

MAHLE

## Chevy LS Replacement Parts for the Aftermarket



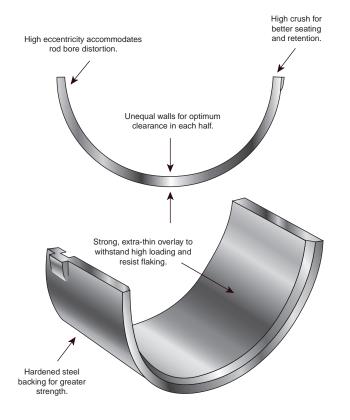
## Deltawall P-Series Bearings

#### Deltawall bearings are only available for the early and late small block Chevrolet connecting rods.

These bearings incorporate a patented design which produces a tighter clearance in the upper or rod half bearing to spread firing loads over more of the bearing surface, while providing greater clearance in the lower or cap half bearing to allow for rod bore close-in and to maintain oil flow for cool running. The upper and

lower bearing shells differ in centerline wall thickness by .002". The upper is .001" thicker than a standard equal wall bearing, and the lower is .001" thinner than an equal wall design for the same application.

Use Deltawall rod bearings in engines which operate over a broad range of RPM's with only brief periods of operation at maximum RPM; such as engines running on road courses or short tracks where the engine pulls hard through its mid-range.



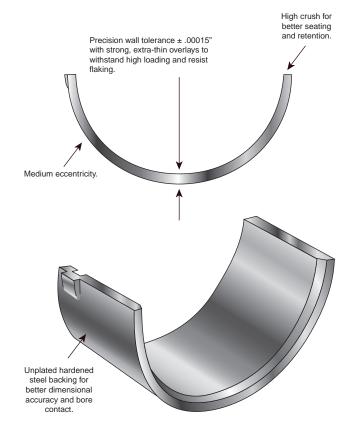
## H-Series Bearings

#### These bearings are identified by a letter H or HN in the part number suffix.

Part numbering is based on the same core number as the standard passenger car parts for the same application. These bearings were developed primarily for use in NASCAR type racing, but are suitable for all types of competition engines.

H-Series bearings have a medium level of eccentricity, high crush, and rod bearings have a hardened steel back and thin overlay. These bearings also have enlarged chamfers for greater crankshaft fillet clearance and are made without flash plating for better seating. Bearings with .001" extra clearance are available for

standard size shafts and carry the suffix HX (X = extra clearance). Rod bearings are available with or without dowel holes (HD = with, H = without), main bearings are available with standard 180 degrees upper half grooving and with full 360 degrees grooving (H = 180 degrees, HG = 360 degrees). Use H-Series bearings with crankshafts that have oversize fillets and where engines run in the medium to high RPM range. H-Series bearings should be used if contact patterns obtained with P-Series parts are too narrow. Contact patterns should ideally cover 2/3 to 3/4 of the bearing surface. See accompanying contact pattern diagrams. If you aren't sure which type of performance bearing to start with, the H-Series bearing will be your best choice.

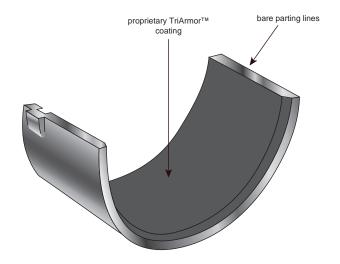


## K-Series Bearings

### These bearings are identified by a letter K in the part number suffix.

Part numbering is based on the same core number as the high performance part and will service the same application. These bearings were developed primarily for high performance applications and all types of competition engines. K-Series bearings have a proprietary .0003" dry film treatment applied to the bearings surface, but not the bearing parting lines. The

dry film coating gives good low load start-up protection. The coating serves as a high pressure, high load dry film anti-wear agent providing additional protection across the broad range of temperatures, especially when oil flow is marginal and is especially slippery with an oil film. These bearings, which are also referred to as TriArmor<sup>™</sup>, still offer the strength and durability of the legendary Clevite TriMetal<sup>™</sup> bearing construction coupled with the latest in coating technology.

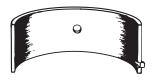


#### Narrow wear pattern



Too much eccentricity. Use the H-Series to correct this.

#### Wide wear pattern



Too little eccentricity. Use the P-Series to correct this.

#### Ideal wear pattern



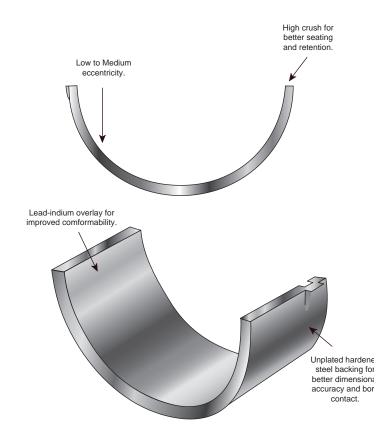
The wear pattern should cover 2/3 - 3/4 of the bearing surface area.

## V-Series Bearings

These parts essentially duplicate the former Vandervell parts under the Clevite part numbering system. (Same core part no. as standard passenger car parts but with a suffix letter "V").

V-Series rod bearings typically have low to medium eccentricity and a hardened steel back. All V-Series main sets use a single piece thrust bearing rather than the former Vandervell assembled type of construction. V-Series parts are not available with oversize chamfers. Extra clearance parts are available with a suffix VX (.001" extra clearance), and VXX (.002" extra clearance) for some applications. V-Series bearings do not have flash plating on the steel back. Narrowed parts are available with a VN suffix for some applications. These are made to accommodate increased crankshaft fillet clearance.

The chief difference between the V-Series and other Clevite® TriMetal<sup>™</sup> bearings is the use of a lead-indium overlay. Use V-Series bearings if prior experience has shown a preference for the lead-indium type of overlay. Lead-indium overlay offers somewhat better conformability than lead-tin-copper overlay with slightly reduced wear resistance.

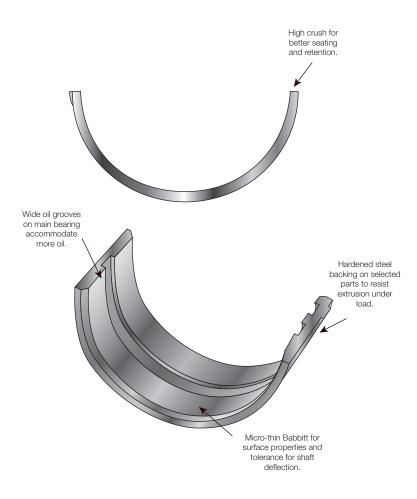


## M-Series Bearings

#### Clevite<sup>®</sup> "Micro" bearings make up the M-series. These are special purpose bearings having a nominal .006" thick babbitt lining on a hardened steel back.

M-Series rod bearings have been slightly narrowed at one end to provide extra fillet clearance without the need of a large chamfer. The lower rod shells have a dowel hole for use in aluminum rods with dowel pins. M-Series mains have enlarged chamfers and, for certain applications, oil holes and oil grooves have also been enlarged. Use M-series parts to take advantage of the high degree of conformability offered by the babbitt lining. These parts are intended mainly for engines where severe crankshaft deflections cause edge loading of the bearings. Under these operating conditions bearing service life will be very short.

Frequent inspections are recommended and bearings should be replaced at the first signs of distress.



# Bearing Installation and Fitting Tips

When measuring bearings, measurements should always be taken at 90 degrees to the parting line to determine the minimum clearance. If measuring the bearing wall thickness, use a special micrometer with a ball anvil to fit the curvature of the bearing ID. The best way to determine bearing clearance is to measure the bearing ID with the bearings installed in the housing and the bolts torqued to the specified assembly torque. Use a dial bore gage to measure the bearing ID at 90 degrees to the parting line, then subtract shaft size from bearing ID to determine clearance. If the dial bore gage is zeroed at the actual diameter of the crankshaft journal to be installed, the dial bore gage will then read clearance directly and the subtraction calculation can be eliminated. About .001" clearance per inch of shaft diameter is a good rule of thumb for clearance. Increasing the total by about .0005" will add a little margin of safety when starting out, especially for rods. Example: .001" X 2.100 = .0021" then add .0005", so starting out set clearance at .0026" for a 2.100 shaft.

If clearance adjustments need to be made, use either an extra clearance part for more clearance, or an undersize part for less clearance. It is permissible to mix sizes if less than .001" adjustment in clearance is desired. When mixing sizes for select fitting never mix parts having more than .0005" difference in wall size, and always install the thickest wall shell in the upper position if installing a rod bearing, or the lower position if installing a main bearing. When working with a reground shaft always measure assembled bearing IDs first and have the shaft sized to produce the desired clearance since there are no extra clearance parts available for undersize shafts.

When measuring a bearing ID or wall thickness avoid measuring at the parting line. As the "Bearing Design" diagram illustrates there is a parting line relief machined into nearly all bearing shells. This relief is to allow for any mis-match between upper and lower shells due to tolerance differences, or possibly resulting from cap shift or twist during assembly. To determine bearing wall eccentricity or assembled bearing ID ovality, measure at a point at least 3/8" away from the parting line.

When installing any bearing DO NOT ATTEMPT TO POLISH THE BEARING RUNNING SURFACE WITH ANY TYPE OF ABRASIVE PAD OR PAPER.

Bearing overlay layers are extremely soft and thin, typically .0005" on high performance parts. These thin layers can easily be damaged or removed by abrasive media. Because the overlay layer is electroplated, it may exhibit microscopic plating nodules that make it feel slightly rough. The nodules are the same material as the rest of the plated layer and will quickly be flattened by the shaft. Bearing surfaces can be lightly burnished with solvent and a paper towel if desired.

Arriving at the correct choice of high performance bearing for a given racing application is much like determining what clearance works best. We use past experience, our knowledge of the intended usage, and common sense to guide us in making an initial choice. From there on we can fine tune the selection process based on results. The information given here is intended to aid in the initial selection as well as the fine tuning process.

The following table serves as a brief overview of the features included in each of the special Clevite<sup>®</sup> brand high performance bearing series:

Feature	P-Series		H-S	H-Series		V-Series		M-Series	
	Rods	Deltawall	Mains	Rods	Mains	Rods	Mains	Rods	Mains
Eccentricity	Н	Н	H-M	М	М	L-M	L-M	L-M-H	L-M
High Crush	Х	Х	Х	Х	Х	Х	Х	Х	Х
Hard Back	Х	Х		Х		Х		Х	
O.S. Chamfers		Х		Х	Х	AS		S	Х
Dowel Hole	А			А		А		Х	
Thin Overlay	Х	Х	Х	Х					
No Flash	А	А	А	Х	Х	Х	Х	Х	Х
Plating									
Reduced Wall				Х	Х	Х	Х		
Tolerance									
Full Grooving			А		А		А		А

#### Legend:

A = Available for some applications

 $H = High \ eccentricity \ (up \ to \ .0015")$ 

L = Low eccentricity (up to .0005")

 $M = Medium \ eccentricity \ (up \ to \ .0010")$ 

S = Shortened length at fillet end

X = Applies to all or nearly all parts

## SAE 9254 High Alloy Steel Base Ring Material

SAE 9254 high alloy steel base material, with HV385 thermal spray face coating, patented by MAHLE combine to create the ultimate in performance piston ring technology.

The unique mechanical, physical, and chemical properties of SAE 9254 steel combine to make the ultimate piston ring base material.

- High tensile strength allows the piston ring to be used in smaller and lighter cross sections and still maintain structural strength, and torsional rigidity needed to seal and hold back extreme firing pressures
- High yield resistance allows the piston ring to maintain strength and tension in high heat operating conditions of a high compression, and power adder application
- Extended fatigue resistance increases cycle life and overall durability of the piston ring, increasing RPM expectations of the performance engine builder
- Increased material hardness improves overall piston ring wear on all critical mating surfaces

The reduced cross section piston ring is lower in mass, and more conformable to less than perfect bores. This makes more a stable piston ring at high RPM, and allows the ring to seal more effectively against both the bottom of the piston groove, and the cylinder wall. The reduced cross section also reduces both static and dynamic tension, therefore reducing friction and the corresponding parasitic loss. HV385 thermal spray face coating patented by MAHLE provides wear resistance, overall durability, and scuff resistance beyond that of any current ring face coating or treatment – in the performance industry.

## High Velocity Oxygen Fueled Thermal Spray Coating (HV385)

MAHLE<sup>®</sup> HV385 High Velocity Oxygen Fueled (HVOF) Thermal Spray Face Coating is designed, engineered, and manufactured to withstand the extreme punishment of today's high RPM naturally aspirated, turbocharged, supercharged and nitrous oxide assisted engines.

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The MAHLE patented HV385 ring face coating is applied using an ultra-high temperature thermal spray process, fueled by pure oxygen and RP1 jet fuel. The resulting jet engine-like combustion event accelerates the molten material to supersonic speeds, spraying onto the face of the ring. This high temperature, high velocity stream of molten alloy face coating ceramic/metallic material creates a very dense and extremely well bonded coating on the ring face that outlasts even the most demanding operating conditions. Additionally, the HV385 thermal spray face coating provides unmatched strength, scuff resistance, and overall durability – not obtainable by any other piston ring face coating, or surface treatment in the industry today.

The HV385 thermal spray face coated top rings feature micropolished side and face sealing surfaces, minimizing friction, ensuring quick seating, and providing a uniform barrel face profile.



The MAHLE high velocity oxygen fueled thermal spray gun applying the patented HV385 ring face MAHLE coating.

## Top Ring

MAHLE<sup>®</sup> performance compression rings are engineered to provide the best possible sealing for maximum power output. To meet the needs of today's harsh performance environment MAHLE offers compression rings in multiple materials, widths and types. Material choices include cast iron, ductile iron, and steel.

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#### Cast Iron

 Claimer sets feature a cast iron or cast iron plasma-moly top compression ring

#### **Ductile Iron**

- Grey Iron and ductile iron work well in moderate performance applications
- Ductile-chrome top rings can withstand operating temperatures up to 600° F. Dusty or highly abrasive environments, like off-road racing, are ductile-chrome's strength
- Ductile-Plasma rings can withstand higher operating temperatures and marginal lubrication environments better than ductile-chrome

#### PC479 – Hardened Ductile Iron

- PC479 Hardened ductile iron goes through an additional hardening process that provides a stronger surface hardness, and overall toughness, which allows the piston ring to run against most bore surfaces without additional face coating
- Used in power adder applications where operating conditions exceed the capabilities of a common face coated ring

#### **GNS - Gas Nitrided Stainless Steel**

 Provides additional hardness and scuff resistance over PC479 for high end power adder applications

#### SAE 9254 Steel

- SAE 9254 Steel provides unequaled strength and fatigue resistance which extends ring life, minimizes side wear, and reduces ring breakage
- SAE 9254 Steel's overall strength allows for thinner radial wall designs that reduce ring flutter, and improve dynamic sealing, which extends the engine's usable RPM range
- MAHLE HV385 patented thermal sprayed face coating and MAHLE SAE 9254 compression rings exceed the strength, scuff resistance, and overall durability levels demanded by todays ultra-high output performance applications

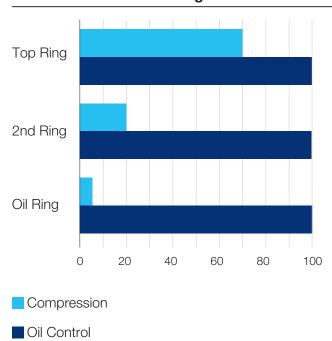
## Second Ring

### The primary function of the second ring is to control oil.

MAHLE® Performance piston rings offer the tapered hook groove (THG) second ring that provides superior oil control, improved combustion gas management, improved top ring stability, and improved sealing. Combined, these qualities provide the performance enthusiast with the best possible oil control and least amount of power loss in any performance second ring.

