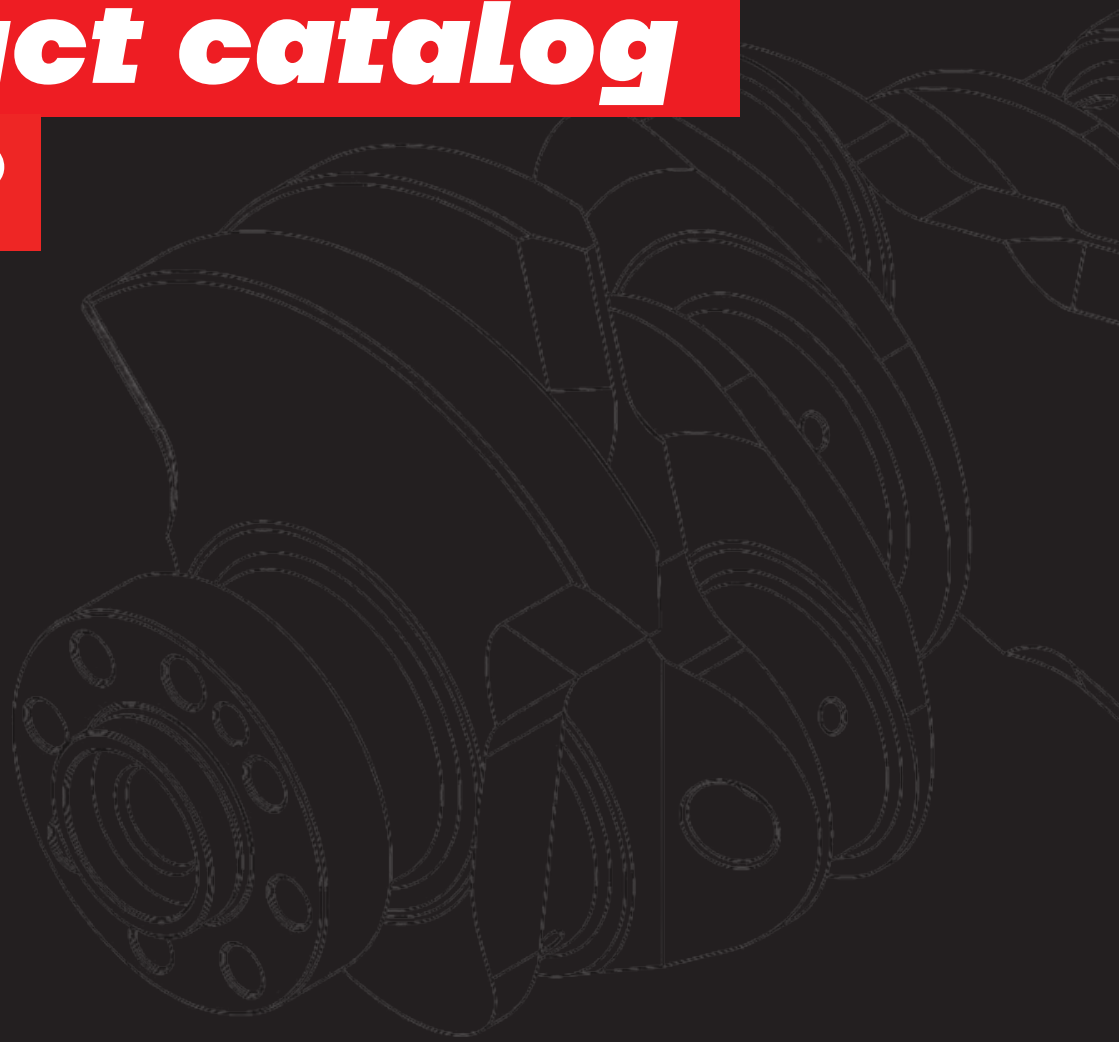


Product catalog

2022



Connecting Rods | Crankshafts | Pistons | Stroker Kits

MOTORSPORT IS NOT JUST BUSINESS !

After more than a century in the engineering and machining business, we have used all our knowledge gained, to provide the motorsport enthusiasts, with a brand offering high quality racing components, covering from road to extreme racing applications, in an unbeatable value package. Nowadays, ZRP has been established in the racing world and we are always trying to offer what the customers need, following the trends in motorsport and offering new kits while improving our existing.

We have a logistics warehouse, based in the biggest port of Greece (Piraeus) with over 2500 items in stock, to cover every possible demand of our dealers and customers in a timely manner.

Keeping in line with the trend of our times, ZRP offers as many communications channels as possible. Customers can be updated in our website www.zrp-rods.com for new and existing parts and offers, while looking at high resolution pictures of each individual product and able to login as a business partner and exploit the B2B capabilities of our site. We are also very active in social media networks, such as facebook and Instagram, managing the main page ZRP RACING PARTS along with some other region-specific pages.

Last but not least, is the heart of ZRP, our personnel, that consists of 12 highly skilled technicians and 8 office employees that can serve customers in both English and the Italian language. Our staff in the Sales, Technical, Administrative and Shipping Departments are totally committed to one common goal: to deliver product, service and technical advice in the highest possible standards.

Our company's manufacturing methods are certified with TUV ISO9001 and the International Certification Network IQNET.



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MAIN BEARING GIRDLE KIT

VAG 1.8L TURBO 20V, 2.0L TFSI GEN.1

Made from high strength, high corrosion resistant 6061 aluminum alloy and CNC machined, ZRP's block guard for EP6 open deck motors protects cylinder walls from flexing and cracking.

It fills the gap between the outer side of the cylinder wall and the rest of the block while they provide maximum engine cooling allowing high water flow to avoid cylinder hot spots.



Part Number: BG-207

BLOCK GUARD

PEUGEOT 207RC, MINI COOPER S R56, CITROEN DS3 (EP6 ENGINE)

ZRP's girdle is made from high-strength aircraft 7075-T6 aluminum, requiring no chain, sprocket, or new pump.

The crankshaft reinforcement plate fits into the 6 central main caps needing no modifications. The kit includes spacers and ARP 2000 studs for all main caps.

Part Number: Girdle-VW-6-KIT



FORGED CONNECTING RODS

ZRP connecting rods are forged from 4340 high tensile steel. All rods are now fitted with industry-leading AMPCO 18 bushings. They are designed for high performance and extreme durability offered in H-beam and I-beam shapes. They are shot peened to relieve stress from the material and multi-stage heat-treated to increase rigidity, offered in "standard", "Heavy-Duty" and "pro-series". Our connecting rods are capable of great power figures but priced reasonably from the racer to the everyday user.

ZRP connecting rods come with industry-standard ARP2000 bolts. Customers can upgrade per request to L19 or CA625+ at an additional cost.



ALL CONNECTING RODS HAVE THE FOLLOWING FEATURES

- Two-Piece forging for great strength.
- CNC machining for superior tolerances as tight as 0.0002".
- Bend and twist are tightly controlled.
- Center to center is maintained to .001" tolerance.
- Shot peened to relieve stress from the material.
- Double ribbed caps for added strength.
- Magnaflux Inspection guarantees the consistency of the forged material.
- Lipped cap: Big end rigidity improvement using bigger contact area between cap and con-rod body.
- Multi-Stage Heat Treat for maximum strength and dimensional stability.
- Finished, Machined, and honed with Sunnen machine.
- Finite Element Analysis FEA Computer-generated stress analysis of con rods.
- Optimal balancing for weight matched sets \pm 1gram.

CONNECTING ROD SERIES

HEAVY DUTY



Built from the finest raw materials with a specially optimized shape which also accommodates, the industry standard, 3/8" bolts in all applications. The design of these rods has been developed, based on our experience, individually to each application in order to optimize the design depending on each engine's character. The Heavy-Duty series conrods are beefed up in their cross members wall thickness and all other critical areas, in order to withstand extreme horsepower figures of more than **240ps** per cylinder!

More economically priced but without compromising quality and performance. The shape is optimized depending on the model, some come in an H-beam shape and others come in an I-beam shape. Depending on the application and if it is for turbo or N/A use, the design is customized for weight and rigidity.

STANDARD



PRO SERIES



Pro Series conrods, aimed for extreme applications. Built from the finest raw materials with a specially optimized shape that also accommodates. The industry-standard size 3/8" cap fasteners, but in **L19** material in **all** applications as standard. For those who are not familiar with **817M40T**, let us say that it is high tensile alloy steel, renowned for its wear resistance properties. It's a popular grade of through-hardening alloy steel due to its excellent machinability in the "T" condition, the hardness is in the range 248/302 Hb. The **817M40T - EN24T** can be further surface-hardened to create components with enhanced wear resistance by induction or nitriding processing. These qualities make it the finest material you can use for Con-rods manufacturing, where high strength properties are required.

Pro Series Rod Terminology



01. Double ribbed caps for added strength and better alignment providing bearing caps precision
02. ARP cap fasteners L19 material in all applications as standard
03. Two-Piece forging for great strength
04. Lipped cap: Big end rigidity improvement using bigger contact area between cap and con-rod body, maintaining the least possible weight
05. Finished, Machined and honed with Sunnen machines
06. Dual grooves for weight reduction and reduced friction
07. Optimal balancing for weight matched sets \pm 1 gram.
08. 817M40T - EN24T Alloy for maximum durability
09. Shot peened to relieve stress from the material and Multi-stage heat treated to increase rigidity
10. I-Beam shape for extra rigidity
11. Shot peening for improved fatigue life
12. Radial groove for oil reservoir
13. AMPCO 18 Bushings for excellent resistance to wear and fatigue

ALFA ROMEO

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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2.5L Alfa 75 & GTV V6 / 3.0L 164 24v

R-ALF-004H	H-Beam	131.00	22.00	55.50	24.80	478	6	3/8"	ARP2000	-	-	AR064-12
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Brera 1750cc TBI, Alfa 159

R-ALF-005-I	I-Beam	148.04	22.00	51.37	21.94	498	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	4C, 940B2000, 940A1000, 939B1000, 960A1000
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AUDI / VOLKSWAGEN

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.4L TFSI (2012-Pre)

R-VW-004-HR	H-Beam	144.00	19.00	50.60	23.00	457	4	5/16"	ARP2000	-	Rifle Drilled Rods	CAVD, CAXA, CAVA, BLG, CAX, CAV, CVA
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1.4L TFSI (2012-Current)

R-VW-005-I	I-Beam	140.02	19.00	50.60	20.00	397	4	5/16"	ARP2000	-	Tapered Pin End	CZCA, CPTA, CZEA, CTHG, CMBH, CZC, CZCB, CZCC, CZDA, CVNA, CHPA, CMBA, CPWA
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1.4L 16v Polo MKIII

R-VW-003-I	I-Beam	144.00	17.00	50.60	20.00	425	4	5/16"	ARP2000	-	Light-weight design	AFH, AFK, AHW
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1.8L TSI / TFSI (EA888)

R-AUD-008I	I-Beam	148.00	21.00	50.60	21.90	522	4	3/8"	ARP2000	-	Tapered Pin End / Also fits OEM pistons	
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* Engine Number: CDAA, BYT, BZB, CABA, CABB, CABD, CADA, CAEA, CAEB, CAED, CAWB, CBFA, CCTA, CCUA, CCZA, CCZC, CDAA, CDHA, CDHB, CDNA, CDNB, CDNC, CDZA, CESA, CETA, CFKA, CGMA, CHJA, CPMA, CPMB, CPSA, CRHA

1.8L Turbo 20v

R-AUD-001-H	H-Beam	144.00	20.00	50.60	24.89	447	4	3/8"	ARP2000	-	Non-Tapered Pin End	AVC, ANB, AWU, AEB, APX, APY, BAM, AMK, AWM, AGU
R-AUD-001-I	I-Beam	144.00	20.00	50.60	24.89	515	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	AVC, ANB, AWU, AEB, APX, APY, BAM, AMK, AWM, AGU
R-AUD-001-IR	I-Beam	144.00	20.00	50.60	24.89	507	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End / Rifle Drilled Rods	AVC, ANB, AWU, AEB, APX, APY, BAM, AMK, AWM, AGU
R-AUD-003-I	I-Beam	144.00	20.00	50.60	24.89	529	4	3/8"	ARP2000	-	Tapered Pin End	AVC, ANB, AWU, AEB, APX, APY, BAM, AMK, AWM, AGU
R-AUD-002-I	I-Beam	144.00	19.00	50.60	25.00	532	4	3/8"	ARP2000	-	Tapered Pin End	APP, ARY, AUQ, AJQ, BFB
R-AUD-005HL	H-Beam	147.20	20.00	50.60	24.89	474	4	3/8"	ARP2000	-	Longer rods +3.20mm	AVC, ANB, AWU, AEB, APX, APY, BAM, AMK, AWM, AGU

AUDI / VOLKSWAGEN

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.9L & 2.0L DTi DIESEL

R-VW-009-I	I-Beam	144.00	26.00	53.70	24.90	523	4	5/16"	ARP2000	-	For bore more than 79.50mm / Tapered Pin End	-
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2.0L TFSI / TSI (Belt Driven)

R-AUD-006HL	H-Beam	144.00	21.00	50.60	24.90	475	4	3/8"	ARP2000	-	Non-Tapered Pin End	BHZ, BYD, BZC, CDLA, CDLB, CDLC, CDLF, CDLG, CDMA, CDZA, BWJ
R-AUD-006-I	I-Beam	144.00	21.00	50.60	24.90	520	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	BHZ, BYD, BZC, CDLA, CDLB, CDLC, CDLF, CDLG, CDMA, CDZA, BWJ
R-AUD-006-IR	I-Beam	144.00	21.00	50.60	24.90	507	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End / Rifle Drilled Rods	BHZ, BYD, BZC, CDLA, CDLB, CDLC, CDLF, CDLG, CDMA, CDZA, BWJ
R-AUD-001-H	H-Beam	144.00	20.00	50.60	24.89	447	4	3/8"	ARP2000	-	Non-Tapered Pin End	AXX, BHZ, BGB, BWE, BUL, CDNB, BYK, BPJ, BWA, BWT
R-AUD-001-I	I-Beam	144.00	20.00	50.60	24.89	515	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	AXX, BHZ, BGB, BWE, BUL, CDNB, BYK, BPJ, BWA, BWT
R-AUD-001-IR	I-Beam	144.00	20.00	50.60	24.89	507	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End / Rifle Drilled Rods	AXX, BHZ, BGB, BWE, BUL, CDNB, BYK, BPJ, BWA, BWT
R-AUD-003-I	I-Beam	144.00	20.00	50.60	24.89	529	4	3/8"	ARP2000	-	Tapered Pin End	AXX, BHZ, BGB, BWE, BUL, CDNB, BYK, BPJ, BWA, BWT

2.0L TFSI / TSI (Chain Driven)

R-AUD-009-I	I-Beam	144.00	21.00	50.60	21.90	488	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	2011-Pre: CCTA, CCZA, CCZB, CBF, CAEB, CAEA, CDNB, CDNC
R-AUD-010-I	I-Beam	144.00	22.00	50.60	21.90	492	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	-
R-VW-008-IR	I-Beam	144.00	23.00	50.60	21.85	508	4	3/8"	ARP2000	-	Non-Tapered Pin End / Rifle Drilled	2011-Current: CCTA, CCZA, CCZB, CBF, CAEB, CAEA, CDNB, CDNC, CJXC, CCHA, CHHB, MQB

2.0L 16v e- 8v

R-VW-001-I	I-Beam	159.00	21.00	50.60	24.89	638	4	3/8"	ARP2000	-	Recommended for Turbo use	ABF, 2E
R-VW-001-IL	I-Beam	159.00	21.00	50.60	24.89	566	4	3/8"	ARP2000	-	Lightweight design - N/A use	ABF, 2E

2.2L RS2 (S2) 5-Cyl.

