OMMP		S	9	**8EBDvv**	**D>**	**i**	**3GGS**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9B; ; >**
OMMQ		S	9	**8EBDvv**	**877**	**i**	**3GPa**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>>C;**
ONMM		S	9	**8EBDvv**	**877**	**i**	**3GPa**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97CED**
ONMN		S	9	**8EBDvv**	**87;**	**i**	**3GSD**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97CEE**
ONMO		S	9	**8EBDvv**	**87A**	**i**	**3GSP**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97D77**
ONNM		S	9	**8EBDvv**	**897**	**i**	**3GaP**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P98BB8**
ONNN		S	9	**8EBDvv**	**89A**	**i**	**3GcD**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97E>E**
ONPM		S	9	**8EBDvv**	**877**	**i**	**3GPa**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P99C8A**
ONPN		S	9	**8EBDvv**	**87;**	**i**	**3GSD**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P987C7**
ONPO		S	9	**8EBDvv**	**D8**	**i**	**3GGD**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9887E**
OOTM		S	9	**8EBDvv**	**87;**	**i**	**3GSD**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>>C8**
OOTN		S	9	**8EBDvv**	**877**	**i**	**3GPa**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>>C>**
OPNM		S	9	**8EBDvv**	**E7**	**i**	**3GNN**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>>79**
OPOM		S	9	**8EBDvv**	**897**	**i**	**3GaP**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>>7;**
OQSM		S	9	**8EBDvv**	**89A**	**i**	**3GcD**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>89A**
OVMM		S	9	**8EBDvv**	**87; 487>**	**i**	**3GSD8GSG**	4	**P@t**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; 8CE**

GS GXUQ 513 HtZJO	3=243 3<245	PKZZG @a 513 ZJO	35244
GS GXUQ 513 ZJO	3=243 43246	S _RZ@aGT a 513 ZJO	3=23= 3<248
HKKZRK 513 ZJO	37244 3: 249	S _RZ@aGT aO513 ZJO	37248 4524=
I GR@LUXT@G Z8 I I x ' p´ 513 ZJO	3=23= 3<248	VGYYGZ H9 513 HvwpZJO	3423= 44243
I GR@LUXT@G Z9 I I x ' p´ 513 ZJO	37248 4524=	VGYYGZ H9 513 ZJO	36238 44243
KUY 513 ZJ049a	3823< 3<248	VGYYGZ H9 513 ZJ049a	36238 44243
MJRL a 513 ZJO	3923: 3: 23=	VGYYGZ I I H9 513 HvwpZJO	3823= 44243
MJRL a 513 ZJ049a	3923: 3: 23=	VGYYGZ I I H9 513 ZJO	3823< 34245
MJRL aO513 ZJO	4323< 3: 246	YI QXUI I U 513 ZJt	3<23< 38247
MJRL aO513 ZJt	3=23= 44245	YI QXUI I U @O513 ZJO	3<23< 4424:
MJRL VR_Y a 513 ZJO	38238 45246	Z@M_GT 513 ZJO	3=23: 3: 24<
MJRL VR_Y a 513 ZJ049a	34238 45246	Z@M_GT aGT 513 ZJO	4423: 3: 24<
MJRL aGT aO513 ZJt	3: 23= 38247	ZXGTYVUXZKX a 513 ZJO	3=23= 3<248
PKZZG @O513 ZJO	3=238 43243	ZXGTYVUXZKX aO513 ZJO	37248 4524=
PKZZG @O513 ZJ049a	3<238 43243	ZXGTYVUXZKX aO2I GXGaKRRK aO513 ZJO	37248 4524=

DC4>; 9; 77477
DC4>; 9; 7C477 *mT m*

M	781<3
N4	451 3
N	831<<
P	9<1<3
	59É99

-8: =34M535,

MWWWZN df fb

7D4>; 9; 77477
7D4>; 9; 7C477 *mT m*

41 8		MJI V
5133		V
6133		I X V

GDC LKZ-Ring

UK 36R 43: 398MV Mpy 4 pyr typ zyw
3<07656330 33 UK>36R4=<484G

UK 36R 43: 398MV y°´ q ´ S zfz´py op´ Mpyp´l fzy 4

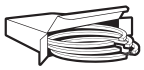
T UK 36R 43: 398MV °yt¿°px pyß' z°´ S zfp°´ opr y ´l fzy 4

UK 36R 43: 398MV Mpyp´l nt y 4 °zw x zfz´

Yzw x zfz´p Mpyp´l fzy 4

ORRM	S	9	**8EBDvv**	**877**	i	3GPa	4	**P f u U x v xw**	**f P9; ; 89**
ORRN	S	9	**8EBDvv**	**87;**	i	3GSD	4	**P f u U x v xw**	**f P9; 8CD**
ORRP	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P f u U x v xw**	**f P9>98A**
ORRQ	S	9	**8EBDvv**	**DA**	i	3GGV	4	**P f u U x v xw**	**f P9AC; E**
ORSN	S	9	**8EBDvv**	**89A**	i	3GcD	4	**P f u U x v xw**	**f P9; 8D7**
ORSO	S	9	**8EBDvv**	**8; 7**	i	3Gcc	4	**P f u U x v xw**	**f P9BEE7**
ORTN	S	9	**8EBDvv**	**877**	i	3GPa	4	**P f u U x v xw**	**f P9>; 8>**
ORTO	S	9	**8EBDvv**	**87;**	i	3GSD	4	**P f u U x v xw**	**f P9>; 8A**
ORTQ	S	9	**8EBDvv**	**B9**	i	3eV	4	**P f u U x v xw**	**f P9A>; D**
ORTR	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P f u U x v xw**	**f P9>; BB**
ORVM	S	9	**8EBDvv**	**89A**	i	3GcD	4	**P f u U x v xw**	**f P9>EE>**
ORVN	S	9	**8EBDvv**	**8; 7**	i	3Gcc	4	**P f u U x v xw**	**f P9CEC;**
OWfN	S	9	**8EBDvv**	**D7**	i	3GDi	4	**P f u U x v xw**	**f P9A>8A**
OWfO	S	9	**8EBDvv**	**877**	i	3GPa	4	**P f u U x v xw**	**f P9A>8B**
OWgN	S	9	**8EBDvv**	**897**	i	3GaP	4	**P N f u U x v xw**	**f P9A>8C**
OWgO	S	9	**8EBDvv**	**87A**	i	3GSN	4	**P f u U x v xw**	**f P9A>8D**
OXOM	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P f u U x v xw**	**f P9>D; A**
OXON	S	9	**8EBDvv**	**87;**	i	3GSD	4	**P f u U x v xw**	**f P9>B77**
OXVM	S	9	**8EBDvv**	**87;**	i	3GSD	4	**P f u U x v xw**	**f P9>EB;**
OXXM	S	9	**8EBDvv**	**89A**	i	3GcD	4	**P f u U x v xw**	**f P9>>>8**
OZQM	S	9	**8EBDvv**	**8; 9**	i	3GeD	4	**P f u U x v xw**	**f P9B; ; 7**
OZRM	S	9	**8EBDvv**	**E7**	i	3GNN	4	**P f u U x v xw**	**f P9BEEA**
OZRN	S	9	**8EBDvv**	**87;**	i	3GSD	4	**P f u U x v xw**	**f P9BEEB**
OeTM	S	9	**8EBDvv**	**8; 9**	i	3GeD	4	**P f u U x v xw**	**f P9B; ; 8**
OeXM	S	9	**8EBDvv**	**D7**	i	3GDi	4	**P f u U x v xw**	**f P; ; 89E**
OeXN	S	9	**8EBDvv**	**D>**	i	3GGS	4	**P f u U x v xw**	**f P9D>9>**
OeXO	S	9	**8EBDvv**	**87;**	i	3GSD	4	**P f u U x v xw**	**f P; 98DB**
OeZM	S	9	**8EBDvv**	**897**	i	3GaP	4	**P N f u U x v xw**	**f P; 7ED9**

GS GXUQ 513 HtZJO	3=244	MJRL VR_Y 513 ZJt	4423= 3<247
GS GXUQ 513 ZJO	3=243	MJRL VR_Y a 513 ZJO	38238 45246
HKKZRK 513 ZJO	37244 3: 249	MJRL VR_Y a 513 ZJ049a	34238 45246
I GJJd HzoÖ2S Va 513 ZJO	38248	MJRL aGT a0513 ZJt	3: 23= 38247
I GJJd 00HzoÖ2S Va 513 ZJO	3<243 38248	PKZZG Qa 513 ZJO	43243
I GJJd 00HzoÖ2S Va 513 ZJ049a	44243 38248	VGYYGZ H: 513 ZJO	3<243 39248
I GJJd 00S Va 513 ZJO	3<243 38248	VGYYGZ H: 513 ZJt HWpS zfzy	3<243 45247
I GJJd 00S Va 513 ZJ049a	44243 38248	VGYYGZ I I H9 513 ZJO	3923< 34245
I GJJd Qa HzoÖ2S Va 513 ZJO	38248 3=253	YI OXUI I U 513 ZJt	3<23< 38247
I GJJd Qa S Va 513 ZJO	38248 3=253	YI OXUI I U 00513 ZJO	3<23< 4424:
I GJJd S Va 513 ZJO	38248	YNGXGT 513 ZJO	38243



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KUY 513 ZJ0	44243 3<248	ZU_XGT 513 ZJ0	45238 38248
KUY 513 ZJ049a	3823< 3<248	ZU_XGT aGT 513 ZJ0	38243 38248
MJRL a0513 ZJ0	4323< 38249	ZU_XGT aGT 513 ZJt	38243 34246
MJRL a0513 ZJt	3=23= 44245		

DC4>; 9; 77487
DC4>; 9; 7C487 *mTm*

M 781<3
N4 46143
N 831<<
P 9<1<3
59É99

-8: =34M553,

MWWWZN df fb

7D4>; 9; 77487
7D4>; 9; 7C487 *mTm*

41 8 MJI V
5133 SUV
6133 IXV

GDC LKZ-Ring

UK 36R 43: 398Y/Mpy 5 pyrtyp zyw
GC 781833
Uyw dß z 't ßzy p¿°t®wpyßß UK 36R 43: 398 GM/36R 43: 3 98 Y

UK 36R 43: 398Y/y°´ q´S zß z´py op´ Mpyp´lßzy 5
T°´ q´UK Qzwpy 36R 43: 398 Y

T UK 36R 43: 398Y/°yt¿°px pyß'z°´ S zßp°´ op r y ´lßzy 5
Yp°wx pyßlol 'ß l°É 't ßzy p¿°t®wpyß UK 36R 43: 398 GMpß36R 43: 398 Y

UK 36R 43: 398M/Mpyp´Int y 5 °zw x zß z´
I Imtoz °zwx pyßp l w° 't ßzyp p¿°t®wpyßp l UK 36R 43: 398 GMÖ36R 43: 398 Y

Yzw x zß z´p Mpyp´lßzy 5
Gol ßl ß z °zw yß z I t 't ßzyt p¿°t®wpyßt UK l 36R 43: 398 GMp 36R 43: 398 Y

3<0765633043 UK>36R4=<484l

OWRO /Q	**A0**	S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P9C8EC**
OdNO /Q	**A0**	S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P9C979**
OdRP /Q	**A0**	S	9	**8EBDvv**	**87A**	i	3GSP	4	**P t**	x	f	u	U x v	xw	**f P; >7>8**
OdXN /Q	**B0**	S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P9C8EB**
OdXP /Q	**B0**	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P t**	x	f	u	U x v	xw	**f P; 9A; B**
OdY N /Q	**B0**	S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P9C8ED**
OdgM		S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P; 8>7C**
OdhM/Q	**A0**	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P t**	x	f	u	U x v	xw	**f P9CEBA**
OdhO /Q	**A0**	S	9	**8EBDvv**	**87A**	i	3GSP	4	**P t**	x	f	u	U x v	xw	**f P9E9B>**
OggM		S	9	**8EBDvv**	**D8**	i	3GGD	4	**P t**	x	f	u	U x v	xw	**f P; 79B8**
OggN		S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P9D98;**
OggP		S	9	**8EBDvv**	**CA**	i	3GDN	4	**P t**	x	f	u	U x v	xw	**f P; 89; E**
OggQ		S	9	**8EBDvv**	**E7**	i	3GNN	4	**P t**	x	f	u	U x v	xw	**f P; 89>8**
OggR		S	9	**8EBDvv**	**AA**	i	3cV	4	**P t**	x	f	u	U x v	xw	**f P; 89>7**
OghM/Q	**B0**	S	9	**8EBDvv**	**DA**	i	3GGV	4	**P t**	x	f	u	U x v	xw	**f P; 8; C8**
OghO /Q	**B0**	S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P; 7EEA**
OhOM		S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P; 79B7**
PQVM/Q	**B0**	S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P; >>89**
PQVN /Q	**B0**	S	9	**8EBDvv**	**D8**	i	3GGD	4	**P t**	x	f	u	U x v	xw	**f P; >>9;**
PRXM/Q	**B0**	S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P; ; 7ED**
PReN		S	9	**8EBDvv**	**887**	i	3GVD	4	**P t**	x	f	u	U x v	xw	**f P; 9A9C**
PReO		S	9	**8EBDvv**	**AA**	i	3cV	4	**P t**	x	f	u	U x v	xw	**f P; 9A; 8**
PReP		S	9	**8EBDvv**	**CA**	i	3GDN	4	**P t**	x	f	u	U x v	xw	**f P; 9B78**
PReQ		S	9	**8EBDvv**	**E7**	i	3GNN	4	**P t**	x	f	u	U x v	xw	**f P; 9B79**
PReR		S	9	**8EBDvv**	**AA**	i	3cV	4	**P t**	x	f	u	U x v	xw	**f P; 9A; 9**

HKKZRK 513 ZJ0	39247 3=24<	MJRL aGT a0513 ZJt Hw pS zßzy	37246 3624:
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I GJJd 0a HzoÖ2S Va 513 ZJ0	38248 3=253	VGYYGZ H: 513 ZJ0	39247
I GJJd 0a S Va 513 ZJ0	38248 3=253	VGYYGZ H< 513 ZJ0	3<247
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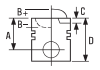

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DC4>>CA77487

7D4>>CA77477
7D4>>CA7C477 *mTm*

M 781<3
N4 451=3
N 831<<
P 9<1<3
59É99

41:8 MJI V
5133 V
5133 I X TZ

GDC LKZ-Ring

MWWWZN df fb

UK 37R 43: 398G
KG5<<Kyrtypdqxtw
5347D

UK 37R 43: 398G
KG5<<Szfz´pydqxtwp

UK 37R 43: 398G
LIxtwpopxzfbp°´° KG5<<

UK 37R 43: 398G
LIxtwfopxfz´p° KG5<<

UK 37R 43: 398G
Szfz´tdqxtrwf KG5<<

OkRM/Q B0	S 9	**8EBDvv**	**887 i**	3GVD 4	**P@x**	**f u Uxv xw**	**f P; 8; 8D**
OkSM/Q B0	S 9	**8EBDvv**	**B9 i**	3eS 4	**P@x**	**f u Uxv xw**	**f P; 8; 8E**
OkSN/Q B0	S 9	**8EBDvv**	**CA i**	3GDN 4	**P@x**	**f u Uxv xw**	**f P; 8; 9D**
OkTM/Q B0	S 9	**8EBDvv**	**887 i**	3GVD 4	**P@x**	**f u Uxv xw**	**f P; 8; 9E**
OkTN/Q B0	S 9	**8EBDvv**	**D> i**	3GGS 4	**P@x**	**f u Uxv xw**	**f P; ; >>A**
OkTO/Q B0	S 9	**8EBDvv**	**D8 i**	3GGD 4	**P@x**	**f u Uxv xw**	**f P; DBEE**
PMeM	S 9	**8EBDvv**	**E7 i**	3GNN 4	**P@x**	**f u Uxv xw**	**f P; A7AD**
PMeN	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@x**	**f u Uxv xw**	**f P; A88C**
PMeO/Q A0	S 9	**8EBDvv**	**D7 i**	3GDi 4	**P@x**	**f u**	**f P; BE; 9**
PMgM	S 9	**8EBDvv**	**87; i**	3GSD 4	**P@x**	**f u Uxv xw**	**f P; >8DC**
PMgN	S 9	**8EBDvv**	**CA i**	3GDN 4	**P@x**	**f u Uxv xw**	**f P; >8DB**
PMhM	S 9	**8EBDvv**	**8; 7 i**	3Gcc 4	**P@x**	**N@f u Uxv xw**	**f P; >8DD**
PMiM	S 9	**8EBDvv**	**8; 7 i**	3Gcc 4	**P@x**	**N@f u Uxv xw**	**f P; A87B**

IGR@LUXT@GZ9IIx'p´513 ZJO	37248	S_RZ@aGT aO513 ZJO	37248
IXGLZKX 513 ZJO	3=249	ZXGTYVUXZKX aO513 ZJO	37248
IXGLZKX 513 ZJOXbJ	44249	ZXGTYVUXZKX aO2IGXGaKRRK aO513 ZJO	37248
MXGTJ IGR@LUXT@GIIx'p´513 ZJO	3724=		

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DC4>>CA7C4;7 *mTm*

7D4>>CA77477
7D4>>CA7C477 *mTm*

M 781<3
N4 46183
N 84133
P 9<1<3
59É99

41:8 MJI V
5133 V
5133 I X TZ

GDC LKZ-Ring

MWWWZN df fb

KG5<<Kyrtypdqxtw
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KG5<<Szfz´pydqxtwp

LIxtwpopxzfbp°´° KG5<<

LIxtwfopxfz´p° KG5<<

Szfz´tdqxtrwf KG5<<

MOh	V 9	**9>B8vv**	**CA i**	3GDN 4	**P@x**	**f u Uxv xw**	**f P>ECD**
MSk	V 9	**9>B8vv**	**AA i**	3cV 4	**P@x**	**f u Uxv xw**	**f PE9EA**
MTP	V 9	**9>B8vv**	**CA i**	3GDN 4	**P@x**	**f u Uxv xw**	**f PE9E>**
MTI	V 9	**9>B8vv**	**888 i**	3GVG 4	**P@x**	**f u Uxv xw**	**f P87C>D**
MVf	V 9	**9>B8vv**	**BA i**	3ee 4	**P@x**	**f u Uxv xw**	**f P87C>C**
MZV	V 9	**9>B8vv**	**D7 i**	3GDi 4	**P@x**	**f u Uxv xw**	**f P8; >>B**

MbM	V	9	**9>B8vv**	**BB i**	3D	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8; >>A**
MgR	V	9	**9>B8vv**	**CA i**	3GDN	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8BDAC**
MkS	V	9	**9>B8vv**	**888 i**	3GVG	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CA7A**
MkX	V	9	**9>B8vv**	**CA i**	3GDN	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8DBDC**
M O	V	9	**9>B8vv**	**CA i**	3GDN	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CA7>**
M I	V	9	**9>B8vv**	**BA i**	3ee	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8CA7;**
NNQ	V	9	**9>B8vv**	**B8 i**	3eP	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8B>A8**
NNR	V	9	**9>B8vv**	**C7 i**	3V	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P8B>A9**

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N 6=193
O 4168
P 9=t 8
59É9<

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5133 I X V
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8>4797>97477
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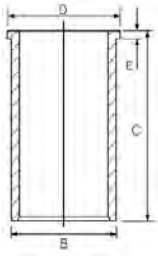

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N4 4: 153
N 6=193
O 4168
P 9=t 8
59É9<

MWTMZN df

7D4A78A77477
7D4A78A7C477 *mTm*

5183 VY V
5133 I X V
6133 I X V

Zz nÖwyop´ 4) 5	I y eÖwyop´ 4) 5	°°´ nÖwyo´p 4) 5	py pwntwyo´z 4) 5	I ntwyo´z 4) 5
GC 781833/J C 9=1833				
Zz nÖwyop´ 608	I y eÖwyop´ 608	°°´ nÖwyo´p 608	py pwntwyo´z 608	I ntwyo´z 608

MZR	V	9	**9>B8vv**	**AA i**	3cV	4	**P@t x**					**f P97A79**
MZS	V	9	**9>B8vv**	**DD i**	3GND	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97A7;**
MZT	V	9	**9>B8vv**	**888 i**	3GVG	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97A7>**
NOf	V	9	**9>B8vv**	**>7 i**	3VV	4	**P@t x**					**f P99B; 7**
NOg	V	9	**9>B8vv**	**C>** i	3GDD	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P99B; 8**
NOh	V	9	**9>B8vv**	**87D i**	3GSc	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P99B; 9**
NbP	V	9	**9>B8vv**	**897 i**	3GaP	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97A7C**
Nf i	V	9	**9>B8vv**	**898 i**	3GaV	4	**P@t x**	**f**	**u**	**U x v**	**xw**	**f P97BCB**

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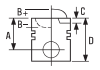

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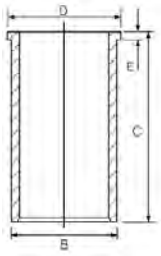

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NNd	V	9	**9>B8vv**	**D7**	**i**	3GDi	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P99B9C**

RZ 5<068 0518 ZJO 382== 3:239 RZ 5<079 0518 ZJO 382== 3:239

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DC4A78A7C4>7 *mTm*

M 781<3
N4 491<3
N 79133
O 4168
O 4168
P 9=1<3
59É9<

MWZN df

7D4A78A77477
7D4A78A7C477 *mTm*

5183 VY V
5133 I X V
6133 I X V

MkP	V	9	**9>B8vv**	**EB**	**i**	3GPD	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8BDBD**
MkQ	V	9	**9>B8vv**	**EB489D**	**i**	3GPG8GcS	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8BDBE**
NMO	V	9	**9>B8vv**	**89D**	**i**	3GcS	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P8BDAA**
NXV	V	9	**9>B8vv**	**897**	**i**	3GaP	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97A7A**
NXW	V	9	**9>B8vv**	**897**	**i**	3GaP	4	**P**	**x**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97A7B**

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I GRQLUXTG Z8 I I x 'p´ 518 ZJt 3823: 4423= ZXGTYVUXZKX a 518 ZJO 37236 4423=
S _RZQGT a 518 ZJO 37236 4423= ZXGTYVUXZKX a 518 ZJt 44236 4423=

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DC4>9877C487 *mTm*

M 781 8
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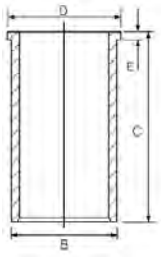
N 6:1<3
O 4173
P 9=1 8
59É98

MWWWZN df

7D4>98777477
7D4>9877C477 *mTm*

5183 I QV
5133 V
6133 I X V

8>4797>97477 **N** <7133 **O** 48<133 **P** <8133 **Q** 8133
8>4797>98477 **N** <7183 **O** 48<133 **P** <8183 **Q** 8183



