ZRP®

FORGED & BILLET ENGINE INTERNALS

PRODUCT CATALOG 2019

CONNECTING RODS / CRANKSHAFTS / PISTONS / STROKER KITS

START
DRIFT ALLSTARS
Haltech
NCP
7RP
TWENTY
ACT
Forge
MOTORSPORT
AEROKIT
DEANE M SPORT
AEROKIT
WISEFAB
FALKEN
WISEFAB
OMEN DEVELOPMENTS

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 ISO9001and the International Certification Network IQNET.

INDEX

PRO SERIES ROD TERMINOLOGY	5
PISTON COATINGS	5
"LONG-ROD" CONVERSION SETS	6
SUPERSPO RT SERIES PISTON TERMINOLOGY	7
DIAMOND SERIES PISTON TERMINOLOGY	7
CUSTOM MADE PISTONS BY DIAMOND RACING	8
CHAMBER MOLDING KIT	8

4340 FORGED CONNECTING RODS

ALFA ROMEO	11
AUDI/VW	11
BMW	12-13
CITROEN/PEUGEOT	13
CHEVROLET	14
DAIHATSU	14
FIAT / LANCIA	14
FORD	15
HONDA	16
HYUNDAI	17
MAZDA	17
MINI COOPER	17
MITSUBISHI	17
NISSAN	18
OPEL / VAUXHALL	18
RENAULT	18
ROVER	19
SUBARU	19
SMART	19
SUZUKI	19
TOYOTA	20
VOLVO	20
YAMAHA	21
KAWASAKI	21
SEA DOO	21

BILLET CRANKSHAFTS

AUDI / VW	23
BMW	23
CHEVROLET	23
CITROEN / PEUGEOT	24
FIAT	24
FORD	24
HONDA	24
LANCIA	25
MINI COOPER	25
MITSUBISHI	25
NISSAN	26
OPEL / VAUXHALL	26
RENAULT	26
SEA DOO	27
SUBARU	27
TOYOTA	27
VOLVO	27

STROKER KITS

AUDI / VW	29
CITROEN / PEUGEOT	30
FORD	31
HONDA	31-32
MITSUBISHI	33-35
NISSAN	36
OPEL / VAUXHALL	37
SUBARU	38-39
TOYOTA	40

FORGED PISTONS

AUDI / VW	43-44
BMW	45-46
CITROEN	46
FIAT / LANCIA	47
FORD	47-48
HONDA	49
MINI COOPER	49
MITSUBISHI	50-51
NISSAN	52
OPEL / VAUXHALL	53-54
PEUGEOT	54
SUBARU	55-56
TOYOTA	56-57

WRIST PINS, PISTONS RINGS, ARP PRODUCTS

G-SERIES 8620 (TREND PERFORMANCE)	59
9310-SERIES	59
H-13 TOOL STEEL SERIES (TREND PERFORMANCE)	60
PISTON RING SETS INDEX	61-62
ARP REPLACEMENT ROD BOLTS	63
ARP FASTENER ASSEMBLY LUBRICANT	63
ARP THREAD CLEANING CHASERS	63

INSTALLATION INSTRUCTIONS

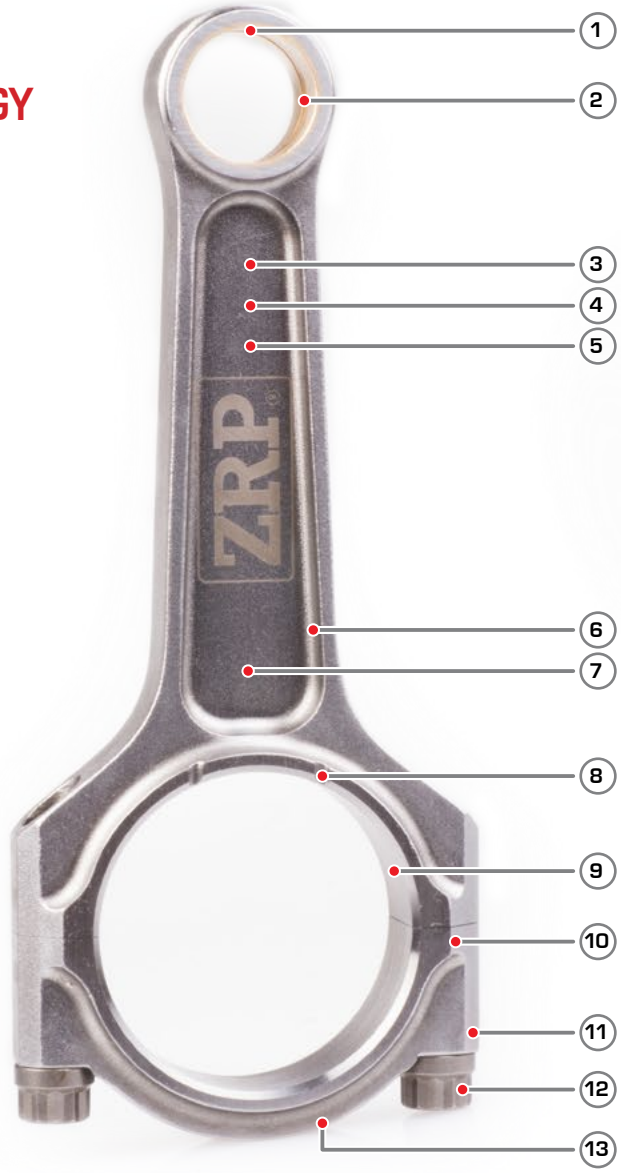
ZRP SUPERSPORT PISTON SERIES-4032 (T6)	64
4340 ZRP CONNECTING ROD	65

TERMS & CONDITIONS

TERMS&CONDITIONS, LIMITED WARRANTY, RETURN POLICY	66

PRO SERIES ROD TERMINOLOGY

1. AMPCO 18 Bushings for excellent resistance to wear and fatigue
2. Radial groove for oil reservoir
3. Shot peening for improved fatigue life
4. I-Beam shape for extra rigidity
5. Shot peened to relieve stress from the material and Multi-stage heat treated to increase rigidity
6. 817M40T – EN24T Alloy for maximum durability
7. Optimal balancing for weight matched sets ± 1 gram.
8. Dual grooves for weight reduction and reduced friction
9. Finished, Machined and honed with Sunnen machines
10. Lipped cap: Big end rigidity improvement using bigger contact area between cap and con-rod body, maintaining the least possible weight
11. Two-Piece forging for great strength
12. ARP cap fasteners and L19 material in all applications as standard
13. Double ribbed caps for added strength and better alignment providing bearing caps precision



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

3. Hard Anodized Coating

- Provides a thermal barrier and increases both corrosion – resistance and wear-resistance
- Deters piston rings from Micro-welding themselves to the ring grooves
- Resists high cylinder temperature and pressures
- Prevents head soaking through entire pistons
- Recommended for large boost and Nitrous applications

4. Double diamond coating

- This coating is a combination of Hard Anodized and Moly skirt coating
- Give you the best protection from cylinder pressures , high cylinder temperatures and pre-mature skirt wer
- Reduce friction
- Recommended for large boost and Nitrous applications

ZRP "LONG-ROD" CONVERSION SETS

We are introducing "long rod" sets for some popular applications.
There are undisputable advantages from using this setup especially for endurance-built engines but drag racing engines can benefit as well.

Some of them are:

- Allows for higher compression ratios (or boost pressure)
- Reduces the tensile loading of the rod (nr.1 cause of rod failure)
- Reduces the pulsing of the intake charge and provides a smoother flow
- Reduces peak piston speed
- Increases the peak airflow
- Allows for shorter piston skirts
- Reduces piston rock and aid ring seal
- Reduces piston side loading for less friction and less bore wear

We also offer ZRP Supersport (4032) or Diamond Series (2618) matching pistons to accompany the longer rods.

SUPERSPORT SERIES PISTON TERMINOLOGY

1. Clip cuts on the edge of the pistons on the Intake side
2. 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 (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 ring seal and relieve the first ring from vibration. This as an effect has longer wear life.
4. Precision CNC machined ring grooves
5. 4032-T6 high-silicon / low-expansion alloy
6. Horizontal slots in the pin bore designed to allow oil to enter between the wrist-pin and pin-bore area.
7. Honed pin bores
8. Full Round skirt design with bottom reinforcing band for High HP and Boost applications (Turbo application)
9. Pistons designed to optimize squish for longer engine life and increased horsepower potential
10. Valve Pockets designed to allow over size valves and high lift camshafts

DIAMOND SERIES PISTON TERMINOLOGY

1. Clip cuts on the edge of the pistons
2. Over size valve pockets for oversize valves.
3. 3D milling on piston crowns for ready to install finish
4. Side gas ports for better ring seal
5. Offset pins for quiet operation
6. Full Round skirt design with bottom reinforcing band for High HP and Boost applications
7. 2618 Low-silicon / High expansion alloy for High HP and Boost applications
8. Molly Skirt coating for friction loss and skirt wear protection
9. 3D under crown milling to achieve uniform crown thickness, eliminate stress risers in the weakest areas and to lighten the piston
10. Window milling reduce piston overall weight while maintaining its strength and structural integrity

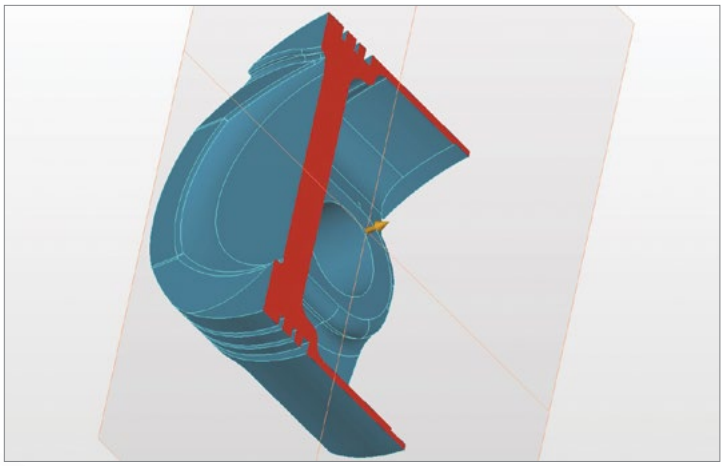
CUSTOM MADE PISTONS BY DIAMOND RACING ®

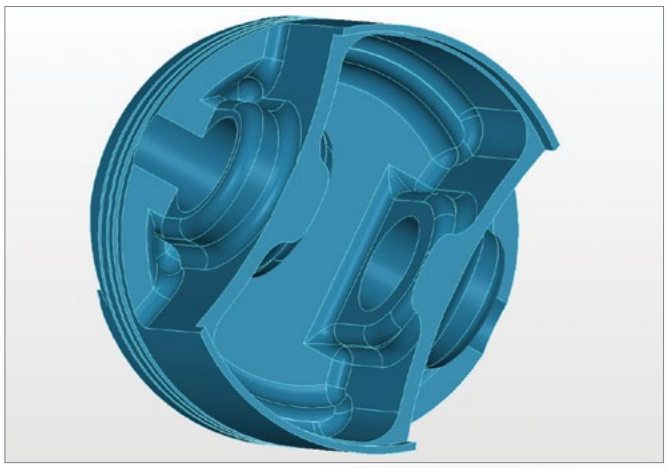
If you need custom-built pistons, Diamond will manufacture them with the best lead time in the industry and always at a reasonable cost. All custom-made pistons are made from 2618 material and are 3D milled on piston crowns for ready to install finish. Custom pistons come with G-SERIES 8620 (Trend Performance) pins, locks and rings.

Custom Features available:

- Lateral gas ports for better ring seal
- Offset pins for quiet operation
- Specialized ring sets for high horsepower forced induction applications
- Over size valve pockets
- Deeper valve pockets to accept high lift camshafts
- Billet pistons available for extreme and oversize projects
- Piston full-round skirt or slipper-style skirt options
- Tool Steel H-13 alloy pins (Rockwell hardness around Rc54)
- Window milling
- Thermal barrier coating "Blast Off Bronze" / Moly Side-Skirt and Under-Crown coating "Stealth Black" / Hard anodized coating / Double diamond coating and PTFE coating, Hard anodized and Teflon seal coating

Custom orders on average take about 3-4 weeks to make. To order custom pistons, please download the form from our website www.zrp-rods.com. With the help of our engineering staff, you can get the right pistons for your engine!





CHAMBER MOLDING KIT

by Diamond Racing ® | Part Number: 03-2000

1-Kit. Consists of 2-part epoxy, spark hole plug. This product is made of high-quality materials to serve you for years to come.
Designed using state-of-the-art technology and with customers in mind.

Features:

- High quality at an affordable price
- Expertly made from premium materials
- Built to match your exact requirements

Accurately reproduce your combustion chamber of your existing cylinder head with our special Molding kit. Greatly aids in manufacturing custom pistons without the need for your actual cylinder head. Fast and easy setup, only takes minutes, comes complete with everything you need including our two-part epoxy, mixing sticks, rubber gloves, and a spark plug hole plug and complete instructions.

4340 FORGED CONNECTING RODS

ZRP connecting rods are forged from 4340 high tensile steel. All rods are now fitted with industry leading AMPCO bushings. They are designed for high performance and extreme durability, offered in H-beam and I-beam shape.
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 625+ at an additional cost.

STANDARD SERIES

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 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.

HEAVY DUTY SERIES

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 new Heavy-Duty series conrods from ZRP, are beefed up in their crossmembers wall thickness and all other critical areas, in order to withstand extreme horsepower figures of more than 220ps per cylinder!

PRO SERIES 817M40T - EN24T ALLOY

In our continual quest for improvement, we proudly introduce an all new series of ZRP conrods, aimed for the Extreme applications.
Built from the finest raw materials with a specially optimized shape which 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 a high tensile alloy steel, renowned for its wear resistance properties. It is 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 Conrods manufacturing, where high strength properties are required.

All the latest Heavy-Duty series conrods from ZRP, easily fulfill the highest standards of motorsport.

ALL ZRP CONNECTING RODS HAVE THE FOLLOWING TECHNICAL FEATURES	
• Two-Piece forging for great strength	• CNC machining for superior tolerances as tight as 0.0002"
• Bend and twist is tightly controlled.	• Center to center is a 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 ± 1gram.

ALFA ROMEO

2.5L ALFA 75 & GTV6 V6 / 3.0L 164 24v

• 4340 High Tensile Steel • Aluminum – Silicon-Bronze bushings with radial groove • ARP2000 cap fasteners - Upgrade option to L19 alloy

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
R-ALF-004H	H-Beam	131.00mm	22.00mm	55.50mm	24.80mm	478	6	3/8"	Standard	

AUDI / VW

• 4340 High Tensile Steel • AMPCO 18 bushings for excellent resistance to wear and fatigue • H-Beam rods have Ribbed pin end
• Heavy Duty Series designed for High HP-Boost applications • I-Beam shaped for extra rigidity • Bushings with radial groove for oil reservoir

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.4L TSI / TFSI EA211										
R-VW-004-HR	H-Beam	144.00mm	19.00mm	50.60mm	23.00mm	457	4	5/16"	Standard	Rifle Drilled Rods
1.6L 16v										
R-VW-003-I	I-Beam	144.00mm	17.00mm	50.60mm	20.00mm	422	4	5/16"	Standard	Light-weight design
1.8L TSI / TFSI (EA888)										
R-AUD-008I	I-Beam	148.00mm	21.00mm	50.60mm	21.90mm	522	4	3/8"	Standard	Tapered Pin End / Also fits OEM pistons
1.8T 20v										
R-AUD-001-H	H-Beam	144.00mm	20.00mm	50.60mm	24.89mm	447	4	3/8"	Standard	Non-Tapered Pin End / Fits aftermarket pistons
R-AUD-001-I	I-Beam	144.00mm	20.00mm	50.60mm	24.89mm	590	4	3/8"	Heavy Duty	Non-Tapered Pin End / Fits aftermarket pistons
R-AUD-001-IR	I-Beam	144.00mm	20.00mm	50.60mm	24.89mm	546	4	3/8"	Heavy Duty	Rifle Drilled Rods / Fits aftermarket pistons
R-AUD-003-I	I-Beam	144.00mm	20.00mm	50.60mm	24.89mm	533	4	3/8"	Standard	Tapered Pin End / Also fits OEM pistons
R-AUD-002-I	I-Beam	144.00mm	19.00mm	50.60mm	25.00mm	537	4	3/8"	Standard	Tapered Pin End / Also fits OEM pistons
R-AUD-005HL	H-Beam	147.20mm	20.00mm	50.60mm	24.89mm	474	4	3/8"	Standard	Longer rods +3.20mm
1.9L & 2.0L DTI DIESEL										
R-VW-009-I	I-Beam	144.00mm	26.00mm	53.70mm	24.90mm	523	4	5/16"	Standard	Tapered Pin End / Also fits OEM pistons
2.0L T FSI / TSI										
R-AUD-006HL	H-Beam	144.00mm	21.00mm	50.60mm	24.90mm	475	4	3/8"	Standard	(EA113) Non-Tapered Pin End / Fits aftermarket pistons
R-AUD-006-I	I-Beam	144.00mm	21.00mm	50.60mm	24.90mm	590	4	3/8"	Heavy Duty	(EA113) Non-Tapered Pin End / Fits aftermarket pistons
R-AUD-006-IR	I-Beam	144.00mm	21.00mm	50.60mm	24.90mm	585	4	3/8"	Heavy Duty	(EA113) Rifle Drilled Rods / Fits aftermarket pistons
R-AUD-007-I	I-Beam	144.00mm	21.00mm	50.60mm	21.90mm	488	4	3/8"	Heavy Duty	(EA888) Non-Tapered Pin End / Fits aftermarket pistons
R-VW-008-IR	I-Beam	144.00mm	23.00mm	50.60mm	21.85mm	508	4	3/8"	Standard	(EA888) Rifle Drilled Rods and Tapered Pin End
2.0L 16v ABF										
R-VW-001-I	I-Beam	159.00mm	21.00mm	50.60mm	24.89mm	638	4	3/8"	Standard	Recommended for Turbo use
R-VW-001-IL	I-Beam	159.00mm	21.00mm	50.60mm	24.89mm	566	4	3/8"	Standard	Lighweight design - N/A use
2.2L RS2 (S2) 5-Cyl.										
R-AUD-004-I	I-Beam	144.00mm	20.00mm	50.60mm	24.89mm	570	5	3/8"	Heavy Duty	Non-Tapered Pin End / Fits aftermarket pistons
2.5L TFSI TT-RS										
R-AUD-009-I	I-Beam	144.00mm	21.00mm	50.60mm	21.90mm	488	5	3/8"	Heavy Duty	Non-Tapered Pin End / Fits aftermarket pistons
2.8L & 2.9L VR6 / 3.2L R32										
R-VW-002I	I-Beam	164.00mm	20.00mm	56.81mm	19.90mm	574	6	3/8"	Standard	For bore more than 84.00mm
R-VW-002-I	I-Beam	164.00mm	20.00mm	56.81mm	19.90mm	618	6	3/8"	Heavy Duty	For bore more than 84.00mm

BMW

• 4340 High Tensile Steel • I-Beam rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • I-Beam shaped for extra rigidity
• The BMW connecting rods come with 3/8" ARP2000 cap fasteners - Upgrade option to L19 alloy • Bushings with radial groove for oil reservoir

