

PISTON RING SETS & CYLINDER LINERS

For Automotive Engines & Construction Machines

Vol.32 ver.1



NIPPON PISTON RING CO.,LTD.



▲Head Office 本社



▲Tochigi Plant 栃木工場



▲NPR Fukushima Works Co.,Ltd. (株)日ビス福島製造所



▲NPR Iwate Co.,Ltd./Ichinoseki Plant (株)日ビス岩手／一関工場



▲NPR Iwate Co.,Ltd./Senmaya Plant (株)日ビス岩手／千厩工場

Introducing **NPR**

Nippon Piston Ring Co., Ltd. was founded in 1931 as the first piston ring manufacturer in Japan. The company has been continuously engaged in the production of various engine components for over half a century.

Engines are constantly being developed and made more efficient. Manufacturers of engine parts, together with engine builders, have to meet the technical challenges modern designs present to them.

NPR has 18 engine test benches of its own, where its products are constantly tested and improved to ensure they are suitable for commercial use.

NPR's products are supplied to every manufacturer of internal combustion engines in Japan. Many are also exported both as original equipment and after market parts to overseas market.

Abroad, NPR's international operation continues to expand with many agents and distributors in many countries.



CONTENTS

Short History of NPR	2	HYUNDAI	111
APPLICATION OF PISTON RING SETS	3	KIA	116
DAIHATSU (ダイハツ)	8	ASIA	119
SUBARU (スバル)	11	CHRYSLER	120
HINO (日野)	13	FORD	122
HONDA (本田)	24	GM	125
ISUZU (いすゞ)	30	APPLICATION OF CYLINDER LINERS	130
KOMATSU (小松)	44	DAIHATSU (ダイハツ)	134
MAZDA (マツダ)	47	HINO (日野)	135
MITSUBISHI (三菱)	54	ISUZU (いすゞ)	140
NISSAN (日産)	69	KOMATSU (小松)	146
UD TRUCKS (UD トラックス) (NISSAN DIESEL, 日産ディーゼル)	81	MITSUBISHI (三菱)	147
SUZUKI (スズキ)	88	UD TRUCKS (UD トラックス) (NISSAN DIESEL, 日産ディーゼル)	151
TOYOTA (トヨタ)	91	TOYOTA (トヨタ)	154
DAEWOO.....	109	MAZDA (マツダ)	155

Short History of **NPR**

~1945

In order to commence local production of piston rings Tomonori Suzuki established in 1931 the Nippon Piston Ring Works in Kawaguchi, Saitama. Until that time all piston rings were imported into Japan. The new company was incorporated into Nippon Piston Ring Co., Ltd. in 1934 with a capital of ¥1 million. With the expanding demand for piston rings for use in trucks, aircrafts and ships NPR's production facilities were progressively enlarged and the Yono Plant was opened in 1939.

~1955

Production of piston rings was restarted in 1946 after the end of World War II. In 1950, NPR introduced for the first time in Japan, chrome plated piston rings for use in repaired automobile engines and in 1953 these were also adopted by original equipment engine manufacturers. In the same year, the company was authorized to use the Japan Industrial Standard notation for piston rings (JIS-8032).

~1965

Following on its success with chrome plating technology, NPR announced the development of Japan's first high strength cast irons, NIPPALLOY and UBALLOY. These were followed in 1968 with the boron cast iron TARKALLOY. All these alloys represented a major step forward in the development of wear resistance material and the technology was subsequently licensed to a number of companies, both Japanese and foreign. Today these materials are still specified as standard materials for engine components. In 1961, NPR introduced Japan's first steel rail three piece oil control ring known as NIFFLEX. This represented a major change in design of oil control rings which until this time had always been traditional cast iron type.

~1975

Emission control of automotive engines to reduce and limit air pollution became a major problem with all leading component manufactures called on to provide technical solution. NPR was in the forefront of development with piston rings for use in lead-free gasoline engines followed by new production of such valve train parts as valve seat inserts, camshafts and tappets.

NPR's overseas activities were stepped up. Expanding its export marketing, NPR was commended in 1966 by the Ministry of International Trade and Industry (MITI) as a distinguished exporting enterprise.

~1985

Engine technology in Japan made remarkable progress during these years, leading to the achievement of unparalleled compactness, light weight and high performance, which won high reputation for Japanese built engines throughout the world. The production of

engines for construction machinery, forklifts and pumps, plus machinery for agriculture or horticulture also increased remarkably. NPR products featured extensively in all these engines.

In 1982, production of cylinder liners, camshafts and sintered metal products was transferred to the new Fukushima Works. In 1984, NPR closed down its Kawaguchi Plant and opened its newly built Tochigi Plant in Nogi-machi, Tochigi, to give NPR a new production line-up comprising three factories—Yono, Tochigi and Fukushima.

~1995

This is a difficult and challenging era with an ever increasing range of requirements presenting themselves from international markets. As a dedicated and specialized manufacturer of functional components NPR continues in its efforts to meet these requirements from both domestic and overseas customers.

Production of narrow steel compression rings with special surface treatment, liners for aluminum cylinder blocks and composite sintered valve seat inserts has been increased to meet the requirement for fuel-efficient, high-performance and durable engine parts. In 1986, NPR commenced massive exports of P/M camshafts to U.S.A

In order to increase the production capacity of piston rings NPR established in 1990 the NPR Iwate/Senmaya. In 1992, NPR started series supply of big volume piston rings to Mercedes-Benz AG (present Daimler AG), Germany.

1996~

Aiming at a reliable global supplier, NPR is expanding the bases, both Japanese and foreign.

In Japan, NPR head office was moved from Tokyo to Saitama in 1998. In 2002, production of piston rings in Yono Plant (in Saitama) was transferred to the newly built NPR Iwate/Ichinoseki Plant, and in 2003, NPR closed down the Yono Plant.

NPR Head Office, Tochigi Plant, NPR Iwate, and NPR Fukushima Works, together were certified in ISO9001, QS9000, ISO14001, and ISO/TS16949:2002 with being recognized their excellence in quality control.

In 2004, NPR celebrated the 70th anniversary of foundation with thanks.

On the other hand, overseas production bases were expanded mainly for the business of piston rings/valve seat inserts, and NPR established production bases in ASEAN, China and North America, respectively.

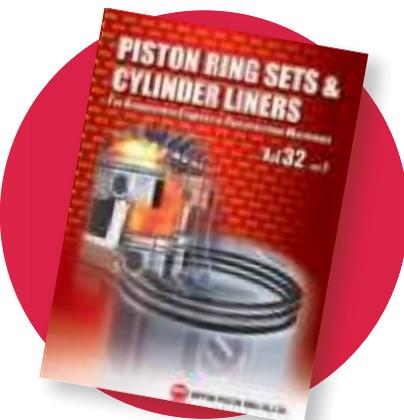
Moreover, as for the overseas sales offices, NPR established NPR of Europe GmbH in Germany in 1999 as a sales base of OE supply to European automobile manufacturer, and established NPR Singapore Pte.Ltd in 2005. These resulted to give NPR a new overseas sales office line-up—U.S.A., Germany, Singapore, China, and South Korea.



You can check the latest version of
NPR's catalog on the following website.

<http://www.npr-japan.com>

The screenshot shows the homepage of the NPR website. At the top, there is a banner featuring several mechanical components like hoses and cylinders. Below the banner, the company logo 'NPR NIPPON PISTON RING' is displayed, followed by the text '日本ピストンリング株式会社' and 'NIPPON PISTON RING CO., LTD.'. Below this, the address '5-12-10, Honmachi-Higashi, Chuo-Ku, Saitama-City, Saitama, JAPAN' is given. A message reads: 'Welcome to the NPR website. The ID authentication screen is available to people who wish to acquire authentic NPR products, so please feel free to use it.' A yellow button labeled '▶ Security Check' is prominently displayed. At the bottom left, there is a 'News Release' section and a Norton Secured logo. A red dashed box highlights the 'Catalogue Vol.30 VER.3 [PISTON RING SETS & CYLINDER LINERS]' link.

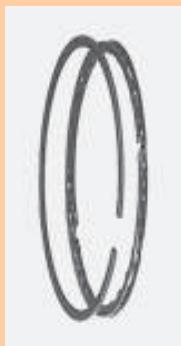


NIPPON PISTON RING CO., LTD.

5-12-10, Honmachi-Higashi, Chuo-ku Saitama-City, Saitama JAPAN

A496A-3-1501-400(TOP)

PISTON RING SETS



● EXPLANATION OF NPR PRODUCT CODE No. / セットコードNo.の解説

Example

SW T10 105 ZZ

Maker Code Drawing No. ZZ.ZY : STD.Spec
ZX : "SS999"Spec

● MAKER CODE

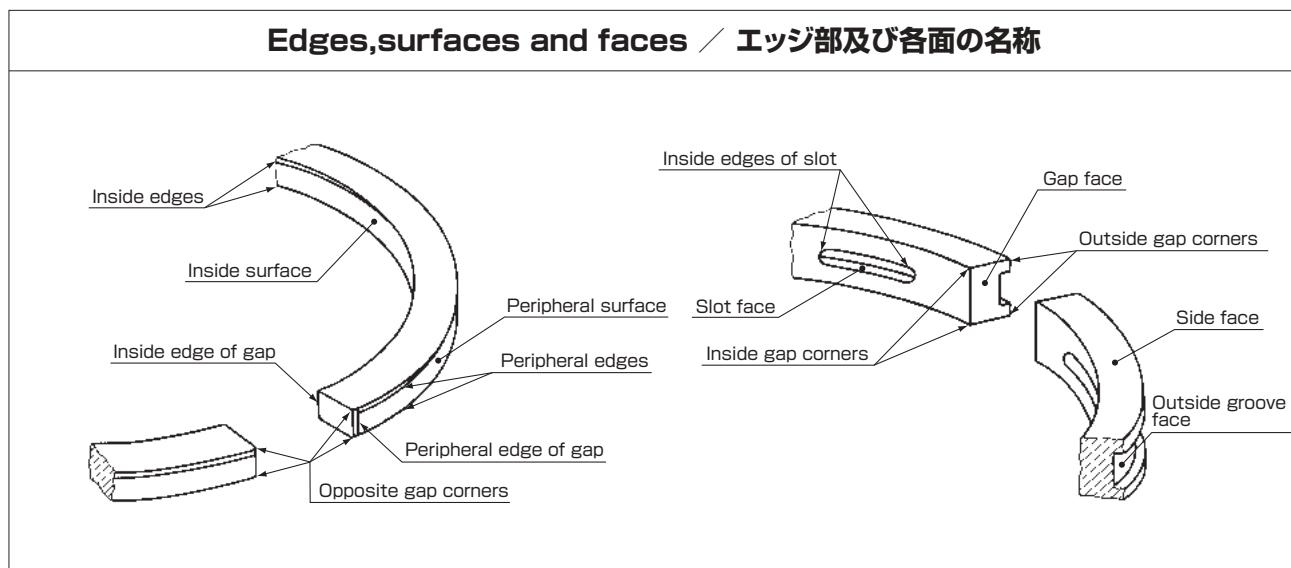
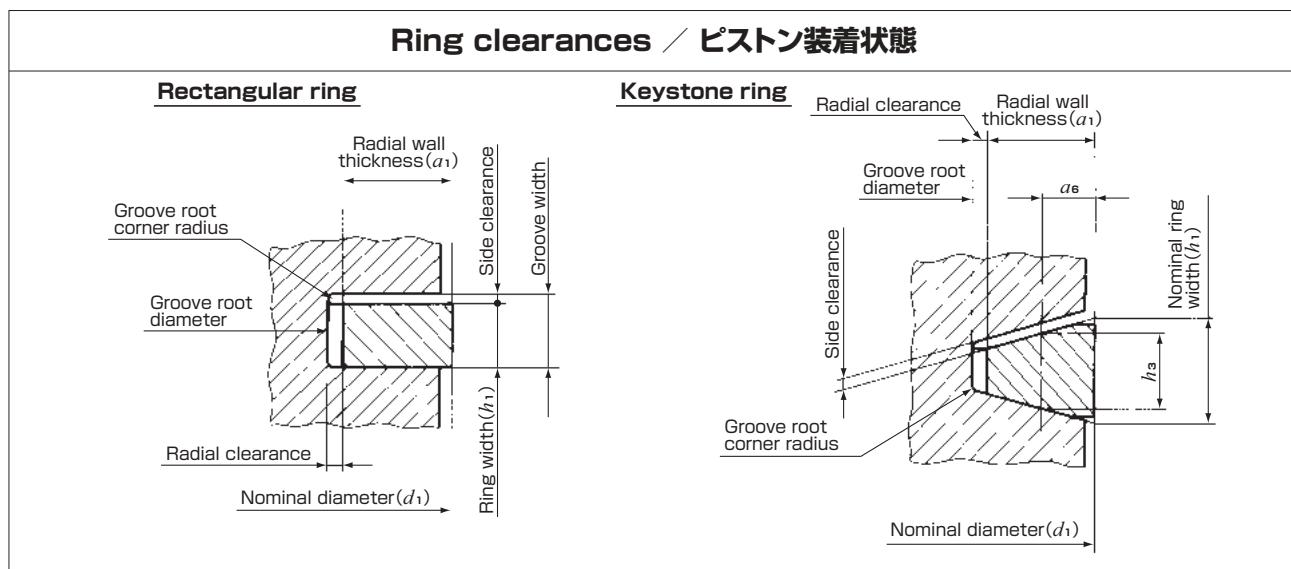
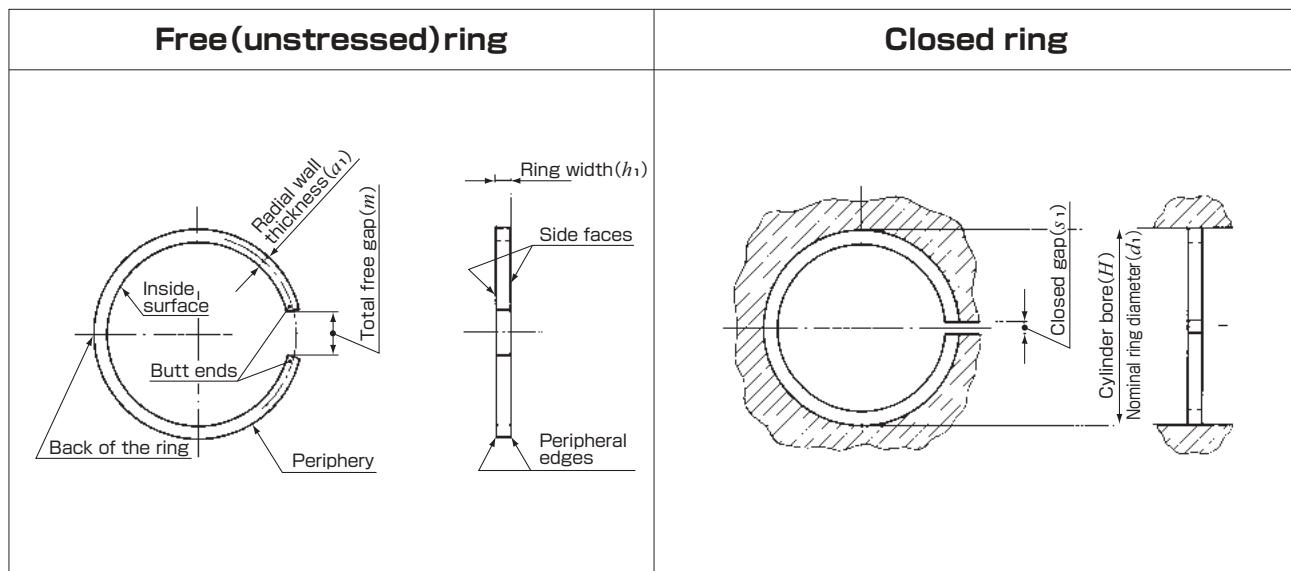
D10 : DAIHATSU	S20 : SUZUKI
F20 : SUBARU	T10 : TOYOTA
H20 : HINO	T20 : MAZDA
H30 : HONDA	A20 : ASIA
I10 : ISUZU	D20 : DAEWOO
K04 : KOMATSU	G30 : HYUNDAI
M30 : MITSUBISHI	K30 : KIA
M31 : MITSUBISHI	C10 : CHRYSLER
N30 : NISSAN	F30 : FORD
N31 : UD TRUCKS	G10 : GM

● Cross-section configuration • Material / 断面形状・材料

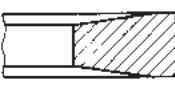
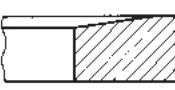
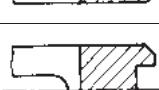
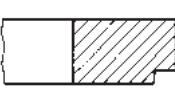
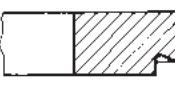
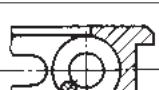
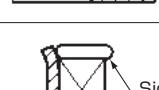
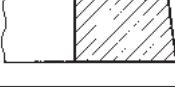
Cross-section configuration / Configuration Code				Material code : Material name
	P		K2	CR : NPR cast iron
	BF		BF-K2 · BF-K4	HB : NIPPALLOY (Spheroidal graphite cast iron)
	T1-B1-T1		T1-K2 T1-K3	SR : Steel
	IB		BF-K3	● Code : Surface treatment
	BF-IB · BF-IC		BF-K1	Fe : Phosphated
	T1-IB		T1-K1	Cr : Chromium plated
	IC		BF-K1-IC	GN : Nitrided
	T1-IC		T1-K1-IC T1-K1-IB	
	T1-RB		C1 · BC1 · BC3 BC16	(Cutter oil control ring)
	B1-TUC B1-UC		E-C1 · E-C3 E-BC1 · E-BC3 · E-BC16	(2-Piece oil control ring)
	TUC UC		NIFF-S · NIFF-H	(3-Piece oil control ring)

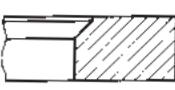
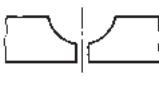
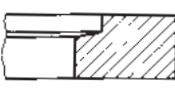
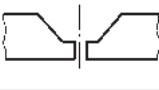
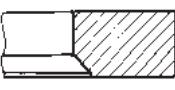
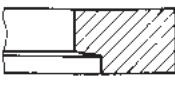
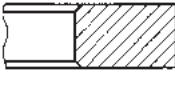
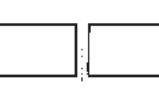
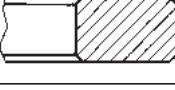
Adove figures show basic cross-section configuration but not in detail.

● Piston ring nomenclature and symbols / ピストンリング各部の名称と記号



● Piston ring types / ピストンリングの形状

Compression ring			Oil control ring		
Cross-section configuration	Rectangular ring		Cross-section configuration	Slotted oil control ring	
	Keystone ring			Bevelled-edge oil control ring	
	Half Keystone ring			Double-bevelled oil control ring	
	Scraper ring (stepped)			Coil spring loaded slotted oil control ring	
	Napier ring (undercut step)			Coil spring loaded bevelled-edge oil control ring	
Face configuration	Straight-faced		Cross-section configuration	Coil spring loaded double-bevelled oil control ring	
	Barrel-faced			Expander/Segment oil control ring	
	Taper-faced				

Edge configuration		Joint configuration	
Internal bevel top (positive twist type)		Joint with side notch	
Internal step top (positive twist type)		Joint with internal notch	
Internal bevel bottom (negative twist type)		Joint (straight)	
Internal step bottom (negative twist type)		Oblique joint (angle)	
Inside edges chamfered		Stepped joint (angle)	
Outside edges chamfered			
Inside and outside edges chamfered			

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
EB	547	Mira	SWD10029ZZ	3	1st 2nd Oil	62.0 62.0 62.0	1.2 1.5 2.8	2.5 2.5 2.8	BF-IB T1 NIFF-S	SR CR SR	Cr Fe GN	Fe Fe GN	13011-87206 13011-87222
KF-VE KF-VE3	658	Pixis	SWD10049ZZ	3	1st 2nd Oil	63.0 63.0 63.0	1.0 1.2 2.0	2.27 2.3 2.35	BF-IB TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	13011-B2020 13011-B2021 13011-B2041
					1st 2nd Oil	63.0 63.0 63.0	1.0 1.0 1.5	2.27 2.1 2.2	BF-IB TUC NIFF-H	SR SR SR	Cr Fe Cr	Fe Fe Fe	13011-B2091
		Mira Move Esse	SWD10052ZZ	3	1st 2nd Oil	63.0 63.0 63.0	1.0 1.0 1.5	2.27 2.1 2.2	BF-IB TUC NIFF-H	SR SR SR	Cr Fe Cr	Fe Fe Fe	
					1st 2nd Oil	66.6 66.6 66.6	1.2 1.5 2.8	2.5 2.8 2.55	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	13011-87208 13011-87232
ED-10	847	Mira Cuore	SWD10045ZZ	3	1st 2nd Oil	66.6 66.6 66.6	1.2 1.5 2.8	2.5 2.8 2.55	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	13011-97209
					1st 2nd Oil	66.6 66.6 66.6	1.2 1.2 2.0	2.3 2.6 2.2	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	
FE051	958	Belrina	SWD10020ZZ	4	1st 2nd Oil	68.0 68.0 68.0	2.0 2.0 4.0	3.0 3.0 3.1	T1 T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	13011-87103
EF	659	Mira Move Hijet Opti Atray	SWD10033ZZ	3	1st 2nd Oil	68.0 68.0 68.0	1.2 1.5 2.8	2.67 2.8 2.55	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	13011-87219
					1st 2nd Oil	68.0 68.0 68.0	1.2 1.2 2.5	2.67 2.8 2.5	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	13011-97204-A 13011-97203
		Mira	SWD10046ZZ	3	1st 2nd Oil	68.0 68.0 68.0	1.0 1.2 2.0	2.1 2.2 2.25	BF-IB TUC NIFF-H	SR CR SR	GN Cr GN	GN Fe GN	13011-97206
					1st 2nd Oil	70.0 70.0 70.0	1.5 1.5 2.8	2.65 3.1 2.85	BF T1 NIFF-S	SR CR SR	Cr Fe GN	Fe Fe GN	13011-87712 13013-87710(0.5)

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
AB AB10 AB20 AB30 AB40 AB50 AB55	547	Fellow Max Mira Wide Cab Hijet	SWD10023ZZ	2	1st	71.6	1.5	3.0	BF	CR	Cr	Fe	13011-87710
					2nd	71.6	1.5	3.0	TUC	CR	Fe	Fe	13011-87714
					Oil	71.6	2.8	3.35	NIFF-S	SR	Cr	Fe	13011-87701
													13011-87702
													13011-87705
													13011-87709
950G	952	Vanguard	SWD10041ZZ	3	1st	72.0	1.5	3.0	BF	CR	Cr	Fe	13011-87803
					2nd	72.0	1.5	2.9	T1	CR	Fe	Fe	
					Oil	72.0	2.8	2.55	NIFF-S	SR	Cr	Fe	
EJ-DE	989	Mira Gino Storia	SWD10047ZZ	3	1st	72.0	1.2	2.45	BF-IB	SR	Cr	Fe	13011-97201-000
					2nd	72.0	1.2	2.9	TUC	CR	Fe	Fe	13011-97202
					Oil	72.0	2.5	2.55	NIFF-S	SR	Cr	Fe	
K3-VE K3-DE K3-VE2 K3-VET	1,297	Storia Terios	SWD10050ZZ	4	1st	72.0	1.2	2.45	BF-IB	SR	Cr	Fe	13011-97401-000
					2nd	72.0	1.2	2.6	TUC	CR	Fe	Fe	
					Oil	72.0	2.0	2.3	NIFF-H	SR	Cr	Fe	
EJ-VE	989	Cuore Mira Gino 1000 Storia Trevis Viva	SWD10053ZZ	3	1st	72.0	1.2	2.5	BF-IB	SR	GN	GN	13011-BZ020-B
					2nd	72.0	1.2	2.3	TUC	HB	Fe	Fe	
					Oil	72.0	2.0	2.25	NIFF-H	SR	GN	GN	
CB-10 CB-20	993	Charade	SWD10024ZZ	3	1st	76.0	1.5	3.1	T1	CR	Cr	Fe	13011-87704
					2nd	76.0	1.5	3.1	T1	CR	Fe	Fe	13011-87708
					Oil	76.0	2.8	3.15	NIFF-S	SR	Cr	Fe	
HD-E HD-E1 HD-EG HD-EP HD-F1	1,589	Feroza	SWD10034ZZ	4	1st	76.0	1.2	2.7	BF-IB	SR	Cr	Fe	13011-87110
					2nd	76.0	1.5	3.2	TUC	CR	Fe	Fe	
					Oil	76.0	3.0	2.55	NIFF-S	SR	Cr	Fe	
HC-E HC-EH HC-F	1,295	Charade Feroza Rocky	SWD10031ZZ	4	1st	76.0	1.2	2.85	BF-IB	SR	Cr	Fe	13011-87104
					2nd	76.0	1.5	3.2	T1	CR	Fe	Fe	13011-87105
					Oil	76.0	3.0	2.85	NIFF-S	SR	GN	GN	13011-87106
													13011-87107
													13011-87108
													13011-87109
CB90	997	Charade	SWD10036ZZ	3	1st	76.0	1.5	2.9	BF	SR	GN	GN	13011-87727
					2nd	76.0	1.5	3.1	T1	CR	Cr	Fe	
					Oil	76.0	2.8	2.55	NIFF-S	SR	GN	GN	



● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
CL-10	993	Charade	SJD10042ZZ	3	1st 2nd Oil	76.0 76.0 76.0	2.0 1.5 3.0	3.3 3.1 3.4	BF-K3 T1 E-BC3	HB CR HB	Cr Cr Cr	Cr Cr Fe	13011-87717 13011-87723A
DF	2,270	DV202	SJD10010ZZ	4	1st 2nd 3rd Oil	85.0 85.0 85.0 85.0	2.0 2.0 2.0 4.0	3.5 3.5 3.5 4.4	T1 T1 T1 E-C1	CR CR CR CR	Cr Fe Fe Cr	Fe Fe Fe Fe	922-4223-1410
DC	2,530	Truck D300 DV32L SV32	SJD10012ZZ	4	1st 2nd 3rd Oil 1 Oil 2	88.0 88.0 88.0 88.0 88.0	2.0 2.0 2.0 4.0 4.0	3.8 3.8 3.8 4.0 3.8	T1 T1 T1 E-C1 C1	CR CR CR CR CR	Cr Fe Fe Cr Cr	Cr Fe Fe Fe Fe	992-5113-1410-00
		DV26T			1st 2nd 3rd Oil	88.0 88.0 88.0 88.0	2.0 2.0 2.0 4.0	3.8 3.8 3.8 4.0	T1 T1 T1 E-C1	CR CR CR CR	Cr Fe Fe Cr	Cr Fe Fe Fe	13011-87304
		Delta (New) Taft Small Bus FSOV Truck (V23・24・25・26)			1st 2nd Oil	88.0 88.0 88.0	2.5 2.0 4.0	3.8 3.8 4.1	BF-IB T1 E-BC3	CR CR CR	Cr Cr Cr	Cr Fe Fe	13011-87305 13011-87307 13011-87308 13011-87036
DL(NEW)	2,765	Delta	SDD10026ZZ	4	1st 2nd Oil	92.0 92.0 92.0	2.5 2.0 4.0	3.6 3.8 3.7	BF T1 E-BC16	HB CR CR	Cr Cr Cr	Fe Fe Fe	13011-87320A 13011-87310 13011-87311 13011-87312 13011-87313
DL	2,765	Delta	SJD10026ZZ	4	1st 2nd Oil	92.0 92.0 92.0	2.5 2.0 4.0	3.8 3.8 4.1	BF T1 E-BC3	CR CR CR	Cr Cr Cr	Cr Fe Fe	13011-87320A 13011-87310 13011-87311 13011-87312 13011-87313
DL-T	2,765	Taft Delta	SDD10048ZZ	4	1st 2nd Oil	92.0 92.0 92.0	2.5 2.0 4.0	3.45 3.8 4.35	BF-K2 T1 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	13011-87317-000

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
EN07	658	Pleo Rex Vivio	SWF20076ZZ	4	1st 2nd Oil	56.0 56.0 56.0	1.2 1.2 2.0	2.25 2.45 2.25	BF-IB T1-IB NIFF-H	SR CR SR	Cr Fe Cr	Fe	12033-KA790
E42 EK42	665	Subaru Rex	SWF20052ZZ	2	1st 2nd Oil	78.0 78.0 78.0	1.2 1.5 2.8	3.0 3.3 2.8	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	48003-5600 48003-5610
EF10	997	Domingo	SWF20054ZZ	3	1st	78.0	1.2	3.0	BF	SR	Cr	Fe	48003-5800
EF12	1,189	Justy			2nd	78.0	1.5	3.3	T1	CR	Cr	Fe	48003-5800
FB16	1,599	Impreza sport 1.6i			Oil	78.0	2.8	2.8	NIFF-S	SR	Cr	Fe	
E62S EA62	1,267	Subaru 1300G	SWF20010ZZ	4	1st 2nd Oil	82.0 82.0 82.0	2.0 2.0 4.0	3.8 3.6 3.8	T1 T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe	88003-8600
EA65	1,298	Subaru 1300G	SWF20032ZZ	4	1st 2nd Oil	83.0 83.0 83.0	1.2 1.5 4.0	3.25 3.6 3.6	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe	48003-7010
FB20	1,995	Forester Impreza VX	SWF20073ZZ	4	1st 2nd Oil	84.0 84.0 84.0	1.0 1.0 2.0	2.67 2.7 2.5	BF-IB TUC NIFF-H	SR SR SR	Cr Fe Cr	Fe	12033-AC210 12033-AC220 12033-AC230
E63S EA63	1,361	Subaru Leone 1400	SWF20014ZZ	4	1st 2nd Oil	85.0 85.0 85.0	2.0 2.0 4.0	3.9 3.9 3.25	T1 T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe	38003-0110
FA20	1,998	BRZ Forester Impreza Legacy Levorg WRX	TCC-J-0071	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.0 2.0		BF-IB TUC NIFF-H	SR SR SR	GN Fe GN	GN	12033-AC300
EJ18	1,820	Impreza Legacy	SWF20043ZZ	4	1st 2nd Oil	87.9 87.9 87.9	1.2 1.5 3.0	3.1 3.6 3.1	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe	12033-AA090
EZ30	2,999	Legacy B4 Outback Legacy Touring Wagon	SWF20070ZZ	6	1st 2nd Oil	89.2 89.2 89.2	1.2 1.2 2.5	3.05 3.6 2.9	BF-IB TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe	12033-AB130

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DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
	EA71	1,595	Subaru Leone 1600 (SEECT)	SWF20017ZZ	4	1st 2nd Oil	92.0 92.0 92.0	2.0 2.0 4.0	4.0 4.0 3.9	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	38003-4320 38003-4300
	EJ20	1,994	Legacy Forester	SWF20044ZZ	4	1st 2nd Oil	92.0 92.0 92.0	1.5 1.5 3.0	3.3 3.7 3.1	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AA610
						1st 2nd Oil	92.0 92.0 92.0	1.2 1.2 2.5	3.3 3.8 2.8	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AB070 12033-AB100 12033-AB160 12033-AB220
				SWF20051ZZ	4	1st 2nd Oil	92.0 92.0 92.0	1.2 1.5 3.0	3.3 3.7 3.1	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AA640
	EA71(NEW)	1,595	Alcyone Subaru Leone	SWF20057ZZ	4	1st 2nd Oil	92.0 92.0 92.0	1.2 1.5 4.0	3.3 3.7 3.65	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AA000 12033-AA320
	EA81	1,781												48003-7100
	EA82	1,781												
	EJ20	1,994	Legacy	SWF20063ZZ	4	1st 2nd Oil	92.0 92.0 92.0	1.2 1.2 2.0	3.3 3.8 2.7	BF-IB TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AB820
	EZ36	3,629	Outback	SWF20069ZZ	6	1st 2nd Oil	92.0 92.0 92.0	1.2 1.2 2.0	3.3 3.8 2.7	BF-IB TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AC060 12033-AC180
	EJ22	2,212	Legacy	SWF20045ZZ	4	1st 2nd Oil	96.9 96.9 96.9	1.2 1.5 3.0	3.25 3.9 3.3	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AA210
						1st 2nd Oil	96.9 96.9 96.9	1.5 1.5 3.0	3.25 3.9 3.3	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AA390 12033-AA450 12033-AA570
	EJ25D	2,457	Legacy Forester	SWF20064ZZ	4	1st 2nd Oil	99.5 99.5 99.5	1.2 1.5 2.8	3.45 4.0 3.1	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AA760
	EJ251 EJ252 EJ259	2,457	Legacy Forester	SWF20066ZZ	4	1st 2nd Oil	99.5 99.5 99.5	1.2 1.2 2.5	3.45 4.0 2.8	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AB010 12033-AB020
	EJ257 EJ255 EJ253					1st 2nd Oil	99.5 99.5 99.5	1.2 1.2 2.0	3.45 4.0 2.7	BF-IB TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AB340 12033-AB250

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Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
DM100	4,313	Truck KM300 KM320 KM330 KM340 KM350 KM410 KM450 KM320D Bus RM100 BM320 Tractor HM320 HM301	SCH20004ZZ	6	1st	90.0	2.5	3.7	T1	CR	Cr	Fe	13001-1350
					2nd	90.0	2.5	3.7	T1	CR	Fe	Fe	13011-1350A
					3rd	90.0	2.5	3.7	B1-TUC	CR	Fe	Fe	3352120507
					Oil 1	90.0	4.0	3.7	BC1	CR	Cr	Fe	3352193901
					Oil 2	90.0	4.0	3.7	BC1	CR	Fe	Fe	
DQ100	4,507	Ranger	SCH20032ZZ	6	1st	92.0	2.5	3.9	T1	CR	Cr	Fe	13011-1360A
					2nd	92.0	2.5	3.9	T1	CR	Fe	Fe	
					3rd	92.0	2.5	3.9	B1-TUC	CR	Fe	Fe	
					Oil 1	92.0	4.0	3.9	BC1	HB	Cr	Fe	
					Oil 2	92.0	4.0	3.9	BC1	CR	Fe	Fe	
EC100	5,010	Truck KL300 Bus RL100 Tractor HL300	SCH20005ZZ	6	1st	97.0	2.5	4.2	BF	HB	Cr	Fe	13011-1390
					2nd	97.0	2.5	4.3	T1-IC	CR	Fe	Fe	13019-1140A(cyl)
					3rd	97.0	2.5	4.3	B1-TUC	CR	Fe	Fe	
					Oil 1	97.0	4.0	4.3	C1	HB	Cr	Fe	
					Oil 2	97.0	4.0	4.3	BC3	CR	Fe	Fe	
W04D	4,009	Ranger 3.5ton Rainbow	SDH20038ZX	4	1st	104.0	2.5	3.85	BF	SR	Cr	Fe	13011-1973
					2nd	104.0	2.0	4.3	T1	CR	Fe	Fe	13011-2540
					Oil	104.0	5.0	4.85	E-BC16	SR	GN	GN	13019-1150A(cyl)
W04C-TI	3,839	Rainbow	SJH20068ZZ	4	1st	104.0	2.806	4.3	BF-K1	HB	Cr	Cr	13011-2891A
					2nd	104.0	2.5	4.3	T1-IC	CR	Cr	Cr	13019-1180A(cyl)
					Oil	104.0	4.0	4.35	E-BC16	SR	GN	GN	
W04D-J N04C-A	4,009	Dutro Ranger Liesse	SDH20099ZZ	4	1st	104.0	2.5	3.7	BF	SR	GN	GN	13011-3950A
					2nd	104.0	2.0	4.3	T1	CR	Fe	Fe	13019-1190A(cyl)
					Oil	104.0	4.0	4.35	E-BC16	SR	GN	GN	13011-E0110
W04C-T	3,839	Bus Rainbow RW RB145	SDH20047ZX	4	1st	104.0	2.806	3.7	BF-K1	SR	GN	GN	13011-2270A
					2nd	104.0	2.5	4.3	T1-IC	CR	Fe	Fe	13011-2270C
					Oil	104.0	5.0	4.7	E-BC3	CR	Cr	Fe	13011-2550B 13019-1160A(cyl)
N04C-T	4,009	Dutro Toyoace Dyna	SDH20101ZY	4	1st	104.0	2.5	3.7	BF	SR	GN	GN	13011-4020A
					2nd	104.0	2.0	3.7	T1	SR	GN	GN	
					Oil	104.0	4.0	4.35	E-BC16	SR	GN	GN	

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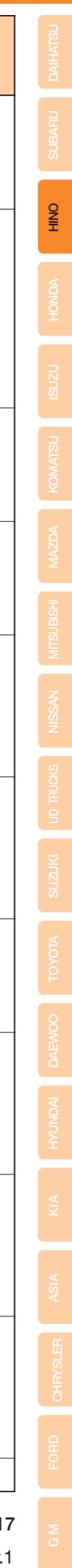
DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
W06D	5,759	AC Rainbow		SDH20041ZX	6	1st	104.0	2.5	3.85	BF	SR	Cr	Fe	13011-1983
						2nd	104.0	2.0	4.3	T1	CR	Fe	Fe	13011-2440
						Oil	104.0	5.0	4.85	E-BC16	SR	GN	GN	13011-2550B
W06D-TI	6,014	Ranger		SJH20055ZZ	6	1st	104.0	2.806	4.3	BF-K1	HB	Cr	Cr	13011-2610A
						2nd	104.0	2.5	4.3	T1-IC	CR	Cr	Cr	13011-2680A
						Oil	104.0	5.0	4.7	E-BC3	CR	Cr	Fe	13011-2950A
W04D-TK	4,009	Ranger Dutro Rainbow		SDH20103ZX	4	1st	104.0	2.806	3.7	BF-K1	SR	GN	GN	13011-4080B
						2nd	104.0	2.0	4.3	T1	CR	Fe	Fe	13011-4080C
						Oil	104.0	4.0	4.35	E-BC16	SR	GN	GN	13011-E0200 13019-1170A (cyl) S1304-E0160 (cyl)
DS70 DS90	7,013	Truck KC300 KC320 TE11 TE61 TE61D Bus RD100 BK11 BT10 BT30 BT31		SCH20006ZZ	6	1st	105.0	3.0	4.2	T1	CR	Cr	Fe	13011-1210
						2nd	105.0	3.0	4.2	B1-TUC	CR	Fe	Fe	13011-1550
						3rd	105.0	3.0	4.2	B1-TUC	CR	Fe	Fe	13011-1550A
						Oil 1	105.0	4.5	4.2	BC1	HB	Fe	Fe	13019-1220A(cyl)
						Oil 2	105.0	4.5	4.2	BC1	HB	Fe	Fe	
EH100	5,871	Truck BH15 KL500 HL100 Bus BX320 Tractor HL100		SCH20021ZX	6	1st	105.0	2.5	3.85	BF	SR	Cr	Fe	13011-1150
						2nd	105.0	2.5	4.3	T1-IC	CR	Fe	Fe	13019-1210A(cyl)
						3rd	105.0	2.5	4.3	B1-TUC	CR	Fe	Fe	
						Oil 1	105.0	4.0	4.3	C1	CR	Cr	Fe	
						Oil 2	105.0	4.0	4.3	BC3	CR	Fe	Fe	
H07B-TI	6,224	For Marine		SDH20089ZZ	6	1st	105.8	2.948	3.95	BF-K1	SR	GN	GN	13011-3630A
						2nd	105.8	2.0	4.40	T1-IC	HB	Cr	Fe	13019-1240A(cyl)
						Oil	105.8	4.0	4.35	E-BC16	SR	GN	GN	
H06B-TI	6,224			SDH20097ZZ	6	1st	105.8	2.806	3.95	BF-K1	SR	Cr	Fe	13011-3850A
						2nd	105.8	2.5	4.4	T1-IC	HB	Cr	Fe	
						3rd	105.8	2.5	4.4	B1-TUC	HB	Cr	Fe	
						Oil	105.8	4.0	4.15	E-BC16	SR	Cr	Fe	
EH300	6,211	Truck KR301 KL501 Bus RL300 RD300		SDH20022ZX	6	1st	108.0	3.0	4.05	BF	SR	Cr	Fe	13011-1032
						2nd	108.0	2.5	4.5	T1-IC	CR	Cr	Fe	13011-1032A
						Oil 1	108.0	5.0	4.95	E-BC16	SR	GN	GN	13011-1062
						Oil 2	108.0	4.0	4.5	BC3	CR	Fe	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference						
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower							
H06C-TA	6,485	Ranger 4.25ton FD	SDH20037ZX	6	1st	108.0	2.806	4.05	BF-K1	SR	Cr	Fe	13011-1961						
					2nd	108.0	2.5	4.5	T1-IC	CR	Fe	Fe	13011-2450B						
					3rd	108.0	2.5	4.5	B1-TUC	CR	Cr	Fe	13011-3200A						
					Oil	108.0	5.0	4.95	E-BC16	SR	GN	GN	13019-1260A(cyl)						
H06C EH500	6,485	Ranger 4E	SDH20042ZX	6	1st	108.0	3.0	4.05	BF	SR	Cr	Fe	13011-2080						
					2nd	108.0	2.5	4.5	T1-IC	CR	Fe	Fe	13011-2081B						
					3rd	108.0	2.5	4.5	B1-TUC	CR	Cr	Fe	13019-1750A(cyl)						
					Oil	108.0	5.0	4.95	E-BC16	SR	GN	GN							
H06C-TI	6,485	Ranger Selega	SDH20075ZZ	6	1st	108.0	2.806	4.5	BF-K1-IC	HB	Cr	Fe	13011-3281A						
					2nd	108.0	2.5	4.5	T1-IC	CR	Fe	Fe	13019-1270A(cyl)						
					3rd	108.0	2.5	4.5	B1-TUC	CR	Cr	Fe							
					Oil	108.0	4.0	4.15	E-BC16	SR	Cr	Fe							
DS50	7,982	Truck TA14 TA14D TC51 TH17 TH61 TH80 TH320 TH340D 2C440 2C340D 2H11D 2H12D 2K11 2L100 Bus BD15 BD15F BD35 BD35P BG13 BH15 BT51 BT51S BT71 RB10 RB10P RB120 RB120P	SCH20007ZZ	6	1st	110.0	3.0	4.5	T1	CR	Cr	Fe	13011-1230						
					2nd	110.0	3.0	4.5	T1	CR	Fe	Fe	13011-1250						
					3rd	110.0	3.0	4.5	TUC	CR	Fe	Fe	13011-1261						
					Oil 1	110.0	4.5	4.5	BC1	CR	Cr	Fe	13011-1650						
DS60	7,982				Oil 2	110.0	4.5	4.5	BC1	CR	Fe	Fe	13011-1830						
					SJH20007ZZ	6	1st	110.0	3.0	4.5	T1	CR	Cr	13011-1680					
							2nd	110.0	3.0	4.5	T1	CR	Fe						
							3rd	110.0	3.0	4.5	TUC	CR	Fe						
DS80	7,982						Oil 1	110.0	4.5	4.4	E-BC3	CR	Cr						
							Oil 2	110.0	4.5	4.5	BC1	CR	Fe						
EH700 H07C	6,443	Ranger 4D Ranger 5 Ranger 7D Truck KLSD KP6D	SDH20043ZX	6	1st	110.0	3.0	4.05	BF	SR	Cr	Fe	13011-1610B						
					2nd	110.0	2.5	4.5	T1-IC	CR	Fe	Fe	13011-1620						
					3rd	110.0	2.5	4.5	B1-TUC	CR	Cr	Fe	13011-1620A						
					Oil	110.0	5.0	4.95	E-BC16	SR	GN	GN	13011-1620B 13011-2070A 13011-2090 13011-3010A 13011-3020A 13011-3120A 13019-1310A(cyl)						



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
	H07D	7,412	Ranger	SDH20056ZX	6	1st 2nd Oil	110.0 110.0 110.0	3.0 2.0 4.0	4.05 4.5 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	13011-2650A 13011-2651A 13019-1300A(cyl)
	H07CT	6,728	Ranger SD	SDH20057ZX	6	1st 2nd 3rd Oil	110.0 110.0 110.0 110.0	2.806 2.0 2.5 4.0	4.05 4.5 4.5 4.35	BF-K1 T1-IC B1-TUC E-BC16	SR CR CR SR	Cr Cr Cr GN	Fe Fe Fe GN	13011-2672A 13019-3270A 13019-1330A(cyl)
						1st 2nd 3rd Oil	110.0 110.0 110.0 110.0	2.806 2.0 2.0 4.0	4.5 4.5 4.5 4.15	BF-K1-IC T1-IC B1-TUC E-BC16	HB HB HB SR	Cr Cr Cr Cr	Fe Cr Fe Fe	13011-3470A 13011-3510A 13019-1340A(cyl)
				SDH20098ZY	6	1st 2nd Oil	110.9 110.9 110.9	2.948 2.0 4.0	3.9 4.6 4.45	BF-K1 TUC E-BC16	SR HB SR	GN Cr GN	GN Fe GN	13011-3860A 13011-3930A 13019-1360A(cyl)
						1st 2nd Oil	112.0 112.0 112.0	2.948 2.0 4.0	4.1 4.3 4.35	BF-K1 T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	13011-E0060
	J05E	5,123	Truck Ranger hybrid	SDH20108ZY	4	1st 2nd Oil	112.0 112.0 112.0	2.5 2.0 4.0	4.15 4.3 4.35	BF T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	13011-E0350 13019-1120A(cyl)
	J08E	7,684	Ranger	SDH20102ZY	6	1st 2nd Oil	112.0 112.0 112.0	2.5 2.0 4.0	4.15 4.3 4.35	BF T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	13011-4040A 13019-1120A(cyl)
	J07E	6,403	Ranger Melpha	SDH20104ZY	5	1st 2nd Oil	112.0 112.0 112.0	2.5 2.0 4.0	4.15 4.3 4.35	BF T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	13011-4050A 13019-1120A(cyl)
						1st 2nd Oil	112.0 112.0 112.0	2.948 2.0 4.0	4.1 4.3 4.35	BF-K1 T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	13011-E0370

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
J05C	5,307	Ranger Dutro Melpha Liesse	SDH20081ZY	4	1st	114.0	3.0	4.5	BF	HB	Cr	Fe	13011-3391B
					2nd	114.0	2.0	4.3	T1-IB	SR	GN	GN	13019-1380A(cyl)
					Oil	114.0	4.0	4.35	E-BC16	SR	GN	GN	
			SDH20086ZY	4	1st	114.0	2.5	4.3	BF	SR	GN	GN	13011-3880A
					2nd	114.0	2.0	4.3	T1	SR	GN	GN	13011-3940A
					Oil	114.0	4.0	4.35	E-BC16	SR	GN	GN	13019-1010B(cyl) 13011-3221A 13019-1370A(cyl) S1304-E0210
J07C	6,634	Ranger	SDH20087ZY	5	1st	114.0	2.5	4.3	BF	SR	GN	GN	13011-3660A
					2nd	114.0	2.0	4.3	T1	SR	GN	GN	13011-3900A
					Oil	114.0	4.0	4.35	E-BC16	SR	GN	GN	13019-1010B(cyl)
			SDH20082ZZ	5	1st	114.0	3.0	4.5	BF	HB	Cr	Fe	13011-3371B
					2nd	114.0	2.0	4.3	T1	SR	GN	GN	13011-3771A
					Oil	114.0	4.0	4.35	E-BC16	SR	GN	GN	13019-1380A(cyl)
J08C	7,961	Selega Ranger Rainbow	SDH20067ZZ	6	1st	114.0	3.0	4.5	BF	HB	Cr	Fe	13011-2960A
					2nd	114.0	2.0	4.3	T1	SR	GN	GN	13011-2961A
					Oil	114.0	4.0	4.35	E-BC16	SR	GN	GN	13011-2962A 13019-1380A(cyl)
			SDH20088ZY	6	1st	114.0	2.5	4.3	BF	SR	GN	GN	13011-3570A
					2nd	114.0	2.0	4.3	T1	SR	GN	GN	13011-3820A
					Oil	114.0	4.0	4.35	E-BC16	SR	GN	GN	13011-3890B 13019-1010B(cyl)
			SWH20090ZZ	6	1st	114.0	3.0	4.5	BF	HB	Cr	Fe	13011-3060A
					2nd	114.0	2.0	4.3	T1	SR	GN	GN	13019-1390A(cyl)
					Oil	114.0	4.0	3.40	NIFF-S	SR	GN	GN	
EL100	7,862	Truck Ranger 7E FG185 LB760	SDH20029ZX	6	1st	116.0	3.0	4.25	BF	SR	Cr	Fe	13011-1700
					2nd	116.0	2.5	4.8	T1-IC	CR	Fe	Fe	13011-1700B
					3rd	116.0	2.5	4.8	B1-TUC	CR	Cr	Fe	13011-1710
					Oil	116.0	5.0	4.95	E-BC16	SR	GN	GN	
P09B-TI	8,501	For Marine	SJH20046ZZ	6	1st	117.8	3.306	4.1	BF-K1	SR	GN	GN	13011-2280A
					2nd	117.8	2.806	4.8	T1-K1-IC	HB	Cr	Cr	13011-2830A
					3rd	117.8	2.5	4.8	B1-TUC	CR	Cr	Fe	(Stationary Engine)
					Oil	117.8	5.0	4.7	E-BC3	HB	Cr	Fe	13019-1440A(cyl)
P10C-TI	9,880		SDH20083ZZ	6	1st	117.8	3.306	4.1	BF-K1	SR	GN	GN	13011-3420A
					2nd	117.8	2.306	4.8	T1-K1-IC	HB	Cr	Fe	13019-1450A(cyl)
					3rd	117.8	2.0	4.8	B1-TUC	HB	Cr	Fe	
					Oil	117.8	4.0	4.65	E-BC16	SR	Cr	Fe	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
DK10 DK20	10,178	Truck KA300 KF700 KF720 TC30 TC320 Bus RC10-P RC100 RC120 RC120P RC140P RC300 RC300-P RC320 Tractor HE100 HF300 HF301 HH700 HH720	SJH20012ZZ	6	1st	120.0	3.5	4.6	BF	HB	Cr	Cr	13011-1200	
					2nd	120.0	3.5	4.6	T1-IC	CR	Fe	Fe	13011-1270	
					3rd	120.0	3.5	4.6	Bl-TUC	CR	Fe	Fe	13011-1280	
					Oil 1	120.0	5.0	4.5	E-BC3	CR	Cr	Fe	13011-1280A	
					Oil 2	120.0	5.0	4.6	BC1	HB	Cr	Fe	13011-1290	
													3311-1205-05	
EB300	9,838	Dump Truck KB112D	SDH20017ZZ	6	1st	120.0	3.5	4.6	BF	HB	Cr	Fe	12011-1330	
					2nd	120.0	3.5	4.6	T1-IC	CR	Fe	Fe	13011-1720	
					3rd	120.0	3.5	4.6	Bl-TUC	CR	Fe	Fe	12011-1730A	
					Oil	120.0	6.0	5.5	E-BC3	CR	Cr	Fe	3334-1205-09	
EB400	9,838	RE	SDH20027ZY	6	1st	120.0	3.306	4.8	BF-K1	HB	Cr	Fe	13011-1630	
					2nd	120.0	3.0	4.6	T1-IC	CR	Fe	Fe	13011-1640	
					3rd	120.0	3.0	4.6	Bl-TUC	CR	Cr	Fe	13011-1640A	
					Oil	120.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-2330B 13019-1470A(cyl) 13019-1500A(cyl)	
EP100 P09C-TA	8,821	Super Dolphin FN288 11.5ton	SDH20034ZX	6	1st	120.0	3.306	4.45	BF-K1	SR	Cr	Fe	13011-1952	
					2nd	120.0	2.806	4.8	T1-K1-IC	CR	Cr	Fe	13019-1480A(cyl)	
					3rd	120.0	2.5	4.8	Bl-TUC	CR	Cr	Fe		
					Oil	120.0	5.0	4.95	E-BC16	SR	GN	GN		
			SDH20050ZZ	6	1st	120.0	3.306	4.45	BF-K1	SR	Cr	Fe	13011-2370A	
					2nd	120.0	3.0	4.6	T1-IC	CR	Cr	Fe	13011-2760A	
					3rd	120.0	2.5	4.8	Bl-TUC	CR	Cr	Fe	13011-2760B	
					Oil	120.0	5.0	4.95	E-BC16	SR	GN	GN	13019-1490A(cyl) 13011-E0540 S1304-E0480(cyl)	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
P11C P11B-TI	10,520	Blue Ribbon Super Dolphin Profia	SDH20073ZZ	6	1st	122.0	3.306	4.1	BF-K1	SR	GN	GN	13011-3110A
					2nd	122.0	2.306	4.8	T1-K1-IC	HB	Cr	Fe	13011-3111A
					3rd	122.0	2.0	4.8	B1-TUC	HB	Cr	Fe	13011-3112A
					Oil	122.0	4.0	4.65	E-BC16	SR	Cr	Fe	13011-3114A
													13011-3114B
													13011-3114C
													13011-3800A
													13011-3830A
													13011-3870A
													13019-1030B(cyl)
EM100	9,419	Super Dolphin FH228 8ton	SDH20033ZX	6	1st	124.0	2.806	4.45	BF-K1	SR	Cr	Fe	13011-1921A
					2nd	124.0	2.5	5.0	T1-IC	CR	Cr	Fe	13019-1540A(cyl)
					3rd	124.0	3.0	5.0	B1-TUC	CR	Cr	Fe	
					Oil	124.0	5.0	4.95	E-BC16	SR	GN	GN	
M10-U	9,880	Bus Blue Ribbon HU	SDH20049ZY	6	1st	127.0	3.306	5.2	BF-K1	HB	Cr	Fe	13011-2250A
					2nd	127.0	3.0	5.0	T1-IC	HB	Cr	Fe	13011-2860A
					3rd	127.0	3.0	5.2	B1-TUC	CR	Cr	Fe	13019-1550A(cyl)
					Oil	127.0	5.0	5.0	E-BC3	CR	Cr	Fe	
ED100	11,581	Truck (Export spec) HE35 HH130	SDH20020ZZ	6	1st	128.0	3.5	4.8	BF	HB	Cr	Fe	13011-1470
					2nd	128.0	3.5	4.8	T1-IC	HB	Cr	Fe	13011-1480
					3rd	128.0	3.5	4.8	B1-TUC	CR	Fe	Fe	13011-1660
					Oil	128.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-1670
			SDH20048ZZ	6	1st	128.0	4.0	4.8	BF	HB	Cr	Fe	13011-2230A
					2nd	128.0	4.0	4.8	T1-IC	HB	Cr	Fe	
					3rd	128.0	3.5	4.8	B1-TUC	CR	Fe	Fe	
					Oil	128.0	6.0	5.5	E-BC3	CR	Cr	Fe	
ER200	11,581	RC	SDH20045ZZ	6	1st	128.0	3.5	4.8	BF	HB	Cr	Fe	13011-1770
					2nd	128.0	3.0	4.8	T1-IC	CR	Fe	Fe	13011-1770B
					3rd	128.0	3.0	4.8	B1-TUC	CR	Cr	Fe	
					Oil	128.0	6.0	5.5	E-BC3	CR	Cr	Fe	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
EF100 EF100T	13,804	Truck HE345 TC701 Bus HE345 TC701	SDH20018ZZ	V8	1st	130.0	3.306	5.2	BF-K1	HB	Cr	Fe	13011-1180	
					2nd	130.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-1180A	
					3rd	130.0	3.5	5.4	BI-TUC	CR	Fe	Fe	13011-1570	
					Oil	130.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-1570A	
													13011-1580	
													13011-1590	
EF300 EF350	14,332	Truck TC702D KF703D ZM704D	SDH20024ZZ	V8	1st	132.0	3.306	5.2	BF-K1	HB	Cr	Fe	13011-1100	
					2nd	132.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-1101	
					3rd	132.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-1091A	
					Oil	132.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-1091B	
													13019-1560A(cyl)	
K13B-TI			SJH20074ZZ	6	1st	132.9	3.306	4.5	BF-K1	SR	GN	GN	13011-3210A	
					2nd	132.9	3.5	5.4	T1-IC	HB	Cr	Cr	13019-1570A (cyl)	
					3rd	132.9	3.5	5.4	BI-TUC	CR	Cr	Fe		
					Oil	132.9	5.0	5.5	E-BC3	HB	Cr	Fe		
EG100 EF550	14,886 16,260	Truck KB500D KS320 ZM102 TC541 Bus RV530P 550P Tractor WG300 HF350	SDH20019ZX	V8	1st	135.0	3.306	4.7	BF-K1	SR	GN	GN	13011-1131	
					2nd	135.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-1131B	
					3rd	135.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-1460	
					Oil	135.0	6.0	5.5	E-BC3	CR	Cr	Fe		
EF550	16,260	Super Dolphin	SDH20039ZX	V8	1st	135.0	2.806	5.4	BF-K1	HB	Cr	Fe	13011-2010A	
					2nd	135.0	3.5	5.4	T1-IC	CR	Fe	Fe	13019-1590A(cyl)	
					3rd	135.0	3.0	5.4	BI-TUC	CR	Cr	Fe		
					Oil	135.0	5.0	4.95	E-BC16	SR	Cr	Fe		
			SDH20058ZX	V8	1st	135.0	3.306	4.7	BF-K1	SR	GN	GN	13011-2700	
					2nd	135.0	3.5	5.4	T1-IC	CR	Fe	Fe		
					3rd	135.0	3.5	5.4	BI-TUC	CR	Cr	Fe		
					Oil	135.0	5.0	4.95	E-BC16	SR	Cr	Fe		

