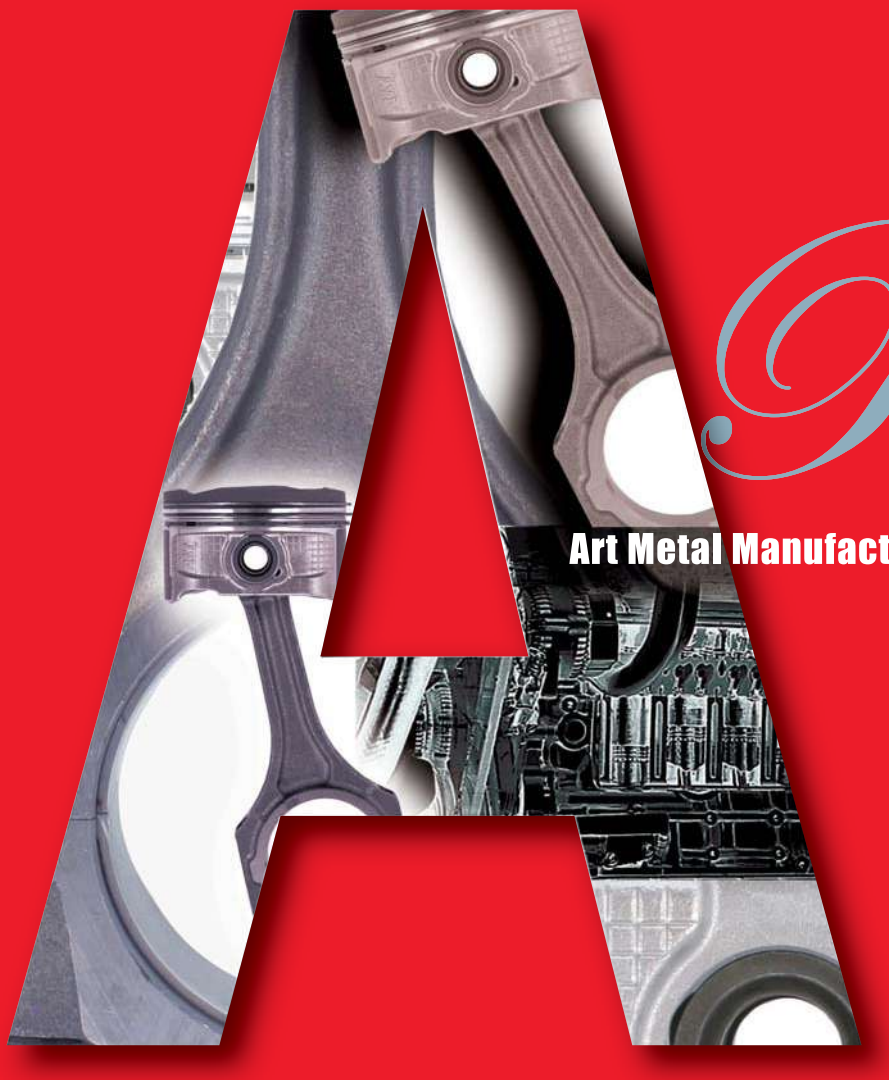
PISTON CATALOG
2024-2026

Vol.8



Art Metal Manufacturing

Corporate Profile

Certificate IATF 0201837
Certificate SGS JP15/062693.02

Certificate JP14/071354.00

☐Company Name	ART METAL MFG.CO.,LTD.
☐Established	1917
☐Incorporated	December 1 , 1945
☐Capital	2,397 Million Japanese Yen
☐Products	Pistons for internal combustion engine and piston pins
☐Head Quarter	2-2-43, Tokiwagi, Ueda, Nagano, Japan



Ueda Head Office



Shioda Plant



Yamada Plant



Pistons for gasoline and diesel engine and pins

History

1917 : Established ART-SHOKAI in Tokyo
1932 : Started mass production of pistons for internal combustion engines
1943 : Factory evacuation to Ueda, Nagano
1945 : Changed company name as ART METAL MFG. CO., LTD.
1964 : Established Tateshina Metal in Kitasaku-gun, Tateshina
1974 : Established ART-SERINA PISTON (ASP) in Thailand
1980 : Established Yamada Plant in Yamada, Ueda
1986 : Established Asama Piston in Asashina, Kitasaku-gun
1993 : Established Shioda Plant and R & D Center in Ueda
1996 : Established Shioda Plant No.2
1998 : Obtained ISO9001 certification
2001 : Obtained ISO14001 certification
2002 : Established ANQING ART TP PISTONS (AAT) in China
2004 : Obtained ISO/TS16949 certification
2005 : Expanded Shioda Plant No.2
2011 : Established PT. ART PISTON INDONESIA (API) in Indonesia
2017 : 100th Anniversary, Business integration with Aisin Seiki Co.
2018 : Expanded Shioda Plant No.2
"Corresponded to transfer product from AISN Nishio plant"

Let us introduce "ART" piston!

"ART" offers the world-class pistons manufactured in a consistent production process based on original research and technology.



"ART" has been performing well in many engines all over the world. We believe that it is the mission of "ART" to obtain even higher trust in external and internal piston market with advanced technology.

－What ART aims－

○We manufacture creative, high quality and high performance piston to meet the functions required to automobiles such as global scale environmental issues and improvement of safety and comfort.
○We always go ahead of the trend such as lower fuel consumption and higher output.
○Our pistons are widely used in passenger cars, commercial vehicles, outboard motors, general-purpose equipment, and racing.
○We are committed to create reliable pistons with manufacturing spirit and continuous research and development.
○We aim higher evaluation not only in domestic but also in world market with sales activities in global market and technical assistant agreement with maker abroad.

－Effort to quality－ ～To provide our pistons to satisfy customer's trust～

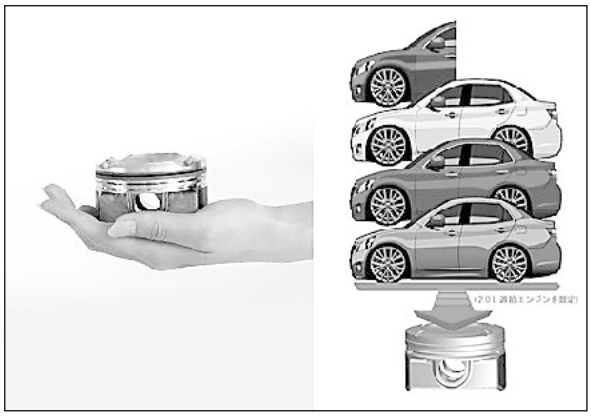
○We regard that importance of guaranteeing quality is not originated from inspection but from manufacturing
○Support manufacturing in a thorough quality control system
○Consider from the manufacturing side with prompt response to make quality better
○Manufacture excellent product with globally shared production system and quality information establishing standardized quality system
○Construct technology to create non-defective products based on the concept of self-process completion.



"ART" provides authentic pistons with high performance!

What is a piston ?

It is one of the prime components for converting combustion (thermal) energy into kinetic one in an internal combustion engine. In engines, pistons are required to be tough and delicate while moving at high speed of thousands revolutions per minute, Which is exposed to high pressure of exceeding 10MP with high temperature exceeding 300℃. Furthermore, most of the pistons for passenger cars are small and palm-size, but the combustion load per piece is equivalent to several car's weight.

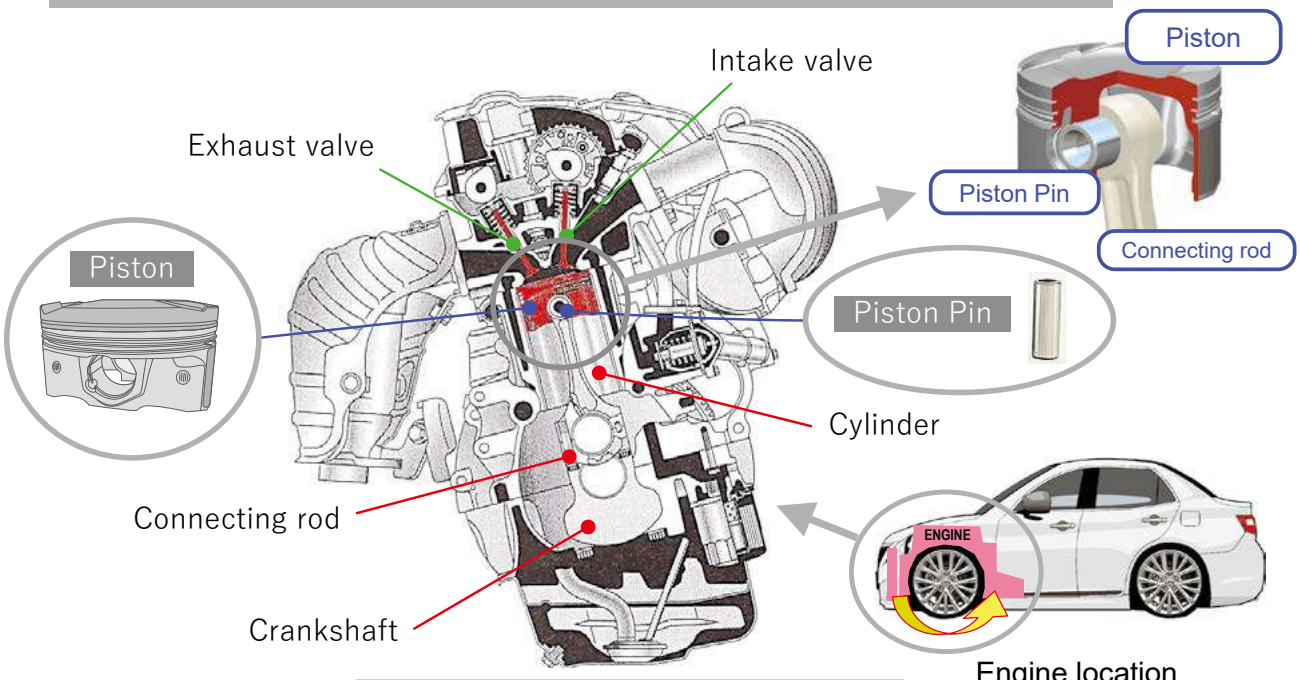


What is the role of pistons?

Pistons are mechanical parts used for internal combustion engines, gasoline and diesel. By the combustion of the air-fuel mixture in the cylinder, piston receives the gas expansion pressure, and moves to the direction to increase the volume inside the cylinder.

Piston is the foremost important part of the engine. Absolute accuracy in design, profile, dimension and material are required to play important roles in engines.

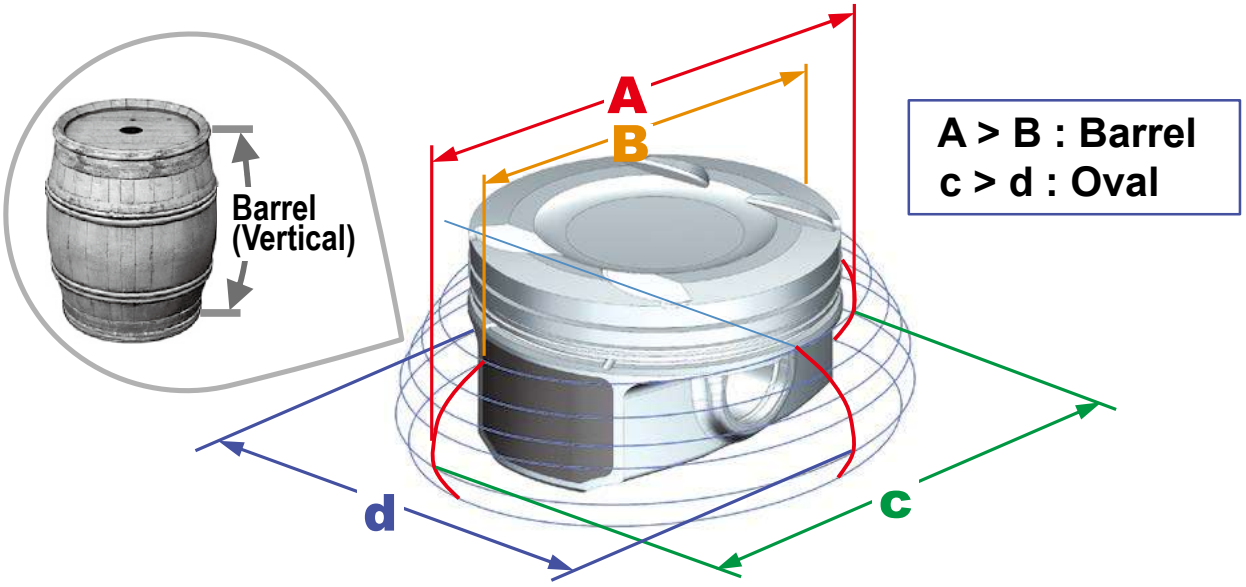
Where are pistons and piston pins mounted?



Engine cross-section view

Engine location

What is a piston profile?

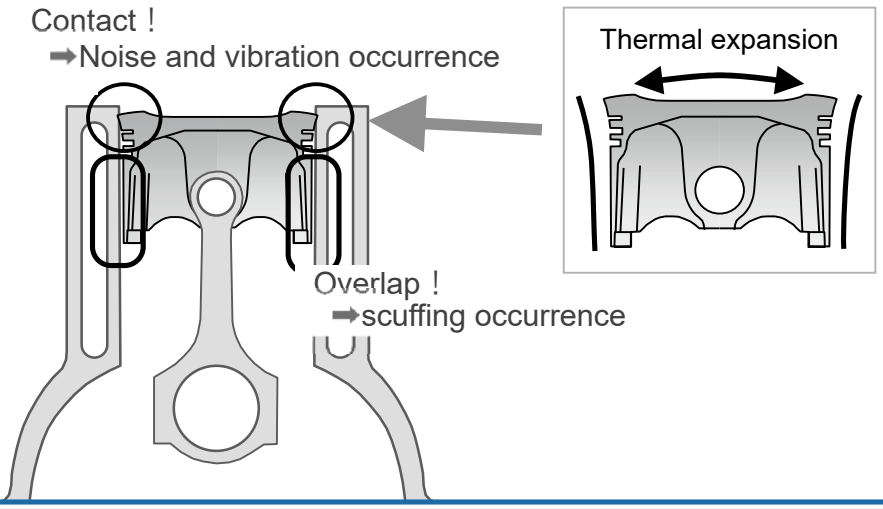


A > B : Barrel
c > d : Oval

The outskirts of piston is carved shape

Why piston profile needs to be curved?

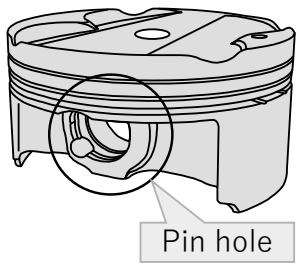
Interference with the cylinder due to thermal expansion

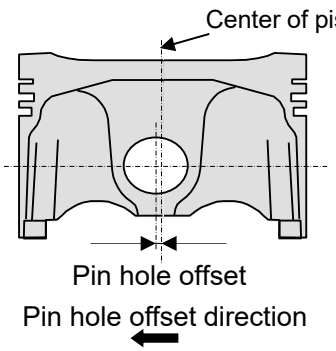


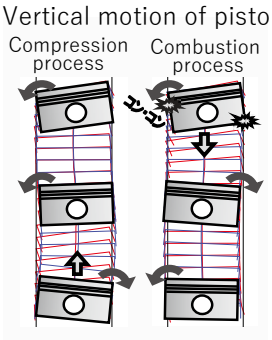
Profile is adjusted not to interfere thermally expanded piston and cylinder wall while engine in operation.

Pin hole position is not at the center of piston

Pin hole is **offset (deviated)** from the center of piston.
Why piston has **offset** at pin hole?



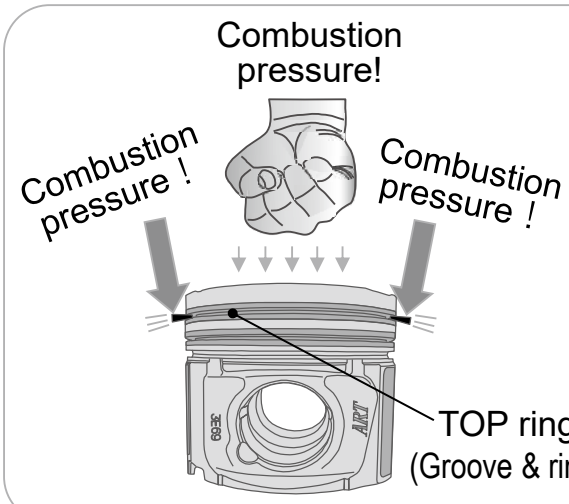


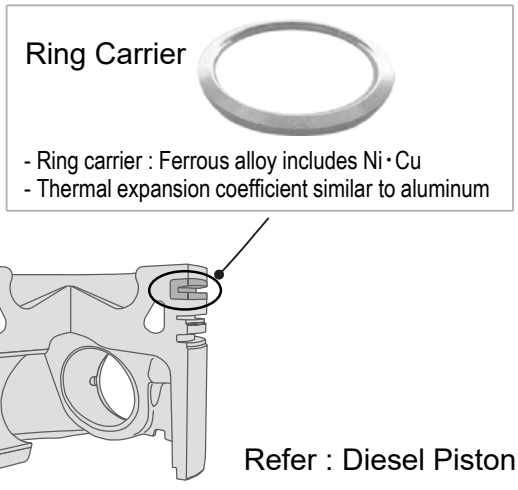


➡Smooth piston movement and reduced noise and vibration

What is ring carrier (Alfin) ? And what's that for ?

Combustion pressure gives heavy load to TOP ring and Top ring groove is worn out.



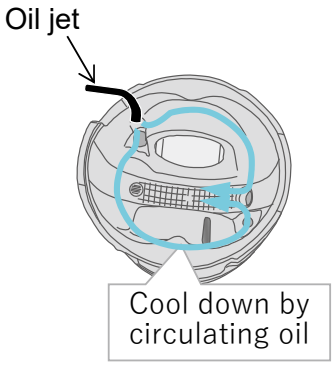


➡Ferrous alloy ring carrier (Alfin process) is mounted to reinforce the durability of TOP ring groove.

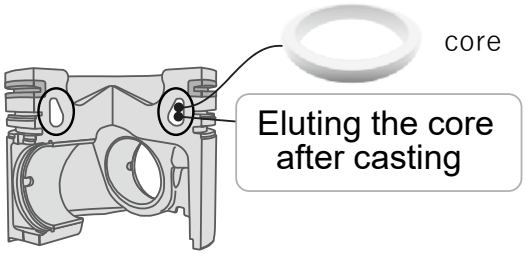
Aluminizing treatment (Alfin process) is applied to the ring carrier surface during casting to enhance fusion adhesion with the piston

What's piston cooling channel ? And what's that for ?

Higher power increases piston temperature
➡Lower material strength



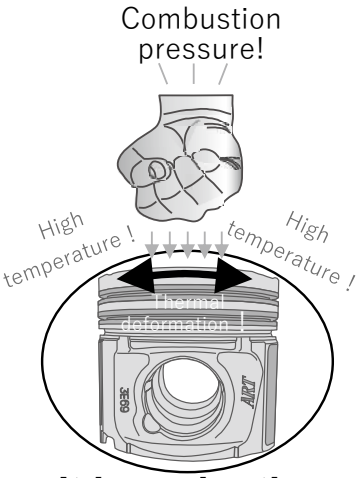

Oil flow in CAE



Refer : Diesel Piston
High performance gasoline

Circulates oil through the cooling cavity of the piston head to reduce piston temperature
➡Reduce loss of material strength

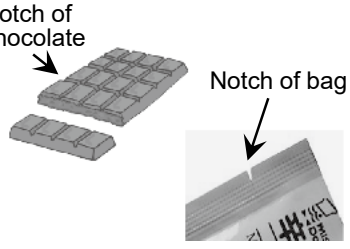
Casting defect and machining scratch can cause the engine problem !



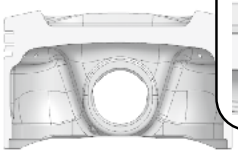
It is under the severe condition !

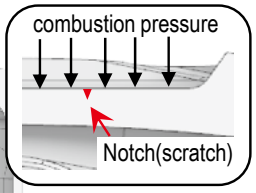
Scratches on the surface of the piston can cause the piston to break.

For example

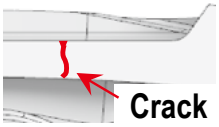


Easy to cut









Broken!

Piston is delicate and fragile…
Please handle with utmost care!

Efforts to Eliminate Casting Defects

Like surface scratches, casting defects can cause pistons to break

Example of casting defect detection by "CT"

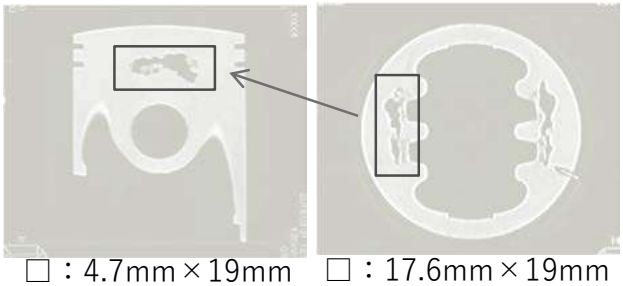


No problem at appearance



Internal quality inspection by "CT"

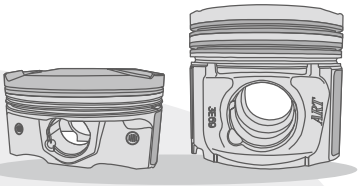
Detail of casting defect



□：4.7mm×19mm　□：17.6mm×19mm

Defect Piston evaluated by "CT"

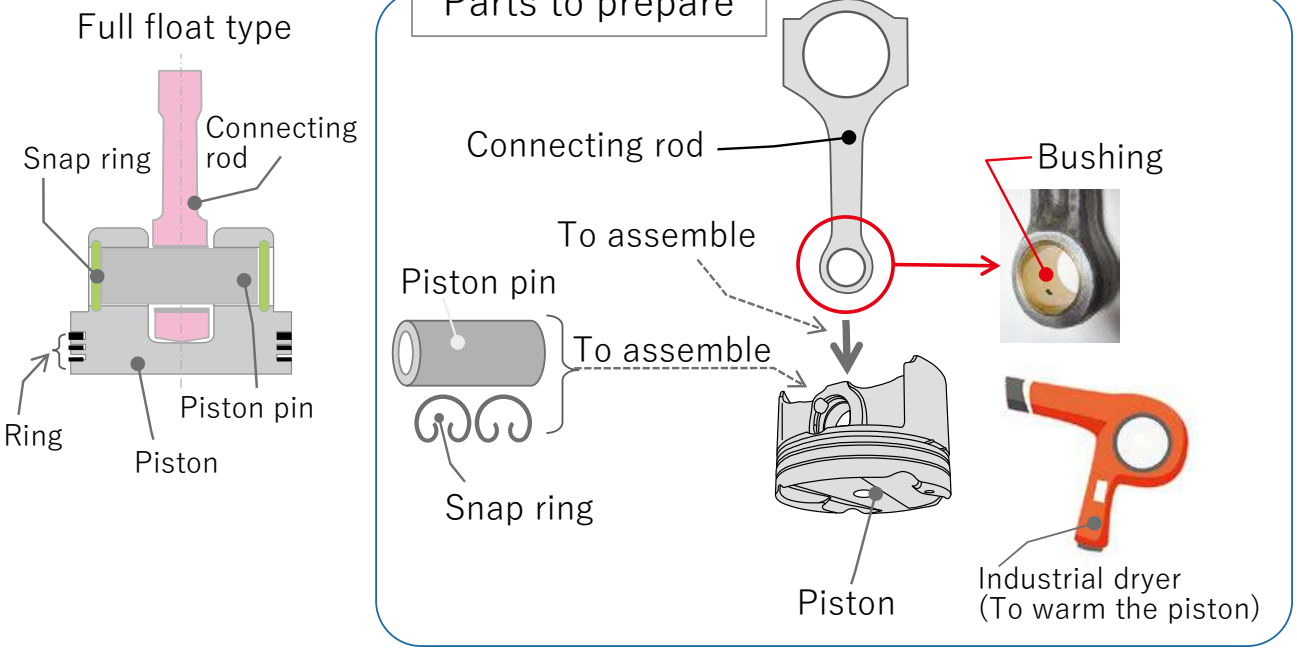
Piston should not have any defects



➡Optimized manufacturing conditions and supply high quality pistons

"ART" regards that importance of guaranteeing quality is not originated from inspection but from manufacturing
→Support manufacturing in a thorough quality control system

Assembling connecting rod and snap ring to (★)full float type piston



①Most of the Full Float Type Pistons are designed that the size of diameter for Pin Hole is smaller than the size of diameter for Piston. Therefore, there is a possibility of Piston Pin to be damaged and Pin Hole when these are assembled at room temperature. To avoid the risk, please warm Pin Hole by following process to expand the diameter of Pin Hole, and then you can insert Piston Pin properly.

②Apply engine oil to Piston Pin Hole, Piston Pin and a small end of Connecting Rod (Bush side)

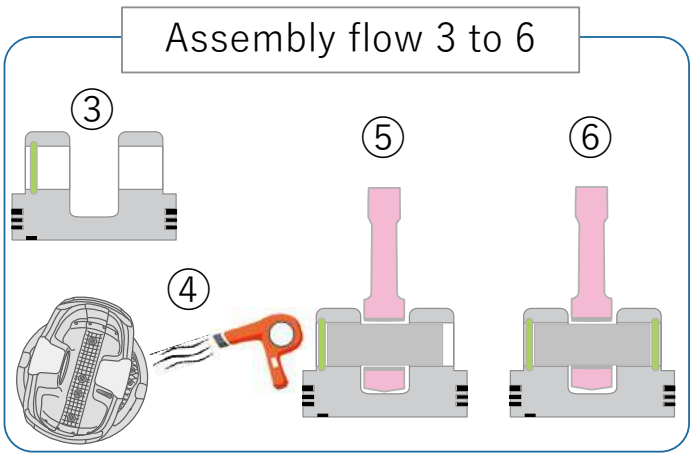
③Insert snap ring to only one side groove to lock Snap Ring.

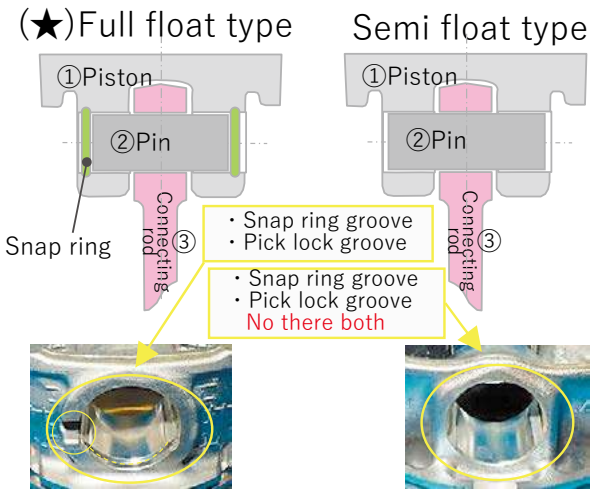
④Use an industrial dryer to warm the area near Pin Hole.

⑤Assembling Piston which rings are attached, Piston Pin and Connecting Rod.

⑥Insert snap ring to the other side groove for.

④Temperature of the area would reach around 120 °C when you warm up near Pin Hole for about 5 minutes with Dryer that is set at around 250 °C, then Piston Pin can be inserted properly.