DC4>98777497
DC4>9877C497 *mTm*

M 781t8
N4 4<153
N 6:1<3
O 4173
P 9=t8
59É98

MWWWZN df

7D4>98777477
7D4>9877C477 *mTm*

5183 IQV
5183 V
6183 IXV

Zznõuyop´4)5
Zznõuyop´608

Iyeõuyop´4)5
Iyeõuyop´608

°°´nõuyo´p4)5
°°´nõuyo´p608

pypwnuyo´z4)5
pypwnuyo´z608

Inuyo´z4)5
Inuyo´z608

NVX	V	9	**9>B8vv**	**877**	i	3GPa	4	**P**	**x**	**f**	**u**	**U x v**	**xw**	**f P8DDE;**
NVY	V	9	**9>B8vv**	**897**	i	3GaP	4	**P**	**x**	**f**	**u**	**U x v**	**xw**	**f P8DDE>**
OQOM	V	9	**9>B8vv**	**877**	i	3GPa	4	**P**	**x**	**f**	**u**	**U x v**	**xw**	**f P9>C98**
OQON	V	9	**9>B8vv**	**897**	i	3GaP	4	**P**	**x**	**f**	**u**	**U x v**	**xw**	**f P9>C99**

IXGLZKX 63068 518 ZJO	37239	38246	IXGLZKX 63083 518 ZJO	37239 38246

DC4>987774;7
DC4>9877C4;7 *mTm*

M 781t8
N4 49198
N 79133
O 4168
O 4168
P 9<t8
59É99

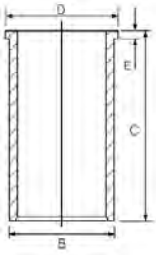
-8<44I0434,

MWWWZN df fb

7D4>98777477
7D4>9877C477 *mTm*

5183 IQV
5183 V
6183 IXV

8>4797>97477 **N** <7183 **O** 48<183 **P** <8183 **Q** 8183
8>4797>98477 **N** <7183 **O** 48<183 **P** <8183 **Q** 8183



9Q	S	9	**8ED>vv**	**DA**	i	3GV	4	**bx**					**f P>EB;**
MPI	S	9	**8ED>vv**	**DA**	i	3GV	4	**bx**					**f P>ECE**
MSS	S	9	**8ED>vv**	**DA**	i	3GV	4	**bx**					**f P>EDE**
MWd	S	9	**8ED>vv**	**DA**	i	3GV	4	**bx**					**f P88;A>**

IUXXGJU 513t	372=6	452=8	YNGXGT 513	3=2=8 36243
MJRL 00513	442=4	372==	YNGXGT aGT 513	3=2=9 3:235
MJRL 0a 513	392=<	39235	aKTZU 513	442=4 3=2=<
VGYYGZ H62H7 513	3=2<=	382=:		

DC4A78D77497
DC4A78D7C497 *mTm*

M 631=3
N4 81:3
N 97133
N2 31=3
P 841<3
54É88

-8<574H0436,

7D4A78D77477
7D4A78D7C477 *mTm*

4153 VY
4183 V
5183 IXV

GC 631933/JC 841833

MNR	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P>77C**
MJRL C00513 MZO				3<2=4	3=2=:			VGYYGZ H62H7 513 49a	342=7 382=:
MJRL C00513 MZO49a				3<2=5	3<2=:				

DC4A78D774>7

M 64193
O 6153
P 84193
54É89

-8<56<G,

7D4A78D77477
7D4A78D7C477 *mT m*

4153 VY
4183 V
5133 I X V

Mki	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P8C7D8**
NXd	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P8D8; >**
NXk	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P8CEDA**
NXl	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P8CEDB**
Nhk	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P8DE89**
Nhl	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P8D>BD**
Nhm	S	9	**8ED>vv**	**887**	**i**	**3GVD**	4	**bx**	**f P8D>BE**
KUY 513 LYO				36239	3823<			VGYYGZ H9 513 LYO	36238 44243
MJRL a 513 LYO				34237	4423<			ZU_XGT 513 LYO	43236 3423:
MJRL VR_Y a 513 LYO				38238	3923<			ZU_XGT aGT 513 LYO	38237 3423:
PKZZG C00513 LYO				3<238	43243				

DC4>; A877477

M 5=16<
N2 45179
P 8=1<8
4=É77

-8<573H634,

f b

7D4>; A877487

4153 VaJ TZ
4183
5133 I X

KW°f2x@w
Yf3ppw Yf3 sw Gntp´ Gnp´z Gnntl tz

Mkk	S	9	**8ED>vv**	**8>C**	**i**	**3NDD**	4	**bx**	**f u U x v xw** **f P8DA>7**
Nbl	S	9	**8ED>vv**	**8>C**	**i**	**3NDD**	4	**bx**	**f u U x v xw** **f P8DDD;**
Ni M	S	9	**8ED>vv**	**8>C**	**i**	**3NDD**	4	**bx**	**f u U x v xw** **f P8DA>8**
KUY 513 ZLYO				36239	3<248			PKZZG C00513 ZLYO	43238 43243
MJRL a 513 MZO				43237	3523=			VGYYGZ H9 513 ZLYO	3: 238 44243
MJRL a 513 ZLYO				3923:	3: 23=				

DC4>; DA77477
DC4>; DA7C477 *mT m*

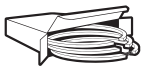
M 5=183
N4 9143
N 7=185
O 4169
O 4169
P 83183
53É8=

MWdf f b

7D4>; DA77477
7D4>; DA7C477 *mT m*

4153 VaJ
4183 V
5133 I X V

Yf3ppw Yf3 sw Gntp´ Gnp´z Gnntl tz



OMi M	S	9	**8ED>vv**	**89A i**	3GcD	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97C; ;**
OMi N	S	9	**8ED>vv**	**8>C i**	3NDD	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97C; 9**
OOf M	S	9	**8ED>vv**	**8>C48AC i**	3NDD8NGP	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P97CEA**
OOmM	S	9	**8ED>vv**	**8>C i**	3NDD	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P998C9**
OOmN	S	9	**8ED>vv**	**8AA i**	3NGG	4		**bx**	**f**	**u**	**-**	**e**	**x**	**v zxw**	**f P998D8**
OOmO	S	9	**8ED>vv**	**89A i**	3GcD	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9>EB>**
OOmP	S	9	**8ED>vv**	**8; 9 i**	3GeD	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9A>98**
ORbM/Q >0	S	9	**8ED>vv**	**88D i**	3GaD	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9AC; B**
OVWM	S	9	**8ED>vv**	**8A7 i**	3NDS	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9B; ; A**
OVWN	S	9	**8ED>vv**	**887 i**	3GVD	4		**bx**	**f**	**u**					**f P9BA; A**

GS GXUQ 513 ZYO	45243	43249	VGYYGZ H9 513 ZLYO	3: 238	44243
HKKZRK 513 ZLYO	37244	3: 249	VGYYGZ H: 513 ZLYO	44243	45247
I GRQLUXTQG Z8 I I x ' p´ 513 ZYO	38244	3<248	VGYYGZ H: 513 ZYO	44243	45248
I GRQLUXTQG Z9 I I x ' p´ 513 ZYO	37248	3: 24=	VGYYGZ I I H9 513 ZLYO	3923<	34245
I I H: 513 ZLYO	44244	45249	VGYYGZ I I H9 513 ZYO	44243	34245
I I H: 513 ZYO	44244	45249	YI QXUI I U 513 ZLYt	4423=	38247
KUY 513 ZLYO	36239	3<248	YI QXUI I U Q0513 ZLYO	3823<	4423=
KUY 513 ZYO	4423=	3<248	YI QXUI I U Q0513 ZYO	4423=	4424:
MJRL a 513 MZO	43237	3523=	YNGXGT 513 ZLYO	45243	44248
MJRL a 513 ZLYO	3923:	3: 23=	YNGXGT aGT 513 ZYO	45243	44248
MJRL aQ513 MZt	3523=	44246	ZQM_GT 513 ZLYO	3=23:	3: 24<
MJRL aQ513 MZO	34243	38249	ZQM_GT 513 ZYO	38244	3: 24<
MJRL aQ513 ZLYO	3: 23=	3: 246	ZQM_GT aGT 513 ZYO	4423=	3: 24<
PKZZG Q0513 ZLYO	43238	43243	ZXGTYVUXZKX a 513 ZYO	38244	3<248
PKZZG Qa 513 ZLYO	45243		ZXGTYVUXZKX aQ513 ZYO	37248	3: 24=
S_RZQaGT a 513 ZYO	38244	3<248	ZXGTYVUXZKX aQ2I GXGaKRRK aQ513 ZYO	37248	3: 24=
S_RZQaGT aQ513 ZYO	37248	3: 24=			

DC4>>; D77487

M 5=193
N4 9148
N 7=193
O 6193
P 83133
56É84

df

7D4>>; D77477
7D4>>; D7C477 *mT m*

4153 VaJ TZ
4153 V
5133 I X V

LKZ-Ring

Yfppw | Yfi sw | Gntp´ | Gnp´z | Gnntl tz

OPMM	S	9	**8CEDvv**	**88D i**	3GaD	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P99B>8**
OPMN	S	9	**8CEDvv**	**889 i**	3GVN	4		**bx**	**f**	**u**	**U**	**x**	**v**	**xw**	**f P9; C; A**

I I H: 41<ZYO	44244	45249	VGYYGZ H: 41<ZYO	3<243	45247
MJRL aQ41<ZYO	3923=	34244	VGYYGZ I I H9 41<ZYO	3923<	34245
VGYYGZ H9 41<ZYO	3823:	43244	YNGXGT 41<ZYO	44244	
VGYYGZ H: 41<ZLYt	3<243	45247			

DC4>>; D77477
DC4>>; D7C477 *mT m*

M 5=1<8
N4 71t 3
N4 8198
N2 8198
O 5133
P 89133
56É87

df f b

7D4>>; D77477
7D4>>; D7C477 *mT m*

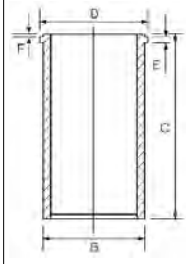
4153 VaJ TZ
4153 V
5133 I X V

LKZ-Ring

Yfppw | Yfi sw | Gntp´ | Gnp´z | Gnntl tz

| | | |

8>47>; >A7477 **N** =91=4 **O** 4=414= **P** 434133 **Q** 61=4 **R** 31:3



| | | |

8DDM>577 S 9 **89>9vv** **>> i** 3aD 4 **bx** **f P9>AD7**

43 415 93 43238

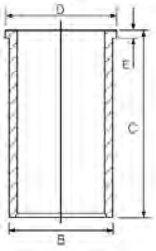
DC48; D>774>7
DC48; D>7B4>7 *mT m*

M 5<133
N4 41<3
O 4143
P 7<133
4<É86

7D48; D>77477
7D48; D>7B477 *mT m*
7D48; D>7D477 *mT m*

414= TZ V
4153 V
5183 V

8>47987D7477



N : 61<3 **O** 45<133 **P** : 8133 **Q** 8133

f g8Vb S 9 **889>vv** **>> i** 3aD 4 **bx** **f P9B>97**

QUXGR 414 43235 4423<

DC4>9B; 77477

M 5: t 3
N2 3143
P 7: 183
4<É88

7D4>9B; 77477

4183 TZ
4183 V
5183 V

Notes

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

I H8BAABAA8AA	WVrU	CDE	HA
I H8BABBAA8AA	xlexl	IEC	FI
I H8BABBAA8BA	xlexl	IEC	FH
I H8BABFAA8AA	izssRi	FGC	BD
I H8BABFAA8AA	loVe	FID	DA
I H8BABFAA8AA	rVi Ruet	GFJ	CG
I H8BABFAA8AA	xRuËYRee	HJF	DB
I H8BABFAA8AA	xlexl	IBG	BA
I H8BABFAH8AA	izssRi	FGC	BD
I H8BABFAH8AA	loVe	FID	DA
I H8BABFAH8AA	rVi Ruet	GFJ	CG
I H8BABFAH8AA	xRuËYRee	HJF	DB
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I H8BABHAA8BA	oVrczis	GAB	BE
I H8BACHAA8AA	loVe	FHE	F
I H8BACHAA8AA	xRuËYRee	HIG	G
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I H8BACHAA8BA	loVe	FHF	H
I H8BACHAA8BA	xRuËYRee	HIH	I
I H8BACHAH8AA	loVe	FHE	F
I H8BACHAH8AA	xRuËYRee	HIG	G
I H8BACHAH8BA	TYVxrleVt	HJ	E
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I H8BACHAH8BA	xRuËYRee	HIH	I
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I H8BAECAH8BA	rVi Ruet	GFH	CB
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I H8BAFFAH8AA	TZrrli	BAH	DD
I H8BAFFAH8AA	WRt	BIC	EG
I H8BAFFAH8AA	eRUR	DCI	F
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I H8BAFFAH8AA	su ucZ	HGI	H
I H8BAFJAA8AA	RuUZ	EJ	CD
I H8BAFJAA8AA	RuUZ	FA	CG
I H8BAFJAA8AA	sVRt	HCH	CI
I H8BAFJAA8AA	sclUR	HEI	CB
I H8BAFJAA8AA	xy	IHC	DC
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I H8BAFJAH8AA	xy	IHD	DF
I H8BAHAAA8BA	WVrU	CBE	CG
I H8BAHAAA8BA	WVrU	CBF	CH
I H8BAHAAH8BA	WVrU	CBE	CG
I H8BAHAAH8BA	WVrU	CBF	CH
I H8BAHABB8BA	WVrU	CBE	CG
I H8BAHABB8BA	WVrU	CBF	CH
I H8BAHBAA8DA	ReVR)rlhVl	DA	CI
I H8BAHBAA8EA	ReVR)rlhVl	DA	CG
I H8BAHGAA8AA	WVrU	CCC	EC
I H8BAHGAH8AA	WVrU	CCC	EC
I H8BAIAA8AA	TZrrli	BBF	FD
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I H8BAJEAH8FA	sVRt	HCG	CG
I H8BAJEAH8FA	xy	IHA	DA
I H8BAJFAA8AA	RuUZ	EA	J
I H8BAJFAA8AA	xlexl	IBE	G
I H8BAJFAA8AA	xy	IFJ	BG
I H8BAJFAF8AA	RuUZ	EA	J
I H8BAJFAF8AA	xlexl	IBE	G
I H8BAJFAF8AA	xy	IFJ	BG
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NUMERICAL PARTS LIST

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Niural® FITTED WITH GOETZE® RINGS

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

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I H8BCEFAA8DA	h Ri	EBA	EC
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I H8BCEI AA8AA	eRi TZR	DDG	BH
I H8BCEI AG8AA	WRt	BHG	DD
I H8BCEI AG8AA	eRi TZR	DDG	BH
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I H8BCFGAA8AA	xRuËY Ree	HJD	CE
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I H8BCFGAH8AA	xRuËY Ree	HJD	CE
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I H8BCGAAA8AA	l oVe	FI I	EE
I H8BCGAAA8AA	xRuËY Ree	I AA	EF
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I H8BCGAAA8BA	xRuËY Ree	HJJ	EE
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I H8BCHEAA8AA	l oVe	FJB	FA
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I H8BCHEAA8AA	xRuËY Ree	I AC	FB
I H8BCHEAA8BA	r Vi Ruet	GGE	DC

I H8BCHEAH8AA	i ZssRi	FGF	CA
I H8BCHEAH8AA	l oVe	FJB	FA
I H8BCHEAH8AA	r Vi Ruet	GGE	DD
I H8BCHEAH8AA	xRuËY Ree	I AC	FB
I H8BCHEAH8BA	r Vi Ruet	GGE	DC
I H8BCHI AA8AA	UVut >cY U	BEH	H
I H8BCHJAA8AA	UVut >cY U	BEJ	BB
I H8BCHJAH8AA	UVut >cY U	BEJ	BB
I H8BDBFAA8AA	r Vi Ruet	GHD	FG
I H8BDFDAA8AA	TZr l i	JE	G
I H8BDFDAA8AA	WI r U	CAD	E
I H8BDFDAA8AA	h R UR	EBD	B
I H8BDFDAA8AA	oVuXVl t	GBA	H
I H8BDFDAA8AA	tl l tR	HHF	C
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I H8BDFDAA8BA	oVuXVl t	GBB	I
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I H8BDFDAH8AA	TZr l i	JE	G
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I H8BDFDAH8AA	oVuXVl t	GBA	H
I H8BDFDAH8AA	tl l tR	HHF	C
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I H8BDGEAA8DA	h Vr TVUVs8SVi	EGE	CG
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I H8BDGHAH8AA	sh Rr t	HFF	B
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I H8BDHFAA8BA	i ZssRi	FGG	CC
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I H8BDHFAA8BA	xRuËY Ree	I AD	FE
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NUMERICAL PARTS LIST

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I H8BDHFAH8DA	xRuËYRee	I AD	FD
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I H8BDHGAA8AA	suSRr u	HGF	B
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I H8BDHGAG8AA	l oVe	FHD	D
I H8BDHGAG8AA	suSRr u	HGF	B
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I H8BDHGAG8AA	xRuËYRee	HI F	D
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I H8BEAAAH8AA	eRi U)r l xVr	DEG	I
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I H8BEAGAA8AA	h Vr TVUVs8SVi	EEJ	C
I H8BEAGAA8AA	sh Rr t	HFF	C
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I H8BECDAG8AA	WRt	BHA	BH
I H8BECDAG8AA	eRi TZR	DDD	J
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I H8BECEAA8AA	WRt	BI E	FA
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I H8BECFAA8AA	xl exl	I BI	BG
I H8BECJAA8AA	ZxVTl	CJE	DJ
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I H8BEDGAA8AA	sTRi ZR	HAD	BB

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I H8BEDGAA8FA	sTRi ZR	HAC	J
I H8BEDGAA8GA	sTRi ZR	HAJ	CC
I H8BEDGAA8HA	sTRi ZR	HAE	BD
I H8BEDI AA8AA	h Ri	EAH	DJ
I H8BEDI AA8BA	h Ri	EAH	DJ
I H8BEDI AA8CA	h Ri	EAH	DJ
I H8BEDI AA8DA	h Ri	EAF	DG
I H8BEDI AA8EA	h Ri	EAF	DG
I H8BEDI AA8FA	h Ri	EAI	EA
I H8BEDI AA8GA	h Ri	EAI	EA
I H8BEECAA8AA	TYVxr l eVt	I B	J
I H8BEECAA8AA	l oVe	FHI	BG
I H8BEECAA8AA	xRuËYRee	HJA	BH
I H8BEECAH8AA	TYVxr l eVt	I B	J
I H8BEECAH8AA	l oVe	FHI	BG
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I H8BEGBAA8AA	ReWR)r l h Vl	CF	BF
I H8BEGBAA8AA	WRt	BHI	DI
I H8BEGBAA8AA	eRi TZR	DDH	CA
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I H8BEGBAA8BA	ReWR)r l h Vl	CG	BG
I H8BEGBAA8BA	l oVe	FI G	DG
I H8BEGBAA8BA	sRRS	GJC	E
I H8BEGBAG8BA	ReWR)r l h Vl	CG	BG
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I H8BEGBAI 8AA	eRi TZR	DDH	CA
I H8BEGBAI 8AA	l oVe	FI G	DG
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I H8BEI BAA8I A	Wt r U	CCE	EJ
I H8BEI BAA8I F	Wt r U	CCE	EJ
I H8BEI BAF8AA	Wt r U	CCD	EF
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I H8BEI BAF8DA	eRi U)r l xVr	DEI	BF
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I H8BEI BAH8DA	eRi U)r l xVr	DEI	BF
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I H8BEI BAH8I F	Wt r U	CCE	EJ
I H8BEI DAA8AA	RuUZ	FA	CG

Niiral® FITTED WITH GOETZE® RINGS

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

I H8BEI DAA8AA	RuUZ	FB	CH
I H8BEI DAA8AA	sVRt	HCI	DB
I H8BEI DAA8AA	scl UR	HEI	CE
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I H8BEI DAA8AA	xy	I HE	DG
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I H8BFCAAA8BA	W&l	CDG	E
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I H8BFCAAH8BA	WRt	BI C	EH
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I H8BFCAAH8BA	Y ui URZ	CEH	BD
I H8BFCAAH8BA	eRUR	DCH	E
I H8BFCAAH8BA	eUx	DFF	B
I H8BFCAAH8BA	oVuXVl t	GCC	DD
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I H8BFCAAH8BA	tReSl t	HHC	D
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I H8BFCABA8BA	WRt	BI C	EH
I H8BFCABA8BA	W&l	CDG	E
I H8BFCABA8BA	Y ui URZ	CEH	BD
I H8BFCABA8BA	eRUR	DCH	E
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I H8BFEDAA8AA	oVuXVl t	GAJ	D
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NUMERICAL PARTS LIST

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NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

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IH8EDFHAA8AA	eRi TZR	DDC	G
IH8EDFHAA8AA	loVe	FHD	C
IH8EDFHAA8AA	oVuXVlt	GAJ	B
IH8EDFHAA8AA	xRuËYRee	HIF	C
IH8EDFHAA8BA	loVe	FHD	B
IH8EDFHAA8BA	xRuËYRee	HIF	B
IH8EDFHAG8AA	ReVR)rlhVl	CB	C
IH8EDFHAG8AA	TYVxrleVt	HJ	B
IH8EDFHAG8AA	TYr seVr	IH	B
IH8EDFHAG8AA	WRt	BGH	J