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.6L 316 M40B16 / M43B16										
R-BMW-002-I-4	I-Beam	140.00mm	22.00mm	48.00mm	21.90mm	498	4	3/8"	Standard	Rifle Drilled Rods
1.8L 318is M42B18 / 1.9L 318is M44B19										
R-BMW-007H	H-Beam	139.95mm	22.00mm	48.00mm	21.97mm	485	4	3/8"	Standard	
R-BMW-007-I	I-Beam	139.95mm	22.00mm	48.00mm	21.97mm	520	4	3/8"	Standard	
2.0L M10 2002										
R-BMW-008-I	I-Beam	135.00mm	22.00mm	52.00mm	23.90mm	551	4	3/8"	Standard	
2.0L M3 S14 EURO										
R-BMW-011H	H-Beam	150.00mm	22.00mm	52.00mm	23.90mm	601	4	3/8"	Standard	
2.3L M3 S14										
R-BMW-001H	H-Beam	144.00mm	22.00mm	52.00mm	23.90mm	596	4	3/8"	Standard	
R-BMW-001-I	I-Beam	144.00mm	22.00mm	52.00mm	23.90mm	615	4	3/8"	Standard	
2.5L M20										
R-BMW-006-I	I-Beam	135.00mm	22.00mm	48.00mm	21.90mm	552	6	3/8"	Standard	
2.5L M3 S14										
R-BMW-001H	H-Beam	144.00mm	22.00mm	52.00mm	23.90mm	596	4	3/8"	Standard	
R-BMW-001-I	I-Beam	144.00mm	22.00mm	52.00mm	23.90mm	615	4	3/8"	Standard	
2.5L M50 & M52 (325) Single Vanos										
R-BMW-002-I	I-Beam	140.00mm	22.00mm	48.00mm	21.90mm	498	6	3/8"	Standard	
2.5L M50 / M52										
R-BMW-006-I	I-Beam	135.00mm	22.00mm	48.00mm	21.90mm	552	6	3/8"	Standard	
2.5L M54 (325)										
R-BMW-003H	H-Beam	145.00mm	22.00mm	48.00mm	21.90mm	544	6	3/8"	Standard	
2.8L M30										
R-BMW-013-I	I-Beam	135.00mm	22.00mm	52.00mm	23.90mm	542	6	3/8"	Standard	
2.8L M50 / M52										
R-BMW-006-I	I-Beam	135.00mm	22.00mm	48.00mm	21.90mm	552	6	3/8"	Standard	
3.0L M30										
R-BMW-013-I	I-Beam	135.00mm	22.00mm	52.00mm	23.90mm	542	6	3/8"	Standard	Rifle Drilled Rods
3.0L M54										
R-BMW-006-I	I-Beam	135.00mm	22.00mm	48.00mm	21.90mm	552	6	3/8"	Standard	
3.0L M3 E36 S50										
R-BMW-005-I	I-Beam	142.00mm	21.00mm	53.00mm	21.90mm	574	6	3/8"	Standard	
3.2L M30										
R-BMW-013-I	I-Beam	135.00mm	22.00mm	52.00mm	23.90mm	542	6	3/8"	Standard	
3.2L M52										
R-BMW-006-I	I-Beam	135.00mm	22.00mm	48.00mm	21.90mm	552	6	3/8"	Standard	

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
3.2L M3 E36 S50										
R-BMW-004H	H-Beam	139.00mm	21.00mm	53.00mm	21.90mm	550	6	3/8"	Standard	
3.2L M3 E46 S54										
R-BMW-012-I	I-Beam	139.00mm	21.00mm	53.00mm	19.91mm	558	6	3/8"	Standard	
3.5L M30										
R-BMW-013-I	I-Beam	135.00mm	22.00mm	52.00mm	23.90mm	542	6	3/8"	Standard	
3.5L M5 & M6 S38B36										
R-BMW-001-I-6	I-Beam	144.00mm	22.00mm	52.00mm	23.90mm	615	6	3/8"	Standard	
3.8L M5 S38										
R-BMW-009H	H-Beam	142.50mm	22.00mm	52.00mm	24.00mm	535	6	3/8"	Standard	
4.0L M3 V8 S65										
R-BMW-014-I	I-Beam	140.72mm	21.00mm	56.00mm	18.45mm	499	8	3/8"	Standard	
R-BMW-014H	H-Beam	140.72mm	21.00mm	56.00mm	18.45mm	463	8	3/8"	Standard	
5.0L M5 E39 S62										
R-BMW-010H	H-Beam	141.50mm	22.00mm	53.00mm	20.90mm	548	8	3/8"	Standard	
5.0L M70 V12										
R-BMW-017-I	I-Beam	135.00mm	22.00mm	48.00mm	21.90mm	559	12	3/8"	Standard	
5.0L M5 & M6 V10 S85										
R-BMW-015-I	I-Beam	140.72mm	21.00mm	56.00mm	18.45mm	499	10	3/8"	Standard	
R-BMW-015H	H-Beam	140.72mm	21.00mm	56.00mm	18.45mm	463	10	3/8"	Standard	
5.4L M70 V12										
R-BMW-017-I	I-Beam	135.00mm	22.00mm	48.00mm	21.90mm	559	12	3/8"	Standard	

CITROEN/PEUGEOT

• 4340 High Tensile Steel • I-Beam rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • H-Beam rods have Ribbed pin end
• Heavy Duty Series designed for High HP-Boost applications • I-Beam shaped for extra rigidity • Bushings with radial groove for oil reservoir
• Citroën / Peugeot connecting rods come with 3/8" ARP2000 cap fasteners - Upgrade option to L19 alloy.

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.6L TU5J4 / TU5JP4										
R-CIT-001HL	H-Beam	133.60mm	19.50mm	48.66mm	23.91mm	461	4	3/8"	Standard	Light weight design
R-CIT-001-I	I-Beam	133.60mm	19.50mm	48.66mm	23.91mm	498	4	3/8"	Heavy Duty	
R-CIT-004-I	I-Beam	137.75mm	18.00mm	48.66mm	23.91mm	435	4	3/8"	Standard	Longer rods +4.15mm / Light weight design
R-CIT-005HL	H-Beam	139.00mm	18.00mm	48.66mm	23.91mm	460	4	3/8"	Standard	Longer rods +5.40mm / Light weight design
1.6L 207 RC TURBO / DS3 (EP6)										
R-PEU-002-I	I-Beam	138.55mm	20.00mm	48.00mm	20.87mm	458	4	3/8"	Standard	Tapered Pin End / Also fits OEM pistons
2.0L EW10J4RS										
R-PEU-003H	H-Beam	139.00mm	21.00mm	48.56mm	24.18mm	493	4	3/8"	Standard	
2.0L XU10J4RS										
R-CIT-002-I	I-Beam	158.00mm	20.00mm	53.70mm	24.20mm	612	4	3/8"	Standard	

CHEVROLET

• Heavy Duty Series designed for High HP-Boost applications • 4340 High Tensile Steel • AMPCO 18 bushings for excellent resistance to wear and fatigue
• Bushings with radial groove for oil reservoir • I-Beam shaped for extra rigidity • ARP 8740 cap fasteners 7/16" size

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
SMALL BLOCK										
R-SBC-001-I	I-Beam	6.000"	0.927"	2.225"	0.940"	594	8	7/16"	Heavy Duty	
R-SBC-002-I	I-Beam	5.700"	0.927"	2.225"	0.940"	570	8	7/16"	Heavy Duty	
LS1										
R-LS1-001-I	I-Beam	6.125"	0.927"	2.225"	0.940"	611	8	7/16"	Heavy Duty	

DAIHATSU

• Heavy Duty Series designed for High HP-Boost applications • 4340 High Tensile Steel • AMPCO 18 bushings for excellent resistance to wear and fatigue
• Bushings with radial groove for oil reservoir • I-Beam shaped for extra rigidity • ARP 8740 cap fasteners 7/16" size

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.0L CHARADE										
R-DAI-001H	H-Beam	125.04mm	19mm	46.08mm	24.80mm	387	3	5/16"	Standard	

FIAT / LANCIA

• 4340 High Tensile Steel • Heavy Duty Series designed for High HP-Boost applications • AMPCO 18 bushings for excellent resistance to wear and fatigue
• H-Beam rods have Ribbed pin end • I-Beam shaped for extra rigidity • Bushings with radial groove for oil reservoir
• Fiat / Lancia connecting rods come with ARP2000 cap fasteners-Upgrade option to L19 alloy for 3/8 bolts and ARP625+ for the 5/16 bolts.

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
500cc (2-Cyl.)										
R–FIA-004H	H-Beam	120.00mm	20.00mm	47.00mm	24.70mm	340	2	5/16"	Standard	Aluminum – silicon-bronze bushings
R–FIA-005-H	H-Beam	130.00mm	20.00mm	47.00mm	24.65mm	361	2	5/16"	Standard	AMPCO 18 bushings
1.4L ABARTH / T-JET / GRANDE PUNTO										
R–FIA-003-I	I-Beam	129.00mm	18.00mm	45.11mm	21.70mm	406	4	5/16"	Standard	Tapered Pin End / Also fits OEM pistons / AMPCO 18 bushings
1.4L & 1.6L PUNTO / UNO / TEMPRA										
R-FIA-001H	H-Beam	128.52mm	22.00mm	48.63mm	25.40mm	485	4	3/8"	Standard	Aluminum – silicon-bronze bushings
R-FIA-001I	I-Beam	128.52mm	22.00mm	48.63mm	25.40mm	520	4	3/8"	Standard	Aluminum – silicon-bronze bushings
R-FIA-EN24-001	I-Beam	128.52mm	22.00mm	48.63mm	25.40mm	534	4	3/8"	Heavy Duty	Aluminum – silicon-bronze bushings / Made from EN24T Alloy
2.0L 20v COUPE 5-Cyl.										
R-FIA-002H	H-Beam	145.00mm	22.00mm	51.37mm	21.95mm	533	5	3/8"	Standard	Aluminum – silicon-bronze bushings
R-FIA-002-I	I-Beam	145.00mm	22.00mm	51.37mm	21.95mm	566	5	3/8"	Standard	AMPCO 18 bushings
2.0L 16v DELTA INTEGRALE										
R-LAN-001-H	H-Beam	145.00mm	22.00mm	53.92mm	25.70mm	564	4	3/8"	Standard	AMPCO 18 bushings
R-LAN-001-I	I-Beam	145.00mm	22.00mm	53.92mm	25.70mm	557	4	3/8"	Standard	AMPCO 18 bushings
R-LAN-002HL	H-Beam	149.00mm	22.00mm	53.92mm	25.70mm	534	4	3/8"	Standard	Longer rods +4.00mm / Aluminum – silicon-bronze bushings

FORD

• 4340 High Tensile Steel • Heavy Duty Series designed for High HP-Boost applications • I-Beam shaped for extra rigidity
• I-Beam connecting rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • Bushings with radial groove for oil reservoir
• Ford connecting rods come with ARP2000 cap fasteners - Upgrade option to L19 alloy for 3/8 bolts and ARP625+ for the 5/16 bolts.

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.0L EcoBoost										
R-FOR-006-I	I-Beam	137,00mm	20,00mm	43,00mm	19,55mm	Call	3	5/16"	Standard	Non-Tapered Pin End
1.6L EcoBoost										
R-FOR-007-I	I-Beam	134,02mm	21,00mm	47,04mm	20,80mm	Call	4	5/16"	Standard	Tapered Pin End
2.0L EcoBoost										
R-FOR-008-I	I-Beam	155,86mm	22.50mm	55,04mm	21.84mm	575	4	3/8"	Heavy Duty	Non-Tapered Pin End
2.3L EcoBoost										
R-FOR-009-I	I-Beam	149,25mm	22.50mm	55,04mm	21.84mm	576	4	3/8"	Heavy Duty	Non-Tapered Pin End
2.0L 16v SIERRA / ESCORT COSWORTH YB										
R-FOR-001-I	I-Beam	128.50mm	24.00mm	55.00mm	25.85mm	588	4	3/8"	Standard	
R-FOR-002-I	I-Beam	136.50mm	24.00mm	55.00mm	25.85mm	626	4	3/8"	Standard	Longer rods +8.00mm
R-FOR-003H	H-Beam	133.50mm	24.00mm	55.00mm	25.85mm	457	4	3/8"	Standard	Longer rods +5.00mm
R-FOR-003-I	I-Beam	133.50mm	24.00mm	55.00mm	25.85mm	Call	4	3/8"	Heavy Duty	Longer rods +5.00mm
R-FOR-EN24-003	I-Beam	133.50mm	24.00mm	55.00mm	25.85mm	542	4	3/8"	Heavy Duty	Longer rods +5.00mm
2.0L DURATEC										
R-FOR-004H	H-Beam	146.25mm	21.00mm	50.023mm	21.82mm	456	4	3/8"	Standard	
R-FOR-004-I	I-Beam	146.25mm	21.00mm	50.023mm	21.82mm	555	4	3/8"	Standard	
2.5L 20v FOCUS RS MKII										
R-FOR-005-I	I-Beam	143.00mm	23.00mm	52.98mm	25.65mm	551	5	3/8"	Standard	

PERATINOS N. - FORD ESCORT COSWORTH FORMULA SALOON

HONDA

• 4340 High Tensile Steel • Heavy Duty Series designed for High HP-Boost applications • I-Beam shaped for extra rigidity
• I-Beam connecting rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • Bushings with radial groove for oil reservoir
• Honda / Acura connecting rods come with ARP2000 cap fasteners - Upgrade option to L19 alloy for 3/8 bolts and ARP625+ for the 5/16 bolts.

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
B16 A										
R-HON-001H	H-Beam	134.40mm	21.00mm	48.00mm	23.75mm	482	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-001-I	I-Beam	134.40mm	21.00mm	48.00mm	23.75mm	537	4	3/8"	Heavy Duty	Recommended usage: Turbo
B18 A / B18 B / B20										
R-HON-002H	H-Beam	137.00mm	21.00mm	48.00mm	23.75mm	390	4	5/16"	Standard	Recommended usage: Natural Aspirated
R-HON-002-I	I-Beam	137.00mm	21.00mm	48.00mm	23.75mm	526	4	3/8"	Heavy Duty	Recommended usage: Turbo
B18 C										
R-HON-003H	H-Beam	138.00mm	21.00mm	48.00mm	21.79mm	486	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-003HL	H-Beam	138.00mm	21.00mm	48.00mm	21.79mm	405	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-003I	I-Beam	138.00mm	21.00mm	48.00mm	21.79mm	516	4	3/8"	Standard	Recommended usage: Turbo
R-HON-003-I	I-Beam	138.00mm	21.00mm	48.00mm	21.79mm	534	4	3/8"	Heavy Duty	Recommended usage: Turbo
R-HON-EN24-003	I-Beam	138.00mm	21.00mm	48.00mm	21.79mm	518	4	3/8"	Heavy Duty	Recommended usage: Turbo

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
K20										
R-HON-010-I	I-Beam	138.90mm	22.00mm	51.00mm	19.83mm	510	4	3/8"	Heavy Duty	Recommended usage: Turbo
R-HON-010H	H-Beam	138.90mm	22.00mm	51.00mm	19.83mm	470	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-010HL	H-Beam	138.90mm	22.00mm	51.00mm	19.83mm	436	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-011I	I-Beam	138.90mm	22.00mm	51.00mm	19.83mm	502	4	5/16"	Standard	Recommended usage: Turbo
R-HON-013HL	H-Beam	148.50mm	22.00mm	51.00mm	19.83mm	453	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-012HL	H-Beam	135.50mm	22.00mm	51.00mm	19.83mm	451	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-012-I	I-Beam	135.50mm	22.00mm	51.00mm	19.83mm	486	4	3/8"	Heavy Duty	Recommended usage: Turbo
F20 as S2000										
R-HON-006HL	H-Beam	153.00mm	23.00mm	51.00mm	23.85mm	503	4	3/8"	Standard	Tapered Pin End
R-HON-006HL	H-Beam	153.00mm	23.00mm	51.00mm	23.85mm	503	4	3/8"	Standard	Tapered Pin End
R-HON-006H	H-Beam	153.00mm	23.00mm	51.00mm	23.85mm	608	4	3/8"	Standard	Tapered Pin End
R-HON-006-I	I-Beam	153.00mm	23.00mm	51.00mm	23.85mm	625	4	3/8"	Heavy Duty	Recommended usage: Turbo
R-HON-014HL	H-Beam	146.75mm	23.00mm	51.00mm	23.85mm	458	4	3/8"	Standard	Tapered Pin End
R-HON-014-I	I-Beam	146.75mm	23.00mm	51.00mm	23.85mm	563	4	3/8"	Heavy Duty	Recommended usage: Turbo
F22										
R-HON-015HL	H-Beam	149.65mm	23.00mm	51.00mm	23.85mm	456	4	3/8"	Standard	
H22										
R-HON-008H	H-Beam	143.20mm	22.00mm	51.00mm	23.75mm	447	4	3/8"	Standard	Recommended usage: Natural Aspirated
F24										
R-HON-016HL	H-Beam	145.50mm	23.00mm	51.00mm	19.83mm	444	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-HON-016-I	I-Beam	145.50mm	23.00mm	51.00mm	19.83mm	510	4	3/8"	Heavy Duty	Recommended usage: Turbo

HYUNDAI

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.5L S' COUPE										
• 4340 High Tensile Steel • Aluminum – Silicon-Bronze bushings with radial groove for oil reservoir • Ribbed pin end • ARP2000 cap fasteners										
R-HYU-001H	H-Beam	131.00mm	18.00mm	48.00mm	22.84mm	434	4	5/16"	Standard	

MAZDA

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
2.0L MX-5 3 / 5 / 6										
• 4340 High Tensile Steel / ARP2000 cap fasteners • I-Beam rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • I-Beam shaped for extra rigidity										
R-MAZ-002H	H-Beam	146.25mm	21.00mm	50.023mm	21.82mm	456	4	3/8"	Standard	
R-MAZ-002-I	I-Beam	146.25mm	21.00mm	50.023mm	21.82mm	515	4	3/8"	Standard	
1.6L / 1.8L MX5 (BP)										
• 4340 High Tensile Steel / AMPCO 18 bushings with radial groove / I-Beam shaped for extra rigidity / ARP2000 cap fasteners - Upgrade option to L19 material										
R-MAZ-001-H	H-Beam	132.80mm	20.00mm	48.00mm	21.84mm	418	4	3/8"	Standard	

MINI COOPER

• 4340 High Tensile Steel • AMPCO 18 bushings with radial groove • I-Beam shaped for extra rigidity • ARP2000 cap fasteners - Upgrade option to L19 material

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.6L R53 SUPERCHARGER										
R-MIN-001-I	I-Beam	131.60mm	21.00mm	49.00mm	23.25mm	474	4	3/8"	Standard	
1.6L R56 TURBO - N12B16 / N14B16										
R-MIN-002-I	I-Beam	138.55mm	20.00mm	48.00mm	20.87mm	458	4	3/8"	Standard	Tapered Pin End

MITSUBISHI

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
4G63 EVO 1-9										
• Heavy Duty & Standard Series made from 4340 High Tensile Steel and Pro Series from 817M40T – EN24T Alloy for maximum durability. • Heavy Duty Series designed for High HP-Boost applications and Pro Series for Extreme projects. • EVO 4G63T connecting rods come with AMPCO 18 bushings for excellent resistance to wear and fatigue • Bushings with radial groove for oil reservoir										
R-MIT-002-H	H-Beam	150.00mm	22.00mm	48.00mm	26.40mm	552	4	3/8"	Standard	ARP2000 cap fasteners - Upgrade option to L19 material
R-MIT-002-I	I-Beam	150.00mm	22.00mm	48.00mm	26.40mm	675	4	3/8"	Heavy Duty	ARP2000 cap fasteners - Upgrade option to L19 material
R-MIT-007-I	I-Beam	156.00mm	22.00mm	48.00mm	26.40mm	678	4	3/8"	Heavy Duty	ARP2000 cap fasteners - Upgrade option to L19 material
R-MIT-003H	H-Beam	147.00mm	22.00mm	48.00mm	26.40mm	530	4	3/8"	Standard	ARP2000 cap fasteners - Upgrade option to L19 material
R-MIT-002-IP	I-Beam	150.00mm	22.00mm	48.00mm	26.40mm	610	4	3/8"	Pro Series	ARP L19 cap fasteners - Upgrade option to ARP 625+ material
R-MIT-007-IP	I-Beam	156.00mm	22.00mm	48.00mm	26.40mm	633	4	3/8"	Pro Series	ARP L19 cap fasteners - Upgrade option to ARP 625+ material
4B11 EVO 10										
• Manufactured from 4340-EN24T High Tensile Steel • Aluminum – silicon/ bronze bushings with radial groove for oil reservoir. • Heavy Duty Series designed for High HP-Boost applications • ARP2000 cap fasteners - Upgrade option to L19 material										
R-MIT-EN24-006	I-Beam	143.71mm	23.00mm	54.99mm	21.87mm	483	4	3/8"	Heavy Duty	ARP2000 cap fasteners - Upgrade option to L19 material

NISSAN

- Heavy Duty & Standard Series made from 4340 High Tensile Steel and Pro Series from 817M40T – EN24T Alloy for maximum durability.
- Heavy Duty Series designed for High HP-Boost applications and Pro Series for Extreme projects.
- I-Beam connecting rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • Bushings with radial groove for oil reservoir.
- Heavy Duty and Standard Series come with ARP2000 cap fasteners - Upgrade option to L19 material. Pro Series rods feature L19 cap fasteners - Upgrade option to 625+ alloy.