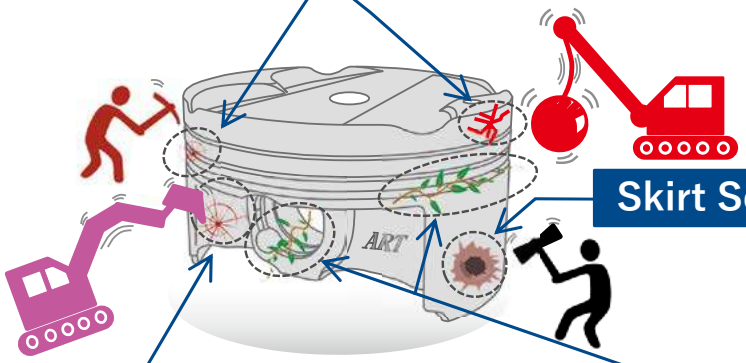




Piston handling carefully

WARNING TO PISTON

Ring & land : Scratch or Notch → No good



Skirt Scratch→No good

Side relief : Scratch or Notch →No good

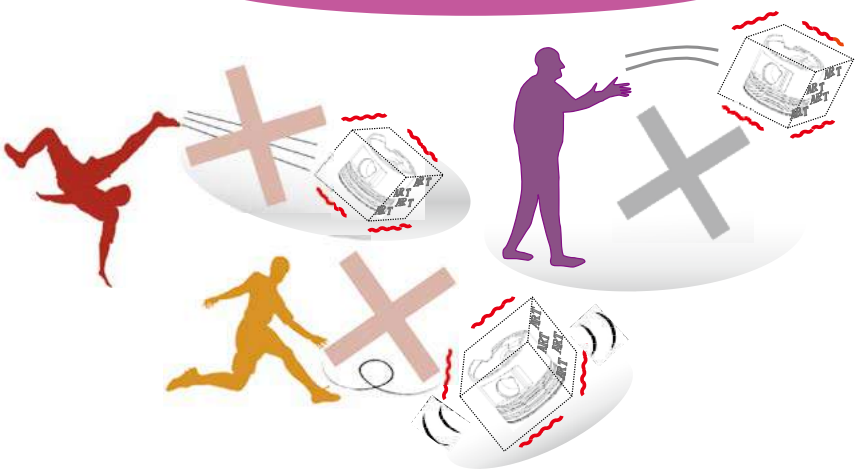
Pin Bore & Ring groove :Harmful matter→No good

FRAGILE

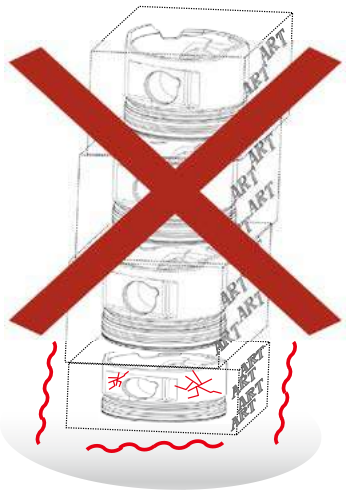


·HANDLE WITH CARE ·KEEP DRY ·DON'T STACK OR DROP

Kick & Throw→ NG

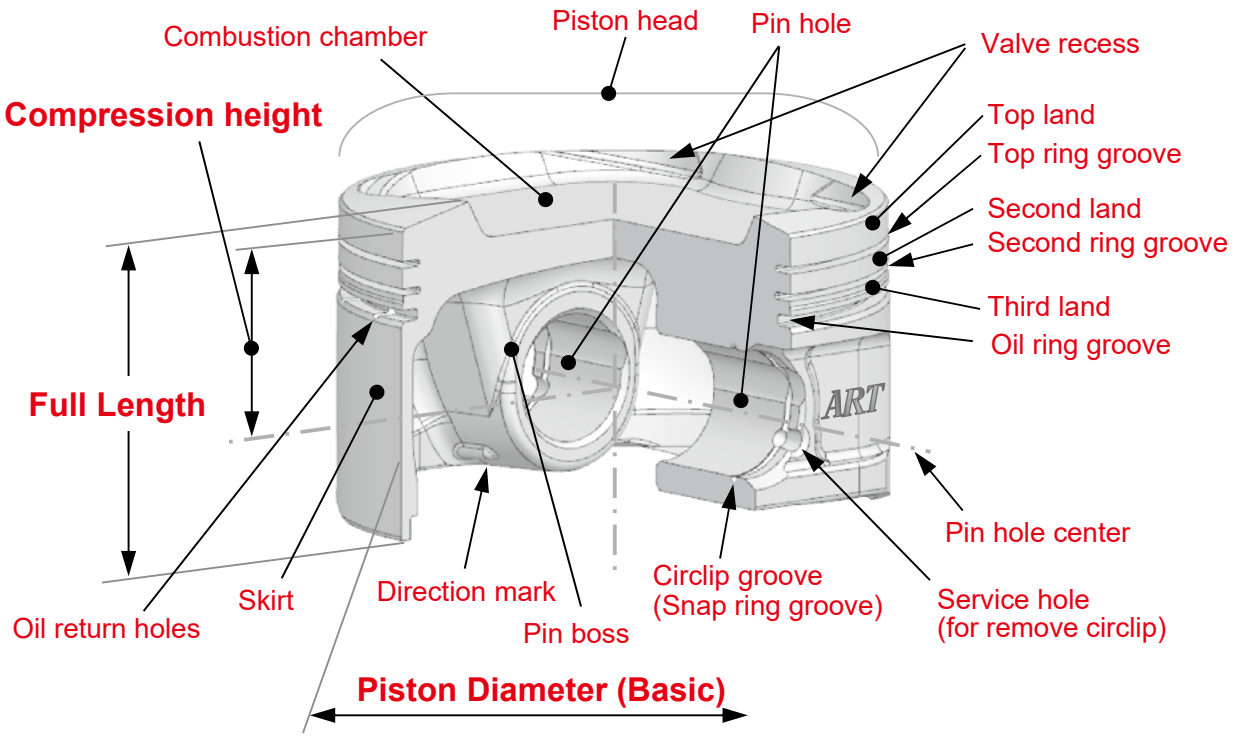


Don't stack

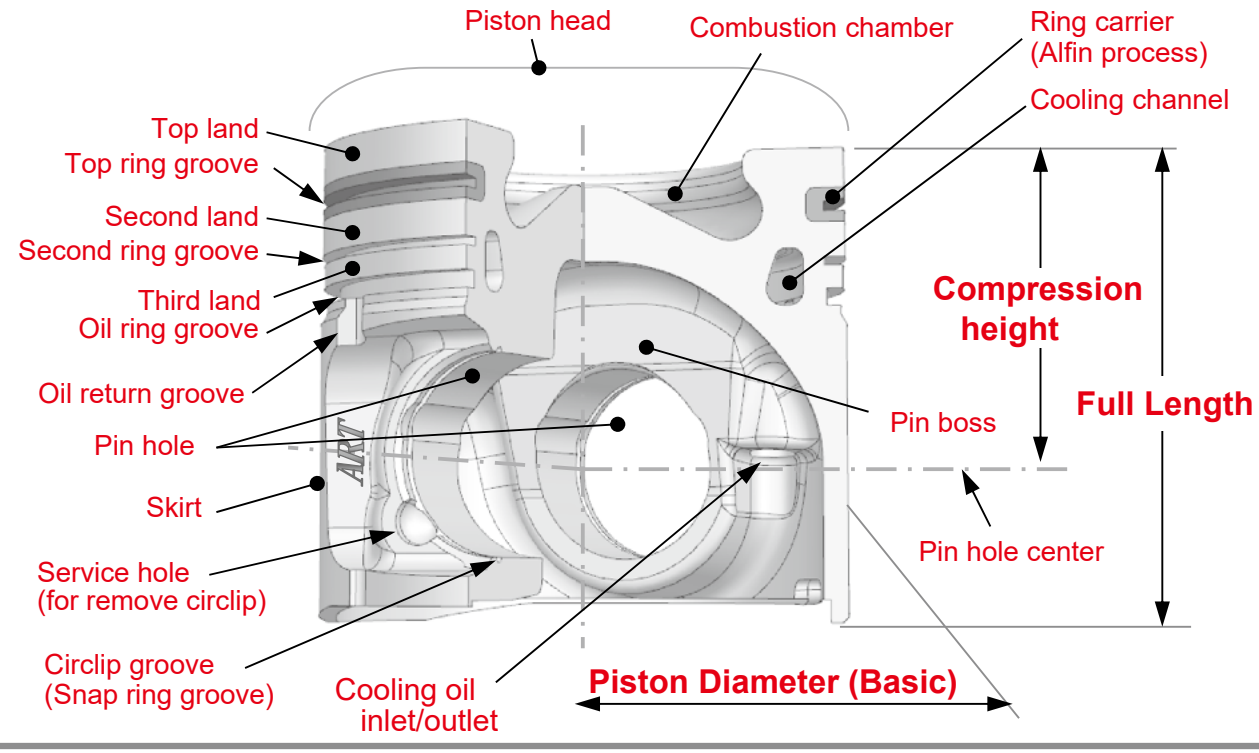


Piston parts name

◇ Gasoline Piston ◇



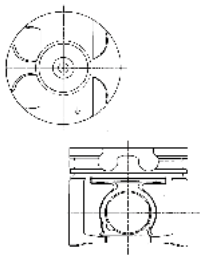
◇ Diesel Piston ◇



◆ CATALOG GUIDANCE

① for TOYOTA Automobile

"ART"

No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	⑦ Vehicle Model	⑧ Full Length / Comp. Height / Surface Treatment	Piston: Alfin ⑨ Strut / Cooling Channel	⑩ Ring Groove	Pin Piston ⑪ Circlip	⑫ Piston Shape
58	②2KD ③4cyls ④92.0mm	⑤TO4D36WA ⑥13101-30030 13101-30031	Hiace,Hilux Fortuner,Innova 2,494cc	82.2 54.23 Tin	○ – ○	Top : 2.0 2nd : 1.5 Oil : 3.0	34.0×65.0 Wire	

① Manufacturer
② Engine Type
③ Number of Cylinders
④ Piston Diameter(mm)
⑤ ART Part No.
⑥ Genuine Part Number
⑦ Vehicle Model, c.c.
⑧ Piston Dimension, Surface Treatment
⑨ Piston specification
⑩ Piston Ring Dimension
⑪ Piston Pin Dimension
⑫ Piston Shape

◆ EXPLANATION OF ART PART NUMBER

①	②	③	④	⑤	⑥
TO	4	D	36	W	A

① Manufacturer's Name

DA=for DAIHATSU
DW=for DAEWOO
HD=for HYNDAI
HI=for HINO
HO=for HONDA
IS=for ISUZU
KA=for KIA
KO=for KOMATSU
KU=for KUBOTA
MA=for MAZDA
MI=for MITSUBISHI
NI=for NISSAN
SU=for SUZUKI
TO=for TOYOTA

② Number of Cylinders
1=1-Cylinder
3=3-Cylinders
4=4-Cylinders
6=6-Cylinders
8=8-Cylinder

③ Gasoline or Diesel
G=Gasoline
D=Diesel

④ Numbers
01-99

⑤ Piston with pin or Piston only
W=Piston with pin
B=Piston only

⑥ A=Alfin type

Index

For DAIHATSU Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	18	DA3G07W	ED	66.6mm	13101-87255		
2	18	DA3G01W	CD	70.0mm	13101-87717		
3	18	DA4G06W	K3	72.0mm	13101-BZ030		
4	18	DA4G08W	K3-VE	72.0mm	13101-BZ110		
5	18	DA4G09W	K5	72.0mm	13101-BZ060	13101-BZ100	
6	19	DA3G02W	CB	76.0mm	13101-87703	13101-87704	
7	19	DA3G04W	CB	76.0mm	13101-87713	13101-87724	13101-87729
8	19	DA3G03W	CD	76.0mm	13101-87711		
9	19	DA4G05W	HC	76.0mm	13101-87105		
10	19	DA4D01W	DG	88.0mm	13101-87306	13101-87309	
11	20	DA4D02W	DL	92.0mm	13101-87314	13101-87315	13101-87316
12	20	DA4D03W	DL	92.0mm	13101-87325	13101-87327	

For HINO Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	21	HI6D01W	EH700	110.0mm	13216-1181-G		
2	21	HI6D02WA	H07D	110.0mm	13216-2260		
3	21	HI6D03WA	J08C	114.0mm	13216-2631		

For HONDA Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	22	HO1G13B	ZH7	60.0mm	13101-ZH7-010		
2	22	HO1G14B	ZH8	68.0mm	13101-ZH8-010		
3	22	HO4G04W	PA1	72.0mm	13101-PA1-010		
4	22	HO4G15W	P2A	75.0mm	13010-P2A-000		
5	22	HO4G11W	EK1	77.0mm	13101-689-000		

For KOMATSU Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	23	KO4D01W	4D95-3	95.0mm	6204-31-2121		
2	23	KO6D02WA	S6D95	95.0mm	6207-31-2141		
3	23	KO6D03WA	6D95	95.0mm	6207-31-2180		
4	23	KO6D04WA	S6D108	108.0mm	6222-33-2110		

For ISUZU Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	24	IS4G01W	G161Z	82.0mm	8-94200-645-0		
2	24	IS4D01W	C221-5	83.0mm	5-12111-065-0		
3	24	IS4G03W	G180Z	84.0mm	8-94201-040-0		
4	24	IS4G05W	C22N	86.0mm	8-92064-306-0		
5	24	IS4D04W	C190	86.0mm	5-12111-203-0		
6	25	IS4D05WA	C190-3G	86.0mm	5-12111-225-0		
7	25	IS4D05W	C190-3G	86.0mm	5-12111-225-0		
8	25	IS4D06W	C240-4	86.0mm	5-12111-064-0		
9	25	IS4D07W	C240-5	86.0mm	9-12411-834-0		
10	25	IS4G04W	G200Z	87.0mm	8-94237-469-1		
11	26	IS4D08WA	C223	88.0mm	8-94250-729-0		
12	26	IS4D09WA	4JA1	93.0mm	8-94369-281-0		
13	26	IS4D17WA	4JA1	93.0mm	8-97176-600-0		
14	26	IS4D21WA	4JA1	93.0mm	8-97942-985-0		
15	26	IS4D10WA	4JB1	93.0mm	8-94433-177-1		
16	27	IS4D30WA	4JB1	93.0mm	8-97176-606-0	8-97108-622-2	
17	27	IS4D28WA	4JB1-T	93.0mm	8-97176-610-0		
18	27	IS4D33WA	4JJ1	95.4mm	8-97367-398-1		
19	27	IS4D34WA	4JK1	95.4mm	8-97355-672-2		
20	27	IS4D11W	4BA1	98.0mm	5-12111-055-1	8-97176-626-0	
21	28	IS4D31WA	4BA1	98.0mm	5-12111-055-0		
22	28	IS4D12W	4BC2	102.0mm	5-12111-230-4		
23	28	IS4D13WA	4BC2N	102.0mm	8-94169-765-0		
24	28	IS4/6D25WA	4/6BD1	102.0mm	1-12111-303-1	1-12111-240-0	
25	28	IS4D26WA	4BD1-T	102.0mm	8-94321-734-0	8-94175-027-2	
26	29	IS4D15WA	4BE1	105.0mm	8-94438-989-0		
27	29	IS4D15W	4BE1	105.0mm	8-94438-989-0		
28	29	IS4D29WA	4BE1	105.0mm	8-94478-116-0	8-97176-649-1	
29	29	IS6D27WA	6BG1	105.0mm	1-12111-781-1	1-12111-528/529-0	
30	29	IS4D16WA	4HF1	112.0mm	8-97176-655-0	8-97095-585-0	

31	30	IS4D19WA	4HF1T	112.0mm	8-97176-657-0	8-97183-667-0	
32	30	IS4D23WA	4HF1	112.0mm	8-97176-654-0	8-97176-867-0	
33	30	IS4D20WA	4HG1	115.0mm	8-97183-666-0		
34	30	IS4D22WA	4HG1T	115.0mm	8-97219-032-0		
35	30	IS4D32WA	4HK1	115.0mm	8-98041-141-0		
36	31	IS6D35WA	6SD1TC	120.0mm	1-12111-9960		

For MAZDA Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	32	MA4G01W	PB	68.0mm	0259-23-200		
2	32	MA4G04W	TC	73.0mm	0370-23-200		
3	32	MA4G07W	E3	77.0mm	E301-23-200		
4	32	MA4G08W	E3N	77.0mm	E302-23-200		
5	32	MA4G09W	E5	77.0mm	E501-23-200		
6	33	MA4G10W	E5N	77.0mm	E502-23-200		
7	33	MA4G11W	NA	78.0mm	0305-23-200A		
8	33	MA4G12W	NA	78.0mm	H601-23-200		
9	33	MA4G13W	NA-N	78.0mm	H602-23-200		
10	33	MA4G14W	VC	80.0mm	0453-23-200		
11	34	MA4G15W	VC	80.0mm	H801-23-200		
12	34	MA4G16W	MA-N	80.0mm	HE01-23-200		
13	34	MA4G17W	F6	81.0mm	F605-23-200		
14	34	MA4G18W	VA	82.0mm	0553-23-200		
15	34	MA4G19W	F8	86.0mm	F801-23-200		
16	35	MA4G20W	FE	86.0mm	FE01-23-200		
17	35	MA4D06WA	WL	93.0mm	WLY1-11-SA0		
18	35	MA4D03WA	HA	95.0mm	SE01-23-200A		
19	35	MA4D04W	HA	100.0mm	SL07-23-200B		
20	35	MA4D05WA	SL01	100.0mm	SL01-23-200A		

For NISSAN Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	36	NI4G35W	GA13	71.0mm	A2010-72Y00		
2	36	NI4G02W	A12	73.0mm	12010-H1011	12010-H1061	
3	36	NI4G36W	GA14	73.5mm	A2010-73Y00		
4	36	NI4G04W	E15	76.0mm	12010-11M22		
5	36	NI4G07W	A14	76.0mm	12010-H7511	12010-H7685	
6	37	NI4G05W	A15	76.0mm	12010-G3421		
7	37	NI4G09W	GA15	76.0mm	12010-H9714		
8	37	NI4G37W	GA16	76.0mm	A2010-74Y00		
9	37	NI4G11W	J15	78.0mm	12010-E3002		
10	37	NI4G10W	J16	78.0mm	12010-01W12		
11	38	NI6G22W	L20S	78.0mm	12010-14S01		
12	38	NI4G15W	L16	83.0mm	12010-A9601		
13	38	NI6G14W	L24E	83.0mm	12010-51L01		
14	38	NI4D01W	SD22	83.0mm	12010-J5310		
15	38	NI4D03W	SD22	83.0mm	12010-Y5210		
16	39	NI4G16W	L18	85.0mm	12010-A8711	12010-W0801	
17	39	NI4G18W	Z20	85.0mm	12010-W1421		
18	39	NI6G24W	P40	86.0mm	12010-58100		
19	39	NI6G25W	L28	86.0mm	12010-08010	12010-C6421	
20	39	NI6G26W	L28	86.0mm	12010-Y8602		
21	40	NI4G20W	Z22	87.0mm	12010-D8101		
22	40	NI4G19W	H20	87.2mm	12010-R9000	12010-R9001	12010-74001
23	40	NI4G21W	Z24	89.0mm	12010-83W00	12010-83W11	
24	40	NI4G34W	KA24	89.0mm	A2010-5V110		
25	40	NI4D04WA	SD23	89.0mm	12010-09W01		
26	41	NI4D08WA	YD25DDTi	89.0mm	A2010-VK50A		
27	41	NI6G33W	VQ30	93.0mm	A2010-38U10		
28	41	NI4D05WA	TD27	96.0mm	12010-10T02		
29	41	NI4D06WA	TD27	96.0mm	12010-6T000		
30	41	NI6G27W	TB42	96.0mm	12010-03J61		
31	42	NI4D07WA	ZD30DD	96.0mm	12010-VW210		
32	42	NI4D09WA	QD32	99.2mm	12010-2S605		
33	42	NI6G30W	TB45	99.5mm	A2010-VB010		

For MITSUBISHI Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	43	MI4G01W	G11B	69.5mm	MD030312		
2	43	MI4G03W	4G13-3V	71.0mm	MD172036		
3	43	MI4G04W	G13B NEW	71.0mm	MD099759		
4	43	MI4G27W	4G13S4	71.0mm	MD351586		
5	43	MI4G49W	4G13S3	71.0mm	MD329659		
6	44	MI4G50W	4G17	72.2mm	MD173577		
7	44	MI4G11W	4G33	73.0mm	MD009581		
8	44	MI4G02W	G12B	74.0mm	MD030322		
9	44	MI4G05W	4G15-3V	75.5mm	MD144901		
10	44	MI4G06W	G15B	75.5mm	MD074715		
11	45	MI4G07W	G15B NEW	75.5mm	MD099770		
12	45	MI4G38W	4G15EW	75.5mm	MD332841		
13	45	MI4G28W	4G18S4	76.0mm	MD361980		
14	45	MI4G54W	4G18S4	76.0mm	MD371690		
15	45	MI4G14W	4G41R	76.5mm	MD011941		
16	46	MI4G58W	4G32	76.9mm	MD105495		
17	46	MI4G08W	4G32R	77.0mm	MD008851		
18	46	MI4G09W	G32B	77.0mm	MD009521		
19	46	MI6G56W	6A12NR	78.4mm	MD186822	(Right bank piston of MD186828)	
20	46	MI6G57W	6A12NL	78.4mm	MD186828	(Left bank piston of MD186822)	
21	47	MI4G13W	G37B	80.6mm	MD074210		
22	47	MI4G18W	G62B	80.6mm	MD040571		
23	47	MI4G33W	93SEW	81.0mm	MD314278		
24	47	MI4G60W	4G92	81.0mm	MD314446		
25	47	MI4G19W	G63B	85.0mm	MD040591		
26	48	MI4G20W	G63BN	85.0mm	MD100372		
27	48	MI4G21W	4G63	85.0mm	MD188097		
28	48	MI4G29W	4G63S	85.0mm	MD188289		
29	48	MI4G30W	63SPM	85.0mm	MD331104		
30	48	MI4G31W	4G64	86.5mm	MD105377		
31	49	MI4G32W	4G64SA	86.5mm	MD303071		
32	49	MI4G53W	4G69S	87.0mm	MN183397		
33	49	MI4G17W	G54BD	91.1mm	MD026921		
34	49	MI6G22W	6G72R	91.1mm	MD119671	(Right bank piston of MD152563)	
35	49	MI6G23W	6G72L	91.1mm	MD152563	(Left bank piston of MD119671)	
36	50	MI6G35W	6G72R	91.1mm	MD197808	(Right bank piston of MD197814)	
37	50	MI6G36W	6G72L	91.1mm	MD197814	(Left bank piston of MD197808)	
38	50	MI6G37W	6G72S2	91.1mm	MD194548		
39	50	MI6G51W	6G72Q	91.1mm	MD318501		
40	50	MI6G52W	6G72SE	91.1mm	MD367099		
41	51	MI6G59W	6G72-S4	91.1mm	1110B778	MD367892	
42	51	MI4D01WA	4D56TC	91.1mm	MD103308		
43	51	MI4D02W	4D56NA	91.1mm	MD103318	MD050021	
44	51	MI4D03WA	4D56NA	91.1mm	MD117177		
45	51	MI4D12WA	4D56TC	91.1mm	MD304847		
46	52	MI4D18W	4D56NA	91.1mm	MD304835		
47	52	MI4D18WA	4D56T	91.1mm	MD304835	(However, Top&2nd ring groooves are flat)	
48	52	MI4D25WA	4D56IC-TC	91.1mm	MD367637	(1&3 clinder pistons of MD367643)	
49	52	MI4D26WA	4D56IC-TC	91.1mm	MD367643	(2&4 clinder pistons of MD367637)	
50	52	MI4D04W	DR5	92.0mm	31617-00106		
51	53	MI4D05W	4DR-51	92.0mm	ME002044		
52	53	MI6G34W	6G74H	93.0mm	MD308276		
53	53	MI6G43W	6G74-S4	93.0mm	MD334469		
54	53	MI4D06W	4D30	100.0mm	ME012090		
55	53	MI4D08W	4D31	100.0mm	ME012131		
56	54	MI4D09WA	4D31	100.0mm	ME012145		
57	54	MI6D27WA	S6KT	102.0mm	34317-10201		
58	54	MI4D10W	4D32	104.0mm	ME012174		
59	54	MI4D17WA	4D32	104.0mm	ME012827		
60	54	MI4D11WA	4D34	104.0mm	ME012901		
61	55	MI4D16WA	4D34	104.0mm	ME012928		
62	55	MI4D29WA	4D32	104.0mm	ME222950		
63	55	MI4D30WA	4D34	104.0mm	ME222953		
64	55	MI4D31WA	4D34T	104.0mm	ME220470		
65	55	MI4D19WA	4D33	108.0mm	ME016895	ME230694	
66	56	MI4D22WA	4D35K	110.0mm	ME014693		
67	56	MI4D28WA	4M51	118.0mm	ME240315		

For SUZUKI Automobile

No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	57	SU4G01W	F8A	62.0mm	12111-78111		
2	57	SU3G02W	F6A	65.0mm	12111-51E00		
3	57	SU4G03W	F10A	65.5mm	12111-75107		
4	57	SU4G15W	SK410	65.5mm	12111-85201		
5	57	SU3G08W	Y64	68.5mm	12111-78402		
6	58	SU4G12W	G10	72.0mm	12111-68EA0		
7	58	SU3G19W	YR9	73.0mm	12111-67LA0		
8	58	SU3/4G04W	G10/Y71	74.0mm	12111-82010		
9	58	SU4G07W	G13A	74.0mm	12111-63B50		
10	58	SU3G09W	G10A	74.0mm	12111-60B51		
11	59	SU4G11W	G13B	74.0mm	12111-63E60		
12	59	SU4G14W	G16	75.0mm	12111-61J50		
13	59	SU4G16W	G16KV	75.0mm	12111-71C02		
14	59	SU4G10W	M15A	78.0mm	12111-54812	12111-54G02	
15	59	SU4G17W	M13A	78.0mm	12111-69G01		
16	60	SU4G18W	J20A	84.0mm	12111-65821		

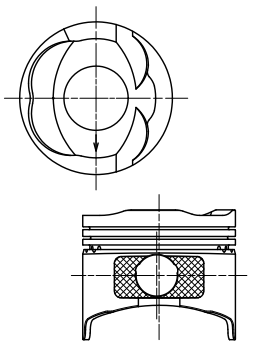
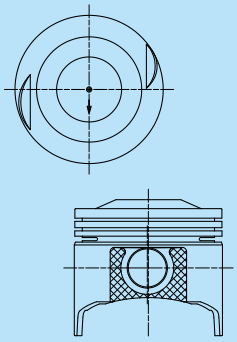
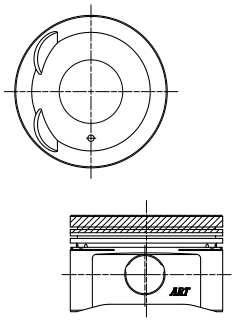
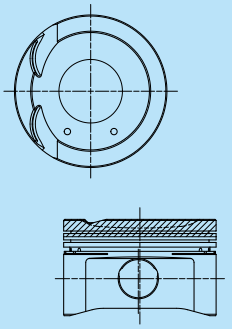
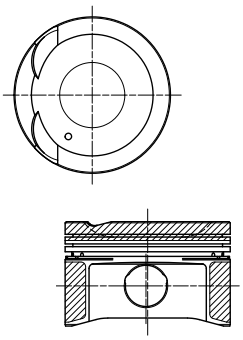
For TOYOTA Automobile