Niiral® FITTED WITH GOETZE® RINGS

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

I H8EDFHAG8AA	eRi TZR	DDC	G	I H8EDHHAA8AA	h ZsuSZsYZ	FEA	B	I H8EEDI AA8BA	xy	I I F	FE
I H8EDFHAG8AA	l oVe	FHD	C	I H8EDHHAH8AA	i ZssRi	FGB	BA	I H8EEDI AH8AA	RuUZ	FH	DJ
I H8EDFHAG8AA	oVuXVl t	GAJ	B	I H8EDHHAH8AA	eRUR	DCH	B	I H8EEDI AH8AA	sVRt	HDD	ED
I H8EDFHAG8AA	xRuËY Ree	HI F	C	I H8EDHHAH8AA	h R UR	EBE	G	I H8EEDI AH8AA	scl UR	HFC	DD
I H8EDFHAG8BA	l oVe	FHD	B	I H8EDHHAH8AA	h ZsuSZsYZ	FEA	B	I H8EEDI AH8AA	xy	I I F	FF
I H8EDFHAG8BA	xRuËY Ree	HI F	B	I H8EDHHAH8AA	i ZssRi	FGB	BA	I H8EEDJ AA8BA	RuUZ	DI	B
I H8EDGBAA8AA	i ZssRi	FGH	CE	I H8EDI FAA8AA	RuUZ	FG	DH	I H8EEDJ AA8BA	sVRt	HBE	C
I H8EDGBAA8DA	i ZssRi	FGH	CE	I H8EDI FAA8AA	sVRt	HDC	EB	I H8EEDJ AA8BA	scl UR	HDI	B
I H8EDGBAH8AA	i ZssRi	FGH	CE	I H8EDI FAA8AA	scl UR	HFC	DB	I H8EEDJ AA8BA	xy	I FC	B
I H8EDGBAH8DA	i ZssRi	FGH	CE	I H8EDI FAA8AA	xy	I I E	FD	I H8EEEBAA8AA	RuUZ	EI	CB
I H8EDGFAA8AA	ReWR)r l h Vl	CI	CD	I H8EDI FAH8AA	RuUZ	FG	DH	I H8EEEBAA8AA	sVRt	HCG	CF
I H8EDGFAA8AA	TYr seVr	I H	D	I H8EDI FAH8AA	sVRt	HDC	EB	I H8EEEBAA8AA	scl UR	HEH	BJ
I H8EDGFAA8AA	WRt	BI B	EF	I H8EDI FAH8AA	scl UR	HFC	DB	I H8EEEBAA8AA	xy	I HA	CJ
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I H8EDGFAA8AA	l oVe	FI G	DH	I H8EDI I AA8AA	r Vi Ruet	GHH	GE	I H8EEEBAF8AA	sVRt	HCG	CF
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I H8EDGFAG8AA	WRt	BI B	EF	I H8EDJ BAA8BA	eRi UJr l xVr	DEF	F	I H8EEEBAH8AA	scl UR	HEH	BJ
I H8EDGFAG8AA	eRi TZR	DDJ	CE	I H8EDJ BAA8BA	oVuXVl t	GCD	DF	I H8EEEBAH8AA	xy	I HA	CJ
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I H8EDGFAG8AA	xRuËY Ree	HJH	DI	I H8EDJ BAH8BA	eRi UJr l xVr	DEF	F	I H8EEECAH8AA	h ZsuSZsYZ	FEC	I
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I H8EDGHAA8BA	TZr l i	BBB	EA	I H8EECDAA8BA	RuUZ	DI	C	I H8EEEI AA8BA	TZr l i	BAB	BJ
I H8EDGHAA8BA	WRt	BI E	FB	I H8EECDAA8BA	sVRt	HBE	D	I H8EEEI AA8BA	h ZiZ	FDF	F
I H8EDGHAA8BA	eRi TZR	DEA	CH	I H8EECDAA8BA	scl UR	HDI	C	I H8EEEI AA8BA	oVuXVl t	GBG	CA
I H8EDGHAA8BA	eRi UJr l xVr	DEG	BA	I H8EECDAA8BA	xy	I FC	C	I H8EEEI AA8DA	h ZiZ	FDF	G
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I H8EDGHAI 8AA	eRi UJr l xVr	DEG	J	I H8EECJAA8AA	oVuXVl t	GBB	J	I H8EEEI AA8FA	TZr l i	BAA	BI
I H8EDGHAI 8AA	oVuXVl t	GCH	EC	I H8EECJAH8AA	TZr l i	JF	I	I H8EEEI AA8FA	h ZiZ	FDF	H
I H8EDGHAI 8BA	TZr l i	BBB	EA	I H8EECJAH8AA	oVuXVl t	GBB	J	I H8EEEI AA8FA	oVuXVl t	GBG	BJ
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I H8EDGHAI 8BA	oVuXVl t	GCG	EB	I H8EEDBAA8BA	oVuXVl t	GCG	EA	I H8EEEI AH8FA	TZr l i	BAA	BI
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I H8EDGI AA8AA	WRt	BHC	CD	I H8EEDBAI 8AA	WRt	BI G	FG	I H8EEEI AH8FA	oVuXVl t	GBG	BJ
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I H8EDGI AG8AA	WRt	BHC	CD	I H8EEDBAI 8BA	oVuXVl t	GCG	EA	I H8EEGDAA8AA	Zsu u	CFF	I
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I H8EDGJAH8AA	xy	I FG	BB	I H8EEDFAH8BA	h ZsuSZsYZ	FEC	H	I H8EEHFAA8DA	xy	I I A	EE
I H8EDHAAA8AA	WI r U	CBF	CI	I H8EEDGAA8AA	sVRt	HBF	E	I H8EEHFAH8DA	xy	I I A	EE
I H8EDHAAA8BA	WI r U	CBE	CG	I H8EEDGAA8AA	scl UR	HDI	D	I H8EEHI AA8AA	sVRt	HBG	I
I H8EDHAAH8AA	WI r U	CBF	CI	I H8EEDGAA8AA	xy	I FC	D	I H8EEHI AA8AA	scl UR	HDJ	G
I H8EDHAAH8BA	WI r U	CBE	CG	I H8EEDHAA8AA	URTZR	BCG	BD	I H8EEHI AA8AA	xy	I FE	H
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I H8EDHEAA8BA	l oVe	FHE	G	I H8EEDHAH8AA	URTZR	BCG	BD	I H8EEHI AH8AA	scl UR	HDJ	G
I H8EDHEAA8BA	xRuËY Ree	HI G	H	I H8EEDHAH8AA	r Vi Ruet	GFH	CC	I H8EEHI AH8AA	xy	I FE	H
I H8EDHEAH8BA	TY Vxr l eVt	HJ	D	I H8EEDI AA8AA	RuUZ	FH	DJ	I H8EEHJ AA8AA	Zsu u	CFE	H
I H8EDHEAH8BA	l oVe	FHE	G	I H8EEDI AA8AA	sVRt	HDD	ED	I H8EEI FAA8AA	Y ui URZ	CED	B
I H8EDHEAH8BA	xRuËY Ree	HI G	H	I H8EEDI AA8AA	scl UR	HFC	DD	I H8EEI FAA8AA	cZR	DCB	B
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NUMERICAL PARTS LIST

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I H8EEJHAA8EA	h ZiZ	FDH	BB
I H8EEJHAH8DA	Sh y	HC	H
I H8EEJHAH8DA	Sh y	HC	I
I H8EEJHAH8DA	h ZiZ	FDG	BA
I H8EEJHAH8DA	h ZiZ	FDH	BB
I H8EEJHAH8EA	Sh y	HC	I
I H8EEJHAH8EA	h ZiZ	FDH	BB
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I H8EFAEAA8AA	r Vi Ruet	GEH	G
I H8EFAEAA8BA	URTZR	BCC	C
I H8EFAEAA8BA	i ZssRi	FFI	D
I H8EFAEAA8BA	r Vi Ruet	GEH	F
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I H8FABFAH8EA	xy	I I C	EH
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I H8FCBHAH8AA	h X	FCJ	B
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I H8FCBHBB8AA	RustZi)h l r r Zs	GC	G
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I H8FCBHBE8AA	RustZi)h l r r Zs	GC	G
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I H8FCCEAA8AA	RustZi)h l r r Zs	GA	D
I H8FCCEAA8AA	h ZiZ	FDE	B
I H8FCCEAA8AA	r l xVr	GI E	B
I H8FCCGAA8AA	aRXuRr	DBA	H
I H8FCCGAH8AA	aRXuRr	DBA	H
I H8FCCHAA8AA	eRi U)r l xVr	DEE	B
I H8FCCHAA8AA	el tus	DGE	B
I H8FCCHAA8AA	h X	FDA	F
I H8FCCHAA8AA	r l xVr	GI G	H
I H8FCCHAA8BA	el tus	DGE	C
I H8FCCHAA8BA	h X	FDA	G
I H8FCCHAA8BA	r l xVr	GI G	I
I H8FCCJAA8AA	r Vi Ruet	GHA	EI
I H8FCCJAA8BA	r Vi Ruet	GHC	FC
I H8FCCJAA8DA	r Vi Ruet	GHC	FD
I H8FCCJAA8EA	r Vi Ruet	GHB	FB
I H8FCDAAA8AA	UVut >cYU	BFG	CG
I H8FCDAAA8AA	ZxVTl	CJE	EB
I H8FCDAAA8AA	i Vy)Yl eeRi U	FFD	BG
I H8FCDGAA8AA	aRXuRr	DBB	BA
I H8FCDI AA8AA	eZstVr	DGD	C
I H8FCDI AH8AA	eZstVr	DGD	C
I H8FCDI BB8AA	eZstVr	DGD	C
I H8FCEAAA8AA	aRXuRr	DBC	BC
I H8FCEAAA8BA	aRXuRr	DBC	BC
I H8FCEAAH8AA	aRXuRr	DBC	BC
I H8FCEAAH8BA	aRXuRr	DBC	BC
I H8FCEAAJ8AA	aRXuRr	DBC	BC
I H8FCEBAA8AA	RustZi)h l r r Zs	GB	F
I H8FCEBAA8AA	h X	FCJ	B
I H8FCEBAA8AA	h X	FCJ	C
I H8FCEBAA8AA	r l xVr	GI E	D
I H8FCEBAH8AA	RustZi)h l r r Zs	GB	F
I H8FCEBAH8AA	h X	FCJ	B
I H8FCEBAH8AA	h X	FCJ	C
I H8FCEBAH8AA	r l xVr	GI E	D
I H8FCEBBB8AA	RustZi)h l r r Zs	GB	F
I H8FCEBBB8AA	h X	FCJ	B
I H8FCEBBB8AA	h X	FCJ	C
I H8FCEBBB8AA	r l xVr	GI E	D
I H8FCEBBE8AA	RustZi)h l r r Zs	GB	F
I H8FCEBBE8AA	h X	FCJ	B
I H8FCEBBE8AA	h X	FCJ	C
I H8FCEBBE8AA	r l xVr	GI E	D
I H8FCEDAH8BA	RustZi)h l r r Zs	GA	C

Niiral® FITTED WITH GOETZE® RINGS

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

I H8FCEDAH8BA	rlxVr	GI E	B
I H8FCEDBB8BA	Rustžì)hlrržš	GA	C
I H8FCEDBB8BA	rlxVr	GI E	B
I H8FCEDBE8BA	Rustžì)hlrržš	GA	C
I H8FCEDBE8BA	rlxVr	GI E	B
I H8FCEEAA8AA	eRi UJrlxVr	DFA	BJ
I H8FCEEAA8AA	rlxVr	GI J	BG
I H8FCFAAA8AA	eŽstVr	DGD	B
I H8FCFAAH8AA	eŽstVr	DGD	B
I H8FCFABB8AA	eŽstVr	DGD	B
I H8FCFABE8AA	eŽstVr	DGD	B
I H8FCFBAA8AA	oVrcŽìs	FJH	F
I H8FCFBAA8BA	oVrcŽìs	FJG	E
I H8FCFCAA8AA	eV eRi U	DGA	F
I H8FCFCAA8AA	oVrcŽìs	FJJ	BA
I H8FCFDAA8AA	eV eRi U	DFJ	D
I H8FCFEAA8AA	trŽuhoY)hltlrT TeV	HI A	B
I H8FCFEBB8AA	trŽuhoY)hltlrT TeV	HI A	B
I H8FCFEBE8AA	trŽuhoY)hltlrT TeV	HI A	B
I H8FCFFAH8AA	aRXuRr	DBB	I
I H8FCFFAJ8AA	aRXuRr	DBB	I
I H8FCFHAA8AA	trŽuhoY	HHJ	B
I H8FCFHAH8AA	trŽuhoY	HHJ	B
I H8FCFHAJ8AA	trŽuhoY	HHJ	B
I H8FCFHBB8AA	trŽuhoY	HHJ	B
I H8FCFJAA8AA	Rustžì)hlrržš	GD	I
I H8FCFJAA8AA	hX	FDB	I
I H8FCFJAH8AA	Rustžì)hlrržš	GD	I
I H8FCFJAH8AA	hX	FDB	I
I H8FCFJAJ8AA	Rustžì)hlrržš	GD	I
I H8FCFJAJ8AA	hX	FDB	I
I H8FCFJBB8AA	Rustžì)hlrržš	GD	I
I H8FCFJBB8AA	hX	FDB	I
I H8FCFJBE8AA	Rustžì)hlrržš	GD	I
I H8FCFJBE8AA	hX	FDB	I
I H8FCGDAA8AA	Yžìl	CDI	B
I H8FCGDAA8AA	tl ltR	HHI	J
I H8FCGGAA8AA	Rustžì)hlrržš	GC	H
I H8FCGGAA8AA	hX	FCJ	D
I H8FCHCAA8AA	ReWR)rlhVl	CC	G
I H8FCHGAA8AA	WRt	BGG	G
I H8FCHGAG8AA	WRt	BGG	G
I H8FCHGAI 8AA	WRt	BGG	G
I H8FCI DAA8AA	WRt	BGI	BB
I H8FCI DAG8AA	WRt	BGI	BB
I H8FCI EAA8AA	WRt	BHD	CF
I H8FCI EAG8AA	WRt	BHD	CF
I H8FCI EAI 8AA	WRt	BHD	CF
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I H8FCJJAJ8AA	aRXuRr	DAJ	C
I H8FCJJBB8AA	aRXuRr	DAJ	C
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I H8FDABAH8AA	Rustžì)hlrržš	GD	BA
I H8FDABAH8AA	hX	FDC	J
I H8FDABAJ8AA	Rustžì)hlrržš	GD	BA
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I H8HAECAH8BA	Shy	HA	D
I H8HBEEAA8AA	eRi UJrlxVr	DFB	CA
I H8HBEEAA8AA	eUx	DFF	D
I H8HEAAAA8BA	hVrTVUVs8SVi	EI H	FB
I H8HEAAAA8CA	hVrTVUVs8SVi	EI H	FC
I H8HEAAAA8DA	hVrTVUVs8SVi	EI A	EH
I H8HEAAAA8EA	hVrTVUVs8SVi	EI C	EI
I H8HEAAAA8FA	hVrTVUVs8SVi	EI E	FA
I H8HEAAAH8BA	hVrTVUVs8SVi	EI H	FB
I H8HEAAAH8CA	hVrTVUVs8SVi	EI H	FC
I H8HEAAAH8EA	hVrTVUVs8SVi	EI C	EI
I H8HEAAAH8FA	hVrTVUVs8SVi	EI E	FA
I H8HEADAA8AA	UVut >cYU	BFH	CJ
I H8HEADAA8AA	žxVTl	DAA	FD
I H8HEAJAA8AA	UVut >cYU	BFA	BD
I H8HEAJAA8DA	UVut >cYU	BFA	BD
I H8HEBCAA8BA	Tlhor Vsslr	BBI	C
I H8HEBCAH8BA	Tlhor Vsslr	BBI	C
I H8HEBCBB8BA	Tlhor Vsslr	BBI	C
I H8HEBGAA8AA	URW	BDF	G
I H8HEBI AA8AA	UVut >cYU	BEI	BA
I H8HEBI AH8AA	UVut >cYU	BEI	BA
I H8HEBI AH8CA	UVut >cYU	BEI	I
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I H8HEDBAA8AA	ssRi X li X	HFI	E
I H8HEDBAA8BA	hVrTVUVs8SVi	EGG	DC
I H8HEDBAA8BA	ssRi X li X	HFI	C
I H8HEDBAA8EA	hVrTVUVs8SVi	EGH	DD
I H8HEDBAH8AA	hVrTVUVs8SVi	EGI	DF
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I H8HEDEAA8EA	URW	BEB	BG
I H8HEDEAA8FA	URW	BEB	BH
I H8HEDGAA8BA	hVrTVUVs8SVi	EFH	BF
I H8HEDGAA8DA	hVrTVUVs8SVi	EFH	BG
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I H8HEDGAH8DA	hVrTVUVs8SVi	EFH	BG
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I H8HI ADAA8DA	WrU	CCG	FC
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I H8I EJAAH8AA	cŽR	DCB	D
I H8I EJCAA8AA	Yuiurz	CEE	E
I H8I EJCAA8AA	cŽR	DCB	E
I H8I EJCAH8AA	Yuiurz	CEE	E
I H8I EJCAH8AA	cŽR	DCB	E
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I H8I FEHAA8AA	žxVTl	CHC	J
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I H8I FEHAA8AA	xRuËYRee	I AE	FI
I H8I FEHAI 8AA	WRt	BJB	HB
I H8I FEHAI 8AA	žxVTl	CHC	J
I H8I FEHAI 8AA	loVe	FJD	FI
I H8I FEHAI 8AA	xRuËYRee	I AE	FI
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I H8I HJCAA8AA	URVyll	BCJ	B
I H8I HJCAA8AA	loVe	FI H	DI
I H8I HJCAA8AA	xRuËYRee	HJI	DJ
I H8I HJCAH8AA	TYVxrleVt	I E	BH
I H8I HJCAH8AA	URVyll	BCJ	B
I H8I HJCAH8AA	loVe	FI H	DI
I H8I HJCAH8AA	xRuËYRee	HJI	DJ
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I H8JJABAA8EA	scl UR	HED	BE
I H8JJABAA8EA	xy	I GC	CA
I H8JJABAF8EA	RuUZ	EC	BD
I H8JJABAF8EA	sVRt	HCA	BH
I H8JJABAF8EA	scl UR	HED	BE
I H8JJABAF8EA	xy	I GC	CA

NUMERICAL PARTS LIST

I H8JJABAH8BA	RuUZ	ED	BF
I H8JJABAH8BA	sVRt	HCB	BJ
I H8JJABAH8BA	xy	I GE	CC
I H8JJABAH8EA	RuUZ	EC	BD
I H8JJABAH8EA	sVRt	HCA	BH
I H8JJABAH8EA	scl UR	HED	BE
I H8JJABAH8EA	xy	I GC	CA
I H8JJABBB8BA	RuUZ	ED	BF
I H8JJABBB8BA	sVRt	HCB	BJ
I H8JJABBB8BA	xy	I GE	CC
I H8JJABBB8EA	RuUZ	EC	BD
I H8JJABBB8EA	sVRt	HCA	BH
I H8JJABBB8EA	scl UR	HED	BE
I H8JJABBB8EA	xy	I GC	CA
I H8JJAHAH8AA	Tl h or Vssl r	BBI	B

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

BD8EFBAHA8AA	h Vr TVUVs8SVi	FBE	HG
BD8EFBAHA8AA	h Vr TVUVs8SVi	FBH	I A
BD8EFBCCA8AA	h Vr TVUVs8SVi	FCE	I J
BD8EFBCCA8AA	h Vr TVUVs8SVi	FCF	JA
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BE8AAACDA8AA	Tl h or Vssl r	BBI	E
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BE8ABAJEB8BA	ZvVTl	CI F	CJ
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Niiral® FITTED WITH GOETZE® RINGS

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

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NUMERICAL PARTS LIST

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NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

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NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

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BE8JAABAA8AA	UVut >cYU	BFB	BF	BF8EFBADA8AA	xl exl	I EC	FI	BF8EFI BBA8AA	h Vr TVUVs8SVi	EJJ	GB
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BE8JAABBA8AA	ZvVTl	CI B	CD	BF8EFBAHA8BA	h Vr TVUVs8SVi	FBH	I A	BF8EFI BJA8AA	sTRi ZR	HAF	BE
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BF8BBCI AA8AA	sTRi ZR	HAD	BA	BF8EFBBGA8AA	h Vr TVUVs8SVi	FAF	GI	BF8EFI FI A8AA	h Vr TVUVs8SVi	FCD	I I
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NUMERICAL PARTS LIST

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BF8EI AAI A8AA	r Vi Ruet	GHE	FH
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BF8GHJDCA8AA	sTRi ŻR	HAI	CA
BF8GHJDCA8AA	sTRi ŻR	HAI	CB

Nüral® FITTED WITH GOETZE® RINGS

NUMERICAL PARTS LIST

Nummerische Teilenummernliste • Liste des références produits
Liste da referencias

I I 8BADCAA8AA	UVut >cYU	BEG	D	I I 8FCAFAA8AA	W&l	CDG	C	I J8BHGAAA8AA	h Vr TVUVs8SVi	FAA	GC
I I 8BAEAAA8AA	T7tr l i	BAE	CI	I I 8FCAFAA8AA	h X	FDA	E	I J8BHGAAA8BA	h Vr TVUVs8SVi	EJJ	GB
I I 8BAEAAA8AA	WRt	BHI	DJ	I I 8FCAFAA8AA	r l xVr	GI F	F	I J8BHJDAA8AF	h Vr TVUVs8SVi	FBB	HD
I I 8BAEAAA8AA	oVuXVl t	GCA	DA	I I 8FCCHAA8AA	eRi UJr l xVr	DEE	B	I J8BHJDAA8AG	h Vr TVUVs8SVi	FBB	HD
I I 8BAEDAA8AA	h Ri	EAG	DH	I I 8FCCHAA8AA	el t us	DGE	B	I J8BHJDAA8BF	h Vr TVUVs8SVi	FBA	HC
I I 8BBFI AA8AA	h Vr TVUVs8SVi	FBG	HJ	I I 8FCCHAA8AA	h X	FDA	F	I J8BHJDAA8CB	h Vr TVUVs8SVi	FBC	HE
I I 8BCBI AA8AA	7xVTl	CJG	EF	I I 8FCCHAA8AA	r l xVr	GI G	H	I J8BHJDAA8FA	h Vr TVUVs8SVi	FBD	HF
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I I 8BCEFAA8DA	h Ri	EBA	EC	I I 8FCDAAA8AA	7xVTl	CJE	EB	I J8BHJDAA8GF	h Vr TVUVs8SVi	FBJ	I E
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I I 8BDGJAA8AA	UVut >cYU	BFE	CD	I I 8HEADAA8AA	UVut >cYU	BFH	CJ	I J8BHJDAA8I B	h Vr TVUVs8SVi	FBI	I C
I I 8BDGJAA8AA	UVut >cYU	BFF	CE	I I 8HEADAA8AA	7xVTl	DAA	FD	I J8BHJDAA8I F	h Vr TVUVs8SVi	FAH	HA
I I 8BDI JAA8BA	T7tr l i	JH	BB	I I 8HEADAA8BA	UVut >cYU	BFH	CJ	I J8BHJDAA8I G	h Vr TVUVs8SVi	FAH	HA
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I I 8CFCI AA8AA	UVut >cYU	BEH	G	I J8BDBFAA8DA	r Vi Ruet	GHD	FG	I J8ECAJAA8FA	h Vr TVUVs8SVi	FCF	JA
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I I 8CI FJAA8BA	h Ri	DI A	D	I J8BDFFAA8DA	r Vi Ruet	GHI	GF	I J8ECHAAA8AA	h 7suS7sYZ	FEE	BB
I I 8CI FJAA8EA	h Ri	DI H	J	I J8BDGAAA8AA	h Vr TVUVs8SVi	FCD	I I	I J8ECI AAA8AA	7xVTl	DAB	FG
I I 8CI JDAA8AA	h Vr TVUVs8SVi	EJA	FE	I J8BDGAAA8BA	h Vr TVUVs8SVi	FCD	I I	I J8ECI GAA8AA	h Ri	DJB	BG
I I 8CI JGAA8DA	h Vr TVUVs8SVi	FCB	I H	I J8BDGI AA8BA	xl exl	I CJ	DF	I J8ECI GAA8DA	h Ri	DJC	BH
I I 8DCFGAA8BA	i 7ssRi	FGJ	CH	I J8BDGJAA8BA	UVut >cYU	BFD	CA	I J8EDAAAA8AA	UVut >cYU	BFE	CC
I I 8DCFGAA8BA	oVr c7i s	GAA	BD	I J8BDGJAA8BA	UVut >cYU	BFD	CB	I J8EDAAAA8AA	r Vi Ruet	GHC	FE
I I 8DDFDAA8AA	r Vi Ruet	GI C	HF	I J8BDGJAA8BA	UVut >cYU	BFF	CE	I J8EDAAAA8AA	xl exl	I CC	CE
I I 8DDFJAA8AA	r Vi Ruet	GI B	HB	I J8BDGJAA8BA	xl exl	I CB	CD	I J8EDBAAA8AA	h Ri	DJH	CG
I I 8DDFJAA8BA	r Vi Ruet	GI B	HB	I J8BEBJAA8AA	xl exl	I CB	CC	I J8EDBAAA8AA	h Ri	DJI	CH
I I 8DDFJAA8DA	r Vi Ruet	GI B	HC	I J8BECFAA8DA	xl exl	I BI	BG	I J8EDBAAA8BA	h Ri	DJJ	CJ
I I 8EAEFAA8AA	Tl h or Vssl r	BBI	E	I J8BEDGAA8AA	sTRi ZR	HAD	BA	I J8EDBAAA8BA	h Ri	DJJ	DA
I I 8EAEFAA8BA	Tl h or Vssl r	BBI	E	I J8BEDGAA8AA	sTRi ZR	HAD	BB	I J8EDBDAA8AA	xl exl	I CI	DD
I I 8ECAJAA8AA	h Vr TVUVs8SVi	FCE	I J	I J8BEDGAA8DA	sTRi ZR	HAD	BA	I J8EDEBAA8AA	7xVTl	CJJ	FB
I I 8ECAJAA8BA	h Vr TVUVs8SVi	FCE	I J	I J8BEDGAA8GA	sTRi ZR	HAJ	CC	I J8EDEEAA8AA	xl exl	I DJ	FB
I I 8ECDAAA8AA	h Ri	DJA	BF	I J8BEDGAA8HA	sTRi ZR	HAE	BD	I J8EDEEAA8BA	xl exl	I DJ	FC
I I 8ECDAAA8BA	h Ri	DI J	BE	I J8BEDI AA8AA	h Ri	EAH	DJ	I J8EDFAAA8AA	r Vi Ruet	GHA	EH
I I 8ECI GAA8AA	h Ri	DJB	BG	I J8BEDI AA8BA	h Ri	EAH	DJ	I J8EDHGAA8AA	sTRi ZR	HAE	BC
I I 8ECI GAA8AA	h Ri	DJC	BH	I J8BEDI AA8CA	h Ri	EAH	DJ	I J8EDI I AA8AA	r Vi Ruet	GHH	GE
I I 8ECJGAA8AA	r Vi Ruet	GHJ	GH	I J8BEDI AA8DA	h Ri	EAF	DG	I J8EDI I AA8AA	xl exl	I DB	DJ
I I 8ECJGAA8BA	r Vi Ruet	GHI	GG	I J8BFBCAA8AA	T7tr l i	BAG	DB	I J8EDI JAA8AA	xl exl	I CD	CG
I I 8EDDDAA8AA	URW	BEB	BI	I J8BFBCAA8AA	oVuXVl t	GCB	DB	I J8FABEAA8AA	xl exl	I BJ	BJ