Back pressure buildup from combustion gasses leaking past the top ring can cause the top ring to float, breaking the combustion seal and reducing power. The MAHLE Performance second ring acts as a check valve to relieve the excessive combustion pressure build up under the top ring, thus stabilizing it. The unique hook configuration of the outside bottom edge scrapes the cylinder walls of oil, and provides a reservoir on each down-stroke, while riding smoothly on a film of oil on the upstroke.

MAHLE Aftermarket continues to lead the Industry with the introduction of SAE 9254 Napier design, THG second rings. Just as with top rings, the overall strength and toughness of SAE 9254 steel allows for thinner and lighter-design second rings, that conform better to the cylinder wall, and actually improve oil scraping efficiency, while reducing friction, and parasitic loss.



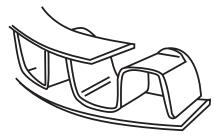
Relative Percentage of Function

The primary function of the second ring is to control oil as much as 80%. The second ring is also used in compression control up to 20%.

## CP-20™ oil control rings

MAHLE<sup>®</sup> Performance CP-20<sup>™</sup> oil control rings were designed to provide superior oil control in all performance applications. MAHLE Performance oil rings utilize the exclusive 20° ear angle for the best possible side seal in the piston oil ring groove. The unique ChemPolish<sup>™</sup> process improves oil drain back. The CP-20 design simplifies installation by eliminating wire latches and or nylon blocks, while the low deflection rate assures an easy installation.

Each CP-20 oil ring assembly is designed around a specific bore diameter to provide the least amount of internal engine friction while providing the best possible oil control. These oil rings are available in four tensions to suit the needs of all racers and performance enthusiasts.



#### **Oil Ring Scraping Efficiency**

Oil scraping efficiency is directly proportional to the radial wall of the rail, and the tension of the assembly. Using the typical three-piece oil ring of the mid-1970's as our baseline, the rail wall vs. tension combinations would look like this:

Time of use in O.E. Engines	Radial Wall of Rail	Tension	Nominal Width	Documented Oil Consumption
1970	.153"168"	20 lbs.	.1875"	1,500 - 3,000 miles per Qt.
1985	.123"136"	16 - 18 lbs	4.0 mm (.1575")	3,000 - 4,000 miles per Qt.
1995	.103"110"	10 - 14 lbs.	3.0 mm (.118")	4,000 - 5,000 miles per Qt.
2005	.093"098"	9 - 10 lbs.	2.5 mm (.0984")	5,000 - 7,500 miles per Qt.
2010	.079"088"	7 - 9 lbs.	2.0 mm (.0787")	7,500 - 10,000 miles per Qt.

MAHLE<sup>®</sup> oil ring assemblies are designed to achieve optimum level of oil control for today's low windage/ wet sump, performance applications.

Over 40 years of oil ring design and evolution has shown a 50% reduction in tension and oil ring assembly radial wall, while also achieving a 300% improvement in oil control. The corresponding reduction in parasitic loss due to reduced tension and friction translates directly to increased horsepower.

## Ring Selection Guide

Tension Category	Tangential Tension Force	Application Recommendations
2.0MM / 2.5N	М	
Ultra-Low	3-5 lbs. (13-22 N.)	Naturally Aspirated Applications, Wet or Dry Sump Oiling System. Crankcase Vacuum System Recommended. Race Only Applications.
Low	6-8 lbs. (27-35 N.)	Naturally Aspirated Applications. Wet or Dry Sump Oiling System. Crankcase Vacuum System Recommended. Primarily Race Applications.
Standard	9-10 lbs. (40-46 N.)	Naturally Aspirated or Power Adder Applications. Wet or Dry Sump Oiling System. Street, Race, or Off-Road Application.
3.0MM / 4.0M	IM	
Ultra-Low	4-6 lbs. (18-27 N.)	Naturally Aspirated Applications, Wet or Dry Sump Oiling System. Crankcase Vacuum System Recommended. Race only applications.
Low	8-12 lbs. (35-53 N.)	Naturally Aspirated Applications. Wet or Dry Sump Oiling System. Crankcase Vacuum System Recommended. Primarily Race Applications.
Standard	14-18 lbs. (62-80 N.)	Naturally Aspirated or Power Adder Applications. Wet or Dry Sump Oiling System. Street, Race, or Off-Road Application.
3/16"		
Low	9-12 lbs. (40-53 N.)	Naturally Aspirated Applications. Wet or Dry Sump Oiling System. Crankcase Vacuum System Recommended. Primarily Race Applications.
Standard	16-22 lbs. (70-98 N.)	Naturally Aspirated or Power Adder Applications. Wet or Dry Sump Oiling System. Street, Race, or Off-Road Application.
High Tension	23-26 lbs. (102-116 N.)	Power Adder Applications. Wet or Dry Sump Oiling System. Nitro Dragster and Funny Car.

## Ring Gap Recommendations

Grey Iron, Ductile Iron, SAE 9254 Steel	Ring Width / Axial Height	Recommended Gap Factor (0.000's /in. of Bore Diameter)	4.00" Bore Example (Nominal in .000's)
	Top/ Upper Comp	ression Ring (UCR)	
Moderate Performance - Street,	.078"/.0625"/1.5MM	.004"	.016"
Drag Race, Oval Track	.043"/ 1.0MM	.0045"	.018"
Race Only/ Naturally Aspirated -	.078"/.0625"/1.5MM	.0045"	.018"
Drag Race, Oval Track	.043"/ 1.0MM	.005"	.020"
Nitrous Oxide - Street	.078"/.0625"/1.5MM	.005"	.020"
	.043"/ 1.0MM	.0055"	.022"
Nitrous Oxide - Race	.078"/.0625"/1.5MM	.007"	.028"
	.043"/ 1.0MM	.0075"	.030"
Supercharged/ Turbocharged	.078"/.0625"/1.5MM	.007"	.028"
	.043"/ 1.0MM	.0075"	.030"
	Second/ Lower Com	npression Ring (LCR)	
Moderate Performance - Street,	.078"/.0625"/1.5MM	.0045"	.018"
Drag Race, Oval Track	.043"/ 1.0MM	.005"	.020"
Race Only/ Naturally Aspirated -	.078"/.0625"/1.5MM	.005"	.020"
Drag Race, Oval Track	.043"/ 1.0MM	.0055"	.022"
Nitrous Oxide - Street	.078"/.0625"/1.5MM	.0055"	.022"
	.043"/ 1.0MM	.006"	.024"
Nitrous Oxide - Race	.078"/.0625"/1.5MM	.0065"	.026"
	.043"/ 1.0MM	.007"	.028"
Supercharged/ Turbocharged	.078"/.0625"/1.5MM	.006"	.024"
	.043"/ 1.0MM	.0065"	.026"

Notice: Most of the second ring gap recommendations are larger than the top rings. Recent testing has proven that a larger second ring gap increases the top ring's stability allowing for a better seal. This larger "escape" path prevents inter-ring pressure from building up and lifting the top ring off the piston allowing combustion to get by. Many engine builders have reported lower blow-by and horsepower gains at the upper RPM ranges with the wider second ring gaps. Also, almost every new car made is using this inter-ring pressure reduction method to lower blow-by and emissions and to increase engine output.

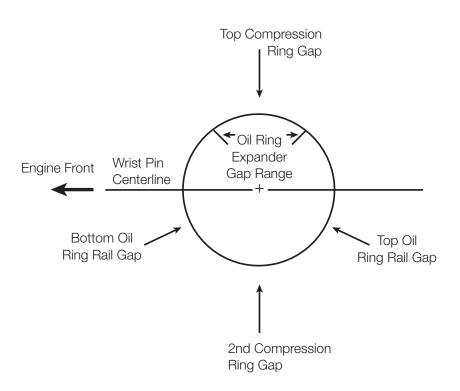
## Ring Installation Procedures

#### Ring gap filing procedures:

- + Determine the appropriate gap for your engines bore size and application.
- + Use a manual hand crank style ring grinder or a quality electric ring grinder to properly fit your rings to the cylinder bore.
- + File the ring from the face to the inside diameter of the ring to prevent chipping or damage of the face coating.
- File only one end of the ring end gap, using the unfiled end as a reference point.
- + Lightly debur the gap edges.

#### Ring installation procedures:

- + Check each ring in its corresponding groove to ensure proper axial and radial clearance.
- Always use a piston ring expander when installing piston rings as spiraling rings into the grooves can damage both the ring and the piston.
- Lubricate new piston rings with a light assembly oil or motor oil before installation onto the piston.
- + Stagger the end gaps on each compression ring, oil rail and expander.



## MLS Head Gaskets

MAHLE performance MLS head gaskets are comprised of 3 stainless steel layers. Sealing beads surround the combustion chamber and coolant passages emphasizing clamp load in these specific areas. Precision tooling provides optimum bead height, width, profile, and bore concentricity.

- Comprised of multiple embossed layers of FKM (fluoroelastomer coated) and uncoated 301 stainless steel
- + Handle any application from naturally

aspirated to boost or nitrous

- Embossed outer layers of the gasket meet the demands of a variety of harsh sealing environments, load conditions and sealing surface finishes
- Design requires less clamp load creating less bore distortion and conforms load distribution across the sealing surface
- Center or shim layer is an uncoated stainless steel layer which can be varied to accommodate multiple thickness requirements
- + No sealants or re-torque required



## Intake Manifold Gaskets

MAHLE performance intake gaskets are designed to allow the engine builder to trim the gaskets for an exact fit on stock or modified ports. The base fiber material is offered with and without a steel core and resists coolant, gasoline, alcohol, and oil. Silicone bead sealed ports provide sealing strength needed around port openings and eliminate leak paths.

- + Conformable fiber material with double perforated steel core
- + Silicone bead sealed ports to help maintain seal under high

vacuum applications and long exposure to fuel and oil

- Intended for high vacuum race engines as well as performance applications
- Long service life in marine, performance street and towing applications
- Proven port shapes for factory performance and aftermarket racing heads
- + Easy trimming to match modified port shapes
- Thickness range of .030" to .120" to compensate for manifold variations



## Valve Cover & Oil Pan Gaskets

High density cork rubber and laminated cork composite gaskets result in a compressible gasket without leak paths. Typically these gaskets are thicker than a standard passenger vehicle gasket.

Steel core laminate valve cover gaskets are a great choice for the professional racer. Fiber laminated over a steel core will provide maximum compression and torque retention in high vacuum conditions. These gaskets are coated with Teflon for better sealing characteristics and easier gasket removal.

Molded rubber valve cover gaskets provide greater ease of installation as well as superior sealing characteristics in an on-again/off-again situation. These gaskets are constructed with a rigid carrier and compression limiters to prevent over-tightening. Silicone rubber materials provide a long service life and multiple sealing beads prevent oil leaks.

#### Molded Rubber Valve Cover Gaskets

- Silicone molded rubber, steel/plastic inner carrier with compression limiters to prevent over tightening and easy installation
- + Superior sealing characteristics
- + Provide dependable sealing in all conditions
- + Race inspired designs and materials
- + Surpass the quality and ability of a typical cork rubber gasket

#### Valve Cover Gaskets

- Severe duty fiber faced steel core with laminated anti-stick coating
- + Enhanced compressibility for good sealing and lateral rigidity
- + Prevents blowouts under high pressures
- Recommended for cast valve covers or sheet metal valve covers
- Safe for all fuels in naturally aspirated, supercharged and nitrous applications

Also available: high density cork rubber and laminated silicone/ cork valve cover gaskets for the budget minded street performance applications



## Exhaust Header Gaskets

MAHLE Performance exhaust header gaskets consist of a Graphite-Kevlar<sup>®</sup> composite fiber facing material attached to both sides of a perforated steel core. This material is much stronger than paper, resisting burnout from high temperatures; it has the ability to seal slightly warped surfaces, with excellent torque retention.

Manufactured from a high grade 301 stainless steel, MLS header gaskets feature an embossed spring steel bead which maintains torque set and creates a strong seal around exhaust ports with resistance to flange motion. These gaskets will not burn or push out and requires no additional sealers

#### **MLS Header Gaskets**

- Manufactured from high grade 301 stainless steel that will not burn through or blow out
- Embossed spring steel maintains torque and will not require additional sealers
- Stand up to extremely high temperatures produced by racing applications

#### **Graphite Header Gaskets**

- + Graphite blend facing with perforated steel core
- + Mechanically clinched on both sides to the facing
- + Highly conformable
- + Withstands and transfers extreme heat through the material
- + Available for specialized racing applications to stock heads



Kevlar® is a registered trademark of the DuPont Corporation.