R-AUD-004-I	I-Beam	144.00	20.00	50.60	24.89	515	5	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	3B, RR, AAN, ABY, ADU
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MORE AUDI / VOLKSWAGEN →

AUDI / VOLKSWAGEN

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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2.5L TFSI TT-RS, RS3, Q2 RS

R-AUD-009-I-5	I-Beam	144.00	21.00	50.60	21.90	488	5	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	CEPA, CEPB
R-AUD-010-I-5	I-Beam	144.00	22.00	50.60	21.90	492	5	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	CEPA, CEPB
R-VW-008-IR-5	I-Beam	144.00	23.00	50.60	21.85	508	5	3/8"	ARP2000	-	Non-Tapered Pin End / Rifle Drilled Rods	CEPA, CEPB, DAZA, DNWA

2.8L & 2.9L VR6 / 3.2L R32 / 3.6L R36 FSI

R-VW-002-I	I-Beam	164.00	20.00	56.81	19.90	618	6	3/8"	ARP2000	Heavy Duty	For bore more than 84.00	2.8L & 2.9L: AAA, ABV, AMV, AQP, AUE, AYL, BDE -- R32: BFH, BML, BJS / 3.6L R36: BWS, BHK, CDVA
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BMW

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.6L 316 M40 / M43

R-BMW-002-I-4	I-Beam	140.00	22.00	48.00	21.90	498	4	3/8"	ARP2000	-	-	M40B16, M43B16
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1.8L 318is M42 / 1.9L 318is M44

R-BMW-007-I	I-Beam	139.95	22.00	48.00	21.97	492	4	3/8"	ARP2000	-	-	M42B18, M44B18
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2.0L B48 Turbo (F-Series)

R-MIN-003-I	I-Beam	148.17	22.00	53.60	23.90	494	4	3/8"	ARP2000	-	Tapered Pin End	B48B20 : (B48B20) F30 320i, F30 330e, F20 120i, G30 520i, G30 530e, G01 X3 Xdrive20i, G20 320i
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2.0L M10 2002

R-BMW-008-I	I-Beam	135.00	22.00	52.00	23.90	496	4	3/8"	ARP2000	-	-	M10B20
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2.0L M3 S14 EURO

R-BMW-011H	H-Beam	150.00	22.00	52.00	23.90	601	4	3/8"	ARP2000	-	-	S14B20
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2.0L N20 Turbo / N26B20 (US only)

R-BMW-022-I	I-Beam	144.35	22.00	53.635	20.88	487	4	3/8"	ARP2000	-	Non-Tapered Pin End / Straight PE	N20B20 / N20B20T / N26B20 (US only)
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2.3L M3 S14

R-BMW-001-I	I-Beam	144.00	22.00	52.00	23.90	566	4	3/8"	ARP2000	-	-	S14B23
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2.5L M20

R-BMW-006-I	I-Beam	135.00	22.00	48.00	21.90	499	6	3/8"	ARP2000	-	-	M20B25
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Red indicates new items or weight

MORE BMW →

BMW												
PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
2.5L M3 S14												
R-BMW-001-I	I-Beam	144.00	22.00	52.00	23.90	566	4	3/8"	ARP2000	-	-	S14B25
2.5L M50 & M52 (325) Single Vanos												
R-BMW-002-I	I-Beam	140.00	22.00	48.00	21.90	498	6	3/8"	ARP2000	-	-	M50B25 Single Vanos, M52B25 Single Vanos
2.5L M50 / M52												
R-BMW-006-I	I-Beam	135.00	22.00	48.00	21.90	552	6	3/8"	ARP2000	-	-	M50B25, M52B25
2.5L M54 (325)												
R-BMW-003H	H-Beam	145.00	22.00	48.00	21.90	544	6	3/8"	ARP2000	-	-	M54B25
2.8L M30												
R-BMW-013-I	I-Beam	135.00	22.00	52.00	23.90	547	6	3/8"	ARP2000	-	-	M30B28
2.8L M50 / M52												
R-BMW-006-I	I-Beam	135.00	22.00	48.00	21.90	499	6	3/8"	ARP2000	-	-	M50B28, M52B28
3.0L M30												
R-BMW-013-I	I-Beam	135.00	22.00	52.00	23.90	496	6	3/8"	ARP2000	-	-	M30B30
3.0L M54												
R-BMW-006-I	I-Beam	135.00	22.00	48.00	21.90	499	6	3/8"	ARP2000	-	-	M54B30
3.0L M3 E36 S50												
R-BMW-005-I	I-Beam	142.00	21.00	53.00	21.90	522	6	3/8"	ARP2000	-	-	S50B30
3.0L N52												
R-BMW-020-I	I-Beam	147.35	20.00	53,630	20.90	450	6	3/8"	ARP2000	-	Non-Tapered Pin End / Straight PE	N52B30
3.0L N54												
R-BMW-018-I	I-Beam	145.00	22.00	53,635	20.88	488	6	3/8"	ARP2000	-	Non-Tapered Pin End / Straight PE	N54B30
3.0L N55 / M4 S55												
R-BMW-019-I	I-Beam	144.35	22.00	53,635	20.88	487	6	3/8"	ARP2000	-	Non-Tapered Pin End / Straight PE	N55B30
3.0L B58												
R-BMW-021-I	I-Beam	148.17	22.00	53.60	23.90	494	6	3/8"	ARP2000	-	Tapered Pin End	B58B30

BMW												
PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
3.2L M30												
R-BMW-013-I	I-Beam	135.00	22.00	52.00	23.90	496	6	3/8"	ARP2000	-	-	M30B32
3.2L M52												
R-BMW-006-I	I-Beam	135.00	22.00	48.00	21.90	499	6	3/8"	ARP2000	-	-	M52B32
3.2L M3 E36 S50 / S52												
R-BMW-004H	H-Beam	139.00	21.00	53.00	21.90	550	6	3/8"	ARP2000	-	-	S50B32
3.2L M3 E46 S54												
R-BMW-012-I	I-Beam	139.00	21.00	53.00	19.91	502	6	3/8"	ARP2000	-	-	S54B32
3.5L M30												
R-BMW-013-I	I-Beam	135.00	22.00	52.00	23.90	496	6	3/8"	ARP2000	-	-	M30B35
3.5L M5 & M6 S38B36												
R-BMW-001-I-6	I-Beam	144.00	22.00	52.00	23.90	566	6	3/8"	ARP2000	-	-	S38B36
3.8L M5 S38												
R-BMW-009H	H-Beam	142.50	22.00	52.00	24.00	535	6	3/8"	ARP2000	-	-	S38B38
4.0L M3 V8 S65												
R-BMW-014-I	I-Beam	140.72	21.00	56.00	18.45	499	8	3/8"	ARP2000	-	Non-Tapered Pin End / Straight PE	S65B40
5.0L M5 E39 S62												
R-BMW-010H	H-Beam	141.50	22.00	53.00	20.90	548	8	3/8"	ARP2000	-	-	S62B50
5.0L M70 V12												
R-BMW-017-I	I-Beam	135.00	22.00	48.00	21.90	499	12	3/8"	ARP2000	-	-	M70B50
5.0L M5 & M6 V10 S85												
R-BMW-015-I	I-Beam	140.72	21.00	56.00	18.45	499	10	3/8"	ARP2000	-	Non-Tapered Pin End / Straight PE	S85B50
5.4L M70 V12												
R-BMW-017-I	I-Beam	135.00	22.00	48.00	21.90	499	12	3/8"	ARP2000	-	-	M70B54

CITROEN / PEUGEOT

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.6L TU5J4 / TU5JP4 (19.50mm pin)

R-CIT-001HL	H-Beam	133.60	19.50	48.66	23.91	461	4	3/8"	ARP2000	-	Light weight design	TU5J4, TU5JP4
R-CIT-001-I	I-Beam	133.60	19.50	48.66	23.91	498	4	3/8"	ARP2000	Heavy Duty	-	TU5J4, TU5JP4

1.6L TU5J4 / TU5JP4 (18.00mm pin)

R-PEU-001H	H-Beam	133.60	18.00	48.66	23.91	461	4	3/8"	ARP2000	-	-	TU5J4, TU5JP4,, TU5J2, TU2J2, TU3J2
R-CIT-004-I	I-Beam	137.75	18.00	48.66	23.91	435	4	3/8"	ARP2000	-	Longer rods +4.15mm / Light weight design	TU5J4, TU5JP4,, TU5J2, TU2J2, TU3J2
R-CIT-005HL	H-Beam	139.00	18.00	48.66	23.91	460	4	3/8"	ARP2000	-	Longer rods +5.40mm / Light weight design	TU5J4, TU5JP4,, TU5J2, TU2J2, TU3J2
R-CIT-006-I	I-Beam	141.00	18.00	48.66	23.91	442	4	3/8"	ARP2000	-	Longer rods +7.40mm / Light weight design	TU5J4, TU5JP4,, TU5J2, TU2J2, TU3J2

1.6L Turbo 207 RC / DS3 (Prince - EP6)

R-PEU-002-I	I-Beam	138.55	20.00	48.00	20.87	450	4	3/8"	ARP2000	-	Tapered Pin End / Also fits OEM pistons	Prince EP6, EP6C, EP6DT, EP6DTS
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2.0L EW10J4RS

R-PEU-003H	H-Beam	139.00	21.00	48.66	24.18	493	4	3/8"	ARP2000	-	-	EW10J4RS
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2.0L XU10J4RS

R-CIT-002-I	I-Beam	158.00	20.00	53.70	24.20	610	4	3/8"	ARP2000	-	-	XU10J4RS
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CHEVROLET

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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Small block

R-SBC-001-I	I-Beam	6.000"	0.927"	2.225"	0.940"	594	8	7/16"	ARP 8740	Heavy Duty	-	Suitable with all Chevy Small Block engines
R-SBC-002-I	I-Beam	5.700"	0.927"	2.225"	0.940"	570	8	7/16"	ARP 8740	Heavy Duty	-	Suitable with all Chevy Small Block engines

LS1

R-LS1-001-I	I-Beam	6.125"	0.927"	2.225"	0.940"	611	8	7/16"	ARP 8740	Heavy Duty	-	Suitable with all Chevy LS1 Engines
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DAIHATSU

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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993cc Turbo, Charade, GT

R-DAI-001H	H-Beam	125.04	19	46.08	24.80	387	3	5/16"	ARP2000	-	-	CB-70, G100, CB-80
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FIAT / LANCIA

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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500cc (2-Cyl.)

R-FIA-004H	H-Beam	120.00	20.00	47.00	24.70	340	2	5/16"	ARP2000	-	Aluminum - silicon-bronze bushings	-
R-FIA-005-H	H-Beam	130.00	20.00	47.00	24.65	361	2	5/16"	ARP2000	-	-	-

1.4L Abarth / T-Jet / Grand Punto

R-FIA-003-I	I-Beam	129.00	18.00	45.11	21.70	406	4	5/16"	ARP2000	-	Tapered Pin End / Also fits OEM pistons	312A1, 198A
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1.4L & 1.6L Punto / Uno / Tempra

R-FIA-001-I	I-Beam	128.52	22.00	48.63	25.40	492	4	3/8"	ARP2000	-	-	146A, 176A, 159A
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2.0L 20v Coupe 5-Cyl.

R-FIA-002-I	I-Beam	145.00	22.00	51.37	21.95	566	5	3/8"	ARP2000	-	-	175A, 182A
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2.0L 16v Delta Integrale

R-LAN-001-H	H-Beam	145.00	22.00	53.92	25.70	564	4	3/8"	ARP2000	-	-	832CS, M16AT, M20L4T
R-LAN-001-I	I-Beam	145.00	22.00	53.92	25.70	557	4	3/8"	ARP2000	-	-	832CS, M16AT, M20L4T
R-LAN-002HL	H-Beam	149.00	22.00	53.92	25.70	534	4	3/8"	ARP2000	-	Longer rods +4.00 / Aluminum - silicon-bronze bushings	832CS, M16AT, M20L4T



Red indicates new items or weight

FORD

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.0L EcoBoost

R-FOR-006-I	I-Beam	137.00	20.00	43.00	19.55	383	3	5/16"	ARP2000	-	Non-Tapered Pin End	SFJA, SFJB, SFJC, SFJD, M1JH, M1JE
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1.6L EcoBoost

R-FOR-007-I	I-Beam	134.02	21.00	47.04	20.80	431	4	5/16"	ARP2000	-	Tapered Pin End	JTJA, HXJA, HXJB, YUDA, JQDB
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2.0L EcoBoost

R-FOR-008-I	I-Beam	155.86	22.50	55.04	21.84	575	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	GTDI
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2.3L EcoBoost

R-FOR-009-I	I-Beam	149.25	22.50	55.04	21.84	576	4	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	YVDA
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2.0L 16v Sierra / Escort / Cosworth YB

R-FOR-001-I	I-Beam	128.50	24.00	55.00	25.85	542	4	3/8"	ARP2000	-	-	N5B, YB
R-FOR-002-I	I-Beam	136.50	24.00	55.00	25.85	572	4	3/8"	ARP2000	-	Longer rods +8.00mm	N5B, YB
R-FOR-003H	H-Beam	133.50	24.00	55.00	25.85	457	4	3/8"	ARP2000	-	Longer rods +5.00mm	N5B, YB
R-FOR-003-I	I-Beam	133.50	24.00	55.00	25.85	Call	4	3/8"	ARP2000	Heavy Duty	Longer rods +5.00mm	N5B, YB
R-FOR-EN24-003	I-Beam	133.50	24.00	55.00	25.85	542	4	3/8"	ARP2000	Heavy Duty	Longer rods +5.00mm	N5B, YB

2.0L Duratec

R-FOR-004H	H-Beam	146.25	21.00	50,023	21.82	456	4	3/8"	ARP2000	-	-	CJBA, AOWA, AOBA, N4JA, N4JB
R-FOR-004-I	I-Beam	146.25	21.00	50,023	21.82	515	4	3/8"	ARP2000	-	-	CJBA, AOWA, AOBA, N4JA, N4JB

2.5L 20v Focus RS MKII

R-FOR-005-I	I-Beam	143.00	23.00	52.98	25.65	551	5	3/8"	ARP2000	-	-	HUBA, JZDA
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HONDA

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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B16A

R-HON-001-I	I-Beam	134.40	21.00	48.00	23.75	537	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	B16A
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B18A, B18B, B20B

R-HON-002H	H-Beam	137.00	21.00	48.00	23.75	390	4	5/16"	ARP2000	-	Recommended usage: Natural Aspirated	B18 A, B18 B, B20
R-HON-002-I	I-Beam	137.00	21.00	48.00	23.75	526	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	B18 A, B18 B, B20

B18C1, B18C2, B18C5, B18C7

R-HON-003H	H-Beam	138.00	21.00	48.00	21.79	486	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	B18C1, B18C2, B18C5, B18C7
R-HON-003HL	H-Beam	138.00	21.00	48.00	21.79	405	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	B18C1, B18C2, B18C5, B18C7
R-HON-003I	I-Beam	138.00	21.00	48.00	21.79	516	4	3/8"	ARP2000	-	Recommended usage: Turbo	B18C1, B18C2, B18C5, B18C7
R-HON-003-I	I-Beam	138.00	21.00	48.00	21.79	534	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	B18C1, B18C2, B18C5, B18C7
R-HON-EN24-003	I-Beam	138.00	21.00	48.00	21.79	518	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	B18C1, B18C2, B18C5, B18C7

K20A2, K20Z1, K20A3

R-HON-010-I	I-Beam	138.90	22.00	51.00	19.83	510	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	K20A2, K20Z1, K20A3
R-HON-010H	H-Beam	138.90	22.00	51.00	19.83	470	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	K20A2, K20Z1, K20A3
R-HON-010HL	H-Beam	138.90	22.00	51.00	19.83	436	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	K20A2, K20Z1, K20A3
R-HON-011I	I-Beam	138.90	22.00	51.00	19.83	502	4	5/16"	ARP2000	-	Recommended usage: Turbo	K20A2, K20Z1, K20A3
R-HON-013HL	H-Beam	148.50	22.00	51.00	19.83	453	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	K20A2, K20Z1, K20A3
R-HON-012HL	H-Beam	135.50	22.00	51.00	19.83	451	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	K20A2, K20Z1, K20A3
R-HON-012-I	I-Beam	135.50	22.00	51.00	19.83	486	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	K20A2, K20Z1, K20A3

F20C (S2000)

R-HON-006HL	H-Beam	153.00	23.00	51.00	23.85	503	4	3/8"	ARP2000	-	Tapered Pin End	F20C
R-HON-006H	H-Beam	153.00	23.00	51.00	23.85	608	4	3/8"	ARP2000	-	Tapered Pin End	F20C
R-HON-006-I	I-Beam	153.00	23.00	51.00	23.85	625	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	F20C
R-HON-014HL	H-Beam	146.75	23.00	51.00	23.85	458	4	3/8"	ARP2000	-	Tapered Pin End	F20C
R-HON-014-I	I-Beam	146.75	23.00	51.00	23.85	563	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	F20C

HONDA

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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F22C

R-HON-015HL	H-Beam	149.65	23.00	51.00	23.85	456	4	3/8"	ARP2000	-	-	F22C
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H22

R-HON-008H	H-Beam	143.20	22.00	51.00	23.75	474	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	H22A, H22Z
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F24

R-HON-016HL	H-Beam	145.50	23.00	51.00	19.83	444	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	F24
R-HON-016-I	I-Beam	145.50	23.00	51.00	19.83	510	4	3/8"	ARP2000	Heavy Duty	Recommended usage: Turbo	F24

HYUNDAI

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.5L S' Coupe

R-HYU-001H	H-Beam	131.00	18.00	48.00	22.84	434	4	5/16"	ARP2000	-	-	-
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MAZDA

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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2.0L MX-5 3 / 5 / 6

R-MAZ-002H	H-Beam	146.25	21.00	50,023	21.82	456	4	3/8"	ARP2000	-	-	LF-DE, LF-VE, LF-VD, MRZ14, NC
R-MAZ-002-I	I-Beam	146.25	21.00	50,023	21.82	515	4	3/8"	ARP2000	-	-	LF-DE, LF-VE, LF-VD, MRZ14, NC

1.6L & 1.8L MX-5 (BP / B6)

R-MAZ-001-H	H-Beam	132.80	20.00	48.00	21.84	418	4	3/8"	ARP2000	-	-	BP, NB, BPT
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MINI COOPER

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.6L R53 Supercharger - W11B16

R-MIN-001-I	I-Beam	131.60	21.00	49.00	23.25	453	4	3/8"	ARP2000	-	-	W11B16
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1.6L R56 Turbo - N12 / N14 / N16 / N18