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.8L CA18										
R-NIS-001H	H-Beam	133.00mm	20.00mm	48.00mm	24.30mm	453	4	3/8"	Standard	
SR20 DET / DE										
R-NIS-002-I	I-Beam	136.30mm	22.00mm	51.00mm	22.80mm	553	4	3/8"	Heavy Duty	
VQ35										
R-NIS-005-I	I-Beam	144.20mm	22.00mm	55.00mm	20.80mm	565	6	3/8"	Heavy Duty	Non-Tapered Pin End
RB25 / RB26										
R-NIS-003-I	I-Beam	121.50mm	21.00mm	51.00mm	21.80mm	523	6	3/8"	Heavy Duty	
RB28										
R-NIS-004H	H-Beam	119.50mm	21.00mm	51.00mm	21.80mm	477	6	3/8"	Standard	
3.8L GTR VR38 DETT										
R-NIS-006-I	I-Beam	165.00mm	23.00mm	59.00mm	22.80mm	743	6	3/8"	Heavy Duty	Non-Tapered Pin End
R-NIS-006-IP	I-Beam	165.00mm	23.00mm	59.00mm	22.80mm	695	6	3/8"	Pro Series	Non-Tapered Pin End

OPEL / VAUXHALL

- 4340 High Tensile Steel • AMPCO 18 bushings for excellent resistance to wear and fatigue • Bushings with radial groove for oil reservoir • I-Beam shaped for extra rigidity
- ARP2000 cap fasteners - Upgrade option to L19 material / Long rods R-OPE-006H come with 8740 cap fasteners

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.6L TURBO OPC Z16										
R-OPE-005-I	I-Beam	129.75mm	19.00mm	46.00mm	21.90mm	419	4	3/8"	Standard	Non-Tapered Pin End
1.6L & 1.8L 16v X18 / A18 / A16 / A18										
R-OPE-002-I	I-Beam	129.75mm	18.00mm	46.00mm	21.90mm	458	4	3/8"	Standard	Tapered Pin End / Also fits OEM pistons
2.0L 16v C20 / Z20										
R-OPE-001-H	H-Beam	143.00mm	21.00mm	52.00mm	26.35mm	514	4	3/8"	Standard	Recommended usage: Natural Aspirated
R-OPE-001-I	I-Beam	143.00mm	21.00mm	52.00mm	26.35mm	532	4	3/8"	Standard	Recommended usage: Turbo
R-OPE-006H	H-Beam	148.00mm	21.00mm	52.00mm	26.35mm	527	4	7/16"	Standard	Longer rods +5.00mm
2.0L 16v as GT & INSIGNIA - LNF / NHH / A20 / NHT / NFT										
R-OPE-009I	I-Beam	145.45mm	23.00mm	52.00mm	23.95mm	547	4	3/8"	Standard	Tapered Pin End / Also fits OEM pistons

RENAULT

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.8L F7P / 2.0L F7R / 2.0L F4R										
• 4340 High Tensile Steel • AMPCO 18 bushings for excellent resistance to wear and fatigue • Bushings with radial groove for oil reservoir • I-Beam shaped for extra rigidity • ARP2000 cap fasteners - Upgrade option to L19 material										
R-REN-001-I	I-Beam	144.00mm	21.00mm	51.60mm	25.00mm	513	4	3/8"	Standard	With bearing tag / Light weight design

ROVER

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
K SERIES										
• 4340 High Tensile Steel • AMPCO 18 bushings for excellent resistance to wear and fatigue • Bushings with radial groove for oil reservoir • I-Beam shaped for extra rigidity • ARP2000 cap fasteners - Upgrade option to 625+ material.										
R-ROV-001-I	I-Beam	133.10mm	18.00mm	51.68mm	22.50mm	367	4	5/16"	Standard	

SUBARU

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
EJ20 / EJ22 / EJ25										
• Heavy Duty & Standard Series made from 4340 High Tensile Steel and Pro Series from 817M40T – EN24T Alloy for maximum durability. • AMPCO 18 bushings for excellent resistance to wear and fatigue • Bushings with radial groove for oil reservoir • Heavy Duty Series designed for High HP-Boost applications and Pro Series for Extreme projects.										
R-SUB-001-H	H-Beam	130.50mm	23.00mm	55.00mm	17.00mm	498	4	3/8"	Standard	ARP2000 cap fasteners - Upgrade option to L19 material
R-SUB-001-I	I-Beam	130.50mm	23.00mm	55.00mm	17.00mm	555	4	3/8"	Heavy Duty	ARP2000 cap fasteners - Upgrade option to L19 material
R-SUB-001-IP	I-Beam	130.50mm	23.00mm	55.00mm	17.00mm	525	4	3/8"	Pro Series	ARP L19 cap fasteners - Upgrade option to ARP 625+ material
EJ20 / EJ22 / EJ25										
R-SUB-002-I	I-Beam	130.50mm	23.00mm	55.00mm	17.00mm	555	6	3/8"	Heavy Duty	ARP2000 cap fasteners - Upgrade option to L19 material

SMART

• 4340 High Tensile Steel • Aluminum – Silicon-Bronze bushings with radial groove for oil reservoir • Ribbed pin end • ARP2000 cap fasteners

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
700cc / 600cc										
R–SMA-001H	H-Beam	114.00mm	16.00mm	41.62mm	17.00mm	264	3	5/16"	Standard	
FORTWO / BRABUS / ROADSTER										
R–SMA-002H	H-Beam	114.00mm	17.00mm	41.62mm	17.00mm	273	3	5/16"	Standard	

SUZUKI

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.3L SWIFT G13										
• 4340 High Tensile Steel / Aluminum – Silicon-Bronze bushings with radial groove for oil reservoir / Ribbed pin end / ARP2000 cap fasteners										
R-SUZ-002H	H-Beam	120.00mm	19.00mm	45.00mm	22.00mm	417	4	5/16"	Standard	
1.6L LIANA / SWIFT M16A (NEW)										
R-SUZ-001H	H-Beam	135.16mm	20.00mm	45.00mm	23.84mm	412	4	5/16"	Standard	
1.3L HAYABUSA										
• 4340 High Tensile Steel • I-Beam rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • Bushings with radial groove for oil reservoir • I-Beam shaped for extra rigidity • H-Beam rods have ribbed pin end • Heavy Duty Series designed for High HP-Boost applications • Hayabusa connecting rods come with 3/8" ARP2000 cap fasteners - Upgrade option to L19 alloy										
R-SUZ-004-I	I-Beam	119.50mm	20.00mm	41.00mm	20.90mm	349	4	3/8"	Heavy Duty	99"-07" Model - Turbo use
R-SUZ-004H	H-Beam	119.50mm	20.00mm	41.00mm	20.90mm	298	4	3/8"	Standard	99"-07" Model - N/A use
R-SUZ-EN24-003	I-Beam	119.50mm	18.00mm	41.00mm	20.90mm	408	4	3/8"	Heavy Duty	08"-12" Model - Turbo use / EN24T Alloy
R-SUZ-003-I	I-Beam	119.50mm	18.00mm	41.00mm	20.90mm	354	4	3/8"	Heavy Duty	08"-12" Model - Turbo use
R-SUZ-003H	H-Beam	119.50mm	18.00mm	41.00mm	20.90mm	305	4	3/8"	Standard	08"-12" Model - N/A use

TOYOTA

• 4340 High Tensile Steel • Heavy Duty Series designed for High HP-Boost applications • I-Beam shaped for extra rigidity
• I-Beam connecting rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze • Bushings with radial groove for oil reservoir
Toyota connecting rods come with ARP2000 cap fasteners - Upgrade option to L19 alloy for 3/8 bolts and ARP625+ for the 5/16 bolts.

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1.3L STARLET 3EF										
R-TOY-001H	H-Beam	118.00mm	18.00mm	43.07mm	20.85mm	367	4	5/16"	Standard	
R-TOY-001-I	I-Beam	118.00mm	18.00mm	43.07mm	20.85mm	377	4	3/8"	Standard	
1.5L STARLET 5EF										
R-TOY-002H	H-Beam	130.50mm	18.00mm	46.00mm	20.85mm	422	4	5/16"	Standard	
R-TOY-002-I	I-Beam	130.50mm	18.00mm	46.00mm	20.85mm	426	4	5/16"	Standard	
4AG 16v / 20v										
R-TOY-003H	H-Beam	122.00mm	18.00mm	43.00mm	21.85mm	441	4	3/8"	Standard	
R-TOY-004H	H-Beam	122.00mm	20.00mm	45.00mm	21.85mm	406	4	3/8"	Standard	
R-TOY-004-I	I-Beam	122.00mm	20.00mm	45.00mm	21.85mm	435	4	3/8"	Heavy Duty	
1ZZ										
R-TOY-007H	H-Beam	146.50mm	20.00mm	47.00mm	19.80mm	426	4	3/8"	Standard	

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
3SGTE										
R-TOY-005H	H-Beam	138.00mm	22.00mm	51.00mm	26.70mm	518	4	3/8"	Standard	
R-TOY-EN24-005	I-Beam	138.00mm	22.00mm	51.00mm	26.70mm	504	4	3/8"	Heavy Duty	EN24T Material
R-TOY-005-I	I-Beam	138.00mm	22.00mm	51.00mm	26.70mm	588	4	3/8"	Heavy Duty	
2JZ SUPRA										
• Heavy Duty & Standard Series made from 4340 High Tensile Steel and Pro Series from 817M40T – EN24T Alloy for maximum durability. • AMPCO 18 bushings for excellent resistance to wear and fatigue • Bushings with radial groove for oil reservoir • Heavy Duty Series designed for High HP-Boost applications and Pro Series for Extreme projects.										
R-TOY-006-H	H-Beam	142.00mm	22.00mm	55.00mm	26.00mm	598	6	3/8"	Standard	ARP2000 cap fasteners - Upgrade option to L19 material
R-TOY-006-I	I-Beam	142.00mm	22.00mm	55.00mm	26.00mm	626	6	3/8"	Heavy Duty	ARP2000 cap fasteners - Upgrade option to L19 material
R-TOY-006-IP	I-Beam	142.00mm	22.00mm	55.00mm	26.00mm	630	6	3/8"	Pro Series	ARP L19 cap fasteners - Upgrade option to ARP 625+ material

VOLVO

• 4340 High Tensile Steel • I-Beam rods have AMPCO 18 bushings, while H-Beam feature aluminum – silicon/ bronze
• Bushings with radial groove for oil reservoir • I-Beam shaped for extra rigidity • H-Beam rods have ribbed pin end

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
B5204 . B5234 . B5254										
R-VOL-001-I	I-Beam	143.00mm	23.00mm	53.00mm	25.65mm	547	5	3/8"	Standard	ARP2000 cap fasteners - Upgrade option to L19 material
B23A as in 240.740										
R-VOL-002H	H-Beam	145.00mm	24.00mm	58.00mm	29.72mm	672	4	7/16"	Standard	ARP 8740 cap fasteners
B234F as in 940 16v . B230ET.FT.GT as in 740.940										
R-VOL-003-I	I-Beam	152.00mm	23.00mm	52.00mm	29.46mm	676	4	3/8"	Standard	ARP2000 cap fasteners - Upgrade option to L19 material

YAMAHA

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1800 SHO - WATERCRAFT										
• 4340 High Tensile Steel • Aluminum – Silicon-Bronze bushings with radial groove for oil reservoir • Ribbed pin end • ARP2000 cap fasteners - Upgrade option to L19 material										
R-YAM-001H	H-Beam	145.00mm	22.00mm	45.00mm	26.82mm	480	4	3/8"	Standard	

KAWASAKI

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
ULTRA 250 / 260 / 400 - WATERCRAFT										
• 4340 High Tensile Steel • Aluminum – Silicon-Bronze bushings with radial groove for oil reservoir • Ribbed pin end • ARP2000 cap fasteners										
PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
R-KAW-001H	H-Beam	112.85mm	21.00mm	42.00mm	23.66mm	404	4	5/16"	Standard	

SEA DOO

PART NUMBER	SHAPE	LENGTH (CC)	PIN SIZE	BIG BORE	B.E WIDTH	WEIGHT (GR)	SET OF	BOLT SIZE	SERIES	FOOTNOTE
1500 XRT / GTX / XRP - WATERCRAFT										
• 4340 High Tensile Steel • I-Beam shaped for extra rigidity • ARP2000 cap fasteners - Upgrade option to L19 material • AMPCO 18 bushings for excellent resistance to wear and fatigue • Bushings with radial groove for oil reservoir										
R-SEA-001-I	I-Beam	120.10mm	23.02mm	48.01mm	21.97mm	506	4	3/8"	Standard	
1630 XRT / GTX / XRP - WATERCRAFT										
R-SEA-002-I	I-Beam	114.90mm	22.01mm	48.02mm	21.98mm	485	4	3/8"	Standard	

BILLET CRANKSHAFTS

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

They are designed carefully, from our vast experience, to provide the best possible engine performance.

Our crankshaft production process consists of very detailed inspections to ensure that they have 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, Micro-polishing for longer bearing life. Finally they are sonic tested and X-rayed to ensure a reliable end product.

We offer many different crankshaft designs from knife edged to stepped counterweights, we have it all depending on the application, whether it is turbo or N/A, drag or drift, rally or hill-climb we have the preferred design for you!

All different designs feature straight oil holes, for best oiling to 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.

AUDI / VW

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
1.8L TURBO 20v (STROKER 2.0L 06A ENGINE)						
• Manufactured from 4340 Precision Billet Steel • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics						
C-AUD-001L	92.80mm	54.00mm	47.80mm	13.80	4340 Billet	Stroker Crankshaft 06A Engine
2.0L TFSI EA113 / EA827 Timing Belt Engine						
• Manufactured from 4340 Precision Billet Steel • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics						
C-AUD-001L	92.80mm	54.00mm	47.80mm	13.80	4340 Billet	Std Stroke / Lightweight Desing
C-AUD-002L	90.00mm	54.00mm	47.80mm	13.35	4340 Billet	De-Stroke Crank. / Lightweight Desing
C-AUD-003L	95.20mm	54.00mm	47.80mm	13.60	4340 Billet	Stroker Crankshaft / Lightweight Desing
C-AUD-004L	98.00mm	54.00mm	47.80mm	14.20	4340 Billet	Stroker Crankshaft / Lightweight Desing
2.0L 16v ABF						
• Manufactured from 4340 Precision Billet Steel • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics						
C–VW-001	90.00mm	54.00mm	47.80mm	13.80	4340 Billet	De-Stroke Crank. for High RPM Engines

BMW

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
M3 S14 SERIES						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability • Tapered rod journals for weight reduction						
C-BMW-001	80.00mm	54.99mm	47.991mm	19.10	4340 Billet	S14B20 Stroker Crank.
C-BMW-003	84.00mm	54.99mm	47.991mm	20.30	4340 Billet	S14B23 Std Stroke
C-BMW-002	87.00mm	54.99mm	47.991mm	20.10	4340 Billet	S14B25 Std Stroke
C-BMW-004	95.00mm	54.99mm	47.991mm	19.50	4340 Billet	S14B25 Stroker Crank.
M3 S50 SERIES						
• Manufactured from 4340 Precision Billet Steel • Undercut counterweights to reduce rotating mass • Tapered rod journals for weight reduction						
C-BMW-005	85.70mm	60.00mm	50.00mm	23.5	4340 Billet	S50B30 Std Stroke
C-BMW-006	91.00mm	60.00mm	50.00mm	23.6	4340 Billet	S50B32 Std Stroke / S50B30 Stroker

CHEVROLET

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
SMALL BLOCK						
• Manufactured from 4340 Precision Billet Steel • Rod journals are drilled for weight reduction • Dual passage – straight through oil feeding • Solid counterweights aimed for maximum durability						
C-SBC-001UL	3.750" / 95.25mm	62.21mm	53.34mm	22.1	4340 Billet	Lightweight Design
C-SBC-002UL	3.480" / 88.39mm	62.21mm	53.34mm	21.9	4340 Billet	Lightweight Design
C-SBC-003UL	3.300" / 83.82mm	62.21mm	53.34mm	21.5	4340 Billet	Lightweight Design
LS1						
• Manufactured from 4340 Precision Billet Steel • Rod journals are drilled for weight reduction • Dual passage – straight through oil feeding • Solid counterweights aimed for maximum durability						
C-LS1-001UL	4.000" / 101.60mm	65.00mm	53.34mm	23.8	4340 Billet	Lightweight Design

CITROEN / PEUGEOT

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
1.6L 16v TU5J4 / TU5JP4 STROKER CRANK.						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability • Straight oil holes for better oiling						
C-CIT-001L	89.00mm	49.98mm	44.98mm	13.20	4340 Billet	Stroker Crank. 1.8L
1.6L 16v TU5J4 - KIT CAR						
• Manufactured from 4340 Precision Billet Steel • Super Lightweight Design with 4-Counterweights • Straight oil holes for better oiling • OEM journal dimensions • Pendulum Undercut and Gun drilled counterweights reduce weight and rotating mass						
C-CIT-004L	82.00mm	49.98mm	44.98mm		4340 Billet	Std Stroke - Kit Car
1.6L 207 RC TURBO / 1.6L DS3 (Engine-EP6)						
• Manufactured from 4340 Precision Billet Steel • Undercut counterweights to reduce rotating mass • Tapered rod journals for weight reduction						
C-MIN-002	85.80mm	45.00mm	45.00mm	15.00	4340 Billet	Std Stroke