Product Description	Year	Application Notes	Part No.
Connecting Rod Bearing Pair	1999-2013	OE Replacement; A-Series (Aluminum); Std, 1, 10, 20, 30, 40	CB-663A
Connecting Rod Bearing Pair	1999-2013	OE Replacement; A-Series (Aluminum); Connecting Rods With Housing Bore Resized .002" Larger Than Stock; Std, 10, 20, 30, 40	CB-1776A
Connecting Rod Bearing Pair	1999-2013	OE Replacement; P-Series (TriMetal™); Std, 1, 2, 10, 20, 30, 40, C60	CB-663P
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); N - Narrowed; Std, 1, 9, 10, 11, 19, 20, 21, 30	CB-663HN
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); ND - Narrowed / Doweled Connecting Rod; Std, 1, 10	CB-663HND
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); NDK - Narrowed / Doweled Connecting Rod; Performance Coating; Std, 1, 10	CB-663HNDK
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); NK - Narrowed; Performance Coating; Std, 1, 10	CB-663HNK
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); XN001in Extra Oil Clearance / Narrowed; Std	CB-663HXN
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); XND001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Std	CB-663HXND
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); XNDK001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Performance Coating; Std	CB- 663HXNDK
Connecting Rod Bearing Pair	1999-2013	High Performance; H-Series (TriMetal™); XNK001in Extra Oil Clearance / Narrowed; Performance Coating; Std	CB-663HXNK
Connecting Rod Bearing Pair	1999-2013	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); N - Narrowed; Std, 1, 10	CB-663VN
Connecting Rod Bearing Pair	1999-2013	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); XN - .001in Extra Oil Clearance / Narrowed; Std	CB-663VXN
Main Bearing Set	1999-2013	OE Replacement; A-Series (Aluminum); Std, 10, 20, 30	MS-2199A
Main Bearing Set	1999-2013	OE Replacement; P-Series (TriMetal™); Std, 10, 20	MS-2199P
Main Bearing Set	1999-2012	OE Replacement; A-Series (Aluminum); .010in Undersize; .020in Oversize Housing Bore; 10	MS-2366A-10
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); Std, 1, 10	MS-2199H
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); Performance Coating; Std, 10	MS-2199HK
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); Std	MS-2199HX

Product Description	Year	Application Notes	Part No.
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); XK001in Extra Oil Clearance; Performance Coating; Std	MS-2199HXK
Main Bearing	2011	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MB-3592HX
Main Bearing	2011	High Performance; H-Series (TriMetal™); .001in Undersize; 1	MB-3592H-1
Camshaft Bearing Set	1999-2003	OE Replacement; Std	SH-1814S
Camshaft Bearing Set	2003-2013	OE Replacement; Non Coated; Std	SH-2125S
Camshaft Bearing Set	1999-2003	High Performance; Std	SH-2160S
Camshaft Bearing Set	2003-2013	OE Replacement; Coated; Std	SH-2199S
Wrist Pin Bushing	1999-2006	OE Replacement	223-3663
Piston Set	2005-2009	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3729
Piston Set	2010-2016	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3887
Piston Set	2010-2014	Without Rings; Coated; Reduced; Std, .50mm, .75mm, 1.00mm	224-3958
Ring Set	1999-2016	Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040	41859CP
Ring Set Performance	1999-2016	3.781" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1259
Ring Set Performance	1999-2016	3.781" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1362
Ring Set Performance	1999-2016	3.781" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0957
Ring Set Performance	1999-2016	3.791" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1260
Ring Set Performance	1999-2016	3.791" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1363
Ring Set Performance	1999-2016	3.791" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0958
Ring Set Performance	1999-2016	3.801" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1261
Ring Set Performance	1999-2016	3.801" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1364
Ring Set Performance	1999-2016	3.801" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0959
Cylinder Head Gasket Set	2002-2007	Cylinder Head Bolts Not Included; Advantage Plus	HS54340
Cylinder Head Gasket Set	1999-2001	Cylinder Head Bolts Not Included; Advantage Plus	HS54331
Cylinder Head Gasket Set	2001	Cylinder Head Bolts Not Included; Advantage Plus	HS54331A
Cylinder Head Gasket Set	2007-2015	Cylinder Head Bolts Not Included; Advantage Plus	HS54442C

Product Description	Year	Application Notes	Part No.
Conversion Gasket Set	1999-2007	Flat Type Bolt Holes (non recessed); Set Contains Camshaft Retaining Plate; Use with Head Set to Make Full Set	CS5975
Conversion Gasket Set	1999-2015	Recessed Bolt Holes In Camshaft Retainer Plate; Use with Head Set to Make Full Set	CS5975A
Engine Gasket Set	2001-2007	Cylinder Head Bolts Not Included; Advantage Plus	95-3561
Engine Gasket Set	1999-2001	Cylinder Head Bolts Not Included; Advantage Plus	95-3562
Cylinder Head Gasket	1999-2001	Composite 3.870" x .060" COT	54331
Cylinder Head Gasket	1999-2015	Multi-Layered Steel; Consolidated Design 3.950" x .050" COT	54441
Cylinder Head Gasket	2007-2015	Multi-Layered Steel; Consolidated Design; Advantage Plus 3.950" x .050" COT	54442
Cylinder Head Bolt Set	1999-2004	Steel	GS33380
Cylinder Head Bolt Set	2004-2015	Steel	GS33449
Valve Cover Gasket Set	1999-2015	Valve Cover Grommets not Included; Molded Rubber	VS50250
Valve Cover Gasket Set	1999-2015	Includes Valve Cover Grommets; Molded Rubber	VS50250A
Valve Cover Grommet Set	1999-2015	Molded Rubber	GS33466
Valve Stem Oil Seal Set	1999-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45922
Valve Stem Oil Seal Set	2001-2015	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45921
Valve Stem Oil Seal Set	1999-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45919
Valve Stem Oil Seal Set	2001-2015	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45920
Exhaust Manifold Gasket Set	1999-2017	Multi-Layered Steel; Advantage Plus	MS16124
Intake Manifold Gasket Set	1999-2015	Contains Premium Grade Intake Manifold Gaskets; Molded Rubber	MS16340
Intake Manifold Gasket Set	1999-2007	Lifter Valley Gasket; Includes (2) Knock Sensor Grommets; Molded Rubber	MS19328
Intake Manifold Gasket Set	2007-2015	Lifter Valley Gasket; Molded Rubber	MS19305
Intake Manifold Gasket Set	1999-2015	Molded Rubber / Steel	MS20135
Intake Manifold Gasket Set	1999-2007	Contains Premium Grade Intake Manifold Gaskets. Master Set - Contains Intake and Valve Cover Gaskets Plus All Miscellaneous Gaskets And Seals Needed for Intake Installation; Molded Rubber; MAHLE Exclusive	MIS16340
Intake Manifold Gasket Set	1999-2009	Master Set - Contains Intake and Valve Cover Gaskets Plus All Miscellaneous Gaskets And Seals Needed for Intake Installation; Molded Rubber / Steel	MIS20135

Product Description	Year	Application Notes	Part No.
Oil Pan Gasket	1999-2017	Molded Rubber	OS32241
Main Bearing Gasket Set	1999-2015	Includes Carrier Gasket; PTFE	JV1657
Timing Cover Gasket Set	1999-2013	Requires Oil Pan Set	JV5022
Timing Cover Gasket Set	1999-2015	Requires Oil Pan Set; Contains Water Pump Gaskets, Timing Cover Gasket and Seal; Molded Rubber	JV5158
Camshaft Gasket	1999-2007	Camshaft Retaining Plate, Flat Type Bolt Holes (non recessed); Steel W/ Molded Rubber; MAHLE Exclusive	B31822
Camshaft Gasket	1999-2013	Recessed Bolt Holes In Camshaft Retainer Plate; Steel W/ Molded Rubber	B32270
Coolant Thermostat Gasket	2004-2006	Molded Rubber	C31823
Coolant Thermostat Gasket	2007-2016	O-Ring Type; Molded Rubber	C32061
Coolant Thermostat Seal	1999-2003	Molded Rubber	72141
Coolant Crossover Pipe Mounting Set	1999-2013	Molded Rubber	GS33845
EGR Valve Gasket	1999-2013	Tube to Exhaust Manifold; Graphite	G31535
EGR Valve Gasket	1999-2013	Composite	G31620
EGR Valve Gasket	1999-2013	O-Ring; Rubber	G31626
Fuel Injector O-Ring Kit	1999-2000	Fluoroelastomer	GS33276
Fuel Injector O-Ring Kit	1999-2015	Fluoroelastomer	GS33529
Fuel Injector O-Ring Kit	2001-2015	Injector to Fuel Rail; Fluoroelastomer	GS33530
Fuel Injection Throttle Body Mounting Gasket	1999-2007	Molded Rubber	G31617
Fuel Injection Throttle Body Mounting Gasket	2007-2015	Molded Rubber	G31974
Oil Cooler Gasket	1999-2016	Oval Port; Beaded Steel; Advantage Plus	B31867
Oil Cooler Gasket	2003-2015	Dual Round Port; Metal with Molded Rubber	B31872
Oil Drain Plug Gasket	1999-2009	With .42" I.D., With Metric Thread; Molded Rubber	B45828
Oil Pump Pickup Tube Gasket	1999-2015	O-Ring Type; Molded Rubber	B32790

Product Description	Year	Application Notes	Part No.
Water Pump Backing Plate Gasket	1999-2013	O-Ring Type; Molded Rubber	K31629
Water Pump Gasket	1999-2015	Contains 2 Gaskets; Molded Rubber	K31628
Exhaust Pipe Flange Gasket	1999-2015	Ring Type A; Steel and Composite	F31618
Exhaust Pipe Flange Gasket	1999-2015	Ring Type E; Graphite/Wire Mesh With Sleeve	F31619
Catalytic Converter Gasket	2005-2015	With 2 Bolt Mounting; Composite	F32693
Crankshaft Repair Sleeve	1999-2015	.780in Sleeve Length; Narrow Lip; Steel	A350
Crankshaft Repair Sleeve	1999-2015	1.156in Sleeve Length; Wide Lip; Steel	A355

Product Description	Year	Application Notes	Part No.
Connecting Rod Bearing Pair	1999-2015	OE Replacement; A-Series (Aluminum); Std, 1, 10, 20, 30, 40	CB-663A
Connecting Rod Bearing Pair	1999-2015	OE Replacement; A-Series (Aluminum); Connecting Rods With Housing Bore Resized .002in Larger Than Stock; Std, 10, 20, 30, 40	CB-1776A
Connecting Rod Bearing Pair	1999-2015	OE Replacement; P-Series (TriMetal™); Std, 1, 2, 10, 20, 30, 40, C60	CB-663P
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); N - Narrowed; Std, 1, 9, 10, 11, 19, 20, 21, 30	CB-663HN
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); ND - Narrowed / Doweled Connecting Rod; Std, 1, 10	CB-663HND
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); NDK - Narrowed / Doweled Connecting Rod; Performance Coating; Std, 1, 10	CB-663HNDK
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); NK - Narrowed; Performance Coating; Std, 1, 10	CB-663HNK
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); XN001in Extra Oil Clearance / Narrowed; Std	CB-663HXN
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); XND001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Std	CB-663HXND
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); XNDK001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Performance Coating; Std	CB-663HXNDK
Connecting Rod Bearing Pair	1999-2015	High Performance; H-Series (TriMetal™); XNK001in Extra Oil Clearance / Narrowed; Performance Coating; Std	CB-663HXNK
Connecting Rod Bearing Pair	1999-2015	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); N - Narrowed; Std, 1, 10	CB-663VN
Connecting Rod Bearing Pair	1999-2015	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); XN001in Extra Oil Clearance / Narrowed; Std	CB-663VXN
Main Bearing Set	1999-2013	OE Replacement; A-Series (Aluminum); Std, 10, 20, 30	MS-2199A
Main Bearing Set	1999-2013	OE Replacement; P-Series (TriMetal™); Std, 10, 20	MS-2199P
Main Bearing Set	1999-2013	OE Replacement; A-Series (Aluminum); .010in Undersize; .020in Oversize Housing Bore; 10	MS-2366A-10
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); Std, 1, 10	MS-2199H
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); Performance Coating; Std, 10	MS-2199HK
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2199HX

Product Description	Year	Application Notes	Part No.
Main Bearing Set	1999-2013	High Performance; H-Series (TriMetal™); XK001in Extra Oil Clearance; Performance Coating; Std	MS-2199HXK
Main Bearing	2011	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MB-3592HX
Main Bearing	2011	High Performance; H-Series (TriMetal™); .001in Undersize; 1	MB-3592H-1
Main Bearing Set	2014-2017	OE Replacement; A-Series (Aluminum); F1 Coated; Std, 10, 20, 30	MS-2339A
Main Bearing Set	2014-2017	High Performance; H-Series (TriMetal™); Std	MS-2339H
Main Bearing Set	2014-2017	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2339HX
Camshaft Bearing Set	1999-2003	OE Replacement; Std	SH-1814S
Camshaft Bearing Set	2003-2010	OE Replacement; Non Coated; Std	SH-2125S
Camshaft Bearing Set	1999-2003	High Performance; Std	SH-2160S
Camshaft Bearing Set	2003-2010	OE Replacement; Coated; Std	SH-2199S
Wrist Pin Bushing	1999-2005	OE Replacement	223-3663
Piston Set	1999-2004	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3536
Piston Set	2005-2009	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3729
Piston Set	2010-2014	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3887
Piston Set	2010-2014	Without Rings; Coated; Reduced; Std, .50mm, .75mm, 1.00mm	224-3958
Piston Set	2004-2007	Without Rings; Std, .50mm, .75mm, 1.00mm	224-3727
Ring Set	1999-2014	Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040	41859CP
Ring Set	2014-2017	Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std	42216CP
Ring Set Performance	1999-2017	3.781" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1259
Ring Set Performance	1999-2017	3.781" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1362
Ring Set Performance	1999-2017	3.781" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0957
Ring Set Performance	1999-2017	3.791" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1260
Ring Set Performance	1999-2017	3.791" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1363
Ring Set Performance	1999-2017	3.791" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0958
Ring Set Performance	1999-2017	3.801" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1261

Product Description	Year	Application Notes	Part No.
Ring Set Performance	1999-2017	3.801" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1364
Ring Set Performance	1999-2017	3.801" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0959
Cylinder Head Gasket Set	2002-2008	Cylinder Head Bolts Not Included; Advantage Plus	HS54340
Cylinder Head Gasket Set	1999-2001	Cylinder Head Bolts Not Included; Advantage Plus	HS54331
Cylinder Head Gasket Set	2001	Cylinder Head Bolts Not Included; Advantage Plus	HS54331A
Cylinder Head Gasket Set	2005-2010	Cylinder Head Bolts Not Included; Advantage Plus	HS54442
Cylinder Head Gasket Set	2005-2007	Cylinder Head Bolts Not Included; Advantage Plus	HS54442A
Cylinder Head Gasket Set	2006-2009	Cylinder Head Bolts Not Included; Advantage Plus	HS54442B
Cylinder Head Gasket Set	2009-2014	Cylinder Head Bolts Not Included; Advantage Plus	HS54442C
Cylinder Head Gasket Set	2010-2014	Cylinder Head Bolts Not Included; Advantage Plus	HS54442D
Cylinder Head Gasket Set	2014-2017	Cylinder Head Bolts Not Included, Fuel Injection Seals Not Included	HS54996
Conversion Gasket Set	1999-2007	Flat Type Bolt Holes (non recessed); Set Contains Camshaft Retaining Plate; Use with Full Set to Make Head Set	CS5975
Conversion Gasket Set	1999-2014	Recessed Bolt Holes In Camshaft Retainer Plate; Use with Head Set to Make Full Set	CS5975A
Engine Gasket Set	1999-2001	Cylinder Head Bolts Not Included; Advantage Plus	95-3562
Engine Gasket Set	2002-2007	Cylinder Head Bolts Not Included; Advantage Plus	95-3561
Engine Gasket Set	2005-2007	Cylinder Head Bolts Not Included	95-3782
Engine Gasket Set	2006-2010	Cylinder Head Bolts Not Included	95-3783
Cylinder Head Gasket	1999-2001	Composite 3.870" x .060" COT	54331
Cylinder Head Gasket	1999-2007	Multi-Layered Steel; Consolidated Design 3.950" x .050" COT	54441
Cylinder Head Gasket	2005-2014	Multi-Layered Steel; Consolidated Design; Advantage Plus 3.950" x .050" COT	54442
Cylinder Head Gasket	2014-2017	Multi-Layered Steel 3.970" x .070" COT	54996
Cylinder Head Bolt Set	1999-2004	Steel	GS33380
Cylinder Head Bolt Set	2004-2014	Steel	GS33449
Cylinder Head Bolt Set	2014-2017	Steel	GS33938
Valve Cover Gasket Set	1999-2014	Valve Cover Grommets not Included; Molded Rubber	VS50250

