## WEATHERLY INDEX 002 Catalog No. EB-40-14 2014 Supersedes EB-40-12

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**Technical Service** 

# For technical service call: 1-800-248-9606



#### Hours: 8:30 am - 6:00 pm EST (Monday - Friday)

Use Of Clevite<sup>®</sup> engine bearings & engine parts, MAHLE Original<sup>®</sup> pistons and rings and Victor Reinz<sup>®</sup> gaskets products in aircraft or other specialty equipment may be a violation of Local, State or Federal Regulatory Agency laws, rules and regulations.

These products are intended solely for automotive applications. Under absolutely NO circumstances should these products ever be used in non-automotive applications including, without limitation, aircraft engines, medical equipment, atomic energy devices or reactors.

"Federal, State and local laws restrict the removal, rendering inoperative, or in some cases the modification of factory installed emission devices or systems. California restricts the use of parts which could increase emissions in vehicles designed for use on public streets or highways. The sale or installation on emission controlled vehicles of certain emission control components not approved by the California Air Resources Board, which alter or modify the original design or performance of such vehicle's emission control system is prohibited. Some of the parts listed and offered for sale in this catalog may fall within the above restrictions. Such parts are intended only for use on off-road vehicles competing in competitive events or on other types of vehicles which are exempt from the applicable emission control laws. Installation of these parts on vehicles subject to emission control laws may be prohibited.

MAHLE Aftermarket recommends that the applicable emission control laws be reviewed before considering the installation of add-on or modified parts."

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# Information at your fingertips

MAHLE Aftermarket - the technology leader in both products and electronic support materials - announces the electronic catalog expansion. These are a few of the features to make searching cyberspace for engine parts easier than ever:

- Interactive search capabilities
- New part data updated daily
- Real-time visibility of new products and added coverage
- Immediate updating of product images and specification data
- Access to online parts ordering through mahlecleviteorder.com (Account required)
- All products sold by MAHLE Aftermarket are visible in one search
- Competitive part number interchanges
- Dynamic part number look-up

More information available immediately at catalog.mahle-aftermarket.com/us/



## Engine bearing catalog system

They are arranged in alphabetical sequence with the manufacturer's name appearing in bold-face type at the outer margins of each page. The index at the front of this catalog will help to easily locate the desired manufacturer.

Each manufacturer listing also includes information on separate model lines and which engines are available for particular years.

#### To find the correct Clevite part number:

1. Use the manufacturer's index in the front of this catalog to locate the vehicle manufacturer listing desired.

2. Turn to the indicated manufacturer section, and using the engine data provided, locate the corresponding block number listed to the right of the desired engine. Model data is also included to help identify what engines are used in particular models during regular production years.

3. Go to the block indicated and locate the quadrant with the appropriate part name desired (i.e. Rod Bearing, Cam Bearing Set, Main Bearing Set). Special notes regarding application data will be stated on the line directly under the part number (i.e. year breaks, serial number breaks). Pay particular attention to any special symbol footnotes listed, which call out alternate materials available and the availability of new, superseded or discontinued items.

4. Scan across to the part number required, making sure to select the desired undersize from the sizes that are currently available.

Each manufacturer listing includes **five** distinct sections. The **first** section, found at the beginning of each listing, consists of engine data used to assist in the correct identification of engines used by the manufacturer. Engine codes are also included for all European and Japanese engines to help identify them. The **second** section consists of model data with correct engines used in specific vehicles and model years. The **third** section consists of original equipment connecting rod forging numbers referenced to the correct block number for rod bearing applications. The **fourth** section consists of original equipment crankshaft forging numbers references to the correct block number for main bearing applications. The **fifth** section consists of the actual set listings and pertinent shop data specifications.

Engines using the same parts are grouped together to save space in the listings. Engines are arranged first by number of cylinders in ascending order (i.e. 4 cylinder, 6 cylinder, 8 cylinder), and then by displacement in ascending order (i.e. 200-229, 231-252, 260 diesel). Each block in the fifth section is divided into four different quadrants. Each quadrant has information pertaining to the specific engines listed on the application data line above it. The following pages will help you in specifying the correct bearing part numbers and undersizes desired.

Quadrant A data includes the types of bearing and number of pairs required (if applicable), the bearing material designation (see chart on following pages), the Clevite® part number and all available undersizes. Positions for individual bearings and thrust washers within a set are also indicated to ensure proper installation in the engine. Any special application or installation information needed appears as a "NOTE" message under the affected set or individual part number. If a main bearing set does not include required thrust washers, the main set listed above it will have a NOTE reading "Requires thrust washer set [set number]."

Quadrant B consists of shop data specifications corresponding to the individual Clevite<sup>®</sup> bearing



directly to its left in Quadrant A. This detailed shop data is divided into five columns reading from left to right:

- 1. Standard shaft diameter
- 2. Vertical oil clearance
- 3. Maximum wall at crown
- 4. Bearing outside diameter or housing bore
- 5. Maximum bearing length

All shop data is expressed in inch sizes, even if the engine is manufactured to metric specifications (a reminder of this appears in Quadrant B of all metric engines).

**Quadrant C** consists of connecting rod and crankshaft forging numbers that correspond to each particular engine in the block. These numbers will help identify the correct connecting rod bearings or main bearing sets for engines listed. Connecting rod forging numbers are listed as "C/S Forging."

	COL	JNTER DAT	A	SHOP DATA					
BEARING OR POSITION	BEARING	PART	AVAILABLE	STD SHAFT DIAMETER	VERT OIL	MAX		MAX	
								4 CYL	
the second se	e: 'H' (1990-	DHC 8V L4 M	Mazda	2.79	95"/71.0mm	x 3.29	0"/83.6mm	1	
Rod Bearing (4)	AL-3	CB-1279AL	STD,,25mm,.50mm,.75mm 1,00mm	1.5724/1.5730	0.0010/0.0031	0.0596	1.6929/1.6935	5 0.6740	
Main Bearing Set 1-2-3-4-5 NOTE: Requires 7 Part Number TV	Thrust Wash	MS-1802AL MB-3173AL Ner Set, Not Inc	STD, 25mm, 50mm, 75mm cluded Use with	1.9661/1,9668	0,0009/0,0017	0,0792	2.1260/2.1267	0.6890	
Thrust Washer Se NOTE: Contains 2 Number MS-18	2 Pieces, Po	TW-472S MB-3173W sition Number	STD 4 Use with Part	2.2539		6.5	2.7165	0.1000	



# Major causes of bearing failure

As you know, every automotive engine part will eventually wear out. And if every part always performed for the full length of its expected life, your job would be fairly simple - to replace parts that have worn. Unfortunately, we cannot always count on an engine part failing only because its normal lifespan is exceeded. A technician must not only be a "replacer of parts" but, like a doctor, he must be capable of diagnosing his "patient" to determine why a part failed prematurely. The table below lists the eight major causes of premature engine bearing failure, along with percentage figures which indicate how often each has been found to be the prime contributor to a bearing's premature failure. However, it is important to note that in many cases a premature bearing failure is due to a combination of several of these causes.

#### MAJOR CAUSES OF PREMATURE BEARING FAILURE

Dirt	45.4%
Misassembly	12.8%
Misalignment	12.6%
Insufficient Lubrication	11.4%
Overloading	8.1%
Corrosion	3.7%
Improper Journal Finish	3.2%
Other	2.8%

Thus we can reason that if a technician merely replaces a damaged bearing in an engine, without determining the cause of its failure, more than 99% of the time he will be subjecting the replacement bearing to the same cause that was responsible for the original failure. What this all means is that just as a doctor cannot cure a patient until he has determined what ails him, so, too, a technician cannot correct the cause of premature bearing failure until he first determines what causes the failure.

Each failure is organized, for your convenience, into four major subjects:

- **1. Appearance** an illustration and brief description of a bearing that has failed due to a specific cause.
- Damaging Action what actually damaged the bearing under the conditions which were present.
- **3. Possible Causes** a listing of those factors capable of creating the particular damaging action.
- **4. Corrective Action** the action that should be taken to correct the cause of failure.

Covered here, are the most common failure types. Please refer to the Bearing Distress Guide located at www.mahle-aftermarket.com as a reference to help you in properly determining the cause of premature bearing failures.

## Normal Appearance



Uniform wear pattern over approximately 2/3 of the bearing's surface. Wear should diminish near the parting line ends of the bearing and the wear pattern should extend uniformly across the bearing in the axial direction.



# Foreign particles in lining

#### **APPEARANCE**

Foreign particles are embedded in the lining of the bearing. Scratch marks may also be visible on the bearing surface.

#### **DAMAGING ACTION**

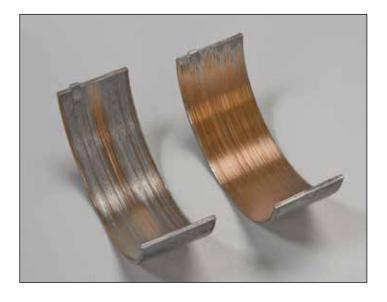
Dust, dirt, abrasives and/or metallic particles, present in the oil supply, embed in the soft babbitt bearing lining, displacing metal and creating a high-spot.

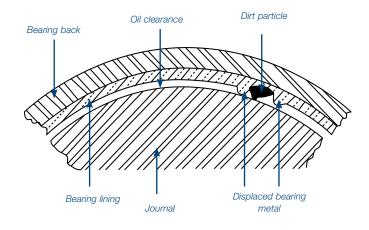
The high-spot may be large enough to make contact with the journal causing a rubbing action that can lead to the eventual breakdown and rupture of the bearing lining. Foreign particles may embed only partially and the protruding portion may come in contact with the journal and cause a grinding wheel action.

#### **POSSIBLE CAUSES**

- 1. Improper cleaning of the engine and/or parts prior to assembly.
- 2. Road dirt and sand entering the engine through the air-intake manifold or faulty air filtration.
- 3. Wear of other engine parts, resulting in small fragments of these parts entering the engine's oil supply.
- 4. Neglected oil filter and/or air filter replacement.

- 1. Inspect journal surfaced and regrind if excesssive wear is discovered.
- 2. Install new bearings, following proper cleaning procedures.
- 3. Recommend that the operator have the oil, air filter, oil filter and crankcase breatherfilter replaced as recommended by the manufacturer.







# Foreign particles on bearing back

#### **APPEARANCE**

A localized area of wear can be seen on the bearing surface. Also, evidence of foreign particle(s) may be visible on the bearing back or bearing housing directly behind the area of surface wear.

#### **DAMAGING ACTION**

Foreign particles between the bearing and its housing prevent the entire area of the bearing back from being in contact with the housing base. As a result, the transfer of heat away from the bearing surface is not uniform causing localized heating of the bearing surface which reduces the life of the bearing.

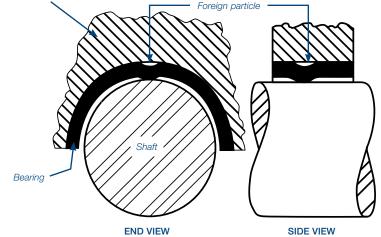
Also, an uneven distribution of the load causes an abnormally high pressure area on the bearing surface, increasing localized wear on this material.

#### **POSSIBLE CAUSES**

Dirt, dust abrasives and/or metallic particles either present in the engine at the time of assembly or created by a burr removal operation can become lodged between the bearing back and bearing housing during engine operation.

- 1. Inspect journal surfaced and regrind if excesssive wear is discovered.
- 2. Install new bearings following proper cleaning and burr removal procedures.



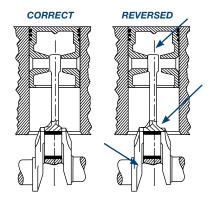




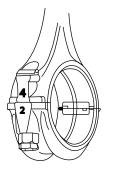
# Misassembly

Engine bearings will not function properly if they are installed incorrectly. In many cases, misassembly will result in premature failure of the bearing.

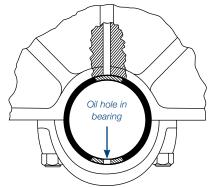
The following are typical assembly errors most often made in the installation of engine bearings.



Position of Offset Connecting Rod Reversed

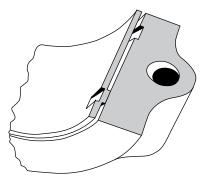


Bearing Caps in Wrong or Reversed Position

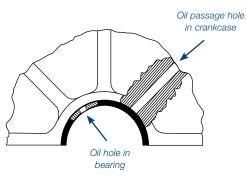


**Bearing Halves Reversed** 

Improper Shim Installation



Locating Lugs Not Nested



Bearing Oil Hole Not Aligned With Oil Passage Hole



# Overlay fatigue

#### **APPEARANCE**

All or part of the bearing surface covered by a network of fine cracks limited in depth to just the .0005" thick surface layer.

#### **DAMAGING ACTION**

Often the appearance is worse than the actual problem. Overlay fatigue is typically caused by the localized overloading of the bearing surface. Once the fine cracks form, the remaining overlay material will flow to fill in the cracks and relieve the load concentration. If the entire bearing surface shows this condition, it's an indication of overloading, possibly due to detonation or use of a standard bearing in a high performance application. If the bearing has seen the end of it's natural service life and the problem is noticed, proceed with normal repairs.



#### **POSSIBLE CAUSES**

Overloading. Babbitt overlay materials are intended to provide surface action, reduce friction, accommodate slight misalignment and embed foreign particles. Babbitt materials don't have much fatigue strength and a heavily loaded engine can have enough rod bore flex under load to fatigue the overlay material and cause fractures.

- 1. If the service life for the old bearing was adequate, replace with the same type of bearing to obtain a similar service life.
- 2. If the service life of the old bearing was too short, replace with a heavier duty bearing to obtain a longer life.
- 3. Replace all other bearings (main, connectiong rod and camshaft) as their remaining service life may be short.
- Switch to Clevite H-Series racing bearings or TriArmor<sup>™</sup> coated bearings if available.





# Excessive crush

#### **APPEARANCE**

Bearing may have localized polishing or wear near the parting lines or adjacent to an oil hole. Contact frequently appears in an "X" shape pattern when at an oil hole.

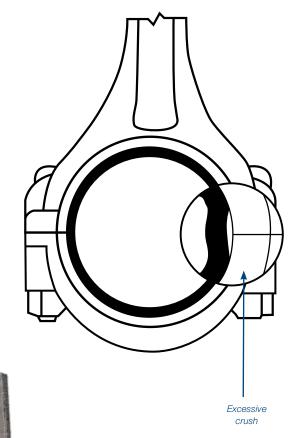
#### **DAMAGING ACTION**

Bearing wall increased in thickness due to upset (yielding) of the steel back. This causes localized shaft contact with resulting polishing and wear.

#### **POSSIBLE CAUSES**

Bearings are designed to be a slight interference fit in their housing bore. Bearing "crush", which is designed into the bearing, controls this. Installing a bearing in an undersize housing hole increases crush and will cause the steel back to yield and get thicker at the point of least resistance. This is generally at an oil hole or adjacent to the parting lines if there is no hole.

- 1. Verify that the bearing installed was correct for the application.
- 2. Inspect housing for correct size within manufacturers limits and resize as required.
- 3. All Clevite high performance, as well as many standard passenger car and heavy duty diesel bearings are designed with maximum crush to provide the greatest amount of retention. Never try to reduce clearance by installing a bearing in a housing smaller than the minimum size specified.







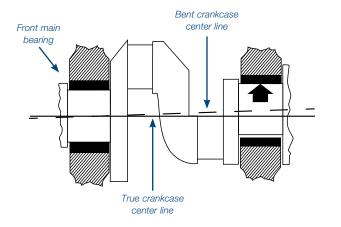
# Bent or twisted connecting rod

#### **APPEARANCE**

Bent rods will exhibit heavy wear on diagonally opposite sides of each shell, typically in an edge-loaded pattern. Twisted rods will exhibit wear running diagonally across the bearing surface.

#### **DAMAGING ACTION**

A bent or twisted connecting rod results in misalignment of the bore, causing the bearing to be cocked so the bearing edge makes metal-tometal contact with the journal which can cause excessive wear on the bearing surface.



#### **POSSIBLE CAUSES**

The most common cause of a bent rod is a previous engine failure such as a blown head gasket, allowing the cylinder to fill with coolant or a dropped valve causing a piston and rod to go under extreme load, resulting in rod deformation.

A twist is most likely introduced during the manufacturing or reconditioning process if upper and lower bores are not maintained parallel.

- 1. Bent and twisted rods must not be re-used but either repaired or replaced. Re-use will result in the same failure.
- 2. Install new bearings, following proper cleaning procedures.





# Oil starvation / marginal oil film

#### **APPEARANCE**

This failure is very common, but difficult to diagnose, especially for a person not seeing many bearing failures. The reason is the progression from early stage scratching from the journal surface penetrating the oil film and contacting the bearing, to ultimate failure (hot short) which may occur quickly and all inside the engine. Distress generally starts at the center of the bearing and progresses toward the outer edges.

#### **DAMAGING ACTION**

The absence of a sufficient oil film between the bearing and the journal allows for metal-to-metal contact. The resulting wiping action causes premature bearing failure.

#### **POSSIBLE CAUSES**

- 1. Too little bearing oil clearance
- 2. Too much bearing clearance combined with heavy loads
- 3. Amount, quality and viscosity of the oil
- 4. Oil delivery or oil pressure issues
- 5. Misassembled parts blocking off oil holes
- 6. Dry start / no pre-lube
- 7. High cylinder pressure causing reduced oil film thickness

- 1. Double-check all measurements taken during the bearing selection procedure to catch any errors in calculation. This can be done during assembly with Clevite Plastigage®
- 2. Check to be sure that the replacement bearing is the correct one for the application.
- 3. Check the journals for damage and regrind if necessary.
- 4. Check the engine for possible blockage of oil passages, oil suction screen and oil filter.
- 5. Check the operation of the oil pump and pressure relief valve.
- 6. Be sure that the oil holes are properly indexed when installing the replacement bearings.
- 7. Make sure the oil quality, additive base and viscosity is correct for the application.
- 8. Always prime the lubrication system before the engine is started for the first time.
- 9. Install new bearings, following proper cleaning procedures.





## TriArmor™

## Coated bearings

The exclusive Clevite<sup>®</sup> TriArmor<sup>™</sup> engine bearings feature a .0003" thick dry film coating on the bearing surface providing extraordinary protection and lubricity. Enhanced wear characteristics increase bearing life in race engines and high performance street engines.

Now, high performance engine builders can enjoy the strength and durability of the legendary Clevite<sup>®</sup> TriMetal<sup>™</sup> bearing construction coupled with the latest in coating technology - right out of the box.

The line of Clevite<sup>®</sup> TriArmor<sup>™</sup> rod and main bearings include popular Ford, GM and Chrysler models as well as popular Sport Compact applications.

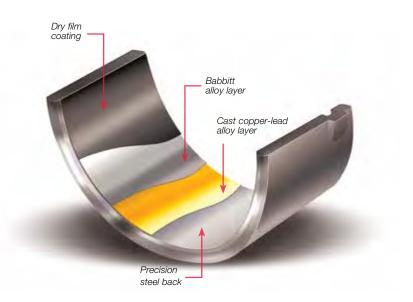
#### **Exclusive Dry Film Treatment**

For years, engine builders have experimented with coating engine bearings for race engines and high performance street engines, with varying degrees of success. Now, MAHLE engineers, after extensive research and development, have devised TriArmor<sup>™</sup>, a proprietary dry film coating.

Central to this breakthrough is the exclusive dry film and unique application and low temperature cure processes. These processes provide extremely uniform thickness coupled with unparalleled adhesion, all while protecting the metallurgical integrity of the bearing during the coating procedure.

The result? A .0003" thick protective coating that offers:

- Reduced friction and drag, resulting in increased horsepower
- Protection during start-up
- Embedability to resist damage from debris
- Ability to withstand extreme temperatures and pressures
- Conformability for distressed or imperfect surfaces
- Extraordinary strength and durability





# Coated bearing features & benefits

#### **Tech Info**

In developing TriArmor<sup>™</sup> materials and processing, MAHLE engineers relied on the science of tribology, the study of design, friction, wear, and lubrication characteristics of interacting surfaces. With our existing body of knowledge based on decades of producing bearings for street and track, this model enabled us to offer the most advanced and efficient coating material possible. The material gives good low load start-up protection. The coating

serves as a high pressure, high load dry film antiwear agent. It also provides additional protection across a broad range of temperatures, especially when oil flow is marginal and is especially slippery with an oil film.

#### **Exclusive Clevite TriArmor™ Features**

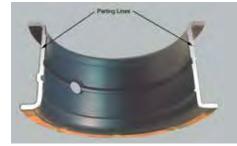
- Coverage for Ford, GM and Chrysler as well as popular Sport Compact Applications
- Parting lines not coated
- Legendary Clevite quality

**Benefit** 

#### Feature

Dry Film Coating Rated for 500 F<sup>1</sup> Rated for 600 F<sup>2</sup> Low Temp Cure Inert Wear Layer OEM Caliber processes Bare Parting Line Advantage Low friction Self-lubricating High strength Resists wear Not temperature sensitive Resists breakdown Extra margin Bearing friendly Conformability Superior quality No sanding needed

Reduces drag & increases HP Helps fight dry starts Good support for oil film Fights unfavorable surface finishes
Protects hot or cold
Welcomes tough racing applications
Defends against severe conditions
Protects metallurgical integrity of bearing
Adapts as needed to the "real engine"
Tightest controls of thickness and curing temps
Proper crush without "reworking" bearing



#### We're particular about parting lines

At MAHLE Aftermarket, we know that bearing crush is critical, especially in high performance engines. So you can imagine that coating the parting lines would adversely affect bearing crush and fit. And you shouldn't have to sand off material that never should have been applied to these surfaces in the first place. So we don't put it there. It's extra effort to do the job right, but that's the only way MAHLE engineers know how.



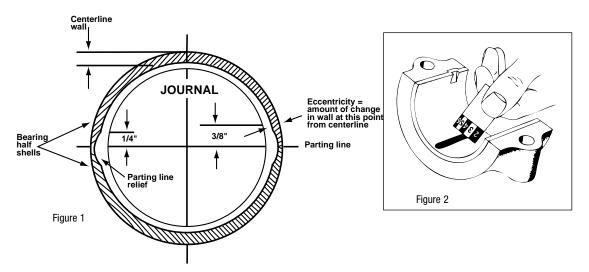
# How much clearance do your bearings need?

How much clearance do I need for my rod, main or camshaft bearings? This is one of the most frequently asked questions. Unfortunately, there isn't one simple answer that suits every case. Engine application, lubricant selection and operating conditions will dictate different clearance levels. This isn't to say we can't generalize on at least a starting point.

First, let's define how and where clearance should be measured. Half shell rod and main bearings do not have a uniform wall. The wall is thickest at 90 degrees from the split and drops off a prescribed amount toward each parting line, depending on the bearings intended application. This drop off is called "Eccentricity." In addition, there is a relief at the parting lines. Eccentricity is used to tailor the bearing shell to its mating hardware and to provide for hardware deflections in operation. Eccentricity also helps to promote oil film formation by providing a wedge shape in the clearance space. The relief at each parting line insures that there will not be a step at the split line due to bearing cap shift or the mating of bearing shells that differ slightly in thickness within allowed tolerance limits. (See figure 1.)

For these reasons, bearing clearances are specified as "vertical clearance" and must be measured at 90 degrees to the split line. The best method of measurement is with a dial bore gage that measures the bearing inside diameter when the bearings are installed at the specified torque without the shaft in place. Measurements should be taken at front, center and rear of each bearing position. Another common method of checking clearance is through the use of Clevite<sup>®</sup> Plastigage<sup>®</sup>. (See figure 2.)

For most applications .00075 to .0010" (three quarters to one thousandth of an inch) of clearance per inch of shaft diameter is a reasonable starting point. For example a 2.000" shaft diameter would require .0015 to .0020" bearing clearance. (.00075 X 2.000" = .0015" and .0010 X 2.000" = .0020") Using this formula will provide a safe starting point for most applications. For high performance engines it is recommended that .0005" be added to the maximum value determined by the above calculation. The recommendation for our 2.000" shaft would be .0025" of clearance.





Remember however, that these are only recommended starting points. The engine and its application will tell us where to go from these starting points. For example, a passenger car engine assembled at .0010" per inch of shaft diameter might turn out to be noisy on start-up, especially if the engine has an aluminum block. Most passenger car engines are originally assembled by "select fitting" to achieve clearances that are less than what would result from random selection of mating parts. This is because the stack-up of manufacturing tolerances on the mating parts may exceed the acceptable level for control of noise and vibration. In addition, most new passenger car engines are now designed to use 5W-30 weight oils to reduce HP loss and conserve energy. These lighter weight oils are capable of flowing more freely through tighter clearances.

Let's pick some typical manufacturing tolerances and look at the potential clearance range that results. A tolerance range (from min. to max. sizes) of .0010" is typical for most crankshaft journals as well as both rod and main bearing housing bores. If the engine uses bimetal bearings the wall tolerance is .0003" per shell or .0006" in total. Adding these up we get .0010" for the housing + .0010" for the shaft + .0006" for the bearings = .0026" total clearance variation possible due to mating part manufacturing tolerances. If our minimum assembled clearance is just .0005" this makes the maximum possible .0031." (.0005" min. + .0026 tolerance range = .0031" max.) For normal passenger car application .0031" of bearing clearance would generally be too much. However, if we take the same engine, let's say a small V-8, and put it in a truck used to pull a camping trailer and use a heavier weight oil, the larger clearance would be more acceptable.

Clearance is also somewhat of a safety factor when imperfections in alignment and component geometry creep in. As surfaces are more perfectly machined and finished, sensitivity to oil film break down is reduced and tighter clearances can be tolerated. Tighter clearances are desirable because they cause the curvature of the shaft and bearing to be more closely matched. This results in a broader oil film that spreads the load over more of the bearing surface thus reducing the pressure within the oil film and on the bearing surface. This will in turn improve bearing life and performance. Typically a used bearing should exhibit signs of use over 2/3 to 3/4 of its ID surface in the most heavily loaded half. (Lower main and upper rod halves.)

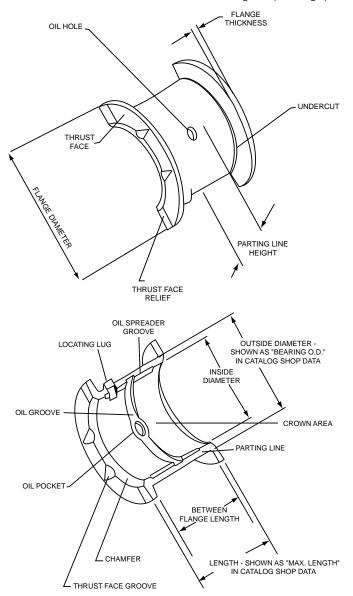
Clearance is just one of many variables that effects bearing performance. In addition, things like oil viscosity, which is determined by oil type and grade selection, engine operating temperature, oil pressure, engine RPM, oil hole drillings in both the block and crankshaft, bearing grooving and other bearing design features all interrelate in the function of an engines lubricating system.

Lighter weight oils have less resistance to flow, consequently their use will result in greater oil flow and possibly less oil pressure, especially at larger clearances. All oils thin out as they heat up; multi-grade oils, however, don't thin out as rapidly as straight grades. Original Equipment clearance specifications are necessarily tight due to the use of energy conserving light-weight



oils, relatively high operating temperatures and a concern for control of noise and vibration, especially in aluminum blocks.

High performance engines on the other hand, typically employ greater bearing clearances for a number of reasons. Their higher operating speeds





result in considerably higher oil temperatures and an accompanying loss in oil viscosity due to fluid film friction that increases with shaft speed. Increased clearance provides less sensitivity to shaft, block and connecting rod deflections and the resulting misalignments that result from the higher levels of loading in these engines. Use of synthetic oils with their better flow properties can help to reduce fluid film friction.

Friction and horsepower loss are prime concerns in high performance engines for obvious reasons. As a result, the coating of various engine components with friction reducing compounds has become common practice. Clevite offers TriArmor<sup>™</sup> coated bearings for selected High Performance applications. Clevite wants to provide high performance engine builders with Clevite® performance series bearings already coated with a friction reducing surface treatment. Use of these coated bearings may result in slightly less clearance than the uncoated Clevite® high performance parts for the same application. This will typically be in the range of .0005." This is because the coating, although expected to remain in place during service, is considered to be somewhat of a sacrificial layer. Some amount of the coating will be removed during break-in and operation resulting in a slight increase in clearance. This is the reason no adjustment in bearing machining dimensions was made to allow for coating application.

Bearing clearance is not a subject that can be addressed without taking into account numerous variables including; geometry of the parts, oil viscosity, oil temperature, engine load, shaft diameter, bearing coatings and one's own ability to accurately measure and assess these variables.

# Influence of grooving on main bearing performance

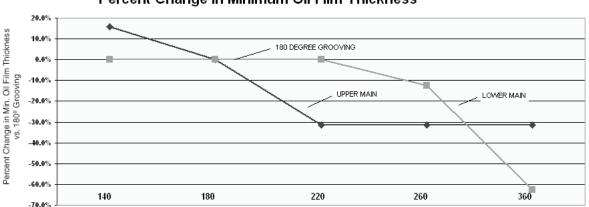
Various forms of main bearing grooving have been used over the years. We are frequently asked what difference grooving makes.

First, it's essential to understand that bearings depend on a film of oil to keep them separated from the shaft surface. This oil film is developed by shaft rotation. As the shaft rotates it pulls oil into the loaded area of the bearing and rides up on this film much like a tire hydroplaning on wet pavement. Grooving in a bearing acts like tread in a tire to break up the oil film. While you want your tires to grip the road, you don't want your bearings to grip the shaft.

The primary reason for having any grooving in a main bearing is to provide oil to the connecting rods. Without rod bearings to feed, a simple oil hole would be sufficient to lubricate a main bearing. Many early engines used full grooved bearings and some even used multiple grooves. As engine and bearing technology developed, bearing grooving was removed from modern lower main bearings. The result is in a thicker film of oil for the shaft to ride on. This provides a greater safety margin and improved bearing life. Upper main shells, which see lower loads than the lowers, have retained a groove to supply the connecting rods with oil.

In an effort to develop the best possible main bearing designs for performance engines, we've investigated the effects of main bearing grooving on bearing performance. The graphs illustrate that a simple 180 degree groove in the upper main shell is still the best overall design.

While a slightly shorter groove of 140 degrees provides a marginal gain, most of the benefit is to the upper shell, which doesn't need improvement. On the other hand, extending the groove into the lower half, even as little as 20 degrees at each parting line (220 degrees in total), takes away from upper bearing performance without providing any benefit to the lower half. It's also interesting to note that as groove length increases so do horsepower loss and peak oil film pressure which is transmitted directly to the bearing.

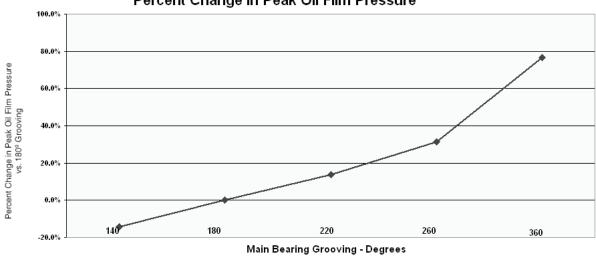


## Percent Change in Minimum Oil Film Thickness

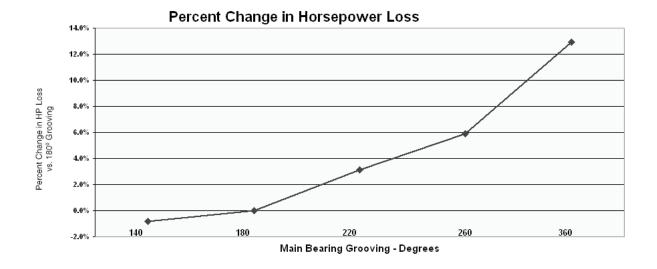


Main Bearing Grooving - Degrees

## Main bearing grooving









# Crankshaft grinding and polishing

Crankshaft journal surfaces should be ground and polished to a surface finish of 15 micro inches roughness average Ra or better. Journals on highly loaded crankshafts such as diesel engines or high performance racing engines require a finish of 10 micro inches Ra or better.

The above is a simple straight forward specification which can be measured with special equipment. However, there is more to generating a ground and polished surface than just meeting the roughness specification. To prevent rapid, premature wear of the crankshaft bearings and to aid in the formation of an oil film, journal surfaces must be ground opposite to engine rotation and polished in the direction of rotation. This recommendation can cause a great deal of confusion in actual execution. Understanding the reasons behind the recommendation and examination of the following illustrations will help make the recommendation more clear.

Metal removal tends to raise burrs. This is true of nearly all metal removal processes. Different processes create different types of burrs. Grinding and polishing produces burrs that are so small that we can't see or feel them but they are there and can damage bearings if the shaft surface is not generated in the proper way. Rather than "burrs," let's call what results from grinding and polishing "microscopic fuzz." This better describes what is left by these processes. This microscopic fuzz has a grain or lay to it like the hair on a dog's back. Figure 1 is an illustration depicting the lay of this fuzz on a journal. (Note: All figures are viewed from nose end of crankshaft.) The direction in which a grinding wheel or polishing belt passes over

the journal surface will determine the lay of the micro fuzz.

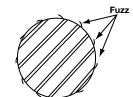


Figure 1 Journal illustrating fuzz from grinding and polishing.

In order to remove this fuzz from the surface, each successive operation should pass over the journal in the opposite direction so that the fuzz will be bent over backward and removed. Polishing in the same direction as grinding would not effectively remove this fuzz because it would merely lay down and then spring up again. Polishing must, therefore, be done opposite to grinding in order to improve the surface.

In order to arrive at how a shaft should be ground and polished, we must first determine the desired end result and then work backwards to establish how to achieve it. Figure 2 depicts a shaft turning in a bearing viewed from the front of a normal clockwise rotating engine. The desired condition is a journal with any fuzz left by the polishing operation oriented so it will lay down as the shaft passes over the bearing (Figure 2).

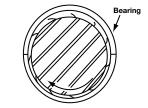


Figure 2 Journal rotating in bearing with the grain of the fuzz.



## Crankshaft grinding

The analogy to the shaft passing over the bearing is like petting a dog from head to tail. A shaft polished in the opposite direction produces abrasion to the bearing which would be like petting a dog from tail to head. To generate a surface lay like that shown in Figure 2, the polishing belt must pass over the shaft surface as shown in Figure 3.

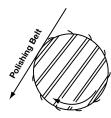


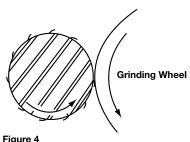
Figure 3 Direction polishing belt should pass over journal and grain of fuzz which results.

The direction of shaft rotation during polishing is not critical if a motorized belt type polisher is used because the belt runs much faster than the shaft. Stock removal during polishing must not exceed .0002" on the diameter.

Having determined the desired surface lay from polishing, we must next establish the proper direction for grinding to produce a surface lay opposite to that resulting from polishing. Figure 4 shows the grinding wheel and shaft directions of rotation and surface lay for grinding when viewed from the front or nose end of the crankshaft. This orientation will be achieved by chucking the flywheel flange at the left side of the grinder (in the headstock). Achieving the best possible surface finish during grinding will reduce the stock removal necessary during polishing. The surface lay generated by grinding would cause abrasion to the bearing surfaces if left unpolished. By polishing in the direction shown in figure 3, the surface lay is reversed by the polishing operation removing fuzz created by grinding and leaving a surface lay which will not abrade the bearing surface.

Nodular cast iron shafts are particularly difficult to grind and polish because of the structure of the iron. Nodular iron gets its name from the nodular form of the graphite in this material. Grinding opens graphite nodules located at the surface of the journal leaving ragged edges which will damage a bearing. Polishing in the proper direction will remove the ragged edges from these open nodules.

All of the above is based on normal clockwise engine rotation when viewed from the front of the engine. For crankshafts which rotate counterclockwise, such as some marine engines, the crankshaft should be chucked at its opposite end during grinding and polishing. This is the same as viewing the crank from the flanged end rather than the nose end in the accompanying figures.



Directions of shaft and grinding wheel rotation and lay of fuzz which results.



## Severe use recommendations

Crankshaft surface finish and shape are key factors affecting the performance of all bearings. These factors become even more critical for thrust surfaces. As in any bearing, increased loading reduces oil film thickness between shaft and bearing surfaces. This is a much more critical situation in thrust bearings due to their flat faces which make formation of an oil film extremely difficult. Radial bearings (those which carry loads in a radial direction like rod and main bearing surfaces come together in the clearance space. Shaft rotation pulls a wedge of oil into the loaded area of the bearing and forms an oil film that supports the load.

Thrust faces, on the other hand, are made up of two flat surfaces that do not form a natural wedge where they meet. In order to help form an oil film, artificial wedge shaped areas are machined into the bearing surfaces at the ends and sometimes adjacent to the grooves. In spite of all the common design efforts, thrust bearings still run on a much thinner film of oil that makes crankshaft surface finish critical in the successful performance of these bearings.

Recent samples of thrust face surface finish on crankshafts from blown fuel "Hemi" engines have confirmed that better finishes resulted in a reduced rate of bearing distress. The study also showed that when no damage occurred, the crankshaft surface finish was improved after running. The surface finishes of 12 crankshafts were measured (7 new and 5 used). The new shafts ranged from a high of 30 Ra to a low of 5 Ra. The used shafts had a very similar range from 31Ra to 4 Ra. Although this represents only a small sampling, it does demonstrate a correlation between surface finish and performance when the condition of mating bearing surfaces was evaluated. Prior to these measurements, race experience had shown no problems on a crankshaft with a thrust-face Ra of 6 and did show problems on crankshafts when the Ra was over 20.

Obtaining a good finish on the thrust face of a crankshaft is difficult to do because it uses side-wheel grinding. Side grinding causes marks that spiral outward toward the OD of the thrust face and may also cause crosshatch marks resembling honing patterns. Both patterns are detrimental to the formation of an oil film because they work like wipers as the shaft rotates. Grinding marks must be removed by polishing. Only a circular pattern should remain. Surface finish should be checked in a tangential direction and must be held to 10 Ra max. The thrust surface should be flat within .0002" max.



avoid - swirl pattern



avoid - crosshatch pattern



# Pointers for selecting high performance rod and main bearings

Just like Fords differ from Chevrolets and Chryslers, the various specialty parts for these engines also differ from one specialty manufacturer to another. This is not to say that any one brand of connecting rod, for example, is necessarily better than another, they just exhibit different characteristics.

#### Background

All bearings are an interference fit in their housing; this relates to something we call crush. Crush results from each half shell bearing being made a few thousandths more than a true half circle. When two bearing shells are placed together their outside diameter is slightly larger than the ID of the housing they fit into. When the housing cap is torqued the bearings are compressed, like a spring, resulting in a radial contact pressure between the bearings and the housing. Another way of looking at it is that the housing is squeezing inward on the bearings and the bearings are pushing back outward against the housing. Most of the interference fit is taken up by the bearings but the outward force exerted by the bearings against the housing also causes slight changes in the size and shape of the housing. This is called "Housing Bore Distortion" or just 'Bore Distortion". With these factors in mind, it's easy to understand why housings made of different materials like aluminum versus iron or steel will have different amounts of "Bore Distortion".

Compensating for differing amounts of bore distortion isn't as simple as just making an adjustment in the bearing clearance when the engine is assembled. The reason is that most housings (connecting rods and engine blocks) have irregular shapes surrounding the bearing. Rods, for example, have a beam at the top, notches for bolt heads or nuts, some have ribs over the cap while others don't and of course, the parting line between the rod and cap is a weak point. The result is that bore distortions are seldom ever uniform in all directions. Some housings go out of round with the greatest dimension in the horizontal direction while others grow more in the vertical. Still others may bulge where there's a notch for bolt head clearance. All of these bore distortion characteristics relate to the static loads between the bearings and housing when the engine is not running. Still another consideration is what happens under the dynamic conditions of a running engine where loads are constantly changing in magnitude and direction. Engine loads placed on the bearings and their housings will result in still further changes in housing bore geometry.

Original equipment bearings are tailored to compensate for the combined static and dynamic distortions which occur in the housings. Specialty high performance parts like connecting rods and aluminum blocks are made for lighter weight and to withstand the higher loads and speeds of high performance engines. They seldom ever duplicate the bore distortion characteristics of the original equipment parts. Taking these facts into account, it should come as no surprise then that standard passenger car bearings are not suitable for engines modified extensively to produce higher horsepower and speeds. This not only explains why we have special bearings for high performance, but also why we offer several choices.

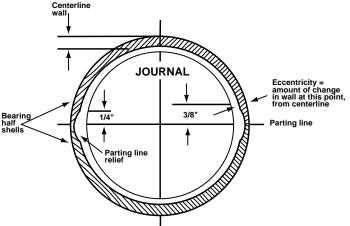
With so many different specialty high performance connecting rods and blocks available its



impossible for the bearing manufacturer to know the characteristics of every piece. Even if we did, the choices of related parts which influence such things as rotating and reciprocating weights and balancing, all effect bearing loads and consequently dynamic bore distortions.

#### **Bearing Design**

So just how are bearings tailored to compensate for bore distortions? To understand this important design concern, we must first determine what the most desirable shape for a bearing ID is. If everything remained constant like loading, speeds and housing geometry, a perfectly round bearing could be made to work very well. For example, electric motor bushings run almost indefinitely under these conditions. In an engine where we have the variables described above, it has been determined that a slightly oval bearing ID with the minimum diameter oriented in line with the maximum load is the most desirable. To produce this type of profile, bearings are made with what we call an eccentric wall. In nearly all cases the bearing wall is thickest at 90 degrees



to the parting line and tapers off from that point toward each parting line by some specified amount.

The amount of change, called eccentricity, is tailored to suit the bore displacement characteristics of the housing. A housing which experiences its greatest distortion in the horizontal direction (across the parting line) provides the desired oval shape so the bearing requires a minimum amount of eccentricity. If the housing experiences its maximum distortion in the vertical direction, a high eccentricity bearing is needed to compensate for this and produce the desired maximum ovality in the horizontal direction.

Connecting rods are subjected to high inertia loads at the top of the exhaust stroke when the weight of the piston, rings, wrist pin and top end of the rod are all pulling on the rod cap. This loading tries to stretch the rod and pulls the big end out of round, causing it to close in across the parting line. In this case, bearing wall eccentricity provides extra

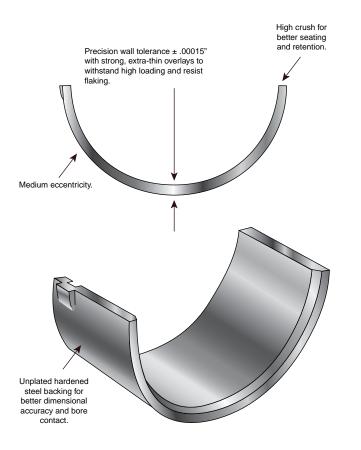
> clearance to let the rod flex without having the bearings contact the shaft. Besides low, medium and high eccentricity, Clevite high performance bearings are offered with numerous additional features to make them compatible with related parts and suitable for the loads and speeds of competition engines.



## **H-Series Bearings**

Please note: Some "H" series bearings will no longer be available with enlarged chamfers. Instead, the bearings will be narrowed in place of the enlarged chamfer to provide greater crankshaft fillet clearance. The new narrowed bearings will be available with a "HN" suffix and will be replacing the standard "H" suffix part number. 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.

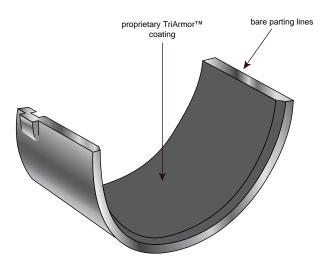
H-Series bearings have a medium level of eccentricity, high crush, and rod bearings have a hardened steel back and thin overlay. These bearings also have enlarged chamfers for greater crankshaft fillet clearance and are made without flash plating for better seating. Bearings with .001" extra clearance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

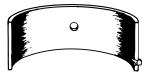


Narrow wear pattern



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.



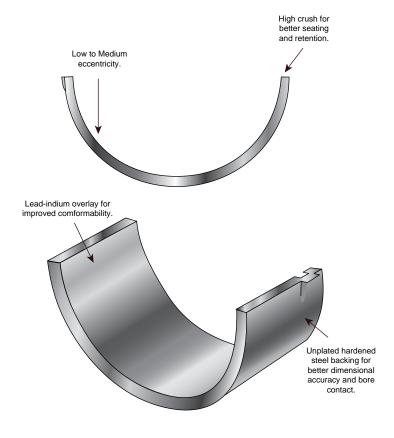
## V-Series bearings

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<sup>®</sup> 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 leadtin-copper overlay with slightly reduced wear resistance.

Some V-Series bearings also feature our Tri-Bore design. Tri-Bore bearings have a tapered face from the centerline of the bearing and were developed primarily for nitro engines to accommodate high crankshaft deflection.

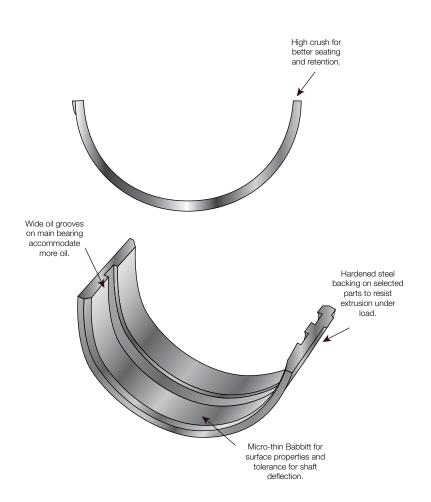




## M-Series bearings

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.





## 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® brand high performance bearing series.

	<b>P-Series</b>		<b>H-Series</b>		<b>V-Series</b>		<b>M-Series</b>	
	Rods	Mains	Rods	Mains	Rods	Mains	Rods	Mains
Eccentricity	Н	H-M	М	М	L-M	L-M	L-M-H	L-M
High Crush	Х	Х	Х	Х	Х	Х	Х	Х
Hard Back	Х		Х		Х		Х	
O.S. Chamfers			Х	Х	AS		S	Х
Dowel Hole	А		А		А		X	
Thin Overlay	Х	Х	Х					
No Flash	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



# Part Number Identification

#### Prefixes

- CB ..... Connecting Rod Bearing SH ..... Camshaft Bearing Set
- SH .....Individual Camshaft Bearing
- SM.....Connecting Rod or Main Bearing Shim Set TW.....Thrust Washer Set
- MS......Main Bearing Set
- **MB**.....Individual Main Bearing
- **223**.....Piston Pin Bushing

#### Suffixes

## D

Bearing has dowel hole.

#### Н

High performance bearing (on main sets this indicates partial groove).

### HG

High performance full annular grooved bearing.

### ΗТ

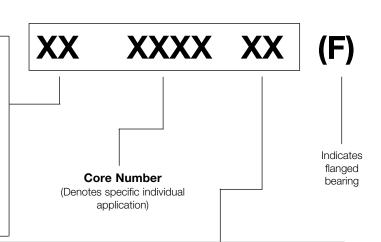
High performance with indentless locating lug. "Full Bore" design.

## Κ

High performance bearing with proprietary TriArmor™ coating applied to the bearing surface.

### Μ

Steel backed bearings with a Micro-Babbitt lining. Precision undersizes are not resizable (material designation B-2).



## Ν

High performance bearing narrowed for greater crankshaft fillet clearance.

## V

High performance bearing with a lead-indium overlay (on main sets this indicates partial groove).

## VG

High performance bearing with a lead-indium overlay and a full annular groove.

## Х

Bearing has .001" more oil clearance than standard.

## XX

Bearing has .002" more oil clearance than standard.

### W

Indicates a part that is a thrust washer (may also be designated upper or lower).



# Bearing Material Designations & Terminology

#### B-1

Steel backed tin or lead base conventional babbitt (nominal .020" thickness).

#### B-2

Steel backed tin or lead base with a Micro-Babbitt lining (nominal .006" thickness).

#### TM-77

Steel backed bearings with an intermediate layer of copper-lead alloy and an electro-plated lead-base overlay. Precision undersizes are not resizable.

#### TM-112

Steel backed bearings with an intermediate layer of copper-lead alloy and an electro-plated lead-base overlay. Precision undersizes are not resizable.

#### Bearing Outside Diameter Or Housing Bore

The minimum to maximum diameter of the hole in the engine block or the connecting rod.

#### Crush

When the bearing half is in its place in the housing bore, there is a slight bit of material that extends above the housing bore. When the assembly is torqued to proper specification, force is then exerting onto the OD of the bearing causing a press fit. Crush also aids in bore distortion, and heat transfer by increasing the surface contact with the bearing and the bore. Clevite Performance bearings have added crush for heat transfer and bearing retention. The amount of crush will vary depending on application.

#### Eccentricity

A gradual reduction in the bearing wall thickness starting at the crown and ending at approximately .380" from the parting lines.

#### **Full Annular Grooved**

Bearings having an oil groove cut from parting line to parting line in the internal surface of the half shell. When two grooved halves are joined, this creates a groove in the internal surface around the total circumference of the bearing.

#### VP-2

Steel backed bearings with an intermediate layer of copper-lead alloy and an electroplated lead indium overlay. Not resizable.

#### VP-3

Steel backed bearings with an intermediate layer of copper-lead alloy and an extra thick electroplated lead indium overlay. Not resizable.

#### **Maximum Bearing Length**

The maximum length that the bearing may have (including the flange when it applies). The actual length is usually less than this value.

#### **Maximum Wall At Crown**

The maximum thickness of the bearing wall at 90° from the parting lines. The actual thickness is usually less than this value.

#### **Standard Shaft Diameter**

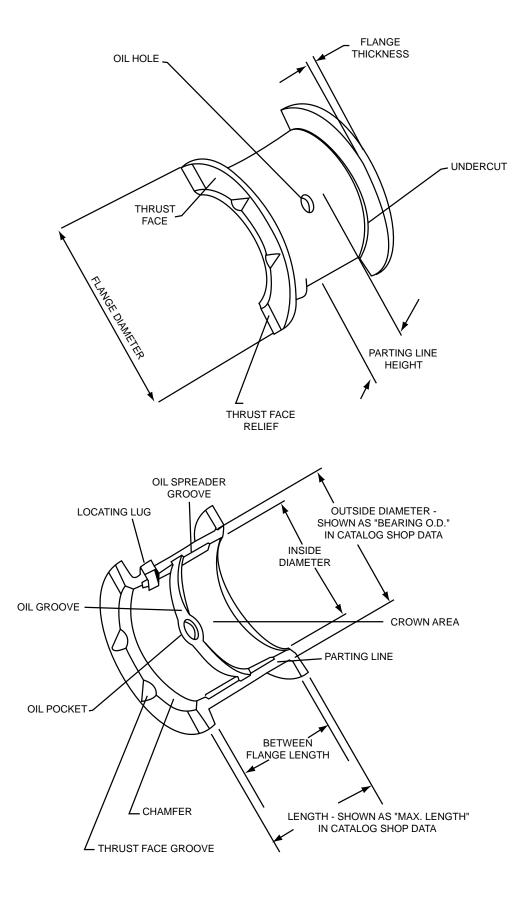
The minimum to maximum size of the standard main crankshaft journal, connecting rod journal or camshaft journal.

#### **Vertical Oil Clearance**

The difference between the assembled inside diameter of the bearing and the outside diameter of the shaft, measured at  $90^{\circ}$  from the bearing parting lines.



# **Bearing Nomenclature**



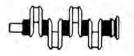


# Crankshaft Designs and Bearing Locations

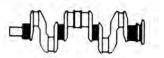
### **Crankshaft Designs**



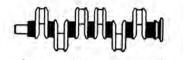
Three main bearing - 4 cylinder



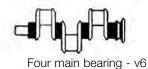
Five main bearing - 4 cylinder



Four main bearing - 6 cylinder



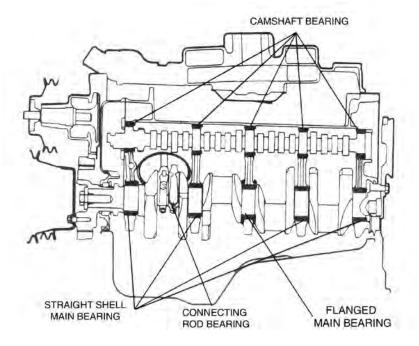
Seven main bearing - 6 cylinder





Five main bearing - v8

### **Bearing Locations**





# Bolt Boots, Bearing Guard and Plastigage

#### **Clevite® Bolt Boots**

Clevite bolt boots protect journal surfaces during engine assembly, preventing crankshaft damage. Shipped with 2 per bag and sold in cartons of 48 bagged pairs only.

2800-B1 (quantities of 48 only)

#### **Clevite® Bearing Guard**

Clevite Bearing Guard is specially formulated to provide proper lubrication for all engine components during assembly and the first crucial moments of operation after engine startup. Bearing Guard has an Extreme Pressure (EP) rating for the most severe applications.

2800-B2 8oz bottle (quantities of 12 only)
2800-B4 1 gallon jug (sold individually)
2800-B5 1-1/3 oz. package (quantities of 50 only)

**2800-B15** 15 gallon drum (sold individually) **CL-400** 4oz bottle (Cam Guard) (quanities of 12 only)

#### Clevite® Plastigage

Plastigage was designed as a final check of total vertical oil clearance during reassembly. It was not meant as a replacement for properly measuring crankshaft journals, housing bores or bearing dimensions before engine reassembly with accurate mics and gauges.

To properly use Plastigage during reassembly, readings should be taken on the bearing cap half shell while the weight of the crankshaft or piston and rod assembly is supported by the other half shell. Place a small amount of oil on the crankshaft journal only where the Plastigage will be placed and wipe any excess oil off with a clean rag. This will result in a more accurate reading by preventing the PLASTIGAGE from sticking to the journal.

Place a strand of Plastigage across the length of the journal parallel to the crankshaft.

Set the cap in place and tighten bolts to the proper OEM torque specification. NOTE: if the crankshaft is moved at this point it will smear the Plastigage, resulting in inaccurate readings.

Carefully remove the cap and measure the crushed Plastigage using the graduations printed on the package. Measure the crush along the entire length of the Plastigage, noting the highs and lows for proper clearance.

After you have made your measurements, carefully remove the crushed Plastigage from the components without scratching the bearing or the journal.

Clevite<sup>®</sup> Plastigage is available in four different sizes to check total vertical oil clearance on connecting rod and main bearings. Each package has a measuring scale printed in inches and millimeters. Strips are color coded for easy size identification and are soluble in oil.

MPG1 .001" - .003" (.025 - .075mm) Green★ MPR1 .002" - .006" (.050 - .15mm) Red★ MPB1 .004" - .009" (.10 - .23mm) Blue★ MPY1 .009" - .020" (.23 - .50mm) Yellow★

(★Sold in quantities of 12 strips only)



Part Number	Tray Quantity	Part Number	Tray Quantity	Part Number	Tray Quantity
Rod B	earing	Main Beari	ng Cont'd.	Main Bearing -	Thrust Cont'd.
CB-663HNU(16)	16 Upper Shells	MB-3248VL(24)	24 Lower Shells	MB-2121HXL(5)	5 Lower Shells
CB-663HXNL(16)	16 Upper Shells	MB-3248VU(24)	24 Upper Shells	MB-2121H-1L(5)	5 Lower Shells
CB-743HNU(16)	16 Upper Shells	MB-3564VL(20)	20 Lower Shells	MB-3249ML(9)	9 Lower Shells
CB-743HXNL(16)	16 Upper Shells	MB-3564VU(20)	20 Upper Shells	MB-3249MU(9)	9 Upper Shells
CB-1512ML(30)	30 Lower Shells	MB-3829HL(25)	25 Lower Shells	MB-3249VL(9)	9 Lower Shells
CB-1512MU(30)	30 Upper Shells	MB-3829HXL(25)	25 Lower Shells	MB-3249VU(9)	9 Upper Shells
CB-1512VL(30)	30 Lower Shells	MB-3829H-1L(25)	25 Lower Shells	Main Bearing - T	hrust - TriArmor
CB-1512VU(30)	30 Upper Shells	MB-3829VL(25)	25 Lower Shells	MB-3249VKL(9)	9 Lower Shells
CB-1798H(32)	16 Pair	MB-3829VU(25)	25 Upper Shells	MB-3249VKU(9)	9 Upper Shells
CB-1798H-1(32)	16 Pair	MB-3829VXL(25)	25 Lower Shells	Main Beari	ng - Flange
CB-1798HT(32)	16 Pair	MB-3829VXU(25)	25 Upper Shells	MB-2404HL(9)	9 Flange
CB-1798HT-1(32)	16 Pair	MB-3829V-1L(25)	25 Lower Shells	MB-2404HXU(9)	9 Flange
CB-1798HXT(32)	16 Pair	MB-3829V-1U(25)	25 Upper Shells	MB-2509HL(9)	9 Flange
CB-1798V(32)	16 Pair	MB-3852HL(25)	25 Lower Shells	MB-2509HXU(9)	9 Flange
CB-1798V-1(32)	16 Pair	MB-3852VL(25)	25 Lower Shells		
CB-1798VX(32)	16 Pair	MB-3852V-1L(25)	25 Lower Shells		
Rod Bearing	with TriArmor	MB-3993HU(20)	20 Upper Shells		
CB-1512VKL(30)	30 Lower Shells	MB-3993H1U(20)	20 Upper Shells		
CB-1512VKU(30)	30 Upper Shells	MB-3993HXU(20)	20 Upper Shells		
Main B	earing	MB-3993HL(20)	20 Lower Shells		
/IB-1840HU(20)	20 Upper Shells	MB-3993H1L(20)	20 Lower Shells		
VB-1840H1U(20)	20 Upper Shells	MB-3993HXL(20)	20 Lower Shells		
VB-1840HXU(20)	20 Upper Shells	Main Bearing	g - TriArmor		
VB-1840HL(20)	20 Lower Shells	MB-3248VKL(24)	24 Lower Shells		
VB-1840H1L(20)	20 Lower Shells	MB-3248VKU(24)	24 Upper Shells		
MB-1840HXL(20)	20 Lower Shells	Main Bearin	ng - Thrust		
MB-2035HU(20)	20 Upper Shells	MB-1841HU(5)	5 Upper Shells		
MB-2035H-1U(20)	20 Upper Shells	MB-1841H1U(5)	5 Upper Shells		
MB-2035HXU(20)	20 Upper Shells	MB-1841HXU(5)	5 Upper Shells		
MB-2035HL(20)	20 Lower Shells	MB-1841HL(5)	5 Lower Shells		
MB-2035H-1L(20)	20 Lower Shells	MB-1841H1L(5)	5 Lower Shells		
MB-2035HXL(20)	20 Lower Shells	MB-1841HXL(5)	5 Lower Shells		
MB-2121HL(24)	24 Lower Shells	MB-2036HU(5)	5 Upper Shells		
MB-2121H-1L(24)	24 Lower Shells	MB-2036H-1U(5)	5 Upper Shells		
MB-2121HXL(24)	24 Lower Shells	MB-2036HXU(5)	5 Upper Shells		
MB-2403HL(16)	16 Straight Shells	MB-2036HL(5)	5 Lower Shells		
MB-2403HXU(16)	16 Straight Shells	MB-2036H-1L(5)	5 Lower Shells		
MB-2508HL(16)	16 Straight Shells	MB-2036HXL(5)	5 Lower Shells		
MB-2508HXU(16)	16 Straight Shells	MB-2122HL(5)	5 Lower Shells		



	COL	JNTER DAT	A		SHOP	DATA		
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OR HOUSING MAX BORE LEN	( GTH
Rod Bearing NOTE: Quad 4 B No Dowel Hole	earing Speci	CB-1663H fications, H-Se	STD,1,10 ries Performance	1.8885/1.8890	0.0010/0.0026	0.0625	2.0150/2.0155 0.7	7920
Rod Bearing NOTE: Quad 4 B with TriArmor Coating Thickr	earing Speci Maximum Wa	all Does Not In		1.8885/1.8890	0.0010/0.0026	0.0625	2.0150/2.0155 0.7	7920
Rod Bearing NOTE: Quad 4 B Bearing Wall . Clearance No	earing Speci 005" Thinne	For .0010" Mo	STD ries Performance ore Oil	1.8885/1.8890	0.0020/0.0036	0.0620	2.0150/2.0155 0.7	7920
Rod Bearing NOTE: Quad 4 B with TriArmor .0010" More O Include Coatin Half	earing Speci Bearing Wall I Clearance I	.0005" Thinner Maximum Wall	Does Not	1.8885/1.8890	0.0020/0.0036	0.0620	2.0150/2.0155 0.7	7920
Rod Bearing NOTE: IRL, H-Se		CB-1664H ance No Dowe	STD,1 I Hole In Cap Half	1.8495/1.8500	0.0008/0.0021	0.0786	2.0080/2.0082 0.6	3550
Rod Bearing NOTE: IRL, H-Se Does Not Inclu In Cap Half	ries Perform		STD,1 rmor Maximum Wall Dowel Hole	1.8495/1.8500	0.0008/0.0021	0.0786	2.0080/2.0082 0.6	3550
Rod Bearing NOTE: IRL, H-Se For .0010" Mor Half	ries Perform		STD Vall .0005" Thinner Iole In Cap	1.8495/1.8500	0.0018/0.0031	0.0781	2.0080/2.0082 0.6	3550
Rod Bearing NOTE: IRL, H-Se .0005" Thinner Maximum Wall No Dowel Hole	ries Perform For .0010" N Does Not In	lore Oil Cleara		1.8495/1.8500	0.0018/0.0031	0.0781	2.0080/2.0082 0.6	3550
Rod Bearing NOTE: H-Series Used In Engine Narrowed On C Clearance	Performance s Without De	oweled Connec		1.8885/1.8890	0.0010/0.0026	0.0625	2.0150/2.0155 0.8	3510
Rod Bearing NOTE: H-Series Half, Maximum Thickness May Connecting Ro Crank Fillet Clo	Performance Wall Does N Be Used In d Narrowed	lot Include Coa Engines Witho	Dowel Hole In Cap ating ut Doweled	1.8885/1.8890	0.0010/0.0026	0.0625	2.0150/2.0155 0.8	3510
Rod Bearing NOTE: H-Series .0010" More O May Be Used I Rod Narrowed Fillet Clearanc	Performance I Clearance I n Engines Wi On One Side	Dowel Hole In thout Doweled	0005" Thinner For Cap Half I Connecting	1.8885/1.8890	0.0020/0.0036	0.0620	2.0150/2.0155 0.8	3510
Rod Bearing NOTE: H-Series .0005" Thinner Hole In Cap Ha Coating Thickr Doweled Conn Increased Crat	Performance For .0010" M alf, Maximum ness May Be ecting Rod N	lore Oil Cleara Wall Does Not Used In Engine larrowed On O	Bearing Wall nce Dowel t Include es Without	1.8885/1.8890	0.0020/0.0036	0.0620	2.0150/2.0155 0.8	3510
Rod Bearing NOTE: H-Series		CB-1775H No Dowel Hol	STD,1 e In Cap Half	1.7715/1.7720	0.0006/0.0030	0.0586	1.8900/1.8905 0.7	7090



	COL	JNTER DAT	A		SHOP	DATA		
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	MAX LENGTH
Rod Bearing NOTE: H-Series Not Include Co Cap Half	Performance		STD,1 r Maximum Wall Does I Hole In	1.7715/1.7720	0.0006/0.0030	0.0586	1.8900/1.890	5 0.7090
Rod Bearing NOTE: H-Series .0010" More Oi Half	Performance		STD .0005" Thinner For a In Cap	1.7715/1.7720	0.0016/0.0040	0.0581	1.8900/1.890	5 0.7090
Rod Bearing NOTE: H-Series .0005" Thinner Maximum Wall No Dowel Hole	Performance For .0010" N Does Not In	lore Oil Cleara	ince	1.7715/1.7720	0.0016/0.0040	0.0581	1.8900/1.890	5 0.7090
Rod Bearing NOTE: NASCAR, Half		CB-1798H rformance No	STD,1 Dowel Hole In Cap	1.8495/1.8500	0.0010/0.0023	0.0625	1.9760/1.976	2 0.7550
Rod Bearing NOTE: NASCAR, Wall Does Not Hole In Cap Ha	H-Series Pe Include Coat		STD h TriArmor Maximum s, No Dowel	1.8495/1.8500	0.0010/0.0023	0.0625	1.9760/1.976	2 0.7550
Rod Bearing NOTE: NASCAR, Half, Indentles	H-Series Pe		STD,1 Dowel Hole In Cap Design	1.8495/1.8500	0.0010/0.0023	0.0625	1.9760/1.976	2 0.7550
Rod Bearing NOTE: NASCAR, Thinner For .00 Hole In Cap Ha	H-Series Pe 10" More Oi		STD aring Wall .0005" Dowel	1.8495/1.8500	0.0020/0.0033	0.0620	1.9760/1.976	2 0.7550
Rod Bearing NOTE: NASCAR, Wall .0005" Thi Maximum Wall No Dowel Hole	H-Series Pe nner For .00 Does Not In	10" More Oil C		1.8495/1.8500	0.0020/0.0033	0.0620	1.9760/1.976	2 0.7550
Rod Bearing NOTE: NASCAR, Thinner For .00 Hole In Cap Ha Bore" Design	H-Series Pe 10" More Oi	Clearance No		1.8495/1.8500	0.0020/0.0033	0.0620	1.9760/1.976	2 0.7550
Rod Bearing NOTE: NASCAR, Half		CB-1798V rformance No	STD,1 Dowel Hole In Cap	1.8495/1.8500	0.0010/0.0023	0.0625	1.9760/1.976	2 0.7550
Rod Bearing NOTE: NASCAR, Thinner For .00 Hole In Cap Ha	V-Series Pe 10" More Oi		STD aring Wall .0005" > Dowel	1.8495/1.8500	0.0020/0.0033	0.0620	1.9760/1.976	2 0.7550
Rod Bearing NOTE: H-Series		CB-1856HN No Dowel Ho	STD,1,10 le In Cap Half	1.9990/2.0000	0.0008/0.0029	0.1119	2.2247/2.225	2 0.7920
Rod Bearing NOTE: H-Series .0010" More Oi Half	Performance		STD .0005" Thinner For a In Cap	1.9990/2.0000	0.0018/0.0039	0.1114	2.2247/2.225	2 0.7920
Main Bearing Se 1-2-4-5 3 NOTE: Pro-Stock Tri-bore Desig	k Chrysler, V	MS-2221V MB-3785V MB-2620V(F) -Series Perfor	STD mance with		0.0002/0.0022 0.0006/0.0031			



	CO	UNTER DAT	Α		SHOP	DATA	\	
BEARING OR POSITION	BEARING MATERIAI	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
Main Bearing Set 1-2-3-4-5 NOTE: NASCAR F Grooved Upper Thrust Washer Number MB-38	807 Cylinde Half And Pi Set, Not Inc	lain Lower Half luded Use with	Requires Part	2.2983/2.2993	0.0004/0.0030	0.0954	2.4906/2.491	6 0.8070
Main Bearing Set 1-2-3-4-5 NOTE: NASCAR F Bearing Wall .00 Clearance Groo Requires Thrust Part Number M	07 Cylinde 05" Thinne ved Upper Washer Se	r For .0010" Mo Half And Plain et, Not Included	ore Oil Lower Half I Use with	2.2983/2.2993	0.0014/0.0040	0.0949	2.4906/2.491	6 0.8070
Main Bearing Set 1-2-3-4-5 NOTE: NASCAR F Contains Full Gi Washer Set, No MB-3850WU(20)	R07 Cylinde rooved Bea t Included L	rings Requires Jse with Part N	Thrust	2.2983/2.2993	0.0003/0.0031	0.0954	2.4906/2.491	6 0.8070
Main Bearing Set 1-2-3-4-5 NOTE: NASCAR F Bearing Wall .00 Clearance Cont Thrust Washer 3 Number MB-383	107 Cylinde 105" Thinne ains Full Gr Set, Not Inc	r For .0010" Mo ooved Bearing luded Use with	ore Oil s Requires 1 Part	2.2983/2.2993	0.0013/0.0041	0.0949	2.4906/2.491	6 0.8070
Main Bearing Set 1-2-4-5 3 NOTE: Dart LS Ne Grooved Upper	TM-77	MS-2321H MB3989H MB3990H(F) Block, H Serie	STD•,1• s Performance		0.0003/0.0020 0.0002/0.0020			
Main Bearing Set NOTE: Dart LS Ne Bearing Wall .00 Clearance Groo	ext Cylinder 005" Thinne	MS-2321HX Block, H Serie r For .0010" Mo	STD• s Performance ore Oil					
Main Bearing NOTE: NASCAR, 2 Crankshafts, V- Half And Plain L	2.017" Main Series Perf			2.0174/2.0176	0.0010/0.0026	0.1088	2.2362/2.237	0 0.7500
Main Bearing NOTE: NASCAR, Crankshafts, V- .0005" Thinner I Grooved Upper	2.017" Main Series Perfe For .0010" N	ormance Beari Nore Oil Cleara	ng Wall nce	2.0174/2.0176	0.0020/0.0036	0.1083	2.2362/2.237	0 0.7500
Main Bearing NOTE: NASCAR, Crankshafts, H- Half And Plain L "Full Bore" Desi	2.000" Main Series Perf .ower Half,	ormance Groo	ved Upper	1.9981/1.9985	0.0017/0.0032	0.0801	2.1605/2.161	0 0.7400
Main Bearing NOTE: NASCAR, 2 Crankshafts, H- .0005" Thinner F Grooved Upper Indentless Lug	2.000" Main Series Perf For .0010" M Half And Pl	ormance Beari Iore Oil Cleara Iain Lower Half	ng Wall nce	1.9981/1.9985	0.0027/0.0042	0.0796	2.1605/2.161	0 0.7400