FIAT

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
1.6L TEMPRA / RITMO / PUNTO						
• Manufactured from 4340 Precision Billet Steel • Counterweight bridge to reduce rotating mass • Tapered rod journals for weight reduction • Knife edged counterweights increase crankshaft aerodynamics						
C-FIA-001L	79.00mm	50.80mm	45.498mm	9.25	4340 Billet	Stroker Crank. 1.9L
C-FIA-002L	67.40mm	50.80mm	45.498mm	9.50	4340 Billet	Std Stroke

FORD

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
2.0L 16v SIERA / ESCORT COSWORTH YB						
• Manufactured from 4340 Precision Billet Steel • Knife edged counterweights increase crankshaft aerodynamics • Tapered rod journals for weight reduction						
C-FOR-001L	77.00mm	56.99mm	51.99mm	16.70	4340 Billet	Std Stroke
C-FOR-002L	82.00mm	56.99mm	51.99mm	17.10	4340 Billet	Stroker Crankshaft
C-FOR-003L	84.00mm	56.99mm	51.99mm	17.15	4340 Billet	Stroker Crankshaft
C-FOR-004L	86.00mm	56.99mm	51.99mm	17.10	4340 Billet	Stroker Crankshaft

HONDA

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
K20						
• Manufactured from 4340 Precision Billet Steel • Large radius journals • Tapered rod journals for weight reduction • Straight oil holes for better lubrication						
C-HON-003UL	93.00mm	55.00mm	48.00mm	16.80	4340 Billet	Stroker Crankshaft
F20 as S2000						
• Manufactured from 4340 Precision Billet Steel • Large radius journals • Tapered rod journals for weight reduction • Straight oil holes for better lubrication						
C-HON-006UL	84.00mm	55.00mm	48.00mm	Call	4340 Billet	Std Stroke
C-HON-004UL	96.50mm	55.00mm	48.00mm	16.10	4340 Billet	Stroker Crankshaft
C-HON-005UL	103.0mm	55.00mm	48.00mm	16.30	4340 Billet	Stroker Crankshaft

LANCIA

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
2.0L DELTA INTEGRALE						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability						
C-LAN-001	90.00mm	50.80mm	53.00mm	13.00	4340 Billet	Std Stroke

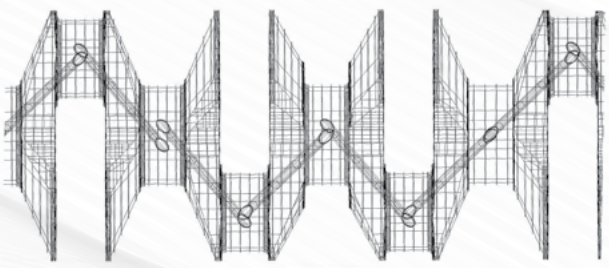
MINI COOPER

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
1.6L R56 TURBO (N12B16 /N14B16)						
• Manufactured from 4340 Precision Billet Steel • Undercut counterweights to reduce rotating mass • Tapered rod journals for weight reduction						
C-MIN-002	85.80mm	45.00mm	45.00mm	15.00	4340 Billet	Std Stroke
1.6L R53 SUPERCHARGER						
• Manufactured from 4340 Precision Billet Steel • Drilled rod journals for weight reduction • Tapered rod journals for weight reduction						
C–MIN-001UL	85.50mm	54.97mm	48.00mm	12.75	4340 Billet	Std Stroke

MITSUBISHI

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
4G63 EVO 4-9						
• Manufactured from 4340 Precision Billet Steel • Tapered rod journals for weight reduction • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics • "High-Speed" oiling system for better lubrication.						
C-MIT-001L	88.00mm	57.00mm	45.00mm	14.45	4340 Billet	Std Stroke
C-MIT-003L	94.00mm	57.00mm	45.00mm	15.25	4340 Billet	Stroker Crankshaft
C-MIT-002L	100.00mm	57.00mm	45.00mm	15.40	4340 Billet	Stroker Crankshaft
4B11 EVO 10 - STROKER CRANK.						
• Manufactured from 4340 Precision Billet Steel • Tapered rod journals for weight reduction • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics • "High-Speed" oiling system for better lubrication.						
C-MIT-004L	94.00mm	51.986mm	51.98mm	16.41	4340 Billet	Stroker Crankshaft

MITSUBISHI EVO 4G63/4B11 CRANKSHAFT



"High-Speed" oiling system for better lubrication.

- Manufactured from 4340 Precision Billet Steel
- Tapered rod journals for weight reduction
- Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics

NISSAN

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
SR20 DET/DE						
• Manufactured from 4340 Precision Billet Steel • Straight oil holes for better lubrication • Tapered rod journals for weight reduction • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics.						
C-NIS-001L	91.00mm	55.00mm	48.00mm	16.80		Stroker Crankshaft / Lightweight Design
RB26 SKYLINE						
• Manufactured from 4340 Precision Billet Steel • Straight oil holes for better lubrication • Tapered rod journals for weight reduction • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics • Dual passage – straight through oil feeding						
C-NIS-002L	73.70mm	54.965mm	47.97mm	18.80	4340 Billet	Std Stroke / Lightweight Design
RB28 SKYLINE						
• Manufactured from 4340 Precision Billet Steel • Straight oil holes for better lubrication • Tapered rod journals for weight reduction • Knife edge counterweights design to reduce weight and increase crankshaft aerodynamics • Dual passage – straight through oil feeding						
C-NIS-003L	77.70mm	54.965mm	47.97mm	19.50	4340 Billet	Std Stroke / Lightweight Design
VR38DET GT-R						
• Manufactured from 4340 Precision Billet Steel • "High-Speed" oiling system for better lubrication • Journal radius disperse load stress • Dual passage – straight through oil feeding • Aero – Wing counterweights design to increase crankshafts aerodynamics						
C-NIS-004UL	94.40mm	65.97mm	55.96mm	18.50	4340 Billet	Stroker Crankshaft

OPEL / VAUXHALL

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
1.6L TURBO Z16LET						
• Manufactured from 4340 Precision Billet Steel • Straight oil holes for better oiling • Super Lightweight Design with 4-Counterweights (Std Stroke) • Solid counterweights aimed for maximum durability (Stroke Crank.)						
C-OPE-004	89.00mm	55.00mm	43.00mm	14.30	4340 Billet	Stroker Crankshaft 1.8L
C-OPE-009L	81.50mm	55.00mm	43.00mm		4340 Billet	Std Stroke with 4-Counterweights
2.0L 16v C20 Engine						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability • 8-Flywheel bolts						
C-OPE-005L	86.00mm	58.00mm	49.00mm	16.20	4340 Billet	Std Stroke
C-OPE-002L	91,00mm	58.00mm	49.00mm	15.30	4340 Billet	Stroker Crankshaft
2.0L 16v Z20 Engine						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability • 6-Flywheel bolts						
C-OPE-007	86.00mm	58.00mm	49.00mm	18.70	4340 Billet	Std Stroke
C-OPE-008	91.00mm	58.00mm	49.00mm	19.00	4340 Billet	Stroker Crankshaft

RENAULT

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
2.0L F4R / F7R						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability						
C-REN-001UL	93.00mm	54.80mm	48.00mm	15.50	4340 Billet	Std Stroke

SEA DOO

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
1500 RXP / RXT						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability • Lightweight Design with 4-Counterweights						
C-SEA-001UL	63.40mm	50.00mm	45.04mm	Call	4340 Billet	Std Stroke
C-SEA-002UL	69.20mm	50.00mm	45.04mm	Call	4340 Billet	Stroker Crank.

SUBARU

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
2.0L EJ20 / 2.5L EJ257						
• Manufactured from 4340 Precision Billet Steel • Gun drilled crank pin and counterweights to reduce weight and rotating mass • Dual passage - straight through oil feeding. • Each journal having two main sources of oil feed, providing enhanced lubrication at higher RPM						
C-SEA-001UL	63.40mm	50.00mm	45.04mm	Call	4340 Billet	Std Stroke 2.0L
C-SEA-002UL	69.20mm	50.00mm	45.04mm	Call	4340 Billet	Std Stroke 2.5L
C-SUB-003UL	83.00mm	60.00mm	52.00mm	8.55	4340 Billet	Stroker Crankshaft 2.7L
EJ33 SVX						
• Manufactured from 4340 Precision Billet Steel • Gun drilled crank pin and counterweights to reduce weight and rotating mass • Dual passage - straight through oil feeding. • Each journal having two main sources of oil feed, providing enhanced lubrication at higher RPM						
C-SUB-004UL	75.00mm	60.00mm	52.00mm	12.50	4340 Billet	Std Stroke
C-SUB-005UL	79.00mm	60.00mm	52.00mm	12.48	4340 Billet	Stroker Crankshaft

TOYOTA

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
2.0L 3SGTE						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability						
C-TOY-001UL	93.00mm	55.00mm	48.00mm	17.20	4340 Billet	Stroker Crankshaft
5SFE w/ 3SGTE JOURNALS						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability • 3SGTE Rod journal diam.						
C-TOY-002UL	100.00mm	55.00mm	48.00mm	17.30	4340 Billet	Stroker Crankshaft
2JZ SUPRA						
• Manufactured from 4340 Precision Billet Steel • "High-Speed" oiling system for better lubrication • Undercut counterweights with "bridge" to reduce rotating mass while maintaining rigidity in center high stress areas.						
C-TOY-005L	94.00mm	61.994mm	51.991mm	22.30	4340 Billet	Stroker Crankshaft

VOLVO

PART NUMBER	STROKE	MAIN JOURNAL	ROD JOURNAL	WEIGHT KG.	CRANK. GRADE	FOOTNOTE
B230 / B234						
• Manufactured from 4340 Precision Billet Steel • Solid counterweights aimed for maximum durability						
C-VOL-001	80.00mm	63.00mm	49.00mm	21.20	4340 Billet	Std Stroke
C-VOL-004	72.80mm	63.00mm	49.00mm	CALL	4340 Billet	DE-Stroke Crank.
C-VOL-002	86.00mm	63.00mm	49.00mm	22.30	4340 Billet	Stroker Crankshaft
C-VOL-003	81.20mm	63.00mm	49.00mm	CALL	4340 Billet	Stroker Crankshaft

ZRP STROKER KITS

There is no replacement for displacement!

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.

4032T-6 PISTONS/HEAVY DUTY RODS/BILLET CRANK.

1.8L TURBO 20v - 06A ENGINE

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 4032-T6 High-Silicon / Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets IN+EX
- Round skirt style
- Premium 1.0mm x 1.2mm x 2.8mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340
- Non-Tapered pin end

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-AUD-001LT-050	81.50mm	9.0:1	92.80mm	144.00mm	20.00mm	29.50mm	-0.10	1936cc	1.20mm x 82.50mm
S-AUD-001LT-150	82.50mm	9.0:1	92.80mm	144.00mm	20.00mm	29.50mm	-0.10	1984cc	1.20mm x 82.50mm
S-AUD-001LT-200	83.00mm	9.0:1	92.80mm	144.00mm	20.00mm	29.50mm	-0.10	1994cc	1.35mm x 83.00mm

* Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

4032T-6 PISTONS / H-BEAM RODS / OEM CRANK.

1.8L TURBO 20v - 06A ENGINE w/ H-BEAM RODS & USED CRANKSHAFT

OEM used crankshaft
- Crankshaft is fully balanced on Sunnen machines 1gr +/- 0.1
- Crankshaft journals inspected and measured to exact tolerance
- Crankshaft sold in fully operational condition

Pistons made from 4032-T6 High-Silicon / Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets IN+EX
- Round skirt style
- Premium 1.0mm x 1.2mm x 2.8mm ring package included

H-Beam Connecting rods w/ Ribbed pin end
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Lipped cap relief for improved big-end integrity
- Shot Peening for improved fatigue life
- Multi Stage Heat Treat for maximum strength
- Bend and twist is tightly controlled
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-AUD-002LT-050	81.50mm	9.0:1	92.80mm	144.00mm	20.00mm	29.50mm	-0.10	1936cc	1.20mm x 82.50mm
S-AUD-002LT-150	82.50mm	9.0:1	92.80mm	144.00mm	20.00mm	29.50mm	-0.10	1984cc	1.20mm x 82.50mm
S-AUD-002LT-200	83.00mm	9.0:1	92.80mm	144.00mm	20.00mm	29.50mm	-0.10	1994cc	1.35mm x 83.00mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

4032T-6 PISTONS / HEAVY DUTY RODS / BILLET CRANK.

2.0L TFSI - EA888 ENGINE

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 4032-T6 High-Silicon/Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets IN+EX
- Round skirt style
- Premium 1.0mm x 1.2mm x 2.8mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340
- Non-Tapered pin end

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-AUD-003LT-050	83.00mm	9.9:1	95.20mm	144.00mm	21.00mm	28.40mm	-0.00	2060cc	0.90mm x 83.00mm

* Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

CITROEN / PEUGEOT

SUPERSPORT PISTONS / HD RODS / BILLET CRANK.

1.6L 16v TU5J4 / TU5JP4

Crankshaft manufactured from 4340 Precision Billet Steel
- OEM design counterweights
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 4032-T6 High-Silicon/Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Round skirt style
- Premium 1.0mm x 1.2mm x 2.8mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
SAXO TU5J4 Head 32.70cc's									
S-CIT-001LT-150	80.00mm	9.1:1	89.00mm	133.60mm	19.50mm	28.90mm	-0.00	1789cc	1.30mm x 80.0mm
C2 VTS TU5JP4 Head 39.50cc's									
S-CIT-001LT-150	80.00mm	8.7:1	89.00mm	133.60mm	19.50mm	28.90mm	-0.00	1789cc	1.30mm x 80.0mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

SUPERSPORT PISTONS / H-BEAM RODS / BILLET CRANK.

1.6L 16v TU5J4 / TU5JP4 (N/A) 2-Rings

Crankshaft manufactured from 4340 Precision Billet Steel
- OEM design counterweights
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 4032-T6 High-Silicon / Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets
- X-Style skirt
- Premium 1.0mm x 1.2mm x 2.8mm ring package included

H-Beam Connecting rods w/ Ribbed pin end
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Lipped cap relief for improved big-end integrity
- Shot Peening for improved fatigue life
- Multi Stage Heat Treat for maximum strength
- Bend and twist is tightly controlled
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
STROKER WITH LONG RODS 137.75mm (+4.15mm)									
TU5J4 HEAD 32.70cc's									
S-CIT-003LN-150	80.00mm	13.6:1	89.00mm	137.75mm	18.00mm	24.75mm	-0.00	1789cc	1.30mm x 80.0mm
TU5JP4 HEAD 39.50cc's									
S-CIT-003LN-150	80.00mm	12.5:1	89.00mm	137.75mm	18.00mm	24.75mm	-0.00	1789cc	0.65mm x 80.0mm

STROKER WITH STD ROD LENGHT 133.60mm									
TU5J4 HEAD 32.70cc's									
S-CIT-002LN-100	79.50mm	12.5:1	89.00mm	133.60mm	19.50mm	29.00mm	+0.10	1767cc	1.30mm x 80.0mm
S-CIT-002LN-150	80.00mm	12.5:1	89.00mm	133.60mm	19.50mm	29.00mm	+0.10	1789cc	1.30mm x 80.0mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

FORD

SUPERSPORT PISTONS / HD RODS / BILLET CRANK.

2.0L 16v SIERRA / ESCORT COSWORTH YB - 84.0mm x 133.50mm

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 4032-T6 High-Silicon/Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Round Skirt Style
- Premium 1.20mm x 1.50mm x 2.50mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340
- Longer rods +5.0mm

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-FOR-002L-9200	92.00mm	12.8:1	84.00mm	133.50mm	24.00mm	32.25mm	+0.25	2234cc	1.30mm x 92.50mm
S-FOR-003L-9150	91.50mm	9.2:1	84.00mm	133.50mm	24.00mm	32.25mm	+0.25	2209cc	1.30mm x 92.50mm
S-FOR-003L-9200	92.00mm	9.2:1	84.00mm	133.50mm	24.00mm	32.25mm	+0.25	2234cc	1.30mm x 92.50mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

HONDA

DIAMOND PISTONS / H-BEAM RODS / BILLET CRANK.

K20 - N/A

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 material for High HP applications
- Radius domes to eliminate hot spots and help flame spreading
- Side gas ports for better ring seal
- Premium 8620 series pins from 1018 mild steel
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

H-Beam Connecting rods w/ Ribbed pin end
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Lipped cap relief for improved big-end integrity
- Shot Peening for improved fatigue life
- Multi Stage Heat Treat for maximum strength
- Bend and twist is tightly controlled
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-HON-004ULN-Std	86.00mm	12:1	93.00mm	135.50mm	22.00mm	30.00mm	-0.00	2161cc	0.63mm x 87.00mm
S-HON-004ULN-050	86.50mm	12:1	93.00mm	135.50mm	22.00mm	30.00mm	-0.00	2186cc	0.63mm x 87.00mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS / HD RODS / BILLET CRANK.

K20 - TURBO

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-HON-002ULT-Std	86.00mm	9.2:1	93.00mm	135.50mm	22.00mm	30.00mm	-0.00	2161cc	1.00mm x 87.00mm
S-HON-002ULT-050	86.50mm	9.3:1	93.00mm	135.50mm	22.00mm	30.00mm	-0.00	2211cc	1.00mm x 87.00mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS / H-BEAM RODS / BILLET CRANK.

F20 - N/A

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 material for High HP applications
- Radius domes to eliminate hot spots and help flame spreading
- Side gas ports for better ring seal
- Premium 8620 series pins from 1018 mild steel
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

H-Beam Connecting rods w/ Ribbed pin end
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Lipped cap relief for improved big-end integrity
- Shot Peening for improved fatigue life
- Multi Stage Heat Treat for maximum strength
- Bend and twist is tightly controlled
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-HON-007ULT-Std	87.00mm	12.1:1	96.50mm	146.75mm	23.00mm	28.98mm	+0.08	2295cc	1.00mm x 89.00mm
S-HON-007ULT-050	87.50mm	12.2:1	96.50mm	146.75mm	23.00mm	28.98mm	+0.08	2321cc	1.00mm x 89.00mm

* Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS / HD RODS / BILLET CRANK.

F20 - TURBO

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-HON-006ULT-Std	87.00mm	9.35:1	96.50mm	146.75mm	23.00mm	28.98mm	+0.08	2295cc	1.00mm x 89.00mm
S-HON-006ULT-050	87.50mm	9.45:1	96.50mm	146.75mm	23.00mm	28.98mm	+0.08	2321cc	1.00mm x 89.00mm

* Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

EVO 4-9 4G63 (7-Bolts)

Diamond Pistons
- Pistons made from 2618 for High HP/Boost applications
- Upgraded Tool steel H-13 alloy pins (wall thick. 5.72mm)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

Supersport Pistons
- 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
- Side gas ports for better ring seal
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

Billet Crankshaft
- Manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Connecting Rods
- AMPCO 18 bushings for excellent resistance to wear and fatigue
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- Heavy Duty & Standard Series made from 4340 High Tensile Steel
- Pro Series made from 817M40T – EN24T for maximum durability
- Heavy Duty Series designed for High HP-Boost applications and Pro Series for Extreme projects.

Important Notes:
- All Compression ratio's calculated with gasket thickness 1.00mm x 86.30mm bore.
- Heavy Duty & Standard series rods comes with ARP2000 cap fasteners
- Pro Series rods comes with ARP L19 cap fasteners
- Optional ARP L19 (4AJ1.500-6SU) or ARP 625+ (300-6704) cap fasteners available as an upgrade.
- ATHENA MLS or O-Ring head gaskets are available in various thicknesses to increase or decrease the Comp.Ratio .