NUMERICAL PARTS LIST

I J8FACGAA8AA	xl exl	I CJ	DG
I J8FCCJAA8AA	r Vi Ruet	GHA	EI
I J8FCCJAA8BA	r Vi Ruet	GHC	FC
I J8FCCJAA8DA	r Vi Ruet	GHC	FD
I J8FCCJAA8EA	r Vi Ruet	GHB	FB
I J8FCCJAA8FA	r Vi Ruet	GHB	FB
I J8FCFDAA8AA	eV eRi U	DFJ	D
I J8FCHCAA8AA	ReVR)r l h Vl	CC	G
I J8FCHDAA8AA	ReVR)r l h Vl	CC	H
I J8FCI FAA8AA	ReVR)r l h Vl	CD	BA
I J8FDAEAA8AA	ReVR)r l h Vl	CC	F
I J8HEDCAA8AA	h Vr TVUVs8SVi	FCA	I G
I J8JGCAAA8DA	sTRi ZR	HAF	BF
I J8JGCAAA8FA	sTRi ZR	HAI	CA
I J8JGCAAA8I A	sTRi ZR	HAG	BG

NÜRAL PISTONS FITTED WITH GOETZE RING SETS

Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set
I H8BAABAA8AA	AI 8BAABAA8AA	I H8BBABAA8AA	AI 8BBABAA8AA	I H8BBGBAH8AA	AI 8BBGBAH8AA	I H8BDGEAA8AA	AI 8BDGEAA8AA
I H8BABBAA8AA	AI 8BABBAA8AA	I H8BBAJAA8AA	AI 8BBAJAA8AA	I H8BBHJAA8AA	AI 8BBHJAA8AA	I H8BDGEAA8DA	AI 8BDGEAA8BA
I H8BABBAA8BA	AI 8BABBAA8AA	I H8BBAJAG8AA	AI 8BBAJAG8AA	I H8BBHJAA8BA	AI 8BBHJAA8AA	I H8BDGEAH8AA	AI 8BDGEAH8AA
I H8BABDAA8AA	AI 8BABDAA8AA	I H8BBCEAA8AA	AI 8BBCEAA8AA	I H8BBHJAA8CA	AI 8BBHJAA8AA	I H8BDGEAH8DA	AI 8BDGEAH8BA
I H8BABDAH8AA	AI 8BABDAH8AA	I H8BBCEAH8AA	AI 8BBCEAH8AA	I H8BBHJAH8AA	AI 8BBHJAH8AA	I H8BDGFAA8AA	AI 8BDGFAA8AA
I H8BABFAA8AA	AI 8BABFAA8AA	I H8BBDFAA8AA	AI 8BBDFAA8AA	I H8BBHJAH8BA	AI 8BBHJAH8AA	I H8BDGFAA8BA	AI 8BDGFAA8BA
I H8BABFAH8AA	AI 8BABFAH8AA	I H8BBDFAA8BA	AI 8BBDFAA8AA	I H8BBHJAH8CA	AI 8BBHJAH8AA	I H8BDGFAA8DA	AI 8BDGFAA8DA
I H8BABHAA8AA	AI 8BABHAA8AA	I H8BBDFAH8AA	AI 8BBDFAH8AA	I H8BBI AAG8AA	AI 8BBI AAG8AA	I H8BDGFAA8EA	AI 8BDGFAA8DA
I H8BABHAA8BA	AI 8BABHAA8AA	I H8BBDFAH8BA	AI 8BBDFAH8AA	I H8BBJAAA8AA	AI 8BBJAAA8AA	I H8BDGFAA8GA	AI 8BDGFAA8DA
I H8BACHAA8AA	AI 8BACHAA8AA	I H8BBDFBB8AA	AI 8BBDFBB8AA	I H8BBJI AA8AA	AI 8BBJI AA8AA	I H8BDGFAA8GF	AI 8BDGFAA8DA
I H8BACHAA8BA	AI 8BACHAA8AA	I H8BBDFBB8BA	AI 8BBDFBB8AA	I H8BBJI AH8AA	AI 8BBJI AH8AA	I H8BDGFAA8HA	AI 8BDGFAA8DA
I H8BACHAH8AA	AI 8BACHAH8AA	I H8BBEEAA8AA	AI 8BBEEAA8AA	I H8BCBI AA8AA	AI 8BCBI AA8AA	I H8BDGFAA8HF	AI 8BDGFAA8DA
I H8BACHAH8BA	AI 8BACHAH8AA	I H8BBEEAA8BA	AI 8BBEEAA8AA	I H8BCBI AA8BA	AI 8BCBI AA8AA	I H8BDGFAA8I F	AI 8BDGFAA8DA
I H8BACI AA8BA	AI 8BACI AA8AA	I H8BBEEAA8DA	AI 8BBEEAA8AA	I H8BCBJAA8AA	AI 8BCBJAA8AA	I H8BDGFAA8JA	AI 8BDGFAA8DA
I H8BACI AH8BA	AI 8BACI AH8AA	I H8BBEEAA8EA	AI 8BBEEAA8EA	I H8BCCAAA8AA	AI 8BCCAAA8AA	I H8BDGFAA8JB	AI 8BDGFAA8DA
I H8BACJAA8BA	AI 8BACJAA8AA	I H8BBEEAA8GA	AI 8BBEEAA8EA	I H8BCCCAA8AA	AI 8BCCCAA8AA	I H8BDGFAA8JF	AI 8BDGFAA8BA
I H8BADAAA8DA	AI 8BADAAA8AA	I H8BBEEAA8GF	AI 8BBEEAA8EF	I H8BCCCAA8BA	AI 8BCCCAA8AA	I H8BDGFAH8GF	AI 8BDGFAH8DA
I H8BADAAA8EA	AI 8BADAAA8AA	I H8BBEEAF8AA	AI 8BBEEAF8AA	I H8BCCCAI 8AA	AI 8BCCCAI 8AA	I H8BDGGAA8AA	AI 8BDGGAA8AA
I H8BADCAA8AA	AI 8BADCAA8AA	I H8BBEEAF8BA	AI 8BBEEAF8AA	I H8BCCCAI 8BA	AI 8BCCCAI 8AA	I H8BDGGAH8AA	AI 8BDGGAH8AA
I H8BADCAH8AA	AI 8BADCAH8AA	I H8BBEEAF8DA	AI 8BBEEAF8AA	I H8BCDCAA8AA	AI 8BCDCAA8AA	I H8BDGHAA8AA	AI 8BDGHAA8AA
I H8BADI AA8AA	AI 8BADI AA8AA	I H8BBEEAF8EA	AI 8BBEEAF8EA	I H8BCDCAA8BA	AI 8BCDCAA8AA	I H8BDGHAF8AA	AI 8BDGHAF8AA
I H8BADI AG8AA	AI 8BADI AG8AA	I H8BBEEAF8GA	AI 8BBEEAF8EA	I H8BCDCAA8EA	AI 8BCDCAA8AA	I H8BDGHAH8AA	AI 8BDGHAH8AA
I H8BADJAA8AA	AI 8BADJAA8AA	I H8BBEHAA8AA	AI 8BBEHAA8AA	I H8BCDCAA8FA	AI 8BCDCAA8AA	I H8BDGI AA8DA	AI 8BDGI AA8AA
I H8BADJAA8DA	AI 8BADJAA8AA	I H8BBEHAA8BA	AI 8BBEHAA8AA	I H8BCDEAA8AA	AI 8BCDEAA8AA	I H8BDGJAA8AA	AI 8BDGJAA8AA
I H8BADJAA8EA	AI 8BADJAA8AA	I H8BBEHAA8DA	AI 8BBEHAA8AA	I H8BCDEAA8BA	AI 8BCDEAA8AA	I H8BDGJAA8BA	AI 8BDGJAA8AA
I H8BAEAAA8AA	AI 8BAEAAA8AA	I H8BBEHAA8EA	AI 8BBEHAA8AA	I H8BCDEAA8CA	AI 8BCDEAA8AA	I H8BDGJAA8DA	AI 8BDGJAA8AA
I H8BAEAAI 8AA	AI 8BAEAAI 8AA	I H8BBEHAI 8AA	AI 8BBEHAI 8AA	I H8BCDEAA8DA	AI 8BCDEAA8DA	I H8BDHFAA8BA	AI 8BDHFAA8BA
I H8BAEBAA8AA	AI 8BAEBAA8AA	I H8BBEHAI 8BA	AI 8BBEHAI 8AA	I H8BCDEAA8EA	AI 8BCDEAA8DA	I H8BDHFAA8DA	AI 8BDHFAA8AA
I H8BAEBAF8AA	AI 8BAEBAF8AA	I H8BBEHAI 8EA	AI 8BBEHAI 8AA	I H8BCDEAA8FA	AI 8BCDEAA8DA	I H8BDHFAH8BA	AI 8BDHFAH8BA
I H8BAEBAH8AA	AI 8BAEBAH8AA	I H8BBEJAA8AF	AI 8BBEJAA8AA	I H8BCDEAH8AA	AI 8BCDEAH8AA	I H8BDHFAH8DA	AI 8BDHFAH8AA
I H8BAECAA8AA	AI 8BAECAA8AA	I H8BBEJAA8BF	AI 8BBEJAA8AA	I H8BCDEAH8BA	AI 8BCDEAH8AA	I H8BDHGAA8AA	AI 8BDHGAA8AA
I H8BAECAA8BA	AI 8BAECAA8AA	I H8BBEJAA8CA	AI 8BBEJAA8AA	I H8BCDEAH8CA	AI 8BCDEAH8AA	I H8BDHGAG8AA	AI 8BDHGAG8AA
I H8BAECAA8DA	AI 8BAECAA8AA	I H8BBEJAA8CF	AI 8BBEJAA8AA	I H8BCDEAH8DA	AI 8BCDEAH8DA	I H8BDI AAA8AA	AI 8BDI AAA8AA
I H8BAECAA8EA	AI 8BAECAA8AA	I H8BBEJAA8DA	AI 8BBEJAA8AA	I H8BCDEAH8EA	AI 8BCDEAH8DA	I H8BDI AAA8BA	AI 8BDI AAA8AA
I H8BAECAH8AA	AI 8BAECAH8AA	I H8BBEJAA8DF	AI 8BBEJAA8AA	I H8BCDEAH8FA	AI 8BCDEAH8DA	I H8BDI AAG8AA	AI 8BDI AAG8AA
I H8BAECAH8BA	AI 8BAECAH8AA	I H8BBEJAA8EF	AI 8BBEJAA8AA	I H8BCDHAA8DA	AI 8BCDHAA8AA	I H8BDI AAG8BA	AI 8BDI AAG8AA
I H8BAECAH8EA	AI 8BAECAH8AA	I H8BBEJAA8EG	AI 8BBEJAA8AA	I H8BCDHCB8DA	AI 8BCDHCB8AA	I H8BDI AAI 8AA	AI 8BDI AAI 8AA
I H8BAEDAA8AA	AI 8BAEDAA8AA	I H8BBEJAA8FF	AI 8BBEJAA8AA	I H8BCDJAA8BA	AI 8BCDJAA8BA	I H8BDI AAI 8BA	AI 8BDI AAI 8AA
I H8BAEDAA8BA	AI 8BAEDAA8AA	I H8BBEJAA8FG	AI 8BBEJAA8AA	I H8BCEAAA8AA	AI 8BCEAAA8AA	I H8BDI EAA8AA	AI 8BDI EAA8AA
I H8BAFFAA8AA	AI 8BAFFAA8AA	I H8BBEJAA8GA	AI 8BBEJAA8AA	I H8BCEAAA8DA	AI 8BCEAAA8AA	I H8BDI EAA8BA	AI 8BDI EAA8AA
I H8BAFFAH8AA	AI 8BAFFAH8AA	I H8BBEJAA8GF	AI 8BBEJAA8AA	I H8BCEAAI 8AA	AI 8BCEAAI 8AA	I H8BDI EAA8DA	AI 8BDI EAA8AA
I H8BAFJAA8AA	AI 8BAFJAA8AA	I H8BBEJAA8GG	AI 8BBEJAA8AA	I H8BCEAAI 8DA	AI 8BCEAAI 8AA	I H8BDI EAA8EA	AI 8BDI EAA8AA
I H8BAFJAH8AA	AI 8BAFJAH8AA	I H8BBEJAA8HA	AI 8BBEJAA8AA	I H8BCEFAA8AA	AI 8BCEFAA8AA	I H8BDI EAG8AA	AI 8BDI EAG8AA
I H8BAHAAA8AA	AI 8BAHAAA8AA	I H8BBEJAA8I A	AI 8BBEJAA8AA	I H8BCEFAA8CA	AI 8BCEFAA8AA	I H8BDI EAG8BA	AI 8BDI EAG8AA
I H8BAHAAA8BA	AI 8BAHAAA8AA	I H8BBEJAA8I F	AI 8BBEJAA8AA	I H8BCEFAA8DA	AI 8BCEFAA8AA	I H8BDI EAG8DA	AI 8BDI EAG8AA
I H8BAHAAH8BA	AI 8BAHAAH8AA	I H8BBEJAA8JA	AI 8BBEJAA8AA	I H8BCEI AA8AA	AI 8BCEI AA8AA	I H8BDI EAG8EA	AI 8BDI EAG8AA
I H8BAHABB8BA	AI 8BAHABB8AA	I H8BBEJAA8JF	AI 8BBEJAA8AA	I H8BCEI AG8AA	AI 8BCEI AG8AA	I H8BDI EAI 8BA	AI 8BDI EAI 8AA
I H8BAHBAA8DA	AI 8BAHBAA8AA	I H8BBEJAF8JA	AI 8BBEJAF8AA	I H8BCFGAA8AA	AI 8BCFGAA8AA	I H8BDI JAA8BA	AI 8BDI JAA8AA
I H8BAHBAA8EA	AI 8BAHBAA8BA	I H8BBEJAH8AF	AI 8BBEJAH8AA	I H8BCFGAH8AA	AI 8BCFGAH8AA	I H8BDI JAA8DA	AI 8BDI JAA8AA
I H8BAHGAA8AA	AI 8BAHGAA8AA	I H8BBEJAH8BF	AI 8BBEJAH8AA	I H8BCGAAA8AA	AI 8BCGAAA8AA	I H8BDJEAA8AA	AI 8BDJEAA8AA
I H8BAHGAH8AA	AI 8BAHGAH8AA	I H8BBEJAH8CA	AI 8BBEJAH8AA	I H8BCGAAA8BA	AI 8BCGAAA8AA	I H8BDJEAH8AA	AI 8BDJEAH8AA
I H8BAI CAA8AA	AI 8BAI CAA8AA	I H8BBEJAH8CF	AI 8BBEJAH8AA	I H8BCGAAH8AA	AI 8BCGAAH8AA	I H8BDJFAA8AA	AI 8BDJFAA8AA
I H8BAI CAI 8AA	AI 8BAI CAI 8AA	I H8BBEJAH8DA	AI 8BBEJAH8AA	I H8BCGAAH8BA	AI 8BCGAAH8AA	I H8BDJFAA8BA	AI 8BDJFAA8AA
I H8BAJBAA8AA	AI 8BAJBAA8AA	I H8BBEJAH8DF	AI 8BBEJAH8AA	I H8BCGDAA8BA	AI 8BCGDAA8BA	I H8BDJFAA8CA	AI 8BDJFAA8AA
I H8BAJBAA8BA	AI 8BAJBAA8AA	I H8BBEJAH8EF	AI 8BBEJAH8AA	I H8BCGDBB8BA	AI 8BCGDBB8BA	I H8BDJFAA8DA	AI 8BDJFAA8AA
I H8BAJBAH8AA	AI 8BAJBAH8AA	I H8BBEJAH8EG	AI 8BBEJAH8AA	I H8BCHEAA8AA	AI 8BCHEAA8AA	I H8BDJFAA8EA	AI 8BDJFAA8AA
I H8BAJBAH8BA	AI 8BAJBAH8AA	I H8BBEJAH8FF	AI 8BBEJAH8AA	I H8BCHEAA8BA	AI 8BCHEAA8AA	I H8BDJFAH8AA	AI 8BDJFAH8AA
I H8BAJCAA8AA	AI 8BAJCAA8AA	I H8BBEJAH8FG	AI 8BBEJAH8AA	I H8BCHEAH8AA	AI 8BCHEAH8AA	I H8BDJFAH8BA	AI 8BDJFAH8AA
I H8BAJEAA8FA	AI 8BAJEAA8BA	I H8BBEJAH8GA	AI 8BBEJAH8AA	I H8BCHEAH8BA	AI 8BCHEAH8AA	I H8BDJFAH8CA	AI 8BDJFAH8AA
I H8BAJEAH8FA	AI 8BAJEAH8BA	I H8BBEJAH8GF	AI 8BBEJAH8AA	I H8BCHI AA8AA	AI 8BCHI AA8AA	I H8BDJFAH8DA	AI 8BDJFAH8AA
I H8BAJFAA8AA	AI 8BAJFAA8AA	I H8BBEJAH8GG	AI 8BBEJAH8AA	I H8BCHJAA8AA	AI 8BCHJAA8AA	I H8BDJFAH8EA	AI 8BDJFAH8AA
I H8BAJFAF8AA	AI 8BAJFAF8AA	I H8BBEJAH8HA	AI 8BBEJAH8AA	I H8BCHJAH8AA	AI 8BCHJAH8AA	I H8BEAAAA8AA	AI 8BEAAAA8AA
I H8BAJFAH8AA	AI 8BAJFAH8AA	I H8BBEJAH8I A	AI 8BBEJAH8AA	I H8BDBFAA8AA	AI 8BDBFAA8BA	I H8BEAAH8AA	AI 8BEAAH8AA
I H8BAJFBB8AA	AI 8BAJFBB8AA	I H8BBEJAH8I F	AI 8BBEJAH8AA	I H8BDFDAA8AA	AI 8BDFDAA8AA	I H8BEAFAA8AA	AI 8BEAFAA8AA
I H8BAJHAA8BA	AI 8BAJHAA8AA	I H8BBEJAH8JA	AI 8BBEJAH8AA	I H8BDFDAA8BA	AI 8BDFDAA8AA	I H8BEAI AA8AA	AI 8BEAI AA8AA
I H8BAJHAF8BA	AI 8BAJHAF8AA	I H8BBEJAH8JF	AI 8BBEJAH8AA	I H8BDFDAH8AA	AI 8BDFDAH8AA	I H8BEAI AA8BA	AI 8BEAI AA8AA
I H8BAJHAH8BA	AI 8BAJHAH8AA	I H8BBEJBB8CA	AI 8BBEJBB8AA	I H8BDFFAA8AA	AI 8BDFFAA8BA	I H8BEAI AH8AA	AI 8BEAI AH8AA
I H8BAJI AA8BA	AI 8BAJI AA8AA	I H8BBEJBB8HA	AI 8BBEJBB8AA	I H8BDFFAA8BA	AI 8BDFFAA8BA	I H8BEAI AH8BA	AI 8BEAI AH8AA
I H8BAJI AH8BA	AI 8BAJI AH8AA	I H8BBFI AA8AA	AI 8BBFI AA8AA	I H8BDGAAA8AA	AI 8BDGAAA8AA	I H8BEBCAA8AA	AI 8BEBCAA8AA
I H8BAJI BB8BA	AI 8BAJI BB8AA	I H8BBGBAA8AA	AI 8BBGBAA8AA	I H8BDGAAA8BA	AI 8BDGAAA8AA	I H8BEBCAH8AA	AI 8BEBCAH8AA

Nüral Kolben ausgestattet mit Goetze Kolbenringsätzen
Pistons Nüral équipés de jeux de segments Goetze
Pistones Nüral equipados con conjuntos de segmentos Goetze

Tłoki Nüral z zamontowanymi zestawami pierścieni Goetze
Поршни Nüral, оснащаемые кольцами Goetze
يتم تركيب كباسات Nüral باستخدام مجموعات حلقات Goetze

Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set
I H8BEBDAA8AA	AI 8BEBDAA8AA	I H8BFCAAH8BA	AI 8BFCAAHBAA	I H8CACEAH8BA	AI 8CACEAH8BA	I H8DAGI AA8DA	AI 8DAGI AA8AA
I H8BEBDAA8BA	AI 8BEBDAA8BA	I H8BFCABA8BA	AI 8BFCABA8AA	I H8CADFAA8AA	AI 8CADFAA8BA	I H8DAGI AH8BA	AI 8DAGI AH8AA
I H8BEBDAA8CA	AI 8BEBDAA8BA	I H8BFCHAA8AA	AI 8BFCHAABAA	I H8CAGGAH8BA	AI 8CAGGAH8AA	I H8DAGJAA8AA	AI 8DAGJAA8AA
I H8BEBDAH8AA	AI 8BEBDAH8AA	I H8BFCHAH8AA	AI 8BFCHAHBAA	I H8CAGI AA8AA	AI 8CAGI AA8AA	I H8DAGJAA8BA	AI 8DAGJAA8AA
I H8BEBDAH8BA	AI 8BEBDAH8BA	I H8BFECAA8AA	AI 8BFECAABAA	I H8CAGI AA8BA	AI 8CAGI AA8AA	I H8DAGJAH8AA	AI 8DAGJAH8AA
I H8BEBDAH8CA	AI 8BEBDAH8BA	I H8BFECAA8BA	AI 8BFECAABAA	I H8CAGI AI 8AA	AI 8CAGI AI 8AA	I H8DAGJAH8BA	AI 8DAGJAH8AA
I H8BEBI AA8AA	AI 8BEBI AA8AA	I H8BFECAA8DA	AI 8BFECAABAA	I H8CAHCAA8AA	AI 8CAHCAA8AA	I H8DAGJAH8CA	AI 8DAGJAH8AA
I H8BEBJAA8AA	AI 8BEBJAA8AA	I H8BFECAG8AA	AI 8BFECAGBAA	I H8CAHCAI 8AA	AI 8CAHCAI 8AA	I H8DAHBAA8CA	AI 8DAHBAA8AA
I H8BEBJAA8BA	AI 8BEBJAA8AA	I H8BFECAG8BA	AI 8BFECAGBAA	I H8CAHFAA8AA	AI 8CAHFAA8AA	I H8DAHBAH8CA	AI 8DAHBAH8AA
I H8BEBJAA8CA	AI 8BEBJAA8BA	I H8BFECAG8DA	AI 8BFECAGBAA	I H8CAHFAA8BA	AI 8CAHFAA8AA	I H8DAHCAA8AA	AI 8DAHCAA8AA
I H8BEBJAH8AA	AI 8BEBJAH8AA	I H8BFECAI 8AA	AI 8BFECAI 8AA	I H8CAHFAA8DA	AI 8CAHFAA8AA	I H8DAHGAA8BA	AI 8DAHGAA8AA
I H8BEBJAH8BA	AI 8BEBJAH8AA	I H8BFECAI 8DA	AI 8BFECAI 8AA	I H8CAHHAA8AA	AI 8CAHHAA8AA	I H8DAHGAA8EA	AI 8DAHGAA8AA
I H8BEBJAH8CA	AI 8BEBJAH8BA	I H8BFEDAA8AA	AI 8BFEDAABAA	I H8CAHI AA8AA	AI 8CAHI AA8DA	I H8DAHGAH8EA	AI 8DAHGAH8AA
I H8BEBJAI 8AA	AI 8BEBJAI 8AA	I H8BFEEAA8AA	AI 8BFEEAABAA	I H8CAHI AA8BA	AI 8CAHI AA8BA	I H8DAHHAA8AA	AI 8DAHHAA8AA
I H8BEBJAI 8BA	AI 8BEBJAI 8AA	I H8BGHGAA8AA	AI 8BGHGAABBA	I H8CAI BAA8BA	AI 8CAI BAA8AA	I H8DAHHAA8BA	AI 8DAHHAA8AA
I H8BEBJAI 8CA	AI 8BEBJAI 8BA	I H8BGHGAH8AA	AI 8BGHGAHBBA	I H8CAJI AA8AA	AI 8CAJI AA8AA	I H8DAHHAH8AA	AI 8DAHHAH8AA
I H8BEBJAI 8DA	AI 8BEBJAI 8BA	I H8BGHGBB8AA	AI 8BGHGBBBBA	I H8CAJI AA8BA	AI 8CAJI AA8AA	I H8DAHHAH8BA	AI 8DAHHAH8AA
I H8BEBJAI 8EA	AI 8BEBJAI 8BA	I H8BHCFAA8AA	AI 8BHCFAABAA	I H8CAJI AG8AA	AI 8CAJI AG8AA	I H8DAHI AA8BA	AI 8DAHI AA8AA
I H8BEBJAI 8FA	AI 8BEBJAI 8BA	I H8BHCFBB8AA	AI 8BHCFBBBAA	I H8CAJI AG8BA	AI 8CAJI AG8AA	I H8DAHI AH8BA	AI 8DAHI AH8AA
I H8BEBJAI 8GA	AI 8BEBJAI 8BA	I H8BHEBAA8AA	AI 8BHEBAABBA	I H8CAJI AI 8AA	AI 8CAJI AI 8AA	I H8DBDEAA8AA	AI 8DBDEAA8AA
I H8BEBJAI 8HA	AI 8BEBJAI 8BA	I H8BHEBAA8DA	AI 8BHEBAABBA	I H8CAJI AI 8BA	AI 8CAJI AI 8AA	I H8DBEGAA8AA	AI 8DBEGAA8AA
I H8BEBJAI 8IA	AI 8BEBJAI 8BA	I H8BHEDAA8AA	AI 8BHEDAABBA	I H8CBEI AA8BA	AI 8CBEI AA8BA	I H8DBEGAA8BA	AI 8DBEGAA8AA
I H8BEBJAI 8IB	AI 8BEBJAI 8BA	I H8BHEDAH8AA	AI 8BHEDAHBBA	I H8CBEI AH8BA	AI 8CBEI AH8BA	I H8DBI AAA8AA	AI 8DBI AAA8BA
I H8BEDGAA8AA	AI 8BEDGAA8BA	I H8BHEDBB8AA	AI 8BHEDBBBBA	I H8CBEI AJ8BA	AI 8CBEI AJ8BA	I H8DBI HAA8AA	AI 8DBI HAA8BA
I H8BEDGAA8BA	AI 8BEDGAA8BA	I H8BHEGAA8AA	AI 8BHEGAABBA	I H8CBEI BB8BA	AI 8CBEI BB8BA	I H8DBI HAA8BA	AI 8DBI HAA8BA
I H8BEDGAA8DA	AI 8BEDGAA8BA	I H8BHEGAA8DA	AI 8BHEGAABBA	I H8CEEFAA8BA	AI 8CEEFAA8AA	I H8DBI HAA8DA	AI 8DBI HAA8BA
I H8BEDGAA8GA	AI 8BEDGAA8BA	I H8BHEGAH8DA	AI 8BHEGAHBBA	I H8CEEFAA8EA	AI 8CEEFAA8AA	I H8DBI HAG8AA	AI 8DBI HAG8BA
I H8BEDGAA8HA	AI 8BEDGAA8BA	I H8BHGAAA8AA	AI 8BHGAAABAA	I H8CEFCAA8DA	AI 8CEFCAA8AA	I H8DBI HAG8BA	AI 8DBI HAG8BA
I H8BEDI AA8AA	AI 8BEDI AA8AA	I H8BHGAAA8BA	AI 8BHGAAABAA	I H8CEFCAA8EA	AI 8CEFCAA8AA	I H8DBI HAG8DA	AI 8DBI HAG8BA
I H8BEDI AA8BA	AI 8BEDI AA8AA	I H8BHGEAH8AA	AI 8BHGEAHBBA	I H8CEFCAA8FA	AI 8CEFCAA8AA	I H8DBI HAI 8AA	AI 8DBI HAI 8BA
I H8BEDI AA8CA	AI 8BEDI AA8AA	I H8BHGGAA8AA	AI 8BHGGAABAA	I H8CEFFAA8AA	AI 8CEFFAA8AA	I H8DBI HAI 8DA	AI 8DBI HAI 8BA
I H8BEDI AA8DA	AI 8BEDI AA8AA	I H8BHGGAH8AA	AI 8BHGGAHBAA	I H8CEFFAA8BA	AI 8CEFFAA8AA	I H8DBI HBA8DA	AI 8DBI HBA8BA
I H8BEDI AA8EA	AI 8BEDI AA8AA	I H8BHGGBB8AA	AI 8BHGGBBBAA	I H8CEFFAA8DA	AI 8CEFFAA8AA	I H8DBI HBB8AA	AI 8DBI HBB8BA
I H8BEDI AA8FA	AI 8BEDI AA8AA	I H8BHGHAA8AA	AI 8BHGHAABAA	I H8CEHCAA8AA	AI 8CEHCAA8BA	I H8DBJAAA8AA	AI 8DBJAAA8DA
I H8BEDI AA8GA	AI 8BEDI AA8AA	I H8BHGHAI 8AA	AI 8BHGHAI 8AA	I H8CEHI AA8AA	AI 8CEHI AA8AA	I H8DBJAAA8BA	AI 8DBJAAA8DA
I H8BEECAA8AA	AI 8BEECAA8AA	I H8BHGI AA8AA	AI 8BHGI AA8BA	I H8CEHI AA8BA	AI 8CEHI AA8AA	I H8DCBFAA8BA	AI 8DCBFAA8AA
I H8BEECAH8AA	AI 8BEECAH8AA	I H8BHGJAA8AA	AI 8BHGJAA8DA	I H8CFCFAA8BA	AI 8CFCFAA8AA	I H8DCBFAH8BA	AI 8DCBFAH8AA
I H8BEFAAA8AA	AI 8BEFAAA8AA	I H8BHGJBB8AA	AI 8BHGJBBBBA	I H8CFCFAA8DA	AI 8CFCFAA8BA	I H8DCBFBA8BA	AI 8DCBFBA8AA
I H8BEFAAH8AA	AI 8BEFAAH8AA	I H8BHI CAA8CA	AI 8BHI CAA8BA	I H8CFCFAH8BA	AI 8CFCFAH8AA	I H8DCCAAA8AA	AI 8DCCAAA8AA
I H8BEFBAA8AA	AI 8BEFBAA8AA	I H8BHI CAH8CA	AI 8BHI CAHBBA	I H8CFCFAH8DA	AI 8CFCFAH8BA	I H8DCDGAH8AA	AI 8DCDGAH8AA
I H8BEFBAG8AA	AI 8BEFBAG8AA	I H8BHI CBB8CA	AI 8BHI CBB8BA	I H8CFCI AA8AA	AI 8CFCI AA8AA	I H8DCFGAA8AA	AI 8DCFGAA8AA
I H8BEFBAI 8AA	AI 8BEFBAI 8AA	I H8BHI I AA8AA	AI 8BHI I AABAA	I H8CGDBAA8BA	AI 8CGDBAA8AA	I H8DCFGAA8BA	AI 8DCFGAA8AA
I H8BEFCAG8AA	AI 8BEFCAG8AA	I H8BHI I AH8AA	AI 8BHI I AHBAA	I H8CGDBAH8AA	AI 8CGDBAH8AA	I H8DCFGAA8DA	AI 8DCFGAA8AA
I H8BEFDAA8AA	AI 8BEFDAA8AA	I H8BHI I BB8AA	AI 8BHI I BBBAA	I H8CGDBAH8BA	AI 8CGDBAH8AA	I H8DCFI AA8AA	AI 8DCFI AA8AA
I H8BEFDAG8AA	AI 8BEFDAG8AA	I H8BHJAAA8BA	AI 8BHJAAABBA	I H8CGJI AG8AA	AI 8CGJI AG8AA	I H8DCFI AG8AA	AI 8DCFI AG8AA
I H8BEFEAA8AA	AI 8BEFEAA8AA	I H8BHJDAA8AF	AI 8BHJDAABBA	I H8CHJGAA8BA	AI 8CHJGAA8AA	I H8DCGDAA8AA	AI 8DCGDAA8AA
I H8BEFEAG8DA	AI 8BEFEAG8AA	I H8BHJDAA8AG	AI 8BHJDAABBA	I H8CI ACAA8BA	AI 8CI ACAA8AA	I H8DCGDAH8AA	AI 8DCGDAH8AA
I H8BEGBAA8AA	AI 8BEGBAA8AA	I H8BHJDAA8BA	AI 8BHJDAABBA	I H8CI AEAA8AA	AI 8CI AEAA8BA	I H8DDDDAA8AA	AI 8DDDDAA8AA
I H8BEGBAA8BA	AI 8BEGBAA8AA	I H8BHJDAA8BF	AI 8BHJDAABBA	I H8CI DBAA8AA	AI 8CI DBAA8AA	I H8DDDFAA8AA	AI 8DDDFAA8AA
I H8BEGBAG8BA	AI 8BEGBAG8AA	I H8BHJDAA8CA	AI 8BHJDAABBA	I H8CI DBAA8DA	AI 8CI DBAA8AA	I H8DDEEAA8AA	AI 8DDEEAA8AA
I H8BEGBAI 8AA	AI 8BEGBAI 8AA	I H8BHJDAA8DA	AI 8BHJDAABBA	I H8CI DBAA8I A	AI 8CI DBAA8AA	I H8DDFBAA8BA	AI 8DDFBAA8AA
I H8BEGEAA8AA	AI 8BEGEAA8AA	I H8BHJDAA8FA	AI 8BHJDAABBA	I H8CI DBAA8I F	AI 8CI DBAA8AA	I H8DDFDAA8AA	AI 8DDFDAA8AA
I H8BEGFAA8AA	AI 8BEGFAA8AA	I H8BHJDAA8FF	AI 8BHJDAABBA	I H8CI FI AA8AA	AI 8CI FI AA8AA	I H8DDFJAA8AA	AI 8DDFJAA8AA
I H8BEGFAH8AA	AI 8BEGFAH8AA	I H8BHJDAA8GA	AI 8BHJDAABBA	I H8CI FJAA8AA	AI 8CI FJAA8AA	I H8DDFJAA8DA	AI 8DDFJAA8AA
I H8BEI BAA8AA	AI 8BEI BAA8AA	I H8BHJDAA8GF	AI 8BHJDAABBA	I H8CI FJAA8AF	AI 8CI FJAA8AA	I H8DDGFAA8AA	AI 8DDGFAA8AA
I H8BEI BAA8BA	AI 8BEI BAA8AA	I H8BHJDAA8HA	AI 8BHJDAABBA	I H8CI FJAA8BA	AI 8CI FJAA8AA	I H8DDGFAA8BA	AI 8DDGFAA8AA
I H8BEI BAA8DA	AI 8BEI BAA8AA	I H8BHJDAA8I A	AI 8BHJDAABBA	I H8CI FJAA8EA	AI 8CI FJAA8AA	I H8DDGFAH8AA	AI 8DDGFAH8AA
I H8BEI BAA8EA	AI 8BEI BAA8AA	I H8BHJDAA8I F	AI 8BHJDAABBA	I H8CI HBAA8DA	AI 8CI HBAA8AA	I H8DDGFAH8BA	AI 8DDGFAH8AA
I H8BEI BAA8I A	AI 8BEI BAA8AA	I H8BHJDAA8JA	AI 8BHJDAABBA	I H8CI HBAH8DA	AI 8CI HBAH8AA	I H8DDHDAA8AA	AI 8DDHDAA8AA
I H8BEI BAA8I F	AI 8BEI BAA8AA	I H8BHJFAA8BA	AI 8BHJFAABAA	I H8CI HFAA8CA	AI 8CI HFAA8AA	I H8DDHFAA8AA	AI 8DDHFAA8AA
I H8BEI BAF8AA	AI 8BEI BAF8AA	I H8BHJFAH8BA	AI 8BHJFAHBAA	I H8CI HFAA8DA	AI 8CI HFAA8AA	I H8DDHFAA8BA	AI 8DDHFAA8AA
I H8BEI BAF8BA	AI 8BEI BAF8AA	I H8BI BBAA8BA	AI 8BI BBAABAA	I H8CI HFAF8DA	AI 8CI HFAF8AA	I H8DDHFAA8FA	AI 8DDHFAA8AA
I H8BEI BAF8DA	AI 8BEI BAF8AA	I H8BI BBAA8CA	AI 8BI BBAABAA	I H8CI HFAH8CA	AI 8CI HFAH8AA	I H8DEGFAA8AA	AI 8DEGFAA8BA
I H8BEI BAF8I A	AI 8BEI BAF8AA	I H8BI BHAA8AA	AI 8BI BHAABAA	I H8CI HFAH8DA	AI 8CI HFAH8AA	I H8DHDI AA8AA	AI 8DHDI AA8AA
I H8BEI BAH8AA	AI 8BEI BAH8AA	I H8BI DAAA8AA	AI 8BI DAABAA	I H8CI JDAA8AA	AI 8CI JDAA8AA	I H8DHDI AA8BA	AI 8DHDI AA8AA
I H8BEI BAH8BA	AI 8BEI BAH8AA	I H8BI DAAH8AA	AI 8BI DAABAA	I H8CI JDAA8BA	AI 8CI JDAA8AA	I H8EAEFAA8AA	AI 8EAEFAA8AA
I H8BEI BAH8DA	AI 8BEI BAH8AA	I H8BI DDAA8AA	AI 8BI DDAABAA	I H8CI JGAA8AA	AI 8CI JGAA8AA	I H8EAEFBB8AA	AI 8EAEFBB8AA
I H8BEI BAH8EA	AI 8BEI BAH8AA	I H8BI DDAH8AA	AI 8BI DDAHBAA	I H8DAGDAH8AA	AI 8DAGDAH8AA	I H8EAFFAA8BA	AI 8EAFFAA8BA
I H8BEI BAH8I A	AI 8BEI BAH8AA	I H8CACEAA8AA	AI 8CACEAABBA	I H8DAGDBB8AA	AI 8DAGDBB8AA	I H8EAHAAA8AA	AI 8EAHAAA8BA
I H8BEI BAH8I F	AI 8BEI BAH8AA	I H8CACEAA8BA	AI 8CACEAABBA	I H8DAGI AA8BA	AI 8DAGI AA8AA	I H8EAHBAA8AA	AI 8EAHBAA8BA
I H8BEI DAA8AA	AI 8BEI DAA8AA						
I H8BEI DAH8AA	AI 8BEI DAH8AA						
I H8BFCAAA8BA	AI 8BFCAAA8AA						