Product Description	Year	Application Notes	Part No.
Valve Cover Gasket Set	1999-2014	Includes Valve Cover Grommets; Molded Rubber	VS50250A
Valve Cover Gasket Set	2014-2017	Molded Rubber	VS50731
Valve Cover Grommet Set	1999-2014	Molded Rubber	GS33466
Valve Stem Oil Seal Set	1999-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45919
Valve Stem Oil Seal Set	2001-2014	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45920
Valve Stem Oil Seal Set	2001-2014	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45921
Valve Stem Oil Seal Set	1999-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45922
Exhaust Manifold Gasket Set	1999-2014	Multi-Layered Steel	MS16124
Exhaust Manifold Gasket Set	2014-2018	Multi-Layered Steel	MS19936
Intake Manifold Gasket Set	1999-2009	Contains Premium Grade Intake Manifold Gaskets. Master Set - Contains Intake and Valve Cover Gaskets Plus All Miscellaneous Gaskets And Seals Needed for Intake Installation; Molded Rubber	MIS16340
Intake Manifold Gasket Set	1999-2009	Master Set - Contains Intake and Valve Cover Gaskets Plus All Miscellaneous Gaskets And Seals Needed for Intake Installation; Molded Rubber / Steel	MIS20135
Intake Manifold Gasket Set	1999-2014	Contains Premium Grade Intake Manifold Gaskets; Molded Rubber	MS16340
Intake Manifold Gasket Set	1999-2007	Lifter Valley Gasket; Includes (2) Knock Sensor Grommets; Molded Rubber	MS19328
Intake Manifold Gasket Set	1999-2014	Molded Rubber / Steel	MS20135
Intake Manifold Gasket	2005-2014	Cylinder Deactivation, Lifter Valley Gasket, Perimeter Only; Molded Rubber	MS19501
Intake Manifold Gasket Set	2006-2009	Rubber	MS19431
Intake Manifold Gasket Set	2008-2014	Lifter Valley Gasket; Molded Rubber	MS19305
Intake Manifold Gasket Set	2014-2017	Valley Pan Gasket; Molded Rubber	MS19944
Intake Manifold Gasket Set	2014-2017	Molded Rubber	MS19945
Oil Pan Gasket Set	2014-2017	Contains RTV	OS32577
Oil Pan Gasket	1999-2014	Molded Rubber	OS32241
Main Bearing Gasket Set	1999-2014	Includes Carrier Gasket; PTFE	JV1657
Main Bearing Gasket Set	2014	MAHLE Exclusive	JV1737
Main Bearing Gasket Set	2015-2017		JV1755

Product Description	Year	Application Notes	Part No.
Timing Cover Gasket Set	1999-2014	Requires Oil Pan Set	JV5022
Timing Cover Gasket Set	1999-2014	Requires Oil Pan Set; Contains Water Pump Gaskets, Timing Cover Gasket and Seal; Molded Rubber	JV5158
Variable Valve Timing (VVT) Sensor Seal	2010-2013	Rubber	B32279
Camshaft Gasket	1999-2007	Camshaft Retaining Plate, Flat Type Bolt Holes (non recessed); Steel W/ Molded Rubber	B31822
Camshaft Gasket	1999-2014	Recessed Bolt Holes In Camshaft Retainer Plate; Steel W/ Molded Rubber	B32270
Coolant Thermostat Gasket	2004-2007	Molded Rubber	C31823
Coolant Thermostat Gasket	2007-2014	O-Ring Type; Molded Rubber	C32061
Coolant Thermostat Seal	1999-2003	Molded Rubber	72141
Coolant Thermostat Seal	2014-2017	Molded Rubber	C32719
Coolant Crossover Pipe Mounting Set	1999-2013	Molded Rubber	GS33845
EGR Valve Gasket	1999-2013	Tube to Exhaust Manifold; Graphite	G31535
EGR Valve Gasket	1999-2013	Composite	G31620
EGR Valve Gasket	1999-2013	O-Ring; Rubber	G31626
Fuel Injector O-Ring Kit	1999-2000	Fluoroelastomer	GS33276
Fuel Injector O-Ring Kit	1999-2014	Fluoroelastomer	GS33529
Fuel Injector O-Ring Kit	2001-2014	Injector to Fuel Rail; Fluoroelastomer	GS33530
Fuel Injection Throttle Body Mounting Gasket	1999-2007	Molded Rubber	G31617
Fuel Injection Throttle Body Mounting Gasket	2006-2009	Molded Rubber	GS33410
Fuel Injection Throttle Body Mounting Gasket	2005	Molded Rubber	G31975
Fuel Injection Throttle Body Mounting Gasket	2006-2014	Molded Rubber	G31974

Product Description	Year	Application Notes	Part No.
Fuel Injection Throttle Body Mounting Gasket	2014-2017	Molded Rubber	G32720
Oil Drain Plug Gasket	1999-2008	With .42in I.D., With Metric Thread; Molded Rubber	B45828
Water Pump Backing Plate Gasket	1999-2013	O-Ring Type; Molded Rubber	K31629
Water Pump Gasket	1999-2014	Contains 2 Gaskets; Molded Rubber	K31628
Water Pump Gasket	2006-2009	Beaded Paper	K32268
Water Pump Gasket	2014-2017	Mounting Gasket; Beaded Steel	K32710
Water Pump Gasket	2014-2017	Pump To Housing; Contains 2 Gaskets; Steel	K33358
Oil Cooler Gasket	1999-2014	Oval Port; Beaded Steel; Advantage Plus	B31867
Oil Cooler Gasket	1999-2014	Dual Round Port; Metal with Molded Rubber	B31872
Oil Pump Pickup Tube Gasket	2006-2007	Paper	B32101
Oil Pump Pickup Tube Gasket	2006-2007	Paper	B32102
Oil Pump Pickup Tube Gasket	1999-2014	O-Ring Type; Molded Rubber	B32790
Exhaust Pipe Flange Gasket	2006-2009	Flange Type; Multi-Layered Steel	F31593
Exhaust Pipe Flange Gasket	2000-2014	Ring Type A; Steel and Composite	F31618
Exhaust Pipe Flange Gasket	1999-2015	Ring Type E; Graphite/Wire Mesh With Sleeve	F31619
Valley Pan Gasket Set	2005-2013	Lifter Valley Gasket, For use when servicing Displacement On Demand Solenoids; Molded Rubber	MS20203
Catalytic Converter Gasket	2006-2009	Flange Type; Composite	F32166
Catalytic Converter Gasket	2005-2014	With 2 Bolt Mounting; Composite	F32693
Crankshaft Repair Sleeve	1999-2014	0.780in Sleeve Length; Narrow Lip; Steel	A350
Crankshaft Repair Sleeve	1999-2014	1.156in Sleeve Length; Wide Lip; Steel	A355

Product Description	Year	Application Notes	Part No.
Connecting Rod Bearing Pair	1997-2007	OE Replacement; A-Series (Aluminum); Std, 1, 10, 20, 30, 40	CB-663A
Connecting Rod Bearing Pair	1997-2004	OE Replacement; A-Series (Aluminum); Connecting Rods With Housing Bore Resized .002in Larger Than Stock; Std, 10, 20, 30, 40	CB-1776A
Connecting Rod Bearing Pair	1997-2007	OE Replacement; P-Series (TrilMetal™); Std, 1, 2, 10, 20, 30, 40, C60	CB-663P
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); N - Narrowed; Std, 1, 9, 10, 11, 19, 20, 21, 30	CB-663HN
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); ND - Narrowed / Doweled Connecting Rod; Std, 1, 10	CB-663HND
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); NDK - Narrowed / Doweled Connecting Rod; Performance Coating; Std, 1, 10	CB-663HNDK
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); NK - Narrowed; Performance Coating; Std, 1, 10	CB-663HNK
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); XN001in Extra Oil Clearance / Narrowed; Std	CB-663HXN
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); XND001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Std	CB-663HXND
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); XNDK001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Performance Coating; Std	CB-663HXNDK
Connecting Rod Bearing Pair	1997-2007	High Performance; H-Series (TriMetal™); XNK001in Extra Oil Clearance / Narrowed; Performance Coating; Std	CB-663HXNK
Connecting Rod Bearing Pair	1997-2007	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); N - Narrowed; Std, 1, 10	CB-663VN
Connecting Rod Bearing Pair	1997-2007	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); XN001in Extra Oil Clearance / Narrowed; Std	CB-663VXN
Main Bearing Set	1997-2007	OE Replacement; A-Series (Aluminum); Std, 10, 20, 30	MS-2199A
Main Bearing Set	1997-2007	OE Replacement; P-Series (TriMetal™); Std, 10, 20	MS-2199P
Main Bearing Set	1997-2007	OE Replacement; A-Series (Aluminum); .010in Undersize; .020in Oversize Housing Bore; 10	MS-2366A-10
Main Bearing Set	1997-2007	High Performance; H-Series (TriMetal™); Std, 1, 10	MS-2199H
Main Bearing Set	1997-2007	High Performance; H-Series (TriMetal™); Performance Coating; Std, 10	MS-2199HK
Main Bearing Set	1997-2007	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2199HX

Product Description	Year	Application Notes	Part No.
Main Bearing Set	1997-2007	High Performance; H-Series (TriMetal™); XK001in Extra Oil Clearance; Performance Coating; Std	MS-2199HXK
Main Bearing Set	1997-2002	OE Replacement; A-Series (Aluminum); .010in Undersize; Contains .010" Oversized Length Flanged Bearing; Domestic; 10	MS-1744A-10
Camshaft Bearing Set	1997-2003	OE Replacement; Std	SH-1814S
Camshaft Bearing Set	2003-2004	OE Replacement; Non Coated; Std	SH-2125S
Camshaft Bearing Set	1999-2002	High Performance; Std	SH-2160S
Camshaft Bearing Set	2003-2004	OE Replacement; Coated; Std	SH-2199S
Wrist Pin Bushing	1997-2004	OE Replacement	223-3663
Piston Set	1997-2004	Without Rings; Coated; Dish; Std, .020, .030, .040	224-3543
Piston Set	1997-2007	Without Rings; Non-Coated; Dish; Std, .020, .030, .040	224-3544
Piston Set	1996	Without Rings; Non-Coated; Flat Top w/ 4 Valve Reliefs; Std, .020, .030, .040	224-3497
Piston Set	2000-2004	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3540
Piston Set	1996-2002	Without Rings; Coated; 4 Valve Relief, Recessed Head; Std, .50mm, .75mm, 1.00mm	224-3940
Ring Set	1997-2004	Premium; 1.5mm; 1.5mm; 3.0mm Steel Plasma Moly; Grey Iron Napier; CP- 20™ Shallow Groove; Std, .020	41850CP
Ring Set Performance	1997-2007	3.902" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1266
Ring Set Performance	1997-2007	3.902" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1369
Ring Set Performance	1997-2007	3.902" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0964
Ring Set Performance	1997-2007	3.909" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1267
Ring Set Performance	1997-2007	3.909" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1370
Ring Set Performance	1997-2007	3.909" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0965
Cylinder Head Gasket Set	1999-2001	Cylinder Head Bolts Not Included	HS5975
Cylinder Head Gasket Set	1997-1998	Cylinder Head Bolts Not Included	HS5975A
Cylinder Head Gasket Set	2001-2002	Cylinder Head Bolts Not Included	HS5975B
Cylinder Head Gasket Set	2001	Cylinder Head Bolts Not Included	HS5975C
Cylinder Head Gasket Set	2001-2004	Cylinder Head Bolts Not Included	HS5975D

Product Description	Year	Application Notes	Part No.
Conversion Gasket Set	1997-2004	Flat Type Bolt Holes (non recessed); Set Contains Camshaft Retaining Plate; Use with Head Set to Make Full Set	CS5975
Conversion Gasket Set	1997-2004	Recessed Bolt Holes In Camshaft Retainer Plate; Use with Head Set to Make Full Set	CS5975A
Gasket Set	1999-2001	Contains Upper and Lower Oil Pan Gaskets; Cylinder Head Bolts Not Included	95-3640
Cylinder Head Gasket	1997-2004	Multi-Layered Steel; Consolidated Design 3.950" x .050" COT	54442
Cylinder Head Gasket Performance	1997-2004	Multi-Layered Steel 3.910" Bore .051" COT	55041
Cylinder Head Bolt Set	1997-2004	Steel	GS33380
Cylinder Head Bolt Set	2004	Steel	GS33449
Valve Cover Gasket Set	1999-2004	Valve Cover Grommets not Included; Molded Rubber	VS50250
Valve Cover Gasket Set	1999-2004	Includes Valve Cover Grommets; Molded Rubber	VS50250A
Valve Cover Gasket Set	1997-1998	Molded Rubber; Domestic	VS50375
Valve Cover Grommet Set	1997-2004	Molded Rubber; Domestic	GS33466
Valve Stem Oil Seal Set	1997-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45919
Valve Stem Oil Seal Set	2001-2004	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45920
Valve Stem Oil Seal Set	2001-2004	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45921
Valve Stem Oil Seal Set	1997-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45922
Exhaust Manifold Gasket Set	1997-2002	Multi-Layered Steel	MS16124
Exhaust Manifold Gasket Set	2001-2004	Multi-Layered Steel	MS19498
Exhaust Manifold Gasket Set Performance	1997-2004	Graphite w/ Perforated Steel Core 1.720" Round Port .060" Thick	MS20286
Exhaust Manifold Gasket Set Performance	1997-2004	Graphite w/ Perforated Steel Core 1.880" Round Port .060" Thick	MS20287
Intake Manifold Gasket Set	1997-2004	Molded Rubber	MS16350
Intake Manifold Gasket Set	1997-2004	Lifter Valley Gasket; Includes (2) Knock Sensor Grommets; Molded Rubber	MS19328
Intake Manifold Gasket Set Performance	1997-2004	Laminated Fiber; .030" Thick; 1.150" x 3.375" Cathedral	MS20056