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference		
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower			
K13C	12,882	Truck Ranger Super Dolphin Profia FS FR FN	SJH20051ZZ	6	1st	135.0	3.306	5.4	BF-K1	HB	Cr	Fe	13011-2410A		
					2nd	135.0	3.5	5.4	T1-IC	HB	Cr	Cr	13019-1580A(cyl)		
					3rd	135.0	3.5	5.4	BI-TUC	CR	Cr	Fe			
			SJH20071ZX	6	Oil	135.0	6.0	5.5	E-BC3	HB	Cr	Fe			
					1st	135.0	3.306	4.7	BF-K1	SR	GN	GN	13011-3090A		
					2nd	135.0	3.5	5.4	T1-IC	HB	Cr	Cr	13011-2841A		
			SJH20085ZZ	6	3rd	135.0	3.5	5.4	BI-TUC	CR	Cr	Fe			
					Oil	135.0	5.0	4.95	E-BC16	SR	Cr	Fe			
					1st	135.0	3.306	5.4	BF-K1	HB	Cr	Fe	13011-3540A		
K13C	12,882	Truck Ranger Super Profia	SDH20092ZY	6	2nd	135.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-3790A		
					3rd	135.0	3.5	5.4	BI-TUC	CR	Cr	Fe			
					Oil	135.0	5.0	4.95	E-BC16	SR	Cr	Fe			
					1st	135.0	3.306	4.7	BF-K1	SR	GN	GN			
F17D	17,238	FS FR FN FW SH RU	SDH20095ZY	V8	2nd	137.0	3.306	4.7	T1-IC	CR	Fe	Fe	13011-3770A		
					3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13019-1090B(cyl)		
					Oil	137.0	4.0	4.15	E-BC16	SR	GN	GN			
					1st	137.0	3.306	4.7	BF-K1	SR	GN	GN			
					2nd	137.0	3.5	5.4	T1-IC	CR	Fe	Fe			
EK100 EK200 EK130T	13,267	Truck TC303D KF301D ZM103D KB501D KS321	SDH20023ZX	6	3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-1011		
					Oil	137.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-1021		
					1st	137.0	3.306	4.7	BF-K1	SR	GN	GN	13011-1010		
					2nd	137.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-1011		
					3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-1021		
					Oil	137.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-2210		
EF700 EF750	15,920	Tractor	SDH20025ZX	V8	1st	137.0	3.306	4.7	BF-K1	SR	GN	GN	13011-1111		
					2nd	137.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-1112		
					3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-1121		
					Oil	137.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-1121B		
					1st	137.0	3.306	4.7	BF-K1	SR	GN	GN	13011-1122		
					2nd	137.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-2170B		
	16,745	HE HH TC			3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-2180		
					Oil	137.0	6.0	5.5	E-BC3	CR	Cr	Fe	13019-1610A(cyl)		



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
EV700	19,900	Truck SH HE526 SS TC562		SDH20028ZZ	V10	1st	137.0	3.306	5.4	BF-K1	HB	Cr	Fe	13011-1741
						2nd	137.0	3.5	5.4	T1-IC	CR	Fe	Fe	13011-1741B
						3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-1751
						Oil	137.0	6.0	5.5	E-BC3	CR	Cr	Fe	13011-2200A 13019-1610A(cyl)
EF700T EF750T	15,920 16,745	Bus RU60/63		SDH20031ZX	V8	1st	137.0	3.306	4.7	BF-K1	SR	GN	GN	13011-1890
						2nd	137.0	3.306	5.4	T1-K1-IC	CR	Cr	Fe	13011-1891
						3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13011-3100B
						Oil	137.0	6.0	5.5	E-BC3	CR	Cr	Fe	13019-1640A(cyl) 13019-1680A(cyl)
EF750	16,745	FN SS SH FS		SDH20040ZZ	V8	1st	137.0	2.806	5.4	BF-K1	HB	Cr	Fe	13011-1990A
						2nd	137.0	3.5	5.4	T1-IC	CR	Fe	Fe	13019-1670A(cyl)
						3rd	137.0	3.0	5.4	BI-TUC	CR	Cr	Fe	
						Oil	137.0	5.0	5.0	E-BC3	CR	Cr	Fe	
F17D EF750	17,238 16,745	Selega Super Dolphin		SDH20059ZX	V8	1st	137.0	3.306	4.7	BF-K1	SR	GN	GN	13011-2710A
						2nd	137.0	3.5	5.4	T1-IC	HB	Cr	Fe	
						3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	
						Oil	137.0	5.0	4.95	E-BC16	SR	Cr	Fe	
K13D	13,267	Super Dolphin		SDH20061ZX	6	1st	137.0	3.306	4.7	BF-K1	SR	GN	GN	13011-2770
						2nd	137.0	3.5	5.4	T1-IC	HB	Cr	Fe	13011-2771B
						3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	13019-1620A(cyl)
						Oil	137.0	5.0	4.95	E-BC16	SR	Cr	Fe	
F17D-TI	17,238	Selega Super Dolphin		SJH20065ZZ	V8	1st	137.0	3.306	5.4	BF-K1	HB	Cr	Fe	13011-2910A
						2nd	137.0	3.306	5.4	T1-K1-IC	HB	Cr	Cr	13019-1660A(cyl)
						3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	
						Oil	137.0	5.0	4.95	E-BC16	SR	Cr	Fe	
				SJH20078ZZ	V8	1st	137.0	3.306	5.4	BF-K1	HB	Cr	Fe	13011-3480A
						2nd	137.0	3.5	5.4	T1-IC	HB	Cr	Cr	13019-1650A(cyl)
						3rd	137.0	3.5	5.4	BI-TUC	CR	Cr	Fe	
						Oil	137.0	4.0	4.15	E-BC16	SR	Cr	Fe	
E13C	12,913	Profia		SDH20100ZY	6	1st	137.0	3.306	4.1	BF-K1	SR	GN	GN	13011-4010A
						2nd	137.0	2.806	4.9	T1-K1-IB	SR	GN	GN	
						3rd	137.0	2.5	4.5	T1	SR	GN	GN	
						Oil	137.0	4.0	4.4	E-BC16	SR	GN	GN	
V22C	21,548	Super Dolphin		SDH20052ZZ	V10	1st	139.0	3.306	5.4	BF-K1	HB	Cr	Fe	13011-2470A
						2nd	139.0	3.5	5.5	T1-IC	CR	Fe	Fe	13011-2471B
						3rd	139.0	3.5	5.5	BI-TUC	CR	Cr	Fe	13011-2472A
						Oil	139.0	6.0	5.5	E-BC3	CR	Cr	Fe	13019-1690A(cyl)

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference		
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower			
F17C F17E	17,238	Super Dolphin Selega	SDH20053ZX	V8	1st	139.0	3.306	4.7	BF-K1	SR	GN	GN	13011-2810A		
					2nd	139.0	3.5	5.5	T1-IC	CR	Fe	Fe	13011-3150A		
					3rd	139.0	3.5	5.5	B1-TUC	CR	Cr	Fe	13019-1700A		
					Oil	139.0	5.0	4.95	E-BC16	SR	GN	GN			
V22D	21,548	Super Dolphin	SDH20072ZY	V10	1st	139.0	3.306	5.4	BF-K1	HB	Cr	Fe	13011-3170A		
					2nd	139.0	3.5	5.5	T1-IC	HB	Cr	Fe	13011-3180		
					3rd	139.0	3.5	5.5	B1-TUC	CR	Cr	Fe	13019-1700A(cyl)		
					Oil	139.0	5.0	4.95	E-BC16	SR	GN	GN			
F20C	19,688	Ranger Truck Super Dolphin Profia FS	SJH20062ZZ	V8	1st	146.0	3.306	5.6	BF-K1	HB	Cr	Fe	13011-2792A		
					2nd	146.0	3.5	5.6	T1-IC	HB	Cr	Cr	13011-3250A		
					3rd	146.0	3.5	5.7	B1-TUC	CR	Cr	Fe	13019-1710A(cyl)		
			SJH20077ZZ	V8	1st	146.0	3.306	5.6	BF-K1	HB	Cr	Fe	13011-3320A		
		Profia SS			2nd	146.0	3.0	5.6	T1-IC	HB	Cr	Cr	13019-1720A(cyl)		
					3rd	146.0	3.0	5.7	B1-TUC	HB	Cr	Fe			
					Oil	146.0	4.0	4.65	E-BC16	SR	Cr	Fe			
V25C	24,610	Super Dolphin Profia SS	SJH20069ZZ	V10	1st	146.0	3.306	5.6	BF-K1	HB	Cr	Fe	13011-2980A		
					2nd	146.0	3.5	5.6	T1-IC	HB	Cr	Cr	13011-2981A		
					3rd	146.0	3.5	5.7	B1-TUC	CR	Cr	Fe	13019-1710A(cyl)		
					Oil	146.0	5.0	4.95	E-BC16	SR	Cr	Fe			
V26C	25,977	Super Dolphin	SJH20080ZY	V10	1st	150.0	3.306	5.5	BF-K1	SR	GN	GN	13011-3450A		
					2nd	150.0	3.0	5.8	T1-IC	HB	Cr	Cr	13019-1730A(cyl)		
					3rd	150.0	3.0	5.8	B1-TUC	HB	Cr	Fe			
					Oil	150.0	4.0	4.65	E-BC16	SR	Cr	Fe			
F21C	20,781	Selega Super Dolphin	SJH20076ZY	V8	1st	150.0	3.306	5.5	BF-K1	SR	GN	GN	13011-3310A		
					2nd	150.0	3.0	5.8	T1-IC	HB	Cr	Cr	13019-1730A(cyl)		
					3rd	150.0	3.0	5.8	B1-TUC	HB	Cr	Fe			
					Oil	150.0	4.0	4.65	E-BC16	SR	Cr	Fe			



● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
E07Z	658	Z Z turbo Life	SWH30495ZZ (TCC-G-0081)	3	1st	66.0	1.2	2.25	BF	SR	Cr	Fe	13011-PDF-004
					2nd	66.0	1.2	2.85	T1	CR	Fe	Fe	
					Oil	66.0	2.8	2.5	NIFF-S	SR	Cr	Fe	
EB1	1,169	Civic 1200	SWH30107ZZ	4	1st	70.0	1.5	2.8	T1	CR	Cr	Fe	13011-634-004
					2nd	70.0	1.5	2.8	T1	CR	Fe	Fe	
					Oil	70.0	2.8	2.75	NIFF-S	SR	Cr	Fe	
RGB(T/C)			YWH30442ZY	1	1st	71.0	1.2	2.45	BF-IB	SR	Cr	Fe	13011-RGB-0060(cyl)
					2nd	71.0	1.2	2.8	T1	CR	Fe	Fe	
					Oil	71.0	2.5	2.5	NIFF-H	SR	Cr	Fe	
P07A	658	Life Turbo Life NA	SWH30473ZZ	3	1st	71.0	1.0	2.3	BF-IB	SR	GN	GN	13011-RS9-006
					2nd	71.0	1.2	2.8	T1	CR	Fe	Fe	
					Oil	71.0	2.0	2.2	NIFF-H	SR	GN	GN	
EB2	1,237	Civic 1200	SWH30184ZY	4	1st	72.0	1.5	2.85	BF	SR	Cr	Fe	13011-642-003
					2nd	72.0	1.5	3.4	T1	CR	Fe	Fe	
					Oil	72.0	2.8	3.0	NIFF-S	SR	Cr	Fe	
E12 EJ1	1,335	Civic 1300 Ballade	SWH30219ZZ	4	1st	72.0	1.0	2.85	BF	SR	Cr	Fe	13011-PA5-034
					2nd	72.0	1.2	3.2	T1	CR	Fe	Fe	
					Oil	72.0	2.8	3.0	NIFF-S	SR	Cr	Fe	
EN EJ	1,335	Ballade Civic 1300 Civic Van SV	SWH30162ZZ	4	1st	72.0	1.5	3.1	BF	HB	Cr	Fe	13011-PA0-004
					2nd	72.0	1.5	3.4	T1	CR	Fe	Fe	
					Oil	72.0	4.0	3.05	NIFF-S	SR	Cr	Fe	
L13A	1,339	Fit 1.3L	SWH30465ZZ	4	1st	73.0	1.0	2.3	BF-IB	SR	GN	GN	13011-RB0-006(cyl)
					2nd	73.0	1.0	2.3	TUC	SR	Fe	Fe	
					Oil	73.0	2.0	2.2	NIFF-H	SR	GN	GN	
LDA-MF3	1,339	Civic Hybrid	SWH30474ZZ	4	1st	73.0	1.0	2.25	BF-IB	SR	Cr	Fe	13011-PWA-G01
					2nd	73.0	1.2	3.0	TUC	CR	Fe	Fe	
					Oil	73.0	2.0	2.2	NIFF-H	SR	Cr	Fe	
EC	1,488	Civic 1500SE Civic Van VB	SWH30091ZZ	4	1st	74.0	1.5	3.4	BF	CR	Cr	Fe	13011-657-003
					2nd	74.0	1.5	3.2	T1	CR	Fe	Fe	
					Oil	74.0	2.8	2.8	NIFF-S	SR	Cr	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
ED3	1,488	Civic 1500	SWH30114ZZ	4	1st	74.0	1.5	3.4	BF	CR	Cr	Fe	13011-657-670
ED4	1,488	Ballade 1500 SG,SH,ST			2nd	74.0	1.5	3.2	T1	CR	Fe	Fe	13011-657-671
EM1	1,599	Accord 1600SJ			Oil	74.0	4.0	3.05	NIFF-S	SR	Cr	Fe	13011-657-675 13011-671-004 13011-PA6-004
D15A3	1,488	Civic CVCC Hatch Back											
D13A2 EV1	1,342	CRX Civic	SWH30252ZZ	4	1st	74.0	1.2	2.8	BF	SR	Cr	Fe	13011-PE0-662
D15A2	1,488	Civic CVCC Civic 1500 Ballade 1500			Oil	74.0	2.8	2.8	NIFF-S	SR	Cr	Fe	13011-PA6-014 13011-PE1-004 13011-PE7-014
EW	1,488	Civic Ballade			1st	74.0	1.5	2.9	BF	SR	GN	GN	13011-PE3-004
EV	1,342				2nd	74.0	1.5	3.2	T1	CR	Cr	Fe	
D15A	1,488	Civic 1500 CRX	SWH30374ZZ	4	1st	74.0	1.0	2.7	BF	SR	Cr	Fe	13011-PE0-004
D15B7 D16A1 D16A8	1,493 1,590	Civic 1500 Civic 1600			2nd	74.0	1.2	3.2	T1	CR	Fe	Fe	
D15B6	1,493	CRX			Oil	74.0	2.8	2.8	NIFF-S	SR	Cr	Fe	
D15B1 D15B2 D15B8	1,493	Civic 1500 Civic 1600 CRX	SWH30365ZZ	4	1st	75.0	1.2	2.7	BF	SR	Cr	Fe	13011-PM5-A02
D16A1 D16A8	1,590	Integra Partner			2nd	75.0	1.5	3.2	TUC	CR	Cr	Fe	13011-PJ1-752
SH4 PM0	1,488	Civic 1500 CRX Domani			Oil	75.0	2.8	2.55	NIFF-S	SR	GN	GN	
D15Z1 D16Y5 D16Y7 D16Y8	1,493 1,590	Civic 1500 Civic 1600	SWH30423ZZ	4	1st	75.0	1.0	2.65	BF-IB	SR	Cr	Fe	13011-P07-004
					2nd	75.0	1.2	2.8	TUC	CR	Fe	Fe	13011-P08-004
					Oil	75.0	2.8	2.55	NIFF-S	SR	Cr	Fe	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment	Reference			
							d 1 (D)	h 1 (B)	a 1 (T)							
D17A1 D17A7 D17A8	1,668	Civic Stream	SWH30440ZZ	4	1st	75.0	1.0	2.65	BF-IB	SR	Cr	Fe	13011-PLM-A00			
					2nd	75.0	1.2	3.0	T1	CR	Fe	Fe	13011-PLR-A00			
					Oil	75.0	2.0	2.45	NIFF-S	SR	Cr	Fe				
D15B7	1,493	Partner Domani	SWH30445ZZ	4	1st	75.0	1.2	2.7	BF	SR	Cr	Fe	13011-P04-G02			
EK1	1,751	Accord Prelude Vigor	SWH30158ZZ	4	1st	77.0	1.5	2.85	BF	SR	Cr	Fe	13011-676-602			
					2nd	77.0	1.5	3.3	TUC	CR	Fe	Fe	13011-676-604			
					Oil	77.0	4.0	3.05	NIFF-S	SR	Cr	Fe	13011-676-642			
EP	1,601												13011-689-003 13011-689-015 13011-689-005			
A18A1	1,829	Accord Prelude	SWH30251ZZ	4	1st	80.0	1.5	3.05	BF	SR	Cr	Fe	13011-PC6-004			
EY ET2	1,598				2nd	80.0	1.5	3.4	TUC	CR	Fe	Fe	13011-PC6-013			
					Oil	80.0	4.0	3.3	NIFF-S	SR	Cr	Fe	13011-PC7-023			
A18A	1,829	Accord Prelude	SWH30409ZZ	4	1st	80.0	1.2	3.05	BF-IB	SR	Cr	Fe	13011-PH2-902			
					2nd	80.0	1.2	3.3	T1	CR	Fe	Fe	13011-PH2-901			
					Oil	80.0	2.8	2.85	NIFF-S	SR	Cr	Fe	13011-PD4-003			
B16A1 B17A1	1,595 1,678	Integra Civic	SWH30373ZZ	4	1st	81.0	1.0	3.1	BF-IB	SR	Cr	Fe	13011-PR3-003			
B18A1 B18B1	1,835				2nd	81.0	1.2	3.4	TUC	CR	Fe	Fe	13011-PR3-004			
					Oil	81.0	2.8	2.7	NIFF-S	SR	Cr	Fe	13011-PR4-A02			
B18A	1,835	Prelude Accord	SWH30375ZZ	4	1st	81.0	1.2	3.1	BF	SR	GN	GN	13011-PK1-751			
B20A3	1,958				2nd	81.0	1.5	3.2	TUC	HB	Fe	Fe	13011-PK1-752			
					Oil	81.0	2.8	2.8	NIFF-S	SR	GN	GN	13011-PH3-004 13011-PH3-901 13011-PH5-003 13011-PJ5-601 13011-PK1-003			

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
R18A1	1,799	Cross Road	SWH30484ZY	4	1st	81.0	1.2	2.5	BF-IB	SR	GN	GN	13011-RNB-A02
		Civic Stream			2nd	81.0	1.2	3.4	TUC	CR	Fe	Fe	13011-RNA-A02
	1,997	Accord Step Wagon Stream CR-V			Oil	81.0	2.0	2.5	NIFF-H	SR	GN	GN	13011-RZP-004
R20A													
C20A	1,996	Legend 2000	SWH30449ZZ	V6	1st	82.0	1.2	3.05	BF-IB	SR	Cr	Fe	13011-PH6-003
					2nd	82.0	1.2	3.3	T1	CR	Fe	Fe	
					Oil	82.0	2.8	2.85	NIFF-S	SR	Cr	Fe	
G20A	1,996	Inspire Rafaga Vigor	TCC-G-0068	5	1st	82.0	1.2	3.05	BF-IB	SR	Cr	Fe	13011-PV0-003
					2nd	82.0	1.2	3.3	T1	CR	Fe	Fe	13011-PV0-004
					Oil	82.0	2.8	2.85	NIFF-S	SR	Cr	Fe	13011-PV0-013 13011-PV0-014
A20A BT	1,995	Accord 2000 Vigor Prelude	SWH30366ZZ	4	1st	82.7	1.5	3.1	BF	SR	GN	GN	13011-PH4-751
					2nd	82.7	1.5	3.2	T1	CR	Cr	Fe	
					Oil	82.7	4.0	3.25	NIFF-S	SR	GN	GN	
B21A1	2,056	Prelude	SWH30448ZZ	4	1st	83.0	1.2	3.05	BF-IB	SR	Cr	Fe	13011-PK3-A04
					2nd	83.0	1.2	3.1	T1	CR	Cr	Fe	
					Oil	83.0	2.8	2.8	NIFF-S	SR	GN	GN	
C25A1	2,494	Legend 2500	SWH30369ZZ	V6	1st	84.0	1.2	3.1	BF-IB	SR	Cr	Fe	13011-PH7-003
					2nd	84.0	1.2	3.6	T1-IB	CR	Fe	Fe	
					Oil	84.0	4.0	3.25	NIFF-S	SR	Cr	Fe	
B20B4 B20Z2	1,972	CR-V Orthia	SWH30437ZZ	4	1st	84.0	1.2	2.9	BF-IB	SR	GN	GN	13011-P3F-003
					2nd	84.0	1.2	3.4	T1	CR	Fe	Fe	
					Oil	84.0	2.8	2.6	NIFF-S	SR	Cr	Fe	
F22A1 F22A4 F22A6 F22B1 F22B2 F22B6	2,156	Accord Prelude Odyssey	SWH30383ZY	4	1st	85.0	1.2	3.05	BF	SR	Cr	Fe	13011-PT0-B03
					2nd	85.0	1.2	3.4	T1	CR	Fe	Fe	
					Oil	85.0	2.8	2.85	NIFF-S	SR	Cr	Fe	
F20A	1,997	Ascot Accord	SDH30444ZZ	4	1st	85.0	1.2	3.05	BF	SR	Cr	Fe	13011-PT1-M02
					2nd	85.0	1.2	3.4	T1	CR	Cr	Fe	13011-PT1-506
					Oil	85.0	3.0	3.25	E-BC16	SR	GN	GN	



Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)			Outside		
F22A	2,156	Accord Prelude Odyssey	SWH30476ZZ	4	1st	85.0	1.2	3.05	BF	SR	Cr	Fe	13011-PT4-X01
					2nd	85.0	1.2	3.4	T1	CR	Fe	Fe	13011-PT4-X02
					Oil	85.0	2.8	2.55	NIFF-S	SR	GN	GN	13011-PT4-X03 13011-PT4-X04
F23A1 F23A4 F23A5 F23A7	2,254	Avancier Odyssey	SWH30443ZZ	4	1st	86.0	1.2	2.9	BF	SR	Cr	Fe	13011-PEA-004
					2nd	86.0	1.2	3.4	T1	CR	Fe	Fe	13011-PAA-Y01
					Oil	86.0	2.8	2.85	NIFF-S	SR	Cr	Fe	
J30A1 J30A4 J30A5 JNA1	2,997	Accord	SWH30432ZZ	V6	1st	86.0	1.2	2.9	BF	SR	Cr	Fe	13011-P8A-A01
					2nd	86.0	1.2	3.4	T1	CR	Fe	Fe	
					Oil	86.0	2.8	2.85	NIFF-S	SR	Cr	Fe	
K20A1 K20A2 K20A3 K20Z1 K20Z2	1,998	Civic	SWH30454ZZ	4	1st	86.0	1.2	2.9	BF	SR	Cr	Fe	13011-PNE-G02
					2nd	86.0	1.2	3.4	T1	CR	Fe	Fe	
					Oil	86.0	2.0	2.5	NIFF-H	SR	GN	GN	
C27A1 C27A4	2,675	Accord Legend	SWH30370ZZ	V6	1st	87.0	1.2	3.1	BF-IB	SR	Cr	Fe	13011-PL2-003
					2nd	87.0	1.2	3.5	T1-IB	CR	Fe	Fe	13011-P0G-A01
					Oil	87.0	4.0	3.15	NIFF-S	SR	Cr	Fe	
H22A1 H22A4	2,157	Accord Prelude	SWH30433ZZ	4	1st	87.0	1.2	3.1	BF-IB	SR	GN	GN	13011-P5M-003
					2nd	87.0	1.2	3.2	TUC	CR	Cr	Fe	13011-PI3-004
					Oil	87.0	2.8	2.55	NIFF-S	SR	GN	GN	
K24A2	2,354	TSX	SWH30435ZZ	4	1st	87.0	1.2	3.1	BF-IB	SR	GN	GN	13011-RBB-006
					2nd	87.0	1.2	3.4	TUC	HB	Cr	Fe	
					Oil	87.0	2.5	2.5	NIFF-H	SR	GN	GN	
K24A3 K24A4 K24A8 K24Z1	2,354	CR-V	SWH30466ZZ	4	1st	87.0	1.2	3.1	BF-IB	SR	Cr	Fe	13011-RAA-A01
					2nd	87.0	1.2	3.4	TUC	CR	Fe	Fe	13011-RAD-004
					Oil	87.0	2.0	2.5	NIFF-H	SR	Cr	Fe	13011-PPA-004
K24Z3	2,354	TSX	SWH30467ZZ	4	1st	87.0	1.2	2.7	BF-IB	SR	GN	GN	13011-RL5-A02(cyl)
					2nd	87.0	1.2	3.4	TUC	HB	Cr	Fe	
					Oil	87.0	2.0	2.5	NIFF-H	SR	GN	GN	
K24Z3 K24Z7 K24W1 K24W2 K24W3	2,354	ILX TSX Civic Si CR-V Accord	SWH30488ZZ	4	1st	87.0	1.2	2.65	BF-IB	SR	Cr	Fe	13011-R40-A01
					2nd	87.0	1.2	3.4	TUC	HB	Cr	Fe	
					Oil	87.0	2.0	2.5	NIFF-H	SR	Cr	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
J32A2	3,210	Odyssey	SWH30438ZZ	V6	1st	89.0	1.2	3.05	BF	SR	Cr	Fe	13011-P8F-A01
J35A1	3,471				2nd	89.0	1.2	3.4	T1	CR	Fe	Fe	
J35A3					Oil	89.0	2.8	2.85	NIFF-S	SR	Cr	Fe	
J35A4													
J34A6													
J35A7													
J35A8													
J35A9													
J35Z1													
J35Z2													
J35Z3													
J35Z4													
J35Z6													
C32A1	3,206	Legend Acura TL	SWH30371ZZ	V6	1st	90.0	1.2	3.3	BF-IB	SR	Cr	Fe	13011-PY3-003
					2nd	90.0	1.2	3.7	T1	CR	Fe	Fe	
					Oil	90.0	2.8	2.85	NIFF-S	SR	GN	GN	
C30A	2,977	NSX	SDH30469ZZ	V6	1st	90.0	1.2	3.1	BF-IB	SR	GN	GN	13011-RKG-E020-M4
					2nd	90.0	1.2	3.4	TUC	HB	Cr	Fe	
					Oil	90.0	2.0	2.75	E-BC16	SR	GN	GN	

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
4XC-1	1,471	Gemini	SWI10151ZZ	4	1st Oil	77.0 77.0	1.5 2.8	3.3 3.1	T1-IB NIFF-S	HB SR	Cr GN	Fe GN	8-94141-947-0
					SWI10153ZZ	4	1st 2nd Oil	77.0 77.0 77.0	1.2 1.2 2.8	2.9 3.5 3.1	BF T1-IB NIFF-S	SR CR SR	GN Cr GN
4XE1 4XE1W	1,588	Panero Gemini	SWI10149ZZ	4	1st 2nd Oil	80.0 80.0 80.0	1.2 1.2 3.0	3.1 3.3 2.5	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8-94370-434-0
		SWI10012ZX			4	1st 2nd Oil	82.0 82.0 82.0	2.0 2.0 4.0	3.05 3.8 3.8	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe
G161AB G161B G161Z	1,584	Florian Elf	SWI10097ZZ	4	1st 2nd Oil	82.0 82.0 82.0	1.5 1.5 4.0	3.45 3.8 3.25	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8-94244-403-0(cyl)
G180	1,817	LUV			SWI10056ZZ	4	1st 2nd Oil	84.0 84.0 84.0	2.0 2.0 4.0	3.8 4.0 3.8	BF T1 NIFF-S	CR CR SR	Cr Fe Cr
G180W	1,817	Gemini 1800 sports	SWI10087ZZ	4	1st 2nd Oil	84.0 84.0 84.0	2.0 2.0 4.0	3.8 3.8 3.8	BF T1 NIFF-S	CR CR SR	Cr Cr Cr	Fe Fe Fe	8-94224-555-0
G180Z 4ZB	1,817	Aska Florian	SWI10098ZZ	4	1st 2nd Oil	84.0 84.0 84.0	1.5 1.5 4.0	3.5 3.8 3.25	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	8-94141-443-0 8-94249-218-0 8-94244-404-0(cyl)
					SWI10205ZX	4	1st 2nd Oil	86.0 86.0 86.0	1.5 1.5 3.0	3.45 3.5 2.85	BF TUC NIFF-S	SR CR SR	Cr Fe Cr
X22SE 22LE C22NE C22SE	2,198	Amigo Rodeo Elf 2.2	SWI10206ZZ	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.5 2.5	2.7 3.5 2.85	BF TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	8-92065-115-0
					SWI10084ZZ	4	1st 2nd Oil	87.0 87.0 87.0	2.0 2.0 4.0	3.8 3.8 3.3	BF T1 NIFF-S	CR CR SR	Cr Cr Cr
G200	1,949	Piazza 117Coupe	SWI10096ZZ	4	1st 2nd Oil	87.0 87.0 87.0	1.5 1.5 4.0	3.5 3.8 3.3	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	8-94231-817-0(cyl)
G200ZN	1,949	LUV Trooper											

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper	
C24SE	2,405	D-MAX 2.4	SWI10220ZZ	4	1st 2nd Oil	87.5 87.5 87.5	1.2 1.5 2.5	3.1 3.7 2.7	BF TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	8-93359-241-0
4ZC1	1,944	Fargo Aska	SWI10133ZZ	4	1st 2nd Oil	88.0 88.0 88.0	1.5 1.5 4.0	3.45 3.8 3.3	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8-94119-545-0 8-94235-878-0 8-94409-555-0
LL2	2,827	Trooper	SWI10154ZZ	6	1st 2nd Oil	89.0 89.0 89.0	1.5 2.0 4.76	4.05 4.05 3.9	BF T1-RC NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	8-14089-059-0
LN2	2,197	Hombre GM Truck	SWI10195ZZ	4	1st 2nd Oil	89.0 89.0 89.0	1.5 1.5 3.0	4.05 3.6 2.95	BF TUC NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	8-12363-179-0
4ZD1	2,254	Trooper	SWI10123ZZ	4	1st 2nd Oil	89.3 89.3 89.3	1.5 1.5 4.0	3.3 3.8 3.05	BF T1 NIFF-S	SR HB SR	GN Cr GN	GN Fe GN	8-94153-966-0 8-94136-778-1
4ZE1	2,559	Mu Bighorn	SWI10144ZZ	4	1st 2nd Oil	92.6 92.6 92.6	1.5 1.5 4.0	3.3 4.0 3.05	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	8-94405-614-0 8-94446-957-1
6VD1	3,165	Trooper Bighorn	SWI10185ZZ	6	1st 2nd Oil	93.4 93.4 93.4	1.5 1.5 4.0	3.45 4.0 3.15	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8-97162-198-0
6VE1	3,494	Rodeo Sport	SWI10191ZZ	6	1st 2nd Oil	93.4 93.4 93.4	1.5 1.5 3.0	3.25 4.0 2.85	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8-97136-135-0
			SDI10217ZZ		1st 2nd Oil	93.4 93.4 93.4	1.2 1.2 2.0	3.5 3.8 2.75	BF-IB TUC E-BC16	SR HB SR	GN Cr GN	GN Fe GN	8-97371-553-0
6VD1-2	3,165	Wizard Bighorn Mu	SWI10230ZZ (TCC-G-0077)	6	1st 2nd Oil	93.4 93.4 93.4	1.5 1.5 3.0	3.3 4.0 2.85	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	8-97170-113-0
LF6	4,293	Hombre	SWI10196ZZ	V6	1st 2nd Oil	101.6 101.6 101.6	1.5 1.5 3.0	3.65 4.2 3.35	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8-12522-848-0 (cyl)
LF8	5,735	Hombre	SWI10197ZZ	V8	1st 2nd Oil	101.6 101.6 101.6	1.5 1.5 3.0	3.65 4.2 3.35	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8-12522-848-0 (cyl)



● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
3KA1 3KB1	877	For Industrial Machine	SDI10105ZZ	3	1st	70.0	2.0	2.9	BF	HB	Cr	Fe	8-94131-493-0 (cyl)
					2nd	70.0	1.5	3.1	T1	CR	Fe	Fe	
					Oil	70.0	3.5	3.25	E-BC3	CR	Cr	Fe	
3KC1	877	For Industrial Machine	SDI10102ZZ	3	1st	74.0	2.0	2.9	BF	HB	Cr	Fe	5-12121-031-0 (cyl)
					2nd	74.0	1.5	3.1	T1	CR	Fe	Fe	
					Oil	74.0	3.5	3.25	E-BC3	CR	Cr	Fe	
4EC1	1,487	Gemini	SDI10143ZZ	4	1st	76.0	2.0	3.1	BF	HB	Cr	Fe	8-94144-187-0 8-94332-767-1
					2nd	76.0	1.5	3.1	T1	CR	Cr	Fe	
					Oil	76.0	3.0	3.25	E-BC16	SR	GN	GN	
4FE1	1,487	Fork Lift	SDI10212ZZ	4	1st	76.3	2.0	3.5	BF	CR	Cr	Fe	8-94169-748-0
					2nd	76.3	2.0	3.5	T1	CR	Cr	Fe	
					Oil	76.3	4.0	3.7	E-BC16	CR	Cr	Fe	
4LC1	1,731	For Industrial Machine	SJI10213ZZ	4	1st	77.4	2.0	3.1	BF	HB	Cr	Cr	8-97034-609-0
					2nd	77.4	1.5	3.2	T1	CR	Fe	Fe	
					Oil	77.4	3.5	3.25	E-BC16	HB	Cr	Fe	
4EE2	1,686	Gemini	SDI10202ZZ	4	1st	79.0	2.0	2.7	BF	SR	GN	GN	8-94381-709-1
					2nd	79.0	1.5	3.3	TUC	CR	Fe	Fe	
					Oil	79.0	3.0	3.25	E-BC16	SR	GN	GN	
RZ4E-TC	1,897	D-MAX	TCC-J-0080	4	1st	80.0	2.0		BF-K2	SR	GN	GN	8-98333-347-0
					2nd	80.0	1.5		TUC	SR	GN	GN	
					Oil	80.0	2.0		E-BC16	SR	GN	GN	
3KR1	1,422	For Industrial Machine	SDI10113ZZ	3	1st	81.0	2.0	3.4	BF	HB	Cr	Fe	5-12121-029-0 (cyl)
					2nd	81.0	1.75	3.4	T1	CR	Fe	Fe	
					Oil	81.0	4.0	3.9	E-BC3	CR	Cr	Fe	
C220	2,207	Truck Elf TLD11 TLD60 TKD11 TLD30 TLD30V Bus BLD11 TLD21B For Chromard Liner	SDI10013ZZ	4	1st	83.0	2.0	3.4	T1	CR	Fe	Fe	9-12181-100-0 9-12181-057-0
					2nd	83.0	2.0	3.4	T1	CR	Fe	Fe	
					3rd	83.0	2.0	3.4	TUC	CR	Fe	Fe	
					Oil 1	83.0	4.0	3.8	E-C1	CR	Fe	Fe	
					Oil 2	83.0	4.0	3.4	BC1	CR	Fe	Fe	
C221	2,207	Truck Elf For Chromard Liner	SDI10017ZZ	4	1st	83.0	2.0	3.4	T1	CR	Fe	Fe	5-12181-122-0
					2nd	83.0	2.0	3.4	T1	CR	Fe	Fe	
					3rd	83.0	2.0	3.4	TUC	CR	Fe	Fe	
					Oil 1	83.0	5.0	3.8	E-BC3	CR	Fe	Fe	
					Oil 2	83.0	5.0	3.4	BC1	CR	Fe	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside / Upper / Lower	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)					
C201PT	2,207	Truck Elf	SJI10018ZZ	4	1st	83.0	2.0	3.4	BF	HB	Cr	Cr	5-12181-005-0
					2nd	83.0	2.0	3.4	T1	CR	Fe	Fe	5-12121-013-0 (cyl)
					3rd	83.0	2.0	3.4	TUC	CR	Fe	Fe	
					Oil 1	83.0	5.0	3.8	E-BC3	CR	Cr	Fe	
					Oil 2	83.0	5.0	3.4	BC1	CR	Fe	Fe	
4FB1	1,817	Gemini	SDI10086ZX	4	1st	84.0	2.5	3.25	BF	SR	Cr	Fe	8-94224-221-0(cyl)
					2nd	84.0	2.0	3.5	T1	CR	Cr	Fe	
					Oil	84.0	4.0	4.35	E-BC16	SR	GN	GN	
4FC1(T)	1,995	Aska Fargo	SJI10109ZZ	4	1st	84.0	2.5	3.5	BF-K2	HB	Cr	Fe	8-94139-973-0 (cyl)
					2nd	84.0	2.0	3.5	T1	CR	Cr	Cr	
					Oil	84.0	4.0	4.2	E-BC3	CR	Cr	Fe	
4JD1	2,800	Mu	SJI10121ZZ	4	1st	84.0	2.0	3.25	BF	HB	Cr	Cr	8-94318-702-0 (cyl)
					2nd	84.0	2.0	3.5	T1	CR	Cr	Cr	
					Oil	84.0	4.0	4.2	E-BC3	CR	Cr	Fe	
4LE1	2,179	For Industrial Machine	SJI10216ZZ	4	1st	85.0	2.0	3.35	BF	HB	Cr	Cr	8-97141-208-0
					2nd	85.0	1.75	3.7	T1-IB	CR	Fe	Fe	
					Oil	85.0	4.0	4.1	E-BC16	SR	Cr	Fe	
C240	2,369	Truck Elf Florian Journey For Chromard Liner	SDI10047ZZ	4	1st	86.0	2.0	3.5	T1	CR	Fe	Fe	9-12181-138-0
					2nd	86.0	2.0	3.5	T1	CR	Fe	Fe	
					3rd	86.0	2.0	3.5	TUC	CR	Fe	Fe	
					Oil 1	86.0	5.0	3.9	E-BC3	CR	Fe	Fe	
					Oil 2	86.0	5.0	3.5	BC1	CR	Fe	Fe	
C190	1,951	Truck Elf For Chromard Liner	SDI10051ZZ	4	1st	86.0	2.0	3.5	T1	CR	Fe	Fe	9-12181-603-0
					2nd	86.0	2.0	3.5	T1	CR	Fe	Fe	5-12181-027-0
					3rd	86.0	2.0	3.5	TUC	CR	Fe	Fe	9-12181-603-0
					Oil	86.0	5.0	4.2	E-BC3	CR	Fe	Fe	9-12181-605-0
2AB1	1,184	For Industrial Machine	SJI10068ZZ	2	1st	86.0	2.0	3.5	BF	HB	Cr	Cr	5-12181-010-2
					2nd	86.0	2.0	3.5	T1	CR	Cr	Fe	5-12121-010-0
					3rd	86.0	2.0	3.5	TUC	CR	Fe	Fe	
					Oil	86.0	5.0	4.3	E-BC3	CR	Cr	Fe	
3AB1	1,777	For Industrial Machine	SJI10069ZZ	3	1st	86.0	2.0	3.5	BF	HB	Cr	Cr	5-12181-011-2
					2nd	86.0	2.0	3.5	T1	CR	Cr	Fe	5-12121-010-0 (cyl)
					3rd	86.0	2.0	3.5	TUC	CR	Fe	Fe	
					Oil	86.0	5.0	4.3	E-BC3	CR	Cr	Fe	
C190G	1,951	Florian Van	SDI10083ZX	4	1st	86.0	2.0	3.25	BF	SR	Cr	Fe	5-12121-008-0 (cyl)
					2nd	86.0	2.0	3.5	T1	CR	Cr	Fe	
					3rd	86.0	2.0	3.5	TUC	CR	Cr	Fe	
					Oil	86.0	5.0	4.3	E-BC3	CR	Cr	Fe	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside	Upper/Lower	Reference		
							d 1 (D)	h 1 (B)	a 1 (T)							
C190	1,951	Truck Elf 150	SDI10093ZZ	4	1st	86.0	2.5	4.0	BF	HB	Cr	Fe	8-94104-954-0 (cyl)			
	2,369				2nd	86.0	2.0	3.5	T1-IC	CR	Cr	Fe	5-12121-022-0 (cyl)			
					Oil	86.0	5.0	4.3	E-BC3	CR	Cr	Fe	5-12121-022-01 (cyl)			
C190	1,951	Truck Elf 150 For Chromard Liner	SDI10095ZZ	4	1st	86.0	2.5	3.8	T1	CR	Fe	Fe	8-94104-949-0 (cyl)			
	2,369				2nd	86.0	2.0	3.5	TUC	CR	Fe	Fe	5-12121-021-0 (cyl)			
					Oil	86.0	5.0	4.2	E-BC3	CR	Fe	Fe				
C240PKG	2,369	Truck Elf For Chromard Liner	SDI10122ZZ	4	1st	86.0	2.5	3.8	BF	CR	Fe	Fe	8-94471-442-0			
					2nd	86.0	2.0	3.5	TUC	CR	Fe	Fe				
					Oil	86.0	5.0	4.2	E-BC3	CR	Fe	Fe				
C223	2,238	117 Coupe	SJI10089ZZ	4	1st	88.0	2.5	4.0	BF	HB	Cr	Cr	5-12121-017-0(cyl)			
					2nd	88.0	2.0	4.0	TUC	CR	Cr	Cr	8-94100-355-0 (cyl)			
					Oil	88.0	4.5	4.7	E-BC3	CR	Cr	Fe				
	2,238	Rodeo Bighorn For Chromard Liner	SJI10099ZZ	4	1st	88.0	2.5	4.0	BF	CR	Fe	Cr	5-12121-024-0(cyl)			
					2nd	88.0	2.0	4.0	TUC	CR	Fe	Cr				
C223 4FD1	2,238	Rodeo Bighorn	SDI10101ZX	4	1st	88.0	2.0	3.25	BF	SR	Cr	Fe	8-94250-730-0 (cyl)			
					2nd	88.0	2.0	3.55	TUC	CR	Cr	Fe				
					Oil	88.0	4.0	4.35	E-BC16	SR	GN	GN				
C223	2,238	Rodeo Bighorn For Chromard Liner	SDI10103ZZ	4	1st	88.0	2.0	3.5	BF	CR	Fe	Fe	8-94253-736-0 (cyl)			
					2nd	88.0	2.0	3.55	TUC	CR	Fe	Fe	8-94408-207-0 (cyl)			
					Oil	88.0	4.0	4.0	E-BC3	CR	Fe	Fe				
C223T	2,238	Truck Faster Hi Pack Van	SJI10111ZZ	4	1st	88.0	2.5	4.0	BF	HB	Cr	Cr	8-94158-084-0(cyl)			
					2nd	88.0	2.0	3.55	TUC	CR	Cr	Fe				
					Oil	88.0	4.0	4.0	E-BC3	CR	Cr	Fe				
	2,238		SDI10119ZZ	4	1st	88.0	2.5	3.5	BF-K2	HB	Cr	Fe	8-94468-521-0			
					2nd	88.0	2.0	3.4	T1	HB	Cr	Fe				
D201	2,229	For Industrial Machine	SJI10124ZZ	4	1st	88.0	2.0	3.7	BF	HB	Cr	Cr	8-94417-175-0			
					2nd	88.0	2.0	3.7	T1-IC	CR	Cr	Fe				
					3rd	88.0	2.0	3.7	BI-TUC	CR	Fe	Fe				
					Oil	88.0	4.0	4.15	E-BC16	SR	GN	GN				
4FG1-1	2,771	Fargo	SDI10272ZZ	4	1st	89.3	2.0	3.1	BF	SR	GN	GN	8-94469-634-0			
					2nd	89.3	2.0	3.7	T1	CR	Cr	Fe				
					Oil	89.3	4.0	4.15	E-BC16	SR	Cr	Fe				

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper Lower	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)					
4JB1	2,771	Truck Elf 150 For Chromard Liner	SDI10110ZZ	4	1st	93.0	2.0	4.0	BF	CR	Fe	Fe	8-94247-867-0(cyl)
					2nd	93.0	2.0	4.0	TUC	CR	Fe	Fe	5-87311082-0(cyl)
					Oil	93.0	4.0	4.1	E-BC3	CR	Fe	Fe	97710771(cyl)
4JK1-TC	2,499	Truck Elf Mu Rodeo D-MAX For Chromard Liner	SDI10211ZZ	4	1st	93.0	2.0	4.0	BF	CR	Fe	Fe	8-97319-087-0
					2nd	93.0	2.0	4.0	TUC	CR	Fe	Fe	5-87310-519-0
					Oil	93.0	4.0	4.35	E-BC16	SR	GN	GN	
4JG1	3,059	Truck Elf Bighorn For Chromard Liner	SDI10129ZZ	4	1st	95.4	2.0	4.0	BF	CR	Fe	Fe	8-94379-486-0
					2nd	95.4	2.0	4.0	T1	CR	Fe	Fe	
					Oil	95.4	4.0	4.1	E-BC3	CR	Fe	Fe	
4JG2	3,059	Bighorn Truck Elf For Chromard Liner	SDI10130ZZ	4	1st	95.4	2.296	4.0	BF-K1	CR	Fe	Fe	8-94370-449-0
					2nd	95.4	2.0	4.0	T1	CR	Fe	Fe	
					Oil	95.4	4.0	4.1	E-BC3	CR	Fe	Fe	
SDI10141ZZ	4				1st	95.4	2.5	4.0	BF-IB	CR	Fe	Fe	8-97080-215-0
					2nd	95.4	2.0	4.0	T1-IB	CR	Fe	Fe	
					Oil	95.4	4.0	4.45	E-BC16	SR	GN	GN	
4JH1	3,059	D-MAX For Chromard Liner	SDI10193ZZ	4	1st	95.4	2.5	4.0	BF	CR	Fe	Fe	8-97941-122-0
					2nd	95.4	2.0	3.8	TUC	CR	Fe	Fe	8-97259-941-0
					Oil	95.4	3.0	3.25	E-BC16	SR	GN	GN	
4JJ1-TC	2,999	Truck Elf	SDI10215ZZ	4	1st	95.4	2.0	3.45	BF-K2	SR	GN	GN	8-98053-579-0
					2nd	95.4	2.0	4.4	T1-IC	CR	Cr	Fe	
					Oil	95.4	3.0	3.0	E-BC16	SR	GN	GN	
SDI10210ZY	4				1st	95.4	2.0	3.45	BF-K2	SR	GN	GN	8-97388-734-0
					2nd	95.4	1.5	4.0	T1	CR	Fe	Fe	8-98096-676-0
					Oil	95.4	3.0	3.0	E-BC16	SR	GN	GN	8-98057-222-0
SDI10209ZZ	4				1st	95.4	2.0	3.45	BF-K2	SR	GN	GN	8-98057-222-0
					2nd	95.4	1.5	3.5	T1	SR	GN	GN	
					Oil	95.4	3.0	3.0	E-BC16	SR	GN	GN	
4JX1	2,999	Mu Bighorn Wizard	SDI10171ZZ	4	1st	95.4	2.448	4.0	BF-K1	HB	Cr	Fe	8-97184-533-0
					2nd	95.4	2.0	4.0	T1-IC	CR	Cr	Fe	
					Oil	95.4	4.0	4.35	E-BC16	SR	GN	GN	
4KH1	2,999	Sweeper Truck	SDI10224ZZ	4	1st	95.4	2.5	3.5	BF	SR	GN	GN	8-98188-644-0
					2nd	95.4	2.0	3.5	TUC	SR	GN	GN	
					Oil	95.4	3.0	3.0	E-BC16	SR	GN	GN	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
C330	3,318	Elf 250 For Chromard Liner		SJI10049ZZ	4	1st	98.0	3.0	3.9	BF	CR	Fe	Cr	9-12181-801-0
						2nd	98.0	2.5	3.9	TUC	CR	Fe	Fe	9-12181-619-0
						Oil	98.0	5.0	4.7	E-BC3	CR	Fe	Fe	
4BA1	2,775	Truck Elf TLD34 · 44 · 54 TLD26 · 64 For Chromard Liner		SJI10071ZZ	4	1st	98.0	3.0	3.9	BF	CR	Fe	Cr	5-12181-025-0
						2nd	98.0	2.5	3.9	TUC	CR	Fe	Fe	5-12121-019-0 (cyl)
						Oil	98.0	5.0	4.7	E-BC3	CR	Fe	Fe	5-12121-001-0 9-12181-601-0 9-12181-801-0 9-12181-619-0
DA120	6,126	TX TS TW TXD		SJI10028ZZ	6	1st	100.0	2.5	4.0	P	CR	Cr	Cr	12181-063
						2nd	100.0	2.5	4.0	T1	CR	Fe	Fe	12181-091
						3rd	100.0	2.5	4.0	T1	CR	Fe	Fe	
						Oil 1	100.0	4.0	4.1	E-C1	CR	Cr	Fe	
						Oil 2	100.0	4.0	4.0	BC1	CR	Fe	Fe	
		Bus BA4341P · 343 BA351 · BA541 BA543 BA551 BB341 · BA351 BA551 · BB351 BX352 · 531 BX552 For Industrial Machine		SDI10061ZX	6	1st	100.0	2.5	3.85	BF	SR	Cr	Fe	1-12181-036-0
						2nd	100.0	2.5	4.4	T1-IC	CR	Fe	Fe	1-12181-087-0
						3rd	100.0	2.5	4.4	BL-TUC	CR	Fe	Fe	1-12181-109-0
						Oil	100.0	5.0	4.95	E-BC16	SR	GN	GN	1-12181-128-0 1-12121-001-0 (cyl) 1-12181-005-0 (cyl)
		For Industrial Machine		SDI10076ZZ	6	1st	100.0	3.0	4.4	BF	CR	Cr	Fe	1-12181-040-0
						2nd	100.0	2.5	4.4	T1-IC	CR	Fe	Fe	1-12121-007-0 (cyl)
						3rd	100.0	2.5	4.4	BL-TUC	CR	Fe	Fe	
						Oil	100.0	5.0	4.8	E-BC3	CR	Cr	Fe	
DA220	4,084	For Industrial Machine		SJI10029ZZ	4	1st	100.0	2.5	4.0	P	CR	Cr	Cr	9-12181-093-0
						2nd	100.0	2.5	4.0	T1	CR	Fe	Fe	
						3rd	100.0	2.5	4.0	T1	CR	Fe	Fe	
						Oil 1	100.0	4.0	4.1	E-C1	CR	Cr	Fe	
						Oil 2	100.0	4.0	4.0	BC1	CR	Fe	Fe	
				SJI10062ZZ	4	1st	100.0	2.5	4.2	BF	HB	Cr	Cr	1-12181-006-0
						2nd	100.0	2.5	4.4	T1-IC	CR	Fe	Fe	1-12181-038-0
						3rd	100.0	2.5	4.4	BL-TUC	CR	Fe	Fe	1-12181-111-0
						Oil	100.0	5.0	4.8	E-BC3	CR	Cr	Fe	1-12121-001-0 (yl)

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper / Lower	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)					
DA640S(T)	6,373	Fork Lift	SDI10057ZZ	6	1st	102.0	3.5	4.4	BF-K1	CR	Cr	Fe	1-12181-014-0
					2nd	102.0	2.5	4.4	T1-IC	CR	Fe	Fe	1-12121-035-0
					3rd	102.0	2.5	4.4	B1-TUC	CR	Fe	Fe	1-12181-011-0 (cyl)
					Oil	102.0	5.0	4.8	E-BC3	CR	Cr	Fe	
DA640PP		For Industrial Machine	SDI10066ZY	6	1st	102.0	3.0	4.4	BF	CR	Cr	Fe	1-12181-034-0
					2nd	102.0	2.5	4.4	T1-IC	CR	Fe	Fe	1-12121-010-0 (cyl)
					3rd	102.0	2.5	4.4	B1-TUC	CR	Fe	Fe	
					Oil	102.0	5.0	4.8	E-BC3	CR	Cr	Fe	
DA640	6,373	Truck BA BF BS TXD	SJI10036ZZ	6	1st	102.0	2.5	4.0	P	CR	Cr	Cr	1-12161-064-0
					2nd	102.0	2.5	4.0	T1	CR	Fe	Fe	1-12181-092-0
					3rd	102.0	2.5	4.0	T1	CR	Fe	Fe	
					Oil 1	102.0	4.0	4.1	E-C1	CR	Cr	Fe	
					Oil 2	102.0	4.0	4.0	BC1	CR	Fe	Fe	
		Bus BA741 BA741P BA743 BB751 BR10 BR10P BR20 BR20P BR351 BR351P BX721E BX731 BX752	SDI10063ZX	6	1st	102.0	2.5	4.1	BF	SR	Cr	Fe	1-12181-033-0
					2nd	102.0	2.5	4.4	T1	CR	Fe	Fe	1-12181-074-0
					3rd	102.0	2.5	4.4	TUC	CR	Fe	Fe	1-12181-088-0
					Oil	102.0	5.0	4.8	E-BC3	CR	Cr	Fe	1-12181-110-0
													1-12121-009-0 (cyl)
6BD1MT	5,393	For Marine Engine	SDI10085ZZ	6	1st	102.0	3.5	4.4	BF-K1	CR	Fe	Fe	5-12121-015-0 (cyl)
		For Chromard Liner			2nd	102.0	2.5	4.4	T1	CR	Fe	Fe	
					Oil	102.0	5.0	4.8	E-BC3	CR	Fe	Fe	
4BD2	3,856	For Chromard Liner	SJI10147ZZ	4	1st	102.0	3.0	4.4	BF	CR	Fe	Cr	8-97117-686-0
					2nd	102.0	2.0	3.7	T1	SR	GN	GN	
					Oil	102.0	4.0	4.45	E-BC16	SR	GN	GN	
6BD1 6BB1	5,393	Truck SBR320 · 380 400 · 450 · 500 JBR FBR370 YBR360 310 Tractor VBR320 VBR322 For Chromard Liner	SJI10065ZY	6	1st	102.0	3.0	4.4	BF	CR	Fe	Cr	5-12181-023-2
					2nd	102.0	2.5	4.4	TUC	CR	Fe	Fe	5-12121-055-0 (cyl)
					Oil	102.0	5.0	4.8	E-BC3	CR	Fe	Fe	