	COL	JNTER DATA			SHOP	DATA		
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX
.0010" Thinner Grooved Upper	2.000" Main -Series Perf For .0020" N Half And Pl	MB-3852HXX Bearing Journa ormance Bearin Aore Oil Clearan ain Lower Half, ull Bore" Desigr	g Wall ce	1.9981/1.9985	0.0037/0.0052	0.0791	2.1605/2.1610	0.7400
	2.000" Main Series Perfe ower Half,	MB-3852V Bearing Journa ormance Groove Indentless Loca	ed Upper	1.9981/1.9985	0.0017/0.0032	0.0801	2.1605/2.1610	0.7400
.0005" Thinner Grooved Upper	2.000" Main Series Perfe For .0010" N Half And Pl	MB-3852VX Bearing Journa ormance Bearin More Oil Clearan ain Lower Half, ull Bore" Desigr	g Wall ce	1.9981/1.9985	0.0027/0.0042	0.0796	2.1605/2.1610	0.7400
.0010" Thinner Grooved Upper	2.000" Main Series Perfe For .0020" N Half And Pl	MB-3852VXX Bearing Journa ormance Bearin fore Oil Clearan ain Lower Half, ull Bore" Design	g Wall ce	1.9981/1.9985	0.0037/0.0052	0.0791	2.1605/2.1610	0.7400
Thrust Washer Se NOTE: Contains 2 MS-2260V, MS-	20 Pieces U	MB-3879WU(20) MB-3879WU se with Part Nur		2.5980/2.6180			3.1260/3.1460	0.1080
	"M" Cylinde	SH-2012ST SH-2012 er Block With 2.0 de Diameter for Degree Spacing	Improved	1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.0010	0.7450
Grooved on the	M" Cylinder Outside Dia	SH-2013ST SH-2013 Block With 2.12 ameter for Impro Degree Spacing				0.0841	2.1200	0.9850
Cam Bearing Set 1-2-3-4-5 NOTE: Dart Iron I Bore Grooved of	B-1 Eagle Cylind on the Outsi	SH-2014ST SH-2014	STD 1200" Housing Improved	1.9487/1.9497	0.0011/0.0049	0.0841	2.1190/2.1210	0.7600
	SVO Cylindon the Outsi	SH-2015ST SH-2015 SH-2016 SH-2017 SH-2018 SH-2019 er Block With 2. de Diameter for Degree Spacing	Improved	2.0655/2.0665 2.0505/2.0515 2.0355/2.0365	0.0011/0.0053 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049	0.0677 0.0752 0.0827	2.2030/2.2050 2.2030/2.2050 2.2030/2.2050	0.6650 0.6650 0.6650
Cam Bearing Set 1-2-4 3 5 NOTE: Nitro Cam		SH-2127S SH-710 SH-1111 SH-277 t For AJPE Cylir	STD	2.1238/2.1248	0.0005/0.0045 0.0011/0.0043 0.0005/0.0040	0.0618	2.2495/2.2505	5 0.5850



### CUSTOM PERFORMANCE

	CO	UNTER DA	TA		SHO	P DAT	A	
BEARING OR POSITION		L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. O HOUSING BORE	MAX LENGTH
Cam Bearing Se 1-2-3-4-5 NOTE: G.M. Perfor Length, Perfor	formance LS		STD linder Blocks, .7800"	2.1650/2.167	70 0.0010/0.006	2 0.070	0 2.3079/2.30	98 0.7800
INTERNAT	IONAL T	RACTOR	1					
Engine		-	Years Block					
A Constant		6 CYL						
466 CID (7.6L) Interna 466 CID (7.6L) Interna Diesel			1					
-	C	OUNTER DA	TA		SHO	P DATA	Ú	100
Bearing or Position		Clevite Part No.	Available Undersizes	Std. Shaft Diameter	Vert. Oil Clearance	Max. Wall	Brg. O.D. or Housing Bore	Max Length
6 CYL					5101.05			
			charged Diesel 6 Cyl charged/Intercooled Diesel 6	Cvi	4.300in./109.2m 4.300in./109.2m			
Rod Bearing(6)	TM-112	CB-675H	STD,10 Performance,No Dowel Hole In Cap	2.9977/2.9990	0.0020/0.0049	0.0995	3.2000/3.2010	1.2000
Rod Bearing(6) NOTE: Thru Engine	Serial Number 4		STD Performance With TriArmor™, kness,No Dowel Hole In Cap Half	2.9977/2.9990	0.0020/0.0049	0.0995	3.2000/3.2010	1.2000
Rod Bearing(6)	TM-112	CB-1365H	STD,10 Performance,No Dowel Hole In Cap	2.9977/2.9990	0.0020/0.0049	0.0995	3.2000/3.2010	1.2600
Rod Bearing(6) NOTE: From Engine TriArmor™,M Cap Half	Serial Number		STD Performance With coating Thickness,No Dowel Hole In	2.9977/2.9990	0.0020/0.0049	0.0995	3.2000/3.2010	1.2600
	Serial Number 4	MS-1343H MB-2628H MB-2629H(F) 440035, H-Series I	STD,10 Performance,Grooved Upper Halves	3.3742/3.3755 3.3742/3.3755	0.0020/0.0049 0.0020/0.0049	0.1555 0.1555	3.6885/3.6895 3.6885/3.6895	1.2250 1.7770
Plain Lower I Main Bearing Set 1-2-3-4-5-6 7 NOTE: From Engine Plain Lower I	TM-112 Serial Number	MS-1642H MB3009H MB2629H(F) 440036, H-Series	STD,10 Performance,Grooved Upper Halves	3.3742/3.3755 3.3742/3.3755	0.0020/0.0049 0.0020/0.0049	0.1555 0.1555	3.6885/3.6895 3.6885/3.6895	1.2990 1.7770
JOHN DEE							_	
Engine 466 CID (7.6L) 6466A	Contractor of	tércooled Diesel	Years Block Eng 1 466		Turbocharged Diesel		Years	Block 1
	C	OUNTER DA	ТА	_	SHC	P DATA		
Bearing or Position		Clevite Part No.	Available Undersizes	Std. Shaft Diameter	Vert. Oil Clearance	Max. Wall	Brg. O.D. or Housing Bore	Max Length
								6 CYL
			ed/Intercooled Diesel 6 Cyl ed Diesel 6 Cyl		4.563in./115.9m 4.563in./115.9m	Contraction of the second		1
Rod Bearing(6) NOTE: H-Series Perf	TM-112	CB-1267H	STD,10	2.9980/2.9990	0.0010/0.0036	0.0955	3.1910/3.1920	1.3900
Rod Bearing(6) NOTE: H-Series Perf	TM-112	CB-1267HK TriArmor™,Maximu	STD um Wall Does Not Include Coating	2.9980/2.9990	0.0010/0.0036	0.0955	3.1910/3.1920	1.3900



ACURA

YEAR	BORE & STROKE	BLOCK
1997-2000	2.953"/75.0mm X 3.543"/90.0mm	1
1986-1989	2.953"/75.0mm X 3.543"/90.0mm	1
1992-1993	3.189"/81.0mm X 3.189"/81.0mm	2
1994-2001	3.189"/81.0mm X 3.433"/87.2mm	3
1997-2001	3.189"/81.0mm X 3.433"/87.2mm	3
1990-1993	3.189"/81.0mm X 3.504"/89.0mm	2
1994-2001	3.189"/81.0mm X 3.504"/89.0mm	2
2002-2004	3.390"/86.1mm X 3.386"/86.0mm	4
2002-2006	3.390"/86.1mm X 3.386"/86.0mm	5
2005-2006	3.390"/86.1mm X 3.386"/86.0mm	4
1997	3.346"/85.0mm X 3.740"/95.0mm	6
2007-2011	3.390"/86.0mm X 3.890"/99.0mm	4
2009-2011	3.420"/87.0mm X 3.890"/99.0mm	4
2004-2008	3.420"/87.0mm X 3.890"/99.0mm	4
	1997-2000 1986-1989 1992-1993 1994-2001 1997-2001 1990-1993 1994-2001 2002-2004 2002-2006 2005-2006 1997 2007-2011 2009-2011	1997-2000         2.953"/75.0mm X 3.543"/90.0mm           1986-1989         2.953"/75.0mm X 3.543"/90.0mm           1992-1993         3.189"/81.0mm X 3.189"/81.0mm           1994-2001         3.189"/81.0mm X 3.433"/87.2mm           1997-2001         3.189"/81.0mm X 3.433"/87.2mm           1997-2001         3.189"/81.0mm X 3.433"/87.2mm           1997-2001         3.189"/81.0mm X 3.504"/89.0mm           1990-1993         3.189"/81.0mm X 3.504"/89.0mm           1994-2001         3.189"/81.0mm X 3.504"/89.0mm           2002-2004         3.390"/86.1mm X 3.386"/86.0mm           2002-2006         3.390"/86.1mm X 3.386"/86.0mm           2005-2006         3.390"/86.1mm X 3.386"/86.0mm           1997         3.346"/85.0mm X 3.740"/95.0mm           2007-2011         3.390"/86.0mm X 3.890"/99.0mm           2007-2011         3.420"/87.0mm X 3.890"/99.0mm

CONNECTIN	IG ROD FORG	ING NUN	IBERS		
FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK
C7917	3.504in/89.0mm	2	PR4	3.504in/89.0mm	2
CRANKSHA	FT FORGING	NUMBER	s		
FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK
321	3.543in/90.0mm	1	4456	3.543in/90.0mm	1

	COL	JNTER DATA	1		SHOP	DATA	ι	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
								4 CYL
	C (1.6L) S	SOHC 16V L4	VTEC D16Y8	2.9	53"/75.0mm	x 3.54	3"/90.0mm	1
	C (1.6L) E 986-1989	DOHC 16V L4	4 D16A1	2.9	53"/75.0mm	x 3.54	3"/90.0mm	
Rod Bearing (4) NOTE: H Series P Fillet Clearance	erformance	Narrowed For		1.7707/1.7717	0.0008/0.0015	0.0592	1.8898/1.8907	0.6780
Rod Bearing (4) NOTE: H Series F .0010" More Oil Crank Fillet Cle	erformance Clearance	Narrowed For In		1.7707/1.7717	0.0018/0.0025	0.0587	1.8898/1.8907	0.6780
Main Bearing Set 1-2-3-4-5 NOTE: H Series P Requires Thrus Part Number Th	erformance t Washer Se	MB-3760H Contains Full C	STD,.026mm,.25mm Grooved Bearings Use with	2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.3237	7 0.7870
Main Bearing Set 1-2-3-4-5 NOTE: H Series P .0010" More Oil Bearings Requi Use with Part N	erformance Clearance ( res Thrust V	MB-3760HX Bearing Wall .0 Contains Full Gi Vasher Set, Not		2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.3237	7 0.7870

	COUNTER DAT	A		SHOP	DATA	4	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL (cont.)							
(cont.) Years: 1			2.9	53"/75.0mm	x 3.54	3"/90.0mm	1 (cont.)
	CC (1.6L) DOHC 16V L 1986-1989	4 D16A1	2.9	53"/75.0mm	x 3.54	3"/90.0mm	
Thrust Washer S NOTE: Contains	et TW-473S MB-3176W 2 Pieces, Position Number	STD 4 Use with Part	2.4114/2.4213	}		3.2185/3.2283	0.0980
Number MS-18 Crankshaft Forg	04H, MS-1804HX ing 321, 4456						
2 1678 0	CC (1.7L) DOHC 16V L	4 VTEC B17A1	3.1	89"/81.0mm	x 3.18	9"/81.0mm	2
1834 0	CC (1.8L) DOHC 16V L	4 B18A1	3.1	89"/81.0mm	x 3.50	4"/89.0mm	
	CC (1.8L) DOHC 16V L 994-2001	4 B18B1	3.1	89"/81.0mm	x 3.50	4"/89.0mm	
Rod Bearing (4) NOTE: H-Series Oil Hole in Bea	TM-77 CB-1353H Performance No Dowel Hol ring	STD,.026mm,.25mm le In Cap Half with	1.7707/1.7717	0.0005/0.0034	0.0590	1.8898/1.8907	0.7680
	TM-77 CB-1353HX Performance Bearing Wall I Clearance No Dowel Hole ble in Bearing		1.7707/1.7717	0.0015/0.0044	0.0586	6 1.8898/1.8907	0.7680
Lower Half Red	MB-3760H Performance Grooved Uppe quires Thrust Washer Set, N		2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.3237	0.7870
	t TM-77 MS-2095HX MB-3760HX	STD	2 1644/2 165/	0.0012/0.0037	0.0776	0 0008/0 0007	0 7870
NOTE: H Series I .0010" More Oi Plain Lower Ha	Performance Bearing Wall . I Clearance Grooved Upper If Requires Thrust Washer vith Part Number TW-473S	Half And	2.1044/2.1004	0.0012/0.0007	0.0770	2.022072.0207	0.7070
Thrust Washer S	MB-3176W	STD	2.4114/2.4213	3		3.2185/3.2283	0.0980
	2 Pieces; Position Number 95H, MS-2095HX	4; Use with Part					
	Forging C7917, PR4						
Years: 1	CC (1.8L) DOHC 16V L			89"/81.0mm			3
	CC (1.8L) DOHC 16V L 997-2001	4 VTEC B18C5	3.1	89"/81.0mm	x 3.43	3"/87.2mm	
Rod Bearing (4) NOTE: H-Series	TM-77 CB-1785H Performance No Dowel Hol	STD,.25mm e In Cap Half	1.7707/1.7717	0.0008/0.0015	0.0595	5 1.8898/1.8907	0.6880
	TM-77 CB-1785HK Performance with TriArmor ating Thickness, No Dowel		1.7707/1.7717	0.0008/0.0015	0.0595	5 1.8898/1.8907	0.6880
	TM-77 CB-1785HX Performance Bearing Wall I Clearance No Dowel Hole		1.7707/1.7717	0.0018/0.0025	0.0590	1.8898/1.8907	0.6880



	COL	JNTER DATA			SHOP	DATA		
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OR HOUSING BORE	MAX LENGTH
							4 CYL	(cont.)
(cont.) Years: 1 1797	1994-2001		VTEC B18C1		89"/81.0mm 89"/81.0mm			(cont.)
Rod Bearing (4) NOTE: H-Series .0005" Thinner	TM-77 Performance For .0010" M Does Not In	CB-1785HXK with TriArmor I lore Oil Clearan clude Coating T	ce	1.7707/1.7717	0.0018/0.0025	0.0590	1.8898/1.890	7 0.6880
Main Bearing Se 1-2-3-4-5 NOTE: H Series Lower Half Re Included Use v	ا Performance quires Thrust	Washer Set, No		2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870
.0010" More O	Performance il Clearance ( alf Requires 1	Grooved Upper Thrust Washer S		2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.323	7 0.7870
Thrust Washer S NOTE: Contains	1	TW-473S MB-3176W osition Number 4	STD 4; Use with Part	2.4114/2.4213			3.2185/3.228	3 0.0980
Number MS-20								
	CC (2.0L) E 2002-2004	DOHC 16V L4	VTEC K20A2	3.3	90"/86.1mm	x 3.38	6"/86.0mm	4
1998		OOHC 16V L4	VTEC K20Z1	3.3	90"/86.1mm	x 3.38	6"/86.0mm	
Years: 2	2007-2011		Irbo. L4 i-VTEC K23		90"/86.0mm			
	CC (2.4L) E 2009-2011	DOHC 16V L4	i-VTEC K24Z3	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
2354		DOHC 16V L4	VTEC K24A2	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
Rod Bearing NOTE: H Series		CB-1861H	STD•	1.8888/1.8898	0.0005/0.0029	0.0588	2.0079/2.008	7 0.6100
Rod Bearing NOTE: H Series .0010" More O	Performance	CB-1861HX Bearing Wall .0	STD• 005" Thinner For	1.8888/1.8898	0.0015/0.0039	0.0583	2.0079/2.008	7 0.6100
	Performance quires Thrust	Washer Set, No		2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870
.0010" More O Plain Lower Ha	t TM-77     Performance il Clearance ( alf Requires ]	MS-2095HX MB-3760HX Bearing Wall .0 Grooved Upper Thrust Washer S		2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.323	7 0.7870
Included Use v Thrust Washer S NOTE: Contains Number MS-20	et I 2 Pieces; Po	TW-473S MB-3176W osition Number	STD 4; Use with Part	2.4114/2.4213			3.2185/3.228	3 0.0980





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	COUNTER DAT	A		SHOP	DATA	SHOP DATA					
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH				
4 CYL											
	CC (2.0L) DOHC 16V L	4 VTEC K20A3	3.3	90"/86.1mm	x 3.38	6"/86.0mm	5				
Main Bearing Se 1-2-3-4-5	t TM-77 MS-2095H MB-3760H	STD,.026mm,.25mm	2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.3237	7 0.7870				
Lower Half Red	Performance Grooved Uppo quires Thrust Washer Set, N vith Part Number TW-473S										
Main Bearing Se 1-2-3-4-5 NOTE: H Series F	t TM-77 MS-2095HX MB-3760HX Performance Bearing Wall .	STD 0005" Thinner For	2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.3237	7 0.7870				
Plain Lower Ha	I Clearance Grooved Upper If Requires Thrust Washer vith Part Number TW-473S										
Thrust Washer S	et <b>TW-473S</b> MB-3176W	STD	2.4114/2.4213			3.2185/3.2283	3 0.0980				
	2 Pieces; Position Number 95H, MS-2095HX	4; Use with Part									
6 2156 0 Years: 1	CC (2.2L) SOHC 16V L	4 VTEC F22B1	3.34	46"/85.0mm	x 3.74	0"/95.0mm	6				
Rod Bearing (4) NOTE: H-Series I Oil Hole in Bea	TM-77 CB-1780H Performance No Dowel Hol ring	STD,.25mm le In Cap Half with	1.8888/1.8898	0.0008/0.0036	0.0589	2.0079/2.0087	0.7650				
	TM-77 CB-1780HK Performance with TriArmon ating Thickness, No Dowel		1.8888/1.8898	0.0008/0.0036	0.0589	2.0079/2.0087	7 0.7650				
	TM-77 CB-1780HX Performance Bearing Wall I Clearance No Dowel Hole		1.8888/1.8898	0.0018/0.0046	0.0584	2.0079/2.0087	0.7650				
.0005" Thinner	TM-77 CB-1780HXK Performance with TriArmon For .0010" More Oil Cleara Does Not Include Coating In Cap Half	nce	1.8888/1.8898	0.0018/0.0046	0.0584	2.0079/2.0087	7 0.7650				

## AUDI

ENGINE	YEAR	BORE & STROKE	BLOCK
1588 CC (1.6L) SOHC 8V L4 Volkswagen CR DIESEL	1982	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V Turbo. L4 Volkswagen CY DIESEL	1982-1983	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V L4 Volkswagen JK DIESEL	1983	3.012"/76.5mm X 3.385"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 Volkswagen JN	1984	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 Volkswagen MG	1985-1987	3.189"/81.0mm X 3.386"/86.0mm	1
1781 CC (1.8L) DOHC 20V Turbo. L4 Volkswagen AMU	2000-2002	3.190"/81.0mm X 3.400"/86.4mm	1
1781 CC (1.8L) DOHC 20V Turbo. L4 Volkswagen ATC	2000-2001	3.190"/81.0mm X 3.400"/86.4mm	1
1781 CC (1.8L) DOHC 20V Turbo. L4 Volkswagen BEA	2003-2006	3.190"/81.0mm X 3.400"/86.4mm	1
1986 CC (2.0L) SOHC 10V L5 Volkswagen CN DIESEL	1979-1982	3.012"/76.5mm X 3.400"/86.4mm	2
1986 CC (2.0L) SOHC 10V Turbo. L5 Volkswagen DE DIESEL	1983-1985	3.012"/76.5mm X 3.400"/86.4mm	2
1984 CC (2.0L) SOHC 8V L4 Volkswagen 3A	1988-1991	3.248"/82.5mm X 3.650"/92.7mm	1



AUDI

ENGINE	YEAR	BORE & STROKE	BLOCK
2144 CC (2.1L) SOHC 10V Turbo. L5 Volkswagen KH	1984-1985	3.130"/79.5mm X 3.400"/86.4mm	2
2144 CC (2.1L) SOHC 10V L5 Volkswagen WE	1984	3.130"/79.5mm X 3.400"/86.4mm	2
2144 CC (2.1L) SOHC 10V L5 Volkswagen WU	1984	3.130"/79.5mm X 3.400"/86.4mm	2
2144 CC (2.1L) SOHC 10V Turbo. L5 Volkswagen WX	1984-1986	3.130"/79.5mm X 3.400"/86.4mm	2
2226 CC (2.2L) SOHC 10V L5 Volkswagen JT	1984-1987	3.189"/81.0mm X 3.386"/86.0mm	2
2226 CC (2.2L) SOHC 10V L5 Volkswagen KX	1984-1987	3.189"/81.0mm X 3.386"/86.0mm	2
2226 CC (2.2L) SOHC 10V L5 Volkswagen KZ	1985-1987	3.189"/81.0mm X 3.386"/86.0mm	2
2226 CC (2.2L) SOHC 10V Turbo. L5 Volkswagen MC	1986-1991	3.189"/81.0mm X 3.386"/86.0mm	2
2226 CC (2.2L) DOHC 20V Turbo. L5 AAN	1992-1995	3.189"/81.0mm X 3.386"/86.0mm	2
2309 CC (2.3L) SOHC 10V L5 Volkswagen NF	1988-1991	3.248"/82.5mm X 3.386"/86.0mm	2
2309 CC (2.3L) SOHC 10V L5 Volkswagen NG	1988-1992	3.248"/82.5mm X 3.386"/86.0mm	2
2309 CC (2.3L) DOHC 20V L5 Volkswagen 7A	1989-1991	3.248"/82.5mm X 3.386"/86.0mm	2

#### **CRANKSHAFT FORGING NUMBERS**

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK
035D	3.386in/86.0mm	2	035D	3.400in/86.4mm	2

		COL	UNTER DA	ATA			SHOP	DATA	<u> </u>	
BEARING POSITION		BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHA DIAMETE		VERT OIL CLEARANCE	MAX		MAX LENGTH
1 1	588 C	C (1.6L) \$	SOHC 8V	L4 Volkswagen DIESE	-	3.01	12"/76.5mm	x 3.38	5"/86.0mm	4 CYL 1
1	588 C	C (1.6L) \$	SOHC 8V	Turbo. L4 Volkswagen	DIESEL	3.01	12"/76.5mm	x 3.38	5"/86.0mm	
1	780 C	C (1.8L) \$	SOHC 8V	L4 Volkswagen		3.18	39"/81.0mm	x 3.38	6"/86.0mm	
				/ Turbo. L4 Volkswage	n		0"/81.0mm			
1	984 C	C (2.0L) \$	SOHC 8V	L4 Volkswagen		3.24	18"/82.5mm	x 3.65	0"/92.7mm	
Rod Bearin NOTE: H S		erformance	-	STD•,.026mm•			0.0005/0.0027			
	eries Pe		CB-1426HX Bearing Wa	STD• all .0005" Thinner For	1.8802/1.	8810	0.0015/0.0037	0.0548	1.9921/1.9929	0.7470



AUDI

	COUNTER	R DATA		SHOP	P DATA	
BEARING OR POSITION	BEARING PART MATERIAL NUMB	AVAILABLE ER UNDERSIZES	STD SHA		BRG O MAX HOUSI WALL BORE	
5 CYL						
2 198	6 CC (2.0L) SOHC	10V L5 Volkswagen	DIESEL	3.012"/76.5mm	x 3.400"/86.4	4mm 2
198	6 CC (2.0L) SOHC	10V Turbo L5 Volksv	vagen DIESEL	. 3.012"/76.5mm	x 3.400"/86.4	4mm
214	4 CC (2.1L) SOHC	10V Turbo. L5 Volks	wagen	3.130"/79.5mm	x 3.400"/86.4	4mm
214	4 CC (2.1L) SOHC	10V L5 Volkswagen		3.130"/79.5mm	x 3.400"/86.4	4mm
222	6 CC (2.2L) SOHC	10V L5 Volkswagen		3.189"/81.0mm	x 3.386"/86.0	Dmm
222	6 CC (2.2L) SOHC	10V Turbo. L5 Volks	wagen	3.189"/81.0mm	x 3.386"/86.0	Dmm
222	6 CC (2.2L) DOHC	20V Turbo. L5		3.189"/81.0mm	x 3.386"/86.0	Omm
230	9 CC (2.3L) SOHC	10V L5 Volkswagen		3.248"/82.5mm	x 3.386"/86.0	Dmm
230	9 CC (2.3L) DOHC	20V L5 Volkswagen		3.248"/82.5mm	x 3.386"/86.0	Dmm
Rod Bearing ( NOTE: H Serie	5) TM-77 CB-1420 es Performance	6H STD•,.026mm•	1.8802/1	.8810 0.0005/0.0027	0.0553 1.9921/	/1.9929 0.7470
		6HX STD• g Wall .0005" Thinner For		.8810 0.0015/0.0037	0.0548 1.9921/	/1.9929 0.7470
Crankshaft Fo	orging 035D		-			

ENGINE	YEAR	BORE & STROKE	BLOCK
98 CID (1.6L) DOHC 16V L4 Mitsubishi 4G61	1989-1990	3.240"/82.3mm X 2.953"/75.0mm	1
98 CID (1.6L) DOHC 16V Turbo. L4 Mitsubishi 4G61	1989	3.240"/82.3mm X 2.953"/75.0mm	1
98 CID (1.6L) SOHC 8V L4 Mitsubishi	1980-1984	3.028"/76.9mm X 3.386"/86.0mm	1
98 CID (1.6L) SOHC 8V L4 Mitsubishi 4G32	1971-1980	3.028"/76.9mm X 3.386"/86.0mm	1
98 CID (1.6L) SOHC 8V Turbo. L4 Mitsubishi G32B	1984-1990	3.028"/76.9mm X 3.386"/86.0mm	1
107 CID (1.8L) SOHC 8V L4 Mitsubishi 4G37	1989-1994	3.173"/80.6mm X 3.386"/86.0mm	1
122 CID (2.0L) SOHC 8V L4 Mitsubishi *A* G63B	1983-1992	3.346"/85.0mm X 3.465"/88.0mm	2
122 CID (2.0L) DOHC 16V L4 Mitsubishi 4G63	1989-1994	3.346"/85.0mm X 3.465"/88.0mm	3
122 CID (2.0L) DOHC 16V Turbo. L4 Mitsubishi 4G63T	1990-1998	3.346"/85.0mm X 3.465"/88.0mm	3
144 CID (2.4L) SOHC 8V L4 Mitsubishi 4G64	1990-1993	3.406"/86.5mm X 3.937"/100.0mm	3
144 CID (2.4L) SOHC 16V L4 Mitsubishi 4G64	1993-1996, 2001-2005	3.406"/86.5mm X 3.937"/100.0mm	4
148 CID (2.4L) DOHC 16V L4	1995-2010	3.445"/87.5mm X 3.976"/101.0mm	5
148 CID (2.4L) DOHC 16V Turbo. L4	2003-2009	3.445"/87.5mm X 3.976"/101.0mm	6
152 CID (2.5L) SOHC 24V V6 Mitsubishi EEB	1995-2000	3.290"/83.5mm X 2.992"/76.0mm	7
181 CID (3.0L) SOHC 12V V6 Mitsubishi 6G72	1987-2000	3.587"/91.1mm X 2.992"/76.0mm	8
181 CID (3.0L) SOHC 24V V6 Mitsubishi 6G72	2001-2005	3.587"/91.1mm X 2.992"/76.0mm	8
181 CID (3.0L) DOHC 24V V6 Mitsubishi 6G72	1991-1996	3.587"/91.1mm X 2.992"/76.0mm	8
181 CID (3.0L) DOHC 24V Turbo. V6 Mitsubishi 6G72T	1991-1996	3.587"/91.1mm X 2.992"/76.0mm	8
273 CID (4.5L) 16V V8	1964-1969	3.625"/92.1mm X 3.313"/84.2mm	12
277 CID (4.5L) 16V V8 Plymouth	1956-1957	3.750"/95.3mm X 3.130"/79.4mm	13



# MAHLE

ENGINE	YEAR	BORE & STROKE	BLOCK
301 CID (4.9L) 16V V8	1957	3.910"/99.3mm X 3.130"/79.4mm	13
303 CID (5.0L) 16V V8	1956	3.810"/96.8mm X 3.310"/84.1mm	13
313 CID (5.1L) 16V V8	1958-1964	3.875"/98.4mm X 3.310"/84.1mm	13
318 CID (5.2L) 16V V8 Magnum	1992-2003	3.910"/99.3mm X 3.313*/84.2mm	14
318 CID (5.2L) 16V V8	1957-1991	3.910"/99.3mm X 3.313"/84.2mm	15
326 CID (5.3L) 16V V8	1959	3.950"/100.4mm X 3.310"/84.1mm	13
340 CID (5.6L) 16V V8	1968-1973	4.040"/102.6mm X 3.313"/84.1mm	12
345 CID (5.7L) 16V V8 HEMI	2003-2012	3.917"/99.5mm X 3.580"/90.9mm	16
345 CID (5.7L) 16V V8 HEMI Hybrid	2009	3.917"/99.5mm X 3.580"/90.9mm	16
350 CID (5.7L) 16V V8	1958	4.063"/103.2mm X 3.375"/85.7mm	17
359 CID (5.9L) 12V Turbo. L6 Cummins 6BT DIESEL	1991-1999	4.016"/102.0mm X 4.724"/120.0mm	9
359 CID (5.9L) 24V Turbo. L6 Cummins ISB ETC DIESEL	1998-2002	4.016"/102.0mm X 4.724"/120.0mm	9
359 CID (5.9L) 24V Turbo. L6 Cummins ISB HO ETH DIESEL	2001-2002	4.016"/102.0mm X 4.724"/120.0mm	9
359 CID (5.9L) 24V Turbo. L6 Cummins ISBe/QSB ETC DIESEL	2003-2005	4.016"/102.0mm X 4.724"/120.0mm	10
359 CID (5.9L) 24V Turbo. L6 Cummins ISBe/QSB HO ETH DIESEL	2003-2010	4.016"/102.0mm X 4.724"/120.0mm	10
359 CID (5.9L) 12V Turbo, L6 Cummins DIESEL	1988-1991	4.016"/102.0mm X 4.724"/120.0mm	9
360 CID (5.9L) 16V V8	1971-2003	4.000"/101.6mm X 3.578"/90.9mm	18
361 CID (5.9L) 16V V8	1958-1966, 1969-1971	4.125"/104.8mm X 3.375"/85.7mm	17
370 CID (6.1L) 16V V8 HEMI	2005-2010	4.055"/103.0mm X 3.580"/90.9mm	16
383 CID (6.3L) 16V V8	1959-1971	4.250"/108.0mm X 3.375"/85.9mm	19
392 CID (6.4L) 16V V8 HEMI	2011-2012	4.090"/103.9mm X 3.720"/94.5mm	20
400 CID (6.6L) 16V V8	1971-1978	4.342"/110.3mm X 3.375"/85.7mm	17
408 CID (6.7L) 24V Turbo. L6 Cummins ETJ DIESEL	2007-2010	4.210"/107.0mm X 4.880"/124.0mm	11
413 CID (6.7L) 16V V8	1959-1965, 1969-1971	4.188"/106.4mm X 3.750"/95.3mm	21
426 CID (7.0L) 16V V8 HEMI	1964-1971	4.250"/108.0mm X 3.750"/95.2mm	22
426 CID (7.0L) 16V V8 Wedge	1963-1965	4.250"/108.0mm X 3.750"/95.2mm	22
440 CID (7.2L) 16V V8	1966-1979	4.320"/109.7mm X 3.750"/95.2mm	21
488 CID (8.0L) 20V V10 Magnum	1992-2003	4.000"/101.6mm X 3.882"/98.6mm	23
505 CID (8.3L) 20V V10	2003-2006	4.031"/102.4mm X 3.960"/100.6mm	24
515 CID (8.4L) 20V V10	2008-2010	4.055"/103.0mm X 3.960"/100.6mm	24

#### CONNECTING ROD FORGING NUMBERS

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BL	оск
1618699	3.313in/84.2mm	14	2406782	3.375in/85.9mm	19	529238	3.375in/85.7mm	17
1618699	3.313in/84.2mm	15	2406886	3.375in/85.7mm	17	529938	3.375in/85.7mm	17
1618699	3.375in/85.7mm	17	2406886	3.375in/85.9mm	19	532294	3.375in/85.7mm	17
1618699	3.375in/85.9mm	19	2406886	3.750in/95.2mm	21	541000	3.375in/85.7mm	17
1737692	3.375in/85.7mm	17	2406886	3.750in/95.3mm	21	544956	3.375in/85.7mm	17
1737692	3.375in/85.9mm	19	2406886	3.750in/95.2mm	22	699	3.313in/84.2mm	14
1851535	3.375in/85.7mm	17	2951908	3.375in/85.7mm	17	699	3.313in/84.2mm	15
1851535	3.375in/85.9mm	19	2951908	3.375in/85.9mm	19	72G	2.992in/76.0mm	8
1851535	3.750in/95.2mm	21	2951908	3.750in/95.2mm	21	72W	2.992in/76.0mm	8
1851535	3.750in/95.3mm	21	2951908	3.750in/95.3mm	21	782	3.313in/84.2mm	14
1851535	3.750in/95.2mm	22	2951908	3.750in/95.2mm	22	782	3.313in/84.2mm	15
2406395	3.375in/85.7mm	17	31	2.953in/75.0mm	1	D	2.953in/75.0mm	1
2406395	3.375in/85.9mm	19	31	3.386in/86.0mm	1	D	3.386in/86.0mm	1
2406395	3.750in/95.2mm	21	3418645	3.313in/84.2mm	14	DC549AAA0143	3.580in/90.9mm	16
2406395	3.750in/95.3mm	21	3418645	3.313in/84.2mm	15	DC549AAB0904	3.580in/90.9mm	16
2406395	3.750in/95.2mm	22	3901085	4.724in/120.0mm	9	F	2.953in/75.0mm	1
2406782	3.313in/84.2mm	14	3901566	4.724in/120.0mm	9	F	3.386in/86.0mm	1
2406782	3.313in/84.2mm	15	40F	3.937in/100.0mm	3	S	2.953in/75.0mm	1
2406782	3.375in/85.7mm	17	529007	3.375in/85.7mm	17	S	3.386in/86.0mm	1
		-			-			

#### **CRANKSHAFT FORGING NUMBERS**

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLC	ск
003K	3.386in/86.0mm	1	1855127	3.375in/85.7mm	17	2658393	3.313in/84.2mm	15
003K	2.992in/76.0mm	8	1855127	3.375in/85.9mm	19	2843868	3.313in/84.2mm	14
003N	3.386in/86.0mm	1	1855127	3.750in/95.2mm	21	2843868	3.313in/84.2mm	15
003N	2.992in/76.0mm	8	1855127	3.750in/95.3mm	21	2NABC	3.386in/86.0mm	1
020201A1	3.386in/86.0mm	1	1855127	3.750in/95.2mm	22	2Y68-76	3.386in/86.0mm	1
020201A1	2.992in/76.0mm	8	1978698	3.375in/85.7mm	17	30R	3.386in/86.0mm	1
020201A1	3.386in/86.0mm	1	1978698	3.375in/85.9mm	19	31-87	3.386in/86.0mm	1
09N	2.992in/76.0mm	8	1978698	3.750in/95.2mm	21	31-87 31M	3.386in/86.0mm	1
1.9	3.386in/86.0mm	1	1978698	3.750in/95.3mm	21	3281N	3.386in/86.0mm	1
1.9	2.992in/76.0mm	8	1978698	3.750in/95.2mm	22	3294	3.375in/85.7mm	17
10-B	3.386in/86.0mm	1	1978698 19N	2.992in/76.0mm	8	3294	3.375in/85.9mm	19
10-B	2.992in/76.0mm	8	2128278	3.313in/84.2mm	14	3294	3.750in/95.2mm	21
103427	3.375in/85.7mm	17	2128278	3.313in/84.2mm	15	3294	3.750in/95.3mm	21
1174N	3.386in/86.0mm	1	2128869	3.313in/84.2mm	14	3294	3.750in/95.2mm	22
1174N	2.992in/76.0mm	8	2128869	3.313in/84.2mm	15	329880N	3.386in/86.0mm	1
11M	3.386in/86.0mm	1	2203155	3.375in/85.7mm	17	3418640	3.578in/90.9mm	18
11M	2.992in/76.0mm	8	2203155	3.375in/85.9mm	19	3418840-2	3.578in/90.9mm	18
1626123	3.313in/84.2mm	14	2203157	3.375in/85.7mm	17	3418995	3.578in/90.9mm	18
1626123	3.313in/84.2mm	15	2203157	3.375in/85.9mm	19	3462387	3.313in/84.2mm	14
1630270	3.313in/84.2mm	14	2205700	3.313in/84.2mm	14	3462387	3.313in/84.2mm	15
1630270	3.313in/84.2mm	15	2205700	3.313in/84.2mm	15	3462923	3.375in/85.7mm	17
1630276	3.313in/84.2mm	14	2205702	3.313in/84.2mm	14	3462923	3.375in/85.9mm	19
1630276	3.313in/84.2mm	15	2205702	3.313in/84.2mm	15	3482387	3.313in/84.2mm	14
1650270	3.313in/84.2mm	14	2206157	3.375in/85.7mm	17	3482387	3.313in/84.2mm	15
1650270	3.313in/84.2mm	15	2206157	3.375in/85.9mm	19	3698641	3.375in/85.7mm	17
1732557	3.313in/84.2mm	14	2206157	3.750in/95.2mm	21	3698641	3.375in/85.9mm	19
1732557	3.313in/84.2mm	15	2206157	3.750in/95.3mm	21	3698641	3.750in/95.2mm	21
1732559	3.313in/84.2mm	14	2206157	3.750in/95.2mm	22	3698641	3.750in/95.3mm	21
1732559	3.313in/84.2mm	15	2206158	3.375in/85.7mm	17	3698641	3.750in/95.2mm	22
1732610	3.313in/84.2mm	14	2206158	3.375in/85.9mm	19	3751841	3.313in/84.2mm	14
1732610	3.313in/84.2mm	15	2206158	3.750in/95.2mm	21	3751841	3.313in/84.2mm	15
1737641	3.375in/85.7mm	17	2206158	3.750in/95.3mm	21	3751877	3.375in/85.7mm	17
1737641	3.375in/85.9mm	19	2206158	3.750in/95.2mm	22	3751877	3.375in/85.9mm	19
1737642	3.375in/85.7mm	17	2206159	3.375in/85.7mm	17	3751888	3.375in/85.7mm	17
1737642	3.375in/85.9mm	19	2206159	3.375in/85.9mm	19	3751888	3.375in/85.9mm	19
1737642	3.750in/95.2mm	21	2206160	3.375in/85.7mm	17	3751888	3.750in/95.2mm	21
1737642	3.750in/95.3mm	21	2206160	3.375in/85.9mm	19	3751888	3.750in/95.3mm	21
1737642	3.750in/95.2mm	22	2206160	3.750in/95.2mm	21	3751888	3.750in/95.2mm	22
1821436	3.375in/85.7mm	17	2206160	3.750in/95.3mm	21	3751888-5	3.375in/85.7mm	17
1821436	3.375in/85.9mm	19	2206160	3.750in/95.2mm	22	3751888-5	3.375in/85.9mm	19
1821436	3.750in/95.2mm	21	2258393	3.313in/84.2mm	14	3751888-5	3.750in/95.2mm	21
1821436	3.750in/95.3mm	21	2258393	3.313in/84.2mm	15	3751888-5	3.750in/95.3mm	21
1821436	3.750in/95.2mm	22	2264182	3.313in/84.2mm	14	3751888-5	3.750in/95.2mm	22
1826123	3.313in/84.2mm	14	2264182	3.313in/84.2mm	15	3907804	4.724in/120.0mm	9
1826123	3.313in/84.2mm	15	2465747	3.313in/84.2mm	14	3YA	3.465in/88.0mm	3
1826129	3.313in/84.2mm	14	2465747	3.313in/84.2mm	15	3YA	3.937in/100.0mm	3
1826129	3.313in/84.2mm	15	2482923	3.375in/85.7mm	17	4027169	3.578in/90.9mm	18
1830276	3.313in/84.2mm	14	2482923	3.375in/85.9mm	19	4027172	3.375in/85.7mm	17
1830276	3.313in/84.2mm	15	2532457	3.313in/84.2mm	14	4027172	3.375in/85.9mm	19
1851436	3.375in/85.7mm	17	2532457	3.313in/84.2mm	15	4027175	3.375in/85.7mm	17
1851436	3.375in/85.9mm	19	2558393	3.313in/84.2mm	14	4027175	3.375in/85.9mm	19
1851436	3.750in/95.2mm	21	2558393	3.313in/84.2mm	15	4027175	3.750in/95.2mm	21
1851436	3.750in/95.3mm	21	2656278	3.313in/84.2mm	14	4027175	3.750in/95.3mm	21
1851436	3.750in/95.2mm	22	2656278	3.313in/84.2mm	15	4027175	3.750in/95.2mm	22
1851527	3.375in/85.7mm	17	2658268	3.313in/84.2mm	14	407N	3.465in/88.0mm	3
1851527	3.375in/85.9mm	19	2658268	3.313in/84.2mm	15	407N	3.937in/100.0mm	3
1851527	3.750in/95.2mm	21	2658278	3.313in/84.2mm	14	40F	3.465in/88.0mm	3
1851527	3.750in/95.3mm	21	2658278	3.313in/84.2mm	15	4196N	3.465in/88.0mm	3
1851527	3.750in/95.2mm	22	2658393	3.313in/84.2mm	14	4196N	3.937in/100.0mm	3



#### **CRANKSHAFT FORGING NUMBERS**

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLC	оск
45-T	3.465in/88.0mm	3	4XC1-U	3.386in/86.0mm	1	9773382	3.375in/85.7mm	17
45-T	3.937in/100.0mm	3	4XCIU	2.953in/75.0mm	1	9773383	3.375in/85.7mm	17
4813	3.375in/85.7mm	17	4XCIU	3.386in/86.0mm	1	9773524	3.375in/85.7mm	17
481379	3.375in/85.7mm	17	53021300AA	3.580in/90.9mm	16	9773573	3.375in/85.7mm	17
481380	3.375in/85.7mm	17	531369	3.375in/85.7mm	17	9782646	3.375in/85.7mm	17
493654	3.375in/85.7mm	17	541585	3.375in/85.7mm	17	9782770	3.375in/85.7mm	17
496452	3.375in/85.7mm	17	544191	3.375in/85.7mm	17	9783785	3.375in/85.7mm	17
4A	3.465in/88.0mm	3	63-GC	3.465in/88.0mm	3	9783786	3.375in/85.7mm	17
4A	3.937in/100.0mm	3	63-GC	3.937in/100.0mm	3	9793573	3.375in/85.7mm	17
4AC	3.465in/88.0mm	3	63GC	3.465in/88.0mm	3	9794054	3.375in/85.7mm	17
4AC	3.937in/100.0mm	3	63GC	3.937in/100.0mm	3	97954	3.375in/85.7mm	17
4AL	3.465in/88.0mm	3	63GU	3.465in/88.0mm	3	9795479	3.375in/85.7mm	17
4AL	3.937in/100.0mm	3	63GU	3.937in/100.0mm	3	97TM	2.992in/76.0mm	8
4G-3	3.386in/86.0mm	1	65-RU	3.465in/88.0mm	3	A-6303	2.992in/76.0mm	8
4G1	2.953in/75.0mm	1	65-RU	3.937in/100.0mm	3	A-6303-A	2.992in/76.0mm	8
4G1	3.386in/86.0mm	1	69-GU	3.465in/88.0mm	3	A1D	2.992in/76.0mm	8
4G3	2.953in/75.0mm	1	69-GU	3.937in/100.0mm	3	A301	2.992in/76.0mm	8
4G3	3.386in/86.0mm	1	6AM	3.465in/88.0mm	3	A6303	2.992in/76.0mm	8
4G61	2.953in/75.0mm	1	6AM	3.937in/100.0mm	3	AD	2.992in/76.0mm	8
4G61	3.386in/86.0mm	1	8698461	3.375in/85.7mm	17	AY	2.992in/76.0mm	8
4K	2.953in/75.0mm	1	8698461	3.375in/85.9mm	19	B301	2.992in/76.0mm	8
4K	3.386in/86.0mm	1	8698461	3.750in/95.2mm	21	GE	3.465in/88.0mm	3
4K05	2.953in/75.0mm	1	8698461	3.750in/95.3mm	21	GE	3.937in/100.0mm	з
4K05	3.386in/86.0mm	1	8698461	3.750in/95.2mm	22	T3A	2.992in/76.0mm	8
4XC1-U	2.953in/75.0mm	1	96TM-AA	2.992in/76.0mm	8			





	COU	NTER DAT	A			SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHA		VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL									
Years: 1	1989-1990 <b>) / 1595 CC</b>	• •	IC 16V L4 Mitsubishi IC 16V Turbo. L4 Mit		4G6	10"/82.3mm 1 10"/82.3mm			
98 CII		C (1.6L) SOH	IC 8V L4 Mitsubishi			28"/76.9mm			
Years: 1	971-1980		IC 8V L4 Mitsubishi 4 IC 8V Turbo. L4 Mits			28"/76.9mm	x 3.38	6"/86.0mm	
	984-1990	(1.0L) SOF		ubisili C		28"/76.9mm	x 3.38	6"/86 0mm	
	ID (1.8L) SO	OHC 8V L4	Mitsubishi 4G37			'3"/80.6mm			
Rod Bearing (4) NOTE: H-Series Fillet Clearance	Performance		STD, 026mm, 25mm Increased Crank If	1.7710/1	.7717	0.0006/0.0027	0.0587	1.8897/1.8905	5 0.8550
Rod Bearing (4) NOTE: H-Series .0010" More Oi Crank Fillet Cle	Performance I Clearance N	larrowed For I		1.7710/1	.7717	0.0016/0.0037	0.0582	1.8897/1.890	5 0.8550
Connecting Rod Crankshaft Forg	ing 003	3K, 003N, 0202	01A1, 09N, 1.9, 10-B, 1174 G61, 4K, 4K05, 4XC1-U, 4X		2NABC	, 2Y68-76, 30R	, 31-87,	31M, 3281N, 3	329880N,
	ID (2.0L) SO	OHC 8V L4	Mitsubishi "A" G63B		3.34	16"/85.0mm	x 3.46	5"/88.0mm	2
Rod Bearing (4) For Year(s): 1983 NOTE: H-Series Fillet Clearance (Thru 3/92)	-1992 Performance		STD,.026mm,.25mm Increased Crank If	1.7710/1	.7717	0.0006/0.0027	0.0587	1.8897/1.8905	5 0.8550
Rod Bearing (4) For Year(s): 1983		B-1120HXN	STD	1.7710/1	.7717	0.0016/0.0037	0.0582	1.8897/1.8905	5 0.8550
	Performance I Clearance N	larrowed For I							
Balance Shaft Bearing Set	AL-3 S	SH-1469S	STD						
LH; Rear		H-1468		1.6129		0.0010/0.0031			0.8268
RH; Front RH; Rear	-	SH-1467 SH-1469		1.6526		0.0010/0.0031			0.7480
For Year(s): 1985 NOTE: From 8/85 FOR VIN(S): D	5-1989	er i 1999		10/20		0.00101010001	0.0000		0.0200
3 122 C Years: 1	989-1994		Mitsubishi 4G63			46"/85.0mm			
Years: 1	990-1998		urbo. L4 Mitsubishi 4 Mitsubishi 4G64			6"/85.0mm %/86.5mm x			
	1990-1993				0.100		0.007	, 100.01111	
	2-1998 Performance	CB-1643H Larger Chamfe owel Hole In C	STD,.026mm,.25mm er For Increased cap Half	1.7710/1	.7717	0.0004/0.0025	0.0589	1.8897/1.8905	5 0.8320



	CO	UNTER DAT	Α	SHOP DATA					
BEARING OR POSITION	BEARING MATERIAI	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
							4 CYL	(cont.)	
(cont.) Years: 1 122 C	1989-1994 ID (2.0L) D		4 Mitsubishi 4G63 urbo. L4 Mitsubishi 4		46"/85.0mm 46"/85.0mm			3 (cont.)	
144 C		SOHC 8V L4	Mitsubishi 4G64	3.40	6"/86.5mm x	3.937	"/100.0mm		
Rod Bearing (4) For Year(s): 1992		CB-1643HX	STD	1.7710/1.7717	0.0014/0.0035	0.0583	1.8897/1.8905	0.8320	
.0010" More Oi	I Clearance								
Rod Bearing (4) For Year(s): 1989 NOTE: H-Series Fillet Clearance (Thru 3/92)	-1992 Performance		STD,.026mm,.25mm r Increased Crank If	1.7710/1.7717	0.0006/0.0027	0.0587	1.8897/1.8905	0.8550	
Rod Bearing (4) For Year(s): 1989 NOTE: H-Series .0010" More Oi	-1992 Performance I Clearance	CB-1120HXN e Bearing Wall Narrowed For Dowel Hole In C		1.7710/1.7717	0.0016/0.0037	0.0582	1.8897/1.8905	0.8550	
Main Bearing Se 1-2-4-5 3 For Year(s): 1992		MS-2039H MB-3504H MB-3505H(F)	STD,.026mm,.25mm		0.0005/0.0025 0.0005/0.0025				
		e Grooved Upp	er Half And Plain						
Main Bearing Se 1-2-4-5 3		MS-2039HX MB-3504HX MB-3505HX(F)	STD		0.0015/0.0035				
For Year(s): 1992 NOTE: H Series I .0010" More Oi (From 4/92)	Performance	e Bearing Wall .	0005" Thinner For						
Balance Shaft Bearing Set	AL-3	SH-1469S	STD						
LH; Rear RH; Front RH; Rear		SH-1468 SH-1467 SH-1469		1.6129 1.6526 1.6129	0.0010/0.0031 0.0010/0.0031 0.0010/0.0031	0.0593	1.7726	0.8268 0.7480 0.8268	
Connecting Rod Crankshaft Forg			196N, 45-T, 4A, 4AC, 4AL,	63-GC, 63GC, 6	3GU, 65-RU, 69	GU, 6A	M, GE		
	ID (2.4L) S		Mitsubishi 4G64	3.40	6"/86.5mm x	3.937	"/100.0mm	4	
Rod Bearing (4) NOTE: H Series I Crank Fillet Cle	Performance	-	STD,.026mm,.25mm fer For Increased Cap Half	1.7710/1.7717	0.0004/0.0025	0.0589	1.8897/1.8905	0.8320	
.0010" More Oi	Performance I Clearance	CB-1643HX Bearing Wall . Larger Chamfe arance No Dow		1.7710/1.7717	0.0014/0.0035	0.0583	1.8897/1.8905	0.8320	



	CO	UNTER DAT	A		SHOP	DATA	<b>\</b>	
BEARING OR POSITION	BEARING MATERIAI	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
4 CYL (cont.)								
(cont.) Years: 1	993-1996, 2	001-2005	Mitsubishi 4G64	3.406	6"/86.5mm x	3.937	"/100.0mm	4 (cont.)
Main Bearing Set 1-2-3-4-5		MS-2261H MB-3504H	STD,.026mm,.25mm	2.2435/2.2441	0.0005/0.0025	0.0785	2.4016/2.402	4 0.8050
For Year(s): 2001 NOTE: H-Series F Lower Half Req Included Use w	Performance uires Thrus	t Washer Set, N						
Main Bearing Set 1-2-3-4-5 For Year(s): 2001 NOTE: H-Series F .0010" More Oil	-2005 Performance		STD .0005" Thinner For r Half And	2.2435/2.2441	0.0015/0.0035	0.0780	2.4016/2.402	4 0.8050
Plain Lower Ha Included Use w	If Requires	Thrust Washer						
Main Bearing Set 1-2-4-5 3 For Year(s): 1993		MS-2039H MB-3504H MB-3505H(F)	STD,.026mm,.25mm		0.0005/0.0025			
NOTE: H Series P Lower Half		e Grooved Uppe	er Half And Plain					
Main Bearing Set 1-2-4-5 3		MS-2039HX MB-3504HX MB-3505HX(F)	STD		0.0015/0.0035			
For Year(s): 1993 NOTE: H Series F .0010" More Oil	Performance		0005" Thinner For					
Thrust Washer Se		TW-677S MB-3854W	STD	2.4842/2.4941			3.1693/3.179	1 0.0830
For Year(s): 2001 NOTE: Contains 2 Number MS-22	2 Pieces, Po		3 Use with Part					
Balance Shaft Bearing Set	AL-3	SH-1469S	STD					
LH; Rear RH; Front RH; Rear		SH-1468 SH-1467 SH-1469		1.6129 1.6526 1.6129	0.0010/0.0031 0.0010/0.0031 0.0010/0.0031	0.0593	1.7726	0.8268 0.7480 0.8268
	D (2.4L) D 995-2010	DOHC 16V L4	4	3.44	5"/87.5mm x	3.976	"/101.0mm	5
Rod Bearing (4) NOTE: H-Series F		CB-1813H e No Dowel Hol	STD,.026mm,.25mm le In Cap Half	1.9677/1.9687	0.0008/0.0030	0.0584	2.0863/2.086	9 0.7930
Rod Bearing (4) NOTE: H-Series F .0010" More Oil Half	Performance		STD 0005" Thinner For In Cap	1.9677/1.9687	0.0018/0.0040	0.0579	2.0863/2.086	9 0.7930
Main Bearing Set 1-2-4-5 3 NOTE: H-Series F Upper Half And Position Numbe Bearings	Performance Plain Lowe	r Half, Bearing			0.0005/0.0029 0.0005/0.0029			



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	CO	UNTER DAT	A	SHOP DATA					
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH	
								4 CYL	
	D (2.4L) [ 003-2009	DOHC 16V Tu	ırbo. L4	3.44	5"/87.5mm x	3.976	"/101.0mm	6	
Rod Bearing (4) NOTE: H-Series F		CB-1813H e No Dowel Hol	STD,.026mm,.25mm e In Cap Half	1.9677/1.9687	0.0008/0.0030	0.0584	2.0863/2.086	9 0.7930	
	Performanc	CB-1813HX e Bearing Wall . No Dowel Hole	STD 0005" Thinner For In Cap	1.9677/1.9687	0.0018/0.0040	0.0579	2.0863/2.086	9 0.7930	
Upper Half And	Performanc	MS-2279H MB-3594H MB-3907H(F) e Position Num er Half, Bearings with Full Groove			0.0005/0.0029 0.0005/0.0029				
Dearnige								6 CYL	
	D (2.5L) \$	SOHC 24V V6	Mitsubishi EEB	3.29	90"/83.5mm	x 2.99	2"/76.0mm	7	
Rod Bearing (6) NOTE: H-Series F		CB-1411H e No Dowel Hol	STD•,.026mm• e In Cap Half	1.9677/1.9685	0.0007/0.0027	0.0587	2.0866/2.086	8 0.6120	
	Performanc	CB-1411HX e Bearing Wall . No Dowel Hole	STD• 0005" Thinner For In Cap	1.9670/1.9674	0.0017/0.0037	0.0582	2.0866/2.087	4 0.6120	
Thrust Washer S	et	TW-458S MB-3108W(L) MB-3108W(U)	STD	2.5984/2.6083 2.5984/2.6083			3.0492/3.059 3.0492/3.059		
Years: 1	987-2000		Mitsubishi 6G72 Mitsubishi 6G72		37"/91.1mm 37"/91.1mm				
Years: 2	001-2005		6 Mitsubishi 6G72		37"/91.1mm				
Years: 1	991-1996		urbo. V6 Mitsubishi		37"/91.1mm				
Rod Bearing (6)		CB-1411H	STD•,.026mm•	1.9677/1.9685	0.0007/0.0027	0.0587	2.0866/2.086	8 0.6120	
	TM-77 Performanc	CB-1411HX	STD• 0005" Thinner For	1.9670/1.9674	0.0017/0.0037	0.0582	2.0866/2.087	4 0.6120	
Main Bearing Set 1-2-3-4 NOTE: H Series F	Performanc			2.3614/2.3622	0.0007/0.0032	0.0783	2.5197/2.520	4 0.7120	
Lower Half Reg Included Use w		st Washer Set, N mber TW-458S	lot						
Main Bearing Set 1-2-3-4	t TM-77	MS-2226HX MB3791HX	STD•	2.3614/2.3622	0.0017/0.0042	0.0778	2.5197/2.520	4 0.0712	
.0010" More Oil Plain Lower Ha	Clearance	e Bearing Wall J Grooved Upper Thrust Washer mber TW-458S							



	COUNTER	DATA		SHOP DATA				
BEARING OR POSITION	BEARING PART MATERIAL NUMB	AVAILABLE ER UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		R MAX LENGTH	
6 CYL (cont.)								
(cont.) Years: 1	1987-2000	2V V6 Mitsubishi 6G72		587"/91.1mm			(cont.)	
Years: 2	2001-2005	4V V6 Mitsubishi 6G72		587"/91.1mm				
Years: 1	1991-1996	24V V6 Mitsubishi 6G72 24V Turbo. V6 Mitsubis		587"/91.1mm 587"/91.1mm				
	1991-1996				A 2.00	2 // 0.01111		
	MB-3108 MB-3108	W(L)	2.5984/2.60 2.5984/2.60			3.0492/3.059 3.0492/3.059		
Connecting Rod Crankshaft Forg		N, 020201A1, 09N, 1.9, 10-B, AY, B301, T3A	1174N, 11M, 19N	, 96TM-AA, 97TM	, A-630(	3, A-6303-A, A	1D, A301,	
Years: 1 359 C Years: 1 359 C Years: 2 359 C	1991-1999 ID (5.9L) 24V Tur 1998-2002 ID (5.9L) 24V Tur 2001-2002 ID (5.9L) 12V Tur	bo. L6 Cummins 6BT E bo. L6 Cummins ISB E bo. L6 Cummins ISB H bo. L6 Cummins DIESI	TC DIESEL 4.01 O ETH DIESE 4.01	6"/102.0mm	4.724	"/120.0mm	n	
Rod Bearing (6)	1988-1991 TM-112CB-1413 Performance No Dov necting Rod		2.7160/2.71	70 0.0015/0.0045	0.0775	5 2.8735/2.874	15 1.2250	
.0010" More O	TM-112 CB-1413 Performance Bearing Il Clearance No Dowe I Connecting Rod	Wall .0005" Thinner For	2.7160/2.71	70 0.0025/0.0055	0.0770	) 2.8735/2.874	15 1.2250	
Lower Half, Co	MB-3110 MB-3109	H H(F) d Upper Half And Plain Bearing, Upper		32 0.0017/0.0047 32 0.0017/0.0047				
4.000	(To Be Re	eplaced By MS-2328H)						
.0010" More O	t TM-112 MS-1717 MB-3110 MB-3109 Performance Bearing il Clearance Grooved alf, Contains Half Flar ameter 4.586"	THX STD HX HX(F) G Wall .0005" Thinner For Upper Half And		32 0.0027/0.0057 32 0.0027/0.0057				
Lower Half, Co	t TM-77 MS-2328 MB-3110 MB-3109	BH STD•,.026mm•,.25mm H H(F) d Upper Half And Plain Bearing, Upper	3.2674/3.26	32 0.0017/0.0047 32 0.0017/0.0047				

	COUNTER DAT	SHOP DATA					
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
(cont.) Years:	CID (5.9L) 12V Turbo. L 1991-1999 CID (5.9L) 24V Turbo. L			"/102.0mm x	4.724		(cont.) 9 (cont.)
359 C Years: 359 C	1998-2002 CID (5.9L) 24V Turbo. L 2001-2002 CID (5.9L) 12V Turbo. L		ETH DIESEL 4.016	"/102.0mm x "/102.0mm x "/102.0mm x	4.724	"/120.0mm	
Main Bearing Se 1-2-3-4-5-7 3 NOTE: H-Series .0010" More O	MB-3110HX MB-3109HX(F) Performance Bearing Wall il Clearance Grooved Uppe alf, Contains Half Flanged B	r Half And		0.0027/0.0057 0.0027/0.0057			
Connecting Roo Crankshaft Forg	d Forging 3901085, 390156	6					
Years: 359 C	<b>CID (5.9L) 24V Turbo. L</b> 2003-2005 <b>CID (5.9L) 24V Turbo. L</b> 2003-2010		4.016 SB HO ETH D	"/102.0mm x			
Rod Bearing (6) NOTE: H-Series Fractured Con	Performance No Dowel Ho	STD,.026mm,.25mm le In Cap Half,	1	0.0015/0.0045			
.0010" More O	TM-112 CB-1873HX Performance Bearing Wall il Clearance No Dowel Hole d Connecting Rod		2.7160/2.7170	0.0020/0.0050	0.0770	2.8735/2.874	5 1.2250
Rod Bearing (6) For Year(s): 2003 NOTE: H-Series Machined Cor	3 Performance No Dowel Ho	STD,.026mm,.25mm	2.7160/2.7170	0.0015/0.0045	0.0775	2.8735/2.874	5 1.2250
.0010" More O			2.7160/2.7170	0.0025/0.0055	0.0770	2.8735/2.874	5 1.2250
Lower Half, Co	MB-3110H MB-3109H(F) 3-2008 Performance Grooved Upp ontains Half Flanged Bearin	g, Upper		0.0017/0.0047 0.0017/0.0047			
Half Flanged E 4.586"	Bearing Only, Max Flange Di (To Be Replaced	ameter 1 By MS-2328H)					
Main Bearing Se 1-2-3-4-5-7 3 For Year(s): 2003	MB-3110HX MB-3109HX(F) 3-2008	STD		0.0027/0.0057			
.0010" More O Plain Lower H	Performance Bearing Wall il Clearance Grooved Uppe alf, Contains Half Flanged B ameter 4.586"	r Half And					





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	COL	JNTER DAT	A	SHOP DATA				
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
6 CYL (cont.)								
10 359 CI (cont.) Years: 20 359 CI	003-2005		6 Cummins ISBe/QS 6 Cummins ISBe/QS	4.016 B HO ETH D	'/102.0mm x			,,
Main Bearing Set 1-2-3-4-5-7 6		MS-2328H MB-3110H MB-3109H(F)	STD•,.026mm•,.25mm•	3.2674/3.2682	0.0017/0.0047	0.0970	3.4637/3.465	1 1.1430
For Year(s): 2003- NOTE: H-Series P Lower Half, Cor Half Flanged Be 4.500"	erformance tains Half F	langed Bearing	, Upper					
Main Bearing Set 1-2-3-4-5-7 6 For Year(s): 2003-		<b>MS-2328HX</b> MB-3110HX MB-3109HX(F)	STD•		0.0027/0.0057 0.0027/0.0057			
NOTE: H-Series P .0010" More Oil Plain Lower Hal Max Flange Dia	erformance Clearance f, Contains meter 4.500	Grooved Upper Half Flanged B	earing,					
	<b>D (6.7L) 2</b> 007-2010	4V Turbo. Le	Cummins ETJ DIE	SEL 4.210'	'/107.0mm x	4.880	"/124.0mm	11
Rod Bearing (6) NOTE: H-Series P Fractured Conn	erformance	CB-1873H No Dowel Hol	STD,.026mm,.25mm e In Cap Half,	2.7160/2.7170	0.0015/0.0045	0.0775	2.8735/2.874	5 1.2250
Rod Bearing (6) NOTE: H-Series P .0010" More Oil Half, Fractured	erformance Clearance	No Dowel Hole	STD 0005" Thinner For In Cap	2.7160/2.7170	0.0020/0.0050	0.0770	2.8735/2.874	5 1.2250
Main Bearing Set 1-2-3-4-5-7 6		<b>MS-1717H</b> MB-3110H MB-3109H(F)	STD,.026mm,.25mm		0.0017/0.0047			
NOTE: H-Series P Lower Half, Cor Half Flanged Be 4.586"	tains Half F aring Only,	langed Bearing	g, Upper ameter					
Main Bearing Set 1-2-3-4-5-7 6	TM-112	MS-1717HX MB-3110HX MB-3109HX(F)	STD		0.0027/0.0057			
NOTE: H-Series P .0010" More Oil Plain Lower Hal Max Flange Dia	Clearance f, Contains meter 4.586	Grooved Upper Half Flanged B						
Main Bearing Set 1-2-3-4-5-7 6	TM-77	MS-2328H MB-3110H MB-3109H(F)	STD•,.026mm•,.25mm•		0.0017/0.0047			
NOTE: H-Series P Lower Half, Cor Half Flanged Be 4.500"	erformance tains Half F	Grooved Uppe langed Bearing	, Upper	0.2014/0.2002	0.0017/0.0047	0.0910	0.4007/0.400	1.4700

	COUNTER DAT	Α		SHOP	DATA		
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
						6 CYL	. <u>(</u> cont.)
(cont.) Years: 2			ESEL 4.210	'/107.0mm x	4.880	"/124.0mm	11 (cont.)
Main Bearing Set 1-2-3-4-5-7 6 NOTE: H-Series I	t TM-77 MS-2328HX MB-3110HX MB-3109HX(F) Performance Bearing Wall	STD•		0.0027/0.0057 0.0027/0.0057			
.0010" More Oi	I Clearance Grooved Uppe If, Contains Half Flanged E	r Half And					
							8 CYL
	ID (4.5L) 16V V8 964-1969		3.6	25"/92.1mm	x 3.31	3"/84.2mm	12
	ID (5.6L) 16V V8 968-1973		4.04	0"/102.6mm	x 3.31	3"/84.1mm	
	TM-77 CB-481HN Performance Narrowed On hk Fillet Clearance No Dow		2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.250	0.7980
Not Include Co	TM-77 CB-481HNK Performance with TriArmon ating Thickness, Narrowed used Crank Fillet Clearance	I On One	2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.250	0.7980
.0010" More Oi	TM-77 CB-481HXN Performance Bearing Wall I Clearance Narrowed On C ak Fillet Clearance No Dow	One Side For	2.1240/2.1250	0.0014/0.0035	0.0618	2.2500/2.250	0.7980
.0005" Thinner Maximum Wall Narrowed On C	TM-77 CB-481HXNK Performance with TriArmor For .0010" More Oil Cleara Does Not Include Coating One Side For Increased Cra Dowel Hole In Cap Half	nce Thickness,	2.1240/2.1250	0.0014/0.0035	0.0618	2.2500/2.250	0.7980
Main Bearing Se		STD,1	0.4005/0.5005	0.0004/0.0005	0.0050	0.0005/0.000	0.0770
1-2-4 3	MB-2035H MB-2036H(F)			0.0004/0.0025 0.0004/0.0025			
5	MB-2559H			0.0004/0.0025			
with Full Groov	Performance Bearings For ed Main Bearings Position oved Upper Half And Plain	Number 1,					
Main Bearing Se	t TM-77 MS-540HK	STD					
1-2-4	MB-2035H			0.0004/0.0025			
3	MB-2036H(F)			0.0004/0.0025			
5 NOTE: H-Series I	MB-2559H Performance with TriArmo	Bearings For	2.4990/2.5005	0.0004/0.0025	0.0958	2.0920/2.093	0 1.3720
Position Numb Position Numb	er 5 with Full Grooved Main er 1, 2, 3, 4 Has Grooved U er Half, Maximum Wall Doe	n Bearings pper Half					