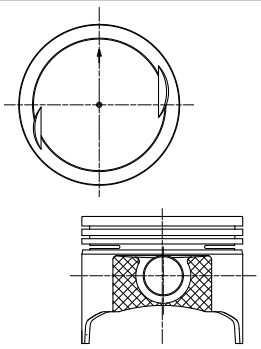
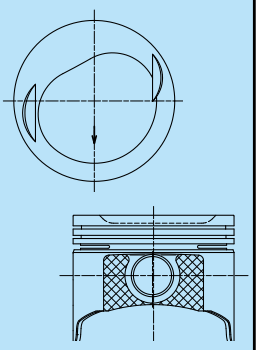
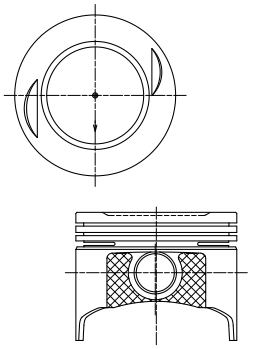
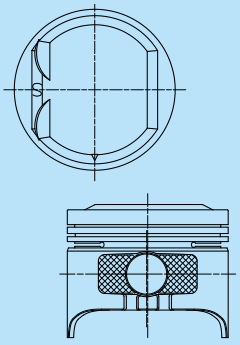
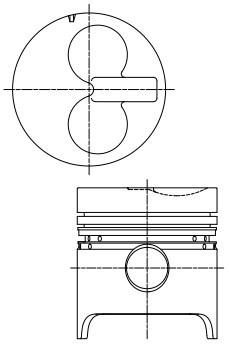
No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	61	TO3G01W	1KR-FE	71.0mm	13101-40020	13101-40021	13101-40030
2	61	TO4G02W	2E	73.0mm	13101-11050	13101-11051	
3	61	TO4G12W	3K	75.0mm	13101-24010		
4	61	TO4G03W	4K	75.0mm	13101-13022		
5	61	TO4G13W	4K	75.0mm	13101-24011		
6	62	TO4G61W	2NZ	75.0mm	13101-21080		
7	62	TO4G67W	2NZ	75.0mm	13101-21050		
8	62	TO4G69W	2NZ	75.0mm	13101-21040		
9	62	TO4G71W	1NZ-FE	75.0mm	13101-21030		
10	62	TO4G07W	3A	77.5mm	13101-15020		
11	63	TO4G70W	1ZZ-FE	79.0mm	13101-22142		
12	63	TO4G76W	1ZZ-FE	79.0mm	13101-22032		
13	63	TO4G04W	5K	80.5mm	13101-13030		
14	63	TO4G05W	5K	80.5mm	13101-13040		
15	63	TO4G01W	7K	80.5mm	13101-06050		
16	64	TO4G64W	7K	80.5mm	13101-06030		
17	64	TO4G16W	12R	80.5mm	13101-31021		
18	64	TO4G23W	1SL	80.5mm	13101-63020		
19	64	TO4G50W	1ZR-FE	80.5mm	13101-37081	13101-0T120	
20	64	TO4G75W	2ZR-FE	80.5mm	13101-31092		
21	65	TO4G08W	4A	81.0mm	13101-16011		
22	65	TO4G09W	4AGEU	81.0mm	13101-16020		
23	65	TO4G11W	4AF	81.0mm	13101-16090		
24	65	TO6G36W	5M	83.0mm	13101-43031		
25	65	TO4G20W	21RC	84.0mm	13101-37030		
26	66	TO4G21W	21R	84.0mm	13101-37060	13101-37061	
27	66	TO4G14W	2TU	85.0mm	13101-26031		
28	66	TO4G15W	3TU	85.0mm	13101-28010		
29	66	TO4G24W	1Y	86.0mm	13101-71010		
30	66	TO4G25W	2Y	86.0mm	13101-72010		
31	67	TO4G26W	3Y	86.0mm	13101-73010		
32	67	TO4G28W	3S-FE	86.0mm	13101-74040		
33	67	TO4G66W	3S-FE	86.0mm	13101-74100		
34	67	TO4G63W	1RZ	86.0mm	13101-75010		
35	67	TO4G68W	1TR	86.0mm	13101-75120	13101-0C010	
36	68	TO4D21WA	2C	86.0mm	13101-64090		
37	68	TO4D32WA	2C	86.0mm	13101-64141		
38	68	TO4D32W	2C	86.0mm	13101-64141		
39	68	TO4D45WA	2C	86.0mm	13101-64190		
40	68	TO4D46WA	3C	86.0mm	13101-64151		
41	69	TO4D30W	1DZ	86.0mm	13101-78201		
42	69	TO4D41W	1DZ	86.0mm	13101-78202-71		
43	69	TO4G37W	5S	87.0mm	13101-74130		
44	69	TO4G22W	5R	88.0mm	13101-44015	13101-44016	
45	69	TO4D02W	2J	88.0mm	13101-48015		

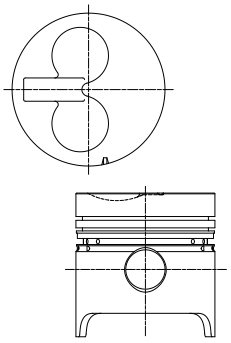
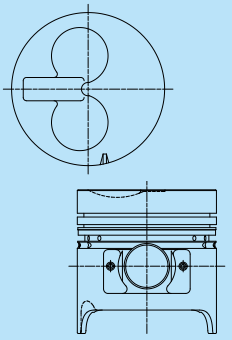
46	70	TO4G17W	18RC	88.5mm	13101-34010	13101-34030	13101-34040
47	70	TO4G43W	2AZ-FE	88.5mm	13101-28030		
48	70	TO4D03W	L114E	90.0mm	13101-54010		
49	70	TO4D04W	L21	90.0mm	13101-54021		
50	70	TO4G27W	4Y	91.0mm	13101-73031		
51	71	TO6D25WA	2H	91.0mm	13101-68010		
52	71	TO4G18W	22R	92.0mm	13101-35020		
53	71	TO4G19W	22R	92.0mm	13101-35032		
54	71	TO4D06WA	2L	92.0mm	13101-54060		
55	71	TO4D05W	2L	92.0mm	13101-54060		
56	72	TO4D08WA	2L	92.0mm	13101-54070		
57	72	TO4D07W	2L	92.0mm	13101-54070		
58	72	TO4D36WA	2KD	92.0mm	13101-30030	13101-30031	
59	72	TO4D48WA	2KD-FTV	92.0mm	13101-30081	13101-0L051	
60	72	TO4D49WA	2GD	92.0mm	13101-11180	13101-0E010	
61	73	TO4D50WA	1GD	92.0mm	13101-0E020		
62	73	TO6G32W	2F	94.0mm	13101-61010	13101-61011	
63	73	TO6G33W	3F	94.0mm	13101-61030		
64	73	TO6G34W	3F-32	94.0mm	13101-61032		
65	73	TO6G45W	1GR-FE	94.0mm	13101-31030		
66	74	TO6G60W	1GR-FE	94.0mm	13101-31120		
67	74	TO6G59W	2GR-FE	94.0mm	13101-31092		
68	74	TO8G01W	2UZ-FE	94.0mm	13101-50082	(Right bank piston of 13301-50072)	
69	74	TO8G02W	2UZ-FE	94.0mm	13301-50072	(Left bank piston of 13101-50082)	
70	74	TO8G03W	2UZ-FE	94.0mm	13101-50061	(Right bank piston of 13301-50051)	
71	75	TO8G04W	2UZ-FE	94.0mm	13301-50051	(Left bank piston of 13101-50061)	
72	75	TO6D33W	1HZ	94.0mm	13101-17010		
73	75	TO6D35WA	1HZ	94.0mm	13101-17100		
74	75	TO4D12W	B	95.0mm	13101-56030		
75	75	TO4G62W	2RZ	95.0mm	13101-75020		
76	76	TO4G65W	2TR	95.0mm	13101-75130	13101-0C020	
77	76	TO4G72W	3RZ	95.0mm	13101-75040	13101-75041	
78	76	TO4D10WA	3L	96.0mm	13101-54100		
79	76	TO4D09W	3L	96.0mm	13101-54100		
80	76	TO4D47WA	1KD	96.0mm	13101-0L030	13101-0L080	
81	77	TO4D15W	2B	98.0mm	13101-57020		
82	77	TO4D29W	1Z	96.0mm	13101-78300-71		
83	77	TO4D31W	2Z	98.0mm	13101-78700-71		
84	77	TO6D42W	12Z	96.0mm	13101-78360-71		
85	77	TO6D43W	13Z	98.0mm	13101-78762-71		
86	78	TO6D44W	14Z	98.0mm	13101-78780-71		
87	78	TO4D37WA	5L	99.5mm	13101-54120		
88	78	TO6G57W	1FZ	100.0mm	13101-66020		
89	78	TO6G58W	1FZ	100.0mm	13101-66050		
90	78	TO4D16WA	3B	102.0mm	13101-58011		
91	79	TO4D17W	13B	102.0mm	13101-58021		
92	79	TO4D19WA	14B	102.0mm	13101-58040		
93	79	TO4D18W	14B	102.0mm	13101-58040		
94	79	TO6D27W	2D	105.0mm	13101-77020		
95	79	TO6D28WA	2D	105.0mm	13101-77021		

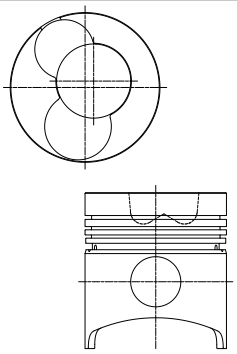
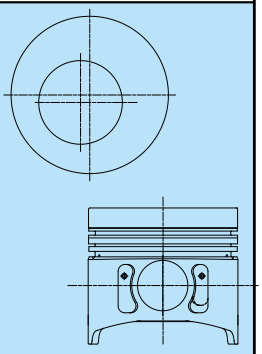
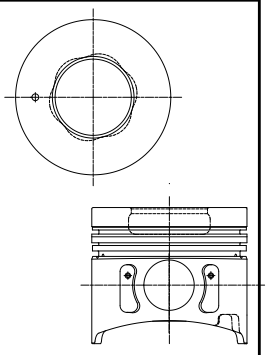
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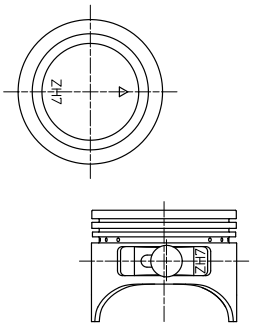
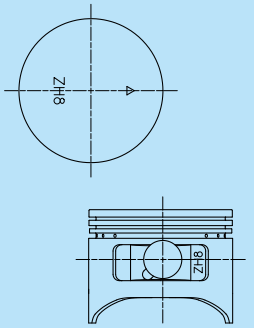
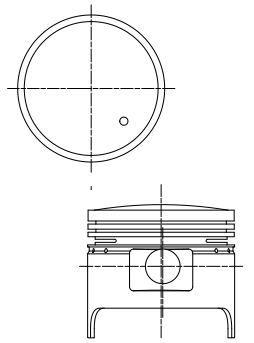
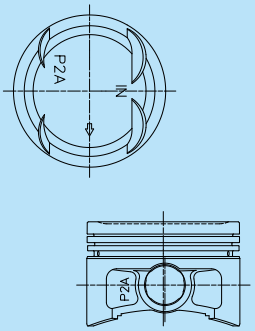
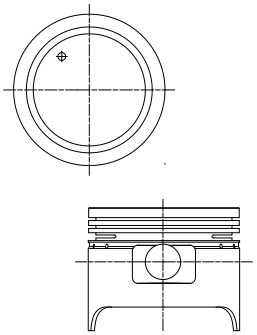
No,	Page	ART Part No.	Engine type	Diameter (φ)	Reference No.	←	←
1	80	KA4G01W	PRIDE	71.0mm	MB3Y8-11-SAO/103		
2	80	KA4G02W	B6	78.0mm	MB3Y8-11-SAO		
3	80	DW4G01W	A15DM	76.5mm	96081975		
4	80	DW4G02W	16D	79.0mm	96182846		
5	80	HD4G01W	X3	75.5mm	23410-22410		
6	81	HD4G02W	XD	76.5mm	23410-26511		
7	81	KU1G02B	GS200R	69.0mm	12896-2111-1		
8	81	KU1G03B	GS280G	73.0mm	13961-2111-1		

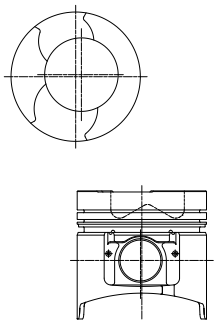
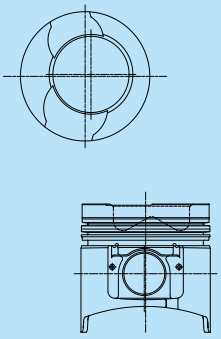
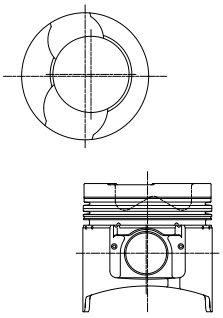
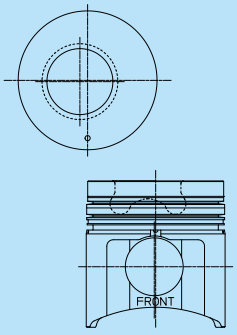
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
1	ED 3cyls 66.6mm	DA3G07W 13101-87255	Perodua Kancil 850cc	56.6 28.6 –	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0×53.0 –	
2	CD 3cyls 70.0mm	DA3G01W 13101-87717	G20L 850cc	64.2 28.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	18.0×60.0	
3	K3 4cyls 72.0mm	DA4G06W 13101-BZ030	Xenia,Avanza Terios 1,297cc	45.5 28.0 Tin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0×53.0 –	
4	K3-VE 4cyls 72.0mm	DA4G08W 13101-BZ110	Xenia,Avanza Terios 1,297cc	45.5 28.0 Tin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0×53.0 –	
5	K5 4cyls 72.0mm	DA4G09W 13101-BZ060 13101-BZ100	Xenia,Avanza 1,495cc	45.5 28.0 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0×53.0 –	

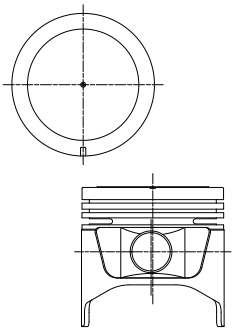
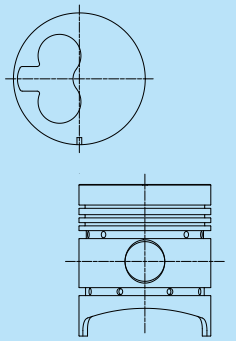
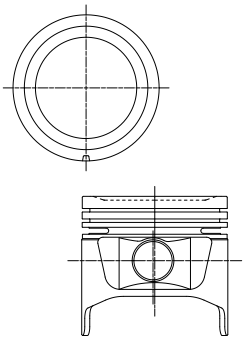
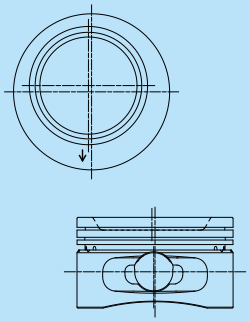
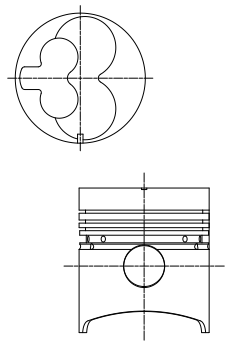
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
6	CB 3cyls 76.0mm	DA3G02W 13101-87703 13101-87704	Charade,G10 993cc	60.0 28.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	18.0 × 60.0 –	
7	CB 3cyls 76.0mm	DA3G04W 13101-87713 13101-87724 13101-87729	Charade 993cc	60.5 28.5 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	18.0 × 60.0 –	
8	CD 3cyls 76.0mm	DA3G03W 13101-87711	Charade 993cc	60.5 28.5 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	18.0 × 60.0 –	
9	HC 4cyls 76.0mm	DA4G05W 13101-87105	Charade 1,295cc	62.9 30.35 –	– – –	Top : 1.2 2nd : 1.5 Oil : 3.0	19.0 × 58.0 –	
10	DG 4cyls 88.0mm	DA4D01W 13101-87306 13101-87309	Truck DV26T 2,530cc	95.0 50.5 Tin	– – –	Top : 2.5 2nd : 2.0 Oil : 4.0	26.0 × 70.0 Wire	

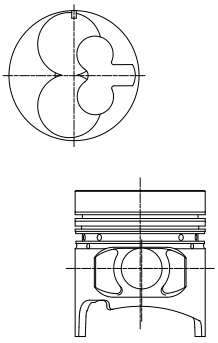
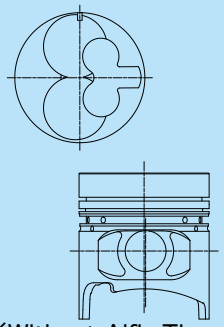
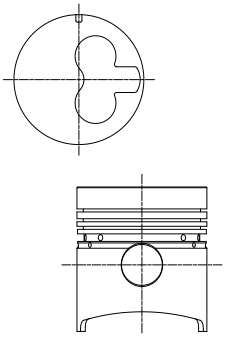
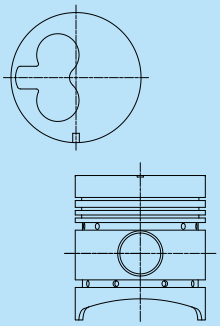
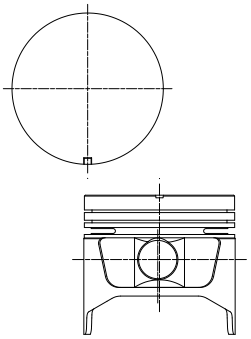
No.	Engine type Cyl. Diameter (φ)	ART Part No. Reference No.	Vehicle Model	Piston Full Length Comp. Height Surface Treatment	Piston Alfin Strut Cooling Channel	Piston Ring Groove	Pin Piston Circlip	Piston Shape
11	DL 4cyls 92.0mm	DA4D02W 13101-87314 13101-87315 13101-87316	Taft,Delta 2,765cc	95.0 50.5 Tin	– – –	Top : 2.5 2nd : 2.0 Oil : 4.0	26.0 × 70.0 Wire	
12	DL 4cyls 92.0mm	DA4D03W 13101-87325 13101-87327	Delta 2,765cc	95.0 50.5 Tin	– ○ –	Top : 2.5 2nd : 2.0 Oil : 4.0	28.0 × 75.0 Flat	
13								
14								
15								

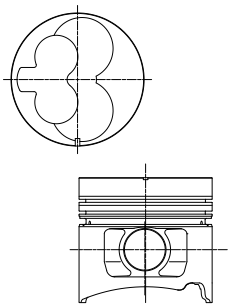
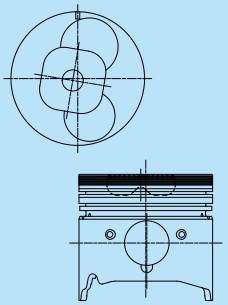
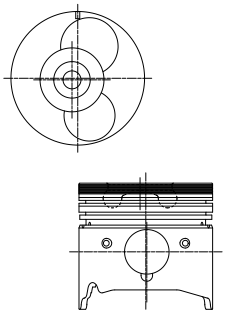
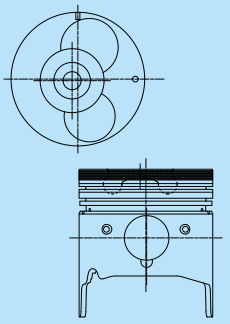
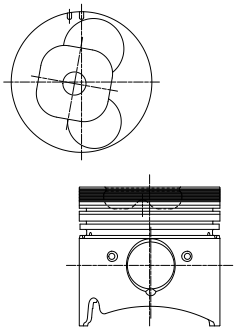
No.	Engine type Cyl. Diameter (ϕ)	ART Part No. Reference No.	Vehicle Model	Piston Full Length Comp. Height Surface Treatment	Piston Alfin Strut Cooling Channel	Piston Ring Groove	Pin Piston Circlip	Piston Shape
1	EH700 6cyls 110.0mm	HI6D01W 13216-1181-G	Ranger 4D Ranger5,Renger7D 6,443cc	121.3 69.3 Tin	– – –	Top : 3.0 2nd : 2.5 3rd : 2.5 Oil : 5.0	39.0 × 90.0 Flat	
2	H07D 6cyls 110.0mm	HI6D02WA 13216-2260	Ranger 7,412cc	100.0 57.0 Tin	○ ○ –	Top : 3.0 2nd : 2.0 Oil : 4.0	37.0 × 85.0 Flat	
3	J08C 6cyls 114.0mm	HI6D03WA 13216-2631	Selega,Ranger Rainbow 7,961cc	100.0 57.0 Tin	○ ○ –	Top : 3.0 2nd : 2.0 Oil : 4.0	37.0 × 85.0 Flat	
4								
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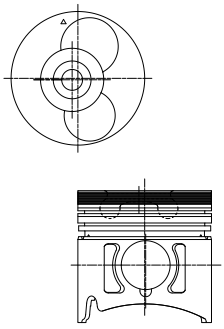
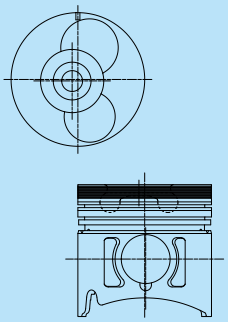
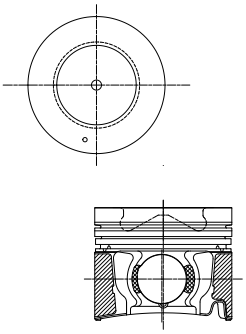
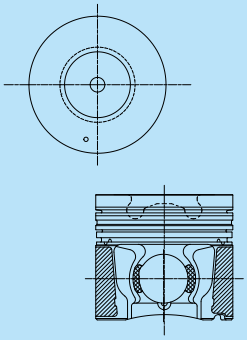
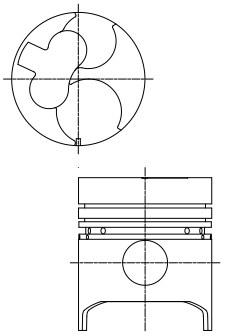
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
1	ZH7 1cyl 60.0mm	HO1G13B 13101-ZH7-010	GX120 Generator	46.0 21.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.5	– –	
2	ZH8 1cyl 68.0mm	HO1G14B 13101-ZH8-010	GX160 Generator	53.5 23.5 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.5	– –	
3	PA1 4cyls 72.0mm	HO4G04W 13101-PA1-010	J-VC,SC SF,SV 1,238cc	65.2 27.5 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	17.0×62.0 –	
4	P2A 4cyls 75.0mm	HO4G15W 13010-P2A-000		51.0 31.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	19.0×56.0 –	
5	EK1 4cyls 77.0mm	HO4G11W 13101-689-000	Accord 1800 Prelude 1800 Vigor 1800 1,750cc	62.5 27.5 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0×64.0 –	

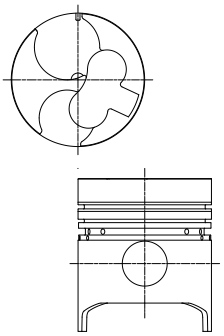
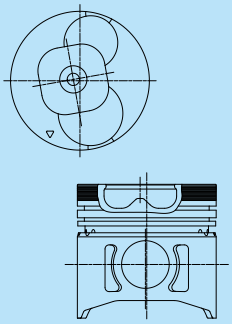
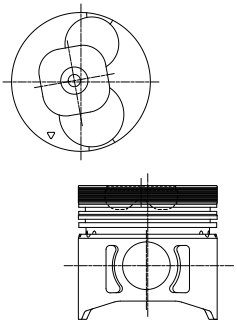
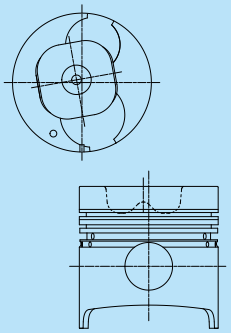
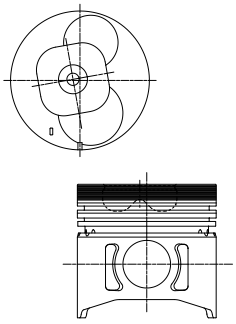
No.	Engine type Cyl. Diameter (φ)	ART Part No. Reference No.	Vehicle Model	Piston Full Length Comp. Height Surface Treatment	Piston Alfin Strut Cooling Channel	Piston Ring Groove	Pin Piston Circlip	Piston Shape
1	4D95-3 4cyls 95.0mm	KO4D01W 6204-31-2121	Bulldozer 3,260cc	94.1 51.1 –	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	30.0 × 74.0 Flat	
2	S6D95 6cyls 95.0mm	KO6D02WA 6207-31-2141	Bulldozer 4,890cc	94.2 51.2 –	○ ○ –	Top : 2.41K 2nd : 2.17K Oil : 4.0	30.0 × 74.0 Flat	
3	6D95 6cyls 95.0mm	KO6D03WA 6207-31-2180	Bulldozer 4,890cc	94.2 51.2 –	○ ○ –	Top : 2.41K 2nd : 2.15K Oil : 4.0	30.0 × 74.0 Flat	
4	S6D108 6cyls 108.0mm	KO6D04WA 6222-33-2110	Bulldozer 7,150cc	113.85 66.77 –	○ – ○	Top : 2.35K 2nd : 2.41K Oil : 4.0	45.0 × 85.0 Flat	
5								

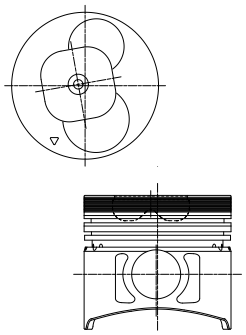
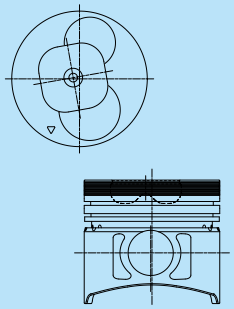
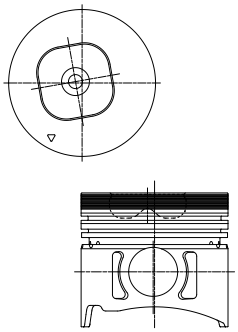
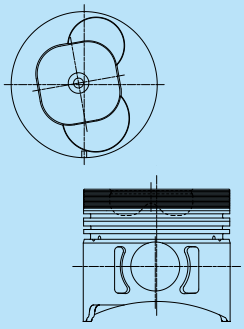
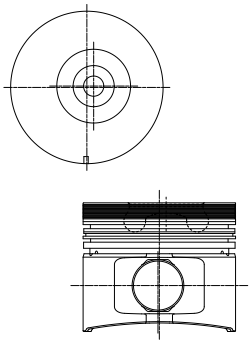
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
1	G161Z 4cyls 82.0mm	IS4G01W 8-94200-645-0	Florian ELF 1,584cc	80.0 37.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	22.0X66.0 –	
2	C221-5 4cyls 83.0mm	IS4D01W 5-12111-065-0	ELF 2,207cc	95.5 48.5 Tin	– – –	Top : 2.04 2nd : 2.03 3rd : 2.03 Oil : 5.02 Oil : 5.02	25.0X72.0 Wire	
3	G180Z 4cyls 84.0mm	IS4G03W 8-94201-040-0	Florian 1,817cc	80.0 37.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 3.0	22.0X66.0 –	
4	C22N 4cyls 86.0mm	IS4G05W 8-92064-306-0	GM 2,198cc	50.0 30.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 3.0	21.0X62.0 –	
5	C190 4cyls 86.0mm	IS4D04W 5-12111-203-0	TRUCK,BUS FOSTER 1,951cc	95.6 51.6 Tin	– – –	Top : 2.04 2nd : 2.04 3rd : 2.02 Oil : 5.02	27.0X74.0 Flat	