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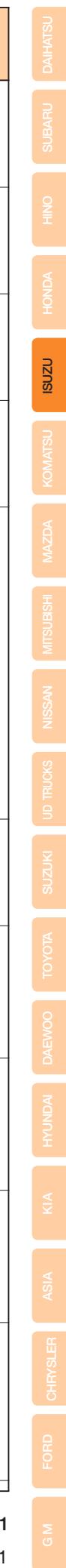
DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside	Upper/Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)					
4BB1	3,595	Elf Journey For Chromard Liner	SJI10070ZZ	4	1st	102.0	3.0	4.4	T1	CR	Fe	Cr	5-12181-024-1	
					2nd	102.0	2.5	4.4	TUC	CR	Fe	Fe	5-12121-005-0 (cyl)	
					Oil	102.0	5.0	4.8	E-BC3	CR	Fe	Fe	5-12181-003-0	
4BC1 4BD1 4BD1-T	3,268	Truck Elf Journey For Chromard Liner	SJI10090ZY	4	1st	102.0	3.0	4.4	BF	CR	Fe	Cr	5-12121-004-0 (cyl)	
					2nd	102.0	2.5	4.4	TUC	CR	Fe	Fe		
					Oil	102.0	5.0	4.8	E-BC3	CR	Fe	Fe		
4BD1L	3,856	Journey For Chromard Liner	SJI10125ZZ	4	1st	102.0	3.0	4.4	T1	CR	Fe	Cr	8-94326-650-0	
					2nd	102.0	2.5	4.4	TUC	CR	Fe	Fe		
					Oil	102.0	4.0	4.4	E-BC3	HB	Fe	Fe		
8GF1	6,599	Pick up Truck SUV	SDI10183ZY	V8	1st	103.0	2.948	3.9	BF-K1	SR	GN	GN	8-97250-331-2	
					2nd	103.0	2.0	4.4	T1-IC	CR	Cr	Fe		
					Oil	103.0	3.0	3.0	E-BC16	SR	GN	GN		
6BF1	6,130	Truck Forward For Chromard Liner	SJI10082ZZ	6	1st	105.0	3.0	4.5	T1	CR	Fe	Cr	1-12121-052-0	
					2nd	105.0	2.5	4.7	TUC	CR	Fe	Fe	5-12121-006-0 (cyl)	
					Oil	105.0	5.0	4.7	E-BC3	CR	Fe	Fe		
6BG1	6,494	Truck Forward (FRS12) For Chromard Liner	SJI10104ZZ	6	1st	105.0	3.0	4.5	T1	CR	Fe	Cr	1-12121-065-0	
					2nd	105.0	2.5	4.7	TUC	CR	Fe	Fe	1-12121-101-1 (cyl)	
					Oil	105.0	4.0	4.4	E-BC3	HB	Fe	Fe		
6BG1MTC	6,494	For Marine Engine For Chromard Liner	SJI10148ZZ	6	1st	105.0	3.306	4.4	BF-K1	CR	Fe	Cr	1-12121-121-0	
					2nd	105.0	2.5	4.7	TUC	CR	Fe	Fe		
					Oil	105.0	4.0	4.4	E-BC3	HB	Fe	Fe		
4BE1	3,636	Truck Elf 2ton For Chromard Liner	SJI10118ZZ	4	1st	105.0	3.0	4.4	BF	CR	Fe	Cr	8-94418-918-0	
					2nd	105.0	2.5	4.5	TUC	CR	Fe	Fe		
					Oil	105.0	5.0	4.9	E-BC3	CR	Fe	Fe		
6BG1-TC	6,494	Truck Forward For Chromard Liner	SJI10128ZZ	6	1st	105.0	3.5	4.4	BF	CR	Fe	Cr	1-12121-115-0	
					2nd	105.0	2.5	4.7	TUC	CR	Fe	Fe		
					Oil	105.0	4.0	4.4	E-BC3	HB	Fe	Fe		
			SJI10223ZZ	6	1st	105.0	3.306	4.4	BF-K1	CR	Fe	Cr	1-12121-146-0 (cyl)	
					2nd	105.0	2.5	4.4	T1-IC	CR	Fe	Fe		
					3rd	105.0	2.5	4.4	BI-TUC	CR	Fe	Fe		
					Oil	105.0	4.0	4.4	E-BC3	HB	Fe	Fe		

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference		
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower			
4BG1	4,329	Truck Elf For Chromard Liner	SJI10168ZZ	4	1st	105.0	3.0	4.4	BF	CR	Fe	Cr	8-97123-833-0		
					2nd	105.0	2.5	4.7	TUC	CR	Fe	Fe			
					Oil	105.0	4.0	4.4	E-BC3	HB	Fe	Fe			
	7,127	Truck Forward	SJI10131ZZ	4	1st	105.0	3.306	4.4	BF-K1	CR	Fe	Cr	8-97032-075-0		
					2nd	105.0	2.5	4.4	T1-IC	CR	Fe	Cr			
					Oil	105.0	4.0	4.4	E-BC3	HB	Fe	Fe			
6HE1	7,127	Truck Forward	SJI10126ZZ	6	1st	110.0	3.0	4.5	BF	HB	Cr	Cr	8-94396-840-0		
6HE1-TC	7,172	Truck Forward	SDI10146ZY	6	1st	110.0	3.836	4.5	BF-K1	HB	Cr	Fe	8-94390-529-1		
					2nd	110.0	3.0	4.4	T1-IC	CR	Cr	Fe			
					3rd	110.0	2.5	4.7	TUC	CR	Cr	Fe			
					Oil	110.0	3.0	3.25	E-BC16	SR	GN	GN			
	7,172		SJI10138ZZ	6	1st	110.0	3.836	4.5	BF-K1	HB	Cr	Fe	8-94394-418-1		
					2nd	110.0	3.0	4.5	BF-IC	HB	Cr	Cr			
					3rd	110.0	2.5	4.7	TUC	CR	Cr	Fe			
					Oil	110.0	4.0	4.35	E-BC16	SR	GN	GN			
4HE1	4,751	Truck Elf	SDI10140ZZ	4	1st	110.04	3.0	4.1	BF-K2	SR	GN	GN	8-97078-779-0		
4HE1-TC	4,751	Truck Elf	SDI10177ZZ	4	1st	110.04	3.0	4.1	BF-K2	SR	GN	GN	8-97166-992-0		
4HF1	4,334	Truck Elf	SJI10127ZZ	4	1st	112.0	3.0	4.5	BF	HB	Cr	Cr	8-97028-691-0		
					2nd	112.0	2.5	4.7	TUC	CR	Cr	Fe			
					Oil	112.0	4.0	4.35	E-BC16	SR	GN	GN			
	4,334		SDI10139ZZ	4	1st	112.0	3.0	4.05	BF-K2	SR	Cr	Fe	8-97109-462-0		
					2nd	112.0	2.5	4.7	TUC	CR	Cr	Fe			
					Oil	112.0	4.0	4.35	E-BC16	SR	GN	GN			
8PA1	9,971	Truck SKS390 SKW520	YDI10080ZX (1cyl)	V8	1st	115.0	3.0	4.05	BF	SR	Cr	Fe	1-12181-016-0		
10PA1	12,464	Truck Bus SRZ440 CRA650 Truck			2nd	115.0	2.5	4.8	TUC	CR	Cr	Fe	1-12121-042-0		
					Oil	115.0	6.0	5.7	E-BC3	CR	Cr	Fe	1-12181-060-0 (cyl)		
12PA1	14,957	VTR300 VRZ440 VTR290		V10											
					V12										



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside	Upper/Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)					
8PB1	11,217	New Power Tractor Dump	YDI10081ZX (1cyl)	V8	1st	115.0	3.0	4.05	BF	SR	Cr	Fe	1-12181-043-0 (cyl)	
					2nd	115.0	2.5	4.8	T1	CR	Cr	Fe	1-12181-058-0 (cyl)	
					Oil	115.0	4.0	4.35	E-BC16	SR	GN	GN	1-12181-061-0 (cyl)	
10PB1	14,022			V10										
					V12									
4HG1 4HJ1 4HK1	4,751	Truck Elf	SDI10160ZZ	4	1st	115.0	3.0	4.1	BF-K2	SR	GN	GN	8-97105-867-0 (cyl)	
					2nd	115.0	2.5	4.8	TUC	CR	Cr	Fe	8-97219-054-0 (cyl)	
					Oil	115.0	4.0	4.35	E-BC16	SR	GN	GN	8-97603-423-1 (cyl) 8-98040-125-0 (cyl) 8-98054-495-0 (cyl) 8-98054-995-0 (cyl)	
6HK1	7,790	Forward Truck	SDI10228ZZ	6	1st	115.0	3.0	4.1	BF-K2	SR	GN	GN	8-98040-125-0 (cyl)	
					2nd	115.0	2.5	4.8	TUC	CR	Cr	Fe		
					Oil	115.0	4.0	4.35	E-BC16	SR	GN	GN		
4HK1X	5,193	Truck Elf	SDI10207ZZ	4	1st	115.0	2.948	4.15	BF-K1	SR	GN	GN	8-98017-166-0	
					2nd	115.0	2.0	4.3	T1-IB	SR	GN	GN		
					3rd	115.0	2.5	4.8	TUC	CR	Cr	Fe		
6HH1	8,226	Truck Forward Journey Erga	SJI10163ZZ	6	1st	115.0	3.5	4.6	BF	HB	Cr	Cr	8-94390-799-0 (cyl)	
					2nd	115.0	2.5	4.8	TUC	CR	Cr	Fe	8-94390-799-2 (cyl)	
					Oil	115.0	4.0	4.35	E-BC16	SR	GN	GN		
SJI10184ZZ	6				1st	115.0	3.5	4.6	BF	HB	Cr	Cr	8-94392-128-1	
					2nd	115.0	2.5	4.8	TUC	CR	Cr	Fe		
					Oil	115.0	3.0	3.1	E-BC16	SR	GN	GN		
6HK1-TC	7,790	Truck Erga	SDI10178ZZ	6	1st	115.0	2.948	4.1	BF-K1	SR	GN	GN	8-94391-502-4 (cyl)	
					2nd	115.0	2.0	4.3	T1-IB	SR	GN	GN		
					3rd	115.0	2.5	4.8	TUC	CR	Cr	Fe		
4HL1	4,777	Elf Forward	SDI10192ZZ	4	1st	115.0	3.0	4.1	BF	SR	GN	GN	8-97331-641-0	
					2nd	115.0	2.0	4.25	T1	SR	Cr	Fe		
					Oil	115.0	3.0	3.1	E-BC16	SR	GN	GN		
6HL1-TC	7,166	Truck Forward	SDI10186ZZ	6	1st	115.0	2.948	4.25	BF-K1	SR	Cr	Fe	8-97601-318-1	
					2nd	115.0	2.5	4.8	T1-IC	CR	Fe	Fe		
					Oil	115.0	3.0	3.1	E-BC16	SR	GN	GN		
6HF1-CNG	7,790	CNG Truck	SDI10214ZZ	6	1st	115.0	3.5	4.1	BF	SR	GN	GN	8-98141-535-0	
					2nd	115.0	2.5	4.8	TUC	CR	Cr	Fe		
					Oil	115.0	4.0	4.35	E-BC16	SR	GN	GN		
6SA1	8,413	Truck Forward 200PS	SJI10112ZZ	6	1st	115.0	3.0	4.6	BF	HB	Cr	Cr	1-12121-070-0	
					2nd	115.0	2.5	4.8	TUC	HB	Cr	Fe	1-12121-113-0	
					Oil	115.0	4.0	4.2	E-BC3	HB	Cr	Fe	1-12121-075-0 (cyl)	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper Lower	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)					
4HF1-LPG	4,334	Truck Elf	SDI10190ZZ	4	1st	115.0	3.0	4.1	BF	SR	GN	GN	8-97258-337-0
					2nd	115.0	2.5	4.8	TUC	CR	Cr	Fe	8-98144-475
					Oil	115.0	3.0	3.1	E-BC16	SR	GN	GN	
10PC1	15,014	Truck CXR 10.75ton	SJI10106ZZ	V10	1st	119.0	3.0	4.6	BF	HB	Cr	Cr	1-12121-047-0 (cyl)
					2nd	119.0	2.5	4.8	T1	CR	Cr	Fe	
					Oil	119.0	4.0	5.0	E-C2	HB	Cr	Fe	
10PC1-T	15,014	Truck Bus Hi-Decker	SJI10115ZX	V10	1st	119.0	4.0	4.6	BF	HB	Cr	Cr	1-12121-062-0 (cyl)
					2nd	119.0	2.5	4.8	TUC	HB	Cr	Fe	
					Oil	119.0	4.0	4.35	E-BC16	SR	GN	GN	
8PC1-T	12,011	Bus Hi-Decker LV217H	SJI10107ZZ	V8	1st	119.0	3.0	4.6	BF	HB	Cr	Cr	1-12121-049-0
					2nd	119.0	2.5	4.8	TUC	HB	Cr	Fe	
					Oil	119.0	4.0	5.0	E-C2	HB	Cr	Fe	
DH100	10,179	Truck TD70E TD80E TD90E TD141 TP70E TP81 TP81E TP91E Bus BC30 BC141 BC151 BC151P BC161 BU05 BU10 BU15 BU20	SDI10040ZX	6	1st	120.0	3.0	4.45	BF	SR	Cr	Fe	1-12181-001-0
					2nd	120.0	3.0	5.0	T1	CR	Fe	Fe	1-12181-083-0
					3rd	120.0	3.0	5.0	TUC	CR	Fe	Fe	1-12181-086-0
					Oil	120.0	6.0	5.6	E-BC3	CR	Cr	Fe	1-12181-114-0
													1-12121-016-0 (cyl) 12181-050 12181-068
6SD1	9,839	Truck Forward CXG23	SJI10179ZZ	6	1st	120.0	3.5	5.0	BF	HB	Cr	Cr	1-12121-094-1
					2nd	120.0	2.5	5.0	TUC	HB	Cr	Fe	
					Oil	120.0	5.0	4.95	E-BC16	SR	Cr	Fe	
6SD1-TC	9,839	Truck Giga CXM CXK CXG	SDI10194ZZ	6	1st	120.0	4.0	4.9	BF-K1	HB	Cr	Fe	1-12121-119-2
					2nd	120.0	3.0	4.6	T1-IC	CR	Cr	Fe	
					3rd	120.0	3.0	4.9	B1-TUC	CR	Cr	Fe	
					Oil	120.0	4.0	4.4	E-BC16	SR	GN	GN	
			SDI10218ZZ	6	1st	120.0	3.0	4.1	BF-K1	SR	GN	GN	1-12121-149-0
					2nd	120.0	2.0	4.25	T1-IB	SR	Cr	Fe	
					3rd	120.0	3.0	4.9	B1-TUC	HB	Cr	Fe	
					Oil	120.0	3.0	3.25	E-BC16	SR	GN	GN	
6UZ1-TCC	9,839	Giga Truck	SDI10225ZZ	6	1st	120.0	2.5	4.3	BF-K1	SR	GN	GN	8-98056-464-1
					2nd	120.0	2.0	4.25	T1-IB	SR	Cr	Fe	
					3rd	120.0	3.0	4.9	B1-TUC	HB	Cr	Fe	
					Oil	120.0	3.0	3.25	E-BC16	SR	GN	GN	
6QA1 D920	11,044 9,203	Bus TDJ DVR 25DP 35DP	SJI10088ZZ	6	1st	125.0	3.0	5.1	BF	HB	Cr	Cr	1-12121-028-0(cyl)
					2nd	125.0	2.5	5.1	TUC	CR	Cr	Fe	1-12121-046-0(cyl)
					Oil	125.0	6.0	5.5	E-BC3	CR	Cr	Fe	1-12121-013-0(cyl)



Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside	Upper/Lower	Reference
						d 1 (D)	h 1 (B)	a 1 (T)					
6QB2	11,044	Bus	SJI10208ZZ	6	1st 2nd Oil	125.0 125.0 125.0	4.0 2.5 6.0	4.8 5.0 5.1	BF Bl-TUC E-BC3	HB CR CR	Cr Cr Cr	Cr Fe Fe	1-12121-096-0
PE1	11,044	Truck Erga Giga	YDI10164ZZ (1cyl)	1	1st 2nd 3rd Oil	127.0 127.0 127.0 127.0	3.806 3.0 3.0 4.0	4.7 5.0 5.2 4.35	BF-K1 T1-IC Bl-TUC E-BC16	SR HB CR SR	GN Cr Cr GN	GN Fe Fe GN	1-12121-129-1
					1st 2nd 3rd Oil	127.0 127.0 127.0 127.0	4.0 3.0 3.0 4.0	5.2 5.0 5.2 4.35	BF T1-IC Bl-TUC E-BC16	HB HB CR SR	Cr Cr Cr GN	Cr Fe Fe GN	1-12121-131-1
					1st 2nd 3rd Oil	127.0 127.0 127.0 127.0	2.917 2.0 3.0 4.0	4.7 4.7 5.2 4.35	BF-K1 T1-IB Bl-TUC E-BC16	SR SR CR SR	GN GN Cr GN	GN GN Fe GN	1-12121-145-0
					1st 2nd 3rd Oil	127.0 127.0 127.0 127.0	3.806 3.0 3.0 4.0	4.7 5.0 5.2 4.35	BF-K1 T1-IC Bl-TUC E-BC16	SR HB CR SR	GN Cr Cr GN	GN Fe Fe GN	1-12121-129-0
10PE1	19,001	Erga Giga	SDI10164ZZ	V10	1st 2nd 3rd Oil	127.0 127.0 127.0 127.0	3.806 3.0 3.0 4.0	4.7 5.0 5.2 4.35	BF-K1 T1-IC Bl-TUC E-BC16	SR HB CR SR	GN Cr Cr GN	GN Fe Fe GN	1-12121-129-0
6RB1-MTC	13,741	Dump CXM 10.5ton L275PS	SDI10116ZZ	6	1st 2nd Oil	132.9 132.9 132.9	4.0 2.5 4.0	5.5 5.5 4.3	BF TUC E-BC3	HB HB HB	Cr Cr Cr	Fe Fe Fe	1-12121-076-0
6WA1-TC	12,068	Truck Giga	SDI10132ZZ	6	1st 2nd 3rd Oil	132.9 132.9 132.9 132.9	4.306 3.0 3.0 5.0	5.2 5.2 5.5 5.7	BF-K1 T1-IC Bl-TUC E-BC3	HB HB CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	1-12121-117-0
					1st 2nd 3rd Oil	132.9 132.9 132.9 132.9	4.306 3.0 3.0 4.0	5.2 5.2 5.5 4.4	BF-K1 T1-IC Bl-TUC E-BC16	HB HB CR SR	Cr Cr Cr GN	Fe Fe Fe GN	1-12121-127-1 (cyl) 1-12121-136-0 (cyl) 1-12121-142-0 (cyl)
					1st 2nd 3rd Oil	132.9 132.9 132.9 132.9	3.806 3.0 3.0 5.0	4.9 5.2 5.5 5.7	BF-K1 T1-IC Bl-TUC E-BC3	SR HB CR CR	GN Cr Cr Cr	GN Fe Fe Fe	
					1st 2nd 3rd Oil	132.9 132.9 132.9 132.9	3.806 3.0 3.0 4.0	4.9 5.2 5.5 4.4	BF-K1 T1-IC Bl-TUC E-BC16	SR HB CR SR	GN Cr Cr GN	GN Fe Fe GN	1-12121-139-0 (cyl) 1-12121-141-0 (cyl)

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper / Lower	Reference			
						d 1 (D)	h 1 (B)	a 1 (T)							
E120	12,023	TGK55E · 75E TMK05E Truck VPR290 TDK46 SPM701 Bus 30KP 35KP BU4K	SDI10050ZZ	6	1st	135.0	4.0	5.5	BF	HB	Cr	Fe	9-12181-149-0		
					2nd	135.0	2.5	5.5	T1	CR	Cr	Fe	1-12121-023-0 (cyl)		
					3rd	135.0	2.5	5.5	T1	CR	Fe	Fe			
					Oil	135.0	7.0	6.2	E-BC3	CR	Cr	Fe			
			SDI10075ZZ	6	1st	135.0	4.0	5.5	BF	HB	Cr	Fe	1-12181-022-0		
					2nd	135.0	2.5	5.5	TUC	HB	Cr	Fe	1-12121-034-0 (cyl)		
					Oil	135.0	7.0	6.2	E-BC3	CR	Cr	Fe			
6RA1	12,023	Truck SHM CXM 10.5ton	SDI10100ZZ	6	1st	135.0	4.0	5.5	BF	HB	Cr	Fe	1-12121-040-0 (cyl)		
6RA2					2nd	135.0	2.5	5.5	T1	CR	Cr	Fe	1-12121-037-0 (cyl)		
6RB1					Oil	135.0	5.0	6.2	E-BC3	CR	Cr	Fe			
6RB2	13,741	Truck SBM CXM 10.5ton													
6RB1	13,741	Truck CXM 10.75ton L320PS	SDI10117ZZ	6	1st	135.0	4.0	5.5	BF	HB	Cr	Fe	1-12121-073-0		
6RB1-TC	13,741	6R-L CXM			2nd	135.0	2.5	5.5	TUC	HB	Cr	Fe			
6RB1-TC					Oil	135.0	4.0	4.3	E-C2	HB	Cr	Fe			
6WG1UTMC		Truck Giga	SDI10142ZZ	6	1st	135.0	4.5	5.5	BF	HB	Cr	Cr	1-12121-122-0 (cyl)		
6WF1TMC					2nd	135.0	2.5	5.5	TUC	HB	Cr	Fe			
6WG1UTMC					Oil	135.0	4.0	4.3	E-BC16	HB	Cr	Fe			
6WF1TMC															
8MA1	16,513	Truck SWG590 VWZ430 VWR340	SJI10073ZZ	V8	1st	145.0	4.0	5.9	BF	HB	Cr	Cr	1-12181-011-0		
8MA1					2nd	145.0	3.0	5.9	TUC	HB	Cr	Fe	1-12121-018-0 (cyl)		
8MA1					Oil	145.0	6.0	6.3	E-BC3	CR	Cr	Fe			
6WG1-TC	15,681	Truck Giga	SDI10167ZZ	6	1st	147.0	3.806	5.3	BF-K1	SR	GN	GN	1-12121-143-0		
6WF1-TC	14,256	Tractor			2nd	147.0	3.0	5.8	T1-IC	HB	Cr	Fe			
6WF1-TC					3rd	147.0	3.0	6.1	B1-TUC	CR	Cr	Fe			
6WF1-TC					Oil	147.0	4.0	4.4	E-BC16	SR	GN	GN			
			SDI10181ZZ	6	1st	147.0	2.948	5.5	BF-K1	SR	GN	GN	1-12121-144-0		
					2nd	147.0	2.5	5.5	T1-IB	SR	GN	GN			
					3rd	147.0	3.0	6.1	B1-TUC	CR	Cr	Fe			
					Oil	147.0	4.0	4.4	E-BC16	SR	GN	GN			



● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
4D92	2,610	Bulldozer Power Shovel	SDK04012ZZ	4	1st 2nd Oil	92.0 92.0 92.0	3.0 3.0 6.0	4.0 4.0 4.5	T1-K1 T1 E-BC3	CR CR CR	Cr Fe Cr	Fe Fe Fe	6141-31-2020 6140-31-2040(cyl)
4D94	2,940	Bulldozer Power Shovel	SDK04015ZZ	4	1st 2nd Oil	94.0 94.0 94.0	2.9 2.5 5.0	3.8 4.1 4.4	BF T1 E-BC16	HB CR CR	Cr Fe Cr	Fe Fe Fe	6142-32-2020 6142-32-2030(cyl)
4D95	3,260	Bulldozer Power Shovel Fork Lift	SDK04014ZZ	4	1st 2nd Oil	95.0 95.0 95.0	2.2 2.2 4.0	4.0 4.0 4.15	BF-K2 T1-K2 E-BC16	CR CR SR	Cr Fe Cr	Fe Fe Fe	6202-32-2300
			SDK04031ZZ	4	1st 2nd Oil	95.0 95.0 95.0	2.0 2.0 4.0	4.0 4.0 4.15	BF T1-IC E-BC16	CR CR SR	Cr Fe Cr	Fe Fe Fe	6204-31-2200 6204-31-2203
			SDK04025ZZ	4	1st 2nd Oil	95.0 95.0 95.0	2.2 2.0 4.0	4.0 4.0 4.15	BF-K2 T1 E-BC16	CR CR SR	Cr Fe Cr	Fe Fe Fe	6202-32-2200
S6D95	4,890	Bulldozer Power Shovel	SDK04018ZX	6	1st 2nd Oil	95.0 95.0 95.0	2.5 2.2 4.0	3.45 4.0 4.15	BF-K1 T1-K2 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	6207-31-2500
			SDK04023ZZ	6	1st 2nd Oil	95.0 95.0 95.0	2.5 2.2 4.0	3.7 4.0 4.15	BF-K1 T1-K1-IC E-BC16	HB HB SR	Cr Cr Cr	Fe Fe Fe	6209-31-2400
			SDK04032ZZ	6	1st 2nd Oil	95.0 95.0 95.0	2.5 2.0 4.0	3.7 4.0 4.35	BF-K1 T1-IC E-BC16	HB CR SR	Cr Fe GN	Fe Fe GN	6207-31-2200(cyl)
6D95 SA6D95	4,890	Bulldozer Power Shovel	SDK04019ZZ	6	1st 2nd Oil	95.0 95.0 95.0	2.0 2.0 4.0	4.0 4.0 4.15	BF T1 E-BC16	CR CR SR	Cr Fe Cr	Fe Fe Fe	6204-31-2202
6D95			SDK04024ZZ	6	1st 2nd Oil	95.0 95.0 95.0	2.2 2.0 4.0	4.0 4.0 4.15	BF-K2 T1 E-BC16	CR CR SR	Cr Fe Cr	Fe Fe Fe	6202-32-2200
S6D102	5,900	Bulldozer Power Shovel	SDK04027ZX	6	1st 2nd Oil	102.0 102.0 102.0	2.875 2.37 4.0	4.05 4.2 4.35	BF-K1 T1-IB E-BC16	SR CR SR	Cr Fe GN	Fe Fe GN	6732-31-2300 6735-31-2030

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference	
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower		
S4D105	4,330	Bulldozer Power Shovel	SDK04009ZZ	4	1st	105.0	3.0	4.2	BF	HB	Cr	Fe	6136-31-2030(cyl)	
					2nd	105.0	2.5	4.5	T1-IC	CR	Fe	Fe	6136-31-2010 (cyl)	
					Oil	105.0	5.0	4.7	E-BC3	CR	Cr	Fe		
	4,330		SDK04033ZZ	4	1st	105.0	3.0	4.2	BF	HB	Cr	Fe	6130-31-2202(cyl)	
					2nd	105.0	3.0	4.2	T1	CR	Cr	Fe	6130-32-2202(cyl)	
					Oil	105.0	5.0	4.65	E-BC16	CR	Cr	Fe	6130-32-2302(cyl) 6130-32-2301(cyl)	
S4D105(NEW)	4,330	Bulldozer Power Shovel	SDK04010ZZ	4	1st	105.0	3.0	4.2	BF-K1	HB	Cr	Fe	6130-31-2200	
					2nd	105.0	2.5	4.5	T1-IC	CR	Fe	Fe	6130-31-2201	
					Oil	105.0	5.0	4.7	E-BC3	CR	Cr	Fe	6131-32-2302 6131-31-2301(cyl)	
													6130-31-2201 6131-32-2301(cyl)	
6D105 S6D105	6,490	Bulldozer Power Shovel	SDK04016ZX	6	1st	105.0	3.0	3.85	BF-K1	SR	Cr	Fe	6137-31-2040	
					2nd	105.0	2.5	4.5	T1-K2	CR	Cr	Fe	6137-31-2032	
					Oil	105.0	5.0	4.7	E-BC3	CR	Cr	Fe	6137-31-2030	
4D105 S4D105		Bulldozer Power Shovel	YDK04026ZZ	1	1st	105.0	2.984	4.38	BF-K1	HB	Cr	Fe		
					2nd	105.0	2.955	4.38	T1-K1-IC	HB	Cr	Fe		
					Oil	105.0	4.0	4.45	E-BC16	CR	Cr	Fe		
S4D106	4,411	Bulldozer Power Shovel	SDK04029ZZ	4	1st	106.0	2.5	3.7	BF-K2	SR	GN	GN	YM123900-22050	
					2nd	106.0	2.0	4.4	T1	CR	Fe	Fe		
					Oil	106.0	3.0	3.25	E-BC16	SR	GN	GN		
S6D107	6,128	Bulldozer Power Shovel	SDK04038ZZ	6	1st	107.0	2.85	4.4	BF-K1	HB	Cr	Fe	6754-31-2070	
					2nd	107.0	2.5	4.5	T1-RB	CR	Fe	Fe		
					Oil	107.0	3.5	4.15	E-BC16	CR	Cr	Fe		
6D108	7,150	Generator	SDK04020ZZ	6	1st	108.0	2.5	4.35	BF-K1	HB	Cr	Fe	6221-31-2200	
					2nd	108.0	2.53	4.35	T1-K1-IC	HB	Cr	Fe		
					Oil	108.0	4.0	4.15	E-BC16	SR	Cr	Fe		
6D110 S6D110	7,130	Generator	SDK04021ZZ	6	1st	110.0	3.0	4.4	BF-K1	HB	Cr	Fe	6138-32-2200	
					2nd	110.0	2.5	4.6	T1-K2	CR	Cr	Fe	6138-31-2020	
					Oil	110.0	5.0	4.05	E-BC16	SR	Cr	Fe		



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference		
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower			
	S4D120	7,240	Bulldozer Power Shovel	SDK04007ZZ	4	1st 2nd Oil	120.0 120.0 120.0	3.5 2.5 5.5	4.8 5.0 5.7	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	6110-30-2301 6110-30-2302 6110-30-2303 6110-30-2401 6110-30-2402 6110-30-2403		
	6D125	11,040	Bulldozer	SDK04022ZZ	6	1st 2nd Oil	125.0 125.0 125.0	2.5 2.5 4.0	5.0 5.0 4.4	BF-K1 T1-K1-IC E-BC16	HB HB CR	Cr Cr Cr	Fe Fe Fe	6150-31-2032 6150-31-2033		
						SDK04034ZX	6	1st 2nd Oil	125.0 125.0 125.0	2.5 2.0 3.0	4.7 5.0 3.1	BF T1-IC E-BC16	SR HB SR	GN Cr GN	GN Fe GN	6150-31-2030
						SDK04035ZX	6	1st 2nd Oil	125.0 125.0 125.0	2.5 2.0 3.0	5.0 5.0 3.1	BF-K1 T1-IC E-BC16	HB HB SR	Cr Cr GN	Fe Fe GN	6151-31-2031
	4D130	8,490	Bulldozer Power Shovel	SDK04011ZZ	4	1st 2nd Oil	130.0 130.0 130.0	3.5 2.5 5.5	5.1 5.4 5.8	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	6114-30-2303 6114-30-2403(cyl)		
	6D140	15,240	Generator	SDK04028ZZ	6	1st 2nd Oil	140.0 140.0 140.0	2.4 2.4 4.0	5.4 5.4 4.15	BF-K1 T1-K1-IC E-BC16	HB HB SR	Cr Cr Cr	Fe Fe Fe	6211-31-2031		
	6D155	19,260	Bulldozer	SDK04008ZZ	6	1st 2nd Oil1 Oil2	155.0 155.0 155.0 155.0	4.0 3.5 6.0 5.0	6.4 6.2 5.7 6.2	BF-K1 T1-IC E-BC1 BC3	HB HB CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	6138-31-2022 6128-31-2023 6128-31-2033(cyl)		
	S6D155 SA6D155	19,260	Bulldozer	SDK04013ZZ	6	1st 2nd Oil	155.0 155.0 155.0	3.68 3.55 4.75	6.06 6.06 5.0	BF-K1 T1-K1-IC E-BC16	HB HB CR	Cr Cr Cr	Fe Fe Fe	6128-31-2060 6128-31-2070(cyl)		

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference	
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower		
B1	1,138	Festiva	SWT20051ZZ	4	1st 2nd Oil	68.0 68.0 68.0	1.2 1.5 3.0	2.45 3.1 2.95	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	B1Y0-11-SCO	
TB	1,169	Familia	SXT20009ZZ	4	1st 2nd Oil	70.0 70.0 70.0	2.0 2.0 4.0	3.1 3.1 3.1	BF TUC NIFF-S	HB CR SR	Cr Fe Cr	Cr Fe Fe	0263-23-170	
PC	985	Familia	SWT20040ZZ	4	1st 2nd Oil	70.0 70.0 70.0	1.5 1.5 4.0	3.1 3.1 3.1	BF T1 NIFF-S	HB CR SR	Cr Fe Cr	Fe Fe Fe	8693-23-130	
B3	1,324	Familia Festiva	SWT20052ZZ	4	1st 2nd Oil	71.0 71.0 71.0	1.2 1.5 3.0	2.47 3.1 2.92	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	B3Y0-11-SCOA B3Y1-11-SCO	
TC	1,272	Familia 1300 Truck	SWT20026ZZ	4	1st 2nd Oil	73.0 73.0 73.0	2.0 2.0 4.0	3.1 3.1 3.0	BF TUC NIFF-S	HB CR SR	Cr Fe Cr	Fe Fe Fe	0324-23-175 0324-23-130	
			SWT20033ZZ	4	1st 2nd Oil	73.0 73.0 73.0	1.5 1.5 4.0	3.1 3.1 3.0	BF T1 NIFF-S	HB CR SR	Cr Fe Cr	Fe Fe Fe	8034-23-130 8034-23-130A	
JF	1,997	Luce	SWT20079ZZ	V6	1st 2nd Oil	74.0 74.0 74.0	1.5 1.5 4.0	2.85 3.4 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	JFY1-11-SCO	
ZJ-VEN	1,348	Demio	SWT20083ZZ	4	1st 2nd Oil	74.0 74.0 74.0	1.0 1.0 2.0	2.45 2.5 2.2	BF-IB TUC NIFF-H	SR SR SR	Cr Fe GN	Fe Fe GN	ZJY4-11-SCO	
ZJ-VE	1,348	Demio Mazda2	TCC-J-0050	4	1st 2nd Oil	74.0 74.0 74.0	1.2 1.2 2.5		BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	ZJY1-11-SCO	
UA UB	1,484	T1500 Craft	SCT20010ZZ	4	1st 2nd Oil	75.0 75.0 75.0	2.5 2.5 4.0	3.3 3.3 3.3	T1 TUC BC1	CR CR CR	Cr Fe Cr	Fe Fe Fe	0107-11-999	
K8-DE	1,844	MX-3 Eunos 500 MS-6 Anfini	SWT20067ZZ	V6	1st 2nd Oil	75.0 75.0 75.0	1.5 1.5 3.0	2.7 3.2 2.55	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	K8Y1-11-SCOA	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper/ Lower	Reference	
							d 1 (D)	h 1 (B)	a 1 (T)					
Z5-DE	1,489	Familia		SWT20074ZZ	4	1st 2nd Oil	75.3 75.3 75.3	1.0 1.2 2.5	2.7 3.2 2.55	BF TUC NIFF-S	SR CR SR	GN Fe GN	Z5Y0-11-SCO	
UC	1,415	Familia Bongo		SWT20036ZZ	4	1st 2nd Oil	77.0 77.0 77.0	1.5 1.5 4.0	2.85 3.2 3.05	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	8569-23-130
E3	1,296	Familia Mazda 323		SWT20037ZZ	4	1st 2nd Oil	77.0 77.0 77.0	1.2 1.5 4.0	3.25 3.2 3.05	BF TUC NIFF-S	SR CR SR	Cr Cr GN	Fe Fe GN	E301-23-130 E301-23-130A
E5	1,490			SWT20045ZZ	4	1st 2nd Oil	77.0 77.0 77.0	1.5 2.0 4.0	2.9 3.3 3.05	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN	E302-23-130A
VB	1,796	Luce (626) Ford Courier		SWT20025ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.5 1.5 4.0	3.6 3.6 3.05	T1 TUC NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	0290-23-130 0494-23-130 3763-23-130 0290-23-131
NA(NEW)	1,796	Luce 1800 Capella (626) Bongo Pick UP Van		SWT20035ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.2 1.5 4.0	3.6 3.6 3.05	BF TUC NIFF-S	HB CR SR	Cr Fe Cr	Fe Fe Fe	8170-23-130 8170-23-130A 8658-23-130 H604-23-130
NA-2	1,586	Luce B1600 Pick up Truck		SWT20049ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.5 2.0 4.0	3.1 3.6 3.05	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN	H617-23-130
B6T B6-ME B6-ZE	1,597	Familia Van Capella Cargo Van Familia Wagon		SWT20060ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.5 1.5 4.0	3.1 3.4 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe GN	Fe Fe GN	B6Y0-11-SCOA
		Capella Familia Van		SWT20063ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.5 1.5 3.0	3.05 3.4 3.05	BF-JB TUC NIFF-S	SR CR SR	Cr Fe GN	Fe Fe GN	B6Y3-11-SCOA
ZL-DE	1,498	Familia Familia S Wagon		SWT20080ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.2 1.5 3.0	2.65 3.2 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	ZLY0-11-SCO
ZY-VE	1,498	Axela Demio Mazda 2		SWT20087ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.2 1.2 2.5	2.45 3.3 2.45	BF-IB TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	ZYY1-11-SCO ZYY2-11-SCO

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
VC	1,769	Luce Van	SWT20030ZZ	4	1st	80.0	2.0	3.6	BF	HB	Cr	Fe	0453-23-130B
		Deluxe 1800			2nd	80.0	2.0	3.6	TUC	CR	Fe	Fe	3975-23-130
		Cosmo			Oil	80.0	4.0	3.25	NIFF-S	SR	Cr	Fe	
MA(NEW)	1,995	Luce (929L)	SWT20031ZZ	4	1st	80.0	1.2	3.45	BF	SR	Cr	Fe	8682-23-130
		Cosmo (121L)			2nd	80.0	1.5	3.6	TUC	CR	Fe	Fe	8682-23-130A
		Capella (626)			Oil	80.0	4.0	3.25	NIFF-S	SR	Cr	Fe	D97Z-6149
VC(NEW)	1,769	Ford Courier											HE18-23-130
		B2000 626	SWT20042ZZ	4	1st	80.0	1.5	3.45	BF	SR	Cr	Fe	HE05-23-130
		(2000)			2nd	80.0	2.0	3.6	TUC	CR	Fe	Fe	
VB(Bore up)	1,970	Cosmo			Oil	80.0	4.0	3.25	NIFF-S	SR	Cr	Fe	
		F6	SWT20054ZZ	4	1st	81.0	1.5	3.1	BF	SR	GN	GN	F601-23-130
		Capella			2nd	81.0	1.5	3.5	TUC	CR	Fe	Fe	F601-23-130A
F6	1,587				Oil	81.0	4.0	3.05	NIFF-S	SR	GN	GN	
		E2000 Titan	SCT20012ZZ	4	1st	82.0	2.5	3.6	T1	CR	Cr	Fe	0164-11-999
		F2000			2nd	82.0	2.5	3.6	T1	CR	Fe	Fe	
VA	1,985	Bus			Oil	82.0	4.5	3.6	BC16	CR	Cr	Fe	
		0552	SWT20021ZZ	4	1st	82.0	2.0	3.6	BF	HB	Cr	Fe	1352-23-130
		VA			2nd	82.0	2.0	3.6	T1	CR	Fe	Fe	0552-23-180
BP01 BP05 BP05-4W BP05-VE	1,839	Familia	SWT20066ZZ	4	1st	83.0	1.5	3.3	BF-IB	SR	GN	GN	BPY1-11-SCO
		Eunos 100			2nd	83.0	1.5	3.6	TUC	CR	Fe	Fe	
		Lantis			Oil	83.0	3.0	2.8	NIFF-S	SR	GN	GN	
FS FS-DE	1,991	Roadstar	SWT20078ZZ	4	1st	83.0	1.2	3.1	BF-IB	SR	GN	GN	FSY2-11-SCO
		Capella			2nd	83.0	1.5	3.6	TUC	CR	Fe	Fe	
		MPV			Oil	83.0	3.0	3.2	NIFF-S	SR	Cr	Fe	
KL-DE KL-G4	2,496	MS6	SWT20073ZZ	V6	1st	84.5	1.5	3.05	BF	SR	Cr	Fe	KLY1-11-SCO
		MS8			2nd	84.5	1.5	3.6	TUC	CR	Fe	Fe	KLY2-11-SCO
		Eunos 800			Oil	84.5	3.0	2.9	NIFF-S	SR	Cr	Fe	
F8-DE	1,789	Capella	SWT20048ZZ	4	1st	86.0	1.5	3.25	BF	SR	Cr	Fe	F801-23-130
		Capella Wagon			2nd	86.0	1.5	3.8	TUC	CR	Fe	Fe	
		Eunos 300			Oil	86.0	4.0	3.2	NIFF-S	SR	Cr	Fe	
FE-DE	1,998	Luce	SWT20065ZZ	4	1st	86.0	1.5	3.1	BF	SR	GN	GN	F2Y1-11-SCO
		Eunos 300			2nd	86.0	1.5	3.8	TUC	CR	Fe	Fe	F2Y2-11-SCO
		Bongo			Oil	86.0	4.0	3.25	NIFF-S	SR	GN	GN	
		Capella Wagon											



Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
L3-VE	2,260	Atenza MPV Mazda 3 Mazda 5 Mazda 6 B2300 Tribute	SWT20090ZZ	4	1st 2nd Oil	87.5 87.5 87.5	1.2 1.2 2.5	2.7 3.4 2.6	BF-IB TUC NIFF-S	SR CR SR	GN Fe GN	GN	L3Y1-11-SCO L3Y6-11-SCO L3Y3-11-SCO
LF-VE	1,998	Atenza Axela	SWT20089ZZ	4	1st 2nd Oil	87.5 87.5 87.5	1.2 1.2 2.5	2.85 3.4 2.8	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe	LFY1-11-SCO LFY1-82-SC2B
L5-VE	2,488	Atenza Atenza Sports	SWT20097ZZ (TCC-H-0084)	4	1st 2nd Oil	89.0 89.0 89.0	1.2 1.2 2.5	2.9 3.8 2.45	BF-IB TUC NIFF-H	SR CR SR	GN Fe GN	GN	L5Y3-11-SCO
U	2,983	B3000 Valcan V6	SWT20075ZZ	V6	1st 2nd Oil	89.0 89.0 89.0	1.5 1.5 4.0	3.45 3.7 3.2	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe	ZZMD-23-130
JE JE48 JE-ZE27	2,954	MPV Centier Luce	SWT20062ZZ	V6	1st 2nd Oil	90.0 90.0 90.0	1.5 1.5 4.0	3.3 3.8 3.25	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN	JEY1-11-SCO
G6	2,606	MPV Proceed	SWT20064ZZ	4	1st 2nd Oil	92.0 92.0 92.0	1.5 1.5 4.0	3.3 4.1 3.2	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe	G601-11-SCOA
A	2,298	B2300	SWT20071ZZ	4	1st 2nd Oil	96.0 96.0 96.0	1.5 1.5 4.0	4.0 4.0 3.25	BF TUC NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	ZZM0-23-130 ZZM9-23-130
C	2,507	B2500	SWT20076ZZ	4	1st 2nd Oil	96.0 96.0 96.0	1.5 1.5 3.0	4.0 4.0 3.45	BF TUC NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	ZZP0-23-130
XS	4,016	B4000 Cologne V6	SWT20072ZZ	V6	1st 2nd Oil	100.4 100.4 100.4	1.6 1.75 3.5	4.0 4.0 3.15	BF TUC NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	ZZM2-23-130 ZZMB-23-130 ZZP2-23-130

● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper / Lower	Reference			
						d 1 (D)	h 1 (B)	a 1 (T)							
PN	1,720	Familia Diesel	SDT20070ZZ	4	1st	78.0	2.0	2.9	BF	SR	GN	PN11-11-SCO			
					2nd	78.0	1.5	3.2	T1-IB	CR	Cr	PNY2-11-SCO			
					Oil	78.0	3.0	3.25	E-BC16	SR	GN				
R2	2,184	Bongo Brawny Bongo Van Truck	SDT20041ZX	4	1st	86.0	2.0	3.05	BF-IB	SR	Cr	Fe	R201-23-130B		
		2nd			86.0	2.0	3.6	T1-IC	CR	Fe	Fe	R201-23-130C			
		Oil			86.0	4.0	4.15	E-BC16	SR	GN	GN				
RFX	1,998	Capella	SDT20055ZZ	4	1st	86.0	2.0	3.1	BF-K3	SR	GN	GN	RF01-23-130		
					2nd	86.0	2.0	3.6	T1-IC	CR	Cr	Fe	RFY0-11-SCOD		
					Oil	86.0	4.0	4.35	E-BC16	SR	GN	GN			
			SDT20068ZZ	4	1st	86.0	2.0	3.1	BF-K3	SR	GN	GN	RFY0-11-SCOF		
					2nd	86.0	2.0	3.6	T1-IC	CR	Cr	Fe			
					Oil	86.0	3.0	3.25	E-BC16	SR	GN	GN			
R2(NEW)	2,184	Bongo	SDT20059ZY	4	1st	86.0	2.0	3.05	BF-IB	SR	Cr	Fe	R2B6-11-SCO		
					2nd	86.0	2.0	3.6	T1-IC	CR	Cr	Fe			
					Oil	86.0	3.0	3.05	E-BC16	SR	GN	GN			
SKYACTIV-D2.2	2,188	CX-5 Atenza	SDT20091ZZ	4	1st	86.0	2.0	2.7	BF-IB	SR	GN	GN	SHY1-11-SCO		
					2nd	86.0	1.5	2.7	T1-IB	SR	GN	GN			
					Oil	86.0	2.0	2.75	E-BC16	SR	GN	GN			
R2D	2,184	Bongo	SDT20084ZZ	4	1st	86.0	2.0	3.1	BF-K2	SR	GN	GN	R2Y2-11-SCO		
					2nd	86.0	2.0	3.6	T1-IC	CR	Cr	Fe			
					Oil	86.0	3.0	3.0	E-BC16	SR	GN	GN			
L3-VDT	2,260	CX-7 Mazda3 Mazda6 Mazda Speed3 Mazda Speed6	SDT20099ZZ (TCC-J-0067)	4	1st	87.5	1.5	3.1	BF	SR	GN	GN	L3Y4-11-SCO		
					2nd	87.5	1.5	3.7	TUC	CR	Fe	Fe			
					Oil	87.5	2.0	2.75	E-BC16	SR	GN	GN			
XA	2,552	E2500 EXA32S Parkins EXA33S EXA35S	SCT20016ZZ	4	1st	88.9	2.383	3.5	BF	HB	Cr	Fe	0559-23-206		
					2nd	88.9	2.383	3.5	T1-IC	HB	Fe	Fe	0559-23-207		
					3rd	88.9	2.383	3.5	T1-IC	HB	Fe	Fe	0636-23-206		
					Oil 1	88.9	4.763	3.5	BC3	HB	Cr	Fe	0636-23-207		
					Oil 2	88.9	4.763	3.5	C1	HB	Fe	Fe	0636-23-210		
S2	2,209	Luce (929L)	SDT20032ZX	4	1st	88.925	2.383	3.45	BF	SR	Cr	Fe	1456-23-206		
XA(NEW)	2,522	Bongo Diesel LA4S BA25B BA259			2nd	88.925	2.383	3.5	T1-IC	CR	Fe	Fe			
					Oil	88.925	4.763	4.6	E-BC16	SR	GN	GN			

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 HONDA
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 MAZDA
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 FORD
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DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside	Upper/Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)					
XB	2,701	Titan E2700 EXC13 EXM	SCT20022ZZ	4	1st	92.0	2.383	3.6	BF	HB	Cr	Fe	0527-23-206	
					2nd	92.0	2.383	3.6	IC	HB	Fe	Fe	0528-23-206	
					3rd	92.0	2.383	3.6	IC	HB	Fe	Fe		
					Oil 1	92.0	4.763	3.6	BC3	HB	Cr	Fe		
					Oil 2	92.0	4.763	3.6	C1	HB	Fe	Fe		
ZB XB EZA	4,052	T4100 Trader	SDT20034ZX	6	1st	92.025	2.383	3.45	BF	SR	Cr	Fe	V101-23-206	
					2nd	92.025	2.383	3.6	T1-IC	CR	Cr	Fe		
					Oil	92.025	4.763	4.6	E-BC16	SR	GN	GN		
WLT	2,499	Bongo Bongo Friendee	SDT20061ZY	4	1st	93.0	2.5	3.5	BF-IB	SR	GN	GN	WLY1-11-SCO	
					2nd	93.0	2.0	3.9	T1-IB	CR	Cr	Fe		
					Oil	93.0	3.0	3.25	E-BC16	SR	GN	GN		
WLC	2,499	BT-50	SDT20092ZZ	4	1st	93.0	2.0	3.3	BF-IB	SR	GN	GN	WLY6-11-SCO	
					2nd	93.0	1.5	3.3	T1	CR	Cr	Fe		
					Oil	93.0	2.0	2.75	E-BC16	SR	GN	GN		
W9	2,849	BT-50	SDT20085ZZ	4	1st	95.0	2.5	3.75	BF-IB	HB	Cr	Fe	W9Y1-11-SCO	
					2nd	95.0	2.0	3.9	T1-IC	CR	Cr	Fe		
					Oil	95.0	3.0	3.85	E-BC16	CR	Cr	Fe		
HA	2,977	Titan E3000	SDT20028ZX	4	1st	95.025	2.383	3.45	BF	SR	Cr	Fe	1363-23-206	
					2nd	95.025	2.383	3.8	T1-IC	CR	Fe	Fe	SE01-23-206	
					Oil	95.025	4.763	4.65	E-BC16	SR	GN	GN	SE01-23-130	
WE(3.0L)	2,953	BT-50	SDT20093ZZ	4	1st	96.0	2.0	3.3	BF	SR	GN	GN	WEY1-11-SCO	
					2nd	96.0	1.5	3.3	T1	SR	GN	GN		
					Oil	96.0	2.0	2.75	E-BC16	SR	GN	GN		
VS	2,956		SDT20082ZZ	4	1st	98.0	2.5	3.4	BF-IB	HB	Cr	Fe	VSY1-11-SCOD	
					2nd	98.0	2.0	3.9	T1-IC	CR	Cr	Fe		
					Oil	98.0	3.0	3.25	E-BC16	SR	GN	GN		
SL	3,455	Titan Truck Titan Dump	SDT20044ZX	4	1st	100.0	2.5	3.65	BF-K2	SR	Cr	Fe	SL01-23-206	
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe		
					Oil	100.0	4.5	4.6	E-BC16	SR	GN	GN		
			SDT20046ZX	4	1st	100.0	2.5	3.65	BF	SR	Cr	Fe	SL50-11-SCO	
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe	SL07-23-206	
					Oil	100.0	4.5	4.6	E-BC16	SR	GN	GN	SLA1-11-SCO	
TF70	4,021	Titan	SDT20069ZZ	4	1st	105.505	2.5	3.9	BF	SR	GN	GN	TF70-11-SCO	
					2nd	105.505	2.0	4.6	T1-IC	CR	Cr	Fe		
					Oil	105.505	3.0	3.25	E-BC16	SR	GN	GN		

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
TF	4,021	Titan	SDT20057ZZ	4	1st	105.505	2.5	4.5	BF-K3	HB	Cr	Fe	TF01-11-SCO
					2nd	105.505	2.0	4.6	T1-IC	CR	Cr	Fe	
					Oil	105.505	4.5	4.6	E-BC3	CR	Cr	Fe	
TM	4,553	Titan	SDT20081ZZ	4	1st	109.0	3.0	3.7	BF-K2	SR	GN	GN	TMY0-11-SCO
					2nd	109.0	2.0	4.6	T1-IC	CR	Cr	Fe	
					Oil	109.0	3.0	3.3	E-BC16	SR	GN	GN	



● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
2G10-2	359	Minica Super Deluxe Minica Sports	SBM30052ZZ	2	1st 2nd 3rd	62.0 62.0 62.0	2.5 2.5 2.5	2.6 2.8 2.8	BF-K2 P P	HB CR CR	Cr Fe Fe	Fe Fe Fe	MD205535 MT205535
2G21	359	Minica F4	SWM30073ZZ	2	1st 2nd Oil	62.0 62.0 62.0	1.5 1.5 2.5	2.8 2.8 3.4	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	MD016760 MD016765
3G82	796	Minicab 800	SWM31067ZZ	3	1st 2nd Oil	65.0 65.0 65.0	1.5 1.5 2.8	2.5 2.9 2.5	BF T1 NIFF-S	SR CR SR	GN Cr Cr	GN Fe Fe	MD120081
4G82	1,061	CMC Varica Minicab	SWM31068ZZ	4	1st 2nd Oil	65.0 65.0 65.0	1.5 1.5 2.8	2.5 2.9 2.5	BF T1 NIFF-S	SR CR SR	GN Cr Cr	GN Fe Fe	
3G83	657	Minica Minicab Minica Toppo	SWM31144ZZ	3	1st 2nd Oil	65.0 65.0 65.0	1.2 1.2 2.8	2.25 2.75 2.5	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD160199
			SWM31158ZZ	3	1st 2nd Oil	65.0 65.0 65.0	1.0 0.8 2.0	2.25 2.45 2.5	BF-IB T1 NIFF-H	SR HB SR	Cr Fe Cr	Fe Fe Fe	MD362974
4A31	1,094	Pajero Toppo	SWM31136ZZ	4	1st 2nd Oil	66.0 66.0 66.0	1.0 1.2 2.5	2.25 2.9 2.75	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	
4G11-EC	1,244	Colt Lancer	SWM31061ZZ	4	1st 2nd Oil	68.2 68.2 68.2	1.5 1.5 4.0	2.7 3.1 3.15	BF T1 NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	MD030360 MD031730 MD115495
4G11	1,244	Mirage Lancer Dodge Colt	SWM31026ZZ	4	1st 2nd Oil	69.5 69.5 69.5	1.5 1.5 4.0	3.1 3.1 3.2	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	MD030350 MD031670
2G23	546	Minica 550 Minicab Wide 550	SWM31009ZZ	2	1st 2nd Oil	70.0 70.0 70.0	1.5 1.5 2.5	3.1 3.1 3.05	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	MD019610
4G42	1,187	Lancer 1200 Colt	SWM31012ZZ	4	1st 2nd Oil	71.0 71.0 71.0	2.0 2.0 4.0	3.3 3.3 3.85	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	MD010850 MD010735

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
4G13	1,298	Mirage Lancer	SWM31062ZY	4	1st	71.0	1.5	2.65	BF	SR	Cr	Fe	MD074687
					2nd	71.0	1.5	3.1	T1	CR	Fe	Fe	MD078543
					Oil	71.0	4.0	3.25	NIFF-S	SR	Cr	Fe	MD115490
4G17	1,343	Mirage Colt	SWM31099ZZ	4	1st	71.0	1.2	2.47	BF	SR	Cr	Fe	MD158908
					2nd	71.0	1.5	3.1	T1	CR	Fe	Fe	
					Oil	71.0	3.0	2.85	NIFF-S	SR	GN	Fe	MD335422
4G30	1,289	Galant Lancer	SWM30057ZZ	4	1st	72.2	1.2	2.5	BF	SR	GN	GN	MD165325
					2nd	72.2	1.5	3.1	T1	CR	Fe	Fe	
					Oil	72.2	3.0	2.85	NIFF-S	SR	GN	GN	
4G36	1,238	Pony Lancer	SWM31016ZZ	4	1st	73.0	2.0	3.3	BF	SR	Cr	Fe	MD009625
					2nd	73.0	2.0	3.3	T1	CR	Fe	Fe	MD115500
					Oil	73.0	4.0	3.0	NIFF-S	SR	Cr	Fe	
4G33	1,439	Galant Lancer Celeste Delica Fork Lift	SWM31024ZZ	4	1st	73.0	1.5	2.7	BF	SR	GN	GN	
					2nd	73.0	1.5	3.3	T1	CR	Fe	Fe	
					Oil	73.0	4.0	3.2	NIFF-S	SR	GN	GN	
4G12	1,410	Lancer Celeste Mirage Plymouth Champ	SWM31027ZZ	4	1st	74.0	1.5	3.3	BF	CR	Cr	Fe	MD030355
					2nd	74.0	1.5	3.3	T1	CR	Fe	Fe	MD012025
					Oil	74.0	4.0	3.3	NIFF-S	SR	Cr	Fe	MD012035
4G31B	1,499	Mirage Galant	SWM31130ZZ	4	1st	74.5	1.5	2.85	BF	SR	Cr	Fe	MD107368
					2nd	74.5	1.5	3.2	T1	CR	Fe	Fe	
					Oil	74.5	4.0	3.2	NIFF-S	SR	Cr	Fe	
6G71	1,998	Debonaire Diamante Galant Σ	SWM31133ZZ	V6	1st	74.7	1.5	3.25	BF	SR	Cr	Fe	MD104889
					2nd	74.7	1.5	3.3	T1	CR	Fe	Fe	MD124452
					Oil	74.7	4.0	3.2	NIFF-S	SR	Cr	Fe	