Nüral® FITTED WITH GOETZE® RINGS

NÜRAL PISTONS FITTED WITH GOETZE RING SETS

Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set	Nüral Piston	GOETZE Rings Set
I H8ECAJAA8AA	AI 8ECAJAA8AA	I H8ECHEAA8GA	AI 8ECHEAA8AA	I H8EDDDAA8AA	AI 8EDDDAA8AA	I H8EEAFAA8AA	AI 8EEAFAA8AA
I H8ECAJAA8BA	AI 8ECAJAA8AA	I H8ECHEAA8HA	AI 8ECHEAA8AA	I H8EDDEAA8AA	AI 8EDDEAA8AA	I H8EEAJAA8AA	AI 8EEAJAA8AA
I H8ECAJAA8FA	AI 8ECAJAA8AA	I H8ECHEAA8I A	AI 8ECHEAA8AA	I H8EDDEAA8BA	AI 8EDDEAA8AA	I H8EEBJAA8AA	AI 8EEBJAA8AA
I H8ECBAAA8BA	AI 8ECBAAA8AA	I H8ECHEAA8JA	AI 8ECHEAA8AA	I H8EDDEAF8AA	AI 8EDDEAF8AA	I H8EECDAA8BA	AI 8EECDAA8BA
I H8ECBAAA8CA	AI 8ECBAAA8AA	I H8ECHEAH8AA	AI 8ECHEAH8AA	I H8EDDEAH8AA	AI 8EDDEAH8AA	I H8EECEAA8AA	AI 8EECEAA8AA
I H8ECBAAA8DA	AI 8ECBAAA8AA	I H8ECHEAH8BA	AI 8ECHEAH8AA	I H8EDDEAH8BA	AI 8EDDEAH8AA	I H8EECEAA8BA	AI 8EECEAA8AA
I H8ECBAAH8BA	AI 8ECBAAH8AA	I H8ECHFAA8AA	AI 8ECHFAA8AA	I H8EDDFAA8AA	AI 8EDDFAA8AA	I H8EECEAH8AA	AI 8EECEAH8AA
I H8ECBAAH8CA	AI 8ECBAAH8AA	I H8ECHFAH8AA	AI 8ECHFAH8AA	I H8EDDFAF8AA	AI 8EDDFAF8AA	I H8EECEAH8BA	AI 8EECEAH8AA
I H8ECBAAH8DA	AI 8ECBAAH8AA	I H8ECHGAA8BA	AI 8ECHGAA8BA	I H8EDDFAH8AA	AI 8EDDFAH8AA	I H8EEDBAA8AA	AI 8EEDBAA8AA
I H8ECBGAA8AA	AI 8ECBGAA8AA	I H8ECHHAA8BA	AI 8ECHHAA8AA	I H8EDDGAA8AA	AI 8EDDGAA8AA	I H8EEDBAA8BA	AI 8EEDBAA8AA
I H8ECCAAA8AA	AI 8ECCAAA8AA	I H8ECHHAA8DA	AI 8ECHHAA8AA	I H8EDDGAH8AA	AI 8EDDGAH8AA	I H8EEDBAI 8AA	AI 8EEDBAI 8AA
I H8ECCAAA8BA	AI 8ECCAAA8AA	I H8ECHHAA8EA	AI 8ECHHAA8AA	I H8EDDHAA8AA	AI 8EDDHAA8AA	I H8EEDBAI 8BA	AI 8EEDBAI 8AA
I H8ECCAAH8AA	AI 8ECCAAH8AA	I H8ECHHAA8FA	AI 8ECHHAA8AA	I H8EDDHAH8AA	AI 8EDDHAH8AA	I H8EEDGAA8AA	AI 8EEDGAA8AA
I H8ECCAAH8BA	AI 8ECCAAH8AA	I H8ECHHAH8BA	AI 8ECHHAH8AA	I H8EDDI AA8AA	AI 8EDDI AA8AA	I H8EEDHAA8AA	AI 8EEDHAA8AA
I H8ECCBAA8AA	AI 8ECCBAA8AA	I H8ECHHAH8DA	AI 8ECHHAH8AA	I H8EDDJAA8BA	AI 8EDDJAA8AA	I H8EEDHAH8AA	AI 8EEDHAH8AA
I H8ECCCAA8BA	AI 8ECCCAA8AA	I H8ECHHAH8EA	AI 8ECHHAH8AA	I H8EDDJAH8BA	AI 8EDDJAH8AA	I H8EEDI AA8AA	AI 8EEDI AA8AA
I H8ECCCAH8BA	AI 8ECCCAH8AA	I H8ECHHAH8FA	AI 8ECHHAH8AA	I H8EDEBAA8AA	AI 8EDEBAA8AA	I H8EEDI AA8BA	AI 8EEDI AA8AA
I H8ECCDAA8AA	AI 8ECCDAA8AA	I H8ECHI AA8AA	AI 8ECHI AA8AA	I H8EDECAA8AA	AI 8EDECAA8AA	I H8EEDI AH8AA	AI 8EEDI AH8AA
I H8ECCDAA8BA	AI 8ECCDAA8AA	I H8ECHI AH8AA	AI 8ECHI AH8AA	I H8EDECAH8AA	AI 8EDECAH8AA	I H8EEDJAA8BA	AI 8EEDJAA8AA
I H8ECCDAH8AA	AI 8ECCDAH8AA	I H8ECHJAA8AA	AI 8ECHJAA8AA	I H8EDEDAA8AA	AI 8EDEDAA8AA	I H8EEEBAA8AA	AI 8EEEBAA8AA
I H8ECCDAH8BA	AI 8ECCDAA8AA	I H8ECI AAA8AA	AI 8ECI AAA8AA	I H8EDEDAH8AA	AI 8EDEDAH8AA	I H8EEEBAF8AA	AI 8EEEBAF8AA
I H8ECCEAA8BA	AI 8ECCEAA8AA	I H8ECI GAA8AA	AI 8ECI GAA8AA	I H8EDEEAA8AA	AI 8EDEEAA8AA	I H8EEEBAH8AA	AI 8EEEBAH8AA
I H8ECCEAH8BA	AI 8ECCEAH8AA	I H8ECI GAA8BA	AI 8ECI GAA8AA	I H8EDEEAA8BA	AI 8EDEEAA8AA	I H8EEEFAA8AA	AI 8EEEFAA8AA
I H8ECDAAA8AA	AI 8ECDAAA8AA	I H8ECI HAA8AA	AI 8ECI HAA8AA	I H8EDEEAA8DA	AI 8EDEEAA8AA	I H8EEEGAA8AA	AI 8EEEGAA8AA
I H8ECDAAA8BA	AI 8ECDAAA8AA	I H8ECI HAH8AA	AI 8ECI HAH8AA	I H8EDEGAA8AA	AI 8EDEGAA8AA	I H8EEEGAA8BA	AI 8EEEGAA8AA
I H8ECDDAA8AA	AI 8ECDDAA8AA	I H8ECI I AA8AA	AI 8ECI I AA8AA	I H8EDEGAA8BA	AI 8EDEGAA8AA	I H8EEEI AA8BA	AI 8EEEI AA8BA
I H8ECDEAA8AA	AI 8ECDEAA8AA	I H8ECI JAA8AA	AI 8ECI JAA8AA	I H8EDFAAA8AA	AI 8EDFAAA8AA	I H8EEEI AA8FA	AI 8EEEI AA8BA
I H8ECDEAH8AA	AI 8ECDEAH8AA	I H8ECJBAA8AA	AI 8ECJBAA8AA	I H8EDFBAA8AA	AI 8EDFBAA8BA	I H8EEEI AH8BA	AI 8EEEI AH8BA
I H8ECDJAA8AA	AI 8ECDJAA8AA	I H8ECJBAA8BA	AI 8ECJBAA8AA	I H8EDFCAA8AA	AI 8EDFCAA8AA	I H8EEEI AH8FA	AI 8EEEI AH8BA
I H8ECEAAA8AA	AI 8ECEAAA8AA	I H8ECJCAA8AA	AI 8ECJCAA8AA	I H8EDFCAH8AA	AI 8EDFCAH8AA	I H8EEFEAA8AA	AI 8EEFEAA8AA
I H8ECEAAI 8AA	AI 8ECEAAI 8AA	I H8ECJDAA8BA	AI 8ECJDAA8BA	I H8EDFDAA8AA	AI 8EDFDAA8AA	I H8EEGCAA8AA	AI 8EEGCAA8AA
I H8ECEBAA8AA	AI 8ECEBAA8AA	I H8ECJDAG8BA	AI 8ECJDAG8BA	I H8EDFDAH8AA	AI 8EDFDAH8AA	I H8EEGDAA8AA	AI 8EEGDAA8AA
I H8ECEBAH8AA	AI 8ECEBAH8AA	I H8ECJEAA8AA	AI 8ECJEAA8AA	I H8EDFEAH8AA	AI 8EDFEAH8AA	I H8EEHFAA8BA	AI 8EEHFAA8AA
I H8ECEDAA8AA	AI 8ECEDAA8AA	I H8ECJEAH8AA	AI 8ECJEAH8AA	I H8EDFFAA8AA	AI 8EDFFAA8AA	I H8EEHFAA8DA	AI 8EEHFAA8AA
I H8ECEDAH8AA	AI 8ECEDAH8AA	I H8ECJFAA8AA	AI 8ECJFAA8AA	I H8EDFFAH8AA	AI 8EDFFAH8AA	I H8EEHFAH8DA	AI 8EEHFAH8AA
I H8ECEEAA8AA	AI 8ECEEAA8AA	I H8ECJFAA8BA	AI 8ECJFAA8AA	I H8EDFHAA8AA	AI 8EDFHAA8AA	I H8EEHI AA8AA	AI 8EEHI AA8AA
I H8ECEEAH8AA	AI 8ECEEAH8AA	I H8ECJFAA8DA	AI 8ECJFAA8AA	I H8EDFHAA8BA	AI 8EDFHAA8AA	I H8EEHI AH8AA	AI 8EEHI AH8AA
I H8ECEFAA8AA	AI 8ECEFAA8AA	I H8ECJFAA8EA	AI 8ECJFAA8AA	I H8EDFHAG8AA	AI 8EDFHAG8AA	I H8EEHJAA8AA	AI 8EEHJAA8AA
I H8ECEFAH8AA	AI 8ECEFAH8AA	I H8ECJFAH8AA	AI 8ECJFAH8AA	I H8EDFHAG8BA	AI 8EDFHAG8AA	I H8EEI FAA8AA	AI 8EEI FAA8AA
I H8ECEGAA8AA	AI 8ECEGAA8AA	I H8ECJFAH8BA	AI 8ECJFAH8AA	I H8EDGBAA8AA	AI 8EDGBAA8AA	I H8EEI FAH8AA	AI 8EEI FAH8AA
I H8ECEGAH8AA	AI 8ECEGAH8AA	I H8ECJFAH8DA	AI 8ECJFAH8AA	I H8EDGBAA8DA	AI 8EDGBAA8AA	I H8EFAAAA8AA	AI 8EFAAAA8BA
I H8ECEHAA8AA	AI 8ECEHAA8AA	I H8ECJJAA8AA	AI 8ECJJAA8AA	I H8EDGBAH8AA	AI 8EDGBAH8AA	I H8EFAAAH8AA	AI 8EFAAAH8BA
I H8ECEHAH8AA	AI 8ECEHAH8AA	I H8ECJJAH8AA	AI 8ECJJAH8AA	I H8EDGBAH8DA	AI 8EDGBAH8AA	I H8EFAEAA8AA	AI 8EFAEAA8AA
I H8ECEI AA8AA	AI 8ECEI AA8DA	I H8EDAAAA8AA	AI 8EDAAAA8AA	I H8EDGFAA8AA	AI 8EDGFAA8AA	I H8EFAEAA8BA	AI 8EFAEAA8AA
I H8ECEI AH8AA	AI 8ECEI AH8DA	I H8EDACAA8AA	AI 8EDACAA8AA	I H8EDGFAG8AA	AI 8EDGFAG8AA	I H8EFAFAA8AA	AI 8EFAFAA8AA
I H8ECEJAA8AA	AI 8ECEJAA8AA	I H8EDADAA8AA	AI 8EDADAA8AA	I H8EDGHAA8AA	AI 8EDGHAA8AA	I H8EFAGAA8AA	AI 8EFAGAA8AA
I H8ECEJAH8AA	AI 8ECEJAH8AA	I H8EDAGAA8AA	AI 8EDAGAA8AA	I H8EDGHAA8BA	AI 8EDGHAA8AA	I H8EFCEAA8AA	AI 8EFCEAA8AA
I H8ECFCAA8AA	AI 8ECFCAA8AA	I H8EDBAAA8AA	AI 8EDBAAA8AA	I H8EDGHAI 8AA	AI 8EDGHAI 8AA	I H8EFCEAH8AA	AI 8EFCEAA8AA
I H8ECFDAA8AA	AI 8ECFDAA8AA	I H8EDBAAA8BA	AI 8EDBAAA8AA	I H8EDGHAI 8BA	AI 8EDGHAI 8AA	I H8EFCGAA8AA	AI 8EFCGAA8AA
I H8ECFDAH8AA	AI 8ECFDAH8AA	I H8EDBDAA8AA	AI 8EDBDAA8AA	I H8EDGI AA8AA	AI 8EDGI AA8AA	I H8EFCGAH8AA	AI 8EFCGAH8AA
I H8ECFGAA8AA	AI 8ECFGAA8AA	I H8EDBGAA8AA	AI 8EDBGAA8AA	I H8EDGI AG8AA	AI 8EDGI AG8AA	I H8EFCI AA8BA	AI 8EFCI AA8BA
I H8ECFGAG8AA	AI 8ECFGAG8AA	I H8EDBGAA8BA	AI 8EDBGAA8AA	I H8EDGJAA8AA	AI 8EDGJAA8AA	I H8EFCI AA8DA	AI 8EFCI AA8BA
I H8ECFGAI 8AA	AI 8ECFGAI 8AA	I H8EDBHAA8AA	AI 8EDBHAA8AA	I H8EDGJAA8BF	AI 8EDGJAA8AA	I H8EFCJAA8AA	AI 8EFCJAA8AA
I H8ECGBAA8AA	AI 8ECGBAA8AA	I H8EDBHAH8AA	AI 8EDBHAH8AA	I H8EDGJAH8AA	AI 8EDGJAH8AA	I H8EFCJAH8AA	AI 8EFCJAH8AA
I H8ECGBAH8AA	AI 8ECGBAH8AA	I H8EDBJAA8AA	AI 8EDBJAA8AA	I H8EDGJAH8BF	AI 8EDGJAH8AA	I H8EFDAAA8AA	AI 8EFDAAA8AA
I H8ECGCAA8AA	AI 8ECGCAA8AA	I H8EDBJAH8AA	AI 8EDBJAH8AA	I H8EDHAAA8AA	AI 8EDHAAA8AA	I H8EFDAAH8AA	AI 8EFDAAH8AA
I H8ECGDAA8AA	AI 8ECGDAA8AA	I H8EDCCAA8AA	AI 8EDCCAA8AA	I H8EDHAAA8BA	AI 8EDHAAA8AA	I H8EFDBAA8AA	AI 8EFDBAA8AA
I H8ECGGAA8AA	AI 8ECGGAA8AA	I H8EDCCAF8AA	AI 8EDCCAF8AA	I H8EDHAAH8AA	AI 8EDHAAH8AA	I H8FABEAA8AA	AI 8FABEAA8AA
I H8ECGHAA8AA	AI 8ECGHAA8AA	I H8EDCCAH8AA	AI 8EDCCAH8AA	I H8EDHAAH8BA	AI 8EDHAAH8AA	I H8FABFAA8AA	AI 8FABFAA8AA
I H8ECGHAH8AA	AI 8ECGHAH8AA	I H8EDCDAA8AA	AI 8EDCDAA8AA	I H8EDHEAA8BA	AI 8EDHEAA8AA	I H8FABFAA8BA	AI 8FABFAA8AA
I H8ECGJAA8AA	AI 8ECGJAA8AA	I H8EDCDAA8BA	AI 8EDCDAA8BA	I H8EDHEAH8BA	AI 8EDHEAH8AA	I H8FABFAA8DA	AI 8FABFAA8AA
I H8ECGJAA8BA	AI 8ECGJAA8AA	I H8EDCDAH8AA	AI 8EDCDAH8AA	I H8EDHFAA8AA	AI 8EDHFAA8AA	I H8FABFAA8EA	AI 8FABFAA8AA
I H8ECHAAA8AA	AI 8ECHAAA8AA	I H8EDCDAH8BA	AI 8EDCDAH8BA	I H8EDHGAA8AA	AI 8EDHGAA8AA	I H8FABFAH8AA	AI 8FABFAH8AA
I H8ECHBAA8AA	AI 8ECHBAA8AA	I H8EDCEAA8AA	AI 8EDCEAA8AA	I H8EDHHAA8AA	AI 8EDHHAA8AA	I H8FABFAH8BA	AI 8FABFAH8AA
I H8ECHBAF8AA	AI 8ECHBAF8AA	I H8EDCFAA8AA	AI 8EDCFAA8AA	I H8EDHHAH8AA	AI 8EDHHAH8AA	I H8FABFAH8DA	AI 8FABFAH8AA
I H8ECHBAH8AA	AI 8ECHBAH8AA	I H8EDCFAA8BA	AI 8EDCFAA8AA	I H8EDI FAA8AA	AI 8EDI FAA8AA	I H8FABFAH8EA	AI 8FABFAH8AA
I H8ECHEAA8AA	AI 8ECHEAA8AA	I H8EDCJAA8AA	AI 8EDCJAA8AA	I H8EDI FAH8AA	AI 8EDI FAH8AA	I H8FABI AA8BA	AI 8FABI AA8AA
I H8ECHEAA8BA	AI 8ECHEAA8AA	I H8EDCJAF8AA	AI 8EDCJAH8AA	I H8EDI I AA8AA	AI 8EDI I AA8AA	I H8FABI AA8CA	AI 8FABI AA8AA
I H8ECHEAA8CA	AI 8ECHEAA8AA	I H8EDCJAH8AA	AI 8EDCJAH8AA	I H8EDI JAA8AA	AI 8EDI JAA8AA	I H8FABI AA8EA	AI 8FABI AA8AA
I H8ECHEAA8DA	AI 8ECHEAA8AA	I H8EDDCAA8AA	AI 8EDDCAA8AA	I H8EDJBAA8BA	AI 8EDJBAA8BA	I H8FABI AH8BA	AI 8FABI AH8AA

Nüral Kolben ausgestattet mit Goetze Kolbenringsätzen
Pistons Nüral équipés de jeux de segments Goetze
Pistones Nüral equipados con conjuntos de segmentos Goetze

Tłoki Nüral z zamontowanymi zestawami pierścieni Goetze
Поршни Nüral, оснащаемые кольцами Goetze
يتم تركيب كباسات Nüral باستخدام مجموعات حلقات Goetze

Nüral Piston	GOETZE Rings Set
I H8FABI AH8CA	AI 8FABI AH8AA
I H8FACHAA8AA	AI 8FACHAA8AA
I H8FACI AA8AA	AI 8FACI AA8AA
I H8FACI AH8AA	AI 8FACI AH8AA
I H8FACJAA8AA	AI 8FACJAA8AA
I H8FACJAA8BA	AI 8FACJAA8AA
I H8FACJAA8DA	AI 8FACJAA8AA
I H8FACJAF8BA	AI 8FACJAF8AA
I H8FACJAH8AA	AI 8FACJAH8AA
I H8FACJAH8BA	AI 8FACJAH8AA
I H8FACJAH8DA	AI 8FACJAH8AA
I H8FCABAA8AA	AI 8FCABAA8AA
I H8FCABAA8BA	AI 8FCABAA8AA
I H8FCABAH8AA	AI 8FCABAH8AA
I H8FCABAH8BA	AI 8FCABAH8AA
I H8FCACAA8AA	AI 8FCACAA8AA
I H8FCAFAA8AA	AI 8FCAFAA8AA
I H8FCBDAA8AA	AI 8FCBDAA8AA
I H8FCBDAA8BA	AI 8FCBDAA8AA
I H8FCBDAH8AA	AI 8FCBDAH8AA
I H8FCBDAH8BA	AI 8FCBDAH8AA
I H8FCBEAA8AA	AI 8FCBEAA8AA
I H8FCBEAH8AA	AI 8FCBEAH8AA
I H8FCBFAA8AA	AI 8FCBFAA8AA
I H8FCBFAA8BA	AI 8FCBFAA8AA
I H8FCBGAA8AA	AI 8FCBGAA8AA
I H8FCBHAA8AA	AI 8FCBHAA8AA
I H8FCBHAH8AA	AI 8FCBHAH8AA
I H8FCBHBB8AA	AI 8FCBHBB8AA
I H8FCBHBE8AA	AI 8FCBHBE8AA
I H8FCBI AA8CA	AI 8FCBI AA8CA
I H8FCBI AH8CA	AI 8FCBI AH8CA
I H8FCBI BB8CA	AI 8FCBI BB8CA
I H8FCCDAH8AA	AI 8FCCDAH8BA
I H8FCCDAJ8AA	AI 8FCCDAJ8BA
I H8FCCDBB8AA	AI 8FCCDBB8BA
I H8FCCDBE8AA	AI 8FCCDBE8BA
I H8FCCEAA8AA	AI 8FCCEAA8AA
I H8FCCGAA8AA	AI 8FCCGAA8AA
I H8FCCGAH8AA	AI 8FCCGAH8AA
I H8FCCHAA8AA	AI 8FCCHAA8AA
I H8FCCHAA8BA	AI 8FCCHAA8AA
I H8FCCJAA8AA	AI 8FCCJAA8AA
I H8FCCJAA8BA	AI 8FCCJAA8AA
I H8FCCJAA8DA	AI 8FCCJAA8AA
I H8FCCJAA8EA	AI 8FCCJAA8AA
I H8FCDAAA8AA	AI 8FCDAAA8AA
I H8FCDFAA8AA	AI 8FCDFAA8AA
I H8FCDGAA8AA	AI 8FCDGAA8AA
I H8FCDI AA8AA	AI 8FCDI AA8AA
I H8FCDI AH8AA	AI 8FCDI AH8AA
I H8FCDI BB8AA	AI 8FCDI BB8AA
I H8FCEAAA8AA	AI 8FCEAAA8AA
I H8FCEAAA8BA	AI 8FCEAAA8AA
I H8FCEAAH8AA	AI 8FCEAAH8AA
I H8FCEAAH8BA	AI 8FCEAAH8AA
I H8FCEAAJ8AA	AI 8FCEAAJ8AA
I H8FCEBAA8AA	AI 8FCEBAA8AA
I H8FCEBAH8AA	AI 8FCEBAH8AA
I H8FCEBBB8AA	AI 8FCEBBB8AA
I H8FCEBBE8AA	AI 8FCEBBE8AA
I H8FCEDAH8BA	AI 8FCEDAH8BA
I H8FCEDBB8BA	AI 8FCEDBB8BA
I H8FCEDBE8BA	AI 8FCEDBE8BA
I H8FCEEAA8AA	AI 8FCEEAA8AA
I H8FCFAAA8AA	AI 8FCFAAA8AA
I H8FCFAAH8AA	AI 8FCFAAH8AA
I H8FCFABB8AA	AI 8FCFABB8AA
I H8FCFABE8AA	AI 8FCFABE8AA
I H8FCFBAA8AA	AI 8FCFBAA8AA

Nüral Piston	GOETZE Rings Set
I H8FCFBAA8BA	AI 8FCFBAA8AA
I H8FCFCAA8AA	AI 8FCFCAA8AA
I H8FCFDAA8AA	AI 8FCFDAA8AA
I H8FCFEAA8AA	AI 8FCFEAA8AA
I H8FCFEAH8AA	AI 8FCFEAH8AA
I H8FCFEBB8AA	AI 8FCFEBB8AA
I H8FCFEBE8AA	AI 8FCFEBE8AA
I H8FCFFAH8AA	AI 8FCFFAH8AA
I H8FCFFAJ8AA	AI 8FCFFAJ8AA
I H8FCFHAA8AA	AI 8FCFHAA8AA
I H8FCFHAH8AA	AI 8FCFHAH8AA
I H8FCFHAJ8AA	AI 8FCFHAJ8AA
I H8FCFHBB8AA	AI 8FCFHBB8AA
I H8FCFJAA8AA	AI 8FCFJAA8AA
I H8FCFJAH8AA	AI 8FCFJAH8AA
I H8FCFJAJ8AA	AI 8FCFJAJ8AA
I H8FCFJBB8AA	AI 8FCFJBB8AA
I H8FCFJBE8AA	AI 8FCFJBE8AA
I H8FCGDAA8AA	AI 8FCGDAA8AA
I H8FCGGAA8AA	AI 8FCGGAA8AA
I H8FCHCAA8AA	AI 8FCHCAA8AA
I H8FCHGAA8AA	AI 8FCHGAA8AA
I H8FCHGAG8AA	AI 8FCHGAG8AA
I H8FCHGAI 8AA	AI 8FCHGAI 8AA
I H8FCI DAA8AA	AI 8FCI DAA8AA
I H8FCI DAG8AA	AI 8FCI DAG8AA
I H8FCI EAA8AA	AI 8FCI EAA8AA
I H8FCI EAG8AA	AI 8FCI EAG8AA
I H8FCI EAI 8AA	AI 8FCI EAI 8AA
I H8FCI FAA8AA	AI 8FCI FAA8AA
I H8FCI GAA8AA	AI 8FCI GAA8AA
I H8FCJAAA8AA	AI 8FCJAAA8AA
I H8FCJJAH8AA	AI 8FCJJAH8AA
I H8FCJJAJ8AA	AI 8FCJJAJ8AA
I H8FCJJBB8AA	AI 8FCJJBB8AA
I H8FDABAA8AA	AI 8FDABAA8AA
I H8FDABAH8AA	AI 8FDABAH8AA
I H8FDABAJ8AA	AI 8FDABAJ8AA
I H8FDAEAA8AA	AI 8FDAEAA8AA
I H8HAECAA8BA	AI 8HAECAA8AA
I H8HAECAH8BA	AI 8HAECAH8AA
I H8HBEEAA8AA	AI 8HBEEAA8AA
I H8HEAAAA8BA	AI 8HEAAAA8BA
I H8HEAAAA8CA	AI 8HEAAAA8BA
I H8HEAAAA8DA	AI 8HEAAAA8AA
I H8HEAAAA8EA	AI 8HEAAAA8BA
I H8HEAAAA8FA	AI 8HEAAAA8BA
I H8HEAAAH8BA	AI 8HEAAAH8BA
I H8HEAAAH8CA	AI 8HEAAAH8BA
I H8HEAAAH8EA	AI 8HEAAAH8BA
I H8HEAAAH8FA	AI 8HEAAAH8BA
I H8HEADAA8AA	AI 8HEADAA8BA
I H8HEAJAA8AA	AI 8HEAJAA8BA
I H8HEAJAA8DA	AI 8HEAJAA8BA
I H8HEBCAA8BA	AI 8HEBCAA8AA
I H8HEBCAH8BA	AI 8HEBCAH8AA
I H8HEBCBB8BA	AI 8HEBCBB8AA
I H8HEBGAA8AA	AI 8HEBGAA8AA
I H8HEBI AA8AA	AI 8HEBI AA8AA
I H8HEBI AH8AA	AI 8HEBI AH8AA
I H8HEBI AH8CA	AI 8HEBI AH8AA
I H8HEDBAA8AA	AI 8HEDBAA8AA
I H8HEDBAA8BA	AI 8HEDBAA8AA
I H8HEDBAA8EA	AI 8HEDBAA8AA
I H8HEDBAH8AA	AI 8HEDBAH8AA
I H8HEDBAH8BA	AI 8HEDBAH8AA
I H8HEDBAH8EA	AI 8HEDBAH8AA
I H8HEDBAH8FA	AI 8HEDBAH8AA
I H8HEDBCA8BA	AI 8HEDBCA8AA
I H8HEDCAA8AA	AI 8HEDCAA8AA