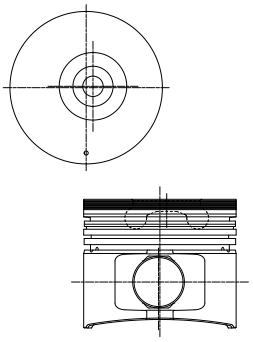
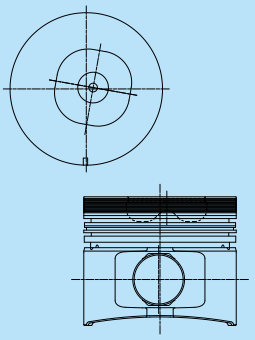
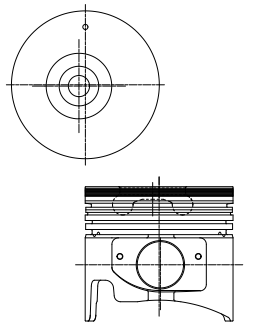
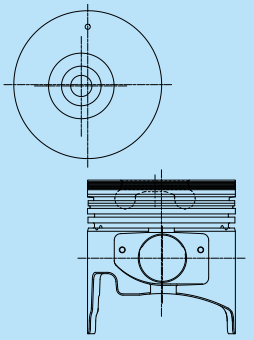
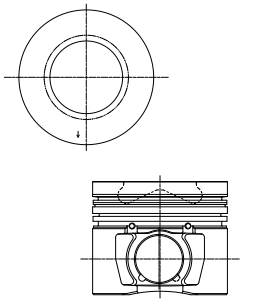
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
6	C190-3G 4cyls 86.0mm	IS4D05WA 5-12111-225-0	ELF 1,951cc	96.53 51.53 Tin	○ – –	Top : 2.5 2nd : 2.0 Oil : 5.0	27.0X68.0 Flat	
7	C190-3G 4cyls 86.0mm	IS4D05W 5-12111-225-0	ELF 1,951cc	96.53 51.53 –	X – –	Top : 2.5 2nd : 2.0 Oil : 5.0	27.0X68.0 Flat	 ※Without Alfin,Tin
8	C240-4 4cyls 86.0mm	IS4D06W 5-12111-064-0	2,369cc	95.5 51.5 Tin	– – –	Top : 2.0 2nd : 2.0 3rd : 2.0 Oil : 5.0	27.0X72.0 Flat	
9	C240-5 4cyls 86.0mm	IS4D07W 9-12411-834-0	ELF 2,369cc	95.5 51.5 Tin	– – –	Top : 2.04 2nd : 2.04 3rd : 2.02 Oil : 5.02 Oil : 5.02	27.0X72.0 Flat	
10	G200Z 4cyls 87.0mm	IS4G04W 8-94237-469-1	1,949cc	80.0 37.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0X69.0 –	

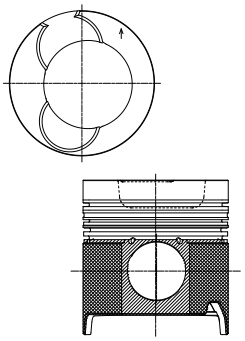
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
11	C223 4cyls 88.0mm	IS4D08WA 8-94250-729-0	Big Horn Rodio 2,238cc	82.6 47.6 Tin	○ ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	27.0X68.0 Flat	
12	4JA1 4cyls 93.0mm	IS4D09WA 8-94369-281-0	ELF 2,771cc	87.8 47.8 Tin	○ ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	31.0X76.0 Wire	
13	4JA1 4cyls 93.0mm	IS4D17WA 8-97176-600-0	ELF Faster 2,771cc	87.8 47.8 Tin	○ ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	31.0X76.0 Wire	
14	4JA1 4cyls 93.0mm	IS4D21WA 8-97942-985-0	D-MAX 2,771cc	102.8 47.8 Tin	○ ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	31.0X76.0 Wire	
15	4JB1 4cyls 93.0mm	IS4D10WA 8-94433-177-1	ELF 2,771cc	91.8 51.8 Tin	○ ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	31.0X76.0 Wire	

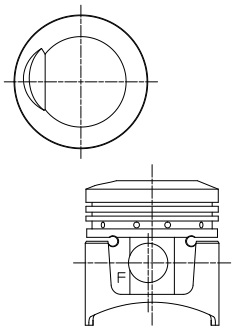
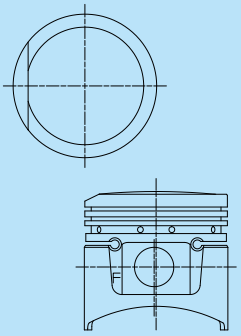
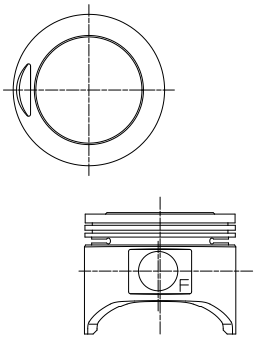
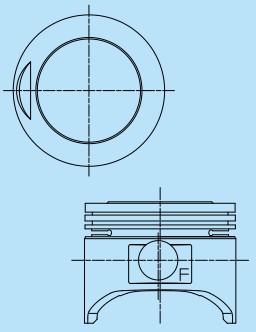
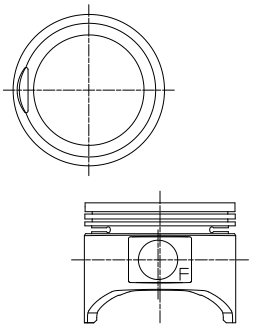
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
16	4JB1 4cyls 93.0mm	IS4D30WA 8-97176-606-0 8-97108-622-2	2,771cc	91.8 51.8 Tin	○ ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	31.0X76.0 Wire	
17	4JB1-T 4cyls 93.0mm	IS4D28WA 8-97176-610-0	2,771cc	91.8 51.8 Tin	○ ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	34.0X78.0 Wire	
18	4JJ1 4cyls 95.4mm	IS4D33WA 8-97367-398-1	D-Max 2,999cc	78.46 49.76 Resin	○ – ○	Top : 1.946K 2nd : 1.5 Oil : 3.0	34.0X78.0 Wire	
19	4JK1 4cyls 95.4mm	IS4D34WA 8-97355-672-2	D-Max 2,499cc	87.21 58.51 Resin	○ – ○	Top : 1.946K 2nd : 1.5 Oil : 3.0	34.0X78.0 Wire	
20	4BA1 4cyls 98.0mm	IS4D11W 5-12111-055-1 8-97176-626-0	ELF 2,775cc	112.25 62.55 Tin	– – –	Top : 3.0 2nd : 2.5 Oil : 5.0	33.0X85.0 Flat	

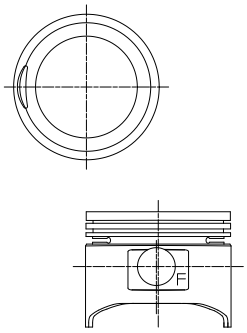
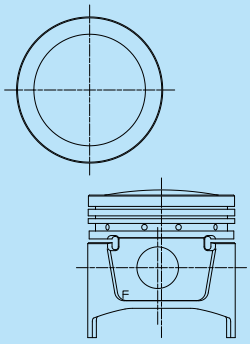
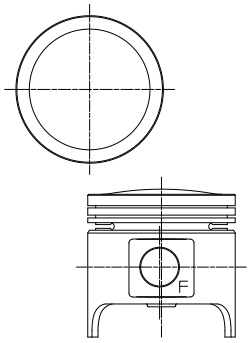
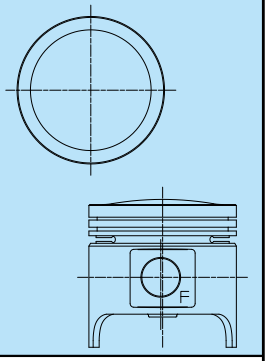
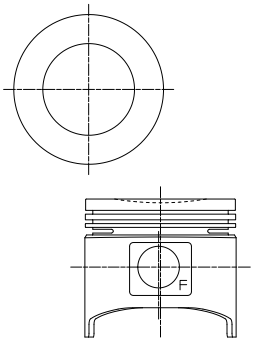
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
21	4BA1 4cyls 98.0mm	IS4D31WA 5-12111-055-0	2,775cc	112.3 62.5 Tin	○ – –	Top : 3.0 2nd : 2.5 Oil : 5.0	33.0X85.0 Flat	
22	4BC2 4cyls 102.0mm	IS4D12W 5-12111-230-4	ELF 3,268cc	98.3 58.9 Tin	– ○ –	Top : 3.0 2nd : 2.5 Oil : 5.0	35.0X85.0 Flat	
23	4BC2N 4cyls 102.0mm	IS4D13WA 8-94169-765-0	ELF 3,268cc	98.3 58.9 Tin	○ ○ –	Top : 3.0 2nd : 2.5 Oil : 5.0	35.0X85.0 Flat	
24	4BD1 6BD1 4cyls 6cyls 102.0mm	IS4D25WA IS6D25WA 1-12111-303-1 1-12111-240-0	3,856cc 5,785cc	104.2 58.75 Tin	○ – –	Top : 3.0 2nd : 2.5 Oil : 5.0	35.0X87.4 Flat	
25	4BD1-T 4cyls 102.0mm	IS4D26WA 8-94321-734-0 8-94175-027-2	3,856cc	98.1 58.7 Tin	○ ○ –	Top : 3.0 2nd : 2.5 Oil : 5.0	35.0X87.4 Flat	

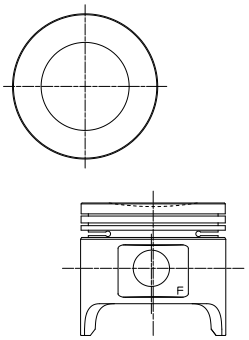
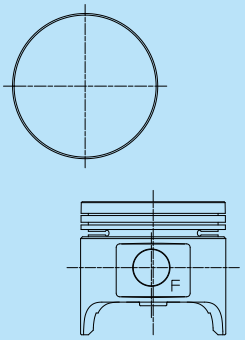
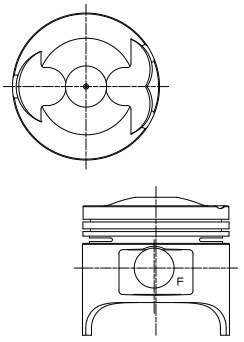
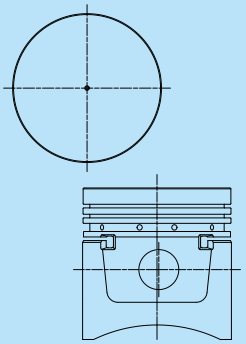
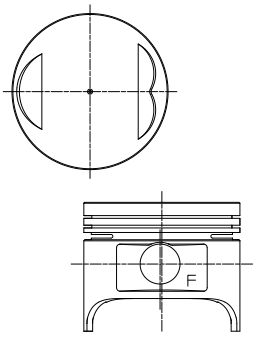
No.	Engine type Cyl. Diameter (φ)	ART Part No. Reference No.	Vehicle Model	Piston Full Length Comp. Height Surface Treatment	Piston Alfin Strut Cooling Channel	Piston Ring Groove	Pin Piston Circlip	Piston Shape
26	4BE1 4cyls 105.0mm	IS4D15WA 8-94438-989-0	ELF 3,636cc	95.68 56.41 Tin	○ – –	Top : 3.0 2nd : 2.5 Oil : 5.0	35.0X85.0 Flat	
27	4BE1 4cyls 105.0mm	IS4D15W 8-94438-989-0	ELF 3,636cc	95.68 56.41 Tin	X – –	Top : 3.0 2nd : 2.5 Oil : 5.0	35.0X85.0 Flat	 ※Without Alfin
28	4BE1 4cyls 105.0mm	IS4D29WA 8-94478-116-0 8-97176-649-1	ELF 3,636cc	95.7 56.4 Tin	○ ○ –	Top : 3.0 2nd : 2.5 Oil : 5.0	35.0X85.0 Flat	
29	6BG1 6cyls 105.0mm	IS6D27WA 1-12111-781-1 1-12111-528/529-0	Forward 6,494cc	94.55 55.25 Tin	○ ○ –	Top : 3.0 2nd : 2.5 Oil : 4.0	35.0X87.4 Flat	
30	4HF1 4cyls 112.0mm	IS4D16WA 8-97176-655-0 8-97095-585-0	ELF 4,334cc	94.52 60.77 Tin	○ ○ –	Top : 3.0 2nd : 2.5 Oil : 4.0	36.0X79.0 Flat	

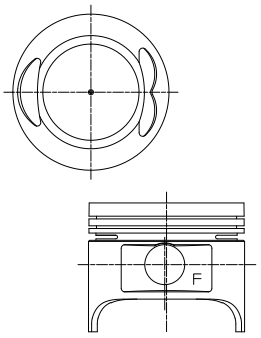
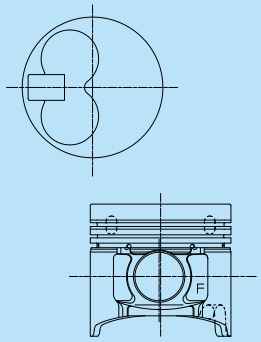
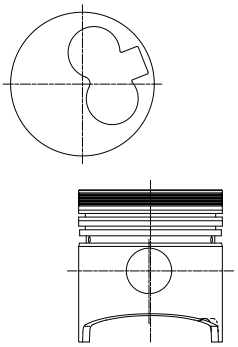
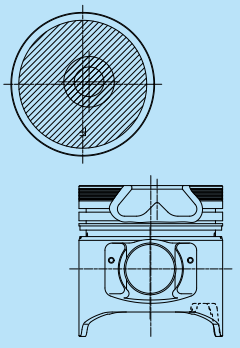
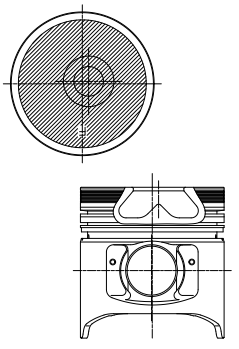
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
31	4HF1T 4cyls 112.0mm	IS4D19WA 8-97176-657-0 8-97183-667-0	ELF 4,334cc	94.52 60.77 Tin	○ ○ –	Top : 2.946K 2nd : 2.5 Oil : 4.0	36.0X79.0 Flat	
32	4HF1 4cyls 112.0mm	IS4D23WA 8-97176-654-0 8-97176-867-0	ELF 4,334cc	94.52 60.77 Tin	○ ○ –	Top : 3.0 2nd : 2.5 Oil : 4.0	36.0X79.0 Flat	
33	4HG1 4cyls 115.0mm	IS4D20WA 8-97183-666-0	ELF 4,751cc	104.5 60.75 Tin	○ ○ –	Top : 2.946K 2nd : 2.5 Oil : 4.0	36.0X79.0 Flat	
34	4HG1T 4cyls 115.0mm	IS4D22WA 8-97219-032-0	ELF 4,751cc	119.5 60.75 Tin	○ ○ ○	Top : 2.946K 2nd : 2.5 Oil : 4.0	36.0X79.0 Flat	
35	4HK1 4cyls 115.0mm	IS4D32WA 8-98041-141-0	ELF 5,193cc	96.6 66.1 Tin	○ – ○	Top : 2.946K 2nd : 2.5 Oil : 4.0	40.0X87.0 Wire	 ※Without Resin

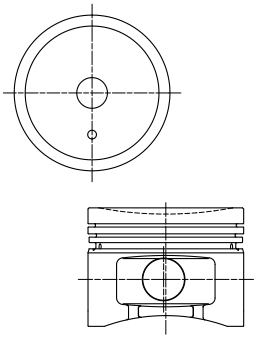
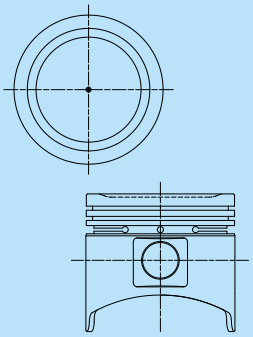
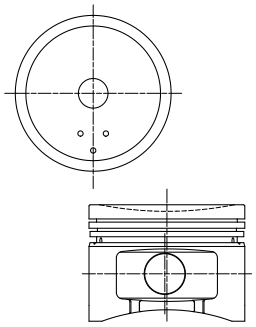
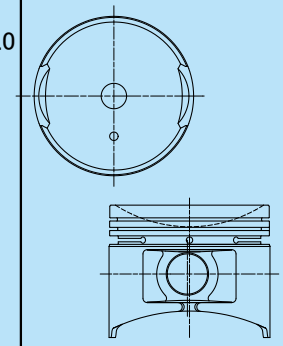
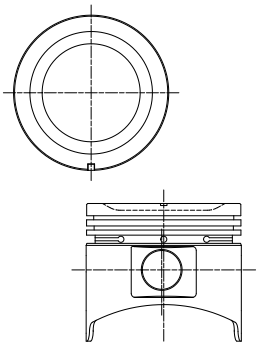
No.	Engine type Cyl. Diameter (φ)	ART Part No. Reference No.	Vehicle Model	Piston Full Length Comp. Height Surface Treatment	Alfin Strut Cooling Channel	Ring Groove	Pin Piston Circlip	Piston Shape
36	6SD1TC 4cyls 120.0mm	IS6D35WA 12111-9960	Giga 9,839cc	127.7 75.2 Resin	○ – ○	Top : 2.94K 2nd : 2.0 3rd : 3.0 Oil : 3.0	48.0 × 99.9 Flat	
37								
38								
39								
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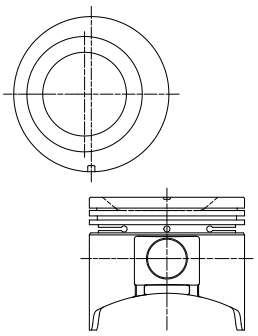
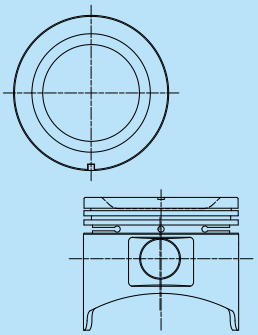
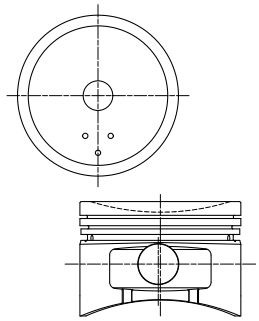
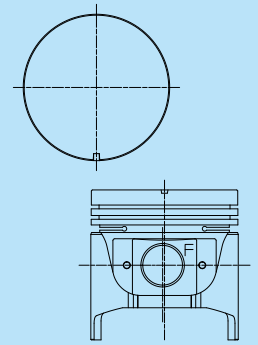
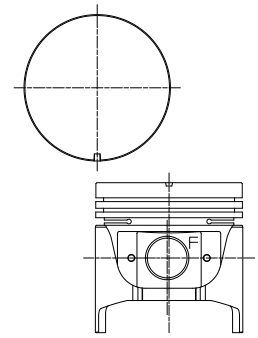
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
1	PB 4cyls 68.0mm	MA4G01W 0259-23-200	Familia Truck 987cc	73.5 37.5 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	20.0×55.0 Wire	
2	TC 4cyls 73.0mm	MA4G04W 0370-23-200	Familia 1,272cc	70.4 37.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	20.0×55.0 Wire	
3	E3 4cyls 77.0mm	MA4G07W E301-23-200	Familia 1,296cc	61.8 29.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 4.0	20.0×65.0 –	
4	E3N 4cyls 77.0mm	MA4G08W E302-23-200	Familia 1,296cc	61.8 29.0 –	– – –	Top : 1.5 2nd : 2.0 Oil : 4.0	20.0×65.0 –	
5	E5 4cyls 77.0mm	MA4G09W E501-23-200	Familia 1,490cc	61.0 29.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 4.0	20.0×65.0 –	

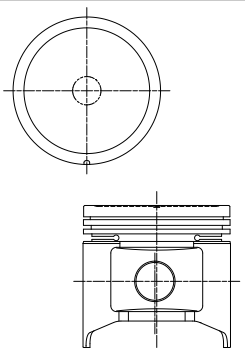
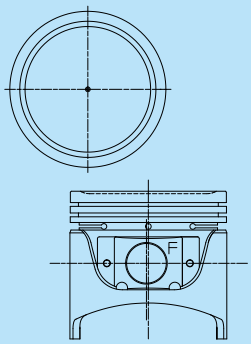
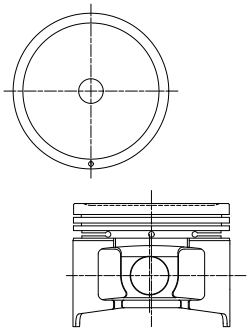
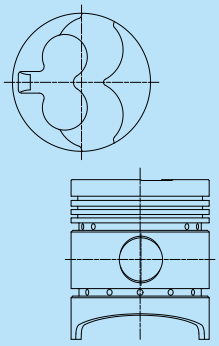
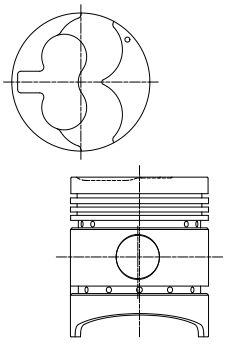
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
6	E5N 4cyls 77.0mm	MA4G10W E502-23-200	Familia 1,490cc	61.0 29.0 –	– – –	Top : 1.5 2nd : 2.0 Oil : 4.0	20.0 × 65.0 –	
7	NA 4cyls 78.0mm	MA4G11W 0305-23-200A	Capella Proceed 1,586cc	78.1 38.4 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 65.0 Wire	
8	NA 4cyls 78.0mm	MA4G12W H601-23-200	Capella 1,586cc	78.2 38.5 –	– – –	Top : 1.2 2nd : 1.5 Oil : 4.0	20.0 × 65.0 –	
9	NA-N 4cyls 78.0mm	MA4G13W H602-23-200	Capella Proceed 1,586cc	78.2 38.5 –	– – –	Top : 1.5 2nd : 2.0 Oil : 4.0	20.0 × 65.0 –	
10	VC 4cyls 80.0mm	MA4G14W 0453-23-200	Luce Van Cosmo 1,769cc	73.0 36.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	22.0 × 64.5 Wire	

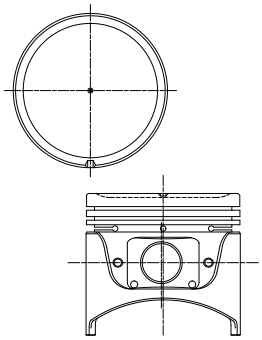
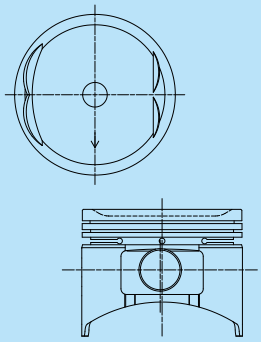
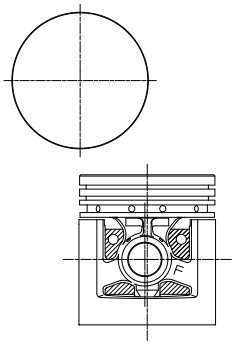
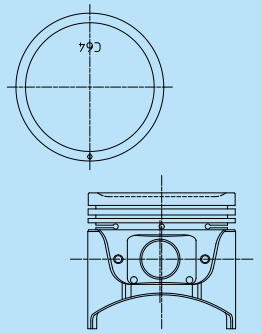
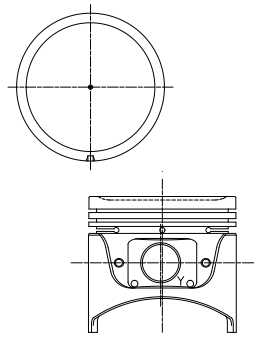
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
11	VC 4cyls 80.0mm	MA4G15W H801-23-200	Luce Van Capella 1,769cc	73.0 36.0 Tin	– – –	Top : 1.2 2nd : 1.5 Oil : 4.0	20.0×65.0 –	
12	MA-N 4cyls 80.0mm	MA4G16W HE01-23-200	Luce Cosmo 1,970cc	73.3 36.3 –	– – –	Top : 1.2 2nd : 1.5 Oil : 4.0	20.0×65.0 –	
13	F6 4cyls 81.0mm	MA4G17W F605-23-200	Capella 1,587cc	76.0 34.3 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×67.0 –	
14	VA 4cyls 82.0mm	MA4G18W 0553-23-200	Titan 1,985cc	83.5 45.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.5	22.0×70.6 Wire	
15	F8 4cyls 86.0mm	MA4G19W F801-23-200	Capella,Luce Cosmo 1,789cc	71.0 34.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×67.0 –	

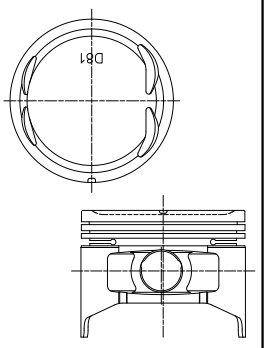
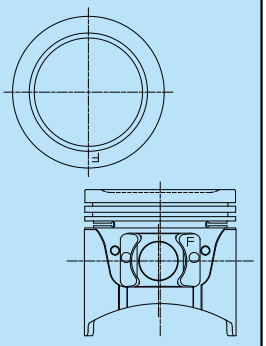
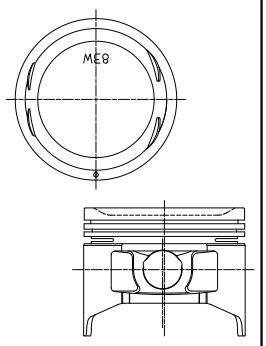
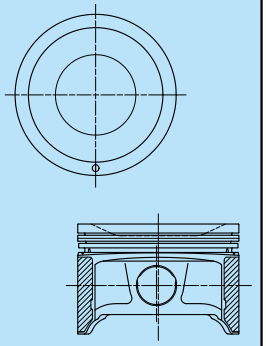
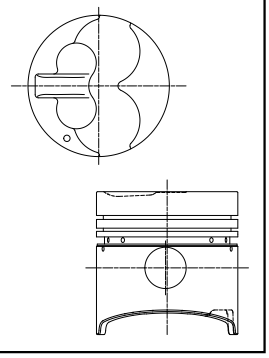
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
16	FE 4cyls 86.0mm	MA4G20W FE01-23-200	Capalla,Eunos Bongo 1,998cc	71.0 34.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 67.0 –	
17	WL 4cyls 93.0mm	MA4D06WA WLY1-11-SA0	Freda Bong,Titan 2,499cc	87.36 47.86 Tin	○ ○ ○	Top : 2.5 2nd : 2.0 Oil : 3.0	32.0 × 70.0 Flat	
18	HA 4cyls 95.0mm	MA4D03WA SE01-23-200A	Titan 2,977cc	100.6 53.6 Tin	○ ○ –	Top : 2.4 2nd : 2.4 Oil : 4.79	30.0 × 79.0 Flat	
19	HA 4cyls 100.0mm	MA4D04W SL07-23-200B	Titan Trader 3,455cc	105.0 58.0 H-Anodize	– ○ ○	Top : 2.5 2nd : 2.0 Oil : 4.5	34.0 × 82.0 Flat	
20	SL01 4cyls 100.0mm	MA4D05WA SL01-23-200A	Titan Truck 3,455cc	105.0 58.0 H-Anodize	○ ○ –	Top : 2.6K 2nd : 2.0 Oil : 4.5	34.0 × 82.0 Flat	