	CO	UNTER DAT	A	SHOP DATA					
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
8 CYL (cont.)									
	ID (4.5L) 1 964-1969	16V V8		3.62	25"/92.1mm	x 3.31	3"/84.2mm	12 (cont.)	
	ID (5.6L) 1 968-1973	16V V8		4.040	)"/102.6mm	x 3.31	3"/84.1mm		
Main Bearing Se 1-2-4 3 5 NOTE: H-Series with Full Groov .0005" Thinner Position Numb	Performanc ed Main Be For .0010"	arings Bearing More Oil Cleara	ance	2.4995/2.5005	0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0953	2.6925/2.6930	1.1520	
And Plain Lowe Main Bearing Se 1-2-4 S NOTE: H-Series Position Numb Bearing Wall .0	t TM-77 Performanc er 5 with Fu 005" Thinne	II Grooved Mai er For .0010" M	n Bearings ore Oil	2.4995/2.5005	0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0953	2.6925/2.6930	1.1520	
Clearance Pos Upper Half And Not Include Co	Plain Lowe	er Half, Maximu							
Main Bearing Se 1-2-4 3 5 NOTE: Engines v V-Series Perfor Lower Half	vith 3.305" /		STD earing Flange O.D. Ilf And Plain	2.4995/2.5005	0.0006/0.0031 0.0006/0.0031 0.0006/0.0031	0.0958	2.6925/2.6930	1.1520	
Cam Bearing Set	B-1	SH-875S SH-875 SH-326 SH-327 SH-328 SH-329	STD	1.9820/1.9830 1.9670/1.9680 1.9510/1.9520	0.0015/0.0055 0.0005/0.0045 0.0005/0.0045 0.0005/0.0045 0.0005/0.0045	0.0650 0.0650 0.0650	2.1135/2.1145 2.0985/2.0995 2.0825/2.0835	0.7700 0.7570 0.7700	



	co	UNTER DAT	ΓA		SHOP	SHOP DATA					
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH			
								8 CYL			
Years:	1956-1957	6V V8 Plym	outh		50"/95.3mm			13			
Years:					10"/99.3mm						
Years:					10"/96.8mm						
	1958-1964	6V V8		3.8	75"/98.4mm	x 3.31	0"/84.1mm				
326 C Years:	10 (5.3L) 1 1959	6V V8		3.95	0"/100.4mm	x 3.31	0"/84.1mm				
Main Bearing Se	et TM-77	MS-540H	STD,1								
1-2-4		MB-2035H			0.0004/0.0025						
3 5		MB-2036H(F) MB-2559H			0.0004/0.0025 0.0004/0.0025						
-	ved Main Be	e Bearings For arings Position	-	2.4000/2.0000	0.000470.0025	0.0000	2.0020/2.0000	1.0720			
Main Bearing Se	et TM-77	MS-540HK	STD								
1-2-4		MB-2035H			0.0004/0.0025						
		MD 2026U/D		0 4005/0 5005	0.0004/0.0005	0.0059	2.6925/2.6930	1.1520			
3 5 NOTE: H-Series					0.0004/0.0025						
5	per 5 with Fu per 1, 2, 3, 4 Per Half, Max	MB-2559H e with TriArmo II Grooved Mai Has Grooved L imum Wall Doo	in Bearings Jpper Half								
5 NOTE: H-Series Position Numb Position Numb And Plain Low Include Coatin Main Bearing Se	per 5 with Fu per 1, 2, 3, 4 per Half, Max ng Thickness	MB-2559H e with TriArmo II Grooved Mai Has Grooved L imum Wall Doo	in Bearings Jpper Half								
5 NOTE: H-Series Position Numb Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4	per 5 with Fu per 1, 2, 3, 4 per Half, Max ng Thickness	MB-2559H e with TriArmo II Grooved Mai Has Grooved U imum Wall Do MS-540HX MB-2035HX	In Bearings Jpper Half es Not	2.4995/2.5005	0.0004/0.0025	0.0958	2.6925/2.6930	0.8770			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3	per 5 with Fu per 1, 2, 3, 4 per Half, Max ng Thickness	MB-2559H e with TriArmo II Grooved Mai Has Grooved U imum Wall Do MS-540HX MB-2035HX MB-2036HX(F)	In Bearings Jpper Half es Not	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035	0.0958 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3 5 NOTE: H-Series with Full Groot .0005" Thinner Position Numb And Plain Low	Performanc Ver 1, 2, 3, 4 Ver Half, Max Mg Thickness Market TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half	MB-2559H e with TriArmo II Grooved Mai Has Grooved U imum Wall Dou MS-540HX MB-2035HX MB-2036HX(F) MB-2559HX e Bearings For arings Bearing More Oil Clear Has Grooved U	in Bearings Jpper Half es Not STD r Position Number 5 J Wall ance Jpper Half	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025	0.0958 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3 NOTE: H-Series with Full Groot .0005" Thinner Position Numb And Plain Low Main Bearing Se	Performanc Ver 1, 2, 3, 4 Ver Half, Max Mg Thickness Market TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MS-540HX MB-2035HX MB-2036HX(F) MB-2559HX e Bearings For arings Bearing More Oil Clear Has Grooved M MS-540HXK	in Bearings Jpper Half es Not STD r Position Number 5 J Wall ance	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0958 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770 1.1520 1.3270			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3 NOTE: H-Series with Full Groot .0005" Thinner Position Numb And Plain Low Main Bearing Se 1-2-4	Performanc Ver 1, 2, 3, 4 Ver Half, Max Mg Thickness Market TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MS-540HX MB-2035HX MB-2035HX e Bearings For arings Bearing More Oil Clears Has Grooved M MS-540HXK MB-2035HX	in Bearings Jpper Half es Not STD Position Number 5 Wall ance Jpper Half	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0958 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770 1.1520 1.3270 0.8770			
5 NOTE: H-Series Position Numb Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3 5 NOTE: H-Series with Full Groot .0005" Thinner Position Numb	Performanc Ver 1, 2, 3, 4 Ver Half, Max Mg Thickness Market TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MS-540HX MB-2035HX MB-2036HX(F) MB-2559HX e Bearings For arings Bearing More Oil Clear Has Grooved M MS-540HXK	in Bearings Jpper Half es Not STD Position Number 5 Wall ance Jpper Half	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0958 0.0953 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770 1.1520 1.3270 0.8770 1.3270			
5 NOTE: H-Series Position Numb Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3 NOTE: H-Series with Full Groot .0005" Thinner Position Numb And Plain Low Main Bearing Se 1-2-4 3 5	Performanc ved Main Be For .0010" / Performanc ved Main Be For .0010" / Per 1, 2, 3, 4 ver Half et TM-77 Performanc ber 5 with Fu 0005" Thinne sition Numbe d Plain Lowe	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MB-2035HX MB-2035HX MB-2036HX(F) MB-2559HX e Bearings Bearing More Oil Clears Has Grooved M MB-2036HX(F) MB-2036HX(F) MB-2036HX(F) MB-2559HX e with TriArmo II Grooved Mai er For .0010" Mai er 1, 2, 3, 4 Has er Half, Maximu	in Bearings Jpper Half es Not STD r Position Number 5 y Wall ance Jpper Half STD sTD or Bearings For in Bearings lore Oil a Grooved	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0958 0.0953 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770 1.1520 1.3270 0.8770 1.3270			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3 5 NOTE: H-Series with Full Groor .0005" Thinner Position Numb And Plain Low Main Bearing Se 1-2-4 3 5 NOTE: H-Series Position Numb Bearing Wall .0 Clearance Pos Upper Half And	Performanc Ver Jain 2, 3, 4 Ver Half, Max Ng Thickness et TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half et TM-77 Performanc Der 5 with Fu D005" Thinne Sition Number D005" Thinne Sition Number D015 Thinne	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MB-2035HX MB-2035HX MB-2036HX(F) MB-2559HX e Bearings Bearing More Oil Clears Has Grooved M MB-2036HX(F) MB-2036HX(F) MB-2036HX(F) MB-2559HX e with TriArmo II Grooved Mai er For .0010" Mai er 1, 2, 3, 4 Has er Half, Maximu	in Bearings Jpper Half es Not STD r Position Number 5 y Wall ance Jpper Half STD sTD or Bearings For in Bearings lore Oil a Grooved	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0958 0.0953 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770 1.1520 1.3270 0.8770 1.3270			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 NOTE: H-Series with Full Groot .0005" Thinner Position Numb And Plain Low Main Bearing Se 1-2-4 S NOTE: H-Series Position Numb Bearing Wall & Clearance Pos Upper Half Am Not Include Co Cam Bearing Se 1	Performanc Ver Jain 2, 3, 4 Ver Half, Max Ng Thickness et TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half et TM-77 Performanc Der 5 with Fu D005" Thinne Sition Number D005" Thinne Sition Number D015 Thinne	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MB-2035HX MB-2035HX MB-2036HX(F) MB-2559HX e Bearings Bearing More Oil Clears Has Grooved Mai MB-2035HX MB-2036HX(F) MB-2559HX e with TriArmo II Grooved Mai er For .0010" Mai er for .0010" Mai er for .0010" Mai er Half, Maximuness SH-875S SH-8755	in Bearings Jpper Half es Not STD Position Number 5 Wall ance Jpper Half STD STD or Bearings For in Bearings lore Oil & Grooved um Wall Does	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0015/0.0055	0.0958 0.0953 0.0953 0.0953 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770 1.1520 1.1520 1.3270 0.8770 1.1520 1.3270			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 3 5 NOTE: H-Series with Full Groot .0005" Thinner Position Numb And Plain Low Main Bearing Se 1-2-4 3 5 NOTE: H-Series Position Numb Bearing Wall .0 Clearance Pos Upper Half And Not Include Co Cam Bearing Se 1 2	Performanc Ver Jain 2, 3, 4 Ver Half, Max Ng Thickness et TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half et TM-77 Performanc Der 5 with Fu D005" Thinne Sition Number D005" Thinne Sition Number D015 Thinne	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MB-2035HX MB-2035HX MB-2035HX e Bearings For arings Bearings More Oil Clears Has Grooved Mai MB-2035HX MB-2035HX MB-2036HX(F) MB-2559HX e with TriArmo II Grooved Mai er For .0010" Mai	in Bearings Jpper Half es Not STD Position Number 5 Wall ance Jpper Half STD STD or Bearings For in Bearings lore Oil & Grooved um Wall Does	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0015/0.0055 0.0005/0.0045	0.0958 0.0953 0.0953 0.0953 0.0953 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930	0.8770 1.1520 1.1520 1.3270 0.8770 1.1520 1.3270			
5 NOTE: H-Series Position Numb And Plain Low Include Coatin Main Bearing Se 1-2-4 NOTE: H-Series with Full Groot .0005" Thinner Position Numb And Plain Low Main Bearing Se 1-2-4 S NOTE: H-Series Position Numb Bearing Wall & Clearance Pos Upper Half Am Not Include Co Cam Bearing Se 1	Performanc Ver Jain 2, 3, 4 Ver Half, Max Ng Thickness et TM-77 Performanc Ved Main Be For .0010" I Der 1, 2, 3, 4 Ver Half et TM-77 Performanc Der 5 with Fu D005" Thinne Sition Number D005" Thinne Sition Number D015 Thinne	MB-2559H e with TriArmo II Grooved Mai Has Grooved Mai Has Grooved Mai MB-2035HX MB-2035HX MB-2036HX(F) MB-2559HX e Bearings Bearing More Oil Clears Has Grooved Mai MB-2035HX MB-2036HX(F) MB-2559HX e with TriArmo II Grooved Mai er For .0010" Mai er for .0010" Mai er for .0010" Mai er Half, Maximuness SH-875S SH-8755	in Bearings Jpper Half es Not STD Position Number 5 Wall ance Jpper Half STD STD or Bearings For in Bearings lore Oil & Grooved um Wall Does	2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 2.4995/2.5005 1.9980/1.9990 1.9820/1.9830 1.9670/1.9680	0.0004/0.0025 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0014/0.0035 0.0015/0.0055	0.0958 0.0953 0.0953 0.0953 0.0953 0.0953 0.0953 0.0953 0.0953	2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.6925/2.6930 2.1135/2.1145 2.1135/2.1145	0.8770 1.1520 1.1520 1.3270 0.8770 1.1520 1.3270 0.7700 0.7700 0.7700			



	COU	NTER DAT	A		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	R MAX LENGTH
8 CYL								
	D (5.2L) 16	V V8 Magn	um	3.9	10"/99.3mm	x 3.31	3"/84.2mm	14
Rod Bearing (8) NOTE: H-Series P Increased Cran Cap Half	erformance			2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.250	5 0.7980
Rod Bearing (8) NOTE: H-Series P Not Include Coa Side For Increas Hole In Cap Hal	Performance ating Thickne sed Crank Fil	ess, Narrowed		2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.250	5 0.7980
Rod Bearing (8) NOTE: H-Series P .0010" More Oil Increased Cran Cap Half	Performance Clearance N	arrowed On C		2.1240/2.1250	0.0014/0.0035	0.0618	2.2500/2.250	5 0.7980
Rod Bearing (8) NOTE: H-Series P .0005" Thinner F Maximum Wall Narrowed On O Clearance No D	Performance For .0010" Mo Does Not Inc ne Side For I	ore Oil Cleara lude Coating ncreased Cra	nce Thickness,	2.1240/2.1250	0.0014/0.0035	0.0618	2.2500/2.250	5 0.7980
Main Bearing Set 1-2-4 3 5 NOTE: Engines w V-Series Perfor Lower Half	∿ № ith 3.305" / 3	1B-2283V 1B-2036V(F) 1B-2559V <b>.375" Main Be</b>	STD earing Flange O.D. If And Plain	2.4995/2.5005	0.0006/0.0031 0.0006/0.0031 0.0006/0.0031	0.0958	2.6925/2.693	0 1.1520
Main Bearing Set 1-2-4 5 NOTE: Engines w V-Series Perfor Lower Half	N N ۱۷ ith 3.460" / 3		STD earing Flange O.D. If And Plain	2.4995/2.5005	0.0006/0.0031 0.0006/0.0031 0.0006/0.0031	0.0958	2.6925/2.693	0 1.1520
Cam Bearing Set 1 2 3 4 5	s s s	H-1112S H-875 H-1112 H-1113 H-1114 H-1114 H-329	STD	1.9820/1.9830 1.9670/1.9680 1.9510/1.9520	0.0015/0.0055 0.0015/0.0055 0.0015/0.0055 0.0015/0.0055 0.0005/0.0045	0.0645 0.0645 0.0645	2.1135/2.114 2.0985/2.099 2.0825/2.083	5 0.6300 5 0.6300 5 0.6300
Crankshaft Forgi	ng 162 212 265	6123, 163027 8278, 21288 8268, 2658278	2, 3418645, 699, 782 70, 1630276, 1650270, 1 99, 2205700, 2205702, 2 3, 2658393, 2843868, 3462	2258393, 2264 387, 3482387, 3	182, 2465747, 3751841	253245	7, 2558393,	2656278,
15 318 CI Years: 19	D (5.2L) 16	SV V8		3.9	10"/99.3mm	x 3.31	3"/84.2mm	15
Rod Bearing (8) NOTE: H-Series P Increased Cran Cap Half	TM-77 C Performance			2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.250	5 0.7980



	CO	UNTER DA	ТА		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BORE	MAX LENGTH
								(cont.)
15 318 C (cont.) Years: 1	ID (5.2L) 1 1957-1991	6V V8		3.9	10"/99.3mm	x 3.31	3"/84.2mm	15 (cont.)
Rod Bearing (8) NOTE: H-Series Not Include Co Side For Increa Hole In Cap Ha	Performanc ating Thick ased Crank	ness, Narrowe		2.1240/2.1250	0.0003/0.0024	0.0623	3 2.2500/2.250	5 0.7980
Rod Bearing (8) NOTE: H-Series .0010" More Oi Increased Crar Cap Half	Performance I Clearance	Narrowed On		2.1240/2.1250	0.0014/0.0035	0.0618	3 2.2500/2.250	5 0.7980
Rod Bearing (8) NOTE: H-Series .0005" Thinner Maximum Wall Narrowed On C Clearance No	Performanc For .0010" I Does Not In One Side For	More Oil Clear Include Coating Increased Cr	or Bearing Wall ance g Thickness,	2.1240/2.1250	0.0014/0.0035	0.0618	3 2.2500/2.250	5 0.7980
Main Bearing Se 1-2-4 3 5		MS-963V MB-2283V MB-2036V(F) MB-2559V	STD	2.4995/2.5005	0.0006/0.0031 0.0006/0.0031 0.0006/0.0031	0.0958	2.6925/2.693	1.1520
NOTE: Engines v V-Series Perfo Lower Half			Bearing Flange O.D. alf And Plain					
Main Bearing Se 1-2-4 3 5	t VP-2	MS-1344V MB-2283V MB-2620V(F) MB-2559V	STD	2.4995/2.5005	0.0006/0.0031 0.0006/0.0031 0.0006/0.0031	0.0958	2.6925/2.693	1.1520
NOTE: Engines v V-Series Perfo		3.530" Main B	learing Flange O.D. alf And Plain		0.0000.0000	010000	1001011000	
Main Bearing Se 1-2-4 3 5	t TM-77	MS-540H MB-2035H MB-2036H(F) MB-2559H	STD,1	2.4995/2.5005	0.0004/0.0025 0.0004/0.0025 0.0004/0.0025	0.0958	2.6925/2.693	1.1520
NOTE: H-Series with Full Groov 2, 3, 4 Has Gro Half	ed Main Be	arings Positio						
<b>Main Bearing Se</b> 1-2-4 3 5	t TM-77	MS-540HK MB-2035H MB-2036H(F) MB-2559H	STD	2.4995/2.5005	0.0004/0.0025 0.0004/0.0025 0.0004/0.0025	0.0958	2.6925/2.693	1.1520
NOTE: H-Series Position Numb Position Numb And Plain Low Include Coatin	er 5 with Fu er 1, 2, 3, 4 er Half, Max	ll Grooved Ma Has Grooved I imum Wall Do	in Bearings Upper Half					
Main Bearing Se 1-2-4 3 5		MS-540HX MB-2035HX MB-2036HX(F) MB-2559HX		2.4995/2.5005	0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0953	2.6925/2.693	1.1520
NOTE: H-Series with Full Groov .0005" Thinner Position Numb And Plain Lowe	/ed Main Be For .0010" / er 1, 2, 3, 4	arings Bearing More Oil Clear	ance					





	COU	NTER DATA			SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. O HOUSING BORE	R MAX LENGTH
8 CYL (cont.)				•				
15 318 CI (cont.) Years: 19		V V8		3.9	10"/99.3mm	x 3.31	3"/84.2mm	15 (cont.)
Main Bearing Set		IS-540HXK	STD					
1-2-4		B-2035HX			5 0.0014/0.0035			
3		B-2036HX(F)			5 0.0014/0.0035			
5		B-2559HX		2.4995/2.5005	5 0.0014/0.0035	0.0953	2.6925/2.693	30 1.3270
NOTE: H-Series P Position Numbe Bearing Wall .00 Clearance Posit Upper Half And Not Include Coa	er 5 with Full ( 005" Thinner   tion Number   Plain Lower	Grooved Main For .0010" Moi 1, 2, 3, 4 Has G Half, Maximun	Bearings re Oil irooved					
	-		075					
Cam Bearing Set		<b>H-1112S</b> H-875	STD	1 0080/1 000/	0.0015/0.0055	0.0646	0 1005/0 10/	5 0 0000
2		H-875 H-1112			0.0015/0.0055			
3		H-1112			0.0015/0.0055			
1		H-1114			0.0015/0.0055			
5	-	H-329			5 0.0005/0.0045			
For Year(s): 1979-	1991							
Cam Bearing Set	B-1 S	H-875S	STD					
1	SI	H-875		1.9980/1.9990	0.0015/0.0055	0.0645	2.1295/2.130	0.9000
2	SI	H-326		1.9820/1.9830	0.0005/0.0045	0.0650	2.1135/2.114	5 0.7700
3	-	H-327			0.0005/0.0045			
4		H-328			0.0005/0.0045			
5 For Year(s): 1957-	-	H-329		1.5605/1.5615	5 0.0005/0.0045	0.0650	1.6920/1.693	0.9500
Connecting Rod Crankshaft Forgi	ng 1620 2120	6123, 1630270 8278, 2128869	3418645, 699, 782 ), 1630276, 1650270, 9, 2205700, 2205702, 2658393, 2843868, 3462	2258393, 2264	182, 2465747,			
16 345 CI		V V8 HEMI			17"/99.5mm	x 3.58	0"/90.9mm	16
	003-2012							
345 CI Years: 20		V V8 HEMI	Hybrid	3.9	17"/99.5mm	x 3.58	0"/90.9mm	
	<b>D (6.1L) 16</b> 005-2010	V V8 HEMI		4.05	5"/103.0mm	x 3.58	0"/90.9mm	
Rod Bearing (8)	TM-77 C	B-1808HN	STD,.026mm,.23mm‡ .25mm,.28mm	2.1257/2.1263	3 0.0009/0.0026	0.0625	2.2522/2.252	0.7410
NOTE: H-Series P Increased Cran Cap Half								
Rod Bearing (8)		B-1808HXN	STD	2.1257/2.1263	3 0.0019/0.0036	0.0620	2.2522/2.252	0.7410
NOTE: H-Series F .0010" More Oil Increased Cran Cap Half	Clearance Na	arrowed On O						
Main Bearing Set 1-2-3-4-5		IS-2220H IB-3780H	STD,.026mm,.23mm‡ .25mm,.28mm	2.5589/2.5592	2 0.0003/0.0015	0.0961	2.7517/2.752	2 0.8510
NOTE: H-Series P Lower Half Req	Performance ( uires Thrust )	Grooved Uppe	r Half And Plain	are even are due		0.0001		0.0070



	COUN	TER DATA			SHOP	DATA	4	
BEARING OR POSITION	BEARING PA	ART UMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
				•			8 CYL	. (cont.)
(cont.) Years:	ID (5.7L) 16V 2003-2012 ID (5.7L) 16V		hybrid		17"/99.5mm 17"/99.5mm			(cont.)
Years: 2			iyona		5"/103.0mm			
Years: 2 Main Bearing Se	2005-2010 t TM-77 MS	-2220HX	STD					
.0010" More O Plain Lower Ha		oved Upper ust Washer S		2.5589/2.5592	0.0013/0.0025	0.0956	3 2.7517/2.752	2 0.8510
Thrust Washer S NOTE: Contains Number MS-22	MB		STD Use with Part	2.8600/2.8800			3.6760	0.1018
Cam Bearing Se 1 2 3 4 5 NOTE: For Year:	t B-1 SH SH SH SH SH SH	-1990S -1990 -1991 -1992 -1993 -1994	STD	2.2748/2.2756 2.2591/2.2598 2.2433/2.2441	0.0013/0.0042 0.0012/0.0042 0.0013/0.0042 0.0012/0.0042 0.0012/0.0054	0.0650 0.0650 0.0650	2.4068/2.407 2.3911/2.392 2.3753/2.376	8 0.5920 1 0.5920 3 0.5920
Connecting Roo Crankshaft Forg	Forging DC549	9AAA0143, D 300AA	C549AAB0904					
	ID (5.7L) 16V	<b>V</b> 8		4.06	3"/103.2mm	x 3.37	5"/85.7mm	17
Years:	1958 ID (5.9L) 16V 1958-1966, 1969 ID (6.6L) 16V	-1971			5"/104.8mm 2"/110.3mm			
	1971-1978							
Used In Engine		owel Hole In eled Connect	•	2.3740/2.3750	0.0005/0.0026	0.0622	2.5000/2.500	5 0.8620
Half, Maximun Thickness May	n Wall Does Not y Be Used In Eng od Narrowed On	th TriArmor Include Coat gines Withou	t Doweled	2.3740/2.3750	0.0005/0.0026	0.0622	2.5000/2.500	5 0.8620
.0010" More O May Be Used I	il Clearance Dov n Engines Witho I On One Side Fo	earing Wall .0 wel Hole In C out Doweled	Connecting	2.3740/2.3750	0.0016/0.0037	0.0617	2.5000/2.500	2 0.8620
Hole In Cap Ha Coating Thick Doweled Conr		e Oil Clearan all Does Not ed In Engines rowed On On	Bearing Wall ce Dowel Include s Without	2.3740/2.3750	0.0016/0.0037	0.0617	2.5000/2.500	5 0.8620



	COUN	TER DATA			SHOP	DATA	۱	
BEARING OR POSITION	BEARING PA		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		R MAX LENGTH
8 CYL (cont.)				•				
17 350 Cl (cont.) Years: 1	ID (5.7L) 16V 958	<b>V</b> 8		4.063	3"/103.2mm	x 3.37	5"/85.7mm	17 (cont.)
	ID (5.9L) 16V 958-1966, 1969-			4.125	5"/104.8mm	x 3.37	5"/85.7mm	
	ID (6.6L) 16V 971-1978	<b>V</b> 8		4.342	2"/110.3mm	x 3.37	5"/85.7mm	
Main Bearing Set 1-2-4-5	MB-	2065P	STD,10,20,40‡		0.0011/0.0036			
	vith 3.430" / 3.50		ring Flange O.D.	2.6245/2.6255	0.0011/0.0036	0.0956	2.8175/2.818	0 1.2240
	irooved Bearing		075					
Cam Bearing Set	SH-	2152S 2152	STD		0.0015/0.0043			
2 3		2153 2154			0.0015/0.0043 0.0015/0.0043			
4		2155			0.0015/0.0043			
5 NOTE: Performar		2156		1.7480/1.7490	0.0015/0.0043	0.0645	1.8795/1.880	5 0.7550
	, ,		, 1851535, 2406395, 24	06782 2406886	2051008 520	007 52	9238 529938	532294
Crankshaft Forg	22061 40271	58, 2206159, 75, 4813, 48 24, 9773573,	1737642, 1821436, 1851- 2206160, 2482923, 329 1379, 481380, 493654, 4 9782646, 9782770, 9783	4, 3462923, 3698 96452, 531369, 3785, 9783786, 9	3641, 3751877, 541585, 544191 793573, 979405	375188 1, 86984 4, 9795	8, 3751888-5, 461, 9773382, 4, 9795479	4027172, 9773383,
	10 (0.32) 104	<b>V</b> O			$1^{\prime\prime}/101~6mm$		'8"/00 0mm	18
Years: 1	971-2003			4.000	0"/101.6mm	x 3.57	8"/90.9mm	18
Rod Bearing (8) NOTE: H-Series F	TM-77 CB-	481HN rrowed On (		1	0.0003/0.0024			
Rod Bearing (8) NOTE: H-Series F Increased Cran Cap Half Rod Bearing (8) NOTE: H-Series F Not Include Co	TM-77 CB- Performance Na k Fillet Clearand TM-77 CB- Performance with ating Thickness used Crank Fillet	481HN rrowed On ( ce No Dowe 481HNK th TriArmor , Narrowed (	One Side For I Hole In STD,10 Maximum Wall Does On One	2.1240/2.1250		0.0623	2.2500/2.250	5 0.7980
Rod Bearing (8) NOTE: H-Series F Increased Cran Cap Half Rod Bearing (8) NOTE: H-Series F Not Include Co Side For Increa Hole In Cap Ha Rod Bearing (8) NOTE: H-Series F .0010" More Oil	TM-77 CB- Performance Na k Fillet Clearand TM-77 CB- Performance with ating Thickness ised Crank Fillet If TM-77 CB-	481HN rrowed On ( ce No Dowel 481HNK th TriArmor   , Narrowed ( Clearance   481HXN aring Wall .0 rowed On Or	STD,10 STD,10 Maximum Wall Does On One No Dowel STD 1005" Thinner For ne Side For	2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.250 2.2500/2.250	5 0.7980 5 0.7980
Rod Bearing (8) NOTE: H-Series F Increased Cran Cap Half Rod Bearing (8) NOTE: H-Series F Not Include Co. Side For Increa Hole In Cap Ha Rod Bearing (8) NOTE: H-Series F .0010" More Oil Increased Cran Cap Half Rod Bearing (8) NOTE: H-Series F .0005" Thinner Maximum Wall Narrowed On C	TM-77 CB- Performance Na hk Fillet Clearand TM-77 CB- Performance with ating Thickness ased Crank Fillet If TM-77 CB- Performance Be I Clearance Nam hk Fillet Clearand TM-77 CB-	481HN rrowed On ( ce No Dowel 481HNK th TriArmor I , Narrowed O Clearance I 481HXN aring Wall .0 rowed On O ce No Dowel 481HXNK th TriArmor I e Oil Clearan de Coating T reased Cran	One Side For Hole In STD,10 Maximum Wall Does On One No Dowel STD 005" Thinner For he Side For Hole In STD Bearing Wall ce hickness,	2.1240/2.1250 2.1240/2.1250 2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.250 2.2500/2.250 2.2500/2.250	5 0.7980 5 0.7980 5 0.7980

	COL	JNTER DATA			SHOP	DATA		
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
							8 CYL	. (cont.)
18 360 CII (cont.) Years: 19	D (5.9L) 1 971-2003	6V V8		4.000	0"/101.6mm	x 3.57	8"/90.9mm	18 (cont.)
	erformance	~	STD 0005" Thinner For	2.8095/2.8105	0.0014/0.0035 0.0014/0.0035 0.0014/0.0035	0.0953	3.0025/3.003	0 1.1520
.0010" More Oil Bearings	Clearance	Contains Full Gr	rooved					
Main Bearing Set 1-2-4 3 5 NOTE: Grooved U		MS-1051P MB-2590P MB-2591P(F) MB-2592P nd Plain Lower	STD,10,20 Half	2.8095/2.8105	0.0005/0.0032 0.0005/0.0032 0.0005/0.0032	0.0959	3.0025/3.003	0 1.1520
Cam Bearing Set 1 2 3 4 5 5 For Year(s): 1979-	B-1	SH-1112S SH-875 SH-1112 SH-1113 SH-1114 SH-329	STD	1.9820/1.9830 1.9670/1.9680 1.9510/1.9520	0.0015/0.0055 0.0015/0.0055 0.0015/0.0055 0.0015/0.0055 0.0005/0.0045	0.0645 0.0645 0.0645	2.1135/2.114 2.0985/2.099 2.0825/2.083	5 0.6300 5 0.6300 5 0.6300
Cam Bearing Set 1 2 3 4 5 For Year(s): 1971-	B-1	<b>SH-875S</b> SH-875 SH-326 SH-327 SH-328 SH-329	STD	1.9820/1.9830 1.9670/1.9680 1.9510/1.9520	0.0015/0.0055 0.0005/0.0045 0.0005/0.0045 0.0005/0.0045 0.0005/0.0045	0.0650 0.0650 0.0650	2.1135/2.114 2.0985/2.099 2.0825/2.083	5 0.7700 5 0.7570 5 0.7700
Crankshaft Forgin	ng 34 D (6.3L) 1	-	-2, 3418995, 4027169	4.250	0"/108.0mm	x 3.37	5"/85.9mm	19
Years: 19 Rod Bearing (8) NOTE: H-Series P Used In Engines Narrowed On Of Clearance	TM-77 TM-77 erformance Without D	CB-527HND Dowel Hole In oweled Connec	ting Rod		0.0005/0.0026			
Rod Bearing (8) NOTE: H-Series P Half, Maximum Thickness May Connecting Rod Crank Fillet Clea	erformance Wall Does N Be Used In I Narrowed	lot Include Coa Engines Withou	t Doweled	2.3740/2.3750	0.0005/0.0026	0.0622	2.5000/2.500	5 0.8620
Rod Bearing (8) NOTE: H-Series P .0010" More Oil May Be Used In Rod Narrowed O Fillet Clearance	erformance Clearance I Engines W On One Side	Dowel Hole In C ithout Doweled	Connecting	2.3740/2.3750	0.0016/0.0037	0.0617	2.5000/2.500	2 0.8620
Rod Bearing (8) NOTE: H-Series P .0005" Thinner F Hole In Cap Halt Coating Thickne Doweled Conne Increased Crant	erformance for .0010" N f, Maximum ess May Be cting Rod N	lore Oil Clearan Wall Does Not Used In Engine Narrowed On Or	Bearing Wall ce Dowel Include s Without	2.3740/2.3750	0.0016/0.0037	0.0617	2.5000/2.500	5 0.8620



	COL	JNTER DAT	A		SHOP	DATA	\	
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
8 CYL (cont.)								
19 383 CII (cont.) Years: 19	D (6.3L) 1 59-1971	6V V8		4.250	0"/108.0mm	x 3.37	5"/85.9mm	19 (cont.)
Main Bearing Set 1-2-4-5 3 NOTE: Engines wi	1	MS-876P MB-2065P MB-2456P(F) 3.500" Main Be	STD,10,20,40‡		0.0011/0.0036 0.0011/0.0036			
Contains Full Gr								
Main Bearing Set 1-2-4-5 3	1	<b>MS-972M</b> MB-2543M MB-2544M(F)	STD		0.0011/0.0032			
NOTE: Engines wi M-Series Perfor Bearings			aring Flange O.D. ved					
Cam Bearing Set 1 2 3 4 5		SH-2152S SH-2152 SH-2153 SH-2154 SH-2155 SH-2155 SH-2156	STD	1.9820/1.9830 1.9670/1.9680 1.9510/1.9520	0.0015/0.0043 0.0015/0.0043 0.0015/0.0043 0.0015/0.0043 0.0015/0.0043	0.0645 0.0645 0.0645	2.1135/2.114 2.0985/2.099 2.0825/2.083	5 0.7550 5 0.6740 5 0.7550
NOTE: Performan	, .							
Crankshaft Forgir	ng 173 220 402	37641, 173764		1851527, 18551 4, 3462923, 3698	27, 1978698,	375188	8, 3751888-5,	4027172,
Years: 20					, , , , , , , , , , , , , , , , , , , ,	~ 0.12	• /•	
Rod Bearing (8)	TM-77	CB-1808HN	STD,.026mm,.23mm‡	2.1257/2.1263	0.0009/0.0026	0.0625	2.2522/2.252	7 0.7410
NOTE: H-Series P Increased Crank Cap Half								
Rod Bearing (8) NOTE: H-Series P .0010" More Oil Increased Crank Cap Half	erformance Clearance N	Narrowed On C		2.1257/2.1263	0.0019/0.0036	0.0620	2.2522/2.252	7 0.7410
Main Bearing Set 1-2-3-4-5 NOTE: H-Series P Lower Half Requ	erformance			2.5589/2.5592	0.0003/0.0015	0.0961	2.7517/2.752	2 0.8510
Included Use wi	th Part Num	nber TW-611S						
Main Bearing Set 1-2-3-4-5 NOTE: H-Series P .0010" More Oil Plain Lower Halt Included Use wi	erformance Clearance ( f Requires 1	Grooved Upper Thrust Washer		2.5589/2.5592	0.0013/0.0025	0.0956	2.7517/2.752	2 0.8510
Thrust Washer Se NOTE: Contains 2	1		STD Use with Part	2.8600/2.8800			3.6760	0.1018



	CO	UNTER DAT	Γ <b>A</b>		SHOP	DATA	4	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
21 413 CI	D (6.7L) 1	6V V8		4.18	8"/106.4mm	x 3.75	0"/95.3mm	8 CYL 21
Years: 1	959-1965, 1 D (7.2L) 1	969-1971			0"/109.7mm			
	966-1979			1				
Rod Bearing (8) NOTE: H-Series F Used In Engine Narrowed On O Clearance	Performanc s Without D	oweled Conne	•	2.3740/2.3750	0.0005/0.0026	0.0622	2.5000/2.5008	i 0.8620
Rod Bearing (8) NOTE: H-Series F Half, Maximum Thickness May Connecting Rod Crank Fillet Cle	Performanc Wall Does Be Used In d Narrowed	Not Include Co Engines Witho	or Dowel Hole In Cap pating put Doweled	2.3740/2.3750	0.0005/0.0026	0.0622	2.5000/2.5005	0.8620
Rod Bearing (8) NOTE: H-Series F .0010" More Oil May Be Used In Rod Narrowed Fillet Clearance	Performance Clearance Engines W On One Sid	Dowel Hole In /ithout Dowele	.0005" Thinner For Cap Half d Connecting	2.3740/2.3750	0.0016/0.0037	0.0617	2.5000/2.5002	2 0.8620
Rod Bearing (8) NOTE: H-Series F .0005" Thinner I Hole In Cap Hal Coating Thickn Doweled Conne Increased Cran	Performanc For .0010" I If, Maximun ess May Be ecting Rod	More Oil Cleara n Wall Does No Used In Engir Narrowed On (	or Bearing Wall ance Dowel ot Include nes Without	2.3740/2.3750	0.0016/0.0037	0.0617	2.5000/2.5005	0.8620
Main Bearing Set 1-2-4-5 3 NOTE: Engines w H-Series Perfor Bearings	ith 3.870" /		earing Flange O.D.		0.0009/0.0030 0.0004/0.0025			
Main Bearing Set 1-2-4-5 3	ith 3.555" /		STD earing Flange O.D. oved		0.0011/0.0032 0.0011/0.0032			
Main Bearing Set 1-2-4-5 3 NOTE: Engines w H-Series Perfor	ith 3.555" /		earing Flange O.D.		0.0010/0.0031 0.0010/0.0031			
3 Is Full Groove Grooved Upper Narrowed Strai	d, Position Half And P	Number 1, 2, 4 lain Lower Hal	4, 5 Has f, Contains					
Cam Bearing Set 1 2 3 4 5		SH-2152S SH-2152 SH-2153 SH-2154 SH-2155 SH-2156	STD	1.9820/1.9830 1.9670/1.9680 1.9510/1.9520	0.0015/0.0043 0.0015/0.0043 0.0015/0.0043 0.0015/0.0043 0.0015/0.0043	0.0645 0.0645 0.0645	2.1135/2.1145 2.0985/2.0995 2.0825/2.0835	0.7550 0.6740 0.7550
NOTE: Performar		-	5 2406886 2051009					
Connecting Rod Crankshaft Forgi	ng 1	737642, 182143	95, 2406886, 2951908 36, 1851436, 1851527, 1 38-5. 4027175. 8698461	855127, 1978698,	2206157, 2206	158, 22	206160, 3294, 3	3698641,

New Number
 ‡ Discontinued



	co	UNTER DATA	\		SHOP	DAT	4	
BEARING OR POSITION	BEARING MATERIA	à PART AL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OR HOUSING BORE	MAX LENGTH
8 CYL 22 426 C	ID (7 0L)	16V V8 HEMI		4.95	0"/108.0mm	× 3 75	0"/05 2mm	22
Years: 1 426 C	1964-1971	16V V8 Wedge	9		0"/108.0mm			
Used In Engine	Performances Without I	CB-527HND ce Dowel Hole In Doweled Connec or Increased Crar	-	2.3740/2.3750	0.0005/0.0026	0.0622	2.5000/2.500	5 0.8620
Half, Maximum Thickness May	Performand Wall Does Be Used Ir d Narrowed	CB-527HNDK ce with TriArmor Not Include Coa n Engines Withou d On One Side Fo	t Doweled	2.3740/2.3750	0.0005/0.0026	0.0622	2.5000/2.500	5 0.8620
.0010" More O May Be Used I	Performance il Clearance n Engines V On One Sic	CB-527HXND ce Bearing Wall . Dowel Hole In C Vithout Doweled de For Increased	Connecting	2.3740/2.3750	0.0016/0.0037	0.0617	7 2.5000/2.500;	2 0.8620
.0005" Thinner Hole In Cap Ha Coating Thickr	Performanc For .0010" alf, Maximum ness May Be recting Rod	CB-527HXNDK ce with TriArmor More Oil Clearan m Wall Does Not e Used In Engine Narrowed On Or arance	Bearing Wall ice Dowel Include s Without	2.3740/2.3750	0.0016/0.0037	0.0617	7 2.5000/2.500	5 0.8620
Performance	Dowel Hole	CB-1512M ra-Large Fillets, M In Cap Half May Connecting Rod	Be Used In	2.3740/2.3750	0.0015/0.0036	0.0620	2.5000/2.500	5 0.8460
Rod Bearing (8) NOTE: Cranksha Performance (		CB-1512M(U) ra-Large Fillets, M pper Shell Only	STD M-Series	2.3740/2.3750	0.0015/0.0036	0.0620	2.5000/2.500	5 0.8460
Performance	Dowel Hole	CB-1512V ra-Large Fillets, V In Cap Half May Connecting Rod	Be Used In	2.3740/2.3750	0.0015/0.0036	0.0620	2.5000/2.500	5 0.8460
Rod Bearing (8) NOTE: Cranksha Performance (	ft With Extr	CB-1512V(U) ra-Large Fillets, V per Shell Only	STD /-Series	2.3740/2.3750	0.0015/0.0036	0.0624	2.5000/2.500	5 0.8460
	with 3.555" /	MS-972M MB-2543M MB-2544M(F) / 3.675" Main Bea Intains Full Groov	STD aring Flange O.D. ved		0.0011/0.0032 0.0011/0.0032			
	with 3.555" /	h Tri-bore Desigr	STD,10 aring Flange O.D. a Grooved		0.0005/0.0026			



	cc	OUNTER DAT	A		SHOP	DATA	A	
BEARING OR POSITION	BEARING MATERI/	G PART AL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
				•			8 CYL	(cont.)
(cont.) Years: 1	964-1971	16V V8 HEM 16V V8 Wedg			0"/108.0mm 0"/108.0mm			(cont.)
	963-1965							
Main Bearing Se 1-2-3-4-5		MS-2067V MB-3564V	STD	2.9975/2.9980	0.0032/0.0049	0.0954	3.1911/3.191	5 0.9490
Tri-bore Desig	nder Block n Grooved Thrust Was	, V-Series Perfo Upper Half And her Set, Not Inc	rmance with Plain Lower					
Main Bearing Se 1-2-4-5 3		MS-2233HG MB-3789HG MB-2457HG(F)	STD,10		0.0010/0.0031			
H-Series Perfo 3 Is Full Groove Grooved Uppe	rmance Be ed, Position r Half And I	arings For Posi n Number 1, 2, 4 Plain Lower Hal For Extra Clear	tion Number , 5 Has f, Contains					
Thrust Washer S	et	TW-120S MB-1739W(L) MB-1739W(U)	STD	3.3150/3.3250 3.3150/3.3250			3.8880/3.898 3.8880/3.898	
Main Bearing J	lournal Dia ces, Positio	r Block Manufa meter Cranksha on Number 3 Us						
Thrust Washer S	et	TW-120SK MB-1739W(L) MB-1739W(U)	STD	3.3150/3.3250 3.3150/3.3250			3.8880/3.898 3.8880/3.898	
Main Bearing J Contains 4 Pie	lournal Dia ces with Tr		Use with	0.0100.00200			0.0000.0000	0.0020
Thrust Washer S		TW-130S MB-2292W(L) MB-2292W(U)	STD	3.0450/3.0550 3.0450/3.0550			3.5520/3.562 3.5520/3.562	
Bored To Acce Diameter Cran	pt, 3.000"   kshafts, Co	aring Journal, C Main Bearing Jo ontains 4 Pieces Number MS-206	, Position					
Cam Bearing Set 1 2 3 4 5 NOTE: Performa		SH-2152S SH-2152 SH-2153 SH-2154 SH-2155 SH-2156 og Set	STD	1.9820/1.9830 1.9670/1.9680 1.9510/1.9520	0.0015/0.0043 0.0015/0.0043 0.0015/0.0043 0.0015/0.0043 0.0015/0.0043	0.0645 0.0645 0.0645	5 2.1135/2.114 5 2.0985/2.099 5 2.0825/2.083	5 0.7550 5 0.6740 5 0.7550
	Forging	1851535, 240639 1737642, 182143	5, 2406886, 2951908 36, 1851436, 1851527, 18 8-5, 4027175, 8698461	55127, 1978698,	2206157, 2206	158, 22	206160, 3294,	3698641,



COUNTER DATA				SHOP DATA				
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
10 CYL								
	ID (8.0L) 2 1992-2003	OV V10 Mag	num	4.000	0"/101.6mm	x 3.88	2"/98.6mm	23
Rod Bearing (10) NOTE: H-Series Increased Crar Cap Half	Performance	CB-481HN e Narrowed On arance No Dowe		2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.2505	0.7980
Not Include Co	Performance bating Thickr ased Crank I	CB-481HNK e with TriArmor ness, Narrowed Fillet Clearance		2.1240/2.1250	0.0003/0.0024	0.0623	2.2500/2.2505	0.7980
.0010" More Oi	Performance il Clearance	CB-481HXN e Bearing Wall . Narrowed On O arance No Dowe		2.1240/2.1250	0.0014/0.0035	0.0618	2.2500/2.2505	0.7980
Maximum Wall	Performanc For .0010" M Does Not Ir One Side For	More Oil Clearan Include Coating Increased Cra	nce Thickness,	2.1240/2.1250	0.0014/0.0035	0.0618	2.2500/2.2505	0.7980
Main Bearing Se 1-2-4-5-6 3 For Year(s): 1992 NOTE: H-Series Lower Half, Alt FOR VIN(S): E	2-2002 Performance		STD,1,10 er Half And Plain				3.1925/3.1930 3.1925/3.1930	
.0010" More Oi	2-2002 Performance il Clearance	MS-2253HX MB-4002HX MB-4003HX(F) e Bearing Wall . Grooved Upper n Cylinder Block					3.1925/3.1930 3.1925/3.1930	
24 505 C	ID (8.3L) 2	20V V10		4.031	'/102.4mm x	3.960	"/100.6mm	24
515 C	2003-2006 ID (8.4L) 2 2008-2010	20V V10		4.055	'/103.0mm x	3.960	"/100.6mm	
Rod Bearing (10) NOTE: H-Series	) TM-77 Performanc	CB-1808HN e Narrowed On arance No Dowe		2.1257/2.1263	0.0009/0.0026	0.0625	2.2522/2.2527	0.7410
Rod Bearing (10) NOTE: H-Series .0010" More Oi	Performance il Clearance	CB-1808HXN e Bearing Wall . Narrowed On O arance No Dowe		2.1257/2.1263	0.0019/0.0036	0.0620	2.2522/2.2527	0.7410
Main Bearing Se 1-2-4-5-6 3 NOTE: H-Series Lower Half, Alu	Performance		STD,1,10 er Half And Plain				3.1925/3.1930 3.1925/3.1930	



	COUNTER I	DATA		SHOP DATA					
BEARING OR POSITION	BEARING PART MATERIAL NUMBE	AVAILABLE R UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH		
						10 CYL	(cont.)		
24 505 CI	D (8.3L) 20V V10		4.031'	'/102.4mm x	3.960	"/100.6mm	24		
(cont.) Years: 20	003-2006						(cont.)		
515 CI	D (8.4L) 20V V10		4.055'	'/103.0mm x	3.960	"/100.6mm			
Years: 20	008-2010								
Main Bearing Set	TM-77 MS-2253H	X STD							
1-2-4-5-6	MB-4002H	IX	2.9995/3.0005	0.0014/0.0035	0.0953	3.1925/3.1930	0.8770		
3	MB-4003H	IX(F)	2.9995/3.0005	0.0014/0.0035	0.0953	3.1925/3.1930	0 1.1520		
.0010" More Oil	erformance Bearing Clearance Grooved L f, Aluminum Cylinder								

ENGINE	YEAR	BORE & STROKE	BLOCK	
97.5 CID (1.6L) DOHC 16V L4 Mazda B6D	1991-1994	3.071"/78.0mm X 3.307"/84.0mm	1	
97.5 CID (1.6L) DOHC 16V Turbo. L4 Mazda B6T	1991-1994	3.071"/78.0mm X 3.307"/84.0mm	1	
112 CID (1.8L) DOHC 16V L4 Mazda BP BP-ZE	1991-1996	3.268"/83.0mm X 3.346"/85.0mm	1	
121 CID (2.0L) DOHC 16V L4 Duratec	2004-2013	3.445"/87.5mm X 3.270"/83.0mm	2	
122 CID (2.0L) DOHC 16V L4 Zetec	1995-2004	3.339"/84.8mm X 3.461"/87.9mm	3	
140 CID (2.3L) DOHC 16V L4 Duratec	2001-2009	3.440"/87.4mm X 3.700"/94.0mm	4	
140 CID (2.3L) DOHC 16V L4 Duratec Hybrid	2005-2008	3.440"/87.4mm X 3.700"/94.0mm	4	
152 CID (2.5L) DOHC 16V L4 Duratec	2009-2010	3.500"/88.9mm X 3.940"/100.1mm	5	
152 CID (2.5L) DOHC 16V L4 Duratec Hybrid	2009	3.500"/88.9mm X 3.940"/100.1mm	5	
221 CID (3.6L) 16V V8	1962-1963	3.500"/88.9mm X 2.880"/73.0mm	6	
255 CID (4.2L) 16V V8	1980-1982	3.680"/93.5mm X 3.000"/76.2mm	6	
260 CID (4.3L) 16V V8	1962-1965	3.800"/96.5mm X 2.880"/73.0mm	6	
281 CID (4.6L) SOHC 16V V8	2006-2011	3.551"/90.2mm X 3.542"/90.0mm	7	
281 CID (4.6L) SOHC 24V V8	2005-2010	3.551"/90.2mm X 3.542"/90.0mm	8	
281 CID (4.6L) SOHC 16V V8 Romeo	1991-2010	3.551"/90.2mm X 3.542"/90.0mm	9	
281 CID (4.6L) SOHC 24V V8 Triton	2009-2010	3.551"/90.2mm X 3.542"/90.0mm	8	
281 CID (4.6L) SOHC 16V V8 Triton (Romeo)	1997-2011	3.551"/90.2mm X 3.542"/90.0mm	9	
281 CID (4.6L) SOHC 16V V8 Triton (Windsor)	1997-2008	3.551"/90.2mm X 3.542"/90.0mm	10	
281 CID (4.6L) DOHC 32V V8 InTech	1993-2005	3.551"/90.2mm X 3.542"/90.0mm	8	
281 CID (4.6L) DOHC 32V V8	1996-2001, 2003-2004	3.551"/90.2mm X 3.542"/90.0mm	8	
281 CID (4.6L) DOHC 32V SC V8	2003-2004	3.551"/90.2mm X 3.542"/90.0mm	8	
289 CID (4.7L) 16V V8 Hi-Perf.	1963-1969	4.000"/101.6mm X 2.880"/73.0mm	6	
289 CID (4.7L) 16V V8	1963-1968	4.000"/101.6mm X 2.880"/73.0mm	6	
302 CID (5.0L) 16V V8 Boss/Eliminator	1969-1971	4.000"/101.6mm X 3.000"/76.2mm	11	
302 CID (5.0L) 16V V8 HO	1982, 1984-1995	4.000"/101.6mm X 3.000"/76.2mm	12	
302 CID (5.0L) 16V V8	1968-2001	4.000"/101.6mm X 3.000"/76.2mm	12	
302 CID (5.0L) DOHC 32V V8 Coyote	2011-2012	3.630"/92.2mm X 3.650"/92.7mm	13	
302 CID (5.0L) DOHC 32V V8 Coyote 99F	2011-2013	3.630"/92.2mm X 3.650"/92.7mm	13	
302 CID (5.0L) DOHC 32V V8 Coyote 99U	2012-2013	3.630"/92.2mm X 3.650"/92.7mm	14	
330 CID (5.4L) SOHC 16V V8 Triton (Windsor)	1997-2011	3.551*/90.2mm X 4.161*/105.7mm	10	
330 CID (5.4L) SOHC 16V SC V8 Triton (Windsor)	1999-2004	3.551"/90.2mm X 4.161"/105.7mm	10	
330 CID (5.4L) SOHC 24V V8 Triton (Windsor)	2004-2012	3.551"/90.2mm X 4.161"/105.7mm	10	
330 CID (5.4L) DOHC 32V V8 InTech	1999-2004	3.551"/90.2mm X 4.161"/105.7mm	10	
330 CID (5.4L) DOHC 32V V8 Windsor	2000	3.551"/90.2mm X 4.161"/105.7mm	10	
330 CID (5.4L) DOHC 32V SC V8 Windsor	2005-2012	3.551"/90.2mm X 4.161"/105.7mm	15	



ENGINE	YEAR	BORE & STROKE	BLOCK
351 CID (5.8L) 16V V8 Cleveland	1969-1974	4.000"/101.6mm X 3.500"/88.8mm	16
351 CID (5.8L) 16V V8 Cleveland Boss	1971-1972	4.000"/101.6mm X 3.500"/88.8mm	16
351 CID (5.8L) 16V V8 Cleveland Cobra Jet	1971-1974	4.000"/101.6mm X 3.500"/88.8mm	16
351 CID (5.8L) 16V V8 Modified	1975-1982	4.000"/101.6mm X 3.500"/88.8mm	17
351 CID (5.8L) 16V V8 Windsor	1969-1998	4.000"/101.6mm X 3.500"/88.8mm	18
351 CID (5.8L) 16V V8 Windsor HO	1993-1995	4.000"/101.6mm X 3.500"/88.8mm	18
370 CID (6.1L) 16V V8	1980-1991	4.050"/102.9mm X 3.590"/91.2mm	19
400 CID (6.6L) 16V V8	1971-1982	4.000"/101.6mm X 4.000"/101.6mm	17
415 CID (6.8L) SOHC 20V V10 Triton	1997-2012	3.551"/90.2mm X 4.161"/105.7mm	20
415 CID (6.8L) SOHC 30V V10 Triton	2005-2012	3.551"/90.2mm X 4.161"/105.7mm	20
429 CID (7.0L) 16V V8 Boss	1969-1970	4.360"/110.7mm X 3.590"/91.2mm	19
429 CID (7.0L) 16V V8 Cobra Jet/Super CJ	1970-1971	4.360"/110.7mm X 3.590"/91.2mm	19
429 CID (7.0L) 16V V8 Police	1971-1972	4.360"/110.7mm X 3.590"/91.2mm	19
429 CID (7.0L) 16V V8 Thunder Jet	1980-1998	4.360"/110.7mm X 3.590"/91.2mm	19
429 CID (7.0L) 16V V8	1968-1973	4.360"/110.7mm X 3.590"/91.2mm	19
460 CID (7.5L) 16V V8 HO	1973-1978	4.360"/110.7mm X 3.850"/97.8mm	19
460 CID (7.5L) 16V V8	1968-1998	4.360"/110.7mm X 3.850"/97.8mm	19
460 CID (7.5L) 16V V8 Police	1973-1974	4.360"/110.7mm X 3.850"/97.8mm	19

#### CONNECTING ROD FORGING NUMBERS

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLC	оск
C20E	3.000in/76.2mm	12	C8DE	3.000in/76.2mm	12	D1AE-A	3.500in/88.8mm	17
C20E	3.000in/76.2mm	6	C8DE	3.000in/76.2mm	6	D1AE-A	4.000in/101.6mm	17
C30E-A	3.000in/76.2mm	12	C8VE	3.590in/91.2mm	19	D60E	3.500in/88.8mm	18
C30E-A	3.000in/76.2mm	6	C8VE	3.850in/97.8mm	19	D6OE	3.500in/88.8mm	18
C3AE-D	3.000in/76.2mm	12	C8VE-A	3.590in/91.2mm	19	D6VE	3.590in/91.2mm	19
C3AE-D	3.000in/76.2mm	6	C8VE-A	3.850in/97.8mm	19	D6VE	3.850in/97.8mm	19
C3AE-J	3.000in/76.2mm	12	C90E	3.500in/88.8mm	18	D9TE	3.590in/91.2mm	19
C3AE-J	3.000in/76.2mm	6	C9OE	3.500in/88.8mm	18	D9TE	3.850in/97.8mm	19
C80E-A	3.000in/76.2mm	12	DOOE-A	3.590in/91.2mm	19	RFF1AE6205-AE	) 3.542in/90.0mm	10
C80E-A	3.000in/76.2mm	6	DOOE-A	3.850in/97.8mm	19	RFF1AE6205-AE	) 3.542in/90.0mm	9

#### **CRANKSHAFT FORGING NUMBERS**

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLO	оск
1J	3.000in/76.2mm	12	2M	3.000in/76.2mm	12	2Y	3.590in/91.2mm	19
1J	3.000in/76.2mm	6	2M	3.000in/76.2mm	6	2Y	3.850in/97.8mm	19
1K	3.500in/88.8mm	17	2MA	3.000in/76.2mm	12	2Y68-76	3.590in/91.2mm	19
1K	4.000in/101.6mm	17	2MA	3.000in/76.2mm	6	2Y68-76	3.850in/97.8mm	19
1KA	3.500in/88.8mm	17	2MAB	3.000in/76.2mm	12	2YA	3.590in/91.2mm	19
1KA	4.000in/101.6mm	17	2MAB	3.000in/76.2mm	6	2YA	3.850in/97.8mm	19
1M	3.000in/76.2mm	12	2MAC	3.000in/76.2mm	12	2YAB	3.590in/91.2mm	19
1M	3.000in/76.2mm	6	2MAC	3.000in/76.2mm	6	2YAB	3.850in/97.8mm	19
1MA	3.000in/76.2mm	12	2MAD	3.000in/76.2mm	12	2YABC	3.590in/91.2mm	19
1MA	3.000in/76.2mm	6	2MAD	3.000in/76.2mm	6	2YABC	3.850in/97.8mm	19
1V	3.590in/91.2mm	19	2MAE	3.000in/76.2mm	12	30R	3.590in/91.2mm	19
1V	3.850in/97.8mm	19	2MAE	3.000in/76.2mm	6	30R	3.850in/97.8mm	19
1VA	3.590in/91.2mm	19	2N	3.000in/76.2mm	12	31-87	3.590in/91.2mm	19
1VA	3.850in/97.8mm	19	2N	3.000in/76.2mm	6	31-87	3.850in/97.8mm	19
1VAB	3.590in/91.2mm	19	2NA	3.000in/76.2mm	12	31M	3.590in/91.2mm	19
1VAB	3.850in/97.8mm	19	2NA	3.000in/76.2mm	6	31M	3.850in/97.8mm	19
1YAB	3.590in/91.2mm	19	2NAB	3.000in/76.2mm	12	3281N	3.590in/91.2mm	19
1YAB	3.850in/97.8mm	19	2NAB	3.000in/76.2mm	6	3281N	3.850in/97.8mm	19
2H-A	3.000in/76.2mm	12	2NABC	3.000in/76.2mm	12	329880N	3.590in/91.2mm	19
2H-A	3.000in/76.2mm	6	2NABC	3.590in/91.2mm	19	329880N	3.850in/97.8mm	19
2J	3.000in/76.2mm	12	2NABC	3.850in/97.8mm	19	3C	3.500in/88.8mm	18
2J	3.000in/76.2mm	6	2NABC	3.000in/76.2mm	6	ЗM	3.500in/88.8mm	18



### CRANKSHAFT FORGING NUMBERS

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLC	
ЗMA	3.500in/88.8mm	18	COE-A	3.000in/76.2mm	12	D7AE	4.000in/101.6mm	17
3Y	3.590in/91.2mm	19	COE-A	3.000in/76.2mm	6	D7AE-A	3.500in/88.8mm	17
3Y	3.850in/97.8mm	19	C20E-A	3.000in/76.2mm	12	D7AE-A	4.000in/101.6mm	17
3YAB	3.590in/91.2mm	19	C20E-A	3.000in/76.2mm	6	D9TE-AA	3.590in/91.2mm	19
3YAB	3.850in/97.8mm	19	C20Z	3.000in/76.2mm	12	D9TE-AA	3.850in/97.8mm	19
4U	3.590in/91.2mm	19	C20Z	3.000in/76.2mm	6	D9TE-B	3.590in/91.2mm	19
4U	3.850in/97.8mm	19	C20Z-A	3.000in/76.2mm	12	D9TE-B	3.850in/97.8mm	19
4UA	3.590in/91.2mm	19	C20Z-A	3.000in/76.2mm	6	D9TE-BA	3.590in/91.2mm	19
4UA	3.850in/97.8mm	19	C2OZ	3.000in/76.2mm	12	D9TE-BA	3.850in/97.8mm	19
4UAB	3.590in/91.2mm	19	C2OZ	3.000in/76.2mm	6	D9TE-EA	3.590in/91.2mm	19
4UAB	3.850in/97.8mm	19	C2OZ-B	3.000in/76.2mm	12	D9TE-EA	3.850in/97.8mm	19
4UB	3.590in/91.2mm	19	C2OZ-B	3.000in/76.2mm	6	E1AE	3.000in/76.2mm	12
4UB	3.850in/97.8mm	19	C30E-B	3.000in/76.2mm	12	E1AE	3.000in/76.2mm	6
5M	3.500in/88.8mm	17	C30E-B	3.000in/76.2mm	6	E1AE-AA	3.000in/76.2mm	12
5M	4.000in/101.6mm		C30Z	3.000in/76.2mm	12	E1AE-AA	3.000in/76.2mm	6
5MA	3.500in/88.8mm	17	C30Z	3.000in/76.2mm	6	E4AE-BA	3.500in/88.8mm	18
5MA	4.000in/101.6mm		C3AE-F	3.000in/76.2mm	12	E7AE	3.000in/76.2mm	12
5MAB	3.500in/88.8mm	17	C3AE-F	3.000in/76.2mm	6	E7AE	3.000in/76.2mm	6
5MAB	4.000in/101.6mm	17	C3AF-N	3.000in/76.2mm	12	E7AE-AA	3.000in/76.2mm	12
5MABC	3.500in/88.8mm	17	C3AF-N	3.000in/76.2mm	6	E7AE-AA	3.000in/76.2mm	6
5MABC	4.000in/101.6mm	17	C3OZ	3.000in/76.2mm	12	F1AE-AD	3.542in/90.0mm	10
7M	3.500in/88.8mm	18	C3OZ	3.000in/76.2mm	6	F1AE-AD	3.542in/90.0mm	9
7MA	3.500in/88.8mm	18	C3OZ-B	3.000in/76.2mm	12	F1AE-AD-5D	3.542in/90.0mm	8
8M	3.500in/88.8mm	17	C3OZ-B	3.000in/76.2mm	6	F1AE-AD-7D	3.542in/90.0mm	8
8M	4.000in/101.6mm	17	C80E-B	3.000in/76.2mm	12	F1AE-AD-8D	3.542in/90.0mm	8
90-21-0	3.461in/87.9mm	3	C80E-B	3.000in/76.2mm	6	F1AE-AE	3.542in/90.0mm	10
90TM-AA	3.461in/87.9mm	3	C8SE-A	3.590in/91.2mm	19	F1AE-AE	3.542in/90.0mm	8
90TM-AB	3.461in/87.9mm	3	C8SE-A	3.850in/97.8mm	19	F1AE-AE	3.542in/90.0mm	9
9166N	3.461in/87.9mm	3	C8VE	3.590in/91.2mm	19	GS-M	3.000in/76.2mm	12
91A-6303-A	3.461in/87.9mm	3	C8VE	3.850in/97.8mm	19	GS-M	3.000in/76.2mm	6
91A-6303-B	3.461in/87.9mm	3	C8VE-A	3.590in/91.2mm	19	н	3.590in/91.2mm	19
91H-6303-B	3.461in/87.9mm	3	C8VE-A	3.850in/97.8mm	19	н	3.850in/97.8mm	19
91K	3.461in/87.9mm	3	C9AE-A	3.590in/91.2mm	19	RFF1AE6306-AD	3.542in/90.0mm	10
91TM-AA	3.461in/87.9mm	3	C9AE-A	3.850in/97.8mm	19	RFF1AE6306-AD	3.542in/90.0mm	9
B5A-6303-B	3.307in/84.0mm	1	C9AE-B	3.590in/91.2mm	19	SM	3.500in/88.8mm	17
B5Q-6303-A	3.307in/84.0mm	1	C9AE-B	3.850in/97.8mm	19	SM	4.000in/101.6mm	17
B5S-6303-A	3.307in/84.0mm	1	C9OE-A	3.500in/88.8mm	18	ZYA	3.590in/91.2mm	19
B616	3.307in/84.0mm	1	C9ZE-A	3.000in/76.2mm	12	ZYA	3.850in/97.8mm	19
B630	3.307in/84.0mm	1	C9ZE-A	3.000in/76.2mm	6			
B657	3.307in/84.0mm	1	D7AE	3.500in/88.8mm	17			

	COUNT		SHOP DATA					
BEARING OR POSITION	BEARING PA MATERIAL NU	ART UMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
								4 CYL
Years: 1 97.5 C Years: 1 112 C	1991-1994	HC 16V Tu	Mazda B6D Irbo. L4 Mazda B6T Mazda BP BP-ZE	3.0	71"/78.0mm 71"/78.0mm 68"/83.0mm	x 3.30	7"/84.0mm	
Rod Bearing (4) NOTE: H Series I	TM-77 CB-	1453H	STD,.026mm	1.7693/1.7699	0.0005/0.0023	0.0592	1.8898/1.8904	4 0.6750

	COUNTER DAT	Α		SHOP	DATA	1	
	ING PART RIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL (cont.)							
1 97.5 CID (1.6 (cont.) Years: 1991-199	6L) DOHC 16V L	.4 Mazda B6D	3.07	71"/78.0mm	x 3.30	7"/84.0mm	1 (cont.)
	6L) DOHC 16V T	urbo. L4 Mazda B6T	3.07	71"/78.0mm	x 3.30	7"/84.0mm	(cont.)
112 CID (1.8 Years: 1991-199		4 Mazda BP BP-ZE	3.20	68"/83.0mm	x 3.34	6"/85.0mm	
Rod Bearing (4) TM NOTE: H Series Perform .0010" More Oil Cleara	•	STD .0005" Thinner For	1.7693/1.7699	0.0015/0.0033	0.0587	1.8898/1.8904	0.6750
1-2-3-4-5	-77 <b>MS-1802H</b> MB3961H	STD,.026mm•	1.9661/1.9668	0.0005/0.0023	0.0792	2.1257/2.1262	0.6700
NOTE: H Series Perform Lower Half Requires T Included Use with Part	hrust Washer Set, N						
1-2-3-4-5	-77 <b>MS-1802HX</b> MB3961HX	STD	1.9661/1.9668	0.0015/0.0033	0.0787	2.1257/2.1262	0.6700
NOTE: H Series Perform .0010" More Oil Cleara Plain Lower Half Requi Included Use with Part	nce Grooved Upper ires Thrust Washer	r Half And					
Thrust Washer Set	TW-472S MB-3173W	STD	2.2539			2.7165	0.1000
NOTE: Contains 2 Pieces Number MS-1802H, MS		4 Use with Part					
Crankshaft Forging		-6303-A, B5S-6303-A, B61					
2 121 CID (2.0 Years: 2004-201	L) DOHC 16V L4 13	4 Duratec	3.44	45"/87.5mm	x 3.27	0"/83.0mm	2
Rod Bearing (4) TM NOTE: H-Series Perform	-77 CB-1840H ance No Dowel Ho	STD le In Cap Half	1.8496/1.8503	0.0010/0.0020	0.0599	1.9694/1.9702	0.6653
Main Bearing Set TM 1-2-4-5 3 For Year(s): 2004-2010 NOTE: H-Series Perform	MB-3822H MB-3823H(F)	STD er Half And Plain		0.0004/0.0024 0.0006/0.0027			
Lower Half							
3 122 CID (2.0 Years: 1995-200	L) DOHC 16V L4	4 Zetec	3.3	39"/84.8mm	x 3.46	1"/87.9mm	3
Rod Bearing (4) TM NOTE: H-Series Perform	-77 CB-1774H ance No Dowel Ho	STD,.026mm,.25mm le In Cap Half	1.8461/1.8468	0.0008/0.0017	0.0585	1.9642/1.9650	0.8020
Rod Bearing (4) TM NOTE: H-Series Perform .0010" More Oil Cleara Half			1.8461/1.8468	0.0018/0.0027	0.0580	1.9642/1.9650	0.8020
Main Bearing Set TM 1-2-4-5 3 NOTE: H-Series Perform	-77 <b>MS-2208HX</b> MB-3753HX MB-3754HX(F)	STD		0.0013/0.0026			
.0010" More Oil Cleara Plain Lower Half							
Main Bearing Set For Year(s): 1995-2003 FOR VIN(S): 3	MS-2208H02	6 <b>mm</b> .25mm					
Crankshaft Forging	90-21-0, 90TM-A4	A, 90TM-AB, 9166N, 91A-63	03-A, 91A-6303	-B, 91H-6303-B,	91K, 91	ITM-AA	