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DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper/ Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)				
3A90 3A91 3A92 4A91	999	Mirage Colt Attrage		SWM31168ZZ (TCC-H-0085)	3	1st	75.0	1.2	2.5	BF	SR	GN	MN195612
	1,124					2nd	75.0	0.8	2.5	T1	SR	Fe	
	1,193			SWM31170ZZ (TCC-J-0002)	3	1st	75.0	1.0	2.3	BF	SR	GN	1110B699
	1,499			TCC-H-0085-4	4	2nd	75.0	1.2	2.5	T1	CR	Fe	1110C722
4G15	1,468	Mirage Libero Cargo Lancer Proton		SWM31063ZY	4	1st	75.5	1.5	2.85	BF	SR	Cr	MD074725
						2nd	75.5	1.5	3.3	T1	CR	Fe	MD078548
				SWM31076ZZ		Oil	75.5	4.0	3.25	NIFF-S	SR	Cr	MD104656
						1st	75.5	1.2	2.7	BF	SR	GN	MD158549
4G19	1,343	Colt		TCC-K-0013	4	2nd	75.5	1.5	3.3	T1	CR	Fe	MD180804
						Oil	75.5	3.0	2.8	NIFF-S	SR	GN	
						1st	75.5	1.2	2.7	BF	SR	GN	MD333896
						2nd	75.5	1.5	3.3	T1	CR	Fe	MD332715
2G24	548	Minica		SWM31064ZZ	2	1st	76.0	1.5	3.05	BF	SR	GN	MD331313
						2nd	76.0	1.5	3.3	TUC	CR	Fe	
						Oil	76.0	2.5	2.8	NIFF-S	SR	GN	MD018280
						1st	76.0	1.2	2.7	BF	SR	Cr	
4G18	1,584	Lancer		SWM31117ZZ	4	2nd	76.0	1.5	3.1	TUC	CR	Fe	MD349422
						Oil	76.0	2.8	2.55	NIFF-S	SR	GN	
						1st	76.0	1.2	2.7	BF	SR	GN	MD361983
						2nd	76.0	1.2	3.2	TUC	CR	Fe	MD361982
4G18P	1,584	Proton Waja		SWM31127ZZ	4	1st	76.0	1.2	2.7	BF	SR	GN	MD010710
						2nd	76.0	1.2	3.2	TUC	CR	Fe	MD010715
						Oil	76.0	2.5	2.55	NIFF-S	SR	GN	MD011893
						1st	76.0	2.0	3.5	BF	CR	Cr	
4G41	1,378	Galant Coupe FTO Delica		SWM30078ZZ	4	2nd	76.5	2.0	3.5	T1	CR	Fe	MD010715
						Oil	76.5	2.0	3.5	NIFF-S	SR	Cr	MD011893
						1st	76.5	4.0	3.6	BF	CR	Fe	
						2nd	76.5	4.0	3.6	NIFF-S	SR	Cr	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
4G32	1,597	Colt Galant Σ Sapporo Lancer Celeste Mirage Delica	SWM31005ZZ	4	1st 2nd Oil	76.9 76.9 76.9	2.0 2.0 4.0	3.5 3.5 3.8	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe	MD000725 MD004709 MD004739 MD004770 MD005885 MD007251 MD008105 MD106741 MD110632
4G32B	1,597	Galant Σ Chariot Tredia Cardia	SWM31043ZZ	4	1st 2nd Oil	76.9 76.9 76.9	1.5 1.5 4.0	3.1 3.5 3.8	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe	MD012765 MD062387 MD093337 MD099430
2G25	783	Minica	SWM31066ZZ	2	1st 2nd Oil	78.0 78.0 78.0	1.5 1.5 2.5	3.05 3.3 2.8	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	MD011810 MD083152
4G91	1,496	Mirage	SWM31150ZZ	4	1st 2nd Oil	78.4 78.4 78.4	1.2 1.2 2.8	3.05 3.3 2.6	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD177113
6A12	1,998	Eterna Galant Diamante Proton Perdona	SWM31137ZZ	V6	1st 2nd Oil	78.4 78.4 78.4	1.2 1.2 2.8	3.05 3.5 2.6	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD302644 MD189104
4G62 G62B	1,795	Galant Σ Sapporo Lancer	SWM31040ZZ	4	1st 2nd Oil	80.6 80.6 80.6	2.0 2.0 4.0	3.5 3.7 3.3	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	MD040610 MD106736
4G37EC G62B 4G62T	1,755 1,795	Tredia Cordia Delica Star Galant Galant Σ	SWM31041ZZ	4	1st 2nd Oil	80.6 80.6 80.6	1.5 1.5 4.0	3.45 3.7 3.3	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD040465 MD077113 MD154012
4G51	1,850	Galant	SWM31025ZZ	4	1st 2nd Oil	81.0 81.0 81.0	2.0 2.0 4.0	3.5 3.7 3.25	BF T1 NIFF-S	HB CR SR	Cr Cr Cr	Fe Fe Fe	MD023060
4G93	1,834	Galant Lancer Mirage	SWM31079ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.2 1.2 2.8	3.2 3.6 2.7	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD173206
4G92	1,597	Mirage Lancer	SWM31085ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.2 1.2 2.8	2.9 3.6 2.8	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	MD173211 MD357240 MD180348
6A13-S4	2,498	Legnum	TCC-G-0071	V6	1st 2nd Oil	81.0 81.0 81.0	1.2 1.2 2.8	3.2 3.6 2.7	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD336735 MD344094 MD344095



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper/ Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)				
	4G67	1,836	Galant Σ Eterna Eterna SAVA	SWM31058ZZ	4	1st 2nd Oil	81.5 81.5 81.5	1.2 1.5 3.0	3.1 3.6 2.9	BF T1 NIFF-S	SR CR SR	GN Cr GN	MD153602
	4G94-S4	1,999	Lancer Pajero io	SWM31164ZZ	4	1st 2nd Oil	81.5 81.5 81.5	1.2 1.2 2.5	2.7 3.4 2.45	BF-IB TUC NIFF-H	SR CR SR	GN Fe Cr	1110B098 1110B099 1110B100 1110B697
	4G61	1,595	Mirage Lancer	SWM31049ZZ	4	1st 2nd Oil	82.3 82.3 82.3	1.2 1.5 3.0	3.1 3.8 2.85	BF T1 NIFF-S	SR CR SR	GN Cr GN	MD133495
	6G73	2,497	Sigma 25V Diamante	SWM31154ZZ	V6	1st 2nd Oil	83.5 83.5 83.5	1.2 1.5 3.0	2.85 3.5 2.85	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	MD310257
	6G73-GDI	2,497	Diamante	TCC-G-0061	V6	1st 2nd Oil	83.5 83.5 83.5	1.2 1.2 2.5		BF-IB TUC NIFF-S	SR CR SR	GN Fe GN	MD370494
	4G52	1,995	Galant Σ Sapporo Celeste Jeep A57 A78 A115 A123 J58	SWM30074ZZ	4	1st 2nd Oil	84.0 84.0 84.0	2.0 2.0 4.0	3.6 3.7 3.8	BF T1 NIFF-S	HB CR SR	Cr Cr Cr	MD021010 MD021035 MD021070 MD027010
	4G63	1,997	Galant Σ Sapporo	SWM31013ZY	4	1st 2nd Oil	85.0 85.0 85.0	2.0 2.0 4.0	3.1 3.7 3.25	BF T1 NIFF-S	SR CR SR	GN Fe Cr	MD040640 MD040840 MD041580
			Lancer Eclipse Chariot RVR	SWM31048ZZ	4	1st 2nd Oil	85.0 85.0 85.0	1.2 1.5 3.0	3.1 3.8 2.55	BF TUC NIFF-S	SR CR SR	GN Cr GN	MD133485
			Galant Chariot	SWM31103ZZ	4	1st 2nd Oil	85.0 85.0 85.0	1.2 1.5 2.8	3.1 3.8 2.55	BF-IB TUC NIFF-S	SR CR SR	GN Cr GN	MD195810 MD313405
	G63B	1,997	Galant Σ Starion	SWM31034ZZ	4	1st 2nd Oil	85.0 85.0 85.0	1.5 1.5 4.0	3.05 3.8 3.15	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	MD088941
	G63B G63B T/C	1,997	Galant Σ Chariot Pajero	SWM31044ZZ	4	1st 2nd Oil	85.0 85.0 85.0	1.5 1.5 4.0	3.5 3.8 3.3	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	MD100467 MD105516 MD147835
	4G63K	1,997	Galant Σ Eterna Eterna SAVA Chariot	SWM31071ZZ	4	1st 2nd Oil	85.0 85.0 85.0	1.2 1.5 3.0	3.1 3.8 2.55	BF-IB TUC NIFF-S	SR CR SR	GN Cr GN	MD195850

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
4G63	1,997	Savrin	SWM31143ZZ	4	1st 2nd Oil	85.0 85.0 85.0	1.2 1.2 2.0	3.1 3.5 2.3	BF-IB TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	MN149594
G64B 4G64	2,350	Delica Wagon Chariot Air Trek	SWM31037ZZ	4	1st 2nd Oil	86.5 86.5 86.5	1.5 1.5 4.0	3.45 3.8 3.3	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD085346 MD103580
4G64K	2,350	Delica Wagon	SWM31072ZZ	4	1st 2nd Oil	86.5 86.5 86.5	1.2 1.5 3.0	3.1 3.8 2.55	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD195872
4G64	2,350	Galant	SWM31116ZZ	4	1st 2nd Oil	86.5 86.5 86.5	1.2 1.5 2.8	3.1 3.8 2.55	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD195828 MD194597
4G69S	2,378	Lancer Air Trek Galant Eclipse	SWM31161ZZ	4	1st 2nd Oil	87.0 87.0 87.0	1.2 1.2 2.0	3.1 3.4 2.2	BF-IB TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	1110A966 1110A967
420A	1,997	Eclipse	SWM31120ZZ	4	1st 2nd Oil	87.5 87.5 87.5	1.2 1.2 3.0	3.45 4.0 2.9	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	M04741401
4G53	2,384	Jeep Canter Rosa	SWM31021ZZ	4	1st 2nd Oil	88.0 88.0 88.0	2.0 2.0 4.0	3.8 4.1 3.3	BF T1 NIFF-S	HB CR SR	Cr Cr Cr	Fe Fe Fe	MD025000 MD026985
4B12	2,359	Lancer Delica D:5 Outlander	TCC-K-0002	4	1st 2nd Oil	88.0 88.0 88.0	1.2 1.2 2.0	3.05 3.6 2.45	BF-IB TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	1110A822
4G54T	2,555	Starion	SWM31039ZZ	4	1st 2nd Oil	91.1 91.1 91.1	1.5 1.5 4.0	3.3 3.8 3.25	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	MD061258 MD076170 MD080598 MD101895 MD106752
4G54B	2,555	Jeep Debonair Galant Σ Sapporo Dodge Challenger	SWM31047ZZ	4	1st 2nd Oil	91.1 91.1 91.1	2.0 2.0 4.0	3.5 3.8 3.25	BF T1 NIFF-S	HB CR SR	Cr Cr Cr	Fe Fe Fe	MD025089 MD026835 MD026960 MD027140 MD107813 MD107818
6G72	2,952	Galant Σ Pajero	SWM31078ZZ	V6	1st 2nd Oil	91.1 91.1 91.1	1.2 1.5 3.0	3.3 3.8 2.9	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	MD165949 MD301803 1110B180
		Galant Σ Debonair	SWM31080ZZ	V6	1st 2nd Oil	91.1 91.1 91.1	1.5 1.5 4.0	3.25 3.8 3.25	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	MD104922 MD104939 MD129548



Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
6G72-S	2,972	Galant GTO Galant Σ Pajero Diamante	TCC-G-0062	V6	1st 2nd Oil	91.1 91.1 91.1	1.2 1.2 2.5		BF-IB TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	MD374009
6G72-S4(NEW)	2,972	Galant GTO Pajero Diamante	SWM31078ZY	V6	1st 2nd Oil	91.1 91.1 91.1	1.2 1.5 3.0	3.3 3.8 2.85	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	1110A937
6G72-S2,S4	2,972	Galant GTO Pajero Diamante	TCC-G-0074	V6	1st 2nd Oil	91.1 91.1 91.1	1.2 1.5 3.0		BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD329755
6G74	3,496	Debonair	SWM31121ZZ	V6	1st 2nd Oil	93.0 93.0 93.0	1.5 1.5 3.0	3.45 3.9 3.0	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	MD322783 MD300569
6G74-GDI	3,497	Pajero Challenger	SWM31121ZY	V6	1st 2nd Oil	93.0 93.0 93.0	1.5 1.5 3.0	3.5 3.9 2.85	BF-IB TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	MD366688
6G74-GDI-1	3,497	Pajero	SWM31166ZZ (TCC-G-0048)	V6	1st 2nd Oil	93.0 93.0 93.0	1.2 1.2 2.5	3.5 3.5 2.6	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	MN119685
6G75	3,828	Pajero	SWM31148ZZ	V6	1st 2nd Oil	95.0 95.0 95.0	1.2 1.2 2.0	3.5 3.4 2.55	BF-IB TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	MN183867 1110A497 1110B806 1110B571

● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
K3B		Combine Harvester Tractor	YDM30119ZZ	1	1st 2nd 3rd Oil	68.0 68.0 68.0 68.0	2.5 2.5 2.5 4.0	2.8 3.0 2.75 3.2	BF T1 TUC E-BC16	CR CR CR CR	Cr Fe Fe Cr	Fe	MM433340
K4E		For Industrial Machine	YDM30112ZZ	1	1st 2nd Oil	76.0 76.0 76.0	2.49 2.0 4.0	3.3 3.3 3.6	BF-K2 T1-IC E-BC16	CR CR CR	Cr Fe Cr	Fe	MM431579
4D65	1,795	Mirage Colt C14A	SDM31090ZX	4	1st 2nd Oil	80.6 80.6 80.6	2.0 2.0 4.0	3.05 3.7 4.35	BF-K2 T1 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	MD071206 MD127022 MD127017
4D68NA	1,998	Galant Proton	SDM31104ZZ	4	1st 2nd Oil	82.7 82.7 82.7	2.0 2.0 3.0	3.25 3.5 3.25	BF-K2 TUC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	MD197162
4D68T	1,998	Chariot	SDM31151ZZ	4	1st 2nd Oil	82.7 82.7 82.7	2.0 2.0 3.0	3.1 3.5 3.25	BF-K2-IB T1-K2 E-BC16	SR HB SR	GN Cr GN	GN	MD197187
4DQ5	2,084	Canter Fork Lift FD15	SDM31010ZZ	4	1st 2nd Oil	84.0 84.0 84.0	2.5 2.0 4.0	3.6 3.6 4.2	BF T1 E-BC3	HB CR HB	Cr Fe Cr	Fe Fe Fe	30615-51011 30617-51011
		Canter	SJM30105ZZ		1st 2nd Oil	84.0 84.0 84.0	2.5 2.0 4.0	3.6 3.6 4.0	BF-K2 T1-IC E-BC3	HB CR CR	Cr Cr Cr	Cr Fe Fe	30617-61011
4N15	2,442	All New Triton All New Pajero Sports	SDM31171ZZ (TCC-H-0104)	4	1st 2nd Oil	86.0 86.0 86.0	2.0 1.5 2.0	2.9 2.9 2.75	BF-K2 T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	1110C712
4D55T 4D56 4D56TDI	2,346 2,476	Galant Σ Galant Sapporo	SDM31038ZX	4	1st 2nd Oil	91.1 91.1 91.1	2.5 2.0 4.0	3.25 3.9 4.35	BF-K2 T1-K2 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	MD050390 MD103391 1110A561
4D56T	2,476	Strada Delica Wagon Space Gear Challenger	SDM31160ZZ	4	1st 2nd Oil	91.1 91.1 91.1	2.5 2.0 3.0	3.3 3.5 3.25	BF-K2 T1-K2 E-BC16	SR HB SR	GN Cr GN	GN Fe GN	1110B977V T
4D55 4D56	2,346 2,476	Galant Σ	SDM31055ZX	4	1st 2nd Oil	91.1 91.1 91.1	2.5 2.0 4.0	3.45 3.8 4.35	BF T1 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	MD050395

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DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
4DR5	2,659	Canter T96A T96B T200C T200F T210CT Jeep J24 J36 J44 J54 J24H Rosa B200 B210	SDM30075ZX	4	1st	92.0	2.5	3.45	BF-K2	SR	Cr	Fe	31617-02012	
					2nd	92.0	2.0	3.9	T1	CR	Fe	Fe	31617-02013	
					3rd	92.0	2.0	3.9	T1	CR	Fe	Fe	31617-05102	
					Oil	92.0	4.5	4.6	E-BC16	SR	GN	GN	31617-05103	
6DR5	3,983	Rosa T44 T44B Fork Lift FD60 Jupiter	SDM30076ZX	6	1st	92.0	2.5	3.45	BF-K2	SR	Cr	Fe	31717-12012	
					2nd	92.0	2.0	3.9	T1	CR	Fe	Fe	31717-12013	
					3rd	92.0	2.0	3.9	T1	CR	Fe	Fe		
					Oil	92.0	4.5	4.6	E-BC16	SR	GN	GN		
4DR52T-1	2,659	Canter	SDM31129ZZ	4	1st	92.0	2.35	3.45	BF-K1	SR	Cr	Fe	ME996069	
S4E	2,609	Fork Lift	SDM30110ZZ	4	1st	94.0	2.5	4.0	BF-K2	HB	Cr	Fe	34417-11011	
					2nd	94.0	2.0	4.0	T1	CR	Fe	Fe		
					Oil	94.0	4.5	4.45	E-BC3	HB	Cr	Fe		
S4S	3,331	For Industrial Machine Bulldozer	SDM30118ZZ (TCC-G-0080)	4	1st	94.0	2.5	3.3	BF-K2	SR	GN	GN	32A17-02010	
6DS1	4,678	Truck T62D T650B T650E T650J T650ZD Bus MR620	SJM30002ZZ	6	1st	95.0	2.5	4.1	BF	CR	Cr	Cr	30817-01006	
					2nd	95.0	2.0	4.1	T1-IC	CR	Cr	Fe	ME020382	
					3rd	95.0	2.0	4.1	T1	CR	Fe	Fe	ME021376	
					Oil	95.0	4.5	4.2	E-BC3	CR	Cr	Fe		
6DS3	5,103	T652B B622	SDM31001ZZ	6	1st	95.0	3.0	3.9	BF-K2	HB	Cr	Fe	ME021855	
4M40-NA 4DR7	2,835	Canter Pajero	SDM31095ZX	4	1st	95.0	2.35	3.45	BF-K1	SR	Cr	Fe	ME202342	
					2nd	95.0	2.0	3.7	T1-IC	HB	Cr	Fe	ME202950	
					Oil	95.0	4.0	4.15	E-BC16	SR	Cr	Fe	ME997256	
4M40	2,835	Pajero	SDM31114ZZ	4	1st	95.0	2.306	3.45	BF-K1	SR	Cr	Fe	ME201522	
4M40-TC 4M42	2,835	Pajero	SDM31140ZZ	4	1st	95.0	2.0	3.9	T1-IC	CR	Cr	Fe	ME202380	
					2nd	95.0	4.0	4.35	E-BC16	SR	GN	GN	MD997894	
					Oil	95.0	3.0	3.25	E-BC16	SR	Cr	Fe		

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
4P10	2,998	Canter	TCC-F-0069	4	1st 2nd Oil	95.8 95.8 95.8	2.306 2.0 2.5		BF-K1 T1 E-BC16	SR CR SR	GN Fe GN	GN Fe GN	MK667801
6DS7	5,430	Truck T653B T653BG T663C T663ZD FK102 Tractor T653ZR Bus B623B B623E	SDM31002ZZ	6	1st 2nd Oil	98.0 98.0 98.0	3.0 2.0 5.0	4.0 4.2 4.8	BF-K2 T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	ME023333 ME023333-02 ME021861 ME024409
6DS5	4,974	Truck T630 T651 Bus B620B B620E B620BE Tractor T651ZR	SJM30056ZZ	6	1st 2nd 3rd Oil	98.0 98.0 98.0 98.0	3.0 2.0 2.0 5.0	4.2 4.2 4.2 4.8	BF T1-IC T1 E-BC3	CR CR CR CR	Cr Cr Fe Cr	Cr Fe Fe Fe	30817-31000 ME020427 ME021382 ME021856
4M41-T1	3,200	Pajero	SDM31149ZZ	4	1st 2nd Oil	98.5 98.5 98.5	2.35 1.5 3.0	3.4 3.5 3.25	BF-K1 T1-IB E-BC16	HB SR SR	Cr GN GN	Fe GN GN	ME203533
4M41-PUS	3,200	Pajero Sports	SDM31149ZY	4	1st 2nd Oil	98.5 98.5 98.5	2.35 1.5 3.0	3.4 3.5 3.65	BF-K1 T1-IB E-BC16	SR SR SR	GN GN GN	GN GN GN	1110B654
4D30	3,298	Truck FE111・121 ・211 Bus BE211 Rosa	SDM31014ZX	4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 5.0	3.65 4.2 4.95	BF-K2 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME012010 ME012070
4D31T	3,298	Canter	SDM31081ZX	4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.0	3.65 4.2 4.35	BF-K2 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME997396 ME997398 ME012848
6D31T	4,948	Fighter	SDM31088ZX	6	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.0	3.65 4.2 4.35	BF-K2 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME999783
6D31	4,948	Fighter	SDM31102ZZ	6	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 5.0	4.0 4.2 4.8	BF-K2 T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	
S6KT	6,380	For Industrial Machine	SDM30108ZX	6	1st 2nd Oil	102.0 102.0 102.0	3.0 2.0 4.0	4.05 4.0 4.15	BF-K2 T1-K2 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	34317-19010
4D34	3,907	Truck FE439	SDM31157ZZ	4	1st 2nd Oil	104.0 104.0 104.0	3.0 2.0 4.0	4.2 4.2 4.15	BF T1-IC E-BC16	HB CR SR	Cr Cr Cr	Fe Fe Fe	ME997237



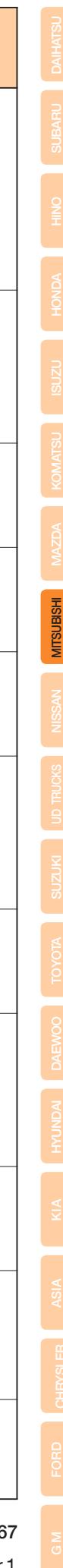
DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
	4D34T	3,907	Canter Rosa Fighter	SDM31075ZX	4	1st 2nd Oil	104.0 104.0 104.0	2.806 2.0 4.0	3.85 4.2 4.35	BF-K1 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME997240
	4D32	3,567	Canter	SDM31098ZX	4	1st 2nd Oil	104.0 104.0 104.0	3.0 2.0 4.0	3.65 4.2 4.35	BF-K2 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME997318
	6D10	5,974	Truck T654B T654ZR	SDM31006ZZ	6	1st 2nd Oil	105.0 105.0 105.0	3.0 2.0 5.0	4.2 4.4 4.8	BF-K2 T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	ME032190 ME032190-01
	6D11	6,754	FK103 KK103 Bus MK103H MM504											ME032326
	4D33	4,214	Canter	SDM31097ZX		1st 2nd Oil	108.0 108.0 108.0	3.0 2.0 4.0	4.05 4.4 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME996378
	4D35	4,561	Rosa Canter	SDM31118ZZ	4	1st 2nd Oil	110.0 110.0 110.0	3.0 2.5 4.0	4.05 4.4 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME996628 ME995237
				SDM31152ZZ	4	1st 2nd Oil	110.0 110.0 110.0	3.0 2.0 4.0	3.85 3.65 4.15	BF-IB T1-IB E-BC16	SR SR SR	Cr Cr Cr	Fe Fe Fe	ME995214
	6D14	6,557	Truck FK115・115H FK115J FK115K・115DK T656ZR FM215 Bus MK115・115H MM115C	SDM31007ZX	6	1st 2nd Oil	110.0 110.0 110.0	3.0 2.5 5.0	4.05 4.4 4.95	BF-K2 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME032071 ME032260 ME032404 ME032458
				SDM31089ZX	6	1st 2nd Oil	110.0 110.0 110.0	3.0 2.5 4.0	4.05 4.4 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME999952
	6D14T	6,557	Bus MK115・115H MM115・515	SDM31122ZZ	6	1st 2nd Oil	110.0 110.0 110.0	2.806 2.5 4.0	4.05 4.0 4.35	BF-K1 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME997465
	6DB	8,550	Truck T330 T330D T335 T370 T380 T383 T390 T410D T480 K100 4K100 4K120 Bus R470 AR470 AM480 MR410 MR420 MR430 MR490 MR510	SJM30005ZZ	6	1st 2nd 3rd Oil	110.0 110.0 110.0 110.0	3.5 2.5 2.5 5.0	4.3 4.7 4.7 4.7	BF T1-IC BI-TUC E-C1	HB CR CR CR	Cr Cr Fe Cr	Cr Fe Fe Fe	30017-71002 30017-71003 30017-75002 30017-75003

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outer Side	Upper Lower	
8DB	11,404	Bus R820 R870 AR820 MR870 MAR870	SJM30006ZZ	8	1st 2nd 3rd Oil	110.0 110.0 110.0 110.0	3.5 2.5 2.5 5.0	4.3 4.7 4.7 4.7	BF T1-IC B1-UC E-C1	HB CR CR CR	Cr Cr Fe Cr	Cr Fe Fe Fe	30017-11000
6D15	6,919	Fighter Aero Midi	SDM31073ZX	6	1st 2nd Oil	113.0 113.0 113.0	3.0 2.5 5.0	4.05 4.4 4.95	BF-K2 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME032403 ME072306
6D15T	6,919	Truck FM316 FM216 M116 · 516	SDM31119ZZ	6	1st 2nd Oil	113.0 113.0 113.0	2.806 2.5 4.0	4.05 4.4 4.35	BF-K1 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME997466 ME999929 ME999954
4M50	4,899	Truck Canter	SDM31172ZZ (TCC-H-0108)	4	1st 2nd Oil	114.0 114.0 114.0	2.806 2.0 4.0	4.1 3.7 4.35	BF-K1 T1-IB E-BC16	SR SR SR	GN GN GN	GN GN GN	ME995590 ME993913
4M51	5,249	Truck Canter	SDM31156ZZ	4	1st 2nd Oil	118.0 118.0 118.0	3.0 2.0 4.0	4.1 4.1 4.35	BF T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	ME995591 ME995592 ME995593
6D16	7,545	Truck FK417 FK517	SDM31051ZX	6	1st 2nd Oil	118.0 118.0 118.0	3.0 2.5 4.0	4.25 4.6 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME999955 ME999540 ME996229 ME996231
6D16T 6M60T 6D17	7,545	Truck FK617A FK618	SDM31054ZX	6	1st 2nd Oil	118.0 118.0 118.0	2.806 2.5 4.0	4.05 4.6 4.4	BF-K1 T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	ME997467 ME997999 ME999549
		Truck Fighter Aero Midi	SDM31159ZZ	6	1st 2nd Oil	118.0 118.0 118.0	2.806 2.5 4.0	4.1 4.6 4.4	BF-K1 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	ME995563 ME995561 (cyl) ME995535 ME995536 (cyl) ME993728 ME993729 (cyl) ME996593
D2700		For Industrial Machine	YDM31033ZZ	1	1st 2nd Oil	118.0 118.0 118.0	3.0 2.5 4.0	4.6 4.6 4.2	BF T1-IC E-BC3	CR CR CR	Cr Cr Cr	Fe Fe Fe	MM332391 MM334038
6M61	8,201	Fighter	SDM31106ZZ	6	1st 2nd Oil	118.0 118.0 118.0	3.0 2.0 4.0	4.1 4.3 4.35	BF T1-IB E-BC16	SR SR SR	GN GN GN	GN GN GN	ME995562 ME995560 (cyl)
6M61CNG	8,201	Truck CNG Fighter	SDM31123ZY	6	1st 2nd Oil	118.0 118.0 118.0	2.5 2.0 4.0	3.9 4.3 4.35	BF TUC E-BC16	SR HB SR	GN Cr GN	GN Fe GN	ME993687 ME993688



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
6D20 6D21	10,308	Truck NP117 FD217R K202 Bus MP117H	SDM31011ZZ	6	1st 2nd Oil	125.0	4.0	5.0	BF-K3	HB	Cr	Fe	30917-01012	
						125.0	3.0	5.3	T1-IC	CR	Cr	Fe	30917-01013	
						125.0	6.0	5.5	E-BC3	CR	Cr	Fe		
6DC2	9,955	Truck/T800H T810H T910Q T910K Bus/B800 JB800K B805K B805M B810K B815K	SDM30007ZZ	6	1st 2nd Oil	125.0	3.0	5.2	BF-K1	HB	Cr	Fe	ME052145	
						125.0	3.0	5.3	T1-IC	CR	Cr	Fe	ME052260	
						125.0	6.0	5.5	E-BC3	CR	Cr	Fe		
8DC2 8DC4 8DC7	13,273	Truck T931 T811 T910 FT102 FV112 Bus B910 B801	SDM30008ZY	V8	1st 2nd Oil	130.0	4.0	5.0	BF-K2	HB	Cr	Fe	31217-02010	
						130.0	3.0	5.3	T1-IC	CR	Cr	Fe	ME062100	
						130.0	6.0	5.5	E-BC3	CR	Cr	Fe		
6D22	11,149	Truck FP308 MP118 MP518	SJM31019ZZ	6	1st 2nd Oil	130.0	3.0	5.2	BF	HB	Cr	Cr	ME052758	
6D22 6D22T	11,149	Truck FFT318 FP318 Bus/HP118 MP518 Fork Lift	SDM31015ZX	6	1st 2nd Oil	130.0	3.306	4.5	BF-K1	SR	GN	GN	30917-20010	
						130.0	3.0	5.3	T1-IC	CR	Cr	Fe	ME052124	
						130.0	6.0	5.5	E-BC16	CR	Cr	Fe	ME052787	
6D24	11,945	Aero Star The Great	SJM31094ZZ	6	1st 2nd Oil	130.0	3.306	4.55	BF-K1	SR	Cr	Fe	ME151190	
6D24T	11,945	Truck	SDM31105ZY	6	1st 2nd Oil	130.0	3.306	4.5	BF-K1	SR	GN	GN	ME995636 (cyl)	
						130.0	2.5	4.7	T1-IB	SR	GN	GN		
						130.0	4.0	4.35	E-BC16	SR	GN	GN		

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
6D22 6D22T2	11,149	Truck FP308 MP118 MP518	SJM31111ZZ	6	1st 2nd Oil	130.0	3.306	4.55	BF-K1	SR	Cr	Fe	ME052889
						130.0	3.0	5.3	T1-IC	HB	Cr	Cr	ME995467
						130.0	4.0	4.77	E-BC16	SR	Cr	Fe	ME350961 ME993736 ME996142 ME996540 ME996544 (cyl)
6D22 6D24	11,149 11,945	The Great	SJM31057ZZ	6	1st 2nd Oil	130.0	3.0	5.2	BF	HB	Cr	Cr	ME052966
						130.0	3.0	5.3	T1-IC	HB	Cr	Cr	ME999136(cyl)
						130.0	4.0	4.77	E-BC16	SR	Cr	Fe	ME995473 ME995465(cyl) ME996391
6D22	11,149	The Great	SJM31110ZZ	6	1st 2nd Oil	130.0	3.306	4.55	BF-K1	SR	Cr	Fe	ME995477 ME995466(cyl)
130.0						130.0	3.0	5.3	T1-IC	HB	Cr	Cr	
130.0						6.0		5.5	E-BC16	CR	Cr	Fe	
6D24CNG	11,945	Bus	SJM31124ZZ	6	1st 2nd Oil	130.0	2.5	4.5	BF	SR	GN	GN	ME993734
130.0						2.5		5.3	TUC	HB	Cr	Cr	
130.0						4.0		4.35	E-BC16	SR	GN	GN	
6R10	12,808	Super Great Aero Ace	TCC-F-0068	6	1st 2nd Oil	132.0	3.306		BF-K1	SR	GN	GN	MX901417
132.0						2.5			T1	CR	Cr	Fe	
132.0						3.5			E-BC16	CR	Cr	Fe	
8DC6 8DC8	14,886	Truck FS313 NW Bus/B907N NA SA MS513 MS613	SDM31004ZZ	V8	1st 2nd Oil	135.0	4.0	5.0	BF-K2	HB	Cr	Fe	31217-60012
						135.0	3.0	5.7	T1-IC	CR	Cr	Fe	ME062086
						135.0	6.0	5.5	E-BC3	CR	Cr	Fe	
8DC6 8DC81(NEW)	14,886	FT FJ FV	SDM31028ZZ	V8	1st 2nd Oil	135.0	3.306	5.4	BF-K1	HB	Cr	Fe	ME062022
						135.0	3.0	5.5	T1-IC	CR	Cr	Fe	ME062246
						135.0	6.0	5.5	E-BC3	CR	Cr	Fe	
8DC91 8DC9T	16,031	Truck FU 11.5ton FV 10.75ton FT EW Bus MS	SDM31029ZX	V8	1st 2nd 3rd Oil	135.0	3.306	4.75	BF-K1	SR	Cr	Fe	ME062018
						135.0	3.0	5.5	T1-IC	CR	Cr	Fe	ME062230
						135.0	3.0	5.5	B1-UC	CR	Cr	Fe	
						135.0	6.0	5.5	E-BC3	CR	Cr	Fe	
6D40-T	12,023	The Great Truck	SDM31056ZX	6	1st 2nd Oil	135.0	3.306	4.75	BF-K1	SR	Cr	Fe	ME120536
135.0						3.0		5.5	T1-IC	CR	Cr	Fe	ME121332
135.0						4.0		4.35	E-BC16	SR	GN	GN	ME996132 (cyl)
8DC9T	16,031	Aero King Aero Queen The Great	SDM31087ZY	V8	1st 2nd 3rd Oil	135.0	3.306	5.4	BF-K1	HB	Cr	Fe	ME090578
135.0						3.0		5.5	T1-IC	CR	Cr	Fe	
135.0						3.0		5.5	B1-UC	CR	Cr	Fe	
135.0						4.0		4.35	E-BC16	SR	GN	GN	



DAIHATSU DAIHATSU	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/ Lower	
6M70	12,882	Aero Star Super Great	SDM31115ZZ	6	1st 2nd Oil	135.0 135.0 135.0	3.306 2.5 4.0	4.65 4.7 4.35	BF-K1 T1-IB E-BC16	SR SR SR	Cr GN GN	Fe GN GN	ME995857 ME995855 (cyl)
S6B		For Industrial Machine	YDM30106ZZ	1	1st 2nd Oil	135.0 135.0 135.0	4.0 3.0 6.0	5.0 5.5 5.5	BF-K2 T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	36217-11010
8DC9	16,031	Aero Bus	TCC-B-0009	V8	1st 2nd 3rd Oil	135.0 135.0 135.0 135.0	4.0 3.0 3.0 6.0		BF-K2 T1-IC BI-TUC E-BC3	HB CR CR CR	Cr Cr Fe Cr	Fe Fe Fe Fe	ME062090
8DC10	16,752	The Great Aero Bus MS7 MS8	SDM31134ZZ	V8	1st 2nd 3rd Oil	138.0 138.0 138.0 138.0	3.306 3.0 3.0 6.0	5.5 5.5 5.5 5.5	BF-K1 T1-IC BI-TUC E-BC16	HB CR CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	ME065717 ME999510
					1st 2nd 3rd Oil	138.0 138.0 138.0 138.0	3.306 3.0 3.0 4.0	5.5 5.5 5.5 4.35	BF-K1 T1-IC BI-TUC E-BC16	HB CR CR SR	Cr Cr Cr GN	Fe Fe Fe GN	ME090582 ME997039
8DC11	17,737	Aero Bus MS7 MS8 Super Great Truck	SDM31128ZZ	V8	1st 2nd 3rd Oil	142.0 142.0 142.0 142.0	3.306 3.0 3.0 4.0	5.6 5.7 5.7 4.15	BF-K1 T1-IC BI-TUC E-BC16	HB CR CR SR	Cr Cr Cr Cr	Fe Fe Fe Fe	30617-50111 ME090588
					1st 2nd 3rd Oil	142.0 142.0 142.0 142.0	3.306 3.0 3.0 5.0	5.6 5.7 5.7 5.3	BF-K1 T1-IC BI-TUC E-BC16	HB CR CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	ME065607
S6A		For Industrial Machine	YJM30107ZZ	1	1st 2nd Oil	145.0 145.0 145.0	4.4 2.92 6.0	5.9 5.9 5.3	BF-K2 T1-K2 E-BC3	HB CR HB	Cr Cr Cr	Cr Fe Fe	32517-11010
8M20	20,089	The Great Aero Queen	SDM31138ZZ	V8	1st 2nd 3rd Oil	146.0 146.0 146.0 146.0	3.306 3.0 3.0 4.0	5.6 5.7 5.7 4.65	BF-K1 T1-IC BI-TUC E-BC16	HB CR HB SR	Cr Cr Cr Cr	Fe Fe Fe Fe	ME996163
S6A2		For Industrial Machine	YJM30109ZZ	1	1st 2nd Oil	150.0 150.0 150.0	4.4 2.92 6.0	6.0 6.0 5.3	BF-K2 T1-K2 E-BC3	HB CR HB	Cr Cr Cr	Cr Fe Fe	32517-17010
S6A3		For Industrial Machine	YDM30120ZZ	1	1st 2nd Oil	150.0 150.0 150.0	3.0 2.5 5.0	4.7 5.5 4.9	BF-K2 T1-K2 E-BC16	SR CR SR	GN Cr Cr	GN Fe Fe	35A17-01010

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
MA10 MA10ET	987	March	SWN30051ZZ (STD)	4	1st	68.0	1.5	2.5	BF	SR	Cr	Fe	12033-01B05
					2nd Oil	68.0	1.5	3.1	T1	CR	Fe	Fe	12033-01B10
CR10DE CR12DE	997 1,240	March	SWN30135ZZ (STD)	4	1st	71.0	1.2	2.45	BF	SR	Cr	Fe	12033-AX001
					2nd Oil	71.0	1.2	2.7	T1	CR	Fe	Fe	
CG10DE CG13DE	997 1,274	March	SWN30110ZZ (STD)	4	1st	71.0	1.2	2.45	BF	SR	Cr	Fe	12033-41B01
					2nd Oil	71.0	1.5	3.1	T1	CR	Fe	Fe	
MA12S QG13DE	1,235	March Micra	SWN30074ZZ (STD)	4	1st	71.0	1.5	2.3	BF	SR	GN	GN	12033-05B10
					2nd Oil	71.0	1.5	3.25	T1	CR	Fe	Fe	12033-05B11
GA13DE GA13DS	1,295	Sentra Sunny	TCC-J-0058	4	1st	71.0	1.5	2.3	BF	SR	GN	GN	12035-05B10
					2nd Oil	71.0	1.5	3.25	T1	CR	Fe	Fe	
CGA3DE	1,348	Cube March Micra	SWN30128ZZ	4	1st	72.0	1.2	2.65	BF	SR	Cr	Fe	12033-2U800
					2nd Oil	72.0	1.2	3.1	T1	CR	Fe	Fe	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
	J13	1,299	Bluebird 1000 1200 1300 Sunny (100Y)	SWN30026ZZ	4	1st	73.0	2.0	3.0	T1	CR	Cr	Fe	12033-A6200
	A10	988	Pulser (100A) Cherry Vanette (C20) Sunny (120Y) Pulser (120A) Cherry 1200 Pick UP			2nd	73.0	2.0	3.0	T1	CR	Fe	Fe	12033-H6200
	A12	1,171				Oil	73.0	4.0	3.0	NIFF-S	SR	Cr	Fe	12033-B3040 12033-H6211
	E10	988	Sunny P130 VP130 WP13D			1st	73.0	1.5	3.0	BF	HB	Cr	Fe	12033-41M01
	CR14DE	1,386	Cube		SWN30137ZZ (STD)	2nd	73.0	1.2	2.25	BF	SR	Cr	Fe	12033-AX201
						Oil	73.0	1.2	2.8	T1	CR	Fe	Fe	
					SWN30138ZZ (O/S0.2)	1st	73.2	1.2	2.25	BF	SR	Cr	Fe	12035-AX200
						2nd	73.2	1.2	2.8	T1	CR	Fe	Fe	12035-AX201
						Oil	73.2	2.0	2.2	NIFF-H	SR	Cr	Fe	
	GA14	1,392	AD Van R-VY10 VFY10	SWN30103ZZ	4	1st	73.6	1.5	2.7	BF	SR	GN	GN	12033-87A10
						2nd	73.6	1.5	3.1	T1	CR	Cr	Fe	12033-87A11
						Oil	73.6	2.8	2.8	NIFF-S	SR	GN	GN	12033-53Y00
	QG15DE	1,497	Wingroad	SWN30172ZZ	4	1st	73.6	1.2	2.45	BF	SR	Cr	Fe	12033-5M370
						2nd	73.6	1.2	3.2	T1	CR	Fe	Fe	
						Oil	73.6	2.5	2.55	NIFF-H	SR	Cr	Fe	
	A12A	1,237	Sunny (120Y) B310 Pulser (120A)	SWN30073ZZ	4	1st	75.0	2.0	3.2	T1	HB	Cr	Fe	12033-H8500
						2nd	75.0	2.0	3.2	T1	CR	Fe	Fe	
						Oil	75.0	4.0	3.05	NIFF-S	SR	Cr	Fe	
	A14	1,397	Sunny (140Y) Pulser (140A) Violet (140A) Vanette (C20)	SWN30045ZX	4	1st	76.0	2.0	2.85	BF	SR	Cr	Fe	12033-H7200
						2nd	76.0	2.0	3.4	T1	CR	Fe	Fe	12033-H8660
						Oil	76.0	4.0	3.25	NIFF-S	SR	Cr	Fe	12033-H8900 12033-H9910
	A14(NEW)	1,397	Vanette (C20) B210 B310 Sunny Pulser	SWN30052ZZ	4	1st	76.0	1.2	3.05	BF	SR	Cr	Fe	12033-H7680
						2nd	76.0	2.0	3.4	TUC	CR	Fe	Fe	12033-H9800
						Oil	76.0	4.0	3.25	NIFF-S	SR	Cr	Fe	12033-H9810 12033-H9915 12033-H9918

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
E13	1,270	Sunny Pulser Laurel Spirit Langley California AD Van	SWN30057ZY	4	1st 2nd Oil	76.0	1.5	2.65	BF	SR	Cr	Fe	12033-01M01
						76.0	1.5	3.4	T1	CR	Fe	Fe	12033-01M02
						76.0	4.0	3.0	NIFF-S	SR	Cr	Fe	12033-01M03 12033-01M10 12033-01M12
E15	1,487												
GA16	1,596	Sunny Pulser	SWN30097ZY	4	1st 2nd Oil	76.0	1.5	2.67	BF	SR	Cr	Fe	12033-94M00
						76.0	1.5	3.2	T1	CR	Fe	Fe	12033-94M01
						76.0	2.8	2.85	NIFF-S	SR	Cr	Fe	12033-94M02
GA16DE	1,596	Sunny Pulser Primera	SWN30104ZZ	4	1st 2nd Oil	76.0	1.5	3.3	BF	HB	Cr	Fe	12033-57Y00
						76.0	1.5	3.2	T1	CR	Fe	Fe	12033-57Y01
						76.0	2.8	2.85	NIFF-S	SR	Cr	Fe	
VQ20	1,995	Cefiro Maxima	SWN30130ZZ	V6	1st 2nd Oil	76.0	1.2	2.7	BF-IB	SR	Cr	Fe	12033-31U00
						76.0	1.2	3.3	T1	CR	Fe	Fe	12033-31U01
						76.0	2.5	2.8	NIFF-S	SR	Cr	Fe	
J15	1,483	Datsun Caravan Cabster Truck N521 UN521	SWN30033ZX	4	1st 2nd Oil	77.95	2.0	2.85	BF	SR	Cr	Fe	12033-01W60
						77.95	2.0	3.7	T1	CR	Fe	Fe	12033-01W61
						77.95	4.0	3.0	NIFF-S	SR	Cr	Fe	12033-01W62 12033-B3030 12033-B8200
J16	1,567	HT20 Bus SVE20 VPE20 KT20											
L20ET	1,988	Cedric Deluxe Gloria Deluxe Skyline	SWN30037ZZ	6	1st 2nd Oil	77.95	2.0	3.3	T1	HB	Cr	Fe	12033-E3030
						77.95	2.0	3.7	T1	CR	Fe	Fe	12033-V0300
						77.95	4.0	3.0	NIFF-S	SR	Cr	Fe	12033-V0310 12033-V0400
CA16S	1,598	Bluebird Stanza Auster	SWN30055ZY	4	1st 2nd Oil	77.95	1.5	2.9	BF	SR	Cr	Fe	12033-06E00
						77.95	1.5	3.4	T1	CR	Fe	Fe	12033-D0120
						77.95	4.0	3.0	NIFF-S	SR	Cr	Fe	12033-D0400 12033-06E01
L20A	1,988	Gloria Van Cedric Bluebird Skyline 2000GT Fairlady Z	SWN30068ZZ	6	1st 2nd Oil	77.95	1.5	3.3	BF	HB	Cr	Fe	12033-01L00
						77.95	2.0	3.6	TUC	CR	Fe	Fe	
						77.95	4.0	3.0	NIFF-S	SR	Cr	Fe	
VG20E VG20ET VG20DET	1,998	Cedric Gloria Laurel Fairlady Z	SWN30092ZY	V6	1st 2nd Oil	77.95	1.5	2.9	BF	SR	Cr	Fe	12033-12P00
						77.95	1.5	3.4	T1	CR	Fe	Fe	
						77.95	2.8	3.0	NIFF-S	SR	Cr	Fe	

DAIHATSU
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ASIA
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DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
	CA16 CA16DE	1,598	Stanza Auster Bluebird	SWN30111ZZ	4	1st 2nd Oil	77.95 77.95 77.95	1.5 1.5 2.8	2.9 3.4 3.0	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-55M00
	L20	1,998	Cedric Bluebird Gloria Skyline2000GT Laurel Fairlady Z	SWN30049ZZ	6	1st 2nd Oil	77.95 77.95 77.95	2.0 2.5 4.0	3.6 3.7 3.0	T1 T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	12033-73401 12033-73402
	RB20E	1,998	Skyline Laurel	TCC-A-0132	6	1st 2nd Oil	77.95 77.95 77.95	1.5 1.5 2.8		BF T1 NIFF-S	SR CR SR	GN Cr Cr	GN Fe Fe	12033-65L00
	HR12DE	1,198	March	SWN30197ZZ	3	1st 2nd Oil	78.0 78.0 78.0	1.2 1.2 2.0	2.45 2.7 2.3	BF-IB T1 NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-1HC0C
	HR16DE	1,597	Vanette Wagon	SWN30196ZZ	4	1st 2nd Oil	78.0 78.0 78.0	1.2 1.2 2.0	2.45 2.7 2.3	BF-IB T1 NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-EE50A 12033-EE000
	MR16DDT	1,618	Juke 16GT	SWN30186ZZ	4	1st 2nd Oil	79.7 79.7 79.7	1.2 1.0 2.0	2.5 2.7 2.4	BF-IB TUC NIFF-H	SR SR SR	GN Fe GN	GN Fe GN	12033-1KC0A 12033-3RC0B
	MRA8DE	1,798	Sentra											
	QG18DE	1,768	Wingroad Bluebird Bluebird Sylphy Primera	SWN30127ZZ	4	1st 2nd Oil	80.0 80.0 80.0	1.5 1.5 2.8	2.87 3.4 2.85	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-WD310
				SWN30142ZY	4	1st 2nd Oil	80.0 80.0 80.0	1.2 1.2 2.5	2.85 3.4 2.6	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-AU300 12033-5M010 12033-5M020
	J18	1,800	Fork Lift Truck	SWN30099ZZ	4	1st 2nd Oil	80.5 80.5 80.5	1.5 2.0 4.0	3.25 3.7 3.25	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-N7900
	NA16S	1,627	Datsun Truck Atlas	SWN30199ZZ (TCC-F-0059)	4	1st 2nd Oil	81.5 81.5 81.5	1.5 1.5 4.0	3.1 3.6 3.05	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12033-73P00
	SR18	1,838	Bluebird Presta Sunny Primera	SWN30105ZZ (STD)	4	1st 2nd Oil	82.5 82.5 82.5	1.5 1.5 3.0	2.9 3.5 2.85	BF-IB T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12033-0E101
				SWN30106ZZ (O/S0.2)	4	1st 2nd Oil	82.7 82.7 82.7	1.5 1.5 3.0	2.9 3.5 2.85	BF-IB T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12035-0E101

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
L13	1,296	Bluebird 1300 1400	SWN30014ZZ	4	1st	83.0	2.0	3.6	T1	CR	Cr	Fe	12033-06000
L14	1,428	P510A P510P P510T P510TK KT510 WP510			2nd	83.0	2.0	3.8	T1	CR	Fe	Fe	12033-21000
		Violet J710 VJ710			Oil	83.0	4.0	3.75	NIFF-S	SR	Cr	Fe	12033-23000 12033-A0600 12033-A3500 12033-A3501
L16	1,595	Sunny PB210											12033-W0700 12033-W7110
L24	2,395	Bluebird Cedric (240C)	SWN30034ZZ	6	1st	83.0	2.0	3.8	T1	CR	Fe	Fe	12033-E3100
L26	2,565	Skyline (240K) Fairlady Z (240Z)			2nd	83.0	2.0	3.8	T1	CR	Fe	Fe	12033-E3110
		Fairlady Z (260Z) Laurel (260L)			Oil	83.0	4.0	3.9	NIFF-S	SR	Cr	Fe	12033-W0810 12033-A8620
CA18E CA18S	1,809	Laurel Skyline Silvia Gazelle Stanza Auster Prairie	SWN30056ZZ	4	1st	83.0	1.5	2.85	BF	SR	Cr	Fe	12033-01E00
2nd	83.0	1.5			3.6	T1	CR	Cr	Fe	12033-01E10			
Oil	83.0	4.0			3.05	NIFF-S	SR	Cr	Fe	12033-01F00 12033-D0210 12033-D0500			
CA18P (LPG)	1,809	Bluebird Skyline Stanza	SWN30083ZZ	4	1st	83.0	2.0	2.85	BF-IB	SR	Cr	Fe	12033-49L00
2nd	83.0	1.5			3.6	T1	CR	Cr	Fe	12033-44F00 12033-D4210 12033-17F00 12033-18F00 12033-18F10			
Oil	83.0	2.8			3.0	NIFF-S	SR	Cr	Fe				
CA18DET CA18ET	1,809	Gazelle Turbo Silvia Turbo Bluebird Turbo	SWN30090ZZ	4	1st	83.0	1.5	2.9	BF	SR	GN	GN	12033-EN200
2nd	83.0	1.5			3.6	T1	CR	Cr	Fe	12033-CK80A			
Oil	83.0	2.8			2.8	NIFF-S	SR	GN	GN	12033-EN20A			
MR18DE	1,797	Tienda Lafesta	SWN30154ZZ	4	1st	84.0	1.2	2.65	BF	SR	Cr	Fe	12033-EN200
MR20DE	1,999	Cube Versa Sentra			2nd	84.0	1.2	3.0	TUC	CR	Fe	Fe	12033-EN20A
		Oil			84.0	2.0	2.55	NIFF-H	SR	Cr	Fe	12033-8W80A	
MR20DE MR-FFV	1,999	Tienda Lafesta Cube Versa Sentra	SWN30166ZZ	4	1st	84.0	1.2	2.6	BF	SR	GN		GN
2nd	84.0	1.2			3.0	TUC	CR	Cr	Fe	12033-8W80A			
Oil	84.0	2.0			2.55	NIFF-H	SR	GN	GN				
MR20DD	1,999	Serena	SWN30188ZZ	4	1st	84.0	1.2	2.7	BF-IB	SR	GN	GN	12033-1VA0A
2nd	84.0	1.2			3.0	TUC	CR	Fe	Fe	12033-1VA0A			
Oil	84.0	2.0			2.5	NIFF-H	SR	GN	GN				



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference	
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower		
	CA20A	1,973	Bluebird Cherry Vanette	SWN30053ZZ	4	1st 2nd Oil	84.5 84.5 84.5	1.5 1.5 4.0	3.05 3.7 3.05	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-04E00 12033-04E10 12033-D1700 12033-D2000	
	CA20P (LPG)	1,973	Bluebird Stanza	SWN30075ZZ	4	1st 2nd Oil	84.5 84.5 84.5	2.0 1.5 2.8	2.85 3.7 3.0	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-V5600	
	CA20E	1,973	Bluebird	SWN30121ZZ	4	1st 2nd Oil	84.5 84.5 84.5	1.5 1.5 2.8	3.1 3.7 2.85	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12033-61E10	
	G16	1,593	Laurel 1800 C30 C30A	SWN30020ZX	4	1st	85.0	2.0	3.05	BF	SR	Cr	Fe	12033-78250	
	G18	1,815	C30T Bluebird			2nd	85.0	2.0	4.2	T1	CR	Fe	Fe	12033-78251	
	L18	1,770	KH510 P610 U1800SSS Skyline CP10 110 KPC10 110			Oil	85.0	4.0	3.25	NIFF-S	SR	Cr	Fe	12033-A8701 12033-A8702	
	Z18	1,770	Skyline			SWN30048ZZ	4	1st	85.0	2.0	T1	CR	Cr	Fe	12033-U6001
	L20B	1,952	Laurel Cedric Silvia Gazelle Stanza Bluebird Auster			2nd	85.0	2.0	4.2	T1	CR	Fe	Fe	12033-U6002	
	Z20 Z20E Z20S	1,952	Laurel Caravan Vanette Bluebird Silvia Skyline	SWN30084ZZ	4	1st 2nd Oil	85.0 85.0 85.0	2.0 1.5 4.0	2.85 3.7 3.15	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-82W01	
				SWN30086ZY	4	1st 2nd Oil	85.0 85.0 85.0	1.5 1.5 4.0	3.05 3.7 3.15	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-24G00 12033-N8510 12033-N8520	
	P	3,956	Truck 680 D680 G680 T680 S680 DG680 681 D681 G81 D681 G681 S681 TG690	SWN30022ZZ	6	1st 2nd Oil	85.69 85.69 85.69	2.5 2.5 4.76	3.7 3.7 4.0	BF T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	12033-58003 12033-58004 12033-58005 12033-C6000 12033-C6011	
	Z24S	2,389	Terrano WD21	SWN30159ZZ	4	1st 2nd Oil	86.0 86.0 86.0	1.5 1.5 4.0	3.1 3.65 2.8	BF-IB T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12033-3T600 12033-0H600	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
L28	2,753	Cedric (280C) Fairlady Z (280Z) Laurel (280L) Leopard	SWN30047ZZ	6	1st 2nd Oil	86.0 86.0 86.0	2.0 2.0 4.0	3.9 4.05 3.25	T1 T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	12033-M4210 12033-N4220 12033-P8360 12033-P3870
L28E	2,753	Leopard Fairlady Z Laurel	SWN30066ZZ	6	1st 2nd Oil	86.0 86.0 86.0	1.5 2.0 4.0	3.6 4.05 3.25	BF TUC NIFF-S	HB CR SR	Cr Fe Cr	Fe Fe Fe	12033-P8600 12033-P8610 12033-P7000 12033-P7910
RB30	2,962	Skyline Patrol	SWN30091ZZ	6	1st 2nd Oil	86.0 86.0 86.0	1.5 1.5 2.8	3.1 3.65 2.85	BF-IB T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12033-67S10
NA20S	1,998	Datsun Truck Atlas Caravan Homy	SWN30202ZZ (TCC-F-0060)	4	1st 2nd Oil	86.0 86.0 86.0	1.5 1.5 4.0	3.05 3.65 3.25	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-85G00 12033-85G10
SR20DE	1,998	Bluebird Silvia 180SX Primera Serena	SWN30102ZZ (STD)	4	1st 2nd Oil	86.0 86.0 86.0	1.5 1.5 3.0	3.05 3.65 3.0	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-60J20 12033-60J22 12033-60J62
			SWN30109ZZ (O/S0.2)	4	1st 2nd Oil	86.2 86.2 86.2	1.5 1.5 3.0	3.1 3.65 3.05	BF-IB T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12035-60J20 12035-60J22 12035-60J62
			SWN30123ZZ (STD)	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.2 2.5	3.1 3.7 2.85	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12033-3J610 12033-4M802
			SWN30124ZZ (O/S0.2)	4	1st 2nd Oil	86.2 86.2 86.2	1.2 1.2 2.5	3.1 3.7 2.85	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12035-3J600 12035-3J610
Z22E Z22S	2,187	Datsun Truck Cabstar	SWN30054ZZ	4	1st 2nd Oil	87.0 87.0 87.0	1.5 1.5 4.0	3.05 3.8 3.05	BF T1 NIFF-S	SR CR SR	Cr Cr GN	Fe Fe GN	12033-06W10 12033-06W20 12033-D8500
VG30E VG30DE VG30DET VE30DE	2,960	Cedric Gloria Fairlady Z Maxima Leopard	SWN30058ZZ	V6	1st 2nd Oil	87.0 87.0 87.0	1.5 1.5 2.8	3.1 3.8 3.0	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	12033-02P10 12033-03P00 12033-03P10 12033-21P10 12033-F6500 12033-F6510 12033-F6511 12033-96E01
VG30i		Datsun Truck	SWN30093ZZ	V6	1st 2nd Oil	87.0 87.0 87.0	2.0 1.5 2.8	3.1 3.8 3.1	BF-IB T1 NIFF-S	SR CR SR	GN Cr Cr	GN Fe Fe	12033-15G10 12033-V8000 12033-15V00