Product Description	Year	Application Notes	Part No.
Intake Manifold Gasket Set Performance	1997-2004	Laminated Fiber; .060" Thick; 1.150" x 3.375" Cathedral Port; Bead Sealed Ports	MS20057
Intake Manifold Gasket Set Performance	1997-2004	Laminated Fiber; .120" Thick; 1.150" x 3.375" Cathedral Port	MS20058
Intake Manifold Bolt Set	1996-2002	Steel	GS33561
Oil Pan Gasket	1997-2004	Molded Rubber	OS32241
Oil Pan Gasket	2000-2004	Molded Rubber	OS32262
Main Bearing Gasket Set	1997-2004	Includes Carrier Gasket; PTFE	JV1657
Timing Cover Gasket Set	1997-2004	Requires Oil Pan Set	JV5022
Timing Cover Gasket Set	1997-2004	Requires Oil Pan Set; Contains Water Pump Gaskets, Timing Cover Gasket and Seal; Molded Rubber	JV5158
Camshaft Gasket	1997-2004	Camshaft Retaining Plate, Flat Type Bolt Holes (non recessed); Steel W/ Molded Rubber	B31822
Camshaft Gasket	1997-2004	Recessed Bolt Holes In Camshaft Retainer Plate; Steel W/ Molded Rubber	B32270
Coolant Thermostat Gasket	2004	Molded Rubber	C31823
Coolant Thermostat Seal	1997-2003	Molded Rubber	72141
Coolant Crossover Pipe Mounting Set	1997-2004	Molded Rubber	GS33845
EGR Valve Gasket	1997-2004	Tube to Exhaust Manifold; Graphite	G31535
EGR Valve Gasket	1997-2004	Composite	G31620
EGR Valve Gasket	1997-2004	O-Ring; Rubber	G31626
Fuel Injection Throttle Body Mounting Gasket	1997-2004	Molded Rubber	G31632
Harmonic Balancer Repair Sleeve	1996-1997	.013" Thickness; Nickel Plated Formed Steel	A228
Oil Cooler Gasket	1997-2004	Oval Port; Beaded Steel	B31867
Oil Cooler Gasket	1997-2004	Dual Round Port; Metal with Molded Rubber	B31872
Oil Drain Plug Gasket	1996-2004	With .42in ID, With Metric Thread; Molded Rubber	B45828

Product Description	Year	Application Notes	Part No.
Water Pump Backing Plate Gasket	1997-2004	O-Ring Type; Molded Rubber	K31629
Water Pump Gasket	1999-2004	Contains 2 Gaskets; Molded Rubber	K31628
Water Pump Gasket	1997-1998	Paper	K31627
Oil Pump Pickup Tube Gasket	1997-2004	O-Ring Type; Molded Rubber	B32790
Exhaust Pipe Flange Gasket	1998-2002	Flange Type; Composite	F31630
Catalytic Converter Gasket	1996-2002	With 2 Bolt Mounting; Composite	F32693
Crankshaft Repair Sleeve	1997-2004	.780in Sleeve Length; Narrow Lip; Steel	A350
Crankshaft Repair Sleeve	1997-2004	1.156in Sleeve Length; Wide Lip; Steel	A355

Product Description	Year	Application Notes	Part No.
Connecting Rod Bearing Pair	1999-2017	OE Replacement; A-Series (Aluminum); Std, 1, 10, 20, 30, 40	CB-663A
Connecting Rod Bearing Pair	1999-2017	OE Replacement; A-Series (Aluminum); Connecting Rods With Housing Bore Resized .002" Larger Than Stock; Std, 10, 20, 30, 40	CB-1776A
Connecting Rod Bearing Pair	1999-2017	OE Replacement; P-Series (TrilMetal™); Std, 1, 2, 10, 20, 30, 40, C60	CB-663P
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); N - Narrowed; Std, 1, 9, 10, 11, 19, 20, 21, 30	CB-663HN
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); ND - Narrowed / Doweled Connecting Rod; Std, 1, 10	CB-663HND
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); NDK - Narrowed / Doweled Connecting Rod; Performance Coating; Std, 1, 10	CB-663HNDK
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); NK - Narrowed; Performance Coating; Std, 1, 10	CB-663HNK
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); XN001in Extra Oil Clearance / Narrowed; Std	CB-663HXN
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); XND001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Std	CB-663HXND
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); XNDK001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Performance Coating; Std	CB-663HXNDK
Connecting Rod Bearing Pair	1999-2017	High Performance; H-Series (TriMetal™); XNK001in Extra Oil Clearance / Narrowed; Performance Coating; Std	CB-663HXNK
Connecting Rod Bearing Pair	1999-2017	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); N - Narrowed; Std, 1, 10	CB-663VN
Connecting Rod Bearing Pair	1999-2017	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); XN001in Extra Oil Clearance / Narrowed; Std	CB-663VXN
Main Bearing Set	1999-2016	OE Replacement; A-Series (Aluminum); Std, 10, 20, 30	MS-2199A
Main Bearing Set	1999-2015	OE Replacement; P-Series (TriMetal™); Std, 10, 20	MS-2199P
Main Bearing Set	1999-2010	OE Replacement; A-Series (Aluminum); .010in Undersize; .020in Oversize Housing Bore; 10	MS-2366A-10
Main Bearing Set	1999-2015	High Performance; H-Series (TriMetal™); Std, 1, 10	MS-2199H
Main Bearing Set	1999-2015	High Performance; H-Series (TriMetal™); Performance Coating; Std, 10	MS-2199HK
Main Bearing Set	1999-2015	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2199HX

Performance Coating: Std   Performance: H-Series (TiMetal <sup>IM</sup> ): X001h Extra Oli Clearance; Std   MB-3592HX     Wain Bearing   2002-2005   High Performance; H-Series (TiMetal <sup>IM</sup> ): X001h Extra Oli Clearance; Std   MB-3592H1     Carnshaft Bearing Set   2000-2003   OE Replacement; Std   SH-19145     Carnshaft Bearing Set   2010   High Performance; Std   SH-21575     Carnshaft Bearing Set   2010   High Performance; Std   SH-21575     Carnshaft Bearing Set   2002-2003   High Performance; Std   SH-21575     Carnshaft Bearing Set   2003-2010   OE Replacement; Non Coated; Std.   SH-21695     Carnshaft Bearing Set   2003-2010   OE Replacement; Std   SH-21695     Carnshaft Bearing Set   2003-2010   OE Replacement; Std   SH-21695     Carnshaft Bearing Set   2003-2010   OE Replacement; Std   SH-21695     Seton Set   2004-2015   Without Flings; Coated; Reduced; Std, Z5mm, J5mm, J5mm, J.00mm   224-3665     Paton Set   1999-2003   Without Flings; Coated; Reduced; Std, Z5mm, J50mm, J75mm, J.00mm   244-3665     Paton Set   1999-2010   Without Flings; Coated; Reduced; Std, Z5mm, So	Product Description	Year	Application Notes	Part No.
Number of the setting   2002-2005   High Performance; H-Series (TriMetal <sup>M</sup> ); .001in Undersize; 1   MB-3592H-1     Carnshaft Bearing Set   2003-2007   OE Replacement; Std   SH-1814S     Carnshaft Bearing Set   2003-2017   OE Replacement; Non Coated; Std   SH-2125S     Carnshaft Bearing Set   2003-2010   High Performance; Std   SH-2157S     Carnshaft Bearing Set   2002-2003   High Performance; Std   SH-2167S     Carnshaft Bearing Set   2003-2010   OE Replacement; Std   SH-2169S     Carnshaft Bearing Set   2003-2005   OE Replacement; Std   SH-2169S     Carnshaft Bearing Set   2003-2005   OE Replacement; Std   SH-2169S     Carnshaft Bearing Set   2003-2005   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3663     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   24-3663     Piston Set   1999-2007   Without Rings; Non-Coated; Std, .200, .030, .040   24-3728     Ring Set   2003-2011   Premium; 1.5mm; 1	Main Bearing Set	1999-2015		MS-2199HXK
Camebalt Beering Set   2000-2003   OE Replacement; Std   OE Replacement; Std   Std     Camshaft Beering Set   2003-2017   OE Replacement; Non Coated; Std   Std   Std-1215S     Camshaft Beering Set   2010   High Performance; Std   Std-216S   Std-216S     Camshaft Beering Set   2003-2010   OE Replacement; Std   Std-216S   Std-216S     Camshaft Beering Set   2003-2003   DE Replacement; Std   Std-216S   Std-216S     Camshaft Beering Set   2003-2005   OE Replacement; Std   Std-216S   Std-216S     Piston Set   2002-2005   Without Rings; Coated; Reduced; Std, 25mm, .50mm, .75mm, 1.00mm   224-3663     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Piston Set   2003-2017   Without Rings; Non-Coated; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2007   Without Rings; Non-Coated; Std, .020, .030, .040   224-3728     Piston Set   1999-2007   Without Rings; Non-Coated; Std, .020	Main Bearing	1999-2017	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MB-3592HX
Camshaft Bearing Set   2003-2017   OE Replacement; Non Coated; Std   SH-2125S     Camshaft Bearing Set   2010   High Performance; Std   SH-2157S     Camshaft Bearing Set   2002-2003   High Performance; Std   SH-2160S     Camshaft Bearing Set   2003-2010   OE Replacement; Std   SH-2199S     Camshaft Bearing Set   2003-2010   OE Replacement; Std   SH-219S     Camshaft Bearing Set   2003-2010   OE Replacement; Std   SH-219S     Whist Pin Bushing   1999-2005   OE Replacement; Std   Std.   Stm., .50mm, .75mm, 1.00mm   224-3663     Piston Set   2006-2016   Without Rings; Coated; Reduced; Std., .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Coated; Reduced; Std., .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Coated; Reduced; Std., .20, .030, .040   224-3665     Piston Set   1999-2009   Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std., .020, .030, .040   42084CP     Ring Set   2007-2017   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow	Main Bearing	2002-2005	High Performance; H-Series (TriMetal™); .001in Undersize; 1	MB-3592H-1
Camshaft Bearing Set   2010   High Performance; Std   SH-2157S     Camshaft Bearing Set   2002-2003   High Performance; Std   SH-2160S     Camshaft Bearing Set   2003-2010   OE Replacement; Std   SH-2199S     Nist Pin Bushing   1999-2005   OE Replacement; Std   223-3663     Piston Set   2002-2005   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   2003-2017   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .200, .030, .040   41858CP     Ring Set   1999-2007   Premium; 1.5mm; 1.5mm; Stell Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   4084CP     Ring Set Performance   1999-2017   4.000" x 1.0mm .143" RW 9254 Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shal	Camshaft Bearing Set	2000-2003	OE Replacement; Std	SH-1814S
Camshaft Bearing Set   2002-2003   High Performance; Std   SH-2160S     Camshaft Bearing Set   2003-2010   OE Replacement; Std   SH-2199S     Wrist Pin Bushing   1999-2005   OE Replacement; Std   223-3663     Piston Set   2002-2005   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Piston Set   2006-2016   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2009   Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   41858CP     Ring Set   2007-2017   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   301-1052     Ring Set Performance   1999-2017   4.000° x 1.0mm .143° RW 9254 Steel HV385 UCR   302-1210     Ring Set Performance <t< td=""><td>Camshaft Bearing Set</td><td>2003-2017</td><td>OE Replacement; Non Coated; Std</td><td>SH-2125S</td></t<>	Camshaft Bearing Set	2003-2017	OE Replacement; Non Coated; Std	SH-2125S
Camshaft Bearing Set   2003-2010   OE Replacement; Std   SH-2199S     Wrist Pin Bushing   1999-2005   OE Replacement; Std   223-3663     Piston Set   2002-2005   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Piston Set   2006-2016   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999 - 2002   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999 - 2007   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3728     Ring Set   1999-2009   Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   42084CP     Ring Set Performance   1999-2017   A.000* x 1.0mm .143* RW 9254 Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   301-1052     Ring Set Performance   1999-2017   A.000* x 1.0mm .143* RW 9254 Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   302-1210     Ring Set Performance   1999-2017   A.000* x 1.0mm .143* RW 9254 S	Camshaft Bearing Set	2010	High Performance; Std	SH-2157S
Wrist Pin Bushing   1999-2005   OE Replacement   223-3663     Piston Set   2002-2005   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Piston Set   2006-2016   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3663     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3665     Ring Set   1999-2002   Premium; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome   41858CP     Ring Set   2003-2011   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   42157CP     Ring Set Performance   1999-2017   4.000° x 1.0mm .143" RW 9254 Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   301-1052     Ring Set Performance   1999-2017   4.000° x 1.0mm .143" RW 9254 Steel HV385 UCR   302-1210     Ring Set Performance   1999-2017   4.000° x 1.5mm .150" RW 9254 Steel HV385 UCR   301-0506	Camshaft Bearing Set	2002-2003	High Performance; Std	SH-2160S
Piston Set   2002-2005   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3663     Piston Set   2006-2016   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Piston Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999-2002   Premium; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome CP-20 <sup>TW</sup> ; Shallow Groove; Std, .020, .030, .040   41858CP     Ring Set   2003-2011   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TW</sup> ; Shallow Groove; Std, .020, .030, .040   42084CP     Ring Set   2007-2017   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TW</sup> ; Shallow Groove; Std, .020, .030, .040   301-1052     Ring Set Performance   1999-2017   4.000" x 1.0mm .143" RW 9254 Steel HV385 UCR   301-1052     Ring Set Performance   1999-2017   4.000" x 1.5mm .151" RW 9254 Steel HV385 UCR   301-0506     Ring Set Performance   1999-2017   4.000" x 1.5mm .150" RW 9254 Steel HV385 UCR   302-1204     Ring Set Performance   1999-2017   4.000" x 1.5mm .150" RW	Camshaft Bearing Set	2003-2010	OE Replacement; Std	SH-2199S
Pieton Set   2006-2016   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3664     Pieton Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Pieton Set   1999 - 2002   Without Rings; Coated; Reduced; Std, .50mm, .75mm, 1.00mm   224-3728     Ring Set   1999 - 2009   Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040   41858CP     Ring Set   2003-2011   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040   42084CP     Ring Set   2007-2017   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040   42157CP     Ring Set Performance   1999-2017   4.000* x 1.0mm .143* RW 9254 Steel Napier LCR   301-1052     Ring Set Performance   1999-2017   4.000* x 1.5mm .151* RW 9254 Steel Napier LCR   303-0775     Ring Set Performance   1999-2017   4.000* x 1.5mm .150* RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4.000* x 1.5mm .150* RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4.000* x 1.5mm .153* RW	Wrist Pin Bushing	1999-2005	OE Replacement	223-3663
Picton Set   2003-2017   Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm   224-3665     Piston Set   1999 -2002   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3728     Ring Set   1999 -2009   Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040   4858CP     Ring Set   2003-2011   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040   42157CP     Ring Set   2007-2017   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20TM; Shallow Groove; Std, .020, .030, .040   301-1052     Ring Set Performance   1999-2017   4.000* x 1.0mm .143* RW 9254 Steel HV385 UCR   302-1210     Ring Set Performance   1999-2017   4.000* x 1.0mm .13* RW 9254 Steel Napier LCR   303-0775     Ring Set Performance   1999-2017   4.000* x 1.5mm .150* RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4.000* x 1.5mm .150* RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4.000* x 1.5mm .150* RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4.000* x 1.5mm .150* RW 9254 Steel Napier	Piston Set	2002-2005	Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm	224-3663
Piston Set   1999 -2002   Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm   224-3728     Ring Set   1999-2009   Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome   41858CP     Ring Set   2003-2011   Premium; 1.5mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   42084CP     Ring Set   2007-2017   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   42157CP     Ring Set   2007-2017   Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20 <sup>TM</sup> ; Shallow Groove; Std, .020, .030, .040   301-1052     Ring Set Performance   1999-2017   4.000" x 1.0mm .143" RW 9254 Steel HV385 UCR   301-1052     Ring Set Performance   1999-2017   4.000" x 2.0mm .113" RW Stainless Steel CP-20 <sup>TM</sup> Standard Tension OCR   303-0775     Ring Set Performance   1999-2017   4.000" x 1.5mm .151" RW 9254 Steel Napier LCR   301-10506     Ring Set Performance   1999-2017   4.000" x 1.5mm .150" RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4.000" x 1.5mm .150" RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4	Piston Set	2006-2016	Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm	224-3664
Ring Set1999-2009Premium; 1.5mm; 1.5mm; 3.0mm; Steel Plasma Moly; Steel Napier; Chrome41858CPRing Set2003-2011Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20TM; Shallow Groove; Std, .020, .030, .04042084CPRing Set2007-2017Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20TM; Shallow Groove; Std, .020, .030, .04042157CPRing Set2007-2017Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20TM; Shallow Groove; Std, .020, .030, .040301-1052Ring Set Performance1999-20174.000" x 1.0mm .143" RW 9254 Steel HV385 UCR302-1210Ring Set Performance1999-20174.000" x 1.0mm .113" RW Stainless Steel CP-20TM Standard Tension OCR303-0775Ring Set Performance1999-20174.000" x 1.5mm .151" RW 9254 Steel HV385 UCR301-0506Ring Set Performance1999-20174.000" x 1.5mm .150" RW 9254 Steel Napier LCR302-1210Ring Set Performance1999-20174.000" x 1.5mm .150" RW 9254 Steel Napier LCR302-1204Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20TM Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 3.0mm .153" RW 9254 Steel Napier LCR302-1204Ring Set Performance1999-20174.000" x 3.0mm .153" RW 9254 Steel Napier LCR303-0305Ring Set Performance1999-20174.000" x 3.0mm .153" RW 9254 Steel Napier LCR303-0305Ring Set Performance1999-20174.000" x 3.0mm .153" RW 9254 Steel Physe UCR303-0305 </td <td>Piston Set</td> <td>2003-2017</td> <td>Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm</td> <td>224-3665</td>	Piston Set	2003-2017	Without Rings; Coated; Reduced; Std, .25mm, .50mm, .75mm, 1.00mm	224-3665
CP-20™; Shallow Groove; Std, .020, .030, .040Ring Set2003-2011Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .04042084CPRing Set2007-2017Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .04042157CPRing Set Performance1999-20174.000" x 1.0mm .143" RW 9254 Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040301-1052Ring Set Performance1999-20174.000" x 1.0mm .143" RW 9254 Steel HV385 UCR302-1210Ring Set Performance1999-20174.000" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR303-0775Ring Set Performance1999-20174.000" x 1.5mm .151" RW 9254 Steel HV385 UCR301-0506Ring Set Performance1999-20174.000" x 1.5mm .151" RW 9254 Steel Napier LCR302-1204Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR302-1204Ring Set Performance1999-20174.000" x 1.5mm .150" RW 9254 Steel Napier LCR302-1204Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 1.5mm .150" RW 9254 Steel HV385 UCR301-1053Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 1.0mm .143" RW 9254 Steel HV385 UCR301-1053	Piston Set	1999 -2002	Without Rings; Non-Coated; Std, .50mm, .75mm, 1.00mm	224-3728
Chrome CP-20™; Shallow Groove; Std, .020, .030, .040Ring Set2007-2017Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .04042157CPRing Set Performance1999-20174.000" x 1.0mm .143" RW 9254 Steel HV385 UCR301-1052Ring Set Performance1999-20174.000" x 1.0mm .136" RW 9254 Steel Napier LCR302-1210Ring Set Performance1999-20174.000" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR303-0775Ring Set Performance1999-20174.000" x 1.5mm .151" RW 9254 Steel Napier LCR301-10506Ring Set Performance1999-20174.000" x 1.5mm .150" RW 9254 Steel Napier LCR302-1204Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR302-1204Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR303-0305Ring Set Performance1999-20174.000" x 1.5mm .143" RW 9254 Steel HV385 UCR301-1053	Ring Set	1999-2009		41858CP
Chrome CP-20™; Shallow Groove; Std, .020, .030, .040 301-1052   Ring Set Performance 1999-2017 4.000" x 1.0mm .143" RW 9254 Steel HV385 UCR 302-1210   Ring Set Performance 1999-2017 4.000" x 1.0mm .136" RW 9254 Steel Napier LCR 302-1210   Ring Set Performance 1999-2017 4.000" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR 303-0775   Ring Set Performance 1999-2017 4.000" x 1.5mm .151" RW 9254 Steel HV385 UCR 301-0506   Ring Set Performance 1999-2017 4.000" x 1.5mm .151" RW 9254 Steel Napier LCR 302-1204   Ring Set Performance 1999-2017 4.000" x 1.5mm .150" RW 9254 Steel Napier LCR 302-1204   Ring Set Performance 1999-2017 4.000" x 1.5mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR 301-1053	Ring Set	2003-2011		42084CP
Ring Set Performance 1999-2017 4.000" x 1.0mm .136" RW 9254 Steel Napier LCR 302-1210   Ring Set Performance 1999-2017 4.000" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR 303-0775   Ring Set Performance 1999-2017 4.000" x 1.5mm .151" RW 9254 Steel HV385 UCR 301-0506   Ring Set Performance 1999-2017 4.000" x 1.5mm .150" RW 9254 Steel Napier LCR 302-1204   Ring Set Performance 1999-2017 4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.000" x 1.5mm .150" RW 9254 Steel Napier LCR 303-0305   Ring Set Performance 1999-2017 4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR 301-1053	Ring Set	2007-2017		42157CP
Ring Set Performance 1999-2017 4.000" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR 303-0775   Ring Set Performance 1999-2017 4.000" x 1.5mm .151" RW 9254 Steel HV385 UCR 301-0506   Ring Set Performance 1999-2017 4.000" x 1.5mm .150" RW 9254 Steel Napier LCR 302-1204   Ring Set Performance 1999-2017 4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR 301-1053	Ring Set Performance	1999-2017	4.000" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1052
Ring Set Performance   1999-2017   4.000" x 1.5mm .151" RW 9254 Steel HV385 UCR   301-0506     Ring Set Performance   1999-2017   4.000" x 1.5mm .150" RW 9254 Steel Napier LCR   302-1204     Ring Set Performance   1999-2017   4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR   303-0305     Ring Set Performance   1999-2017   4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR   301-1053	Ring Set Performance	1999-2017	4.000" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1210
Ring Set Performance 1999-2017 4.000" x 1.5mm .150" RW 9254 Steel Napier LCR 302-1204   Ring Set Performance 1999-2017 4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR 301-1053	Ring Set Performance	1999-2017	4.000" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0775
Ring Set Performance 1999-2017 4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR 303-0305   Ring Set Performance 1999-2017 4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR 301-1053	Ring Set Performance	1999-2017	4.000" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0506
Ring Set Performance   1999-2017   4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR   301-1053	Ring Set Performance	1999-2017	4.000" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1204
	Ring Set Performance	1999-2017	4.000" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0305
Ring Set Performance 1999-2017 4.005" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR 303-0776	Ring Set Performance	1999-2017	4.005" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1053
	Ring Set Performance	1999-2017	4.005" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0776