R-MIN-002-I	I-Beam	138.55	20.00	48.00	20.87	450	4	3/8"	ARP2000	-	Tapered Pin End	N12B16, N14B16, N18B16A, N18B16B, N18B16C
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2.0L B48 JCW & F56 (2014-Current)

R-MIN-003-I	I-Beam	148.17	22.00	53.60	23.90	494	4	3/8"	ARP2000	-	Tapered Pin End	B48B20 Clubman, F55, F56 & F57 Cooper S, F60 Countryman
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MINI COOPER

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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2.0L N20 JCW & Countryman S (2011-2017)

R-MIN-004-I	I-Beam	144.35	22.00	53,635	20.88	487	4	3/8"	ARP2000	-	Non-Tapered Pin End / Straight PE	N20B20 / N20B20T
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MITSUBISHI

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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4G63 EVO 1-9

R-MIT-002-H	H-Beam	150.00	22.00	48.00	26.40	552	4	3/8"	ARP2000	-	-	4G63T, 4G63
R-MIT-002-I	I-Beam	150.00	22.00	48.00	26.40	675	4	3/8"	ARP2000	Heavy Duty	-	4G63T, 4G63
R-MIT-002-IP	I-Beam	150.00	22.00	48.00	26.40	610	4	3/8"	ARP L19	Pro Series	-	4G63T, 4G63
R-MIT-007-I	I-Beam	156.00	22.00	48.00	26.40	612	4	3/8"	ARP2000	Heavy Duty	-	4G63T, 4G63
R-MIT-007-IP	I-Beam	156.00	22.00	48.00	26.40	633	4	3/8"	ARP L19	Pro Series	-	4G63T, 4G63

4B11 EVO 10

R-MIT-EN24-006	I-Beam	143.71	23.00	54.99	21.87	483	4	3/8"	ARP2000	Heavy Duty	-	4B11
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MERCEDES

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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2.0L A45 M133

R-MER-001-I	I-Beam	138.70	22.00	51.60	20.00	480	4	3/8"	ARP2000	-	-	M133 (AMG) / M139
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MITSUBISHI EVO 7 - WORLD RECORD 7.654' - (9SEC PARTS- GTR RACING TUNING)

NISSAN

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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CA18DET (Silvia)

R-NIS-001H	H-Beam	133.00	20.00	48.00	24.30	453	4	3/8"	ARP2000	-	-	CA18DET
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SR20DET / SR20DE (Silvia / Primera / 200SX)

R-NIS-002-I	I-Beam	136.30	22.00	51.00	22.80	553	4	3/8"	ARP2000	Heavy Duty	-	SR20DET, SR20DE, SR20VE, SR20VET
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VQ35DE (350Z)

R-NIS-005-I	I-Beam	144.20	22.00	55.00	20.80	565	6	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	VQ35DE
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RB25DET / RB26DETT (Skyline R32 /R34)

R-NIS-003-I	I-Beam	121.50	21.00	51.00	21.80	494	6	3/8"	ARP2000	Heavy Duty	-	RB26DETT, RB25DET
R-NIS-004H	H-Beam	119.50	21.00	51.00	21.80	477	6	3/8"	ARP2000	-	Stroker Ver. (Shorter)	RB26DETT, RB25DET

VR38DETT (GTR)

R-NIS-006-I	I-Beam	165.00	23.00	59.00	22.80	743	6	3/8"	ARP2000	Heavy Duty	Non-Tapered Pin End	VR38DETT
R-NIS-006-IP	I-Beam	165.00	23.00	59.00	22.80	695	6	3/8"	ARP L19	Pro Series	Non-Tapered Pin End	VR38DETT

OPEL / VAUXHALL

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.6L Turbo Z16LET (Corsa OPC)

R-OPE-005-I	I-Beam	129.75	19.00	46.00	21.90	419	4	3/8"	ARP2000	-	Non-Tapered Pin End	Z16LER, A16LER, A16LET, Z16LEH
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1.6L 16v X16XE

R-OPE-002-I	I-Beam	129.75	18.00	46.00	21.90	403	4	3/8"	ARP2000	-	Tapered Pin End / Also fits OEM pistons	X16XE, X16XEL, C16NZ, C16N2
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2.0L 16v C20XE / Z20LET (Astra e Calibra)

R-OPE-001-H	H-Beam	143.00	21.00	52.00	26.35	514	4	3/8"	ARP2000	-	Recommended usage: Natural Aspirated	C20XE, C20LET, Z20LET, Z20LEH, Y20LET, Z20LER
R-OPE-001-I	I-Beam	143.00	21.00	52.00	26.35	532	4	3/8"	ARP2000	-	Recommended usage: Turbo	C20XE, C20LET, Z20LET, Z20LEH, Y20LET, Z20LER
R-OPE-006H	H-Beam	148.00	21.00	52.00	26.35	527	4	7/16"	ARP 8740	-	Longer rods +5.00mm	C20XE, C20LET, Z20LET, Z20LEH, Y20LET, Z20LER

2.0L 16v LNF / A20NFT (Astra J & GT)

R-OPE-009I	I-Beam	145.45	23.00	52.13	23.95	547	4	3/8"	ARP2000	-	Tapered Pin End / Also fits OEM pistons	LNF, A20NHT, A20NFT, A20NFT, JVXR
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RENAULT

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.8L F7P / 2.0L F7R / 2.0L F4R

R-REN-001-I	I-Beam	144.00	21.00	51.60	25.00	513	4	3/8"	ARP2000	-	With bearing tag / Light weight design	F7P, F7R, F4R
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ROVER

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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K SERIES

R-ROV-001-I	I-Beam	133.10	18.00	51.68	22.50	367	4	5/16"	ARP2000	-	-	18K4F
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SUBARU

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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EJ20 / EJ22 / EJ25

R-SUB-001-H	H-Beam	130.50	23.00	55.00	17.00	498	4	3/8"	ARP2000	-	-	EJ20, EJ205, EJ25, EJ257, EJ22ET
R-SUB-001-I	I-Beam	130.50	23.00	55.00	17.00	555	4	3/8"	ARP2000	Heavy Duty	-	EJ20, EJ205, EJ25, EJ257, EJ22ET
R-SUB-001-IP	I-Beam	130.50	23.00	55.00	17.00	525	4	3/8"	ARP L19	Pro Series	-	EJ20, EJ205, EJ25, EJ257, EJ22ET

EG33 SVX

R-SUB-002-I	I-Beam	130.50	23.00	55.00	17.00	555	6	3/8"	ARP2000	Heavy Duty	-	EG33
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SMART

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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700cc / 600cc

R-SMA-001H	H-Beam	114.00	16.00	41.62	17.00	264	3	5/16"	ARP2000	-	-	-
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Red indicates new items or weight

SUZUKI

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.6L M16A / Liana, Swift

R-SUZ-001H	H-Beam	135.16	20.00	45.00	23.84	412	4	5/16"	ARP2000	-	-	M16A
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1.3L Hayabusa

R-SUZ-004-I	I-Beam	119.50	20.90	41.00	20.00	355	4	3/8"	ARP2000	Heavy Duty	99"-07" Model - Turbo use	Gen.1
R-SUZ-004H	H-Beam	119.50	20.90	41.00	20.00	298	4	5/16"	ARP2000	-	99"-07" Model - N/A use	Gen.1
R-SUZ-EN24-003	I-Beam	119.50	20.90	41.00	18.00	408	4	3/8"	ARP2000	Heavy Duty	08"-12" Model - Turbo use / EN24T Alloy	Gen.2
R-SUZ-003-I	I-Beam	119.50	20.90	41.00	18.00	354	4	3/8"	ARP2000	Heavy Duty	08"-12" Model - Turbo use	Gen.2
R-SUZ-003-H	H-Beam	119.50	20.90	41.00	18.00	309	4	5/16"	ARP2000	-	08"-12" Model - N/A use	Gen.2

TOYOTA

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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1.3L 4E-FTE

R-TOY-001H	H-Beam	118.00	18.00	43.07	20.85	367	4	5/16"	ARP2000	-	-	3EF, 4E-FTE, 4E-FE
R-TOY-001-I	I-Beam	118.00	18.00	43.07	20.85	377	4	3/8"	ARP2000	-	-	3EF, 4E-FTE, 4E-FE

1.5L 5E-FE / 5E-FTE

R-TOY-002H	H-Beam	130.50	18.00	46.00	20.85	422	4	5/16"	ARP2000	-	-	5E-FE, 5E-FTE
R-TOY-002-I	I-Beam	130.50	18.00	46.00	20.85	426	4	5/16"	ARP2000	-	-	5E-FE, 5E-FTE

1.6L 4AG 16v e 20v

R-TOY-003H	H-Beam	122.00	18.00	43.00	21.85	441	4	3/8"	ARP2000	-	-	4AG, 4AGE
R-TOY-004H	H-Beam	122.00	20.00	45.00	21.85	406	4	3/8"	ARP2000	-	-	4AG, 4AGE
R-TOY-004-I	I-Beam	122.00	20.00	45.00	21.85	435	4	3/8"	ARP2000	Heavy Duty	-	4AG, 4AGE

2.0L 3SGTE / 3SGE

R-TOY-005-I	I-Beam	138.00	22.00	51.00	26.70	588	4	3/8"	ARP2000	Heavy Duty	-	3SGTE, 3SGE
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3.0L 2JZ Supra

R-TOY-006-H	H-Beam	142.00	22.00	55.00	26.00	598	6	3/8"	ARP2000	-	-	2JZ-GTE
R-TOY-006-I	I-Beam	142.00	22.00	55.00	26.00	626	6	3/8"	ARP2000	Heavy Duty	-	2JZ-GTE
R-TOY-006-IP	I-Beam	142.00	22.00	55.00	26.00	630	6	3/8"	ARP L19	Pro Series	-	2JZ-GTE

3.0L B58 Supra

R-BMW-021-I	I-Beam	148.17	22.00	53.60	23.90	494	6	3/8"	ARP2000	-	Tapered Pin End	B58B30
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VOLVO

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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2.5L 20v B5254 & 2.0L 20v B5204T2 (V70)

R-VOL-001-I	I-Beam	143.00	23.00	53.00	25.65	547	5	3/8"	ARP2000	-	-	B5204T2, B5254, B5234
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2.3L 8v B23A (240.740)

R-VOL-002H	H-Beam	145.00	24.00	58.00	29.72	672	4	7/16"	ARP 8740	-	-	B23A
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2.3L 16v B234F / 2.0L 8v B230

R-VOL-003-I	I-Beam	152.00	23.00	52.00	29.46	618	4	3/8"	ARP2000	-	-	B234F, B230
R-VOL-004-I	I-Beam	158.00	23.00	52.00	29.46	604	4	3/8"	ARP2000	-	-	B234F, B230

1.9L 16v B4204T / B4194 (S40 / V40)

R-VOL-005-I-4	I-Beam	139.50	23.00	53.00	25.65	531	4	3/8"	ARP2000	-	-	B4204T / B4194
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2.3L 20v B5234 (C70/T5)

R-VOL-005-I-5	I-Beam	139.50	23.00	53.00	25.65	531	5	3/8"	ARP2000	-	-	B5234
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2.8L 24v B6284 (S80)

R-VOL-005-I-6	I-Beam	139.50	23.00	53.00	25.65	531	6	3/8"	ARP2000	-	-	B6284
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WATERCRAFT

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	FASTENERS GRADE	SERIES	FOOTNOTE	ENGINE NUMBER
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Yamaha - 1800 SHO

R-YAM-001H	H-Beam	145.00	22.00	45.00	26.82	480	4	3/8"	ARP2000	-	-	1800 SHO
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Kawasaki - Ultra 250 / 260 / 400

R-KAW-001H	H-Beam	112.85	21.00	42.00	23.66	404	4	5/16"	ARP2000	-	-	ULTRA 250, 260, 400
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Sea Doo - 1500 XRT / GTX / XRP

R-SEA-001-I	I-Beam	120.10	23.02	48.01	21.97	506	4	3/8"	ARP2000	-	-	1500 XRT, GTX, XRP
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Sea Doo - 1630 XRT / GTX / XRP

R-SEA-002-I	I-Beam	114.90	22.01	48.02	21.98	485	4	3/8"	ARP2000	-	-	1630 XRT, GTX, XRP
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Red indicates new items or weight

Billet Crankshafts

All ZRP crankshafts are manufactured from aerospace-grade 4340 solid billet steel. No compromises have been made to the quality of the material to ensure the best possible product.

Carefully designed, from our vast experience, they provide the best possible engine performance.

Our crankshaft production process consists of detailed inspections to ensure the best quality and tolerances for perfect fitment. We use CNC machining for precise results, multi-stage heat treatment, ION (Plasma) Nitriding for hardening and heat treatment for superior wear resistance, Magna-fluxing for flawless surface finish, shot peening for stress release, and Micro-polishing for longer bearing life. Finally, they are sonic tested and X-rayed to ensure a reliable end product.

From knife-edged to stepped counterweights, many different designs are offered and depending on the application, whether it is turbo or N/A, drag or drift, rally or hill-climb, we've got you covered!

All different designs feature straight oil holes for better oiling of the rod journals and are all balanced to 1gr.cm +/- 0.1 for the 4 cylinders and 2gr.cm +/- 0.1 for the 6 cylinders using the state-of-the-art Sunnen machines.

All ZRP crankshafts are fully balanced and ready to install.



ALL CRANKSHAFTS HAVE THE FOLLOWING TECHNICAL FEATURES

- Full CNC machining.
- ION (Plasma) Nitride process for hardening.
- Multi Stage Heat Treatment.
- Shot peening for stress release.
- 100% Magna- fluxing for flawless surface finish.
- Heat treatment for superior wear resistance.
- Micro-polishing for longer bearing life.
- Sonic tested and X-rayed to ensure a reliable end product.

AUDI / VOLKSWAGEN

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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1.8L Turbo 20v - Stroker

C-AUD-001L	92.80mm	54.00mm	47.80mm	13.80	4340 Billet	Stroker 2.0L - 06A Engine	Suitable with 06A engine
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2.0L TFSI / TSI (Belt Driven Engine)

C-AUD-001L	92.80mm	54.00mm	47.80mm	13.80	4340 Billet	Std Stroke	Suitable with all 2.0L TFSI / TSI Belt Driven Engines
C-AUD-002L	90.00mm	54.00mm	47.80mm	13.35	4340 Billet	De-Stroke Crank.	Suitable with all 2.0L TFSI / TSI Belt Driven Engines
C-AUD-003L	95.20mm	54.00mm	47.80mm	13.60	4340 Billet	Stroker Crank.	Suitable with all 2.0L TFSI / TSI Belt Driven Engines
C-AUD-004L	98.00mm	54.00mm	47.80mm	14.20	4340 Billet	Stroker Crank.	Suitable with all 2.0L TFSI / TSI Belt Driven Engines

2.0L 16v ABF (De-Stroke)

C-VW-001L	90.00mm	54.00mm	47.80mm	13.80	4340 Billet	De-Stroke for high rpm engines	ABF
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2.2L RS2 (S2) 5-Cyl.