88.0MM X 150.0MM W/ BILLET CRANKSHAFT

CRANKSHAFT P/N	CONNECTING RODS	CONNECTING RODS DESC.	PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO 47CC	COMP. RATIO 43CC	DOME CC'S
C-MIT-001L	R-MIT-002-H	Standard Series - H-Beam	Supersport	42401-850	85.00mm	8.5:1	9.0:1	-12.40
	R-MIT-002-I	Heavy Duty Series - I-Beam	Supersport	42401-855	85.50mm	8.5:1	9.0:1	-13.20
	R-MIT-002-IP	Pro Series - I-Beam	Supersport	42401-860	86.00mm	8.5:1	9.0:1	-14.00
			Diamond	22408-850	85.00mm	8.55:1	9.0:1	-12.3
			Diamond	22408-855	85.50mm	8.65:1	9.15:1	-12.3
			Diamond	22408-860	86.00mm	8.75:1	9.25:1	-12.3
			Diamond	22401-850	85.00mm	9.00:1	9.65:1	-8.00
			Diamond	22401-855	85.50mm	9.15:1	9.75:1	-8.00
			Diamond	22401-860	86.00mm	9.25:1	9.85:1	-8.00
			Diamond	22409-850	85.00mm	10.1:1	10.85:1	-1.00
			Diamond	22409-855	85.50mm	10.2:1	10.95:1	-1.00
– Head cc's : Evo 4-7 = 47.00 / Evo 8-9 =43.00			Diamond	22409-860	86.00mm	10.3:1	11.1:1	-1.00

88.0MM X 156.0MM W/ BILLET CRANKSHAFT

CRANKSHAFT P/N	CONNECTING RODS	CONNECTING RODS DESC.	PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO 47CC	COMP. RATIO 43CC	DOME CC'S
C-MIT-001L	R-MIT-007-I	Heavy Duty Series - I-Beam	Diamond	22402-850	85.00mm	8.6:1	9.0:1	-11.8
	R-MIT-007-IP	Pro Series - I-Beam	Diamond	22402-855	85.50mm	8.7:1	9.1:1	-11.8
			Diamond	22402-860	86.00mm	8.8:1	9.2:1	-11.8
			Diamond	22410-850	85.00mm	9.0:1	9.6:1	-8.0
			Diamond	22410-855	85.50mm	9.1:1	9.7:1	-8.0
			Diamond	22410-860	86.00mm	9.2:1	9.8:1	-8.0
			Diamond	22411-850	85.00mm	10:01	10.8:1	-1.0
			Diamond	22411-855	85.50mm	10.1:1	10.9:1	-1.0
– Head cc's : Evo 4-7 = 47.00 / Evo 8-9 =43.00			Diamond	22411-860	86.00mm	10.2:1	11:01	-1.0

94.0MM X 150.0MM W/ BILLET CRANKSHAFT

CRANKSHAFT P/N	CONNECTING RODS	CONNECTING RODS DESC.	PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO 47CC	COMP. RATIO 43CC	DOME CC'S
C-MIT-003L	R-MIT-002-H	Standard Series - H-Beam	Diamond	22412-850	85.00mm	8.6:1	9.0:1	-16.5
	R-MIT-002-I	Heavy Duty Series - I-Beam	Diamond	22412-855	85.50mm	8.7:1	9.1:1	-16.5
	R-MIT-002-IP	Pro Series - I-Beam	Diamond	22412-860	86.00mm	8.8:1	9.2:1	-16.5
			Diamond	22403-850	85.00mm	9.0:1	9.5:1	-12.3
			Diamond	22403-855	85.50mm	9.0:1	9.5:1	-12.3
			Diamond	22403-860	86.00mm	9.0:1	9.5:1	-12.3
			Diamond	22413-850	85.00mm	10.1:1	10.8:1	-4.5
			Diamond	22413-855	85.50mm	10.2:1	10.9:1	-4.5
– Head cc's : Evo 4-7 = 47.00 / Evo 8-9 =43.00			Diamond	22413-860	86.00mm	10.3:1	11.0:1	-4.5

94.0MM X 156.0MM W/ BILLET CRANKSHAFT

CRANKSHAFT P/N	CONNECTING RODS	CONNECTING RODS DESC.	PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO 47CC	COMP. RATIO 43CC	DOME CC'S
C-MIT-003L	R-MIT-007-I	Heavy Duty Series - I-Beam	Diamond	22414-850	85.00mm	8.6:1	9.0:1	-16.5
	R-MIT-007-IP	Pro Series - I-Beam	Diamond	22414-855	85.50mm	8.7:1	9.1:1	-16.5
			Diamond	22414-860	86.00mm	8.8:1	9.2:1	-16.5
			Diamond	22404-850	85.00mm	9.1:1	9.6:1	-11.8
			Diamond	22404-855	85.50mm	9.2:1	9.7:1	-11.8
			Diamond	22404-860	86.00mm	9.3:1	9.8:1	-11.8
			Diamond	22415-850	85.00mm	10.1:1	10.8:1	-4.5
			Diamond	22415-855	85.50mm	10.2:1	10.9:1	-4.5
– Head cc's : Evo 4-7 = 47.00 / Evo 8-9 =43.00			Diamond	22415-860	86.00mm	10.3:1	11.0:1	-4.5

100MM X 150.0MM W/ BILLET CRANKSHAFT

CRANKSHAFT P/N	CONNECTING RODS	CONNECTING RODS DESC.	PISTON SERIES	PART NUMBER	BORE SIZE	COMP. RATIO 47CC	COMP. RATIO 43CC	DOME CC'S
C-MIT-002L	R-MIT-002-H	Standard Series - H-Beam	Diamond	22407-850	85.00mm	9.4:1	9.9:1	-11.8
	R-MIT-002-I	Heavy Duty Series - I-Beam	Diamond	22407-855	85.50mm	9.5:1	10:01	-11.8
	R-MIT-002-IP	Pro Series - I-Beam	Diamond	22407-860	86.00mm	9.6:1	10.1:1	-11.8
			Diamond	22416-850	85.00mm	9.8:1	10.5:1	-8.0
			Diamond	22416-855	85.50mm	9.9:1	10.6:1	-8.0
– Head cc's : Evo 4-7 = 47.00 / Evo 8-9 =43.00			Diamond	22416-860	86.00mm	10:01	10.7:1	-8.0

4G63 with 4G64 BLOCK

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-MIT-003LT-Std	87.00mm	8.5:1	100.0mm	150.00mm	22.00mm		-0.28	2378cc	1.00mm x 86.30mm
S-MIT-003LT-050	87.50mm	8.5:1	100.0mm	150.00mm	22.00mm		-0.28	2405cc	1.00mm x 86.30mm

*Optional ARP L19 or 625+ cap fasteners and Pro Series 817M40 Alloy-Steel Connecting rods available as an upgrade

DIAMOND PISTONS / HD RODS / BILLET CRANK.

4B11 EVO 10

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel EN24T

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-MIT-007LT-STD	86.00mm	9.0:1	94.00mm	143.71mm	23.00mm	29.21mm	-0.08	2184cc	1.00mm x 87.00mm
S-MIT-007LT-050	86.50mm	9.1:1	94.00mm	143.71mm	23.00mm	29.21mm	-0.08	2210cc	1.00mm x 87.00mm

* Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

NISSAN

DIAMOND PISTONS / HD RODS / BILLET CRANK.

SR20 DET/DE

Crankshaft manufactured from 4340 Precision Billet Steel
- Knife edged counterweights improve crankshaft aerodynamics
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-NIS-001LT-050	86.50mm	9.0:1	91.00mm	136.30mm	22.00mm	29.35mm	-0.10	2139cc	1.10mm x 87.50mm
S-NIS-001LT-100	87.00mm	9.0:1	91.00mm	136.30mm	22.00mm	29.35mm	-0.10	2164cc	1.10mm x 87.50mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS/PRO SERIES RODS/BILLET CRANK.

VR38 DETT GT-R

Crankshaft Manufactured from 4340 Precision Billet Steel
- Aero-Wing counterweights improve crankshafts aerodynamics
- "High-Speed" oiling system
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

* Fully system balanced and ready to install

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

Pro Series 817M40 Alloy-Steel Rods for extra rigidity
- ARP L19 rod bolts rated to 260.000psi (3/8")
- Non-Tapered pin end
- AMPCO 18 bushing with radial groove
- Dual grooves in thrust face for weight reduction
- Shot Peening for improved fatigue life
- Multi Stage Heat Treat for maximum strength
- Bend and twist is tightly controlled

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-NIS-002-Grade 1	95.50mm	9.5:1	94.40mm	165.00mm	23.00mm	31.25mm	-0.55	4057cc	0.96mm x 96.00mm
S-NIS-002-Grade 2	95.50mm	9.5:1	94.40mm	165.00mm	23.00mm	31.25mm	-0.55	4057cc	0.96mm x 96.00mm
S-NIS-002-Grade 3	95.50mm	9.5:1	94.40mm	165.00mm	23.00mm	31.25mm	-0.55	4057cc	0.96mm x 96.00mm
S-NIS-002-300	98.50mm	9.4:1	94.40mm	165.00mm	23.00mm	31.25mm	-0.55	4316cc	0.96mm x 100.0mm
S-NIS-002-350	99.00mm	9.5:1	94.40mm	165.00mm	23.00mm	31.25mm	-0.55	4360cc	0.96mm x 100.0mm
S-NIS-002-400	99.50mm	9.6:1	94.40mm	165.00mm	23.00mm	31.25mm	-0.55	4404cc	0.96mm x 100.0mm
S-NIS-002-450	100.0mm	9.7:1	94.40mm	165.00mm	23.00mm	31.25mm	-0.55	4448cc	0.96mm x 100.0mm

*Optional ARP 625+ cap fasteners (P/N 300-6704) available as an upgrade.

*Fully system balanced and ready to install

OPEL / VAUXHALL

DIAMOND PISTONS / I-BEAM RODS / BILLET CRANK.

1.6L TURBO - OPC / VXR Z16LET

Crankshaft manufactured from 4340 Precision Billet Steel
- OEM design counterweights
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 2618 for High HP/Boost applications
- Premium 8620 series pins from 1018 mild steel
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Premium 1.00mm x 1.20mm x 2.80mm ring package included
- Support rail for special application

I-Beam Connecting rods for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-OPE-002LT-Std	79.00mm	8.9:1	89.00mm	129.75mm	19.00mm	24.25mm	-0.00	1745cc	1.27mm x 80.00mm
S-OPE-002LT-050	79.50mm	9.0:1	89.00mm	129.75mm	19.00mm	24.25mm	-0.00	1767cc	1.27mm x 80.00mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

SUPERSPORT PISTONS / H-BEAM RODS / BILLET CRANK.

2.0L 16v C20 XE (PISTON 2-RING)

Crankshaft manufactured from 4340 Precision Billet Steel
- Undercut Counterweights reduce weight and rotating mass
- "High-Speed" oiling system
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 4032-T6 High-Silicon/Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets
- X-Style Skirt
- Premium 1.00mm x 2.80mm ring package included

H-Beam Connecting rods w/ Ribbed pin end
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Lipped cap relief for improved big-end integrity
- Shot Peening for improved fatigue life
- Multi Stage Heat Treat for maximum strength
- Bend and twist is tightly controlled
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-OPE-001LN-050	86.50mm	12.4:1	91.00mm	143.00mm	21.00mm	27.75mm	-0.05	2139cc	1.00mm x 87.50mm
S-OPE-001LN-100	87.00mm	12.4:1	91.00mm	143.00mm	21.00mm	27.75mm	-0.05	2164cc	1.00mm x 87.50mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS / I-BEAM RODS / BILLET CRANK.

2.0L 16v C20 TURBO

Crankshaft manufactured from 4340 Precision Billet Steel
- Undercut Counterweights reduce weight and rotating mass
- "High-Speed" oiling system
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 2618 for High HP/Boost applications
- Premium 8620 series pins from 1018 mild steel
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

I-Beam Connecting rods for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-OPE-001LT-050	86.50mm	8.85:1	91.00mm	143.00mm	21.00mm	27.80mm	-0.00	2139cc	1.00mm x 87.50mm
S-OPE-001LT-100	87.00mm	8.85:1	91.00mm	143.00mm	21.00mm	27.80mm	-0.00	2164cc	1.00mm x 87.50mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS / I-BEAM RODS / BILLET CRANK.

2.0L 16v Z20 TURBO

Crankshaft manufactured from 4340 Precision Billet Steel
- Undercut Counterweights reduce weight and rotating mass
- "High-Speed" oiling system
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 2618 for High HP/Boost applications
- Premium 8620 series pins from 1018 mild steel
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Premium 1.00mm x 1.20mm x 2.80mm ring package included

I-Beam Connecting rods for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-OPE-003LT-050	86.50mm	8.8:1	91.00mm	143.00mm	21.00mm	27.80mm	-0.00	2139cc	1.00mm x 87.50mm
S-OPE-003LT-100	87.00mm	8.8:1	91.00mm	143.00mm	21.00mm	27.80mm	-0.00	2164cc	1.00mm x 87.50mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

SUBARU

DIAMOND PISTONS / HD RODS / BILLET CRANK.

EJ20 / EJ205 WRX-STi (1998-UP)

Crankshaft manufactured from 4340 Precision Billet Steel
- Gun drilled crank pin and counterweights
- Dual passage - straight through oil feeding, Each journal having two main sources of oil feed
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Pro-Select Total Seal 1.00mm x 1.20mm x 2.00mm ring set
- Support rail for special application

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-SUB-001UL-Std	92.00mm	8.5:1	79.00mm	130.45mm	23.00mm	30.68mm	-0.32	2101cc	0.60mm x 94.00mm
S-SUB-001UL-050	92.50mm	8.5:1	79.00mm	130.45mm	23.00mm	30.68mm	-0.32	2124cc	0.60mm x 94.00mm
S-SUB-001UL-100	93.00mm	8.5:1	79.00mm	130.45mm	23.00mm	30.68mm	-0.32	2147cc	0.60mm x 94.00mm

*Optional ARP L19 (P/N 4AJ1.500-6SU) or ARP 625+ (P/N 300-6704) cap fasteners and Pro Series 817M40 Alloy-Steel connecting rods (R-SUB-001-IP) available as an upgrade.

4032-T6 PISTONS ALLOY- H-BEAM RODS - BILLET CRANK.

Crankshaft manufactured from 4340 Precision Billet Steel
- Gun drilled crank pin and counterweights
- Dual passage - straight through oil feeding,Each journal having two main sources of oil feed
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 4032-T6 High-Silicon / Low-Expansion Alloy
- 9310 Alloy wrist pins / Cylindrical shape
- Gas pressure accumulator groove for better ring seal
- Anti-detonation grooves to protect the first ring
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Round Style Skirt
- Side gas ports for better ring seal
- Premium 1.00mm x 2.80mm ring package included

HD Series Connecting rods H-Beam Shape
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Lipped cap relief for improved big-end integrity
- Shot Peening for improved fatigue life
- Multi Stage Heat Treat for maximum strength
- Bend and twist is tightly controlled
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-SUB-005UL-Std	92.00mm	8.5:1	79.00mm	130.45mm	23.00mm	30.70mm	-0.35	2101cc	1.00mm x 94.00mm
S-SUB-005UL-050	92.50mm	8.5:1	79.00mm	130.45mm	23.00mm	30.70mm	-0.35	2124cc	1.00mm x 94.00mm

*Optional ARP L19 (P/N 4AJ1.500-6SU) or ARP 625+ (P/N 300-6704) cap fasteners available as an upgrade.
*Pro Series 817M40 Alloy-Steel or HD Series I-Beam Connecting rods available as an upgrade (P/N R-SUB-001-IP / R-SUB-001-I)

EJ25 / EJ257 WRX-STi (2004-UP)

Crankshaft manufactured from 4340 Precision Billet Steel
- Gun drilled crank pin and counterweights
- Dual passage - straight through oil feeding, Each journal having two main sources of oil feed
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Pro-Select Total Seal 1.00mm x 1.20mm x 2.00mm ring set
- Support rail for special application

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-SUB-003UL-Std	99.50mm	9.0:1	83.00mm	130.45mm	23.00mm	28.67mm	-0.38	2582cc	1.30mm x 101.0mm
S-SUB-003UL-025	99.75mm	9.0:1	83.00mm	130.45mm	23.00mm	28.67mm	-0.38	2556cc	1.30mm x 101.0mm
S-SUB-003UL-050	100.0mm	9.0:1	83.00mm	130.45mm	23.00mm	28.67mm	-0.38	2608cc	1.30mm x 101.0mm

*With 0,60mm gasket the Comp. Ratio increases to 9.6:1
*Optional ARP L19 (P/N 4AJ1.500-6SU) or ARP 625+ (P/N 300-6704) cap fasteners and Pro Series 817M40 Alloy-Steel Con-rods, available as an upgrade (P/N R-SUB-001-IP)

DIAMOND PISTONS / HD RODS / BILLET CRANK.

3.3L EG33 (6-Cyl.) ONLY FOR RESLEEVED ENGINES OF 99.50MM / 100.00MM DIAM.

Crankshaft manufactured from 4340 Precision Billet Steel
- Gun drilled crank pin and counterweights
- Dual passage - straight through oil feeding, Each journal having two main sources of oil feed
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Molly Skirt coating for friction loss and skirt wear protection
- Pro-Select Total Seal 1.00mm x 1.20mm x 2.00mm ring set
- Support rail for special application

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-SUB-004UL-99.50	99.50mm	9.0:1	79.00mm	130.45mm	23.00mm	30.68mm	-0.32	3686cc	1.30mm x 100.0mm

*Optional ARP L19 (P/N 4AJ1.500-6SU) or 625+ (P/N 300-6704) cap fasteners and Pro Series 817M40 Alloy-Steel Con-rods available as an upgrade (P/N R-SUB-001-IP)

TOYOTA

DIAMOND PISTONS / HD RODS / BILLET CRANK.

3SGTE CELICA

Crankshaft manufactured from 4340 Precision Billet Steel
- OEM design counterweights
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Premium 1.00mm x 1.20mm x 2.80mm ring package included
- Support rail for special application

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-TOY-001UL-020	86.20mm	8.9:1	93.00mm	138.00mm	22.00mm	31.50mm	-0.00	2171cc	1.42mm x 87.00mm
S-TOY-001UL-050	86.50mm	9.0:1	93.00mm	138.00mm	22.00mm	31.50mm	-0.00	2186cc	1.42mm x 87.00mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS / HD RODS / BILLET CRANK.

5SFE BLOCK w/ 3SGTE HEAD

Crankshaft manufactured from 4340 Precision Billet Steel
- OEM design counterweights
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- 3SGTE rod journal 48.00mm diam.

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Premium 1.00mm x 1.20mm x 2.80mm ring package included
- Support rail for special application

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO 18 bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-TOY-002L-STD	87.00mm	9.0:1	100.0mm	138.00mm	22.00mm	28.00mm	-0.00	2378cc	1.00mm x 88.00mm
S-TOY-002L-050	87.50mm	9.0:1	100.0mm	138.00mm	22.00mm	28.00mm	-0.00	2405cc	1.00mm x 88.00mm

*Optional ARP L19 cap fasteners (P/N 4AJ1.500-6SU) available as an upgrade.

DIAMOND PISTONS / HD RODS / BILLET CRANK.