Product Description	Year	Application Notes	Part No.
Ring Set Performance	1999-2017	4.005" x .043" .157" RW GNS UCR	301-1162
Ring Set Performance	1999-2017	4.005" x .043" .135" RW Steel Napier LCR	302-1307
Ring Set Performance	1999-2017	4.005" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0972
Ring Set Performance	1999-2017	4.005" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1262
Ring Set Performance	1999-2017	4.010" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1054
Ring Set Performance	1999-2017	4.010" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1211
Ring Set Performance	1999-2017	4.010" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0777
Ring Set Performance	1999-2017	4.010" x .043" .157" RW GNS UCR	301-1163
Ring Set Performance	1999-2017	4.010" x .043" .135" RW Steel Napier LCR	302-1291
Ring Set Performance	1999-2017	4.015" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1055
Ring Set Performance	1999-2017	4.015" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0860
Ring Set Performance	1999-2017	4.015" x .043" .157" RW GNS UCR	301-1164
Ring Set Performance	1999-2017	4.015" x .043" .135" RW Steel Napier LCR	302-1295
Ring Set Performance	1999-2017	4.020" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1056
Ring Set Performance	1999-2017	4.020" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1212
Ring Set Performance	1999-2017	4.020" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0778
Ring Set Performance	1999-2017	4.020" x .043" .157" RW GNS UCR	301-1165
Ring Set Performance	1999-2017	4.020" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0307
Ring Set Performance	1999-2017	4.020" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0507
Ring Set Performance	1999-2017	4.020" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1205
Ring Set Performance	1999-2017	4.020" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0307
Ring Set Performance	1999-2017	4.025" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1057
Ring Set Performance	1999-2017	4.025" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0857
Ring Set Performance	1999-2017	4.025" x .043" .157" RW GNS UCR	301-1166
Ring Set Performance	1999-2017	4.025" x .043" .135" RW Steel Napier LCR	302-1308
Ring Set Performance	1999-2017	4.025" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-1244
Ring Set Performance	1999-2017	4.025" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1263

Product Description	Year	Application Notes	Part No.
Ring Set Performance	1999-2017	4.030" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1058
Ring Set Performance	1999-2017	4.030" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1213
Ring Set Performance	1999-2017	4.030" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0799
Ring Set Performance	1999-2017	4.030" x .043" .157" RW GNS UCR	301-1167
Ring Set Performance	1999-2017	4.030" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0308
Ring Set Performance	1999-2017	4.030" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0508
Ring Set Performance	1999-2017	4.030" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1206
Ring Set Performance	1999-2017	4.030" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0308
Ring Set Performance	1999-2017	4.035" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1059
Ring Set Performance	1999-2017	4.035" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1238
Ring Set Performance	1999-2017	4.035" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0858
Ring Set Performance	1999-2017	4.035" x .043" .157" RW GNS UCR	301-1168
Ring Set Performance	1999-2017	4.035" x .043" .135" RW Steel Napier LCR	302-1252
Ring Set Performance	1999-2017	4.035" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-1245
Ring Set Performance	1999-2017	4.035" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1267
Ring Set Performance	1999-2017	4.040" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1060
Ring Set Performance	1999-2017	4.040" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1214
Ring Set Performance	1999-2017	4.040" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0780
Ring Set Performance	1999-2017	4.040" x .043" .157" RW GNS UCR	301-1169
Ring Set Performance	1999-2017	4.040" x .043" .135" RW Steel Napier LCR	302-1292
Ring Set Performance	1999-2017	4.040" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0309
Ring Set Performance	1999-2017	4.040" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0509
Ring Set Performance	1999-2017	4.040" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1207
Ring Set Performance	1999-2017	4.040" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0309
Ring Set Performance	1999-2017	4.045" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1061
Ring Set Performance	1999-2017	4.045" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1239
Ring Set Performance	1999-2017	4.045" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0859

Product Description	Year	Application Notes	Part No.
Ring Set Performance	1999-2017	4.045" x .043" .157" RW GNS UCR	301-1170
Ring Set Performance	1999-2017	4.045" x .043" .135" RW Steel Napier LCR	302-1294
Ring Set Performance	1999-2017	4.045" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-1246
Ring Set Performance	1999-2017	4.045" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1264
Ring Set Performance	1999-2017	4.050" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1095
Ring Set Performance	1999-2017	4.050" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1215
Ring Set Performance	1999-2017	4.050" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0781
Ring Set Performance	1999-2017	4.055" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1062
Ring Set Performance	1999-2017	4.055" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1284
Ring Set Performance	1999-2017	4.055" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0782
Ring Set Performance	1999-2017	4.055" x .043" .157" RW GNS UCR	301-1172
Ring Set Performance	1999-2017	4.055" x .043" .135" RW Steel Napier LCR	302-1247
Ring Set Performance	1999-2017	4.060" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1096
Ring Set Performance	1999-2017	4.060" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1285
Ring Set Performance	1999-2017	4.060" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0783
Ring Set Performance	1999-2017	4.065" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1063
Ring Set Performance	1999-2017	4.065" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1216
Ring Set Performance	1999-2017	4.065" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0784
Ring Set Performance	1999-2017	4.065" x .043" .157" RW GNS UCR	301-1174
Ring Set Performance	1999-2017	4.065" x .043" .135" RW Steel Napier LCR	302-1293
Ring Set Performance	1999-2017	4.065" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0975
Ring Set Performance	1999-2017	4.065" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1290
Cylinder Head Gasket Set	2001-2007	Cylinder Head Bolts Not Included; Advantage Plus	HS54332
Cylinder Head Gasket Set	2001	Cylinder Head Bolts Not Included; Advantage Plus	HS54332A
Cylinder Head Gasket Set	2005-2007	Cylinder Head Bolts Not Included; Advantage Plus	HS54332B
Cylinder Head Gasket Set	1999-2000	Cylinder Head Bolts Not Included; Advantage Plus	HS54341
Cylinder Head Gasket Set	2005-2009	Cylinder Head Bolts Not Included; Advantage Plus	HS54445

Product Description	Year	Application Notes	Part No.
Cylinder Head Gasket Set	2011-2015	Cylinder Head Bolts Not Included; Advantage Plus	HS54660
Cylinder Head Gasket Set	2007-2016	Cylinder Head Bolts Not Included; Advantage Plus	HS54660A
Conversion Gasket Set	1999-2007	Flat Type Bolt Holes (non recessed); Set Contains Camshaft Retaining Plate; Use with Head Set to Make Full Set	CS5975
Conversion Gasket Set	1999-2016	Recessed Bolt Holes In Camshaft Retainer Plate; Use with Head Set to Make Full Set	CS5975A
Engine Gasket Set	2001-2003	Cylinder Head Bolts Not Included; Advantage Plus	95-3563
Engine Gasket Set	1999-2000	Cylinder Head Bolts Not Included; Advantage Plus	95-3564
Cylinder Head Gasket	1999-2007	Multi-Layered Steel 4.100" x .050 COT	54445
Cylinder Head Gasket	2009-2016	Multi-Layered Steel 4.100" x .050 COT	54660
Cylinder Head Gasket Performance	1999-2017	Multi-Layered Steel 4.060" Bore .051" COT	55042
Cylinder Head Bolt Set	1999-2004	Steel	GS33380
Cylinder Head Bolt Set	2004-2016	Steel	GS33449
Valve Cover Gasket Set	1999-2016	Valve Cover Grommets not Included; Molded Rubber	VS50250
Valve Cover Gasket Set	1999-2016	Includes Valve Cover Grommets; Molded Rubber	VS50250A
Valve Cover Grommet Set	1999-2016	Molded Rubber	GS33466
Valve Stem Oil Seal Set	1999-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45919
Valve Stem Oil Seal Set	2001-2016	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45920
Valve Stem Oil Seal Set	2001-2016	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45921
Valve Stem Oil Seal Set	1999-2001	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45922
Exhaust Manifold Gasket Set	1999-2017	Multi-Layered Steel; Advantage Plus	MS16124
Exhaust Manifold Gasket Set Performance	1999-2017	Graphite w/ Perforated Steel Core 1.720" Round Port .060" Thick	MS20286
Exhaust Manifold Gasket Set Performance	1999-2017	Graphite w/ Perforated Steel Core 1.880" Round Port .060" Thick	MS20287
Intake Manifold Gasket	2007-2015	Cylinder Deactivation, Lifter Valley Gasket, Perimeter Only; Molded Rubber	MS19501