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	COU	INTER DA	ГА		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE			MAX LENGTH
				•				4 CYL
Years: 2	ID (2.3L) D 2001-2009 ID (2.3L) D		.4 Duratec .4 Duratec Hybrid		40"/87.4mm 40"/87.4mm			4
	2005-2008			1				
Rod Bearing (4) NOTE: H-Series	Performance		STD,.25mm ble In Cap Half	1.9677/1.9685	0.0010/0.0020	0.0598	2.0875/2.0883	3 0.6653
Rod Bearing (4) NOTE: H-Series Not Include Co Cap Half	Performance		STD‡ or Maximum Wall Does el Hole In	1.9677/1.9685	0.0010/0.0020	0.0598	2.0875/2.0883	3 0.6653
Rod Bearing (4) NOTE: H-Series .0010" More O Half	Performance		STD I .0005" Thinner For e In Cap	1.9677/1.9685	0.0020/0.0030	0.0593	2.0875/2.0883	3 0.6653
Main Bearing Se 1-2-4-5 3 NOTE: H-Series Lower Half	n N	MS-2245H MB-3822H MB-3823H(F) Grooved Up	STD per Half And Plain		0.0004/0.0024 0.0006/0.0027			
Years: 2			.4 Duratec .4 Duratec Hybrid		0"/88.9mm x 0"/88.9mm x			5
Main Bearing Se 1-2-4-5 3 NOTE: H-Series Lower Half	N N	MS-2245H MB-3822H MB-3823H(F) Grooved Up	STD per Half And Plain		0.0004/0.0024 0.0006/0.0027			
								8 CYL
	ID (3.6L) 16	6V V8		3.5	00"/88.9mm	x 2.88	0"/73.0mm	6
255 C	1962-1963 ID (4.2L) 16 1980-1982	6V V8		3.6	80"/93.5mm	x 3.00	0"/76.2mm	
260 C	ID (4.3L) 16	6V V8		3.8	00"/96.5mm	x 2.88	0"/73.0mm	
289 C	ID (4.7L) 16	6V V8 Hi-P	erf.	4.00	0"/101.6mm	x 2.88	0"/73.0mm	
289 C	ID (4.7L) 16	6V V8		4.00	0"/101.6mm	x 2.88	0"/73.0mm	
Rod Bearing (8) NOTE: H-Series Increased Cran Cap Half	Performance			2.1228/2.1236	0.0006/0.0028	0.0575	2.2390/2.2398	3 0.6810
Rod Bearing (8) NOTE: H-Series Used In Engine Narrowed On C Clearance	Performance s Without Do	weled Conne		2.1228/2.1236	0.0006/0.0028	0.0575	2.2390/2.2398	3 0.6810
Rod Bearing (8) NOTE: H-Series Not Include Co Side For Increa Hole In Cap Ha	Performance ating Thickne ased Crank Fi	ess, Narrowe		2.1228/2.1236	0.0006/0.0028	0.0575	2.2390/2.2398	3 0.6810





COUNTER DATA SHOP DATA					SHOP	DATA	A	
POSITION N	EARING	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.) 6 221 CID	(3 61 ) 1			2.5	00"/88.9mm	× 2 88	0"/73 0mm	6
(cont.) Years: 1963				0.0	00 /00.311111	× 2.00	<i>io 715.</i> 011111	(cont.)
255 CID Years: 198	0-1982			3.6	80"/93.5mm	x 3.00	0"/76.2mm	
260 CID Years: 196	2-1965				00"/96.5mm			
Years: 196	3-1969	16V V8 Hi-Pe	erf.		0"/101.6mm			
289 CID Years: 196	3-1968				0"/101.6mm			
Rod Bearing (8) NOTE: H-Series Per .0010" More Oil Cl Increased Crank F Cap Half	formance	Narrowed On	One Side For	2.1228/2.1236	0.0016/0.0038	0.0570	) 2.2390/2.2398	0.6810
Rod Bearing (8) NOTE: H-Series Per .0005" Thinner Fo Maximum Wall Do Narrowed On One Clearance No Dov	formance r .0010" M es Not Ir Side For	More Oil Cleara nclude Coating r Increased Cra	nce Thickness,	2.1228/2.1236	0.0016/0.0038	0.0570	) 2.2390/2.2398	0.6810
Main Bearing Set		MS-590H	STD,1,10					
1-2-4-5 3 NOTE: H-Series Per	formanc	MB-2121H MB-2122H(F) e Grooved Upp	er Half And Plain				2.4412/2.4420 2.4412/2.4420	
Lower Half Main Bearing Set	TNA 77	MS-590HK	STD.10					
1-2-4-5 3	1101-77	MB-2121H MB-2122H(F)	510,10				2.4412/2.4420	
NOTE: H-Series Per And Plain Lower H Include Coating T	lalf, Max	imum Wall Doe	r Grooved Upper Half es Not					
Main Bearing Set 1-2-4-5 3	TM-77	MS-590HX MB-2121HX MB-2122HX(F)	STD				2 2.4412/2.4420	
NOTE: H-Series Per .0010" More Oil Cl Plain Lower Half								
Main Bearing Set 1-2-4-5 3	TM-77	MS-590HXK MB-2121HX MB-2122HX(F)	STD			******	2 2.4412/2.4420	
NOTE: H-Series Per .0005" Thinner For Grooved Upper Ha Wall Does Not Inc	r .0010" M alf And P	e with TriArmo More Oil Cleara Iain Lower Halt	nce (, Maximum					
Main Bearing Set		MS-590V	STD‡					
1-2-4-5 3 NOTE: V-Series Per	formance	MB-2121V MB-2122V(F) e Grooved Upp	er Half And Plain				) 2.4412/2.4420 ) 2.4412/2.4420	
Lower Half	VDC	MO FOOLY	CTD4					
Main Bearing Set 1-2-4-5 3	VP-2	MB-2121VX	STD‡				5 2.4412/2.4420	
NOTE: V-Series Per .0010" More Oil Cl Plain Lower Half				2.2482/2.2490	0.0014/0.0036	0.0955	5 2.4412/2.4420	1.1330

Π	A	Η	L	E

	CO	UNTER DAT	A	SHOP DATA					
BEARING OR	BEARING	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX		NAX LENGTH	
POSITION	MATERIA	LNOMBER	UNDERSIZES	DIAMETER	CLEANANCE	WALL		(cont.)	
	D (3.6L) 1 962-1963	6V V8		3.5	00"/88.9mm	x 2.88		<u>`                                    </u>	
255 CI	D (4.2L) 1 980-1982	6V V8		3.6	80"/93.5mm	x 3.00	0"/76.2mm		
Years: 1	<b>D (4.3L)</b> 1 962-1965			3.8	00"/96.5mm	x 2.88	0"/73.0mm		
Years: 1	963-1969	I6V V8 Hi-Pe	rf.		0"/101.6mm				
	ID (4.7L) 1 963-1968	6V V8		4.00	0"/101.6mm	x 2.88	0"/73.0mm		
Main Bearing		MB-2122HX	STD	2.2482/2.2490	0.0016/0.0038	0.0952	2.4412/2.442	0 1.1330	
•	Performance	e Bearing Wall Contains Flang							
Cam Bearing Set 1 2 3 4 5	B-2	SH-1321S SH-1321 SH-1322 SH-1323 SH-1324 SH-1325	STD	2.0655/2.0665 2.0505/2.0515 2.0355/2.0365	0.0011/0.0049 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049	0.0602 0.0602 0.0602	2.1880/2.190 2.1730/2.175 2.1580/2.160	0 0.6650 0 0.6650 0 0.6650	
NOTE: Performa	nce Bearing	Set							
	C E			30Z, C3AE-F, C3		30Z-B, (	C80E-B, C9ZE	A, E1AE,	
Rod Bearing (8) NOTE: H-Series I FOR VIN(S): V	TM-77	CB-1442H e No Dowel Hol	STD,.026mm,.23mm .25mm,.28mm e In Cap Half	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	6 0.8270	
Rod Bearing (8)	Performanc		STD Maximum Wall Does Hole In	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	6 0.8270	
	Performanc	CB-1442HX e Bearing Wall No Dowel Hole	STD 0005" Thinner For In Cap	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	6 0.8270	
Rod Bearing (8) NOTE: H-Series I .0005" Thinner Maximum Wall No Dowel Hole FOR VIN(S): V	Performanc For .0010" I Does Not In	More Oil Cleara	nce	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	6 0.8270	
Main Bearing Set 1-2-3-4 5 5 NOTE: H-Series I	Performanc		STD,.026mm,.25mm		0.0005/0.0025			0.1151	
Set with Lower Position Number Lower Half FOR VIN(S): V			•						





	COL	JNTER DAT	A		SHOP DATA					
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	NAX LENGTH		
8 CYL (cont.)				•						
7 281 Cl (cont.) Years: 2		OHC 16V V	8	3.5	51"/90.2mm	x 3.54	2"/90.0mm	7 (cont.)		
Main Bearing Set	TM-77	MS-2007HK	STD,.25mm‡							
1-2-3-4 5		MB-3139H MB-3139W		2.6567/2.6577	0.0005/0.0025	0.0962	2.8504/2.851	3 0.7580 0.1151		
5 NOTE: H-Series F Thrust Washer Bearing Positio Plain Lower Ha Coating Thickn FOR VIN(S): V	Performance Set with Lov n Number 5 If, Maximum	wer Half Flang Grooved Upp	er Half And	2.6567/2.6577	0.0005/0.0025	0.0962	2.8504/2.851	3 0.8900		
Main Bearing Set	TM-77	MS-2007HX	STD							
1-2-3-4		MB-3139HX		2.6567/2.6577	0.0015/0.0035	0.0957	2.8504/2.851	3 0.7580		
5		MB-3139W						0.1151		
5		MB-3140HX(F)		2.6567/2.6577	0.0015/0.0035	0.0957	2.8504/2.851	3 0.8900		
.0010" More Oil Washer Set wit Position Numbe Lower Half FOR VIN(S): V	Clearance h Lower Hal	Contains 1 Pie f Flanged Thru	ust Bearing							
Main Bearing Set		MS-2007HXK	STD	0.6507/0.0577	0.0045/0.0005	0.0057	0.0504/0.054	0 7500		
1-2-3-4 5		MB-3139HX MB-3139W		2.6567/2.6577	0.0015/0.0035	0.0957	2.8504/2.851	3 0.7580 0.1151		
5		MB-3139W MB-3140HX(F)		2 6567/2 6577	0.0015/0.0035	0.0957	2 8504/2 851			
NOTE: H-Series F		( )	r Bearing Wall	2.000172.0017	0.0010/0.0000	0.0307	2.0004/2.001	0.0300		
.0005" Thinner Contains 1 Piec Flanged Thrust Upper Half And Not Include Cos FOR VIN(S): V	e Thrust Wa Bearing Pos Plain Lowe	asher Set with sition Number r Half, Maximu	Lower Half 5 Grooved							
	• •	OHC 24V V	8	3.5	51"/90.2mm	x 3.54	2"/90.0mm	8		
281 CI		OHC 24V V	8 Triton	3.5	51"/90.2mm	x 3.54	2"/90.0mm			
281 CI	009-2010 D (4.6L) D 993-2005	онс 32V V	8 InTech	3.5	51"/90.2mm	x 3.54	2"/90.0mm			
281 CI		OHC 32V V	8	3.5	51"/90.2mm	x 3.54	2"/90.0mm			
281 CI		OHC 32V S	C V8	3.5	51"/90.2mm	x 3.54	2"/90.0mm			
Rod Bearing (8)	TM-77	CB-1442H	STD,.026mm,.23mm .25mm,.28mm	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	6 0.8270		
NOTE: H-Series F FOR VIN(S): 8,H,I		e No Dowel Ho								
Rod Bearing (8) NOTE: H-Series F Not Include Cos Cap Half FOR VIN(S): 8,H,I	Performance ating Thickn		STD r Maximum Wall Does I Hole In	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	6 0.8270		
Rod Bearing (8) NOTE: H-Series F .0010" More Oil Half	Performance	•	STD .0005" Thinner For e In Cap	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	6 0.8270		



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BEARING MATERIAL NUMBER           (4.6L) SOHC 24V N 5-2010           (4.6L) SOHC 24V N 9-2010           (4.6L) DOHC 32V N 3-2005           (4.6L) DOHC 32V N 6-2001, 2003-2004           (4.6L) DOHC 32V N 6-2004           TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y           TM-77 MS-2259H MB-3841H	V8 Triton V8 InTech V8 SC V8 C STD or Bearing Wall rance g Thickness,	3.5 3.5 3.5 3.5	VERT OIL CLEARANCE 51"/90.2mm 51"/90.2mm 51"/90.2mm 51"/90.2mm 51"/90.2mm	x 3.54 x 3.54 x 3.54 x 3.54 x 3.54	8 CYL 2"/90.0mm 2"/90.0mm 2"/90.0mm 2"/90.0mm 2"/90.0mm	MAX LENGTH (cont.) 8 (cont.)
5-2010 (4.6L) SOHC 24V V 9-2010 (4.6L) DOHC 32V V 3-2005 (4.6L) DOHC 32V V 6-2001, 2003-2004 (4.6L) DOHC 32V V 6-2004 (4.6L) DOHC 32V V 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	V8 Triton V8 InTech V8 SC V8 C STD or Bearing Wall rance g Thickness,	3.5 3.5 3.5 3.5	51"/90.2mm 51"/90.2mm 51"/90.2mm 51"/90.2mm	x 3.54 x 3.54 x 3.54 x 3.54 x 3.54	2"/90.0mm 2"/90.0mm 2"/90.0mm 2"/90.0mm 2"/90.0mm	8 (cont.)
5-2010 (4.6L) SOHC 24V V 9-2010 (4.6L) DOHC 32V V 3-2005 (4.6L) DOHC 32V V 6-2001, 2003-2004 (4.6L) DOHC 32V V 6-2004 (4.6L) DOHC 32V V 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	V8 Triton V8 InTech V8 SC V8 C STD or Bearing Wall rance g Thickness,	3.5 3.5 3.5 3.5	51"/90.2mm 51"/90.2mm 51"/90.2mm 51"/90.2mm	x 3.54 x 3.54 x 3.54 x 3.54 x 3.54	2"/90.0mm 2"/90.0mm 2"/90.0mm 2"/90.0mm	(cont.)
(4.6L) SOHC 24V ( 9-2010 (4.6L) DOHC 32V ( 3-2005 (4.6L) DOHC 32V ( 6-2001, 2003-2004 (4.6L) DOHC 32V ( 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	V8 InTech V8 SC V8 STD or Bearing Wall rance g Thickness,	3.5 3.5 3.5	51"/90.2mm 51"/90.2mm 51"/90.2mm	x 3.54 x 3.54 x 3.54	2"/90.0mm 2"/90.0mm 2"/90.0mm	
9-2010 (4.6L) DOHC 32V V 3-2005 (4.6L) DOHC 32V V 6-2001, 2003-2004 (4.6L) DOHC 32V S 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	V8 InTech V8 SC V8 STD or Bearing Wall rance g Thickness,	3.5 3.5 3.5	51"/90.2mm 51"/90.2mm 51"/90.2mm	x 3.54 x 3.54 x 3.54	2"/90.0mm 2"/90.0mm 2"/90.0mm	
(4.6L) DOHC 32V ( 3-2005 (4.6L) DOHC 32V ( 6-2001, 2003-2004 (4.6L) DOHC 32V ( 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	V8 SC V8 STD or Bearing Wall rance g Thickness,	3.5	51"/90.2mm 51"/90.2mm	x 3.54 x 3.54	2"/90.0mm 2"/90.0mm	
3-2005 (4.6L) DOHC 32V ( 6-2001, 2003-2004 (4.6L) DOHC 32V ( 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	V8 SC V8 STD or Bearing Wall rance g Thickness,	3.5	51"/90.2mm 51"/90.2mm	x 3.54 x 3.54	2"/90.0mm 2"/90.0mm	
(4.6L) DOHC 32V ( 6-2001, 2003-2004 (4.6L) DOHC 32V ( 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	SC V8 STD or Bearing Wall rance g Thickness,	3.5	51"/90.2mm	x 3.54	2"/90.0mm	
6-2001, 2003-2004 (4.6L) DOHC 32V 3 3-2004 TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clean bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	SC V8 STD or Bearing Wall rance g Thickness,					
TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	STD or Bearing Wall rance g Thickness,					
TM-77 CB-1442HXK formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	or Bearing Wall rance g Thickness,	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	6 0.8270
formance with TriArm r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	or Bearing Wall rance g Thickness,	2.0039/2.080/	0.0021/0.0033	0.0754	2.2300/2.239	0 0.8270
r .0010" More Oil Clear bes Not Include Coatin Cap Half /,Y TM-77 MS-2259H	rance g Thickness,					
Cap Half /,Y TM-77 MS-2259H	• · · · · ·					
TM-77 MS-2259H						
TM-77 MS-2259H		1				
	STD,.026mm,.25mm					
WD-364111		2.6567/2.6577	0.0003/0.0028	0.0962	2.8504/2.851	3 0.7580
MB-3139W MB-3842H(F)		0.0503/0.0533	0.0003/0.0028	0.0000	0.0504/0.054	0.1151
1 Piece Thrust Washer ed Thrust Bearing Posi	Set with tion Number					
TM-77 MS-2259HK	STD, 25mm	0.0507/0.057	0.0000/0.0000	0.0000	0.0504/0.054	0 7500
MB-3139W		2.0507/2.0577	0.0003/0.0028	0.0962	2.0304/2.031	0.1151
MB-3842H(F)		2.6567/2.6577	0.0003/0.0028	0.0962	2.8504/2.851	3 0.8910
gine Contains 1 Piece alf Flanged Thrust Bea 5 Grooved Upper Half	Thrust Washer ring And Plain					
TM-77 MS-2259HX	STD					
		2.6567/2.6577	0.0013/0.0038	0.0957	2.8504/2.851	3 0.7580 0.1151
	)	2.6567/2.6577	0.0013/0.0038	0.0957	2.5804/2.581	
Vall .0005" Thinner For ce Contains 1 Piece Th alf Flanged Thrust Bea 5 Grooved Upper Half /	.0010" rust Washer ring					
	formance Aluminum C Piece Thrust Washer ad Thrust Bearing Posi Half And Plain Lower I (Y TM-77 MS-2259HK MB-3841H MB-3139W MB-3842H(F) formance with TriArm gine Contains 1 Piece of Grooved Upper Half hum Wall Does Not Ind (Y TM-77 MS-2259HX MB-3841HX MB-3139W MB-3841HX MB-3139W MB-3842HX(F) formance Aluminum C (all .0005" Thinner For the Contains 1 Piece Th aff Flanged Thrust Bea	formance Aluminum Cylinder Block, Romeo Piece Thrust Washer Set with ad Thrust Bearing Position Number Half And Plain Lower Half And Plain Lower Half (Y TM-77 MS-2259HK STD,.25mm MB-3841H MB-3139W MB-3842H(F) formance with TriArmor Aluminum Cylinder gine Contains 1 Piece Thrust Washer alf Flanged Thrust Bearing 5 Grooved Upper Half And Plain hum Wall Does Not Include Coating (Y TM-77 MS-2259HX STD MB-3842HX(F) formance Aluminum Cylinder Block, Romeo (all .0005" Thinner For .0010" the Contains 1 Piece Thrust Washer alf Flanged Thrust Bearing 5 Grooved Upper Half And Plain	formance Aluminum Cylinder Block, Romeo Piece Thrust Washer Set with ad Thrust Bearing Position Number Half And Plain Lower Half (Y TM-77 MS-2259HK STD,.25mm MB-3841H MB-3139W MB-3842H(F) formance with TriArmor Aluminum Cylinder gine Contains 1 Piece Thrust Washer If Flanged Thrust Bearing 5 Grooved Upper Half And Plain num Wall Does Not Include Coating (Y TM-77 MS-2259HX STD MB-3842HX(F) formance Aluminum Cylinder Block, Romeo /all .0005" Thinner For .0010" the Contains 1 Piece Thrust Washer alf Flanged Thrust Bearing 5 Grooved Upper Half And Plain	formance Aluminum Cylinder Block, Romeo Piece Thrust Washer Set with ad Thrust Bearing Position Number Half And Plain Lower Half (Y TM-77 MS-2259HK STD,.25mm MB-3841H MB-3139W MB-3842H(F) formance with TriArmor Aluminum Cylinder gine Contains 1 Piece Thrust Washer alf Flanged Thrust Bearing 5 Grooved Upper Half And Plain hum Wall Does Not Include Coating (Y TM-77 MS-2259HX STD MB-3841HX MB-3139W MB-3842HX(F) formance Aluminum Cylinder Block, Romeo Vall .0005" Thinner For .0010" we Contains 1 Piece Thrust Washer alf Flanged Thrust Bearing 5 Grooved Upper Half And Plain	formance Aluminum Cylinder Block, Romeo Piece Thrust Washer Set with dd Thrust Bearing Position Number Half And Plain Lower Half Y TM-77 MS-2259HK STD.25mm MB-3842H(F) formance with TriArmor Aluminum Cylinder gine Contains 1 Piece Thrust Washer Hf Flanged Thrust Bearing 5 Grooved Upper Half And Plain hum Wall Does Not Include Coating YY TM-77 MS-2259HX STD MB-3841HX MB-3139W MB-3842HX(F) formance Aluminum Cylinder Block, Romeo Vall .0005" Thinner For .0010" te Contains 1 Piece Thrust Washer Hf Flanged Thrust Bearing 5 Grooved Upper Half And Plain	formance Aluminum Cylinder Block, Romeo Piece Thrust Washer Set with dd Thrust Bearing Position Number Half And Plain Lower Half /Y TM-77 MS-2259HK STD,.25mm MB-3842H(F) formance with TriArmor Aluminum Cylinder gine Contains 1 Piece Thrust Washer MF-3139W MB-3842H(F) TM-77 MS-2259HX STD MB-3841HX MB-3139W MB-3841HX MB-3139W MB-3842HX(F) formance Aluminum Cylinder Block, Romeo /All .0005" Thinner For .0010" te Contains 1 Piece Thrust Washer aff Flanged Thrust Bearing 5 Grooved Upper Half And Plain MB-3842HX(F) formance Aluminum Cylinder Block, Romeo /all .0005" Thinner For .0010" te Contains 1 Piece Thrust Washer aff Flanged Thrust Bearing 5 Grooved Upper Half And Plain





	COUN	ITER DATA		SHOP DATA					
BEARING OR POSITION	BEARING F		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OI HOUSING BORE	R MAX LENGTH	
8 CYL (cont.)									
8 281 C	ID (4.6L) SO	HC 24V V8		3.5	51"/90.2mm	x 3.54	2"/90.0mm	1 8	
	2005-2010							(cont.)	
	ID (4.6L) SO	HC 24V V8	Triton	3.5	51"/90.2mm	x 3.54	2"/90.0mm	1	
	2009-2010 ID (4.6L) DO		InTech	25	51"/90.2mm	v 2 54	2"/00.0mm		
	993-2005	HC 32V V0	intech	5.5	51 / 50.211111	x 3.34	2 / 90.01111		
	ID (4.6L) DO	HC 32V V8		3.5	51"/90.2mm	x 3.54	2"/90.0mm		
	996-2001, 2003								
	ID (4.6L) DO	HC 32V SC	V8	3.5	51"/90.2mm	x 3.54	2"/90.0mm	h	
Main Bearing Se			STD						
1-2-3-4 5		3-3841HX 3-3139W		2.6567/2.6577	0.0013/0.0038	0.0957	2.8504/2.851	3 0.7580 0.1151	
5		3-313999 3-3842HX(F)		2.6567/2.6577	0.0013/0.0038	0.0957	2.5804/2.581	0.1101	
Thrust Washer Bearing Positio Plain Lower Ha Coating Thickn FOR VIN(S): 8,H,	on Number 5 G Ilf, Maximum W ness R,V,Y	rooved Upper Vall Does Not I	Half And Include						
Crankshaft Forg	•		AD-7D, F1AE-AD-8D, F1A						
	ID (4.6L) SO 1991-2010	HC 16V V8	Romeo	3.5	51"/90.2mm	x 3.54	2"/90.0mm	9	
281 C		HC 16V V8	Triton (Romeo)	3.5	51"/90.2mm	x 3.54	2"/90.0mm	h	
Rod Bearing (8)	TM-77 CE		STD,.026mm,.23mm .25mm,.28mm	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	0.8270	
NOTE: H-Series FOR VIN(S): W,X									
Rod Bearing (8)	TM-77 CE		STD Maximum Wall Does	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	96 0.8270	
Not Include Co Cap Half FOR VIN(S): W,X	ating Thicknes								
Rod Bearing (8)	TM-77 CE Performance B I Clearance No	earing Wall .0	STD 005" Thinner For n Cap	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	96 0.8270	
Rod Bearing (8) NOTE: H-Series .0005" Thinner Maximum Wall No Dowel Hole FOR VIN(S): W,X	Performance w For .0010" Mor Does Not Inclu In Cap Half	re Oil Clearand	ce	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	96 0.8270	



	COL	A	SHOP DATA						
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
							8 CYL	(cont.)	
(cont.) Years: 1	991-2010		8 Romeo 8 Triton (Romeo)		51"/90.2mm 51"/90.2mm			9 (cont.)	
	997-2011		o miton (nomeo)	0.0.	51 750.2mm	× 0.04	2 / 30.011111		
Main Bearing Set 1-2-3-4 5		MS-2007H MB-3139H MB-3139W	STD,.026mm,.25mm	2.6567/2.6577	0.0005/0.0025	0.0962	2.8504/2.8513	0.7580 0.1151	
5		MB-3140H(F)		2.6567/2.6577	0.0005/0.0025	0.0962	2.8504/2.8513		
For Year(s): 1993 NOTE: H-Series F Engine Contain Lower Half Flan 5 Grooved Upp FOR VIN(S): W,X	Performance s 1 Piece Th ged Thrust	rust Washer S Bearing Posit	ion Number						
Main Bearing Set 1-2-3-4 5		MS-2007HK MB-3139H MB-3139W	STD,.25mm‡	2.6567/2.6577	0.0005/0.0025	0.0962	2.8504/2.8513	3 0.7580 0.1151	
5		MB-3140H(F)		2.6567/2.6577	0.0005/0.0025	0.0962	2.8504/2.8513		
Set with Lower Position Numbe Lower Half, Ma Thickness FOR VIN(S): W,X	er 5 Grooved	d Upper Half A	nd Plain						
Main Bearing Set 1-2-3-4 5		MS-2007HX MB-3139HX MB-3139W	STD	2.6567/2.6577	0.0015/0.0035	0.0957	2.8504/2.8513		
5		MB-3139W MB-3140HX(F)		2.6567/2.6577	0.0015/0.0035	0.0957	2 8504/2 8513	0.1151	
For Year(s): 1993 NOTE: H-Series F Engine, Bearing More Oil Cleara Set with Lower Position Numbe Lower Half FOR VIN(S): W,X	-2011 Performance Wall .0005 Ince Contain Half Flange	e Cast Iron Cy ' Thinner For . ns 1 Piece Thr d Thrust Bear	ust Washer ing						
Main Bearing Set		MS-2007HXK MB-3139HX	STD	2.6567/2.6577	0.0015/0.0035	0.0957	2.8504/2.8513		
5		MB-3139W MB-3140HX(F)		2.6567/2.6577	0.0015/0.0035	0.0957	2.8504/2.8513	0.1151	
For Year(s): 1993	-2011 Performance Engine, Bear e Oil Clearar Set with Lov n Number 5 If, Maximum	e with TriArmo ring Wall .000 nce Contains wer Half Flang Grooved Upp	l Piece ed Thrust er Half And						

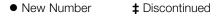


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COUNTER DATA				SHOP DATA					
BEARING OR POSITION	BEARING MATERIAI	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
8 CYL (cont.)									
(cont.) Years: 1	991-2010	ОНС 16V V	/8 Romeo /8 Triton (Romeo)		51"/90.2mm 51"/90.2mm			9 (cont.)	
	997-2011		,	0.00			_ / 001011111		
Main Bearing Set 1-2-3-4 5 5		MS-2259H MB-3841H MB-3139W MB-3842H(F)	STD,.026mm,.25mm		0.0003/0.0028			0.1151	
For Year(s): 1993	-2011 Performance s 1 Piece Tl ged Thrust	e Aluminum C hrust Washer Bearing Posit	tion Number	2.000172.0017	0.000070.0020	0.0002	2.000472.0010	0.0010	
Main Bearing Set 1-2-3-4 5 For Year(s): 1993 NOTE: H-Series F Block, Romeo E Set with Lower Position Numbe Lower Half, Mai Thickness FOR VIN(S): W	-2011 Performance Engine Cont Half Flange er 5 Groove	ains 1 Piece 1 d Thrust Bear d Upper Half A	ring And Plain		0.0003/0.0028			0.1151	
Main Bearing Set 1-2-3-4 5 5 For Year(s): 1993	-2011 Performance Wall .0005 Ince Contai Half Flange	" Thinner For ns 1 Piece Thr d Thrust Bear	ylinder Block, Romeo .0010" rust Washer ring		0.0013/0.0038			0.1151	
Main Bearing Set 1-2-3-4 5 5 For Year(s): 1993	-2011 Performance Engine, Bea Oil Cleara Set with Lo n Number 5 If, Maximun	ring Wall .000 nce Contains wer Half Flang Grooved Upp	or Aluminum Cylinder 5" Thinner 1 Piece ged Thrust per Half And		0.0013/0.0038			0.1151	



	CO	UNTER DATA	N Contraction of the second se		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BORE	MAX LENGTH
			-					(cont.)
(cont.) Years: 1	1991-2010	SOHC 16V V8	Romeo Triton (Romeo)		51"/90.2mm 51"/90.2mm			9 (cont.)
	1997-2011		intoin (noineo)	0.0	51 750.2mm	× 0.04	2 / 30.011111	
Main Bearing Se 1 2-3-4-5 5	t TM-77	MS-2202H MB-3752H MB-3139H MB-3139W	STD,.026mm,.25mm		0.0003/0.0032 0.0005/0.0025			
Shell Bearings	Performanc And 3 Piece	e Windsor Engin Thrust Washer d Upper Half An						
Main Bearing Se 1 2-3-4-5 5	t TM-77	MS-2202HX MB-3752HX MB-3139HX MB-3139W	STD		0.0013/0.0042			
Contains Straig	For .0010" M ght Shell Be Set Position	More Oil Clearan arings And 3 Pie n Number 5 Groo	ce					
Connecting Rod Crankshaft Forg			, RFF1AE6306-AD					
		SOHC 16V V8	Triton (Windsor)	3.5	51"/90.2mm	x 3.54	2"/90.0mm	10
330 C	1997-2008 ID (5.4L) \$ 1997-2011	SOHC 16V V8	Triton (Windsor)	3.55	1"/90.2mm x	4.161	"/105.7mm	
330 C		SOHC 16V SC	V8 Triton (Windsor	) 3.55	1"/90.2mm x	4.161	"/105.7mm	
330 C		SOHC 24V V8	Triton (Windsor)	3.55	1"/90.2mm x	4.161	"/105.7mm	
330 C		DOHC 32V V8	InTech	3.55	1"/90.2mm x	4.161	"/105.7mm	
	ID (5.4L) [	DOHC 32V V8	Windsor	3.55	1"/90.2mm x	4.161	"/105.7mm	
Rod Bearing (8)	TM-77	CB-1442H	STD,.026mm,.23mm .25mm,.28mm	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.2396	6.8270
NOTE: H-Series FOR VIN(S): 5,L,			e In Cap Half					
	Performance il Clearance	No Dowel Hole	STD 0005" Thinner For In Cap	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.2396	6.8270
Rod Bearing (8) NOTE: H-Series .0005" Thinner	TM-77 Performance For .0010" M Does Not Ir In Cap Half	CB-1442HXK e with TriArmor More Oil Clearan Include Coating T	ce	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.2396	0.8270





	COL	A	SHOP DATA					
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.)								
(cont.) Years: 1	997-2008		3 Triton (Windsor)		51"/90.2mm			10 (cont.)
Years: 1	997-2011		3 Triton (Windsor)		1"/90.2mm x			
Years: 1	999-2004		C V8 Triton (Windsor		1"/90.2mm x			
Years: 2	004-2012		3 Triton (Windsor)		1"/90.2mm x			
	ID (5.4L) D 999-2004	OHC 32V V8	3 InTech	3.55	1"/90.2mm x	4.161	"/105.7mm	
330 Cl Years: 2		OHC 32V V8	8 Windsor	3.55	1"/90.2mm x	4.161	"/105.7mm	
Rod Bearing (8) For Year(s): 1997		CB-1442HK	STD	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.2396	6 0.8270
NOTE: H-Series I Not Include Co Cap Half	Performance ating Thickn	ess, No Dowel	Maximum Wall Does Hole In					
FOR VIN(S): 5,L,V		r						
Main Bearing Set 1 2-3-4-5 5	1	<b>MS-2202H</b> MB-3752H MB-3139H MB-3139W	STD,.026mm,.25mm		0.0003/0.0032 0.0005/0.0025			
NOTE: H-Series I Shell Bearings Position Numb Lower Half FOR VIN(S): 5,L,N	Performance And 3 Piece er 5 Grooved	Windsor Engi Thrust Washer Upper Half Ar						0.1101
Main Bearing Set		MS-2202HX	STD					
1 2-3-4-5 5	1	MB-3752HX MB-3139HX MB-3139W			0.0013/0.0042 0.0015/0.0035			
NOTE: H-Series I .0005" Thinner Contains Straig Thrust Washer Half And Plain I FOR VIN(S): 5,L,1	Performance For .0010" M ght Shell Bea Set Position Lower Half	Windsor Engi lore Oil Cleara rings And 3 Pi Number 5 Gro	nce ece					0.1101
Connecting Rod								
	•	6V V8 Boss/	E, RFF1AE6306-AD Eliminator	4.00	0"/101.6mm	x 3.00	0"/76.2mm	11
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I Lower Half	t TM-77	MS-590H MB-2121H MB-2122H(F) Grooved Upp	STD,1,10 er Half And Plain		0.0006/0.0028			
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I .0010" More Oil Plain Lower Ha	Performance		STD .0005" Thinner For r Half And		0.0016/0.0038 0.0016/0.0038			



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	COL	JNTER DAT	A		SHOP DATA				
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
							8 CYL	(cont.)	
(cont.) Years: 19	969-1971	6V V8 Boss/	Eliminator	4.000	)"/101.6mm	x 3.00	0"/76.2mm	11 (cont.)	
Main Bearing Set 1-2-4-5 3 NOTE: V-Series P		MS-590V MB-2121V MB-2122V(F) Grooved Uppe	STD‡ er Half And Plain		0.0004/0.0026 0.0004/0.0026				
Lower Half Main Bearing Set		MS-590VX	STD‡			0.0055			
1-2-4-5 3		MB-2121VX MB-2122VX(F)			0.0014/0.0036 0.0014/0.0036				
NOTE: V-Series P .0010" More Oil Plain Lower Hat	Clearance		0005" Thinner For Half And						
Main Bearing NOTE: H-Series P .0010" More Oil Only, Grooved U	erformance Clearance	Contains Flang		2.2482/2.2490	0.0016/0.0038	0.0952	2.4412/2.4420	1.1330	
Cam Bearing Set 1 2 3 4 5		SH-1321S SH-1321 SH-1322 SH-1323 SH-1324 SH-1325	STD	2.0655/2.0665 2.0505/2.0515 2.0355/2.0365	0.0011/0.0049 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049	0.0602 0.0602 0.0602	2.1880/2.1900 2.1730/2.1750 2.1580/2.1600	0.6650 0.6650 0.6650	
NOTE: Performan	ce Bearing	Set							
Cam Bearing Set 1 2 3 4 5 NOTE: Performan 2.204" Housing	ce, 302 SV0		STD Cylinder Block With als	2.0855/2.0865 2.0505/2.0515 2.0355/2.0365	0.0011/0.0053 0.0011/0.0049 0.0011/0.0049 0.0011/0.0048 0.0011/0.0049	0.0679 0.0752 0.0827	2.2030/2.2050 2.2030/2.2050 2.2030/2.2050	0.6650 0.6650 0.6650	
12 302 CI	D (5.0L) 1	6V V8 HO		4.000	)"/101.6mm	x 3.00	0"/76.2mm	12	
	982, 1984-19 <b>D (5.0L) 1</b> 968-2001			4.000	)"/101.6mm	x 3.00	0"/76.2mm		
Rod Bearing (8) NOTE: H-Series P Increased Crant Cap Half	erformance			2.1228/2.1236	0.0006/0.0028	0.0575	2.2390/2.2398	0.6810	
Rod Bearing (8) NOTE: H-Series P Used In Engines Narrowed On Or Clearance	erformance Without D	oweled Connec	•	2.1228/2.1236	0.0006/0.0028	0.0575	2.2390/2.2398	0.6810	
Rod Bearing (8) NOTE: H-Series P Not Include Coa Side For Increas Hole In Cap Halt	erformance iting Thickn sed Crank F	ess, Narrowed		2.1228/2.1236	0.0006/0.0028	0.0575	2.2390/2.2398	0.6810	
Rod Bearing (8) NOTE: H-Series P .0010" More Oil Increased Crant Cap Half	erformance Clearance	Narrowed On C		2.1228/2.1236	0.0016/0.0038	0.0570	2.2390/2.2398	0.6810	



	co	Α		SHOP	DATA	۱		
BEARING OR POSITION		PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.) 12 302 C		16V V8 HO		4.00	0"/101.6mm	~ 2 00	01/76 0mm	12
(cont.) Years: 1				4.00	0°/101.0mm	x 3.00	0°/70.2mm	(cont.)
	ID (5.0L) 1 968-2001	16V V8		4.00	0"/101.6mm	x 3.00	0"/76.2mm	
Maximum Wall	Performanc For .0010" I Does Not I One Side Fo	More Oil Cleara nclude Coating r Increased Cra	nce Thickness,	2.1228/2.1236	0.0016/0.0038	0.0570	2.2390/2.2398	3 0.6810
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I Lower Half		MS-590H MB-2121H MB-2122H(F) e Grooved Upp	STD,1,10 er Half And Plain		0.0006/0.0028			
	Performanc er Half, Max	imum Wall Doe	STD,10 r Grooved Upper Half s Not		0.0006/0.0028			
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I	t TM-77 Performanc	MS-590HX MB-2121HX MB-2122HX(F)	STD .0005" Thinner For r Half And		0.0016/0.0038			
	Performanc For .0010" I r Half And P	More Oil Cleara Plain Lower Half	nce , Maximum		0.0016/0.0038 0.0016/0.0038			
Main Bearing Set 1-2-4-5 3 NOTE: V-Series F Lower Half	t VP-2	MS-590V MB-2121V MB-2122V(F)	STD‡		0.0004/0.0026			
	Performance	MS-590VX MB-2121VX MB-2122VX(F) e Bearing Wall Grooved Upper	STD‡ 0005" Thinner For r Half And		0.0014/0.0036			
.0010" More Oi	Performance	MB-2122HX e Bearing Wall Contains Flang And Plain Lowe		2.2482/2.2490	0.0016/0.0038	0.0952	2.4412/2.4420	) 1.1330
Cam Bearing Set 1 2 3 4 5 NOTE: Performat		SH-1321S SH-1321 SH-1322 SH-1323 SH-1324 SH-1325 Set	STD	2.0655/2.0665 2.0505/2.0515 2.0355/2.0365	0.0011/0.0049 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049 0.0011/0.0049	0.0602 0.0602 0.0602	2.1880/2.1900 2.1730/2.1750 2.1580/2.1600	0.6650 0.6650 0.6650



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	COUNTER DAT	A		SHOP	DAT	4	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		R MAX LENGTH
						8 CY	(cont.)
(cont.) Years: 1 302 C	ID (5.0L) 16V V8 HO 982, 1984-1995 ID (5.0L) 16V V8 968-2001			0"/101.6mm 0"/101.6mm			(cont.)
Cam Bearing Set 1 2 3 4 5 NOTE: Performa			2.0855/2.0865 2.0505/2.0515 2.0355/2.0365	0.0011/0.0053 0.0011/0.0049 0.0011/0.0049 0.0011/0.0048 0.0011/0.0048	0.0679 0.0752 0.0827	2.2030/2.20 2.2030/2.20 2.2030/2.20	50 0.6650 50 0.6650 50 0.6650
Connecting Rod Crankshaft Forg		-A, 2J, 2M, 2MA, 2MAB, 20Z, C2OZ-B, C30E-B, 0	2MAC, 2MAD, 21				
Years: 2 302 C	ID (5.0L) DOHC 32V V 2011-2012 ID (5.0L) DOHC 32V V	•		30"/92.2mm 30"/92.2mm			
Years: 2 Rod Bearing (8)	2011-2013 TM-77 CB-1442H	STD,.026mm,.23mm .25mm,.28mm	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.23	96 0.8270
NOTE: H-Series	Performance No Dowel Ho	le In Cap Half					
	TM-77 CB-1442HX Performance Bearing Wall I Clearance No Dowel Hole		2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.23	96 0.8270
.0005" Thinner	TM-77 CB-1442HXK Performance with TriArmo For .0010" More Oil Cleara Does Not Include Coating In Cap Half	ance	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.23	96 0.8270
	TM-77 CB-1442HK -2012 Performance with TriArmo ating Thickness, No Dowe		2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.23	96 0.8270
Main Bearing Se 1-2-3-4 5 5	t TM-77 <b>MS-2292H</b> MB-3931H MB-3932H(F) MB-3932W	STD,.25mm,.026mm		0.0003/0.0028 0.0003/0.0028			
Set with Lower	Performance Contains 1 P Half Flanged Thrust Beari er 5 Grooved Upper Half A	ng					
Main Bearing Se 1-2-3-4 5 5	MB-3931HX MB-3932HX(F) MB-3932W	STD		0.0013/0.0038 0.0013/0.0038			
.0010" More Oi Washer Set wit	Performance Bearing Wall I Clearance Contains 1 Pie Ih Lower Half Flanged Thru er 5 Grooved Upper Half A	ce Thrust ust Bearing					



	COL	UNTER DAT	A		SHOP DATA				
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OR HOUSING BORE	MAX LENGTH	
8 CYL									
	D (5.0L) D	OHC 32V V	8 Coyote 99U	3.63	30"/92.2mm	x 3.65	0"/92.7mm	14	
Rod Bearing (8)	TM-77	CB-1442H	STD,.026mm,.23mm .25mm,.28mm	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	6 0.8270	
NOTE: H-Series	Performance	e No Dowel Ho	le In Cap Half						
Rod Bearing (8) NOTE: H-Series I .0010" More Oil Half	Performance		STD .0005" Thinner For In Cap	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	6 0.8270	
Rod Bearing (8) NOTE: H-Series I .0005" Thinner Maximum Wall No Dowel Hole	Performance For .0010" N Does Not In	Nore Oil Cleara	nce	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	6 0.8270	
Set with Lower Position Number	Performance Half Flange	d Thrust Bearing	-		0.0003/0.0028 0.0003/0.0028				
Lower Half Main Bearing Set 1-2-3-4 5 5		MS-2292HX MB-3931HX MB-3932HX(F) MB-3932W	STD		0.0013/0.0038 0.0013/0.0038				
NOTE: H-Series I .0010" More Oil Washer Set wit Position Numb Lower Half	l Clearance h Lower Hal	Contains 1 Pie If Flanged Thru	st Bearing						
	D (5.4L) D	OHC 32V S	C V8 Windsor	3.55	1"/90.2mm x	4.161	"/105.7mm	15	
Rod Bearing (8) NOTE: H-Series I FOR VIN(S): S		CB-1442H e No Dowel Ho	STD,.026mm,.23mm .25mm,.28mm le In Cap Half	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	6 0.8270	
Rod Bearing (8)	Performance		STD r Maximum Wall Does I Hole In	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.239	6 0.8270	
Rod Bearing (8)	Performance		STD .0005" Thinner For In Cap	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	3 0.8270	
Rod Bearing (8) NOTE: H-Series I .0005" Thinner Maximum Wall No Dowel Hole FOR VIN(S): S	Performance For .0010" N Does Not In	Nore Oil Cleara	nce	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.239	6 0.8270	



	COL	JNTER DAT	A	SHOP DATA				
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BORE L	MAX ENGTH
							8 CYL (	
(cont.) Years: 20		OHC 32V S	C V8 Windsor	3.551	I"/90.2mm x	4.161	"/105.7mm	15 (cont.)
Main Bearing Set		MS-2295H	STD026mm	1				(cont.)
1 2-3-4-5 5		MB-3939H MB-3139H MB-3139W			0.0003/0.0032 0.0005/0.0025			
For Year(s): 2007-2 NOTE: H Series Pe Grooved Upper I FOR VIN(S): S	erformance							
Main Bearing Set	TM-77	MS-2295HX	STD					
1 2-3-4-5 5	i	MB-3939HX MB-3139HX MB-3139W			0.0013/0.0042 0.0015/0.0035			
For Year(s): 2007-3 NOTE: H Series Pe .0010" More Oil 0 Block, Grooved FOR VIN(S): S	erformance Clearance (	Cast Iron Cylin	der					
Main Bearing Set 1-2-3-4-5 5		MS-2293H MB-3139H MB-3139W	STD,.026mm,.25mm	2.6567/2.6577	0.0005/0.0025	0.0962	2.8504/2.8513	0.7580 0.1151
For Year(s): 2005-: NOTE: H Series Pe Upper Half And I FOR VIN(S): S	erformance		inder Block, Grooved					
Main Bearing Set 1-2-3-4-5 5	1	MS-2293HX MB-3139HX MB-3139W	STD	2.6567/2.6577	0.0015/0.0035	0.0957	2.8504/2.8513	0.7580 0.1151
For Year(s): 2005-3 NOTE: H Series Pe .0010" More Oil 0 Grooved Upper I FOR VIN(S): S	erformance Clearance	Aluminum Cylir	nder Block,					
	) (5.8L) 1	6V V8 Cleve	land	4.000	)"/101.6mm	x 3.50	0"/88.8mm	16
Years: 19 351 CIE Years: 19	) (5.8L) 1	6V V8 Cleve	land Boss	4.000	)"/101.6mm	x 3.50	0"/88.8mm	
	) (5.8L) 1	6V V8 Cleve	land Cobra Jet	4.000	)"/101.6mm	x 3.50	0"/88.8mm	
Rod Bearing (8) NOTE: H-Series Pe Increased Crank Cap Half	erformance			2.3103/2.3111	0.0001/0.0023	0.0624	2.4361/2.4369	0.6760
Main Bearing Set 1-2-4-5 3		<b>MS-1010H</b> MB-2560H MB-2561H(F)	STD,1‡,10		0.0003/0.0025			
NOTE: H-Series Pe Lower Half	erformance	Grooved Upp	er Half And Plain					
Main Bearing Set 1-2-4-5	1	MS-1010HK MB-2560H	STD		0.0003/0.0025			
3 NOTE: H-Series Po And Plain Lower Include Coating	erformance Half, Maxi		Grooved Upper Half s Not	2.7484/2.7492	0.0003/0.0025	0.0962	2.9417/2.9425	1.1180



	CO	UNTER DAT	A		SHOP	DATA	1	
BEARING OR POSITION		i Part L Number	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
8 CYL (cont.)								
(cont.) Years: 1	969-1974	16V V8 Cleve			0"/101.6mm			(cont.)
	971-1972	16V V8 Cleve	land Boss	4.000	0"/101.6mm	x 3.50	0"/88.8mm	
351 C		16V V8 Cleve	land Cobra Jet	4.00	0"/101.6mm	x 3.50	0"/88.8mm	
Main Bearing Set 1-2-4-5 3		MS-1010HX MB-2560HX MB-2561HX(F)	STD		0.0013/0.0035			
NOTE: H-Series I	Clearance		.0005" Thinner For r Half And	2.1404/2.1402	0.001070.0000	0.0507	2.0411/2.042	5 1.1100
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I		MS-1010HXK MB-2560HX MB-2561HX(F) ce with TriArmor	STD		0.0013/0.0035 0.0013/0.0035			
.0005" Thinner Grooved Upper	For .0010"   Half And F	More Oil Cleara Plain Lower Half ating Thickness	nce , Maximum					
Cam Bearing Set	B-1	SH-710S SH-710 SH-511 SH-512 SH-513	STD	2.0655/2.0665 2.0505/2.0515 2.0355/2.0365	0.0005/0.0045 0.0010/0.0050 0.0010/0.0050 0.0010/0.0050	0.0608 0.0608 0.0608	2.1890/2.190 2.1740/2.175 2.1590/2.160	0 0.6700 0 0.6700 0 0.6700
5		SH-514	" <b>I</b>		0.0010/0.0050			
Years: 1 400 C	975-1982 I <b>D (6.6L)</b> <sup>-</sup>	16V V8 Modif 16V V8	lied		0"/101.6mm '/101.6mm x			
	971-1982			1				
Rod Bearing (8) NOTE: H-Series I Increased Cran Cap Half	Performanc	CB-927HN ce Narrowed On arance No Down		2.3103/2.3111	0.0001/0.0023	0.0624	2.4361/2.436	9 0.6760
Main Bearing Set 1-2-4-5 3 For Year(a): 1977		<b>MS-1432H</b> MB-2754H MB-2558H(F)	STD,10		0.0005/0.0029			
For Year(s): 1977 NOTE: H-Series I Lower Half		e Grooved Upp	er Half And Plain					
Main Bearing Set 1-2-4-5 3 For Year(s): 1977		<b>MS-1432HK</b> MB-2754H MB-2558H(F)	STD,10		0.0005/0.0029 0.0005/0.0029			
NOTE: H-Series I	Performanc er Half, Max g Thickness	kimum Wall Doe	<sup>r</sup> Grooved Upper Half s Not					
Main Bearing Set 1-2-4-5 3		MS-1432HX MB-2754HX MB-2558HX(F)	STD		0.0015/0.0039			
	Performance I Clearance	e Bearing Wall	.0005" Thinner For r Half And					



	CO	UNTER DAT	A	SHOP DATA				
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
							8 CYL	(cont.)
	ID (5.8L) 1 975-1982	16V V8 Modif	fied	4.000	0"/101.6mm	x 3.50	0"/88.8mm	17 (cont.)
400 C	ID (6.6L) 1	16V V8		4.000	'/101.6mm x	4.000	"/101.6mm	È É
	971-1982							
Main Bearing Set 1-2-4-5	t TM-77	MS-1432HXK MB-2754HX	STD	0.0004/2.0000	0.0015/0.0039	0.0055	2 1000/2 102	0 0 0 400
3		MB-2558HX(F)			0.0015/0.0039			
	Performanc For .0010" I Half And P Include Coa	e with TriArmon More Oil Cleara Plain Lower Half	nce , Maximum					
Main Bearing Set	t TM-77	MS-981H	STD,10					
1-2-4-5		MB-2557H			0.0005/0.0029			
3		MB-2558H(F)		2.9994/3.0002	0.0005/0.0029	0.0960	3.1922/3.193	0 1.1330
For Year(s): 1971 NOTE: H-Series		e Contains Full	Grooved Bearings					
Cam Bearing Set		SH-710S	STD					
1		SH-710	0.0	2.1240/2.1250	0.0005/0.0045	0.0619	2.2495/2.250	5 0.6700
2		SH-511			0.0010/0.0050			
3		SH-512			0.0010/0.0050			
4		SH-513			0.0010/0.0050			
5		SH-514		2.0205/2.0215	0.0010/0.0050	0.0608	2.1440/2.145	0 0.6700
Connecting Rod Crankshaft Forg			, 5MAB, 5MABC, 8M, D7A	. D7AE-A. SM				
	-	16V V8 Winds			0"/101.6mm	x 3.50	0"/88.8mm	18
Years: 1	969-1998	16V V8 Winds		4.00	0"/101.6mm	x 3.50	0"/88.8mm	
Years: 1	993-1995							
Rod Bearing (8) NOTE: H-Series I Increased Cran Cap Half	Performanc	CB-831HN e Narrowed On arance No Dow		2.3103/2.3111	0.0002/0.0024	0.0576	2.4265/2.427	3 0.6760
Not Include Co	Performanc ating Thick sed Crank			2.3103/2.3111	0.0002/0.0024	0.0576	2.4265/2.427	3 0.6760
.0010" More Oi	Performanc I Clearance	CB-831HXN e Bearing Wall Narrowed On C arance No Dow		2.3103/2.3111	0.0012/0.0034	0.0571	2.4265/2.427	3 0.6760
Maximum Wall	Performanc For .0010" I Does Not In One Side Fo	More Oil Cleara nclude Coating r Increased Cra	nce Thickness,	2.3103/2.3111	0.0012/0.0034	0.0571	2.4265/2.427	3 0.6760
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I Lower Half		MS-1432H MB-2754H MB-2558H(F) e Grooved Upp	STD,10 er Half And Plain		0.0005/0.0029 0.0005/0.0029			



	COUNTER	DATA		SHOP DATA					
BEARING OR POSITION	BEARING PART MATERIAL NUMBE	AVAILABLE R UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH		
8 CYL (cont.)									
	D (5.8L) 16V V8 W	lindsor	4.000	0"/101.6mm	x 3.50	0"/88.8mm	18		
	969-1998 D (5.8L) 16V V8 W	indsor HO	4.00	0"/101.6mm	x 3.50	0"/88.8mm	(cont.)		
	993-1995								
Main Bearing Set 1-2-4-5	TM-77 MS-1432H MB-2754H		2 0004/2 0002	0.0005/0.0029	0.0060	2 1022/2 1030	0.8400		
3	MB-2558H			0.0005/0.0029					
	er Half, Maximum Wal	rmor Grooved Upper Half Does Not							
Main Bearing Set	TM-77 MS-1432H	X STD							
1-2-4-5	MB-2754H			0.0015/0.0039					
	Clearance Grooved L	Wall .0005" Thinner For	2.9994/3.0002	0.0015/0.0039	0.0955	3.1922/3.1930	0 1.1330		
Main Bearing Set									
1-2-4-5	MB-2754H			0.0015/0.0039					
3 NOTE: H-Series I	MB-2558F Performance with TriA		2.9994/3.0002	0.0015/0.0039	0.0955	3.1922/3.1930	1.1330		
Grooved Upper	For .0010" More Oil C Half And Plain Lower Include Coating Thick	Half, Maximum							
Main Bearing Set 1-2-3-4-5 NOTE: 351 Clevel	MB-3830H		2.7484/2.7492	0.0001/0.0015	0.0962	2.9417/2.942	5 0.8450		
Requires Main H-Series Perfor	Bearing Spacer Set, N rmance Grooved Uppe with Part Number MS	lot Included, er Half And Plain							
Main Bearing Set 1-2-3-4-5			0 7494/0 7400	0.0011/0.0025	0.0057	0.0417/0.0400	0.9460		
		Nindsor Cylinder Block,	2.1404/2.1492	0.0011/0.0025	0.0957	2.9417/2.9423	0.6450		
Requires Main H-Series Perfor For .0010" More And Plain Lowe	Bearing Spacer Set, N rmance Bearing Wall . e Oil Clearance Groov er Half Use with Part N , MS-2255-SEMI	lot Included, 0005" Thinner ed Upper Half							
Main Bearing Set	TM-77 MS-981H	STD,10							
1-2-4-5	MB-2557H			0.0005/0.0029					
3 NOTE: H-Series F	MB-2558F Performance Contains	I(F) Full Grooved Bearings	2.9994/3.0002	0.0005/0.0029	0.0960	3.1922/3.1930	1.1330		
Main Bearing	MS-2254-	<u> </u>							
Spacer Set	WIG-2204-								
1-2-4-5	MB-38310					3.1922/3.1930			
3 NOTE: Use With 1	MB-38330				0.1375	3.1922/3.1930	1.1330		
M6303-E351 In Special Perform Contains Semi-	351 Cleveland SVO Sp A Windsor Cylinder B nance Main Bearing S Finished Spacer Set ( S-2256H, MS-2256HX	lock, Requires et Not Included, Dnly Use with							

	COL	JNTER DAT	A	SHOP DATA				
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
							8 CYL	(cont.)
(cont.) Years: 1	1969-1998	6V V8 Wind 6V V8 Wind			0"/101.6mm 0"/101.6mm			(cont.)
	1993-1995		301 110	4.000	o /101.011111	× 0.00	0 /00.01111	
Main Bearing		MS-2255-SEM	II STD					
Spacer Set								
1-2-4-5		MB-3831C					3.1922/3.1930	
3		MB-3832C(F)				0.1375	3.1922/3.1930	0 1.1180
NOTE: Use With Windsor Cylind Performance M Contains Semi Part Number M	der Block, Re Main Bearing -Finished Sp	equires Specia Set Not Inclue acer Set Only	ıl ded,					
Cam Bearing Se	t B-2	SH-1321S	STD					
		SH-1321		2.0805/2.0815	0.0011/0.0049	0.0602	2.2030/2.2050	0.665
2		SH-1322			0.0011/0.0049			
3	:	SH-1323		2.0505/2.0515	0.0011/0.0049	0.0602	2.1730/2.1750	0.665
4		SH-1324			0.0011/0.0049			
5		SH-1325		2.0205/2.0215	0.0011/0.0049	0.0602	2.1430/2.1450	0.665
NOTE: Performa	nce Bearing	Set						
Cam Bearing Se	t B-2	SH-2147S	STD					
		SH-2147			0.0011/0.0053			
2		SH-2148			0.0011/0.0049			
3		SH-2149			0.0011/0.0049			
4 5		SH-2150			0.0011/0.0048			
		SH-2151	e Cylinder Block With	2.0205/2.0215	0.0011/0.0049	0.0902	2.2030/2.2050	0.0000
2.204" Housing								
Connecting Rod								
Crankshaft Forg			I, 7MA, C9OE-A, E4AE-BA					
19 370 C	ID (6.1L) 1	6V V8		4.05	0"/102.9mm	x 3.59	0"/91.2mm	19
	1980-1991							
429 C	ID (7.0L) 1	6V V8 Boss	1	4.36	0"/110.7mm	x 3.59	0"/91.2mm	
	1969-1970							
Years: 1	1970-1971		a Jet/Super CJ		0"/110.7mm			
Years: 1	1971-1972	6V V8 Polic			0"/110.7mm			
Years: 1	1980-1998	6V V8 Thun	der Jet		0"/110.7mm			
Years: 1	ID (7.0L) 1 1968-1973				0"/110.7mm			
Years: 1	ID (7.5L) 1 1973-1978				0"/110.7mm			
Years: 1	ID (7.5L) 1 1968-1998				0"/110.7mm 0"/110.7mm			
	1D (7.5L) 1 1973-1974	6V V8 Polic	e	4.30	0 / 110./mm	× 3.65	0 /9/.omm	
Rod Bearing (8) NOTE: H-Series Increased Crai Cap Half	TM-77 Performance			2.4992/2.5000	0.0001/0.0023	0.0760	2.6522/2.6530	0.8110



	C	OUNTER DAT	A	SHOP DATA				
POSITION		G PART AL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. O HOUSING BORE	R MAX LENGTH
8 CYL (cont.) 19 370 CIE	) (6.1L)	16V V8		4.05	0"/102.9mm	x 3.59	0"/91.2mm	n 19
(cont.) Years: 194 429 CID	80-1991 ) (7.0L)	16V V8 Boss			0"/110.7mm			(cont.)
Years: 19 429 CID Years: 19	) (7.0L)	16V V8 Cobra	a Jet/Super CJ	4.36	0"/110.7mm	x 3.59	0"/91.2mm	n
	(7.0L)	16V V8 Police	e	4.36	0"/110.7mm	x 3.59	0"/91.2mm	n
429 CID (7.0L) 16V V8 Thunder Jet Years: 1980-1998 429 CID (7.0L) 16V V8					0"/110.7mm			
429 CID Years: 19	• •	16V V8		4.36	0"/110.7mm	x 3.59	0"/91.2mm	n
	) (7.5L)	16V V8 HO		4.36	0"/110.7mm	x 3.85	0"/97.8mm	n
460 CIE Years: 19		16V V8		4.36	0"/110.7mm	x 3.85	0"/97.8mm	n
460 CID	) (7.5L)	16V V8 Polic	е	4.36	0"/110.7mm	x 3.85	0"/97.8mm	n
Years: 19 Main Bearing Set		7 MS-1039H	STD.10	1				
1-2-4-5 3		MB-2564H MB-2565H	0.0,.0		2 0.0004/0.0028 2 0.0004/0.0028			
NOTE: H Series Pe	erforman	ce						
Main Bearing Set 1-2-4-5 3		7 MS-1039HX MB2564HX MB2565HX	STD		2 0.0014/0.0038 2 0.0014/0.0038			
NOTE: H Series Pe .0010" More Oil (			.0005" Thinner For					
Main Bearing Set 1-2-4-5 3		MB-2564V MB-2565V(F)	STD,10		2 0.0004/0.0028 2 0.0004/0.0028			
NOTE: V-Series Pe Upper Half And F			Design Grooved					
Cam Bearing Set 1-2-3-4-5	B-1	SH-1111S SH-1111	STD	2.1238/2.1248	3 0.0011/0.0043	0.0618	3 2.2495/2.25	05 0.5850
Cam Bearing Set 1-2-3-4-5 NOTE: Oversize Al	-	SH-1766S SH-1766 d Blocks with He	STD Dusing Bore Size	2.1238/2.1248	3 0.0011/0.0050	0.0694	2.2645/2.26	55 0.6300
2.2645" / 2.2655" Connecting Rod F Crankshaft Forgin	orging g	1V, 1VA, 1VAB, 1	00E-A, D6VE, D9TE YAB, 2NABC, 2Y, 2Y68-70 4UAB, 4UB, C8SE-A, C8	-,,, -			.,,	, ,
10 CYL								
Years: 19	97-2012	SOHC 20V V			1"/90.2mm x			
Years: 20		SOHC 30V V	TO TRION	3.55	1"/90.2mm x	4.161	7105.7mm	'
Rod Bearing (10) NOTE: H-Series Pe		7 CB-1442H	STD,.026mm,.23mm .25mm,.28mm	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.23	96 0.8270
Rod Bearing (10)	TM-7 erformar	7 CB-1442HX ice Bearing Wall	STD .0005" Thinner For	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.23	96 0.8270



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	co	UNTER DAT	A	SHOP DATA				
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
							10 CYL	(cont.)
20 415 CI (cont.) Years: 19		SOHC 20V V	10 Triton	3.55	1"/90.2mm x	4.161	"/105.7mm	20 (cont.)
415 CII Years: 20		SOHC 30V V	10 Triton	3.55	1"/90.2mm x	4.161	"/105.7mm	
Rod Bearing (10) NOTE: H-Series P .0005" Thinner F Maximum Wall I No Dowel Hole	erformanc or .0010" I Does Not In	More Oil Cleara	nce	2.0859/2.0867	0.0021/0.0033	0.0754	2.2388/2.2396	0.8270
Rod Bearing (10) NOTE: H-Series P Not Include Coa Cap Half	erformanc		STD r Maximum Wall Does I Hole In	2.0859/2.0867	0.0011/0.0023	0.0759	2.2388/2.2396	0.8270
Main Bearing Set 1 2-3-4-5-6 6 NOTE: H-Series P And 3 Piece Thr	erformanc		STD,.026mm,.25mm		0.0003/0.0032 0.0005/0.0025			
Main Bearing Set 1 2-3-4-5-6 6	TM-77 erformanc Clearance	MS-2203HX MB-3752HX MB-3139HX MB-3139W e Bearing Wall Contains Strai	STD .0005" Thinner For ght Shell		0.0013/0.0042 0.0015/0.0035			

### GENERAL MOTORS CORP.

ENGINE	YEAR	BORE & STROKE	BLOCK
110 CID (1.8L) DOHC 16V L4 Toyota LNK	2003-2006	3.230"/82.0mm X 3.350"/85.0mm	1
122 CID (2.0L) DOHC 16V SC L4 Ecotec	2005-2007	3.386"/86.0mm X 3.385"/86.0mm	2
122 CID (2.0L) DOHC 16V Turbo. L4 Ecotec	2007-2011	3.386"/86.0mm X 3.385"/86.0mm	2
134 CID (2.2L) DOHC 16V L4 Ecotec	2002-2011	3.386"/86.0mm X 3.720*/94.6mm	2
145 CID (2.4L) DOHC 16V L4 Ecotec	2006-2011	3.464"/88.0mm X 3.850"/98.0mm	2
145 CID (2.4L) DOHC 16V L4 Ecotec Hybrid	2008-2010	3.464"/88.0mm X 3.850*/98.0mm	2
181 CID (3.0L) 12V V6 Buick	1982-1988	3.800"/96.5mm X 2.660*/67.6mm	3
196 CID (3.2L) 12V V6 Buick	1978-1979	3.500"/88.9mm X 3.400"/84.0mm	3
200 CID (3.3L) 12V V6 Chevrolet	1978-1979	3.500"/88.9mm X 3.484"/88.4mm	4
229 CID (3.8L) 12V V6 Chevrolet	1980-1984	3.736"/95.0mm X 3.484"/88.4mm	4
231 CID (3.8L) 12V V6 Buick	1978-1988	3.800"/96.5mm X 3.400"/86.4mm	3
231 CID (3.8L) 12V Turbo. V6 Buick	1978-1987, 1989	3.800"/96.5mm X 3.400"/86.4mm	3
252 CID (4.1L) 12V V6 Buick	1980-1984	3.965"/100.8mm X 3.400"/86.4mm	3
260 CID (4.3L) 16V V8 Oldsmobile DIESEL	1979	3.500"/88.9mm X 3.390"/86.1mm	5
262 CID (4.3L) 16V V8 Chevrolet	1975-1976	3.670"/93.2mm X 3.100"/78.7mm	6
265 CID (4.3L) 16V V8 Chevrolet	1955-1957	3.750"/95.3mm X 3.000"/76.2mm	7
267 CID (4.4L) 16V V8 Chevrolet	1979-1982	3.500"/88.9mm X 3.484"/88.4mm	6
283 CID (4.6L) 16V V8 Chevrolet	1957-1967	3.875"/98.4mm X 3.000*/76.2mm	9
294 CID (4.8L) 16V V8 Vortec	1999-2011	3.780"/96.0mm X 3.268*/83.0mm	10
302 CID (4.9L) 16V V8 Chevrolet	1967-1969	4.000"/101.6mm X 3.000"/76.2mm	8

New Number
 ‡ Discontinued

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### GENERAL MOTORS CORP.