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
	H20	1,982	Cedric 130 130V W130 Junior 41 Caball C142 DC142 Clipper Miler 444 D444 444A Gloria Van Bus GC240	SWN30069ZZ	4	1st 2nd Oil	87.2 87.2 87.2	2.0 2.5 4.0	4.05 4.05 3.8	BF TUC NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	12033-R9000 12033-R9023 12033-Y4460
	Z24	2,389	Datsun Truck	SWN30059ZZ	4	1st 2nd Oil	89.0 89.0 89.0	1.5 1.5 4.0	3.25 3.9 3.2	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-10W00 12033-30W10
	Z24i			SWN30085ZZ	4	1st 2nd Oil	89.0 89.0 89.0	2.0 1.5 4.0	3.05 3.9 3.2	BF-IB T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-13G10 12033-83W00
	KA24E	2,389	Largo	SWN30096ZZ	4	1st 2nd Oil	89.0 89.0 89.0	1.5 1.5 2.8	3.27 3.9 3.15	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-53F01 12033-70F00
	KA24DE	2,389	Altima	SWN30118ZZ	4	1st 2nd Oil	89.0 89.0 89.0	1.5 1.5 2.8	3.05 3.9 3.15	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-1E400
				SWN30143ZZ	4	1st 2nd Oil	89.0 89.0 89.0	1.2 1.2 2.5	3.25 3.8 2.85	BF-IB T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	12033-9E000
				TCC-H-0083	4	1st 2nd Oil	89.0 89.0 89.0	1.2 1.2 2.5		BF-IB T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12033-5V110

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
QR25DE	2,488	X-Trail 25X Serena Teana Elgrand Murano Altima Caravan Rogue	SWN30140ZZ (STD)	4	1st	89.0	1.2	3.1	BF-IB	SR	GN	GN	12033-9H500
					2nd	89.0	1.2	3.8	T1	CR	Cr	Fe	12033-8H301
					Oil	89.0	2.5	2.85	NIFF-S	SR	GN	GN	12033-EA000 12033-EA00B
			SWN30141ZZ (O/S0.2)	4	1st	89.2	1.2	3.1	BF-IB	SR	GN	GN	12035-9H500
					2nd	89.2	1.2	3.8	T1	CR	Cr	Fe	
					Oil	89.2	2.5	2.85	NIFF-S	SR	GN	GN	
			SWN30189ZY (STD)	4	1st	89.0	1.2	2.9	BF-IB	SR	GN	GN	12033-ET80B
					2nd	89.0	1.2	3.8	T1	CR	Fe	Fe	12033-JA00B
					Oil	89.0	2.0	2.25	NIFF-H	SR	GN	GN	12033-JG30A 12033-3TA0A
			SWN30200ZY (O/S0.2)	4	1st	89.2	1.2	2.9	BF-IB	SR	GN	GN	
					2nd	89.2	1.2	3.8	T1	CR	Fe	Fe	
					Oil	89.2	2.0	2.25	NIFF-H	SR	GN	GN	
VG33	3,274	Elgrand Terrano	SWN30120ZZ	V6	1st	91.5	1.5	3.25	BF	SR	Cr	Fe	12033-0W000
Y44 Y40	4,414	President	SWN30078ZZ	V8	1st	92.0	2.0	3.1	BF	SR	GN	GN	12033-F2700
					2nd	92.0	2.5	4.0	T1	CR	Cr	Fe	12033-F1100
					Oil	92.0	4.0	3.3	NIFF-S	SR	Cr	Fe	
VQ30DE	2,987	Maxima Cedric Gloria	SWN30115ZZ (STD)	V6	1st	93.0	1.2	3.25	BF	SR	Cr	Fe	12033-38U01
					2nd	93.0	1.2	4.0	T1	CR	Fe	Fe	12033-47U01
					Oil	93.0	2.5	2.85	NIFF-S	SR	Cr	Fe	12033-2Y903 12033-AG301 12033-AG302 12033-47U03
			SWN30119ZZ (O/S0.2)	V6	1st	93.2	1.2	3.3	BF-IB	SR	GN	GN	12035-AG301
					2nd	93.2	1.2	4.0	T1	CR	Cr	Fe	12035-47U03
VQ35DE	3,498	Elgrand Fuga Skyline	SWN30131ZZ (STD)	V6	1st	95.5	1.2	3.45	BF	SR	Cr	Fe	12033-4W005
					2nd	95.5	1.2	4.1	T1	CR	Fe	Fe	12033-8J100
					Oil	95.5	2.5	2.75	NIFF-S	SR	Cr	Fe	
VQ40DE	3,954	Murano Teana Maxima Stagea Quest Frontier NV1500 NV2500 NV3500	SWN30132ZZ (O/S0.2)	V6	1st	95.7	1.2	3.45	BF	SR	Cr	Fe	12035-4W003
					2nd	95.7	1.2	4.1	T1	CR	Fe	Fe	12035-4W004
					Oil	95.7	2.5	2.75	NIFF-S	SR	Cr	Fe	12035-4W005 12035-4W007 12035-5W300
			SWN30191ZZ	V6	1st	95.5	1.2	3.1	BF	SR	GN	GN	12033-JA10D
					2nd	95.5	1.2	4.1	TUC	CR	Fe	Fe	12033-JP00A
					Oil	95.5	2.0	2.6	NIFF-H	SR	GN	GN	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
VQ35HR	3,498	Fairlady Z Skyline Fuga		SWN30162ZZ (STD)	V6	1st	95.5	1.2	3.1	BF	SR	GN	GN	12033-JK20A
						2nd	95.5	1.2	3.7	TUC	CR	Fe	Fe	12033-JK20C
VQ37VHR	3,696			SWN30163ZZ (O/S0.2)	V6	1st	95.7	1.2	3.15	BF-IB	SR	GN	GN	12035-JK20A
						2nd	95.7	1.2	3.7	TUC	CR	Fe	Fe	12035-JK20C
VK50VE	5,026	Infiniti		SWN30184ZZ (STD)	V8	1st	95.5	1.2	3.15	BF-IB	SR	GN	GN	12033-1CA0A
						2nd	95.5	1.2	3.7	TUC	CR	Fe	Fe	
TB42 TB42E	4,169	Safari		SWN30122ZZ	6	1st	96.0	2.0	3.3	BF	SR	GN	GN	12033-03J00
						2nd	96.0	2.0	4.2	T1	CR	Cr	Fe	
VK56DE (OLD)	5,552	Infiniti Armada		SWN30149ZZ (STD)	V8	1st	98.0	1.5	3.45	BF	SR	Cr	Fe	12033-7S001
						2nd	98.0	1.5	4.3	TUC	CR	Fe	Fe	
VK56DE (NEW)	5,552	Infiniti Patrol		SWN30160ZZ (STD)	V8	1st	98.0	1.5	3.3	BF	SR	Cr	Fe	12033-ZE00A
						2nd	98.0	1.5	4.3	TUC	CR	Fe	Fe	
VK56VD	5,552			SWN30161ZY (O/S0.2)	V8	1st	98.2	1.5	3.3	BF	SR	GN	GN	12035-ZE00A
						2nd	98.2	1.5	4.3	TUC	CR	Fe	Fe	
TB45E	4,478	Fork Lift Safari		SWN30181ZZ	6	1st	99.5	2.0	3.5	BF	SR	GN	GN	12033-VB000
						2nd	99.5	1.5	4.2	T1	CR	Cr	Fe	
						Oil	99.5	4.0	3.1	NIFF-S	SR	GN	GN	

● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper / Lower	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)					
CD17	1,680	Sunny	SDN30088ZX	4	1st 2nd Oil	80.0 80.0 80.0	1.75 2.0 3.0	2.85 3.3 3.25	BF-IB T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-16A00
SD15	1,493	For Industrial Machine	SJN31024ZZ	3	1st 2nd 3rd Oil 1 Oil 2	83.0 83.0 83.0 83.0 83.0	2.5 2.0 2.0 4.5 4.5	3.5 3.4 3.4 3.9 3.4	BF-K1 T1-IC B1-TUC E-BC3 BC3	HB HB CR CR CR	Cr Cr Cr Cr Cr	Cr Fe Fe Fe Fe	12033-Z7003
SD16	1,600												
LD28	2,792	Cedric Gloria Skyline	SDN30067ZZ	6	1st 2nd Oil	84.5 84.5 84.5	2.0 2.0 4.0	3.5 3.5 4.1	BF-IB T1-IC E-BC16	HB CR CR	Cr Fe Cr	Fe Fe Fe	12033-V0700
CD20	1,973	Datsun Truck Sunny Deisel	SDN30133ZZ	4	1st 2nd Oil	84.5 84.5 84.5	2.0 2.0 3.0	3.1 3.5 3.25	BF-IB T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-57J00
CD20T	1,973	Avenir Serena Primera Vanette	TCC-J-0061	4	1st 2nd Oil	84.5 84.5 84.5	2.0 2.0 3.0		BF-K2-IB T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-1C300
LD20	1,952	Bluebird	SDN30098ZX	4	1st 2nd Oil	85.0 85.0 85.0	2.0 2.0 4.0	3.05 3.5 4.1	BF-IB T1-IC E-BC3	SR CR CR	Cr Fe Cr	Fe Fe Fe	12033-W1700
RD28	2,825	Crew Gloria Skyline	SDN30144ZZ	6	1st 2nd Oil	85.0 85.0 85.0	2.0 2.0 4.0	3.1 3.5 4.35	BF T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-22J11
YD22DD	2,184	Sunny	SDN30180ZZ	4	1st 2nd Oil	86.0 86.0 86.0	2.0 2.0 3.0	3.1 3.6 3.25	BF-K2 T1-IC E-BC16	SR CR SR	GN Fe GN	GN Fe GN	12033-AW400
			SDN30169ZZ	4	1st 2nd Oil	86.0 86.0 86.0	1.75 1.5 3.0	2.9 3.05 3.25	BF-K2 T1-IB E-BC16	SR SR SR	GN Cr GN	GN Fe GN	12033-WD000
LD23	2,283	Serena	SDN30145ZZ	4	1st 2nd Oil	87.0 87.0 87.0	2.0 2.0 3.0	3.5 3.4 3.3	BF-IC TUC E-BC16	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-9C625
YD25DDTi	2,488	Pathfinder Navara	SDN30182ZZ	4	1st 2nd Oil	89.0 89.0 89.0	2.0 2.0 3.0	2.9 3.5 3.25	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-VK520
		Serena Bassara Presage	SDN30182ZY	4	1st 2nd Oil	89.0 89.0 89.0	2.0 2.0 3.0	2.9 3.5 3.25	BF-K2 T1-IB E-BC16	SR CR SR	GN Fe GN	GN Fe GN	12033-VK510

DAIHATSU
SUBARU
HINO
HONDA
ISUZU
KOMATSU
MAZDA
MITSUBISHI
UD TRUCKS
NISSAN
SUZUKI
TOYOTA
DAEWOO
HYUNDAI
KIA
ASIA
CHRYSLER
FORD
GM

DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside	Upper/Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)					
	TD25-2	2,494	Truck	SDN30146ZZ	4	1st 2nd Oil	92.9 92.9 92.9	2.5 2.0 3.0	3.45 4.0 3.25	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-5T116
	TD27T AD27T	2,664	Truck Caravan	SDN30147ZZ	4	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 4.0	3.5 4.0 4.35	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-37N10
	BD30	2,953	Cedric Atlas	SDN30150ZX	4	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 4.0	3.65 4.0 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-54T10
	ZD30DD ZD30DDT BD30T	2,953	Atlas Caravan Navara	SDN30153ZZ	4	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 3.0	3.5 4.0 3.25	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-2W211 12033-0W814 12033-NA010 12033-0W813 12033-0W81A 12033-7F400
	TD27ETi	2,664	Caravan Coach Mistral Terrano											
	TD42T	4,169	Safari Civilian		6	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 3.0	3.5 4.0 3.25	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-DY712
				SDN30167ZZ	6	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 4.0	3.7 4.0 4.15	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-05D01
				SDN30187ZZ	6	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 3.0	4.0 4.0 3.25	BF T1-IC E-BC16	HB HB SR	Cr Cr GN	Fe Fe GN	12033-06J15
	ZD30DDTi	2,953	Safari Terrano	SDN30174ZZ	4	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 2.0	3.7 4.0 2.75	BF-K2 T1-IB E-BC16	SR CR SR	GN Fe GN	GN Fe GN	12033-VK610 12033-DB010
	ZD30DD	2,953	Caravan Coach Safari Terrano	SDN30195ZZ	4	1st 2nd Oil	96.0 96.0 96.0	2.0 1.2 2.0	3.1 3.0 2.75	BF T1-IB E-BC16	SR SR SR	GN Cr GN	GN Fe GN	12033-2W200B 12033-VW210 12033-VW211
	ED30	2,956	Truck	SDN30148ZZ	4	1st 2nd Oil	98.0 98.0 98.0	3.0 2.0 4.5	4.2 3.9 4.4	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J5576
	QD32NA	3,153	Caravan Datsun truck Frontier	SDN30152ZZ	4	1st 2nd Oil	99.2 99.2 99.2	2.5 2.0 3.0	3.7 4.1 3.15	BF T1-IC E-BC16	SR HB SR	GN Cr GN	GN Fe GN	12033-2S610
	QD32	3,153	Datsun Pick up Caravan Terrano	SDN30164ZZ	4	1st 2nd Oil	99.2 99.2 99.2	2.5 2.0 3.0	3.8 4.1 3.15	BF-K2 T1-IC E-BC16	HB HB SR	Cr Cr GN	Fe Fe GN	12033-1W411

● Diesel-engine Automobiles ● ディーゼル車●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
SD20	1,991	Cedric	SJN31003ZZ	4	1st	83.0	2.5	3.5	BF	CR	Cr	Cr	12033-37500
		QG31Y Q131			2nd	83.0	2.0	3.4	T1	CR	Cr	Fe	12033-76201
		Junior			3rd	83.0	2.0	3.4	T1	CR	Cr	Fe	12033-76202
SD22	2,164	Q40 Q41			Oil 1	83.0	4.5	3.9	E-BC3	CR	Cr	Fe	12033-76203
		Caball			Oil 2	83.0	4.5	3.4	BC3	CR	Cr	Fe	12033-76204
		HQC142											12033-V1310
		QC240											12033-Y1400
		DQC240											12033-Y1401
		QC141											12033-Y1402
		Bus											12033-Y1403
		CQC142											12033-Y1404
		GHQC142											12033-Y1410
		KQC152											12033-Y3010
		Truck	SDN31027ZZ	4	1st	83.0	2.5	3.5	BF	HB	Cr	Fe	12033-R8100
		Fork Lift			2nd	83.0	2.0	3.4	T1-IC	HB	Cr	Fe	12033-R8103
					Oil	83.0	4.5	3.9	E-BC3	CR	Cr	Fe	12033-R8104
													12033-R8110
													12033-R8112
													12033-R8114
SD33T	3,246	Safari	SDN31028ZZ	6	1st	83.0	2.5	3.5	BF-K2	HB	Cr	Fe	12033-C8704
					2nd	83.0	2.0	3.4	T1-IC	HB	Cr	Fe	12033-C8702
					Oil	83.0	4.0	4.0	E-BC3	CR	Cr	Fe	
SD15	1,493	Fork Lift	SDN31030ZZ	3	1st	83.0	2.5	3.5	BF	HB	Cr	Fe	12033-Z7007
SD16					2nd	83.0	2.0	3.4	T1-IC	HB	Cr	Fe	
					Oil	83.0	4.5	3.9	E-BC3	CR	Cr	Fe	
SD33	3,246	Truck	SJN31004ZZ	6	1st	83.0	2.5	3.5	BF	CR	Cr	Cr	12033-61500
SD33T		QC80 QSC80			2nd	83.0	2.0	3.4	T1	CR	Cr	Fe	12033-61502
		DQSC80			3rd	83.0	2.0	3.4	T1	CR	Cr	Fe	12033-61503
		Safari			Oil 1	83.0	4.5	3.9	E-BC3	CR	Cr	Fe	12033-J2200
					Oil 2	83.0	4.5	3.4	BC3	CR	Cr	Fe	12033-J2201
													12033-J2202
													12033-J2204
SD23	2,289	Truck	SDN31023ZZ	4	1st	89.0	2.5	3.7	BF	HB	Cr	Fe	12033-L2000
		Fork Lift			2nd	89.0	2.0	3.7	T1-IC	HB	Cr	Fe	12033-L2002
SD25(NEW)	2,494				Oil	89.0	4.5	4.2	E-BC3	CR	Cr	Fe	12033-L2003
													12033-L2004
TD23	2,289	Truck	SDN31037ZZ	4	1st	89.0	2.5	3.7	BF	HB	Cr	Fe	12033-02N00
		Caravan			2nd	89.0	2.0	3.7	T1-IC	HB	Cr	Fe	12033-02N10
		Atlas			Oil	89.0	4.0	4.15	E-BC16	SR	Cr	Fe	

DAHATSU
 SUBARU
 HINO
 HONDA
 ISUZU
 KOMATSU
 MAZDA
 MITSUBISHI
 UD TRUCK
 SUZUKI
 TOYOTA
 DAEWOO
 HYUNDAI
 KIA
 ASIA
 CHRYSLER
 FORD
 GM

Fit for UD TRUCKS NISSAN / UD トラックス (NISSAN DIESEL / 日産ディーゼル)

DAIHATSU	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference		
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower			
DAIHATSU	TD25	2,494	Truck Atlas	SDN31038ZX	4	1st 2nd Oil	92.9 92.9 92.9	2.5 4.0 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-44G10		
SUBARU	TD25TI	2,494	Atlas Cedric	SDN30198ZZ (TCC-A-0083)	4	1st 2nd Oil	92.9 92.9 92.9	2.5 2.0 3.0	3.7 4.0 3.25	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12033-3S910	
HINO	TD27	2,664	Homy Atlas Datsun Caravan	SDN31035ZX	4	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 4.0	3.65 4.0 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-43G11 12033-43G10	
HONDA				SDN31056ZZ	4	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 3.0	3.65 4.0 3.25	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-6T010	
ISUZU	TD42 AD3	4,169	Datsun Jeep Safari Civilian	SDN31052ZX	6	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 4.0	3.65 4.0 4.35	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-06J10 12033-06J11	
KOMATSU	TD42-T	4,169	Safari Gran Road	SDN31065ZZ	6	1st 2nd Oil	96.0 96.0 96.0	2.5 2.0 3.0	3.65 4.0 3.25	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	12033-06J15	
MAZDA	ED30	2,956	Truck Bison YC341 Caball YC341	SDN31015ZZ	4	1st 2nd 3rd Oil	98.0 98.0 98.0 98.0	3.0 2.0 2.0 4.5	4.2 4.3 4.3 4.4	BF T1-IC T1 E-BC3	HB CR CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	12033-J2002 12033-J2004 12033-J2006 97011-02139	
MITSUBISHI				SDN31016ZZ	6	1st 2nd 3rd Oil	100.0 100.0 100.0 100.0	3.0 2.0 2.0 4.5	4.2 4.2 4.2 4.5	BF T1-IC T1 E-BC3	HB CR CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	12040-Z5025 12040-Z5026 12040-Z5027 12040-Z5001(cyl)	
NISSAN				SDN31020ZZ	6	1st 2nd 3rd Oil	100.0 100.0 100.0 100.0	3.0 2.0 2.0 4.5	4.2 4.2 4.2 4.5	BF-K1 T1-IC T1 E-BC3	HB CR CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	12040-Z5525 12040-Z5526 12040-Z5501(cyl)	
UD TRUCKS					6	1st 2nd 3rd Oil	100.0 100.0 100.0 100.0	3.0 2.0 2.0 4.5	4.2 4.2 4.2 4.5	BF-K2 T1-IC T1 E-BC3	HB CR CR CR	Cr Cr Cr Cr	Fe Fe Fe Fe	12033-Z5527 12033-Z5502(cyl)	
SUZUKI	ED33	3,298	Truck Bison HMC341 Civilian GHMC341		4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
TOYOTA					4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
DAEWOO					4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
HYUNDAI					4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
KIA	ED33	3,298	Truck Bison HMC341 Civilian GHMC341		4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
ASIA					4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
CHRYSLER					4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
FORD					4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	
GM	ED33	3,298	Truck Bison HMC341 Civilian GHMC341		4	1st 2nd Oil	100.0 100.0 100.0	3.0 2.0 4.5	4.2 4.2 4.5	BF T1-IC E-BC3	HB CR CR	Cr Cr Cr	Fe Fe Fe	12033-J6500 12033-J6501 12033-T9000 12033-Z5004(cyl)	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
FD6T(NEW)	5,654	Truck	SDN31026ZZ	6	1st	100.0	3.0	4.2	BF-K2	HB	Cr	Fe	12040-Z5528
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe	12033-Z5504(cyl)
					Oil	100.0	4.5	4.5	E-BC3	CR	Cr	Fe	
FD6 ED6	5,654	Truck	SDN31029ZZ	6	1st	100.0	3.0	4.2	BF	HB	Cr	Fe	12040-Z5028
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe	12040-Z5005
					Oil	100.0	4.5	4.5	E-BC3	CR	Cr	Fe	
FD33T	3,298	Datsun Truck	SDN31032ZZ	4	1st	100.0	3.0	4.2	BF-K2	HB	Cr	Fe	12033-T9307
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	100.0	4.5	4.5	E-BC3	CR	Cr	Fe	
ED33(NEW)	3,298	Datsun Truck	SDN31050ZZ	4	1st	100.0	2.0	4.0	BF	HB	Cr	Fe	12033-T9303
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe	12033-T9306
					Oil	100.0	4.0	4.05	E-BC16	SR	Cr	Fe	12033-W4200
FD35	3,465	Condor	SDN31045ZX	4	1st	102.5	2.0	3.65	BF	SR	Cr	Fe	12033-01T10
					2nd	102.5	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	102.5	4.0	4.35	E-BC16	SR	GN	GN	
FD35T	3,465	Condor	SDN31057ZZ	4	1st	102.5	3.0	4.2	BF-K2	HB	Cr	Fe	12033-01T60
					2nd	102.5	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	102.5	4.0	4.35	E-BC16	SR	GN	GN	
ED35	3,465	Datsun Truck	SDN31051ZZ	4	1st	102.5	3.0	3.65	BF	SR	Cr	Fe	12033-56T10
					2nd	102.5	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	102.5	4.0	4.15	E-BC16	SR	Cr	Fe	
FM6T		Cargo Truck	SDN31061ZZ	6	1st	105.9	2.5	3.7	BF-K2	SR	GN	GN	12040-Z5508
					2nd	105.9	2.0	4.5	T1-IC	CR	Cr	Fe	
					Oil	105.9	4.0	4.35	E-BC16	SR	GN	GN	
FD46 FD46T	4,617	Condor Atlas	SDN30171ZZ	4	1st	108.0	2.5	3.7	BF-K2	SR	GN	GN	12033-31D03
					2nd	108.0	2.0	4.5	T1-IC	CR	Cr	Fe	
					Oil	108.0	3.0	3.25	E-BC16	SR	GN	GN	
FD46	4,617	Condor Atlas	SDN31064ZX	4	1st	108.0	3.0	4.05	BF	SR	Cr	Fe	12033-0T010
					2nd	108.0	2.0	4.5	T1-IC	CR	Cr	Fe	12033-0T000
					Oil	108.0	4.0	4.4	E-BC16	SR	GN	GN	
FE6T	6,925	MK250	SDN31036ZY	6	1st	108.0	3.0	4.3	BF-K2	HB	Cr	Fe	12040-Z5505
					2nd	108.0	2.0	4.5	T1-IC	CR	Cr	Fe	12040-Z5512
					Oil	108.0	4.0	4.4	E-BC16	SR	GN	GN	12040-Z5517
FE6	6,925	MK250	SDN31044ZX	6	1st	108.0	3.0	3.9	BF	SR	GN	GN	12040-Z5504
					2nd	108.0	2.0	4.5	T1-IC	CR	Cr	Fe	12040-Z5511
					Oil	108.0	4.0	4.4	E-BC16	SR	GN	GN	



Fit for UD TRUCKS NISSAN / UD トラックス
(NISSAN DIESEL / 日産ディーゼル)

DAIHATSU	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
FE6TA	6,925	MK250	SDN31054ZZ	6	1st	108.0	2.5	3.7	BF-K2	SR	GN	GN	12040-Z5519
					2nd	108.0	2.0	4.5	T1-IC	CR	Cr	Fe	12040-Z5560
					Oil	108.0	4.0	4.4	E-BC16	SR	GN	GN	12040-Z5561 12040-Z5603
FE6T-24V FE6TC	6,926	CWA214	SDN31067ZZ	6	1st	108.0	2.5	3.3	BF-K2	SR	GN	GN	12040-Z5608
					2nd	108.0	2.0	3.25	T1-IB	SR	Cr	Fe	
					Oil	108.0	3.0	3.25	E-BC16	SR	GN	GN	
UD3	3,076	Truck U680 TU680 DUG680 U681 Bus U690 UR690 NUR690 UG680	YDN31005ZZ	1	1st	110.0	3.0	4.45	BF	HB	Fe	Fe	12040-90008
					2nd	110.0	3.0	4.45	BF	HB	Fe	Fe	
					3rd	110.0	3.0	4.2	T1	CR	Fe	Fe	
					4th	110.0	3.0	4.2	T1	CR	Fe	Fe	
					Oil 1	110.0	4.8	4.8	E-BC3	CR	Fe	Fe	
					Oil 2	110.0	4.8	4.8	E-BC3	CR	Fe	Fe	
UD4	4,941	Truck T80 T80S T80SD TC81 Bus R80 4R82 4RA82 RX102 4RA104											
UD5	6,177	Truck 5TWDC10 Bus 5R104 5RA104											
UD6	7,413	Truck 6TW1Z 6TW1ZS 6TW12SD Bus 6R110 6RA110											
UD8	9,822	Bus U8RA110											
UD12	14,825	WD38											
ND6	6,842	CK10 PRX102 For Industrial Machine	SDN31006ZX	6	1st	110.0	4.0	4.4	BF	CR	Cr	Fe	12040-95025
					2nd	110.0	3.0	4.4	T1	CR	Cr	Fe	12040-95005(cyl)
					Oil	110.0	5.0	4.95	E-BC16	SR	GN	GN	12040-95006 12040-90127 12040-95004(cyl)

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
ND6T	6,842	Bus	SDN31017ZZ	6	1st	110.0	4.0	4.4	BF-K1	HB	Cr	Fe	12040-90326
					2nd	110.0	3.0	4.4	T1	CR	Cr	Fe	12040-95003(cyl)
					Oil	110.0	5.0	4.7	E-BC3	HB	Cr	Fe	
NE6 NE6TA	7,412	U.S.A. Spec	SDN31031ZX	6	1st	110.0	3.0	4.1	BF-K2	SR	GN	GN	12040-95012
					2nd	110.0	2.5	4.0	T1-IC	CR	Cr	Fe	12040-95013
					Oil	110.0	4.0	4.35	E-BC16	SR	GN	GN	12040-95014 12040-95016 12040-95029
GH5	4,675	Condor MK LK	TCC-F-0067-4	4	1st	110.0	2.8		BF-K1	SR	GN	GN	52215-34346
					2nd	110.0	2.0		T1	CR	Cr	Fe	
					Oil	110.0	2.5		E-BC16	SR	GN	GN	
GH7	7,013	Condor PK PW	TCC-F-0067-6	6	1st	110.0	2.8		BF-K1	SR	GN	GN	
					2nd	110.0	2.0		T1	CR	Cr	Fe	
					Oil	110.0	2.5		E-BC16	SR	GN	GN	
NS6TA NF6TA	9,160	CV32	SDN31060ZZ	6	1st	120.0	3.0	4.1	BF-K2	SR	GN	GN	12040-95501
					2nd	120.0	2.5	4.8	T1-IC	CR	Cr	Fe	
					Oil	120.0	4.0	4.4	E-BC16	SR	GN	GN	
GH11	10,836	Quon Truck GK Truck	TCC-F-0064	6	1st	123.0	3.306		BF-K1	SR	GN	GN	52213-56406
					2nd	123.0	2.5		T1	SR	GN	GN	
					Oil	123.0	3.0		E-BC16	SR	GN	GN	
MD92TCI	9,203	Bus UA272 Truck Quon	SDN31053ZY	6	1st	125.0	2.5	4.3	BF-K2	SR	GN	GN	12040-Z6002
					2nd	125.0	2.0	4.3	T1-IB	SR	GN	GN	12040-Z6004
					Oil	125.0	3.0	3.1	E-BC16	SR	GN	GN	12040-Z6005
PD6	10,308	CB20 CK20 TK20 U20 TFA21 CD40 CV40 CW40 PT81	SDN31007ZX	6	1st	125.0	5.0	5.25	BF	CR	Cr	Fe	12040-90026
					2nd	125.0	3.5	5.2	T1-IC	CR	Cr	Fe	12040-90029
					Oil	125.0	5.0	4.95	E-BC16	SR	GN	GN	12040-90125 12040-96007 12040-96009
													12040-96026 12040-96127 12040-96226 12040-96000(cyl) 12040-96004(cyl)
PD6T	10,308	CW41 CK20 TK20 CD40 CV40 PT81 CW40 M20 CB20 TFA21	SDN31012ZX	6	1st	125.0	4.0	5.2	BF-K1	HB	Cr	Fe	12040-96125
					2nd	125.0	3.5	5.2	T1-IC	CR	Cr	Fe	12040-96129
					Oil	125.0	5.0	4.95	E-BC16	SR	GN	GN	12040-90228 12000-96005(cyl) 12040-96005(cyl) 12040-96010(cyl)



Fit for UD TRUCKS NISSAN / UD トラックス (NISSAN DIESEL / 日産ディーゼル)

DAIHATSU	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
PD6T	10,308	Bus Truck	SDN31042ZZ	6	1st	125.0	4.0	5.0	BF-K2	HB	Cr	Fe	12040-96013
					2nd	125.0	3.5	5.2	T1-IC	CR	Cr	Fe	
					Oil	125.0	5.0	4.8	E-BC16	CR	Cr	Fe	
GH13	12,777	Quon Tractor	TCC-F-0063	6	1st	131.0	3.306		BF-K1	SR	GN	GN	52212-53763
					2nd	131.0	2.5		T1	SR	GN	GN	
					Oil	131.0	3.0		E-BC16	SR	GN	GN	
PE6	11,670	CK30 CK31 CV31 CD32 RB30 CB300	SDN31011ZZ	6	1st	133.0	4.0	5.2	BF-K1	HB	Cr	Fe	12040-90225 12040-90227 12040-96028 12040-96128 12040-96500(cyl) 12040-96503(cyl)
					2nd	133.0	3.5	5.5	T1-IC	CR	Cr	Fe	
					Oil	133.0	6.0	5.7	E-BC3	HB	Cr	Fe	
PE6T	11,670	CD45	SDN31022ZZ	6	1st	133.0	4.0	5.3	BF-K2	HB	Cr	Fe	12040-96225 12040-96228 12040-96512 12040-96504(cyl) 12040-96509(cyl) 12040-96510(cyl) 12040-96513(cyl)
					2nd	133.0	3.5	5.5	T1-IC	CR	Cr	Fe	
					Oil	133.0	6.0	5.7	E-BC3	HB	Cr	Fe	
			SDN31041ZY	6	1st	133.0	3.0	5.2	BF-K2	HB	Cr	Fe	12040-96517
					2nd	133.0	2.5	5.5	T1-IC	CR	Cr	Fe	
PF6	12,503	Truck	SDN31048ZZ	6	1st	133.0	2.5	4.70	BF-K2	SR	GN	GN	12040-96566 12040-96570 12040-96564(cyl)
					2nd	133.0	2.5	5.50	T1-IC	CR	Cr	Fe	
					Oil	133.0	4.0	4.05	E-BC16	SR	Cr	Fe	
RD8	14,313	Bus CD52 CW50 CW51 CW52 RA50 RA51 TWA52 WD151	SDN31013ZY	V8	1st	135.0	4.0	5.1	BF	HB	Cr	Fe	12040-90325 12040-97008 12040-97025 12040-97026 12040-97028 12040-97126 12040-97179 12040-97226 12040-97228 12040-97007(cyl)
					2nd	135.0	3.0	5.5	T1-IC	CR	Cr	Fe	
					Oil	135.0	6.0	5.7	E-BC16	CR	Cr	Fe	
RD8T	14,313	Bus DA50 RA50 RA51	TCC-H-0096-8	V8	1st	135.0	4.0		BF-K1	HB	Cr	Fe	12040-97109(cyl)
					2nd	135.0	3.0		T1-IC	HB	Cr	Fe	
					Oil	135.0	5.0		E-BC16	SR	Cr	GN	
RD10	17,829	CK60 CW60 CW61 WD23 WD30	SDN31014ZZ	V10	1st	135.0	4.0	5.1	BF	HB	Cr	Fe	12040-97025 12040-97125 12040-97127 12040-97227 12040-90229 12040-97007(cyl)
					2nd	135.0	3.0	5.5	T1-IC	CR	Cr	Fe	
					Oil	135.0	6.0	5.7	E-BC3	CR	Cr	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference	
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower		
RD10T	17,892	Truck Marine	TCC-H-0096-10	V10	1st 2nd Oil	135.0 135.0 135.0	4.0 3.0 5.0		BF-K1 T1-IC E-BC16	HB HB SR	Cr Cr GN	Fe Fe GN	12040-97109(cyl)	
RD8T	14,313	Truck CV56	SDN31018ZZ	V8	1st 2nd Oil	135.0 135.0 135.0	4.0 3.0 6.0	5.5 5.5 5.7	BF-K1 T1-IC E-BC16	HB CR CR	Cr Cr Fe	Fe Fe Fe	12040-97128 12040-97008(cyl)	
RE8	15,115	CW53 CD53 CW510	SDN31033ZZ	V8	1st 2nd Oil	135.0 135.0 135.0	3.0 3.0 5.0	5.1 5.5 4.95	BF T1-IC E-BC16	HB CR SR	Cr Cr Fe	Fe Fe Fe	12040-97074	
RE10	18,894		SDN31058ZZ	V10	1st 2nd Oil	135.0 135.0 135.0	3.0 3.0 5.0	5.1 5.5 4.95	BF T1-IC E-BC16	HB CR SR	Cr Cr Fe	Fe Fe Fe		
GE13TD	13,074	Truck Big Thumb	SDN31063ZZ	6	1st 2nd Oil	136.0 136.0 136.0	2.5 2.0 3.0	3.7 3.7 3.0	BF-K2 T1-IB E-BC16	SR HB SR	GN Cr GN	GN Fe GN	12040-00Z07 12040-00Z0A	
RF8	16,991	CD520	SDN31034ZZ	V8	1st 2nd Oil	138.0 138.0 138.0	2.5 2.5 4.0	5.2 5.6 4.65	BF-IB T1-IC E-BC16	HB CR SR	Cr Cr Fe	Fe Fe Fe	12040-97072	
		CD520 Big Thumb	SDN31034ZX	V8	1st 2nd Oil	138.0 138.0 138.0	2.5 2.5 4.0	4.7 5.6 4.4	BF T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12040-97072	
RF8T	16,991	CD520	SDN31068ZZ	V8	1st 2nd Oil	138.0 138.0 138.0	3.0 2.5 4.0	4.7 5.6 4.05	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12040-97101	
RF10	21,239	Big Thumb	SDN31043ZZ	V10	1st 2nd Oil	138.0 138.0 138.0	2.5 2.5 4.0	4.7 5.6 4.4	BF T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12040-97078	
RG8	17,991	KL-CD53	SDN31059ZZ	V8	1st 2nd Oil	142.0 142.0 142.0	3.0 2.5 4.0	4.7 5.8 4.35	BF T1-IB E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12040-97107	
			TCC-H-0097	V8	1st 2nd Oil	142.0 142.0 142.0	2.5 2.0 4.0		BF T1-IB E-BC16	SR SR SR	GN GN GN	GN GN GN	12040-ND001	
RH8	21,205	Tractor	YDN31055ZZ (cyl)	1	1st 2nd Oil	150.0 150.0 150.0	3.0 2.5 4.0	4.7 5.6 4.35	BF T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	12040-97106(cyl) 12040-97105(cyl)	
RH10	26,507													

 DAIHATSU
 SUBARU
 HINO
 HONDA
 ISUZU
 KOMATSU
 MAZDA
 MITSUBISHI
 NISSAN
 UD TRUCK
 SUZUKI
 TOYOTA
 DAEWOO
 HYUNDAI
 KIA
 ASIA
 CHRYSLER
 FORD
 GM

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
LJ50	539	Carry Truck Carry Van	SBS20078ZZ	3	1st	61.0	1.2	2.45	K2	SR	Cr	Fe	12140-72811
					2nd	61.0	2.0	2.6	BF-K2	CR	Cr	Fe	12140-67011
F8A	797	New Jimny Carry Van	SWS20098ZZ	4	1st	62.0	1.5	2.8	BF	HB	Cr	Fe	12140-73010
					2nd	62.0	1.5	2.8	T1	CR	Fe	Fe	
					Oil	62.0	2.8	2.8	NIFF-S	SR	Cr	Fe	
F5A	543	Fronte 550	SWS20138ZZ	3	1st	62.0	1.5	2.8	BF	HB	Cr	Fe	12140-73000
					2nd	62.0	1.5	2.8	T1	CR	Fe	Fe	
					Oil	62.0	2.8	2.8	NIFF-S	SR	Cr	Fe	
F8A(NEW)	797	Jimny Carry Van	SWS20153ZZ	4	1st	62.0	1.2	2.25	BF-IB	SR	Cr	Fe	12140-85050
					2nd	62.0	1.2	2.5	TUC	CR	Fe	Fe	
					Oil	62.0	2.8	2.85	NIFF-S	SR	GN	GN	
F5A(NEW)	543	Fronte Cervo	SWS20184ZZ	3	1st	62.0	1.2	2.25	BF-IB	SR	Cr	Fe	12140-85050
					2nd	62.0	1.2	2.5	TUC	CR	Fe	Fe	
					Oil	62.0	2.8	2.85	NIFF-S	SR	GN	GN	
F6A	657	Alto Van Cervo	SWS20128ZZ	3	1st	65.0	1.2	2.3	BF-IB	SR	GN	GN	12140-51E50
					2nd	65.0	1.5	2.7	TUC	CR	Fe	Fe	
					Oil	65.0	2.5	2.5	NIFF-H	SR	GN	GN	
F6A-N	657	Alto Works RS/R AZ Wagon Kei	SWS20211ZZ	3	1st	65.0	1.2	2.3	BF-IB	SR	GN	GN	12140-50E50
					2nd	65.0	1.2	2.7	TUC	CR	Fe	Fe	
					Oil	65.0	2.5	2.5	NIFF-H	SR	GN	GN	
F6A-N	657	Alto	TCC-H-0004	3	1st	65.0	1.0		BF	SR	Cr	Fe	12140-51F10
					2nd	65.0	1.2		T1	CR	Fe	Fe	
					Oil	65.0	2.0		NIFF-H	SR	GN	GN	
F10A	970	Jimny	SWS20106ZZ	4	1st	65.5	1.5	2.5	BF	SR	GN	GN	12140-75111
					2nd	65.5	1.5	2.7	T1	CR	Fe	Fe	12140-75110(cyl)
					Oil	65.5	2.8	2.8	NIFF-H	SR	Cr	Fe	
K6A	658	Alto Jimny Kei	SWS20200ZZ	3	1st	68.0	1.0	2.25	BF-IB	SR	Cr	Fe	12140-73601
					2nd	68.0	1.2	2.5	TUC	CR	Fe	Fe	
					Oil	68.0	2.0	2.3	NIFF-H	SR	Cr	Fe	
K10A	996	Alto Works	SWS20206ZZ	4	1st	68.0	1.0	2.25	BF-IB	SR	Cr	Fe	12140-73G01-000
					2nd	68.0	1.2	2.5	TUC	CR	Fe	Fe	
					Oil	68.0	2.0	2.3	NIFF-H	SR	Cr	Fe	
SS80 Y64 Y65	796	Alto Fronte	SWS20120ZZ	3	1st	68.5	1.5	2.8	BF	HB	Cr	Fe	12140-78410
					2nd	68.5	1.5	2.8	T1	CR	Fe	Fe	12140-78411(cyl)
					Oil	68.5	2.8	2.8	NIFF-S	SR	Cr	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
F8D	796	Alto	SWS20221ZZ (TCC-G-0115)	3	1st	68.5	1.2	2.65	BF-IB	SR	Cr	Fe	12140M84400
					2nd	68.5	1.5	2.8	T1	CR	Fe	Fe	
					Oil	68.5	2.5	2.25	NIFF-H	SR	Cr	Fe	
F10D	1,061	Maruti Zen Estilo Suzuki/Maruti Alto Wagon R	TCC-K-0040	4	1st	68.5	1.0		BF	SR	GN	GN	12140M79G60-000
					2nd	68.5	1.2		TUC	CR	Fe	Fe	
					Oil	68.5	2.0		NIFF-H	SR	GN	GN	
K12A	1,197	Swift	SWS20205ZZ	4	1st	71.0	1.0	2.5	BF-IB	SR	GN	GN	12140-75F30-000
					2nd	71.0	1.2	2.8	TUC	CR	Cr	Fe	
					Oil	71.0	2.0	2.5	NIFF-H	SR	GN	GN	
G10	993	Cultus Forsa Swift	SWS20209ZZ	4	1st	72.0	1.2	2.7	BF-IB	SR	GN	GN	12140-72F00
					2nd	72.0	1.5	3.2	TUC	CR	Fe	Fe	
					Oil	72.0	2.8	2.8	NIFF-H	SR	GN	GN	
K10B	996	Splash Alto Wagon R Multi Suzuki	SWS20223ZZ (TCC-H-0068)	3	1st	73.0	1.0	2.3	BF-IB	SR	GN	GN	12140B58M50N000
					2nd	73.0	1.2	2.55	TUC	CR	Fe	Fe	
					Oil	73.0	2.0	2.2	NIFF-H	SR	GN	GN	
G10	993	Swift Caltus	SWS20144ZZ	3	1st	74.0	1.2	2.7	BF	SR	GN	GN	12140-82161
					2nd	74.0	1.5	3.2	T1-IB	CR	Cr	Fe	
					Oil	74.0	2.8	2.8	NIFF-S	SR	Cr	Fe	
	993	Caltus	SWS20131ZZ	3	1st	74.0	1.2	2.8	BF	SR	Cr	Fe	12140-82001(cyl)
					2nd	74.0	1.5	3.2	T1	CR	Fe	Fe	12140-82050(cyl)
	993	Caltus	SWS20185ZZ	3	1st	74.0	1.2	2.7	BF-IB	SR	GN	GN	12140-63E50
					2nd	74.0	1.2	3.2	TUC	CR	Fe	Fe	
					Oil	74.0	2.5	2.85	NIFF-S	SR	GN	GN	
G13A G13BA	1,298	Caltus	SWS20141ZZ	4	1st	74.0	1.2	2.8	BF	SR	Cr	Fe	12140-82001(cyl)
					2nd	74.0	1.5	3.2	T1	CR	Fe	Fe	12140-82050(cyl)
					Oil	74.0	2.8	2.8	NIFF-S	SR	Cr	Fe	12140-82051(cyl)
		Swift	SWS20143ZZ	4	1st	74.0	1.2	2.85	BF-IB	SR	Cr	Fe	12140-82010
G13B G13BB	1,298	Swift	SWS20186ZZ	4	1st	74.0	1.2	2.7	BF-IB	SR	GN	GN	12140-63E50
					2nd	74.0	1.2	3.2	TUC	CR	Fe	Fe	
					Oil	74.0	2.5	2.85	NIFF-S	SR	GN	GN	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper/ Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)				
G16A G16B	1,590	Escudo		SWS20142ZZ	4	1st	75.0	1.2	2.7	BF-IB	SR	GN	GN 12140-60A50
						2nd	75.0	1.5	3.2	TUC	CR	Fe	Fe
G16A G16B	1,590			SWS20190ZZ	4	1st	75.0	1.2	2.7	BF-IB	SR	GN	GN 12140-61G50
						2nd	75.0	1.2	2.8	TUC	CR	Fe	Fe
G15A	1,493	APV		SWS20217ZZ	4	1st	75.0	1.2	2.7	BF-IB	SR	GN	GN 12140-61J00
G16A	1,590					2nd	75.0	1.2	3.15	TUC	CR	Fe	Fe
M13A	1,328	Swift Jimny		SWS20199ZZ	4	1st	78.0	1.2	2.85	BF-IB	SR	Cr	Fe
M13A	1,328	Swift Solio				2nd	78.0	1.5	3.2	TUC	CR	Fe	Fe
M15A	1,490	Chevrolet MW Aerio SX4		SWS20196ZY (TCC-H-0086)	4	1st	78.0	1.2	2.7	BF-IB	SR	GN	GN 12140-54GA0
M15A	1,490					2nd	78.0	1.2	3.0	TUC	CR	Fe	Fe
H20A	1,998	Escudo Vitara		TCC-H-0087	V6	1st	78.0	1.2		BF-IB	SR	GN	GN 12140-85FA0
H20A	1,998					2nd	78.0	1.5		TUC	CR	Cr	Fe
J18 J18A	1,840	Estreem Caltus		SWS20178ZZ	4	1st	84.0	1.2	2.9	BF-IB	SR	GN	GN 12140-77E00
J20 J20A	1,995	Escudo Aerio				2nd	84.0	1.5	3.55	TUC	CR	Cr	Fe
J20B	1,995	SX-4		SWS20216ZZ	4	1st	84.0	1.2	2.5	BF-IB	SR	GN	GN 12140-65J00
J20B	1,995					2nd	84.0	1.2	3.0	TUC	CR	Cr	Fe
H25A	2,494	Escudo		SWS20207ZZ	V6	1st	84.0	1.2	2.9	BF-IB	SR	GN	GN 12140-86FA0
H25A	2,494					2nd	84.0	1.5	3.55	TUC	CR	Cr	Fe
H27A	2,736	Escude		SWS20210ZZ	V6	1st	88.0	1.2	3.3	BF-IB	SR	GN	GN 12140-52D00-00
H27A	2,736					2nd	88.0	1.5	3.3	TUC	CR	Cr	Fe
J24B	2,393	Escude		SWS20215ZZ	4	1st	92.0	1.2	3.1	BF-IB	SR	GN	GN 12140-78K00
J24B	2,393					2nd	92.0	1.0	3.1	TUC	HB	Fe	Fe
						Oil	92.0	2.0	2.55	NIFF-H	SR	GN	GN

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
1SZ	997	Vitz	SWT10201ZZ	4	1st 2nd Oil	69.0 69.0 69.0	1.2 1.2 2.0	2.25 2.8 2.20	BF TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	13011-23040 13011-23041
1E-L	999	Starlet	SWT10104ZZ	4	1st 2nd Oil	70.5 70.5 70.5	1.5 1.5 3.0	2.7 2.9 3.05	BF-IB T1 NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	13011-10070 13011-10080 13011-10081
1KR-FE	996	iQ Passo Boon Vitz	SWT10223ZZ (TCC-G-0082)	3	1st 2nd Oil	71.0 71.0 71.0	1.0 1.0 1.5	2.3 2.3 2.2	BF TUC NIFF-H	SR SR SR	Cr Fe Cr	Fe Fe Fe	13011-40030A 13011-40050 13011-40051 13011-40052
K3-VE	1,297	bB	SWT10220ZZ	4	1st 2nd Oil	72.0 72.0 72.0	1.2 1.2 2.0	2.3 2.6 2.25	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	13011-BZ010 13011-23060
2SZ					1st 2nd Oil	72.0 72.0 72.0	2.0 2.0 4.0	3.4 3.4 3.8	T1 T1 NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	13011-12030 13011-12010 13011-12031
3SZ-VE	1,495	Rush bB Town Ace Lite Ace Avanza	SWT10219ZZ	4	1st 2nd Oil	72.0 72.0 72.0	1.2 1.2 2.0	2.5 2.3 2.25	BF-IB TUC NIFF-H	SR HB SR	GN Fe GN	GN Fe GN	13011-BZ110 13011-BZ1040
2SZ-FE	1,296	Vitz	SWT10238ZZ (TCC-G-0057)	4	1st 2nd Oil	72.0 72.0 72.0	1.0 1.0 1.5	2.25 2.3 2.0	BF-IB TUC NIFF-H	SR SR SR	Cr Fe Cr	Fe Fe Fe	13011-23073
1NR-FE	1,329	iQ Corolla Yaris	TCC-J-0017	4	1st 2nd Oil	72.5 72.5 72.5	1.0 1.0 1.5		BF-IB TUC NIFF-H	SR SR SR	GN Fe Cr	GN Fe Fe	13011-47031
			TCC-H-0118		1st 2nd Oil	72.5 72.5 72.5	1.0 1.0 2.0		BF-IB B1-TUC NIFF-H	SR SR SR	GN Cr GN	GN Fe GN	13011-47033
3NR-FE 3NR-VE	1,197	Agya Etios Yaris	TCC-K-0036	4	1st 2nd Oil	72.5 72.5 72.5	1.0 1.0 2.0		BF-IB TUC NIFF-H	SR SR SR	Cr Fe Cr	Fe Fe Fe	04130-47010
2E-LU 2E-ELU	1,295	Corolla Starlet	SWT10105ZZ	4	1st 2nd Oil	73.0 73.0 73.0	1.5 1.5 3.0	2.65 3.1 2.85	BF-IB TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	13011-11040 13011-11041
3E 3E-E	1,456	Sprinter Tercel Corsa			1st 2nd Oil	73.0 73.0 73.0	1.5 1.5 3.0	2.65 3.1 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	13011-11060 13011-11061
3E-E		SWT10143ZZ	4	1st 2nd Oil	73.0 73.0 73.0	1.5 1.5 3.0	2.65 3.1 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	13011-11090 13011-11061	

DAIHATSU
SUBARU
HINO
HONDA
ISUZU
KOMATSU
MAZDA
MITSUBISHI
NISSAN
UD TRUCKS
SUZUKI
TOYOTA
DAEWOO
HYUNDAI
KIA
ASIA
CHRYSLER
FORD
GM

DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
4E-FE	1,331	Corolla Starlet Sprinter Tercel Corsa		SWT10128ZZ	4	1st 2nd Oil	74.0	1.2	2.7	BF	SR	Cr	Fe	13011-11122
							74.0	1.2	3.1	TUC	CR	Fe	Fe	13011-11140
5E-FE	1,496	Publica Starlet Sprinter Corolla Corona Daihatsu Charman		SWT10052ZY	4	1st 2nd Oil	75.0	2.0	3.6	BF	CR	Cr	Fe	13011-22011
							75.0	2.0	3.6	T1	CR	Fe	Fe	13011-24010
3K	1,166	Corolla Corona Daihatsu Charman					75.0	4.0	3.05	NIFF-S	SR	Cr	Fe	13011-24011
														13011-24012 13011-24020 13011-24030
4K-E	1,290	Corolla Starlet Sprinter		SWT10109ZZ	4	1st 2nd Oil	75.0	1.5	3.05	BF	SR	Cr	Fe	13011-13010
							75.0	1.5	3.4	T1	CR	Fe	Fe	13011-13060
1G-EU	1,988	Soarer Crown Mark II Chaser Cresta		SWT10073ZZ	6	1st 2nd Oil	75.0	1.5	3.25	BF	HB	Cr	Fe	13011-70010
							75.0	1.5	3.4	T1	CR	Fe	Fe	13011-70030
1G-FE	1,988	Crown Mark II Chaser Cresta		SWT10170ZZ	6	1st 2nd Oil	75.0	1.2	2.5	BF	SR	Cr	Fe	13011-70110
							75.0	1.2	2.8	TUC	CR	Fe	Fe	
1G-GEU	1,988	Altezza Crown Cresta Supra Soarer Chaser Mark II		SWT10212ZZ	6	1st 2nd Oil	75.0	1.2	3.05	BF-IB	SR	Cr	Fe	13011-88300
							75.0	1.5	3.2	TUC	CR	Cr	Fe	
M 2M	1,988 2,253	Crown		SXT10004ZZ	6	1st 2nd Oil	75.0	2.0	3.6	T1	CR	Cr	Cr	13011-41011
							75.0	2.0	3.6	T1	CR	Fe	Fe	13011-41015
1NZ-FE 2NZ-FE	1,496 1,298	Vitz Ist Porte Corolla Funcargo		SWT10192ZZ	4	1st 2nd Oil	75.0	1.2	2.5	BF	SR	GN	GN	13011-21050
							75.0	1.2	2.8	TUC	CR	Fe	Fe	13011-21041
2NZ-FE	1,298	Yaris Vitz Funcargo		SWT10211ZZ	4	1st 2nd Oil	75.0	1.2	2.5	BF	SR	GN	GN	13011-21060
							75.0	1.2	2.5	TUC	HB	Cr	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper	
1NZ-FXE	1,497	Prius Hybrid	SDT10222ZZ	4	1st	75.0	1.2	2.5	BF	SR	GN	GN	13011-21030
					2nd	75.0	1.2	2.8	TUC	CR	Fe	Fe	13011-21070
2A-U 2A-LU	1,295	Tercel Corsa Corolla	SWT10068ZX	4	1st	75.0	0.8	2.5	BF-IB	SR	GN	GN	13011-21100
					2nd	75.0	1.0	2.3	T1	SR	Fe	Fe	13011-21130
3P 4P	1,350	Hi Ace Corona Van Toyo Ace	SWT10009ZZ	4	1st	76.0	2.0	2.85	BF	SR	Cr	Fe	13011-14010
					2nd	76.0	2.0	3.7	T1	CR	Fe	Fe	13011-14020
1A-U 3A-U	1,452	Corona Tercel Corolla Sprinter Corsa	SWT10078ZX	4	1st	77.5	1.5	2.85	BF	SR	Cr	Fe	13011-15010
					2nd	77.5	1.5	3.4	T1	CR	Fe	Fe	13011-15011
2R	1,490	Corona Stout Hi Lux Toyo Ace Bus	SWT10014ZZ	4	1st	78.0	2.0	3.7	T1	CR	Cr	Fe	13011-31010
					2nd	78.0	2.5	3.6	TUC	CR	Cr	Fe	13011-31030
5A	1,498	Corolla Sprinter Carina	SWT10161ZZ	4	1st	78.7	1.5	2.65	BF	SR	Cr	Fe	13011-15050
					2nd	78.7	1.5	3.5	T1	CR	Fe	Fe	
5A-F 5A-FE	1,498	Corolla	SWT10181ZZ	4	1st	78.7	1.2	2.85	BF	SR	Cr	Fe	13011-15100
					2nd	78.7	1.5	3.5	T1	CR	Fe	Fe	13011-15120
8A-FE	1,342	Vios	TCC-G-0058	4	1st	78.7	1.2		BF	SR	GN	GN	13011-15130
					2nd	78.7	1.5		T1	CR	Fe	Fe	
1ZZ-FE	1,794	Corolla Vista	SWT10183ZZ	4	1st	79.0	1.2	2.65	BF	SR	Cr	Fe	13011-22030
					2nd	79.0	1.2	3.2	TUC	CR	Fe	Fe	13011-22040
3ZZ-FE	1,598	Welcab			Oil	79.0	3.0	2.55	NIFF-S	SR	Cr	Fe	13011-22100
													13011-22111 13011-22200 13011-22220 13011-22221 13011-22230 13011-22090
1ZZ-FE	1,794	Vista Corolla	SWT10183ZY	4	1st	79.0	1.2	2.7	BF	SR	GN	GN	13011-22140
					2nd	79.0	1.2	3.2	TUC	CR	Fe	Fe	
3ZZ-FE	1,598	Premio Avencis			Oil	79.0	3.0	2.55	NIFF-S	SR	GN	GN	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
T	1,407	Corolla 1400 Carina 1400 Sprinter	SWT10039ZZ	4	1st 2nd Oil	80.0	2.0	3.8	BF	CR	Cr	Fe	13011-25010	
						80.0	2.0	3.8	T1	CR	Fe	Fe	13011-25020	
						80.0	4.0	3.8	NIFF-S	SR	Cr	Fe	13011-25032 13011-25041	
4M-U	2,563	Mark II Grande	SXT10041ZZ	6	1st 2nd Oil	80.0	2.0	3.8	BF	CR	Cr	Cr	13011-45021	
						80.0	2.0	3.8	T1	CR	Fe	Fe	13011-45040	
						80.0	4.0	3.85	NIFF-S	SR	Cr	Fe		
T-U	1,407	Corolla Sprinter	SXT10060ZZ	4	1st 2nd Oil	80.0	1.5	3.8	BF	CR	Cr	Cr	13011-25042	
						80.0	2.0	3.8	T1	CR	Fe	Fe	13011-25033	
						80.0	4.0	3.8	NIFF-S	SR	Cr	Fe		
12R 12R-J	1,587	Corona Hi Lux Hi Ace Toyo Ace	SWT10042ZY	4	1st 2nd Oil	80.5	2.0	3.9	BF	CR	Cr	Fe	13011-31050	
						80.5	2.0	3.7	T1	CR	Fe	Fe	13011-31051	
						80.5	4.0	3.75	NIFF-S	SR	Cr	Fe	13011-31060 13011-31061 13011-31070 13011-31090	
1S-U	1,832	Carina Cerica Mark II Chaser Cresta	SWT10080ZZ	4	1st 2nd Oil	80.5	1.5	3.25	BF	SR	Cr	Fe	13011-63010	
						80.5	1.5	3.65	T1	CR	Fe	Fe	13011-63011	
						80.5	4.0	3.25	NIFF-S	SR	Cr	Fe	13011-63020 13011-63030 13011-63031	
5K 5K-U 5K-J	1,496	Corona Van Corolla Van Carina Van Lite Ace Van Town Ace Van	SWT10099ZZ	4	1st 2nd Oil	80.5	1.5	3.1	BF	SR	GN	GN	13011-13040	
						80.5	1.5	3.65	T1	CR	Fe	Fe	13011-13050	
						80.5	4.0	3.25	NIFF-S	SR	GN	GN	13011-13090	
7K-E	1,781	Lite Ace Van Town Ace Van Town Ace Lite Ace Truck	SWT10169ZY	4	1st 2nd Oil	80.5	1.5	3.1	BF	SR	GN	GN	13011-13100	
						80.5	1.5	3.6	TUC	CR	Cr	Fe	13011-13110	
						80.5	4.0	2.55	NIFF-S	SR	GN	GN	13011-13120	
1ZR-FE	1,598	Corolla Premio Ist	SWT10232ZZ	4	1st 2nd Oil	80.5	1.0	2.9	BF-IB	SR	GN	GN	13011-37160	
						80.5	1.0	2.5	TUC	SR	Fe	Fe	13011-37140	
						80.5	1.5	1.95	NIFF-H	SR	Cr	Fe	13011-37090	
4A-L 4A-LC 4A-GEU	1,587	Corolla Sprinter Trueno Corolla Levin Corona GT Carina GT	SWT10108ZZ	4	1st 2nd Oil	81.0	1.5	3.1	BF	SR	Cr	Fe	13011-16010	
						81.0	1.5	3.5	TUC	CR	Fe	Fe	13011-16011	
						81.0	2.8	2.8	NIFF-S	SR	Cr	Fe	13011-16031 13011-16032 13011-16030 13011-16050 13011-16070	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference	
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower		
4A-F	1,587	Corolla Sprinter Carina Corona Premio	SWT10142ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.5 1.5 3.0	2.7 3.4 2.85	BF T1 NIFF-S	SR CR SR	GN Fe GN	GN	13011-16140 13011-16150	
4A-FE														
4A-GZELU	1,587	Corolla Levin Sprinter Trueno	SWT10145ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.5 1.5 2.8	3.1 3.4 2.8	BF TUC NIFF-S	SR CR SR	GN Cr Cr	GN Fe Fe	13011-16050 13011-16090 13011-16180	
4A-GEU	1,587	Corolla Levin Sprinter Trueno Carina GT	SWT10101ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.5 1.5 2.8	3.1 3.5 2.8	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe	13011-16050 13011-16070 13011-16090	
			SWT10150ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.2 1.5 2.8	2.9 3.4 2.8	BF TUC NIFF-S	SR CR SR	GN Cr GN	GN	13011-16200	
4A-FE	1,587	Corolla Carina	SWT10156ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.2 1.5 3.0	2.9 3.4 2.85	BF T1 NIFF-S	SR CR SR	GN Fe GN	GN	13011-16280 13011-16290	
7A-FE	1,762	Premio Sprinter Caldina												13011-16300 13011-16320
2ZZ-FE 2ZZ-GE	1,796	Corolla Allex	SWT10196ZZ	4	1st 2nd Oil	82.0 82.0 82.0	1.2 1.2 3.0	2.85 3.05 3.2	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe	13011-88601	
4S	1,838	Caldina Camry Vista	SWT10123ZZ	4	1st 2nd Oil	82.5 82.5 82.5	1.5 1.5 4.0	3.05 3.8 2.9	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe	13011-74110-1 13011-74120-1 13011-74121-1	
5M 5M-E 5M-EU	2,759	Celica XX Crown	SWT10072ZX	6	1st 2nd Oil	83.0 83.0 83.0	2.0 2.0 4.0	3.05 3.8 3.25	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe	13011-43010 13011-43030	
5M-GE 5M-EU	2,759	Crown Soarer 2800GT Celica XX	SWT10079ZZ	6	1st 2nd Oil	83.0 83.0 83.0	1.5 1.5 4.0	3.1 3.8 2.9	BF T1 NIFF-S	SR CR SR	GN Fe Cr	GN	13011-43050 13011-43080	
7M-GE 7M-GTE	2,954	Soarer Crown	SWT10115ZZ	6	1st 2nd Oil	83.0 83.0 83.0	1.5 1.5 4.0	3.1 3.7 2.85	BF TUC NIFF-S	SR HB SR	GN Cr GN	GN	13011-42010 13011-42011	
4GR-E30	2,499	Crown Mark X Lexus IS250	SDT10225ZZ	V6	1st 2nd Oil	83.0 83.0 83.0	1.2 1.2 2.0	2.7 2.7 2.75	BF B1-TUC E-BC16	SR SR SR	GN Cr GN	GN	13011-31220 13011-31260 13011-31270	
2S-ELU	1,995	Vista Camry	SWT10088ZZ	4	1st 2nd Oil	84.0 84.0 84.0	1.5 1.5 4.0	3.45 3.8 3.3	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe	13011-74010 13011-74020 13011-74040	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference	
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower		
21R	1,972	Corona 2000	SXT10067ZZ	4	1st	84.0	2.0	4.0	BF	CR	Cr	Cr	13011-37010		
					2nd	84.0	2.0	4.0	T1	CR	Cr	Fe	13011-37030		
21R-C	1,972	Celica Liftback Chaser Mark II	SWT10076ZZ	4	1st	84.0	1.5	3.45	BF	SR	Cr	Fe	13011-37050		
					2nd	84.0	2.0	4.0	T1	CR	Cr	Fe	13011-37060		
21R-C	1,972	Cressida Mark II	SWT10102ZZ	4	1st	84.0	1.5	3.1	BF	SR	GN	GN	13011-37070		
					2nd	84.0	1.5	3.8	T1	CR	Cr	Fe	13011-37071		
2T 2T-C 12T	1,588	Corona 1600 Celica Corolla 1600ST	SWT10040ZZ	4	1st	85.0	2.0	4.0	BF	CR	Cr	Fe	13011-26020		
					2nd	85.0	2.0	4.0	T1	CR	Fe	Fe	13011-26041		
					Oil	85.0	4.0	3.25	NIFF-S	SR	Cr	Fe	13011-26040 13011-27020		
2T	1,588	Corona 1600 Corona 1800	SWT10059ZZ	4	1st	85.0	1.5	3.25	BF	SR	Cr	Fe	13011-28010		
3T	1,770	Camry Celica			2nd	85.0	1.5	3.8	T1	CR	Fe	Fe	13011-28011		
6R	1,707	Corona RT61・71・77 RT84・94 RX10・20・26 RX16V RT88V			1st	86.0	2.0	3.9	T1	CR	Cr	Fe	13011-31010		
					2nd	86.0	2.5	3.9	T1	CR	Cr	Fe	13011-33020		
7R	1,591	Corona RT60・70・76	SWT10019ZZ	4	Oil	86.0	4.0	3.25	NIFF-S	SR	Cr	Fe	13011-33021 13011-33022 13011-33030		
8R	1,858	Corona MARK II RT62K RT72K RT72S													
1Y	1,626	Master Ace Hi Ace Wagon	SWT10090ZY	4	1st	86.0	1.5	3.45	BF	SR	Cr	Fe	13011-71010		
2Y	1,812	Town Ace Lite Ace			2nd	86.0	1.5	4.0	T1	CR	Cr	Fe	13011-71020		
3Y	1,998	Mark II Van Vista Camry			Oil	86.0	4.0	3.25	NIFF-S	SR	Cr	Fe	13011-71030 13011-72020 13011-74070-A 13011-74072 13011-74091		
3S-FE 3S-FSE	1,998	Carina Corona											13011-74280 13011-74080 13011-74081		

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper	
1Y(NEW)	1,626	Lite Ace	SWT10090ZZ	4	1st	86.0	1.5	3.3	BF	SR	GN	GN	13011-71033
		Town Ace			2nd	86.0	1.5	4.0	T1	CR	Cr	Fe	13011-71042
	1,812	Mark II Corona			Oil	86.0	4.0	3.05	NIFF-S	SR	GN	GN	
2Y(NEW)				4									
	1,998												
3Y(NEW)	1,998	Ipsum Vista Camry Corona	SWT10119ZZ	4	1st	86.0	1.5	3.25	BF	SR	Cr	Fe	13011-74070
					2nd	86.0	1.5	3.8	T1	CR	Fe	Fe	13011-74072
					Oil	86.0	4.0	3.25	NIFF-S	SR	Cr	Fe	13011-74080 13011-74081
3S-F 3S-FE	1,998			4									
1AZ-FE 1AZ-FSE	1,998	RAV 4 Corolla Runx Premio Allion Caldina	SWT10186ZZ	4	1st	86.0	1.2	2.7	BF	SR	GN	GN	13011-28120
					2nd	86.0	1.2	3.1	TUC	CR	Fe	Fe	
					Oil	86.0	2.0	2.5	NIFF-H	SR	GN	GN	
Wish Avencis Noah			SWT10176ZY	4	1st	86.0	1.2	2.9	BF	SR	GN	GN	13011-28130
					2nd	86.0	1.2	2.9	TUC	SR	GN	GN	
					Oil	86.0	3.0	2.75	NIFF-S	SR	GN	GN	
1TR-FE	1,998	Hi Ace Van Toyo Ace Hi Ace Dyna	SDT10185ZZ	4	1st	86.0	1.2	2.7	BF	SR	GN	GN	13011-75100
					2nd	86.0	1.2	3.1	TUC	CR	Fe	Fe	
					Oil	86.0	2.0	2.75	E-BC16	SR	GN	GN	
1RZ-FE	1,998	Hi Ace	SWT10125ZZ	4	1st	86.0	1.75	3.3	BF	SR	GN	GN	13011-75020
					2nd	86.0	1.5	3.05	TUC	SR	Cr	Fe	13011-75080
					Oil	86.0	4.0	2.8	NIFF-S	SR	GN	GN	
1JZ-GE	2,491	Crown Aristo Supra Soarer	SWT10134ZZ	6	1st	86.0	1.5	3.3	BF	SR	GN	GN	13011-46040
					2nd	86.0	1.5	3.8	TUC	CR	Cr	Fe	13011-46041
					Oil	86.0	4.0	2.9	NIFF-S	SR	GN	GN	13011-46050
2JZ-GE 2JZ-GTE	2,997	Lexus GS300 Mark II Chaser Cresta		6									
1JZ-GE	2,491	Chaser Tourers	SWT10216ZZ	6	1st	86.0	1.5	3.25	BF	SR	Cr	Fe	13011-46030
					2nd	86.0	1.5	3.6	T1	CR	Fe	Fe	
					Oil	86.0	4.0	2.8	NIFF-S	SR	GN	GN	
1JZ-GTE	2,491		SWT10249ZZ (TCC-J-0047)	6	1st	86.0	1.2	3.1	BF	SR	GN	GN	13011-88410
					2nd	86.0	1.5	3.6	T1	CR	Fe	Fe	
					Oil	86.0	4.0	2.8	NIFF-S	SR	GN	GN	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
	3S-GTE 3S-GE	1,998	Celica 2000GT Caldina MR2 Camry Vista	SWT10141ZZ	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.5 4.0	3.3 3.6 3.25	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	13011-88363 13011-88380
	3S-GTE	1,998	Caldina Turbo Celica Turbo MR2 Turbo	TCC-K-0017	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.5 4.0		BF-IB TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	13011-88480
	3S-FE	1,998	Camry Vista Corona Caldina Ipsum	SWT10162ZY	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.2 3.0	2.9 3.4 2.85	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	13011-74340
	2JZ-D4	2,997	Crown Mark II Chaser Cresta Lexus GS300	SDT10215ZZ	6	1st 2nd Oil	86.0 86.0 86.0	1.2 1.2 2.0	2.7 3.45 2.75	BF T1 E-BC16	SR CR SR	GN Cr GN	GN Fe GN	13011-46060 13011-46061
	4U-GSE	1,998	86 FR-S FT-86	TCC-J-0071	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.0 2.0		BF-IB TUC NIFF-H	SR SR SR	GN Fe GN	GN Fe GN	SU003-00145
	5S-FE 5S-FNE	2,163	Scepter Camry Harrier Mark II	SWT10133ZZ	4	1st 2nd Oil	87.0 87.0 87.0	1.5 1.5 4.0	3.5 3.6 3.05	BF T1 NIFF-S	SR CR SR	Cr Cr GN	Fe Fe GN	13011-74261 13011-74290 13011-74260 13011-74300
				SWT10149ZZ	4	1st 2nd Oil	87.0 87.0 87.0	1.5 1.5 3.0	3.5 3.6 2.85	BF T1 NIFF-S	SR CR SR	Cr Cr Cr	Fe Fe Fe	13011-74150
				SWT10166ZZ	4	1st 2nd Oil	87.0 87.0 87.0	1.2 1.2 3.0	2.9 3.4 2.75	BF TUC NIFF-S	SR CR SR	Cr Fe GN	Fe Fe GN	13011-74380 13011-74370 13011-74410
	3VZ-E 3VZ-FE	2,958	Camry Hi Lux Windom Cepter Lexus ES300	SWT10144ZZ	V6	1st 2nd Oil	87.5 87.5 87.5	1.5 1.5 4.0	3.3 3.8 2.85	BF T1 NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	13011-62060 13011-65021
				SWT10148ZZ	V6	1st 2nd Oil	87.5 87.5 87.5	1.5 1.5 3.0	3.3 3.8 2.9	BF T1 NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	13011-62040

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
1MZ-FE 2MZ-FE	2,995	Camry	SWT10177ZY	V6	1st	87.5	1.2	2.85	BF	SR	Cr	Fe	13011-20020
	2,496	Lexus ES300 Windom Harrier Mark II			2nd	87.5	1.2	3.4	TUC	CR	Fe	Fe	13011-20010
					Oil	87.5	3.0	2.55	NIFF-S	SR	GN	GN	13011-20012
													13011-20050
1UZ-FE	3,969	Crown Celsior Majesta Soarer Lexus	SWT10147ZZ	V8	1st	87.5	1.5	3.1	BF	SR	GN	GN	13011-50040
					2nd	87.5	1.5	3.7	TUC	CR	Fe	Fe	
					Oil	87.5	3.0	2.85	NIFF-S	SR	GN	GN	
3GR-D4 3GR-FE 3GR-FSE	2,994	Mark X Crown GS300	TCC-K-0016	V6	1st	87.5	1.2		BF	SR	GN	GN	13011-31170
					2nd	87.5	1.2		TUC	SR	Fe	Fe	13011-31171
					Oil	87.5	2.0		E-BC16	SR	GN	GN	
5R 5R-U	1,994	Crown RS50 RS50B Dyna RK171 RK171V-B RK176-H RK176V-HB Stout RK101 RK101-K Toyo Ace	SWT10069ZY	4	1st	88.0	2.0	4.2	BF	CR	Cr	Fe	13011-44010
					2nd	88.0	2.5	4.2	T1	CR	Cr	Fe	13011-44011
					Oil	88.0	4.0	3.3	NIFF-S	SR	Cr	Fe	13011-44030
													13011-44031
													13011-44032
													13011-44040
													13011-44041
													13011-44042
													13011-44043
													13011-44060
													13011-44061
													13011-44062
													13011-44063
													13011-44073
16R 16R-B 16R-U	1,808	Corona Carina Corona Van Celica	SWT10043ZZ	4	1st	88.5	2.0	4.2	BF	CR	Cr	Fe	13011-34012
					2nd	88.5	2.5	4.2	T1	CR	Cr	Fe	13011-34013
					Oil	88.5	4.0	3.85	NIFF-S	SR	Cr	Fe	13011-34020
18R 18R-B 18R-U	1,968	Mark II Stout											13011-34021
													13011-34022
													13011-34023
													13011-34030
													13011-34050
19R	1,968												13011-38010
													13011-38020
20R	2,189		SJT10063ZZ	4	1st	88.5	2.0	4.2	BF	CR	Cr	Cr	13011-38030
					2nd	88.5	2.5	4.2	TUC	CR	Cr	Fe	
					Oil 1	88.5	4.0	4.1	E-BC3	CR	Cr	Fe	
					Oil 2	88.5	4.0	4.0	BC3	CR	Cr	Fe	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference	
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower		
2AZ-FE 2AZ-FSE	2,362	Harrier Kluger Camry Ipsum Estima RAV 4	SDT10172ZZ	4	1st	88.5	1.2	2.7	BF	SR	Cr	Fe	13011-28100		
					2nd	88.5	1.2	3.1	TUC	CR	Fe	Fe	13011-28141		
					Oil	88.5	2.0	2.75	E-BC16	SR	GN	GN	13011-28180		
	2,362	RAV4 Mark X Vellfire	SWT10182ZZ	4	1st	88.5	1.2	2.7	BF	SR	Cr	Fe	13011-28101		
					2nd	88.5	1.2	3.2	TUC	CR	Fe	Fe	13011-28102		
					Oil	88.5	2.0	2.45	NIFF-H	SR	GN	GN			
2AZ-FE 2AZ-FSE	2,362	RAV4 Mark X Vellfire	SDT10200ZZ	4	1st	88.5	1.0	2.7	BF	SR	GN	GN	13011-28160		
					2nd	88.5	1.0	2.7	TUC	SR	Fe	Fe	13011-28161		
					Oil	88.5	2.0	2.75	E-BC16	SR	GN	GN	13011-28190		
													13011-0H040		
													13011-0H041		
													13011-28240		
1AR-FE	2,671	Lexus RX270	SDT10226ZZ	4	1st	90.0	1.0	2.9	BF-IB	SR	GN	GN	13011-36020		
2AR-FE 2AR-FSE	2,493	Lexus ES Lexus IS Camry Crown Hybrid			2nd	90.0	1.0	2.7	TUC	SR	Fe	Fe	13011-36020-A		
					Oil	90.0	2.0	2.75	E-BC16	SR	GN	GN	13011-36030		
													13011-36050		
													13011-36060		
													13011-36070		
F	3,878	Truck FA80 FA80D FA90 FA90D Land Cruiser FJ40 FJ43 FJ45V 2FQ10 Bus FB80 FB100	SWT10026ZZ	6	1st	90.0	3.0	3.7	T1	CR	Cr	Fe	13011-69021		
					2nd	90.0	3.0	3.7	T1	CR	Fe	Fe	13011-60011		
					Oil 1	90.0	4.0	3.9	NIFF-S	SR	Cr	Fe			
					Oil 2	90.0	4.0	3.7	C1	CR	Fe	Fe			
F(NEW)	3,878	Truck Bus Land Cruiser	SWT10044ZZ	6	1st	90.0	2.0	4.0	T1	CR	Cr	Fe	13011-60040		
					2nd	90.0	2.5	4.0	T1	CR	Fe	Fe			
					Oil 1	90.0	4.0	3.9	NIFF-S	SR	Cr	Fe			
					Oil 2	90.0	4.0	4.0	BC3	CR	Fe	Fe			
4Y 4Y-E	2,237	Crown Hi Ace Fork Lift	SWT10111ZZ	4	1st	91.0	1.5	3.25	BF-IB	SR	Cr	Fe	13011-73020		
					2nd	91.0	1.5	3.95	TUC	CR	Cr	Fe	13011-73030		
					Oil	91.0	4.0	3.1	NIFF-S	SR	Cr	Fe	13011-73040		
													13011-73042		
22R 22R-E 22R-EC	2,366	Coaster Celica Corona Hi Lux Hi Ace Land Cruiser	SWT10077ZX	4	1st	92.0	2.0	3.45	BF	SR	Cr	Fe	13011-35010		
					2nd	92.0	2.5	4.2	T1	CR	Fe	Fe	13011-35020		
					Oil	92.0	4.0	3.25	NIFF-S	SR	Cr	Fe	13011-35030		
			SWT10103ZZ	4	1st	92.0	1.5	3.3	BF	SR	Cr	Fe	13011-35040		
					2nd	92.0	1.5	4.0	T1	CR	Cr	Fe	13011-35050		
					Oil	92.0	4.0	3.25	NIFF-S	SR	GN	GN	13011-35060		
													13011-35061		
													13011-35070		

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper	
3MZ-FE	3,310	Harrier Hybrid Kluger Hybrid Lexus ES330,RX330	SWT10228ZZ	V6	1st	92.0	1.2	2.85	BF	SR	Cr	Fe	13011-0A030
					2nd	92.0	1.2	3.8	TUC	CR	Fe	Fe	
			SDT10247ZZ (TCC-H-0080)	V6	1st	92.0	1.2	3.1	BF-IB	SR	GN	GN	13011-20061
					2nd	92.0	1.2	3.8	TUC	CR	Fe	Fe	
5P	2,771	Fork Lift	SWT10048ZZ	4	1st	93.0	2.5	3.8	BF	CR	Cr	Fe	13011-96102
					2nd	93.0	2.5	3.8	T1	CR	Fe	Fe	
5VZ-FE	3,378	Land Cruiser Hi Lux Surf Hi Ace Granvia	SWT10178ZZ	V6	1st	93.5	1.5	3.3	BF	SR	GN	GN	13011-62100
					2nd	93.5	1.5	4.0	T1	CR	Fe	Fe	13011-62110
2F	4,230	Truck FJ55 FJ101 FC22D Land Cruiser	SWT10049ZZ	6	1st	94.0	2.0	4.2	BF	CR	Cr	Fe	13011-61010
					2nd	94.0	2.5	4.2	T1	CR	Cr	Fe	
3F 3F-E	3,955	Land Cruiser	SWT10106ZY	6	1st	94.0	1.5	3.5	BF	SR	GN	GN	13011-61060
					2nd	94.0	1.5	4.0	T1	CR	Fe	Fe	
3F(NEW)	3,955	Land Cruiser	SWT10151ZZ	6	1st	94.0	2.0	3.3	BF	SR	GN	GN	13011-61062
					2nd	94.0	2.0	4.0	T1	CR	Cr	Fe	
1GR-FE	3,955	Hi Lux Surf Land Cruiser Prado	SWT10195ZZ	V6	1st	94.0	1.2	3.25	BF	SR	Cr	Fe	13011-31100
					2nd	94.0	1.2	3.4	TUC	CR	Fe	Fe	
2GR-FE 2GR-FSE	3,459	Harrier Camry Avalon Lexus Estima RAV 4	SDT10194ZY	V6	1st	94.0	1.2	2.9	BF-IB	SR	GN	GN	13011-31140
					2nd	94.0	1.2	2.9	TUC	SR	Fe	Fe	13011-31141
2UZ-FE	4,663	Land Cruiser Lexus LX470 Lexus GX470 Hi Lux Surf	SWT10203ZZ	V8	1st	94.0	1.5	3.3	BF	SR	GN	GN	13011-50140
					2nd	94.0	1.5	4.0	T1	CR	Fe	Fe	13011-50141
			SWT10240ZZ (TCC-H-0070)	V8	1st	94.0	1.2	2.9	BF-IB	SR	GN	GN	13011-50162
					2nd	94.0	1.2	3.9	TUC-RB	CR	Fe	Fe	13011-0F022



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
1UR-FSE 1UR-FFV	4,608	Land Cruiser Lexus GS460 Crown Majesta		SDT10204ZZ	V8	1st 2nd Oil	94.0	1.2	2.9	BF-IB	SR	GN	GN	13011-38080
							94.0	1.2	2.9	TUC	SR	Fe	Fe	13011-38081
2UR-FSE	4,968						94.0	2.0	2.75	E-BC16	SR	GN	GN	13011-38090 13011-38110
1UR-FE	4,608	Lexus LS460 Land Cruiser		SWT10236ZZ (TCC-D-0045)	V8	1st 2nd Oil	94.0	1.2	2.9	BF-IB	SR	GN	GN	13011-0S011
3UR-FE	5,663	Lexus IS-F Lexus RCF					94.0	1.2	3.4	TUC	CR	Fe	Fe	
2TZ-FE 2TZ-FZE	2,438	Estima		SWT10127ZZ	4	1st 2nd Oil	95.0	1.75	3.65	BF	SR	Cr	Fe	13011-76010
3RZ-FE	2,693	Hi Lux Surf Land Cruiser Prado Toyo Ace Gravvia					95.0	1.5	3.5	T1	CR	Fe	Fe	13011-76050
2RZ	2,438	Hi Ace wagon		SWT10245ZZ (TCC-H-0079)	4	1st 2nd Oil	95.0	1.75	3.3	BF	SR	GN	GN	13011-75060
3RZ-FE	2,693						95.0	1.5	3.45	TUC	SR	Cr	Fe	13011-75030
2TR-FE	2,693	Hi Lux Surf Land Cruiser Hi Ace Prado		SDT10193ZY	4	1st 2nd Oil	95.0	1.2	2.9	BF	SR	GN	GN	13011-75130
2TR-FFV	2,693	Hi Ace Wagon Land Cruiser Prado					95.0	1.2	3.4	TUC	CR	Fe	Fe	13011-75110
1FZ-FE	4,477	Land Cruiser 70 80		SWT10168ZZ	6	1st 2nd Oil	100.0	2.0	3.5	BF	SR	GN	GN	13011-66020
							100.0	2.0	3.8	TUC	CR	Cr	Fe	
		Land Cruiser FZJ80G		SWT10184ZZ	6	1st 2nd Oil	100.0	4.0	3.3	NIFF-S	SR	GN	GN	13011-66021
							100.0	1.75	3.7	BF-IB	SR	Cr	Fe	
							100.0	2.0	3.8	TUC	CR	GN	GN	
							100.0	4.0	3.3	NIFF-S	SR	GN	GN	

● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
1ND-TV	1,362	Corolla iQ Probox Yaris	SDT10202ZZ (TCC-F-0066)	4	1st 2nd Oil	73.0 73.0 73.0	1.5 1.5 3.0	2.5 2.45 3.25	BF T1 E-BC16	SR SR SR	GN Cr GN	GN Fe GN	13011-33041
1N-T	1,453	Corolla II Tercel Corsa	SWT10117ZZ	4	1st 2nd Oil	74.0 74.0 74.0	1.5 1.5 3.0	2.7 3.2 2.8	BF-K2 T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	13011-55010 13011-55011
1CD-FTV	1,995	Corolla Avencis	SDT10206ZZ	4	1st 2nd Oil	82.2 82.2 82.2	2.0 1.5 3.0	3.05 2.9 3.75	BF T1 E-BC16	SR HB CR	Cr Cr Cr	Fe Fe Fe	13011-27030
1CDA	1,995	Corolla Avencis	SDT10214ZZ	4	1st 2nd Oil	82.2 82.2 82.2	2.0 1.5 3.0	2.85 2.7 3.1	BF T1 E-BC16	SR HB SR	Cr Fe GN	Fe Fe GN	13011-27040
1C 1C-L	1,839	Corona Carina Corolla Sprinter	SDT10081ZX	4	1st 2nd Oil	83.0 83.0 83.0	2.0 2.0 4.0	3.05 3.8 4.35	BF-K2 T1 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	13011-64010 13011-64020 13011-64040 13011-64070 13011-64080
1C(NEW)	1,839	Corolla	SDT10110ZZ	4	1st 2nd Oil	83.0 83.0 83.0	2.0 2.0 3.0	3.1 3.5 3.15	BF-K2 T1 E-BC16	SR CR SR	GN Cr GN	GN Fe GN	13011-64220 13011-64130
1DZ	2,486	Estima Town Ace	SDT10159ZZ	4	1st 2nd Oil	86.0 86.0 86.0	2.0 2.0 4.0	3.1 3.6 4.35	BF-K2 T1 E-BC16	SR CR SR	GN Cr GN	GN Fe GN	13011-78201-71
3C-T	2,184	Camry Vista Fork Lift											
1DZ	2,486	Fork Lift	SDT10191ZZ	4	1st 2nd Oil	86.0 86.0 86.0	2.0 2.0 4.0	3.05 3.6 4.15	BF-K2 T1-K3 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	13011-78200-71
1DZ-II	2,486	Fork Lift	SDT10244ZZ	4	1st 2nd Oil	86.0 86.0 86.0	2.0 2.0 3.0	3.1 3.1 3.25	BF-K2 T1 E-BC16	SR SR SR	GN GN GN	GN GN GN	13011-UC010



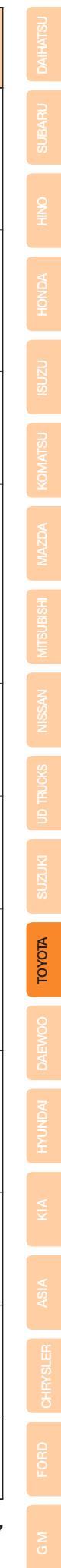
DAIHATSU DAIHATSU	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
DAIHATSU DAIHATSU	1,974	Town Ace Corona Corolla Carina Caldina Master Ace Daihatsu Delta	SDT10096ZX	4	1st	86.0	2.0	3.05	BF-K2	SR	Cr	Fe	13011-64060
					2nd	86.0	2.0	3.6	T1	CR	Cr	Fe	13011-64110
					Oil	86.0	4.0	4.35	E-BC16	SR	GN	GN	13011-64150
			SDT10152ZZ	4	1st	86.0	1.75	2.90	BF-K2	SR	GN	GN	13011-64170
					2nd	86.0	2.0	3.6	T1	CR	Cr	Fe	
					Oil	86.0	3.0	3.05	E-BC16	SR	GN	GN	
			SDT10155ZZ	4	1st	86.0	2.0	3.1	BF-K2	SR	GN	GN	13011-64190
					2nd	86.0	2.0	3.6	T1	CR	Cr	Fe	13011-64202
					Oil	86.0	3.0	3.05	E-BC16	SR	GN	GN	13011-64210 13011-64212 13011-64213 13011-64230
DAIHATSU DAIHATSU	4,461	Land Cruiser	SDT10239ZZ (TCC-F-0011)	V8	1st	86.0	2.0	2.85	BF	SR	Cr	Fe	13011-51031
2nd	86.0	1.5	2.9	T1	SR	GN	GN						
Oil	86.0	2.0	2.75	E-BC16	SR	GN	GN						
DAIHATSU DAIHATSU	2,231	Avensis Lexus IS 200d RAV 4	TCC-K-0014	4	1st	86.0	2.0		BF	SR	GN	GN	13011-26090
					2nd	86.0	1.5		T1	SR	Fe	Fe	13011-26100
					Oil	86.0	2.0		E-BC16	SR	GN	GN	13011-26110
			SCT10024ZZ	4	1st	88.0	2.5	3.8	BF-K3	HB	Cr	Fe	13011-46021
					2nd	88.0	2.5	3.8	T1	CR	Cr	Fe	
					3rd	88.0	2.5	3.8	TUC	CR	Fe	Fe	
					Oil 1	88.0	4.0	3.8	BC1	CR	Cr	Fe	
					Oil 2	88.0	4.0	3.8	BC1	CR	Fe	Fe	
			SDT10045ZX	4	1st	88.0	2.54	3.8	BF-K3	HB	Cr	Fe	13011-48013
					2nd	88.0	2.5	3.8	T1	CR	Cr	Fe	13011-48021
					3rd	88.0	2.5	3.8	TUC	CR	Fe	Fe	
					Oil	88.0	4.0	4.35	E-BC16	SR	GN	GN	
			SJT10050ZZ	4	1st	88.0	2.54	3.8	BF-K3	HB	Cr	Cr	13011-48022
					2nd	88.0	2.5	3.8	T1	CR	Cr	Fe	13011-48023
					Oil	88.0	4.0	4.2	E-BC3	CR	Cr	Fe	13011-48030

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
H	3,567	Dyna HV15	SCT10025ZZ	6	1st	88.0	2.5	3.8	BF-K3	HB	Cr	Fe	13011-47020
					2nd	88.0	2.5	3.8	T1	CR	Cr	Fe	
					3rd	88.0	2.5	3.8	TUC	CR	Fe	Fe	
	3,567				Oil 1	88.0	4.0	3.8	BC1	CR	Cr	Fe	
					Oil 2	88.0	4.0	3.8	BC1	CR	Fe	Fe	
		Dyna HU15	SDT10047ZZ	6	1st	88.0	2.54	3.8	BF-K3	HB	Cr	Fe	13011-47021
					2nd	88.0	2.5	3.8	T1	CR	Cr	Fe	
					3rd	88.0	2.5	3.8	TUC	CR	Fe	Fe	
		Land Cruiser Dyna HU30 HU45			Oil	88.0	4.0	4.2	E-BC3	CR	Cr	Fe	13011-47022
L	2,188	Crown Chaser Hi Lux (Truck) Hi Ace Blizzard (Jeep)	SDT10066ZZ	4	1st	90.0	2.5	3.8	BF	HB	Cr	Fe	13011-54010
					2nd	90.0	2.0	4.0	T1	CR	Cr	Fe	13011-54020
					Oil	90.0	4.0	4.2	E-BC3	CR	Cr	Fe	13011-54021
L(NEW)	2,188	Crown Corona Mark II Toyo Ace Hi Ace (Expo) Blizzard (Jeep) Hi Lux (Expo)	SDT10082ZX	4	1st	90.0	2.0	3.35	BF-K2	SR	GN	GN	13011-54030
					2nd	90.0	2.0	4.0	T1	CR	Cr	Fe	13011-54031
					Oil	90.0	4.0	4.35	E-BC16	SR	GN	GN	13011-54040
													13011-54041
													13011-54042
													13011-54080
2H	3,980	Land Cruiser 3FD3・35・40 FDG Bus Coaster	SDT10075ZX	6	1st	91.0	2.54	4.0	BF-K3	HB	Cr	Fe	13011-68010
					2nd	91.0	2.5	4.0	T1	CR	Cr	Fe	13011-68020
					Oil	91.0	4.0	4.35	E-BC16	SR	GN	GN	13011-96601
		Fork Lift Coaster			1st	91.0	2.54	4.0	BF-K3	HB	Cr	Fe	13011-31960-71
12H-T	3,980	Bus Coaster (Export) Land Cruiser	SDT10112ZZ	6	1st	91.0	2.5	3.5	BF-K3	SR	GN	GN	13011-68030
					2nd	91.0	2.5	4.0	T1	CR	Cr	Fe	
					Oil	91.0	4.0	4.2	E-BC3	CR	Cr	Fe	
2L-T 2L-TE	2,446	Crown Chaser Corona Mark II	SDT10089ZZ	4	1st	92.0	2.0	3.35	BF-K2	SR	GN	GN	13011-54050
					2nd	92.0	2.0	3.3	T1	SR	GN	GN	13011-54060
					Oil	92.0	4.0	4.35	E-BC16	SR	GN	GN	13011-54061
													13011-54100



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
							d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
2KD	2,494	Hi Ace Hi Lux Fortuner Innova		SDT10180ZZ	4	1st	92.0	2.0	2.9	BF	SR	GN	GN	13011-30030
						2nd	92.0	1.5	2.9	T1	SR	GN	GN	13011-30031
						Oil	92.0	3.0	3.0	E-BC16	SR	GN	GN	13011-30060
2KD-VNT 2KD-FTV	2,494	Hi Ace Fortuner		SDT10207ZZ	4	1st	92.0	2.0	2.9	BF-K2	SR	GN	GN	13011-30120
						2nd	92.0	1.5	2.9	T1	SR	GN	GN	13011-0L070
						Oil	92.0	3.0	3.0	E-BC16	SR	GN	GN	
1GD 2GD	2,754 2,393			SDT10234ZZ	4	1st	92.0	2.0	2.9	BF-K2	SR	GN	GN	13011-11200
						2nd	92.0	1.5	2.9	T1	SR	GN	GN	
						Oil	92.0	3.0	3.0	E-BC16	SR	GN	GN	
1HZ	4,163	Land Cruiser Coaster		SDT10163ZZ	6	1st	94.0	2.0	3.5	BF-K2	SR	GN	GN	13011-17010
						2nd	94.0	2.0	4.0	T1	CR	Cr	Fe	13011-17011
						Oil	94.0	4.0	4.25	E-BC16	SR	GN	GN	13011-17020 13011-17030
1HD-FTE	4,163	Land Cruiser Coaster		SDT10210ZZ	6	1st	94.0	2.0	3.3	BF	SR	GN	GN	13011-17040
						2nd	94.0	1.5	3.1	TUC	SR	GN	GN	
						Oil	94.0	4.0	4.35	E-BC16	SR	GN	GN	
1PZ	3,469	Land Cruiser		SDT10190ZZ	5	1st	94.0	2.0	3.5	BF-K2	SR	GN	GN	13011-18030
						2nd	94.0	2.0	4.0	T1	CR	Cr	Fe	
						Oil	94.0	4.0	4.35	E-BC16	SR	GN	GN	
B	2,977	Toyo Ace Dyna Coaster Land Cruiser Hino Ranger		SDT10058ZZ	4	1st	95.0	2.5	4.1	BF-K3	HB	Cr	Fe	13011-56011
						2nd	95.0	2.5	4.3	T1	CR	Cr	Fe	
						3rd	95.0	2.5	4.3	TUC	CR	Fe	Fe	
						Oil	95.0	4.5	4.3	E-BC3	CR	Cr	Fe	
B(NEW)	2,977	Dyna Daihatsu Delta Hino Ranger		SJT10070ZZ	4	1st	95.0	2.54	4.1	BF-K3	HB	Cr	Cr	13011-56012
						2nd	95.0	2.5	4.3	T1	CR	Cr	Fe	13011-56013
						Oil	95.0	4.5	4.3	E-BC3	CR	Cr	Fe	13011-56021 13011-56022
B(OLD)	2,977	Dyna Coaster BU10・12 BU15・BU19		SJT10071ZZ	4	1st	95.0	2.5	4.3	BF	CR	Cr	Cr	13011-56010
						2nd	95.0	2.5	4.3	T1	CR	Cr	Fe	
						3rd	95.0	2.5	4.3	TUC	CR	Fe	Fe	
						Oil	95.0	4.5	4.3	E-BC3	CR	Cr	Fe	
11B B(NEW)	2,977	Dyna Toyo Ace		SDT10154ZZ	4	1st	95.0	2.5	3.5	BF-K2	SR	GN	GN	13011-56040
						2nd	95.0	2.0	4.3	T1	CR	Cr	Fe	
						Oil	95.0	4.0	4.35	E-BC16	SR	GN	GN	
		Dyna Toyo Ace		SDT10157ZZ	4	1st	95.0	2.5	3.7	BF	SR	Cr	Fe	13011-56030
						2nd	95.0	2.5	4.3	T1	CR	Cr	Fe	
						Oil	95.0	4.5	4.3	E-BC3	CR	Cr	Fe	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
3L	2,779	Toyo Ace Hi Lux Hi Ace Van Wagon	SDT10124ZY	4	1st	96.0	2.0	3.35	BF-K2	SR	GN	GN	13011-54120
					2nd	96.0	2.0	4.2	T1	CR	Cr	Fe	
					Oil	96.0	4.0	4.35	E-BC16	SR	GN	GN	
1KZ-TE	2,982	Land Cruiser Hi Lux Surf Hi Ace Wagon Land Cruiser	SDT10137ZY	4	1st	96.0	2.0	3.35	BF-K2	SR	GN	GN	13011-67030
					2nd	96.0	2.0	3.65	TUC	SR	Cr	Fe	
					Oil	96.0	3.0	3.25	E-BC16	SR	GN	GN	
1Z	2,953	Dyna	SDT10158ZZ	4	1st	96.0	2.0	3.5	BF	SR	GN	GN	13011-78300-71
					2nd	96.0	2.0	4.4	T1	CR	Cr	Fe	
					Oil	96.0	4.0	3.95	E-BC3	CR	Cr	Fe	
1KD-FTV	2,982	Land Cruiser Hi Lux Surf Hi Ace	SDT10175ZY	4	1st	96.0	2.0	3.35	BF-K2	SR	GN	GN	13011-30020
					2nd	96.0	1.5	3.3	T1	SR	GN	GN	
					Oil	96.0	3.0	3.0	E-BC16	SR	GN	GN	
2B	3,168	Coaster Land Cruiser	SJT10084ZZ	4	1st	98.0	2.54	4.1	BF-K3	HB	Cr	Cr	13011-57010
					2nd	98.0	2.5	4.3	T1	CR	Cr	Fe	
					Oil	98.0	4.5	4.4	E-BC3	CR	Cr	Fe	
2Z	3,469	Fork Lift	SDT10179ZZ	4	1st	98.0	2.0	3.5	BF	SR	GN	GN	13011-78700-71
					2nd	98.0	2.0	4.3	T1	CR	Cr	Fe	
					Oil	98.0	4.0	4.35	E-BC16	SR	GN	GN	
5L 5L-E	2,985	Hi Ace Van Hi Lux Hi Ace Land Cruiser	SDT10167ZZ	4	1st	99.5	2.0	3.6	BF-K2	SR	GN	GN	13011-54130
					2nd	99.5	1.5	3.7	TUC	SR	GN	GN	
					Oil	99.5	4.0	4.35	E-BC16	SR	GN	GN	
3B	3,431	Dyna Coaster Toyo Ace Land Cruiser	SJT10087ZZ	4	1st	102.0	2.54	4.3	BF-K3	HB	Cr	Cr	13011-58010
					2nd	102.0	2.5	4.4	T1	CR	Cr	Fe	
					Oil	102.0	4.5	4.4	E-BC3	CR	Cr	Fe	
13B	3,431	Dyna Toyo Ace	SDT10136ZX	4	1st	102.0	2.5	4.1	BF	SR	Cr	Fe	13011-58030
					2nd	102.0	2.5	4.3	T1	CR	Cr	Fe	
					Oil	102.0	4.5	4.6	E-BC16	SR	GN	GN	
13B-T	3,431	Land Cruiser 70	SDT10217ZZ	4	1st	102.0	2.5	4.1	BF-K2	HB	Cr	Fe	13011-58040
					2nd	102.0	2.5	4.3	T1	CR	Cr	Fe	
					Oil	102.0	4.5	4.6	E-BC16	CR	Cr	Fe	



DAIHATSU SUBARU HINO HONDA ISUZU KOMATSU MAZDA MITSUBISHI NISSAN UD TRUCKS SUZUKI TOYOTA DAEWOO HYUNDAI KIA ASIA CHRYSLER FORD GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside Upper/ Lower	Reference
							d 1 (D)	h 1 (B)	a 1 (T)				
	14B	3,660	Dyna Toyo Ace Coaster	SDT10135ZZ	4	1st 2nd Oil	102.0 102.0 102.0	2.5 2.0 4.0	3.7 4.3 4.35	BF-K2 T1 E-BC16	SR CR SR	GN Cr GN	13011-58050 13011-58070 13011-58072
	14B-T	3,660	Dyna Toyo Ace	SDT10248ZZ (TCC-G-0110)	4	1st 2nd Oil	102.0 102.0 102.0	3.0 2.0 4.0	3.7 4.3 4.35	BF-K2 T1 E-BC16	SR CR SR	GN Cr GN	13011-58060
	N04C-A	4,009	Dyna Toyo Ace	SDT10198ZZ	4	1st 2nd Oil	104.0 104.0 104.0	2.5 2.0 4.0	3.7 4.3 4.35	BF T1 E-BC16	SR CR SR	GN Fe GN	13011-78060 13011-58072
	N04C W04DT	4,009	Dyna Toyo Ace	SDT10221ZZ	4	1st 2nd Oil	104.0 104.0 104.0	2.806 2.0 4.0	3.7 4.3 4.35	BF-K1 T1 E-BC16	SR CR SR	GN Fe GN	13011-78220 S1304-E0281
	1W	4,009	Dyna Toyo Ace	SDT10209ZZ	4	1st 2nd Oil	104.0 104.0 104.0	2.5 2.0 5.0	4.3 4.3 4.7	BF T1-IC E-BC3	HB CR CR	Cr Fe Cr	13011-78010 S1304-E0251
	2D	6,494	Truck DA90 DA90D DA95 DA110 DA110D DA115 DA115C DA116 Bus DB90 DB92 DB95 DB100 DB100C DB102 DB102C DB105 DB105C DR10 DR11 DR15	SJT10028ZZ	6	1st 2nd 3rd Oil 1 Oil 2	105.0 105.0 105.0 105.0 105.0	3.0 3.0 3.0 5.0 5.0	4.2 4.2 4.2 4.6 4.2	BF T1 BI-TUC E-BC3 BC1	CR CR CR CR CR	Cr Cr Fe Fe Cr	13011-77010 13011-77020 13011-77021 13011-77022 13011-77023
				SJT10065ZZ		1st 2nd 3rd Oil	105.0 105.0 105.0 105.0	3.0 3.0 3.0 5.0	4.2 4.2 4.2 4.6	BF T1 BI-TUC E-BC3	CR CR CR CR	Cr Cr Fe Fe	13011-77024
				SJT10074ZZ		1st 2nd 3rd Oil	105.0 105.0 105.0 105.0	3.05 2.5 2.5 5.0	4.0 4.4 4.4 4.6	BF-K3 T1 BI-TUC E-BC3	HB CR CR CR	Cr Cr Fe Cr	13011-77040 13011-77041 13011-77050
				SDT10188ZZ		1st 2nd Oil	108.0 108.0 108.0	3.0 2.0 4.0	3.7 4.3 4.4	BF-K2 BI-TUC E-BC16	SR CR SR	GN Cr GN	13011-58090
				SDT10189ZZ		1st 2nd Oil	108.0 108.0 108.0	3.0 2.0 4.0	3.7 3.8 4.4	BF BI-TUC E-BC16	SR CR SR	GN Fe GN	13011-58110
	S05C	4,899	Toyo Ace Dyna	SDT10199ZZ	4	1st 2nd Oil	114.0 114.0 114.0	2.5 2.0 4.0	4.3 4.3 4.35	BF T1 E-BC16	SR SR SR	GN GN GN	13011-78031 13011-3731A

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
3EA F6B S-TEC I 0.8L YSE	796	Fino Matiz Tico	SWD20002ZY	3	1st 2nd Oil	68.5 68.5 68.5	1.2 1.5 2.8	2.5 2.8 2.8	BF T1 NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	12140-78B00 94581409
3EA	796	Matiz	SWD20011ZZ	3	1st 2nd Oil	68.5 68.5 68.5	1.2 1.2 2.5	2.65 2.8 2.8	BF-IB T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	96325192 (cyl)
4EA	995	Matiz (GM)	SWD20005ZZ	4	1st 2nd Oil	68.5 68.5 68.5	1.2 1.2 2.5	2.65 2.8 2.8	BF-IB T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	96325192 (cyl)
NP960	1,498	Leman 1.5L Lanos Espero Cielo Nubica Lacetti	SWD20003ZX	4	1st 2nd Oil	76.5 76.5 76.5	1.5 1.5 3.0	2.65 3.2 2.9	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	
D-TEC 1.6	1,598	Lanos Nubira Espero Aveo 1.6	SWD20004ZZ	4	1st 2nd Oil	79.0 79.0 79.0	1.2 1.5 3.0	3.05 3.3 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	S1220014 93740225(GM)
T18SED	1,796	Excelle 1.8 3BOX RV	SWD20012ZZ	4	1st 2nd Oil	80.5 80.5 80.5	1.2 1.2 2.0	2.9 3.2 3.0	BF-IB TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	93742700
X18XEV	1,796	Optra 1.8	SWD20009ZZ	4	1st 2nd Oil	81.6 81.6 81.6	1.2 1.5 3.0	3.1 3.3 2.9	BF-IB TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	92067238
D-TEC 2.2	2,198	Prince	SWD20006ZZ	4	1st 2nd Oil	86.0 86.0 86.0	1.5 1.5 3.0	3.45 3.5 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	92062027

● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
6BB1	5,393	Excavator Fork Lift Generator For Chromard Liner	SJD20007ZZ	6	1st 2nd Oil	102.0 102.0 102.0	3.0 2.5 5.0	4.4 4.4 4.8	BF T1-IC E-BC3	CR CR CR	Fe Fe Fe	Cr Fe Fe	65.02503-8069
DB58	5,785	Generator	SDD20008ZZ	6	1st 2nd Oil	102.0 102.0 102.0	3.0 2.5 4.0	4.4 4.4 4.15	BF-K1 T1-IC E-BC16	CR CR SR	Cr Fe GN	Fe Fe GN	65.02503-8058
D2366	11,051	BV113 Bus Wheel Loader Excavator	TCC-J-0069	6	1st 2nd Oil	123.0 123.0 123.0	3.315 3.0 4.0		BF-K1 T1-IC E-BC16	CR CR SR	Cr Cr GN	Fe Fe GN	65.02503-8236

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
G4HA EPSILON 0.8	798	Atos	SWG30020ZZ	4	1st 2nd Oil	63.0 63.0 63.0	1.2 1.5 2.8	2.25 2.8 2.75	BF T1-IB NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-02511 23040-02510
G4HC EPSILON 1.0	999	Atos	SWG30018ZZ	4	1st 2nd Oil	66.0 66.0 66.0	1.2 1.2 2.5	2.25 2.9 2.75	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-02700
G4HG EPSILON 1.1	1,086	Santro i 10	SWG30031ZZ	4	1st 2nd Oil	67.0 67.0 67.0	1.2 1.2 2.5	2.3 2.7 2.5	BF T1 NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	23040-02820
			SWG30038ZZ	4	1st 2nd Oil	67.0 67.0 67.0	1.2 1.2 2.0	2.3 2.8 2.65	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	23040-02950 23040-02955 23040-02970
			SWG30051ZZ	4	1st 2nd Oil	67.0 67.0 67.0	1.2 1.2 2.0	2.3 2.8 2.45	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	23040-02980
X11 G4DG	1,298	Excel 94	SWG30022ZZ	4	1st 2nd Oil	71.0 71.0 71.0	1.5 1.5 4.0	2.65 3.1 3.25	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-24010
G4LA	999	Atos(G4HG)	SWG30058ZZ (TCC-G-0036)	4	1st 2nd Oil	71.0 71.0 71.0	1.0 1.2 2.0	2.25 2.5 1.95	BF TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	23040-03000
G4EA ALPHA 1.3 ALPHA 1.3s	1,341	Accent	SWG30016ZZ	4	1st 2nd Oil	71.5 71.5 71.5	1.5 1.5 3.0	2.65 3.1 2.85	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-22300 23040-22351
		Click	SWG30036ZZ	4	1st 2nd Oil	71.5 71.5 71.5	1.2 1.2 2.0	2.65 3.0 2.5	BF-IB TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	23040-22301
G4AE ALPHA 1.5	1,468	Accent Scoupe	SWG30017ZX	4	1st 2nd Oil	75.5 75.5 75.5	1.5 1.5 3.0	2.85 3.1 2.75	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-22010
G4EK ALPHA 1.5	1,468	Accent Avante	SWG30019ZZ	4	1st 2nd Oil	75.5 75.5 75.5	1.2 1.5 3.0	2.85 3.1 2.75	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23010-26001
		Excel 1.5	SWG30023ZZ	4	1st 2nd Oil	75.5 75.5 75.5	1.5 1.5 4.0	2.85 3.3 3.25	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-21110 23040-21210 23040-24200 23040-21100



DAIHATSU	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
G4AJ	1,468	Click	SWG30035ZZ	4	1st 2nd Oil	75.5 75.5 75.5	1.2 1.2 2.0	2.85 3.3 2.8	BF-IB TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	23040-26002
G4ED ALPHA 1.6	1,599	Elantra Santa Fe	SWG30030ZZ	4	1st 2nd Oil	76.5 76.5 76.5	1.2 1.2 2.5	2.85 3.2 2.85	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-26101
G4ED ALPHA II 1.6					1st 2nd Oil	76.5 76.5 76.5	1.2 1.2 2.0	2.85 3.2 2.5	BF-IB TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	23040-26160
GAMMA 1.4	1,396	Avante HD	SWG30046ZZ	4	1st 2nd Oil	77.0 77.0 77.0	1.2 1.2 2.0	2.85 3.05 2.55	BF-IB TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-2B000
GAMMA 1.6	1,591				1st 2nd Oil	77.0 77.0 77.0	1.2 1.2 2.5	2.85 3.2 2.8	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	
G4GR BETA 1.6 J2	1,559	Elantra	SWG30025ZZ	4	1st 2nd Oil	77.4 77.4 77.4	1.2 1.2 2.5	2.85 3.3 2.8	BF-IB T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-23100 23040-23150 23040-23912
FB	1,793	Spectra 1.8	SWG30040ZZ	4	1st 2nd Oil	81.0 81.0 81.0	1.2 1.2 2.5	3.3 3.4 2.85	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-2Y000
2K0 Nu 1.8L	1,797	Elantra 11	SWG30059ZZ (TCC-G-0104)	4	1st 2nd Oil	81.0 81.0 81.0	1.0 1.2 2.0	2.7 3.15 2.2	BF-IB TUC-RB NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	23040-2E000
Nu 2.0L	1,999	Elantra i40 Tucson	TCC-K-2020	4	1st 2nd Oil	81.0 81.0 81.0	1.0 1.2 2.0		BF-IB TUC E-BC16	SR CR SR	GN Fe GN	GN Fe GN	23040-2E200
G4DM SIRIUS 1.8D	1,836	Sonata	SWG30032ZZ	4	1st 2nd Oil	81.5 81.5 81.5	1.2 1.5 3.0	3.1 3.6 2.55	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	23040-33430
G4GB BETA 1.8	1,796	Avante Tiburon Elantra	SWG30028ZY	4	1st 2nd Oil	82.0 82.0 82.0	1.2 1.2 2.5	3.05 3.5 2.85	BF-IB T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	23040-23000 23040-23050 23040-23200
G4GC G4GF BETA 2.0	1,975	Elantra Elantra Touring Coupe Tucson	SWG30054ZZ	4	1st 2nd Oil	82.0 82.0 82.0	1.2 1.2 2.0	2.85 3.05 2.45	BF TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	23040-23300
G4CR G4RJP SIRIUS 1.6	1,595	Elantra	SWG30021ZZ	4	1st 2nd Oil	82.3 82.3 82.3	1.2 1.5 3.0	3.1 3.8 2.85	BF T1 NIFF-S	SR CR SR	GN Cr GN	GN Fe GN	23040-33030