Product Description	Year	Application Notes	Part No.
Intake Manifold Gasket Set	1999-2007	Contains Premium Grade Intake Manifold Gaskets. Master Set - Contains Intake and Valve Cover Gaskets Plus All Miscellaneous Gaskets And Seals Needed for Intake Installation; Molded Rubber	MIS16340
Intake Manifold Gasket Set	1999-2007	Master Set - Contains Intake and Valve Cover Gaskets Plus All Miscellaneous Gaskets And Seals Needed for Intake Installation; Molded Rubber / Steel	MIS20135
Intake Manifold Gasket Set	1999-2013	Contains Premium Grade Intake Manifold Gaskets; Molded Rubber	MS16340
Intake Manifold Gasket Set	2005-2016	Lifter Valley Gasket; Molded Rubber	MS19305
Intake Manifold Gasket Set	1999-2007	Lifter Valley Gasket; Includes (2) Knock Sensor Grommets; Molded Rubber	MS19328
Intake Manifold Gasket Set	2005-2007	Rubber	MS19430
Intake Manifold Gasket Set	2011-2015	Molded Rubber	MS19589
Intake Manifold Gasket Set	2007-2016	Molded Rubber	MS19598
Intake Manifold Gasket Set	1999-2013	Molded Rubber / Steel	MS20135
Intake Manifold Gasket Set Performance	1999-2017	Laminated Fiber; .030" Thick; 1.150" x 3.375" Cathedral	MS20056
Intake Manifold Gasket Set Performance	1999-2017	Laminated Fiber; .060" Thick; 1.150" x 3.375" Cathedral Port; Bead Sealed Ports	MS20057
Intake Manifold Gasket Set Performance	1999-2017	Laminated Fiber; .120" Thick; 1.150" x 3.375" Cathedral Port	MS20058
Oil Pan Gasket	1999-2018	Molded Rubber	OS32241
Oil Drain Plug Gasket	1999-2009	With .42in I.D., With Metric Thread; Molded Rubber	B45828
Main Bearing Gasket Set	2000-2016	Includes Carrier Gasket; PTFE	JV1657
Timing Cover Gasket Set	1999-2012	Requires Oil Pan Set	JV5022
Timing Cover Gasket Set	1999-2016	Requires Oil Pan Set; Contains Water Pump Gaskets, Timing Cover Gasket and Seal; Molded Rubber	JV5158
Camshaft Gasket	1999-2007	Camshaft Retaining Plate, Flat Type Bolt Holes (non recessed); Steel W/ Molded Rubber	B31822
Camshaft Gasket	1999-2009	Recessed Bolt Holes In Camshaft Retainer Plate; Steel W/ Molded Rubber	B32270
Variable Valve Timing (VVT) Sensor Seal	2007-2016	Rubber	B32279
Coolant Thermostat Gasket	2004-2007	Molded Rubber	C31823

Product Description	Year	Application Notes	Part No.
Coolant Thermostat Gasket	2007-2016	O-Ring Type; Molded Rubber	C32061
Coolant Crossover Pipe Mounting Set	1999-2013	Molded Rubber	GS33845
Coolant Thermostat Seal	1999-2003	Molded Rubber	72141
EGR Valve Gasket	1999-2007	Tube to Exhaust Manifold; Graphite	G31535
EGR Valve Gasket	1999-2007	Composite	G31620
EGR Valve Gasket	1999-2007	O-Ring; Rubber	G31626
Fuel Injector O-Ring Kit	1999-2000	Fluoroelastomer	GS33276
Fuel Injector O-Ring Kit	1999-2016	Fluoroelastomer	GS33529
Fuel Injector O-Ring Kit	2001-2016	Injector to Fuel Rail; Fluoroelastomer	GS33530
Fuel Injection Throttle Body Mounting Gasket	1999-2007	Molded Rubber	G31617
Fuel Injection Throttle Body Mounting Gasket	2005-2015	Molded Rubber	G31963
Fuel Injection Throttle Body Mounting Gasket	2006-2016	Molded Rubber	G31974
Fuel Injection Throttle Body Mounting Gasket	2005	Molded Rubber	G31975
Oil Cooler Gasket	1999-2016	Oval Port; Beaded Steel; Advantage Plus	B31867
Oil Cooler Gasket	1999-2016	Dual Round Port; Metal with Molded Rubber	B31872
Water Pump Gasket	1999-2016	Contains 2 Gaskets; Molded Rubber	K31628
Water Pump Backing Plate Gasket	1999-2013	O-Ring Type; Molded Rubber	K31629
Oil Pump Pickup Tube Gasket	2005-2009	Paper; MAHLE Exclusive	B32101
Oil Pump Pickup Tube Gasket	2005-2009	Paper; MAHLE Exclusive	B32102
Oil Pump Pickup Tube Gasket	1999-2016	O-Ring Type; Molded Rubber	B32790
Exhaust Pipe Flange Gasket	1999-2016	Ring Type A; Steel and Composite	F31618

Product Description	Year	Application Notes	Part No.
Exhaust Pipe Flange Gasket	2005-2016	Ring Type E; Graphite/Wire Mesh With Sleeve	F31619
Exhaust Pipe Flange Gasket	2005-2007	Flange Type; Beaded Steel	F31962
Exhaust Pipe Flange Gasket	2011-2015	Ring Type B; Sintered Metal	F32245
Exhaust Pipe Flange Gasket	2007-2009	Ring Type B; Sintered Metal	F32246
Exhaust Pipe Flange Gasket	2011-2015	Ring Type A; Steel and Composite	F32274
Catalytic Converter Gasket	2010-2016	With 2 Bolt Mounting; Composite	F32693
Crankshaft Repair Sleeve	2003-2016	.780in Sleeve Length; Narrow Lip; Steel	A350
Crankshaft Repair Sleeve	1999-2016	1.156in Sleeve Length; Wide Lip; Steel	A355

Product Description	Year	Application Notes	Part No.
Connecting Rod Bearing Pair	2008-2015	OE Replacement; A-Series (Aluminum); Std, 1, 10, 20, 30, 40	CB-663A
Connecting Rod Bearing Pair	2008-2015	OE Replacement; A-Series (Aluminum); Connecting Rods With Housing Bore Resized .002in Larger Than Stock; Std, 10, 20, 30, 40	CB-1776A
Connecting Rod Bearing Pair	2008-2015	OE Replacement; P-Series (TriMetal™); Std, 1, 2, 10, 20, 30, 40, C60	CB-663P
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); N - Narrowed; Std, 1, 9, 10, 11, 19, 20, 21, 30	CB-663HN
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); ND - Narrowed / Doweled Connecting Rod; Std, 1, 10	CB-663HND
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); NDK - Narrowed / Doweled Connecting Rod; Performance Coating; Std, 1, 10	CB-663HNDK
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); NK - Narrowed; Performance Coating; Std, 1, 10	CB-663HNK
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); XN001in Extra Oil Clearance / Narrowed; Std	CB-663HXN
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); XND001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Std	CB-663HXND
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); XNDK001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Performance Coating; Std	CB-663HXNDK
Connecting Rod Bearing Pair	2008-2015	High Performance; H-Series (TriMetal™); XNK001in Extra Oil Clearance / Narrowed; Performance Coating; Std	CB-663HXNK
Connecting Rod Bearing Pair	2008-2015	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); N - Narrowed; Std, 1, 10	CB-663VN
Connecting Rod Bearing Pair	2008-2015	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); XN001in Extra Oil Clearance / Narrowed; Std	CB-663VXN
Main Bearing Set	2008-2015	OE Replacement; A-Series (Aluminum); Std, 10, 20, 30	MS-2199A
Main Bearing Set	2008-2015	OE Replacement; P-Series (TriMetal™); Std, 10, 20	MS-2199P
Main Bearing Set	2008-2015	High Performance; H-Series (TriMetal™); Std, 1, 10	MS-2199H
Main Bearing Set	2008-2015	High Performance; H-Series (TriMetal™); Performance Coating; Std, 10	MS-2199HK
Main Bearing Set	2008-2015	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2199HX
Main Bearing Set	2008-2015	High Performance; H-Series (TriMetal™); XK001in Extra Oil Clearance; Performance Coating; Std	MS-2199HXK

Product Description	Year	Application Notes	Part No.
Main Bearing Set	2006-2013	OE Replacement; P-Series (TriMetal™); Std, 10	MS-2294P
Main Bearing Set	2006-2013	High Performance; H-Series (TriMetal™); Std, 1	MS-2294H
Main Bearing Set	2006-2013	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2294HX
Main Bearing Set	2014-2017	OE Replacement; A-Series (Aluminum); F1 Coated; Std, 10, 20, 30	MS-2339A
Main Bearing Set	2014-2017	High Performance; H-Series (TriMetal™); Std	MS-2339H
Main Bearing Set	2014-2017	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2339HX
Main Bearing Set	2009-2013	OE Replacement; A-Series (Aluminum); .010in Undersize; .020in Oversize Housing Bore; 10	MS-2366A-10
Main Bearing	2011	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MB-3592HX
Main Bearing	2011	High Performance; H-Series (TriMetal™); .001in Undersize; 1	MB-3592H-1
Camshaft Bearing Set	2010-2011	OE Replacement; Non Coated; Std	SH-2125S
Camshaft Bearing Set	2014-2018	High Performance; Coated; Std	SH-2231S
Camshaft Bearing Set	2011	High Performance; Std	SH-2157S
Camshaft Bearing Set	2010-2011	OE Replacement; Coated; Std	SH-2199S
Piston Set	2008-2016	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3760
Piston Set	2008-2009	Without Rings; Coated; Std, .50mm, .75mm, 1.00mm	224-3888
Ring Set	2009-2015	Premium; 1.5mm; 1.2mm; 2.0mm; Steel Plasma Moly; Ductile Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040	42066CP
Ring Set	2008-2017	Premium; 1.5mm; 1.5mm; 2.5mm; Steel Plasma Moly ; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040	42082CP
Ring Set	2009-2016	Premium; 1.5mm; 1.5mm; 2.5mm; Steel Plasma Moly; Steel Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040	42154CP
Ring Set	2014-2017	Premium; 1.2mm; 1.5mm; 2.5mm; Steel Plasma Moly; Grey Iron Napier; Chrome CP-20™; Shallow Groove; Std, .020	42217CP
Ring Set Performance	2008-2017	4.065" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1063
Ring Set Performance	2008-2017	4.065" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1216
Ring Set Performance	2008-2017	4.065" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0784
Ring Set Performance	2008-2017	4.065" x .043" .157" RW GNS UCR	301-1174

Product Description	Year	Application Notes	Part No.
Ring Set Performance	2008-2017	4.065" x .043" .135" RW Steel Napier LCR	302-1293
Ring Set Performance	2008-2017	4.065" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0975
Ring Set Performance	2008-2017	4.065" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1209
Ring Set Performance	2008-2017	4.070" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1064
Ring Set Performance	2008-2017	4.070" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1240
Ring Set Performance	2008-2017	4.070" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0785
Ring Set Performance	2008-2017	4.075" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1128
Ring Set Performance	2008-2017	4.075" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1217
Ring Set Performance	2008-2017	4.075" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0861
Ring Set Performance	2008-2017	4.075" x .043" .157" RW GNS UCR	301-1176
Ring Set Performance	2008-2017	4.075" x .043" .135" RW Steel Napier LCR	302-1253
Ring Set Performance	2008-2017	4.075" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-1274
Ring Set Performance	2008-2017	4.075" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1352
Ring Set Performance	2008-2017	4.080" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1065
Ring Set Performance	2008-2017	4.080" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1286
Ring Set Performance	2008-2017	4.080" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0786
Ring Set Performance	2008-2017	4.085" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1129
Ring Set Performance	2008-2017	4.085" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1218
Ring Set Performance	2008-2017	4.085" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0787
Ring Set Performance	2008-2017	4.085" x .043" .157" RW GNS UCR	301-1178
Ring Set Performance	2008-2017	4.085" x .043" .135" RW Steel Napier LCR	302-1254
Ring Set Performance	2008-2017	4.085" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-1248
Ring Set Performance	2008-2017	4.085" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1245
Cylinder Head Gasket Set	2009-2013	Cylinder Head Bolts Not Included; Advantage Plus	HS54660A
Cylinder Head Gasket Set	2008-2015	Cylinder Head Bolts Not Included; Advantage Plus	HS54660B
Cylinder Head Gasket Set	2014-2017	MAHLE Exclusive	HS55332

Product Description	Year	Application Notes	Part No.
Conversion Gasket Set	2008-2015	Recessed Bolt Holes In Camshaft Retainer Plate; Use with Head Set to Make Full Set	CS5975A
Cylinder Head Gasket	2008-2015	Multi-Layered Steel 4.100" x .050" COT	54660
Cylinder Head Gasket	2009-2015	Multi-Layered Steel 4.100" x .050" COT	54983
Cylinder Head Gasket	2014-2017	Multi-Layered Steel; MAHLE Exclusive	55332
Cylinder Head Gasket Performance	2008-2017	Multi-Layered Steel 4.100" Bore .051" COT	55043
Cylinder Head Bolt Set	2008-2016	Steel	GS33449
Valve Cover Gasket Set	2008-2015	Valve Cover Grommets not Included; Molded Rubber	VS50250
Valve Cover Gasket Set	2008-2016	Includes Valve Cover Grommets; Molded Rubber	VS50250A
Valve Cover Gasket Set	2014-2017	Molded Rubber	VS50731
Valve Cover Grommet Set	2008-2015	Molded Rubber	GS33466
Valve Stem Oil Seal Set	2008-2015	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45920
Valve Stem Oil Seal Set	2008-2015	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45921
Exhaust Manifold Gasket Set	2008-2017	Multi-Layered Steel; Advantage Plus	MS16124
Exhaust Manifold Gasket Set	2014-2018	Multi-Layered Steel; MAHLE Exclusive	MS19936
Exhaust Manifold Gasket Set Performance	2008-2017	Graphite w/ Perforated Steel Core .060" Thick Fits up to 1.720" O.D. Round Port Headers	MS20286
Exhaust Manifold Gasket Set Performance	2008-2017	Graphite w/ Perforated Steel Core .060" Thick Fits up to 1.880" O.D. Round Port Headers	MS20287
Intake Manifold Gasket Set	2008-2015	Lifter Valley Gasket; Molded Rubber	MS19305
Intake Manifold Gasket Set	2008-2015	Molded Rubber	MS19589
Intake Manifold Gasket Set	2008-2013	Molded Rubber	MS19598
Intake Manifold Gasket Set	2014-2017	Valley Pan Gasket; Molded Rubber; MAHLE Exclusive	MS19944
Intake Manifold Gasket Set	2014-2017	Molded Rubber	MS19945
Intake Manifold Gasket Set Performance	2008-2017	Laminated Fiber; .030" Thick; 1.250" x 2.500" Rectangle Port	MS20064