2JZ SUPRA

Crankshaft manufactured from 4340 Precision Billet Steel
- Undercut Counterweights reduce weight and rotating mass
- Multi-Stage Heat Treatment for superior wear resistance
- Nitride process for hardening
- Shot Peening for improved fatigue resistance
- Micro-Polishing for longer bearing life
- Journal radium disperse load stress
- "High-Speed" oiling system

Pistons made from 2618 for High HP/Boost applications
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54)
- 3D milling on piston crowns for ready to install finish
- Offset pins for quiet operation
- Side gas ports for better ring seal
- Premium 1.00mm x 1.20mm x 2.80mm ring package included
- Support rail for special application

HD Series Rods I-Beam Shape for extra rigidity
- ARP 2000 rod bolts rated to 220.000psi (3/8")
- AMPCO bushing with radial groove
- Shot Peening for improved fatigue life
- Bend and twist is tightly controlled
- Multi Stage Heat Treat for maximum strength
- 2 Piece forgings from High Tensile Steel 4340

PART NUMBER	BORE SIZE	COMP. RATIO	STROKE	ROD C/C	PIN DIAM.	COMP. HEIGHT	DECK CLEAR.	DISPLACEMENT	GASKET THICKNESS
S-TOY-003UL-050	86.50mm	9.0:1	94.00mm	142.00mm	22.00mm	29.97mm	-0.02	3314cc	1.00mm x 87.00mm
S-TOY-003UL-100	87.00mm	9.0:1	94.00mm	142.00mm	22.00mm	29.97mm	-0.02	3353cc	1.00mm x 87.00mm

*Optional ARP 625+ cap fasteners and Pro Series 817M40 Alloy-Steel Connecting rods available as an upgrade.

FORGED PISTONS

After years of developing our custom-made pistons for our stroker kits, we have finally introduced the ZRP line of pistons.

They are offered in our preferred performance “recipes” and divided to two main categories to choose from, based on the customer’s needs.

Choose your pistons depending on your project and get more power and reliability for your money!

SUPERSPORT SERIES 4032-T6 MATERIAL

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 then OE bore clearances.

We have chosen Round Style Skirt design for Turbo Application and X-Style skirt for Natural aspirated engines, with over size 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, gas pressure accumulator groove for better ring seal and vibration relieve. 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"

DIAMOND PISTONS 2618 MATERIAL

The high-performance pistons series, called "Diamond Series", are engineered with only one thing in mind: WINNING RACES. These are manufactured from Diamond Racing, in the USA, from 2618 alloy. The Diamond racing company is known from the late 60s to produce the highest quality engine parts around. The past 2 decades Diamond has solely dedicated itself to manufacturing forged pistons.

With all state of the art machinery they offer customers the state of the industry in machining. All Diamond pistons have 3D Under crown Milling operations that are performed on the underside of the piston crown to achieve uniform crown thickness, eliminate stress risers in the weakest areas and to lighten the piston. In some cases, the forging might not match the application ideally, so it is milled to correct the differences.

The Coordinate Measuring Machine (CMM) is one of several sophisticated pieces of measuring and modeling apparatus used in Diamond's engineering department. The CMM provides very accurate measurements, measuring the location and details of valve pockets, for example, to within a .0001in. This laser scanner is used for modeling purposes, especially for scanning piston domes where it scans thousands of surface points in minutes. Developing the highest quality pistons in the industry by using the latest CNC machinery and computer software aids, as well as providing unmatched quality control. With these credentials it was only a matter of time before we decide that this is the firm to work with, for making unlimited horsepower!

Optional coatings offered per request:

Thermal barrier coating "Blast Off Bronze" / Moly Side-Skirt and Under-Crown coating "Stealth Black" / Hard anodized coating / Double diamond coating / PTFE coating, Hard anodized and Teflon seal coating

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

AUDI / VW

SUPERSPORT SERIES 4032-T6 ALLOY

1.4L TSI / TFSI (EA211)

4032-T6 High-Silicon / Low-Expansion alloy
- Gas pressure accumulator and Anti-Detonation grooves
- Round skirt style and 3D piston crown
- Over size and deeper valve pockets
- 9310 alloy wrist pins / Cylindrical shape
- Offset pins for quiet operation
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 212.00mm
- C/R Calculated w/ Gasket 0.65mm x 77.0mm
- Top Ring Down : 5.50mm
- Head cc's : 26.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
43701-765	76.50mm	10.0:1	10.0:1	29.00mm	75.60mm	144.00mm	19.00mm		-7.50	21-GNH07650	WP037
43701-770	77.00mm	10.0:1	10.0:1	29.00mm	75.60mm	144.00mm	19.00mm		-7.50	21-GNH07700	WP037

SUPERSPORT SERIES 4032-T6 ALLOY

1.8T 20v

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 piston
- 9310 alloy wrist pins / Cylindrical shape
- Offset pins for quiet operation
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 220.00mm
- C/R Calculated w/ Gasket 1.20mm x 82.5mm
- Top Ring Down : 8.0mm
- Head cc's : 44.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
43702-810	81.00mm	9.0:1	9.5:1	32.70mm	86.40mm	144.00mm	20.00mm	-0.10	-4.20	21-GNH08100	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	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	WP061

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

43703-815	81.50mm	9.0:1	9.5:1	29.50mm	92.80mm	144.00mm	20.00mm	-0.10	-9.00	21-GNH08150	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	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	WP061

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

DIAMOND PISTONS 2618 ALLOY

43703-815	81.50mm	9.0:1	9.5:1	29.49mm	92.80mm	144.00mm	20.00mm	-0.11	-9.00	21-GNH08150	G7872250155C
43703-825	82.50mm	9.0:1	9.5:1	29.49mm	92.80mm	144.00mm	20.00mm	-0.11	-10.5	21-GNH08250	G7872250155C
43703-830	83.00mm	9.0:1	9.5:1	29.49mm	92.80mm	144.00mm	20.00mm	-0.11	-10.4	21-GNH08300	G7872250155C

SUPERSPORT SERIES 4032-T6 ALLOY

1.8L TSI / TFSI (EA888)

4032-T6 High-Silicon / Low-Expansion alloy
- Gas pressure accumulator groove
- Anti-Detonation grooves
- Round skirt style and 3D piston crown
- Over size and deeper valve pockets
- 9310 alloy wrist pins / Cylindrical shape
- Offset pins for quiet operation
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 220.00mm
- C/R Calculated w/ Gasket 0.90mm x 83.0mm
- Top Ring Down : 6.50mm
- Head cc's :

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
43704-825	82.50mm	9.6:1	9.6:1	29.70mm	84.10mm	148.00mm	21.00mm	-0.25	+0.36	21-GNH08250	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	WP034

DIAMOND PISTONS 2618 ALLOY

1.9L & 2.0L TDI DIESEL

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Flat Top design & Round skirt style
- Total Seal Pro-Select ring set 1.00mmx1.20mmx2.00mm
- Tool Steel H-13 alloy pins (Rockwell hardness around Rc54) Wall Thick. 6.65mm
- Offset pins for quiet operation
- Block Height : 296.00mm
- C/R Calculated w/ Gasket 1.45mm
- Top Ring Down : 10.10mm
- Head cc's : 0.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23704-820	82.00mm		18:1	45.79mm	95.50mm	144.00mm	26.00mm		-21.50	CUSTOM-CS-04	H10232500260C

SUPERSPORT SERIES 4032-T6 ALLOY

2.0L TFSI / TSI EA888 Chain Driven / EA113 Belt Driven

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

- 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 : 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

* Pistons are designed to be used in all engine configurations with 21.00mm pin

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
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	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	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	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	WP061

2.0L Stroker 95.20mm Crank. (EA888 Chain 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	WP061

DIAMOND PISTONS 2618 ALLOY

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets

- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included

- 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

* Pistons are designed to be used in all engine configurations with 21.00mm pin

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23701-825	82.50mm	9.4:1 / 9.5:1	9.6:1 / 9.8:1	29.50mm	92.80mm	144.00mm	21.00mm	-0.10	-7.60	21-GNH08250	G8272250180C
23701-830	83.00mm	9.4:1 / 9.5:1	9.6:1 / 9.8:1	29.50mm	92.80mm	144.00mm	21.00mm	-0.10	-8.30	21-GNH08300	G8272250180C

* Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm

DIAMOND PISTONS 2618 ALLOY

2.5L TFSI as TT-RS

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Side gas ports for better ring seal
- Round skirt style
- Premium 1.00mm x 1.20mm x 2.80mm rings included

- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Offset pins for quiet operation
- Molly Skirt coating

- Block Height : 220.00mm
- C/R Calculated w/ Gasket 0.85mm x 83.0mm
- Top Ring Down : 6.30mm
- Head cc's : 46.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23702-825	82.50mm	9.4:1	10.0:1	29.50mm	92.80mm	144.00mm	21.00mm	-0.10	-7.60	21-GNH08250	G8272250180C
23702-830	83.00mm	9.4:1	10.0:1	29.50mm	92.80mm	144.00mm	21.00mm	-0.10	-8.30	21-GNH08300	G8272250180C

* Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm

DIAMOND PISTONS 2618 ALLOY

3.2L R32 24v

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Offset pins for quiet operation
- Tool Steel H-13 alloy pins (Rockwell hardness around Rc54) Wall Thick. 6.65mm

- Side gas ports for better ring seal
- Over size and deeper valve pockets
- Premium 1.00mm x 1.20mm x 2.80mm rings included

- Block Height : 252.40mm
- C/R Calculated w/ Gasket 0.65mm x 85.0mm
- Top Ring Down :
- Head cc's : 39.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23703-845	84.50mm	9.0:1	10.9:1	34.70mm	95.90mm	164.00mm	20.00mm	-0.30	-23.00	21-GNH08450	H7872250200C

BMW

SUPERSPORT SERIES 4032-T6 ALLOY

1.8L M40 / M42

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 : 212.00mm
- C/R Calculated w/ Gasket 1.75mm x 87.0mm
- Top Ring Down : 6.80mm
- Head cc's : 33.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
41101-840	84.00mm	8.8:1	10.0:1	31.50mm	81.00mm	139.95mm	22.00mm	-0.05	-14.30	21-GNH08400	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	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	WP098

SUPERSPORT SERIES 4032-T6 ALLOY

2.5L M50 Single Vanos

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 : 209.95mm
- C/R Calculated w/ Gasket 1.70mm x 85.0mm
- Top Ring Down : 7.50mm
- Head cc's : 33.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
41103-840	84.00mm	9.0:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	-0.45	-12.50	21-GNH08400	WP098
41103-845	84.50mm	9.0:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	-0.45	-13.20	21-GNH08450	WP098
41103-850	85.00mm	9.0:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	-0.45	-13.90	21-GNH08500	WP098

SUPERSPORT SERIES 4032-T6 ALLOY

2.5L M52 Single Vanos

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 : 210.80mm
- C/R Calculated w/ Gasket 0.70mm x 85.0mm
- Top Ring Down : 7.50mm
- Head cc's : 36.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
41105-840	84.00mm	8.3:1	10.5:1	32.50mm	75.00mm	140.00mm	22.00mm	-0.80	-12.50	21-GNH08400	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	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	WP098

SUPERSPORT SERIES 4032-T6 ALLOY

2.8L M50 / M52B / M54B

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 : 210.80mm
- C/R Calculated w/ Gasket 0.70mm x 85.0mm
- Top Ring Down : 7.50mm
- Head cc's : 35.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
41102-840	84.00mm	8.7:1	10.2:1	32.50mm	84.00mm	135.00mm	22.00mm	-1.30	-12.50	21-GNH08400	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	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	WP098

SUPERSPORT SERIES 4032-T6 ALLOY

3.2L M3 S54 E46

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 : 217.00mm
- C/R Calculated w/ Gasket 0.64mm x 88.0mm
- Top Ring Down : 8.00mm
- Head cc's : 33.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
41104-870	87.00mm	9.0:1	11.3:1	32.30mm	91.00mm	139.00mm	21.00mm	-0.20	-29.20	21-GNH08400	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	WP098

CITROEN

SUPERSPORT SERIES 4032-T6 ALLOY

1.6L TURBO DS3 - EP6

4032-T6 High-Silicon / Low-Expansion alloy
- Gas pressure accumulator and Anti-Detonation grooves
- Round skirt style
- Over size and deeper valve pockets
- 9310 alloy wrist pins / Cylindrical shape
- Offset pins for quiet operation
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 210.50mm
- C/R Calculated w/ Gasket 0.90mm x 78.0mm
- Top Ring Down :
- Head cc's : 37.60

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

DIAMOND PISTONS 2618 ALLOY

1.6L TURBO DS3 - EP6

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 210.50mm
- C/R Calculated w/ Gasket 0.90mm x 78.0mm
- Top Ring Down :
- Head cc's : 37.60

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22901-770	77.00mm	10.0:1	10.5:1	28.44mm	85.80mm	138.55mm	20.00mm	-	+0.1	21-GNH07700	G7872000200C
22901-775	77.50mm	10.0:1	10.5:1	28.44mm	85.80mm	138.55mm	20.00mm	-	+0.1	21-GNH07750	G7872000200C

SUPERSPORT SERIES 4032-T6 ALLOY

1.6L 16v TU5J4 for STROKER CRANK. 89.00mm

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
- 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 : 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

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
42902-800	80.00mm	13.6:1	10.8:1	24.75mm	89.00mm	137.75mm	18.00mm	0.00	+4.20	21-GNH08000	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	WP035

SUPERSPORT SERIES 4032-T6 ALLOY

1.6L 16v TU5JP4 for STROKER CRANK. 89.00mm (C2 HEAD)

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
- 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 : 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

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
42902-800	80.00mm	12.5:1	10.8:1	24.75mm	89.00mm	137.75mm	18.00mm	0	+4.20	21-GNH08000	WP099
42903-800	80.00mm	8.7:1	10.8:1	28.90mm	89.00mm	133.60mm	19.50mm	0	-15.41	21-GNH08000	WP035

FIAT / LANCIA

SUPERSPORT SERIES 4032-T6 ALLOY

1.4L T-JET / 500 ABARTH / Engine 198A

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 1.5 x 1.2 x 2.0 rings included
- Block Height : 198.00mm
- C/R Calculated w/ Gasket 0.72mm x 73.0mm
- Top Ring Down : 6.40mm
- Head cc's : 14.30

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
41401-720	72.00mm	9.8:1	9.8:1	26.80mm	84.00mm	129.00mm	18.00mm	-0.20	-13.70	720XTZ-3	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	WP064

SUPERSPORT SERIES 4032-T6 ALLOY

2.0L DELTA INTEGRALE 16v / FIAT COUPE

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 : 229.00mm
- C/R Calculated w/ Gasket 1.60mm x 87.0mm
- Top Ring Down : 8.55mm
- Head cc's : 42.70

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
42001-840	84.00mm	8.5:1	8.0:1	38.90mm	90.00mm	145.00mm	22.00mm	-0.10	-13.30	21-GNH08400	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	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	WP122

FORD

DIAMOND PISTONS 2618 ALLOY

1.6L ECOBOOST SERIES

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 203.85mm
- C/R Calculated w/ Gasket 0.50mm x 79.75mm
- Top Ring Down : 6.35mm
- Head cc's : 35.50

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
21501-790	79.00mm	10.0:1	10.0:1	28.70mm	81.40mm	134.00mm	21.00mm	-0.45	-5.90	21-GNH07900	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade.

DIAMOND PISTONS 2618 ALLOY

2.0L ECOBOOST SERIES

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : -
- C/R Calculated w/ Gasket OEM
- Top Ring Down : 6.40mm
- Head cc's : 43.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
21502-875	87.50mm	10.0:1	10.1:1	32.76mm	83.10mm	155.90mm	22.50mm	-	-6.90	21-GNH08750	G8862500180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade.

SUPERSPORT SERIES 4032-T6 ALLOY

2.0L 16v COSWORTH (STROKER & N/A WRC Spec. w/ LONG RODS)

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 : 207.50mm
- C/R Calculated w/ Gasket 1.0mm x 92.50mm
- Top Ring Down : 7.20mm
- Head cc's : 45.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
41501-908	90.80mm	10.2:1	8.0:1	32.75mm	77.00mm	136.50mm	24.00mm	+0.25	-3.66 (FT)		WP022
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

DIAMOND PISTONS 2618 ALLOY

2.3L ECOBOOST SERIES

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 229.00mm
- C/R Calculated w/ Gasket 1.0mm x 89.0mm
- Top Ring Down : 6.40mm
- Head cc's : 53.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
21503-875	87.50mm	9.5:1	9.5:1	32.76mm	94.00mm	149.22mm	22.50mm	-	-6.41	21-GNH08750	G8862500180C
21503-880	88.00mm	9.5:1	9.5:1	32.76mm	94.00mm	149.22mm	22.50mm	-	-6.41	21-GNH08800	G8862500180C
21503-890	89.00mm	9.5:1	9.5:1	32.76mm	94.00mm	149.22mm	22.50mm	-	-6.41	21-GNH08900	G8862500180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade.