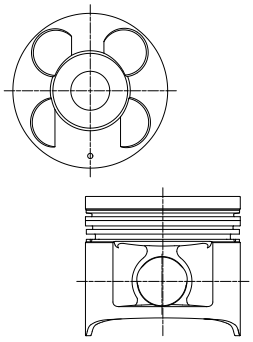
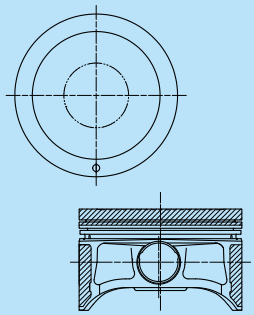
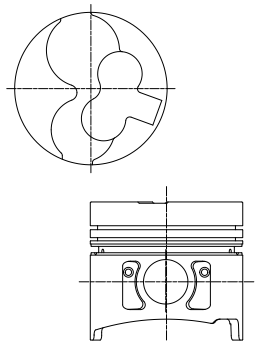
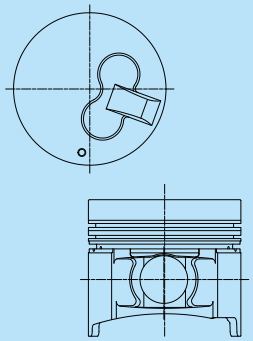
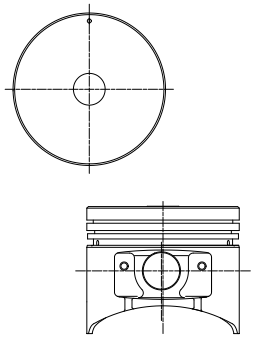
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
1	GA13 4cyls 71.0mm	NI4G35W A2010-72Y00	1,300cc	54.0 32.6 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	19.0×47.0 Flat	
2	A12 4cyls 73.0mm	NI4G02W 12010-H1011 12010-H1061	Sunny Cherry 1,171cc	67.4 32.5 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	17.5×65.3 –	
3	GA14 4cyls 73.5mm	NI4G36W A2010-73Y00	AD Van R-VY10 1,400cc	55.0 32.6 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	19.0×49.0 Flat	
4	E15 4cyls 76.0mm	NI4G04W 12010-11M22	Sunny Pulser 1,487cc	62.5 32.5 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	19.0×62.0 –	
5	A14 4cyls 76.0mm	NI4G07W 12010-H7511 12010-H7685	Sunny Vanette 1,397cc	67.4 32.5 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	19.0×63.0 –	

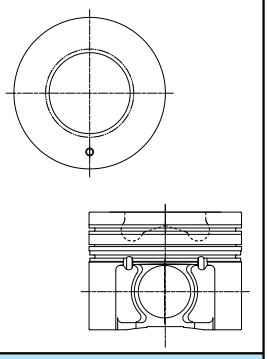
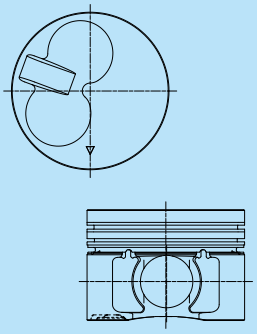
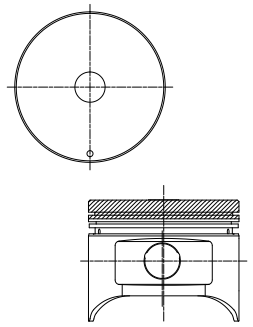
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6	A15 4cyls 76.0mm	NI4G05W 12010-G3421	Sunny Vanette 1,487cc	65.0 30.0 Tin	– – –	Top : 1.2 2nd : 2.0 Oil : 4.0	19.0 × 63.0 –	
7	GA15 4cyls 76.0mm	NI4G09W 12010-H9714	Sunny Vanette 1,487cc	65.0 30.0 Tin	– – –	Top : 1.2 2nd : 2.0 Oil : 4.0	19.0 × 63.0 –	
8	GA16 4cyls 76.0mm	NI4G37W A2010-74Y00	Sunny Pulser 1,596cc	54.0 29.5 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	19.0 × 52.0 Flat	
9	J15 4cyls 78.0mm	NI4G11W 12010-E3002	Datsun Caravan 1,483cc	79.3 39.8 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	21.0 × 66.6 –	
10	J16 4cyls 78.0mm	NI4G10W 12010-01W12	Datsun Caravan 1,567cc	79.3 39.8 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	21.0 × 66.6 –	

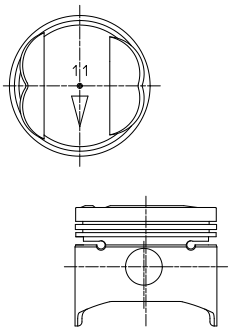
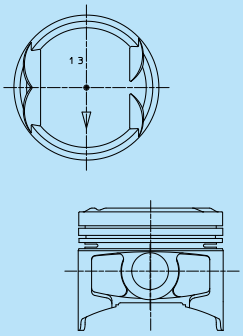
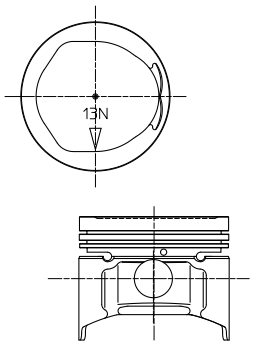
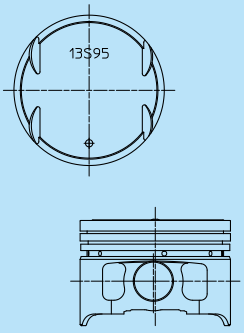
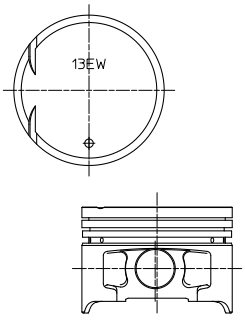
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11	L20S 4cyls 78.0mm	NI6G22W 12010-14S01	Cedric 1,998cc	75.1 40.1 Tin	– – –	Top : 1.5 2nd : 2.0 Oil : 4.0	20.0×61.0 –	
12	L16 4cyls 83.0mm	NI4G15W 12010-A9601	Bulebird Violet,Auster 1,595cc	78.1 38.1 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	21.0×72.0 –	
13	L24E 6cyls 83.0mm	NI6G14W 12010-51L01	Cedric,Laurel Skyline 2,393cc	65.1 38.1 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	20.0×61.0 –	
14	SD22 4cyls 83.0mm	NI4D01W 12010-J5310	Caravan Caball 2,164cc	96.0 48.0 Tin	– – –	Top : 2.55 2nd : 2.03 3rd : 2.03 Oil : 4.51 Oil : 4.51	26.0×71.0 Wire	
15	SD22 4cyls 83.0mm	NI4D03W 12010-Y5210	Caravan Caball 2,164cc	96.0 48.0 Tin	– – –	Top : 2.55 2nd : 2.03 3rd : 2.03 Oil : 4.51 Oil : 4.51	26.0×71.0 Wire	

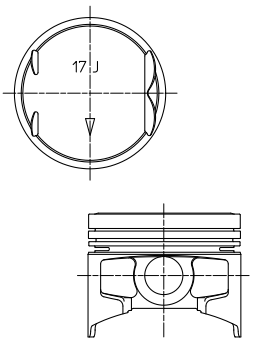
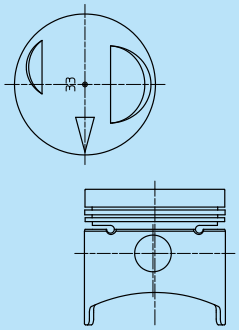
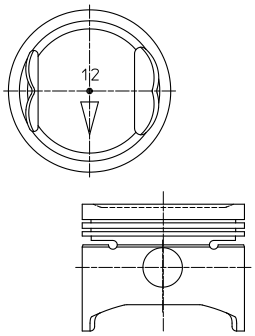
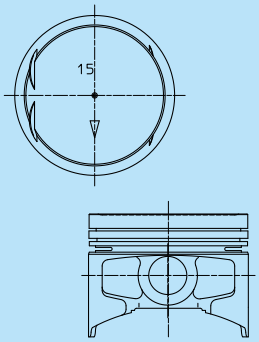
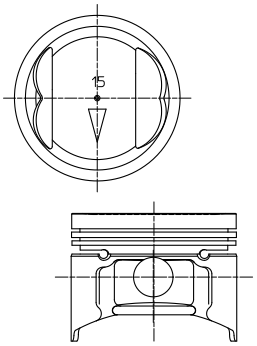
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
16	L18 4cyls 85.0mm	NI4G16W 12010-A8711 12010-W0801	Skyline,Laurel Bulebird 1,770cc	78.1 38.1 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	21.0×72.0 –	
17	Z20 4cyls 85.0mm	NI4G18W 12010-W1421	Skyline,Laurel Bulebird 1,952cc	67.0 32.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	21.0×72.0 –	
18	P40 6cyls 86.0mm	NI6G24W 12010-58100	Truck 4,000cc	94.5 53.3 Tin	– ○ –	Top : 2.5 2nd : 2.5 Oil : 4.75	20.7×74.5 –	
19	L28 6cyls 86.0mm	NI6G25W 12010-08010 12010-C6421	Cedric Gloria 2,753cc	78.2 38.1 Tin	– ○ –	Top : 1.5 2nd : 2.0 Oil : 4.0	21.0×72.0 –	
20	L28 6cyls 86.0mm	NI6G26W 12010-Y8602	Cedric Gloria 2,753cc	78.2 38.1 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	21.0×72.0 –	

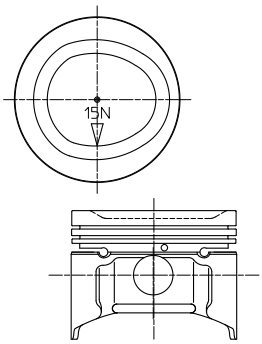
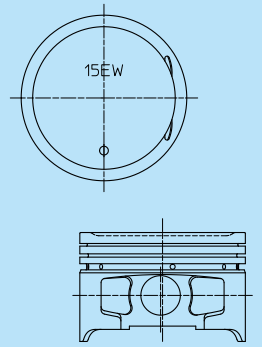
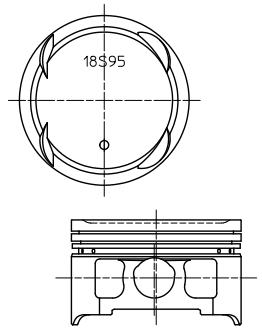
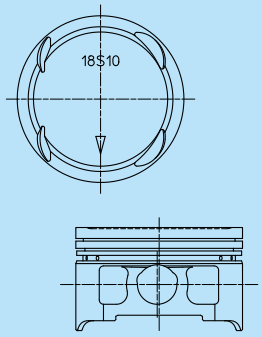
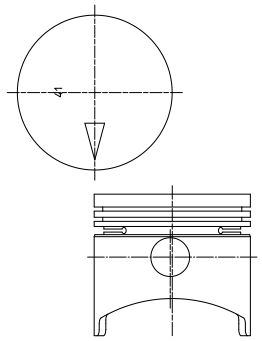
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
21	Z22 4cyls 87.0mm	NI4G20W 12010-D8101	Datsun Truck Cabster 2,187cc	67.0 32.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	21.0×64.0 –	
22	H20 4cyls 87.2mm	NI4G19W 12010-R9000 12010-R9001 12010-74001	Truck,Bus Cedric 1,982cc	84.0 41.0 Tin	– ○ –	Top : 2.0 2nd : 2.5 Oil : 4.0	22.0×72.6 Flat	
23	Z24 4cyls 89.0mm	NI4G21W 12010-83W00 12010-83W11	Datsun Truck 2,400cc	70.5 34.0 Tin	– – –	Top : 2.0 2nd : 1.5 Oil : 4.0	21.0×66.4 –	
24	KA24 4cyls 89.0mm	NI4G34W A2010-5V110	Largo 2,388cc	60.8 34.0 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	21.0×57.0 Flat	
25	SD23 4cyls 89.0mm	NI4D04WA 12010-09W01	Truck Safari 2,289cc	90.0 48.0 Tin	○ – –	Top : 2.5 2nd : 2.0 Oil : 4.5	26.0×71.0 Wire	

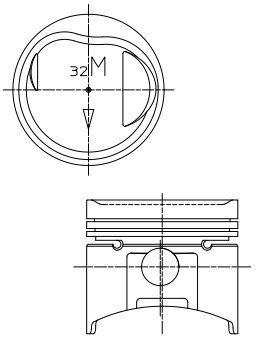
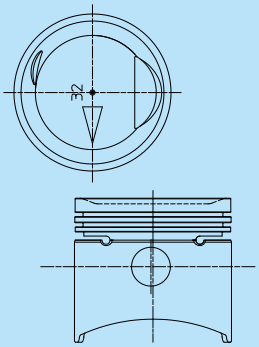
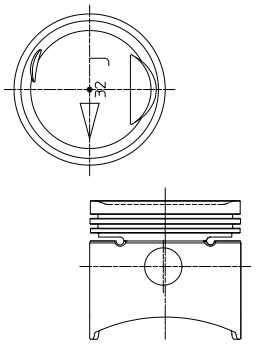
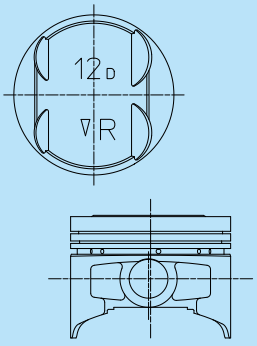
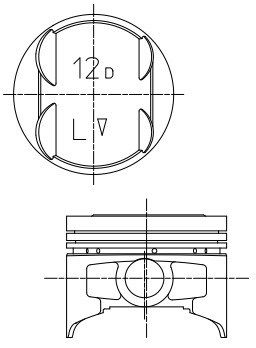
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
26	YD25DDTi 4cyls 89.0mm	NI4D08WA A2010-VK50A	Atlas 2,488cc	80.03 48.83 Tin	○ – ○	Top : 2.0K 2nd : 2.0 Oil : 3.0	28.0 × 61.0 Flat	
27	VQ30 6cyls 93.0mm	NI6G33W A2010-38U10	Maxima Cedric,Gloria 2,987cc	57.9 30.4 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	22.0 × 58.0 Flat	
28	TD27 4cyls 96.0mm	NI4D05WA 12010-10T02	Caravan Hormy 2,663cc	87.0 50.3 Tin	○ ○ –	Top : 2.5 2nd : 2.0 Oil : 4.0	28.0 × 80.0 Wire	
29	TD27 4cyls 96.0mm	NI4D06WA 12010-6T000	Caravan Hormy 2,663cc	86.0 50.3 –	○ ○ –	Top : 2.5 2nd : 2.0 Oil : 3.0	30.0 × 74.0 Wire	
30	TB42 6cyls 96.0mm	NI6G27W 12010-03J61	Safari 4,169cc	80.0 40.5 –	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	23.0 × 76.0 Flat	

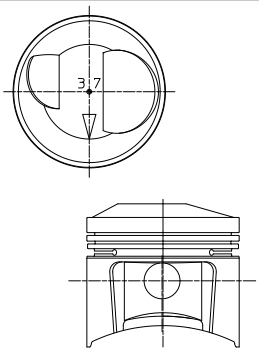
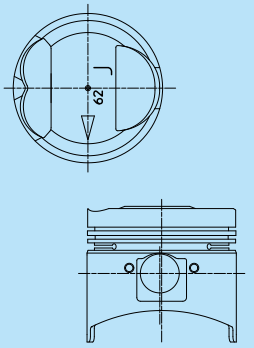
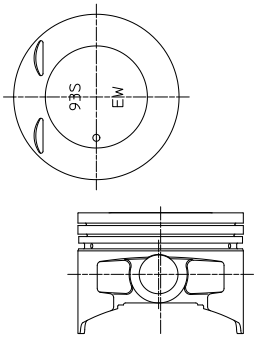
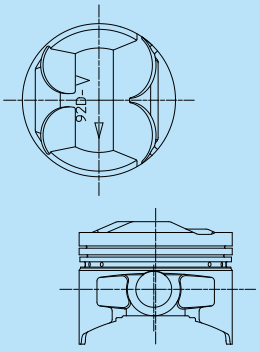
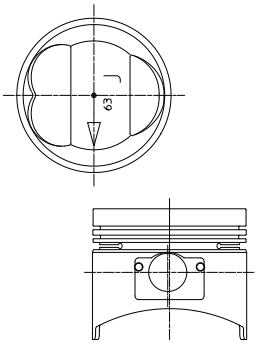
No.	Engine type Cyl. Diameter (φ)	ART Part No. Reference No.	Vehicle Model	Piston Full Length Comp. Height Surface Treatment	Piston Alfin Strut Cooling Channel	Piston Ring Groove	Pin Piston Circlip	Piston Shape
31	ZD30DD 4cyls 96.0mm	NI4D07WA 12010-VW210	Safari Caravan 2,953cc	74.1 50.1 Tin	○ – ○	Top : 2.0 2nd : 1.2 Oil : 2.0	33.0 × 78.0 Wire	
32	QD32 4cyls 99.2mm	NI4D09WA 12010-2S605	Caravan Atlas 3,153cc	69.8 45.25 Tin	○ ○ –	Top : 2.5 2nd : 2.0 Oil : 3.0	33.0 × 78 Wire	
33	TB45 6cyls 99.5mm	NI6G30W A2010-VB010	Fork Lift	80.0 40.3 H-Anodize	– – –	Top : 2.0 2nd : 1.5 Oil : 4.0	23.0 × 65.0 Flat	
34								
35								

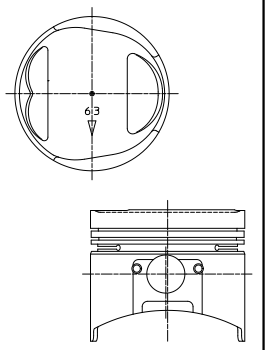
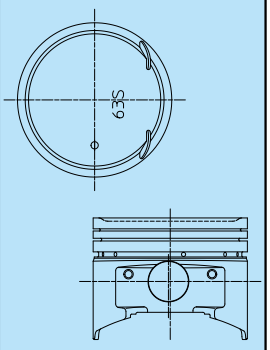
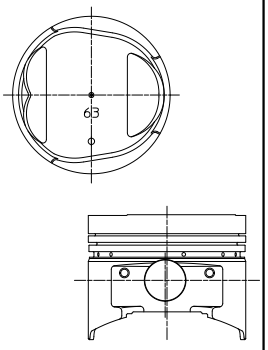
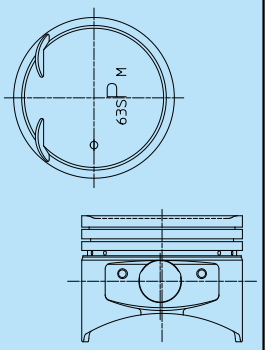
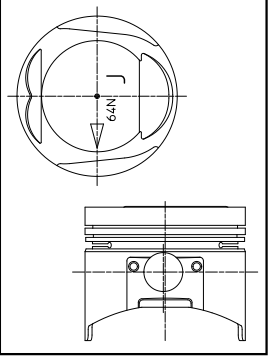
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
1	G11B 4cyls 69.5mm	MI4G01W MD030312	Mirage Lancer 1,244cc	58.9 29.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0 × 59.0 –	
2	4G13-3V 4cyls 71.0mm	MI4G03W MD172036	Mirage Lancer 1,298cc	59.9 29.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 3.0	18.0 × 56.0 –	
3	G13B NEW 4cyls 71.0mm	MI4G04W MD099759	Mirage Lancer 1,298cc	58.3 29.3 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0 × 60.0 –	
4	4G13S4 4cyls 71.0mm	MI4G27W MD351586	Mirage Lancer 1,298cc	49.65 28.65 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	18.0 × 56.0 –	
5	4G13S3 4cyls 71.0mm	MI4G49W MD329659	Mirage Lancer 1,298cc	50.0 29.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	18.0 × 56.0 –	

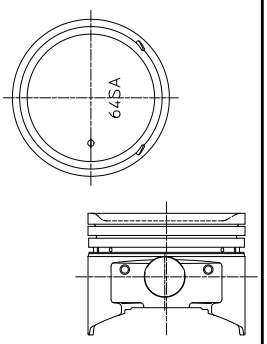
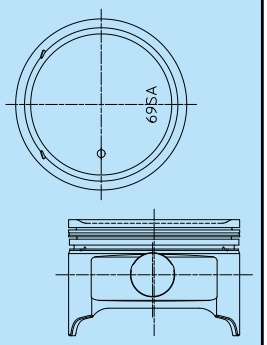
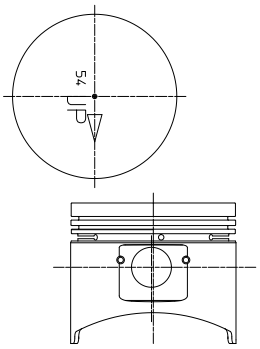
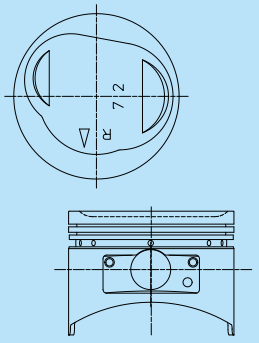
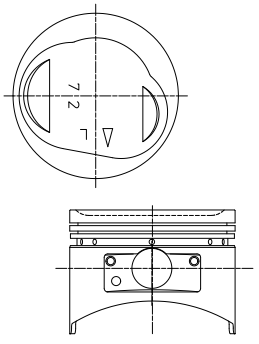
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
6	4G17 4cyls 72.2mm	MI4G50W MD173577	Mirage Colt 1,300cc	58.5 29.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 3.0	18.0×56.0 –	
7	4G33 4cyls 73.0mm	MI4G11W MD009581	Galant,Delica Fork Lift 1,439cc	70.2 33.21 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	19.0×64.0 –	
8	G12B 4cyls 74.0mm	MI4G02W MD030322	Mirage 1,410cc	58.0 28.8 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0×60.0 –	
9	4G15-3V 4cyls 75.5mm	MI4G05W MD144901	Mirage Lancer 1,468cc	58.0 29.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 3.0	18.0×56.0 –	
10	G15B 4cyls 75.5mm	MI4G06W MD074715	Mirage Lancer 1,468cc	58.2 29.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0×60.0 –	

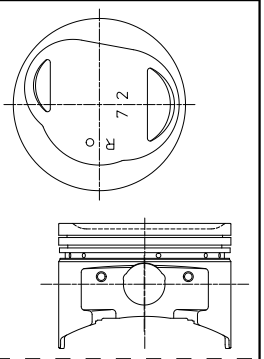
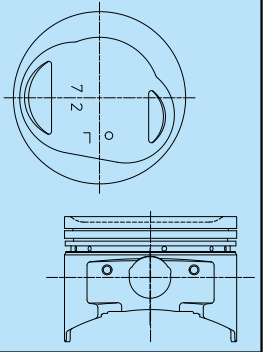
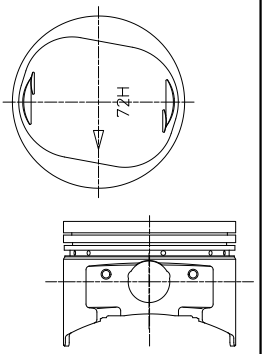
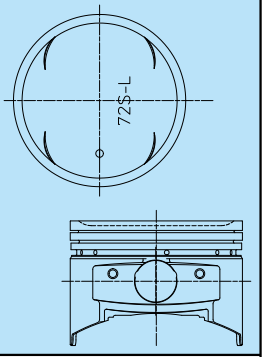
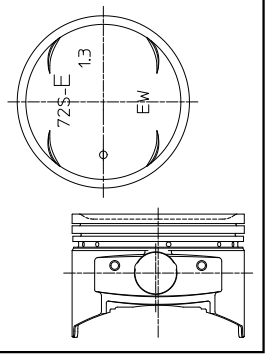
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
11	G15B NEW 4cyls 75.5mm	MI4G07W MD099770	Mirage Lancer 1,468cc	58.6 29.4 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0 × 60.0 –	
12	4G15EW 4cyls 75.5mm	MI4G38W MD332841	Lancer 1,468cc	49.7 28.65 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	18.0 × 56.0 –	
13	4G18S4 4cyls 76.0mm	MI4G28W MD361980	Prton Waja 1,600cc	47.0 25.98 –	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	18.0 × 56.0 –	
14	4G18S4 4cyls 76.0mm	MI4G54W MD371690	Lancer 1,600cc	47.0 25.98 –	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	18.0 × 56.0 –	
15	4G41R 4cyls 76.5mm	MI4G14W MD011941	Delica 1,378cc	69.3 30.8 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	19.0 × 64.0 Flat	

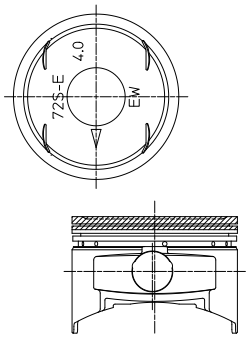
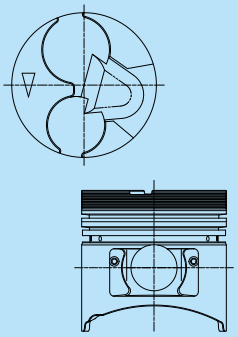
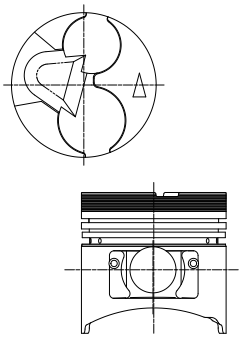
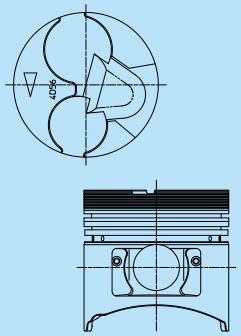
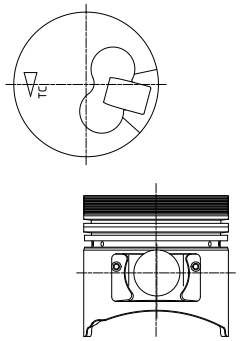
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
16	4G32 4cyls 76.9mm	MI4G58W MD105495	Colt,Galant Lancer,Mirage 1,597cc	68.0 34.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	19.0×64.0 –	
17	4G32R 4cyls 77.0mm	MI4G08W MD008851	Colt,Galant Lancer,Mirage 1,597cc	70.5 33.5 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	19.0×64.0 –	
18	G32B 4cyls 77.0mm	MI4G09W MD009521	Galant,Chariot Tredia,Cordia 1,597cc	70.5 33.5 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	19.0×64.0 –	
19	6A12NR 6cyls 78.4mm	MI6G56W MD186822	Galant Diamante 1,998cc	60.0 30.4 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.8	19.0×58.0 –	
20	6A12NL 6cyls 78.4mm	MI6G57W MD186828	Galant Diamante 1,998cc	60.0 30.4 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.8	19.0×58.0 –	

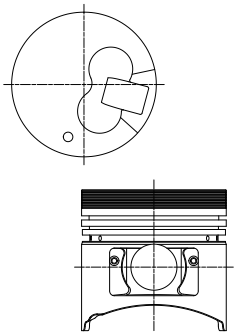
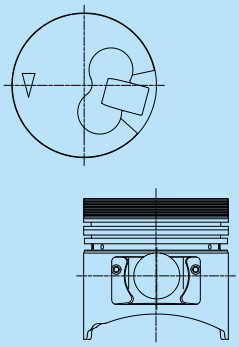
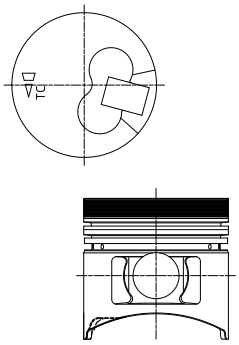
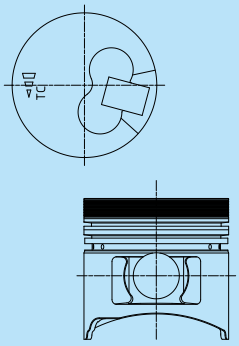
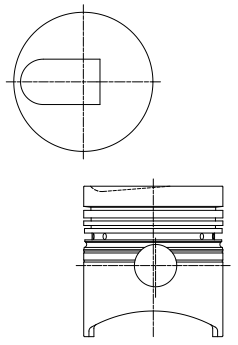
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
21	G37B 4cyls 80.6mm	MI4G13W MD074210	Galant 1,755cc	75.5 33.5 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	19.0 × 64.0 –	
22	G62B 4cyls 80.6mm	MI4G18W MD040571	Galant 1,795cc	73.2 35.0 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	21.0 × 72.0 –	
23	93SEW 4cyls 81.0mm	MI4G33W MD314278	Pajero Lancer	59.1 30.1 –	– – –	Top : 1.2 2nd : 1.2 Oil : 2.8	19.0 × 58.0 –	
24	4G92 4cyls 81.0mm	MI4G60W MD314446	Lancer Mirage 1,597cc	64.8 30.05 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.8	19.0 × 58.0 –	
25	G63B 4cyls 85.0mm	MI4G19W MD040591	Galant Starion 1,997cc	72.0 35.0 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	21.0 × 72.0 –	