Nüral Piston	GOETZE Rings Set
I H8HEDEAA8DA	AI 8HEDEAA8AA
I H8HEDEAA8EA	AI 8HEDEAA8AA
I H8HEDEAA8FA	AI 8HEDEAA8AA
I H8HEDGAA8BA	AI 8HEDGAA8AA
I H8HEDGAA8DA	AI 8HEDGAA8AA
I H8HEDGAH8BA	AI 8HEDGAH8AA
I H8HEDGAH8DA	AI 8HEDGAH8AA
I H8HEEGAA8AA	AI 8HEEGAA8AA
I H8HEEGBB8AA	AI 8HEEGBB8AA
I H8HI ADAA8BA	AI 8HI ADAA8BA
I H8HI ADAA8DA	AI 8HI ADAA8BA
I H8HI ADAH8BA	AI 8HI ADAH8BA
I H8HI ADBB8BA	AI 8HI ADBB8BA
I H8HI ADBE8BA	AI 8HI ADBE8BA
I H8HI AGAA8BA	AI 8HI AGAA8BA
I H8HI AGAH8AA	AI 8HI AGAH8BA
I H8HI AGAH8BA	AI 8HI AGAH8BA
I H8HI AGAJ8AA	AI 8HI AGAJ8BA
I H8HI AGAJ8BA	AI 8HI AGAJ8BA
I H8HI AGBB8BA	AI 8HI AGBB8BA
I H8HI AGBE8AA	AI 8HI AGBE8BA
I H8HI AGBE8BA	AI 8HI AGBE8BA
I H8HI AGBH8AA	AI 8HI AGBH8BA
I H8HI AGBH8BA	AI 8HI AGBH8BA
I H8HI BJAA8BA	AI 8HI BJAA8AA
I H8HI BJAA8DA	AI 8HI BJAA8BA
I H8HI BJAI 8BA	AI 8HI BJAI 8AA
I H8HI BJAI 8DA	AI 8HI BJAI 8BA
I H8HI CAAA8AA	AI 8HI CAAA8AA
I H8HI CAAA8BA	AI 8HI CAAA8AA
I H8HI CAAI 8AA	AI 8HI CAAI 8AA
I H8HI CBAA8AA	AI 8HI CBAA8AA
I H8HI CGAG8AA	AI 8HI CGAG8AA
I H8HI CGAI 8AA	AI 8HI CGAI 8AA
I H8HI CJAA8AA	AI 8HI CJAA8AA
I H8HI CJAG8AA	AI 8HI CJAG8AA
I H8HI DAAA8AA	AI 8HI DAAA8AA
I H8HI DAAA8BA	AI 8HI DAAA8AA
I H8HI DAAA8BF	AI 8HI DAAA8AA
I H8HI DAAA8DA	AI 8HI DAAA8AA
I H8HI DI AA8BA	AI 8HI DI AA8AA
I H8HI DI AA8DA	AI 8HI DI AA8AA
I H8HI DI AI 8DA	AI 8HI DI AI 8AA
I H8HI DJAA8AA	AI 8HI DJAA8AA
I H8HI DJAA8BA	AI 8HI DJAA8AA
I H8HI EBAH8AA	AI 8HI EBAH8AA
I H8HI EI AA8AA	AI 8HI EI AA8AA
I H8HI EI CB8AA	AI 8HI EI CB8AA
I H8HI FAAA8AA	AI 8HI FAAA8AA
I H8HI FAAH8AA	AI 8HI FAAH8AA
I H8HI FABB8AA	AI 8HI FABB8AA
I H8HI FDAA8BA	AI 8HI FDAA8AA
I H8HI FFAA8AA	AI 8HI FFAA8AA
I H8HI FFAG8AA	AI 8HI FFAG8AA
I H8HI FFAI 8AA	AI 8HI FFAI 8AA
I H8HI GDAA8AA	AI 8HI GDAA8AA
I H8HI GEAA8AA	AI 8HI GEAA8AA
I H8HI GEAH8AA	AI 8HI GEAH8AA
I H8HI GFAA8AA	AI 8HI GFAA8AA
I H8HI GFAH8AA	AI 8HI GFAH8AA
I H8I EJAA8AA	AI 8I EJAA8AA
I H8I EJCAA8AA	AI 8I EJCAA8FA
I H8I EJCAH8AA	AI 8I EJCAH8FA
I H8I FEHAA8AA	AI 8I FEHAA8AA
I H8I FEHAI 8AA	AI 8I FEHAI 8AA
I H8I HJCAA8AA	AI 8I HJCAA8AA
I H8I HJCAH8AA	AI 8I HJCAH8AA
I H8JGCAAA8BA	AI 8JGCAAA8AA
I H8JGCAAA8DA	AI 8JGCAAA8AA
I H8JGCAAA8FA	AI 8JGCAAA8AA

Nüral Piston	GOETZE Rings Set
I H8JGCAAA8I A	AI 8JGCAAA8AA
I H8JJABAA8BA	AI 8JJABAA8AA
I H8JJABAA8EA	AI 8JJABAA8AA
I H8JJABAF8EA	AI 8JJABAF8AA
I H8JJABAH8BA	AI 8JJABAH8AA
I H8JJABAH8EA	AI 8JJABAH8AA
I H8JJABBB8BA	AI 8JJABBB8AA
I H8JJABBB8EA	AI 8JJABBB8AA
I H8JJAHAH8AA	AI 8JJAHAH8AA

Nüral® FITTED WITH GOETZE® RINGS

Notes

EN

FBP	From base of piston
FPC	From piston crown
ABP	At base of piston
PCL	At pin centre line
FOC	From flat of crown
MP (D)	Measurement point (Datum)
BD	Bore diameter
PD	Piston diameter

ES

FBP	Desde la base del pistón
FPC	Desde la corona del pistón
ABP	En la base del pistón
PCL	En el centro del bulón
FOC	Desde la base de la corona
MP (D)	Punto de medida (dato)
BD	Diámetro de cilindro
PD	Diámetro de pistón

DE

FBP	Vom unteren Ende des Kolbenschafts
FPC	Vom Kolbenboden
ABP	Am unteren Ende des Kolbenschafts
PCL	Maß Kolbenblozen-Mitte
FOC	Flach vom Kolbenboden
MP (D)	Messepunkte
BD	Durchmesser Bohrung
PD	Durchmesser Kolben

PL

FBP	Od bazy tłoka
FPC	Od korony tłoka
ABP	W bazie tłoka
PCL	W osi centralnej sworznia
FOC	Od płaszczyzny korony
MP (D)	Punkt pomiarowy (Datum)
BD	Średnica cylindra
PD	Średnica tłoka

IT

FBP	Dalla base del pistone
FPC	Dalla testa del pistone
ABP	Alla base del pistone
PCL	All'asse foro spinotto
FOC	Dal piano testa
MP (D)	Punto di misurazione (dati)
BD	Alesaggio
PD	Diametro pistone

RU

FBP	От основания поршня
FPC	От головки поршня
ABP	У основания поршня
PCL	У оси поршневого пальца
FOC	От плоскости головки поршня
MP (D)	Точка измерения (начало отсчета)
BD	Диаметр цилиндра
PD	Диаметр поршня

FR

FBP	De la base du piston
FPC	De la tête du piston
ABP	À la base du piston
PCL	Au centre de l'axe
FOC	Du plat de la tête
MP (D)	Point de mesure (Système géodésique)
BD	Diamètre d'alésage
PD	Diamètre de piston

AR

FBP	من قاعدة المكبس
FPC	من تاج المكبس
ABP	على قاعدة المكبس
PCL	الخط المركزي للمسمار
FOC	من مسطح من التاج
MP (D)	نقطة القياس (بالمرجع)
BD	قطر الثقب
PD	قطر المكبس

PISTON CLEARANCE DATA

Kolbenspiel • Dato de holgura del pistón
Jeu de piston • Dati di tolleranza pistone

Dane dotyczące luzów tłokowych • Монтажный зазор
بيانات خلوص المكبس

PISTON CLEARANCE DATA

	TGmm		TCCT 0	m CTT	m O
	TC m		mTCCT 0	mT O T	mT OT
	TGmmT		CT 0	mTCTT	mm O T
	TGmmT		m CT 0	CTT	O T
	TC		m O T 0	TCTT	O
	TC T		m CT 0	CTT	O T
	TGmm		CT 0	O T	Om
	TGn T		CT 0	mm CTT	mmm O T
	TGmTT		m CT 0	CTT	O TT
	TC		O T 0	m mCTT	mTO
	TGn T		TCT 0	m CTT	m O T
	TGn T		TCT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TO mT			m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		m O T 0	m CTT	m O T
	TGn T		m O T 0	m CTT	m O T
	TGmTT		m CT 0	mT CTT	mTm0 TT
	TC T		m CT 0	CTT	O T
	TC		mmCT 0	CTT	O
	TC		mmCT 0	CTT	m0
	TC		mmCT 0	CTT	m0
	TC		mTCT 0	CTT	m0
	TC		mTCT 0	CTT	m0
	TGn T		m CT 0	mT CTT	mT O T
	TGmTT		mCT 0	CTT	O TT
	TC T		m O T 0	O T	O
	TC T		m O T 0	O TT	O T
	TC T		m O T 0	O TT	O T
	TC T		m O T 0	O TT	O T
	TC T		m O T 0	O T	O
	TC T		m O T 0	O TT	O T
	TC		CT 0	mCTT	TO
	TC T		CT 0	CTT	O T
	TC T		m CT 0	TCTT	O T
	TC T		m CT 0	TCTT	O T
	TC T		m CT 0	TCTT	O T
	TC		CT 0	CTT	m0
	TC T		mTCT 0	CTT	O T
	TGmmT		m O T 0	m TCTT	mm O T
	TGmmT		m CT 0	mTTCTT	O T
	TGn T		m CT 0	m TCTT	m O T
	TGn T		TCT 0	m TCTT	m O T
	TGmTT		m CT 0	CTT	O TT
	TGmT		m CT 0	mT CT	mTm0 TT
	TGmmT		TCT 0	mT CTT	mTm0 T
	TGn T		CT 0	m CTT	m O T
	TGn		m CT 0	m CTT	m O
	TC		m O T 0	TO TT	TO
	TGn T		CT 0	m CTT	m O T
	TGmTT		CT 0	m CTT	m O TT
	TGmTT		m CT 0	CTT	O TT
	TGmTT		m CT 0	CTT	O TT
	TGn T		TCT 0	mT Gn	mT CT
	TGn T		m CT 0	m CTT	m O T
	TGn		m CT 0	m CTT	m O
	TGn T		m CT 0	m CTT	m O T
	TGn T		mCT 0	m CTT	m O T
	TGn T		TCT 0	m CTT	m O T
	TGn T		m0 T 0	m CTT	m O T
	TGn T		m0 T 0	m CTT	m O T
	TGn T		O T 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		m CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		m CT 0	m CTT	m O T
	TC		CT 0	CTT	O
	TGn T		m CT 0	mT CTT	m O T
	TGmTT		m CT 0	mT O TT	mT O T
	TO T		CTT0 0	m CTT	m O T
	TGn T		O 0	mmm0 T	mmm0 T
	TGn		O T 0	mmm0	mmm0

	TGmTT		CT 0	mTTCTT	O TT
	TGmmT		m CT 0	mTTCTT	O T
	TC		TCT 0	mTTCTT	O T
	TC T		m CT 0	CTT	O mT
	TGn T		CT 0	mmTCTT	mT O T
	TGn T		TCT 0	mmTCTT	mT O T
	TGn T		TCT 0	mmTCTT	mT O T
	TO T		CT 0	m CTT	m O T
	TGn		TO T 0	m CTT	m O
	TGn		O m 0	mT O	mT O T
	TC T		m CT 0	CTT	O T
	TC T		m CT 0	CTT	O T
	TGn		O 0	mT O m	mT C
	TGn		m CT 0	mT CTT	mT O m
	TGn		m CT 0	mT CTT	mT O m
	TC T		TCT 0	CTT	O T
	TC T		m CT 0	CTT	O T
	TC T		m CT 0	CTT	O T
	TGn T		CT 0	mm CTT	mm O T
	TGn T		CT 0	mm CTT	mm O T
	TC m		m O 0	C m	O T
	TC T		m O T 0	CTT	O T
	TGn		m CT 0	mT CTT	mT O m
	TGn		TCT 0	mT CTT	mT O m
	TC T		m O T 0	mCTT	TO T
	TC T		m CT 0	CTT	O mT
	TC T		TCT 0	TO	TO m
	TC T		TCT 0	mT CTT	mT O T
	TGn T		m CT 0	m CTT	m O T
	TGn T		O T 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn T		CT 0	m CTT	m O T
	TGn		m CT 0	mT CTT	mT O
	TGmm		m CT 0	mT CTT	mT O
	TGmm		m CT 0	mT CTT	mT O
	TGn		m CT 0	mT CTT	mT O
	TGmm		m O T 0	mT CTT	mT O
	TC T		m CT 0	mmTT	mC T
	TC		CTT 0	O TT	O
	TC		CT 0	O TT	O
	TGn T		m CT 0	mT CTT	mTm0 T
	TGn T		m O T 0	mT CTT	mTm0 T
	TGn T		m CT 0	m TCTT	m O T
	TC T		mTCT 0	CTT	O T
	TC T		mmCT 0	CTT	O T
	TCmm		O 0	CTT	O
	TC T		m CT 0	CTT	O T
	TC T		CT 0	O TT	O T
	TC T		O 0	O TT	O T
	TC T		CT 0	O	O
	TC T		TCT 0	CTT	O T
	TC T		m CT 0	m0 T	m0 T
	TC		m CT 0	m0 T	m0
	TC T		CT 0	CTT	O T
	TC		m O T 0	O	O T
	TGmTT		CT 0	m0 T	m0 T
	TGn T		O 0	m0 T	m0 T
	TC T		CT 0	mTm0	mTTO
	TC T		m CT 0	CTT	O mT
	TGn T		m O T 0	CTT	O T
	TGmm		O 0	C	O T
	TC T		CT 0	O T	O TT
	TC T		TCT 0	O T	O T
	TC T		TCT 0	TCTT	O T
	TGn T		CT 0	m0 T	m0 T
	TGmmT		m CT 0	mTTCTT	O T
	TGmT		O T 0	mTTCTT	O
	TC T		m CT 0	CTT	O T
	TC T		m CT 0	C mT	m0 T
	TC		O T 0	CT	O
	TC T		mTO T 0	CTT	O T
	TGn T		TCT 0	m C T	m O T
	TGn T		m CT 0	m C T	m O T
	TGmTT		CT 0	m CTT	m O TT
	TC		m CT 0	TCTT	O

Niiral® FITTED WITH GOETZE® RINGS

PISTON CLEARANCE DATA

Kolbenspiel • Dato de holgura del pistón
Jeu de piston • Dati di tolleranza pistone

Dane dotyczące luzów tłokowych • Монтажный зазор
بيانات خلوص المكبس

PISTON CLEARANCE DATA

Notes

Dane dotyczące wysunięcia tłoka • Параметры выступания поршня
بيانات نتوء المكبس

PISTON PROTRUSION DATA

		-	+	!
87-102800-10	OPEL 84 MM STD	+0.40	+0.50	STD gasket
87-102800-10	OPEL 84 MM STD	+0.51	+0.60	1 notch gasket
87-102800-10	OPEL 84 MM STD	+0.61	+0.70	2 notch gasket
87-102900-10	OPEL 83,975 MM STD	+0.40	+0.50	STD gasket
87-102900-10	OPEL 83,975 MM STD	+0.69	+0.76	2 notch gasket
87-102900-10	OPEL 83,975 MM STD	+0.76	+0.83	3 notch gasket
87-103200-00	KHD 91 MM STD	+0.59	+0.69	1 notch gasket
87-103200-00	KHD 91 MM STD	+0.69	+0.76	2 notch gasket
87-103200-00	KHD 91 MM STD	+0.76	+0.83	3 notch gasket
87-103900-00	IVECO 104 MM STD	+0.53	+0.72	
87-103900-30	IVECO-TRK 104 MM STD	+0.48	+0.79	
87-104000-00	PEUGEOT 82,2 MM STD	+0.51	+0.55	1.26mm gasket
87-104000-00	PEUGEOT 82,2 MM STD	+0.55	+0.59	1.30mm gasket
87-104000-00	PEUGEOT 82,2 MM STD	+0.59	+0.63	1.34mm gasket
87-104300-00	MAN 128 MM STD	+0.01	+0.33	
87-104300-10	MAN 128 MM STD KH-0,20	+0.01	+0.33	
87-105500-00	PEUGEOT 83 MM STD	+0.56	+0.67	1.36mm gasket
87-105500-00	PEUGEOT 83 MM STD	+0.68	+0.71	1.40mm gasket
87-105500-00	PEUGEOT 83 MM STD	+0.72	+0.75	1.44mm gasket
87-105500-00	PEUGEOT 83 MM STD	+0.76	+0.79	1.48mm gasket
87-105500-00	PEUGEOT 83 MM STD	+0.80	+0.83	1.52mm gasket
87-105900-00	VAG 81 MM STD	+0.66	+0.86	1 notch gasket
87-105900-00	VAG 81 MM STD	+0.81	+0.90	2 notch gasket
87-105900-00	VAG 81 MM STD	+0.91	+1.02	3 notch gasket
87-107000-00	FORD 82.50 MM STD	+0.50	+0.60	
87-109500-00	AUDI 76,5 MM STD	+0.67	+0.80	1 notch gasket
87-109500-00	AUDI 76,5 MM STD	+0.81	+0.90	2 notch gasket
87-109500-00	AUDI 76,5 MM STD	+0.91	+1.02	3 notch gasket
87-109800-10	VAG 76,51 MM STD	+0.65	+0.80	1 notch gasket
87-109800-10	VAG 76,51 MM STD	+0.81	+0.90	2 notch gasket
87-109800-10	VAG 76,51 MM STD	+0.91	+1.02	3 notch gasket
87-113500-00	FORD 89,91 MM STD	+0.45	+0.53	1 hole gasket
87-113500-00	FORD 89,91 MM STD	+0.53	+0.65	2 hole gasket
87-113500-00	FORD 89,91 MM STD	+0.65	+0.70	3 hole gasket
87-113500-10	FORD 89.9 MM STD	+0.45	+0.53	1 hole gasket
87-113500-10	FORD 89.9 MM STD	+0.53	+0.65	2 hole gasket
87-113500-10	FORD 89.9 MM STD	+0.65	+0.70	3 hole gasket
87-114400-00	BMW 84 MM STD	+0.80	+0.90	1 notch gasket
87-114400-00	BMW 84 MM STD	+0.90	+1.00	2 notch gasket
87-114400-10	BMW 84 MM STD	+0.80	+0.90	1 notch gasket
87-114400-10	BMW 84 MM STD	+0.90	+1.00	2 notch gasket
87-114400-30	BMW 84 MM STD	+0.85	+0.90	1 notch gasket
87-114400-30	BMW 84 MM STD	+0.90	+1.00	2 notch gasket
87-114400-30	BMW 84 MM STD	+1.00	+1.10	3 notch gasket
87-114700-00	PEUGEOT 85 MM STD	+0.55	+0.60	1.25mm gasket
87-114700-00	PEUGEOT 85 MM STD	+0.61	+0.65	1.30mm gasket
87-114700-00	PEUGEOT 85 MM STD	+0.66	+0.70	1.35mm gasket
87-114700-00	PEUGEOT 85 MM STD	+0.71	+0.75	1.40mm gasket
87-114900-80	VAG 79,51 MM STD	+0.81	+0.96	1.53mm gasket
87-114900-80	VAG 79,51 MM STD	+0.96	+1.01	1.57mm gasket
87-114900-80	VAG 79,51 MM STD	+1.01	+1.03	1.61mm gasket
87-114900-85	VAG 79,51 MM STD	+0.81	+0.96	1.53mm gasket
87-114900-85	VAG 79,51 MM STD	+0.96	+1.01	1.57mm gasket
87-114900-85	VAG 79,51 MM STD	+1.01	+1.03	1.61mm gasket
87-114900-90	VAG 79,51 MM STD	+0.91	+1.00	1 notch gasket
87-114900-90	VAG 79,51 MM STD	+1.01	+1.10	2 notch gasket
87-114900-90	VAG 79,51 MM STD	+1.10	+1.20	3 notch gasket
87-114900-95	VAG 79,51 MM STD	+0.91	+1.00	1 notch gasket
87-114900-95	VAG 79,51 MM STD	+1.01	+1.10	2 notch gasket
87-114900-95	VAG 79,51 MM STD	+1.10	+1.20	3 notch gasket
87-117900-00	M.BENZ-PKW 88 MM STD	+0.38	+0.62	

		-	+	!
87-117900-10	M.BENZ-PKW 88 MM STD	+0.38	+0.62	
87-121900-00	IVECO LKW 125 MM STD	+0.20	+0.25	
87-122200-00	IVECO 94,4 MM STD	+0.45	+0.50	1.20mm gasket
87-122200-00	IVECO 94,4 MM STD	+0.51	+0.60	1.30mm gasket
87-122200-00	IVECO 94,4 MM STD	+0.61	+0.70	1.40mm gasket
87-122200-00	IVECO 94,4 MM STD	+0.71	+0.80	1.50mm gasket
87-122200-10	IVECO 94,4 MM STD	+0.40	+0.50	1.20mm gasket
87-122200-10	IVECO 94,4 MM STD	+0.51	+0.60	1.30mm gasket
87-122200-10	IVECO 94,4 MM STD	+0.61	+0.70	1.40mm gasket
87-122200-10	IVECO 94,4 MM STD	+0.71	+0.80	1.50mm gasket
87-123400-10	RENAULT 76 MM STD	+0.25	+0.30	
87-123700-30	FORD 93.67 MM STD	+0.25	+0.40	
87-124000-30	FIAT-PKW 82 MM STD	+0.79	+0.88	STD gasket
87-124000-30	FIAT-PKW 82 MM STD	+0.88	+0.96	1 notch gasket
87-124000-30	FIAT-PKW 82 MM STD	+0.96	+1.05	2 notch gasket
87-124500-00	MAN 128 MM STD	+0.10	+0.33	
87-124500-10	MAN 128 MM STD KH 0,20 MM	+0.10	+0.33	
87-126600-00	PEUGEOT 85.00 MM STD	+0.65	+0.75	1.52mm gasket
87-126600-00	PEUGEOT 85.00 MM STD	+0.77	+0.81	1.57mm gasket
87-126600-00	PEUGEOT 85.00 MM STD	+0.82	+0.86	1.62mm gasket
87-135800-00	PEUGEOT 92 MM STD	+0.50	+0.60	1.30mm gasket
87-136400-00	M.BENZ 88 MM STD	+0.38	+0.60	
87-136500-10	MAN 108 MM STD	+0.09	+0.39	
87-140800-00	FORD-PKW 86 MM STD	+0.43	+0.52	1.10mm gasket
87-140800-00	FORD-PKW 86 MM STD	+0.52	+0.57	1.15mm gasket
87-140800-00	FORD-PKW 86 MM STD	+0.57	+0.62	1.20mm gasket
87-140800-10	FORD 86,01 MM FORD	+0.43	+0.52	1.10mm gasket
87-140800-10	FORD 86,01 MM FORD	+0.52	+0.57	1.15mm gasket
87-140800-10	FORD 86,01 MM FORD	+0.57	+0.62	1.20mm gasket
87-141300-00	FORD 79 MM STD	-1.40	-1.60	
87-141800-00	M.BENZ-LKW 128 MM STD	+0.22	+0.71	
87-143200-00	HATZ 75 MM STD	+0.65	+0.75	Together with gasket
87-143300-00	HATZ 80 MM STD	+0.80	+0.90	Together with gasket
87-143500-00	HATZ 108 MM STD	+1.10	+1.30	
87-143800-00	MAN 128 MM STD	+0.01	+0.33	
87-143800-10	MAN 128 MM STD KH 0,20 MM	+0.01	+0.33	
87-143800-20	MAN 128 MM STD KH 0,40 MM	+0.01	+0.33	
87-143800-30	MAN 128 MM STD	+0.01	+0.33	
87-143800-40	MAN 128 MM STD	+0.01	+0.33	
87-144000-00	LAND-ROVER 90,47 MM STD	+0.10	+0.15	1.10mm gasket
87-152000-10	PEUGEOT 83 MM STD	+0.35	+0.54	1.49mm gasket
87-152000-10	PEUGEOT 83 MM STD	+0.65	+0.77	1.60mm gasket
87-152000-10	PEUGEOT 83 MM STD	+0.77	+0.83	1.73mm gasket
87-167600-00	KHD 120 MM STD	+1.10	+1.30	Together with gasket
87-172500-00	KHD 100 MM STD	+1.00	+1.20	Together with gasket
87-174100-00	DAF 130 MM STD	-0.25	+0.25	
87-174100-30	DAF 130 MM STD	-0.25	+0.25	
87-174300-00	MERCEDES 97 MM STD	-0.70	+0.30	
87-174300-10	MERCEDES 97 MM STD	-0.70	+0.30	
87-176000-00	M.BENZ-LKW 125 MM STD	+0.07	+0.43	
87-176400-00	M.BENZ-LKW 115 MM STD	+0.08	+0.41	
87-176700-00	M.BENZ 90.9 MM STD	+0.50	+0.90	
87-176800-00	M.BENZ-LKW 125 MM STD	+0.07	+0.43	
87-176900-00	M.BENZ 128 MM STD	+0.09	+0.30	
87-176900-10	MERCEDES 128 MM STD	-0.10	+0.22	
87-178200-20	MERCEDES 97 MM STD	-0.70	+0.30	
87-178400-00	KHD 102 MM STD	+1.00	+1.20	Together with gasket
87-178800-00	MERCEDES PKW 97 MM STD	-0.08	+0.30	
87-179300-10	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
87-179300-15	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
87-179300-50	M.BENZ-LKW 128 MM STD	+0.07	+0.43	

