# A-type ENGINE TUNING PARTS

#### A-type forged high compression piston



#### Die forged products)

	A12 modified 1300	A12 modified 1300	A14 modified	A15 modified
	(STD)	(0.05os)	1500	1600
	forged high comp	forged high comp	forged high comp	forged high comp
Manufacturing	ÿ77(STD)	ÿ77(0.05os)	ÿ78 ÿ79	ÿ78 ÿ79
method Type Piston	ÿ17.45×46mm 32.7mm	ÿ17.45×46mm 32.7mm	ÿ19×46mm	ÿ19×46mm
diameter Pin			32.7mm	29.8mm
diameter x length Pin height	1.2×1.2×2.5mm	1.2×1.2×2.5mm	1.2×1.2×2.5mm	1.2×1.2×2.5mm
Piston ring	6.5x3.5x2.9mm 6.5x3.5x2.9mm 6.5x3.5x2.9mm 6.5x3.5x2.9mm IN4.2/EX4.5mm IN4.2/EX4.5mm IN4.0/			
thickness Round thickness Rec	ess 655¥44.0mm IN3.8/EX3.8	mm		
Recess	2.5cc	2.5cc	2.2cc	2.0cc
volume Weight	244g	244g	250g/78ÿ	240g/78ÿ
price	Unit: ¥90,000	Unit: ¥90,000	Unit: ¥90,000	Unit: ¥90,000
*Notes Piston diameter (design value)	ÿ76.93	ÿ76.98	ÿ78ÿ77.93 ÿ79=78.93	ÿ78ÿ77.93 ÿ79=78.93

#### A 12 modified 77ÿ lightweight racing piston (forged + machined)



ÿPiston diameter Design value •77ÿ (STD) 76.93ÿ •77ÿ (OS)

This piston is made from forged material, which has a proven track record of durability, and is machined to be as lightweight as possible. In addition to a 7mm wide top land design, the valve receases are carved to 4.5mm for both the IN and EX to accommodate high lift camshafts. Furthermore, the design incorporates the durability and high performance required for racing, such as changes to the ovaility and skirt si

	Forged +	
	Machined	
Manufacturing	High compression	
method Type Piston	ÿ77 (STD/OS)	
diameter Pin		
diameter x length Pin height	ÿ17.45×46mm 32.7mm 1.	×1.2×2.5mm
Piston ring	7.0x3.5x2.9mm	1
thickness	IN4.5/EX4.5mm	
Round	2.6cc	1
thickness Recess depth Recess	volume Weig <b>264</b> g	
price	Unit: ¥90,000	

#### Type A F112 Reinforced Metal (STD)



A-type F112 reinforced metal

•F112 Main Metal SET Body ÿ16,500

•F112 Connecting rod metal SET
Unit price: ÿ13,500

Type A F112 + WPC processed product

•F112 WPC Main Metal SET Body ¥24,560 •F112 WPC Connecting Rod Metal SET Body ¥19,740

We use F112 material, which is significantly stronger than F770 material used in conventional genuine products, Nismo, and aftermarket metals. F112 metal has a proven track record in motorsports and continues to protect the engine from metal troubles under harsh operating conditions such as high revolutions, high

loads, and high temperatures. In addition, by further applying WPC treatment to this strengthened metal, friction loss is reduced, frictional heat generation is suppressed, and the seizure load is significantly

improved. Recommended for those who use it under harsher conditions.

#### A-type metal head gasket



ÿA-type stopper type head gasket

The A-type stopper type head gasket is the strongest head gasket in Japan, designed to push the limits of the engine. 
The head gasket, which is used heavily due to the close bore pitch peculiar to the A-type, has already reached its limit. The gradual progression of gasket leakage without the driver notiong will definitely reduce the performance of the high-output engine. This head gasket was developed as a countermeasure, wrapping the inner plate around the bore in a grommet shape and overlapping the stopper part with the outer bead plate, creating the strongest structure that improves sealing performance with a two-stage structure of stopper and bead. It can withstand continuous use at high output and high revolutions, and brings out 100% of the engine's original

ÿA-type bead type head gasket

This bead type head gasket secures the surface pressure by providing beads by pressing around the combustion chamber and around the water and oil holes, which require high sealing performance. The layout is appropriately distributed by the width and height of the beads, and it is an indispensable part for tuning engines.

ÿA-type bead type head gasket

G/K Bore dian	neter Thickn	ess Price
79ÿ 79.5ÿ 0.8mm	Body ÿ18,00	0
79ÿ 79.5ÿ 1.0mm	Body ÿ18,00	0
79ÿ 79.5ÿ 1.2mm	Body ¥19,00	0 79ÿ 79.5ÿ 1.5mm
Body ¥20,000		
79ÿ 79.5ÿ 2.0mm	Body ÿ23,00	0

ÿA-type stopper type head gasket

			25
	G/K Bore diar	neter Thickn	ess Price
	79ÿ	0.8mm Bo	dy ÿ24,000
	79ÿ	1.0mm Bo	dy ÿ25,000
р	erformance. 79ÿ	1.2mm Bo	dy ÿ25,000

#### A-type sliding cam sprocket gear



This is a sliding cam sprocket gear that allows highly accurate valve timing adjustment with outstanding efficiency, which was not possible with genuine products or multi-hole sprocket gears The material is made of high-strength material and has been soft-nitrided to greatly improve the wear resistance of the tooth surface, resulting in high performance.

Manufacturing	Machined (high-precision finish)	
method	Chromium-molybdenum steel	
Material Bolt	M6 Chromoly flange bolt Heat treated	
Heat treatment + surface treatment	+ soft nitriding (sprocket) Heat treated	
	+ black dye (plate) 24° (+12° -12°)	
Slide width		
adjustment	1 memory 2 degree interval	
memory price	Unit price: ÿ18,000	

#### A-type reinforced connecting rod bolt



Made by ARP (USA) - A genuine reinforced bolt that allows you to control torque and

Unit price: ÿ19,000

## A-type timing chain



Ti or w

#### A-type reinforced timing chain

\*Double ch

This reinforced chain has a relatively thin 5-10ŷ insoluble manganese phosphate film formed on the metal surface, which is then allowed to penetrate the material surface evenly and without unevenness. This makes it four times more resistant to wear! It keeps the chain in the best condition for a long period of time by preventing valve timing delays caused by chain stretching. It is also resistant to the burning and galling that often occurs in the chain's sliding parts, and allows it to maintain smooth movement and reduce friction loss.

Sprocket gears are sold separately. Unit price: ÿ10,000

#### A-type single timing chain for racing

This is a single timing chain for racing with improved tensile strength due to cold forged reinforced bushings, reinforced rollers made of alloy steel, hard chrome reinforced pins, etc. It is 40% lighter in weight than conventional double chains, and reduces chain flutter and friction loss, stabilizing valve trining.

\*The sprockets and tensioners can be used as they are.

Unit price: ÿ11,000

### A-type ARP main stud bolt



This is a stud type main bolt designed by ARP, an American company. Its sufficient tensile strength suppresses crank vibration at high revolutions, enabling A-type engines to rotate at high speeds. In addition, the use of stud bolts minimizes housing deformation caused by increased tightening force of the main bolt, stabilizing metal clearance.

A12-A15 unit:

#### A-type adjustable chain tensioner



The backstroke can be adjusted according to the chain flex, improving the stability of the valve timing at high revolutions.

Unit price: ÿ17,500