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ENGINE	YEAR	BORE & STROKE	BLOC
305 CID (5.0L) 16V V8 Chevrolet	1976-1996	3.736"/95.0mm X 3.484"/88.4mm	6
305 CID (5.0L) 16V V8 Vortec	1996-2002	3.736"/95.0mm X 3.484"/88.4mm	6
307 CID (5.0L) 16V V8 Chevrolet	1968-1973	3.875"/98.4mm X 3.250"/82.6mm	6
325 CID (5.3L) 16V V8	2005-2009	3.780"/96.0mm X 3.622"/92.0mm	11
325 CID (5.3L) 16V V8 Vortec	1999-2011	3.780"/96.0mm X 3.622"/92.0mm	10
325 CID (5.3L) 16V V8 Vortec Hybrid	2004-2007	3.780"/96.0mm X 3.622"/92.0mm	11
326 CID (5.3L) 16V V8 Pontiac	1963-1967	3.719"/94.5mm X 3.750"/95.3mm	12
327 CID (5.3L) 16V V8 Chevrolet	1962-1969	4.000"/101.6mm X 3.250"/82.5mm	8
346 CID (5.7L) 16V V8 Chevrolet	1997-2005	3.898"/99.0mm X 3.622"/92.0mm	10
348 CID (5.7L) 16V V8 Chevrolet	1958-1965	4.125"/104.8mm X 3.250"/82.6mm	13
350 CID (5.7L) 16V V8 Oldsmobile DIESEL	1978-1985	4.057"/103.0mm X 3.385"/86.0mm	5
350 CID (5.7L) 16V V8 Pontiac	1968-1979	3.875"/98.4mm X 3.750"/95.3mm	12
350 CID (5.7L) 16V V8 Chevrolet	1967-1997	4.000"/101.6mm X 3.484"/88.5mm	6
350 CID (5.7L) 16V V8 Vortec	1995-2003	4.000"/101.6mm X 3.484"/88.5mm	6
864 CID (6.0L) 16V V8 Vortec	1999-2011	4.000"/101.6mm X 3.622"/92.0mm	10
364 CID (6.0L) 16V V8 Vortec Hybrid	2008-2011	4.000"/101.6mm X 3.622"/92.0mm	11
366 CID (6.0L) 16V V8 Chevrolet	1980-1998	3.938"/100.0mm X 3.766"/95.5mm	14
366 CID (6.0L) 16V V8	1966-1967	3.938"/100.0mm X 3.766"/95.5mm	15
368 CID (6.0L) 16V V8 Cadillac	1980-1984	3.800"/96.5mm X 4.060"/103.1mm	16
371 CID (6.1L) 16V V8 Oldsmobile	1959-1960	4.000"/101.6mm X 3.690"/93.7mm	16
376 CID (6.2L) 16V V8	2008-2011	4.065"/103.3mm X 3.622*/92.0mm	11
876 CID (6.2L) 16V SC V8	2009-2011	4.065"/103.3mm X 3.622"/92.0mm	17
376 CID (6.2L) 16V V8 Vortec	2007-2011	4.065"/103.3mm X 3.622*/92.0mm	11
389 CID (6.4L) 16V V8 Pontiac	1959-1966	4.063"/103.2mm X 3.750"/95.3mm	18
394 CID (6.5L) 16V V8	1959-1964	4.130"/104.8mm X 3.690"/93.7mm	16
396 CID (6.5L) 16V V8 Chevrolet	1965-1970	4.094*/104.0mm X 3.766*/95.5mm	15
400 CID (6.6L) 16V V8 Chevrolet	1970-1980	4.125"/104.8mm X 3.750"/95.3mm	19
		4.1257104.0mm X 3.750795.3mm 3.875*/98.4mm X 4.250*/108.0mm	20
400 CID (6.6L) 16V V8 Oldsmobile	1968-1969		
400 CID (6.6L) 16V V8 Oldsmobile	1965-1967	4.000"/101.6mm X 4.000"/101.6mm	
400 CID (6.6L) 16V V8 Pontiac	1967-1979	4.120"/104.7mm X 3.750"/95.3mm	12
402 CID (6.6L) 16V V8 Chevrolet	1970-1972	4.125"/104.8mm X 3.766"/95.7mm	21
403 CID (6.6L) 32V Turbo. V8 Duramax DIESEL	2001-2011	4.055"/103.0mm X 3.898"/99.0mm	22
109 CID (6.7L) 16V V8 Chevrolet	1961-1965	4.313"/109.5mm X 3.500"/88.9mm	13
121 CID (6.9L) 16V V8 Pontiac	1961-1966	4.094"/104.0mm X 4.000"/101.6mm	
425 CID (7.0L) 16V V8 Cadillac	1977-1979	4.083"/103.7mm X 4.060"/103.1mm	
25 CID (7.0L) 16V V8 Oldsmobile	1966-1967	4.125"/104.8mm X 3.980"/101.0mm	
25 CID (7.0L) 16V V8	1965-1967	4.125"/104.8mm X 3.980"/101.0mm	
27 CID (7.0L) 16V V8 Chevrolet	1966-1969, 1980-1998	4.250"/108.0mm X 3.766"/95.7mm	15
27 CID (7.0L) 16V V8	2006-2011	4.125"/104.8mm X 4.000"/101.6mm	
28 CID (7.0L) 16V V8 Pontiac	1967-1969	4.120"/104.6mm X 4.000"/101.6mm	
I54 CID (7.4L) 16V V8	1974	4.250"/108.0mm X 4.000"/101.6mm	21
54 CID (7.4L) 16V V8 Chevrolet	1970-1997	4.250"/108.0mm X 4.000"/101.6mm	14
154 CID (7.4L) 16V V8 Vortec	1996-2000	4.250"/108.0mm X 4.000"/101.6mm	14
155 CID (7.5L) 16V V8 HO	1971-1972	4.150"/105.4mm X 4.210"/107.0mm	23
155 CID (7.5L) 16V V8 Oldsmobile	1968-1976	4.125"/104.8mm X 4.250"/108.0mm	20
455 CID (7.5L) 16V V8 Pontiac	1970-1976	4.150"/105.4mm X 4.210"/107.0mm	23
155 CID (7.5L) 16V V8 Pontiac Super Duty	1972-1974	4.150"/105.4mm X 4.210"/107.0mm	23
472 CID (7.7L) 16V V8 Cadillac	1968-1974	4.300"/109.2mm X 4.060"/103.1mm	16
196 CID (8.1L) 16V V8 Vortec	2001-2007	4.250"/108.0mm X 4.370"/111.0mm	
500 CID (8.2L) 16V V8 Cadillac	1970-1976	4.300"/109.2mm X 4.300"/109.2mm	
265 CID (4.3L) 16V V8 Chevrolet	1994-1996	3.750"/95.3mm X 3.000"/76.2mm	8



GENERAL MOTORS

### CONNECTING ROD FORGING NUMBERS

CONNECTIN	NG ROD FORG	ING NU	MBERS					
FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLO	оск
0997	3.385in/86.0mm	5	3703527	3.100in/78.7mm	6	3923282	3.250in/82.6mm	6
0997	3.390in/86.1mm	5	3703527	3.250in/82.6mm	6	3923282	3.484in/88.4mm	6
121	3.622in/92.0mm	10	3703527	3.484in/88.4mm	6	3923282	3.484in/88.5mm	6
121	3.268in/83.0mm	9	3703527	3.484in/88.5mm	6	3923282	3.000in/76.2mm	7
121	3.622in/92.0mm	9	3703527	3.000in/76.2mm	7	3933174	3.766in/95.5mm	13
1357201	2.660in/67.6mm	3	3703527	3.250in/82.5mm	7	3933174	4.000in/101.6mm	13
1357201	3.400in/84.0mm	3	3784000	3.100in/78.7mm	6	3933174	3.766in/95.7mm	14
1357201	3.400in/86.4mm	3	3784000	3.250in/82.6mm	6	3933174	3.750in/95.3mm	19
1357333	2.660in/67.6mm	3	3784000	3.484in/88.4mm	6	3946841	3.100in/78.7mm	6
1357333	3.400in/84.0mm	3	3784000	3.484in/88.5mm	6	3946841	3.250in/82.6mm	6
1357333	3.400in/86.4mm	3	3784000	3.000in/76.2mm	7	3946841	3.484in/88.4mm	6
1377248	2.660in/67.6mm	3	3784000	3.250in/82.5mm	7	3946841	3.484in/88.5mm	6
1377248	3.400in/84.0mm	3	380282	3.385in/86.0mm	5	3946841	3.000in/76.2mm	7
1377248	3.400in/86.4mm	3	380282	3.390in/86.1mm	5	3951629	3.750in/95.3mm	19
143	3.622in/92.0mm	10	380283	3.385in/86.0mm	5	397858	3.980in/101.0mm	20
143	3.268in/83.0mm	9	380283	3.390in/86.1mm	5	397858	4.250in/108.0mm	20
143	3.622in/92.0mm	9	380383	3.385in/86.0mm	5	398410	3.385in/86.0mm	5
201	2.660in/67.6mm	3	380383	3.390in/86.1mm	5	398410	3.390in/86.1mm	5
201	3.400in/84.0mm	3	3815281	3.100in/78.7mm	6	401406	3.980in/101.0mm	20
201	3.400in/86.4mm	3	3815281	3.250in/82.6mm	6	401406	4.250in/108.0mm	20
220	2.660in/67.6mm	3	3815281	3.484in/88.4mm	6	401456	3.980in/101.0mm	20
220	3.400in/84.0mm	3	3815281	3.484in/88.5mm	6	401456	4.250in/108.0mm	20
220	3.400in/86.4mm	3	3815281	3.000in/76.2mm	7	408	2.660in/67.6mm	3
222	4.060in/103.1mm	-	3815281	3.250in/82.5mm	7	408	3.400in/86.4mm	3
222	4.300in/109.2mm		384759	3.980in/101.0mm		410997	3.385in/86.0mm	5
230276	3.385in/86.0mm	5	384759	4.250in/108.0mm		410997	3.390in/86.1mm	5
230276	3.390in/86.1mm	5	3856239	3.766in/95.5mm	13	410999	3.980in/101.0mm	20
25509405	2.660in/67.6mm	3	3856239	4.000in/101.6mm		410999	4.250in/108.0mm	20
25509405	3.400in/84.0mm	3	3856239	3.766in/95.7mm	14	461	2.660in/67.6mm	3
25509405	3.400in/86.4mm	3	3856239	3.750in/95.3mm	19	461	3.400in/86.4mm	3
278410A	3.898in/99.0mm	22	3856240	3.766in/95.5mm	13	529007	3.750in/95.3mm	11
3185281	3.100in/78.7mm	6	3856240	4.000in/101.6mm		529238	3.750in/95.3mm	11
3185281	3.250in/82.6mm	6	3856240	3.766in/95.7mm	14	529938	3.750in/95.3mm	11
3185281	3.484in/88.4mm	6	3856240	3.750in/95.3mm	19	532294	3.750in/95.3mm	11
3185281	3.484in/88.5mm	6	3892671	3.100in/78.7mm	6	541000	3.750in/95.3mm	11
3185281	3.000in/76.2mm	7	3892671	3.250in/82.6mm	6	544956	3.750in/95.3mm	11
3185281	3.250in/82.5mm	7	3892671	3.484in/88.4mm	6	673	2.660in/67.6mm	3
3633111	4.060in/103.1mm		3892671	3.484in/88.5mm	6	673	3.400in/84.0mm	3
3633111	4.300in/109.2mm		3892671	3.000in/76.2mm	7	673	3.400in/86.4mm	3
3703526	3.100in/78.7mm	6	3916396	3.100in/78.7mm	6	763	2.660in/67.6mm	3
3703526	3.250in/82.6mm	6	3916396	3.250in/82.6mm	6	763	3.400in/84.0mm	3
3703526	3.484in/88.4mm	6	3916396	3.484in/88.4mm	6	763	3.400in/86.4mm	3
3703526	3.484in/88.5mm	6	3916396	3.484in/88.5mm	6	779	2.660in/67.6mm	3
3703526	3.000in/76.2mm	7	3916396	3.000in/76.2mm	7	779	3.400in/84.0mm	3
3703526	3.250in/82.5mm	7	3923282	3.100in/78.7mm	6	779	3.400in/86.4mm	3
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CRANKSHA	FT FORGING	NUMBE	RS					
FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLO	оск
103427	3.750in/95.3mm	11	1178	3.484in/88.5mm	6	1235419	3.390in/86.1mm	5
1130	3.100in/78.7mm	6	1178	3.000in/76.2mm	7	1254083	2.660in/67.6mm	3
1130	3.250in/82.6mm	6	1178	3.250in/82.5mm	7	1254083	3.400in/84.0mm	3
1130	3.484in/88.4mm	6	1182	3.100in/78.7mm	6	1254083	3.400in/86.4mm	3
1130	3.484in/88.5mm	6	1182	3.250in/82.6mm	6	12552216	3.622in/92.0mm	10
1130	3.000in/76.2mm	7	1182	3.484in/88.4mm	6	12552216	3.268in/83.0mm	9
1130	3.250in/82.5mm	7	1182	3.484in/88.5mm	6	12552216	3.622in/92.0mm	9
1178	3.100in/78.7mm	6	1182	3.000in/76.2mm	7	12553482	3.622in/92.0mm	10
1178	3.250in/82.6mm	6	1182	3.250in/82.5mm	7	12553482	3.268in/83.0mm	9
1178	3.484in/88.4mm	6	1235419	3.385in/86.0mm	5	12553482	3.622in/92.0mm	9
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#### CRANKSHAFT FORGING NUMBERS

	i i onana i							
FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLC	CK
1255645	2.660in/67.6mm	3	230278	3.400in/84.0mm	3	2NABC	3.000in/76.2mm	7
1255645	3.400in/84.0mm	3	230278	3.400in/86.4mm	3	2Y68-76	3.100in/78.7mm	6
1255645	3.400in/86.4mm	3	230331	3.980in/101.0mm	20	2Y68-76	3.250in/82.6mm	6
1255646	2.660in/67.6mm	3	230331	4.250in/108.0mm	20	2Y68-76	3.484in/88.4mm	6
1255646	3.400in/84.0mm	3	230376	3.385in/86.0mm	5	2Y68-76	3.484in/88.5mm	6
1255646	3.400in/86.4mm	3	230376	3.390in/86.1mm	5	2Y68-76	3.000in/76.2mm	7
1255674	2.660in/67.6mm	3	230376	3.100in/78.7mm	6	306275	3.100in/78.7mm	6
1255674	3.400in/84.0mm	3	230376	3.250in/82.6mm	6	306275	3.250in/82.6mm	6
1255674	3.400in/86.4mm	3	230376	3.484in/88.4mm	6	306275	3.484in/88.4mm	6
1255846	2.660in/67.6mm	3	230376	3.484in/88.5mm	6	306275	3.484in/88.5mm	6
	3.400in/84.0mm			3.000in/76.2mm				
1255846		3	230376		7	306275	3.000in/76.2mm	7
1255846	3.400in/86.4mm	3	230377	3.980in/101.0mm	20	306276	3.100in/78.7mm	6
1255862	2.660in/67.6mm	3	230377	4.250in/108.0mm	20	306276	3.250in/82.6mm	6
1255862	3.400in/84.0mm	3	230378	3.980in/101.0mm	20	306276	3.484in/88.4mm	6
1255862	3.400in/86.4mm	3	230378	4.250in/108.0mm	20	306276	3.484in/88.5mm	6
1257125	2.660in/67.6mm	3	230378	2.660in/67.6mm	3	306276	3.000in/76.2mm	7
1257125	3.400in/84.0mm	3	230378	3.400in/84.0mm	3	30R	3.100in/78.7mm	6
1257125	3.400in/86.4mm	3	230378	3.400in/86.4mm	3	30R	3.250in/82.6mm	6
1260877	2.660in/67.6mm	3	230905	3.385in/86.0mm	5	30R	3.484in/88.4mm	6
1260877	3.400in/84.0mm	3	230905	3.390in/86.1mm	5	30R	3.484in/88.5mm	6
1260877	3.400in/86.4mm	3	230907	3.980in/101.0mm	20	30R	3.000in/76.2mm	7
1261438	2.660in/67.6mm	3	230907	4.250in/108.0mm	20	31-87	3.100in/78.7mm	6
1261438	3.400in/84.0mm	3	230908	3.980in/101.0mm	20	31-87	3.250in/82.6mm	6
1261438	3.400in/86.4mm	3	230908	4.250in/108.0mm	20	31-87	3.484in/88.4mm	6
1261787	2.660in/67.6mm	3	25505554	2.660in/67.6mm	3	31-87	3.484in/88.5mm	6
1261787	3.400in/84.0mm	3	25505554	3.400in/84.0mm	3	31-87	3.000in/76.2mm	7
1261787	3.400in/86.4mm	3	25505554	3.400in/86.4mm	3	310514	3.100in/78.7mm	6
135411	3.484in/88.4mm	4	25506397	2.660in/67.6mm	3	310514	3.250in/82.6mm	6
1354N	3.484in/88.4mm	4	25506397	3.400in/84.0mm	3	310514	3.484in/88.4mm	6
1357898	2.660in/67.6mm	3	25506397	3.400in/86.4mm	3	310514	3.484in/88.5mm	6
1357898	3.400in/84.0mm	3	25506818	2.660in/67.6mm	3	310514	3.000in/76.2mm	7
								6
1357898	3.400in/86.4mm	3	25506818	3.400in/84.0mm	3	31M	3.100in/78.7mm	
1375802	3.385in/86.0mm	5	25506818	3.400in/86.4mm	3	31M	3.250in/82.6mm	6
1375802	3.390in/86.1mm	5	25509404	2.660in/67.6mm	3	31M	3.484in/88.4mm	6
1378351	2.660in/67.6mm	3	25509404	3.400in/84.0mm	3	31M	3.484in/88.5mm	6
1378351	3.400in/84.0mm	3	25509404	3.400in/86.4mm	3	31M	3.000in/76.2mm	7
1378351	3.400in/86.4mm	3	25514290	2.660in/67.6mm	3	3279	3.100in/78.7mm	6
1378354	2.660in/67.6mm	3	25514290	3.400in/84.0mm	3	3279	3.250in/82.6mm	6
1378354	3.400in/84.0mm	3	25514290	3.400in/86.4mm	3	3279	3.484in/88.4mm	6
1378354	3.400in/86.4mm	3	25520329	2.660in/67.6mm	3	3279	3.484in/88.5mm	6
1398346	3.385in/86.0mm	5	25520329	3.400in/84.0mm	3	3279	3.000in/76.2mm	7
1398346	3.390in/86.1mm	5	25520329	3.400in/86.4mm	3	3279	3.250in/82.5mm	7
143	3.484in/88.4mm	4	2680	3.100in/78.7mm	6	3281N	3.100in/78.7mm	6
1467292	4.060in/103.1mm	15	2680	3.250in/82.6mm	6	3281N	3.250in/82.6mm	6
1467292	4.300in/109.2mm	15	2680	3.484in/88.4mm	6	3281N	3.484in/88.4mm	6
147	3.484in/88.4mm	4	2680	3.484in/88.5mm	6	3281N	3.484in/88.5mm	6
1486424	4.060in/103.1mm	15	2680	3.000in/76.2mm	7	3281N	3.000in/76.2mm	7
1486424	4.300in/109.2mm	15	2680	3.250in/82.5mm	7	329880N	3.100in/78.7mm	6
1495094	4.060in/103.1mm	15	2690	3.100in/78.7mm	6	329880N	3.250in/82.6mm	6
1495094	4.300in/109.2mm		2690	3.250in/82.6mm	6	329880N	3.484in/88.4mm	6
1495095	4.060in/103.1mm		2690	3.484in/88.4mm	6	329880N	3.484in/88.5mm	6
1495095	4.300in/109.2mm		2690	3.484in/88.5mm	6	329880N	3.000in/76.2mm	7
1496793	4.060in/103.1mm		2690	3.000in/76.2mm	7	3521	4.000in/101.6mm	13
1496793	4.300in/109.2mm		275	2.660in/67.6mm	3	3521	3.750in/95.3mm	19
1609142R	4.060in/103.1mm		275	3.400in/86.4mm	3	353039	4.000in/101.6mm	13
1609142R							3.750in/95.3mm	
	4.300in/109.2mm		2NABC	3.100in/78.7mm	6	353039		19
230277	2.660in/67.6mm	3	2NABC	3.250in/82.6mm	6	354431	3.100in/78.7mm	6
230277	3.400in/84.0mm	3	2NABC	3.484in/88.4mm	6	354431	3.250in/82.6mm	6
230277	3.400in/86.4mm	3	2NABC	3.484in/88.5mm	6	354431	3.484in/88.4mm	6



#### CRANKSHAFT FORGING NUMBERS

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO		DCK
354431	3.484in/88.5mm	6	3887114	3.766in/95.5mm	13	3930809	3.100in/78.7mm	6
354431	3.000in/76.2mm	7	3887114	4.000in/101.6mm	13	3930809	3.250in/82.6mm	6
359730	4.000in/101.6mm	13	3887114	3.766in/95.7mm	14	3930809	3.484in/88.4mm	6
359730	3.750in/95.3mm	19	3887114	3.750in/95.3mm	19	3930809	3.484in/88.5mm	6
3732444	3.100in/78.7mm	6	388766	3.385in/86.0mm	5	3930809	3.000in/76.2mm	7
3732444	3.250in/82.6mm	6	388766	3.390in/86.1mm	5	3930809	3.250in/82.5mm	7
3732444	3.484in/88.4mm	6	390275	3.385in/86.0mm	5	3932444	3.100in/78.7mm	6
3732444	3.484in/88.5mm	6	390275	3.390in/86.1mm	5	3932444	3.250in/82.6mm	6
3732444	3.000in/76.2mm	7	390370	3.980in/101.0mm	20	3932444	3.484in/88.4mm	6
3782680	3.250in/82.5mm	7	390370	4.250in/108.0mm	20	3932444	3.484in/88.5mm	6
3782690	3.250in/82.5mm	7	3904815	3.766in/95.5mm	13	3932444	3.000in/76.2mm	7
378354	2.660in/67.6mm	3	3904815	4.000in/101.6mm	13	393654	3.385in/86.0mm	5
378354	3.400in/84.0mm	3	3904815	3.766in/95.7mm	14	393654	3.390in/86.1mm	5
378354	3.400in/86.4mm	3	3904815	3.750in/95.3mm	19	3941172	3.100in/78.7mm	6
3804816	3.766in/95.5mm	13	3904816	3.766in/95.5mm	13	3941172	3.250in/82.6mm	6
3804816	4.000in/101.6mm	13	3904816	4.000in/101.6mm	13	3941172	3.484in/88.4mm	6
3804816	3.766in/95.7mm	14	3904816	3.766in/95.7mm	14	3941172	3.484in/88.5mm	6
3804816	3.750in/95.3mm	19	3904816	3.750in/95.3mm	19	3941172	3.000in/76.2mm	7
381269	3.385in/86.0mm	5	3911000	3.100in/78.7mm	6	3941172	3.250in/82.5mm	7
381269	3.390in/86.1mm	5	3911000	3.250in/82.6mm	6	3941174	3.100in/78.7mm	6
3815822	3.250in/82.5mm	7	3911000	3.484in/88.4mm	6	3941174	3.250in/82.6mm	6
381919	3.385in/86.0mm	5	3911000	3.484in/88.5mm	6	3941174	3.484in/88.4mm	6
381919	3.390in/86.1mm	5	3911000	3.000in/76.2mm	7	3941174	3.484in/88.5mm	6
3832442	3.100in/78.7mm	6	3911000	3.250in/82.5mm	7	3941174	3.000in/76.2mm	7
3832442	3.250in/82.6mm	6	3911001	3.100in/78.7mm	6	3941174	3.250in/82.5mm	7
3832442	3.484in/88.4mm	6	3911001	3.250in/82.6mm	6	3941180	3.766in/95.5mm	13
3832442	3.484in/88.5mm	6	3911001	3.484in/88.4mm	6	3941180	4.000in/101.6mm	13
3832442	3.000in/76.2mm	7	3911001	3.484in/88.5mm	6	3941180	3.766in/95.7mm	14
3836144	3.766in/95.5mm	13	3911001	3.000in/76.2mm	7	3941180	3.750in/95.3mm	19
3836144	4.000in/101.6mm	13	3911001	3.250in/82.5mm	7	3941184	3.100in/78.7mm	6
3836144	3.766in/95.7mm	14	3911011	3.100in/78.7mm	6	3941184	3.250in/82.6mm	6
3836144	3.750in/95.3mm	19	3911011	3.250in/82.6mm	6	3941184	3.484in/88.4mm	6
384722	3.980in/101.0mm	20	3911011	3.484in/88.4mm	6	3941184	3.484in/88.5mm	6
384722	4.250in/108.0mm	20	3911011	3.484in/88.5mm	6	3941184	3.000in/76.2mm	7
3863144	3.766in/95.5mm	13	3911011	3.000in/76.2mm	7	3942411	3.766in/95.5mm	13
3863144	4.000in/101.6mm	13	3911011	3.250in/82.5mm	7	3942411	4.000in/101.6mm	13
3863144	3.766in/95.7mm	14	391101A	3.100in/78.7mm	6	3942411	3.766in/95.7mm	14
3863144	3.750in/95.3mm	19	391101A	3.250in/82.6mm	6	3942411	3.750in/95.3mm	19
3874874	3.766in/95.5mm	13	391101A	3.484in/88.4mm	6	3951528	3.750in/95.3mm	19
3874874	4.000in/101.6mm	13	391101A	3.484in/88.5mm	6	3951529D	3.750in/95.3mm	19
3874874	3.766in/95.7mm	14	391101A	3.000in/76.2mm	7	395654	3.385in/86.0mm	5
3874874	3.750in/95.3mm	19	391101A	3.250in/82.5mm	7	395654	3.390in/86.1mm	5
3882841	3.750in/95.3mm	19	3912335	3.100in/78.7mm	6	3962523	4.000in/101.6mm	13
3882842	3.766in/95.5mm	13	3912335	3.250in/82.6mm	6	3962523	3.750in/95.3mm	19
3882842	4.000in/101.6mm	13	3912335	3.484in/88.4mm	6	3963523	4.000in/101.6mm	13
3882842	3.766in/95.7mm	14	3912335	3.484in/88.5mm	6	3963523	3.750in/95.3mm	19
3882842	3.750in/95.3mm	19	3912335	3.000in/76.2mm	7	3963524	4.000in/101.6mm	13
3882847	3.766in/95.5mm	13	3914681	3.100in/78.7mm	6	3963524	3.750in/95.3mm	19
3882847	4.000in/101.6mm	13	3914681	3.250in/82.6mm	6	3967463	4.000in/101.6mm	13
3882847	3.766in/95.7mm	14	3914681	3.484in/88.4mm	6	3967463	3.750in/95.3mm	19
3882847	3.750in/95.3mm	19	3914681	3.484in/88.5mm	6	397303	3.980in/101.0mm	20
3882848	3.766in/95.5mm	13	3914681	3.000in/76.2mm	7	397303	4.250in/108.0mm	20
3882848	4.000in/101.6mm	13	3914681	3.250in/82.5mm	7	397363	3.980in/101.0mm	20
3882848	3.766in/95.7mm	14	3914682	3.100in/78.7mm	6	397363	4.250in/108.0mm	20
3882848	3.750in/95.3mm	19	3914682	3.250in/82.6mm	6	3975945	4.000in/101.6mm	13
3882849	3.766in/95.5mm	13	3914682	3.484in/88.4mm	6	3975945	3.750in/95.3mm	19
3882849	4.000in/101.6mm	13	3914682	3.484in/88.5mm	6	398261	3.385in/86.0mm	5
3882849	3.766in/95.7mm	14	3914682	3.000in/76.2mm	7	398261	3.390in/86.1mm	5
3882849	3.750in/95.3mm	19	3914682	3.250in/82.5mm	7	398621	3.385in/86.0mm	5

New Number

**‡** Discontinued



#### CRANKSHAFT FORGING NUMBERS

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE BLC	ск
398621	3.390in/86.1mm	5	481379	3.750in/95.3mm	11	9115	3.766in/95.5mm	13
400934	3.980in/101.0mm	20	481380	3.750in/95.3mm	11	9115	4.000in/101.6mm	13
400934	4.250in/108.0mm	20	493654	3.750in/95.3mm	11	9115	3.766in/95.7mm	14
403707	3.980in/101.0mm	20	496452	3.750in/95.3mm	11	9115	3.750in/95.3mm	19
403707	4.250in/108.0mm	20	496453	4.210in/107.0mm	23	9770488	4.210in/107.0mm	23
404	2.660in/67.6mm	3	531369	3.750in/95.3mm	11	9773382	3.750in/95.3mm	11
404	3.400in/86.4mm	3	541585	3.750in/95.3mm	11	9773383	3.750in/95.3mm	11
405954	3.980in/101.0mm	20	542990	4.210in/107.0mm	23	9773384	4.210in/107.0mm	23
405954	4.250in/108.0mm	20	544191	3.750in/95.3mm	11	9773524	3.750in/95.3mm	11
418882	3.385in/86.0mm	5	556607	3.385in/86.0mm	5	9773573	3.750in/95.3mm	11
418882	3.390in/86.1mm	5	556607	3.390in/86.1mm	5	9782646	3.750in/95.3mm	11
4568749	3.100in/78.7mm	6	5782680	3.250in/82.5mm	7	9782769	4.210in/107.0mm	23
4568749	3.250in/82.6mm	6	584722	3.980in/101.0mm	20	9782770	3.750in/95.3mm	11
4568749	3.484in/88.4mm	6	584722	4.250in/108.0mm	20	9783785	3.750in/95.3mm	11
4568749	3.484in/88.5mm	6	6223	3.766in/95.5mm	13	9783786	3.750in/95.3mm	11
4568749	3.000in/76.2mm	7	6223	4.000in/101.6mm	13	9783787	4.210in/107.0mm	23
4577	3.100in/78.7mm	6	6223	3.766in/95.7mm	14	9793573	3.750in/95.3mm	11
4577	3.250in/82.6mm	6	6223	3.750in/95.3mm	19	9794054	3.750in/95.3mm	11
4577	3.484in/88.4mm	6	7115	3.766in/95.5mm	13	97954	3.750in/95.3mm	11
4577	3.484in/88.5mm	6	7115	4.000in/101.6mm	13	9795479	3.750in/95.3mm	11
4577	3.000in/76.2mm	7	7115	3.766in/95.7mm	14	9799103	4.210in/107.0mm	23
4577	3.250in/82.5mm	7	7115	3.750in/95.3mm	19	N353039	4.000in/101.6mm	13
4672	3.100in/78.7mm	6	726N	3.484in/88.4mm	4	N353039	3.750in/95.3mm	19
4672	3.250in/82.6mm	6	732	2.660in/67.6mm	3	N853039	4.000in/101.6mm	13
4672	3.484in/88.4mm	6	732	3.400in/86.4mm	3	N853039	3.750in/95.3mm	19
4672	3.484in/88.5mm	6	7416	4.000in/101.6mm	13	N853638	4.000in/101.6mm	13
4672	3.000in/76.2mm	7	7416	3.750in/95.3mm	19	N853638	3.750in/95.3mm	19
4672	3.250in/82.5mm	7	8767	2.660in/67.6mm	3			
4813	3.750in/95.3mm	11	8767	3.400in/86.4mm	3			

	COU	INTER DAT	A	SHOP DATA				
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL				-				
	D (1.8L) D 003-2006	OHC 16V L	4 Toyota LNK	3.2	30"/82.0mm	x 3.35	0"/85.0mm	1
Rod Bearing (4) NOTE: H Series P		CB-1920H	STD•,.026mm•	1.7713/1.771	7 0.0005/0.0024	0.0588	1.8898/1.8907	7 0.6250
Rod Bearing (4) NOTE: H Series P .0010" More Oil	erformance		STD• .0005" Thinner For	1.7713/1.771	7 0.0015/0.0034	0.0583	1.8898/1.8907	7 0.6250
2 122 CID (2.0L) DOHC 16V SC L4 Ecotec Years: 2005-2007				3.3	86"/86.0mm	x 3.38	5"/86.0mm	2
	D (2.0L) D	OHC 16V T	urbo. L4 Ecotec	3.3	86"/86.0mm	x 3.38	5"/86.0mm	
134 CID (2.2L) DOHC 16V L4 Ecotec Years: 2002-2011				3.3	86"/86.0mm	x 3.72	0"/94.6mm	
	145 CID (2.4L) DOHC 16V L4 Ecotec Years: 2006-2011			3.4	64"/88.0mm	x 3.85	0"/98.0mm	
	D (2.4L) D 008-2010	OHC 16V L	4 Ecotec Hybrid	3.4	64"/88.0mm	x 3.85	0"/98.0mm	



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	cc	DUNTER DAT	Γ <b>A</b>		SHOP	DATA	<u>م</u>	
BEARING OR POSITION		G PART AL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	R MAX LENGTH
							4 CYL	(cont.)
2 122 Cl (cont.) Years: 2		DOHC 16V S	C L4 Ecotec	3.3	86"/86.0mm	x 3.38	5"/86.0mm	2 (cont.)
	<b>D (2.0L)</b> 007-2011	DOHC 16V T	urbo. L4 Ecotec	3.3	86"/86.0mm	x 3.38	5"/86.0mm	
Years: 2	002-2011	DOHC 16V L			86"/86.0mm			
Years: 2	006-2011	DOHC 16V L			64"/88.0mm			
Years: 2	008-2010		4 Ecotec Hybrid		64"/88.0mm			
Rod Bearing (4) NOTE: H-Series F		CB-1827H ce No Dowel Ho	STD ble In Cap Half	1.9291/1.9297	7 0.0004/0.0022	0.0609	2.0519/2.052	
2 404 0		10V/VC Duist	k		00"/96.5mm	v 0.00	01/67 6	6 CYL 3
Years: 1	982-1988	12V V6 Buicl						
Years: 1	978-1979	12V V6 Buicl			00"/88.9mm			
Years: 1	978-1988	12V V6 Buicl		3.8	00"/96.5mm	x 3.40	0"/86.4mm	
	D (3.8L) 978-1987,	12V Turbo. V 1989	/6 Buick	3.8	00"/96.5mm	x 3.40	0"/86.4mm	
	<b>D (4.1L)</b> 980-1984	12V V6 Buicl	k	3.96	5"/100.8mm	x 3.40	0"/86.4mm	
Rod Bearing (6) NOTE: H-Series F		CB-1398H ce No Dowel Ho	STD,1,10 ble In Cap Half	2.2480/2.2485	5 0.0015/0.0033	0.0619	2.3738/2.374	5 0.7420
	Performan	CB-1398HX ce Bearing Wall e No Dowel Hole	STD .0005" Thinner For e In Cap	2.2480/2.2485	5 0.0025/0.0043	0.0614	2.3738/2.374	5 0.7420
Rod Bearing (6) NOTE: V-Series F	VP-2 Performan		STD Ile In Cap Half	2.2480/2.2485	5 0.0015/0.0033	0.0619	2.3738/2.374	5 0.7380
Cam Bearing (4)	B-1	SH-1360	STD‡	1.7850/1.7860	0.0011/0.0053	0.0642	2 1.9155/1.917	5 0.7550
Connecting Rod Crankshaft Forgi	ing	1254083, 12556 1357898, 13783	33, 1377248, 201, 220, 255 45, 1255646, 1255674, 51, 1378354, 230277, 2 329, 275, 378354, 404, 73	1255846, 1255 30278, 230378,	862, 1257125,			
	D (3.3L) 978-1979	12V V6 Chev	rolet	3.5	00"/88.9mm	x 3.48	4"/88.4mm	4
229 CI		12V V6 Chev	rolet	3.7	36"/95.0mm	x 3.48	4"/88.4mm	
Rod Bearing (6) NOTE: H-Series F	TM-77	CB-1227H ce No Dowel Ho	STD,1 ble In Cap Half	2.0990/2.1000	0.0003/0.0033	0.0622	2.2247/2.225	7 0.7130
	Performan	CB-1227HX ce Bearing Wall e No Dowel Hole	STD .0005" Thinner For e In Cap	2.0990/2.1000	0.0013/0.0043	0.0617	2.2247/2.225	7 0.7130
Main Bearing Set 1-2-3 4 NOTE: Grooved U		MS-1454P MB-2508P MB-2509P(F) And Plain Lowe	STD,1,10,20,30,40		3 0.0006/0.0036 3 0.0011/0.0041			



	COUNT	TER DATA		SHOP DATA					
BEARING OR POSITION	BEARING PA MATERIAL NU	ART UMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		R MAX LENGTH	
6 CYL (cont.)									
4 200 C (cont.) Years: 1	ID (3.3L) 12V	V6 Chevro	olet	3.5	00"/88.9mm	x 3.48	4"/88.4mm	n 4 (cont.)	
	ID (3.8L) 12V	V6 Chevro	olet	3.7	36"/95.0mm	x 3.48	4"/88.4mm	n	
am Bearing Se		1350S	STD						
	SH-2				0.0010/0.0050				
-4	SH-2 SH2				0.0010/0.0050				
	0.1.10		147 700N	1.0002/1.0092	0.0010/0.0000	0.0044	1.3330/2.00	10 0.750	
Crankshaft Forg	ging 13541	1, 1354N, 143	3, 147, 726N						
B CYL				0.5	0011/00 0		01/06 1	6	
5 260 C Years: 1	ID (4.3L) 16V	v8 Oldsm	ODIIE DIESEL	3.5	00"/88.9mm	x 3.39	0"/86.1mm	n 5	
	ID (5.7L) 16V	V8 Oldsm	obile DIESEI	4.05	7"/103.0mm	x 3.38	5"/86.0mm	n .	
	1978-1985	vo olasili.	Dire Diedee	4.00	///////////////////////////////////////	A 0.00	0 /00.01111		
Main Bearing Se	t TM-77 MS-	-804H	STD,1,10,20						
1		2362H		2.9993/3.0003	0.0008/0.0038	0.0936	3.1880/3.18	90 0.9800	
-4		-2163H			0.0008/0.0038				
3		-2363H(F)			0.0008/0.0038				
OTE: H. Sarias		2364H	osition Number 2,	2.9993/3.0003	0.0016/0.0049	0.0932	3.1880/3.18	90 1.6290	
	I Grooved Main E								
-, .,	Grooved Upper								
Half									
Main Bearing Se	t TM-77 MS-	-804HX	STD						
			SID						
	MB-	2362HX	SID		0.0018/0.0048				
2-4	MB- MB-	2362HX 2163HX	510	2.9993/3.0003	0.0018/0.0048	0.0931	3.1880/3.18	90 0.979	
1 2-4 3	MB- MB- MB-	2362HX 2163HX 2363HX(F)	510	2.9993/3.0003 2.9993/3.0003	0.0018/0.0048	0.0931 0.0931	3.1880/3.18 3.1880/3.18	90 0.9790 90 1.1950	
1 2-4 3 5	MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX		2.9993/3.0003 2.9993/3.0003	0.0018/0.0048	0.0931 0.0931	3.1880/3.18 3.1880/3.18	90 0.9790 90 1.1950	
1 2-4 3 5 <b>NOTE: H-Series</b>	MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX aring Wall .0	005" Thinner For	2.9993/3.0003 2.9993/3.0003	0.0018/0.0048	0.0931 0.0931	3.1880/3.18 3.1880/3.18	90 0.9790 90 1.1950	
1 2-4 3 NOTE: H-Series .0010" More O Number 2, 3, 4	MB- MB- MB- MB- I Clearance Bea I Clearance Bea I, 5 with Full Groo	2362HX 2163HX 2363HX(F) 2364HX aring Wall .0 rings For Pos poved Main Be	005" Thinner For sition earings	2.9993/3.0003 2.9993/3.0003	0.0018/0.0048	0.0931 0.0931	3.1880/3.18 3.1880/3.18	90 0.9790 90 1.1950	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb	MB- MB- MB- MB- Performance Bea il Clearance Bea	2362HX 2163HX 2363HX(F) 2364HX aring Wall .0 rings For Pos poved Main Be	005" Thinner For sition earings	2.9993/3.0003 2.9993/3.0003	0.0018/0.0048	0.0931 0.0931	3.1880/3.18 3.1880/3.18	90 0.9790 90 1.1950	
1 2-4 3 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half	MB- MB- MB- MB- I Clearance Bea I Clearance Bea I, 5 with Full Groo Per 1 Has Groove	2362HX 2163HX 2363HX(F) 2364HX aring Wall .0 rings For Po- oved Main Be od Upper Halt	005" Thinner For sition earings f And Plain	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003	0.0018/0.0048	0.0931 0.0931	3.1880/3.18 3.1880/3.18	90 0.9790 90 1.1950	
NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half	MB- MB- MB- MB- I Clearance Beau , 5 with Full Groo per 1 Has Groove	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Half	005" Thinner For sition sarings f And Plain 182, 380283, 380383, 3	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059	0.0931 0.0931 0.0927	3.1880/3.189 3.1880/3.189 3.1880/3.189	90 0.9790 90 1.1950 90 1.6290	
1 2-4 3 5 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod	MB- MB- MB- MB- MB- I Clearance Bear , 5 with Full Groo ber 1 Has Groove d Forging 0997, 2 ging 12354	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Half	005" Thinner For sition sarings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059	0.0931 0.0931 0.0927	3.1880/3.189 3.1880/3.189 3.1880/3.189	90 0.9790 90 1.1950 90 1.6290	
1 2-4 3 5 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Roc Crankshaft Forg	MB- MB- MB- MB- MB- I Clearance Bear , 5 with Full Groo ber 1 Has Groove d Forging 0997, 2 ging 12354	2362HX 2163HX 2363HX(F) 2364HX aring Wall .0 rings For Pos oved Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55	005" Thinner For sition earings f And Plain 182, 380283, 380383, 3 1398346, 230376, 230 6607	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3812	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059	0.0931 0.0931 0.0927 0.0927	3.1880/3.186 3.1880/3.186 3.1880/3.186	90 0.9790 90 1.1950 90 1.6290 4, 398261	
NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Roc Crankshaft Forg	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX aring Wall .0 rings For Pos oved Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55	005" Thinner For sition earings f And Plain 182, 380283, 380383, 3 1398346, 230376, 230 6607	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3812	9 0.0018/0.0048 9 0.0018/0.0048 9 0.0026/0.0059 919, 388766, 39	0.0931 0.0931 0.0927 0.0927	3.1880/3.186 3.1880/3.186 3.1880/3.186	90 0.9790 90 1.1950 90 1.6290 4, 398261	
1 2-4 3 5 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Roc Crankshaft Forg 6 262 C Years:	MB- MB- MB- MB- MB- Performance Bear , 5 with Full Groo ber 1 Has Groove d Forging 0997, 2 ging 12354 39862 GLD (4.3L) 16V	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Halt 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro	005" Thinner For sition earings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 Slet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 1905, 381269, 3813 <b>3.6</b>	9 0.0018/0.0048 9 0.0018/0.0048 9 0.0026/0.0059 919, 388766, 39	0.0931 0.0931 0.0927 0275, 39 <b>x 3.10</b>	3.1880/3.186 3.1890/3.186 3.1890/3.186 3.1890/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.1800/3.186 3.1800/3.1800/3.186 3.1800/3.	90 0.9790 90 1.1950 90 1.6290 4, 398261 <b>n 6</b>	
NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 2 267 C Years: 1	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be d Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro	005" Thinner For sition earings f And Plain 1398346, 230376, 230 6607 olet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 1905, 381269, 3811 <b>3.6</b> <b>3.5</b>	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm	0.0931 0.0931 0.0927 0275, 38 <b>x 3.10</b> <b>x 3.48</b>	3.1880/3.186 3.1890/3.186 3.1890/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.1800/3.186 3.1800/3.	90 0.9790 90 1.1950 90 1.6290 4, 398261 <b>n 6</b>	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 267 C Years: 305 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be d Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro	005" Thinner For sition earings f And Plain 1398346, 230376, 230 6607 olet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 1905, 381269, 3811 <b>3.6</b> <b>3.5</b>	<ul> <li>0.0018/0.0048</li> <li>0.0018/0.0048</li> <li>0.0026/0.0059</li> <li>919, 388766, 39</li> <li>70"/93.2mm</li> </ul>	0.0931 0.0931 0.0927 0275, 38 <b>x 3.10</b> <b>x 3.48</b>	3.1880/3.186 3.1890/3.186 3.1890/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.186 3.1800/3.1800/3.186 3.1800/3.	90 0.9790 90 1.1950 90 1.6290 4, 398261 <b>n 6</b>	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 267 C Years: 305 C Years:	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition earings f And Plain 82, 380283, 380383, 3 1398346, 230376, 230 6607 olet olet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 <b>3.6</b> <b>3.5</b> <b>3.7</b>	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm	0.0931 0.0931 0.0927 0275, 36 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.186 3.1890/3.186 3.1890/3.1860/3.18	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 1 267 C Years: 1 305 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition earings f And Plain 82, 380283, 380383, 3 1398346, 230376, 230 6607 olet olet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 <b>3.6</b> <b>3.5</b> <b>3.7</b>	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm	0.0931 0.0931 0.0927 0275, 36 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.186 3.1890/3.186 3.1890/3.1860/3.18	90 0.979( 90 1.195( 90 1.629( 4, 398261 n 6 n	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 1 267 C Years: 1 305 C Years: 1 305 C Years: 1	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition parings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 36607 Slet Slet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 3.6 3.5 3.7 3.7 3.7	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm 36"/95.0mm	0.0931 0.0931 0.0927 0275, 3 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.186 3.1890/3.186 3.180	90 0.979( 90 1.195( 90 1.629( 4, 398261 n 6 n n	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 1 305 C Years: 305 C Years: 305 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition parings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 36607 Slet Slet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 3.6 3.5 3.7 3.7 3.7	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm	0.0931 0.0931 0.0927 0275, 3 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.186 3.1890/3.186 3.180	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n	
A 2-4 3-5 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: ' 305 C Years: ' 305 C Years: ' 305 C Years: ' 307 C Years: '	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX paring Wall .0 rings For Pos- pord Main Be d Upper Halt 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Vortec V8 Chevro	005" Thinner For sition parings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 Slet Slet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 1905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm 36"/95.0mm 75"/98.4mm	0.0931 0.0931 0.0927 0275, 39 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.188 3.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.189 4.1880/3.189 4.189	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n n	
A 2-4 3-5 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 1 305 C Years: 2 307 C Years: 2 307 C Years: 2 307 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX paring Wall .0 rings For Pos- pord Main Be d Upper Halt 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Vortec V8 Chevro	005" Thinner For sition parings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 Slet Slet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 1905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm 36"/95.0mm	0.0931 0.0931 0.0927 0275, 39 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.188 3.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.1880/3.189 4.189 4.1880/3.189 4.189	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n n	
A 2-4 3-5 NOTE: H-Series .0010" More Of Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 1 305 C Years: 3 307 C Years: 3 307 C Years: 1 307 C Years: 1 307 C Years: 1 307 C Years: 1 307 C Years: 1 307 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX baring Wall .0 rings For Pos- by Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition earings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 olet olet olet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 1905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8 4.00	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm 36"/95.0mm 75"/98.4mm 0"/101.6mm	0.0931 0.0931 0.0927 0275, 39 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.188 3.1880/3.189 4.1880/3.189 4.1890/3.1890/3.189 4.1890/3.189 4.1890/3.1890/3.189 4.1890/3.189 4.1890/3.1890/3.189 4.1890/3.1890/3.189 4.1890/3.1890/3.1890/3.1990/3.	90 0.979( 90 1.195( 90 1.629( 4, 398261 n 6 n n n	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 267 C Years: 305 C Years: 307 C Years: 350 C Years: 350 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX baring Wall .0 rings For Pos- by Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition earings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 olet olet olet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 1905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8 4.00	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm 36"/95.0mm 75"/98.4mm	0.0931 0.0931 0.0927 0275, 39 <b>x 3.10</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b> <b>x 3.48</b>	3.1880/3.188 3.1880/3.189 4.1880/3.189 4.1890/3.1890/3.189 4.1890/3.189 4.1890/3.1890/3.189 4.1890/3.189 4.1890/3.1890/3.189 4.1890/3.1890/3.189 4.1890/3.1890/3.1890/3.1990/3.	90 0.979( 90 1.195( 90 1.629) 4, 398261 n 6 n n n	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 1 305 C Years: 1 305 C Years: 1 300 C Years: 1 350 C Years: 1	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX aaring Wall .0 rings For Pos oved Main Be d Upper Halt 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition parings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 66607 Diet Diet Diet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8 4.00 4.00	0.0018/0.0048 0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 36"/95.0mm 36"/95.0mm 36"/95.0mm 75"/98.4mm 0"/101.6mm 0"/101.6mm	0.0931 0.0931 0.0927 0275, 36 x 3.10 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48	3.1880/3.188 3.1880/3.186 4.1880/3.186 4.1890/3.186 4.180	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n n n	
A 2-4 3-5 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: 267 C Years: 305 C Years: 307 C Years: 350 C Years: 350 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX aaring Wall .0 rings For Pos oved Main Be d Upper Halt 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro	005" Thinner For sition parings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 blet blet blet blet blet	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8 4.00 4.00	0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 00"/88.9mm 36"/95.0mm 36"/95.0mm 75"/98.4mm 0"/101.6mm	0.0931 0.0931 0.0927 0275, 36 x 3.10 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48	3.1880/3.188 3.1880/3.186 4.1880/3.186 4.1890/3.186 4.180	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n n n	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: - 305 C Years: - 305 C Years: - 305 C Years: - 350 C Years: - 350 C Years: - 350 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX paring Wall .0 rings For Pos- powed Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro V8 Chevro C8 Chevro	005" Thinner For sition earings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 olet olet olet olet olet olet STD,1,9,10,11,19 20,21,30	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8 4.00 4.00	0.0018/0.0048 0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 36"/95.0mm 36"/95.0mm 36"/95.0mm 75"/98.4mm 0"/101.6mm 0"/101.6mm	0.0931 0.0931 0.0927 0275, 36 x 3.10 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48	3.1880/3.188 3.1880/3.186 4.1880/3.186 4.1890/3.186 4.180	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n n n	
2-4 NOTE: H-Series .0010" More O Number 2, 3, 4 Position Numb Lower Half Connecting Rod Crankshaft Forg 6 262 C Years: - 305 C Years: - 307 C Years: - 307 C Years: - 350 C Years: - 350 C Years: - 350 C Years: - 350 C	MB- MB- MB- MB- MB- MB- MB- MB- MB- MB-	2362HX 2163HX 2363HX(F) 2364HX earing Wall .0 rings For Pos oved Main Be ed Upper Half 230276, 3802 19, 1375802, 1, 418882, 55 V8 Chevro V8 Chevro	005" Thinner For sition earings f And Plain 282, 380283, 380383, 3 1398346, 230376, 230 6607 olet olet olet olet olet stD, 1, 9, 10, 11, 19 20, 21, 30 One Side For	2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 2.9993/3.0003 98410, 410997 9905, 381269, 3813 3.6 3.5 3.7 3.7 3.7 3.8 4.00 4.00	0.0018/0.0048 0.0018/0.0048 0.0018/0.0048 0.0026/0.0059 919, 388766, 39 70"/93.2mm 36"/95.0mm 36"/95.0mm 36"/95.0mm 75"/98.4mm 0"/101.6mm 0"/101.6mm	0.0931 0.0931 0.0927 0275, 36 x 3.10 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48 x 3.48	3.1880/3.188 3.1880/3.186 4.1880/3.186 4.1890/3.186 4.180	90 0.9790 90 1.1950 90 1.6290 4, 398261 n 6 n n n	



GENERAL MOTORS

	COUNTER DAT	A		SHOP	DATA	A	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	NAX LENGTH
						8 CYL	(cont.)
	ID (4.3L) 16V V8 Chev	rolet	3.6	70"/93.2mm	x 3.10		-
	ID (4.4L) 16V V8 Chev 1979-1982	rolet	3.5	00"/88.9mm	x 3.48	4"/88.4mm	
	ID (5.0L) 16V V8 Chev 1976-1996	rolet	3.7	'36"/95.0mm	x 3.48	4"/88.4mm	
Years: 1	ID (5.0L) 16V V8 Vorte 1996-2002			'36"/95.0mm			
Years: 1	ID (5.0L) 16V V8 Chev 1968-1973			75"/98.4mm			
Years: 1	ID (5.7L) 16V V8 Chev 1967-1997			0"/101.6mm			
Years: 1	ID (5.7L) 16V V8 Vorte 1995-2003			0"/101.6mm			
Used In Engine	TM-77 CB-663HND Performance Dowel Hole I es Without Doweled Conne Dne Side For Increased Cra	cting Rod	2.0990/2.1000	0.0009/0.0030	0.0619	9 2.2247/2.225	2 0.7920
Half, Maximum Thickness May	TM-77 CB-663HNDK Performance with TriArmo Wall Does Not Include Co Be Used In Engines Witho Narrowed On One Side I earance	r Dowel Hole In Cap ating but Doweled	2.0990/2.1000	0.0009/0.0030	0.0619	9 2.2247/2.225	2 0.7920
Not Include Co	TM-77 CB-663HNK Performance with TriArmo pating Thickness, Narrowe ased Crank Fillet Clearance off	d On One	2.0990/2.1000	0.0009/0.0030	0.0619	9 2.2247/2.225	2 0.7920
.0010" More Oi	TM-77 CB-663HXN Performance Bearing Wall I Clearance Narrowed On Ink Fillet Clearance No Dow	One Side For	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
.0010" More Oi May Be Used I	TM-77 CB-663HXND Performance Bearing Wall I Clearance Dowel Hole In n Engines Without Dowele On One Side For Increase e	Cap Half d Connecting	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
.0005" Thinner Hole In Cap Ha Coating Thickr Doweled Conn	TM-77 CB-663HXNDI Performance with TriArmo For .0010" More Oil Cleara alf, Maximum Wall Does No ness May Be Used In Engin ecting Rod Narrowed On O nk Fillet Clearance	r Bearing Wall ance Dowel ot Include es Without	2.0990/2.1000	0.0019/0.0040	0.0614	1 2.2247/2.225	2 0.7920
.0005" Thinner Maximum Wall Narrowed On (	TM-77 CB-663HXNK Performance with TriArmo For .0010" More Oil Cleara Does Not Include Coating One Side For Increased Cra Dowel Hole In Cap Half	ance Thickness,	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920



	SHOP DATA							
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE			MAX LENGTH
8 CYL (cont.) 6 262 CIE	) <i>(</i> 4 31 ) 1	16V V8 Chevr	olet	3.6	70"/93.2mm	v 3 10	0"/78 7mm	6
(cont.) Years: 19			0101	0.0	10 / 30.211111	× 0.10	0 //0./11111	(cont.)
Years: 19			00"/88.9mm					
Years: 19	76-1996	16V V8 Chevr			36"/95.0mm			
305 CIE Years: 19	• •	16V V8 Vorteo	;	3.7	36"/95.0mm	x 3.48	4"/88.4mm	
	D (5.0L)	16V V8 Chevr	olet	3.8	75"/98.4mm	x 3.25	0"/82.6mm	
350 CIE Years: 19		16V V8 Chevr	olet	4.00	0"/101.6mm	x 3.48	4"/88.5mm	
	D (5.7L)	16V V8 Vorteo	•	4.00	0"/101.6mm	x 3.48	4"/88.5mm	
Rod Bearing (8) NOTE: V-Series Pe Increased Crank Cap Half	erformanc			2.0990/2.1000	0.0008/0.0028	0.0621	2.2247/2.2252	0.7920
Rod Bearing (8) NOTE: V-Series Pe .0010" More Oil 0 Increased Crank Cap Half	Clearance	Narrowed On O	ne Side For	2.0990/2.1000	0.0018/0.0038	0.0616	3 2.2247/2.2252	0.7920
Main Bearing Set 1-2-3-4 5 NOTE: H-Series Pe Lower Half		MS-909H MB-2508H MB-2509H(F) e Grooved Uppe	STD,1,9,10,11,19 20,21,30 rr Half And Plain		0.0006/0.0036 0.0011/0.0041			
Main Bearing Set 1-2-3-4 5 NOTE: H-Series Pe		MS-909HG MB-2508HG MB-2509HG(F) Contains Full (	STD Grooved Bearings		0.0006/0.0036 0.0011/0.0041			
Main Bearing Set 1-2-3-4 5	TM-77	MS-909HK MB-2508H MB-2509H(F) e with TriArmor	STD,1,10 Grooved Upper Half		0.0006/0.0036 0.0011/0.0041			
Include Coating								
Main Bearing Set 1-2-3-4 5	TM-77	MS-909HX MB-2508HX MB-2509HX(F)	STD		0.0016/0.0046			
NOTE: H-Series Pe .0010" More Oil ( Plain Lower Half	Clearance	e Bearing Wall .						
Main Bearing Set 1-2-3-4 5		MS-909HXK MB-2508HX MB-2509HX(F)	STD		0.0016/0.0046			
NOTE: H-Series Pe .0005" Thinner F Grooved Upper I Wall Does Not In	or .0010" I Half And P	More Oil Clearan Plain Lower Half,	ice					
Main Bearing Set 1-2-3-4 5 NOTE: V-Series Pe Lower Half	VP-2	MS-909V MB-2508V MB-2509V(F)	STD,10 r Half And Plain		0.0005/0.0028 0.0005/0.0028			



	CO	UNTER DAT	A	SHOP DATA				
BEARING OR POSITION	BEARING MATERIAI	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BORE	MAX LENGTH
							8 CYL	<u>, ,</u>
(cont.) Years: 1	975-1976	6V V8 Chev			70"/93.2mm			6 (cont.)
Years: 1	979-1982	6V V8 Chev		3.5	00"/88.9mm	x 3.48	4"/88.4mm	
	ID (5.0L) 1 976-1996	6V V8 Chev	rolet	3.7	36"/95.0mm	x 3.48	4"/88.4mm	
	ID (5.0L) 1 996-2002	6V V8 Vorte	C	3.7	36"/95.0mm	x 3.48	4"/88.4mm	
	ID (5.0L) 1 968-1973	6V V8 Chev	rolet	3.8	75"/98.4mm	x 3.25	0"/82.6mm	
350 C		6V V8 Chev	rolet	4.00	0"/101.6mm	x 3.48	4"/88.5mm	
		6V V8 Vorte	c	4.00	0"/101.6mm	x 3.48	4"/88.5mm	
	995-2003		075 4 4 0					
	sing 283 Cra		STD,1,10		0.0005/0.0031 0.0010/0.0036	0.0954		5 1.7180
Contains A Spa Position Numb Lower Half			-					
Main Bearing Set 1-2-3-4 5 5 NOTE: Engine Us		MS-1110HK MB-2650H MB-1769H(F) MB-2651C nkshaft, H-Set	STD,1‡,10‡		0.0005/0.0031 0.0010/0.0036	0.0954		3 1.7180
with TriArmor ( Bearing In Posi And Plain Lowe	Contains A S ition Numbe	Spacer To Be U	Jsed With					
Main Bearing Set 1-2-3-4		MS-1110HX MB-2650HX	STD	2.2983/2.2993	0.0015/0.0041	0.1700	) 2.6406/2.6416	0.8070
5		MB-1769HX(F) MB-2651C			0.0020/0.0046	0.0949		3 1.7180
0	sing 283 Cra 005" Thinne tains A Spac ition Numbe	nkshaft, H-Sei r For .0010" M cer To Be Usei	d With			0.075	2.0400/2.0410	1.5200
Main Bearing Set 1-2-3-4		MS-1110HXK MB-2650HX	STD		0.0015/0.0041			
5		MB-1769HX(F) MB-2651C		2.2978/2.2988	3 0.0020/0.0046		) 2.4906/2.4916 3 2.6406/2.6416	
NOTE: Engine Us with TriArmor I .0010" More Oi Used With Bea Upper Half And	sing 283 Cra Bearing Wall I Clearance ring In Posit	nkshaft, H-Sei I .0005" Thinne Contains A Sp ion Number 5	acer To Be					
Main Bearing NOTE: Engine Us Bearing Wall .0 Clearance Con Upper Half And	sing 283 Cra 005" Thinne tains Flange	r For .0010" M d Bearing Onl		2.2978/2.2988	3 0.0020/0.0046	0.0949	9 2.4906/2.4916	3 1.7180
Main Bearing NOTE: H-Series I Grooved Upper	Performance		STD nged Bearing Only, f	2.4478/2.4488	8 0.0011/0.0041	0.0955	5 2.6406/2.6416	3 1.7180



	co	DUNTER DA	ТА	SHOP DATA					
BEARING OR POSITION	MATERI	G PART AL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
8 CYL (cont.)									
	• •	16V V8 Che	vrolet	3.6	70"/93.2mm	x 3.10	0"/78.7mm		
267 C		16V V8 Che	vrolet	3.5	00"/88.9mm	x 3.48	4"/88.4mm	(cont.)	
	979-1982	16V V8 Che	vrolet	3.7	36"/95.0mm	x 3.48	4"/88.4mm		
	976-1996				00" (05 0				
Years: 1	996-2002	16V V8 Vort			36"/95.0mm				
		16V V8 Che	vrolet	3.8	75"/98.4mm	x 3.25	0"/82.6mm		
350 C		16V V8 Che	vrolet	4.00	0"/101.6mm	x 3.48	4"/88.5mm		
350 C		16V V8 Vort	ec	4.00	0"/101.6mm	x 3.48	4"/88.5mm		
Main Bearing		MB-2509HX	STD	2.4478/2.4488	0.0021/0.0051	0.0950	2.6406/2.641	5 1.7180	
			I .0005" Thinner For						
.0010" More Oi Only, Grooved			• •						
Cam Bearing Set	t B-2	SH-1349S	STD						
1		SH-1349			0.0010/0.0048				
2-5 3-4		SH-1350 SH-1351			0.0010/0.0048				
NOTE: Performa	nce Bearin			1.0002/1.0002	0.0010/0.0040	0.0044	1.0000/2.001	0.1400	
Cam Bearing Set	B-2	SH-1772S SH-1351	STD	1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.001	0.7450	
2-3-4-5		SH-2185	Decision Cont	1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.001	0.8650	
NOTE: Aluminum Cam Bearing Set	•	SH-1796S	stD						
1-2-3-4-5	D-2	SH-1351	510	1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.001	0.7450	
NOTE: Oversize / 1.9990" / 2.001			lousing Bore Size Set						
Connecting Rod Crankshaft Forg	ing	1130, 1178, 118 3281N, 329880N	26, 3703527, 3784000, 3815 2, 230376, 2680, 2690, 2NA 4, 354431, 3732444, 38324 09, 3932444, 3941172, 3941	BC, 2Y68-76, 30 42, 3911000, 39	6275, 306276, 3 11001, 3911011	30R, 31- 1, 39110	87, 310514, 31		
	ID (4.3L) 955-1957	16V V8 Che	vrolet	3.7	50"/95.3mm	x 3.00	0"/76.2mm	7	
Rod Bearing (8) NOTE: H-Series I Increased Crar Cap Half	TM-77 Performan			1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125/	2 0.7920	
Rod Bearing (8) NOTE: H-Series Used In Engine Narrowed On C Clearance	Performan s Without	Doweled Conn		1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920	
Rod Bearing (8) NOTE: H-Series I Half, Maximum Thickness May Connecting Ro Crank Fillet Cle	Performan Wall Does Be Used I d Narrowe	Not Include Control Include Co	or Dowel Hole In Cap oating out Doweled	1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920	



	CO	UNTER DAT	ГА	SHOP DATA					
				BRG O.D. OR					
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE			MAX LENGTH	
								. (cont.)	
7 265 C (cont.) Years: 1	• •	16V V8 Chev	vrolet	3.75	50"/95.3mm	x 3.00	0"/76.2mm	7 (cont.)	
Rod Bearing (8)		CB-745HNK	STD,1,10	1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920	
NOTE: H-Series Not Include Co Side For Increa Hole In Cap Ha	ating Thick ased Crank	ness, Narrowe							
Rod Bearing (8) NOTE: H-Series .0010" More Oi Increased Crar Cap Half	Performanc I Clearance	Narrowed On		1.9990/2.0000	0.0014/0.0035	0.0616	2.1247/2.125	2 0.7920	
Rod Bearing (8) NOTE: H-Series .0005" Thinner Maximum Wall Narrowed On C Clearance No I	Performanc For .0010" I Does Not In One Side For	More Oil Clear nclude Coating r Increased Cr	or Bearing Wall ance 9 Thickness,	1.9990/2.0000	0.0014/0.0035	0.0616	2.1247/2.125	2 0.7920	
Rod Bearing (8) NOTE: V-Series I Increased Crar Cap Half	Performance			1.9990/2.0000	0.0010/0.0031	0.0620	2.1247/2.125	2 0.7920	
Rod Bearing (8) NOTE: V-Series I .0010" More Oi Increased Crar Cap Half	Performance I Clearance	e Bearing Wall Narrowed On		1.9990/2.0000	0.0020/0.0041	0.0615	2.1247/2.125	2 0.7920	
Main Bearing Se 1-2-3-4 5 NOTE: H-Series Lower Half		MS-429H MB-1808H MB-1769H(F) e Grooved Up	STD,1,10 per Half And Plain		0.0004/0.0030 0.0010/0.0036				
	Performanc		STD,10 or Grooved Upper Half		0.0004/0.0030 0.0010/0.0036				
And Plain Lowe Include Coating			es Not						
<b>Main Bearing Se</b> 1-2-3-4 5	t TM-77	MS-429HX MB-1808HX MB-1769HX(F)			0.0014/0.0040				
NOTE: H-Series .0010" More Oi Plain Lower Ha	I Clearance		l .0005" Thinner For er Half And						
Main Bearing Se 1-2-3-4 5		MS-429HXK MB-1808HX MB-1769HX(F)			0.0014/0.0040				
NOTE: H-Series .0005" Thinner Grooved Uppe Wall Does Not	For .0010" I r Half And P	More Oil Clear Iain Lower Ha	ance If, Maximum						
<b>Main Bearing Se</b> 1-2-3-4 5	t VP-2	MS-429V MB-1808V MB-1769V(F)	STD		0.0003/0.0031 0.0010/0.0036				



	COL	JNTER DAT	A	SHOP DATA					
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
8 CYL (cont.)									
(cont.) Years: 19	955-1957	6V V8 Chevr		3.75	50"/95.3mm	x 3.00	0"/76.2mn	n 7 (cont.)	
Main Bearing Set 1-2-3-4 5 NOTE: V-Series P .0010" More Oil Plain Lower Hal	erformance Clearance (		STD 0005" Thinner For Y Half And		0.0013/0.0041 0.0020/0.0046				
Main Bearing NOTE: Engine Us Bearing Wall .00 Clearance Cont Upper Half And	ing 283 Crai 005" Thinnei ains Flange	r For .0010" Mo d Bearing Only	ore Oil	2.2978/2.2988	0.0020/0.0046	0.0949	2.4906/2.49	16 1.7180	
Cam Bearing Set 1 2 3-4 5		<b>SH-287S</b> SH-290 SH-288 SH287 SH-289	STD	1.8682/1.8692 1.8682/1.8692	0.0010/0.0050 0.0010/0.0050 0.0010/0.0050 0.0010/0.0050	0.0694 0.0644	2.0090/2.01 1.9990/2.00	10 0.7500 10 0.7500	
Connecting Rod Crankshaft Forgi	ng 11 32	30, 1178, 1182, 81N, 329880N,	6, 3703527, 3784000, 3815 230376, 2680, 2690, 2NA 354431, 3732444, 38324 9, 3932444, 3941172, 3941	BC, 2Y68-76, 30 42, 3911000, 39	6275, 306276, 3 11001, 3911011	OR, 31- , 39110	87, 310514, 3		
Years: 19 327 Cl Years: 19 265 Cl	967-1969 D (5.3L) 1 962-1969	6V V8 Chevr 6V V8 Chevr 6V V8 Chevr	rolet	4.000	0"/101.6mm 0"/101.6mm 50"/95.3mm	x 3.25	0"/82.5mn	n	
Rod Bearing (8) For Year(s): 1968- NOTE: H-Series F Increased Cran Cap Half	TM-77 1996 Performance			2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.22	52 0.7920	
Rod Bearing (8) For Year(s): 1968	1996 Performance Without De	oweled Connec		2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.22	52 0.7920	
Rod Bearing (8) For Year(s): 1968-	1996 Performance Wall Does N Be Used In I Narrowed	lot Include Coa Engines Witho	ut Doweled	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.22	52 0.7920	
Rod Bearing (8) For Year(s): 1968- NOTE: H-Series F Not Include Coa Side For Increa: Hole In Cap Hal	1996 erformance ating Thickn sed Crank F	ess, Narrowed		2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.22	52 0.7920	



	COUNTER DAT	A		SHOP DATA					
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	NAX LENGTH		
(cont.) Years:	ID (4.9L) 16V V8 Chev 1967-1969 ID (5.3L) 16V V8 Chev			0"/101.6mm 0"/101.6mm		0"/76.2mm	(cont.)		
265 C	1962-1969 ID (4.3L) 16V V8 Chev 1994-1996	rolet	3.7	'50"/95.3mm	x 3.00	0"/76.2mm			
Rod Bearing (8) For Year(s): 196 NOTE: H-Series .0010" More O	TM-77 CB-663HXN	One Side For	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920		
.0010" More O May Be Used I	Performance Bearing Wall il Clearance Dowel Hole In In Engines Without Dowele I On One Side For Increase	Cap Half d Connecting	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920		
.0005" Thinner Hole In Cap Ha Coating Thick Doweled Conr	TM-77 CB-663HXNDF 8-1996 Performance with TriArmo For .0010" More Oil Cleara alf, Maximum Wall Does No ness May Be Used In Engin tecting Rod Narrowed On C nk Fillet Clearance	r Bearing Wall ance Dowel ot Include ses Without	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920		
.0005" Thinner Maximum Wal Narrowed On		nce Thickness,	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920		
	VP-2 CB-663VN 8-1996 Performance Narrowed On nk Fillet Clearance No Dow		2.0990/2.1000	0.0008/0.0028	0.0621	2.2247/2.225	2 0.7920		
.0010" More O	VP-2 CB-663VXN 8-1996 Performance Bearing Wall il Clearance Narrowed On 0 nk Fillet Clearance No Dow	One Side For	2.0990/2.1000	0.0018/0.0038	0.0616	2.2247/2.225	2 0.7920		
	TM-77 CB-745HN 2-1967 Performance Narrowed Or nk Fillet Clearance No Dow		1.9990/2.000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920		
Used In Engine	TM-77 CB-745HND 2-1967 Performance Dowel Hole I es Without Doweled Conne One Side For Increased Cra	cting Rod	1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920		