PISTON PROTRUSION DATA

Kolbenüberstands-Daten • Altura del pistón en PMS
Données de dépassement de piston • Dati di tolleranza pistone

		-	+	!
87-179300-65	M.BENZ-LKW 128 MM STD	-0.10	+0.32	
87-179300-70	M.BENZ-LKW 128 MM STD	-0.07	+0.43	
87-179300-80	M.BENZ-LKW 128 MM STD	+0.07	+0.43	
87-179300-85	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
87-179300-86	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
87-179700-00	M.BENZ 95,5 MM STD	+0.50	+0.90	
87-181100-10	JOHN DEERE 106,5 MM STD	+0.10	+0.30	
87-181700-00	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
87-181800-00	J.DEERE 102 MM STD	-0.07	0.00	
87-181800-10	J.DEERE 102 MM STD	-0.07	0.00	
87-181800-20	J.DEERE 106.5 MM STD	+0.14	+0.20	
87-183300-00	M.BENZ 87 MM STD	+0.73	+0.96	
87-202400-00	FORD-TRK 111,76 MM STD	+0.18	+0.61	
87-202400-10	FORD-TRK 111,76 MM STD	+0.28	+0.58	
87-202400-30	FORD-TRK 111,76 MM STD	+0.28	+0.58	
87-202800-00	FORD-LKW 104,775 MM STD	-0.15	+0.40	
87-203500-00	FORDSON 100 MM STD	-0.700	+0.127	
87-206800-00	IVECO 100 MM STD	+0.46	+0.79	
87-207200-00	IVECO 95 MM STD	+0.46	+0.79	
87-207300-00	FORD PKW 93,67 MM STD	-0.114	+0.213	
87-207800-00	IVECO 137 MM STD	-0.27	+0.22	
87-207800-10	IVECO-LKW 137 MM STD	-0.275	+0.225	
87-208100-10	FORD TRK 106,68 MM STD	-0.05	-0.15	
87-214800-10	FORD 107,21 MM STD	-0.15	+0.40	
87-214900-10	IVECO 115 MM STD	-0.29	+0.10	
87-215500-00	FORD 80 MM STD	+0.43	+0.62	1 notch gasket
87-215500-00	FORD 80 MM STD	+0.62	+0.68	2 notch gasket
87-215500-00	FORD 80 MM STD	+0.68	+0.74	3 notch gasket
87-243300-00	IHC LKW 98,425 MM STD	+0.46	+0.77	
87-243600-00	IHC LKW 98,425 MM STD	-0.40	-0.55	
87-244500-10	IVECO 104 MM STD	+0.46	+0.79	
87-247800-00	IVECO 104 MM STD	+0.355	+0.761	
87-247800-10	IVECO 104 MM STD	+0.46	+0.79	
87-248000-10	ISUZU 93 MM STD	0.00	+0.70	
87-252800-00	KHD 94 MM STD	+0.43	+0.64	1 notch gasket
87-252800-00	KHD 94 MM STD	+0.64	+0.74	2 notch gasket
87-252800-00	KHD 94 MM STD	+0.74	+0.84	3 notch gasket
87-274800-00	MAN 121 MM STD	+0.05	+0.35	
87-274800-10	MAN 121 MM STD	+0.05	+0.35	
87-274800-20	MAN 121 MM STD KH -0,20	+0.05	+0.35	
87-274800-30	MAN 121 MM STD KH -0,40	+0.05	+0.35	
87-279600-10	MWM 105 MM STD	-0.28	-0.60	
87-280200-10	MAN 125 MM STD	0.00	+0.32	
87-283100-00	MAN 128 MM STD	+0.010	+0.038	
87-283100-30	MAN 128 MM STD	0.00	+0.20	
87-283100-80	MAN 128 MM STD	+0.01	+0.38	
87-283100-85	MAN 128 MM STD KH 0,20 MM	+0.01	+0.38	
87-283100-86	MAN 128 MM STD KH 0,40 MM	+0.01	+0.38	
87-285900-20	MAN 108 MM STD	+0.15	+0.32	
87-285900-40	MAN 108 MM STD	+0.15	+0.32	
87-288000-10	MITSUBISHI 91.10 MM STD	+0.55	+0.65	
87-288300-00	MITSUBISHI 104 MM STD	+0.60	+0.70	
87-288300-10	MITSUBISHI 104 MM STD	+0.60	+0.70	
87-289300-10	M.BENZ-LKW 102 MM STD	+0.28	+0.50	
87-289600-00	M.BENZ-LKW 130 MM STD	+0.27	+0.61	
87-305900-00	OPEL 80 MM STD	0.00	+0.75	1.30mm gasket
87-305900-00	OPEL 80 MM STD	+0.75	+0.85	1.40mm gasket
87-305900-00	OPEL 80 MM STD	+0.85	+1.05	1.50mm gasket
87-306700-10	OPEL 82,5 MM STD	0.00	+0.75	1.30mm gasket
87-306700-10	OPEL 82,5 MM STD	+0.75	+0.85	1.40mm gasket
87-306700-10	OPEL 82,5 MM STD	+0.85	+1.05	1.50mm gasket

		-	+	!
87-307600-20	OPEL 79 MM STD	+0.58	+0.64	STD gasket
87-307600-20	OPEL 79 MM STD	+0.65	+0.70	1 hole gasket
87-307600-20	OPEL 79 MM STD	+0.70	+0.78	2 hole gasket
87-307600-40	OPEL 79 MM STD	+0.63	+0.70	1.45mm gasket
87-307600-40	OPEL 79 MM STD	+0.70	+0.76	1.50mm gasket
87-307600-40	OPEL 79 MM STD	+0.76	+0.83	1.55mm gasket
87-314600-00	PERKINS TRK 91,48 MM STD	0.00	-0.13	
87-314600-10	PERKINS 91,48 MM STD	0.00	-0.13	
87-315000-00	PERKINS-TRK 98,48 MM STD	+0.28	+0.48	
87-318000-00	PERKINS 101,054 MM STD KH -0,30 MM	+0.08	+0.25	
87-318700-10	PEUGEOT 94 MM STD	0.00	+0.84	
87-321500-00	PEUGEOT 80 MM STD	+0.54	+0.77	1.61mm gasket
87-321500-00	PEUGEOT 80 MM STD	+0.77	+0.82	1.73mm gasket
87-321500-10	PEUGEOT 80 MM STD	+0.54	+0.77	1.61mm gasket
87-321500-10	PEUGEOT 80 MM STD	+0.77	+0.82	1.73mm gasket
87-322100-00	PERKINS 98,48 MM STD	+0.38	+0.53	
87-322700-00	PERKINS TRK 101.054 MM STD	+0.08	+0.25	
87-325600-00	PERKINS LKW 100 MM STD	+0.382	+0.504	
87-325800-00	FORD 73,7 MM STD	+0.618	+0.725	1.252mm gasket
87-326300-00	PEUGEOT 92 MM STD	+0.64	+0.74	
87-326500-00	PERKINS-LKW 100 MM STD	+0.382	+0.504	
87-335000-00	RENAULT 78 MM STD	0.00	+0.885	1.65mm gasket
87-335000-00	RENAULT 78 MM STD	+0.885	+0.985	1.75mm gasket
87-335000-00	RENAULT 78 MM STD	+0.985	+1.085	1.85mm gasket
87-335000-10	RENAULT 78 MM STD	0.00	+0.885	1.65mm gasket
87-335000-10	RENAULT 78 MM STD	+0.885	+0.985	1.75mm gasket
87-335000-10	RENAULT 78 MM STD	+0.985	+1.085	1.85mm gasket
87-336500-00	RENAULT 80 MM STD	0.00	+0.87	1.65mm gasket
87-336500-00	RENAULT 80 MM STD	+0.87	+1.00	1.75mm gasket
87-336500-00	RENAULT 80 MM STD	+1.00	+...	1.85mm gasket
87-336500-10	RENAULT 80 MM STD	+0.55	+0.65	1.40mm gasket
87-336500-10	RENAULT 80 MM STD	+0.65	+0.75	1.50mm gasket
87-336500-10	RENAULT 80 MM STD	+0.75	+0.85	1.60mm gasket
87-335000-00	RENAULT 78 MM STD	0.00	+0.885	1.65mm gasket
87-335000-00	RENAULT 78 MM STD	+0.885	+0.985	1.75mm gasket
87-335000-00	RENAULT 78 MM STD	+0.985	+1.085	1.85mm gasket
87-335000-10	RENAULT 78 MM STD	0.00	+0.885	1.65mm gasket
87-335000-10	RENAULT 78 MM STD	+0.885	+0.985	1.75mm gasket
87-335000-10	RENAULT 78 MM STD	+0.985	+1.085	1.85mm gasket
87-336500-00	RENAULT 80 MM STD	0.00	+0.87	1.65mm gasket
87-336500-00	RENAULT 80 MM STD	+0.87	+1.00	1.75mm gasket
87-336500-00	RENAULT 80 MM STD	+1.00	+...	1.85mm gasket
87-336500-10	RENAULT 80 MM STD	+0.55	+0.65	1.40mm gasket
87-336500-10	RENAULT 80 MM STD	+0.65	+0.75	1.50mm gasket
87-336500-10	RENAULT 80 MM STD	+0.75	+0.85	1.60mm gasket
87-361900-00	STEYR 100 MM STD	+0.25	+0.28	
87-373800-10	TOYOTA 92 MM STD	+0.68	+0.77	B gasket
87-373800-10	TOYOTA 92 MM STD	+0.78	+0.87	D gasket
87-373800-10	TOYOTA 92 MM STD	+0.88	+0.97	F gasket
87-396300-00	VOLVO 120,65 MM STD	-0.50	+0.20	
87-405600-60	VOLVO 130,18 MM STD	-0.50	+0.45	
87-405600-70	VOLVO 130,18 MM STD	-0.05	+0.45	
87-421000-10	VAG 81 MM STD	0.00	+0.75	
87-421000-20	VAG 81 MM STD	0.00	+0.75	
87-421900-00	M.BENZ-PKW 93,75 MM STD	+0.50	+0.90	
87-424000-00	PEUGEOT 75 MM STD	+0.53	+0.63	1.25mm gasket
87-424000-00	PEUGEOT 75 MM STD	+0.63	+0.68	1.30mm gasket
87-424000-00	PEUGEOT 75 MM STD	+0.68	+0.73	1.35mm gasket
87-424000-00	PEUGEOT 75 MM STD	+0.73	+0.78	1.40mm gasket
87-424000-00	PEUGEOT 75 MM STD	+0.78	+0.88	1.45mm gasket
87-425000-00	PERKINS-TRK 103 MM STD	+0.35	+0.55	1.70mm gasket

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PISTON PROTRUSION DATA

		-	+	!
87-425400-00	PERKINS-TRK 103 MM STD	+0.35	+0.55	1.70mm gasket
87-426200-00	PERKINS-TRK 105 MM STD	+0.36	+0.50	
87-427700-10	FORD-PKW 86,01 MM STD	+0.43	+0.52	1.10mm gasket
87-427700-10	FORD-PKW 86,01 MM STD	+0.52	+0.57	1.15mm gasket
87-427700-10	FORD-PKW 86,01 MM STD	+0.57	+0.62	1.20mm gasket
87-427700-30	FORD-PKW 86.01 MM STD	+0.43	+0.52	1.10mm gasket
87-427700-30	FORD-PKW 86.01 MM STD	+0.52	+0.57	1.15mm gasket
87-427700-30	FORD-PKW 86.01 MM STD	+0.57	+0.62	1.20mm gasket
87-431700-00	KIA 91 MM STD	+0.06	+0.24	
87-431800-00	KIA 94.545 MM STD	+0.30	+0.40	
87-431900-00	HYUNDAI 83 MM STD	+0.30	+0.39	
87-432000-00	HYUNDAI 91.1 MM STD	+0.45	+0.60	
87-501400-00	VOLVO 104,77 MM STD	+0.20	+0.70	
87-520900-00	FORD 104,775 MM STD	+0.152	+0.380	
87-521100-00	NISSAN 93 MM STD	+0.11	+0.16	
87-521200-00	MITSUBISHI 91.10 MM STD	+0.65	+0.90	
87-521400-00	FORD-TRK 111,76 MM STD	0.00	+0.50	
87-521800-20	LAND ROVER 90.47 MM STD	+0.50	+0.60	1 notch gasket
87-521800-20	LAND ROVER 90.47 MM STD	+0.61	+0.70	2 notch gasket
87-521800-20	LAND ROVER 90.47 MM STD	+0.71	+0.80	3 notch gasket
87-525300-00	BMC 98 MM STD	0.00	+0.20	
87-714400-00	LAND ROVER 90.47 MM STD	+0.10	+0.15	1.10mm Gasket
87-714800-20	KHD 100 MM STD	+1.00	+1.20	Together with gasket
87-740000-20	M.BENZ-LKW 97,5 MM STD	+0.38	+0.62	
87-740000-40	MERCEDES 97.5 MM STD	+0.38	+0.62	
87-740000-50	MERCEDES 97.5 MM STD	+0.38	+0.62	
87-740300-00	KHD 125 MM STD	+1.15	+1.30	Together with gasket
87-740300-10	KHD 125 MM STD	+1.15	+1.30	Together with gasket
87-741800-00	KHD 100 MM STD	+1.00	+1.20	Together with gasket
87-741800-20	KHD 100 MM STD	+1.00	+1.20	Together with gasket
87-743100-00	M.BENZ 89 MM STD	+0.83	+1.06	
87-743100-10	M.BENZ 89 MM STD	+0.84	+1.06	1.80mm gasket
87-743100-10	M.BENZ 89 MM STD	+1.03	+1.06	2.00mm gasket
87-743100-30	M.BENZ 89 MM STD	+0.73	+0.97	
87-743100-40	M.BENZ 89 MM STD	+0.83	+1.06	1.74mm gasket
87-743100-40	M.BENZ 89 MM STD	+1.03	+1.26	1.97mm gasket
87-743200-00	M.BENZ-LKW 130 MM STD	+0.07	+0.43	
87-743400-10	DAF 130 MM STD	0.00	+0.25	
87-743400-30	DAF 130 MM STD	0.00	+0.25	
87-743400-40	DAF 130 MM STD	0.00	+0.25	
87-743400-50	DAF 130 MM STD	0.00	+0.25	
87-743600-10	M.BENZ 87,00 MM STD	+0.735	+0.965	
87-744600-00	KHD 100 MM STD	+1.00	+1.20	Together with gasket
87-781900-10	FIAT 100 MM STD	+0.365	+0.761	
87-781900-30	IVECO 100 MM STD	+0.365	+0.761	
87-782000-00	IVECO-TRK 103 MM STD	+0.465	+0.785	
87-782900-00	FORD 107,21 MM STD	+0.152	+0.380	
87-783000-30	IVECO 137 MM STD	-0.27	+0.22	
87-784800-00	FORD 93,67 MM STD	+0.30	+0.40	
87-784800-10	FORD 93,67 MM STD	+0.35	+0.45	
87-854700-00	IVECO 94,4 MM STD	+0.40	+0.50	1.20mm gasket
87-854700-00	IVECO 94,4 MM STD	+0.51	+0.60	1.30mm gasket
87-854700-00	IVECO 94,4 MM STD	+0.61	+0.70	1.40mm gasket
87-854700-00	IVECO 94,4 MM STD	+0.71	+0.80	1.50mm gasket
87-960900-00	SCANIA 115 MM STD	+0.07	+0.50	
87-962000-10	SCANIA 127 MM STD	+0.95	+1.35	Together with gasket
87-962000-40	SCANIA 127 MM STD	+0.95	+1.35	Together with gasket
87-990100-10	AUDI 79,5 MM STD	+0.66	+0.86	1 notch gasket
87-990100-10	AUDI 79,5 MM STD	+0.87	+0.90	2 notch gasket
87-990100-10	AUDI 79,5 MM STD	+0.91	+1.02	3 notch gasket
87-990100-40	VAG 79,51 MM STD	+0.66	+0.86	1 notch gasket

		-	+	!
87-990100-40	VAG 79,51 MM STD	+0.87	+0.90	2 notch gasket
87-990100-40	VAG 79,51 MM STD	+0.91	+1.02	3 notch gasket
88-103200-00	KHD 91 MM STD	+0.59	+0.69	1 notch gasket
88-103200-00	KHD 91 MM STD	+0.69	+0.76	2 notch gasket
88-103200-00	KHD 91 MM STD	+0.76	+0.83	3 notch gasket
88-104300-00	MAN 128 MM STD	+0.01	+0.33	
88-136500-10	MAN 108 MM STD	+0.09	+0.39	
88-141800-00	M.BENZ-LKW 128 MM STD	+0.22	+0.71	
88-152000-30	PEUGEOT 83 MM STD	+0.35	+0.54	1.49mm gasket
88-172500-00	KHD 100 MM STD	+1.00	+1.20	Together with gasket
88-174100-30	DAF 130 MM STD	0.25	+0.25	
88-176800-00	M.BENZ-LKW 125 MM STD	-0.07	+0.43	
88-179300-10	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
88-181100-10	J.DEERE 106,5 MM STD	+0.10	+0.30	
88-181100-20	J.DEERE 106,5 MM STD	+0.14	+0.20	
88-181700-00	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
88-181800-00	J.DEERE 102 MM STD	-0.07	0.00	
88-181800-10	J.DEERE 102 MM STD	-0.07	0.00	
88-203500-00	FORD LKW 100 MM STD	+0.700	+0.127	
88-243300-00	IHC LKW 98,425 MM STD	+0.45	+0.77	
88-243600-00	IHC LKW 98,425 MM STD	-0.40	-0.55	
88-252800-00	KHD 94 MM STD	+0.43	+0.64	1 notch gasket
88-274800-00	MAN 121 MM STD	+0.05	+0.35	
88-743400-10	DAF 130 MM STD	0.00	+0.25	
88-743400-30	DAF 130 MM STD	0.00	+0.25	
88-960900-00	SCANIA 115 MM STD	+0.07	+0.50	
89-124500-00	MAN 128 MM STD	+0.10	+0.33	
89-143800-00	MAN 128 MM STD	+0.01	+0.33	
89-143800-10	MAN 128 MM STD KH: 0,20 MM	+0.01	+0.33	
89-143800-20	MAN 128 MM STD KH: 0,40 MM	+0.01	+0.33	
89-143800-30	MAN 128 MM STD	+0.01	+0.33	
89-179300-05	M.BENZ-LKW 128 MM STD	-0.07	+0.43	
89-179300-15	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
89-179300-18	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
89-179300-60	M.BENZ LKW 128 MM STD	+0.17	+0.53	
89-179300-65	M.BENZ-LKW 128 MM STD	-0.10	+0.32	
89-179300-66	M.BENZ-LKW 128 MM STD	-0.10	+0.32	
89-179300-70	M.BENZ-LKW 128 MM STD	-0.07	+0.43	
89-179300-71	M.BENZ-LKW 128 MM STD	-0.07	+0.43	
89-179300-80	M.BENZ-LKW 128 MM STD	+0.07	+0.43	
89-179300-85	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
89-179300-86	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
89-181700-00	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
89-181700-60	M.BENZ-LKW 128 MM STD	+0.17	+0.53	
89-289600-00	M.BENZ-LKW 130 MM STD	+0.27	+0.61	
89-243300-10	IHC LKW 98,425 MM STD	+0.45	+0.77	
89-243600-10	IHC LKW 98,425 MM STD	-0.40	-0.55	
89-280200-10	MAN 125 MM STD	0.00	+0.32	
89-283100-00	MAN 128 MM STD	+0.010	+0.038	
89-283100-30	MAN 128 MM STD	0.00	+0.20	
89-283100-80	MAN 128 MM STD	+0.01	+0.33	
89-283100-85	MAN 128 MM STD KH:0,20 MM	+0.01	+0.33	
89-283100-86	MAN 128 MM STD KH:0,40 MM	+0.01	+0.33	
89-289600-30	M.BENZ-LKW 130 MM STD	+0.27	+0.61	
89-396300-00	VOLVO 120,65 MM STD	-0.50	+0.20	
89-405600-00	VOLVO 130,18 MM STD	-0.50	+0.45	
89-405600-60	VOLVO 130,18 MM STD	-0.50	+0.45	
89-405600-70	VOLVO-LKW 130,18 MM STD	-0.05	+0.45	
89-405600-80	VOLVO-LKW 130,18 MM STD	-0.05	+0.45	
89-743200-00	M.BENZ-LKW 130 MM STD	+0.07	+0.43	
89-960900-00	SCANIA 115 MM STD	+0.07	+0.50	
89-962000-10	SCANIA 127 MM STD	+0.95	+1.35	Together with gasket

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PISTON

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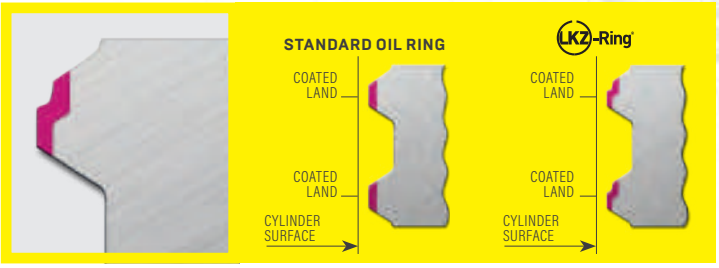

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- Reduced oil consumption up to -50%* and friction up to -15%*
- Cuts CO_2 and improves fuel consumption
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