DIAMOND PISTONS 2618 ALLOY

3.5L V6 ECOBOOST SERIES

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : -
- C/R Calculated w/ Gasket 1.0mm x 92.50mm
- Top Ring Down : 7.62mm
- Head cc's : 56.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
21504-925	92.50mm	10:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-0.67		G9052250180C
21504-927	92.75mm	10:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-0.67		G9052250180C
21504-930	93.00mm	10:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-0.67		G9052250180C
21505-925	92.50mm	9.5:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-4.50		G9052250180C
21505-927	92.75mm	9.5:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-4.50		G9052250180C
21505-930	93.00mm	9.5:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-4.50		G9052250180C
21506-925	92.50mm	9.0:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-8.80		G9052250180C
21506-927	92.75mm	9.0:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-8.80		G9052250180C
21506-930	93.00mm	9.0:1	10:1	31.50mm	86.70mm	152.75mm	23.00mm	-	-8.80		G9052250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H9052250250C wall thick. 6.35mm

HONDA

DIAMOND PISTONS 2618 ALLOY

K20

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- N/A Pistons have radius domes to eliminate hot spots and help flame spreading
- Block Height : 212.00mm
- C/R Calculated w/ Gasket 0.63mm x 87.0mm
- Top Ring Down : 7.00mm
- Head cc's : 50.50

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
21601-860	86.00mm	8.8:1	11.7:1	30.00mm	86.00mm	138.90mm	22.00mm	-0.10	-9.0	21-GNH08600	G8662250180C
21601-865	86.50mm	8.9:1	11.7:1	30.00mm	86.00mm	138.90mm	22.00mm	-0.10	-9.0	21-GNH08650	G8662250180C
21602-860	86.00mm	11.2:1	11.7:1	30.00mm	86.00mm	138.90mm	22.00mm	-0.10	+6.0	21-GNH08600	G8662250180C
21602-865	86.50mm	11.3:1	11.7:1	30.00mm	86.00mm	138.90mm	22.00mm	-0.10	+6.0	21-GNH08650	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm

F20C / F22C

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Side gas ports for better ring seal
- N/A Pistons have radius domes to eliminate hot spots and help flame spreading
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 223.90mm
- C/R Calculated w/ Gasket 0.75mm x 89.0mm
- Top Ring Down : 6.00mm
- Head cc's : 52.50

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
21603-870	87.00mm	8.45:1	11:1	28.98mm	84.00mm	153.00mm	23.00mm	+0.08	-10.0	21-GNH08700	G9052250180C
21603-875	87.50mm	8.55:1	11:1	28.98mm	84.00mm	153.00mm	23.00mm	+0.08	-10.0	21-GNH08750	G9052250180C
21604-870	87.00mm	11:1	11:1	28.98mm	84.00mm	153.00mm	23.00mm	+0.08	+7.0	21-GNH08700	G9052250180C
21604-875	87.50mm	11.1:1	11:1	28.98mm	84.00mm	153.00mm	23.00mm	+0.08	+7.0	21-GNH08750	G9052250180C
21605-875	87.50mm	12.5:1	11:1	25.64mm	103.00mm	146.75mm	23.00mm	-0.01	+3.7	21-GNH08750	G9052250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H9052250250C wall thick. 6.35mm

MINI COOPER

SUPERSPORT SERIES 4032-T6 ALLOY

1.6L R56 TURBO (Prince - N12B16 / N14B16) - 4032 ALLOY

4032-T6 High-Silicon / Low-Expansion alloy
- Gas pressure accumulator and Anti-Detonation grooves
- Round skirt style
- Over size and deeper valve pockets
- 9310 alloy wrist pins / Cylindrical shape
- Offset pins for quiet operation
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 210.50mm
- C/R Calculated w/ Gasket 0.90mm x 78.0mm
- Top Ring Down :
- Head cc's : 37.60

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

DIAMOND PISTONS 2618 ALLOY

1.6L R56 TURBO (Prince - N12B16 / N14B16) - 2618 ALLOY

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 210.50mm
- C/R Calculated w/ Gasket 0.90mm x 78.0mm
- Top Ring Down :
- Head cc's : 37.60

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22901-770	77.00mm	10.0:1	10.5:1	28.44mm	85.80mm	138.55mm	20.00mm	-	+0.1	21-GNH07700	G7872000200C
22901-775	77.50mm	10.0:1	10.5:1	28.44mm	85.80mm	138.55mm	20.00mm	-	+0.1	21-GNH07750	G7872000200C

4G63 EVO 4-9

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 229.00mm
- Head cc's : Evo 4-7=47.00 / Evo 8-9 =43.00
- Top Ring Down : 8.30mm - The piston with
- Comp. Height 25.91mm have 6.75mm TRD
- C/R Calculated w/ Gasket 1.00mm x 86.30mm

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22408-850	85.00mm	8.55:1 / 9.0:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-12.3	21-GNH08500	G8662250180C
22408-855	85.50mm	8.65:1 / 9.15:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-12.3	21-GNH08550	G8662250180C
22408-860	86.00mm	8.75:1 / 9.25:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-12.3	21-GNH08600	G8662250180C
22401-850	85.00mm	9.0:1 / 9.65:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-8.0	21-GNH08500	G8662250180C
22401-855	85.50mm	9.15:1 / 9.75:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-8.0	21-GNH08550	G8662250180C
22401-860	86.00mm	9.25:1 / 9.85:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-8.0	21-GNH08600	G8662250180C
22409-850	85.00mm	10.1:1 / 10.85:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-1.0	21-GNH08500	G8662250180C
22409-855	85.50mm	10.2:1 / 10.95:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-1.0	21-GNH08550	G8662250180C
22409-860	86.00mm	10.3:1 / 11.1:1	8.8:1	34.93mm	88.00mm	150.00mm	22.00mm	-0.07	-1.0	21-GNH08600	G8662250180C
22402-850	85.00mm	8.61 / 9.0:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-11.8	21-GNH08500	G8662250180C
22402-855	85.50mm	8.7:1 / 9.1:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-11.8	21-GNH08550	G8662250180C
22402-860	86.00mm	8.8:1 / 9.2:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-11.8	21-GNH08600	G8662250180C
22410-850	85.00mm	9.0:1 / 9.6:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-8.0	21-GNH08500	G8662250180C
22410-855	85.50mm	9.1:1 / 9.7:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-8.0	21-GNH08550	G8662250180C
22410-860	86.00mm	9.2:1 / 9.8:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-8.0	21-GNH08600	G8662250180C
22411-850	85.00mm	10:1 / 10.8:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-1.0	21-GNH08500	G8662250180C
22411-855	85.50mm	10.1:1 / 10.9:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-1.0	21-GNH08550	G8662250180C
22411-860	86.00mm	10.2:1 / 11:1	8.8:1	28.83mm	88.00mm	156.00mm	22.00mm	-0.17	-1.0	21-GNH08600	G8662250180C
22412-850	85.00mm	8.6:1 / 9.0:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-16.5	21-GNH08500	G8662250180C
22412-855	85.50mm	8.7:1 / 9.1:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-16.5	21-GNH08550	G8662250180C
22412-860	86.00mm	8.8:1 / 9.2:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-16.5	21-GNH08600	G8662250180C
22403-850	85.00mm	9.0:1 / 9.5:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-12.3	21-GNH08500	G8662250180C
22403-855	85.50mm	9.0:1 / 9.5:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-12.3	21-GNH08550	G8662250180C
22403-860	86.00mm	9.0:1 / 9.5:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-12.3	21-GNH08600	G8662250180C
22413-850	85.00mm	10.1:1 / 10.8:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-4.5	21-GNH08500	G8662250180C
22413-855	85.50mm	10.2:1 / 10.9:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-4.5	21-GNH08550	G8662250180C
22413-860	86.00mm	10.3:1 / 11.0:1	8.8:1	31.88mm	94.00mm	150.00mm	22.00mm	-0.12	-4.5	21-GNH08600	G8662250180C
22414-850	85.00mm	8.6:1 / 9.0:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-16.5	21-GNH08500	G8662250180C
22414-855	85.50mm	8.7:1 / 9.1:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-16.5	21-GNH08550	G8662250180C
22414-860	86.00mm	8.8:1 / 9.2:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-16.5	21-GNH08550	G8662250180C
22404-850	85.00mm	9.1:1 / 9.6:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-11.8	21-GNH08500	G8662250180C
22404-855	85.50mm	9.2:1 / 9.7:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-11.8	21-GNH08550	G8662250180C
22404-860	86.00mm	9.3:1 / 9.8:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-11.8	21-GNH08550	G8662250180C
22415-850	85.00mm	10.1:1 / 10.8:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-4.5	21-GNH08500	G8662250180C
22415-855	85.50mm	10.2:1 / 10.9:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-4.5	21-GNH08550	G8662250180C
22415-860	86.00mm	10.3:1 / 11.0:1	8.8:1	25.91mm	94.00mm	156.00mm	22.00mm	-0.09	-4.5	21-GNH08550	G8662250180C
22407-850	85.00mm	9.4:1 / 9.9:1	8.8:1	28.83mm	100.0mm	150.00mm	22.00mm	-0.17	-11.8	21-GNH08500	G8662250180C
22407-855	85.50mm	9.5:1 / 10.0:1	8.8:1	28.83mm	100.0mm	150.00mm	22.00mm	-0.17	-11.8	21-GNH08550	G8662250180C
22407-860	86.00mm	9.6:1 / 10.1:1	8.8:1	28.83mm	100.0mm	150.00mm	22.00mm	-0.17	-11.8	21-GNH08600	G8662250180C
22416-850	85.00mm	9.4:1 / 9.9:1	8.8:1	28.83mm	100.0mm	150.00mm	22.00mm	-0.17	-8.0	21-GNH08500	G8662250180C
22416-855	85.50mm	9.5:1 / 10.0:1	8.8:1	28.83mm	100.0mm	150.00mm	22.00mm	-0.17	-8.0	21-GNH08550	G8662250180C
22416-860	86.00mm	9.6:1 / 10.1:1	8.8:1	28.83mm	100.0mm	150.00mm	22.00mm	-0.17	-8.0	21-GNH08600	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm.

MITSUBISHI

SUPERSPORT SERIES 4032-T6 ALLOY

4G63 EVO 4-9

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
- Side gas ports for better ring seal
- Premium 1.0 x 1.2 x 2.8 rings included

- Block Height : 229.00mm
- C/R Calculated w/ Gasket 1.00mm x 86.30mm
- Top Ring Down : 7.10mm
- Head cc's : 47.00 / 43.00 (Evo 8+9 =43.00)

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
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	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	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	WP122

DIAMOND PISTONS 2618 ALLOY

4B11 - EVO X (2008-UP)

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Molly Skirt coating for friction loss and skirt wear protection

- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included

- Block Height : 220.00mm
- C/R Calculated w/ Gasket : 1.00mm x 87.00mm
- Top Ring Down : 7.62mm
- Head cc's : 49.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22405-860	86.00mm	9.0:1	9.0:1	33.15mm	86.00mm	143.71mm	23.00mm	-0.14	-6.0	21-GNH08600	G9052250180C
22405-865	86.50mm	9.1:1	9.0:1	33.15mm	86.00mm	143.71mm	23.00mm	-0.14	-6.0	21-GNH08650	G9052250180C
22406-860	86.00mm	9.0:1	9.0:1	29.21mm	94.00mm	143.71mm	23.00mm	-0.08	-12.0	21-GNH08600	G9052250180C
22406-865	86.50mm	9.1:1	9.0:1	29.21mm	94.00mm	143.71mm	23.00mm	-0.08	-12.0	21-GNH08650	G9052250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H9052250250C wall thick. 6.35mm

NISSAN

DIAMOND PISTONS 2618 ALLOY

VR38 DETT GT-R

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Molly Skirt coating for friction loss and skirt wear protection
- Total Seal Pro-Select 1.20mm x 1.50mm x 3.00mm ring set included
- Side gas ports for better ring seal
- Tool steel H-13 alloy pins (Rockwell hardness around Rc54) Wall Thick. 6.35mm
- Round skirt style
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Block Height : 244.00mm
- C/R Calculated w/ Gasket 0.96mm x 96.00mm
- Top Ring Down : 6.60mm
- Head cc's : 67.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22601-955/1	95.50mm	9.0:1	9.0:1	34.29mm	88.40mm	165.00mm	23.00mm	-0.51	-0.86	09503760	H9052500250C
22601-955/2	95.50mm	9.0:1	9.0:1	34.29mm	88.40mm	165.00mm	23.00mm	-0.51	-0.86	09503760	H9052500250C
22601-955/3	95.50mm	9.0:1	9.0:1	34.29mm	88.40mm	165.00mm	23.00mm	-0.51	-0.86	09503760	H9052500250C
22601-985	98.50mm	9.5:1	9.0:1	34.29mm	88.40mm	165.00mm	23.00mm	-0.51	-0.86	09503878	H9052500250C
22601-990	99.00mm	9.6:1	9.0:1	34.29mm	88.40mm	165.00mm	23.00mm	-0.51	-0.86	09503898	H9052500250C
22601-995	99.50mm	9.6:1	9.0:1	34.29mm	88.40mm	165.00mm	23.00mm	-0.51	-0.86	09503917	H9052500250C
22601-100	100.0mm	9.7:1	9.0:1	34.29mm	88.40mm	165.00mm	23.00mm	-0.51	-0.86	09503937	H9052500250C
22602-955/1	95.50mm	9.5:1	9.0:1	31.24mm	94.40mm	165.00mm	23.00mm	-0.56	-0.86	09503760	H9052500250C
22602-955/2	95.50mm	9.5:1	9.0:1	31.24mm	94.40mm	165.00mm	23.00mm	-0.56	-0.86	09503760	H9052500250C
22602-955/3	95.50mm	9.5:1	9.0:1	31.24mm	94.40mm	165.00mm	23.00mm	-0.56	-0.86	09503760	H9052500250C
22602-985	98.50mm	9.4:1	9.0:1	31.24mm	94.40mm	165.00mm	23.00mm	-0.56	-6.50	09503878	H9052500250C
22602-990	99.00mm	9.5:1	9.0:1	31.24mm	94.40mm	165.00mm	23.00mm	-0.56	-6.50	09503898	H9052500250C
22602-995	99.50mm	9.6:1	9.0:1	31.24mm	94.40mm	165.00mm	23.00mm	-0.56	-6.50	09503917	H9052500250C
22602-100	100.0mm	9.7:1	9.0:1	31.24mm	94.40mm	165.00mm	23.00mm	-0.56	-6.50	09503937	H9052500250C

Important Requirement : Due to the uniqueness of the GTR's engine assembly, you are always required to specify the exact piston grades your engine requires . This information is labeled individually on each block by Nissan. This is required only for non-sleeved blocks.

SUPERSPORT SERIES 4032-T6 ALLOY

RB26DETT R32-R34

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
- Side gas ports for better ring seal
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 188.50mm
- C/R Calculated w/ Gasket 1.20mm x 87.00mm
- Top Ring Down : 8.40mm
- Head cc's : 66.50

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
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

DIAMOND PISTONS 2618 ALLOY

SR20 DET - STROKER CRANK. 91.00mm

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 211.25mm
- C/R Calculated w/ Gasket : 1.10mm x 87.50mm
- Top Ring Down : 8.30mm
- Head cc's : 45.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22603-865	86.50mm	9.0:1	8.5:1	29.35mm	91.00mm	136.30mm	22.00mm	-0.10	-14.50	21-GNH0865	G8662250180C
22603-870	87.00mm	9.0:1	8.5:1	29.35mm	91.00mm	136.30mm	22.00mm	-0.10	-15.00	21-GNH0870	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm

OPEL / VAUXHALL

SUPERSPORT SERIES 4032-T6 ALLOY

1.6L Z16LET / LEH

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 1.0 x 1.2 x 2.8 rings included
- Block Height : 198.50mm
- C/R Calculated w/ Gasket 1.27mm x 80.00mm
- Top Ring Down : 5.50mm
- Head cc's : 39.50

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

DIAMOND PISTONS 2618 ALLOY

1.6L Z16LET / LEH - STROKER CRANK. 89.00mm

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Block Height : 198.50mm
- C/R Calculated w/ Gasket 1.27mm x 80.00mm
- Top Ring Down : 5.45mm
- Head cc's : 39.50

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22701-790	79.00mm	8.9:1	8.8:1	24.25mm	89.00mm	129.75mm	19.00mm	0	-8.5	21-GNH07900	G7482000125C
22701-795	79.50mm	9.0:1	8.8:1	24.25mm	89.00mm	129.75mm	19.00mm	0	-9.3	21-GNH07950	G7482000125C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H7482000125C wall thick. 3.18mm

SUPERSPORT SERIES 4032-T6 ALLOY

2.0L TURBO Z20LET / LEH / LER - C20LET - Y20LET & C20XE

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 : 216.30mm
- C/R Calculated w/ Gasket 1.00mm x 87.50mm
- Top Ring Down : 7.00mm
- Head cc's : 43.00 / 42.60

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
42702-860	86.00mm	8.8:1	8.8:1	30.25mm	86.00mm	143.00mm	21.00mm	-0.05	-14.50	21-GNH08600	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	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	WP092

SUPERSPORT SERIES 4032-T6 ALLOY

2.0L C20XE - STROKER PISTONS N/A with 2-RINGS

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
- X-Style skirt
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 216.30mm
- C/R Calculated w/ Gasket 1.00mm x 87.50mm
- Top Ring Down : 6.00mm
- Head cc's : 42.60

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
42703-865	86.50mm	12.4:1	10.5:1	27.75mm	91.00mm	143.00mm	21.00mm	-0.05	+2.3	21-GNH08650	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	WP051

DIAMOND PISTONS 2618 ALLOY

2.0L Z20 TURBO & C20XE TURBO - STROKER CRANK. 91.00mm

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Block Height : 216.30mm
- C/R Calculated w/ Gasket 1.00mm x 87.50mm
- Top Ring Down : 5.70mm
- Head cc's : 43.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22702-865	86.50mm	8.8:1	8.8:1	27.80mm	91.00mm	143.00mm	21.00mm	0.00	-19.15	21-GNH08650	G8662250180C
22702-870	87.00mm	8.8:1	8.8:1	27.80mm	91.00mm	143.00mm	21.00mm	0.00	-20.00	21-GNH08700	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm

DIAMOND PISTONS 2618 ALLOY

2.0L 16v as GT & INSIGNIA - Engine: Z20 LNF / NHH . A20 NHT / NFT

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Block Height : 220.00mm
- C/R Calculated w/ Gasket 0.64mm x 87.50mm
- Top Ring Down : 6.40mm
- Head cc's : 51.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22703-860	86.00mm	9.3:1	9.2:1	31.11mm	86.00mm	145.45mm	23.00mm	-0.44	+1.0	21-GNH08600	G9052150185C
22703-870	87.00mm	9.3:1	9.2:1	31.11mm	86.00mm	145.45mm	23.00mm	-0.44	+1.0	21-GNH08700	G9052150185C

PEUGEOT

SUPERSPORT SERIES 4032-T6 ALLOY

207 RC TURBO 1.6L 16v (EP6) - 4032 ALLOY

4032-T6 High-Silicon / Low-Expansion alloy
- Gas pressure accumulator and Anti-Detonation grooves
- Round skirt style
- Over size and deeper valve pockets
- 9310 alloy wrist pins / Cylindrical shape
- Offset pins for quiet operation
- Premium 1.0 x 1.2 x 2.8 rings included
- Block Height : 210.50mm
- C/R Calculated w/ Gasket 0.90mm x 78.0mm
- Top Ring Down :
- Head cc's : 37.60

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

DIAMOND PISTONS 2618 ALLOY

207 RC TURBO 1.6L 16v (EP6) - 2618 ALLOY

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Over size and deeper valve pockets
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Premium 1.00mm x 1.20mm x 2.80mm rings included
- Block Height : 210.50mm
- C/R Calculated w/ Gasket 0.90mm x 78.0mm
- Top Ring Down :
- Head cc's : 37.60

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
22901-770	77.00mm	10.0:1	10.5:1	28.44mm	85.80mm	138.55mm	20.00mm	-	+0.1	21-GNH07700	G7872000200C
22901-775	77.50mm	10.0:1	10.5:1	28.44mm	85.80mm	138.55mm	20.00mm	-	+0.1	21-GNH07750	G7872000200C

SUPERSPORT SERIES 4032-T6 ALLOY

1.6L 16v TU5J4 - STROKER CRANK. 89.00mm

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
- 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 : 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

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
42902-800	80.00mm	13.6:1	10.8:1	24.75mm	89.00mm	137.75mm	18.00mm	0.00	+4.20	21-GNH08000	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	WP035

SUPERSPORT SERIES 4032-T6 ALLOY

1.6L 16v TU5JP4 - STROKER CRANK. 89.00mm (206 HEAD)

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
- 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 : 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

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
42902-800	80.00mm	12.5:1	10.8:1	24.75mm	89.00mm	137.75mm	18.00mm	0	+4.20	21-GNH08000	WP099
42903-800	80.00mm	8.7:1	10.8:1	28.90mm	89.00mm	133.60mm	19.50mm	0	-15.41	21-GNH08000	WP035

SUBARU

SUPERSPORT SERIES 4032-T6 ALLOY

EJ20 / EJ205 WRX-STi (1998-UP)

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
- Side gas ports for better ring seal
- Premium 1.0 x 1.2 x 2.8 rings included

- Block Height : 201.00mm
- C/R Calculated w/ Gasket 1.00mm x 94.00mm
- Top Ring Down : 6.50mm - Stroker 5.70mm
- Head cc's : 48.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
43301-920	92.00mm	8.5:1	8.0:1	32.70mm	75.00mm	130.45mm	23.00mm	-0.35	-8.70	21-GNH09200	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	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	WP082
43302-920	92.00mm	8.5:1	8.0:1	30.70mm	79.00mm	130.45mm	23.00mm	-0.35	-7.70	21-GNH09200	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

DIAMOND PISTONS 2618 ALLOY

EJ20 / EJ205 WRX-STi (1998-UP)

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Molly Skirt coating for friction loss and skirt wear protection
- Total Seal Pro-Select ring set included 1.00mm x 1.20mm x 2.00mm

- Premium 8620 series pins from 1018 mild steel
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Over size and deeper valve pockets