	CO	UNTER DAT	A		SHOP	DATA	4	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.)								
	ID (4.9L) 1 967-1969	16V V8 Chevr	olet	4.000	0"/101.6mm	x 3.00	0"/76.2mm	8 (cont.)
	ID (5.3L) 1 962-1969	16V V8 Chevr	olet	4.000	0"/101.6mm	x 3.25	0"/82.5mm	
265 C		16V V8 Chevr	olet	3.7	50"/95.3mm	x 3.00	0"/76.2mm	
Rod Bearing (8) For Year(s): 1962		CB-745HNDK	STD,10	1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920
NOTE: H-Series I Half, Maximum Thickness May	Performanc Wall Does Be Used In d Narrowed	e with TriArmor Not Include Coa Engines Withou I On One Side Fo	ut Doweled					
Not Include Co	-1967 Performanc ating Thick used Crank	CB-745HNK e with TriArmor ness, Narrowed Fillet Clearance		1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920
.0010" More Oi	-1967 Performanc I Clearance	CB-745HXN e Bearing Wall . Narrowed On C arance No Dowe		1.9990/2.0000	0.0014/0.0035	0.0616	3 2.1247/2.125	2 0.7920
Maximum Wall	-1967 Performanc For .0010" I Does Not In One Side Fo	More Oil Clearan Include Coating Ir Increased Cra	nce Thickness,	1.9990/2.0000	0.0014/0.0035	0.0616	3 2.1247/2.125	2 0.7920
Rod Bearing (8) For Year(s): 1962 NOTE: V-Series F Increased Crar Cap Half	Performanc	CB-745VN e Narrowed On arance No Dowe		1.9990/2.0000	0.0010/0.0031	0.0620	) 2.1247/2.125	2 0.7920
.0010" More Oi	-1967 Performanc I Clearance			1.9990/2.0000	0.0020/0.0041	0.0615	2.1247/2.125	2 0.7920
Main Bearing Set 1-2-3-4 5 For Year(s): 1968 NOTE: H-Series	-1996	MS-909H MB-2508H MB-2509H(F)	STD,1,9,10,11,19 20,21,30 er Half And Plain		0.0006/0.0036			
Lower Half	enormanc	e arooved oppe						
Main Bearing Set 1-2-3-4 5 For Year(s): 1968	-1996	MS-909HG MB-2508HG MB-2509HG(F) e Contains Full	STD Grooved Bearings		0.0006/0.0036 0.0011/0.0041			



	CO	UNTER DAT	A	SHOP DATA					
BEARING OR POSITION	BEARING	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	MAX LENGTH	
							8 CYL	. (cont.)	
(cont.) Years: 1 327 C	967-1969	6V V8 Chev 6V V8 Chev			0"/101.6mm 0"/101.6mm			(cont.)	
	ID (4.3L) 1 1994-1996	6V V8 Chev	rolet	3.7	50"/95.3mm	x 3.00	0"/76.2mm		
Main Bearing Se 1-2-3-4 5		MS-909HK MB-2508H MB-2509H(F)	STD,1,10		0.0006/0.0036				
For Year(s): 1968 NOTE: H-Series And Plain Lowe Include Coatin	Performanc er Half, Max	imum Wall Doe	r Grooved Upper Half s Not						
Main Bearing Se 1-2-3-4 5 For Year(s): 1968		MS-909HX MB-2508HX MB-2509HX(F)	STD		0.0016/0.0046 0.0021/0.0051				
	Performance I Clearance		.0005" Thinner For r Half And						
Main Bearing Se 1-2-3-4 5 For Year(s): 1968 NOTE: H-Series .0005" Thinner Grooved Uppe	3-1996 Performanc For .0010" N	Nore Oil Cleara	ince		0.0016/0.0046 0.0021/0.0051				
Wall Does Not									
Main Bearing Se 1-2-3-4 5 For Year(s): 1968 NOTE: V-Series	t VP-2 8-1996	MS-909V MB-2508V MB-2509V(F)	STD,10 er Half And Plain		0.0005/0.0028 0.0005/0.0028				
Lower Half Main Bearing Se 1-2-3-4 5 5		MS-1110H MB-2650H MB-1769H(F) MB-2651C	STD,1,10		0.0005/0.0031 0.0010/0.0036	0.0954		6 1.7180	
For Year(s): 1968 NOTE: Engine Us Contains A Spa Position Numb Lower Half	sing 283 Cra acer To Be l	Jsed With Bear							
Main Bearing Se 1-2-3-4 5 5 5		MS-1110HK MB-2650H MB-1769H(F) MB-2651C	STD,1‡,10‡		0.0005/0.0031 0.0010/0.0036	0.0954		6 1.7180	
For Year(s): 1968 NOTE: Engine Us with TriArmor Bearing In Pos And Plain Lowe	sing 283 Cra Contains A S ition Numbe	Spacer To Be U							



	CO	UNTER DAT	Ά.		SHOP	DATA	۱	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OI HOUSING BORE	R MAX LENGTH
8 CYL (cont.)								
(cont.) Years: 1	967-1969	16V V8 Chev			0"/101.6mm			(cont.)
		6V V8 Chev	rolet	4.000	0"/101.6mm	x 3.25	0"/82.5mm	
265 CI	962-1969 D (4.3L) 1 994-1996	16V V8 Chev	rolet	3.7	50"/95.3mm	x 3.00	0"/76.2mm	
Main Bearing Set		MS-1110HX	STD	1				
1-2-3-4 5		MB-2650HX MB-1769HX(F)			0.0015/0.0041 0.0020/0.0046			
5		MB-2651C				0.0753	2.6406/2.641	6 1.5200
For Year(s): 1968 NOTE: Engine Us Bearing Wall .0 Clearance Com Bearing In Posi And Plain Lowe	ing 283 Cra 005" Thinne tains A Spa tion Numbe	er For .0010" M cer To Be Used	d With					
Main Bearing Set		MS-1110HXK	STD					
1-2-3-4 5 5 For Year(s): 1968		MB-2650HX MB-1769HX(F) MB-2651C			0.0015/0.0041 0.0020/0.0046	0.0949		6 1.7180
.0010" More Oil Used With Bear Upper Half And Main Bearing Set 1-2-3-4 5	ring In Posi Plain Lowe	tion Number 5			0.0004/0.0030			
For Year(s): 1962 NOTE: H-Series I Lower Half			er Half And Plain					
Main Bearing Set 1-2-3-4 5 For Year(s): 1962 NOTE: H-Series I	-1967	MS-429HK MB-1808H MB-1769H(F) e with TriArmo	STD,10 r Grooved Upper Half		0.0004/0.0030 0.0010/0.0036			
And Plain Lowe Include Coating	,		es Not					
Main Bearing Set	r	MS-429HX	STD	0.0000 0.0000	0.004.410.0010	0.00.0	0.400010.40	
1-2-3-4		MB-1808HX MB-1769HX(F)			0.0014/0.0040 0.0020/0.0046			
For Year(s): 1962 NOTE: H-Series I .0010" More Oil Plain Lower Ha	Performance	e Bearing Wall	.0005" Thinner For r Half And	2.2910/2.2900	0.0020/0.0040	0.0948	2.4900/2.491	0 1.7100
Main Bearing Set	TM-77	MS-429HXK	STD					
1-2-3-4 5		MB-1808HX MB-1769HX(F)			0.0014/0.0040 0.0020/0.0046			
For Year(s): 1962 NOTE: H-Series I .0005" Thinner Grooved Upper Wall Does Not	Performanc For .0010" I Half And P	More Oil Cleara Iain Lower Hal	ince f, Maximum					



	COL	UNTER DAT	A	SHOP DATA					
BEARING OR	BEARING MATERIAI	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE		
							8 CYL	(cont.)	
(cont.) Years: 1	967-1969	6V V8 Chev 6V V8 Chev			)"/101.6mm )"/101.6mm		0"/76.2mm	8 (cont.)	
Years: 1	962-1969	6V V8 Chev			50"/95.3mm				
	994-1996			0.11		. 0.00	• / • • • • •		
Main Bearing Set 1-2-3-4		MS-429V MB-1808V	STD		0.0003/0.0031				
5 Far Vaariah 1060		MB-1769V(F)		2.2978/2.2988	0.0010/0.0036	0.0954	2.4906/2.491	5 1.7180	
For Year(s): 1962 NOTE: V-Series F Lower Half		Grooved Upp	er Half And Plain						
Main Bearing Set		MS-429VX	STD						
1-2-3-4 5		MB-1808VX MB-1769VX(F)			0.0013/0.0041 0.0020/0.0046				
For Year(s): 1962 NOTE: V-Series F .0010" More Oil Plain Lower Ha	-1967 Performance I Clearance	Bearing Wall	.0005" Thinner For er Half And						
Bearing Wall .0 Clearance Com Upper Half And H-Series Perform .0010" More Oil Only, Grooved	005" Thinne tains Flange I Plain Lowe nance Bearin I Clearance	r For .0010" M ed Bearing Onl r Half ng Wall .0005" Contains Flan	y, Grooved Thinner For ged Bearing						
Main Bearing For Year(s): 1968	TM-77 -1996 Performance	MB-2509H-1 e Contains Fla	STD nged Bearing Only,	2.4478/2.4488	0.0011/0.0041	0.0955	2.6406/2.641	6 1.7180	
Main Bearing For Year(s): 1968 NOTE: H-Series I .0010" More Oil Only, Grooved	-1996 Performance I Clearance	Contains Flan		2.4478/2.4488	0.0021/0.0051	0.0950	2.6406/2.641	6 1.7180	
Cam Bearing Set	B-2	SH-1349S	STD						
1		SH-1349			0.0010/0.0048				
2-5 3-4		SH-1350 SH-1351			0.0010/0.0048				
<sup>3-4</sup> For Year(s): 1964		GH-1001		1.0002/1.0092	0.0010/0.0048	0.0044	1.9990/2.001	0.7400	
NOTE: Performa		Set							
Cam Bearing Set	B-2	SH-1772S	STD						
1		SH-1351		1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.001	0 0.7450	
2-3-4-5		SH-2185		1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.001	0 0.8650	
For Year(s): 1968		a alu Daví	anas Bassing Cat						
			ance Bearing Set						
Cam Bearing Set		SH-1796S	STD	1 0600/4 0000	0.0010/0.0040	0.0044	1 0000/0 001	0 0 7450	
1-2-3-4-5 For Year(s): 1964		SH-1351		1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.001	0 0.7450	
NOTE: Oversize	Align Bored	Blocks with H ance Bearing S	ousing Bore Size						



	COUNTER DAT	A		SHOP	DATA	<u>۱</u>	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.)							
(cont.) Years: 1	ID (4.9L) 16V V8 Chevi 967-1969 ID (5.3L) 16V V8 Chevi			0"/101.6mm 0"/101.6mm			(cont.)
265 C	962-1969 ID (4.3L) 16V V8 Chevr	rolet	3.7	50"/95.3mm	x 3.00	0"/76.2mm	
Years: 1 Cam Bearing Set	994-1996 B-1 SH-287S	STD	1				
Cam bearing Set 1 2 3-4 5 For Year(s): 1962	SH-290 SH-288 SH287 SH-289	510	1.8682/1.8692 1.8682/1.8692	0.0010/0.0050 0.0010/0.0050 0.0010/0.0050 0.0010/0.0050	0.0694 0.0644	2.0090/2.011	0 0.7500 0 0.7500
Connecting Rod Crankshaft Forg		2, 2680, 3279, 3782680,	3782690, 3815		391100	01, 3911011,	391101A,
	3914681, 3914682 D (4.6L) 16V V8 Cheve 957-1967	2, 3930809, 3941172, 394 rolet		, 5782680 <b>75"/98.4mm</b>	x 3.00	0"/76.2mm	9
Rod Bearing (8) NOTE: H-Series	TM-77 CB-745HN Performance Narrowed On ak Fillet Clearance No Down		1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920
Used In Engine	TM-77 CB-745HND Performance Dowel Hole Ir s Without Doweled Connec One Side For Increased Cra	ting Rod	1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920
Half, Maximum Thickness May	TM-77 CB-745HNDK Performance with TriArmor Wall Does Not Include Coa Be Used In Engines Witho d Narrowed On One Side F earance	ating ut Doweled	1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920
Not Include Co	TM-77 CB-745HNK Performance with TriArmor ating Thickness, Narrowed sed Crank Fillet Clearance If	On One	1.9990/2.0000	0.0004/0.0025	0.0621	2.1247/2.125	2 0.7920
.0010" More Oi	TM-77 CB-745HXN Performance Bearing Wall I Clearance Narrowed On C Ik Fillet Clearance No Dowe	One Side For	1.9990/2.0000	0.0014/0.0035	0.0616	2.1247/2.125	2 0.7920
.0005" Thinner Maximum Wall Narrowed On C	TM-77 CB-745HXNK Performance with TriArmor For .0010" More Oil Cleara Does Not Include Coating One Side For Increased Cra Dowel Hole In Cap Half	nce Thickness,	1.9990/2.0000	0.0014/0.0035	0.0616	6 2.1247/2.125	2 0.7920
	VP-2 CB-745VN Performance Narrowed On Ik Fillet Clearance No Down		1.9990/2.0000	0.0010/0.0031	0.0620	2.1247/2.125	2 0.7920



	CO	UNTER DAT	Γ <b>A</b>	SHOP DATA					
BEARING OR	BEARING		AVAILABLE	STD SHAFT	VERT OIL			MAX	
POSITION	MATERIA	L NUMBER	UNDERSIZES	DIAMETER	CLEARANCE	WALL		LENGTH	
								(cont.)	
(cont.) Years: 19	957-1967	6V V8 Chev			75"/98.4mm			9 (cont.)	
Rod Bearing (8) NOTE: V-Series P .0010" More Oil Increased Crant Cap Half	erformance Clearance	Narrowed On		1.9990/2.0000	0.0020/0.0041	0.0615	2.1247/2.1252	2 0.7920	
Main Bearing Set 1-2-3-4 5		MS-429H MB-1808H MB-1769H(F)	STD,1,10		0.0004/0.0030				
NOTE: H-Series P Lower Half			per Half And Plain	2.2070/2.2000	0.0010/0.0000	0.0004	2.4000/2.4010	/ 11/100	
Main Bearing Set 1-2-3-4 5 NOTE: H-Series P		MS-429HK MB-1808H MB-1769H(F) e with TriArmo	STD,10		0.0004/0.0030 0.0010/0.0036				
And Plain Lower Include Coating	r Half, Maxi	imum Wall Do							
Main Bearing Set 1-2-3-4 5		MS-429HX MB-1808HX MB-1769HX(F)	STD		0.0014/0.0040				
NOTE: H-Series P .0010" More Oil Plain Lower Hal	Clearance		.0005" Thinner For er Half And						
Main Bearing Set 1-2-3-4 5		MS-429HXK MB-1808HX MB-1769HX(F)	STD		0.0014/0.0040				
NOTE: H-Series P .0005" Thinner F Grooved Upper Wall Does Not Ir	or .0010" N Half And P	Aore Oil Cleara Iain Lower Hal	ance f, Maximum						
Main Bearing Set 1-2-3-4 5		MS-429V MB-1808V MB-1769V(F)	STD		0.0003/0.0031				
NOTE: V-Series P Lower Half			er Half And Plain						
Main Bearing Set 1-2-3-4 5		MS-429VX MB-1808VX MB-1769VX(F)	STD		0.0013/0.0041				
NOTE: V-Series P .0010" More Oil Plain Lower Hal	Clearance		.0005" Thinner For er Half And						
Main Bearing NOTE: H-Series P .0010" More Oil Only, Grooved U	erformance Clearance	Contains Flan		2.2978/2.2988	0.0020/0.0046	0.0949	2.4906/2.4916	3 1.7180	
Cam Bearing Set 1 2-5 3-4		SH-1349S SH-1349 SH-1350 SH-1351	STD	1.8682/1.8692	0.0010/0.0048 0.0010/0.0048 0.0010/0.0048	0.0694	2.0090/2.0110	0.7450	
For Year(s): 1964- NOTE: Performan		Set							
Cam Bearing Set 1-2-3-4-5 For Year(s): 1964-		SH-1796S SH-1351	STD	1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.0010	0.7450	
NOTE: Oversize A 1.9990" / 2.0010	lign Bored								

**GENERAL MOTORS** 



	COUNTER DAT	A		SHOP	DATA	<b>\</b>	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
8 CYL (cont.)		- lat	0.0	7511/00 4		01/70 0	
9 283 C (cont.) Years: 1	ID (4.6L) 16V V8 Chevi 1957-1967	olet	3.8	75"/98.4mm	x 3.00	0"/76.2mm	9 (cont.)
Cam Bearing Set 1 2 3-4 5 For Year(s): 1957	t B-1 <b>SH-287S</b> SH-290 SH-288 SH287 SH-289	STD	1.8682/1.8692 1.8682/1.8692	0.0010/0.0050 0.0010/0.0050 0.0010/0.0050 0.0010/0.0050	0.0694 0.0644	2.0090/2.011 1.9990/2.001	0 0.7500 0 0.7500 0 0.7500
	ID (4.8L) 16V V8 Vorte	c	3.78	80"/96.0mm	x 3.26	8"/83.0mm	10
325 C	1999-2011 ID (5.3L) 16V V8 Vorte 1999-2011	c	3.78	80"/96.0mm	x 3.62	2"/92.0mm	
<b>346 C</b> Years: 1	ID (5.7L) 16V V8 Cheve 1997-2005			98"/99.0mm			
	ID (6.0L) 16V V8 Vorte 1999-2011	c	4.000	0"/101.6mm	x 3.62	2"/92.0mm	
	TM-77 CB-663HN Performance Narrowed On hk Fillet Clearance No Dow		2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
Rod Bearing (8) NOTE: H-Series Used In Engine	TM-77 CB-663HND Performance Dowel Hole In the Without Doweled Connect One Side For Increased Cra	ting Rod	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
Half, Maximum Thickness May	TM-77 CB-663HNDK Performance with TriArmon Wall Does Not Include Cos Be Used In Engines Witho d Narrowed On One Side F earance	ating ut Doweled	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
Not Include Co	TM-77 CB-663HNK Performance with TriArmor ating Thickness, Narrowed ased Crank Fillet Clearance Iff	On One	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
.0010" More Oi	TM-77 CB-663HXN Performance Bearing Wall I Clearance Narrowed On C Ink Fillet Clearance No Down	One Side For	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
.0010" More Oi May Be Used I	TM-77 CB-663HXND Performance Bearing Wall I Clearance Dowel Hole In n Engines Without Doweled On One Side For Increased e	Cap Half I Connecting	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
.0005" Thinner Hole In Cap Ha Coating Thickr Doweled Conn	TM-77 CB-663HXNDK Performance with TriArmor For .0010" More Oil Cleara lif, Maximum Wall Does Nor ness May Be Used In Engine ecting Rod Narrowed On O nk Fillet Clearance	Bearing Wall nce Dowel t Include es Without	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920



A	Η	L	E

	COUNTER DAT	A		SHOP	DATA	1	
						BRG O.D. OF	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		HOUSING BORE	MAX LENGTH
						8 CYL	(cont.)
(cont.) Years:	ID (4.8L) 16V V8 Vorte 1999-2011		3.7	80"/96.0mm	x 3.26	8"/83.0mm	10 (cont.)
Years:	ID (5.3L) 16V V8 Vorte			80"/96.0mm			
Years:	ID (5.7L) 16V V8 Chev 1997-2005			98"/99.0mm			
Years:	ID (6.0L) 16V V8 Vorte			0"/101.6mm			
.0005" Thinner Maximum Wal Narrowed On (	TM-77 CB-663HXNK Performance with TriArmo For .0010" More Oil Cleara I Does Not Include Coating One Side For Increased Cra Dowel Hole In Cap Half	nce Thickness,	2.0990/2.1000	0.0019/0.0040	0.0614	2.224772.225	2 0.7920
	VP-2 CB-663VN Performance Narrowed Or nk Fillet Clearance No Dow		2.0990/2.1000	0.0008/0.0028	0.0621	2.2247/2.225	2 0.7920
.0010" More O	VP-2 CB-663VXN Performance Bearing Wall il Clearance Narrowed On nk Fillet Clearance No Dow	One Side For	2.0990/2.1000	0.0018/0.0038	0.0616	2.2247/2.225	2 0.7920
	MB-3591H MB-3591H MB-3592H(F) Performance Grooved Upp	STD,1,10 Der Half And Plain		0.0005/0.0026 0.0005/0.0026			
Lower Half Main Bearing Se 1-2-4-5	t TM-77 MS-2199HK MB-3591H	STD,10	2.5588/2.5593	0.0005/0.0026	0.0957	2.7509/2.751	4 0.8050
	MB-3592H(F) Performance with TriArmo er Half, Maximum Wall Doo on Thickness		2.5588/2.5593	0.0005/0.0026	0.0957	2.7509/2.751	4 1.0280
Main Bearing Se 1-2-4-5 3	TM-77 MS-2199HX MB-3591HX MB-3592HX(F)	STD		0.0015/0.0036			
	Performance Bearing Wall il Clearance Grooved Uppe alf						
Main Bearing Se 1-2-4-5 3	t TM-77 MS-2199HXK MB-3591HX MB-3592HX(F)	STD		0.0015/0.0036			
.0005" Thinner Grooved Uppe	Performance with TriArmo For .0010" More Oil Cleara r Half And Plain Lower Hal Include Coating Thickness	ance f, Maximum					
Main Bearing NOTE: H-Series .0010" More O	TM-77 MB-3592HX Performance Bearing Wall il Clearance Contains Flan Upper Half And Plain Low	STD .0005" Thinner For ged Bearing	2.5588/2.5593	0.0015/0.0036	0.0952	2.7509/2.751	4 1.0280
	TM-77 MB-3592H-1 Performance Contains Fla r Half And Plain Lower Hal	nged Bearing Only,	2.5588/2.5593	0.0005/0.0026	0.0957	2.7509/2.751	4 1.0280



	COL	UNTER DAT	4		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		R MAX LENGTH
8 CYL (cont.)								
(cont.) Years: 1	999-2011	6V V8 Vorte			80"/96.0mm			(cont.)
Years: 1	999-2011	6V V8 Vorted			80"/96.0mm 98"/99.0mm			
Years: 1	997-2005	6V V8 Chevr 6V V8 Vorted			0"/101.6mm			
	999-2011		•	4.00	0 / 101.011111	A 0.02	2 / 52.01111	
Cam Bearing Set	B-2	SH-2157S	STD					
1-5 2-4		SH-2157 SH-2158			0.0022/0.0074			
3		SH-2158 SH-2159			0.0010/0.0062			
For Year(s): 2003		0.1 2100		2.1.000/2.1.0/(		0.0100	210010121000	0.1000
NOTE: For 2003:	2nd Design	,	ber 1 And 5					
Housing Bore i		.3492"						
Performance, Be	•							
Cam Bearing Set		SH-2160S	STD	0 1650/0 167/	0.0011/0.0000	0.0700	0 0070/0 000	5 0 6950
1-5 2-4		SH-2160 SH-2161			0.0011/0.0063 0.0011/0.0063			
3		SH-2162			0.0011/0.0063			
For Year(s): 1997								
NOTE: For 2003:	1st Design,	Position Numb	er 1 And 5					
Housing Bore i		.3295"						
Performance, Be	aring Set							
Connecting Rod Crankshaft Forg		1, 143 552216, 125534	182					
Years: 2	D (5.3L) 1 005-2009			3.7	80"/96.0mm	x 3.62	2"/92.0mm	11
Years: 2	004-2007	6V V8 Vorteo			80"/96.0mm			
Years: 2	008-2011	6V V8 Vorteo	c Hybrid		0"/101.6mm			
Years: 2	D (6.2L) 1 008-2011				5"/103.3mm			
	D (6.2L) 1 007-2011	6V V8 Vorteo	C	4.06	5"/103.3mm	x 3.62	2"/92.0mm	
Rod Bearing (8)		CB-663HN	STD,1,9,10,11,19 20,21,30	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
NOTE: H-Series I Increased Cran Cap Half								
Rod Bearing (8) NOTE: H-Series I Used In Engine Narrowed On C Clearance	Performance s Without D	oweled Connec	•	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
Rod Bearing (8) NOTE: H-Series I Half, Maximum Thickness May Connecting Ro Crank Fillet Cle	Performance Wall Does N Be Used In d Narrowed	Not Include Coa Engines Withou	ut Doweled	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920



	COL	JNTER DAT	A		SHOP	DATA	۹	
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BORE	MAX LENGTH
11 325 C	D (5.3L) 1	ev ve		3.7	80"/96.0mm	× 3 62	8 CYL	(cont.)
(cont.) Years: 2	005-2009							(cont.)
	D (5.3L) 1 004-2007	6V V8 Vorte	c Hybrid	3.78	80"/96.0mm	x 3.62	2"/92.0mm	
364 CI		6V V8 Vorte	c Hybrid	4.00	0"/101.6mm	x 3.62	2"/92.0mm	
	ID (6.2L) 1	6V V8		4.06	5"/103.3mm	x 3.62	2"/92.0mm	
	008-2011		-	4.00	Ell /102 2mama		011/00 0	
	007-2011	6V V8 Vorte	C	4.06	5"/103.3mm	x 3.62	2"/92.0mm	
Rod Bearing (8) NOTE: H-Series I Not Include Co Side For Increa Hole In Cap Ha	Performance ating Thickn sed Crank F	ess, Narrowed		2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.2252	0.7920
Rod Bearing (8) NOTE: H-Series I .0010" More Oil Increased Cran Cap Half	Performance Clearance	Narrowed On C		2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	0.7920
Rod Bearing (8) NOTE: H-Series I .0010" More Oil May Be Used In Rod Narrowed Fillet Clearance	Performance I Clearance I In Engines Wi On One Side	Dowel Hole In ( thout Doweled	Connecting	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	0.7920
Rod Bearing (8) NOTE: H-Series I .0005" Thinner Hole In Cap Ha Coating Thickn Doweled Conne Increased Cran	Performance For .0010" M If, Maximum less May Be ecting Rod N	lore Oil Cleara Wall Does Not Used In Engine larrowed On O	Bearing Wall nce Dowel Include es Without	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	0.7920
Rod Bearing (8) NOTE: H-Series I .0005" Thinner Maximum Wall Narrowed On C Clearance No I	Performance For .0010" M Does Not In One Side For	lore Oil Clearan clude Coating Increased Cra	nce Thickness,	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	0.7920
Rod Bearing (8) NOTE: V-Series F Increased Cran Cap Half	Performance			2.0990/2.1000	0.0008/0.0028	0.0621	2.2247/2.2252	0.7920
Rod Bearing (8) NOTE: V-Series F .0010" More Oil Increased Cran Cap Half	Performance Clearance	Narrowed On C		2.0990/2.1000	0.0018/0.0038	0.0616	3 2.2247/2.2252	0.7920
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I Lower Half	1	MS-2199H MB-3591H MB-3592H(F) Grooved Uppe	STD,1,10 er Half And Plain		0.0005/0.0026 0.0005/0.0026			

	со	UNTER DAT	A		SHOP	DATA	4	
BEARING OR POSITION		PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		R MAX LENGTH
8 CYL (cont.)							0.11 /0.0.0	
	D (5.3L) 1	16V V8		3.7	80"/96.0mm	x 3.62	2"/92.0mm	11 (cont.)
325 CI		6V V8 Vorte	c Hybrid	3.7	80"/96.0mm	x 3.62	2"/92.0mm	
	D (6.0L) 1	6V V8 Vorte	c Hybrid	4.00	0"/101.6mm	x 3.62	2"/92.0mm	
	D (6.2L) 1 008-2011	16V V8		4.06	5"/103.3mm	x 3.62	2"/92.0mm	
376 CI		16V V8 Vorte	c	4.06	5"/103.3mm	x 3.62	2"/92.0mm	
Main Bearing Set		MS-2199HK	STD,10	1				
1-2-4-5 3		MB-3591H MB-3592H(F)			3 0.0005/0.0026 3 0.0005/0.0026			
NOTE: H-Series F And Plain Lowe Include Coating	er Half, Max	imum Wall Doe	r Grooved Upper Half s Not					
Main Bearing Set 1-2-4-5 3	t TM-77	MS-2199HX MB-3591HX MB-3592HX(F)	STD		3 0.0015/0.0036 3 0.0015/0.0036			
Ŷ	Clearance	e Bearing Wall	.0005" Thinner For r Half And	2.000072.0030	0.0010/0.0000	0.0302	2.1008/2.101	4 1.0200
Main Bearing Set 1-2-4-5 3		MS-2199HXK MB-3591HX MB-3592HX(F)	STD		3 0.0015/0.0036 3 0.0015/0.0036			
NOTE: H-Series F .0005" Thinner Grooved Upper Wall Does Not	For .0010" I Half And P	More Oil Cleara Iain Lower Half	nce , Maximum					
Main Bearing NOTE: H-Series F .0010" More Oil Only, Grooved	Performance	Contains Flang		2.5588/2.5593	3 0.0015/0.0036	0.0952	2.7509/2.751	4 1.0280
Main Bearing NOTE: H-Series F Grooved Upper	Performanc		nged Bearing Only,	2.5588/2.5593	3 0.0005/0.0026	0.0957	2.7509/2.751	4 1.0280
Cam Bearing Set	B-2	SH-2157S	STD					
1-5 2-4		SH-2157 SH-2158			0.0022/0.0074			
3		SH-2159			0.0010/0.0062			
NOTE: Performar	, ,	~						
Connecting Rod Crankshaft Forg	ing 12	2552216, 12553						
Years: 1	963-1967	16V V8 Ponti		3.7	19"/94.5mm	x 3.75	0"/95.3mm	12
Years: 1	968-1979	16V V8 Ponti			75"/98.4mm			
	<b>D (6.6L) 1</b> 967-1979	16V V8 Ponti	ac	4.12	0"/104.7mm	x 3.75	0"/95.3mm	
Rod Bearing (8) NOTE: H-Series F Increased Cran Cap Half	Performanc			2.2487/2.2497	0.0012/0.0033	0.0619	2.3745/2.375	0 0.8460



	CO	UNTER DAT	A		SHOP	DAT	A	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		R MAX LENGTH
				•			8 CYL	. (cont.)
(cont.) Years: 1	1963-1967	16V V8 Pont			19"/94.5mm			(cont.)
Years: 1	1968-1979	16V V8 Pont 16V V8 Pont			75"/98.4mm 0"/104.7mm			
	1967-1979		lac	4.120	0 / 104./1111	x 5.75	0 /95.50	
Rod Bearing (8) NOTE: H-Series .0010" More Oi Increased Crar Cap Half	Performanc il Clearance	Narrowed On		2.2487/2.2497	0.0021/0.0042	0.0614	1 2.3745/2.375	0 0.8460
Main Bearing Se	t TM-77	MS-496P	STD,10,20,30		0.0007/0.0000	0.000		
1-2-3 4		MB-1917P MB-1918P(F)			0.0007/0.0038			
5		MB-1891P			0.0007/0.0038			
NOTE: Contains			0.70					
Cam Bearing Se 1-2-3-4-5	t B-1	SH-292S SH-292	STD	1.8992/1.8997	0.0010/0.0060	0.0643	3 2.0297/2.031	7 0.6900
Years: 1 409 C	ID (5.7L) 1 1958-1965	16V V8 Chev 16V V8 Chev		4.12	5"/104.8mm 3"/109.5mm	x 3.25	0"/82.6mm	
Rod Bearing (8) NOTE: H-Series Increased Crar Cap Half	Performanc			2.1990/2.2000	0.0010/0.0031	0.0619	9 2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series Used In Engine Narrowed On ( Clearance	Performances Without D	oweled Conne	•	2.1990/2.2000	0.0010/0.0031	0.0619	9 2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series Half, Maximum Thickness May Connecting Ro Crank Fillet Cle	Performanc Wall Does Be Used In d Narrowed	Not Include Co Engines With	r Dowel Hole In Cap pating put Doweled	2.1990/2.2000	0.0010/0.0031	0.0619	9 2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series Not Include Co Side For Increa Hole In Cap Ha	Performanc ating Thick ased Crank	ness, Narrowe		2.1990/2.2000	0.0010/0.0031	0.0619	9 2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0010" More Oi Increased Crar Cap Half	Performance I Clearance	Narrowed On		2.1990/2.2000	0.0020/0.0041	0.0614	1 2.3247/2.325	2 0.8420



	co	UNTER DAT	A		SHOP	DATA	<b>\</b>	
BEARING OR POSITION	BEARING MATERIA	i PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.) 13 348 CI	D (5.7L)	16V V8 Chev	rolet	4.12	5"/104.8mm	x 3.25	0"/82.6mm	13
(cont.) Years: 1	958-1965	16V V8 Chev			3"/109.5mm			(cont.)
	961-1965	IOV VO CIIEV	Tolet	4.51	5 / 109.511111	× 3.50	0 700.911111	
Rod Bearing (8) NOTE: H-Series F .0010" More Oil May Be Used In Rod Narrowed Fillet Clearance	Performance Clearance Engines V On One Sid	Dowel Hole In Vithout Dowele	d Connecting	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.3252	2 0.8420
Rod Bearing (8) NOTE: H-Series F .0005" Thinner Hole In Cap Ha Coating Thickn Doweled Conne Increased Cran	Performand For .0010" If, Maximur ess May Be ecting Rod	More Oil Cleara n Wall Does No e Used In Engin Narrowed On (	r Bearing Wall ance Dowel ot Include ses Without	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.3252	2 0.8420
Rod Bearing (8) NOTE: H-Series F .0005" Thinner Maximum Wall Narrowed On O Clearance No D	Performand For .0010" Does Not I One Side Fo	More Oil Cleara nclude Coating r Increased Cra	ance Thickness,	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.3252	2 0.8420
Rod Bearing (8) NOTE: V-Series P		CB-743V e No Dowel Ho	STD,1,10 le In Cap Half	2.1990/2.2000	0.0009/0.0030	0.0619	2.3247/2.3252	2 0.8920
Rod Bearing (8) NOTE: V-Series F Used In Engine Narrowed On O Clearance	s Without [	Doweled Conne		2.1990/2.2000	0.0009/0.0034	0.0620	2.3247/2.3252	2 0.8420
Rod Bearing (8) NOTE: V-Series F .0010" More Oil May Be Used Ir Rod Narrowed Fillet Clearance	Performance Clearance Engines V On One Sid	Dowel Hole In Vithout Dowele	d Connecting	2.1990/2.2000	0.0019/0.0044	0.0615	2.3247/2.3252	2 0.8420
Rod Bearing (8) NOTE: V-Series F .0010" More Oil Half	Performanc		STD .0005" Thinner For a In Cap	2.1990/2.2000	0.0019/0.0040	0.0614	2.3247/2.3252	2 0.8920
Rod Bearing (8) NOTE: M-Series I Used In Engine			STD In Cap Half May Be acting Rod	2.1990/2.2000	0.0010/0.0031	0.0622	2.3247/2.3252	2 0.8920
Main Bearing Set 1-2-3-4 5 NOTE: H Series P		MS-2323H MB-3993H MB-1841H	STD•		0.0006/0.0032 0.0020/0.0046			
Main Bearing Set 1-2-3-4 5 NOTE: H Series F	t TM-77	<b>MS-2323HX</b> MB-3993HX MB-1841HX	STD•		0.0016/0.0042 0.0030/0.0056			
Cam Bearing Set		SH-398S	STD					
1 2 3-4 5	-	SH-398 SH-399 SH-400 SH-401		1.8682/1.8692 1.8682/1.8692	0.0010/0.0052 0.0010/0.0052 0.0005/0.0050 0.0010/0.0052	0.0694 0.0647	2.0090/2.0110	0.8650 0.8700



		E

	COU	NTER DAT/	A		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
								8 CYL
Years: 1	980-1998	3V V8 Chevr 3V V8 Chevr			8"/100.0mm "/108.0mm x			
Years: 1	970-1997	V V8 Vorte			'/108.0mm x			
Years: 1	996-2000							
Rod Bearing (8) NOTE: H-Series I Increased Crar Cap Half	Performance			2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series I Used In Engine Narrowed On C Clearance	Performance s Without Do	weled Connec		2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series I Half, Maximum Thickness May Connecting Ro Crank Fillet Cle	Performance Wall Does No Be Used In E d Narrowed O	ot Include Coa ingines Withou	It Doweled	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series I Not Include Co Side For Increa Hole In Cap Ha	Performance ating Thickne sed Crank Fil	ess, Narrowed		2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series I .0010" More Oi Increased Cran Cap Half	Performance I Clearance N	arrowed On O		2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series I .0010" More Oi May Be Used In Rod Narrowed Fillet Clearance	Performance I Clearance D n Engines Wit On One Side	owel Hole In C hout Doweled	Connecting	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series I .0005" Thinner Hole In Cap Ha Coating Thickn Doweled Conn Increased Cran	Performance For .0010" Mo If, Maximum less May Be U ecting Rod Na	ore Oil Clearar Wall Does Not Jsed In Engine arrowed On O	Bearing Wall Ince Dowel Include In Without	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series I .0005" Thinner Maximum Wall Narrowed On C Clearance No D	Performance For .0010" Mo Does Not Inc One Side For I	ore Oil Clearar lude Coating ncreased Cra	nce Thickness,	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: V-Series F		B-743V No Dowel Hole	STD,1,10 In Cap Half	2.1990/2.2000	0.0009/0.0030	0.0619	2.3247/2.325	2 0.8920



	co	UNTER DAT	Α		SHOP	DATA	-	
BEARING OR POSITION		PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.) 14 366 C		16V V8 Chev	rolet	3.02	8"/100.0mm	x 3 76	6"/95 5mm	14
(cont.) Years: 1	980-1998			0.00	5 / 100.011111	× 0.70	0 / 35.51111	(cont.)
Years: 1	970-1997	16V V8 Chev 16V V8 Vorte			'/108.0mm x '/108.0mm x			
Years: 1	996-2000		•					
Used In Engine	s Without D	CB-743VND e Dowel Hole Ir Doweled Conne r Increased Cra	0	2.1990/2.2000	0.0009/0.0034	0.0620	2.3247/2.3252	2 0.8420
.0010" More Oi May Be Used In	Performanc I Clearance n Engines V On One Sid	CB-743VNDX e Bearing Wall Dowel Hole In Vithout Doweled te For Increased	Connecting	2.1990/2.2000	0.0019/0.0044	0.0615	2.3247/2.3252	2 0.8420
	Performanc	CB-743VX e Bearing Wall No Dowel Hole	STD 0005" Thinner For In Cap	2.1990/2.2000	0.0019/0.0040	0.0614	2.3247/2.3252	2 0.8920
		CB-829M ce Dowel Hole I Doweled Conne	STD n Cap Half May Be cting Rod	2.1990/2.2000	0.0010/0.0031	0.0622	2.3247/2.3252	2 0.8920
Main Bearing Set 1-2-3-4 5 NOTE: H-Series I		MS-829H MB-2403H MB-2404H(F)	STD,1,9,10,11,19 20,21,30 er Half And Plain		0.0007/0.0032 0.0012/0.0038			
Lower Half	renormanc	e arooved opp						
Main Bearing Set 1-2-3-4 5	t TM-77	MS-829HG MB-2403HG MB-2404HG(F)	STD		0.0007/0.0032			
			Grooved Bearings					
	Performanc	MS-829HK MB-2403H MB-2404H(F) with TriArmon timum Wall Doe	STD,1,10 r Grooved Upper Half		0.0007/0.0032 0.0012/0.0038			
Include Coating			SNOT					
Main Bearing Set 1-2-3-4 5	t TM-77	MS-829HX MB-2403HX MB-2404HX(F)	STD		0.0017/0.0042			
	I Clearance	e Bearing Wall Grooved Uppe	.0005" Thinner For r Half And					
Main Bearing Set 1-2-3-4 5		MS-829HXK MB-2403HX MB-2404HX(F)	STD		0.0017/0.0042			
	For .0010"   Half And P	More Oil Cleara Plain Lower Half	nce , Maximum					
Main Bearing Set 1-2-3-4 5 NOTE: V-Series F Lower Half	t VP-2	MB-2403V MB-2404V(F)	STD,1,10		0.0007/0.0035 0.0011/0.0039			

GENERAL MOTORS

	cc	OUNTER DATA	A		SHOP	DATA	<b>\</b>	
		G PART AL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
(cont.) Years: 198	0-1998	16V V8 Chevr			3"/100.0mm		6"/95.5mm	14 (cont.)
Years: 197	0-1997	16V V8 Chevr			'/108.0mm x			
Years: 199	6-2000	16V V8 Vorted		4.250	'/108.0mm x	4.000	"/101.6mm	
Main Bearing Set 1-2-3-4 5 NOTE: V-Series Per	VP-2	MS-829VX MB-2403VX MB-2404VX(F) ce Bearing Wall .0	STD 0005" Thinner For		0.0017/0.0045 0.0021/0.0049			
.0010" More Oil C Plain Lower Half	learanc	e Grooved Upper	Half And					
Main Bearing Set 1-2-3-4 5 NOTE: M-Series Per Lower Half	B-2	MS-1732M MB-3111M MB-2404P(F) ace Grooved Uppe	STD er Half And Plain		0.0007/0.0037 0.0009/0.0039			
Main Bearing NOTE: H-Series Per Grooved Upper Ha	forman		STD ged Bearing Only,	2.7478/2.7488	0.0012/0.0038	0.0934	2.9370/2.9380	1.8110
Main Bearing NOTE: H-Series Per .0010" More Oil C Only, Grooved Up	forman learanc	e Contains Flange	ed Bearing	2.7478/2.7488	0.0022/0.0048	0.0929	2.9370/2.9380	1.8110
Cam Bearing Set 1-2-3-4-5 NOTE: Align Bored Bore	B-1 Engine	SH-617S SH-617 With 2.1195" / 2.1	STD 205" Housing	1.9485/1.9495	0.0006/0.0046	0.0847	2.1195/2.1205	0.9900
Cam Bearing Set 1 2-5 3-4	B-2	SH-2144S SH-2144 SH-2145 SH-2146	STD	1.9487/1.9497	0.0011/0.0047 0.0011/0.0047 0.0011/0.0047	0.0891	2.1290/2.1310	0.9850
NOTE: Performance Connecting Rod Fo	-	÷	2022174					
Crankshaft Forging		3521, 353039, 35 3887114, 3904815	, 5955174 9730, 3804816, 3836144 5, 3904816, 3941180, 394 N353039, N853039, N853	2411, 3962523,				
15 366 CID Years: 196		16V V8		3.938	3"/100.0mm	x 3.76	6"/95.5mm	15
	(6.5L)	16V V8 Chevr	olet	4.094	4"/104.0mm	x 3.76	6"/95.5mm	
427 CID	(7.0L)	16V V8 Chevr 1980-1998	olet	4.250	0"/108.0mm	x 3.76	6"/95.7mm	
Rod Bearing (8)		CB-743HN	STD,1,9,10,11,19 20,21,30	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.3252	0.8420
NOTE: H-Series Per Increased Crank F Cap Half			One Side For					
Rod Bearing (8) NOTE: H-Series Per Used In Engines V Narrowed On One Clearance	rforman Without	Doweled Connec	ting Rod	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.3252	0.8420

**GENERAL MOTORS** 

	COUNTER DAT	A		SHOP	DATA	4	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.)							
15 366 C (cont.) Years: 1	ID (6.0L) 16V V8		3.93	8"/100.0mm	x 3.76	6"/95.5mm	15 (cont.)
	ID (6.5L) 16V V8 Chevr	olet	4.094	4"/104.0mm	x 3.76	6"/95.5mm	
	965-1970		4.05	011/400 0		01 /05 7	
	ID (7.0L) 16V V8 Chevr 966-1969, 1980-1998	olet	4.25	0"/108.0mm	x 3.76	6"/95./mm	
Half, Maximum Thickness May	TM-77 CB-743HNDK Performance with TriArmor Wall Does Not Include Coa Be Used In Engines Without Narrowed On One Side Fearance	ating ut Doweled	2.1990/2.2000	0.0010/0.0031	0.0619	) 2.3247/2.325	2 0.8420
Not Include Co	TM-77 CB-743HNK Performance with TriArmor pating Thickness, Narrowed ased Crank Fillet Clearance off	On One	2.1990/2.2000	0.0010/0.0031	0.0619	9 2.3247/2.325/	2 0.8420
.0010" More Oi	TM-77 CB-743HXN Performance Bearing Wall . I Clearance Narrowed On C hk Fillet Clearance No Dowe	One Side For	2.1990/2.2000	0.0020/0.0041	0.0614	4 2.3247/2.325	2 0.8420
.0010" More Oi May Be Used I	TM-77 CB-743HXND Performance Bearing Wall . I Clearance Dowel Hole In 0 n Engines Without Doweled On One Side For Increased	Cap Half I Connecting	2.1990/2.2000	0.0020/0.0041	0.0614	1 2.3247/2.325	2 0.8420
.0005" Thinner Hole In Cap Ha Coating Thickr Doweled Conn	TM-77 CB-743HXNDK Performance with TriArmor For .0010" More Oil Cleara lif, Maximum Wall Does Not ness May Be Used In Engine ecting Rod Narrowed On O hk Fillet Clearance	Bearing Wall nce Dowel I Include es Without	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
.0005" Thinner Maximum Wall Narrowed On C	TM-77 CB-743HXNK Performance with TriArmor For .0010" More Oil Cleara Does Not Include Coating One Side For Increased Cra Dowel Hole In Cap Half	nce Thickness,	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: V-Series	VP-2 CB-743V Performance No Dowel Hole	STD,1,10 e In Cap Half	2.1990/2.2000	0.0009/0.0030	0.0619	2.3247/2.325	2 0.8920
Used In Engine	VP-2 CB-743VND Performance Dowel Hole In es Without Doweled Connec One Side For Increased Cra	ting Rod	2.1990/2.2000	0.0009/0.0034	0.0620	) 2.3247/2.325	2 0.8420
.0010" More Oi May Be Used I	VP-2 CB-743VNDX Performance Bearing Wall . I Clearance Dowel Hole In 0 n Engines Without Doweled On One Side For Increased e	Cap Half I Connecting	2.1990/2.2000	0.0019/0.0044	0.0615	5 2.3247/2.325	2 0.8420



	CO	UNTER DAT	A		SHOP	DATA		
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	MAX LENGTH
	ID (6.0L) <sup>•</sup> 966-1967	16V V8		3.93	3"/100.0mm	x 3.76		(cont.) 15 (cont.)
396 C		16V V8 Chev	rolet	4.094	4"/104.0mm	x 3.76	6"/95.5mm	· · ·
	ID (7.0L) 1 966-1969, 1	16V V8 Chev 980-1998	rolet	4.25	0"/108.0mm	x 3.76	6"/95.7mm	
	Performanc	CB-743VX e Bearing Wall No Dowel Hole	STD .0005" Thinner For In Cap	2.1990/2.2000	0.0019/0.0040	0.0614	2.3247/2.325	2 0.8920
Rod Bearing (8) NOTE: M-Series Used In Engine			STD n Cap Half May Be cting Rod	2.1990/2.2000	0.0010/0.0031	0.0622	2.3247/2.325	2 0.8920
Main Bearing Se 1-2-3-4 5	t TM-77	MS-829H MB-2403H MB-2404H(F)	STD,1,9,10,11,19 20,21,30		0.0007/0.0032			
NOTE: H-Series Lower Half	Performanc	e Grooved Upp	er Half And Plain					
Main Bearing Se 1-2-3-4 5		MS-829HG MB-2403HG MB-2404HG(F)	STD		0.0007/0.0032 0.0012/0.0038			
			Grooved Bearings					
And Plain Lowe	Performanc er Half, Max	imum Wall Doe	STD,1,10 r Grooved Upper Half s Not		0.0007/0.0032 0.0012/0.0038			
Include Coating Main Bearing Se 1-2-3-4	•	MS-829HX MB-2403HX MB-2404HX(F)	STD		0.0017/0.0042			
	I Clearance		.0005" Thinner For r Half And	2.1410/2.1400	0.002270.0040	0.0501	2.3370/2.330	0 1.0110
<b>Main Bearing Se</b> 1-2-3-4 5		MS-829HXK MB-2403HX MB-2404HX(F)	STD		0.0017/0.0042			
	For .0010"   r Half And P	More Oil Cleara Plain Lower Half	nce , Maximum					
Main Bearing Se 1-2-3-4 5 NOTE: V-Series I		MS-829V MB-2403V MB-2404V(F)	STD,1,10 er Half And Plain		0.0007/0.0035 0.0011/0.0039			
Lower Half	Shormane	e alcorea opp						
<b>Main Bearing Se</b> 1-2-3-4 5		MS-829VX MB-2403VX MB-2404VX(F)	STD		0.0017/0.0045			
	I Clearance	e Bearing Wall Grooved Uppe	.0005" Thinner For r Half And					
Main Bearing Se 1-2-3-4 5 NOTE: M-Series Lower Half		MS-1732M MB-3111M MB-2404P(F) ce Grooved Upp	STD Der Half And Plain		0.0007/0.0037 0.0009/0.0039			



	co	UNTER DA	ТА		SHOP	DATA	۱	
BEARING OR POSITION	BEARING MATERIA	PART	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.)								
	ID (6.0L) 1 1966-1967	16V V8		3.93	8"/100.0mm	x 3.76	6"/95.5mm	15 (cont.)
	ID (6.5L) 1 1965-1970	16V V8 Che	vrolet	4.09	4"/104.0mm	x 3.76	6"/95.5mm	
Years:	1966-1969, 1		vrolet	4.25	0"/108.0mm	x 3.76	6"/95.7mm	
Main Bearing NOTE: H-Series Grooved Uppe	Performanc		STD anged Bearing Only, If	2.7478/2.7488	3 0.0012/0.0038	0.0934	2.9370/2.9380	) 1.811(
Main Bearing NOTE: H-Series .0010" More O Only, Grooved	Performanc il Clearance	Contains Flar		2.7478/2.7488	3 0.0022/0.0048	0.0929	2.9370/2.9380	) 1.8110
Cam Bearing Se 1-2-3-4-5		SH-617S SH-617	STD	1.9485/1.9495	0.0006/0.0046	0.0847	2.1195/2.1205	5 0.9900
For Year(s): 1967 NOTE: Align Bor Bore		Vith 2.1195" / 2	2.1205" Housing					
Cam Bearing Se 1 2-5 3-4 For Year(s): 1967	7-1998	SH-2144S SH-2144 SH-2145 SH-2146	STD	1.9487/1.9497	0.0011/0.0047 0.0011/0.0047 0.0011/0.0047	0.0891	2.1290/2.1310	0.9850
NOTE: Performa	-	-	070					
Cam Bearing Se 1 2 3-4 5		SH-615S SH-615 SH-616 SH-617 SH-618	STD	1.9485/1.9495 1.9485/1.9495	0.0006/0.0046 0.0006/0.0046 0.0006/0.0046 0.0006/0.0046	0.0897 0.0847	2.1295/2.1305	5 0.9900 5 0.9900
For Year(s): 1965 Connecting Roo Crankshaft Forg	Forging 3 ging 3	804816, 3836	40, 3933174 144, 3863144, 3874874, 80, 3942411, 6223, 7115, 9		847, 3882848,	388284	9, 3887114, 3	3904815
16 368 C		16V V8 Cad			0"/96.5mm x	4.060	"/103.1mm	16
371 C	1980-1984 ID (6.1L) 1 1959-1960	16V V8 Olds	mobile	4.00	0"/101.6mm	x 3.69	0"/93.7mm	
394 C	ID (6.5L) 1 1959-1964	16V V8		4.13	0"/104.8mm	x 3.69	0"/93.7mm	
425 C		16V V8 Cad	illac	4.083	"/103.7mm x	4.060	"/103.1mm	
	ID (7.7L)	16V V8 Cad	illac	4.300	"/109.2mm x	4.060	"/103.1mm	
	ID (8.2L) 1 1970-1976	16V V8 Cad	illac	4.300	"/109.2mm x	4.300	"/109.2mm	
Rod Bearing (8) NOTE: H-Series Increased Cra Cap Half	Performanc			2.4988/2.4998	3 0.0007/0.0028	0.0620	2.6245/2.6250	0.7810
Rod Bearing (8) NOTE: H-Series .0010" More O Increased Cra Cap Half	Performance il Clearance	Narrowed On	+	2.4988/2.4998	3 0.0017/0.0042	0.0615	2.6245/2.6250	0.7810
Cap Half Connecting Roc Crankshaft Forg			24, 1495094, 1495095, 149	96793, 1609142R				



н	п	

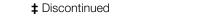
	COUNTER DAT	A		SHOP	DAT	4	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
	ID (6.2L) 16V SC V8		4.06	5"/103.3mm	x 3.62	2"/92.0mm	8 CYL 17
	CID (7.0L) 16V V8		4.125	'/104.8mm x	4.000	"/101.6mm	
Rod Bearing (8)	TM-77 CB-663HN	STD,1,9,10,11,19 20,21,30	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
	Performance Narrowed Or nk Fillet Clearance No Dow						
Used In Engine	TM-77 CB-663HND Performance Dowel Hole I es Without Doweled Conne One Side For Increased Cra	ecting Rod	2.0990/2.1000	0.0009/0.0030	0.0619	) 2.2247/2.225	2 0.7920
Half, Maximun Thickness May	Performance with TriArmo n Wall Does Not Include Co y Be Used In Engines Witho od Narrowed On One Side I	or Dowel Hole In Cap pating put Doweled	2.0990/2.1000	0.0009/0.0030	0.0619	) 2.2247/2.225	2 0.7920
Not Include Co	Performance with TriArmo pating Thickness, Narrowe ased Crank Fillet Clearance	d On One	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.225	2 0.7920
.0010" More O	TM-77 CB-663HXN Performance Bearing Wall il Clearance Narrowed On nk Fillet Clearance No Dow	One Side For	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
.0010" More O May Be Used I	TM-77 CB-663HXND Performance Bearing Wall il Clearance Dowel Hole In In Engines Without Dowele I On One Side For Increase re	Cap Half d Connecting	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
.0005" Thinner Hole In Cap Ha Coating Thick Doweled Conr	TM-77 CB-663HXND Performance with TriArmo For .0010" More Oil Cleara alf, Maximum Wall Does No ness May Be Used In Engin necting Rod Narrowed On O nk Fillet Clearance	or Bearing Wall ance Dowel ot Include nes Without	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
.0005" Thinner Maximum Wal Narrowed On	TM-77 CB-663HXNK Performance with TriArmo For .0010" More Oil Cleara I Does Not Include Coating One Side For Increased Cra Dowel Hole In Cap Half	ance Thickness,	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.225	2 0.7920
	VP-2 CB-663VN Performance Narrowed Or nk Fillet Clearance No Dow		2.0990/2.1000	0.0008/0.0028	0.0621	2.2247/2.225	2 0.7920



	CO	UNTER DAT	A		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.)								
(cont.) Years: 2	009-2011	16V SC V8			5"/103.3mm			17 (cont.)
	ID (7.0L) 1 006-2011	164 48		4.125	'/104.8mm x	4.000	"/101.6mm	
Rod Bearing (8)	VP-2 Performance	Narrowed On		2.0990/2.1000	0.0018/0.0038	0.0616	2.2247/2.2252	2 0.7920
Main Bearing Set 1-2-4-5 3 NOTE: H-Series I Lower Half		MS-2294H MB-3938H MB-3592H(F) e Grooved Upp	STD,1		0.0005/0.0026 0.0005/0.0026			
Main Bearing Set 1-2-4-5 3	Performanc I Clearance	•	STD .0005" Thinner For Fr Half And		0.0015/0.0036 0.0015/0.0036			
Main Bearing NOTE: H-Series I .0010" More Oi Only, Grooved	Performanc I Clearance	Contains Flan		2.5588/2.5593	0.0015/0.0036	0.0952	2.7509/2.7514	1.0280
Main Bearing NOTE: H-Series I Grooved Upper	Performanc		nged Bearing Only, f	2.5588/2.5593	0.0005/0.0026	0.0957	2.7509/2.7514	1.0280
Cam Bearing Set 1-5 2-4 3 NOTE: Performa		SH-2157S SH-2157 SH-2158 SH-2159 g Set	STD	2.1650/2.1670	0.0022/0.0074 0.0010/0.0062 0.0010/0.0062	0.0799	2.3276/2.3295	0.7800
		16V V8 Ponti	ac	4.063	3"/103.2mm	x 3.75	0"/95.3mm	18
Rod Bearing (8) NOTE: H-Series I Increased Cran Cap Half	Performanc			2.2487/2.2497	0.0012/0.0033	0.0619	2.3745/2.3750	0.8460
Rod Bearing (8) NOTE: H-Series I .0010" More Oi Increased Cran Cap Half	Performanc I Clearance	Narrowed On		2.2487/2.2497	0.0021/0.0042	0.0614	2.3745/2.3750	0.8460
Main Bearing Set 1-2-3 4 5 NOTE: Contains		MS-496P MB-1917P MB-1918P(F) MB-1891P d Bearings	STD, 10, 20, 30	2.9990/3.0000	0.0007/0.0038 0.0007/0.0038 0.0007/0.0038	0.0938	3.1880/3.1890	1.1350
Cam Bearing Set 1-2-3-4-5	B-1	SH-292S SH-292	STD	1.8992/1.8997	0.0010/0.0060	0.0643	2.0297/2.0317	0.6900
Cam Bearing Set 1 2-3-4-5	B-1	SH-291S SH-291 SH-292	STD	1.8992/1.8997	0.0010/0.0060	0.0643	2.0297/2.0317	1.0700



	COL	JNTER DAT	A		SHOP	DATA		
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
								8 CYL
	ID (6.6L) 1 970-1980	6V V8 Chev	rolet	4.12	5"/104.8mm	x 3.75	0"/95.3mm	19
Rod Bearing (8)	TM-77	CB-663HN	STD,1,9,10,11,19	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.2252	2 0.7920
NOTE: H-Series Increased Crar Cap Half								
Rod Bearing (8) NOTE: H-Series Used In Engine Narrowed On C Clearance	Performance s Without Do	oweled Conne		2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: H-Series Half, Maximum Thickness May Connecting Ro Crank Fillet Cle	Performance Wall Does N Be Used In d Narrowed	lot Include Co Engines Witho	r Dowel Hole In Cap ating but Doweled	2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: H-Series Not Include Co Side For Increa Hole In Cap Ha	Performance ating Thickn Ised Crank F	ess, Narrowe		2.0990/2.1000	0.0009/0.0030	0.0619	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: H-Series .0010" More Oi Increased Crar Cap Half	Performance I Clearance N	Narrowed On		2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: H-Series .0010" More Oi May Be Used In Rod Narrowed Fillet Clearance	Performance I Clearance I In Engines Wi On One Side	Dowel Hole In thout Dowele	d Connecting	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: H-Series .0005" Thinner Hole In Cap Ha Coating Thickr Doweled Conn Increased Crar	Performance For .0010" M If, Maximum less May Be lecting Rod N	lore Oil Cleara Wall Does No Used In Engin Iarrowed On C	r Bearing Wall ance Dowel ot Include ses Without	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: H-Series .0005" Thinner Maximum Wall Narrowed On C Clearance No I	Performance For .0010" M Does Not In One Side For	lore Oil Cleara clude Coating Increased Cra	ance Thickness,	2.0990/2.1000	0.0019/0.0040	0.0614	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: V-Series I Increased Crar Cap Half	Performance			2.0990/2.1000	0.0008/0.0028	0.0621	2.2247/2.2252	2 0.7920
Rod Bearing (8) NOTE: V-Series I .0010" More Oi Increased Crar Cap Half	Performance I Clearance N	Narrowed On		2.0990/2.1000	0.0018/0.0038	0.0616	2.2247/2.2252	2 0.7920



New Number



	COL	JNTER DAT	4		SHOP	DATA	۱	
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL (cont.)								
19 400 CII (cont.) Years: 19		6V V8 Chevr	olet	4.12	5"/104.8mm	x 3.75	0"/95.3mm	19 (cont.)
Main Bearing Set 1-2-3-4 5	TM-77	<b>MS-1038H</b> MB-2562H MB-2563H(F)	STD,1,9,10,11,19‡ 20,21		0.0007/0.0031 0.0012/0.0036			3 0.8070
NOTE: Engine Usi Grooved Upper			es Performance					
Main Bearing Set 1-2-3-4 5		MS-1038HG MB-2562HG MB-2563HG(F)	STD		0.0007/0.0031			
NOTE: Engine Usi Contains Full Gr			es Performance					
Main Bearing Set 1-2-3-4 5 NOTE: Engine Usi with TriArmor G	ng 400 Cra rooved Upp	er Half And Pla	in Lower		0.0007/0.0031 0.0012/0.0036			
Half, Maximum Thickness	Wall Does N	lot Include Coa	iting					
Main Bearing Set 1-2-3-4 5		<b>MS-1038HX</b> MB-2562HX MB-2563HX(F)	STD		0.0017/0.0041			
NOTE: Engine Usi Bearing Wall .00 Clearance Groo	05" Thinne	r For .0010" Mo	re Oil					
Main Bearing Set 1-2-3-4 5 NOTE: Engine Usi	ng 400 Cra				0.0017/0.0041 0.0022/0.0046			
with TriArmor B .0010" More Oil Plain Lower Hal Coating Thickne	Clearance f, Maximum	Grooved Upper	Half And					
Main Bearing Set 1-2-3-4 5 5		MS-1564P MB-2604P MB-2548P(F) MB-2878C	STD		0.0030/0.0045 0.0011/0.0039	0.0953		5 1.7180
NOTE: Engine Usi Bearings For Po Main Bearings E 3, 4 Has Groove Contains A Spac Position Numbe	sition Num Bearings Fo d Upper Ha cer To Be U	ber 5 with Full ( r Position Num If And Plain Lo	Grooved ber 1, 2, wer Half					
Cam Bearing Set		SH-1349S SH-1349	STD	1 8682/1 8692	0.0010/0.0048	0 0744	2 0190/2 0210	0 7450
2-5 3-4		SH-1350 SH-1351		1.8682/1.8692	0.0010/0.0048	0.0694	2.0090/2.0110	0.7450
NOTE: Performan		Set SH-1772S	STD					
Cam Bearing Set 1 2-3-4-5		SH-1351 SH-2185			0.0010/0.0048 0.0010/0.0048			
NOTE: Aluminum	-		-					
Cam Bearing Set 1-2-3-4-5 NOTE: Oversize A 1.9990" / 2.0010	lign Bored			1.8682/1.8692	0.0010/0.0048	0.0644	1.9990/2.0010	0.7450

GENERAL MOTORS

	CC	OUNTER DAT	A		SHOP	DAT	A	
BEARING OR POSITION	BEARING MATERIA	PART	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	MAX LENGTH
							8 CYL	. (cont.)
19 400 C (cont.) Years: 1	• •	16V V8 Chev	rolet	4.12	5"/104.8mm	x 3.75	60"/95.3mm	19 (cont.)
		856239, 385624	0, 3933174, 3951629					(000111)
Crankshaft Forg	3	882849, 38871	59730, 3804816, 3836 14, 3904815, 3904816 3, 3975945, 6223, 7115	, 3941180, 39424	11, 3951528, 3	8951529	D, 3962523,	
Years: 1	968-1969	16V V8 Olds			5"/98.4mm x			
	ID (6.6L) 1965-1967	16V V8 Olds	mobile	4.000	"/101.6mm x	4.000	)"/101.6mm	
	ID (7.0L)	16V V8 Olds	mobile	4.125	"/104.8mm x	3.980	)"/101.0mm	
	ID (7.0L)	16V V8		4.125	"/104.8mm x	3.980	)"/101.0mm	
	ID (7.5L) 1968-1976	16V V8 Olds	mobile	4.125	"/104.8mm x	4.250	)"/108.0mm	
Rod Bearing (8) NOTE: H-Series I Increased Crar Cap Half	Performan	CB-542HN ce Narrowed Or arance No Dow		2.4988/2.4998	3 0.0007/0.0028	0.0620	) 2.6245/2.625	0 0.7810
.0010" More Oi	Performane I Clearance	CB-542HXN ce Bearing Wall Narrowed On earance No Dow		2.4000 2.4000	3 0.0017/0.0042	0.0010	2.024072.020	
Main Bearing Se	t TM-77	MS-804H MB-2362H	STD,1,10,20	2 0003/3 0003	0.0008/0.0038	0.0936	3 1880/3 189	0 0 9800
2-4		MB-2163H			0.0008/0.0038			
3		MB-2363H(F)		2.9993/3.0003	0.0008/0.0038	0.0936	3.1880/3.189	0 1.1950
5		MB-2364H		2.9993/3.0003	0.0016/0.0049	0.0932	2 3.1880/3.189	0 1.6290
		•	Position Number 2,					
3, 4, 5 with Full Number 1 Has Half		-						
Main Bearing Se	t TM-77	MS-804HX	STD					
1 2-4		MB-2362HX MB-2163HX			0.0018/0.0048 0.0018/0.0048			
3		MB-2363HX(F)			0.0018/0.0048			
5		MB-2364HX		2.9993/3.0003	0.0026/0.0059	0.0927	3.1880/3.189	0 1.6290
	l Clearance , 5 with Full	e Bearings For I Grooved Main	Bearings					
Cam Bearing Set	t B-1	SH-1354S	STD					
1		SH-1354			0.0015/0.0050			
2		SH-1355			0.0015/0.0050			
3 4		SH1356 SH-1357			0.0015/0.0050 0.0015/0.0050			
5		SH-1358			0.0015/0.0050			
Connecting Rod Crankshaft Forg	ing 2		401406, 401456, 41099 230378, 230907, 2309		70, 397303, 397	363, 40	0934, 403707	, 405954,



	COL	JNTER DAT	A		SHOP	DATA	<b>\</b>	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
8 CYL								
	ID (6.6L) 1 1970-1972	6V V8 Chev	rolet	4.12	5"/104.8mm	x 3.76	6"/95.7mm	21
	ID (7.4L) 1	6V V8		4.250	'/108.0mm x	4.000	"/101.6mm	
Rod Bearing (8)		CB-743HN	STD,1,9,10,11,19 20,21,30	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.3252	2 0.8420
NOTE: H-Series Increased Cra Cap Half								
Rod Bearing (8) NOTE: H-Series Used In Engine Narrowed On Clearance	Performance es Without Do	weled Conne		2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series Half, Maximun Thickness May Connecting Ro Crank Fillet Cl	Performance n Wall Does N y Be Used In I od Narrowed	lot Include Co Engines Witho	ut Doweled	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series Not Include Co Side For Increa Hole In Cap Ha	Performance bating Thickn ased Crank F	ess, Narrowed		2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0010" More O Increased Cran Cap Half	Performance il Clearance N	Narrowed On C		2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0010" More O May Be Used I Rod Narrowed Fillet Clearanc	Performance il Clearance I n Engines Wi I On One Side	Dowel Hole In thout Doweled	Connecting	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0005" Thinner Hole In Cap Ha Coating Thicks Doweled Conn Increased Cra	Performance For .0010" M alf, Maximum ness May Be necting Rod N	lore Oil Cleara Wall Does No Used In Engin larrowed On O	r Bearing Wall nce Dowel t Include es Without	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0005" Thinner Maximum Wal Narrowed On Clearance No	Performance For .0010" M I Does Not In One Side For	lore Oil Cleara clude Coating Increased Cra	nce Thickness,	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: V-Series	Performance		STD,1,10 e In Cap Half		0.0009/0.0030			
Rod Bearing (8) NOTE: V-Series Used In Engine Narrowed On Clearance	Performance es Without Do	weled Conne		2.1990/2.2000	0.0009/0.0034	0.0620	2.3247/2.325	2 0.8420