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper Lower	
G4CP 2.0	1,997	Sonata 2.0	SWG30029ZZ	4	1st	85.0	1.5	3.25	BF	SR	Cr	Fe	23040-32800
					2nd	85.0	1.5	3.7	T1	CR	Fe	Fe	
			SWG30026ZZ	4	1st	85.0	1.2	3.1	BF-IB	SR	GN	GN	23040-38100
					2nd	85.0	1.5	3.8	TUC	CR	Fe	Fe	
G4CP 2.0 SIRIUS 2.0D	1,997	Sonata 2.0 New Sonata	SWG30027ZZ	4	1st	85.0	1.2	3.1	BF	SR	GN	GN	23040-33110
					2nd	85.0	1.5	3.8	TUC	CR	Cr	Fe	23040-33140
THETA 2.0 THETA II 2.0	1,998	NF Sonata 2.0L	SWG30042ZZ	4	1st	86.0	1.2	3.05	BF	SR	Cr	Fe	23040-25000
					2nd	86.0	1.2	3.6	TUC	CR	Fe	Fe	
G4KC	1,975	Sonata Lotze	SWG30042ZY (TCC-H-0088)	4	1st	86.0	1.2	2.9	BF	SR	GN	GN	23040-2G000
					2nd	86.0	1.2	3.6	TUC	CR	Fe	Fe	
G4JS SIRIUS II	2,350	Grace (New) Grandeur Grace Grand Salon	SWG30024ZZ	4	1st	86.5	1.5	3.45	BF	SR	Cr	Fe	23040-32610
		Santa Fe 2.4			2nd	86.5	1.5	3.8	TUC	CR	Fe	Fe	
			SWG30047ZZ	4	1st	86.5	1.2	3.1	BF-IB	SR	Cr	Fe	23040-38200
					2nd	86.5	1.5	3.8	TUC	CR	Fe	Fe	23040-38212
G6BA DELTA 2.7	2,656	Delta Hyundai Coupe	SWG30037ZZ	V6	1st	86.7	1.2	3.05	BF-IB	SR	Cr	Fe	23040-37300
					2nd	86.7	1.2	3.6	T1	CR	Fe	Fe	
		Tiburon Sonata 05 Trajet Tucson	SWG30045ZZ	V6	1st	86.7	1.2	3.05	BF-IB	SR	Cr	Fe	23040-3E001
					2nd	86.7	1.2	3.6	T1	CR	Fe	Fe	
G4KC THETA II 2.4	2,359	NF Sonata 2.4L Tucson	SWG30041ZZ	4	1st	88.0	1.2	3.05	BF-IB	SR	Cr	Fe	23040-25200
					2nd	88.0	1.2	3.6	TUC	CR	Fe	Fe	
G6DB LAMBDA 3.3	3,342	Grandeur Azera Santa Fe Sonata	SWG30055ZZ	6	1st	92.0	1.2	3.1	BF-IB	SR	GN	GN	23040-3C150
					2nd	92.0	1.2	3.4	TUC	CR	Fe	Fe	
H10 G6AU SIGMA G6CU	3,467	Santa Fe XG 350	SWG30056ZZ (TCC-B-0023)	6	1st	93.0	1.5	3.3	BF	SR	GN	GN	23040-39800
					2nd	93.0	1.5	3.9	TUC	CR	Cr	Fe	
					Oil	93.0	3.0	2.85	NIFF-S	SR	GN	GN	



● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
D4FA	1,493	Verna HD65 Truck	SDG30060ZZ (TCC-G-0002)	4	1st 2nd Oil	75.0 75.0 75.0	1.75 1.75 3.0	2.9 3.15 3.0	BF-IB T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	23040-2A900
D3EA	1,493	Accent LC	SDG30053ZZ	3	1st 2nd Oil	83.0 83.0 83.0	1.93 2.0 3.0	2.9 3.8 3.25	BF-K1 T1-RB E-BC16	SR CR SR	GN Cr GN	GN Fe GN	
D4EA	1,991	Santa Fe 2.0 Tucson Sonata	SDG30043ZZ	4	1st 2nd Oil	83.0 83.0 83.0	1.93 2.0 3.0	2.9 3.8 3.25	BF-K1 T1-RB E-BC16	SR CR SR	GN Cr GN	GN Fe GN	23040-27950 23040-27920
R-Line 2.0	1,995	iX35 Santa Fe Tucson	TCC-K-0041	4	1st 2nd Oil	84.0 84.0 84.0	2.415 2.0 3.0		BF-K1 T1-RB E-BC16	SR CR SR	GN Fe GN	GN Fe GN	23040-2F930 23040-2F900
R-Line 2.2	2,199	Santa Fe Grandeur	TCC-K-2010	4	1st 2nd Oil	85.4 85.4 85.4	2.5 2.0 3.0		BF-K1 T1-RB E-BC16	SR CR SR	Cr Fe GN	Fe Fe GN	23040-2F910
D4EB	2,188	Santa Fe 2.2 CRDI	SDG30052ZZ	4	1st 2nd Oil	87.0 87.0 87.0	2.5 2.0 3.0	3.35 3.7 3.85	BF-K2 T1 E-BC16	HB CR CR	Cr Cr Cr	Fe Fe Fe	23040-27940
			SDG30061ZZ (TCC-J-0021)	4	1st 2nd Oil	87.0 87.0 87.0	2.5 2.0 3.0	3.3 3.7 3.25	BF-K1 T1-IC E-BC16	SR HB SR	GN Cr GN	GN Fe GN	23040-27960
D4CB	2,497	H-1 Libero Sorento Starex i 800 Satellite	SDG30049ZZ	4	1st 2nd Oil	91.0 91.0 91.0	2.44 2.0 3.0	3.3 4.0 3.25	BF-K2 T1-RB E-BC16	HB CR SR	Cr Cr GN	Fe Fe GN	23040-4A900
			SDG30062ZZ	4	1st 2nd Oil	91.0 91.0 91.0	2.5 2.0 3.0	3.3 3.9 3.25	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	23040-4A940
D4BF	2,476	Galloper Grace Turbo Starex Turbo	SDG30009ZX	4	1st 2nd Oil	91.1 91.1 91.1	2.5 2.0 4.0	3.25 3.9 4.35	BF-K2 T1-K2 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	23040-42850 1110A561 23040-42510
D4BA(OLD) 1 ton	2,476	Grace Porter	SDG30003ZX	4	1st 2nd Oil	91.1 91.1 91.1	2.5 2.0 4.0	3.45 3.8 4.35	BF T1 E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	23040-42000
D4BA(NEW) 1 ton	2,476	Grace Porter Galloper	SDG30010ZX	4	1st 2nd Oil	91.1 91.1 91.1	2.0 2.0 4.0	3.3 3.8 4.35	BF T1 E-BC16	SR CR SR	GN Cr GN	GN Fe GN	23040-42010
D4BC D4BA D4BF D4BH	2,476	H100 Galloper Grace Starex Porter T, T2	SDG30011ZX	4	1st 2nd Oil	91.1 91.1 91.1	2.0 2.0 3.0	3.3 3.8 3.25	BF T1 E-BC16	SR CR SR	GN Cr GN	GN Fe GN	23040-42210 23040-42200 23040-42202

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment Outside / Upper / Lower	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)					
J3CRDI	2,902	Terracan	SDG30044ZY	4	1st	97.1	2.45	3.5	BF-K2	HB	Cr	Fe	23040-4X920
					2nd	97.1	2.0	3.9	T1-RB	HB	Cr	Fe	
					Oil	97.1	3.0	3.25	E-BC16	SR	GN	GN	
D4AE D4AL	3,298	Mighty II 3.5ton	SDG30002ZZ	4	1st	100.0	3.0	4.0	BF-K1-IB	HB	Cr	Fe	23040-41400
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	100.0	4.0	4.35	E-BC16	SR	GN	GN	
D4AE(OLD)	3,298	Mighty	SDG30004ZX	4	1st	100.0	3.0	3.65	BF-K2	SR	Cr	Fe	23040-41060
					2nd	100.0	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	100.0	5.0	4.95	E-BC16	SR	GN	GN	
D4AF K-1	3,567	Mighty	SDG30005ZX	4	1st	104.0	3.0	3.65	BF-K2	SR	Cr	Fe	23040-41200
					2nd	104.0	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	104.0	4.0	4.4	E-BC16	SR	GN	GN	
D4DD	3,907	HD65 HD78	SDG30057ZZ (TCC-G-0035)	4	1st	104.0	2.806	3.7	BF-K1	SR	GN	GN	23040-45500
					2nd	104.0	2.0	4.2	T1-IC	CR	Cr	Fe	
					Oil	104.0	3.0	3.25	E-BC16	SR	GN	GN	
D6BR (6D16)	7,545	4.5ton Truck 5ton Truck	SDG30006ZZ	6	1st	118.0	3.0	4.25	BF	SR	Cr	Fe	23040-93000
					2nd	118.0	2.5	4.6	T1-IC	CR	Cr	Fe	
					Oil	118.0	4.0	4.4	E-BC16	SR	GN	GN	
D6AB D6AC (6D22)	11,149	Aero City Aero Town Aero Express HSX	SDG30008ZZ	6	1st	130.0	3.306	5.4	BF-K1	HB	Cr	Fe	23040-83020
					2nd	130.0	3.0	5.3	T1-IC	CR	Cr	Fe	23430-83000
					Oil	130.0	6.0	5.5	E-BC16	CR	Cr	Fe	
(6D22)	11,149	Aero City Aero Town Aero Express HSX	SDG30014ZX	6	1st	130.0	3.306	4.55	BF-K1	SR	Cr	Fe	23040-83030
					2nd	130.0	3.0	5.3	T1-IC	CR	Cr	Fe	
					Oil	130.0	4.0	4.35	E-BC16	SR	GN	GN	
D6AC	11,149	Aero Air Compressor	SDG30012ZZ	6	1st	130.0	3.306	4.55	BF-K1	SR	Cr	Fe	23040-83000
					2nd	130.0	3.0	5.2	T1-IC	CR	Cr	Fe	
					Oil	130.0	6.0	5.5	E-BC16	CR	Cr	Fe	
D70 D6CA	12,920	Samco	SDG30048ZZ	6	1st	133.0	3.33	5.4	BF-K1	HB	Cr	Fe	23430-84010
					2nd	133.0	3.0	5.35	T1	HB	Cr	Fe	
					Oil	133.0	4.0	4.15	E-BC16	SR	Cr	Fe	
D8AX (8DC91A)	16,031	15ton Truck 18ton Truck	SDG30007ZZ	V8	1st	135.0	3.306	5.4	BF-K1	HB	Cr	Fe	23040-72020
					2nd	135.0	3.0	5.5	T1-IC	CR	Cr	Fe	23040-72800
					3rd	135.0	3.0	5.5	B1-UC	CR	Cr	Fe	
					Oil	135.0	4.0	4.35	E-BC16	SR	GN	GN	
D8AY D8AX (8DC91A)	16,031	15ton Truck 18ton Truck	SDG30013ZZ	V8	1st	135.0	3.306	5.4	BF-K1	HB	Cr	Fe	23040-72000
					2nd	135.0	3.0	5.5	T1-IC	CR	Cr	Fe	
					3rd	135.0	3.0	5.5	B1-UC	CR	Cr	Fe	
					Oil	135.0	6.0	5.7	E-BC16	CR	Cr	Fe	



● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
B1	1,138	Pride	SWK30018ZZ	4	1st	68.0	1.2	2.45	BF	SR	Cr	Fe	KK1Y-11-SCO
					2nd	68.0	1.5	3.1	TUC	CR	Fe	Fe	KK1Y8-11-SCO
					Oil	68.0	3.0	2.95	NIFF-S	SR	Cr	Fe	KKY1-11-SCO
C10	785	Towner	SWK30021ZZ	3	1st	70.0	1.2	2.5	BF-IB	SR	GN	GN	K0BMI-11-SCO
					2nd	70.0	1.5	3.0	TUC	CR	Fe	Fe	
					Oil	70.0	2.8	2.85	NIFF-S	SR	GN	GN	
B3	1,324	Pride	SWK30017ZZ	4	1st	71.0	1.2	2.47	BF	SR	Cr	Fe	K1Y0-11-SCO
					2nd	71.0	1.5	3.1	TUC	CR	Fe	Fe	K1Y1-11-SCO
					Oil	71.0	3.0	2.92	NIFF-S	SR	Cr	Fe	
1Y0 Kappa II 1.0L	998	Picanto	SWK30028ZZ (TCC-G-0105)	3	1st	71.0	1.0	2.3	BF-IB	SR	GN	GN	23040-04100
					2nd	71.0	1.2	2.5	TUC	CR	Fe	Fe	
					Oil	71.0	2.0	1.95	NIFF-H	SR	GN	GN	
DC	1,493	Rio	SWK30019ZZ	4	1st	75.5	1.2	2.85	BF-IB	SR	Cr	Fe	OK3Y0-11-SCO
					2nd	75.5	1.2	3.3	TUC	CR	Fe	Fe	OK3Y2-11-SCO
					Oil	75.5	2.5	2.8	NIFF-S	SR	Cr	Fe	
B6D	1,597	Sephia	SWK30026ZZ	4	1st	78.0	1.5	3.05	BF	SR	Cr	Fe	OK2Y2-11-SCO
					2nd	78.0	1.5	3.4	TUC	CR	Fe	Fe	OK2Y0-11-SCO
					Oil	78.0	3.0	3.0	NIFF-S	SR	Cr	Fe	
KV20 B5D	1,498	Sephia Capital	SWK30020ZZ	4	1st	78.0	1.5	3.05	BF	SR	Cr	Fe	K9Y1-11-SCO
					2nd	78.0	1.5	3.4	TUC	CR	Fe	Fe	
					Oil	78.0	4.0	3.05	NIFF-S	SR	Cr	Fe	
ROVER KV6 2.5L	2,497	Carnival	SWK30025ZZ	V6	1st	80.0	1.2	2.9	BF-IB	SR	Cr	Fe	OK9YV-11-SCO
					2nd	80.0	1.5	3.4	TUC	CR	Fe	Fe	
					Oil	80.0	2.5	2.85	NIFF-S	SR	Cr	Fe	
FE FED	1,998	Sportage	SWK30022ZZ	4	1st	86.0	1.5	3.3	BF	SR	GN	GN	OKFY3-11-SCO
					2nd	86.0	1.5	3.8	TUC	CR	Fe	Fe	
					Oil	86.0	4.0	3.05	NIFF-S	SR	GN	GN	

● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment	Reference	
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
D4FB	1,582	Cerato	TCC-K-0044	4	1st	77.2	1.75		BF-IB	SR	GN	GN	23040-2A960
		Ceed			2nd	77.2	1.75		T1-IC	CR	Cr	Fe	
		Soul			Oil	77.2	3.0		E-BC16	SR	GN	GN	
NB1(OLD)	2,184	Besta	SDK30006ZZ	4	1st	86.0	2.0	3.05	BF-IB	SR	Cr	Fe	R201-23-130
					2nd	86.0	2.0	3.6	T1-IC	CR	Fe	Fe	
					Oil	86.0	4.0	4.15	E-BC16	SR	GN	GN	
NB7	2,184	Sportage	SDK30011ZX	4	1st	86.0	2.0	3.05	BF-IB	SR	Cr	Fe	K7Y1-11-SCO
		Sportage Turbo			2nd	86.0	2.0	3.6	T1-IC	CR	Cr	Fe	
					Oil	86.0	3.0	3.25	E-BC16	SR	GN	GN	
R2 NB1(NEW)	2,184	New Besta	SDK30013ZX	4	1st	86.0	2.0	3.05	BF-K2	SR	Cr	Fe	K7Y0-11-SCO
					2nd	86.0	2.0	3.6	T1-IC	CR	Fe	Fe	
					Oil	86.0	4.0	4.15	E-BC16	SR	GN	GN	
S2 X2	2,209 2,522	Bongo	SDK30007ZX	4	1st	88.925	2.383	3.45	BF	SR	Cr	Fe	K6ZO-11-SCO
					2nd	88.925	2.383	3.5	T1-IC	CR	Fe	Fe	
		Ceres			Oil	88.925	4.763	4.6	E-BC16	SR	GN	GN	
SF	2,417	K2400	SDK30005ZX	4	1st	92.0	2.4	3.8	BF	CR	Cr	Fe	K7Z0-11-SCO K756-23-206
		Bongo			2nd	92.0	2.4	3.8	T1	CR	Fe	Fe	
		Porter Bongo			Oil	92.0	4.0	4.35	E-BC16	SR	GN	GN	
SS SUTC	2,700	Besta	SDK30004ZX	4	1st	92.0	2.85	3.45	BF-K1	SR	Cr	Fe	K4Z0-11-SCO K480-23-206
		Hi Topic			2nd	92.0	2.4	3.8	T1	CR	Fe	Fe	
					Oil	92.0	4.0	4.35	E-BC16	SR	GN	GN	
ZB	4,052	K4100	SDK30012ZX	6	1st	92.025	2.383	3.45	BF	SR	Cr	Fe	OK8Y1-11-SCO
					2nd	92.025	2.383	3.6	T1-IC	CR	Cr	Fe	
					Oil	92.025	4.763	4.6	E-BC16	SR	GN	GN	
RFA VN	2,662	Hi Besta	SDK30009ZZ	4	1st	93.0	2.0	3.25	BF-IB	SR	Cr	Fe	VNY1-11-SCO
					2nd	93.0	2.0	3.7	TUC	CR	Cr	Fe	
					Oil	93.0	3.0	3.25	E-BC16	SR	GN	GN	
JS J2	2,665	K2700	SDK30001ZZ	4	1st	94.5	2.0	3.3	BF	SR	GN	GN	K6Z1-11-SCO
		Pregio			2nd	94.5	2.0	4.0	T1-IC	CR	Cr	Fe	
					Oil	94.5	3.0	3.25	E-BC16	SR	GN	GN	
HA1	2,957	K3000	SDK30010ZZ	4	1st	95.0	2.383	3.45	BF	SR	Cr	Fe	KOY0-11-SCO
		Super Titan			2nd	95.0	2.383	3.8	T1	CR	Cr	Fe	
					Oil	95.0	4.0	4.15	E-BC16	SR	GN	GN	

DAHATSU
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 FORD
 GM

DAIHATSU	SUBARU	HINO	HONDA	ISUZU	KOMATSU	MAZDA	MITSUBISHI	NISSAN	UD TRUCKS	SUZUKI	TOYOTA	DAEWOO	HYUNDAI	KIA	ASIA	CHRYSLER	FORD	GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
																			d 1 (D)	h 1 (B)	a 1 (T)	Outside	Upper/Lower									
J3 TCI	2,902	Carnival		SDK30016ZZ	4	1st 2nd Oil	97.1 97.1 97.1	2.0 2.0 3.0	3.5 3.9 3.25	BF-K2 T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	K5Z1-11-SCO																		
JT	2,956	K3000 K4000		SDK30008ZZ	4	1st 2nd Oil	98.0 98.0 98.0	2.0 2.0 3.0	3.65 3.9 3.25	BF-IB T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	K7Z1-11-SCO																		
JD	3,455	Trade K3500		SDK30014ZX	4	1st 2nd Oil	100.0 100.0 100.0	2.5 2.0 4.5	3.65 4.2 4.6	BF T1-IC E-BC16	SR CR SR	Cr Cr GN	Fe Fe GN	K4Y0-11-SCO																		
SH	3,598	Trade K3600		SDK30003ZZ	4	1st 2nd Oil	100.0 100.0 100.0	2.0 2.0 3.0	3.7 4.2 3.25	BF T1-IC E-BC16	SR CR SR	GN Cr GN	GN Fe GN	K4Y1-11-SCO																		
H07C	6,728	Cosmos		SDK30015ZX	6	1st 2nd 3rd Oil	110.0 110.0 110.0 110.0	3.0 2.5 2.5 5.0	4.05 4.5 4.5 4.95	BF T1-IC BI-TUC E-BC16	SR CR CR SR	Cr Fe Cr GN	Fe Fe Fe GN	OK8Y0-11-SCO																		
EF750	16,745	Granto Granbird		SDK30023ZZ	V8	1st 2nd 3rd Oil	137.0 137.0 137.0 137.0	3.306 3.5 3.5 6.0	5.4 5.4 5.4 5.5	BF-K1 T1-IC BI-TUC E-BC3	HB CR CR CR	Cr Fe Cr Cr	Fe Fe Fe Fe	AA92F-11120																		

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
CD800 JADE	796	Towner	SWA20001ZZ	3	1st 2nd Oil	70.0 70.0 70.0	1.2 1.5 2.8	2.5 3.0 2.85	BF-IB TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	AA100-11-120

● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
EM100	9,419	Truck	SDA20002ZX	6	1st 2nd 3rd Oil	124.0 124.0 124.0 124.0	2.806 2.5 3.0 5.0	4.45 5.0 5.0 4.95	BF-K1 T1-IC B1-TUC E-BC16	SR CR CR SR	Cr Cr Cr GN	Fe Fe Fe GN	EA1522-2010AS

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference		
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower			
6G73	2,497	Avenger Cirrus Stratus	SWC10009ZZ	V6	1st	83.5	1.2	2.85	BF	SR	Cr	Fe	MD310258		
					2nd	83.5	1.5	3.5	T1	CR	Fe	Fe	MD159836		
					Oil	83.5	3.0	2.85	NIFF-S	SR	Cr	Fe			
EER 2.7	2,736	Concorde	SWC10001ZZ	V6	1st	86.0	1.5	3.45	BF	SR	Cr	Fe	4897027 AA		
ELLESMORE L81	2,962	Interpid Stratus			2nd	86.0	1.5	4.0	T1-RB	CR	Fe	Fe			
					Oil	86.0	3.0	3.0	NIFF-S	SR	Cr	Fe			
SLANT 6	3,687	Pick up Ram Van Ram Wagon	SWC10017ZZ	V6	1st	86.36	1.98	4.0	BF	CR	Cr	Fe	4131203		
					2nd	86.36	1.98	4.0	T1-RB	CR	Fe	Fe	4131214		
					Oil	86.36	4.76	4.2	NIFF-S	SR	Cr	Fe	4131205		
K 2.2 K 2.2T K 2.5 K 2.5T	2,212 2,507	Acclaim Caravan Dakota	SWC10003ZZ	4	1st	87.5	1.5	3.8	BF	CR	Cr	Fe	4626636		
					2nd	87.5	1.5	4.0	T1-RB	CR	Fe	Fe	4411977		
					Oil	87.5	4.0	3.8	NIFF-S	SR	Cr	Fe	4626575		
EDZ 2.4	2,429	Stratus Sebring	SWC10004ZZ	4	1st	87.5	1.2	2.9	BF	SR	GN	GN	4897024 AA		
EDT 2.4	2,429	Neon PT Cruiser Wrangler			2nd	87.5	1.5	3.9	T1-RB	CR	Cr	Fe			
					Oil	87.5	3.0	2.55	NIFF-S	SR	GN	GN			
EDZ 2.4 POWERTECH 2.4	2,429	Sebring Stratus	SWC10007ZZ	4	1st	87.5	1.5	3.3	BF-IB	SR	GN	GN	5073524 AA		
EDZ 2.4 POWERTECH 2.4	2,429	Sebring Stratus			2nd	87.5	1.5	4.0	TUC	CR	Fe	Fe	4773005		
					Oil	87.5	3.0	2.55	NIFF-S	SR	GN	GN			
EGW 3.2	3,195	Concorde Interpid	SWC10008ZZ	V6	1st	92.0	1.2	3.3	BF	SR	GN	GN	4897032 AA		
EGA 3.3 POWERTECH 3.7	3,293 3,701	Grand Caravan Voyager			2nd	92.0	1.5	4.1	TUC	CR	Fe	Fe			
					Oil	92.0	3.0	3.05	NIFF-S	SR	GN	GN			
EGJ 3.5 EGH 3.8	3,507 3,802	Concorde Interpid	SWC10005ZZ	V6	1st	96.0	1.5	3.5	BF	SR	GN	GN	4626388		
					2nd	96.0	1.5	4.0	T1-RB	CR	Fe	Fe	4626660		
					Oil	96.0	3.0	3.2	NIFF-S	SR	GN	GN			
EGG 3.5 EGQ 4.0 EGS 4.0	3,518 3,952	Pacifica Nitro Concorde	SWC10013ZZ	V6	1st	96.0	1.2	3.5	BF	SR	GN	GN	4897035 AA		
					2nd	96.0	1.5	4.0	TUC	CR	Fe	Fe			
					Oil	96.0	3.0	3.45	NIFF-S	SR	Cr	Fe			
EGJ 3.5 EGH 3.8 SMPI 4.0	3,523 3,778 3,952	Concorde Grand Caravan Town & Countly	SWC10015ZX	V6	1st	96.0	1.2	3.5	BF	SR	GN	GN	4773023		
					2nd	96.0	1.5	4.0	T1-RB	CR	Fe	Fe			
					Oil	96.0	3.0	3.2	NIFF-S	SR	GN	GN			

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
PENTSTAR 3.6L	3,604	200 300 Avenger Challenger Charger Durango Grand Caravan Grand Cherokee Journey Ram 1500 Ram Cargo Van Ram Promaster Town & Country Wrangler	SWC10025ZZ (TCC-G-0093)	V6	1st 2nd Oil	96.0 96.0 96.0	1.2 1.2 2.0	3.1 3.7 2.55	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	68078776AA
AMC 150	2,464	Cherokee Dakota	SWC10011ZX	4	1st 2nd Oil	98.43 98.43 98.43	1.5 1.5 4.0	3.5 4.5 3.2	BF T1-RB NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	4798324
POWERTECH 4.0	3,966	Wrangler Cherokee	SWC10012ZY	V6	1st 2nd Oil	98.43 98.43 98.43	1.5 1.5 4.0	3.5 4.5 3.2	BF T1-RB NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	4798878
LA239	3,917	Pick up Ram Van Dakota	SWC10018ZZ	V6	1st 2nd Oil	99.31 99.31 99.31	2.0 2.0 4.76	4.5 4.5 4.2	BF-IB T1-RB NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	3780007
LA318 MAGNUM 5.2	5,211	Pick up Ram Van Ram Wagon	SWC10019ZZ	V8	1st 2nd Oil	99.31 99.31 99.31	2.0 2.0 4.76	4.5 4.5 4.2	BF-IB T1-RB NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	2808553 2808550 3780007
MAGNUM 5.2	5,211	Dakota Ram Van Ram Wagon	SWC10020ZX	V8	1st 2nd Oil	99.31 99.31 99.31	2.0 2.0 4.0	3.45 4.5 3.1	BF T1 NIFF-S	SR CR SR	Cr Fe GN	Fe Fe GN	4638060 4720727
HEMI 5.7 EZB HEMI 5.7	5,654	Durango Ram 1500 Ram 2500	SWC10016ZX	V8	1st 2nd Oil	99.5 99.5 99.5	1.5 1.5 3.0	3.5 4.5 2.85	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	5086002 AA
HEMI 5.7L	5,654	Challenger Charger Grand Cherokee Durango Ram 1500 Ram 2500 Ram 3500	SWC10024ZZ (TCC-G-0094)	V8	1st 2nd Oil	99.5 99.5 99.5	1.2 1.2 2.0	3.1 4.0 2.7	BF TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	68046210AB

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Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
6BT ISB5.9	5,899	Pick up Ram 2500 Ram 3500 Ram Charger	SDC10022ZZ	6	1st 2nd Oil	102.0 102.0 102.0	2.84 2.385 4.0	4.2 4.3 4.3	BF-K1 T1-RB E-BC16	HB CR CR	Cr Fe Cr	Fe Fe Fe	4089258
B6.7	6,690	Ram 2500 Ram 3500 Ram 4500 Chassis Cab Ram 5500 Chassis Cab	SDC10023ZX	6	1st 2nd Oil	107.0 107.0 107.0	2.85 2.5 3.5	4.4 4.5 4.15	BF-K1 T1-RB E-BC16	HB CR CR	Cr Fe Cr	Fe Fe Fe	4955366

DAIHATSU
SUBARU
HINO
HONDA
ISUZU
KOMATSU
MAZDA
MITSUBISHI
NISSAN
UD TRUCKS
SUZUKI
TOYOTA
DAEWOO
HYUNDAI
KIA
ASIA
CHRYSLER
FORD
GM

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
ZETEC ROCAM	999	Escort Fiesta Ka	TCC-H-0046	4	1st 2nd Oil	68.68 68.68 68.68	1.2 1.5 2.0		BF TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	A59870
ZL16 ROCAM	1,596	Focus	SWF30017ZZ	4	1st 2nd Oil	82.0 82.0 82.0	1.2 1.5 2.0	2.85 3.5 3.05	BF TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	XS6E 6148 DA
DURATEC VE DURATEC 25SVT	2,540	Contour	SWF30003ZZ	6	1st 2nd Oil	82.5 82.5 82.5	1.2 1.5 3.0	2.9 3.6 2.85	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	F5RZ 6148E XS2Z 6148 AA
FS FS05	1,991	Probe	SWF30001ZZ	4	1st 2nd Oil	83.0 83.0 83.0	1.2 1.5 3.0	3.1 3.6 3.2	BF-IB TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	FSY2-11-SCO E62Z 6149 AA
ZETEC-R 2.0	1,991	Cougar Escape Focus ZX2	SWF30002ZZ	4	1st 2nd Oil	84.8 84.8 84.8	1.5 1.75 3.0	3.05 3.9 3.2	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	YS4Z 6135 AA F8CZ 6148 AA
CVH 2.0	1,986	Focus Escape Tracer	SWF30005ZZ	4	1st 2nd Oil	84.86 84.86 84.86	1.5 1.5 3.0	3.1 3.9 3.1	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	F7CZ 6148 AA 2MGZ 6135 AA
ZETEC-E 2.0	1,991	Mystique	SWF30007ZZ	4	1st 2nd Oil	84.86 84.86 84.86	1.5 1.75 3.0	3.1 3.8 3.1	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	F5RZ 6148 A
ECO BOOST 20T DURATEC 20H	1,999	Escape Focus Fusion Taurus	SWF30023ZZ	4	1st 2nd Oil	87.5 87.5 87.5	1.2 1.2 2.0	2.9 3.4 2.5	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	AG9Z 6148 A CM5Z 6148 AB
DURATEC 25	2,488	Escape Fusion Escape hybrid Fusion hybrid	SWF30024ZZ	4	1st 2nd Oil	89.0 89.0 89.0	1.2 1.2 2.5	2.9 3.8 2.45	BF-IB TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	9E5Z 6148 A
VULCAN V6	2,997	Sable Taurus Ranger	SWF30016ZZ	V6	1st 2nd Oil	89.0 89.0 89.0	1.5 1.5 3.0	3.45 3.7 2.95	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	4F1Z 6148 CA 2F1Z 6148 AA
DURATEC 30	2,967	Fusion Taurus	SWF30021ZZ	V6	1st 2nd Oil	89.0 89.0 89.0	1.2 1.5 2.5	3.5 4.1 2.85	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	YF1Z 6148BA

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
TRITON 46GT TRITON 46V	4,605	Expedition	SWF30006ZZ	V8	1st 2nd Oil	90.2	1.5	3.3	BF TUC NIFF-S	SR CR SR	GN	GN	F5LY 6148 A F7AZ 6148 AA 2L3Z 6148 AA
						90.2	1.5	4.1			Fe	GN	
TRITON 54 TRITON 54V INTECH 54	5,408	F150		V8									
TRITON 46 TRITON 46C INTECH 46	4,605	Continental Mustang Town Car	SWF30008ZZ	V8	1st 2nd Oil	90.2	1.2	3.3	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN	F8LZ 6148 AA
TRITON 6.8	6,801	Fullsize Van	SWF30019ZY	V10	1st 2nd Oil	90.2	1.5	3.25	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	2L3Z 6148 AA
COYOTE 50	4,951	F150 Mustang	SWF30027ZZ (TCC-G-0090)	V8	1st 2nd Oil	92.2	1.2	3.1	BF TUC NIFF-H	SR HB SR	GN Cr GN	GN	CU7Z 6148 A
DURATEC 35	3,496	Edge Fusion Taurus Explorer F150	SWF30026ZZ	6	1st 2nd Oil	92.5	1.2	3.1	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN	ATAZ 6148 C
COLOGNE 29	2,901	Bronco II Ranger	SWF30014ZY	V6	1st 2nd Oil	93.0	1.6	3.9	BF T1 NIFF-S	HB CR SR	Cr Fe GN	Fe Fe GN	E7RY 6148 A
HSC 2.3	2,311	Tempo Topaz	SWF30011ZX	4	1st 2nd Oil	93.47	2.0	3.3	BF T1-RB NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	E63Z 6148 A
HSC 2.5	2,496	Sable Taurus				93.47	2.0	4.3					
OHC 2.3	2,295	Tempo Mustang Marquis	SWL03268ZX	4	1st 2nd Oil	96.0	1.5	3.45	BF T1-RB NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	F1ZZ 6148 A
ESSEX V6 38	3,802	Thunderbird Continental Cougar	SWF30013ZY	V6	1st 2nd Oil	96.8	1.5	3.45	BF T1-RB NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	E8DZ 6148 A F4DZ 6148 A E9SZ 6148 B
232CI V6 ESSEX V6 38	3,802	Cougar Mustang Marquis	SWF30015ZZ	V6	1st 2nd Oil	96.8	2.0	4.4	BF T1-RB NIFF-S	CR CR SR	Cr Fe Cr	Fe Fe Fe	E2DZ 6148 A
ESSEX V6 38 ESSEX V6 42	3,802 4,195	Windstar Mustang Cougar	SWF30004ZZ	V6	1st 2nd Oil	96.8	1.5	3.3	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	F6ZZ 6148 A 2L3Z 6148 KA
COLOGNE 40	4,015	Explorer Mustang Mountaineer	SWF30012ZZ	V6	1st 2nd Oil	100.4	1.2	3.5	BF TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	2U3Z 6148 AA



● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
POWER STROKE 6.4	6,399	F250 F350 F450	SDF30022ZX	V8	1st	98.2	2.35	3.5	BF-K1	SR	GN	GN	4C3Z 6148 AA
					2nd	98.2	2.0	4.3	T1-RB	CR	Fe	Fe	
					Oil	98.2	3.0	3.25	E-BC16	SR	GN	GN	
POWER STROKE 6.7T	6,651	Econoline E450 Econoline E550 F250 F350 F450 F550	SDF30025ZZ (TCC-G-0091)	V8	1st	99.0	2.85	3.6	BF-K1	HB	Cr	Fe	BC3Z 6148 A
					2nd	99.0	2.0	3.6	TUC	CR	Fe	Fe	
					Oil	99.0	2.5	2.85	E-BC16	SR	GN	GN	
POWER STROKE 7.3T	7,276	Econoline Excursion F250 F350 F450 F550 F650	SDF30020ZX	V8	1st	104.4	3.0	3.9	BF-K1	SR	GN	GN	F81Z 6148 AA F7TZ 6148 AA
					2nd	104.4	2.0	4.0	T1-RB	CR	Fe	Fe	
					Oil	104.4	3.5	3.85	E-BC16	CR	Cr	Fe	

● Gasoline-engine Automobiles ● ガソリン車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
S-TEC II 1.0L	996	Spark	SWG10045ZZ	4	1st 2nd Oil	68.5 68.5 68.5	1.2 1.2 2.0	2.65 2.8 2.55	BF-IB T1 NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	93745491
S-TEC II 1.2L	1,206	Spark Aveo Sail	SWG10033ZZ	4	1st 2nd Oil	69.7 69.7 69.7	1.2 1.2 2.0	2.65 2.8 2.4	BF-IB T1 NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	93744884
B12D LAQ	1,206	N200 N300	SWG10047ZZ (TCC-H-0010)	4	1st 2nd Oil	69.7 69.7 69.7	1.2 1.2 2.0	2.5 2.8 2.5	BF T1 NIFF-H	SR HB SR	GN Fe GN	GN Fe GN	24545481
ECOTEC I4 ECOTEC LLO	1,249	Chevrolet Spark	SWG10051ZZ (TCC-G-0037)	4	1st 2nd Oil	70.5 70.5 70.5	1.0 1.2 2.0	2.3 2.55 1.95	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	25191142
C10NE	999	Corsa Meriva	TCC-H-0047	4	1st 2nd Oil	71.08 71.08 71.08	1.5 1.5 3.0		BF T1 NIFF-S	HB CR SR	Cr Fe Cr	Fe Fe Fe	A14149
S-TEC III 1.4L	1,399	Sail Spin	SWG10034ZZ	4	1st 2nd Oil	73.8 73.8 73.8	1.2 1.2 2.0	2.5 2.8 2.45	BF-IB TUC NIFF-H	SR HB SR	GN Fe GN	GN Fe GN	93736247
S-TEC III 1.5L	1,485	Sail Spin	SWG10046ZZ	4	1st 2nd Oil	74.71 74.71 74.71	1.0 1.2 2.0	2.25 2.8 2.2	BF TUC NIFF-H	SR CR SR	Cr Fe GN	Fe Fe GN	25190067
E-TEC I 1.3L 13N 13S	1,297	Corsa 1.3	SWG10041ZZ	4	1st 2nd Oil	75.0 75.0 75.0	1.5 1.5 3.0	3.25 3.3 2.9	BF-IB T1-IB NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	93244958
E-TEC II 1.5L LV8	1,498	Chevy Taxi Aveo	SWG10030ZZ	4	1st 2nd Oil	76.5 76.5 76.5	1.5 1.5 2.0	3.1 3.2 2.7	BF TUC NIFF-H	HB CR SR	Cr Fe Cr	Fe Fe Fe	93742961
E-TEC I 1.4L X14XE1	1,389	Corsa 1.4 Evolution	SWG10028ZZ	4	1st 2nd Oil	77.6 77.6 77.6	1.5 1.5 3.0	2.85 3.2 3.2	BF-IB TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	93227616
F14D3 85CB 89CB	1,796	Lacetti	SWG10026ZZ	4	1st 2nd Oil	77.88 77.88 77.88	1.2 1.5 2.5	2.85 3.3 2.9	BF TUC NIFF-H	SR CR SR	Cr Fe Cr	Fe Fe Fe	93740229
E-TEC I 1.6L X16XE1	1,598	Corsa 1.6	SWG10029ZZ	4	1st 2nd Oil	79.0 79.0 79.0	1.2 1.5 3.0	3.05 3.3 3.0	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	93235611
E-TEC II 1.6L L91	1,598	Sonic Aveo Aveo5 Cruze G3(Pontiac)	TCC-J-0068	4	1st 2nd Oil	79.0 79.0 79.0	1.2 1.2 2.0		BF-IB TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	55581399 93744928
E-TEC I 1.8L X18XE1	1,796	Corsa 1.8 Evolution	SWG10035ZZ	4	1st 2nd Oil	80.5 80.5 80.5	1.2 1.2 2.0	3.1 3.0 3.0	BF T1 NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	93332835

DAIHATSU
SUBARU
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ISUZU
KOMATSU
MAZDA
MITSUBISHI
NISSAN
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SUZUKI
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DAEWOO
HYUNDAI
KIA
ASIA
CHRYSLER
FORD
GM

DAIHATSU	SUBARU	HINO	HONDA	ISUZU	KOMATSU	MAZDA	MITSUBISHI	NISSAN	UD TRUCKS	SUZUKI	TOYOTA	DAEWOO	HYUNDAI	KIA	ASIA	CHRYSLER	FORD	GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment	Reference	
																			d 1 (D)	h 1 (B)	a 1 (T)	Outside	Upper/Lower									
																			ECOTEC LUW	1,796	Astra Cruze Sonic	TCC-J-0065	4	1st 2nd Oil	80.5 80.5 80.5	1.2 1.2 2.0		BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	55568927 95507585
																		SATURN I4 LLO SATURN I4 LKO	1,901	SC SC1 SC2	SWG10020ZX	4	1st 2nd Oil	82.0 82.0 82.0	1.5 1.5 3.0	3.05 3.5 3.2	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	21006715 21006721	
																		SATURN I4 L24 SATURN I4 LLO	1,901	SI SC1 SC2	SWG10021ZY	4	1st 2nd Oil	82.0 82.0 82.0	1.2 1.5 3.0	2.85 3.5 3.2	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	21007180	
																		ECOTEC LSJ	1,998	Cobalt G5 Alero	SWG10019ZY	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.5 2.5	2.9 3.5 2.85	BF TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	21018813	
																		ECOTEC 2.2 L61 ECOTEC 2.2 LAP	2,196													
																		ELLESMORE L81	2,962	Catera L300 LS2	SWG10016ZZ	V6	1st 2nd Oil	86.0 86.0 86.0	1.2 1.5 3.0	2.9 3.5 3.05	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	9118853	
																		CID 121 GM 122 2.0L	1,983	Sunbird	SWG10010ZZ	4	1st 2nd Oil	86.0 86.0 86.0	1.5 1.5 3.0	3.3 3.6 3.05	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	52273305 52273308	
																		ECOTEC LNF	1,998	Chevrolet Captiva	SWG10032ZX	4	1st 2nd Oil	86.0 86.0 86.0	1.2 1.5 2.0	3.1 3.5 2.75	BF TUC NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	89018107	
																		ECOTEC 2.2 LAP	2,201	Sports												
																		Northstar L47	3,995	Aurora	SWG10015ZY	V8	1st 2nd Oil	87.0 87.0 87.0	1.2 1.5 3.0	2.9 3.6 2.85	BF TUC NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12555219	
																		ECOTEC 2.4L	2,384	Equinox LaCrosse	SWG10048ZZ (TCC-G-0095)	4	1st 2nd Oil	88.0 88.0 88.0	1.2 1.5 2.0	2.9 4.0 2.45	BF-IB TUC NIFF-H	SR CR SR	GN Cr Cr	GN Fe Fe	12659419	
																		ECOTEC 2.5L	2,457	Regal HHR Maribou Verano Impala Hybrid Regal Hybrid Terrain												
																		GM 60°L82 GM 60°LG8	3,136	Lumina Monte Carlo Century	SWG10004ZZ	V6	1st 2nd Oil	89.0 89.0 89.0	1.2 1.5 3.0	3.5 3.6 2.85	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	12538683 12481987	
																		GM 60°LE2	2,835	Citation II S-15 Jimmy S-15 Pickup	SWL03235ZX	V6	1st 2nd Oil	89.0 89.0 89.0	1.5 2.0 4.76	3.25 4.05 3.85	BF-IB T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	14034969	

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper / Lower	
ALLOYTEC 3.2	3,195	Winstorm Winstorm MaXX Captiva Captiva MaXX Antara Escudo	SWG10044ZZ	V6	1st 2nd Oil	89.0 89.0 89.0	1.2 1.5 2.5	3.1 3.25 2.85	BF-IB TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	92068446
QUAD-4 LD9	2,392	Cabalier Grand AM Malibu	SWG10022ZX	4	1st 2nd Oil	90.0 90.0 90.0	1.2 1.5 3.0	3.3 3.8 3.25	BF T1-RB NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	24575965
QUAD-4 LG0	2,254	Achieva Skylark Grand AM	SWG10014ZZ	4	1st 2nd Oil	92.0 92.0 92.0	1.5 1.5 3.0	3.3 3.7 3.05	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	22548439
GM 60°LA1	3,392	Montana Alero Grand AM	SWG10001ZZ	V6	1st 2nd Oil	92.0 92.0 92.0	1.2 1.5 4.0	3.3 3.7 3.65	BF T1 NIFF-S	SR CR SR	Cr Fe Cr	Fe Fe Fe	12537866
GM 60°LA1	3,392	Alero Aztek	SWG10009ZZ	V6	1st 2nd Oil	92.0 92.0 92.0	1.2 1.5 3.0	3.3 3.8 2.55	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	12481322
GM 60°LHJ	3,350	Grand AM											
NORTHSTAR L37	4,605	Allante Deville Eldorado	SWG10008ZZ	V8	1st 2nd Oil	93.0 93.0 93.0	1.5 1.5 3.0	3.3 3.9 2.85	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	3543903
NORTHSTAR L37	4,605	Deville Eldorado Seville	SWG10013ZZ	V8	1st 2nd Oil	93.0 93.0 93.0	1.2 1.5 3.0	3.5 3.9 2.85	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	89017431 12555217
CADILLAC V8 LD8 NORTHSTAR LD8 NORTHSTAR LH2 NORTHSTAR L37	4,605	Deville Eldorado Seville	SWG10011ZZ	V8	1st 2nd Oil	93.0 93.0 93.0	1.2 1.5 2.5	3.5 3.9 2.6	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	89017413 12564801
POWER TECH4.7	4,703												
BUICK 3300	3,343	Cutlass Ciera Cutlass Cruiser	SWG10012ZZ	V6	1st 2nd Oil	94.0 94.0 94.0	1.5 1.5 3.0	3.5 3.7 3.2	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	24501330 24501065
HIGH VALUE LX9	3,498	G6 Malibu Montana Relay Rendezvous	SWG10038ZX	V6	1st 2nd Oil	94.0 94.0 94.0	1.2 1.5 2.5	3.3 3.7 2.7	BF T1-RB NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	12584525
ALLOYTEC LY7	3,564	Chevrolet Captexiva Sports	SWG10039ZZ	V6	1st 2nd Oil	94.0 94.0 94.0	1.2 1.5 2.5	2.9 3.4 2.5	BF-IB TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	12608615
LLT LLE	3,564	Camaro Acadia CTS	SWG10052ZZ	V6	1st 2nd Oil	94.0 94.0 94.0	1.2 1.5 2.5	3.3 3.4 2.5	BF TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	12616973



DAIHATSU	SUBARU	HINO	HONDA	ISUZU	KOMATSU	MAZDA	MITSUBISHI	NISSAN	UD TRUCKS	SUZUKI	TOYOTA	DAEWOO	HYUNDAI	KIA	ASIA	CHRYSLER	FORD	GM	Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment	Upper/Lower	Reference
																			d 1 (D)	h 1 (B)	a 1 (T)	Outside										
VORTEC 3700 LLR ATLAS LLR	3,653	Canyon Colorado H3	SWG10036ZZ	5	1st 2nd Oil	95.5 95.5 95.5	1.2 1.5 2.5	3.3 3.7 2.85	BF TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	89018219																			
VORTEC 2900 LLV	2,921	Canyon Colorado	SWG10037ZZ	4	1st 2nd Oil	95.5 95.5 95.5	1.2 1.5 2.5	3.3 3.7 2.85	BF TUC NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	89018219																			
VORTEC 4800 LR4 VORTEC 4800 LY2 VORTEC 5300 III VORTEC 5300 IV VORTEC 5300 LH6 VORTEC 5300 LH8 VORTEC 5300 LM7 VORTEC 5300 LS4	4,818	Savana Express	SWG10005ZZ	V8	1st 2nd Oil	96.01 96.01 96.01	1.5 1.5 3.0	3.3 4.0 3.2	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	12456338																			
	5,328	Sierra 1500																														
Buick V6 L27 Buick V6 L67	3,785 3,791	Ninety Eight Eighty Eight Bonnieville	SWG10006ZZ	V6	1st 2nd Oil	96.5 96.5 96.5	1.2 1.5 3.0	3.5 3.8 2.85	BF T1-RB NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	24502947																			
Oldsmobile V8 307	5,031	Caprice Cutlass Delta 88 Electra Ninety Eight	SWG10023ZY	V8	1st 2nd Oil	96.5 96.5 96.5	2.0 2.0 4.76	3.5 4.4 4.05	BF T1-RB NIFF-S	SR CR SR	GN Fe Cr	GN Fe Fe	22529562																			
BUICK V6 L26 BUICK V6 L36	3,785 3,791	LSS Bonneville Park avenue	SWG10003ZZ	V6	1st 2nd Oil	96.52 96.52 96.52	1.2 1.5 2.0	3.5 3.8 2.8	BF T1-RB NIFF-H	SR CR SR	GN Fe GN	GN Fe GN	12480825 12537410																			
HI VALUE LZE	3,510	Monte Carlo Malibu Pontiac G6	SWG10049ZZ	V6	1st 2nd Oil	99.0 99.0 99.0	1.2 1.5 2.5	3.3 3.75 2.85	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	89018067 89018068																			
VORTEC 5700 LS1 VORTEC 5700 LS6	5,670	Corvette GTO Camaro	SWG10018ZZ	V8	1st 2nd Oil	99.0 99.0 99.0	1.5 1.5 3.0	3.5 4.1 3.2	BF TUC NIFF-S	SR CR SR	GN Fe GN	GN Fe GN	12533556 88894247 88894299																			
VORTEC 6000	5,967	Chevrolet Avalanche	SWG10031ZX	V8	1st 2nd Oil	101.6 101.6 101.6	1.2 1.5 2.5	3.5 4.2 2.55	BF TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	89017484																			
VORTEC 6200	6,162	Chevrolet Corvette Pontiac GTO Cadillac CTS	SWG10050ZZ	V8	1st 2nd Oil	103.25 103.25 103.25	1.5 1.5 2.5	3.5 4.7 2.85	BF TUC NIFF-H	SR CR SR	GN Fe Cr	GN Fe Fe	19168090																			

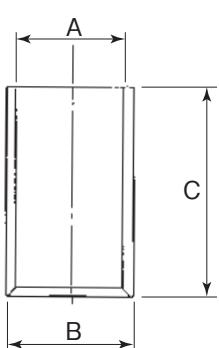
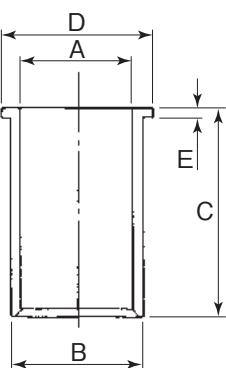
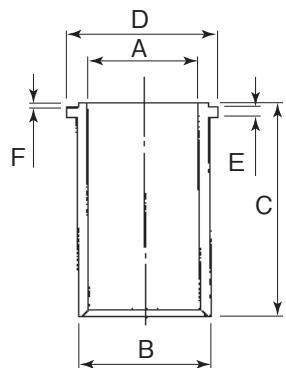
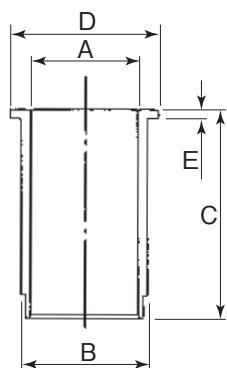
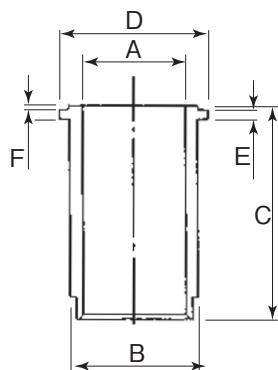
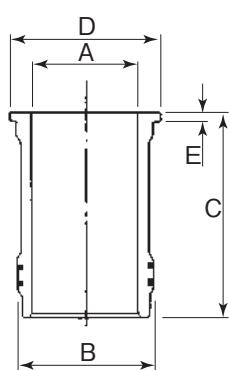
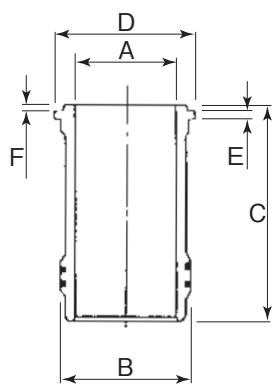
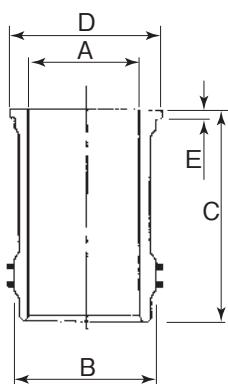
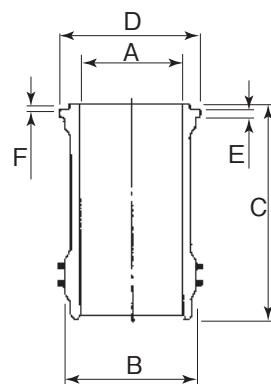
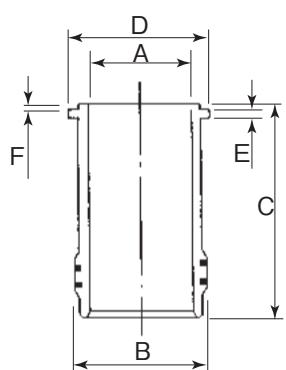
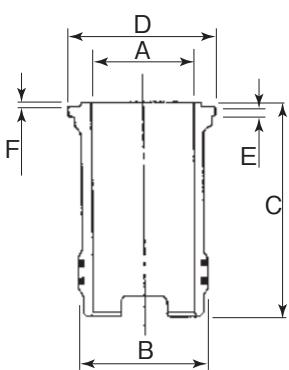
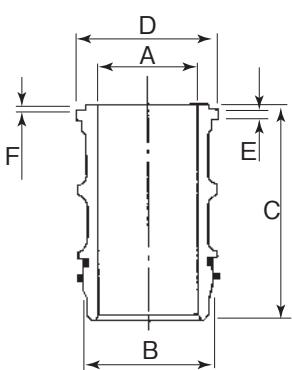
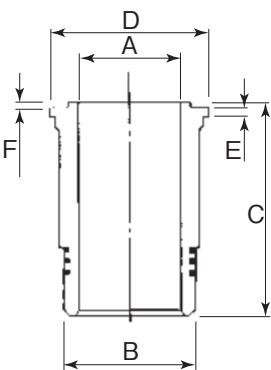
● Diesel-engine Automobiles ● ディーゼル車 ●

Engine Type	Exhaust quantity (c.c.)	Vehicle Model Chassis Type	NPR Catalog Code	Cyl No.	Position	Size (mm)			Shape	Material	Surface Treatment		Reference
						d 1 (D)	h 1 (B)	a 1 (T)			Outside	Upper/Lower	
GM 6.5	6,473	C3500 HD Chery Van Cutaway	SDG10024ZX	V8	1st 2nd Oil	103.0 103.0 103.0	2.8 2.0 4.0	3.7 4.1 4.15	BF-K1-IB T1-IB E-BC16	SR CR SR	GN Fe GN	GN Fe GN	12369198

CYLINDER LINER

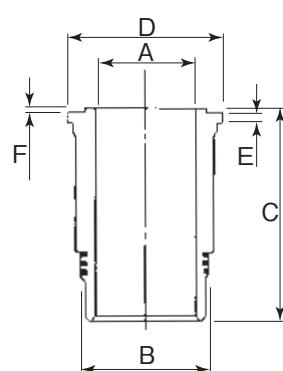


DAIHATSU
HINO
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KOMATSU
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UD TRUCKS
TOYOTA
MAZDA

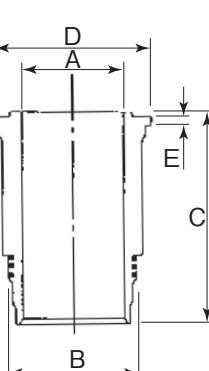
D01**D02****D03****D04****D05****W01****W02****W03****W04****W05****W06****W07****W08**

DAIHATSU
HINO
ISUZU
KOMATSU
MITSUBISHI
UD TRUCKS
TOYOTA
MAZDA

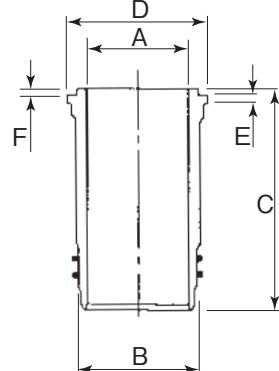
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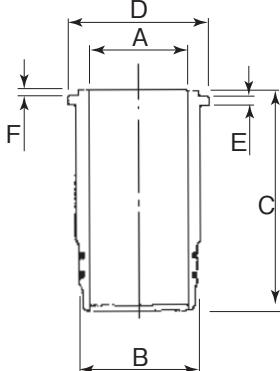
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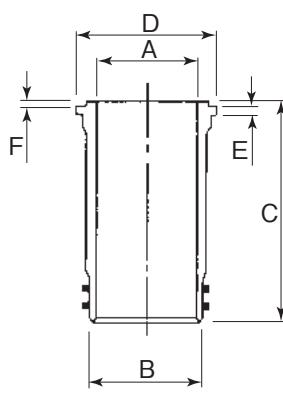
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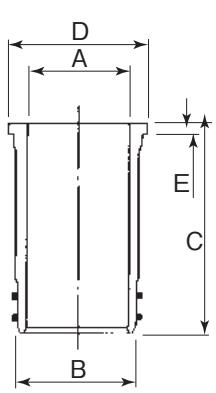
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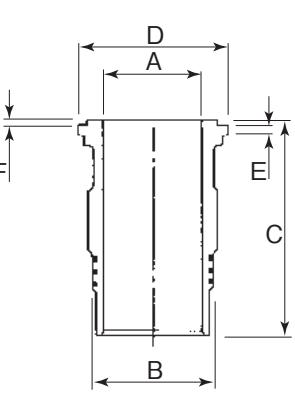
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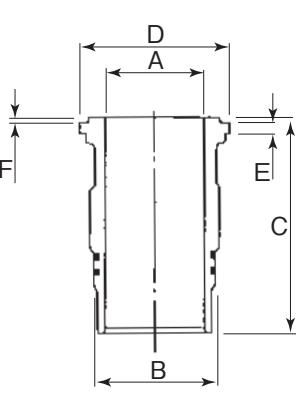
W14



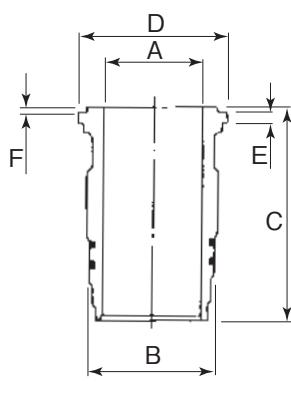
W15



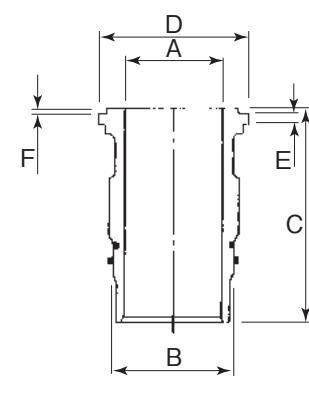
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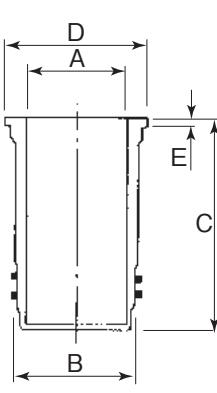
W17



W18



W19



Surface Treatment

DC..... Water jacket only is chromium plated

F..... Phosphated (all over)

CF..... Outside chromium plated + phosphated

CM..... Inside chromium plated

NF..... Nitrided + Phosphated

NON... Without any surface treatment

ライナ表面処理

DC..... 外周 W/J 部のみクロムメッキ

F..... 磷酸塩被膜処理

CF..... 外周クロム + 磷酸塩皮膜処理

CM..... 内周クロム

NF..... 硝化 + 磷酸塩皮膜処理

NON... 表面処理なし

The world standard cylinder liners



NIPPON PISTON RING CO., LTD.