- Block Height : 201.00mm
- C/R Calculated w/ Gasket 0.60mm x 94.00mm
- Top Ring Down : 7.62mm
- Head cc's : 48.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23301-920	92.00mm	8.5:1	8.0:1	32.68mm	75.00mm	130.45mm	23.00mm	-0.37	-12.0	09513622	G9052500180C
23301-925	92.50mm	8.5:1	8.0:1	32.68mm	75.00mm	130.45mm	23.00mm	-0.37	-12.0	09513642	G9052500180C
23301-930	93.00mm	8.5:1	8.0:1	32.68mm	75.00mm	130.45mm	23.00mm	-0.37	-12.0	09513661	G9052500180C
23302-920	92.00mm	8.5:1	8.0:1	30.68mm	79.00mm	130.45mm	23.00mm	-0.37	-15.5	09513622	G9052500180C
23302-925	92.50mm	8.5:1	8.0:1	30.68mm	79.00mm	130.45mm	23.00mm	-0.37	-15.5	09513642	G9052500180C
23302-930	93.00mm	8.5:1	8.0:1	30.68mm	79.00mm	130.45mm	23.00mm	-0.37	-15.5	09513661	G9052500180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H9052500250C wall thick. 6.35mm

SUPERSPORT SERIES 4032-T6 ALLOY

EJ25 / EJ257 WRX-STi (2004-UP)

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
- Side gas ports for better ring seal
- 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

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
43303-995	99.50mm	8.5:1	8.0:1	30.70mm	79.00mm	130.45mm	23.00mm	-0.35	-19.90	21-GNH09950	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	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	WP082

DIAMOND PISTONS 2618 ALLOY

EJ25 / EJ257 WRX-STi (2004-UP)

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Molly Skirt coating for friction loss and skirt wear protection
- Total Seal Pro-Select ring set included 1.00mm x 1.20mm x 2.00mm
- Premium 8620 series pins from 1018 mild steel
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Block Height : 201.00mm
- C/R Calculated w/ Gasket 0.60mm - Stroker 1.30mm
- Top Ring Down : 6.35mm - Stroker 6.10mm
- Head cc's : 51.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23303-995	99.50mm	8.55:1	8.0:1	30.68mm	79.00mm	130.45mm	23.00mm	-0.37	-22.0	09513917	G9052500180C
23303-9975	99.75mm	8.60:1	8.0:1	30.68mm	79.00mm	130.45mm	23.00mm	-0.37	-22.0	09513927	G9052500180C
23303-100	100.0mm	8.65:1	8.0:1	30.68mm	79.00mm	130.45mm	23.00mm	-0.37	-22.0	09513937	G9052500180C
23304-995	99.50mm	9.0:1	8.0:1	28.67mm	83.00mm	130.45mm	23.00mm	-0.38	-16.0	09513917	G9052500180C
23304-9975	99.75mm	9.0:1	8.0:1	28.67mm	83.00mm	130.45mm	23.00mm	-0.38	-16.0	09513927	G9052500180C
23304-100	100.0mm	9.0:1	8.0:1	28.67mm	83.00mm	130.45mm	23.00mm	-0.38	-16.0	09513937	G9052500180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H9052500250C wall thick. 6.35mm
*The stroker pistons with 0,60mm head gasket increases the Comp. Ratio to 9.6:1

DIAMOND PISTONS 2618 ALLOY

EG33 - SVX 3.3L 24v (Re-Sleeve required and only for stroker crank. 79.00mm)

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Molly Skirt coating for friction loss and skirt wear protection
- Total Seal Pro-Select ring set included 1.00mm x 1.20mm x 2.00mm
- Premium 8620 series pins from 1018 mild steel
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Block Height : 201.00mm
- C/R Calculated w/ Gasket 1.30mm x 100.0mm
- Top Ring Down : 6.35mm
- Head cc's : 51.00
- OEM Bore & Stroke: 96.9 x 75.0mm

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23306-995	99.50mm	9.0:1	10.0:1	30.68mm	79.00mm	130.45mm	23.00mm	-0.37	-12.0	09513917	G9052500180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H9052500250C wall thick. 6.35mm

TOYOTA

SUPERSPORT SERIES 4032-T6 ALLOY

1.3L STARLET 3E-FTE / 4E-FTE

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
- Block Height : 187.00mm
- C/R Calculated w/ Gasket 0.85mm x 75.50mm
- Top Ring Down : 7.40mm
- Head cc's : 39.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
43501-740	74.00mm	8.3:1	8.2:1	29.95mm	77.40mm	118.00mm	18.00mm	-0.35	-1.00	740XTZ-3	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	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	WP079

SUPERSPORT SERIES 4032-T6 ALLOY

1.5L COROLLA 5E-FE

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
- Block Height : 204.00mm
- C/R Calculated w/ Gasket1.40mm x 75.50mm
- Top Ring Down : 7.40mm
- Head cc's : 39.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
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

SUPERSPORT SERIES 4032-T6 ALLOY

3SGTE CELICA

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

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
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

DIAMOND PISTONS 2618 ALLOY

3SGTE CELICA - STROKER CRANK. 93.0mm

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Premium 1.0 x 1.2 x 2.8 rings included
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Block Height : 216.00mm
- C/R Calculated w/ Gasket 1.42mm x 87.00mm
- Top Ring Down : 7.50mm
- Head cc's : 49.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23501-862	86.25mm	8.9:1	8.8:1	31.50mm	93.00mm	138.00mm	22.00mm	0.00	-10.50	21-GNH08625	G8662250180C
23501-865	86.50mm	9.0:1	8.8:1	31.50mm	93.00mm	138.00mm	22.00mm	0.00	-10.50	21-GNH08650	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm

DIAMOND PISTONS 2618 ALLOY

5SFE Block with 3SGTE HEAD - STROKER CRANK. 100.0mm

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Premium 1.0 x 1.2 x 2.8 rings included
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Block Height : -
- C/R Calculated w/ Gasket 1.00mm x 88.00mm
- Top Ring Down : 6.0mm
- Head cc's : 50.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23502-870	87.00mm	9.0:1	9.5:1	28.00mm	100.00mm	138.00mm	22.00mm		-18.60	21-GNH08700	G8662250180C
23502-875	87.50mm	9.0:1	9.5:1	28.00mm	100.00mm	138.00mm	22.00mm		-18.60	21-GNH08750	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm

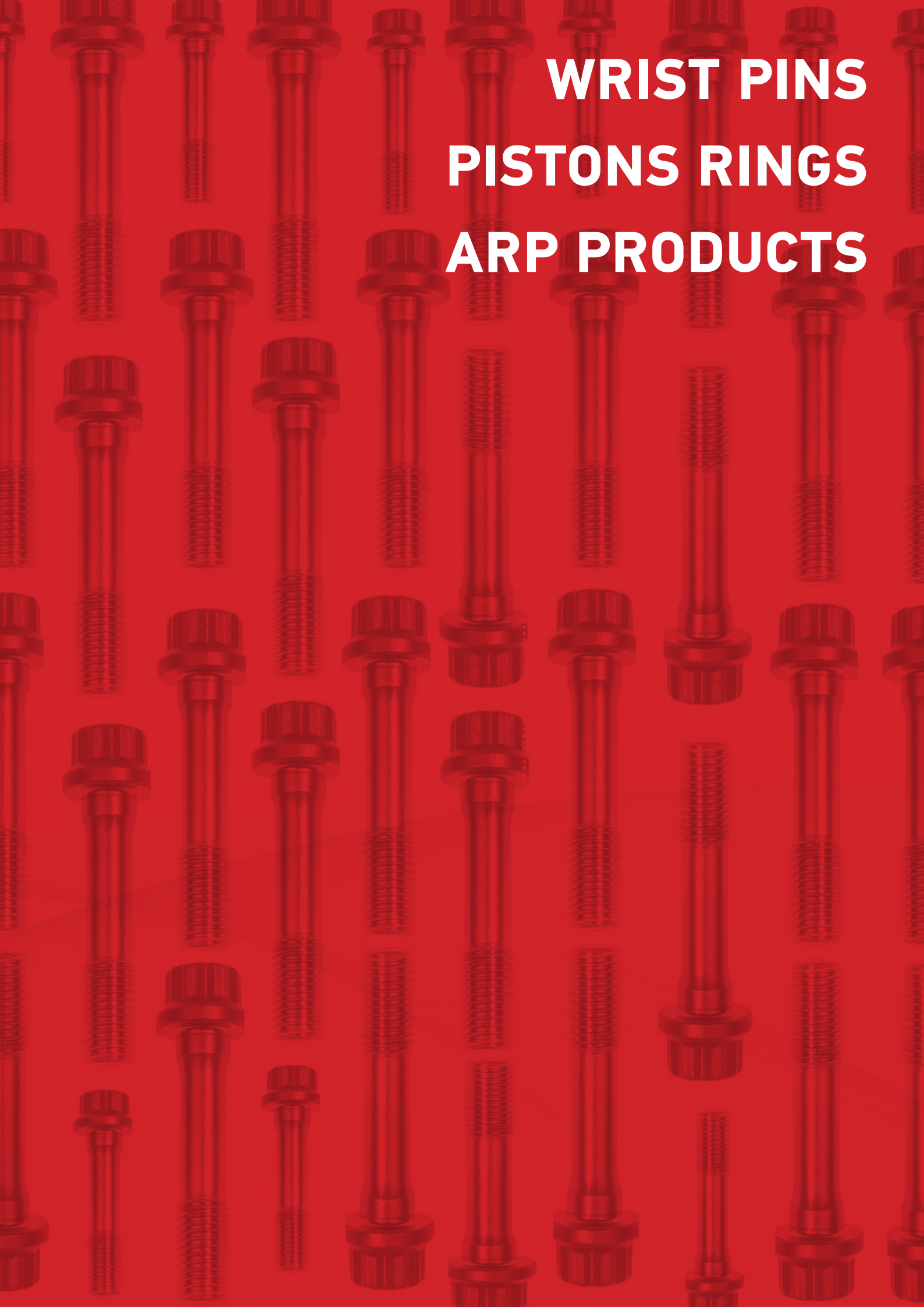
DIAMOND PISTONS 2618 ALLOY

2JZ SUPRA

2618 material for High HP-Boost applications
- 3D Milling process on both. crown and under-crown
- Premium 8620 series pins from 1018 mild steel
- Premium 1.0 x 1.2 x 2.8 rings included
- Side gas ports for better ring seal
- Round skirt style
- Offset pins for quiet operation
- Over size and deeper valve pockets
- Block Height : 218.95mm
- C/R Calculated w/ Gasket 1.00mm x 87.00mm
- Top Ring Down : 7.65mm - Stroker 7.15mm
- Head cc's : 45.00

PART NUMBER	BORE	C/R	OEM CR	COMP. HEIGHT	STROKE	ROD C/C	PIN DIAM.	DECK CLEAR.	DOME CC'S	RING SET	PIN P/N
23503-865	86.50mm	9.0:1	8.5:1	33.99mm	86.00mm	142.00mm	22.00mm	-0.04	-10.4	21-GNH08650	G8662250180C
23503-870	87.00mm	9.0:1	8.5:1	33.99mm	86.00mm	142.00mm	22.00mm	-0.04	-10.4	21-GNH08700	G8662250180C
23504-865	86.50mm	9.0:1	8.5:1	29.97mm	94.00mm	142.00mm	22.00mm	-0.02	-16.2	21-GNH08650	G8662250180C
23504-870	87.00mm	9.0:1	8.5:1	29.97mm	94.00mm	142.00mm	22.00mm	-0.02	-16.2	21-GNH08700	G8662250180C

*Optional Tool steel H-13 alloy wrist pins available as an upgrade. Part number H8662250225C wall thick. 5.72mm



WRIST PINS
PISTONS RINGS
ARP PRODUCTS

WRIST PIN INDEX

"T" = CONICAL SHAPE "C" = CYLINDRICAL SHAPE "R" = RATIO / CHAMFERED FOR ROUND WIRE LOCK

G-SERIES 8620 (TREND PERFORMANCE)

Produced from chrome molybdenum 4130 thick-wall tubing.
Superior to the common 1018 mild steel alternative, this alloy steel pin is ideally suited for use in naturally aspirated race engines.
The four operations performed in its manufacture are as follows: Blanked to size, heat treated (60 Rockwell O.D./45 core), tumbled, and ground.

PART NUMBER	DIAMETER	LENGTH	WALL THICKNESS	TYPE	GRAM WEIGHT	MATERIAL
G6692000125C	17.00	50.80	3.18	C/R	53.00	8620
G7082000125C	18.00	50.80	3.18	C/R	57.00	8620
G7482000125C	19.00	50.80	3.18	C/R	61.00	8620
G7872000125C	20.00	50.80	3.18	C/R	65.00	8620
G7872000200C	20.00	50.80	5.08	C/R	93.00	8620
G7872250155C	20.00	57.15	3.94	C/R	87.00	8620
G8272000125C	21.00	50.80	3.18	C/R	69.00	8620
G8272180155C	21.00	55.37	3.94	C/R	90.00	8620
G8272500155C	21.00	63.50	3.94	C/R	103.00	8620
G8272250180C	21.00	57.15	4.57	C/R	104.00	8620
G8662250180C	22.00	57.15	4.57	C/R	110.00	8620
G8662500180C	22.00	63.50	4.57	C/R	123.00	8620
G8862500180C	22.50	63.50	4.57	C/R	123.00	8620
G9052150185C	23.00	54.60	4.70	C/R	113.50	8620
G9052250180C	23.00	57.15	4.57	C/R	117.00	8620
G9052500180C	23.00	63.50	4.57	C/R	130.00	8620
G9062500155	23.01	63.50	3.94	C	118.00	8620
G9452500185	24.00	63.50	4.70	C	142.00	8620
G9452750155	24.00	69.85	3.94	C	136.00	8620

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	C	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	105.00	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	109.80	9310
WP046	22.00	63.00	4.00	C/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	123.00	9310
WP022	24.00	63.50	4.00	C	121.00	9310

H-13 TOOL STEEL SERIES (TREND PERFORMANCE)

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	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 SETS INDEX

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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
92.00	09513622	1.20mm	AP	3.40mm ± 0.10mm	1.20mm	NAP	3.63mm ± 0.10mm	2.00mm	STD	2.92mm ± 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
93.00	09513661	1.20mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.91mm ± 0.10mm	2.00mm	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
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
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
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
100.0	09513937	1.20mm	AP	3.40mm ± 0.10mm	1.20mm	RBT	4.19mm ± 0.10mm	2.00mm	STD	3.30mm ± 0.15mm
100.0	21-GNH01000	1.00mm	GN	3.70mm ± 0.10mm	1.20mm	NAP	4.10mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
100.0	09503937	1.20mm	AP	3.40mm ± 0.10mm	1.50mm	RBT	4.06mm ± 0.10mm	3.00mm	STD	3.94mm ± 0.15mm
100.5	09513957	1.20mm	AP	3.40mm ± 0.10mm	1.20mm	RBT	4.19mm ± 0.10mm	2.00mm	STD	3.30mm ± 0.15mm
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
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
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
79.50	21-GNH07950	1.00mm	GN	2.90mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
80.50	21-GNH08050	1.00mm	GN	2.90mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
81.50	21-GNH08150	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
82.50	21-GNH08250	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.40mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
83.50	21-GNH08350	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
84.50	21-GNH08450	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
85.50	21-GNH08550	1.00mm	GN	3.10mm ± 0.10mm	1.20mm	NAP	3.50mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
86.50	21-GNH08650	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

PISTON RING SETS INDEX

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
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
89.50	21-GNH08950	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
90.50	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
91.50	21-GNH09150	1.00mm	GN	3.30mm ± 0.10mm	1.20mm	NAP	3.70mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
92.50	09513642	1.20mm	AP	3.40mm ± 0.10mm	1.20mm	NAP	3.63mm ± 0.10mm	2.00mm	STD	3.30mm ± 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
92.50	09053641	1.50mm	AP	3.81mm ± 0.10mm	1.50mm	NAP	4.16mm ± 0.10mm	3.00mm	STD	3.68mm ± 0.15mm
92.75	09053651	1.50mm	AP	3.81mm ± 0.10mm	1.50mm	NAP	4.16mm ± 0.10mm	3.00mm	STD	3.68mm ± 0.15mm
93.00	09053661	1.50mm	AP	3.81mm ± 0.10mm	1.50mm	NAP	3.94mm ± 0.10mm	3.00mm	STD	3.68mm ± 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
94.50	21-GNH09450	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
95.50	21-GNH09550	1.00mm	GN	3.50mm ± 0.10mm	1.20mm	NAP	3.90mm ± 0.10mm	2.80mm	STD	3.10mm ± 0.15mm
95.50	09503760	1.20mm	AP	3.40mm ± 0.10mm	1.50mm	RBT	3.55mm ± 0.10mm	3.00mm	STD	3.81mm ± 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
98.50	09503878	1.20mm	AP	3.40mm ± 0.10mm	1.50mm	RBT	4.47mm ± 0.10mm	3.00mm	STD	3.81mm ± 0.15mm
99.00	09503898	1.20mm	AP	3.40mm ± 0.10mm	1.50mm	RBT	4.14mm ± 0.10mm	3.00mm	STD	3.68mm ± 0.15mm
99.50	09513917	1.20mm	AP	3.40mm ± 0.10mm	1.20mm	RBT	4.19mm ± 0.10mm	2.00mm	STD	3.30mm ± 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
99.50	09503917	1.20mm	AP	3.40mm ± 0.10mm	1.50mm	RBT	4.19mm ± 0.10mm	3.00mm	STD	2.92mm ± 0.15mm
99.75	09513927	1.20mm	AP	3.40mm ± 0.10mm	1.20mm	RBT	4.19mm ± 0.10mm	2.00mm	STD	3.30mm ± 0.15mm

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 preloadrepeatability 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. Sqeeze 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
1/4	911-0001
5/16	911-0002
3/8	911-0003
7/16	911-0004
1/2	911-0005
M6 X 1,00	912-0012

SIZE	PART NUMBER
M8 x 1.25	912-001
M10 x 1.25	912-002
M10 x 1.50	912-003
M10 x 2.00	912-014
M11x 1.25	912-004
M11x 1.50	912-005

SIZE	PART NUMBER
M11 x 1.50 x 152mm	912-0013
M11 x 2.00	912-0011
M12 x 1.25	912-0006
M12 x 1.50	912-0007
M12 x 1.75	912-0008
M6 X 1,00	912-0012

COMPINATION SETS	PART NUMBER
USS Combo Pack (5-pc) - 1/4 , 5/16 , 3/8 , 7/16 , 1/2	911-0006
Metric 1.25 Pitch Combo Pack (4-pc) M8,M10,M11,M12	912-0009
Metric Combo Pack (4-pc,std,lenght) M10,M11,M12 (1.50 & 1.75)	912-0010
M12 x 1.50	912-0007
M12 x 1.75	912-0008
M11x 1.50	912-005

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 ÷ 25.4= 3.385" (3.385" x 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.

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 torqueing.
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 5:00P.M. 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:

A. Due to the nature of performance applications, ZRP products are sold without any express warranty or implied warranty.

B. 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.

C. 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.

D. ZRP parts, tuning parts, and other accessories are generally delivered without TÜV testing and are only for use in specialized racing vehicles.

E. Licensing for use on normal road vehicles is not part of any agreement.

F. 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.

G. 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.

H. 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.

A. 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.

B. If an error was made by the customer, a 12% restocking fee will be imposed upon the cost of the item in question.

C. No cash refunds. Credits issued can be applied to new or existing orders.

D. 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.

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