	CO	UNTER DATA	4		SHOP	DATA		
BEARING OR	BEARING		AVAILABLE	STD SHAFT	VERT OIL	мах		MAX
POSITION	MATERIA	L NUMBER	UNDERSIZES	DIAMETER	CLEARANCE	WALL		LENGTH
			-1-1					(cont.)
21 402 CI (cont.) Years: 19		16V V8 Chevr	olet	4.12:	5"/104.8mm	x 3.76	6"/95.7mm	21 (cont.)
	D (7.4L) 1	16V V8		4 250	'/108.0mm x	4 000	"/101 6mm	
Years: 19				4.200	/ 100.011111 X	4.000	/ 10 1.01111	
.0010" More Oil May Be Used In	Clearance Engines V On One Sid		Connecting	2.1990/2.2000	0.0019/0.0044	0.0615	2.3247/2.325	2 0.8420
	erformanc	CB-743VX e Bearing Wall .( No Dowel Hole	STD 0005" Thinner For In Cap	2.1990/2.2000	0.0019/0.0040	0.0614	2.3247/2.325	2 0.8920
Rod Bearing (8)			STD Cap Half May Be ting Rod	2.1990/2.2000	0.0010/0.0031	0.0622	2.3247/2.325	2 0.8920
Main Bearing Set 1-2-3-4 5	TM-77	MS-829H MB-2403H MB-2404H(F)	STD,1,9,10,11,19 20,21,30		0.0007/0.0032			
NOTE: H-Series P Lower Half	erformanc		er Half And Plain	2.14/02.1400	0.00120.0000	0.0000	2.007 072.000	
Main Bearing Set 1-2-3-4 5		MS-829HG MB-2403HG MB-2404HG(F)	STD		0.0007/0.0032			
			Grooved Bearings					
Main Bearing Set 1-2-3-4 5	1 M-77	MS-829HK MB-2403H MB-2404H(F)	STD,1,10		0.0007/0.0032			
	r Half, Max	e with TriArmor	Grooved Upper Half Not	2.1410/2.1400	0.0012/0.0000	0.0550	2.5070/2.500	5 1.0110
Main Bearing Set		MS-829HX	STD					
1-2-3-4 5		MB-2403HX MB-2404HX(F)			0.0017/0.0042 0.0022/0.0048			
	Clearance	e Bearing Wall . Grooved Upper	0005" Thinner For Half And					
Main Bearing Set 1-2-3-4 5	TM-77	MS-829HXK MB-2403HX MB-2404HX(F)	STD		0.0017/0.0042			
NOTE: H-Series P .0005" Thinner F	or .0010"   Half And P	e with TriArmor More Oil Clearar Plain Lower Half,	ice	2.1410/2.1400	0.002270.0040	0.0301	2.0070/2.000	
Main Bearing Set 1-2-3-4 5	VP-2	MS-829V MB-2403V MB-2404V(F)	STD,1,10		0.0007/0.0035			
NOTE: V-Series P Lower Half	erformanc		r Half And Plain	2.1410/2.1400	0.0011/0.0000	5.5501	21001 0121000	
Main Bearing Set 1-2-3-4	VP-2	MS-829VX MB-2403VX	STD	2.7482/2.7492	0.0017/0.0045	0.0932	2.9370/2.938	0 1.0470
5 NOTE: V-Series P	Clearance	MB-2404VX(F)	0005" Thinner For Half And		0.0021/0.0049			



COUNTER DATA				SHOP DATA					
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
8 CYL (cont.)				•					
(cont.) Years: 1	970-1972	16V V8 Chev	rolet		5"/104.8mm			(cont.)	
454 C Years: 1	<b>D (7.4L)</b> 1 974	16V V8		4.250	'/108.0mm x	4.000	"/101.6mm		
Main Bearing Se 1-2-3-4 5 NOTE: M-Series Lower Half		MS-1732M MB-3111M MB-2404P(F) ce Grooved Upp	STD er Half And Plain		0.0007/0.0037 0.0009/0.0039				
Main Bearing	Performanc		STD nged Bearing Only,	2.7478/2.7488	0.0012/0.0038	0.0934	2.9370/2.9380	) 1.8110	
Main Bearing NOTE: H-Series I .0010" More Oi Only, Grooved	Performance	Contains Flang	•	2.7478/2.7488	0.0022/0.0048	0.0929	2.9370/2.9380	) 1.8110	
Cam Bearing Set 1-2-3-4-5 NOTE: Align Bore Bore		SH-617S SH-617 Vith 2.1195" / 2.	STD 1205" Housing	1.9485/1.9495	0.0006/0.0046	0.0847	2.1195/2.1205	i 0.9900	
	D (6.6L) ( 001-2011	32V Turbo. V	8 Duramax DIESEL	4.05	5"/103.0mm	x 3.89	8"/99.0mm	22	
Rod Bearing (8) NOTE: H-Series I Undersize Bear must be Rehar	Performance ings can be	e used but the O	Crankshaft	2.4764/2.4772	0.0010/0.0034	0.0794	2.6372/2.6378	3 0.9340	
Rod Bearing (8) NOTE: H-Series I .0010" More Oi Half Undersize Crankshaft mu Treatment	Performance Clearance Bearings c	No Dowel Hole an be used but	the	2.4764/2.4772	0.0020/0.0044	0.0789	2.6372/2.6378	3 0.9340	
Lower Half Und Crankshaft Mu	Performanc lersize Bea st Be Reha	rings Can Be U dened With A N	litride Heat	3.1459/3.1466	0.0009/0.0033	0.0994	3.3464/3.3472	2 0.8200	
	TM-77 Performance Clearance	MS-2218HX MB-3776HX te Bearing Wall Grooved Uppe te Bearings Can	STD .0005" Thinner For r Half And Be Used	3.1459/3.1466	0.0019/0.0043	0.0989	3.3465/3.3472	2 0.8200	
Nitride Heat Tr Thrust Washer S		TW-610S	STD						
NOTE: Contains Part Number M	,		1 And 5 Use with	3.5039/3.5137			4.2027/4.2125	0.1181	
Cam Bearing Set		SH-1999S SH-1999 SH-2006	STD	2.3988/2.4000			2.5590/2.5602		



• New Number

**‡** Discontinued

	SHOP DATA							
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BORE L	AAX ENGTH
23 421 CI	D (6.9L) 1	16V V8 Pontia	c	4,094	'/104.0mm x	4.000		8 CYL 23
Years: 1	961-1966							20
	<b>D (7.0L)</b> 1 967-1969	16V V8 Pontia	C	4.120	'/104.6mm x	4.000	"/101.6mm	
455 CI		16V V8 HO		4.150	'/105.4mm x	4.210	"/107.0mm	
455 CI		16V V8 Pontia	c	4.150	'/105.4mm x	4.210	"/107.0mm	
	D (7.5L) 1 972-1974	16V V8 Pontia	c Super Duty	4.150	'/105.4mm x	4.210	"/107.0mm	
Rod Bearing (8) NOTE: H-Series F Increased Cran Cap Half	Performanc	CB-758HN e Narrowed On ( arance No Dowe		2.2487/2.2497	0.0012/0.0033	0.0619	2.3745/2.3750	0.8460
.0010" More Oil	Performance	CB-758HXN e Bearing Wall .( Narrowed On O arance No Dowe		2.2487/2.2497	0.0021/0.0042	0.0614	2.3745/2.3750	0.8460
Main Bearing Set	TM-77	MS-667H	STD,1,10	0.0400/0.0500	0.0005 10.0005			
1-2-3		MB-2215H MB-2216H(F)			0.0005/0.0035			
5		MB-2217H			0.0005/0.0035			
5 with Full Groo	Performanc	e Bearings For F Bearings Positior Half And Plain L						
Main Bearing Set	TM-77	MS-667HX	STD					
1-2-3		MB-2215HX			0.0015/0.0045			
4		MB-2216HX(F) MB-2217HX			0.0015/0.0045 0.0015/0.0045			
.0010" More Oil Number 4, 5 wit	Performance Clearance th Full Groc er 1, 2, 3 Ha		igs					
Cam Bearing Set 1-2-3-4-5	B-1	SH-292S SH-292	STD	1.8992/1.8997	0.0010/0.0060	0.0643	2.0297/2.0317	0.6900
For Year(s): 1963								
Crankshaft Forgi	•		770488, 9773384, 978276					~ ~
	<b>D (8.1L)</b> 1 001-2007	16V V8 Vorteo	,	4.250	'/108.0mm x	4.370	"/111.0mm	24
Rod Bearing (8)	TM-77	CB-743HN	STD,1,9,10,11,19 20,21,30	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.3252	0.8420
NOTE: H-Series F Increased Cran Cap Half		e Narrowed On arance No Dowe	One Side For					
Used In Engine	Performances Without E	CB-743HND e Dowel Hole In Doweled Connec r Increased Crar	-	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.3252	0.8420





	COL	SHOP DATA						
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	MAX LENGTH
8 CYL (cont.)			•	4 050	1/100 0	4 270	1/111 0	24
(cont.) Years: 2		6V V8 Vorte	C	4.250	'/108.0mm x	4.370	7111.0mm	(cont.)
Rod Bearing (8)	TM-77 ( Performance Wall Does N Be Used In I d Narrowed	lot Include Coa Engines Witho	ut Doweled	2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series Not Include Co Side For Increa Hole In Cap Ha	Performance ating Thickn Ised Crank F	ess, Narrowed		2.1990/2.2000	0.0010/0.0031	0.0619	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0010" More Oi Increased Crar Cap Half	Performance I Clearance N	Narrowed On C		2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0010" More Oi May Be Used In Rod Narrowed Fillet Clearance	Performance I Clearance I In Engines Wi On One Side	Dowel Hole In ( thout Doweled	Connecting	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0005" Thinner Hole In Cap Ha Coating Thickr Doweled Conn Increased Crar	Performance For .0010" M If, Maximum less May Be ecting Rod N	lore Oil Cleara Wall Does Not Used In Engine larrowed On O	<sup>•</sup> Bearing Wall nce Dowel t Include es Without	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: H-Series .0005" Thinner Maximum Wall Narrowed On C Clearance No I	Performance For .0010" M Does Not In One Side For	lore Oil Cleara clude Coating Increased Cra	nce Thickness,	2.1990/2.2000	0.0020/0.0041	0.0614	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: V-Series I		CB-743V No Dowel Hol	STD,1,10 e In Cap Half	2.1990/2.2000	0.0009/0.0030	0.0619	2.3247/2.325	2 0.8920
Rod Bearing (8) NOTE: V-Series I Used In Engine Narrowed On C Clearance	Performance s Without Do	oweled Connec	-	2.1990/2.2000	0.0009/0.0034	0.0620	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: V-Series I .0010" More Oi May Be Used In Rod Narrowed Fillet Clearance	Performance I Clearance I In Engines Wi On One Side	Dowel Hole In ( thout Doweled	Connecting	2.1990/2.2000	0.0019/0.0044	0.0615	2.3247/2.325	2 0.8420
Rod Bearing (8) NOTE: V-Series I .0010" More Oi Half	Performance	•	STD 0005" Thinner For In Cap	2.1990/2.2000	0.0019/0.0040	0.0614	2.3247/2.325	2 0.8920
Rod Bearing (8) NOTE: M-Series Used In Engine	Performance		STD n Cap Half May Be cting Rod	2.1990/2.2000	0.0010/0.0031	0.0622	2.3247/2.325	2 0.8920

	CO		SHOP DATA					
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
							8 CYL	(cont.)
24 496 Cl (cont.) Years: 20	D (8.1L) 1 001-2007	4.250"	/108.0mm x	4.370	"/111.0mm	24 (cont.)		
Main Bearing Set 1-2-3-4 5 NOTE: H-Series F Lower Half		MS-2327H MB-3774H MB-3775H(F) e Grooved Up	STD•,10• per Half And Plain		0.0008/0.0031 0.0007/0.0030			
Cam Bearing Set 1-2-3-4-5 NOTE: Align Bore Bore		SH-617S SH-617 Vith 2.1195" / 2	STD 2.1205" Housing	1.9485/1.9495	0.0006/0.0046	0.0847	2.1195/2.1205	0.9900
Cam Bearing Set 1 2-5 3-4 NOTE: Performan		SH-2144S SH-2144 SH-2145 SH-2146 g Set	STD	1.9487/1.9497	0.0011/0.0047 0.0011/0.0047 0.0011/0.0047	0.0891	2.1290/2.1310	0.9850

#### HONDA

ENGINE	YEAR	BORE & STROKE	BLOCK
1590 CC (1.6L) SOHC 8V L4 D16B5 CNG	1998-2000	2.953"/75.0mm X 3.543*/90.0mm	1
1590 CC (1.6L) SOHC 16V L4 D16A6	1988-1991	2.953"/75.0mm X 3.543*/90.0mm	2
1590 CC (1.6L) SOHC 16V L4 D16Y7	1996-2000	2.953"/75.0mm X 3.543"/90.0mm	2
1590 CC (1.6L) SOHC 16V L4 VTEC D16Y5	1996-2000	2.953"/75.0mm X 3.543*/90.0mm	2
1590 CC (1.6L) SOHC 16V L4 VTEC D16Y8	1996-2000	2.953"/75.0mm X 3.543"/90.0mm	2
1590 CC (1.6L) SOHC 16V L4 VTEC D16Z6	1992-1995	2.953"/75.0mm X 3.543*/90.0mm	2
1595 CC (1.6L) DOHC 16V L4 VTEC B16A2	1996-1997, 1999-2000	3.189"/81.0mm X 3.047"/77.4mm	3
1595 CC (1.6L) DOHC 16V L4 VTEC B16A3	1994-1995	3.189"/81.0mm X 3.047*/77.4mm	3
1829 CC (1.8L) SOHC 12V L4 A18A1	1987	3.150"/80.0mm X 3.583*/91.0mm	4
1829 CC (1.8L) SOHC 8V L4 ES1	1983	3.150"/80.0mm X 3.583"/91.0mm	4
1829 CC (1.8L) SOHC 12V L4 ES2	1984-1985	3.150"/80.0mm X 3.583*/91.0mm	4
1829 CC (1.8L) SOHC 12V L4 ES3	1985	3.150"/80.0mm X 3.583*/91.0mm	4
1829 CC (1.8L) SOHC 8V L4 ET2	1984-1986	3.150"/80.0mm X 3.583*/91.0mm	4
1955 CC (2.0L) SOHC 12V L4 A20A1	1987-1989	3.258"/82.8mm X 3.583*/91.0mm	4
1955 CC (2.0L) SOHC 12V L4 A20A3	1987-1989	3.258"/82.8mm X 3.583"/91.0mm	4
1955 CC (2.0L) SOHC 12V L4 BS	1986	3.258"/82.8mm X 3.583*/91.0mm	4
1955 CC (2.0L) SOHC 12V L4 BT	1986	3.258"/82.8mm X 3.583*/91.0mm	4
1955 CC (2.0L) SOHC 12V L4 BTI	1985-1987	3.258"/82.8mm X 3.583*/91.0mm	4
1958 CC (2.0L) SOHC 12V L4 B20A3	1988-1990	3.189"/81.0mm X 3.740"/95.0mm	5
1958 CC (2.0L) DOHC 16V L4 B20A5	1988-1991	3.189"/81.0mm X 3.740"/95.0mm	6
1972 CC (2.0L) DOHC 16V L4 B20B4	1997-1998	3.307"/84.0mm X 3.504"/89.0mm	7
1972 CC (2.0L) DOHC 16V L4 B20Z2	1999-2001	3.307"/84.0mm X 3.504"/89.0mm	7
1997 CC (2.0L) DOHC 16V L4 VTEC F20C1	2000-2003	3.420"/87.0mm X 3.310"/84.0mm	8
1998 CC (2.0L) DOHC 16V L4 VTEC K20A3	2002-2005	3.390"/86.1mm X 3.386"/86.0mm	9
1998 CC (2.0L) DOHC 16V L4 VTEC K20Z3	2006-2011	3.390"/86.1mm X 3.386"/86.0mm	10
2056 CC (2.1L) DOHC 16V L4 B21A1	1990-1991	3.268"/83.0mm X 3.740"/95.0mm	6
2156 CC (2.2L) SOHC 16V L4 F22A1	1990-1996	3.346"/85.0mm X 3.740"/95.0mm	11
2156 CC (2.2L) SOHC 16V L4 F22A4	1990-1991	3.346"/85.0mm X 3.740"/95.0mm	11
2156 CC (2.2L) SOHC 16V L4 F22A6	1991-1993	3.346"/85.0mm X 3.740"/95.0mm	11
2156 CC (2.2L) SOHC 16V L4 F22B2	1994-1997	3.346"/85.0mm X 3.740"/95.0mm	11

New Number
 ‡ Discontinued



#### HONDA

ENGINE	YEAR	BORE & STROKE	BLOCK
2156 CC (2.2L) SOHC 16V L4 F22B6	1995-1997	3.346"/85.0mm X 3.740"/95.0mm	11
2156 CC (2.2L) SOHC 16V L4 VTEC F22B1	1994-1997	3.346"/85.0mm X 3.740"/95.0mm	11
2157 CC (2.2L) DOHC 16V L4 VTEC F22C1	2004-2009	3.425"/87.0mm X 3.571"/90.7mm	12
2157 CC (2.2L) DOHC 16V L4 VTEC H22A1	1993-1996	3.425"/87.0mm X 3.571"/90.7mm	11
2157 CC (2.2L) DOHC 16V L4 VTEC H22A4	1997-2001	3.425"/87.0mm X 3.571"/90.7mm	6
2259 CC (2.3L) DOHC 16V L4 H23A1	1992-1996	3.425"/87.0mm X 3.740"/95.0mm	11
2354 CC (2.4L) DOHC 16V L4 i-VTEC K24Z1	2007-2009	3.420"/87.0mm X 3.890"/99.0mm	13
2354 CC (2.4L) DOHC 16V L4 i-VTEC K24Z2	2008-2011	3.420"/87.0mm X 3.890"/99.0mm	13
2354 CC (2.4L) DOHC 16V L4 i-VTEC K24Z3	2008-2011	3.420"/87.0mm X 3.890"/99.0mm	13
2354 CC (2.4L) DOHC 16V L4 i-VTEC K24Z6	2010-2011	3.420"/87.0mm X 3.890"/99.0mm	13
2354 CC (2.4L) DOHC 16V L4 VTEC K24A1	2002-2006	3.420"/87.0mm X 3.890"/99.0mm	13
2354 CC (2.4L) DOHC 16V L4 VTEC K24A4	2003-2006	3.420"/87.0mm X 3.890"/99.0mm	13
2354 CC (2.4L) DOHC 16V L4 VTEC K24A8	2006-2011	3.420"/87.0mm X 3.890"/99.0mm	13

		SHOP	DATA	۸				
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OF HOUSING BORE	NAX LENGTH
4 CYL								
	C (1.6L) S	OHC 8V L	4 D16B5 CNG	2.9	53"/75.0mm	x 3.54	3"/90.0mm	1
Rod Bearing (4) NOTE: H Series P Fillet Clearance	erformance		STD,.026mm,.25mm or Increased Crank alf	1.7707/1.7717	0.0008/0.0015	0.0592	1.8898/1.890	7 0.6780
Rod Bearing (4) NOTE: H Series P .0010" More Oil Crank Fillet Cle	erformance Clearance	Narrowed For	1.0005" Thinner For Increased	1.7707/1.7717	0.0018/0.0025	0.0587	1.8898/1.890	7 0.6780
		OHC 16V	L4 D16A6	2.9	53"/75.0mm	x 3.54	3"/90.0mm	2
	988-1991							
	C (1.6L) S 996-2000	OHC 16V	L4 D16Y7	2.9	53"/75.0mm	x 3.54	3"/90.0mm	
1590 C	C (1.6L) S	OHC 16V	L4 VTEC D16Y5	2.9	53"/75.0mm	x 3.54	3"/90.0mm	
1590 0	996-2000 C (1.6L) S 996-2000	OHC 16V	L4 VTEC D16Y8	2.9	53"/75.0mm	x 3.54	3"/90.0mm	
	C (1.6L) S	OHC 16V	L4 VTEC D16Z6	2.9	53"/75.0mm	x 3.54	3"/90.0mm	
Rod Bearing (4) NOTE: H Series P Fillet Clearance	erformance		STD,.026mm,.25mm or Increased Crank alf	1.7707/1.7717	0.0008/0.0015	0.0592	1.8898/1.890	7 0.6780
Rod Bearing (4) NOTE: H Series P .0010" More Oil Crank Fillet Cle	erformance Clearance	Narrowed For	1.0005" Thinner For Increased	1.7707/1.7717	0.0018/0.0025	0.0587	1.8898/1.890	7 0.6780



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	COL	JNTER DATA		SHOP DATA					
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BORE	MAX LENGTH	
								(cont.)	
(cont.) Years: 1	988-1991	SOHC 16V L4			53"/75.0mm			(cont.)	
Years: 1	996-2000	SOHC 16V L4			53"/75.0mm				
Years: 1	996-2000		VTEC D16Y5		53"/75.0mm				
Years: 1	996-2000		VTEC D16Y8		53"/75.0mm				
Years: 1	992-1995		VTEC D16Z6	2.9	53"/75.0mm	x 3.54	3"/90.0mm		
Main Bearing Se 1-2-3-4-5 NOTE: H Series I	1	MS-1804H MB-3760H Contains Full G	STD,.026mm,.25mm	2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870	
	t Washer Se	t, Not Included							
Main Bearing Se 1-2-3-4-5		MS-1804HX MB-3760HX	STD	2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.323	7 0.7870	
.0010" More Oi	l Clearance ( ires Thrust V	Contains Full Gr Vasher Set, Not							
Thrust Washer S NOTE: Contains	1	TW-473S MB-3176W sition Number 4	STD Use with Part	2.4114/2.4213	3		3.2185/3.228	3 0.0980	
Number MS-18	,								
	CC (1.6L) E 996-1997, 19		VTEC B16A2	3.1	89"/81.0mm	x 3.04	7"/77.4mm	3	
1595 0			VTEC B16A3	3.1	89"/81.0mm	x 3.04	7"/77.4mm		
Rod Bearing (4) NOTE: H-Series	Performance	CB-1777H No Dowel Hole To Be Replaced B		1.7707/1.7717	0.0014/0.0043	0.0590	1.8898/1.890	7 0.7677	
	Performance I Clearance I	CB-1777HX Bearing Wall .0 No Dowel Hole In To Be Replaced I		1.7707/1.7717	7 0.0024/0.0053	0.0585	1.8898/1.890	7 0.7677	
Main Bearing Se 1-2-3-4-5	t TM-77	MS-2095H MB-3760H	STD,.026mm,.25mm	2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870	
NOTE: H Series I Lower Half Red Included Use w	quires Thrust	Washer Set, No							
.0010" More Oi	Performance	MS-2095HX MB-3760HX Bearing Wall .0 Grooved Upper I Ihrust Washer S		2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.323	7 0.7870	
Included Use w									
Thrust Washer S NOTE: Contains			STD ; Use with Part	2.4114/2.4213	3		3.2185/3.228	3 0.0980	



	COUNTER DAT	SHOP DATA					
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		NAX LENGTH
4 CYL							
Years:				50"/80.0mm			
Years:				50"/80.0mm			
Years:	CC (1.8L) SOHC 12V L			50"/80.0mm			
Years:	CC (1.8L) SOHC 12V L 1985 CC (1.8L) SOHC 8V L4			50"/80.0mm 50"/80.0mm			
Years:	1984-1986 CC (2.0L) SOHC 12V L			58"/82.8mm			
Years:	1987-1989 CC (2.0L) SOHC 12V L			58"/82.8mm			
1955	1987-1989 CC (2.0L) SOHC 12V L	4 BS	3.2	58"/82.8mm	x 3.58	3"/91.0mm	
Years: 1955 Years:	CC (2.0L) SOHC 12V L	4 BT	3.2	58"/82.8mm	x 3.58	3"/91.0mm	
1955	CC (2.0L) SOHC 12V L 1985-1987	4 BTI	3.2	58"/82.8mm	x 3.58	3"/91.0mm	
Rod Bearing (4)	TM-77 CB-1353H Performance No Dowel Ho	STD,.026mm,.25mm le In Cap Half with	1.7707/1.7717	7 0.0005/0.0034	0.0590	1.8898/1.890	7 0.7680
.0010" More C	TM-77 CB-1353HX Performance Bearing Wall bil Clearance No Dowel Hole lole in Bearing		1.7707/1.7717	7 0.0015/0.0044	0.0586	1.8898/1.890	7 0.7680
	CC (2.0L) SOHC 12V L 1988-1990	4 B20A3	3.1	89"/81.0mm	x 3.74	0"/95.0mm	5
Rod Bearing (4) NOTE: H-Series Oil Hole in Bea	Performance No Dowel Ho	STD,.026mm,.25mm le In Cap Half with	1.7707/1.7717	7 0.0005/0.0034	0.0590	1.8898/1.890	7 0.7680
.0010" More C	TM-77 CB-1353HX Performance Bearing Wall bil Clearance No Dowel Hole lole in Bearing		1.7707/1.7717	7 0.0015/0.0044	0.0586	i 1.8898/1.890	7 0.7680
	MB-3760H Performance Contains Full Ist Washer Set, Not Included		2.1644/2.1654	\$ 0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870
.0010" More C Bearings Req	et TM-77 MS-1804HX MB-3760HX Performance Bearing Wall bil Clearance Contains Full C uires Thrust Washer Set, No Number TW-473S	arooved	2.1644/2.1654	\$ 0.0012/0.0037	0.0776	2.3228/2.323	7 0.7870
	Set TW-473S MB-3176W s 2 Pieces, Position Number 804H, MS-1804HX	STD 4 Use with Part	2.4114/2.4213	3		3.2185/3.228	3 0.0980



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	COUNTER DAT	Α		SHOP	DATA	1	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
							4 CYL
Years:	CC (2.0L) DOHC 16V L 1988-1991 CC (2.1L) DOHC 16V L			89"/81.0mm 68"/83.0mm			
Years: 2157	1990-1991 CC (2.2L) DOHC 16V L 1997-2001		3.4	25"/87.0mm	x 3.57	1"/90.7mm	
Rod Bearing (4)	TM-77 CB-1780H Performance No Dowel Ho	STD, 25mm le In Cap Half with	1.8888/1.8898	0.0008/0.0036	0.0589	2.0079/2.008	7 0.7650
	TM-77 CB-1780HK Performance with TriArmo pating Thickness, No Dowe		1.8888/1.8898	0.0008/0.0036	0.0589	2.0079/2.008	7 0.7650
	TM-77 CB-1780HX Performance Bearing Wall il Clearance No Dowel Hole		1.8888/1.8898	0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
.0005" Thinner	Performance with TriArmo For .0010" More Oil Cleara Does Not Include Coating	nce	1.8888/1.8898	0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
Main Bearing Se 1-2-3-4-5	MB-3760H	STD,.026mm,.25mm	2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870
	Performance Contains Full st Washer Set, Not Include W-473S	•					
Main Bearing Se 1-2-3-4-5	t TM-77 MS-1804HX MB-3760HX Performance Bearing Wall	STD	2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.323	7 0.7870
.0010" More O Bearings Requ	il Clearance Contains Full C lires Thrust Washer Set, No Number TW-473S	arooved					
Thrust Washer S	et TW-473S MB-3176W 2 Pieces, Position Number	STD	2.4114/2.4213			3.2185/3.228	3 0.0980
	304H, MS-1804HX	4 ooc marrar					
	CC (2.0L) DOHC 16V L	4 B20B4	3.30	07"/84.0mm	x 3.50	4"/89.0mm	7
1972	1997-1998 CC (2.0L) DOHC 16V L 1999-2001	4 B20Z2	3.30	07"/84.0mm	x 3.50	4"/89.0mm	
	TM-77 CB-1461HN Performance Narrowed For e No Dowel Hole In Cap Ha		1.7707/1.7717	0.0008/0.0015	0.0592	1.8898/1.890	7 0.6780
.0010" More O	TM-77 CB-1461HXN Performance Bearing Wall Il Clearance Narrowed For earance No Dowel Hole In 0	Increased	1.7707/1.7717	0.0018/0.0025	0.0587	1.8898/1.8907	7 0.6780
Lower Half Re	t TM-77 MS-2095H MB-3760H Performance Grooved Upp quires Thrust Washer Set, I vith Part Number TW-473S		2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870



	CO	UNTER DAT	A		SHOP	DATA	<b>\</b>	
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OR HOUSING BORE	MAX LENGTH
4 CYL (cont.)								
7 1972 0 (cont.) Years: 1	• •	DOHC 16V L	4 B20B4	3.30	07"/84.0mm	x 3.50	4"/89.0mm	7 (cont.)
1972 0		DOHC 16V L	4 B20Z2	3.30	07"/84.0mm	x 3.50	4"/89.0mm	
.0010" More Oi	Performance	MS-2095HX MB-3760HX e Bearing Wall . Grooved Upper Thrust Washer		2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.323	7 0.7870
Included Use w	ith Part Nu	mber TW-473S						
Thrust Washer S		TW-473S MB-3176W	STD	2.4114/2.4213			3.2185/3.228	3 0 0980
NOTE: Contains : Number MS-20	2 Pieces; P	osition Number	4; Use with Part	2.4114/2.4210			0.2 100/0.220	0.0000
	,		4 VTEC F20C1	3.42	20"/87.0mm	x 3.31	0"/84.0mm	8
	000-2003							
Rod Bearing NOTE: H-Series I Oil Hole in Bear	Performance	CB-1780H e No Dowel Hol	STD, 25mm e In Cap Half with	1.8888/1.8898	0.0008/0.0036	0.0589	2.0079/2.008	7 0.7650
	Performanc	CB-1780HK e with TriArmor ness, No Dowel	STD Maximum Wall Does Hole In	1.8888/1.8898	0.0008/0.0036	0.0589	2.0079/2.008	7 0.7650
	Performance	CB-1780HX e Bearing Wall . No Dowel Hole	STD 0005" Thinner For In Cap	1.8888/1.8898	0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
	Performanc For .0010" M Does Not Ir	More Oil Clearan	nce	1.8888/1.8898	0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
	Performance at Washer Se	MS-2309H MB-3962H e Contains Full ( et, Not Included	STD•,.026mm• Grooved Bearings Use with	2.1644/2.1654	0.0004/0.0028	0.0982	2.3622/2.363	0.7870
	Performance Clearance C ires Thrust \	Contains Full Gr Washer Set, Not	ooved	2.1644/2.1654	0.0014/0.0038	0.0977	2.3622/2.363	0.7870
Thrust Washer S		TW-473S MB-3176W	STD	2.4114/2.4213			2 0105/2 000	0,0000
NOTE: Contains : Number MS230	2 Pieces, Po	sition Number	4 Use with Part	2.4114/2.4213			3.2185/3.228	0.0980
	CC (2.0L)	DOHC 16V L	4 VTEC K20A3	3.39	90"/86.1mm	x 3.38	6"/86.0mm	9
Main Bearing Set 1-2-3-4-5 NOTE: H Series F	t TM-77 Performance juires Thrus	t Washer Set, N		2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870



	COL	JNTER DATA			SHOP DATA					
BEARING OR POSITION	BEARING MATERIAL	PART	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX		MAX LENGTH		
				I			4 CYL	(cont.)		
(cont.) Years: 2	2002-2005		VTEC K20A3	3.39	90"/86.1mm	x 3.38	6"/86.0mm	9 (cont.)		
.0010" More Oi	Performance I Clearance ( Ilf Requires 1	Grooved Upper   Thrust Washer S		2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.3237	0.7870		
Thrust Washer S NOTE: Contains		TW-473S MB-3176W psition Number 4	STD	2.4114/2.4213			3.2185/3.2283	0.0980		
Number MS-20										
	CC (2.0L) [ 2006-2011	DOHC 16V L4	VTEC K20Z3	3.39	90"/86.1mm	x 3.38	6"/86.0mm	10		
Rod Bearing NOTE: H Series I		CB-1861H	STD•	1.8888/1.8898	0.0005/0.0029	0.0588	2.0079/2.0087	0.6100		
Rod Bearing NOTE: H Series I .0010" More Oi	Performance	CB-1861HX Bearing Wall .0	STD• 005" Thinner For	1.8888/1.8898	0.0015/0.0039	0.0583	2.0079/2.0087	0.6100		
Main Bearing Se 1-2-3-4-5 NOTE: H Series I Lower Half Red Included Use w	Performance quires Thrust	Washer Set, No		2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.3237	0.7870		
.0010" More Oi	Performance I Clearance ( Ilf Requires 1	Grooved Upper   Thrust Washer S		2.1644/2.1654	0.0012/0.0037	0.0776	2.3228/2.3237	0.7870		
Thrust Washer S	2 Pieces; Po		STD I; Use with Part	2.4114/2.4213			3.2185/3.2283	0.0980		
	CC (2.2L) S	SOHC 16V L4	F22A1	3.34	46"/85.0mm	x 3.74	0"/95.0mm	11		
2156		SOHC 16V L4	F22A4	3.34	46"/85.0mm	x 3.74	0"/95.0mm			
2156 0		60HC 16V L4	F22A6	3.34	46"/85.0mm	x 3.74	0"/95.0mm			
2156	1991-1993 CC (2.2L) \$ 1994-1997	60HC 16V L4	F22B2	3.34	46"/85.0mm	x 3.74	0"/95.0mm			
2156 0		SOHC 16V L4	F22B6	3.34	46"/85.0mm	x 3.74	0"/95.0mm			
2156 0		50HC 16V L4	VTEC F22B1	3.34	46"/85.0mm	x 3.74	0"/95.0mm			
2157 0		DOHC 16V L4	VTEC H22A1	3.42	25"/87.0mm	x 3.57	1"/90.7mm			
2259 0		DOHC 16V L4	H23A1	3.42	25"/87.0mm	x 3.74	0"/95.0mm			
Rod Bearing (4)	TM-77 Performance	CB-1780H No Dowel Hole	STD,.25mm In Cap Half with	1.8888/1.8898	0.0008/0.0036	0.0589	2.0079/2.0087	0.7650		



	COUNTER DAT	4		SHOP	DATA	4	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL (cont.							
(cont.) Years:				46"/85.0mm			(cont.)
Years:	CC (2.2L) SOHC 16V L4		3.3	46"/85.0mm	x 3.74	0"/95.0mm	
Years:	CC (2.2L) SOHC 16V L4		3.3	46"/85.0mm	x 3.74	0"/95.0mm	
Years:	CC (2.2L) SOHC 16V L4 1994-1997			46"/85.0mm			
Years:	CC (2.2L) SOHC 16V L4 1995-1997			46"/85.0mm			
Years:	CC (2.2L) SOHC 16V L4 1994-1997			46"/85.0mm			
Years:	CC (2.2L) DOHC 16V Lo 1993-1996		3.4	25"/87.0mm	x 3.57	'1"/90.7mm	
	CC (2.3L) DOHC 16V L4 1992-1996	4 H23A1	3.4	25"/87.0mm	x 3.74	0"/95.0mm	
Rod Bearing (4) NOTE: H-Series			1.8888/1.8898	3 0.0008/0.0036	0.0589	2.0079/2.008	7 0.7650
	TM-77 CB-1780HX Performance Bearing Wall . Dil Clearance No Dowel Hole		1.8888/1.8898	3 0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
.0005" Thinne	Performance with TriArmor r For .0010" More Oil Clearar Il Does Not Include Coating	ice	1.8888/1.8898	3 0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
	CC (2.2L) DOHC 16V L	4 VTEC F22C1	3.4	25"/87.0mm	x 3.57	′1"/90.7mm	12
Rod Bearing (4) NOTE: H-Series Oil Hole in Bea	Performance No Dowel Hol	STD,.25mm e In Cap Half with	1.8888/1.8898	3 0.0008/0.0036	0.0589	2.0079/2.008	7 0.7650
	TM-77 CB-1780HK Performance with TriArmor oating Thickness, No Dowel		1.8888/1.8898	3 0.0008/0.0036	0.0589	2.0079/2.008	7 0.7650
	TM-77 CB-1780HX Performance Bearing Wall . Dil Clearance No Dowel Hole		1.8888/1.8898	3 0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
.0005" Thinne	Performance with TriArmor r For .0010" More Oil Clearar Il Does Not Include Coating	ice	1.8888/1.8898	3 0.0018/0.0046	0.0584	2.0079/2.008	7 0.7650
	MB-3962H Performance Contains Full ( ist Washer Set, Not Included	•	2.1644/2.1654	0.0004/0.0028	0.0982	2.3622/2.363	0 0.7870



	COUNTER	R DATA			SHOP	DAT	4	
BEARING OR POSITION	BEARING PART MATERIAL NUM		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
							4 CYL	(cont.)
12 2157 (cont.) Years: 2	CC (2.2L) DOHC 2004-2009	16V L4	VTEC F22C1	3.4	25"/87.0mm	x 3.57	'1"/90.7mm	12 (cont.)
Main Bearing Se 1-5	MB3962	2HX	STD•	2.1644/2.1654	0.0014/0.0038	0.0977	2.3622/2.363	0 0.7870
.010" More Oil Bearings Requ	Performance Bearin Clearance Contains iires Thrust Washer Number TW-473S	Full Groo	oved					
Thrust Washer S	Set TW-473 MB-317		STD	2.4114/2.4213			3.2185/3.228	3 0.0980
	2 Pieces, Position N 09H, MS2309HX	lumber 4	Use with Part					
	CC (2.4L) DOHC	16V L4	i-VTEC K24Z1	3.4	20"/87.0mm	x 3.89	0"/99.0mm	13
	CC (2.4L) DOHC	16V L4	i-VTEC K24Z2	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
	CC (2.4L) DOHC	16V L4	i-VTEC K24Z3	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
2354	CC (2.4L) DOHC	16V L4	i-VTEC K24Z6	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
2354	CC (2.4L) DOHC	16V L4	VTEC K24A1	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
2354	CC (2.4L) DOHC	16V L4	VTEC K24A4	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
2354	2003-2006 CC (2.4L) DOHC 2006-2011	16V L4	VTEC K24A8	3.4	20"/87.0mm	x 3.89	0"/99.0mm	
Rod Bearing (4) NOTE: H Series	TM-77 CB-186 Performance	1H	STD•	1.8888/1.8898	0.0005/0.0029	0.0588	8 2.0079/2.008	7 0.6100
Rod Bearing (4) NOTE: H Series .0010" More O	TM-77 CB-186 Performance Bearin il Clearance		STD• 005" Thinner For	1.8888/1.8898	0.0015/0.0039	0.0583	3 2.0079/2.008	7 0.6100
Main Bearing Se 1-2-3-4-5	t TM-77 MS-209 MB-376		STD,.026mm,.25mm	2.1644/2.1654	0.0002/0.0027	0.0781	2.3228/2.323	7 0.7870
Lower Half Re	Performance Groov quires Thrust Washe vith Part Number TV	er Set, No						
Main Bearing Se 1-2-3-4-5	t TM-77 MS-209 MB-376		STD	2.1644/2.1654	0.0012/0.0037	0.0776	3 2.3228/2.323	7 0.7870
.0010" More O Plain Lower Ha	Performance Bearin il Clearance Groove alf Requires Thrust \ vith Part Number TV	d Upper H Washer S	alf And					
Thrust Washer S	Set TW-473 MB-317	-	STD	2.4114/2.4213	1		3.2185/3.228	3 0.0980
	2 Pieces; Position I 095H, MS-2095HX	Number 4	; Use with Part					



#### INFINITI

### MAHLE

ENGINE	YEAR	BORE & STROKE	BLOCK

1998 CC (2.0L) DOHC 16V L4 Nissan SR20DE

1991-1996, 1999-2002 3.390"/86.1mm X 3.386"/86.0mm 1

	COL	JNTER DATA		SHOP DATA				
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL								
	C (2.0L) [		Nissan SR20DE	3.39	90"/86.1mm	x 3.38	6"/86.0mm	1
Rod Bearing (4) NOTE: H Series P		CB-1629H	STD•	1.8880/1.8890	0.0006/0.0026	0.0592	2.0079/2.0084	0.6750
Rod Bearing (4) NOTE: H Series Pe .0010" More Oil	erformance	CB-1629HX Bearing Wall .0	STD• 005" Thinner For	1.8880/1.8890	0.0016/0.0036	0.0587	2.0079/2.0084	0.6750
Main Bearing Set 1-2-3-4-5 NOTE: H Series Pe Lower Half Requ Included Use wi	erformance uires Thrust	MB3478H Grooved Upper Washer Set, No		2.1636/2.1646	0.0004/0.0030	0.0778	2.3206/2.3216	0.0755
Main Bearing Set 1-5 NOTE: H Series Po .0010" More Oil Plain Lower Halt Included Use wi	erformance Clearance ( f Requires 1	Grooved Upper Thrust Washer S	Half And	2.1636/2.1646	0.0014/0.0040	0.0773	2.3206/2.3216	0.0755
Thrust Washer Se NOTE: Contains 2 Number MS-201	Pieces; Po		STD 2; Use with Part	2.4314			3.2878	0.0770

### MAZDA

ENGINE	YEAR	BORE & STROKE	BLOCK
1489 CC (1.5L) DOHC 16V L4 Z5-DE	1995-1998	2.965"/75.3mm X 3.268"/83.0mm	1
1597 CC (1.6L) SOHC 16V L4 B6	1992-1993	3.071"/78.0mm X 3.307"/84.0mm	2
1597 CC (1.6L) SOHC 8V L4 B6B	1986-1994	3.071"/78.0mm X 3.307"/84.0mm	2
1597 CC (1.6L) DOHC 16V L4 B6-ZE	1990-1996	3.071"/78.0mm X 3.307"/84.0mm	2
1597 CC (1.6L) DOHC 16V Turbo. L4 B6E	1988-1989	3.071"/78.0mm X 3.307"/84.0mm	2
1839 CC (1.8L) SOHC 8V L4 BPE	1990-1994	3.268"/83.0mm X 3.346"/85.0mm	2
1839 CC (1.8L) DOHC 16V L4 BP-4W	1999-2000	3.268"/83.0mm X 3.346"/85.0mm	2
1839 CC (1.8L) DOHC 16V L4 BP-Z3	2001-2005	3.268"/83.0mm X 3.346"/85.0mm	2
1839 CC (1.8L) DOHC 16V L4 BP-ZE	1994-1997	3.268"/83.0mm X 3.346"/85.0mm	2
1839 CC (1.8L) DOHC 16V L4 BPD	1990-1998	3.268"/83.0mm X 3.346"/85.0mm	2
122 CID (2.0L) DOHC 16V L4 Ford Zetec	2001-2004	3.339"/84.8mm X 3.461"/87.9mm	3
1998 CC (2.0L) DOHC 16V L4 LFD	2004-2011	3.440"/87.5mm X 3.270"/83.1mm	4
140 CID (2.3L) DOHC 16V L4 Ford Duratec	2001-2009	3.440"/87.4mm X 3.700"/94.0mm	5
140 CID (2.3L) DOHC 16V Turbo. L4 Ford MZR L3T	2006-2012	3.440"/87.4mm X 3.700"/94.0mm	6



New Number
 ‡ Discontinued

ENGINE	YEAR	BORE & STROKE	BLOCK
140 CID (2.3L) DOHC 16V L4 Ford MZR L3V	2003-2010	3.440"/87.4mm X 3.700"/94.0mm	5
140 CID (2.3L) DOHC 16V L4 Ford MZR L3X	2007-2009	3.440"/87.4mm X 3.700"/94.0mm	5
140 CID (2.3L) DOHC 16V L4 Ford Duratec Hybrid	2008	3.440"/87.4mm X 3.700"/94.0mm	5
152 CID (2.5L) DOHC 16V L4 Ford Duratec	2009-2011	3.500"/88.9mm X 3.940"/100.1mm	7
152 CID (2.5L) DOHC 16V L4 Ford Duratec Hybrid	2009	3.500"/88.9mm X 3.940"/100.1mm	7

#### **CRANKSHAFT FORGING NUMBERS**

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK
B3C7 B4A-6303-B B4A-B	3.268in/83.0mm 3.268in/83.0mm 3.268in/83.0mm	1	B5A-6303-B B630 B657	3.268in/83.0mm 3.307in/84.0mm 3.307in/84.0mm	_	B6S DOHC	3.307in/84.0m 3.307in/84.0m	

	COL	JNTER DAT	ГА		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
								4 CYL
	C (1.5L) E	DOHC 16V	L4 Z5-DE	2.9	65"/75.3mm	x 3.26	8"/83.0mm	1
Main Bearing Set 1-2-3-4-5 NOTE: H Series P Lower Half Req Included Use wi	erformance uires Thrust	MB3961H Grooved Upp Washer Set,		1.9661/1.9668	0.0005/0.0023	0.0792	2.1257/2.126	2 0.6700
Main Bearing Set 1-2-3-4-5 NOTE: H Series P .0010" More Oil Plain Lower Hal Included Use w	erformance Clearance ( f Requires 1	MB3961HX Bearing Wall Grooved Uppe Thrust Washe	r Set, Not	1.9661/1.9668	0.0015/0.0033	0.0787	2.1257/2.126	2 0.6700
Thrust Washer Se NOTE: Contains 2 Number MS-180	Pieces, Po		STD r 4 Use with Part	2.2539			2.7165	0.1000
Crankshaft Forgi	ng B3	C7, B4A-6303	-B, B4A-B, B5A-6303-B	•				



	COUNTER DATA	λ		SHOP	DATA	1	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OR HOUSING BORE	MAX LENGTH
4 CYL 2 1597	CC (1.6L) SOHC 16V L4	DC	2.0	71"/78.0mm	~ 2 20	71/04 0000	2
	1992-1993	bo	3.0	/1~//0.0mm	x 3.30	/ /04.0000	<b>_</b>
	CC (1.6L) SOHC 8V L4	B6B	3.0	71"/78.0mm	x 3.30	7"/84.0mm	
	CC (1.6L) DOHC 16V L4 1990-1996	4 B6-ZE	3.0	71"/78.0mm	x 3.30	7"/84.0mm	
Years:	CC (1.6L) DOHC 16V Tu 1988-1989		3.0	71"/78.0mm	x 3.30	7"/84.0mm	
	CC (1.8L) SOHC 8V L4	BPE	3.2	68"/83.0mm	x 3.34	6"/85.0mm	
1839	CC (1.8L) DOHC 16V L4	BP-4W	3.2	68"/83.0mm	x 3.34	6"/85.0mm	
1839	CC (1.8L) DOHC 16V L4	BP-Z3	3.2	68"/83.0mm	x 3.34	6"/85.0mm	
1839	CC (1.8L) DOHC 16V L4	BP-ZE	3.2	68"/83.0mm	x 3.34	6"/85.0mm	
	CC (1.8L) DOHC 16V L4	BPD	3.2	68"/83.0mm	x 3.34	6"/85.0mm	
Rod Bearing (4) NOTE: H Series		STD,.026mm	1.7693/1.7699	0.0005/0.0023	0.0592	1.8898/1.8904	0.6750
Rod Bearing (4) NOTE: H Series .0010" More O	Performance Bearing Wall .0	STD 0005" Thinner For	1.7693/1.7699	0.0015/0.0033	0.0587	1.8898/1.8904	4 0.6750
1-2-3-4-5	t TM-77 MS-1802H MB3961H	STD,.026mm•	1.9661/1.9668	0.0005/0.0023	0.0792	2.1257/2.1262	2 0.6700
Lower Half Re	Performance Grooved Uppe quires Thrust Washer Set, N with Part Number TW-472S						
Main Bearing Se 1-2-3-4-5	et TM-77 MS-1802HX MB3961HX	STD	1.9661/1.9668	0.0015/0.0033	0.0787	2.1257/2.1262	2 0.6700
.0010" More O Plain Lower Ha	Performance Bearing Wall .0 il Clearance Grooved Upper alf Requires Thrust Washer S with Part Number TW-472S	Half And					
	Set TW-472S MB-3173W 2 Pieces, Position Number 4 802H, MS-1802HX	STD I Use with Part	2.2539			2.7165	0.1000
Crankshaft Forg	,	DOHC					
3 122 C	ID (2.0L) DOHC 16V L4		3.3	39"/84.8mm	x 3.46	1"/87.9mm	3
Rod Bearing (4)		STD,.026mm,.25mm In Cap Half	1.8461/1.8468	0.0008/0.0017	0.0585	1.9642/1.965	0.8020
Rod Bearing (4) NOTE: H-Series		STD 0005" Thinner For	1.8461/1.8468	0.0018/0.0027	0.0580	1.9642/1.9650	0.8020
Main Bearing Se 1-2-4-5 3	t TM-77 <b>MS-2208HX</b> MB-3753HX MB-3754HX(F)	STD		0.0013/0.0026			
NOTE: H-Series	Performance Bearing Wall . I Clearance Grooved Upper						



MAHLE		R	H		E
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	CO	UNTER DATA	4		SHOP	DATA		
BEARING OR POSITION	BEARING MATERIAI	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
								4 CYL
	CC (2.0L) I 2004-2011	DOHC 16V L	4 LFD	3.44	40"/87.5mm	x 3.27	0"/83.1mm	4
Rod Bearing NOTE: H-Series		CB-1840H e No Dowel Hole	STD e In Cap Half	1.8496/1.8503	0.0010/0.0020	0.0599	1.9694/1.9702	0.6653
Main Bearing Se 1-2-4-5 3 NOTE: H-Series Lower Half		MS-2245H MB-3822H MB-3823H(F) e Grooved Uppe	STD er Half And Plain		0.0004/0.0024 0.0006/0.0027			
	ID (2.3L) D	DOHC 16V L4	Ford Duratec	3.44	40"/87.4mm	x 3.70	0"/94.0mm	5
140 C		DOHC 16V L4	Ford MZR L3V	3.44	40"/87.4mm	x 3.70	0"/94.0mm	
140 C		OOHC 16V L4	Ford MZR L3X	3.44	40"/87.4mm	x 3.70	0"/94.0mm	
		OOHC 16V L4	Ford Duratec Hybr	id 3.44	40"/87.4mm	x 3.70	0"/94.0mm	
Rod Bearing (4) NOTE: H-Series		CB-1838H e No Dowel Hole	STD, 25mm e In Cap Half	1.9677/1.9685	0.0010/0.0020	0.0598	2.0875/2.0883	0.6653
	Performance	CB-1838HK e with TriArmor ness, No Dowel	STD‡ Maximum Wall Does Hole In	1.9677/1.9685	0.0010/0.0020	0.0598	2.0875/2.0883	0.6653
	Performance	CB-1838HX e Bearing Wall . No Dowel Hole	STD 0005" Thinner For In Cap	1.9677/1.9685	0.0020/0.0030	0.0593	2.0875/2.0883	0.6653
Main Bearing Se 1-2-4-5 3 NOTE: H-Series Lower Half		MS-2245H MB-3822H MB-3823H(F) e Grooved Uppe	STD er Half And Plain		0.0004/0.0024 0.0006/0.0027			
	ID (2.3L) D	OHC 16V Tu	ırbo. L4 Ford MZR L	.3T 3.44	40"/87.4mm	x 3.70	0"/94.0mm	6
	2006-2012			1				
Rod Bearing NOTE: H Series		CB-1925H	STD,.026mm	2.0465/2.0472	0.0004/0.0022	0.0588	2.1662/2.1667	0.6650
Rod Bearing NOTE: H-Series .0010" More Oi	Performance	CB-1925HX e Bearing Wall .	STD 0005" Thinner For	2.0465/2.0472	0.0014/0.0032	0.0583	2.1667/2.1667	0.6650
Main Bearing Se 1-2-4-5 3 NOTE: H-Series Lower Half		MS-2245H MB-3822H MB-3823H(F) e Grooved Uppe	STD er Half And Plain		0.0004/0.0024 0.0006/0.0027			
7 152 C Years: 2	2009-2011 ID (2.5L) D		Ford Duratec		)"/88.9mm x )"/88.9mm x			7
Main Bearing Se 1-2-4-5 3 NOTE: H-Series Lower Half	t TM-77	MS-2245H MB-3822H MB-3823H(F) e Grooved Uppe	STD er Half And Plain		0.0004/0.0024 0.0006/0.0027			



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ENGINE	YEAR	BORE & STROKE	BLOCK
1595 CC (1.6L) DOHC 16V L4 4G61	1991-1992	3.240"/82.3mm X 2.953"/75.0mm	1
1595 CC (1.6L) DOHC 16V Turbo. L4 4G61	1989-1990	3.240"/82.3mm X 2.953"/75.0mm	1
1597 CC (1.6L) SOHC 8V Turbo. L4 G32B	1985-1988	3.028"/76.9mm X 3.386"/86.0mm	1
1755 CC (1.8L) SOHC 8V L4 4G37	1989-1994	3.173"/80.6mm X 3.386"/86.0mm	1
1794 CC (1.8L) SOHC 8V L4 G62B	1983	3.173"/80.6mm X 3.460"/88.0mm	1
1794 CC (1.8L) SOHC 8V Turbo. L4 G62B	1984-1988	3.173"/80.6mm X 3.460"/88.0mm	1
1997 CC (2.0L) SOHC 8V L4 4G63	1989-1992	3.346"/85.0mm X 3.465"/88.0mm	2
1997 CC (2.0L) SOHC 16V L4 4G63	1993	3.346"/85.0mm X 3.465"/88.0mm	3
1997 CC (2.0L) SOHC 8V L4 G63B	1983-1989	3.346"/85.0mm X 3.465"/88.0mm	4
1997 CC (2.0L) DOHC 16V L4 4G63	1989-1994	3.346"/85.0mm X 3.465"/88.0mm	2
1997 CC (2.0L) DOHC 16V Turbo. L4 4G63T	1990-1999, 2003-2006	3.346"/85.0mm X 3.465"/88.0mm	5
1998 CC (2.0L) DOHC 16V Turbo. L4 MIVEC 4B11	2008-2011	3.400"/86.0mm X 3.400"/86.0mm	6
2351 CC (2.4L) SOHC 8V L4 4G64	1989-1996	3.406"/86.5mm X 3.937"/100.0mm	3
2351 CC (2.4L) SOHC 16V L4 4G64	1993-2005	3.406"/86.5mm X 3.937"/100.0mm	7
2351 CC (2.4L) SOHC 8V L4 G64B	1985-1988	3.406"/86.5mm X 3.937"/100.0mm	4
2351 CC (2.4L) DOHC 16V L4 4G64	1994	3.406"/86.5mm X 3.937"/100.0mm	3
2378 CC (2.4L) SOHC 16V L4 4G69	2004	3.420"/87.0mm X 3.940"/100.0mm	8
2497 CC (2.5L) SOHC 24V V6 6G73	1995	3.290"/83.5mm X 2.992"/76.0mm	9
2972 CC (3.0L) SOHC 12V V6 6G72	1988-1999	3.587"/91.1mm X 2.992"/76.0mm	10
2972 CC (3.0L) SOHC 24V V6 6G72	1995-2005	3.587"/91.1mm X 2.992"/76.0mm	10
2972 CC (3.0L) DOHC 24V V6 6G72	1991-1999	3.587"/91.1mm X 2.992"/76.0mm	10
2972 CC (3.0L) DOHC 24V Turbo. V6 6G72T	1991-1999	3.587"/91.1mm X 2.992"/76.0mm	10

#### CONNECTING ROD FORGING NUMBERS

	STROKE 2.992in/76.0mm		FORGING NO 72W	STROKE 2.992in/76.0mm	10 BLOCK			
CRANKSHA	FT FORGING	NUMBER	S					
FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK
19N	2.992in/76.0mm	10	G37	3.386in/86.0mm	1	T3A	2.992in/76.0	mm 10

	COUNTER DA	ТА		SHOP	P DAT	4	
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. OI HOUSING BORE	R MAX LENGTH
4 CYL							
Years: 1595 Years: 1597 Years: 1755	CC (1.6L) DOHC 16V 1991-1992 CC (1.6L) DOHC 16V 1989-1990 CC (1.6L) SOHC 8V T 1985-1988 CC (1.8L) SOHC 8V L 1989-1994	Turbo. L4 4G61 urbo. L4 G32B	3.2	240"/82.3mm 240"/82.3mm 28"/76.9mm 73"/80.6mm	x 2.95 x 3.38	3"/75.0mm 6"/86.0mm	
1794	CC (1.8L) SOHC 8V L	4 G62B	3.1	73"/80.6mm	x 3.46	60"/88.0mm	
	CC (1.8L) SOHC 8V T 1984-1988	urbo. L4 G62B	3.1	73"/80.6mm	x 3.46	0"/88.0mm	h



	COUNTE	R DATA			SHOP	DATA	1	
BEARING OR POSITION	BEARING PART MATERIAL NUM		AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE		BRG O.D. OF HOUSING BORE	MAX LENGTH
								(cont.)
(cont.) Years:	CC (1.6L) DOHO				40"/82.3mm			(cont.)
Years:	CC (1.6L) DOHO				40"/82.3mm			
Years:	CC (1.6L) SOHC				28"/76.9mm			
Years:	CC (1.8L) SOHC				73"/80.6mm			
Years:					73"/80.6mm			
	CC (1.8L) SOHC 1984-1988	8V Turb	o. L4 G62B	3.1	73"/80.6mm	x 3.46	0"/88.0mm	
Rod Bearing (4) NOTE: H-Series		owed For In	STD,.026mm,.25mm hcreased Crank	1.7710/1.7717	0.0006/0.0027	0.0587	1.8897/1.890	5 0.8550
.0010" More C	TM-77 CB-112 Performance Beari Dil Clearance Narrow learance No Dowel	ing Wall .00 ved For Inc	reased	1.7710/1.7717	0.0016/0.0037	0.0582	1.8897/1.890	5 0.8550
Crankshaft For				1				
Years:	CC (2.0L) SOHC				46"/85.0mm			
	CC (2.0L) DOHC 1989-1994	5 16V L4	4663	3.3	46"/85.0mm	x 3.46	5"/88.0mm	
Rod Bearing (4) For Year(s): 199 NOTE: H Series	TM-77 CB-16	er Chamfer		1.7710/1.7717	0.0004/0.0025	0.0589	1.8897/1.890	5 0.8320
Rod Bearing (4)	TM-77 CB-16		STD	1.7710/1.7717	0.0014/0.0035	0.0583	1.8897/1.890	5 0.8320
.0010" More C	2-1994 Performance Bearin Dil Clearance Larger ank Fillet Clearance	Chamfer F	For					
		wed For Ir	STD,.026mm,.25mm	1.7710/1.7717	7 0.0006/0.0027	0.0587	1.8897/1.890	5 0.8550
.0010" More C		ing Wall .00 ved For Inc	reased	1.7710/1.7717	7 0.0016/0.0037	0.0582	1.8897/1.890	5 0.8550
<b>Main Bearing S</b> 1-2-4-5 3 For Year(s): 199	MB-35 MB-35	04H	STD,.026mm,.25mm		0.0005/0.0025			
	Performance Groov	ved Upper	Half And Plain					





	co	UNTER DATA	4	SHOP DATA					
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH	
4 CYL (cont.)									
(cont.) Years: 1	1989-1992	SOHC 8V L4		3.34	46"/85.0mm	x 3.46	5"/88.0mm	2 (cont.)	
Years: 1	1989-1994	DOHC 16V L	4 4G63	3.34	46"/85.0mm	x 3.46	5"/88.0mm		
Main Bearing Se 1-2-4-5 3	t TM-77	MS-2039HX MB-3504HX MB-3505HX(F)	STD		0.0015/0.0035				
For Year(s): 1992 NOTE: H Series I .0010" More Oi (From 4/92)	Performanc		0005" Thinner For						
Balance Shaft Bearing Set	AL-3	SH-1469S	STD						
LH; Rear RH; Front		SH-1468 SH-1467		1.6129 1.6526	0.0010/0.0031	0.0593	1.7726	0.8268	
RH; Rear 3 1997 (		SH-1469	4000	1.6129	0.0010/0.0031 46"/85.0mm			0.8268	
Years: 1 2351	1993 CC (2.4L)	SOHC 16V L4			6"/86.5mm x			3	
		DOHC 16V L	4 4G64	3.400	6"/86.5mm x	3.937	"/100.0mm		
	2-1996 Performanc	CB-1643H e Larger Chamfe Dowel Hole In C	STD,.026mm,.25mm er For Increased ap Half	1.7710/1.7717	0.0004/0.0025	0.0589	1.8897/1.8905	0.8320	
Rod Bearing (4) For Year(s): 1992	TM-77 2-1996	CB-1643HX	STD	1.7710/1.7717	0.0014/0.0035	0.0583	1.8897/1.8905	0.8320	
Increased Crar	il Clearance	Larger Chamfer arance No Dowe	r For						
.0010" More Oi Increased Crar Cap Half Main Bearing Se 1-2-4-5 3	il Clearance nk Fillet Clea t TM-77	Larger Chamfer	r For		0.0005/0.0025 0.0005/0.0025				
.0010" More Oi Increased Crar Cap Half Main Bearing Se	il Clearance nk Fillet Clea nt TM-77 2-1994	Arger Chamfel arance No Dowe MS-2039H MB-3504H MB-3505H(F)	r For Pl Hole In STD,.026mm,.25mm						
.0010" More Oi Increased Crar Cap Half Main Bearing Se 1-2-4-5 3 For Year(s): 1992 NOTE: H Series Lower Half (From 4/92) Main Bearing Se 1-2-4-5 3	il Clearance nk Fillet Clea nt TM-77 2-1994 Performanc nt TM-77	Arger Chamfel arance No Dowe MS-2039H MB-3504H MB-3505H(F)	r For Pl Hole In STD,.026mm,.25mm	2.2435/2.2441		0.0785	2.4016/2.4024 2.4016/2.4024	0.8050	
.0010" More Oi Increased Crar Cap Half Main Bearing Se 1-2-4-5 3 For Year(s): 1992 NOTE: H Series Lower Half (From 4/92) Main Bearing Se 1-2-4-5 3 For Year(s): 1992	il Clearance nk Fillet Clear nt TM-77 2-1994 Performanc 4t TM-77 2-1994 Performanc	MS-2039H MB-3504H MB-3505H(F) e Grooved Uppe MS-2039HX MB-3504HX MB-3504HX MB-3505HX(F) e Bearing Wall .0	r For Pl Hole In STD,.026mm,.25mm Pr Half And Plain	2.2435/2.2441	0.0005/0.0025	0.0785	2.4016/2.4024 2.4016/2.4024	0.8050	
.0010" More Oi Increased Crar Cap Half Main Bearing Se 1-2-4-5 3 For Year(s): 1992 NOTE: H Series Lower Half (From 4/92) Main Bearing Se 1-2-4-5 3 For Year(s): 1992 NOTE: H Series .0010" More Oi	il Clearance nk Fillet Clear nt TM-77 2-1994 Performanc 4t TM-77 2-1994 Performanc	MS-2039H MB-3504H MB-3505H(F) e Grooved Uppe MS-2039HX MB-3504HX MB-3504HX MB-3505HX(F) e Bearing Wall .0	r For bl Hole In STD,.026mm,.25mm or Half And Plain STD	2.2435/2.2441	0.0005/0.0025	0.0785	2.4016/2.4024 2.4016/2.4024	0.8050	



	CO	UNTER DAT	A		SHOP	DATA		
BEARING OR POSITION	BEARING MATERIA	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE			MAX LENGTH
Years: 1	983-1989	SOHC 8V L4			46"/85.0mm			4 CYL 4
	CC (2.4L)	SOHC 8V L4	I G64B	3.40	6"/86.5mm x	3.937	"/100.0mm	
Rod Bearing (4) NOTE: H-Series Fillet Clearance	Performanc		STD,.026mm,.25mm or Increased Crank alf	1.7710/1.7717	0.0006/0.0027	0.0587	1.8897/1.890	5 0.8550
Rod Bearing (4) NOTE: H-Series .0010" More Oi Crank Fillet Cle	Performanc I Clearance	Narrowed For		1.7710/1.7717	0.0016/0.0037	0.0582	1.8897/1.890	5 0.8550
	CC (2.0L)		Turbo. L4 4G63T	3.3	46"/85.0mm	x 3.46	5"/88.0mm	5
Rod Bearing (4) For Year(s): 1992 NOTE: H Series I Crank Fillet Cla	2-2006 Performance		STD,.026mm,.25mm fer For Increased Cap Half	1.7710/1.7717	0.0004/0.0025	0.0589	1.8897/1.890	5 0.8320
Rod Bearing (4) For Year(s): 1992 NOTE: H Series I .0010" More Oi Increased Crar Cap Half	2-2006 Performance I Clearance	Larger Chamfe		1.7710/1.7717	0.0014/0.0035	0.0583	1.8897/1.890	5 0.8320
Rod Bearing (4) For Year(s): 1990 NOTE: H-Series Fillet Clearance (Thru 3/92)	)-1992 Performanc		STD,.026mm,.25mm or Increased Crank alf	1.7710/1.7717	0.0006/0.0027	0.0587	1.8897/1.890	5 0.8550
Rod Bearing (4) For Year(s): 1990 NOTE: H-Series .0010" More Oi Crank Fillet Clo (Thru 3/92)	)-1992 Performance I Clearance	Narrowed For		1.7710/1.7717	0.0016/0.0037	0.0582	1.8897/1.890	5 0.8550
Main Bearing Se 1-2-3-4-5 For Year(s): 1997 NOTE: H-Series Lower Half Red Included Use v	7-2006 Performanc quires Thrus	st Washer Set,		2.2435/2.2441	0.0005/0.0025	0.0785	2.4016/2.402	4 0.8050
Main Bearing Se 1-2-3-4-5 For Year(s): 1997 NOTE: H-Series .0010" More Oi Plain Lower Ha Included Use v	7-2006 Performanc I Clearance Ilf Requires	Grooved Uppe Thrust Washer	Set, Not	2.2435/2.2441	0.0015/0.0035	0.0780	2.4016/2.402	4 0.8050
Main Bearing Se 1-2-4-5 3 For Year(s): 1992 NOTE: H Series I Lower Half (From 4/92)	2-1999	MS-2039H MB-3504H MB-3505H(F) e Grooved Upp	STD,.026mm,.25mm		0.0005/0.0025 0.0005/0.0025			





	COL	JNTER DATA	۱		SHOP	DATA	1	
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL (cont.)								
5 1997 0 (cont.) Years: 15			ırbo. L4 4G63T	3.34	46"/85.0mm	x 3.46	5"/88.0mm	5 (cont.)
Main Bearing Set		MS-2039HX	STD	1				(cont.)
1-2-4-5		MB-3504HX			0.0015/0.0035			
3 For Year(s): 1992-		MB-3505HX(F)		2.2435/2.2441	0.0015/0.0035	0.0780	2.4016/2.4024	0.8050
NOTE: H Series P		Bearing Wall .0	005" Thinner For					
.0010" More Oil (From 4/92)	Clearance							
Thrust Washer Se		TW-677S MB-3854W	STD	2.4842/2.4941			3.1693/3.1791	0.0830
For Year(s): 1997- NOTE: Contains 2 Number MS-220	2 Pieces, Po		Use with Part					
Balance Shaft		SH-1469S	STD					
Bearing Set LH: Rear		SH-1468		1.6129	0.0010/0.0031	0.0589	1.7333	0.8268
RH; Front		SH-1467		1.6526	0.0010/0.0031			0.7480
RH; Rear For Year(s): 1990-		SH-1469		1.6129	0.0010/0.0031	0.0589	1.7333	0.8268
6 1998 C		DOHC 16V Tu	irbo. L4 MIVEC 4B1	1 3.40	00"/86.0mm	x 3.40	0"/86.0mm	6
Rod Bearing NOTE: H Series P		CB-1918H	STD•,.026mm•	2.0454/2.0461	0.0005/0.0021	0.0589	2.1654/2.1657	0.6750
Rod Bearing NOTE: H Series P .0010" More Oil	erformance	CB-1918HX Bearing Wall .0	STD• 005" Thinner For	2.0454/2.0461	0.0015/0.0031	0.0584	2.1654/2.1657	0.6750
Main Bearing Set 1-2-3-4-5		MS-2307H MB3952H	STD•,.026mm•	2.0462/2.0467	0.0004/0.0022	0.7880	2.2047/2.2054	0.7100
NOTE: H Series P Lower Half Req Included Use w	uires Thrus	t Washer Set, No						
Main Bearing Set 1-2-3-4-5		MS-2307HX MB3952HX	STD•	2.0462/2.0467	0.0014/0.0032	0.0783	2.2047/2.2054	0.7100
	Clearance If Requires	Grooved Upper Thrust Washer S	Half And					
Thrust Washer Se		TW-694S MB3948W	STD	2.0462/2.0467			2.2047/2.2054	0.0770
NOTE: Contains 2 Number MS-23	,		Use with Part					
	C (2.4L) \$	SOHC 16V L4	4G64	3.400	6"/86.5mm x	3.937	"/100.0mm	7
Rod Bearing (4) For Year(s): 1993	-2003	CB-1643H	STD,.026mm,.25mm	1.7710/1.7717	0.0004/0.0025	0.0589	1.8897/1.8905	0.8320
NOTE: H Series P Crank Fillet Cle		Larger Chamfe Dowel Hole In Ca						
Rod Bearing (4) For Year(s): 1993-	TM-77	CB-1643HX	STD	1.7710/1.7717	0.0014/0.0035	0.0583	1.8897/1.8905	0.8320
NOTE: H Series P .0010" More Oil	erformance Clearance	Bearing Wall .0 Larger Chamfer rance No Dowe	For					