C-AUD-005L	92.80mm	58.00mm	47.80mm	18.55	4340 Billet	Stroker Crank.	3B , RR , AAN , ABY , ADU
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BMW

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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M3 S14 Series

C-BMW-001	80.00mm	54.99mm	47.991mm	20.30	4340 Billet	S14B20 Stroker Crank.	S14B20
C-BMW-003	84.00mm	54.99mm	47.991mm	20.40	4340 Billet	S14B23 Std Stroke	S14B23
C-BMW-002	87.00mm	54.99mm	47.991mm	20.50	4340 Billet	S14B25 Std Stroke	S14B25
C-BMW-004	95.00mm	54.99mm	47.991mm	19.50	4340 Billet	S14B25 Stroker Crank.	S14B25

M3 E36 S50 Series

C-BMW-005	85.70mm	60.00mm	50.00mm	23.50	4340 Billet	S50B30 Std Stroke	S50B30
C-BMW-006	91.00mm	60.00mm	50.00mm	23.60	4340 Billet	S50B32 Std Stroke / S50B30 Stroker	S50B32



Red indicates new items or weight (drawing)

CHEVROLET

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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Small block

C-SBC-001UL	3.750" / 95.25mm	62.21mm	53.34mm	22.10	4340 Billet	Lightweight Design	Suitable with all Chevy Small Block engines
C-SBC-002UL	3.480" / 88.39mm	62.21mm	53.34mm	21.90	4340 Billet	Lightweight Design	Suitable with all Chevy Small Block engines
C-SBC-003UL	3.300" / 83.82mm	62.21mm	53.34mm	21.50	4340 Billet	Lightweight Design	Suitable with all Chevy Small Block engines

LS1

C-LS1-001UL	4.000" / 101.60mm	65.00mm	53.34mm	23.80	4340 Billet	Lightweight Design	Suitable with all Chevy LS1 Engines
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CITROEN / PEUGEOT

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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1.6L 16v TU5J4 / TU5JP4

C-CIT-001L	89.00mm	49.98mm	44.98mm	13.20	4340 Billet	Stroker Crank. 1.8L	TU5J4 / TU5JP4
C-CIT-004L	82.00mm	49.98mm	44.98mm	10.10	4340 Billet	Std Stroke - Kit Car	TU5J4 / TU5JP4

1.6L Turbo 207 RC / DS3 (Prince - EP6)

C-MIN-002	85.80mm	45.00mm	45.00mm	15.00	4340 Billet	Std Stroke	Prince EP6 / EP6C / EP6DT / EP6DTS
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FIAT

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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1.6L Tempra, Ritmo, Punto

C-FIA-001UL	79.00mm	50.80mm	45.498mm	9.25	4340 Billet	Stroker Crank. 1.9L	159A
C-FIA-002L	67.40mm	50.80mm	45.498mm	9.50	4340 Billet	Std Stroke	159A

FORD

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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2.0L 16v Sierra / Escort / Cosworth YB

C-FOR-001L	77.00mm	56.99mm	51.99mm	18.50	4340 Billet	Std Stroke	N5B
C-FOR-002L	82.00mm	56.99mm	51.99mm	19.00	4340 Billet	Stroker Crankshaft	N5B
C-FOR-003L	84.00mm	56.99mm	51.99mm	19.20	4340 Billet	Stroker Crankshaft	N5B
C-FOR-004L	86.00mm	56.99mm	51.99mm	17.10	4340 Billet	Stroker Crankshaft	N5B

HONDA

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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K20A2, K20Z1, K20A3

C-HON-003UL	93.00mm	55.00mm	48.00mm	16.80	4340 Billet	Stroker Crankshaft	K20A2, K20Z1, K20A3
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F20 as S2000

C-HON-006UL	84.00mm	55.00mm	48.00mm	13.30	4340 Billet	Std Stroke / Lightweight Design	F20C
C-HON-004UL	96.50mm	55.00mm	48.00mm	16.10	4340 Billet	Stroker Crankshaft	F20C
C-HON-005UL	103.0mm	55.00mm	48.00mm	16.30	4340 Billet	Stroker Crankshaft	F20C

LANCIA

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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2.0L 16v Delta Integrale

C-LAN-001L	90.00mm	50.80mm	53.00mm	13.00	4340 Billet	Std Stroke	832CS / M16AT / M20L4T
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MINI COOPER

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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1.6L R56 Turbo - N12B16 / N14B16

C-MIN-002	85.80mm	45.00mm	45.00mm	15.00	4340 Billet	Std Stroke	N12B16 / N14B16 / N18B16A / N18B16B / N18B16C
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1.6L R53 Supercharger - W11B16

C-MIN-001UL	85.50mm	54.97mm	48.00mm	12.75	4340 Billet	Std Stroke	W11B16
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MITSUBISHI

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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4G63 EVO 4-9

C-MIT-001L	88.00mm	57.00mm	45.00mm	15.80	4340 Billet	Std Stroke	4G63T / 4G63
C-MIT-003L	94.00mm	57.00mm	45.00mm	15.90	4340 Billet	Stroker Crankshaft	4G63T / 4G63
C-MIT-002L	100.00mm	57.00mm	45.00mm	16.50	4340 Billet	Stroker Crankshaft	4G63T / 4G63

4B11 EVO - Stroker 2.2L

C-MIT-004L	94.00mm	51.986mm	51.98mm	16.41	4340 Billet	Stroker Crankshaft	4B11
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Red indicates new items or weight (drawing)

NISSAN

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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SR20DET / SR20DE (Silvia / Primera / 200SX)

C-NIS-001L	91.00mm	55.00mm	48.00mm	17.90	4339 Billet	Stroker Crankshaft	SR20DET / SR20DE / SR20VE / SR20VET
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RB26DETT (Skyline R32 /R34)

C-NIS-002L	73.70mm	54.965mm	47.97mm	18.80	4340 Billet	Std Stroke / Lightweight Design	RB26DETT / RB25DET
C-NIS-003L	77.70mm	54.965mm	47.97mm	19.50	4340 Billet	Stroker 2.8L / Lightweight Design	RB26DETT

VR38DETT (GTR)

C-NIS-004UL	94.40mm	65.97mm	55.96mm	18.50	4340 Billet	Stroker Crankshaft	VR38 DETT
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OPEL / VAUXHALL

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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1.6L Turbo Z16LET (Corsa OPC)

C-OPE-004	89.00mm	55.00mm	43.00mm	14.30	4340 Billet	Stroker Crankshaft 1.8L	Z16LER / A16LER / A16LET / Z16LEH
C-OPE-009L	81.50mm	55.00mm	43.00mm	11.70	4340 Billet	Std stroke w/ 4-Count.	Z16LER / A16LER / A16LET / Z16LEH

2.0L 16v C20 Engine

C-OPE-005L	86.00mm	58.00mm	49.00mm	16.20	4340 Billet	Std Stroke	C20XE
C-OPE-002L	91.00mm	58.00mm	49.00mm	15.30	4340 Billet	Stroker Crankshaft	C20XE

2.0L 16v Z20 Engine

C-OPE-007	86.00mm	58.00mm	49.00mm	18.70	4340 Billet	Std Stroke	Z20LET / Z20LEH / Y20LET / Z20LER
C-OPE-008	91.00mm	58.00mm	49.00mm	19.00	4340 Billet	Stroker Crankshaft	Z20LET / Z20LEH / Y20LET / Z20LER

RENAULT

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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2.0L F7R / 2.0L F4R (De-Stroke)

C-REN-002UL	90.00mm	54.80mm	48.00mm	15.50	4340 Billet	De-Stroke	F4R / F7R
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2.0L F7R / 2.0L F4R

C-REN-001UL	93.00mm	54.80mm	48.00mm	15.50	4340 Billet	Std Stroke	F4R / F7R
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SUBARU

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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EJ20 / EJ22 / EJ25

C-SUB-001UL	75.00mm	60.00mm	52.00mm	8.00	4340 Billet	Std Stroke 2.0L	EJ20 / EJ205 / EJ25 / EJ257 / EJ22ET
C-SUB-002UL	79.00mm	60.00mm	52.00mm	8.10	4340 Billet	Std Stroke 2.5L	EJ25 / EJ257
C-SUB-003UL	83.00mm	60.00mm	52.00mm	8.55	4340 Billet	Stroker Crankshaft 2.7L	EJ25 / EJ257

EG33 SVX

C-SUB-004UL	75.00mm	60.00mm	52.00mm	12.50	4340 Billet	Std Stroke	EG33
C-SUB-005UL	79.00mm	60.00mm	52.00mm	12.48	4340 Billet	Stroker Crankshaft	EG33

TOYOTA

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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2.0L 3SGTE / 3SGE

C-TOY-001UL	93.00mm	55.00mm	48.00mm	17.20	4340 Billet	Stroker Crankshaft	3SGTE / 3SGE
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2.4L 5SFE w/ 3SGTE Journals

C-TOY-002UL	100.00mm	55.00mm	48.00mm	17.30	4340 Billet	Stroker Crankshaft	3SGTE / 3SGE / 5SFE
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3.0L 2JZ Supra

C-TOY-005L	94.00mm	61.994mm	51.991mm	22.30	4340 Billet	Stroker Crankshaft	2JZ-GTE
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VOLVO

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK GRADE	FOOTNOTE	ENGINE NUMBER
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2.3L 16v B234F / 2.0L 8v B230

C-VOL-001	80.00mm	63.00mm	49.00mm	21.20	4340 Billet	Std Stroker	B230 / B234
C-VOL-004	72.80mm	63.00mm	49.00mm	20.40	4340 Billet	DE-Stroke Crank.	B230 / B234
C-VOL-002	86.00mm	63.00mm	49.00mm	22.30	4340 Billet	Stroker Crankshaft	B230 / B234
C-VOL-003	81.20mm	63.00mm	49.00mm	21.30	4340 Billet	Stroker Crankshaft	B230 / B234

FORGED PISTONS SUPERSPORT SERIES



As the name suggests, these are developed for mild to high tuning mainly for road or club race cars that want to develop their engine for high mileage and/or street use. These are designed by ZRP engineers and manufactured in Germany from **4032 (T6) high-silicon, low-expansion alloy**. This allows the engine builder to run a closer piston to bore clearance, thus producing a better seal. This helps remove the slapping noise during cold start, common place among engines running forged pistons due to larger than OE bore clearances.

We have chosen Round Style Skirt design for Turbo Application and X-Style skirt for Natural aspirated engines, with oversize and deeper valve pockets to allow even the most extreme camshaft profiles to be used.

They have offset pins for quiet operation and the wrist pins are made from 9310 alloy. Other features include Anti-detonation grooves to protect the first rings and gas-pressure accumulator grooves for better ring seal and vibration relief.

Premium Japanese quality 1.00mm x 1.20mm x 2.80mm ring package included.

Optional coatings available per request:

Thermal barrier coating "Blast Off Bronze" / Moly Side-Skirt and Under-Crown coating "Stealth Black"

SUPERSPORT SERIES PISTON TERMINOLOGY



1. Clip cuts on the edge of the pistons on the intake side
2. Anti-detonation grooves act as small pressured gas reservoirs to keep the piston from rattling at high rpm, damaging the cylinder's top and rounding the piston's top edge. This also helps reduce detonation waves protecting the first ring from damage (Long wear life and performance).
3. Gas pressure accumulator groove in the 2nd ring land. this acts as a shock absorber using the residual combustion gasses to improve the ring seal and relieve the first ring from vibration. this, as an effect, has a longer wear life.
4. Horizontal slots in the pin bore allow oil to enter between the wrist pin and pin-bore area.
5. Full round skirt design with the bottom reinforcing band for High Hp and boost applications (turbo application)
6. 4032-T6 high-silicon / low-expansion alloy
7. Precision CNC machined ring grooves
8. Pistons designed to optimize squish for longer engine life and increased horsepower potential
9. Valve pockets designed to allow oversize valves and high lift camshafts

WHICH PISTON IS RIGHT FOR YOUR ENGINE?

DEPENDING ON THE USE EACH HAVE THEIR ADVANTAGES.

PISTON ALLOY COMPARISON

4032-Alloy	2618-Alloy
High silicon	Low silicon
Low expansion	High expansion
Tighter piston-to-wall clearance	More Piston-to-wall clearance needed
Quiet Operation	Noise when cold
Less ductile	More ductile
More stable & consistent	Higher resistance to detonation
Longer life cycle	Shorter life cycles
Harder	Softer

DIFFERENT TYPES OF PISTON COATINGS BUILD YOUR OWN PISTONS!



- 1. Thermal barrier coating "Blast Off Bronze"**
 - Reflects heat into the combustion chamber
 - Extends piston life by decreasing the rate of thermal transfer
 - Increases exhaust gas velocity
 - Greatly improves scavenging potential
 - Recommended for any performance application
- 2. Piston side-skirt and under-crown coating**
 - Better lubrication
 - Anti-Friction and Anti-wear properties
 - Reduce the chance of scuffing on dry start ups
 - Recommended for any performance application

FORGED PISTONS

NEW LINE ▲ Alpha Series

Piston Material

Performance Series pistons are made from 4032 high-silicon and low-expansion alloy, which allows the engine builder to run a closer piston to bore tolerance, thus producing a better seal.

|| Benefits : Quiet Operation, Tight piston to wall clearance, Low ductile, More stable and consistent than 2618 alloy, Long life cycle, Harder than 2618 alloy.

Performance Series pistons are made from dedicated forging. **Piston Forging**

|| Benefits : Lightweight piston, Superior Strength, Optimized internal shape by forging, Material fibers create by forging remain intact. High material characteristic, No edges rounded internal surface (Edges in the internal piston area could lead to failure), Optimized thickness in every different piston area (High heat transfer, Better piston temperature dissipation, Better piston sealing).

Piston Design

The pistons are designed for all 2.0L TFSI & TSI engine configurations with 21.00mm pin.

|| Benefits

- Increase the **Pin Bosses** lateral thickness, high resistance at high engine Rpm.
- **Round skirt design** with bottom reinforced band for High HP/Boost applications.
- Designed to optimize **squish** for longer engine life and increased horsepower potential.
- Bigger and deeper valve pockets to allow oversized valves and high-lift camshafts.
- **Offset** pin for quiet operation
- Clip cuts on the edge of the pistons on the Intake side
- **Anti-detonation grooves** act also as small pressured gas reservoirs to keep the piston from rattling on high RPM, damaging the top of the cylinder, and rounding the top edge of the piston. This also helps reduce detonation waves protecting the first ring from damage. This feature affects long wear life and performance.
- **Gas pressure accumulator groove** in the 2nd ring land. This acts as a shock absorber using the residual combustion gasses to improve the ring seal and relieve the first ring from vibration. This as an effect has a longer wear life.

Skirt Coating

Graphite coating is applied by a print **screen-printing** technique like OEM pistons.

|| Benefits : Better lubrication, Less friction, Wear protection, Reduce the chance of scuffing on cold start, Reduce the piston slap and over-fueling.



Get the right measurement !

A small window is left open at the piston's **gauge point** which enables micrometer to contact the aluminum surface achieving a completely accurate measurement.

←○ Measurement Gauge Point

AUDI / VOLKSWAGEN

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
1.4L TFSI (2012-Pre)												
• 4032-T6 High-Silicon / Low-Expansion alloy			• 9310 alloy wrist pins / Cylindrical shape			• Block Height : 212.00mm						
• Gas pressure accumulator and Anti-Detonation grooves			• Offset pins for quiet operation			• C/R Calculated w/ Gasket 0.65mm x 77.0mm						
• Round skirt style and 3D piston crown			• Premium 1.0 x 1.2 x 2.8 rings included			• Top Ring Down : 5.50mm						
• Over size and deeper valve pockets						• Head cc's : 26.00						
43701-765	76.50mm	10.0:1	10.0:1	29.00mm	75.60mm	144.00mm	19.00mm	-0.20	-7.50	21-GNH07650	247	WP019
43701-770	77.00mm	10.0:1	10.0:1	29.00mm	75.60mm	144.00mm	19.00mm	-0.20	-7.50	21-GNH07700	252	WP019

1.8L Turbo 20v

• 4032-T6 High-Silicon / Low-Expansion alloy			• Clip cuts on the edge of the piston			• Block Height : 220.00mm						
• Gas pressure accumulator and Anti-Detonation grooves			• 9310 alloy wrist pins / Cylindrical shape			• C/R Calculated w/ Gasket 1.20mm x 82.5mm						
• Round skirt style			• Offset pins for quiet operation			• Top Ring Down : 8.0mm						
• Over size and deeper valve pockets			• Premium 1.0 x 1.2 x 2.8 rings included			• Head cc's : 44.00						
43702-810	81.00mm	9.0:1	9.5:1	32.70mm	86.40mm	144.00mm	20.00mm	-0.10	-4.20	21-GNH08100	292	WP061
43702-815	81.50mm	9.0:1	9.5:1	32.70mm	86.40mm	144.00mm	20.00mm	-0.10	-4.90	21-GNH08150	295	WP061
43702-820	82.00mm	9.0:1	9.5:1	32.70mm	86.40mm	144.00mm	20.00mm	-0.10	-5.60	21-GNH08200	300	WP061

1.8L Stroker 92.80mm Crank. (06A Engine)

• 4032-T6 High-Silicon / Low-Expansion alloy			• Clip cuts on the edge of the piston			• Block Height : 220.00mm						
• Gas pressure accumulator and Anti-Detonation grooves			• 9310 alloy wrist pins / Cylindrical shape			• C/R Calculated w/ Gasket 1.20mm x 82.5mm						
• Round skirt style			• Offset pins for quiet operation			• Top Ring Down : 8.0mm						
• Over size and deeper valve pockets			• Premium 1.0 x 1.2 x 2.8 rings included			• Head cc's : 44.00						
43703-815	81.50mm	9.0:1	9.5:1	29.50mm	92.80mm	144.00mm	20.00mm	-0.10	-9.00	21-GNH08100	281	WP061
43703-825	82.50mm	9.0:1	9.5:1	29.50mm	92.80mm	144.00mm	20.00mm	-0.10	-10.5	21-GNH08250	285	WP061
43703-830	83.00mm	9.0:1	9.5:1	29.50mm	92.80mm	144.00mm	20.00mm	-0.10	-10.4	21-GNH08300	290	WP061

1.8L TSI / TFSI (EA888)

• 4032-T6 High-Silicon / Low-Expansion alloy			• Over size and deeper valve pockets			• Block Height : 220.00mm						
• Gas pressure accumulator groove			• 9310 alloy wrist pins / Cylindrical shape			• C/R Calculated w/ Gasket 0.90mm x 83.0mm						
• Anti-Detonation grooves			• Offset pins for quiet operation			• Top Ring Down : 6.50mm						
• Round skirt style and 3D piston crown			• Premium 1.0 x 1.2 x 2.8 rings included			• Head cc's :						
43704-825	82.50mm	9.6:1	9.6:1	29.70mm	84.10mm	148.00mm	21.00mm	-0.25	+0.36	21-GNH08250	324	WP034
43704-830	83.00mm	9.6:1	9.6:1	29.70mm	84.10mm	148.00mm	21.00mm	-0.25	+0.36	21-GNH08300	330	WP034