5-12-10, Honmachi-Higashi, Chuo-ku, Saitama City, Saitama, 338-8503 JAPAN

<http://www.npr.co.jp/>

DAIHATSU	Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
									Grade	B	C	D	E	
HINO	DG	2,530	4	L12752-AC	88.00	D03	NON	F	1	93.00	182.00	97.00	7.00	992-5113-91171-6
				L12752-AC	88.00	D03	NON	F	2	93.00	182.00	97.00	7.00	992-5113-91171-7
				L12752-AC	88.00	D03	NON	F	3	93.00	182.00	97.00	7.00	992-5113-91171-8
ISUZU	DR	2,530	4	L12752-BB	87.60	D03	NON	S	1	93.00	182.00	97.00	3.00	11461-87380
				L12752-BB	87.60	D03	NON	S	2	93.00	182.00	97.00	3.00	11462-87380
				L12752-BB	87.60	D03	NON	S	3	93.00	182.00	97.00	3.00	11463-87380
KOMATSU	DL	2,765	4	L15486-AA	91.60	D03	NON	S	1	96.00	182.00	101.00	3.00	11461-87303
				L15486-AA	91.60	D03	NON	S	2	96.00	182.00	101.00	3.00	11462-87303
				L15486-AA	91.60	D03	NON	S	3	96.00	182.00	101.00	3.00	11463-87303
DAIHATSU	DL (NEW)	2,765	4	L55903-AA	92.00	D03	NON	S		96.00	178.00	101.00	3.00	11461-87305
UD TRUCKS														
TOYOTA														
MAZDA														

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
DM100	4,313	4	L12732-CC	90.00	W02	NON	F		104.50	198.50	110.00	9.00	11467-1330, -1401, -1440
EC100	5,010	4	L15137-BA	97.00	W02	NON	F		110.50	206.00	117.00	10.00	11467-1130
W04CTi	4,009	4	L16188CPB	104.00	D02	NF	F	A	107.00	200.00	112.00	8.00	11467-2181A
			L16188CQB	104.00	D02	NF	F	B	107.00	200.00	112.00	8.00	11467-2191A
			L16188CSB	104.00	D02	NF	F	C	107.00	200.00	112.00	8.00	11467-2211A
W04D W06D W06E N04C	5,759	4, 6	L16188DFA	104.00	D02	F	F	A	107.00	200.00	112.00	8.00	11467-1762A, 11461-78021
			L16188DGA	104.00	D02	F	F	B	107.00	200.00	112.00	8.00	11467-1772A, 11461-78031
			L16188DHA	104.00	D02	F	F	C	107.00	200.00	112.00	8.00	11467-1792A, 11461-78051
			L16188CTA	104.00	D03	F	F	W	107.00	201.00	112.00	8.00	11467-1761A
			L16188CUA	104.00	D03	F	F	X	107.00	201.00	112.00	8.00	11467-1771A
			L16188CVA	104.00	D03	F	F	Y	107.00	201.00	112.00	8.00	11467-1781A
			L16188CWA	104.00	D03	F	F	Z	107.00	201.00	112.00	8.00	11467-1791A
EH100	5,871	6	L16048-BE	105.00	D03	NON	F		110.00	206.00	115.00	8.00	11461-1060A
H06BTI H06BT	6,224	6	L16163BZA	105.80	D03	NF	F	W	110.00	204.00	118.00	8.00	11467-2740A, 11467-1921A
			L16163CAA	105.80	D03	NF	F	X	110.00	204.00	118.00	8.00	11467-2750A, 11467-1931A
			L16163CBA	105.80	D03	NF	F	Y	110.00	204.00	118.00	8.00	11467-2760A, 11467-1941A
			L16163CCA	105.80	D03	NF	F	Z	110.00	204.00	118.00	8.00	11467-2770A, 11467-1951A
EH300	6,211	6	L16071-ZA	108.00	D03	NON	F	AA	112.00	204.00	118.00	8.00	11467-1010A
			L16071AAA	108.00	D03	NON	F	BB	112.00	204.00	118.00	8.00	11467-1020B
			L16071-CF	108.00	D03	NON	F		112.00	204.00	118.00	8.00	11467-1030A(代表)
EH700 H07CT	6,443	6	L16100AJA	110.00	D03	F	F	W	113.00	204.00	118.00	8.00	11467-1200, -1201, -1202
			L16100AKA	110.00	D03	F	F	X	113.00	204.00	118.00	8.00	11467-1210, -1211, -1212
			L16100ALA	110.00	D03	F	F	Y	113.00	204.00	118.00	8.00	11467-1220, -1221, -1222
			L16100AMA	110.00	D03	F	F	Z	113.00	204.00	118.00	8.00	11467-1230, -1231, -1232

DAIHATSU
HINO
ISUZU
KOMATSU
MITSUBISHI
UD TRUCKS
TOYOTA
MAZDA

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
EH500 H06CT	6,485	6	L16163BMA	108.00	D03	F	F	W	113.00	204.00	118.00	8.00	11467-1592A
			L16163BNA	108.00	D03	F	F	X	113.00	204.00	118.00	8.00	11467-1602A
			L16163BPA	108.00	D03	F	F	Y	113.00	204.00	118.00	8.00	11467-1612A
			L16163BQA	108.00	D03	F	F	Z	113.00	204.00	118.00	8.00	11467-1622A
H07BTi	6,224	6	L16567-DA	105.80	D03	F	F	W	113.00	203.00	118.00	8.00	11467-2900A
			L16567-EA	105.80	D03	F	F	X	113.00	203.00	118.00	8.00	11467-2910A
			L16567-FA	105.80	D03	F	F	Y	113.00	203.00	118.00	8.00	11467-2920A
			L16567-GA	105.80	D03	F	F	Z	113.00	203.00	118.00	8.00	11467-2930A
H08C J08 J05C	7,961	4, 6	L16521ECA	114.00	D02	F	F	A	117.00	203.00	122.00	8.00	11467-2601B
			L16521EKA	114.00	D02	F	F	A	117.00	203.00	122.00	3.00	11462-E0090
			L16521EDA	114.00	D02	F	F	B	117.00	203.00	122.00	8.00	11467-2611B / 11467-2790
			L16521ELA	114.00	D02	F	F	B	117.00	203.00	122.00	3.00	11463-E0060
			L16521EEA	114.00	D02	F	F	C	117.00	203.00	122.00	8.00	11467-2621B
			L16521EMA	114.00	D02	F	F	C	117.00	203.00	122.00	3.00	11464-E0060
J08BTi		6	L16567-LA	110.90	D03	NF	F	A	117.00	204.00	122.00	8.00	11467-3070A
			L16567-MA	110.90	D03	NF	F	B	117.00	204.00	122.00	8.00	11467-3080A
			L16567-NA	110.90	D03	NF	F	C	117.00	204.00	122.00	8.00	11467-3090A
YJ75 S05D			L16568-YB	114.00	D02	F	F	A	117.00	186.50	122.00	8.00	11467-2941A, 11461-78090
			L16568-ZB	114.00	D02	F	F	B	117.00	186.50	122.00	8.00	11467-2951A, 11461-78100
			L16568AAB	114.00	D02	F	F	C	117.00	186.50	122.00	8.00	11467-2961A, 11461-78110
J05D		4	L16568ADB	112.00	D02	F	F	A	117.00	186.50	122.00	8.00	11467-3170, S1146-73170
			L16568AEB	112.00	D02	F	F	B	117.00	186.50	122.00	8.00	11467-3180, S1146-73180
			L16568AFB	112.00	D02	F	F	C	117.00	186.50	122.00	8.00	11467-3190, S1146-73190

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
J08E	6	L16576-YB	112.00	D02	F	F	A	117.00	203.00	122.00	8.00	11467-3200B/S1146-73200	
		L16576-ZB	112.00	D02	F	F	B	117.00	203.00	122.00	8.00	11467-3210B/S1146-73210	
		L16576AAB	112.00	D02	F	F	C	117.00	203.00	122.00	8.00	11467-3220B/S1146-73220	
		L16576BGA	112.00	D02	F	F	A	117.00	203.00	122.00	3.00	11462-E0080	
		L16576BHA	112.00	D02	F	F	B	117.00	203.00	122.00	3.00	11463-E0050	
		L16576BJA	112.00	D02	F	F	C	117.00	203.00	122.00	3.00	11464-E0050	
A09	6	L16603-KA	112.00	D02	F	F	A	117.00	228.00	123.00	3.00	11462-E0010	
		L16603-LA	112.00	D02	F	F	B	117.00	228.00	123.00	3.00	11463-E0010	
		L16603-MA	112.00	D02	F	F	C	117.00	228.00	123.00	3.00	11464-E0010	
P09BTi P09BT		L16227ABA	117.80	D03	NF	F	A	122.80	234.70	132.00	8.00	11467-2100A, 1970A	
		L16227ACA	117.80	D03	NF	F	B	122.80	234.70	132.00	8.00	11467-2110A, 1980A	
		L16227ADA	117.80	D03	NF	F	C	122.80	234.70	132.00	8.00	11467-2120A, 1990A	
P10CTi		L16561-LA	117.80	D03	NF	F	A	122.80	222.80	132.00	8.00	11467-2810A	
		L16561-MA	117.80	D03	NF	F	B	122.80	222.80	132.00	8.00	11467-2820A	
		L16561-NA	117.80	D03	NF	F	C	122.80	222.80	132.00	8.00	11467-2830A	
EP100	8,821	6	L16183DSA	120.00	D03	F	F	A	125.00	236.00	132.00	8.00	11467-1731A
			L16183DTA	120.00	D03	F	F	B	125.00	236.00	132.00	8.00	11467-1741
			L16183DUA	120.00	D03	F	F	C	125.00	236.00	132.00	8.00	11467-1751
P11C	10,520	6	L16536BHA	122.00	D03	F	F	A	127.00	229.00	134.00	8.00	11467-3130A, 2390A, 2710A
			L16536BJA	122.00	D03	F	F	B	127.00	229.00	134.00	8.00	11467-3140A, 2400A, 2720A
			L16536BKA	122.00	D03	F	F	C	127.00	229.00	134.00	8.00	11467-3150A, 2410A, 2730A
P11BTi		6	L16567-HA	121.99	D03	NF	F	A	127.00	229.00	134.00	8.00	11467-3000A
			L16567-JA	121.99	D03	NF	F	B	127.00	229.00	134.00	8.00	11467-3010A
			L16567-KA	121.99	D03	NF	F	C	127.00	229.00	134.00	8.00	11467-3020A
EL100	6	L16081-DC	116.00	W11	NON	F		129.00	222.80	138.00	9.00	11467-1240	

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Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
EM100	9,419	6	L16125AJA	124.00	D03	F	F	A	129.00	236.00	134.00	8.00	11467-1661, -1662
			L16125AKA	124.00	D03	F	F	B	129.00	236.00	134.00	8.00	11467-1671, -1672A
M10U	9,880	6	L16218AEA	127.00	D03	F	F	A	130.30	236.00	135.20	8.00	11467-2000A
			L16218AFA	127.00	D03	F	F	B	130.30	236.00	135.20	8.00	11467-2010A
			L16218AGA	127.00	D03	F	F	C	130.30	236.00	135.20	8.00	11467-2020A
			L16218AHA	127.00	D03	F	F	D	130.30	236.00	135.20	8.00	11467-2030A
EB300 EB400		6	L16132-AB	120.00	W02	NON	F		136.00	287.30	143.00	11.10	11467-1180
			L16132-JD	120.00	W02	DC	F		136.00	287.30	143.00	11.10	11467-1870
E13C	12,913	6	L16577-QB	137.00	D03	F	F	A	142.00	251.00	149.60	5.00	11462-E0030
			L16577-RB	137.00	D03	F	F	B	142.00	251.00	149.60	5.00	11463-E0030
			L16577-SB	137.00	D03	F	F	C	142.00	251.00	149.60	5.00	11464-E0030
ED100	11,581	6	L12770-RC	128.00	W11	NON	F		144.00	291.00	151.00	11.10	11461-1010B, 11467-1370A
ER200	11,581	6	L12770AEC	128.00	W11	DC	F		144.00	291.00	151.00	11.10	11467-1860
EF100	13,804	8	L12742-EJ	130.00	W11	NON	F		146.00	247.80	157.00	12.12	11467-1110
EG100	14,886	6	L16035-AH	135.00	W11	NON	F		151.00	247.80	162.00	12.10	11467-1120
EF300	14,886	8	L16086-GA	132.00	W11	NON	F		151.00	247.80	162.00	13.62	11467-1071
F20C V25C	19,688 24,610	8, 10	L16512BUA	146.00	D03	F	F	A	152.00	244.60	159.00	8.00	11467-2280B, 2490A
			L16512BVA	146.00	D03	F	F	B	152.00	244.60	159.00	8.00	11467-2290B, 2500A
			L16512BWA	146.00	D03	F	F	C	152.00	244.60	159.00	8.00	11467-2300B, 2510A
EF500		8	L16093-BA	135.00	W11	NON	F		153.00	247.80	165.00	13.62	11467-1101
EF700 EF750	16,745	8	L16094-GB	137.00	W11	NON	F		153.00	247.80	165.00	12.12	11467-1900, 1480B, 1091B, 1081C
			L16094AWC	137.00	W11	DC	F		153.00	247.80	165.00	12.12	11467-1900, 1480B, 1091B, 1081C
EF550	16,260	8	L16179-BC	135.00	W11	NON	F		153.00	247.80	165.00	12.12	11467-1690

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
EK100 K13D	13,267	6	L16195-GB	137.00	W11	NON	F		153.00	266.80	164.00	12.12	11467-1080, 11467-1650, 11467-1910
F17D	17,238	8	L16523-AC	137.00	W11	F	F		153.00	248.00	165.00	12.00	11467-2270
K13C	12,882	6	L16542-KB	135.00	W11	DC	F		153.00	266.80	164.00	12.00	11467-2641A
YJ38 K13C	12,882	6	L16542-TC	135.00	W11	F	F		153.00	266.80	164.00	12.08	11467-1960A, 11467-2380B
F17C	16,745	8	L16094BXD	139.00	W11	CF	F		154.00	248.00	166.00	12.00	11467-1702A
			L16706-AA	139.00	W11	F	F		154.00	248.00	166.00	12.00	11467-1702A (w/o outside chromium plating)
F20CE	19,688	8	L16512CAA	146.00	D03	F	F	D	154.00	244.60	161.00	8.50	11467-2680A
			L16512CBA	146.00	D03	F	F	E	154.00	244.60	161.00	8.50	11467-2690A
			L16512CCA	146.00	D03	F	F	F	154.00	244.60	161.00	8.50	11467-2700A
F21C	20,781	8	L16555-YA	150.00	D03	F	F	D	154.00	244.60	161.00	8.50	11467-3030A, -2650A
			L16555-ZA	150.00	D03	F	F	E	154.00	244.60	161.00	8.50	11467-3040A, -2660A
			L16555AAA	150.00	D03	F	F	F	154.00	244.60	161.00	8.50	11467-3050A, -2670A
F21C V26C	20,781	8,	L16555-TB	150.00	D03	F	F		154.00	244.60	161.00	8.50	11467-2650A
K13BTI		6		132.90	W03	NF	F		155.00	266.80	164.00	12.08	11461-1810A, 11467-2480A
V22C	21,548	10	L16504-BB	139.00	W11	NON	F		156.00	247.80	167.00	12.10	11467-2130
V22D	21,548	10	L16504-ND	139.00	W11	F	F		156.00	247.80	167.00	12.00	11467-2320

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Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
C190	1,951	4	L65001-DA	86.00	D04	CM	F		88.00	163.00	94.00	0.82	8-97176-659-0/660-0 8-97176-661-0/662-0 8-97176-663-0/664-0 8-97176-665-0/666-0
C240	2,369	4	L65002-DA	86.00	D04	CM	F		88.00	178.00	94.00	0.82	8-97176-896-0/897-0 8-97176-898-0/899-0 8-97176-900-0/901-0 8-97176-902-0/903-0
C223	2,238	4	L65003-DA	88.00	D04	CM	F		90.00	163.00	95.00	0.82	8-97176-675-0/676-0 8-97176-677-0/678-0 8-97176-679-0/680-0 8-97176-681-0/682-0
4JA1		4	L65004-DA	93.00	D04	CM	F		95.00	156.00	101.00	0.82	8-97176-691-0/692-0 8-97176-693-0/694-0 8-97176-695-0/696-0 8-97176-697-0/698-0
4JB1	2,771	4	L65005-DA	93.00	D04	CM	F		95.00	181.00	101.00	0.82	8-97176-683-0/684-0 8-97176-685-0/686-0 8-97176-687-0/688-0 8-97176-689-0/690-0
4JG2 4JH1 4JH1T	3,059	4	L65013-DA	95.40	D04	CM	F		97.00	178.00	102.42	1.15	8-97176-699-0/700-0 8-97176-701-0/702-0 8-97176-703-0/704-0 8-97176-705-0/706-0
4BA1		4	L65006-DA	98.00	D04	CM	F		101.00	156.00	108.00	1.32	8-97176-904/905 8-97176-906/907 8-97176-908/909 8-97176-910/911
4BC2		4	L66007-DA	102.00	D04	CM	F		105.00	187.00	112.00	1.32	8-97176-707-1/708-1 8-97176-709-1/710-1 8-97176-711-1/712-1 8-97176-713-1/714-1
6BB1 6BD1 6BD1T 4BB1 4BD1 4BD1T		4, 6	L66008-DA	102.00	D04	CM	F		105.00	204.00	112.00	1.32	1-11261-240-0/241-0 1-11261-242-0/243-0 1-11261-244-0/245-0 1-11261-246-0/247-0

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
4BE1		4	L66009-DA	105.00	D04	CM	F		107.00	187.00	113.00	1.32	8-97176-715-0/716-0 8-97176-717-0/718-0 8-97176-719-0/720-0 8-97176-721-0/722-0
6BG1		6	L66010-DA	105.00	D04	CM	F		107.00	203.00	113.00	1.32	1-11261-248-0/249-0 1-11261-250-0/251-0 1-11261-252-0/253-0 1-11261-254-0/255-0
6HE1TC	7,172	6	L16549-QC	110.00	D02	F	F	1X	113.00	210.00	119.70	6.00	8-94391-600-0
			L16549-RC	110.00	D02	F	F	3X	113.00	210.00	119.70	6.00	8-94391-601-0
			L16549-BE	110.00	D02	F	F		113.00	210.00	119.70	6.00	8-94394-563-1
DA120	6,126	6	L22090ALA	100.00	W03	NON	F	A	113.00	220.00	116.00	10.00	9-11261-301-1
			L22090AJB	100.00	W03	NON	F	B	113.00	220.00	119.00	8.00	9-11261-095-0, 9-11261-095-1, 9-11261-287-1
DA640	6,373	6	L22498-KA	102.00	W19	NON	F		113.00	220.00	119.00	8.00	9-11261-293-0
			L22540-UB	102.00	W19	NON	F		113.00	228.00	119.00	8.00	9-11261-288-0, 9-87692-096
4HE1	4,751	4	L66014BCA	110.00	D03	F	F	OD=1X	115.00	210.00	120.70	5.65	8-97176-723 / 724
			L66014CCA	110.00	D03	F	F	OD=3X	115.00	210.00	120.70	5.65	8-97176-725 / 726
4HF1 6HF1	4,334	4,6	L16639-AA	112.00	D02	F	F	OD=1X	115.00	180.00	121.70	6.00	8-97176-727 8-94389-276
			L16639-BA	112.00	D02	F	F	OD=3X	115.00	180.00	121.70	6.00	8-97176-728 8-94389-276
6HH1 6HK1	8,226	6	L16549ADD	115.00	D02	F	F	1X	118.00	210.00	123.70	6.00	8-94391-602 8-94393-273
			L16549AED	115.00	D02	F	F	3X	118.00	210.00	123.70	6.00	8-94391-603 8-94393-273
6HL 4HL	4,777 7,166	4,6	L16549-VD	115.00	D02	F	F	1X	118.00	183.00	123.70	6.00	8-98014-042-0 8-97600-240-2
			L16549-WD	115.00	D02	F	F	3X	118.00	183.00	123.70	6.00	8-98014-043-0 8-97600-241-2
4HG1	4,751	4	L16554-LC	115.00	D02	F	F	1X	118.00	180.00	123.70	6.00	8-98014-048-0
			L16554-MC	115.00	D02	F	F	3X	118.00	180.00	123.70	6.00	8-98014-049-0

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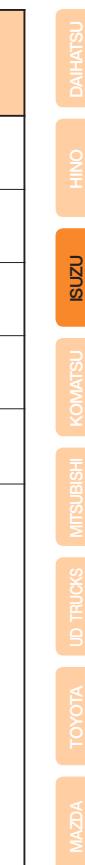
Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
6SA1	8,413	6	L16107AEA	115.00	D05	NON	F	1AX	119.00	216.00	125.70	6.00	1-11261-347-0
			L16107AFA	115.00	D05	NON	F	1CX	119.00	216.00	125.70	6.00	1-11261-348-0
			L16107AGA	115.00	D05	NON	F	2AX	119.00	216.00	125.70	6.00	1-11261-349-0
			L16107AHA	115.00	D05	NON	F	2CX	119.00	216.00	125.70	6.00	1-11261-350-0
			L16107AJA	115.00	D05	NON	F	3AX	119.00	216.00	125.70	6.00	1-11261-351-0
			L16107AKA	115.00	D05	NON	F	3CX	119.00	216.00	125.70	6.00	1-11261-352-0
6UZ1		6	L16640-AA	120.00	D05	NON	F	1X/AX	123.00	239.20	129.70	6.00	1-11261-368-1
			L16640-BA	120.00	D05	NON	F	1X/CX	123.00	239.20	129.70	6.00	1-11261-369-1
			L16640-CA	120.00	D05	NON	F	3X/AX	123.00	239.20	129.70	6.00	1-11261-370-1
			L16640-DA	120.00	D05	NON	F	3X/CX	123.00	239.20	129.70	6.00	1-11261-371-1
6UZ1-F		6	L16640-EA	120.00	D05	F	F	1X/AX	123.00	239.20	129.70	6.00	
			L16640-FA	120.00	D05	F	F	1X/CX	123.00	239.20	129.70	6.00	
			L16640-GA	120.00	D05	F	F	3X/AX	123.00	239.20	129.70	6.00	
			L16640-HA	120.00	D05	F	F	3X/CX	123.00	239.20	129.70	6.00	
6SD1 6SD1T	9,839	6	L16642-AA	120.00	D05	NON	F	1X/AX	123.00	239.20	129.70	6.00	1-11261-298-0
			L16642-BA	120.00	D05	NON	F	1X/CX	123.00	239.20	129.70	6.00	1-11261-299-0
			L16642-CA	120.00	D05	NON	F	3X/AX	123.00	239.20	129.70	6.00	1-11261-300-0
			L16642-DA	120.00	D05	NON	F	3X/CX	123.00	239.20	129.70	6.00	1-11261-301-0
6SD1-F	9,839	6	L16642-EA	120.00	D05	F	F	1X/AX	123.00	239.20	129.70	6.00	
			L16642-FA	120.00	D05	F	F	1X/CX	123.00	239.20	129.70	6.00	
			L16642-GA	120.00	D05	F	F	3X/AX	123.00	239.20	129.70	6.00	
			L16642-HA	120.00	D05	F	F	3X/CX	123.00	239.20	129.70	6.00	

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
10PA1	9,971	8,	L16047CNA	115.00	W11	NON	F		130.00	219.25	141.70	10.00	1-11261-063-0
10PB1	12,464	10,											
12PA1	14,957	12											
PA1			L16047CYA	115.00	W11	NON	F	AX	130.00	219.25	141.70	10.00	1-11261-256-0
PB1			L16047CZA	115.00	W11	NON	F	CX	130.00	219.25	141.70	10.00	1-11261-256-0
8PE1			L16531-PF	127.00	D02	F	F		130.60	233.00	136.60	6.00	1-11261-175-1
10PE1													
12PE1													
PE1			L16531AHC	127.00	D02	F	F	1X	130.60	233.00	136.60	6.00	1-11261-202-0, 1-11261-372-1
			L16531AJC	127.00	D02	F	F	3X	130.60	233.00	136.60	6.00	1-11261-203-0, 1-11261-373-1
12PB1T	11,217 14,022 16,826	8, 10, 12	L16047CXA	115.00	W07	NON	F		133.00	219.25	143.70	10.00	1-11261-104-0
8PB1MTC			L16047CWB	115.00	W07	NON	F		133.00	219.25	143.70	10.00	1-11261-155-0
PC1	15,014	8, 10, 12	L16177-TA	119.00	W18	NON	F	AX	133.00	219.25	143.70	10.00	1-11261-264-0
			L16177-VA	119.00	W18	NON	F	AX	133.00	219.25	143.70	10.00	1-11261-272-0
			L16177-UA	119.00	W18	NON	F	CA	133.00	219.25	143.70	10.00	1-11261-265-0
			L16177-WA	119.00	W18	NON	F	CX	133.00	219.25	143.70	10.00	1-11261-273-0
			L16177-RA	119.00	W18	NON	F		133.00	219.25	143.70	10.00	1-11261-076-1
			L16177-SA	119.00	W18	NON	F		133.00	219.25	143.70	10.00	1-11261-111-0
			L16177-FG	119.00	W18	NON	F		133.00	219.25	143.70	10.00	1-11261-143-2
			L16177-ME	119.00	W18	NON	F		133.00	219.25	143.70	10.00	1-11261-145-2, 1-11261-147-2
10PD1	16,683	10	L56017ABA	119.00	W18	NON	F	ID=AX	133.00	234.30	143.70	10.00	1-11261-282
			L56017BBA	119.00	W18	NON	F	ID=CX	133.00	234.30	143.70	10.00	1-11261-283
			L56017-BA	119.00	W18	NON	F		133.00	234.30	143.70	10.00	1-11261-161

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DAIHATSU DAIHATSU	Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
									Grade	B	C	D	E	
HINO	6WA1TC	12,068	6	L16520-WD	132.90	D02	F	F	1X	137.00	266.00	143.70	6.00	1-11261-362-1
				L16520-XD	132.90	D02	F	F	3X	137.00	266.00	143.70	6.00	1-11261-363-1
KOMATSU	E110	9,203	6	L12538-QA	125.00	W16	NON	F		140.00	281.30	147.00	11.00	9-11261-228-0
MITSUBISHI UD TRUCKS	6QA1	9,203	6	L12635-ZB	125.00	W16	NON	F		140.00	282.00	147.00	11.00	1-11261-061-1
TOYOTA MAZDA	D920	9,203	6	L12635AEA	125.00	W12	NON	F	AX	140.00	256.30	147.00	11.00	1-11261-335-0
				L12635AFA	125.00	W12	NON	F	CX	140.00	256.30	147.00	11.00	1-11261-336-0
				L12635-FC	125.00	W12	NON	F		140.00	256.30	147.00	11.00	9-11261-227-0
6QA1		11,044	6	L56019AHA	125.00	W16	DC	F	ID=AX	140.00	257.00	147.00	5.65	1-11261-290
				L56019ABA	125.00	W16	NON	F	ID=AX	140.00	257.00	147.00	5.65	1-11261-290
				L56019BHA	125.00	W16	DC	F	ID=CX	140.00	257.00	147.00	5.65	1-11261-291
				L56019BBA	125.00	W16	NON	F	ID=CX	140.00	257.00	147.00	5.65	1-11261-291
				L56019-HA	125.00	W16	DC	F		140.00	257.00	147.00	5.65	1-11261-160
6RA1 6RB1		13,741	6	L12760ADA	135.00	D02	F	F	1	141.00	264.00	146.70	6.00	1-11261-204-0
				L12760AEA	135.00	D02	F	F	2	141.00	264.00	146.70	6.00	1-11261-208-0
				L12760-VA	135.00	D02	F	F		141.00	264.00	146.70	6.00	1-11261-133-0
6RB1MTC		13,741	6	L12760ABC	132.90	D03	F	F	1	141.00	265.90	146.70	6.00	1-11261-202-0
				L12760ACC	132.90	D03	F	F	2	141.00	265.90	146.70	6.00	1-11261-203-0
				L12760-UC	132.90	D03	F	F		141.00	265.90	146.70	6.00	1-11261-116-0
6RB1X		13,741	6	L12760-ZB	135.00	D02	F	F	1	141.00	264.00	146.70	6.00	1-11261-288-0
				L12760AAB	135.00	D02	F	F	2	141.00	264.00	146.70	6.00	1-11261-289-0
				L12760-SC	135.00	D02	F	F		141.00	264.00	146.70	6.00	1-11261-105-1
6WG1UMTC		6		L16552-TA	142.90	D05	F	F	1X	151.50	267.00	158.30	6.00	1-11261-392-0
				L16552-UA	142.90	D05	F	F	3X	151.50	267.00	158.30	6.00	1-11261-393-0

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
6WG1TC	15,681	6	L16552-FC	147.00	D05	F	F	1X	151.60	267.00	158.30	6.00	1-11261-333-2
			L16552-PC	147.00	D05	F	F	1X	151.60	267.00	158.30	6.00	1-11261-379-2
			L16552-GC	147.00	D05	F	F	3X	151.60	267.00	158.30	6.00	1-11261-334-2
			L16552-QC	147.00	D05	F	F	3X	151.60	267.00	158.30	6.00	1-11261-380-2
V170	15,513	8	L12694-PB	145.00	W09	NON	F		164.00	238.80	173.00	10.10	9-11261-274-0



DAIHATSU DAIHATSU	Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
									Grade	B	C	D	E	
HINO	4D95	3,260	4	L65901ABA	95.00	D04	NON	F	OD=A	98.00	180.00	104.00	4.00	6207-21-2111
				L65901BBA	95.00	D04	NON	F	OD=B	98.00	180.00	104.00	4.00	6207-21-2121
KOMATSU	S6D102	5,900	6	L56904-AA	102.00	D01	NON	S		104.50	200.00	-	-	6736-21-2110
MITSUBISHI UD TRUCKS	S6D108	7,150	6	L66903-CA	108.00	D05	F	F	S, M, L	115.50	219.50	120.00	5.10	6121-21-2210, 6121-21-2220, 6121-21-2230
TOYOTA	S6D105	6,490	6	L56905-BA	105.00	W09	NON	F		118.70	223.00	127.00	10.10	6136-21-2210
MAZDA				L56905-CA	105.00	W09	F	F		118.70	223.00	127.00	10.10	6137-23-2211
	S6D125	11,040	6	L66902-CA	125.00	W09	F	F		141.50	256.30	153.00	10.20	6150-21-2221/2220

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
4DQ5	2,084	4	L55111-AA	84.00	D01	NON	S		87.00	162.50	-	-	30607-50301
4D56	2,476	4	L55113-AA	91.10	D01	NON	S		94.10	167.00	-	-	MD168963
4D55	2,346	4	L65112-AA	91.10	D01	NON	S		94.10	164.50	-	-	MD050430
4D56	2,476	4	L65101-AA	91.10	D01	NON	S		94.20	167.00	-	-	MD103648
			L65101-BA	91.10	D01	NON	F		94.20	167.00	-	-	MD168963
4DR51	2,659	4	L55114-AA	92.00	D01	NON	S		95.00	176.00	-	-	ME001245
S4S	3,331	4	L65104-AA	94.00	D01	NON	S		98.00	185.50	-	-	32A07-00300
S4E2	2,609	4	L55115-AA	98.00	D01	NON	S		101.70	168.50	-	-	34407-05400
4D31	3,298	4	L66102-AA	100.00	D01	NON	S		104.00	191.50	-	-	ME011604
S4K S6KT	6,380	4, 6	L66103-AA	102.00	D01	NON	S		105.00	196.00	-	-	34307-00501
4D32	3,567	4	L66116-AA	104.00	D01	NON	S		107.00	192.00	-	-	ME012900
6DS1	4,678	6	L12641-DD	95.00	W02	NON	F		108.00	191.20	115.00	10.00	ME020306
4D34	3,907	4	L66117-AA	104.00	D01	NON	S		108.00	197.50	-	-	ME013366
6DS7	5,430	6	L15203-AC OLD	98.00	W09	NON	F		110.00	201.20	117.00	10.00	ME021843
			L15203-BA NEW	98.00	W08	NON	F		110.00	206.20	117.00	10.00	ME029187
4D33	4,214	4	L66118-AA	108.00	D01	NON	S		112.00	198.00	-	-	ME013333
6D15T		6	L66113-CA	113.00	D03	F	F		117.00	206.00	125.00	8.00	ME071086
6D15T2	6,919	6	L66105ACA	113.00	D05	F	F	A	117.00	206.00	125.00	8.00	ME071090
			L66105BCA	113.00	D05	F	F	B	117.00	206.00	125.00	8.00	ME071091
			L66105CCA	113.00	D05	F	F	C	117.00	206.00	125.00	8.00	ME071092
			L66105-CA	113.00	D03	F	F		117.00	206.00	125.00	8.00	ME07089
6D10	5,974	6	L16128-AA	105.00	W04	NON	F		119.00	205.80	125.60	10.00	ME031502, ME031503, ME031504
6D14	6,557	6	L16131-AB	110.00	W13	NON	F		122.00	206.00	130.60	10.00	ME071178, ME071179, ME071180

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Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
6M60	7,545	6	L16641-AA (TCC-G-905)	118.00	D03	F	F	1A	122.00	210.50	128.00	8.00	ME071937
			L16641-BA (TCC-G-906)	118.00	D03	F	F	2A	122.00	210.50	128.00	8.00	ME071938
			L16641-CA (TCC-G-907)	118.00	D03	F	F	3A	122.00	210.50	128.00	8.00	ME071939
			L16641-DA (TCC-G-908)	118.00	D03	F	F	1B	122.00	210.50	128.00	8.00	ME071940
			L16641-EA (TCC-G-909)	118.00	D03	F	F	2B	122.00	210.50	128.00	8.00	ME071941
			L16641-FA (TCC-G-910)	118.00	D03	F	F	3B	122.00	210.50	128.00	8.00	ME071942
6D16	7,545	6	L16189AGA	118.00	D03	F	F	1A	122.00	206.00	128.00	8.00	ME041102
			L16189AKA	118.00	D03	F	F	1B	122.00	206.00	128.00	8.00	ME041105
			L16189AHA	118.00	D03	F	F	2A	122.00	206.00	128.00	8.00	ME041103
			L16189ALA	118.00	D03	F	F	2B	122.00	206.00	128.00	8.00	ME041106
			L16189AJA	118.00	D03	F	F	3A	122.00	206.00	128.00	8.00	ME041104
			L16189AMA	118.00	D03	F	F	3B	122.00	206.00	128.00	8.00	ME041107
6D16R	7,545	6	L16189-ZA	118.00	D02	F	F	1A	122.00	209.00	128.00	8.00	ME071225
			L16189ACA	118.00	D02	F	F	1B	122.00	209.00	128.00	8.00	ME071228
			L16189AAA	118.00	D02	F	F	2A	122.00	209.00	128.00	8.00	ME071226
			L16189ADA	118.00	D02	F	F	2B	122.00	209.00	128.00	8.00	ME071229
			L16189ABA	118.00	D02	F	F	3A	122.00	209.00	128.00	8.00	ME071227
			L16189AEA	118.00	D02	F	F	3B	122.00	209.00	128.00	8.00	ME071230
6D17	7,545	6	L16189AUA	118.00	D02	F	F	1A	122.00	209.00	128.00	8.00	ME071538
			L16189AXA	118.00	D02	F	F	1B	122.00	209.00	128.00	8.00	ME071541
			L16189AVA	118.00	D02	F	F	2A	122.00	209.00	128.00	8.00	ME071539
			L16189AYA	118.00	D02	F	F	2B	122.00	209.00	128.00	8.00	ME071542
			L16189AWA	118.00	D02	F	F	3A	122.00	209.00	128.00	8.00	ME071540
			L16189AZA	118.00	D02	F	F	3B	122.00	209.00	128.00	8.00	ME071543

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
6D14T		6	L66111-BA	110.00	W11	NON	F		122.00	211.00	131.00	10.00	ME071175
6DB	8,553	6	L66130-BA (L22557-AF)	110.00	W01	NON	F		125.00	270.00	135.00	11.80	30007-62200, ME040040
6D15T 6D15(OLD)		6	L66110-BA	113.00	W02	NON	F		125.00	211.00	133.00	10.00	ME071062
			L66112-BA	113.00	W09	NON	F		125.00	206.00	133.00	10.00	ME031655/56/57
65D15(NEW)			L56120-BA	113.00	W09	NON	F		125.00	206.00	133.00	10.00	ME071041/42/43/44
6D40	13,023	6	L16517APA	135.00	D03	F	F	1A	140.00	259.30	149.00	9.00	ME120025
			L16517ASA	135.00	D03	F	F	1B	140.00	259.30	149.00	9.00	ME120028
			L16517AQA	135.00	D03	F	F	2A	140.00	259.30	149.00	9.00	ME120026
			L16517ATA	135.00	D03	F	F	2B	140.00	259.30	149.00	9.00	ME120029
			L16517ARA	135.00	D03	F	F	3A	140.00	259.30	149.00	9.00	ME120027
			L16517AUA	135.00	D03	F	F	3B	140.00	259.30	149.00	9.00	ME120030
6D20	10,308	6	L16158-LA	125.00	W15	NON	F	A	143.00	261.30	153.00	11.50	ME051554
			L16158-MA	125.00	W15	NON	F	B	143.00	261.30	153.00	11.50	ME051555
			L16158-NA	125.00	W15	NON	F	C	143.00	261.30	153.00	11.50	ME051556
8DC2 6DC2		6, 8	L16021-AH	130.00	W10	NON	F		147.00	229.00	157.00	11.80	31107-02203/ME061158
6D22T	11,149	6	L16165BMA	130.00	W15	NON	F	A	147.00	261.81	156.00	11.50	ME051632
			L16165BSA	130.00	W15	DC	F	A	147.00	261.81	156.00	11.50	ME051644
			L16165BNA	130.00	W15	NON	F	B	147.00	261.81	156.00	11.50	ME051633
			L16165BTA	130.00	W15	DC	F	B	147.00	261.81	156.00	11.50	ME051645
			L16165BPA	130.00	W15	NON	F	C	147.00	261.81	156.00	11.50	ME051634
			L16165BUA	130.00	W15	DC	F	C	147.00	261.81	156.00	11.50	ME051646
8DC8	14,886	8	L16097-EB	135.00	W10	DC	F		154.00	229.30	163.00	11.80	31207-72183
8DC81 82	14,886	8	L56122-HA	135.00	W10	DC	F		154.00	229.70	163.00	11.80	ME062379/ME062597/98/99
8DC90	16,031	8	L56123-HA	135.00	W15	DC	F		154.00	259.70	163.00	11.80	ME091488/89

DAIHATSU HINO ISUZU KOMATSU MITSUBISHI UD TRUCKS TOYOTA MAZDA

DAIHATSU DAIHATSU	Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
									Grade	B	C	D	E	
HINO	8DC91	16,031	8	L56124-HA	135.00	W10	DC	F		154.00	259.70	163.00	11.80	ME062602/603/604
ISUZU	8DC81 82	14,886	8	L66122-BA	135.00	W10	NON	F		154.00	229.70	163.00	11.80	ME062379/ME062597/98/99
KOMATSU	8DC91	16,031	8	L66124-BA	135.00	W10	NON	F		154.00	259.70	163.00	11.80	ME062602/603/604
MITSUBISHI	8DC9	16,031	8	L66106-HA	135.00	W10	DC	F		155.00	259.30	163.00	11.80	ME061782
UD TRUCKS	8DC91	16,031	8	L66107-HA	135.00	W10	CF	F		155.00	259.70	163.00	11.80	ME062602
TOYOTA				L66107-FA	135.00	W10	DC	F		155.00	259.70	163.00	11.80	ME062602
MAZDA	8DC10	16,752	8	L66108-BA	138.00	W10	NON	F		155.00	259.70	163.00	13.40	ME062857
	8DC11	17,737	8	L66109-HA	142.00	W11	DC	F		161.00	259.50	163.00	15.00	ME060439
				L66109-FA	142.00	W11	DC	F		161.00	259.50	163.00	15.00	ME060439
				L66109-BA	142.00	W11	NON	F		161.00	259.50	163.00	15.00	ME060439
	6M7	13,023	6	L16517AVA	135.00	D03	F	F	1A	140.00	260.60	149.00	9.00	ME180960
				L16517AYA	135.00	D03	F	F	1B	140.00	260.60	149.00	9.00	ME180963
				L16517AWA	135.00	D03	F	F	2A	140.00	260.60	149.00	9.00	ME180961
				L16517AZA	135.00	D03	F	F	2B	140.00	260.60	149.00	9.00	ME180964
				L16517AXA	135.00	D03	F	F	3A	140.00	260.60	149.00	9.00	ME180962
				L16517BAA	135.00	D03	F	F	3B	140.00	260.60	149.00	9.00	ME180965

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
SD23/25	2,289	4	L55213-AA	88.50	D04	NON	S		92.00	172.00	98.00	5.00	11012-L2002/04
			L55213-BA	89.00	D04	NON	F		92.00	172.00	98.00	5.00	11012-L2002/04
TD23	2,289	4	L65201-AA	88.50	D04	NON	S		92.00	160.00	98.00	5.00	11012-02N45
			L65201-BA	89.00	D04	NON	F		92.00	160.00	98.00	5.00	11012-02N10
TD25	2,494	4	L55214-AA	92.40	D04	NON	S		95.90	160.00	101.90	5.00	11012-44G40
			L55214-BA	92.90	D04	NON	F		95.90	160.00	101.90	5.00	11012-44G10
TD25/BD25	2,289	4	L65202-AA	92.90	D04	NON	S		96.00	160.00	102.00	5.00	11012-44G10
TD27	2,664	4	L55215-AA	95.50	D04	NON	S		99.00	160.00	105.00	5.00	11012-43G45
BD30	2,953	4	L55226-BA	96.00	D02	NON	F		99.00	172.50	105.00	5.00	11012-54T00
TD42	4,169	6	L55228-BA	96.00	D02	NON	F		99.00	164.00	105.00	5.00	11012-06J00
TD27	2,664	4	L65203-AA	95.50	D04	NON	F		99.00	160.00	105.00	5.00	11012-43G10
FE6	6,925	6	L16618-DA	108.00	D05	F	F	0	111.00	217.00	116.00	8.00	11012-Z5604
			L16618-GA	108.00	D05	F	F	0	111.00	220.00	116.00	8.00	11012-Z5518
			L16618-EA	108.00	D05	F	F	1	111.00	217.00	116.00	8.00	11012-Z5604
			L16618-HA	108.00	D05	F	F	1	111.00	220.00	116.00	8.00	11012-Z5518
			L16618-FA	108.00	D05	NON	F		111.00	217.00	116.00	8.00	11012-Z5604
			L16618-JA	108.00	D05	NON	F		111.00	220.00	116.00	8.00	11012-Z5518
			L16618-AA	108.00	D05	F	F	0	111.00	212.00	116.00	8.00	11012-Z5616
			L16618-BA	108.00	D05	F	F	1	111.00	212.00	116.00	8.00	11012-Z5617
			L16618-KA	108.00	D05	F	F	2	111.00	212.00	116.00	8.00	
GH5/GH7	4,675 7,013		TCC-G-911	110.00	D03	NON	F	0	113.00	225.00	119.00	6.00	52214-09575
			TCC-G-912	110.00	D03	NON	F	1	113.00	225.00	119.00	6.00	52214-09575

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Fit for UD TRUCKS NISSAN / UD トラックス (NISSAN DIESEL / 日産ディーゼル)

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
ED33	3,298	4	L16133-KD	100.00	W08	DC	F	L	112.00	191.00	118.00	8.00	11012-T9067
			L16133-KD	100.00	W08	DC	F	M	112.00	191.00	118.00	8.00	11012-T9017
			L16133-KD	100.00	W08	DC	F	S	112.00	191.00	118.00	8.00	11012-T9007
			L56216-BA	100.00	W08	NON	F		112.00	191.00	118.00	8.00	11012-T9002
FD6	5,654	6	L66217-BA	100.00	W02	NON	F		112.00	212.00	118.00	8.00	11012-Z5001 11012-Z5002
ED33	3,298	4	L16133-PD	100.00	W08	DC	F	L	113.20	191.00	119.20	8.00	11012-02T60
			L16133-PD	100.00	W08	DC	F	M	113.20	191.00	119.20	8.00	11012-02T10
			L16133-PD	100.00	W08	DC	F	S	113.20	191.00	119.20	8.00	11012-02T00
FD35	3,465	4	L56226-BA	102.50	W02	NON	F		113.20	191.00	119.20	8.00	11012-01T13
ND(OLD)	6,842	6	L12656AJA	110.00	D05	NON	F		115.00	229.00	119.00	3.00	11012-95001 11012-95002
ND6	6,842	6	L12656AKA	110.00	D05	NON	F	0	115.00	229.00	121.00	3.00	11012-95065
			L12656ALA	110.00	D05	NON	F	1	115.00	229.00	121.00	3.00	11012-95066
NE/ NE6(H)	6,842	6	L12656-WC	110.00	D05	F	F	0	115.00	229.00	119.00	3.00	11012-95005
			L12656-XC	110.00	D05	F	F	1	115.00	229.00	119.00	3.00	11012-95006
NE6TA	7,000	6	L16534-SB	110.00	D03	F	F	0	115.00	229.00	121.00	3.00	11012-95063
			L16534-TB	110.00	D03	F	F	1	115.00	229.00	121.00	3.00	11012-95064
NF6	9,160	6	L66204-CA	120.00	D05	F	F		123.00	226.00	129.00	8.00	11012-95516
MD92	9,203	6	L66230-BA	125.00	D05	NON	F		129.00	200.00	135.00	8.00	11012-Z6008
PD6	10,308	6	L12568-MB	125.00	D05	NON	F	0	130.00	259.00	134.00	3.00	11012-96009
			L12568-MB	125.00	D05	NON	F	1	130.00	259.00	134.00	3.00	11012-96010
			L12568-MB	125.00	D05	NON	F	2	130.00	259.00	134.00	3.00	11012-96011

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
PE6 PE6T PF6	11,670 12,503	6	L16701-AB	133.00	D05	NON	F		138.00	259.00	144.00	3.00	11012-96565 11012-96575 11012-96576
			L16701-BB	133.00	D05	F	F		138.00	259.00	144.00	3.00	11012-96565 11012-96575 11012-96576
PE6	11,670	6	L66205-BA	133.00	D05	NON	F		138.00	259.00	142.00	3.00	11012-96500
PE6 PE6T	11,670	6	L66206-BA	133.00	D05	NON	F		138.00	259.00	142.00	3.00	11012-96561 11012-96562
			L66223-BA	133.00	D05	NON	F		138.00	259.00	144.00	3.00	11012-96607
RE8	15,115	8	L56224-BA	135.00	W09	NON	F		153.00	236.00	161.00	11.20	11012-97202
RD8	14,313	8	L56225-GZ	135.00	W09	CF	F		153.00	243.00	161.00	8.20	11012-97063
			L56225-HA	135.00	W09	DC	F		153.00	243.00	161.00	8.20	11012-97062
			L66214-BZ (L56225-BA)	135.00	W09	NON	F		153.00	243.00	161.00	8.20	11012-97025
RE8	15,115	8	L66208-BA	135.00	W09	NON	F		154.00	238.00	161.00	11.10	11012-97161
			L66208-GA	135.00	W09	DC	F		154.00	238.00	161.00	11.10	11012-97161
RF8	16,991	8	L66210-GA	138.00	W09	DC	F		160.00	235.80	167.00	12.30	11012-97164
			L66210-BA	138.00	W09	NON	F		160.00	235.80	167.00	12.30	11012-97164
			L66211-GA	138.00	W09	DC	F		160.00	235.80	167.00	12.30	11012-97178
			L66211-BA	138.00	W09	NON	F		160.00	235.80	167.00	12.30	11012-97178
RG8	17,991	8	L66212-GA	142.00	W10	DC	F		160.00	236.00	167.00	12.30	11012-97219
			L66212-BA	142.00	W10	NON	F		160.00	236.00	167.00	12.30	11012-97219
RH8 RH10	21,205 26,507	8, 10	L16638-AA	150.00	D03	NON	F	0	153.00	246.20	161.00	8.00	11012-97261
			L16638-BA	150.00	D03	NON	F	1	153.00	246.20	161.00	8.00	11012-97262

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Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-face	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
2C	1,974	4	L55307-AA	86.00	D01	NON	S		90.00	158.00	-	-	11461-64060
2J(OLD)	2,481	4	L65301-AA	88.00	D01	NON	S		92.00	183.00	-	-	11461-48010
2J(NEW)	2,481	4	L65302-AA	88.00	D01	NON	S		92.00	184.00	-	-	11461-48011
L	2,188	4	L15287-FA	89.60	D03	NON	S		94.00	160.50	101.00	3.50	11461-54010
			L15455-AA	90.00	D03	NON	F		94.00	160.50	101.00	3.50	11461-54010
2H	3,980	6	L55308-AA	91.00	D03	NON	S		95.00	184.00	100.80	2.55	11461-68010
2L	2,446	4	L55309-AA	92.00	D01	NON	S		96.00	176.00	-	-	11461-54060
1HZ	4,163	6	L65303-AA	94.00	D01	NON	S		98.00	190.20	-	-	11461-17010
11B	2,977	4	L55310-BA	94.50	D03	NON	S		99.00	191.20	105.00	2.50	11461-56030
			L55310-AA	95.00	D03	NON	F		99.00	191.20	105.00	2.50	11461-56030
3L	2,779	4	L55312-AA	96.00	D02	NON	S		100.00	180.00	105.00	3.50	11461-54100
			L55313-AA	96.00	D02	NON	S		100.00	180.00	105.00	3.50	11461-54120
B	2,977	4	L65311-AA	95.00	D03	NON	F		100.00	190.20	108.00	2.50	11461-56010
			L15456-AB	94.60	D03	NON	S		102.00	190.20	108.00	2.50	11461-56020
2B	3,168	4	L55314-AA	98.00	D03	NON	S		102.00	190.20	108.00	2.50	11461-57010
13B	3,431	4	L66304-AA	101.60	D03	NON	S		106.00	190.20	111.70	2.50	11461-58020
3B	3,431	4	L66315-AA	102.00	D03	NON	S		106.00	187.70	112.00	2.50	11461-58010
14B	3,660	4	L66316-AA	101.60	D01	NON	S		106.00	200.00	-	-	11461-58040
2D	6,494	6	L12248-KA	105.00	W11	NON	F		115.50	233.30	121.00	10.00	11461-77021, 11461-77041
			L12248-AB	105.00	W11	NON	F		115.50	242.00	120.00	10.00	SL2248E

Engine Type	Exhaust quantity (c.c.)	Cyl No.	NPR Product Code	Bore/A	Type	Sur-fac-e	Finish/Semi	Size (mm)					Reference
								Grade	B	C	D	E	
PB	987	4	L15289-AA	68.00	W19	NON	F		77.00	125.00	87.95	8.50	0249-10-311
R2B6	2,148	4	L15577-RC	86.00	D02	F	F	WHITE	89.00	163.35	94.00	2.85	R2B6-10-311B R2B6-10-312B R2B6-10-313B
			L15577-SC	86.00	D02	F	F	YELLOW	89.00	163.35	94.00	2.85	R2B6-10-3B7B
RFT	2,000	4	L15614-SA	86.00	D02	F	F	WHITE	89.00	155.35	94.00	2.85	RFJ5-10-313B
			L15614-TA	86.00	D02	F	F	YELLOW	89.00	155.35	94.00	2.85	RFJ5-10-3B7B
XA	2,552	4	L55908-BA	88.90	D03	NON	F		96.90	189.00	101.00	3.80	S501-23-051
HA	2,977	4	L55909-BA	95.00	D03	NON	F		98.50	191.00	103.50	3.80	SE01-23-051
SLA1	3,500	4	L16191BUB	100.00	D03	F	F	RED	103.00	193.70	108.00	2.50	SLY0-10-313
			L16191BVB	100.00	D03	F	F		103.00	193.70	108.00	2.50	SLY0-10-311
SL	3,500	4	L16191AKB	100.01	D03	F	F	GREEN	103.50	193.70	108.00	2.50	SL01-23-312
			L16191AJB	100.01	D03	F	F	RED	103.50	193.70	108.00	2.50	SL01-23-311
TF01	4,021	4	L16238ACC	105.50	D03	F	F	GREEN	109.00	200.00	114.50	6.00	TFY0-10-311
			L16238ABC	105.50	D03	F	F	RED	109.00	200.00	114.50	6.00	TFY0-10-313
TM	4,553	4	L56910ACA	109.00	D03	F	F	A	112.50	202.50	118.00	6.00	TMY0-10-311
			L56910BCA	109.00	D03	F	F	B	112.50	202.50	118.00	6.00	TMY0-10-313

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