Product Description	Year	Application Notes	Part No.
Intake Manifold Gasket Set Performance	2008-2017	Laminated Fiber; .060" Thick; 1.250" x 2.500" Rectangle Port; Bead Sealed Ports	MS20065
Intake Manifold Gasket Set Performance	2008-2017	Laminated Fiber; .120" Thick; 1.250" x 2.500" Rectangle Port	MS20066
Intake Manifold Gasket	2015	Cylinder Deactivation, Lifter Valley Gasket, Perimeter Only; Molded Rubber	MS19501
Main Bearing Gasket Set	2008-2015	Includes Carrier Gasket; PTFE	JV1657
Main Bearing Gasket Set	2014	MAHLE Exclusive	JV1737
Oil Pan Gasket Set	2014-2017	Contains RTV; MAHLE Exclusive	OS32577
Oil Pan Gasket	2008-2015	Molded Rubber	OS32241
Main Bearing Gasket Set	2015-2017		JV1755
Timing Cover Gasket Set	2008-2014	Requires Oil Pan Set	JV5022
Timing Cover Gasket Set	2008-2015	Requires Oil Pan Set; Contains Water Pump Gaskets, Timing Cover Gasket and Seal; Molded Rubber	JV5158
Camshaft Gasket	2008-2014	Recessed Bolt Holes In Camshaft Retainer Plate; Steel W/ Molded Rubber	B32270
Variable Valve Timing (VVT) Sensor Seal	2009-2014	Rubber	B32279
Coolant Thermostat Gasket	2008	Molded Rubber	C31823
Coolant Thermostat Gasket	2008-2016	O-Ring Type; Molded Rubber	C32061
Coolant Thermostat Seal	2014-2017	Molded Rubber	C32719
Coolant Crossover Pipe Mounting Set	2008-2013	Molded Rubber	GS33845
Fuel Injection Throttle Body Mounting Gasket	2008-2016	Molded Rubber	G31963
Fuel Injection Nozzle O-Ring	2014-2017		GS33940
Fuel Injector O-Ring Kit	2009-2013	Fluoroelastomer	GS33529
Fuel Injector O-Ring Kit	2009-2013	Injector to Fuel Rail; Fluoroelastomer	GS33530
Fuel Injection Throttle Body Mounting Gasket	2008-2013	Molded Rubber	G31974

Product Description	Year	Application Notes	Part No.
Fuel Injection Throttle Body Mounting Gasket	2014-2017	Molded Rubber	G33318
Water Pump Gasket	2008-2016	Contains 2 Gaskets; Molded Rubber	K31628
Water Pump Gasket	2014-2017	Mounting Gasket; Beaded Steel; MAHLE Exclusive	K32710
Water Pump Gasket	2014-2017	Pump To Housing; Contains 2 Gaskets; Steel; MAHLE Exclusive	K33358
Water Pump Backing Plate Gasket	2008-2013	O-Ring Type; Molded Rubber	K31629
Oil Cooler Gasket	2008-2015	Oval Port; Beaded Steel; Advantage Plus	B31867
Oil Cooler Gasket	2008-2015	Dual Round Port; Metal with Molded Rubber	B31872
Oil Pump Pickup Tube Gasket	2008-2014	O-Ring Type; Molded Rubber	B32790
Exhaust Pipe Flange Gasket	2009-2015	Ring Type A; Steel and Composite	F31618
Exhaust Pipe Flange Gasket	2009-2015	Ring Type E; Graphite/Wire Mesh With Sleeve	F31619
Exhaust Pipe Flange Gasket	2009-2013	Ring Type D; Coil Wrap with Sleeve	F31731
Exhaust Pipe Flange Gasket	2008-2013	Flange Type; Beaded Steel	F31962
Catalytic Converter Gasket	2008-2013	Flange Type; Composite	F32286
Catalytic Converter Gasket	2009-2013	Graphite; Domestic	F32696
Crankshaft Repair Sleeve	2008-2016	.780in Sleeve Length; Narrow Lip; Steel	A350
Crankshaft Repair Sleeve	2008-2016	1.156in Sleeve Length; Wide Lip; Steel	A355

## 427 CID (7.0L) 4.125" / 104.8mm x 4.00" / 101.6mm Gen IV (LS7) Engines

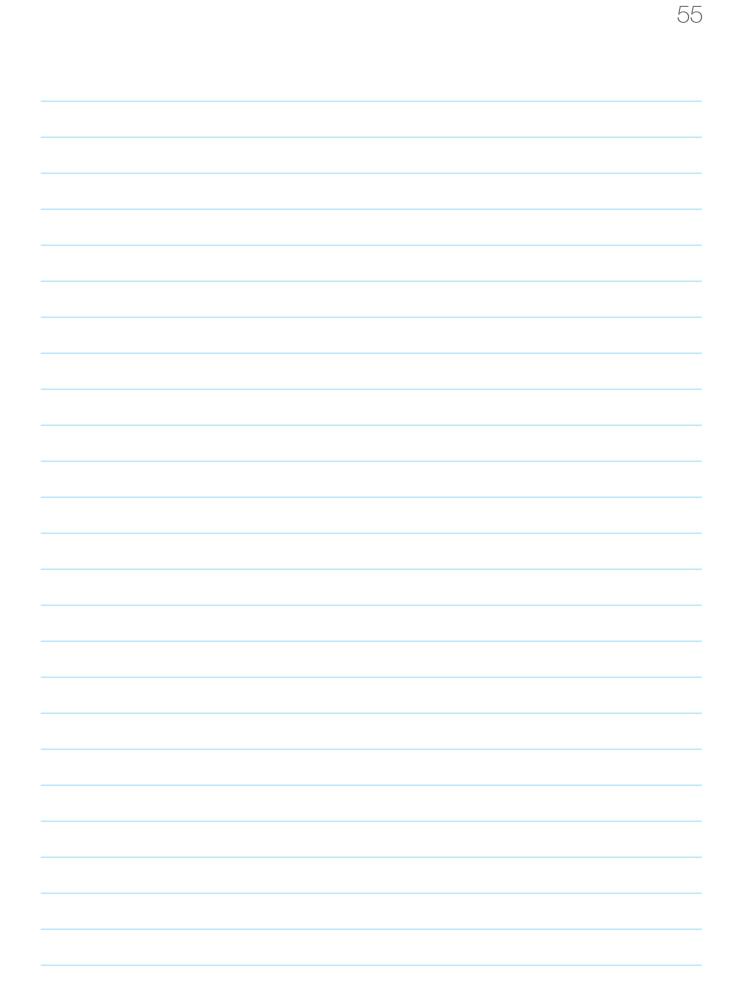
Product Description	Year	Application Notes	Part No.
Connecting Rod Bearing Pair	2006-2010	OE Replacement; A-Series (Aluminum); Std, 1, 10, 20, 30, 40	CB-663A
Connecting Rod Bearing Pair	2006-2013	OE Replacement; A-Series (Aluminum); Connecting Rods With Housing Bore Resized .002in Larger Than Stock; Std, 10, 20, 30, 40	CB-1776A
Connecting Rod Bearing Pair	2006-2010	OE Replacement; P-Series (TriMetal™); Std, 1, 2, 10, 20, 30, 40, C60	CB-663P
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); N - Narrowed; Std, 1, 9, 10, 11, 19, 20, 21, 30	CB-663HN
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); ND - Narrowed / Doweled Connecting Rod; Std, 1, 10	CB-663HND
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); NDK - Narrowed / Doweled Connecting Rod; Performance Coating; Std, 1, 10	CB-663HNDK
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); NK - Narrowed; Performance Coating; Std, 1, 10	CB-663HNK
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); XN001in Extra Oil Clearance / Narrowed; Std	CB-663HXN
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); XND001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Std	CB-663HXND
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); XNDK001in Extra Oil Clearance / Narrowed / Doweled Connecting Rod; Performance Coating; Std	CB-663HXNDK
Connecting Rod Bearing Pair	2006-2010	High Performance; H-Series (TriMetal™); XNK001in Extra Oil Clearance / Narrowed; Performance Coating; Std	CB-663HXNK
Connecting Rod Bearing Pair	2006-2010	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); N - Narrowed; Std, 1, 10	CB-663VN
Connecting Rod Bearing Pair	2006-2010	High Performance; V-Series (TriMetal™ / Lead-Indium Overlay); XN001in Extra Oil Clearance / Narrowed; Std	CB-663VXN
Main Bearing Set	2006-2013	OE Replacement; P-Series (TriMetal™); Std, 10	MS-2294P
Main Bearing Set	2006-2013	High Performance; H-Series (TriMetal™); Std, 1	MS-2294H
Main Bearing Set	2006-2013	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MS-2294HX
Main Bearing	2011	High Performance; H-Series (TriMetal™); X001in Extra Oil Clearance; Std	MB-3592HX
Main Bearing	2011	High Performance; H-Series (TriMetal™); .001in Undersize; 1	MB-3592H-1
Camshaft Bearing Set	2006-2010	OE Replacement; Non Coated; Std	SH-2125S
Camshaft Bearing Set	2006-2010	OE Replacement; Coated; Std	SH-2199S

# 427 CID (7.0L) 4.125" / 104.8mm x 4.00" / 101.6mm Gen IV (LS7) Engines

Product Description	Year	Application Notes	Part No.
Ring Set	2006-2015	Premium; 1.2mm; 1.2mm; 2.0mm; Steel Plasma Moly; Ductile Napier; Chrome CP-20™; Shallow Groove; Std, .020, .030, .040	42083CP
Ring Set Performance	2006-2015	4.125" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1066
Ring Set Performance	2006-2015	4.125" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1220
Ring Set Performance	2006-2015	4.125" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0794
Ring Set Performance	2006-2015	4.125" x .043" .157" RW GNS UCR	301-1186
Ring Set Performance	2006-2015	4.125" x .043" .135" RW Steel Napier LCR	302-1256
Ring Set Performance	2006-2015	4.125" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0319
Ring Set Performance	2006-2015	4.125" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0981
Ring Set Performance	2006-2015	4.125" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1270
Ring Set Performance	2006-2015	4.125" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0319
Ring Set Performance	2006-2015	4.130" x 1.0mm .143" RW 9254 Steel HV385 UCR	301-1067
Ring Set Performance	2006-2015	4.130" x 1.0mm .136" RW 9254 Steel Napier LCR	302-1241
Ring Set Performance	2006-2015	4.130" x 2.0mm .113" RW Stainless Steel CP-20™ Standard Tension OCR	303-0795
Ring Set Performance	2006-2015	4.130" x .043" .157" RW GNS UCR	301-1187
Ring Set Performance	2006-2015	4.130" x .043" .135" RW Steel Napier LCR	302-1251
Ring Set Performance	2006-2015	4.130" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0320
Ring Set Performance	2006-2015	4.130" x 1.5mm .151" RW 9254 Steel HV385 UCR	301-0982
Ring Set Performance	2006-2015	4.130" x 1.5mm .150" RW 9254 Steel Napier LCR	302-1311
Ring Set Performance	2006-2015	4.130" x 3.0mm .153" RW Stainless Steel CP-20™ Standard Tension OCR	303-0320
Cylinder Head Gasket	2006-2015	Multi-Layered Steel 4.180" x .050" COT	54446
Cylinder Head Gasket Performance	2006-2015	Multi-Layered Steel 4.130" Bore .051" COT	55044
Cylinder Head Bolt Set	2006-2013	Steel; Domestic	GS33449
Valve Cover Gasket Set	2006-2013	Valve Cover Grommets not Included; Molded Rubber	VS50250
Valve Cover Gasket Set	2006-2013	Includes Valve Cover Grommets; Molded Rubber	VS50250A
Valve Cover Grommet Set	2006-2013	Molded Rubber	GS33466

### 427 CID (7.0L) 4.125" / 104.8mm x 4.00" / 101.6mm Gen IV (LS7) Engines

Product Description	Year	Application Notes	Part No.
Valve Stem Oil Seal Set	2006-2013	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45920
Valve Stem Oil Seal Set	2006-2013	Contains 8, Priced as a Set; Metal with Molded Rubber	SS45921
Intake Manifold Gasket Set	2006-2013	Lifter Valley Gasket; Molded Rubber	MS19305
Intake Manifold Gasket Set	2006-2013	Molded Rubber	MS19589
Intake Manifold Gasket Set Performance	2006-2015	Laminated Fiber; .030" Thick; 1.375" x 2.410" Rectangle Port	MS20059
Intake Manifold Gasket Set Performance	2006-2015	Laminated Fiber; .060" Thick; 1.375" x 2.410" Rectangle Port; Bead Sealed Ports	MS20060
Intake Manifold Gasket Set Performance	2006-2015	Laminated Fiber; .120" Thick; 1.375" x 2.410" Rectangle Port	MS20061
Main Bearing Gasket Set	2007-2013	Includes Carrier Gasket; PTFE	JV1657
Timing Cover Gasket Set	2006-2007	Requires Oil Pan Set	JV5022
Timing Cover Gasket Set	2006-2007	Requires Oil Pan Set; Contains Water Pump Gaskets, Timing Cover Gasket and Seal; Molded Rubber	JV5158
Camshaft Gasket	2006-2008	Camshaft Retaining Plate, Flat Type Bolt Holes (non recessed); Steel W/ Molded Rubber; MAHLE Exclusive	B31822
Camshaft Gasket	2006-2009	Recessed Bolt Holes In Camshaft Retainer Plate; Steel W/ Molded Rubber	B32270
Coolant Crossover Pipe Mounting Set	2007-2013	Molded Rubber	GS33845
Fuel Injection Throttle Body Mounting Gasket	2006-2014	Molded Rubber	G31963
Water Pump Gasket	2006-2013	Contains 2 Gaskets; Molded Rubber	K31628
Water Pump Backing Plate Gasket	2006-2013	O-Ring Type; Molded Rubber	K31629
Coolant Thermostat Gasket	2006-2007	Molded Rubber	C31823
Coolant Thermostat Gasket	2008-2013	O-Ring Type; Molded Rubber	C32061
Crankshaft Repair Sleeve	2006-2013	.780in Sleeve Length; Narrow Lip; Steel	A350
Crankshaft Repair Sleeve	2006-2013	1.156in Sleeve Length; Wide Lip; Steel	A355



MAHLE Aftermarket Inc. 23030 MAHLE Drive Farmington Hills, MI 48335 United States Phone +1 (800) 338-8786 Fax +1 (248) 596-8899

MAHLE Aftermarket S de RL de CV Km. 53.750 Carretera México-Toluca Zn Ind. Dona Rosa, Letra E, Interior 1A Col. Parque Industrial Lerma, 52000, Lerma, Mexico Teléfono: +52 722 2624530, Fax: +52 722 2624550

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