AUDI / VOLKSWAGEN

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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2.0L TFSI / TSI Belt & Chain Driven Engine

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator groove • Anti-Detonation grooves • Over size and deeper valve pockets • Clip cuts on the edge of the pistons on the Intake side 				<ul style="list-style-type: none"> • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Round skirt style • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 220.00mm • C/R Calculated w/ Gasket 0.90mm x 83.0mm • Top Ring Down : 6.30mm • Head cc's : 46.00 - Chain Driven • Head cc's : 45.00 - Belt Driven 				
43705-825	82.50mm	9.6:1 / 9.8:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-5.90	21-GNH08100	302	WP061
43705-830	83.00mm	9.6:1 / 9.8:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-6.60	21-GNH08150	304	WP061
43706-825	82.50mm	9.2:1 / 9.3:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-9.50	21-GNH08250	308	WP061
43706-830	83.00mm	9.2:1 / 9.3:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-10.3	21-GNH08200	313	WP061

*The pistons are designed to be used in all TFSI & TSI engine configurations with 21.00mm pin. Con-Rod part number w/21.0mm pin R-AUD-006-I (Belt Driven) / R-AUD-009-I (Chain Driven)

2.0L Stroker 95.20mm Crank. (EA888 Belt Driven)

43707-050	83.00mm	9.5:1 / 9.6:1	9.6:1 / 9.8:1	28.40mm	95.20mm	144.00mm	21.00mm	-0.00	-9.50	21-GNH08300	298	WP061
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2.0L TFSI / TSI Belt & Chain Driven Engine ▲ Alpha Series

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator groove • Anti-Detonation grooves • Over size and deeper valve pockets • Clip cuts on the edge of the pistons on the Intake side 				<ul style="list-style-type: none"> • Nickel-chrome-molybdenum alloy wrist pins • -Pin Cylindrical Shape / Wall thickness 9.00mm. • Offset pins for quiet operation • Print screen graphite coating like OEM pistons. • Dedicated Forging 				<ul style="list-style-type: none"> • Block Height : 220.00mm • C/R Calculated w/ Gasket 0.90mm x 83.0mm • Top Ring Down : 6.30mm • Head cc's : 46.00 - Chain Driven • Head cc's : 45.00 - Belt Driven 				
43705-825A	82.50mm	9.6:1 / 9.8:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-5.90	21-GNH08100	302	WP061
43705-830A	83.00mm	9.6:1 / 9.8:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-6.60	21-GNH08150	304	WP061
43706-825A	82.50mm	9.2:1 / 9.3:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-9.50	21-GNH08250	308	WP061
43706-830A	83.00mm	9.2:1 / 9.3:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-10.3	21-GNH08200	313	WP061

*The pistons are designed to be used in all TFSI & TSI engine configurations with 21.00mm pin. Con-Rod part number w/21.0mm pin R-AUD-006-I (Belt Driven) / R-AUD-009-I (Chain Driven)

2.5L TFSI (TT-RS)

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator groove • Anti-Detonation grooves • Over size and deeper valve pockets • Clip cuts on the edge of the pistons on the Intake side 				<ul style="list-style-type: none"> • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Round skirt style • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 220.00mm • C/R Calculated w/ Gasket 0.90mm x 83.0mm • Top Ring Down : 6.30mm • Head cc's : 46.00 				
43705-825A	82.50mm	9.6:1 / 9.8:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-5.90	21-GNH08100	302	WP061
43705-830A	83.00mm	9.6:1 / 9.8:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-6.60	21-GNH08150	304	WP061
43706-825A	82.50mm	9.2:1 / 9.3:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-9.50	21-GNH08250	308	WP061
43706-830A	83.00mm	9.2:1 / 9.3:1	9.6:1 / 9.8:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-10.3	21-GNH08200	313	WP061

*The pistons are designed to be used in all 2.5L TFSI engine configurations with 21.00mm pin. Con-Rod part number w/21.0mm pin R-AUD-009-I-5

AUDI / VOLKSWAGEN

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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2.0L TFSI / TSI Belt & Chain Driven Engine ▲ Alpha Series

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator groove • Anti-Detonation grooves • Over size and deeper valve pockets • Clip cuts on the edge of the pistons on the Intake side 				<ul style="list-style-type: none"> • Nickel-chrome-molybdenum alloy wrist pins • -Pin Cylindrical Shape / Wall thickness 9.00mm. • Offset pins for quiet operation • Print screen graphite coating like OEM pistons. • Dedicated Forging 				<ul style="list-style-type: none"> • Block Height : 220.00mm • C/R Calculated w/ Gasket 0.90mm x 83.0mm • Top Ring Down : 6.30mm • Head cc's : 46.00 				
43705-825-5A	82.50mm	9.8:1	10:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-5.90	21-GNH08100	302	WP061
43705-830-5A	83.00mm	9.8:1	10:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-6.60	21-GNH08150	304	WP061
43706-825-5A	82.50mm	9.3:1	10:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-9.50	21-GNH08250	308	WP061
43706-830-5A	83.00mm	9.3:1	10:1	29.55mm	92.80mm	144.00mm	21.00mm	-0.05	-10.3	21-GNH08200	313	WP061

*The pistons are designed to be used in all 2.5L TFSI engine configurations with 21.00mm pin. Con-Rod part number w/21.0mm pin R-AUD-009-I-5

BMW

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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1.8L M40 / M42

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 212.00mm • C/R Calculated w/ Gasket 1.75mm x 87.0mm • Top Ring Down : 6.80mm • Head cc's : 33.00 				
41101-840	84.00mm	8.8:1	10.0:1	31.50mm	81.00mm	139.95mm	22.00mm	-0.05	-14.30	21-GNH08400	323	WP098
41101-845	84.50mm	8.8:1	10.0:1	31.50mm	81.00mm	139.95mm	22.00mm	-0.05	-15.50	21-GNH08450	325	WP098
41101-850	85.00mm	8.8:1	10.0:1	31.50mm	81.00mm	139.95mm	22.00mm	-0.05	-15.60	21-GNH08500	327	WP098

2.5L M50 Single Vanos

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 209.95mm • C/R Calculated w/ Gasket 1.70mm x 85.0mm • Top Ring Down : 7.50mm • Head cc's : 33.00 				
41103-840	84.00mm	8.56:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	0.05	-12.50	21-GNH08400	334	WP098
41103-845	84.50mm	8.65:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	0.05	-13.20	21-GNH08450	334	WP098
41103-850	85.00mm	8.74:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	0.05	-13.90	21-GNH08500	334	WP098

ATHENA MLS or O-Ring gaskets are available in various thicknesses to increase or decrease the Comp. Ratio

BMW

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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2.5L M52 Single Vanos

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 210.80mm • C/R Calculated w/ Gasket 0.70mm x 85.0mm • Top Ring Down : 7.50mm • Head cc's : 36.00 				
41105-840	84.00mm	8.3:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	-0.80	-12.50	21-GNH08400	334	WP098
41105-845	84.50mm	8.3:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	-0.80	-13.20	21-GNH08450	334	WP098
41105-850	85.00mm	8.3:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	-0.80	-13.90	21-GNH08500	334	WP098

2.8L M50 / M52 / M54

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 210.80mm • C/R Calculated w/ Gasket 0.70mm x 85.0mm • Top Ring Down : 7.50mm • Head cc's : 35.00 				
41102-840	84.00mm	8.7:1	10.2:1	32.50mm	84.00mm	135.00mm	22.00mm	-1.30	-12.50	21-GNH08400	334	WP098
41102-845	84.50mm	8.7:1	10.2:1	32.50mm	84.00mm	135.00mm	22.00mm	-1.30	-13.20	21-GNH08450	334	WP098
41102-850	85.00mm	8.7:1	10.2:1	32.50mm	84.00mm	135.00mm	22.00mm	-1.30	-13.90	21-GNH08500	334	WP098

3.2L M3 S54 E46

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 217.00mm • C/R Calculated w/ Gasket 0.64mm x 88.0mm • Top Ring Down : 8.00mm • Head cc's : 33.00 				
41104-870	87.00mm	9.0:1	11.3:1	32.30mm	91.00mm	139.00mm	21.00mm	-0.20	-29.20	21-GNH08400	334	WP098
41104-875	87.50mm	9.0:1	11.3:1	32.30mm	91.00mm	139.00mm	21.00mm	-0.20	-30.00	21-GNH08450	339	WP098

CITROEN / PEUGEOT

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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1.6L DS3 (EP6-Prince), 1.6L 207 RC Turbo

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 210.50mm • C/R Calculated w/ Gasket 0.90mm x 78.0mm • Top Ring Down : • Head cc's : 37.60 				
42501-770	77.00mm	10.5:1	10.5:1	28.50mm	85.80mm	138.55mm	20.00mm		-0.55	21-GNH07700	246	WP051
42501-775	77.50mm	10.5:1	10.5:1	28.50mm	85.80mm	138.55mm	20.00mm		-0.55	21-GNH07750	252	WP051

1.6L 16v Rallye (TU5J4 Head), Stroker pistons

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Turbo use Round skirt style - N/A use X-Style Skirt • Over size and deeper valve pockets • Naturally Aspirated pistons have 2-Rings 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 207.00mm • C/R Calculated w/ Gasket 1.30mm x 80.0mm • Top Ring Down : 5.90mm N/A - 7.70mm Turbo • Head cc's : 32.70 				
42902-800	80.00mm	13.6:1	10.8:1	24.75mm	89.00mm	137.75mm	18.00mm	0.00	+4.20	21-GNH08000	248	WP099
42903-800	80.00mm	9.15:1	10.8:1	28.90mm	89.00mm	133.60mm	19.50mm	0.00	-15.41	21-GNH08000	272	WP035

CITROEN / PEUGEOT

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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1.6L 16v C2 (TU5JP4 Head), Stroker pistons

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Turbo use Round skirt style - N/A use X-Style Skirt • Over size and deeper valve pockets • Naturally Aspirated pistons have 2-Rings 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 207.00mm • C/R Calculated w/ Gasket 0.65mm x 80.0mm • Top Ring Down : 5.90mm N/A - 7.70mm Turbo • Head cc's : 39.50 				
42902-800	80.00mm	12.5:1	10.8:1	24.75mm	89.00mm	137.75mm	18.00mm	0.00	+4.20	21-GNH08000	248	WP099
42903-800	80.00mm	8.7:1	10.8:1	28.90mm	89.00mm	133.60mm	19.50mm	0.00	-15.41	21-GNH08000	272	WP035

FIAT / LANCIA

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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1.4L Abarth / T-Jet / Grand Punto

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.5 x 1.2 x 2.0 rings included 				<ul style="list-style-type: none"> • Block Height : 198.00mm • C/R Calculated w/ Gasket 0.72mm x 73.0mm • Top Ring Down : 6.40mm • Head cc's : 14.30 				
41401-720	72.00mm	9.8:1	9.8:1	26.80mm	84.00mm	129.00mm	18.00mm	-0.20	-13.70	720XTZ-3	206	WP064
41401-725	72.50mm	9.8:1	9.8:1	26.80mm	84.00mm	129.00mm	18.00mm	-0.20	-14.50	725XTZ-3	208	WP064

2.0L 16v Delta Integrale, 2.0L 16v Coupe

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 229.00mm • C/R Calculated w/ Gasket 1.60mm x 87.0mm • Top Ring Down : 8.55mm • Head cc's : 42.70 				
42001-840	84.00mm	8.5:1	8.0:1	38.90mm	90.00mm	145.00mm	22.00mm	-0.10	-13.30	21-GNH08400	377	WP122
42001-845	84.50mm	8.5:1	8.0:1	38.90mm	90.00mm	145.00mm	22.00mm	-0.10	-14.10	21-GNH08450	386	WP122
42001-850	85.00mm	8.5:1	8.0:1	38.90mm	90.00mm	145.00mm	22.00mm	-0.10	-14.85	21-GNH08500	388	WP122

FORD

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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2.0L 16 Cosworth (YB)

<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets 				<ul style="list-style-type: none"> • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included 				<ul style="list-style-type: none"> • Block Height : 207.50mm • C/R Calculated w/ Gasket 1.0mm x 92.50mm • Top Ring Down : 7.20mm • Head cc's : 45.00 				
41501-908	90.80mm	10.2:1	8.0:1	32.75mm	77.00mm	136.50mm	24.00mm	+0.25	-3.66 (FT)		369	WP022

Stroker 84.00mm Crank.

41502-920	92.00mm	12.8:1	8.0:1	32.25mm	84.00mm	133.50mm	24.00mm	+0.25	+3.30			WP022
41503-915	91.50mm	9.2:1	8.0:1	32.25mm	84.00mm	133.50mm	24.00mm	+0.25	-15.0			WP022
41503-920	92.00mm	9.2:1	8.0:1	32.25mm	84.00mm	133.50mm	24.00mm	+0.25	-15.0			WP022

ATHENA MLS or O-Ring gaskets are available in various thicknesses to increase or decrease the Comp. Ratio

MINI COOPER

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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1.6L R56 Turbo - N12B16 / N14B16

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
42501-770	77.00mm	10.5:1	10.5:1	28.50mm	85.80mm	138.55mm	20.00mm	-0.55	21-GNH07700	246	WP051	
42501-775	77.50mm	10.5:1	10.5:1	28.50mm	85.80mm	138.55mm	20.00mm	-0.55	21-GNH07750	252	WP051	

MITSUBISHI

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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4G63 EVO 4-9

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
42401-850	85.00mm	8.5:1 / 9.0:1	8.8:1	34.87mm	88.00mm	150.00mm	22.00mm	-0.13	-12.40	21-GNH08500	318	WP122
42401-855	85.50mm	8.5:1 / 9.0:1	8.8:1	34.87mm	88.00mm	150.00mm	22.00mm	-0.13	-13.20	21-GNH08550	320	WP122
42401-860	86.00mm	8.5:1 / 9.0:1	8.8:1	34.87mm	88.00mm	150.00mm	22.00mm	-0.13	-14.00	21-GNH08600	326	WP122

NISSAN

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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RB26DETT R32-R35

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
42601-865	86.50mm	8.8:1	8.5:1	30.00mm	73.70mm	121.50mm	21.00mm	-0.15	+15.50	21-GNH0865		WP092
42601-870	87.00mm	8.9:1	8.5:1	30.00mm	73.70mm	121.50mm	21.00mm	-0.15	+15.50	21-GNH0870		WP092



OPEL / VAUXHALL

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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1.6L Turbo Z16LET (Corsa OPC)

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
42701-790	79.00mm	8.5:1	8.8:1	28.00mm	81.50mm	129.75mm	19.00mm	0	-5.0	21-GNH07900	276	WP019
42701-795	79.50mm	8.5:1	8.8:1	28.00mm	81.50mm	129.75mm	19.00mm	0	-5.6	21-GNH07950	282	WP019

2.0L 16v C20XE & Z20LET

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
42702-860	86.00mm	8.8:1	8.8:1	30.25mm	86.00mm	143.00mm	21.00mm	-0.05	-14.50	21-GNH08600	321	WP092
42702-865	86.50mm	8.8:1	8.8:1	30.25mm	86.00mm	143.00mm	21.00mm	-0.05	-15.25	21-GNH08650	333	WP092
42702-870	87.00mm	8.8:1	8.8:1	30.25mm	86.00mm	143.00mm	21.00mm	-0.05	-16.00	21-GNH08700	326	WP092

2.0L 16v C20XE, Stroker pistons w/ 2-rings

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
42703-865	86.50mm	12.4:1	10.5:1	27.75mm	91.00mm	143.00mm	21.00mm	-0.05	+2.3	21-GNH08650	301	WP051
42703-870	87.00mm	12.4:1	10.5:1	27.75mm	91.00mm	143.00mm	21.00mm	-0.05	+1.95	21-GNH08700	305	WP051

SUBARU

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
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EJ20 / EJ205 WRX-STi (1998-UP)

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
43301-920	92.00mm	8.5:1	8.0:1	32.70mm	75.00mm	130.45mm	23.00mm	-0.35	-8.70	21-GNH09200	366	WP082
43301-925	92.50mm	8.5:1	8.0:1	32.70mm	75.00mm	130.45mm	23.00mm	-0.35	-9.40	21-GNH09250	371	WP082
43301-930	93.00mm	8.5:1	8.0:1	32.70mm	75.00mm	130.45mm	23.00mm	-0.35	-10.20	21-GNH09300	372	WP082

Stroker 79.00mm crank.