	CO	UNTER DAT	Α		SHOP	DATA		
BEARING OR POSITION	BEARING	PART L NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE			MAX LENGTH
							4 CYL	(cont.)
7 2351 0	C (2.4L)	SOHC 16V L	4 4G64	3.400	6"/86.5mm x	3,937		<u>`                                    </u>
(cont.) Years: 1	• •		11001	0.10	,	0.001	, 100.011111	(cont.)
Main Bearing Set		MS-2261H	STD,.026mm,.25mm					(00111)
1-2-3-4-5		MB-3504H		2.2435/2.2441	0.0005/0.0025	0.0785	2.4016/2.4024	0.8050
For Year(s): 1997 NOTE: H-Series F Lower Half Req Included Use w	Performanc uires Thrus	st Washer Set, N	er Half And Plain Not					
Main Bearing Set	TM-77	MS-2261HX	STD					
1-2-3-4-5		MB-3504HX		2.2435/2.2441	0.0015/0.0035	0.0780	2.4016/2.4024	0.8050
For Year(s): 1997 NOTE: H-Series F .0010" More Oil Plain Lower Ha Included Use w	Performanc Clearance If Requires	Grooved Uppe Thrust Washer						
Main Bearing Set	TM-77	MS-2039H	STD,.026mm,.25mm					
1-2-4-5		MB-3504H			0.0005/0.0025			
3 Ear Vaar(a): 1003	1007	MB-3505H(F)		2.2435/2.2441	0.0005/0.0025	0.0785	2.4016/2.4024	0.8050
For Year(s): 1993 NOTE: H Series P Lower Half		e Grooved Upp	er Half And Plain					
Main Bearing Set	TM-77	MS-2039HX	STD					
1-2-4-5		MB-3504HX			0.0015/0.0035			
3	4007	MB-3505HX(F)		2.2435/2.2441	0.0015/0.0035	0.0780	2.4016/2.4024	0.8050
For Year(s): 1993 NOTE: H Series P .0010" More Oil	erformanc		0005" Thinner For					
Thrust Washer Se		<b>TW-677S</b> MB-3854W	STD	2.4842/2.4941			3.1693/3.1791	0.0830
For Year(s): 1997		<b>11   -</b>	O Lies with David					
NOTE: Contains 2 Number MS-22	61H, MS-22	261HX						
Balance Shaft Bearing Set	AL-3	SH-1469S	STD					
LH; Rear		SH-1468		1.6129	0.0010/0.0031	0.0589	1.7333	0.8268
RH; Front		SH-1467		1.6526	0.0010/0.0031			0.7480
RH; Rear		SH-1469		1.6129	0.0010/0.0031	0.0589	1.7333	0.8268
8 2378 0 Years: 2	• •	SOHC 16V L	4 4G69	3.420	0"/87.0mm x	3.940	"/100.0mm	8
Main Bearing Set		MS-2261H MB-3504H	STD,.026mm,.25mm	2.2435/2.2441	0.0005/0.0025	0.0785	2.4016/2.4024	0.8050
NOTE: H-Series F Lower Half Req Included Use w	uires Thrus	st Washer Set, N	er Half And Plain Not					
Main Bearing Set 1-2-3-4-5	TM-77	MS-2261HX MB-3504HX	STD	2.2435/2.2441	0.0015/0.0035	0.0780	2.4016/2.4024	0.8050
	Clearance If Requires	e Bearing Wall Grooved Upper Thrust Washer						
Thrust Washer Se		TW-677S MB-3854W	STD	2.4842/2.4941			3.1693/3.1791	0.0830
NOTE: Contains 2 Number MS-22			3 Use with Part					



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COUNTER DATA				SHOP	DATA		
BEARING OR POSITION	BEARING PART MATERIAL NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
4 CYL (cont.)							
8 2378	CC (2.4L) SOHC 16V L	4 4G69	3.420	)"/87.0mm x	3.940	"/100.0mm	8
(cont.) Years: 2							(cont.)
Balance Shaft Bearing Set	AL-3 SH-1469S	STD					
LH; Rear	SH-1468		1,6129	0.0010/0.0031	0.0589	1.7333	0.8268
RH; Front	SH-1467		1.6526	0.0010/0.0031			0.7480
RH; Rear	SH-1469		1.6129	0.0010/0.0031	0.0589	1.7333	0.8268
6 CYL							
9 2497 ( Years: 1	CC (2.5L) SOHC 24V V	6 6G73	3.29	0"/83.5mm	x 2.99	2"/76.0mm	9
Rod Bearing (6) NOTE: H-Series	TM-77 CB-1411H Performance No Dowel Ho	STD•,.026mm• le in Cap Half	1.9677/1.9685	0.0007/0.0027	0.0587	2.0866/2.0868	0.6120
Rod Bearing (6) NOTE: H-Series	TM-77 CB-1411HX Performance Bearing Wall I Clearance No Dowel Hole	STD• .0005" Thinner For	1.9670/1.9674	0.0017/0.0037	0.0582	2.0866/2.0874	0.6120
Thrust Washer S	et <b>TW-458S</b> MB-3108W(L) MB-3108W(U)	STD	2.5984/2.6083 2.5984/2.6083			3.0492/3.0594 3.0492/3.0594	
	4 Pieces, Position Number 26H, MS-2226HX	3 Use with Part					
	CC (3.0L) SOHC 12V V	6 6G72	3.58	87"/91.1mm	x 2.99	2"/76.0mm	10
2972	1988-1999 CC (3.0L) SOHC 24V V	6 6G72	3.58	37"/91.1mm	x 2.99	2"/76.0mm	
2972	1995-2005 CC (3.0L) DOHC 24V V 1991-1999	/6 6G72	3.58	87"/91.1mm	x 2.99	2"/76.0mm	
2972	CC (3.0L) DOHC 24V 1	urbo. V6 6G72T	3.58	37"/91.1mm	x 2.99	2"/76.0mm	
Rod Bearing (6)	TM-77 CB-1411H Performance No Dowel Ho	STD•,.026mm• le In Cap Half	1.9677/1.9685	0.0007/0.0027	0.0587	2.0866/2.0868	0.6120
	TM-77 CB-1411HX Performance Bearing Wall I Clearance No Dowel Hole		1.9670/1.9674	0.0017/0.0037	0.0582	2.0866/2.0874	0.6120
Lower Half Red	t TM-77 MS-2226H MB3791H Performance Grooved Upp quires Thrust Washer Set, I vith Part Number TW-458S		2.3614/2.3622	0.0007/0.0032	0.0783	2.5197/2.5204	0.7120
Main Bearing Se 1-2-3-4 NOTE: H Series I			2.3614/2.3622	0.0017/0.0042	0.0778	2.5197/2.5204	0.0712
Plain Lower Ha	alf Requires Thrust Washer with Part Number TW-458S						
Thrust Washer S		STD	2.5984/2.6083 2.5984/2.6083			3.0492/3.0594 3.0492/3.0594	
	4 Pieces, Position Number 26H, MS-2226HX	3 Use with Part					
Connecting Rod Crankshaft Forg	Forging 72G, 72W ing 19N, T3A						



ENGINE	YEAR	BORE & STROKE	BLOCK
1998 CC (2.0L) DOHC 16V L4 SR20DE	1991-2001	3.390"/86.1mm X 3.386"/86.0mm	1

	COL		SHOP DATA					
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL		MAX LENGTH
				-				4 CYL
1 1998 C Years: 19		DOHC 16V L	4 SR20DE	3.39	0"/86.1mm	x 3.38	6"/86.0mm	1
Rod Bearing (4) NOTE: H Series P		CB-1629H	STD•	1.8880/1.8890	0.0006/0.0026	0.0592	2.0079/2.0084	0.6750
Rod Bearing (4) NOTE: H Series P .0010" More Oil	erformance	CB-1629HX Bearing Wall .	STD• 0005" Thinner For	1.8880/1.8890	0.0016/0.0036	0.0587	2.0079/2.0084	0.6750
Main Bearing Set 1-2-3-4-5 NOTE: H Series P Lower Half Req Included Use wi	erformance uires Thrus	t Washer Set, N		2.1636/2.1646	0.0004/0.0030	0.0778	2.3206/2.3216	0.0755
Main Bearing Set 1-5 NOTE: H Series P .0010" More Oil Plain Lower Hal Included Use wi	erformance Clearance f Requires	Grooved Upper Thrust Washer		2.1636/2.1646	0.0014/0.0040	0.0773	2.3206/2.3216	0.0755
Thrust Washer Se NOTE: Contains 2 Number MS-201	Pieces; Po		STD 2; Use with Part	2.4314			3.2878	0.0770

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ENGINE	YEAR	BORE & STROKE	BLOCK
1820 CC (1.8L) SOHC 16V H4 EJ18E	1993-1997	3.461"/87.9mm X 2.953"/75.0mm	1
1994 CC (2.0L) DOHC 16V Turbo. H4 EJ205	2002-2005	3.620"/92.0mm X 2.950"/75.0mm	1
2212 CC (2.2L) SOHC 16V H4 EJ222	1999-2001	3.815"/96.9mm X 2.953*/75.0mm	1
2212 CC (2.2L) SOHC 16V H4 EJ223	1999-2001	3.815"/96.9mm X 2.953*/75.0mm	1
2212 CC (2.2L) SOHC 16V H4 EJ22E	1990-1996, 1998-1999	3.815"/96.9mm X 2.953*/75.0mm	1
2212 CC (2.2L) SOHC 16V H4 EJ22EZ	1996-1998	3.815"/96.9mm X 2.953*/75.0mm	1
2212 CC (2.2L) SOHC 16V Turbo. H4 EJ22T	1991-1994	3.815"/96.9mm X 2.953*/75.0mm	1
2457 CC (2.5L) SOHC 16V H4 EJ251	1999-2004	3.917"/99.5mm X 3.110"/79.0mm	1
2457 CC (2.5L) SOHC 16V H4 EJ252	2000	3.917"/99.5mm X 3.110"/79.0mm	1
2457 CC (2.5L) SOHC 16V H4 EJ253	2001-2011	3.917"/99.5mm X 3.110"/79.0mm	1
2457 CC (2.5L) SOHC 16V H4 EJ259	2004	3.917"/99.5mm X 3.110"/79.0mm	1
2457 CC (2.5L) DOHC 16V Turbo. H4 EJ255	2004-2011	3.917"/99.5mm X 3.110"/79.0mm	1
2457 CC (2.5L) DOHC 16V Turbo. H4 EJ257	2004-2013	3.917"/99.5mm X 3.110"/79.0mm	1
2457 CC (2.5L) DOHC 16V H4 EJ25D	1996-1999	3.917"/99.5mm X 3.110"/79.0mm	1

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ENGINE	YEAR	BORE & STROKE	BLOCK
2457 CC (2.5L) DOHC 16V H4 EJ25DZ	1998	3.917"/99.5mm X 3.110"/79.0mm	1

COUNTER DATA	SHOP DATA
BEARING OR BEARING PART AVAILABLE POSITION MATERIAL NUMBER UNDERSIZES	BRG O.D. OR STD SHAFT VERT OIL MAX HOUSING MAX DIAMETER CLEARANCE WALL BORE LENGTH
4 CYL	
1 1820 CC (1.8L) SOHC 16V H4	3.461"/87.9mm x 2.953"/75.0mm
1994 CC (2.0L) DOHC 16V Turbo. H4	3.620"/92.0mm x 2.950"/75.0mm
2212 CC (2.2L) SOHC 16V H4	3.815"/96.9mm x 2.953"/75.0mm
2212 CC (2.2L) SOHC 16V Turbo. H4	3.815"/96.9mm x 2.953"/75.0mm
2457 CC (2.5L) SOHC 16V H4	3.917"/99.5mm x 3.110"/79.0mm
2457 CC (2.5L) DOHC 16V Turbo. H4	3.917"/99.5mm x 3.110"/79.0mm
2457 CC (2.5L) DOHC 16V H4	3.917"/99.5mm x 3.110"/79.0mm
Rod Bearing (4) TM-77 CB-1657H STD•,.25mm• NOTE: H Series Performance	2.0466/2.0472 0.0002/0.0021 0.0590 2.1654/2.1661 0.0650
Rod Bearing (4) TM-77 CB-1657HX STD• NOTE: H Series Performance Bearing Wall .0005" Thinner For .0010" More Oil Clearance	2.0466/2.0472 0.0012/0.0031 0.0585 2.1654/2.1661 0.0650
Main Bearing Set         TM-77         MS-2258H         STD+,.25mm+           1-3         MB3981H           2-4         MB3982H           5         MB3840H(F)           NOTE: H Series Performance For Engines With #5 Thrust Position	2.3616/2.3622 0.0003/0.0016 0.0789 2.5197/2.5204 0.7530 2.3616/2.3622 0.0003/0.0016 0.0789 2.5197/2.5204 0.5950 2.3616/2.3622 0.0003/0.0016 0.0789 2.5197/2.5204 0.9030
Main Bearing Set       TM-77       MS-2258HX       STD•         1-3       MB3552HXA          2-4       MB3552HXB          5       MB3804HX(F)          NOTE: H Series Performance Bearing Wall .0005" Thinner For .0010" More Oil Clearance For Engines With #5       Thrust Position	2.3616/2.3622 0.0012/0.0032 0.0784 2.5197/2.5205 0.7480 2.3616/2.3622 0.0012/0.0032 0.0784 2.5197/2.5205 0.5905 2.3616/2.3622 0.0012/0.0032 0.0784 2.5197/2.5205 0.9030

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ENGINE	YEAR	BORE & STROKE	BLOCK
	2000 2006	2 220#/02 0mm V 2 250#/05 0mm	
1796 CC (1.8L) DOHC 16V L4 2ZZGE 2997 CC (3.0L) DOHC 24V L6 2JZGE	2000-2006 1993-1998	3.230"/82.0mm X 3.350"/85.0mm 3.386"/86.0mm X 3.386"/86.0mm	2
2997 CC (3.0L) DOHC 24V Turbo. L6 2JZGTE	1993-1998	3.386"/86.0mm X 3.386"/86.0mm	2



COUNTER DATA			SHOP DATA					
BEARING OR POSITION	BEARING MATERIAL	PART NUMBER	AVAILABLE UNDERSIZES	STD SHAFT DIAMETER	VERT OIL CLEARANCE			MAX LENGTH
				•				4 CYL
	CC (1.8L) [ 000-2006	DOHC 16V	L4 2ZZGE	3.2	30"/82.0mm	x 3.35	0"/85.0mm	1
Rod Bearing (4) NOTE: H Series F		CB-1920H	STD•,.026mm•	1.7713/1.7717	0.0005/0.0024	0.0588	1.8898/1.8907	0.6250
Rod Bearing (4) NOTE: H Series F .0010" More Oil	Performance	CB-1920HX Bearing Wall	STD• .0005" Thinner For	1.7713/1.7717	0.0015/0.0034	0.0583	1.8898/1.8907	0.6250
								6 CYL
Years: 1	993-1998	DOHC 24V		3.3	86"/86.0mm	x 3.38	6"/86.0mm	2
	CC (3.0L) [ 993-1998	DOHC 24V	Turbo. L6 2JZGTE	3.3	86"/86.0mm	x 3.38	6"/86.0mm	
Rod Bearing (6) NOTE: H-Series F		CB-1628H No Dowel He	STD,.25mm‡ ole In Cap Half	2.0465/2.0472	0.0014/0.0021	0.0595	2.1663/2.1670	0.7600
Rod Bearing (6) NOTE: H-Series F .0010" More Oil Half	Performance		STD I .0005" Thinner For e In Cap	2.0465/2.0472	0.0024/0.0031	0.0590	2.1663/2.1670	0.7600
Main Bearing Set 1 2-3-4-5-6-7 NOTE: H Series F Lower Half Req Included Use w	Performance Juires Thrus	t Washer Set,			0.0005/0.0023			
Main Bearing Set 1 2-3-4-5-6-7 NOTE: H Series F .0010" More Oil Plain Lower Ha	Performance	MB-3477HX MB-3550HX Bearing Wall Grooved Uppe			0.0015/0.0033 0.0015/0.0033			
Included Use w Thrust Washer Se		nber TW-5899 TW-5895	STD					
		MB-3477W(L) MB-3477W(U)		2.6535 2.6535			3.2244 3.2244	0.0776 0.0776
NOTE: Contains Number MS-20		sition Numbe	r 3 Use with Part					

### VOLKSWAGEN

ENGINE	YEAR	BORE & STROKE	BLOCK
1588 CC (1.6L) SOHC 8V L4 1V DIESEL	1989-1992	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V L4 CR DIESEL	1981-1983	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V L4 CS DIESEL	1982-1984	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V Turbo. L4 CY DIESEL	1982-1984	3.012"/76.5mm X 3.385"/86.0mm	1

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ENGINE	YEAR	BORE & STROKE	BLOCK
1588 CC (1.6L) SOHC 8V L4 JK DIESEL	1983-1984	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V Turbo. L4 MD DIESEL	1985	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V L4 ME DIESEL	1985-1992	3.012"/76.5mm X 3.385"/86.0mm	1
1588 CC (1.6L) SOHC 8V Turbo. L4 MF DIESEL	1985-1992	3.012"/76.5mm X 3.385"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 2H	1990-1993	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 ABG	1991-1993	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 ACC	1993-1998	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 GX	1985-1987	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 HT	1985-1986	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 JH	1983-1989	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 JN	1984-1985, 1987-1990	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 MZ	1985-1986	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 PF	1987-1992	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 RD	1985-1988	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 RV	1988-1992	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) SOHC 8V L4 UM	1987	3.189"/81.0mm X 3.386"/86.0mm	1
1780 CC (1.8L) DOHC 16V L4 PL	1987-1989	3.189"/81.0mm X 3.386"/86.0mm	1
1781 CC (1.8L) SOHC 8V SC L4 PG	1990-1992	3.190"/81.0mm X 3.400"/86.4mm	1
1781 CC (1.8L) DOHC 20V Turbo. L4 APH	1999-2001	3.190"/81.0mm X 3.400"/86.4mm	1
1984 CC (2.0L) SOHC 8V L4 ABA	1993-2002	3.248"/82.5mm X 3.650"/92.7mm	1
1984 CC (2.0L) SOHC 8V L4 AEG	1998-2001	3.248"/82.5mm X 3.650"/92.7mm	1
1984 CC (2.0L) DOHC 16V L4 9A	1990-1994	3.248"/82.5mm X 3.650"/92.7mm	1
2144 CC (2.1L) SOHC 10V L5 KM	1984	3.130"/79.5mm X 3.400"/86.4mm	2
2144 CC (2.1L) SOHC 10V L5 WE	1984	3.130"/79.5mm X 3.400"/86.4mm	2
2226 CC (2.2L) SOHC 10V L5 JT	1986-1987	3.189"/81.0mm X 3.386"/86.0mm	2
2226 CC (2.2L) SOHC 10V L5 KX	1985-1988	3.189"/81.0mm X 3.386"/86.0mm	2
2459 CC (2.5L) SOHC 10V L5 Audi AAF	1992-1994	3.190"/81.0mm X 3.760"/95.5mm	3

#### **CRANKSHAFT FORGING NUMBERS**

FORGING NO	STROKE	BLOCK	FORGING NO	STROKE	BLOCK
035D	3.386in/86.0mm	2	035D	3.400in/86.4mm	2

	COUNTER DATA				SHOP DATA					
BEARII POSITI		BEARING MATERIAL	PART	AVAILABLE R UNDERSIZES		STD SHAFT DIAMETER	VERT OIL CLEARANCE	MAX WALL	BRG O.D. O HOUSING BORE	R MAX LENGTH
4 CYL	-									
1	1588	CC (1.6L) S	SOHC 8	V L4 DIESEL		3.0	)12"/76.5mm	x 3.38	85"/86.0mm	n 1
	1588	CC (1.6L) S	SOHC 8	V Turbo. L4 DIESEL		3.0	)12"/76.5mm	x 3.38	85"/86.0mm	n
	1780	CC (1.8L) S	SOHC 8	V L4		3.1	89"/81.0mm	x 3.38	86"/86.0mm	n
	1780	CC (1.8L) [	DOHC 1	6V L4		3.1	89"/81.0mm	x 3.38	86"/86.0mm	n
	1781	CC (1.8L) S	SOHC 8	V SC L4		3.1	90"/81.0mm	x 3.40	0"/86.4mm	n
	1781	CC (1.8L) [	DOHC 2	0V Turbo. L4		3.1	90"/81.0mm	x 3.40	0"/86.4mn	n
	1984	CC (2.0L) S	SOHC 8	V L4		3.2	248"/82.5mm	x 3.65	50"/92.7mm	n



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1984 CC (2.0	L) DOHC 16V L4	ł	3.248"/82.5mm	x 3.650"/92.7mm	
Rod Bearing (4) TM- NOTE: H Series Performa	77 CB-1426H	STD•,.026mm•	1.8802/1.8810 0.0005/0.0027	0.0553 1.9921/1.9929	0.7470
Rod Bearing (4) TM- NOTE: H Series Performa .0010" More Oil Clearan	nce Bearing Wall .0	STD• 005" Thinner For	1.8802/1.8810 0.0015/0.0037	0.0548 1.9921/1.9929	0.7470
					5 CYL
2 2144 CC (2.1	L) SOHC 10V L5		3.130"/79.5mm	x 3.400"/86.4mm	2
2226 CC (2.2	L) SOHC 10V L5		3.189"/81.0mm	x 3.386"/86.0mm	
Rod Bearing (5) TM- NOTE: H Series Performa	77 CB-1426H Ince	STD•,.026mm•	1.8802/1.8810 0.0005/0.0027	0.0553 1.9921/1.9929	0.7470
Rod Bearing (5) TM- NOTE: H Series Performa .0010" More Oil Clearan		STD• 005" Thinner For	1.8802/1.8810 0.0015/0.0037	0.0548 1.9921/1.9929	0.7470
Crankshaft Forging	035D				
3 2459 CC (2.5	L) SOHC 10V L5	Audi	3.190"/81.0mm	x 3.760"/95.5mm	3
Rod Bearing TM- NOTE: H Series Performa	77 CB-1426H Ince	STD•,.026mm•	1.8802/1.8810 0.0005/0.0027	0.0553 1.9921/1.9929	0.7470
Rod Bearing TM- NOTE: H Series Performa .0010" More Oil Clearan	~	STD• 005" Thinner For	1.8802/1.8810 0.0015/0.0037	0.0548 1.9921/1.9929	0.7470



#### ACL INTERCHANGES

ACL	Clevite	ACL	Clevite
1B1442H025	CB-1442H026mm	1B663H	CB-663HN-30
1B1442H25	CB-1442H25mm	1B663H-001	CB-663HN-1
1B1442H-STD	CB-1442H	1B663H-009	CB-663HN-9
1B1442HX-STD	CB-1442HX	1B663H-010	CB-663HN-10
1B1663H-001	CB-1663H-1	1B663H-011	CB-663HN-11
1B1663H-010	CB-1663H-10	1B663H-020	CB-663HN-20
1B1663H-STD	CB-1663H	1B663H-09	CB-663H-9
1B1663HX-STD	CB-1663HX	1B663H-1	CB-663H-1
1B1665HD-001	CB-1665HD-1	1B663H-10	CB-663H-1
1B1665HD-001	CB-1665HND1	1B663H-10	CB-663H-10
1B1665HD-STD	CB-1665HD	1B663H-11	CB-663H-11
1B1665HD-STD	CB-1665HND	1B663H-20	CB-663H-20
1B1665HXD-STD	CB-1665HXD	1B663H-30	CB-663HN-30
1B1665HXD-STD	CB-1665HXND	1B663HD-01	CB-663HD-1
1B1808H025	CB-1808HN026mm	1B663HD-01	CB-663HND-1
1B1808H25	CB-1808HN25mm	1B663HD-010	CB-663HND-10
1B1808H-STD	CB-1808HN	1B663HD-10	CB-663HD-10
1B1808HX-STD	CB-1808HXN	1B663HD-STD	CB-663HD
1B481H	CB-481H	1B663HD-STD	CB-663HND
1B481H-001	CB-481HN-1	1B663H-STD	CB-663HN
1B481H-01	CB-481H-1	1B663HXD-STD	CB-663HXD
1B481H-010	CB-481HN-10	1B663HXD-STD	CB-663HXND
1B481H-1	CB-481H-1	1B663HX-STD	CB-663HX
1B481H-10	CB-481H-10	1B663HX-STD	CB-663HXN
1B481H-STD	CB-481HN	1B743H	CB-743HN-30
1B481HX	CB-481HX	1B743H-01	CB-743H-1
1B481HX-STD	CB-481HXN	1B743H-01	CB-743HN-1
1B527HD	CB-527HD	1B743H-09	CB-743H-9
1B527HD-01	CB-527HD-1	1B743H-09	CB-743HN-9
1B527HD-010	CB-527HND-10	1B743H-1	CB-743H-1
1B527HD-10	CB-527HD-10	1B743H-10	CB-743H-10
1B527HD-STD	CB-527HND	1B743H-10	CB-743HN-10
1B527HDX-STD	CB-527HXND	1B743H-11	CB-743H-11
1B527HXD	CB-527HXD	1B743H-11	CB-743HN-11
1B634H	CB-634H	1B743H-20	CB-743H-20
1B634H-001	CB-634HN-1	1B743H-20	CB-743HN-20
1B634H-009	CB-634HN-9	1B743H-30	CB-743HN-30
1B634H-01	CB-634H-1	1B743HD-01	CB-743HD-1
1B634H-010	CB-634HN-10	1B743HD-01	CB-743HND-1
1B634H-011	CB-634HN-11	1B743HD-10	CB-743HD-10
1B634H-1	CB-634H-1	1B743HD-10	CB-743HND-10
1B634H-10	CB-634H-10	1B743HD-STD	CB-743HD
1B634HD-010	CB-634HND-10	1B743HD-STD	CB-743HND
1B634HD10	CB-634HD-10	1B743H-STD	CB-743H
1B634HD-STD	CB-634HD	1B743H-STD	CB-743HN
1B634HD-STD	CB-634HND	1B743HXD-STD	CB-743HXD
1B634H-STD	CB-634HN	1B743HXD-STD	CB-743HXND
1B634HX	CB-634HX	1B743HX-STD	CB-743HX
1B634HX-STD	CB-634HXN	1B743HX-STD	CB-743HXN
1B663H	CB-663H	1B745H-01	CB-745H-1



ACL	Clevite	ACL	Clevite
1B745H-01	CB-745HN-1	4B1946H-STD	CB-1353H
1B745H-1	CB-745H-1	4B1946HX-STD	CB-1353HX
1B745H-10	CB-745H-10	4B1956H025	CB-1461HN026mm
1B745H-10	CB-745HN-10	4B1956H25	CB-1461HN25MM
1B745HD-10	CB-745HD-10	4B1956H-STD	CB-1461HN
1B745HD-10	CB-745HND-10	4B1956HX-STD	CB-1461HXN
1B745HD-STD	CB-745HD	4B1972H-STD	CB-1861H
1B745HD-STD	CB-745HND	4B1972HX-STD	CB-1861HX
1B745H-STD	CB-745H	4B2960H-010	CB-1629HX
1B745H-STD	CB-745HN	4B2960H-STD	CB-1629H
1B745HX-STD	CB-745HX	4B4390H025	CB-1840H026mm
1B745HX-STD	CB-745HXN	4B4390H25	CB-1840H25mm
1B818H-10	CB-818H-10	4B4390H-STD	CB-1840H
1B818H-10	CB-818HN-10	4B4390HX-STD	CB-1840HX
1B818H-STD	CB-818H	4B8170H.025	CB-1838H026mm
1B818H-STD	CB-818HN	4B8170H.25	CB-1838H25mm
1B927H-01	CB-927H-1	4B8170H-STD	CB-1838H
1B927H-1	CB-927H-1	4B8170HX-STD	CB-1838HX
1B927H-10	CB-927H-10	4B8172HSTD	CB-1925H
1B927H-10	CB-927HN-10	4B8172HXSTD	CB-1925HX
1B927H-STD	CB-927H	4B8296H025	CB-1657H026MM
1B927H-STD	CB-927HN	4B8296H25	CB-1657H25MM
4B1146H025	CB-1120HN026mm	4B8296H-STD	CB-1657H
4B1146H25	CB-1120HN25mm	4B8296HX-STD	CB-1657HX
4B1146H-STD	CB-1120HN	4B8351H-025	CB-1453H026MM
4B1146HX-STD	CB-1120HXN	4B8351H-STD	CB-1453H
4B1185H025	CB1643HN026MM	4B8351HX-STD	CB-1453HX
4B1185H025	CB-1643H026MM	5M1010H-01	MS-1010H-1
4B1185H25	CB1643HN25MM	5M1010H-10	MS-1010H-10
4B1185H25	CB-1643H25MM	5M1010H-STD	MS-1010H
4B1185H-STD	CB-1643HN	5M1010HX-STD	MS-1010HX
4B1185H-STD	CB-1643H	5M1038H-01	MS-1038H-1
4B1185HX-STD	CB1643HXN	5M1038H-10	MS-1038H-10
4B1185HX-STD	CB-1643HX	5M1038H-STD	MS-1038H
4B1236H-025MM	CB-1918H026MM	5M1038HX-STD	MS-1038HX
4B1236H-STD	CB-1918H	5M1039H-01	MS-1039H-1
4B1236HX-STD	CB-1918HX	5M1039H-10	MS-1039H-10
4B1606H025	CB-1426H026MM	5M1039H-STD	MS-1039H
4B1606H-STD	CB-1426H	5M1039HX-STD	MS-1039HX
4B1606HX-STD	CB-1426HX	5M1186H25	MS-2039H25MM
4B1856HSTD	CB-1920H	5M1186H-025	MS-2039H026MM
4B1856HXSTD	CB-1920HX	5M1186H-STD	MS-2039H
4B1912H25	CB-1780H25mm	5M1186HX-STD	MS-2039HX
4B1912H-STD	CB-1780H	5M1219H025	MS-2261H026mm
4B1912HX-STD	CB-1780HX	5M1219H25	MS-2261H25mm
4B1925H25	CB-1785H25mm	5M1219H-STD	MS-2261H
4B1925H-STD	CB-1785H	5M1219HX-STD	MS-2261HX
4B1925HX-STD	CB-1785HX	5M1237H-025MM	MS-2307H026MM
4B1946H025	CB-1353H026mm	5M1237H-STD	MS-2307H
		5M1237HX-STD	



#### ACL INTERCHANGES

ACL	Clevite	ACL	Clevite
5M1432H-01	MS-1432H-1	5M829H-20	MS-829H-20
5M1432H-10	MS-1432H-10	5M829H-30	MS-829H-30
5M1432H-STD	MS-1432H	5M829H-STD	MS-829H
5M1432HX-STD	MS-1432HX	5M829HX-STD	MS-829HX
5M1799H	MB-3852H	5M8309H025	MS-2258H026MM
5M1799H1	MB-3852H-1	5M8309H25	MS-2258H25MM
5M1799H1X	MB-3852HX	5M8309H-STD	MS-2258H
5M1913H025MM	MS-2309H026MM	5M8309HX-STD	MS-2258HX
5M1913H-STD	MS-2309H	5M8353H025MM	MS-1802H026MM
5M1913HX-STD	MS-2309HX	5M8353H-STD	MS-1802H
5M1957H025	MS-1804H026MM	5M8353HX-STD	MS-1802HX
5M1957H25	MS-1804H25MM	5M909H-01	MS-909H-1
5M1957H-STD	MS-1804H	5M909H-09	MS-909H-9
5M1957HX-STD	MS-1804HX	5M909H-10	MS-909H-10
5M1959H025	MS-2095H026MM	5M909H-11	MS-909H-11
5M1959H25	MS-2095H25MM	5M909H-20	MS-909H-20
5M1959H-STD	MS-2095H	5M909H-30	MS-909H-30
5M1959HX-STD	MS-2095HX	5M909H-STD	MS-909H
5M2220H025	MS-2220H026mm	5M909HX-STD	MS-909HX
5M2220H25	MS-2220H25mm	6B8100H25	CB-1628H25mm
5M2220H-STD	MS-2220H	6B8100H-STD	CB-1628H
5M2220HX-STD	MS-2220HX	6B8100HX-STD	CB-1628HX
5M2964H25	MS-2015HX	7M8103H-STD	MS-2014H
5M2964H-STD	MS-2015H	7M8103HX-STD	MS-2014HX
5M429H-01	MS-429H-1	8B1442H025	CB-1442H026mm
5M429H-10	MS-429H-10	8B1442H25	CB-1442H25mm
5M429H-STD	MS-429H	8B1442H-STD	CB-1442H
5M429HX-STD	MS-429HX	8B1442HX-STD	CB-1442HX
5M5645HSTD	MS-2293H	8B1663H-001	CB-1663H-1
5M5645HXSTD	MS-2293HX	8B1663H-010	CB-1663H-10
5M5647H-STD	MS-2259H	8B1663H-STD	CB-1663H
5M5647HX	MS-2259HX	8B1663HX-STD	CB-1663HX
5M590H-01	MS-590H-1	8B1665HD-001	CB-1665HD-1
5M590H-09	MS-590H-9	8B1665HD-001	CB-1665HND1
5M590H-10	MS-590H-10	8B1665HD-STD	CB-1665HD
5M590H-11	MS-590H-11	8B1665HD-STD	CB-1665HND
5M590H-STD	MS-590H	8B1665HXD-STD	CB-1665HXD
5M590HX-STD	MS-590HX	8B1665HXD-STD	CB-1665HXND
5M7296H025	MS-2202H026mm	8B1808H025	CB-1808HN026mm
5M7296H25	MS-2202H25mm	8B1808H25	CB-1808HN25mm
5M7296H-STD	MS-2202H	8B1808H-STD	CB-1808HN
5M7296HX-STD	MS-2202HX	8B1808HX-STD	CB-1808HXN
5M7298H-01	MS-2199H-1	8B481H-001	CB-481HN-1
5M7298H-10	MS-2199H-10	8B481H-010	CB-481HN-10
5M7298H-STD	MS-2199H	8B481H-STD	CB-481HN
5M7298HX-STD	MS-2199HX	8B481HX-STD	CB-481HXN
5M829H-01	MS-829H-1	8B527HD-010	CB-527HND-10
5M829H-09	MS-829H-9	8B527HD-STD	CB-527HND
5M829H-10	MS-829H-10	8B527HXD-STD	CB-527HXND
5M829H-11	MS-829H-11	8B634H-001	CB-634HN-1



ACL	Clevite
8B634H-009	CB-634HN-9
8B634H-010	CB-634HN-10
8B634H-011	CB-634HN-11
8B634HD-010	CB-634HND-10
8B634HD-STD	CB-634HND
8B634H-STD	CB-634HN
8B634HX-STD	CB-634HXN
8B663H-001	CB-663HN-1
8B663H-009	CB-663HN-9
8B663H-010	CB-663HN-10
8B663H-011	CB-663HN-11
8B663H-020	CB-663HN-20
8B663HD-001	CB-663HND-1
8B663HD-010	CB-663HND-10
8B663HD-STD	CB-663HND
8B663H-STD	CB-663HN
8B663HXD-STD	CB-663HXD
8B663HX-STD	CB-663HXN
8B743H-01	CB-743HN-1
8B743H-09	CB-743HN-9
8B743H-10	CB-743HN-10
8B743H-11	CB-743HN-11
8B743H-20	CB-743HN-20
8B743HD-01	CB-743HND-1
8B743HD-10	CB-743HND-10
8B743HD-STD	CB-743HND
8B743H-STD	CB-743HN
8B743HXD-STD	CB-743HXND
8B743HX-STD	CB-743HXN
8B745H-01	CB-745HN-1
8B745H-10	CB-745HN-10
8B745HD-10	CB-745HND-10
8B745HD-STD	CB-745HND
8B745H-STD	CB-745HN
8B745HX-STD	CB-745HXN
8B818H-10	CB-818HN-10
8B818H-STD	CB-818HN
8B927H-10	CB-927HN-10
8B927H-STD	CB-927HN



### KING INTERCHANGES

King	Clevite	King	Clevite
5568XP-010	MS-1804H25MM	CR8026XP-021	CB-743HN-21
CR4002XP-STD	CB-1453H	CR8026XP-030	CB-743HN-30
CR4033XP25	CB-1780H25mm	CR8026XP-STD	CB-743HN
CR4033XP-STD	CB-1780H	CR8026XP-STDX	CB-743HXN
CR4033XPX	CB-1780HX	CR8027XP-001	CB-1665HND1
CR4046XP-STD	CB-1461HN	CR8027XP-010	CB-1665HND-10
CR4120XP-STD	CB-1643H	CR8027XP-STD	CB-1665HND
CR4125XP	CB-1657H	CR8027XP-STDX	CB-1665HXND
CR4136XP25	CB-1629HX	CR8028XP-001	CB-1663H-1
CR4136XP-STD	CB-1629H	CR8028XP-010	CB-1663H-10
CR426M.75MM	CB-1590A75MM(4)	CR8028XP-STD	CB-1663H
CR426M.75MM	CB-1590A75MM	CR8028XP-STDX	CB-1663HX
CR4287HP-010	CB-1785H25mm	CR803HPN	CB-745HN
CR4287XP	CB-1785H	CR803HPN-001	CB-745HN-1
CR4287XP-STDX	CB-1785HX	CR803HPN-010	CB-745HN-10
CR4337HP	CB-1353H	CR803HPN-STDX	CB-745HXN
CR4337HP-010	CB-1353H25mm	CR803XPN	CB-745HN
CR4337HP-STDX	CB-1353HX	CR803XPN-001	CB-745HN-1
CR4375HP	CB-1785H	CR803XPN-010	CB-745HN-10
CR4375HP-010	CB-1785H25mm	CR803XPN-STDX	CB-745HXN
CR4375HP-STDX	CB-1785HX	CR804HPN-010	CB-634HN-10
CR439XP-010	CB-1353H25mm	CR804HPN-STD	CB-634HN
CR439XP-STD	CB-1353H	CR804HPN-STDX	CB-634HXN
CR439XP-STDX	CB-1353HX	CR804XPN-010	CB-634HN-10
CR4481XP-STD	CB-1120HN	CR804XPN-STD	CB-634HN
CR6754XP	CB-1628H	CR804XPN-STDX	CB-634HXN
CR8008HP	CB-481HN	CR805XPN-001	CB-481HN-1
CR8008HP-001	CB-481HN-1	CR805XPN-010	CB-481HN-10
CR8008HP-010	CB-481HN-10	CR805XPN-STD	CB-481HN
CR8008HP-STDX	CB-481HXN	CR805XPN-STDX	CB-481HXN
CR8011HP	CB-831HN	CR806HPHD-STD	CB-527HND
CR8011HP-001	CB-831HN-1	CR806HPND-001	CB-527HND-1
CR8011HP-010	CB-831HN-10	CR806HPND-010	CB-527HND-10
CR8011HP-STDX	CB-831HXN	CR806HPND-STDX	CB-527HXND
CR8025XP-001	CB-663HN-1	CR806XPND-001	CB-527HND-1
CR8025XP-010	CB-663HN-10	CR806XPND-010	CB-527HND-10
CR8025XP-010X	CB-663HN-9	CR806XPND-STD	CB-527HND
CR8025XP-011	CB-663HN-11	CR806XPND-STDX	CB-527HXND
CR8025XP-020	CB-663HN-20	CR807HPN-001	CB-663HN-1
CR8025XP-020X	CB-663HN-19	CR807HPN-010	CB-663HN-10
CR8025XP-021	CB-663HN-21	CR807HPN-010X	CB-663HN-9
CR8025XP-030	CB-663HN-30	CR807HPN-011	CB-663HN-11
CR8025XP-STD	CB-663HN	CR807HPN-020	CB-663HN-20
CR8025XP-STDX	CB-663HXN	CR807HPN-020X	CB-663HN-19
CR8026XP-001	CB-743HN-1	CR807HPN-020X	CB-663HN-21
CR8026XP-001	CB-743HN-10	CR807HPN-021	CB-663HN-30
CR8026XP-010	CB-743HN-10 CB-743HN-9	CR807HPND-001	CB-663HND-1
CR8026XP-010X	CB-743HN-11	CR807HPND-001	CB-663HND-10
CR8026XP-011	CB-743HN-20	CR807HPND-STD	CB-663HND
CR8026XP-020		CR807HPND-STD	CB-663HXND
	CB-743HN-19		



King	Clevite	King	Clevite
CR807HPN-STD	CB-663HN	CR848HP-020	CB-663HN-20
CR807HPN-STDX	CB-663HXN	CR848HP-020X	CB-663HN-19
CR807XPN-001	CB-663HN-1	CR848HP-021	CB-663HN-21
CR807XPN-010	CB-663HN-10	CR848HP-030	CB-663HN-30
CR807XPN-010X	CB-663HN-9	CR848HP-STDX	CB-663HXN
CR807XPN-011	CB-663HN-11	CR849HP	CB-743HN
CR807XPN-020	CB-663HN-20	CR849HP-001	CB-743HN-1
CR807XPN-020X	CB-663HN-19	CR849HP-010	CB-743HN-10
CR807XPN-021	CB-663HN-21	CR849HP-010X	CB-743HN-9
CR807XPN-030	CB-663HN-30	CR849HP-011	CB-743HN-11
CR807XPND-001	CB-663HND-1	CR849HP-020	CB-743HN-20
CR807XPND-010	CB-663HND-10	CR849HP-020X	CB-743HN-19
CR807XPND-STD	CB-663HND	CR849HP-021	CB-743HN-21
CR807XPND-STDX	CB-663HXND	CR849HP-030	CB-743HN-30
CR807XPN-STD	CB-663HN	CR849HP-STDX	CB-743HXN
CR807XPN-STDX	CB-663HXN	CR850HP-001	CB-663HND-1
CR808HPN-001	CB-743HN-1	CR850HP-010	CB-663HND-10
CR808HPN-010	CB-743HN-10	CR850HP-STD	CB-663HND
CR808HPN-010X	CB-743HN-9	CR850HP-STDX	CB-663HXND
CR808HPN-020	CB-743HN-20	CR851HP	CB-745HN
CR808HPN-030	CB-743HN-30	CR851HP-001	CB-745HN-1
CR808HPND-001	CB-743HND-1	CR851HP-010	CB-745HN-10
CR808HPND-010	CB-743HND-10	CR851HP-020	CB-745HN-20
CR808HPND-010X	CB-743HND-9	CR851HP-STDX	CB-745HXN
CR808HPND-STD	CB-743HND	CR852HP	CB-745HND
CR808HPND-STDX	CB-743HXND	CR852HP-010	CB-745HND-10
CR808HPN-STD	CB-743HN	CR853HP	CB-743HND
CR808HPN-STDX	CB-743HXN	CR853HP-001	CB-743HND-1
CR808XPN-001	CB-743HN-1	CR853HP-010	CB-743HND-10
CR808XPN-010	CB-743HN-10	CR853HP-010X	CB-743HND-9
CR808XPN-010X	CB-743HN-9	CR853HP-011	CB-743HND-11
CR808XPN-011	CB-743HN-11	CR853HP-STDX	CB-743HXND
CR808XPN-020	CB-743HN-20	CR854HP	CB-634HN
CR808XPN-020X	CB-743HN-19	CR854HP-001	CB-634HN-1
CR808XPN-030	CB-743HN-30	CR854HP-010	CB-634HN-10
CR808XPND-001	CB-743HND-1	CR854HP-011	CB-634HN-11
CR808XPND-010	CB-743HND-10	CR854HP-STDX	CB-634HXN
CR808XPND-STD	CB-743HND	CR855HP	CB-634HND
CR808XPND-STDX	CB-743HXND	CR855HP-010	CB-634HND-10
CR808XPN-STD	CB-743HN	CR863HP	CB-1512MU(30)
CR808XPN-STDX	CB-743HXN	CR863HP	CB-1512M(U)
CR814XPN-001	CB-831HN-1	CR867HP	CB-1856HN
CR814XPN-010	CB-831HN-10	CR867XPN-001	CB-1856HN-1
CR814XPN-STD	CB-831HN	CR867XPN-010	CB-1856HN-10
CR814XPN-STDX	CB-831HXN	CR867XPN-STD	CB-1856HN
CR848HP	CB-663HN	CR868HPN-001	CB-1442H026mm
CR848HP-001	CB-663HN-1	CR868HPN-010	CB-1442H25mm
CR848HP-009	CB-663HN-9	CR868HPN-STD	CB-1442H-251111
CR848HP-010	CB-663HN-10	CR868HPN-STDX	CB-1442HX
CR848HP-011	CB-663HN-11	CR868XPN-001	CB-1442H026mm



#### KING INTERCHANGES

King	Clevite	King	Clevite
CR868XPN-010	CB-1442H25mm	MB5143HP-020	MS-1038H-20
CR868XPN-STD	CB-1442H	MB5143HP-021	MS-1038H-21
CR868XPN-STDX	CB-1442HX	MB5143HP-STDX	MS-1038HX
CR874HP	CB-818HN	MB5147HP	MS-829H
CR874HP-010	CB-818HN-10	MB5147HP-001	MS-829H-1
CR874HP-011	CB-818HN-11	MB5147HP-010	MS-829H-10
CR889HP	CB-1442H	MB5147HP-010X	MS-829H-9
CR889HP-001	CB-1442H026mm	MB5147HP-011	MS-829H-11
CR889HP-010	CB-1442H25mm	MB5147HP-020	MS-829H-20
CR889HP-STDX	CB-1442HX	MB5147HP-020X	MS-829H-19
MB 5112HP	MS-1010H	MB5147HP-030	MS-829H-30
MB5013HP	MS-2199H	MB5147HP-STDX	MS-829HX
VB5013HP-001	MS-2199H-1	MB5160HP	MS-909HG
VB5013HP-010	MS-2199H-10	MB5161HP	MS-590H
MB5013HP-STDX	MS-2199HX	MB5161HP-001	MS-590H-1
VIB5013XP-001	MS-2199H-1	MB5161HP-010	MS-590H-10
MB5013XP-010	MS-2199H-10	MB5161HP-STDX	MS-590HX
MB5013XP-STD	MS-2199H	MB5164HP	MS-829HG
MB5013XP-STDX	MS-2199HX	MB5169HP	MS-1010H
VB509HP-001	MS-1038H-1	MB5169HP-010	MS-1010H-10
VIB600111 001	MS-1038H-10	MB5169HP-STDX	MS-1010HX
MB509HP-020	MS-1038H-20	MB5209XP-STD	MS-2039H
MB509HP-STD	MS-1038H	MB5243XP25	MS-2015HX
MB509HP-STDX	MS-1038HX	MB5243XP-STD	MS-2015H
MB509XP	MS-1038H	MB5259XP-010	MS-2095H25MM
MB509XP-001	MS-1038H-1	MB5259XP-STD	MS-2095H
MB509XP-010	MS-1038H-10	MB5259XP-STDX	MS-2095HX
MB509XP-010X	MS-1038H-9	MB5280HP-STD	MS-2202H
MB509XP-020	MS-1038H-20	MB5280XP-STD	MS-2202H
MB509XP-020	MS-1038H-21	MB5282HP	MS-2007H
MB509XP-021 MB509XP-STDX	MS-1038HX	MB5282HP-001	MS-2007H026mm
MB509AP-STDA	MS-2233HG-10	MB5282HP-010	MS-2007H25mm
MB5116HP-STD	MS-2233HG MS-2233HG	MB5282HP-STDX	MS-2007H25mm MS-2007HX
MB5116XP-010	MS-2233HG-10	MB5283HP	MS-2007 HX MS-2259H
		MB5283HP-001	
MB5116XP-STD	MS-2233HG		MS-2259H026mm
MB5142HP	MS-909H	MB5283HP-010	MS-2259H25mm
MB5142HP-001	MS-909H-1	MB5283HP-STD	MS-2259H
MB5142HP-010	MS-909H-10	MB5283HP-STDX	MS-2259HX
MB5142HP-010X	MS-909H-9	MB5283XP-010	MS-2259H25mm
MB5142HP-011	MS-909H-11	MB5283XP-STD	MS-2259H
VB5142HP-020	MS-909H-20	MB5283XP-STDX	MS-2259HX
MB5142HP-020X	MS-909H-19	MB529HP-010	MS-590H-10
MB5142HP-021	MS-909H-21	MB529HP-STD	MS-590H
MB5142HP-030	MS-909H-30	MB529HP-STDX	MS-590HX
MB5142HP-STDX	MS-909HX	MB529XP-010	MS-590H-10
MB5143HP	MS-1038H	MB529XP-STD	MS-590H
MB5143HP-001	MS-1038H-1	MB529XP-STDX	MS-590HX
MB5143HP-010	MS-1038H-10	MB5304XP-STD	MS-1802H
MB5143HP-010X	MS-1038H-9	MB5315XP-STD	MS-2261H
MB5143HP-011	MS-1038H-11	MB5353HP-001	MS-2007H026mm



King	Clevite	King	Clevite
MB5353HP-010	MS-2007H25mm	MB556HP-020	MS-829H-20
MB5353HP-STD	MS-2007H	MB556HP-020X	MS-829H-19
VB5353XP-001	MS-2007H026mm	MB556HP-030	MS-829H-30
MB5353XP-010	MS-2007H25mm	MB556HP-STD	MS-829H
MB5353XP-STD	MS-2007H	MB556HP-STDX	MS-829HX
MB5382XP-STD	MS-2258H	MB556XP-001	MS-829H-1
MB5385HP	MS-540H	MB556XP-010	MS-829H-10
MB5385HP	MS-1344V	MB556XP-010X	MS-829H-9
VB5385HP-001	MS-540H-1	MB556XP-011	MS-829H-11
MB5385HP-STDX	MS-540HX	MB556XP-020	MS-829H-20
MB5392HP	MS-1432H	MB556XP-020X	MS-829H-19
MB5392HP-010	MS-1432H-10	MB556XP-030	MS-829H-30
MB5392HP-STDX	MS-1432HX	MB556XP-STD	MS-829H
MB5407HP	MS-2202H	MB556XP-STDX	MS-829HX
MB5407HP-001	MS-2202H026mm	MB557HP-001	MS-909H-1
MB5407HP-010	MS-2202H25mm	MB557HP-010	MS-909H-10
MB5407HP-STDX	MS-2202HX	MB557HP-010X	MS-909H-9
MB5420HP	MS-2067V	MB557HP-011	MS-909H-11
MB5425XP-001	MS-909H-1	MB557HP-020	MS-909H-20
MB5425XP-010	MS-909H-10	MB557HP-020X	MS-909H-19
MB5425XP-010X	MS-909H-9	MB557HP-021	MS-909H-21
MB5425XP-011	MS-909H-11	MB557HP-030	MS-909H-30
MB5425XP-020	MS-909H-20	MB557HP-STD	MS-909H
MB5425XP-020X	MS-909H-19	MB557HP-STDX	MS-909HX
MB5425XP-021	MS-909H-21	MB557XP-001	MS-909H-1
MB5425XP-030	MS-909H-30	MB557XP-010	MS-909H-10
MB5425XP-STD	MS-909H	MB557XP-010X	MS-909H-9
MB5425XP-STDX	MS-909HX	MB557XP-011	MS-909H-11
MB5426XP-001	MS-829H-1	MB557XP-020	MS-909H-20
MB5426XP-010	MS-829H-10	MB557XP-020X	MS-909H-19
MB5426XP-010X	MS-829H-9	MB557XP-021	MS-909H-21
MB5426XP-011	MS-829H-11	MB557XP-030	MS-909H-30
MB5426XP-020	MS-829H-20	MB557XP-STD	MS-909H
MB5426XP-020X	MS-829H-19	MB557XP-STDX	MS-909HX
VB5426XP-021	MS-829H-21	MB5650HP-010	MS-1039V-10
MB5426XP-030	MS-829H-30	MB5650HP-STD	MS-1039V
MB5426XP-STD	MS-829H	MB5650XP-010	MS-1039V-10
MB5426XP-STDX	MS-829HX	MB5650XP-STD	MS-1039V
MB5503XP-010	MS-1010H-10	MB5673XP025MM	MS-2309H026MM
MB5503XP-STD	MS-1010H	MB5673XP-STD	MS-2309H
MB5503XP-STDX	MS-1010HX	MB5673XP-STD	MS-2309HX
MB5505XP-010	MS-1432H-10		
MB5505XP-STD	MS-1432H		
MB5505XP-STDX	MS-1432HX		
MB5568XP-STD	MS-1804H		
MB5568XP-STDX	MS-1804HX		
VB556HP-001	MS-829H-1		
MB556HP-010	MS-829H-10		
MB556HP-010X	MS-829H-9		



#### SEALED POWER INTERCHANGES

Sealed Power	Clevite	Sealed Power	Clevite
108M	MS-804H	141M20	MS-829H-20
108M10	MS-804H-10	141M21	MS-829H-21
108M1X	MS-804HX	141M30	MS-829H-30
108M20	MS-804H-20	141M9	MS-829H-9
126M	MS-1010H	144M	MS-2256H
126M10	MS-1010H-10	144M10	MS-2256H-10
126M1X	MS-1010HX	145MSEMI	MS-2254-SEMI
129M	MS-590H	146M	MS-1010H
129M1	MS-590H-1	146M10	MS-1010H-10
129M10	MS-590H-10	146M1X	MS-1010HX
129M1X	MS-590HX	147MSEMI	MS-2255-SEMI
130M	MS-1432H	148M	MS-2007H
130M10	MS-1432H-10	148M.026MM	MS-2007H026mm
130M1X	MS-1432HX	148M.25MM	MS-2007H25mm
130M1X	MS-1432HXK	148M026X	MS-2007HX
134M	MS-1039V	149M	MS-2259H
134M	MS-1039H	149M.026MM	MS-2259H026mm
134M10	MS-1039V-10	149M.026X	MS-2259HX
134M10	MS-1039H-10	149M.25MM	MS-2259H25mm
134M1X	MS-1039HX	151M	MS-667H
136M	MS-1732M	151M10	MS-667H-10
138M	MS-429H	152M	MS-2199H
138M1	MS-429H-1	152M1	MS-2199H-1
138M10	MS-429H-10	152M10	MS-2199H-10
139M	MS-909H	152M10	MS-2199HX
139M1	MS-909H-1	153M	MS-2202H
139M10	MS-909H-10	153M.026MM	MS-2202H026mm
139M11	MS-909H-11	153M.25MM	MS-2202H25mm
139M19	MS-909H-19	153M026X	MS-2202HX
139M1X	MS-909HX	154M	MS-2202HX MS-2203H
139M20	MS-909H-20	156M	MS-2253H
139M21	MS-909H-21	156M1	MS-2253H-1
139M30	MS-909H-30	156M1X	MS-2253HX
139M9	MS-909H-9	158M.026MM	MS-2208H026mm
140M	MS-909H-9 MS-1038H		
	MS-1038H-1	159M 159M.026MM	MS-2095H MS-2095H026MM
140M1 140M10		159M.026X	MS-2095HX
	MS-1038H-10		
140M11	MS-1038H-11	159M.25MM	MS-2095H25MM
140M1X	MS-1038HX	160M	MS-1804H
140M20	MS-1038H-20	2210SB20	CB-436B-20
140M21	MS-1038H-21	2570SA10	CB-673B-10
140M9	MS-1038H-9	3645CP	CB-979M
1415SB10	CB-503B-10	3645CP10	CB-979M-10
1415SB30	CB-503B-30	3735SB	CB-1221M
141M	MS-829H	3735SB10	CB-1221M-10
141M1	MS-829H-1	4-7195CH	CB-1780H
141M10	MS-829H-10	4-7195CH10	CB-1780H25mm
141M11	MS-829H-11	4-7195CH1X	CB-1780HX
141M19	MS-829H-19	4-7305CH	CB-1774H
141M1X	MS-829HX	4-7305CH.026MM	CB-1774H026mm



Sealed Power	Clevite	Sealed Power	Clevite
6-1415SB10	CB-503B-10	8-7155CH	CB-831HN
6-1415SB30	CB-503B-30	8-7155CH10	CB-831HN-10
6-7120CH	CB-1398H	8-7160CH	CB-634HN
6-7120CH1	CB-1398H-1	8-7160CH10	CB-634HN-10
6-7120CH10	CB-1398H-10	8-7160CH1X	CB-634HXN
7100CH	CB-663HN	8-7175CH10	CB-927HN-10
7100CH1	CB-663HN-1	8-7185CH	CB-818HN
7100CH10	CB-663HN-10	8-7185CH10	CB-818HN-10
7100CH1X	CB-663HXN	8-7195CH	CB-1780H
7100CH20	CB-663HN-20	8-7195CH10	CB-1780H25mm
7100CH30	CB-663HN-30	8-7195CH1X	CB-1780HX
7125CH	CB-481HN	8-7200CH	CB-743HN
8-7040CH	CB-542HN	8-7200CH1	CB-743HN-1
8-7040CH10	CB-542HN-10	8-7200CH10	CB-743HN-10
8-7040CH1X	CB-542HXN	8-7200CH11	CB-743HN-11
8-7040CH20	CB-542HN-20	8-7200CH1X	CB-743HXN
8-7050CH	CB-758HN	8-7200CH20	CB-743HN-20
8-7050CH1	CB-758HN-1	8-7200CH21	CB-743HN-21
8-7050CH10	CB-758HN-10	8-7200CH30	CB-743HN-30
8-7050CH1X	CB-758HXN	8-7200CH9	CB-743HN-9
8-7065CH	CB-745HN	8-7200CHA11	CB-743HND-11
8-7065CH1	CB-745HN-1	8-7200CHA9	CB-743HND-9
8-7065CH10	CB-745HN-10	8-7250CH	CB-1442H
8-7065CH1X	CB-745HXN	8-7250CH.026MM	CB-1442H026mm
8-7065CHA	CB-745HND	8-7250CH.026X	CB-1442HX
8-7065CHA10	CB-745HND-10	8-7250CH.25MM	CB-1442H25mm
8-7095CH	CB-663HN	8-7300SHA	CB-1512V
8-7095CH1	CB-663HN-1	8-7300SHA	CB-1512M
8-7095CH10	CB-663HN-10	8-7300SHA10	CB-1512V-10
8-7095CH1X	CB-663HXN	10-7250CH	CB-1442H
8-7095CH20	CB-663HN-20	10-7250CH.026MM	CB-1442H026mm
8-7095CH30	CB-663HN-30	10-7250CH.026X	CB-1442HX
8-7100CH	CB-663HN	C8-7065CH	CB-745HNK
8-7100CH1	CB-663HN-1	C8-7065CHA	CB-745HNDK
8-7100CH10	CB-663HN-10	C8-7100CH	CB-663HNK
8-7100CH11	CB-663HN-11	C8-7100CH-1	CB-663HNK-1
8-7100CH19	CB-663HN-19	C8-7100CH-10	CB-663HNK-10
8-7100CH1X	CB-663HXN	C8-7100CH1X	CB-663HXNK
8-7100CH20	CB-663HN-20	C8-7100CHA	CB-663HNDK
8-7100CH21	CB-663HN-21	C8-7155CH	CB-831HNK
8-7100CH30	CB-663HN-30	C8-7155CH10	CB-831HNK-10
8-7100CH9	CB-663HN-9	C8-7160CH	CB-634HNK
8-7100CHA	CB-663HND	C8-7160CH10	CB-634HNK-10
8-7100CHA1	CB-663HND-1	C8-7200CH	CB-743HNK
8-7100CHA10	CB-663HND-10	C8-7200CH10	CB-743HNK-10
8-7100CHA1X	CB-663HXND	C8-7200CH1X	CB-743HXNK
8-7125CH	CB-481HN	C8-7200CHA	CB-743HNDK
8-7125CH10	CB-481HN-10	C8-7200CHA10	CB-743HNDK-10
8-7135CH			
3-7135CH 3-7135CH10	CB-527HND CB-527HND-10	C129M C129M10	MS-590HK MS-590HK-10



#### SEALED POWER INTERCHANGES

Sealed Power	Clevite
C129M1X	MS-590HXK
C130M	MS-1432HK
C130M10	MS-1432HK-10
C139M	MS-909HK
C139M1	MS-909HK-1
C139M10	MS-909HK-10
C139M1X	MS-909HXK
C140M	MS-1038HK
C140M10	MS-1038HK-10
C141M	MS-829HK
C141M10	MS-829HK-10
C141M1X	MS-829HXK



### TOLERANCES AND CLEARANCE

### MAHLE

#### CRANKCASE TOLERANCES

Finish of Main Bores: 60-90 micro inches Ra.

**Bore Tolerance:** .001" (.025mm) up to 10.000" (250mm) bore **Out-of-Round:** .001" (.025mm) max if horizontal is larger than vertical

#### Alignment

.002" (.050mm) max overall misalignment	(.001"025mm for HD or highly loaded engines)
.001" (.025mm) max misalignment on adjacent bores	(.0005"013mm for HD or highly loaded engines)

## CRANKSHAFT TOLERANCES MAIN BEARING AND CRANKPIN JOURNALS

**Finish of Journals:** 15 micro inches Ra. or better (10 micro inches Ra. or better for HD or highly loaded engines)

#### Diameter Tolerance:

.0005" (.013mm) up to 1.500" (38mm) journal

.001" (.025mm) for 1.500" (38mm) to 10.000" (250mm) journal

#### Out-of-Round:

.0005" (.013mm) maximum	.0002"005mm for HD or
up to 5.000" (125mm)	highly loaded engines
journal	

(Never use a maximum out-of-round journal with a maximum out-of-round bore.)

#### Taper:

.0002" (.005mm) max up to 1.000" (25mm) long journal	.0001"003mm for HD or highly loaded engines
.0004" (.010mm) max for 1.000" (25mm) to 2.000" (50mm) long journal	.0002"005mm for HD or highly loaded engines
.0005" (.013mm) max for 2.000" (50mm) or longer journal	.0003"008mm for HD or highly loaded engines
Alignment:	

.001" (.025mm) max misalignment on adjacent journals	.0005"013mm for HD or highly loaded engines
.002" (.050mm) max overall misalignment	.001"025mm for HD or highly loaded engines
Crankpin and main journals should be parallel within .001" (.025mm)	.0005"013mm for HD or highly loaded engines

Hour-Glass or Barrel Shape Condition: Same as taper

**Oil Holes:** Must be well blended into journal surface.

#### **BEARING SPREAD**

Main bearings: .005" (.13mm) to .020" (.50mm) in excess of crankcase bore diameter

Connecting rod bearings: .020" (.50mm) in excess of rod bore

#### **CRANKSHAFT END CLEARANCE**

Shaft Diameter	End Clearance
2.000"-2.750"	.003"007"
(50mm-70mm)	.075mm175mm)
2.813"-3.500"	.005"009"
(71mm-88mm)	(.125mm225mm)
3.500" or over	.007"011"
(89mm or over)	(.175mm275mm)

#### **CONNECTING ROD TOLERANCES**

Finish of Rod Bores: 60-90 micro inches Ra.

#### Rod Tolerance:

.0005" (.013mm) up to 3.250" (81mm) diameter

.001" (.025mm) from 3.250"(81mm)to 10.000" (250mm) diameter

**Out-of-Round:** .001" (.025mm) maximum if horizontal is larger than vertical

#### Taper:

.0002" (.005mm) up to	.0001"003mm for HD or
1.000" (25mm) length	highly loaded engines
.0004" (.010mm) for 1.000" (25mm) to 2.000" 50mm) length	.0002"005mm for HD or highly loaded engines
.0005" (.013mm) for 2.000"	.0003"008mm for HD or
(50mm) or longer	highly loaded engines

#### Hour-Glass or Barrel Shape Condition: Same as taper

Parallelism: Between rod bore and wrist pin hole .001" (.025mm) in 5.000" (125mm)

Twist: .001" (.025mm) in 6.000" (150mm)

#### CONNECTING ROD END CLEARANCE

Fillets at end of crankpin should not bind on ends of rod bearing, .004" (.10mm) to .010" (.25mm) clearance recommended.

#### **OIL CLEARANCE - RESIZED BEARINGS**

The oil clearance shown in this catalog are for the factory manufactured precision sizes. When installing a resized bearing, adjust the oil clearance shown as follows:

For babbitt and TM- copper-lead: Add .0004" (.010mm) to both low and high limit

For TM-112 copper-lead: Add .0008" (.020mm) to low limit and .0004"(.010 mm) to high limit

#### **PIN BUSHINGS**

Resizing: Light Ream: .007"/.015" Bore: .015"/.030"



### MEASUREMENT EQUIVALENTS

Fraction		Decimal	MM
1/2		.50000	12.7000
		.51181	13.0000
	33/64	.51563	13.0969
17/32		.53125	13.4938
	35/64	.54688	13.8906
		.55118	14.0000
9/16		.56250	14.2875
	37/64	.57813	14.6844
		.59055	15.0000
19/32		.59375	15.0813
	39/64	.60938	15.4781
5/8		.62500	15.8750
		.62992	16.0000
	41/64	.64063	16.2719
21/32		.65625	16.6688
		.66929	17.0000
	43/64	.67188	17.0656
11/16		.68750	17.4625
	45/64	.70313	17.8594
		.70866	18.0000
23/32	47/04	.71875	18.2563
	47/64	.73438	18.6531
0/4		.74803	19.0000
3/4	40/64	.75000	19.0500
25/32	49/64	.76563 .78125	19.4469 19.8438
20/02		.78740	20.0000
	51/64	.79688	20.0000
13/16	51/04	.81250	20.6375
		.82677	21.0000
	53/64	.82813	21.0000
27/32	00,01	.84375	21.4313
	55/64	.85938	21.8281
		.86614	22.0000
7/8		.87500	22.2250
	57/64	.89063	22.6219
		.90551	23.0000
29/32		.90625	23.0188
	59/64	.92188	23.4156
15/16		.93750	23.8125
		.94488	24.0000
	61/64	.95313	24.2094
31/32		.96875	24.6063
		.98425	25.0000
	63/64	.98438	25.0031
	03/04	.30430	25.0051

	Fraction		Decimal	MM
	Traction	1/64	.01563	.3969
	1/32	., с .	.03125	.7938
			.03937	1.0000
		3/64	.04688	1.1906
1/16			.06250	1.5875
		5/64	.07813	1.9844
			.07874	2.0000
	3/32		.09375	2.3813
		7/64	.10938	2.7781
			.11811	3.0000
1/8			.12500	3.1750
		9/64	.14063	3.5719
	5/32		.15625	3.9688
			.15748	4.0000
		11/64	.17188	4.3656
3/16			.18750	4.7625
			.19685	5.0000
		13/64	.20313	5.1594
	7/32		.21875	5.5563
		15/64	.23438	5.9531
			.23622	6.0000
1/4			.2500	6.3500
		17/64	.26563	6.7469
			.27559	7.0000
	9/32		.28125	7.1438
		19/64	.29688	7.5406
5/16			.31250	7.9375
			.31496	8.0000
		21/64	.32813	8.3344
	11/32		.34375	8.7313
			.35433	9.0000
		23/64	.35938	9.1281
3/8			.37500	9.5250
		25/64	.39063	9.9219
			.39370	10.0000
	13/32		.40625	10.3188
		27/64	.42188	10.7156
			.43307	11.0000
7/16			.43750	11.1125
		29/64	.45313	11.5094
	15/32		.46875	11.9063
			.47244	12.0000
		31/64	.48438	12.3031

MM X .03937 = Inches / Inches X 25.4 = MM