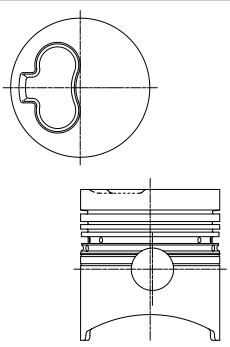
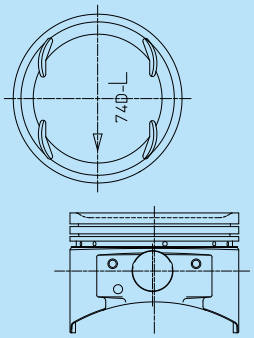
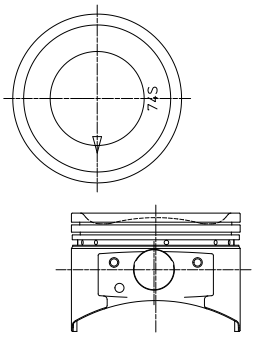
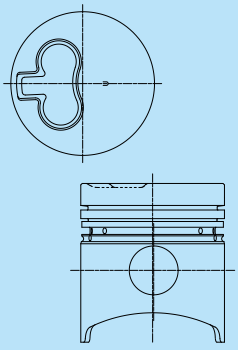
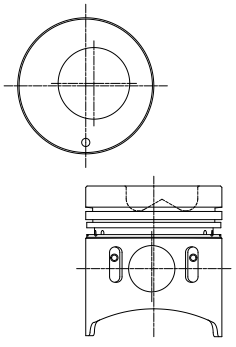
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
26	G63BN 4cyls 85.0mm	MI4G20W MD100372	Galant Starion 1,997cc	72.4 35.4 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	21.0×72.0 –	
27	4G63 4cyls 85.0mm	MI4G21W MD188097	Galant Lancer 1,997cc	67.0 35.0 –	– ○ –	Top : 1.2 2nd : 1.5 Oil : 2.8	22.0×62.0 –	
28	4G63S 4cyls 85.0mm	MI4G29W MD188289	Pajero,Delica Canter 1,997cc	67.4 35.0 Tin	– ○ –	Top : 1.2 2nd : 1.5 Oil : 3.0	22.0×62.0 –	
29	63SPM 4cyls 85.0mm	MI4G30W MD331104	Pajero,Delica Canter 1,997cc	66.7 34.65 –	– ○ –	Top : 1.2 2nd : 1.5 Oil : 2.8	22.0×62.0 –	
30	4G64 4cyls 86.5mm	MI4G31W MD105377	Delica Airtreck 2,350cc	72.4 35.0 –	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	21.0×72.0 –	

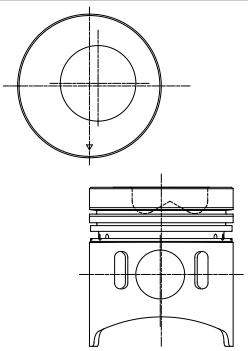
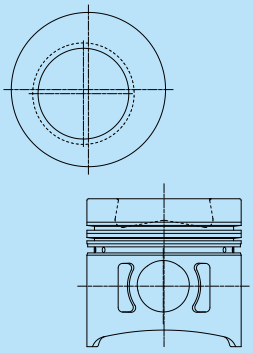
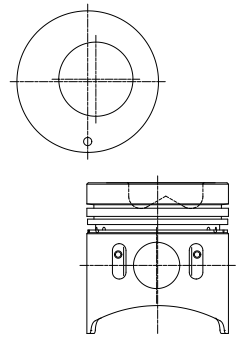
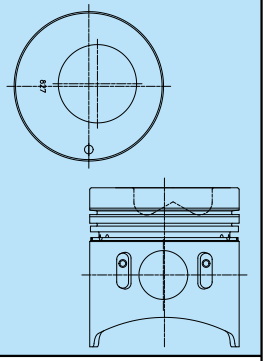
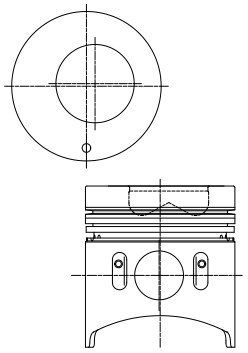
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
31	4G64SA 4cyls 86.5mm	MI4G32W MD303071	Delica Airtreck 2,350cc	67.0 35.0 –	– ○ –	Top : 1.2 2nd : 1.5 Oil : 2.8	22.0 × 62.0 –	
32	4G69S 4cyls 87.0mm	MI4G53W MN183397	Grandis Airtreck 2,378cc	59.0 28.0 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	22.0 × 69.0 –	
33	G54BD 4cyls 91.1mm	MI4G17W MD026921	Galant 2,555cc	77.4 35.4 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	22.0 × 79.0 –	
34	6G72R 6cyls 91.1mm	MI6G22W MD119671	Sigma Debonair 2,972cc	68.2 32.15 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 64.0 –	
35	6G72L 6cyls 91.1mm	MI6G23W MD152563	Sigma Debonair 2,972cc	68.2 32.15 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 64.0 –	

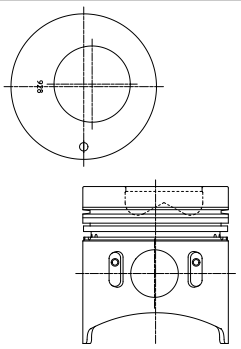
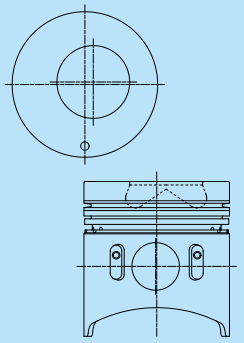
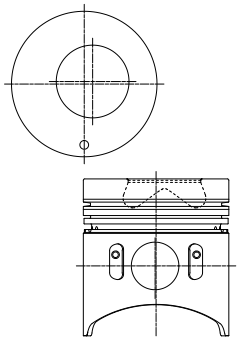
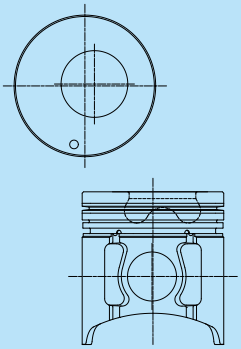
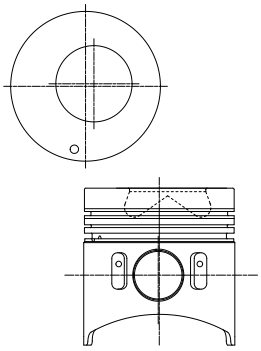
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
36	6G72R 6cyls 91.1mm	MI6G35W MD197808	Pajero,Delica Diamante 2,972cc	66.15 32.15 Tin	– ○ –	Top : 1.2 2nd : 1.5 Oil : 3.0	22.0×64.0 –	
37	6G72L 6cyls 91.1mm	MI6G36W MD197814	Pajero,Delica Diamante 2,972cc	66.15 32.15 Tin	– ○ –	Top : 1.2 2nd : 1.5 Oil : 3.0	22.0×64.0 –	
38	6G72S2 6cyls 91.1mm	MI6G37W MD194548	Pajero,Eclipse Challenger 2,972cc	65.9 31.9 Tin	– ○ –	Top : 1.2 2nd : 1.5 Oil : 3.0	22.0×64.0 –	
39	6G72Q 6cyls 91.1mm	MI6G51W MD318501	Sigma Pajero 2,972cc	65.9 31.9 –	– ○ –	Top : 1.2 2nd : 1.5 Oil : 3.0	22.0×64.0 –	
40	6G72SE 6cyls 91.1mm	MI6G52W MD367099	Sigma Pajero 2,972cc	65.2 31.2 Tin	– ○ –	Top : 1.2 2nd : 1.5 Oil : 3.0	22.0×64.0 –	

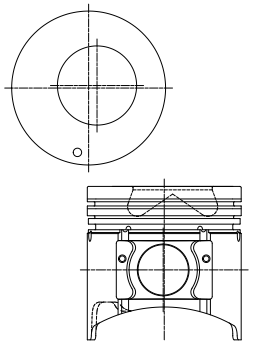
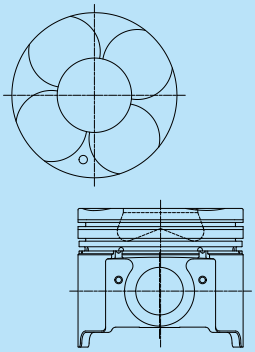
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
41	6G72-S4 6cyls 91.1mm	MI6G59W 1110B778 MD367892	Pajero 2,972cc	64.2 30.2 Tin H-Anodize	– – –	Top : 1.2 2nd : 1.5 Oil : 3.0	22.0 × 64.0 –	
42	4D56TC 4cyls 91.1mm	MI4D01WA MD103308	Galant Diesel Delica 2,346cc	88.7 48.7 Tin	○ ○ –	Top : 2.6K 2nd : 2.1K Oil : 4.0	29.0 × 75.0 Wire	
43	4D56NA 4cyls 91.1mm	MI4D02W MD103318 MD050021	Galant Diesel Delica 2,346cc	88.7 48.7 Tin	– ○ –	Top : 2.5 2nd : 2.0 Oil : 4.0	29.0 × 75.0 Wire	
44	4D56NA 4cyls 91.1mm	MI4D03WA MD117177	Delica Diesel 2,346cc	88.7 48.7 Tin	○ ○ –	Top : 2.6 2nd : 2.0 Oil : 4.0	29.0 × 75.0 Wire	
45	4D56TC 4cyls 91.1mm	MI4D12WA MD304847	Delica 2,346cc	88.7 48.7 Tin	○ ○ –	Top : 2.6K 2nd : 2.1K Oil : 4.0	29.0 × 75.0 Wire	

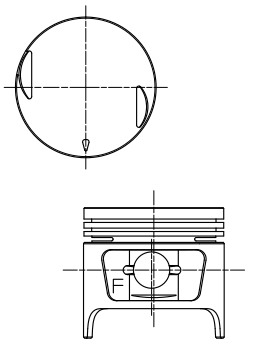
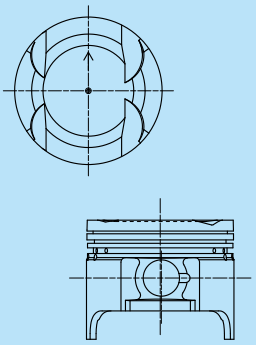
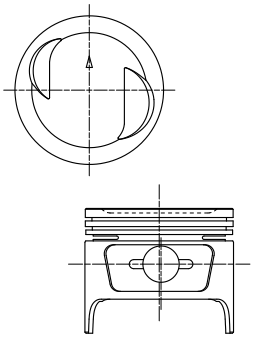
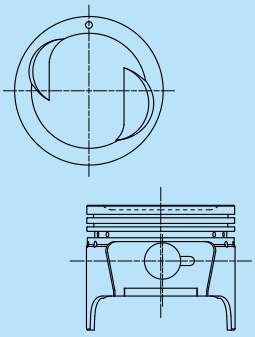
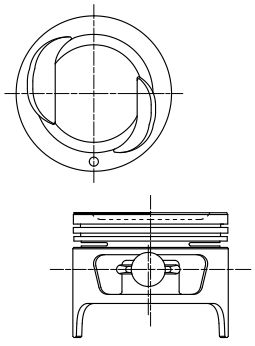
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
46	4D56NA 4cyls 91.1mm	MI4D18W MD304835	Galant	88.7 48.7 Tin	– ○ –	Top : 2.6 2nd : 2.0 Oil : 4.0	29.0 × 75.0 Wire	
47	4D56T 4cyls 80.5mm	MI4D18WA MD304835	Galant 2,476cc	88.7 48.7 Tin	○ ○ –	Top : 2.6 2nd : 2.1 Oil : 4.0	29.0 × 75.0 Wire	
48	4D56IC-TC 4cyls 91.1mm	MI4D25WA MD367637	Pajero 2,476cc	88.7 48.7 Tin	○ – ○	Top : 2.6K 2nd : 2.1K Oil : 4.0	29.0 × 75.0 Wire	
49	4D56IC-TC 4cyls 91.1mm	MI4D26WA MD367643	Pajero 2,476cc	88.7 48.7 Tin	○ – ○	Top : 2.6K 2nd : 2.1K Oil : 4.0	29.0 × 75.0 Wire	
50	DR5 4cyls 92.0mm	MI4D04W 31617-00106	Jeep,Canter Rosa 2,659cc	99.5 52.5 –	– – –	Top : 2.635K 2nd : 2.0 3rd : 2.0 Oil : 4.5	28.0 × 77.0 Wire	

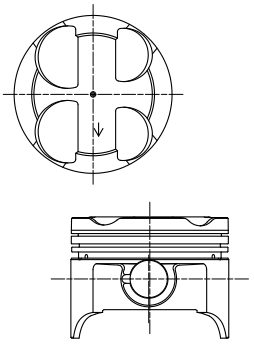
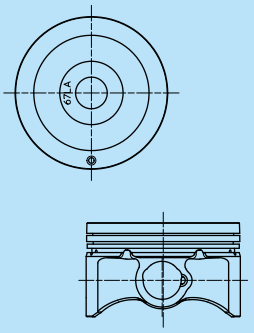
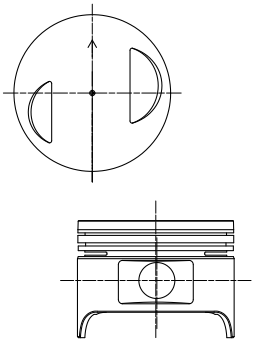
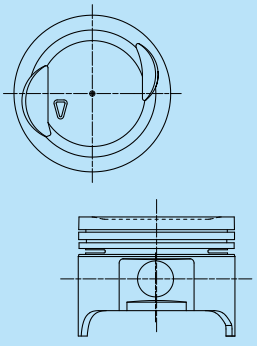
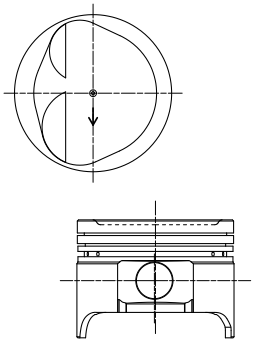
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
51	4DR-51 4cyls 92.0mm	MI4D05W ME002044	Canter Diesel 2,700cc	99.8 52.75 –	– ○ –	Top : 2.635K 2nd : 2.0 3rd : 2.0 Oil : 4.5	28.0 × 77.0 Wire	
52	6G74H 6cyls 93.0mm	MI6G34W MD308276	Pajero,Lancer Debonair 3,500cc	66.0 32.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 3.0	22.0 × 64.0 Flat	
53	6G74-S4 6cyls 93.0mm	MI6G43W MD334469	Debonair 3,500cc	65.2 31.2 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 3.0	22.0 × 64.0 Flat	
54	4D30 4cyls 100.0mm	MI4D06W ME012090	Truck,Bus 3,298cc	110.5 60.5 –	– – –	Top : 3.0K 2nd : 2.0 Oil : 5.0	34.0 × 84.0 Flat	
55	4D31 4cyls 100.0mm	MI4D08W ME012131	Canter Diesel 3,298cc	110.7 60.7 –	– ○ –	Top : 3.0K 2nd : 2.0 Oil : 5.0	34.0 × 84.0 Flat	

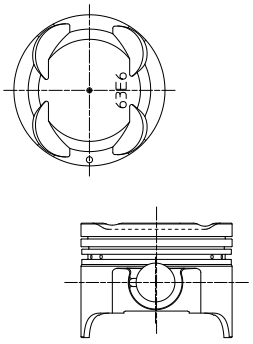
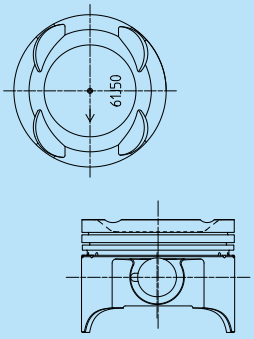
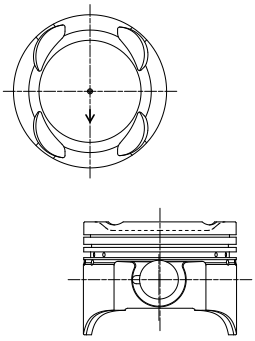
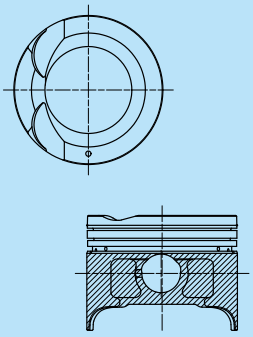
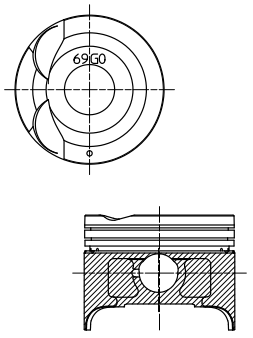
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
56	4D31 4cyls 100.0mm	MI4D09WA ME012145	Canter Diesel 3,298cc	110.7 60.7 –	○ – –	Top : 3.0K 2nd : 2.0 Oil : 5.0	34.0×84.0 Flat	
57	S6KT 6cyls 102.0mm	MI6D27WA 34317-10201	6,380cc	97.8 57.8 –	○ – –	Top : 3.18K 2nd : 2.18K Oil : 4.0	34.0×84.0 Flat	
58	4D32 4cyls 104.0mm	MI4D10W ME012174	Canter Diesel 3,567cc	110.7 60.7 Tin	– ○ –	Top : 3.0K 2nd : 2.0 Oil : 4.0	34.0×84.0 Flat	
59	4D32 4cyls 104.0mm	MI4D17WA ME012827	Canter 3,567cc	110.7 60.7 Tin	○ ○ –	Top : 3.0K 2nd : 2.0 Oil : 4.0	34.0×84.0 Flat	
60	4D34 4cyls 104.0mm	MI4D11WA ME012901	Canter Diesel 3,907cc	112.2 62.2 Tin	○ ○ –	Top : 2.74K 2nd : 2.0 Oil : 4.0	34.0×84.0 Flat	

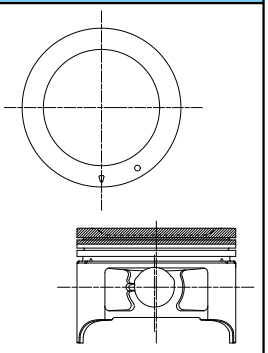
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
61	4D34 4cyls 104.0mm	MI4D16WA ME012928	Canter Diesel 3,907cc	112.2 62.2 Tin	○ ○ –	Top : 2.74K 2nd : 2.0 Oil : 4.0	34.0 × 84.0 Flat	
62	4D32 4cyls 104.0mm	MI4D29WA ME222950	Canter 3,567cc	110.7 60.7 Tin	○ ○ –	Top : 2.74K 2nd : 2.0 Oil : 4.0	34.0 × 84.0 Flat	
63	4D34 4cyls 104.0mm	MI4D30WA ME222953	Canter 3,907cc	112.2 62.2 Tin	○ ○ –	Top : 2.74K 2nd : 2.0 Oil : 4.0	34.0 × 84.0 Flat	
64	4D34T 4cyls 104.0mm	MI4D31WA ME220470	Canter 3,907cc	112.2 62.2 Tin	○ – ○	Top : 2.74K 2nd : 2.0 Oil : 4.0	36.0 × 88.0 Flat	
65	4D33 4cyls 108.0mm	MI4D19WA ME016895 ME230694	Canter 4,214cc	112.2 62.2 Tin	○ ○ –	Top : 3.0 2nd : 2.0 Oil : 4.0	34.0 × 84.0 Flat	

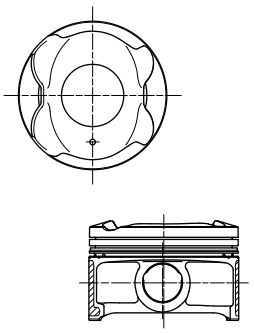
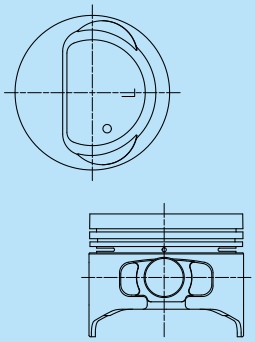
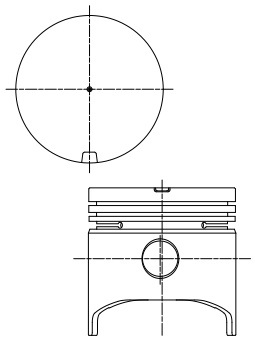
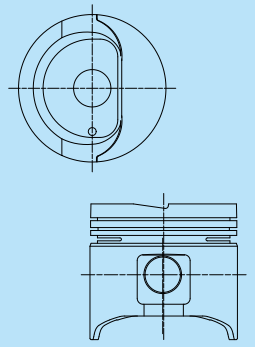
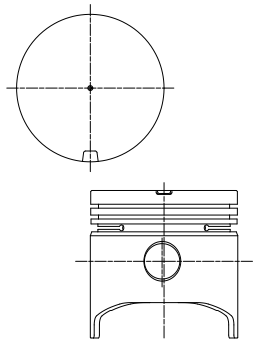
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
66	4D35K 4cyls 110.0mm	MI4D22WA ME014693	Canter 4,561cc	109.7 59.7 Tin	○ ○ ○	Top : 3.0 2nd : 2.0 Oil : 4.0	36.0×88.0 Flat	
67	4M51 4cyls 118.0mm	MI4D28WA ME240315	Canter 5,249cc	99.1 59.1 Tin	○ ○ –	Top : 3.0 2nd : 2.0 Oil : 3.0	34.0×84.0 Flat	
68								
69								
70								

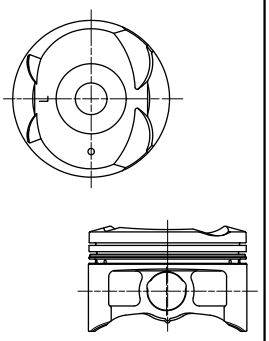
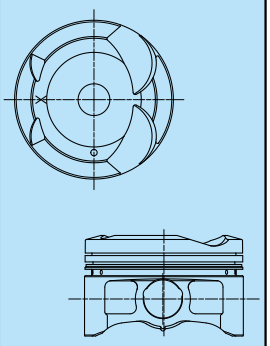
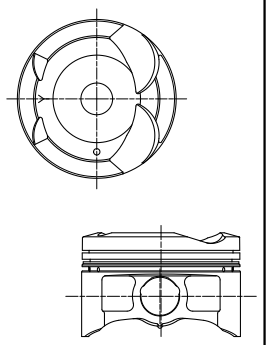
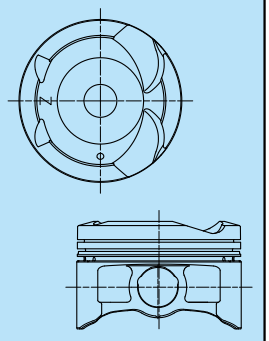
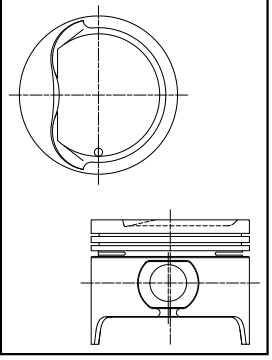
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
1	F8A 4cyls 62.0mm	SU4G01W 12111-78111	New Jimny 797cc	57.5 27.5 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	16.0 × 49.5 Wire	
2	F6A 3cyls 65.0mm	SU3G02W 12111-51E00	Alto Van Celvo 657cc	52.5 25.5 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.5	16.0 × 49.5 Wire	
3	F10A 4cyls 65.5mm	SU4G03W 12111-75107	Jimny 970cc	55.0 24.55 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	16.0 × 49.5 Wire	
4	SK410 4cyls 65.5mm	SU4G15W 12111-85201	Carry 797cc	55.0 24.55 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	16.0 × 53.5 Wire	
5	Y64 3cyls 68.5mm	SU3G08W 12111-78402	Alto Fronte 800cc	55.0 25.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	16.0 × 49.5 Wire	

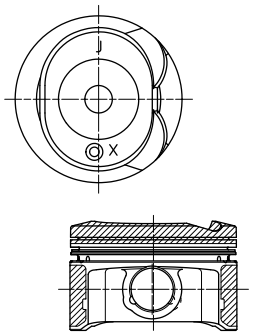
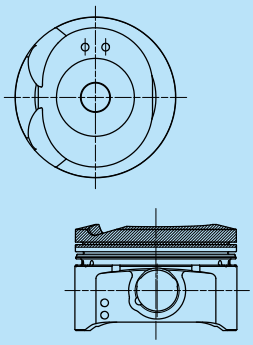
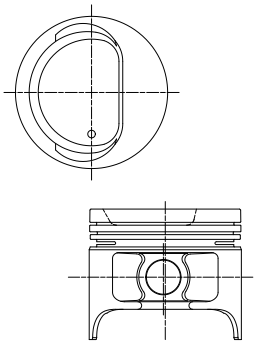
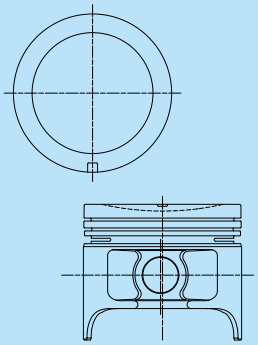
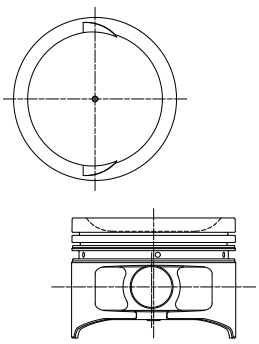
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
6	G10 4cyls 72.0mm	SU4G12W 12111-68EA0	1,000cc	55.3 28.0 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	17.0×61.0 Wire	
7	YR9 3cyls 73.0mm	SU3G19W 12111-67LA0	Karimun WagonR S-presso 996cc	44.5 27.25 –	– – –	Top : 1.0 2nd : 1.2 Oil : 2.0	18.0×47.5 Wire	
8	G10/Y71 3cyls 74.0mm	SU3G04W SU4G04W 12111-82010	Galtas 993cc	55.3 28.3 Tin	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	17.0×65.0 –	
9	G13A 4cyls 74.0mm	SU4G07W 12111-63B50	Swift 1,298cc	56.3 29.25 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	17.0×65.0 –	
10	G10A 3cyls 74.0mm	SU3G09W 12111-60B51	Swift 1,290cc	55.7 28.7 –	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	17.0×65.0 –	

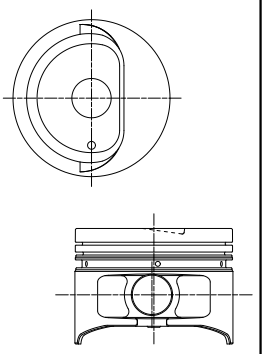
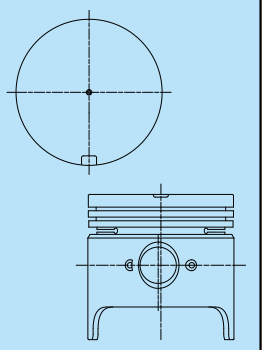
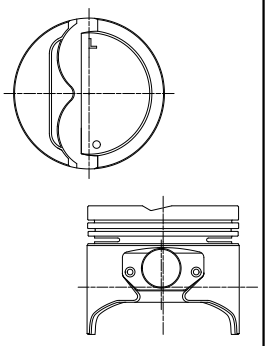
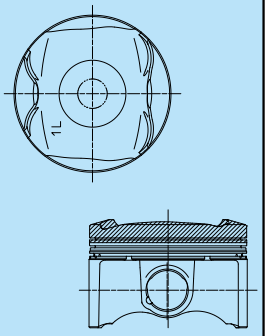
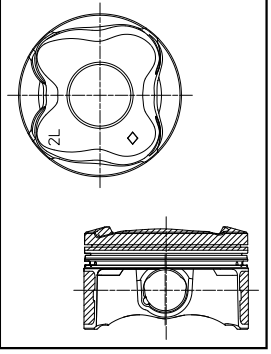
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
11	G13B 4cyls 74.0mm	SU4G11W 12111-63E60	Baneno1.3 1,290cc	56.1 29.05 –	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	19.0 × 63.0 Wire	
12	G16 4cyls 75.0mm	SU4G14W 12111-61J50	APV 1,500cc	55.3 28.3 –	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	19.0 × 63.0 Wire	
13	G16KV 4cyls 75.0mm	SU4G16W 12111-71C02	Escude 1,590cc	55.3 28.3 –	– – –	Top : 1.2 2nd : 1.5 Oil : 2.8	19.0 × 63.0 Wire	
14	M15A 4cyls 78.0mm	SU4G10W 12111-54812 12111-54G02	Swift 1,490cc	59.5 30.0 Resin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	20.0 × 59.0 Wire	
15	M13A 4cyls 78.0mm	SU4G17W 12111-69G01	Swift	59.5 30.0 Resin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.5	20.0 × 59.0 Wire	

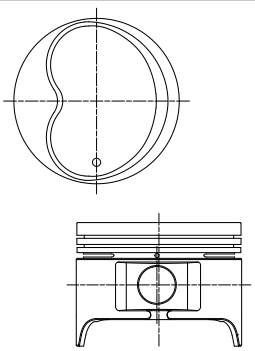
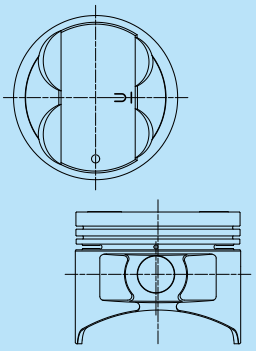
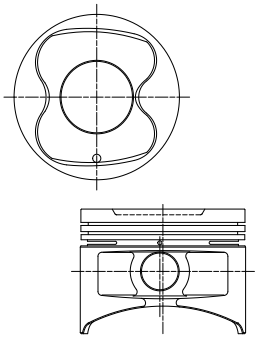
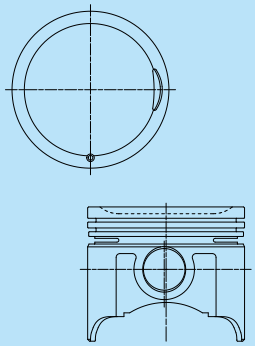
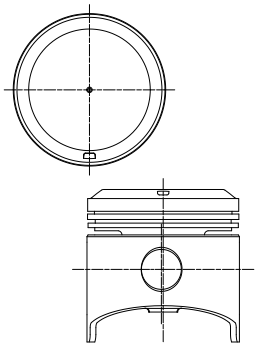
No.	Engine type Cyl. Diameter (φ)	ART Part No. Reference No.	Vehicle Model	Piston Full Length Comp. Height Surface Treatment	Piston Alfin Strut Cooling Channel	Piston Ring Groove	Pin Piston Circlip	Piston Shape
16	J20A 4cyls 84.0mm	SU4G18W 12111-65821	Escude 1,995cc	60.7 31.2 H-Anodize	- - -	Top : 1.2 2nd : 1.2 Oil : 2.5	21.0×59.0 Wire	
17								
18								
19								
20								

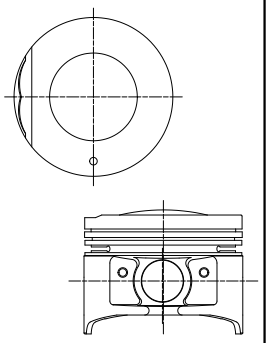
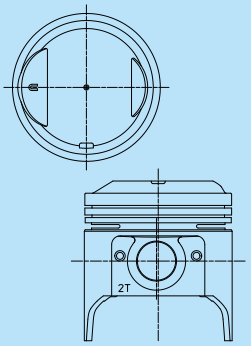
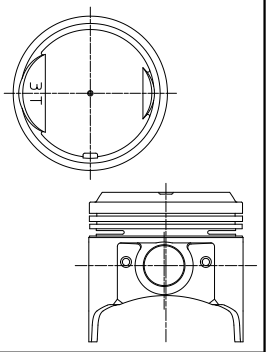
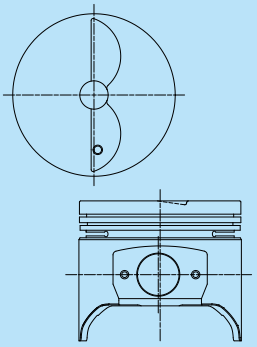
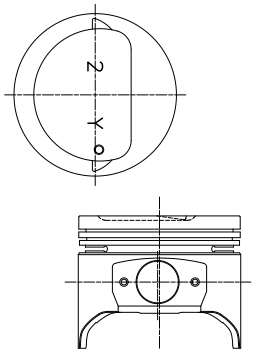
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
1	1KR-FE 3cyls 71.0mm	TO3G01W 13101-40020 13101-40021 13101-40030	Yaris etc. 996cc	47.1 26.5 Resin	– – –	Top : 1.0 2nd : 1.0 Oil : 1.5	18.0×47.0 –	
2	2E 4cyls 73.0mm	TO4G02W 13101-11050 13101-11051	Corolla Starlet 1,295cc	58.0 30.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 3.0	18.0×59.0 –	
3	3K 4cyls 75.0mm	TO4G12W 13101-24010	Publica,Starlet Sprinter,Corolla 1,166cc	75.0 36.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	18.0×61.0 Wire	
4	4K 4cyls 75.0mm	TO4G03W 13101-13022	Publica,Starlet Sprinter,Corolla Chamant 1,290cc	69.0 36.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0×61.0 Wire	
5	4K 4cyls 75.0mm	TO4G13W 13101-24011	Publica,Starlet Sprinter,Corolla 1,290cc	75.0 36.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	18.0×61.0 Wire	

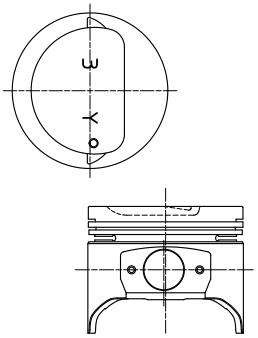
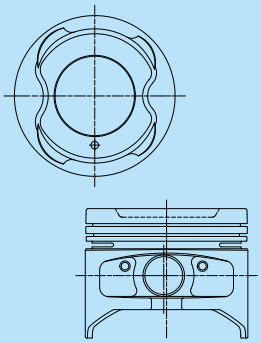
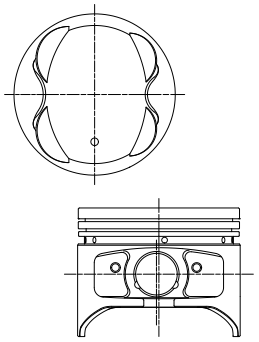
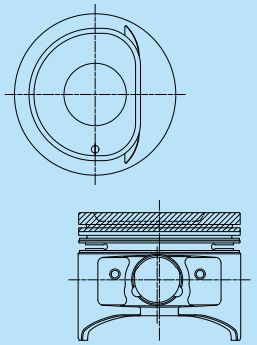
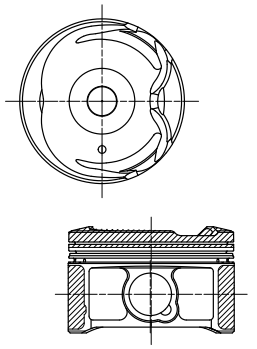
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
6	2NZ 4cyls 75.0mm	TO4G61W 13101-21080	Vios 1,298cc	49.7 28.1 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0×53.0 –	
7	2NZ 4cyls 75.0mm	TO4G67W 13101-21050	Vios 1,298cc	47.5 28.0 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 3.0	18.0×53.0 –	
8	2NZ 4cyls 75.0mm	TO4G69W 13101-21040	Vios 1,298cc	49.0 28.0 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0×53.0 –	
9	1NZ-FE 4cyls 75.0mm	TO4G71W 13101-21030	Corolla Yaris 1,497cc	49.0 28.0 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0×53.0 –	
10	3A 4cyls 77.5mm	TO4G07W 13101-15020	Tarcel,Corsa Corolla 1,452cc	60.9 30.9 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	18.0×61.0 –	

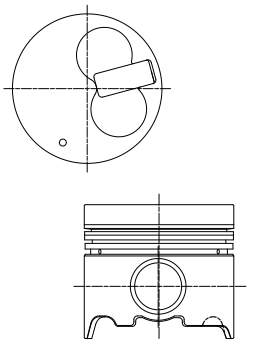
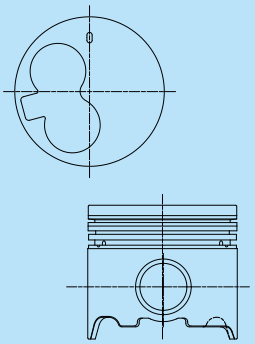
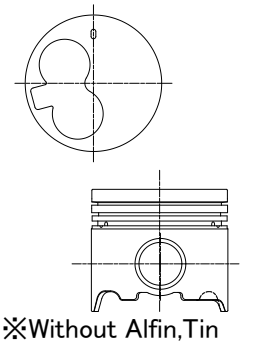
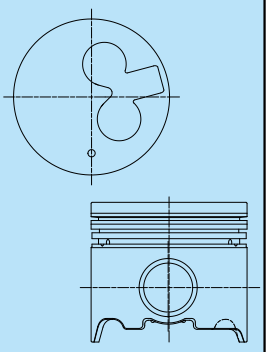
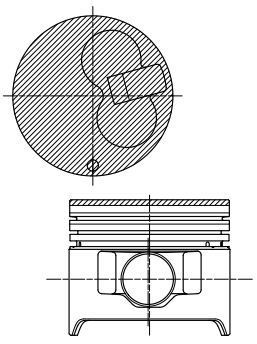
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
11	1ZZ-FE 4cyls 79.0mm	TO4G70W 13101-22142	Corolla Vista 1,794cc	49.3 29.8 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 3.0	20.0 × 50.0 Wire	
12	1ZZ-FE 4cyls 79.0mm	TO4G76W 13101-22032	Corolla Celica 1,794cc	51.7 29.8 Tin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 3.0	20.0 × 50.0 Wire	
13	5K 4cyls 80.5mm	TO4G04W 13101-13030	Corona-Van 1,496cc	69.0 36.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0 × 61.0 Wire	
14	5K 4cyls 80.5mm	TO4G05W 13101-13040	Corona-Van 1,496cc	69.0 36.0 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	18.0 × 61.0 Wire	
15	7K 4cyls 80.5mm	TO4G01W 13101-06050	Lite-Ace 1,781cc	58.8 33.75 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	20.0 × 56.0 –	

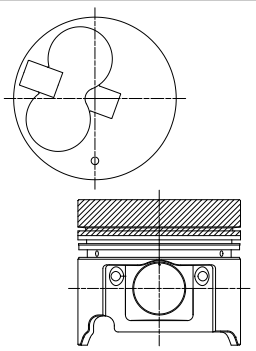
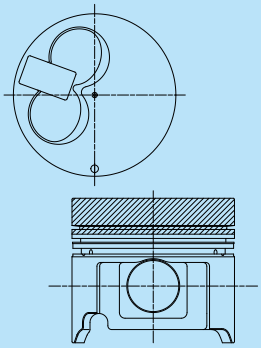
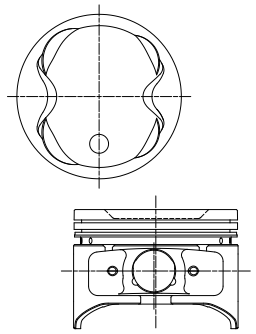
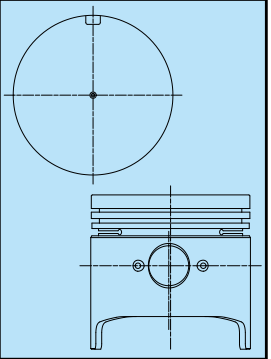
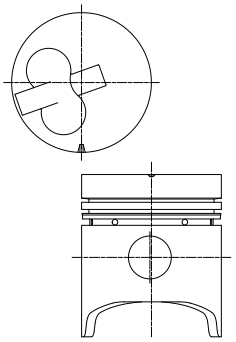
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
16	7K 4cyls 80.5mm	TO4G64W 13101-06030	Lite-Ace 1,781cc	58.8 33.75 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	20.0×56.0 –	
17	12R 4cyls 80.5mm	TO4G16W 13101-31021	Corona,Toyo-Ace Corona-Van 1,587cc	80.0 39.0 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	20.0×66.0 Wire	
18	1SL 4cyls 80.5mm	TO4G23W 13101-63020	Carina,Celica Chaser,resta 1,832cc	68.0 33.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	20.0×66.0 –	
19	1ZR-FE 4cyls 80.5mm	TO4G50W 13101-37081 13101-0T120	Corolla Auris 1,598cc	55.0 33.2 Tin H-Anodize	– – –	Top : 1.0 2nd : 1.0 Oil : 1.5	20.0×50.0 Wire	
20	2ZR-FE 4cyls 80.5mm	TO4G75W 13101-37380	Yaris,Corolla Allion,Premio 1,797cc	50.1 28.28 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.0 Oil : 2.0	20.0×50.0 Wire	

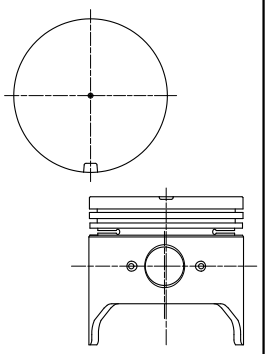
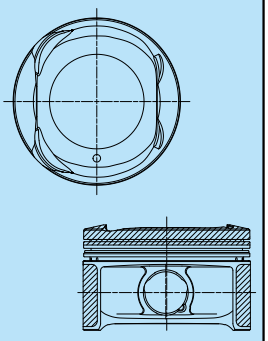
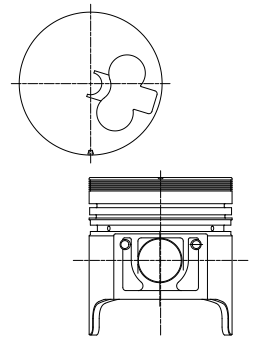
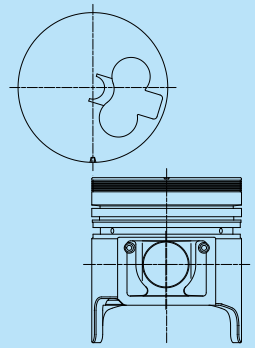
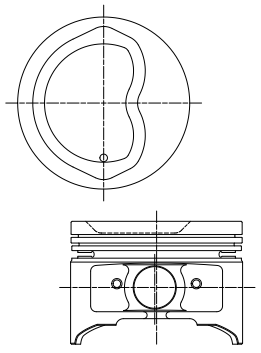
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
21	4A 4cyls 81.0mm	TO4G08W 13101-16011	Corolla 1,587cc	60.5 30.5 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	18.0×61.0 –	
22	4AGEU 4cyls 81.0mm	TO4G09W 13101-16020	Corolla 1,587cc	64.5 30.5 –	– – –	Top : 1.5 2nd : 1.5 Oil : 2.8	18.0×61.0 –	
23	4AF 4cyls 81.0mm	TO4G11W 13101-16090	Corolla 1,587cc	61.0 30.5 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 3.0	18.0×61.0 –	
24	5M 6cyls 83.0mm	TO6G36W 13101-43031	Celica,Crown 2,759cc	71.0 33.0 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	22.0×66.0 Wire	
25	21RC 4cyls 84.0mm	TO4G20W 13101-37030	Corona,Chaser Mark Ⅱ 1,972cc	84.0 39.0 Tin	– – –	Top : 1.5 2nd : 2.0 Oil : 4.0	22.0×72.0 Wire	

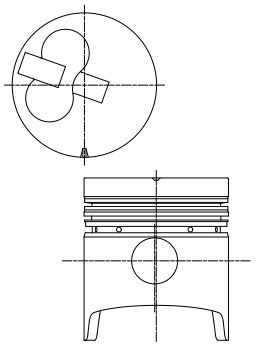
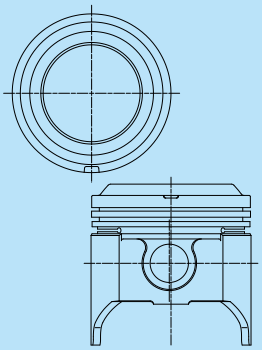
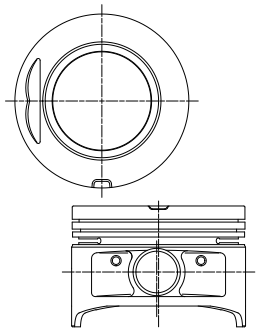
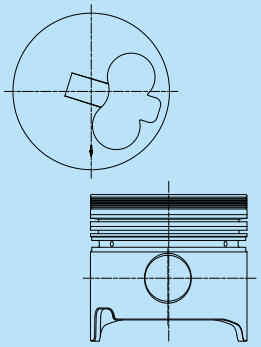
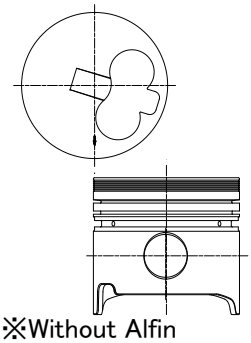
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
26	21R 4cyls 84.0mm	TO4G21W 13101-37060 13101-37061	Corona,Chaser Mark Ⅱ 1,972cc	65.6 34.9 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×66.0 Wire	
27	2TU 4cyls 85.0mm	TO4G14W 13101-26031	Corona Camry,Celica 1,588cc	91.8 39.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×66.0 –	
28	3TU 4cyls 85.0mm	TO4G15W 13101-28010	Corona Camry,Celica 1,770cc	82.4 35.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×66.0 –	
29	1Y 4cyls 86.0mm	TO4G24W 13101-71010	Master Ace Hiace Wagon 1,626cc	74.0 39.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×66.0 –	
30	2Y 4cyls 86.0mm	TO4G25W 13101-72010	Master Ace Hiace Wagon 1,812cc	70.0 35.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×66.0 –	

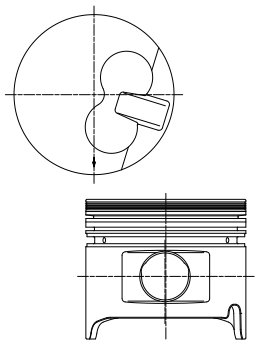
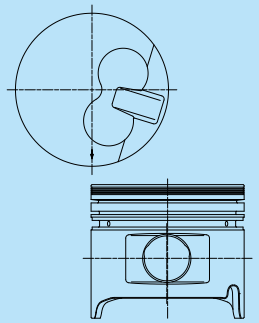
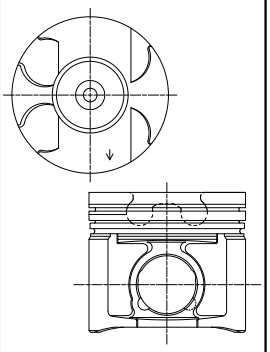
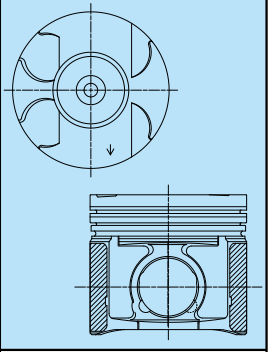
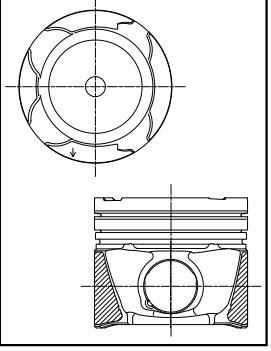
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
31	3Y 4cyls 86.0mm	TO4G26W 13101-73010	Master Ace Hiace Wagon 1,998cc	70.0 35.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×66.0 –	
32	3S-FE 4cyls 86.0mm	TO4G28W 13101-74040	Camry,Vista Corolla 1,998cc	68.4 35.4 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	20.0×66.0 –	
33	3S-FE 4cyls 86.0mm	TO4G66W 13101-74100	Camry,Vista Corolla 1,998cc	68.0 35.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×66.0 Wire	
34	1RZ 4cyls 86.0mm	TO4G63W 13101-75010	Hiace 1,998cc	67.5 35.5 Tin H-Anodize	– ○ –	Top : 1.75 2nd : 1.5 Oil : 4.0	24.0×61.0 Wire	
35	1TR 4cyls 86.0mm	TO4G68W 13101-75120 13101-0C010	Hiace Ban Toyo Ace 1,998cc	55.0 32.6 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	22.0×56.0 Wire	

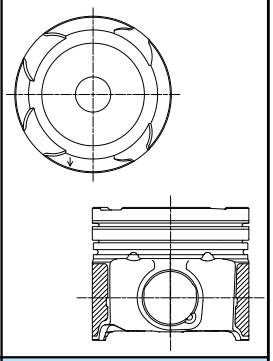
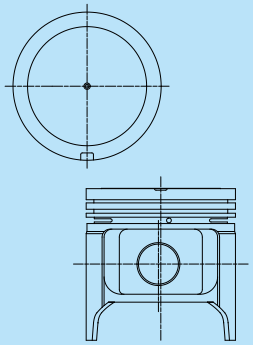
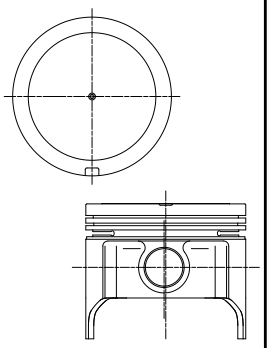
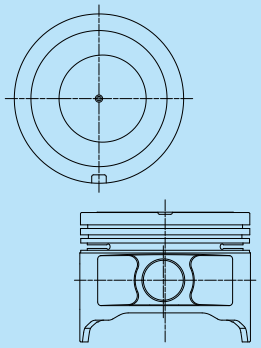
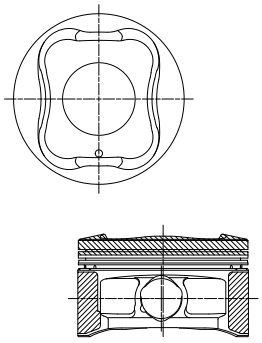
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
36	2C 4cyls 86.0mm	TO4D21WA 13101-64090	Town-Ace Lite-Ace 1,974cc	77.0 46.95 Tin	○ – –	Top : 1.826K 2nd : 2.0 Oil : 3.0	27.0×58.0 Flat	
37	2C 4cyls 86.0mm	TO4D32WA 13101-64141	Town-Ace Lite-Ace 1,974cc	77.0 46.95 Tin	○ ○ –	Top : 2.076K 2nd : 2.0 Oil : 3.0	27.0×58.0 Flat	
38	2C 4cyls 86.0mm	TO4D32W 13101-64141	Town-Ace Lite-Ace 1,974cc	77.0 46.95 –	× ○ –	Top : 2.076K 2nd : 2.0 Oil : 3.0	27.0×58.0 Flat	 ※Without Alfin,Tin
39	2C 4cyls 86.0mm	TO4D45WA 13101-64190	Town-Ace Lite-Ace 1,974cc	77.0 46.95 Tin	○ ○ –	Top : 2.078K 2nd : 2.0 Oil : 3.0	27.0×58.0 Flat	
40	3C 4cyls 86.0mm	TO4D46WA 13101-64151	Town-Ace Lite-Ace 2,184cc	72.5 42.45 Tin H-Anodize	○ – ○	Top : 2.076K 2nd : 2.0 Oil : 3.0	27.0×61.0 Flat	

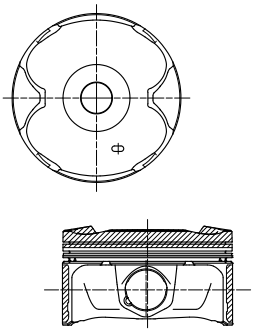
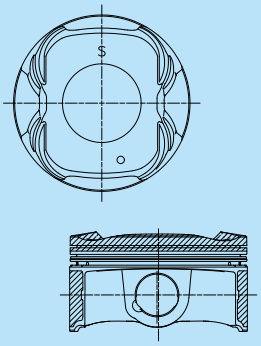
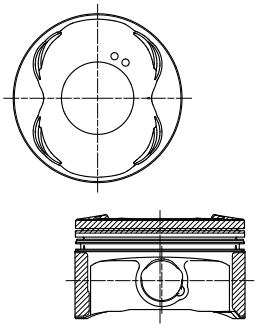
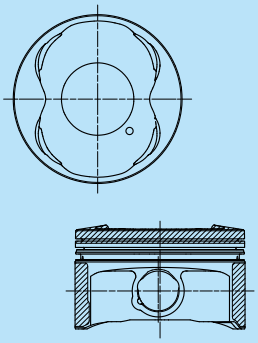
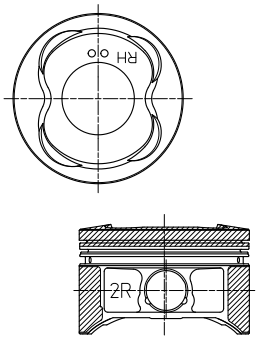
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
41	1DZ 4cyls 86.0mm	TO4D30W 13101-78201	Fork Lift	77.0 46.95 Tin H-Anodize	– ○ –	Top : 2.076K 2nd : 2.0 Oil : 4.0	27.0 × 68.0 Flat	
42	1DZ 4cyls 86.0mm	TO4D41W 13101-78202-71	Fork Lift	76.5 46.45 Tin H-Anodize	– – –	Top : 2.076K 2nd : 2.0 Oil : 3.0	27.0 × 68.0 Flat	
43	5S 4cyls 87.0mm	TO4G37W 13101-74130	Scepter,Camry Harrier 2,163cc	63.0 32.5 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 66.0 Wire	
44	5R 4cyls 88.0mm	TO4G22W 13101-44015 13101-44016	Crown,Dyna Stout 1,994cc	85.0 39.0 Tin	– ○ –	Top : 2.0 2nd : 2.5 Oil : 4.0	22.0 × 75.0 Wire	
45	2J 4cyls 88.0mm	TO4D02W 13101-48015	Dyna Toyo-Ace 2,481cc	102.2 52.2 Tin	– – –	Top : 2.626K 2nd : 2.5 Oil : 4.0	27.0 × 74.0 Wire	

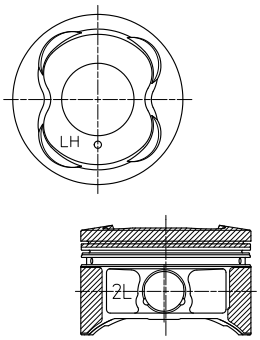
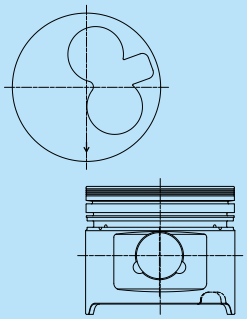
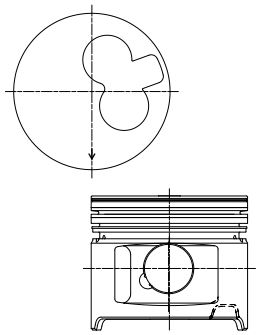
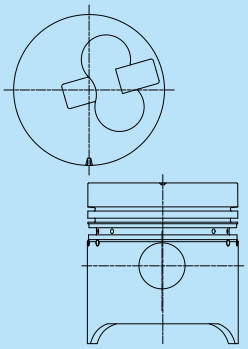
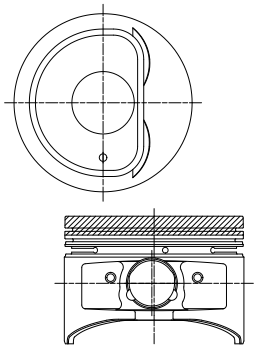
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
46	18RC 4cyls 88.5mm	TO4G17W 13101-34010 13101-34030 13101-34040	Corona,Carina Celica,Hiace 1,968cc	84.8 39.75 Tin	– ○ –	Top : 2.0 2nd : 2.5 Oil : 4.0	22.0 × 75.0 Wire	
47	2AZ-FE 4cyls 88.5mm	TO4G43W 13101-28030	Camry,Harrier Ipsum 2,362cc	55.8 33.5 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	22.0 × 56.0 Wire	
48	L114E 4cyls 90.0mm	TO4D03W 13101-54010	Hiace,Hilux Crown 2,188cc	99.2 52.2 Tin	– ○ –	Top : 2.5 2nd : 2.0 Oil : 4.0	27.0 × 74.0 Flat	
49	L21 4cyls 90.0mm	TO4D04W 13101-54021	Crown,Corona Toyo-Ace,Hiace 2,188cc	99.2 52.2 Tin	– ○ –	Top : 2.074K 2nd : 2.0 Oil : 4.0	27.0 × 74.0 Flat	
50	4Y 4cyls 91.0mm	TO4G27W 13101-73031	Crown Hiace 2,237cc	65.0 35.0 Tin	– ○ –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 66.0 –	

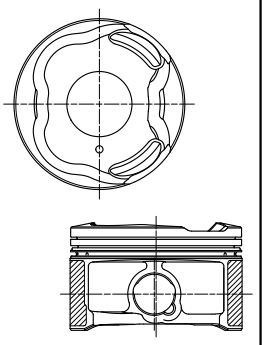
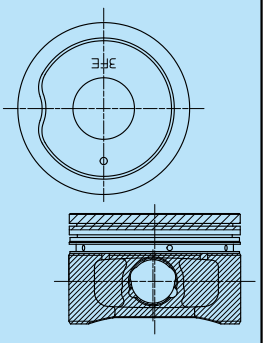
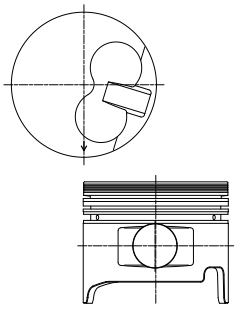
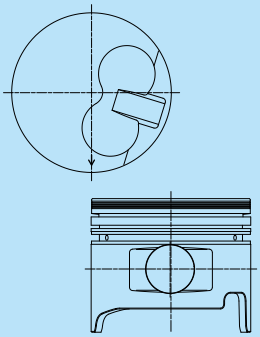
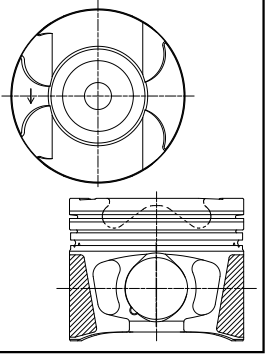
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
51	2H 6cyls 91.0mm	TO6D25WA 13101-68010	Land Cruiser Coaster 3,980cc	102.2 52.2 Tin	○ – –	Top : 2.607K 2nd : 2.5 Oil : 4.0	29.0 × 74.0 Flat	
52	22R 4cyls 92.0mm	TO4G18W 13101-35020	Coaster Land Cruiser 2,366cc	92.5 39.0 Tin	– – –	Top : 2.0 2nd : 2.5 Oil : 4.0	22.0 × 75.0 Wire	
53	22R 4cyls 92.0mm	TO4G19W 13101-35032	Coaster Land Cruiser 2,366cc	63.9 34.9 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 70.0 Wire	
54	2L 4cyls 92.0mm	TO4D06WA 13101-54060	Crown,Chaser Corona,Mark Ⅱ 2,446cc	86.2 49.2 Tin	○ – –	Top : 2.084K 2nd : 2.0 Oil : 4.0	27.0 × 74.0 Flat	
55	2L 4cyls 92.0mm	TO4D05W 13101-54060	Crown,Chaser Corona,Mark Ⅱ 2,446cc	86.2 49.2 Tin	× – –	Top : 2.084K 2nd : 2.0 Oil : 4.0	27.0 × 74.0 Flat	 ※Without Alfin

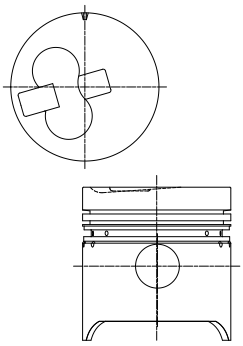
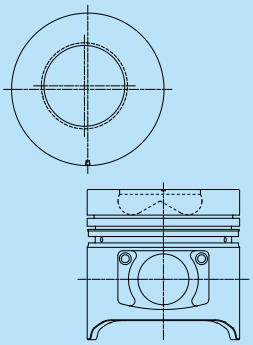
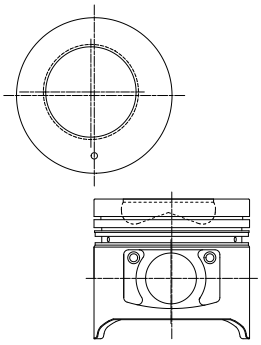
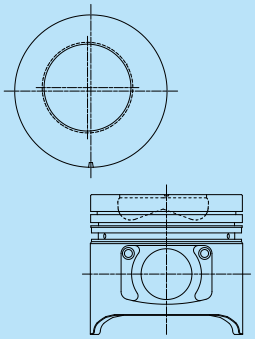
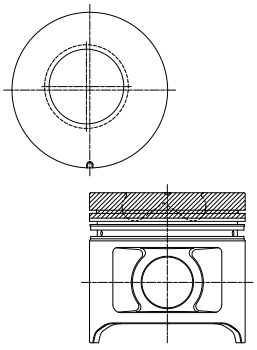
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
56	2L 4cyls 92.0mm	TO4D08WA 13101-54070	Crown,Chaser Corona,Mark Ⅱ 2,446cc	80.3 44.3 Tin	○ – –	Top : 2.064K 2nd : 2.0 Oil : 4.0	27.0 × 70.0 Flat	
57	2L 4cyls 92.0mm	TO4D07W 13101-54070	Crown,Chaser Corona,Mark Ⅱ 2,446cc	80.3 44.3 Tin	× – –	Top : 2.064K 2nd : 2.0 Oil : 4.0	27.0 × 70.0 Flat	 ※Without Alfin
58	2KD 4cyls 92.0mm	TO4D36WA 13101-30030 13101-30031	Hiace,Hilux Fortuner,Innova 2,494cc	82.2 54.23 Tin	○ – ○	Top : 2.0 2nd : 1.5 Oil : 3.0	34.0 × 65.0 Wire	
59	2KD-FTV 4cyls 92.0mm	TO4D48WA 13101-30081 13101-0L051	Hiace,Dyna Fortuner,Innova 2,494cc	82.2 54.23 Resin	○ – ○	Top : 2.0 2nd : 1.5 Oil : 3.0	34.0 × 65.0 Wire	
60	2GD 4cyls 92.0mm	TO4D49WA 13101-11180 13101-0E010	Hilux Revo,Hilux Fortuner,Innova 2,393cc	78.2 53.18 Resin	○ – ○	Top : 2.124K 2nd : 1.5 Oil : 3.0	31.0 × 67.0 Wire	

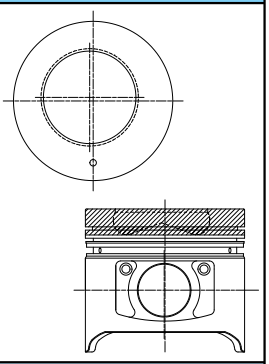
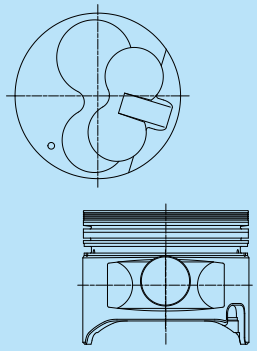
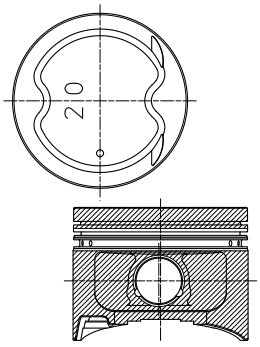
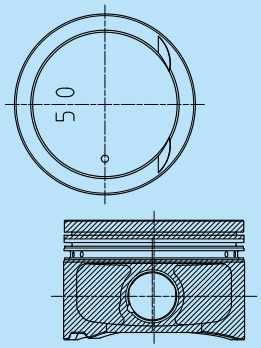
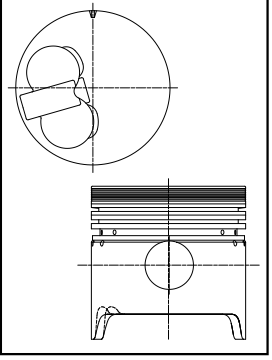
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
61	1GD 4cyls 92.0mm	TO4D50WA 13101-0E020 13101-11200	Hilux,Dyna Land Cruiser Prado 2,754cc	78.1 53.14 Resin	○ – ○	Top : 2.124K 2nd : 1.5 Oil : 3.0	31.0 × 67.0 Wire	
62	2F 6cyls 94.0mm	TO6G32W 13101-61010 13101-61011	Truck Land Cruiser 4,230cc	95.5 47.5 Tin	– – –	Top : 2.0 2nd : 2.5 Oil : 4.0	25.2 × 72.0 –	
63	3F 6cyls 94.0mm	TO6G33W 13101-61030	Land Cruiser 3,955cc	79.3 37.3 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0 × 75.0 Wire	
64	3F-32 6cyls 94.0mm	TO6G34W 13101-61032	Land Cruiser 3,955cc	71.5 37.5 Tin	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	22.0 × 75.0 Wire	
65	1GR-FE 6cyls 94.0mm	TO6G45W 13101-31030	Tundra Hilux Tacoma 3,955cc	56.6 32.5 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	22.0 × 62.0 Wire	

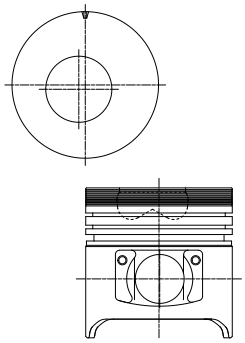
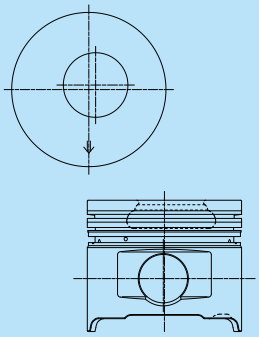
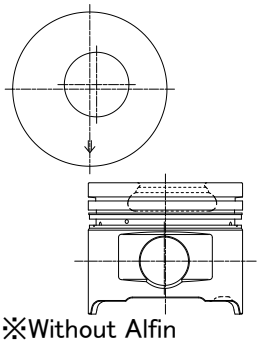
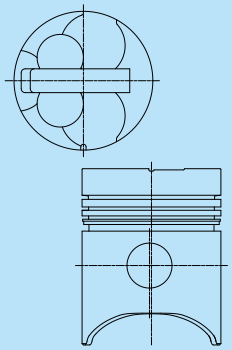
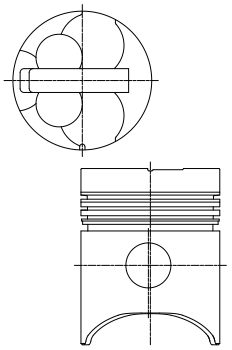
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
66	1GR-FE 6cyls 94.0mm	TO6G60W 13101-31120	Hilux Land Cruiser 3,955cc	54.7 32.8 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 3.0	22.0×56.0 Wire	
67	2GR-FE 6cyls 94.0mm	TO6G59W 13101-31092	Nubir,Lanos Camry,Rav4 1,598cc 3,456cc	52.6 31.2 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	22.0×56.0 Wire	
68	2UZ-FE 8cyls(RH) 94.0mm	TO8G77W 13101-50082	Land Cruiser LEXUS 4,663cc	57.4 33.8 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 3.0	22.0×62.0 Wire	
69	2UZ-FE 8cyls(LH) 94.0mm	TO8G78W 13301-50072	Land Cruiser LEXUS 4,663cc	57.4 33.8 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 3.0	22.0×62.0 Wire	
70	2UZ-FE 8cyls(RH) 94.0mm	TO8G79W 13101-50061	Land Cruiser LEXUS 4,663cc	60.3 33.8 Resin H-Anodize	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×62.0 Wire	

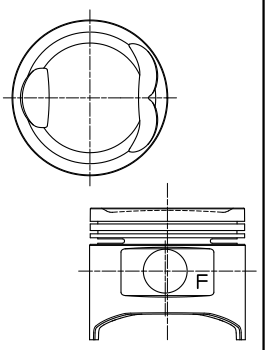
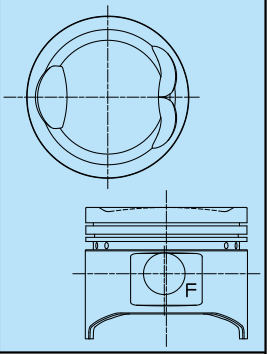
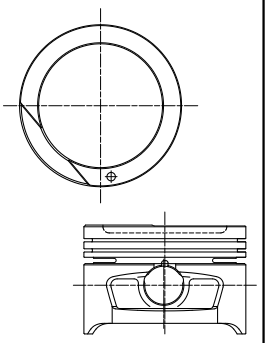
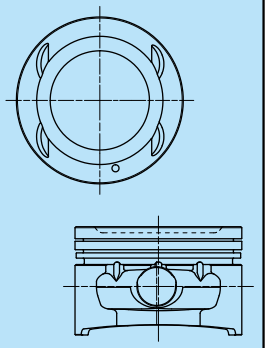
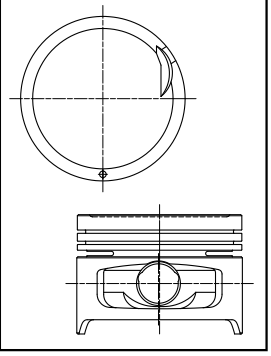
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
71	2UZ-FE 8cyls(LH) 94.0mm	TO8G80W 13301-50051	Land Cruiser LEXUS 4,663cc	60.3 33.8 Resin H-Anodize	- - -	Top : 1.5 2nd : 1.5 Oil : 4.0	22.0×62.0 Wire	
72	1HZ 6cyls 94.0mm	TO6D33W 13101-17010	Land Cruiser 4,163cc	80.6 43.6 Tin	× × -	Top : 2.05K 2nd : 2.0 Oil : 4.0	29.0×65.0 Wire	 ※Without Alfin,Strut
73	1HZ 6cyls 94.0mm	TO6D35WA 13101-17100	Land Cruiser 4,163cc	80.6 43.6 Tin	○ - -	Top : 2.09K 2nd : 2.0 Oil : 4.0	29.0×65.0 Wire	
74	B 4cyls 95.0mm	TO4D12W 13101-56030	Dyna,Coaster Land Cruiser 2,977cc	101.2 52.2 Tin	- - -	Top : 2.626K 2nd : 2.5 Oil : 4.5	29.0×79.0 Flat	
75	2RZ 4cyls 95.0mm	TO4G62W 13101-75020	Hiace 2,438cc	67.5 35.5 Tin H-Anodize	- ○ -	Top : 1.75 2nd : 1.5 Oil : 4.0	24.0×70.0 Wire	

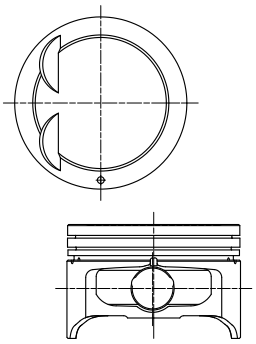
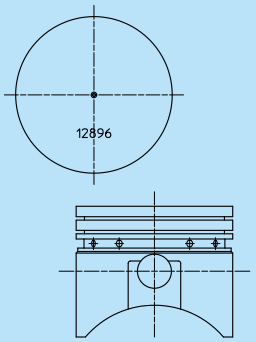
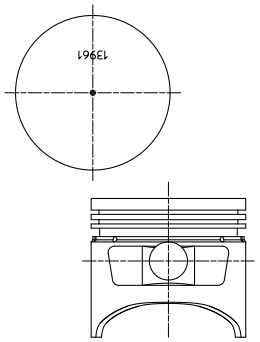
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
76	2TR 4cyls 95.0mm	TO4G65W 13101-75130 13101-0C020	Hilux,Surf Land Cruiser Prado 2,693cc	59.3 37.0 Resin H-Anodize	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	22.0 × 62.0 Wire	
77	3RZ 4cyls 95.0mm	TO4G72W 13101-75040 13101-75041	Hilux Land Cruiser 2,693cc	61.0 37.5 Resin H-Anodize	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	24.0 × 70.0 Wire	
78	3L 4cyls 96.0mm	TO4D10WA 13101-54100	Toyo-Ace Hilux,Hiace 2,779cc	80.3 42.30 Tin	○ – –	Top : 2.064K 2nd : 2.0 Oil : 4.0	29.0 × 75.0 Flat	 ※Without Alfin
79	3L 4cyls 96.0mm	TO4D09W 13101-54100	Toyo-Ace Hilux,Hiace 2,779cc	80.3 42.3 Tin	× – –	Top : 2.064K 2nd : 2.0 Oil : 4.0	29.0 × 75.0 Flat	
80	1KD 4cyls 96.0mm	TO4D47WA 13101-0L030 13101-0L080	Land Cruiser Hiace,Hilux 2,982cc	78.5 49.63 Resin	○ – ○	Top : 2.124K 2nd : 1.5 Oil : 3.0	34.0 × 73.0 Wire	

No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
81	2B 4cyls 98.0mm	TO4D15W 13101-57020	Coaster Lnad Cruiser 3,168cc	101.2 52.20 Tin	– – –	Top : 2.626K 2nd : 2.5 Oil : 4.5	29.0 × 79.0 Wire	
82	1Z 4cyls 96.0mm	TO4D29W 13101-78300-71	Fork Lift	94.5 56.53 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	32.0 × 77.0 Flat	
83	2Z 4cyls 98.0mm	TO4D31W 13101-78700-71	Fork Lift	88.0 49.96 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	32.0 × 77.0 Flat	
84	12Z 6cyls 96.0mm	TO6D42W 13101-78360-71	Fork Lift	88.0 50.03 Tin	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	32.0 × 77.0 Flat	
85	13Z 6cyls 98.0mm	TO6D43W 13101-78762-71	Fork Lift	94.5 56.46 Tin H-Anodize	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	32.0 × 77.0 Flat	

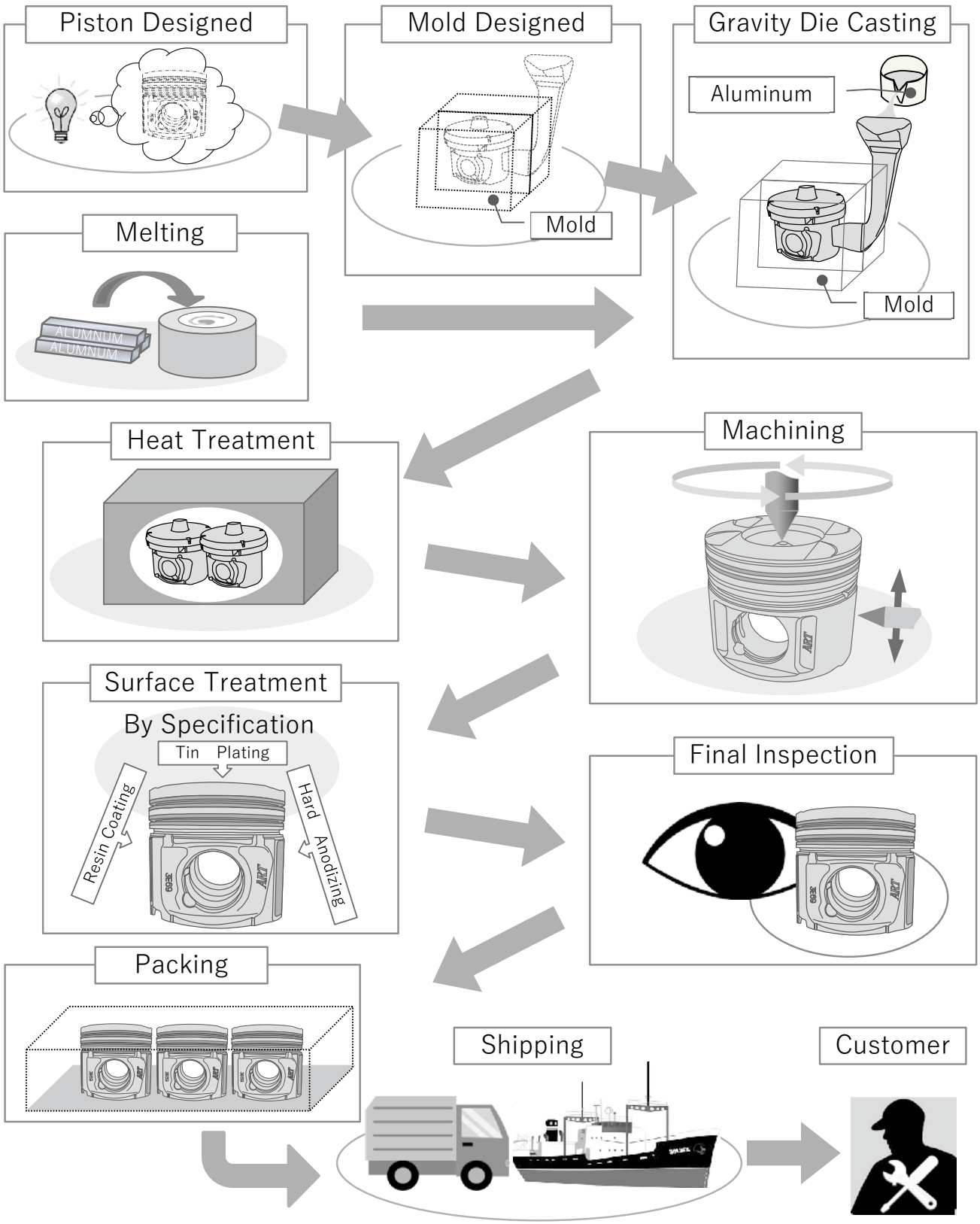
No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston / Circlip	Piston Shape
86	14Z 6cyls 98.0mm	TO6D44W 13101-78780-71	Fork Lift	88.0 49.96 Tin H-Anodize	– ○ –	Top : 2.0 2nd : 2.0 Oil : 4.0	32.0×77.0 Flat	
87	5L 4cyls 99.5mm	TO4D37WA 13101-54120	Hiace,Hilux Land Cruiser 2,985cc	80.3 42.3 Tin	○ – ○	Top : 2.09K 2nd : 1.5 Oil : 4.0	29.0×74.0 Flat	
88	1FZ 6cyls 100.0mm	TO6G57W 13101-66020	Land Cruiser 4,476cc	76.0 42.0 Resin H-Anodize	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	26.0×62.8 Wire	
89	1FZ 6cyls 100.0mm	TO6G58W 13101-66050	Land Cruiser 4,476cc	66.0 42.0 Resin H-Anodize	– – –	Top : 1.75 2nd : 2.0 Oil : 4.0	26.0×62.8 Wire	
90	3B 4cyls 102.0mm	TO4D16WA 13101-58011	Dyna,Coaster Lnad Cruiser 3,431cc	101.2 52.2 Tin	○ – –	Top : 2.535K 2nd : 2.5 Oil : 4.5	32.0×84.0 Wire	

No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
91	13B 4cyls 102.0mm	TO4D17W 13101-58021	Dyna,Toyo-Ace 3,431cc	104.4 63.38 Tin	– ○ –	Top : 2.5 2nd : 2.5 Oil : 4.5	34.0×84.0 Flat	
92	14B 4cyls 102.0mm	TO4D19WA 13101-58040	Dyna,Toyo-Ace 3,661cc	86.8 51.83 Tin	○ – –	Top : 2.535K 2nd : 2.0 Oil : 4.0	32.0×72.0 Flat	
93	14B 4cyls 102.0mm	TO4D18W 13101-58040	Dyna,Toyo-Ace 3,661cc	86.8 51.83 Tin	× – –	Top : 2.535K 2nd : 2.0 Oil : 4.0	32.0×72.0 Flat	 ※Without Alfin
94	2D 6cyls 105.0mm	TO6D27W 13101-77020	Toyota Truck Toyota Bus 6,494cc	133.2 73.2 Tin	– – –	Top : 3.1K 2nd : 2.5 3rd : 2.5 Oil : 5.0	34.0×88.5 Wire	
95	2D 6cyls 105.0mm	TO6D28WA 13101-77021	Truck Bus 6,494cc	133.2 73.2 Tin	○ – –	Top : 3.1K 2nd : 2.5 3rd : 2.5 Oil : 5.0	34.0×88.5 Wire	

No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin / Strut / Cooling Channel	Piston: Ring Groove	Pin Piston: Circlip	Piston Shape
1	PRIDE 4cyls 71.0mm	KA4G01W MB3Y8-11-SAO/103	KIA Pride 1,000cc	60.0 28.7 –	– – –	Top : 1.2 2nd : 1.5 Oil : 3.0	20.0×51.0 –	
2	B6 4cyls 78.0mm	KA4G02W MB3Y8-11-SAO	KIA Spectra 1,600cc	63.2 31.85 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	20.0×61.0 –	
3	A15DM 4cyls 76.5mm	DW4G01W 96081975	Daewoo Leman,Lanos Espero,Cielo 1,500cc	51.0 28.0 Tin	– – –	Top : 1.5 2nd : 1.5 Oil : 3.0	18.0×55.0 –	
4	16D 4cyls 79.0mm	DW4G02W 96182846	Nubir,Lanos 1,598cc	51.3 28.3 Tin	– – –	Top : 1.2 2nd : 1.5 Oil : 3.0	18.0×56.0 –	
5	X3 4cyls 75.5mm	HD4G01W 23410-22410	Hyundai Accent 1,500cc	54.4 31.4 –	– – –	Top : 1.5 2nd : 1.5 Oil : 3.0	18.0×47.5 –	

No.	Engine type Cyl. Diameter (φ)	ART Part No. / Reference No.	Vehicle Model	Piston: Full Length / Comp. Height / Surface Treatment	Piston: Alfin Strut / Cooling Channel	Piston: Ring Groove	Pin Piston Circlip	Piston Shape
6	XD 4cyls 76.5mm	HD4G02W 23410-26511	Hyundai Click 1,600cc	50.2 28.2 Tin	– – –	Top : 1.2 2nd : 1.2 Oil : 2.0	18.0 × 47.5 –	
7	GS200R 1cyl 69.0mm	KU1G02B 12896-2111-1	Kubota	57.6 28.6 –	– – –	Top : 1.5 2nd : 1.5 Oil : 4.0	– –	
8	GS280G 1cyl 73.0mm	KU1G03B 13961-2111-1	Kubota	65.5 29.5 –	– – –	Top : 2.0 2nd : 2.0 Oil : 4.0	– –	
9								
10								

Piston Production Process



IMPORTANT NOTICE

The purpose of this PISTON CATALOG is to furnish our customers with as complete a listing of their pistons requirements as possible.

All listings, application or interchanges contained in this catalog are based on the latest information available at the time of printing. Every effort has been made to ensure that the information contained in this catalog is correct, but we do not assume any responsibility for errors which may occur.

All reference to manufactures names or part numbers are only used as a guide when ordering piston.

We added Low Price Type pistons which means cheaper version against the ordinary pistons in this catalog. As we changed specification for Alfins, struts and other factors, the potential and life of these pistons are lower than the ordinary pistons. Please understand the difference and handle with care as it is.

We apply our own part numbers on this catalog, the contents of this piston catalog will be changed without notice.

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