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
43302-920	92.00mm	8.5:1	8.0:1	30.70mm	79.00mm	130.45mm	23.00mm	-0.35	-7.70	21-GNH09200	348	WP082
43302-925	92.50mm	8.5:1	8.0:1	30.70mm	79.00mm	130.45mm	23.00mm	-0.35	-8.60	21-GNH09250		WP082

ATHENA MLS or O-Ring gaskets are available in various thicknesses to increase or decrease the Comp. Ratio

SUBARU

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • Over size and deeper valve pockets • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.0 x 1.2 x 2.8 rings included • Block Height : 201.00mm • C/R Calculated w/ Gasket 1.00mm x 100.0mm • Top Ring Down : 5.70mm • Head cc's : 51.00 												
43303-995	99.50mm	8.5:1	8.0:1	30.70mm	79.00mm	130.45mm	23.00mm	-0.35	-19.90	21-GNH09950	402	WP082
43303-9975	99.75mm	8.5:1	8.0:1	30.70mm	79.00mm	130.45mm	23.00mm	-0.35	-20.30	21-GNH09975	405	WP082
43303-100	100.00mm	8.5:1	8.0:1	30.70mm	79.00mm	130.45mm	23.00mm	-0.35	-20.70	21-GNH01000	407	WP082

TOYOTA

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.5 x 1.2 x 2.0 rings included • C/R Calculated w/ Gasket 0.85mm x 75.50mm • Top Ring Down : 7.40mm • Head cc's : 39.00 												
43501-740	74.00mm	8.3:1	8.2:1	29.95mm	77.40mm	118.00mm	18.00mm	-0.35	-1.00	740XTZ-3	254	WP079
43501-745	74.50mm	8.3:1	8.2:1	29.95mm	77.40mm	118.00mm	18.00mm	-0.35	-1.45	745XTZ-3	259	WP079
43501-750	75.00mm	8.3:1	8.2:1	29.95mm	77.40mm	118.00mm	18.00mm	-0.35	-2.10	750XTZ-3	263	WP079
<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Round skirt style • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Premium 1.5 x 1.2 x 2.0 rings included • C/R Calculated w/ Gasket 1.40mm x 75.50mm • Top Ring Down : 7.40mm • Head cc's : 39.00 												
43503-740	74.00mm	9.0:1	9.4:1	29.95mm	87.00mm	130.50mm	18.00mm	-0.05	-1.00	740XTZ-3		WP079
43503-745	74.50mm	9.0:1	9.4:1	29.95mm	87.00mm	130.50mm	18.00mm	-0.05	-1.45	745XTZ-3		WP079
43503-750	75.00mm	9.0:1	9.4:1	29.95mm	87.00mm	130.50mm	18.00mm	-0.05	-2.10	750XTZ-3		WP079

2.0L 3SGTE

PART NUMBER	BORE SIZE	COMP. RATIO	OEM C/R	COMP. HEIGHT	STROKE	ROD CC	PIN DIAM.	DECK. CLEAR.	DOVE CC'S	RING SET	GRAMS	PIN DIAM.
<ul style="list-style-type: none"> • 4032-T6 High-Silicon / Low-Expansion alloy • Gas pressure accumulator and Anti-Detonation grooves • Over size and deeper valve pockets • Clip cuts on the edge of the pistons on the Intake side • 9310 alloy wrist pins / Cylindrical shape • Offset pins for quiet operation • Round skirt style • Premium 1.0 x 1.2 x 2.8 rings included • Block Height : 216.00mm • C/R Calculated w/ Gasket 1.00mm x 87.00mm • Top Ring Down : 8.00mm • Head cc's : 49.00 												
43502-860	86.00mm	9.0:1	8.8:1	35.00mm	86.00mm	138.00mm	22.00mm	0.00	-7.00	21-GNH08600		WP116
43502-862	86.25mm	9.0:1	8.8:1	35.00mm	86.00mm	138.00mm	22.00mm	0.00	-7.00	21-GNH08625		WP116

ZRP

STROKER KITS

ZRP stroker kits are specifically designed to satisfy the demanding needs of the professional racer or the everyday driver alike, by giving a significant advantage of extra displacement to your engine.

Our engineers have combined the highest quality materials and the latest forging and machining techniques to produce these kits. ZRP has focused on European and Japanese engines and has expanded the range of stroker kits to fulfill the racing industry's needs.

Stroker kits, depending on the engine's use, come with either H or I beam connecting rods and DIAMOND 2618 alloy or ZRP Supersport Series 4032-T6 alloy forged pistons.

All components in the stroker kit adhere to the strictest quality assurances.



**THERE IS NO REPLACEMENT
FOR DISPLACEMENT!**

AUDI / VOLKSWAGEN

1.8L Turbo 20v - O6A Engine Stroke 92.8mm x 144.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-AUD-001L	R-AUD-001-H R-AUD-001-I	H-Beam I-Beam HD Series	Supersport	43703-815	81.50mm	9.0:1	1936cc	1.20mm x 82.50mm	-0.10
				43703-825	82.50mm	9.0:1	1984cc	1.20mm x 82.50mm	-0.10
				43703-830	83.00mm	9.0:1	1994cc	1.35mm x 83.00mm	-0.10
		Diamond	Custom made upon request						

2.0L TFSI /TSI Belt driven Stroke 95.20mm x 144.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-AUD-003L	R-AUD-006-H R-AUD-006-I	H-Beam I-Beam HD Series	Supersport	43707-830	83.00mm	9.9:1	2060cc	0.90mm x 83.00mm	-0.00
			Diamond	Custom made upon request					

CITROEN / PEUGEOT

1.6L 16v TU5J4 / TU5JP4 Stroke 89.0mm x 133.60mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-CIT-001L	R-CIT-001-H R-CIT-001-I	H-Beam I-Beam	Wossner	K9407D100	79.50mm	12.5:1	-	1.30mm x 80.0mm	+0.10
				K9407D150	80.00mm	12.5:1	-	1.30mm x 80.0mm	+0.10
			Supersport	42903-800	80.00mm	9.10:1	8.7:1	1.30mm x 80.0mm	-0.00

Head cc's - Saxo TU5J4 = 32.70 / C2 VTS TU5JP4 = 39.50
Displacement: 79.50mm 1767cc / 80.0mm 1789cc

1.6L 16v TU5J4 / TU5JP4 Stroke 89.0mm x 137.75mm rods (+4.15mm)

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-CIT-001L	R-CIT-004-I	I-Beam (Lightweight)	Supersport	42902-800	80.00mm	13.6:1	-	1.30mm x 80.0mm	-0.00
				42902-800	80.00mm	-	12.5:1	0.65mm x 80.0mm	-0.00

Head cc's - Saxo TU5J4 = 32.70 / C2 VTS TU5JP4 = 39.50
Pistons pin size 18.0mm - Displacement: 1789cc

HONDA

K20 A2, Z1, A3 Stroke 93.0mm x 135.5mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-HON-003UL	R-HON-012HL R-HON-012-I	H-Beam I-Beam HD Series	Diamond	21602-860	86.00mm	12:1	2161cc	0.63mm x 87.00mm	-0.00
				21602-865	86.50mm	12:1	2186cc	0.63mm x 87.00mm	-0.00
				21601-860	86.00mm	9.2:1	2161cc	1.00mm x 87.00mm	-0.00
				21601-865	86.50mm	9.3:1	2211cc	1.00mm x 87.00mm	-0.00

F20C (S2000) Stroke 93.0mm x 135.5mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-HON-004UL	R-HON-014HL R-HON-014-I	H-Beam I-Beam HD Series	Diamond	21604-870	87.00mm	12.1:1	2295cc	1.00mm x 89.00mm	+0.08
				21604-875	87.50mm	12.2:1	2321cc	1.00mm x 89.00mm	+0.08
				21603-870	87.00mm	9.35:1	2295cc	1.00mm x 89.00mm	+0.08
				21603-875	87.50mm	9.45:1	2321cc	1.00mm x 89.00mm	+0.08

MITSUBISHI

2.0L 4G63 EVO 4-9 (7-Bolts), 88.0mm Stroke x 150.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-MIT-001L	R-MIT-002-H R-MIT-002-I R-MIT-002-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Supersport	42401-850	85.00mm	8.5:1	9.0:1	1.00mm x 86.30mm	-12.40
				42401-855	85.50mm	8.5:1	9.0:1	1.00mm x 86.30mm	-13.20
				42401-860	86.00mm	8.5:1	9.0:1	1.00mm x 86.30mm	-14.00
				82000-4-H	85.00mm	8.55:1	9.0:1	1.00mm x 86.30mm	-12.3
			Diamond	82001-4-H	85.50mm	8.65:1	9.15:1	1.00mm x 86.30mm	-12.3
				82002-4-H	86.00mm	8.75:1	9.25:1	1.00mm x 86.30mm	-12.3
				82003-4-H	85.00mm	9.00:1	9.65:1	1.00mm x 86.30mm	-8.00
				82004-4-H	85.50mm	9.15:1	9.75:1	1.00mm x 86.30mm	-8.00
				82005-4-H	86.00mm	9.25:1	9.85:1	1.00mm x 86.30mm	-8.00
				82006-4-H	85.00mm	10.1:1	10.85:1	1.00mm x 86.30mm	-1.00
				82007-4-H	85.50mm	10.2:1	10.95:1	1.00mm x 86.30mm	-1.00
				82008-4-H	86.00mm	10.3:1	11.1:1	1.00mm x 86.30mm	-1.00

Head cc's - Evo 4-7 = 47.00 / Evo 8-9 = 43.00

888.0mm Stroke x 156.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-MIT-001L	R-MIT-007-I R-MIT-007-IP	I-Beam HD Series I-Beam Pro Series	Diamond	82027-4-H	85.00mm	8.6:1	9.0:1	1.00mm x 86.30mm	-11.8
				82028-4-H	85.50mm	8.7:1	9.1:1	1.00mm x 86.30mm	-11.8
				82029-4-H	86.00mm	8.8:1	9.2:1	1.00mm x 86.30mm	-11.8
				82030-4-H	85.00mm	9.0:1	9.6:1	1.00mm x 86.30mm	-8.0
				82031-4-H	85.50mm	9.1:1	9.7:1	1.00mm x 86.30mm	-8.0
				82032-4-H	86.00mm	9.2:1	9.8:1	1.00mm x 86.30mm	-8.0
				82033-4-H	85.00mm	10.0:1	10.8:1	1.00mm x 86.30mm	-1.0
				82034-4-H	85.50mm	10.1:1	10.9:1	1.00mm x 86.30mm	-1.0
				82035-4-H	86.00mm	10.2:1	11.0:1	1.00mm x 86.30mm	-1.0

Head cc's : Evo 4-7 = 47.00 / Evo 8-9 =43.00

94.0mm Stroke x 150.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-MIT-003L	R-MIT-002-H R-MIT-002-I R-MIT-002-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Diamond	82009-4-H	85.00mm	8.6:1	9.0:1	1.00mm x 86.30mm	-16.5
				82010-4-H	85.50mm	8.7:1	9.1:1	1.00mm x 86.30mm	-16.5
				82011-4-H	86.00mm	8.8:1	9.2:1	1.00mm x 86.30mm	-16.5
				82012-4-H	85.00mm	9.0:1	9.5:1	1.00mm x 86.30mm	-12.3
				82013-4-H	85.50mm	9.0:1	9.5:1	1.00mm x 86.30mm	-12.3
				82014-4-H	86.00mm	9.0:1	9.5:1	1.00mm x 86.30mm	-12.3
				82015-4-H	85.00mm	10.1:1	10.8:1	1.00mm x 86.30mm	-4.5
				82016-4-H	85.50mm	10.2:1	10.9:1	1.00mm x 86.30mm	-4.5
				82017-4-H	86.00mm	10.3:1	11.0:1	1.00mm x 86.30mm	-4.5

Head cc's : Evo 4-7 = 47.00 / Evo 8-9 =43.00

94.0mm Stroke x 156.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-MIT-003L	R-MIT-007-I R-MIT-007-IP	I-Beam HD Series I-Beam Pro Series	Diamond	82036-4-H	85.00mm	8.6:1	9.0:1	1.00mm x 86.30mm	-16.5
				82037-4-H	85.50mm	8.7:1	9.1:1	1.00mm x 86.30mm	-16.5
				82038-4-H	86.00mm	8.8:1	9.2:1	1.00mm x 86.30mm	-16.5
				82039-4-H	85.00mm	9.1:1	9.6:1	1.00mm x 86.30mm	-11.8
				82040-4-H	85.50mm	9.2:1	9.7:1	1.00mm x 86.30mm	-11.8
				82041-4-H	86.00mm	9.3:1	9.8:1	1.00mm x 86.30mm	-11.8
				82042-4-H	85.00mm	10.1:1	10.8:1	1.00mm x 86.30mm	-4.5
				82043-4-H	85.50mm	10.2:1	10.9:1	1.00mm x 86.30mm	-4.5
				82044-4-H	86.00mm	10.3:1	11.0:1	1.00mm x 86.30mm	-4.5

Head cc's: Evo 4-7 = 47.00 / Evo 8-9 = 43.00

100mm Stroke x 150.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-MIT-002L	R-MIT-002-H R-MIT-002-I R-MIT-002-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Diamond	82027-4-H	85.00mm	9.4:1	9.9:1	1.00mm x 86.30mm	-11.8
				82028-4-H	85.50mm	9.5:1	10:1	1.00mm x 86.30mm	-11.8
				82029-4-H	86.00mm	9.6:1	10.1:1	1.00mm x 86.30mm	-11.8
				82030-4-H	85.00mm	9.8:1	10.5:1	1.00mm x 86.30mm	-8.0
				82031-4-H	85.50mm	9.9:1	10.6:1	1.00mm x 86.30mm	-8.0
				82032-4-H	86.00mm	10:1	10.7:1	1.00mm x 86.30mm	-8.0

Head cc's: Evo 4-7 = 47.00 / Evo 8-9 = 43.00

100mm Stroke x 150.0mm rods (4G64 Block)

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-MIT-002L	R-MIT-002-H R-MIT-002-I R-MIT-002-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Diamond					Custom made upon request	

Head cc's: Evo 4-7 = 47.00 / Evo 8-9 = 43.00

MITSUBISHI

4B11 EVO 10 Stroke 94.0mm x 143.71mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-MIT-004L	R-MIT-EN24-006	I-Beam HD Series	Diamond	82054-4-H	86.00mm	9.0:1	2184cc	1.0mm x 87.0mm	-0.08
				82055-4-H	86.50mm	9.1:1	2210cc	1.0mm x 87.0mm	-0.08
				82056-4-H	86.00mm	10.0:1	2184cc	1.0mm x 87.0mm	-0.08
				82057-4-H	86.50mm	10.1:1	2210cc	1.0mm x 87.0mm	-0.08
				82064-4-H	90.00mm	9.8:1	2392cc	1.0mm x 87.0mm	-0.08
				82065-4-H	90.00mm	10.8:1	2392cc	1.0mm x 87.0mm	-0.08

NISSAN

SR20DET / SR20DE Stroke 91.0mm x 136.30mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-NIS-001L	R-NIS-002-I	I-Beam HD Series	Diamond	22603-865	86.50mm	9.0:1	2139cc	1.10mm x 87.50mm	-0.10
				22603-870	87.00mm	9.0:1	2164cc	1.10mm x 87.50mm	-0.10

OPEL / VAUXHALL

1.6L Turbo Z16LET Stroke 89.0mm x 129.75mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-OPE-004	R-OPE-005-I	I-Beam	Diamond	22701-790	79.00mm	8.9:1	1745cc	1.27mm x 80.00mm	-0.00
				22701-795	79.50mm	9.0:1	1767cc	1.27mm x 80.00mm	-0.00

2.0L 16v C20 XE Stroke 91.0mm x 143.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-OPE-002L	R-OPE-001-H R-OPE-001-I	H-Beam I-Beam	Supersport	42703-865	86.50mm	12.4:1	2139cc	1.00mm x 87.50mm	-0.05
				42703-870	87.00mm	12.4:1	2164cc	1.00mm x 87.50mm	-0.05
			Diamond	22702-865	86.50mm	8.85:1	2139cc	1.00mm x 87.50mm	-0.05
				22702-870	87.00mm	8.85:1	2164cc	1.00mm x 87.50mm	-0.05

* The Opel 2.0L Stroker kit requires an "external crank speed sensor modification" in order to avoid clearance issues with the OEM internal trigger wheel and the rotating assembly.

* N/A Pistons w/ 2-rings

2.0L 16v Z20 LET Stroke 91.0mm x 143.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-OPE-008L	R-OPE-001-H R-OPE-001-I	H-Beam I-Beam	Diamond	22702-865	86.50mm	8.8:1	2139cc	1.00mm x 87.50mm	-0.00
				22702-870	87.00mm	8.8:1	2164cc	1.00mm x 87.50mm	-0.00

* The Opel 2.0L Stroker kit requires an "external crank speed sensor modification" in order to avoid clearance issues with the OEM internal trigger wheel and the rotating assembly.

