

4AG ENGINE PARTS

4AG Big Valve (16V)

*1.0mm oversize



(Updated 2025.09.14)

• 4AG Big Valve Set ¥32,500 / 16 pieces SET

	INT	EXH
Umbrella diameter	φ31.5	φ27.0
Stem diameter	φ6	φ6
Stem length	STD	STD
weight	38.8g	33.8g

*Lightweight type, IN 2.3g, EX 2.5g compared to genuine parts

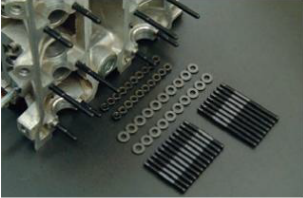
4AG Race valve guide (16V)



[Specifications]
Material: Phosphor bronze / IN, EX
Length: STD

(Updated 2025.09.14)
¥33,600/SET

4AG Cam cap stud bolt



This is a stud-type cam cap bolt designed to eliminate the hassle of assembly. Naturally, it is a bottom-type bolt that prevents deformation of the cam housing. Also, by using a flat washer, uniform torque management is possible.

*For 4AG (4V) ¥16,000/set

4AG High lift compatible reinforced valve spring (16V)



A common type for IN and EX, compatible with everything from STD lift to high lift. A full-fledged reinforced spring with an oval shape to prevent full adhesion.

When set: 36mm-25.6kg
When fully loaded: 24mm-69.3kg

(Updated 2026.07.09)
¥33,600/SET

4AG 81.5/82/82.5/83φ forged high compression piston for AE111



This high-response model is made of high-strength forged material, lightweight machined, and equipped with low-friction rings and lightweight piston pins. It has enough rigidity to withstand the loads of high revolutions, and the compression ratio can be set to 11.2 to 12.3:1 by selecting the gasket thickness and grinding the head surface a little. The valve recess is calculated so that it can be installed without compromising the valve timing, even when using cams of 288 degrees or 304 degrees.

*Compression ratio (82φ)
1.2mm head gasket: 11:1
0.8mm head gasket: 11.6:1
0.8mm G/K + 0.5mm head surface grinding: 12.3:1
¥105,000
(Updated 2026.01.13)

*Full floating type

4AG (20V) Metal Head Gasket



Type	Bore diameter	Thickness	Price
Stopper type	82.5φ	0.8mm	¥26,000
Stopper type	82.5φ	1.0mm	¥26,000
Stopper type	82.5φ	1.2mm	¥26,000
Stopper type	82.5φ	1.5mm	¥27,000
Bead type	83.5φ	0.8mm	¥20,000
Bead type	83.5φ	1.0mm	¥20,000
Bead type	83.5φ	1.2mm	¥21,000
Bead type	83.5φ	1.5mm	¥23,000
Bead type	83.5φ	2.0mm	¥26,000

AE86/AE92 4AG 81.5φ forged street piston



This street piston has been newly designed and reproduced due to the discontinuation of Toyota's genuine 0.5mm oversized piston. The piston is completely machined from forged material, leaving no excess material, and uses lightweight short pins to achieve an ultra-lightweight total of 117g. The use of proven forged materials ensures sufficient strength, while the lightweight design provides high response, making this a high-performance model.

(Updated 2026.01.13)
*For AE86 ¥10,500
*For AE92 ¥10,500

Compression ratio 9.4:1 (compatible with regular gasoline)
Pin diameter...AE86 (18φ)AE92 (20φ)

*Full floating type

AE92 4AG Super Connecting Rod



- Pin Diameter φ20(Full-flow machined)
- Weight Appzrox. 420 g (tolerance within ±1g)
- Manufacturing Process Forged material + machined
- Material Chromium-molybdenum steel (SCM440)
- Heat Treatment Quenching and tempering
- Surface Treatment Double shot peening
- Hardness HRC 32-36
- Bolts Manufactured by ARP (strength rating: 220,000 psi)
- Manufacturer Tanaka Kogyo Co., Ltd.
- Price ¥132,000

4AG KAMEARI Reinforced Metal



•Main metal set
Grade No. 4 - 7 ¥17,500

•Connecting rod metal set
AE86 40φ crank pin
Grade No. 1-3 ¥14,000
AE92 42φ crank pin
Grade No. 3-6 ¥14,000



4AG Thrust Metal Set

•Thrust metal set (product number: TW-1400A) * Set ¥1,370
of 4 / equivalent to genuine product

*Main bushings are sold in sets of two, top and bottom, while connecting rod bushings are sold individually.
Please check the details below.

*The early AE86 connecting rods (bolts are 8mm type) are not compatible because the knock positions on the top and bottom of the bushings are different.

are different.

4AG KAMEARI Reinforced Metal Details									
No.	Part name	Part number(grade)	Required quantity	Unit	Price	(Identification Color) Metal Thickness/Tolerance		Part number comparison with genuine parts	Conform
1	Main bearing (upper and lower set)	M-KEW-AE92-04	5	Set	¥3,500	(Blue) t=2.0	-0.004 -0.008	-	AE82.AE86.AE92 AW11(NA, S/ C) AE101, AE111 Enhanced Durability
	Main bearing (upper and lower set)	M-KEW-AE92-05	5	Set	¥3,500	(Pink) t=2.0	0 -0.004		
	Main bearing (upper and lower set)	M-KEW-AE92-06	5	Set	¥3,500	(Purple) t=2.0	+0.004 0		
	Main bearing (upper and lower set)	M-KEW-AE92-07	5	Set	¥3,500	(Black) t=2.0	+0.008 +0.004		
2	AE86 Connecting rod bearing	C-KEW-AE86-01	8	Piece	¥1,750	(Brown) t=1.5	-0.01 -0.014	1	For Crankshaft pins φ40 AE82, AE86, AW11(NA)(~87.9) Enhanced Durability
	AE86 Connecting rod bearing	C-KEW-AE86-02	8	Piece	¥1,750	(Green) t=1.5	-0.006 -0.01	2	
	AE86 Connecting rod bearing	C-KEW-AE86-03	8	Piece	¥1,750	(Yellow) t=1.5	-0.002 -0.006	3	
3	AE92 Connecting rod bearing	C-KEW-AE92-03	8	Piece	¥1,750	(Yellow) t=1.5	-0.01 -0.014	1	For Crankshaft pins φ42 AE92 AW11(NA)(87.9~) AW11S/C AE101, AE111 Enhanced Durability
	AE92 Connecting rod bearing	C-KEW-AE92-04	8	Piece	¥1,750	(Blue) t=1.5	-0.006 -0.01	2	
	AE92 Connecting rod bearing	C-KEW-AE92-05	8	Piece	¥1,750	(Pink) t=1.5	-0.002 -0.006	3	
	AE92 Connecting rod bearing	C-KEW-AE92-06	8	Piece	¥1,750	(Red) t=1.5	+0.002 -0.002	-	