* N/A Pistons w/ 2-rings

SUBARU

EJ20 / EJ205 WRX-STi (1998-UP) Stroke 79.0mm x 130.45mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-SUB-002UL	R-SUB-001-H R-SUB-001-I R-SUB-001-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Supersport	43302-920	92.00mm	8.5:1	2101cc	1.00mm x 94.00mm	-0.35
				43302-925	92.50mm	8.5:1	2124cc	1.00mm x 94.00mm	-0.35
			Diamond	36004-H-4	92.00mm	8.3:1	2101cc	0.60mm x 94.00mm	-0.32
				36005-H-5	92.50mm	8.4:1	2124cc	0.60mm x 94.00mm	-0.32
				36006-H-6	93.00mm	8.5:1	2147cc	0.60mm x 94.00mm	-0.32

EJ25 / EJ257 WRX-STi (2004-UP) Stroke 83.0mm x 130.45mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-SUB-003UL	R-SUB-001-H R-SUB-001-I R-SUB-001-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Diamond	36023-4-H	99.50mm	8.1:1	2582cc	0.60mm x 101.0mm	-0.38
				36024-4-H	99.75mm	8.2:1	2556cc	0.60mm x 101.0mm	-0.38
				36025-4-H	100.0mm	8.2:1	2608cc	0.60mm x 101.0mm	-0.38
				36026-4-H	100.50mm	8.3:1	2634cc	0.60mm x 101.0mm	-0.38
				36027-4-H	99.50mm	9.0:1	2582cc	0.60mm x 101.0mm	-0.38
				36028-4-H	99.75mm	9.1:1	2556cc	0.60mm x 101.0mm	-0.38
				36029-4-H	100.0mm	9.1:1	2608cc	0.60mm x 101.0mm	-0.38
				36030-4-H	100.50mm	9.2:1	2634cc	0.60mm x 101.0mm	-0.38
				36031-4-H	99.50mm	9.9:1	2582cc	0.60mm x 101.0mm	-0.38
				36032-4-H	99.75mm	10:1	2556cc	0.60mm x 101.0mm	-0.38
				36033-4-H	100.0mm	10:1	2608cc	0.60mm x 101.0mm	-0.38
				36034-4-H	100.50mm	10.1:1	2634cc	0.60mm x 101.0mm	-0.38

3.3L EG33 (6-Cyl.) Stroke 79.0mm x 130.45mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK. CLEAR.
C-SUB-005UL	R-SUB-001-H R-SUB-001-I R-SUB-001-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Diamond	36023-6-H	99.50mm	9.0:1	3686cc	1.30mm x 100.0mm	-0.38
				36024-6-H	99.75mm	9.1:1	3704cc	1.30mm x 100.0mm	-0.38
				36025-6-H	100.0mm	9.1:1	3723cc	1.30mm x 100.0mm	-0.38
				36026-6-H	100.50mm	9.2:1	3760cc	1.30mm x 100.0mm	-0.38

* Only for sleeved engines

TOYOTA

2.0L 3SGTE Celica Stroke 93.0mm x 138.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK CLEAR.
C-TOY-001UL	R-TOY-005-I	I-Beam HD Series	Diamond	23501-862	86.20mm	8.9:1	2171cc	1.42mm x 87.00mm	-0.00
				23501-865	86.50mm	9.0:1	2186cc	1.42mm x 87.00mm	-0.00

5SFE Block w/ 3SGTE Head Stroke 100.0mm x 138.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK CLEAR.
C-TOY-001UL	R-TOY-005-I	I-Beam HD Series	Diamond	23502-870	87.00mm	9.0:1	2378cc	1.00mm x 88.00mm	-0.00
				23502-875	87.50mm	9.0:1	2405cc	1.00mm x 88.00mm	-0.00

3.0L 2JZ Supra Stroke 94.0mm x 142.0mm rods

CRANKSHAFT	CON - RODS		PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO	DISPLACEMENT	GASKET THICK.	DECK CLEAR.
C-TOY-005L	R-TOY-006-H R-TOY-006-I R-TOY-006-IP	H-Beam I-Beam HD Series I-Beam Pro Series	Diamond	37009-6-H	86.00mm	8.5:1	3276cc	1.00mm x 87.00mm	-0.02
				37010-6-H	86.50mm	8.6:1	3314cc	1.00mm x 87.00mm	-0.02
				37011-6-H	87.00mm	8.7:1	3353cc	1.00mm x 87.00mm	-0.02
				37012-6-H	86.00mm	9.0:1	3276cc	1.00mm x 87.00mm	-0.02
				37013-6-H	86.50mm	9.1:1	3314cc	1.00mm x 87.00mm	-0.02
				37014-6-H	87.00mm	9.2:1	3353cc	1.00mm x 87.00mm	-0.02
				37015-6-H	86.00mm	10.0:1	3276cc	1.00mm x 87.00mm	-0.02
				37016-6-H	86.50mm	10.1:1	3314cc	1.00mm x 87.00mm	-0.02
				37017-6-H	87.00mm	10.2:1	3353cc	1.00mm x 87.00mm	-0.02



ARP CONNECTING ROD FASTENERS

We use ARP products to our connecting rods. The “weak link” in a connecting rod has always been the bolt, and racers know that nobody builds a better bolt than ARP. However, it is critically important to monitor the stretch of each bolt and replace it when it has permanently elongated by .001”. Below you will find an extensive listing of aftermarket connecting rods and replacement bolt specifications.

You should also know that ARP rod bolts are superior to those from other manufacturers especially in the area of fatigue strength. Testing has shown ARP rod bolts to have twenty times the fatigue strength of other bolts. As such, it makes good sense to rely on ARP for optimum connecting rod service and reliability. Make the most of your racing budget and rely on ARP rod bolts. You'll find the ARP name proudly stamped on each bolt as your assurance of quality.



ARP CONNECTING ROD BOLT MATERIAL OVERVIEW

8740 CHROME MOLY: 8740 chrome moly is seen as good tough steel with adequate fatigue properties for most racing applications, only if the threads are rolled after heat treatment, as is ARP's standard procedure. Chrome moly can be heat-treated to deliver between 180,000 and 200,000 psi tensile strengths.

ARP2000®: ARP2000 is an steel alloy that can be heat-treated to a higher level than 8740. While 8740 and ARP2000 share similar characteristics – ARP2000 is capable of achieving a tensile strength of 220,000 psi. Stress corrosion and hydrogen embrittlement are typically not a problem.

L19®: L19 is a very high-strength material capable of delivering a tensile strength at 260,000 psi. L19 requires special care to avoid hydrogen embrittlement. This material is easily contaminated and subject to stress corrosion. It must be kept well-oiled and not exposed to moisture.

CUSTOM AGE 625 PLUS®: This super-alloy demonstrates superior fatigue life, tensile strength, and toughness – with complete resistance to atmospheric corrosion and oxidation. ARP is the first to develop manufacturing and testing processes for fasteners with Custom Age 625+. Typical tensile strength is 260,000 / 280,000 psi.



ARP REPLACEMENT ROD BOLTS

ZRP Connecting rods join forces with ARP to provide to every car enthusiast the ultimate package in durability and reliability. ARP Pro series connecting rod bolts are precision CNC-machined to exact specifications and designed for optimum reliability. They are heat-treated and threads are rolled to provide up to ten times more fatigue strength. This makes them far superior to standard OEM fasteners in terms of durability, and fully capable of handling the extra stress of high-combustion engines.

PART NUMBER	THREAD SIZE	UHL	MATERIAL	SET OF (PCS)	FASTENER CLAMP LOAD AT (PSI)	PACKAGE INCLUDES
4AJ1.500-2SU	3/8	1.500	ARP2000	1,00	220,00	ARP 2000 Rod Bolt
200-6207	3/8	1.500	ARP2000	8,00	220,00	ARP 2000 Rod bolts + ARP lubricant (0.5 oz.) + Washers
4AJ1.500-6SU	3/8	1.500	L19	1,00	260,00	ARP L19 Rod Bolt
300-6704	3/8	1.500	Custom Age 625+	8,00	260,00	ARP CA 625+ bolts + ARP lubricant (0.5 oz.) + Washers
4AJ1.600-6SU	3/8	1.600	ARP2000	1,00	220,00	ARP 2000 Rod Bolt (1pc) 3+8 UHL:1.600
200-6209	3/8	1.600	ARP2000	8,00	220,00	ARP 2000 bolts + ARP lubricant (0.5 oz.) + Washers
300-6703	3/8	1.600	Custom Age 625+	8,00	260,00	ARP CA 625+ bolts + ARP lubricant (0.5 oz.) + Washers
4AJ1.750-2SU	3/8	1.750	ARP2000	1,00	220,00	ARP 2000 Rod Bolt (1pc) 3+8 UHL:1.750
200-6208	3/8	1.750	ARP2000	8,00	220,00	ARP 2000 bolts + ARP lubricant (0.5 oz.) + Washers
200-6220	5/16	1.500	ARP2000	2,00	220,00	ARP 2000 bolts + Washers
200-6210	5/16	1.500	ARP2000	8,00	220,00	ARP 2000 bolts + ARP lubricant (0.5 oz.) + Washers
300-6708	5/16	1.500	Custom Age 625+	8,00	260,00	ARP CA 625+ bolts + ARP lubricant (0.5 oz.) + Washers
200-6006	7/16	1.600	8740	16,00	180 / 200.00	ARP 8740 bolts + ARP lubricant (0.5 oz.) + Washers
200-6026	7/16	1.600	8740	2,00	180 / 200.00	ARP 8740 Rod Bolt Kit 7+16 UHL:1.600

ARP FASTENER ASSEMBLY LUBRICANT

ARP Ultra-Torque Fastener Assembly Lubricant™ has been specifically designed to reduce tension preload scatter and eliminate the need to cycle high performance engine fasteners before final installation. ARP Ultra-Torque far surpasses all requirements offered by previous ARP lubricants in terms of fastener preload repeatability and performance lubricating properties.

100-9908	ARP Ultra-Torque Assembly Lubricant (0.5 oz. Pouch)
100-9913	ARP Ultra-Torque Assembly Lubricant (1.0 oz. Pouch)
100-9909	ARP Ultra-Torque Assembly Lubricant (1.69 oz. Squeeze Tube)
100-9910	ARP Ultra-Torque Assembly Lubricant (10 oz. Brush Top Container)
100-9911	ARP Ultra-Torque Assembly Lubricant (20 oz. Brush Top Container)



BENEFITS OF ARP ULTRA-TORQUE:

- Obtains 95%-100% of the recommended installed preload on the first cycle, allowing the fastener to reach the proper preload on the first pull without cycling
- Maintains installed preload levels within 5% on all subsequent cycles
- Stabilizes preload levels within 5% between a group of fasteners
- Prevents seizing and galling on threaded fasteners
- 360°F melting point
- Metal free

ARP THREAD CLEANING CHASERS

ARP's handy thread cleaning chaser taps are designed with correct thread pitch and diameter to clean dirty blind or thru holes. They are a handy addition to the tool box of any serious engine builder and an essential aid for preparing any block for final assembly. Don't take a chance on improper torque values caused by dirty threads! Use these handy thread chasers whenever possible!

Note: These are strictly cleaning taps and are NOT designed to cut thread.

SIZE	PART NUMBER	SIZE	PART NUMBER	SIZE	PART NUMBER	COMINATION SETS	PART NUMBER
1/4	911-0001	M8 x 1.25	912-001	M11 x 1.50 x 152mm	912-0013	USS Combo Pack (5-pc) - 1/4, 5/16, 3/8, 7/16, 1/2	911-0006
5/16	911-0002	M10 x 1.25	912-002	M11 x 2.00	912-0011	Metric 1.25 Pitch Combo Pack (4-pc) M8,M10,M11,M12	912-0009
3/8	911-0003	M10 x 1.50	912-003	M12 x 1.25	912-0006	Metric Combo Pack (4-pc, std, length) M10,M11,M12 (1.50 & 1.75)	912-0010
7/16	911-0004	M10 x 2.00	912-014	M12 x 1.50	912-0007	M12 x 1.50	912-0007
1/2	911-0005	M11x 1.25	912-004	M12 x 1.75	912-0008	M12 x 1.75	912-0008
M6 X 1,00	912-0012	M11x 1.50	912-005	M6 X 1,00	912-0012	M11x 1.50	912-005

WRIST PIN PRIVATION INDEX

S = Cylindrical Shape / T = Conical Shape / R = Radius

WRIST PINS - 9310-SERIES

Made of nickel-chrome-molybdenum, providing very good strength and toughness properties. It also shows high hardenability, high core hardness and high fatigue resistant.

PART NUMBER	DIAMETER	LENGTH	WALL THICKNESS	TYPE	GRAM WEIGHT	MATERIAL
WP064	18.00	56.00	4.00	C	76.00	9310
WP079	18.00	62.80	4.00	C	74.00	9310
WP099	18.00	51.00	4.00	T	68.00	9310
WP037	19.00	51.00	4.50	T	75.00	9310
WP019	19.00	61.00	3.00	C	73.00	9310
WP035	19.46	61.00	3.75	T	80.00	9310
WP061	20.00	61.00	4.50	C	105.0	9310
WP034	21.00	55.50	4.00	T/R	86.00	9310
WP051	21.00	51.00	3.75	T	75.00	9310
WP092	21.00	61.00	4.50	C	111.00	9310
WP116	22.00	58.00	4.00	C	101.70	9310
WP122	22.00	63.00	4.00	C	109.8	9310
WP046	22.00	63.00	4.00	T	98.00	9310
WP098	22.00	51.00	4.50	C	99.00	9310
WP009	22.00	51.00	4.00	T	76.00	9310
WP082	23.00	55.50	5.00	C	123.0	9310
WP022	24.00	63.50	4.00	T	121.0	9310

WRIST PINS H-13 TOOL STEEL (TREN PERFORMANCE USA)

H13 is a tool steel used for premium piston pins.

It is probably the best all-round material for most applications, especially in power-adder engines. It is also a popular choice in Pro Stock drag racing engines. The H13 piston pin, which has a Rockwell hardness value around Rc54 is the choice of many Drag race, Hill Climb, Drift and teams.

PART NUMBER	DIAMETER	LENGTH	WALL THICKNESS	TYPE	GRAM WEIGHT	MATERIAL
H6301650100C	16.00	41.91	2.54	C/R	53.00	H-13
H6692000125C	17.00	50.80	3.18	C/R	53.00	H-13
H7082000125C	18.00	50.80	3.18	C/R	57.00	H-13
H7482000125C	19.00	50.80	3.18	C/R	72.00	H-13
H7482200155	19.00	50.80	3.94	C	54.00	H-13
H7872000205C	20.00	50.80	5.21	C/R	104.00	H-13
H7872250185C	20.00	57.15	4.70	C/R	83.00	H-13
H7872250200C	20.00	57.15	5.08	C/R	104.20	H-13
H8272000135C	21.00	50.80	3.43	C/R	78.00	H-13
H8272250165	21.00	57.15	4.19	C	95.00	H-13
H8272300155C	21.00	58.42	3.94	C/R	98.00	H-13
H8272500185C	21.00	63.50	4.70	C/R	116.00	H-13
H8272250200C	21.00	57.15	5.08	C/R	114.00	H-13
H8662250225C	22.00	57.15	5.72	C/R	121.00	H-13
H8662500200C	22.00	63.50	5.08	C/R	132.00	H-13
H8662500220	22.00	63.50	5.59	C	141.00	H-13
H8672000200	22.02	50.80	5.08	C	112.00	H-13
H8672250185C	22.02	57.15	4.70	C/R	120.00	H-13
H8672750155C	22.02	69.85	3.94	C/R	134.00	H-13
H8672750200	22.02	69.85	5.08	C	86.00	H-13
H9052250250C	23.00	57.15	6.35	C/R	142.00	H-13
H9052500250C	23.00	63.50	6.35	C/R	133.00	H-13
H9452500190C	24.00	63.50	4.83	C/R	136.00	H-13
H9452750225	24.00	69.85	5.72	C	142.00	H-13
H10232500200C	26.00	63.50	5.08	C	call	H-13

PISTON RING INDEX

TOP RING	DESCRIPTION	SECOND RING	DESCRIPTION	OIL RING	DESCRIPTION
AP	Stainless steel w/ C-23 PVD Face coating	NAP	Napier face	STD	Std Tension
GN	Gas nitrided - barrel face	RBT	Taper face - Reverse back twist		

PISTON RING SET - NPR EUROPE

TOP RING - GN		GAS NITRIDED - BARREL FACE		SECOND RING - NAP		NAPIER FACE		OIL RING - STD		STD TENSION
DIAMETER (MM)	PART NUMBER	TOP RING AXIAL	RING TYPE	TOP RING RADIAL	2ND RING AXIAL	RING TYPE	2ND RING RADIAL	OIL RING AXIAL	RING TYPE	OIL RING RADIAL
65.00	21-GNH06500	1.00mm	GN	2.50mm ± 0.10mm	1.20mm	NAP	2.70mm ± 0.10mm	2.80mm	STD	2.80mm ± 0.15mm
72.00	720XTZ-3	1.50mm	GN	2.70mm ± 0.10mm	1.20mm	NAP	3.00mm ± 0.10mm	2.00mm	STD	2.80mm ± 0.15mm
72.50	725XTZ-3	1.50mm	GN	2.70mm ± 0.10mm	1.20mm	NAP	3.00mm ± 0.10mm	2.00mm	STD	2.80mm ± 0.15mm
73.00	21-GNH07300	1.00mm	GN	2.70mm ± 0.10mm	1.20mm	NAP	3.00mm ± 0.10mm	2.80mm	STD	2.80mm ± 0.15mm
75.00	21-GNH07500	1.00mm	GN	2.70mm ± 0.10mm	1.20mm	NAP	3.20mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
75.50	21-GNH07550	1.00mm	GN	2.70mm ± 0.10mm	1.20mm	NAP	3.20mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
76.00	21-GNH07600	1.00mm	GN	2.70mm ± 0.10mm	1.20mm	NAP	3.20mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
78.50	21-GNH07850	1.00mm	GN	2.90mm ± 0.10mm	1.20mm	NAP	3.20mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
79.00	21-GNH07900	1.00mm	GN	2.90mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
79.50	21-GNH07950	1.00mm	GN	2.90mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
80.00	21-GNH08000	1.00mm	GN	2.90mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
80.50	21-GNH08050	1.00mm	GN	2.90mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
81.00	21-GNH08100	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
81.50	21-GNH08150	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
82.00	21-GNH08200	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
82.50	21-GNH08250	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
83.00	21-GNH08300	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
83.50	21-GNH08350	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
84.00	21-GNH08400	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
84.50	21-GNH08450	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
85.00	21-GNH08500	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
85.50	21-GNH08550	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
86.00	21-GNH08600	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
86.50	21-GNH08650	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.60mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm

PISTON RING SET - NPR EUROPE

TOP RING - GN		GAS NITRIDED - BARREL FACE		SECOND RING - NAP		NAPIER FACE		OIL RING - STD		STD TENSION
DIAMETER (MM)	PART NUMBER	TOP RING AXIAL	RING TYPE	TOP RING RADIAL	2ND RING AXIAL	RING TYPE	2ND RING RADIAL	OIL RING AXIAL	RING TYPE	OIL RING RADIAL
87.00	21-GNH08700	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.60mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
87.50	21-GNH08750	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.60mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
87.70	21-GNH08770	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.60mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
88.00	21-GNH08800	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.60mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
88.50	21-GNH08850	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.60mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
89.00	21-GNH08900	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.60mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
89.50	21-GNH08950	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
90.00	21-GNH09000	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
90.50	21-GNH09050	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
90.75	21-GNH09070	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
91.00	21-GNH09100	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
91.50	21-GNH09150	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
92.00	21-GNH09200	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
92.50	21-GNH09250	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.80mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
93.00	21-GNH09300	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
93.50	21-GNH09350	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
94.00	21-GNH09400	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
94.50	21-GNH09450	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
95.00	21-GNH09500	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
95.50	21-GNH09550	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
96.00	21-GNH09600	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
96.50	21-GNH09650	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
99.50	21-GNH09950	1.00mm	GN	3.70mm ± 0.10mm	1.20mm	NAP	4.10mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
100.00	21-GNH01000	1.00mm	GN	3.70mm ± 0.10mm	1.20mm	NAP	4.10mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm

ZRP APPAREL | T-SHIRTS

	Part Number	Size	Colour	Notes
Team	121-01	Medium	Black	100% Cotton, Ring Spun
Team	121-02	Large	Black	100% Cotton, Ring Spun
Team	121-03	X-Large	Black	100% Cotton, Ring Spun
Team	121-04	2X-Large	Black	100% Cotton, Ring Spun
Raceday	221-01	Medium	Black / White	100% Combed Cotton
Raceday	221-02	Large	Black / White	100% Combed Cotton
Raceday	221-03	X-Large	Black / White	100% Combed Cotton
Raceday	221-04	2X-Large	Black / White	100% Combed Cotton

ZRP APPAREL | SWEATSHIRT

	Part Number	Size	Colour	Notes
Winner	321-01	Medium	Grey / Black	95% Cotton - 5% Polyester
Winner	321-02	Large	Grey / Black	95% Cotton - 5% Polyester
Winner	321-03	X-Large	Grey / Black	95% Cotton - 5% Polyester
Winner	321-04	2X-Large	Grey / Black	95% Cotton - 5% Polyester



Winner - Sweatshirt



Raceday - T-Shirts



Team - T-Shirts

ZRP SUPERSPORT PISTON SERIES-4032 (T6) INSTALLATION INSTRUCTIONS

IMPORTANT:

Inspect all your pistons, pins, rings before installation or modification. Parts that are altered, scratched, or damaged are non-returnable.

PISTON TO BORE CLEARANCE:

ZRP pistons already have the recommended clearance built in. Skirt diameter is smaller than the recommended bore size (see sizing on box).

Some applications: Nitrous, supercharged, turbo, cold water marine engines or filed cast iron block may need more than the recommended clearance (0.025 to 0.050). ZRP pistons are measured 90 degrees from the pin axis at the widest point on the piston skirt.

Clearances are set before coating and coatings are 0.012mm (0.00047") thick, should be deducted when measuring for piston to bore clearance.

Adding additional clearance then recommended may create extra engine noise (piston slap) upon start up and cold running. This can cause

damage to the pistons and/or cylinder. Some piston noise is normal on engine start up and during cold running this will reduce when engine is at operating temperature. It is advisable to avoid high loads or high RPM during engine warm up.

PISTON RING END GAP TABLE

APPLICATION	TOP RING	SECOND RING	OIL RING
Street / Hi Performance N/A	.0045" x Bore	.010" - .015" Bigger than top ring	Min. .015" Do not file expander
Drag Racing / Road Racing	.006" x Bore	.010" - .015" Bigger than top ring	Min. .015" Do not file expander
Nitrous / Turbo Supercharged	.0065" x Bore	.010" - .015" Bigger than top ring	Min. .015" Do not file expander
Street / Hi Performance Turbo	.0055" x Bore	.010" - .015" Bigger than top ring	Min. .015" Do not file expander

Ring end gap should be measured with the ring square in the bore on a fresh hone. Cylinder should be free of any taper.

DETERMINING RING GAP:

All bore sizes must be converted to inches and the result of this equation to millimeters (mm) – Example: To find top ring end gap for a street N/A application with 86.00mm bore: $86.0 \div 25.4 = 3.385$ (3.385×0.0045) = 0.015" (0.015" x 25.4)=0.38mm is the minimum clearance. All rings are manufactured for a specific bore and clearance. You must always measure the ring gaps at your specific bore to check if correct and if they are all the same. If the ring gaps are tighter than the minimum, you will have to "adapt" the rings by filing them. To carry on with this procedure you need a special "ring filing tool". You must make sure, after the procedures, that the sides of each rings are kept squared. Also, have in mind that for every 0.025mm over the intended bore size, ring gap will increase by 0.079mm.

WRIST PIN OFFSET:

Many ZRP piston have an offset wrist pin. These pistons need to be installed with the offset to the thrust side of the engine. On pistons with centered wrist pins, the smaller valve pocket(s) to the exhaust side of the engine except some five valve engines.

PISTON TO VALVE CLEARANCE:

With the many cam profiles, gasket thicknesses, and deck clearances available it is important to make sure there is adequate clearance between the piston and the valve. ZRP recommends a minimum of 1.5mm (.060") Intake and 2.0mm (.080") Exhaust. Using Clay is the most common method.

PISTON TO HEAD CLEARANCE (Squish):

ZRP recommends a minimum of 0.7-1.0mm (.027"-.040") for naturally aspirated engines and 1.0-1.5mm (.040"-.060") for Turbo, Supercharged, or Nitrous applications.

WRIST PIN CLIPS:

Most of ZRP pistons use a Round Wire type pin locks. Before installation check the lock groove for debris or burrs that will keep the lock from seating fully in the groove. Insert one end of the lock in the groove and spiral lock into groove. DO NOT COMPRESS LOCK TOGETHER TO GET INTO THE GROOVE, this will distort the lock and can cause lock failure. It is good practice to check over piston crown and valve pockets for and sharp edges. Sharp edges should be removed to avoid potential "Hot Spots" on the piston.

Cleaning:

Pistons should be cleaned with warm soapy water and dried before installation. We recommend a thin coating of oil on the piston skirt and cylinder wall. Avoid using Synthetic oil during engine break-in as this may keep the rings from properly seating. Lubricate wrist pins with oil or assembly lube before installation.

4340 ZRP CONNECTING ROD INSTALLATION INSTRUCTIONS

INSTALLATION STEPS

1. The first thing you need to do when you get the bolts is to measure them, so you are sure you have the correct size. Please note that many bolts may look alike but have differences. After you have measured the bolts, you must clean the threads of the rods and bolts very well.
2. Next, always apply ARP moly lube on the threads and under the head of the bolts before torquing.
3. Install rods by positioning cap and beam into alignment. Each rod is numbered and MUST be assembled with the same number on the cap and beam.
4. Sequentially torque bolts to specified torque, NOT exceeding the specified values on the table below:

ROD TORQUE / STRETCH SPECS

Material	Thread Size (in.)	UHL * (in.)	Recommended Bolt Stretch (in.)	Recommended Torque w/ ARP Lube (ft/lb)
ARP 2000	5/16	1.500	.0055" - .0060"	30
ARP 2000	3/8	1.500	.0050" - .0055"	50
ARP 2000	3/8	1.600	.0062" - .0065"	50
ARP 8740	7/16	1.600	.0050" - .0055"	75
ARP L19 *	3/8	1.500	.0060" - .0065"	55

* L19 material: Is easily contaminated and subject to stress corrosion. It must be kept well-oiled and not exposed to moisture

* UHL: Means "Under Head Length». The distance as measured from tip of the fastener to place directly at the base of the head.

ARP LUBE:

We recommend to only using the supplied **ARP Ultra** torque fastener assembly lube. ARP lube reduces friction about 25-30% in comparison to engine oil.

The above-mentioned values are valid only if the thread and seat area of the bolt has been lubed properly!!!

Note: If any of the bolts have taken a permanent set and have stretched by .001" (0.02mm) or longer you should replace the bolts **IMMEDIATELY!**

CRITICAL CLEARANCE GUIDE

- Connecting rod bearing to crankshaft clearance should be .002" (0.05mm) minimum and .003" (0.07mm) maximum. The measurement should be vertical.
- **The recommended wrist pin clearance is .0008" (0.02mm) minimum and .0015" (0.04mm) maximum. In some case, depending on the wrist pin diam. the rods may require resizing at the time of installation.**
- Side clearance should be .015" (0.38mm) minimum and .025" (0.63mm) maximum.
- The Clearance between engine block and the connecting rods and crankshaft should be .061"(1.54) minimum.

Important Note:

If for some reason you want to balance the connecting rods it is not recommended to remove material from connecting rod cap.

TERMS & CONDITIONS

Orders:

By telephone (+30) 210 8251640 Monday – Friday 9:00 A.M. to 5:00PM. Eastern European Time / E-mail info@zrp-rods.com

Prices:

There are available discounts for quantity purchases and approved accounts. Drakos Ltd (ZRP Worldwide Distribution) reserve the right to decide the qualifications, requirements and final approval for discounts. Prices are subjected to changes without notice

Payment:

Cash, Bank transfer, major credit cards and Pay-Pal (PayPal 3.5% admin fee applies). If the seller requires the service of an attorney, whether legal action be brought or not, in the event of any default, the buyer agrees to pay all costs of collection including, but not limited to, court costs and attorney fees.

Shipping:

We use major carriers for shipping (UPS, TNT, Hellenic post.) with freight and other delivery charges (COD, insurance, etc.) collect.

Special:

All special/custom orders must be paid in full, in advance when ordered. The sales of special/ custom orders are final, and no items may be returned.

Returns:

Must be authorized and include a copy of the Invoice. No returns accepted after 30 days from the Invoice date. All merchandise returned is subject to a 12% restocking charge.

Custom Made:

ZRP Products not in stock can be custom made. Check with us for pricing and lead time. Any custom-machined parts made under customer specifications are non-returnable items and the sale is final on these products.

Limited Warranty:

- Due to the nature of performance applications, ZRP products are sold without any express warranty or implied warranty.
- ZRP products are warranted to be free of defects in original material and workmanship for 30 days from date of original invoicing. This warranty is not valid on products that have been modified in any way, or show evidence of misapplication, heat, improper installation, abuse, or lack of proper maintenance.
- Drakos Ltd., as a Worldwide Distributor of ZRP Products, shall not under any circumstances, be liable for any special, accidental, or consequential damages including, but not limited to, damages, lost profits or revenue, property damage or personal injury (including death), cost of purchased or replacement goods or claim by customers of the purchaser; which may arise and/or result from sales, installation or use of the parts.
- ZRP parts, tuning parts, and other accessories are generally delivered without TÜV testing and are only for use in specialized racing vehicles.
- Licensing for use on normal road vehicles is not part of any agreement.
- If a product is found defective, this product at Drakos Ltd. option, as a distributor of ZRP products, will be replaced or repaired at cost to products only, excluding labor and other related incurred costs. All defected products must be returned to Drakos Ltd., by post prepaid within the 30-days warranty period.
- In line with our policy of continuous product development, the exact specifications of the kit may vary. We do reserve all rights to change any specification without prior notice. All rights reserved.
- In the case that any claim occurs, it will be the responsibility is the Hellenic courts which operate under Greek law.

Return Policy:

All returns must be sent prepaid, in original packaging in an additional box, not installed, and accompanied with the original invoice number and dates of each item returned for credit. We suggest you use a traceable Mail service and insure your parts against loss.

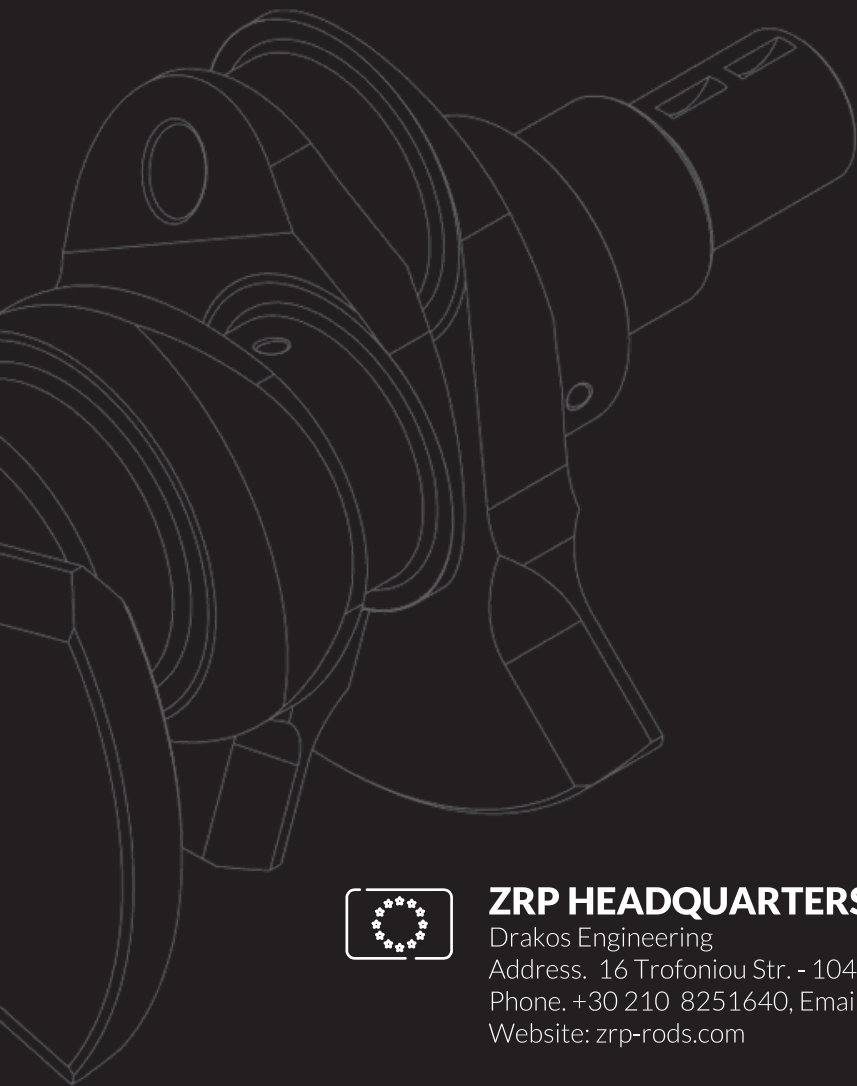
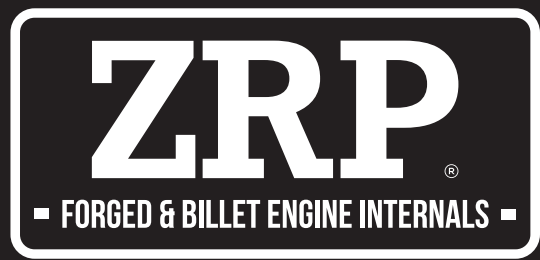
- If an error was made by Drakos Ltd –Distributor of the producer of ZRP products, upon reception of the item, Drakos Ltd – Worldwide Distributor of ZRP products will reimburse the customer for shipping costs.
- If an error was made by the customer, a 12% restocking fee will be imposed upon the cost of the item in question.
- No cash refunds. Credits issued can be applied to new or existing orders.
- Custom products are not returnable.

Do Not return any packages without contacting us first.

WARNING:

All the parts are sold for racing purposes and may be installed on vehicles (cars, motorcycles, boats, etc.) used solely in sanctioned off-highway events. The installation of these parts may cause the vehicles to be unable to be lawfully used on public highways, and the purchaser assumes all risk and expenses thereof. In our catalogs we use brand names for the sole purpose of identification for vehicles, engines, cylinder heads, etc. No other intention is implied in the use of these brand names. Every possible effort has been made to insure the accuracy of the information listed in this catalog. However, we are not responsible for any damage caused by misapplication or typographical errors.





ZRP HEADQUARTERS

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Website: zrp-usa.com

A brand of:

