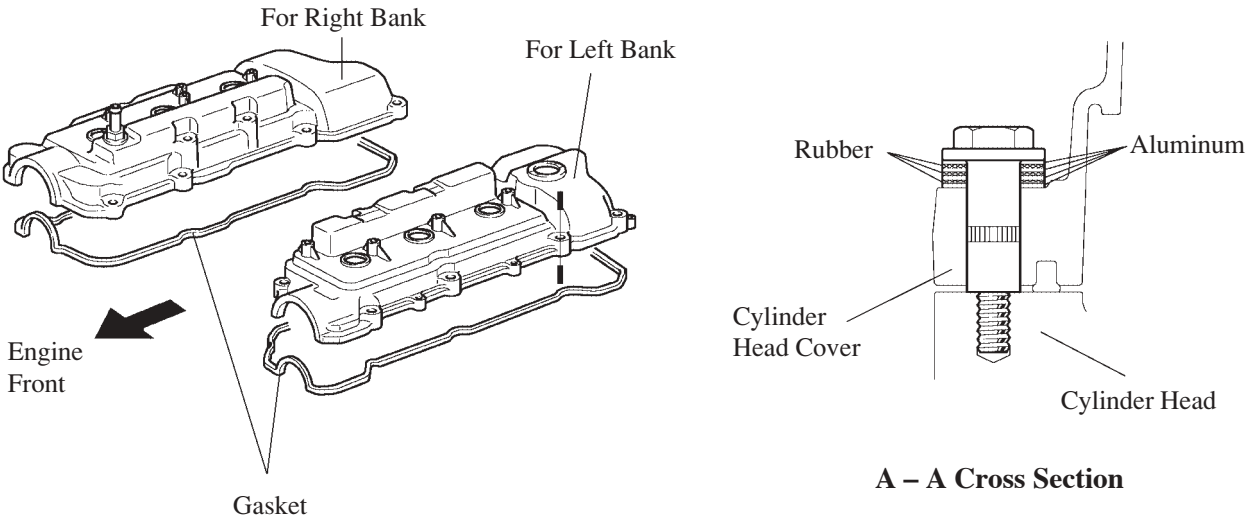
■ENGINE PROPER

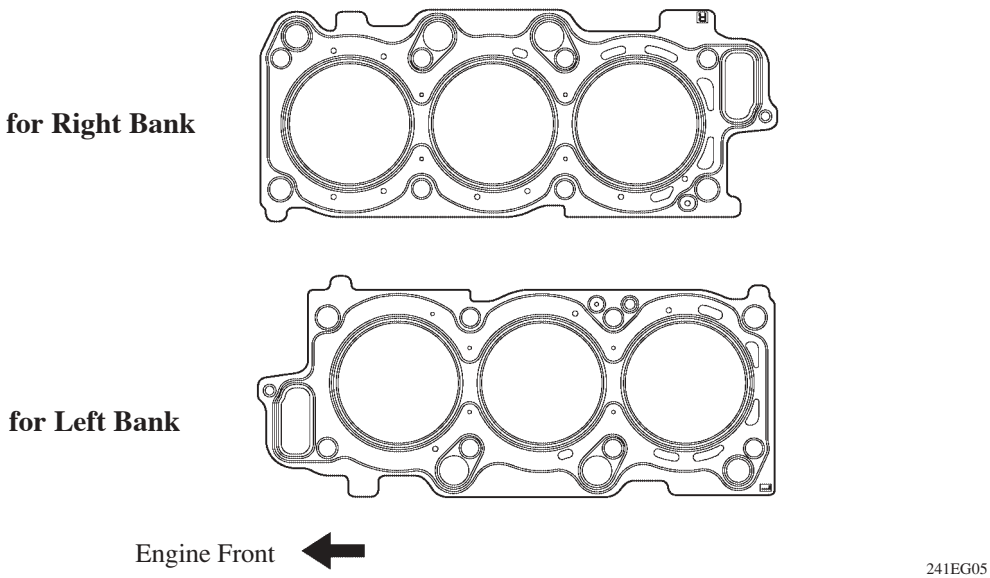
1. Cylinder Head Cover

- Lightweight and high-strength aluminum diecast cylinder head covers are used.
- An aluminum washer made of vibration-damping laminated aluminum sheet is used on the evenly spaced shoulder bolts which fasten the cylinder head covers.



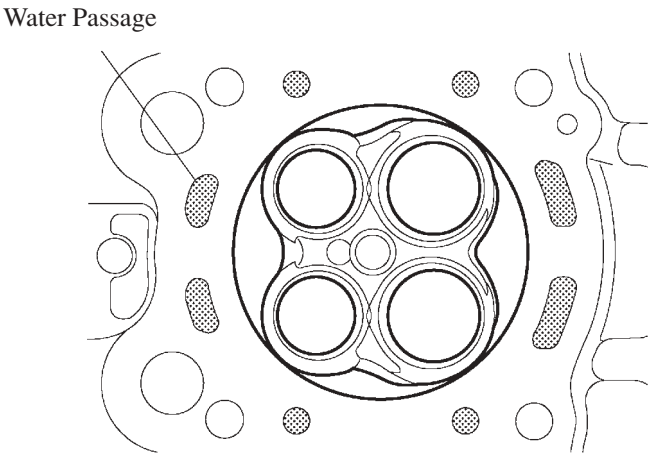
2. Cylinder Head Gasket

A metal type cylinder head gasket which offers superior pressure resistance and sealing performance has been adopted.



3. Cylinder Head

- The cylinder head, which is made of aluminum, has adopted a pentroof-type combustion chamber. The spark plug is located in the center of the combustion chamber.
- Upright, small-diameter intake ports are adopted.
- Plastic region tightening bolts are used for the cylinder head bolts for good axial tension.

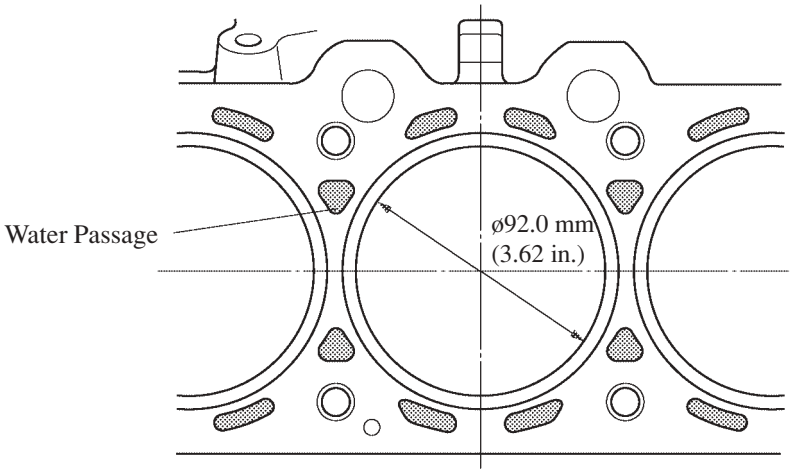


View of Back Side

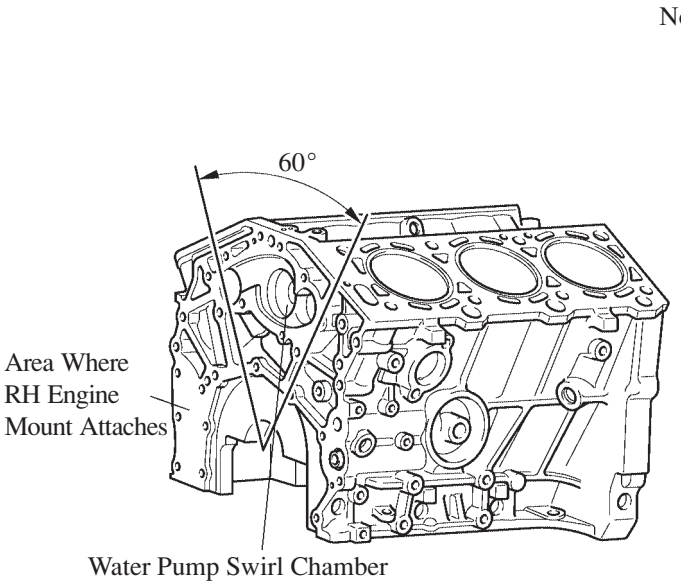
D012EG01

4. Cylinder Block

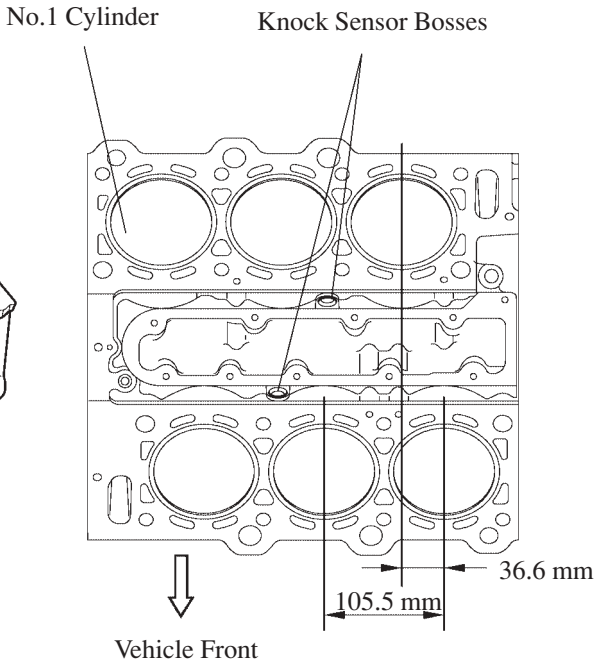
- The cylinder block has a bank angle of 60°, a bank offset of 36.6 mm (1.44 in.) and a bore pitch of 105.5 mm (4.15 in.), resulting in a compact block.
- Lightweight aluminum alloy is used for the cylinder block.
- A thin cast-iron liner is press-fitted inside the cylinder to ensure an added reliability. This liner is thin, so that boring is not possible.
- A water pump swirl chamber and an inlet passage to the pump are provided in the V-bank to help make the engine compact.
- Knock sensor bosses are provided at 2 locations in V-bank.



D012EG02



198EG38

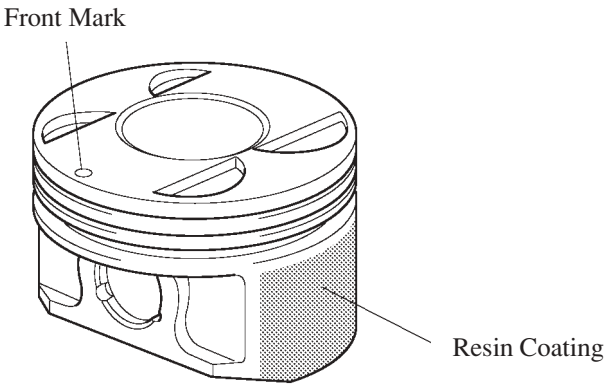


208EG63

View of Top Side

5. Piston

- The piston is made of aluminum alloy and skirt area is made compact and lightweight.
- The piston skirt has been coated with resin to reduce the friction loss.
- Full floating type piston pins are used.
- This piston is common to all cylinders. Therefore, the pistons are not shaped especially for the right or the left bank. As a result, serviceability has been improved.



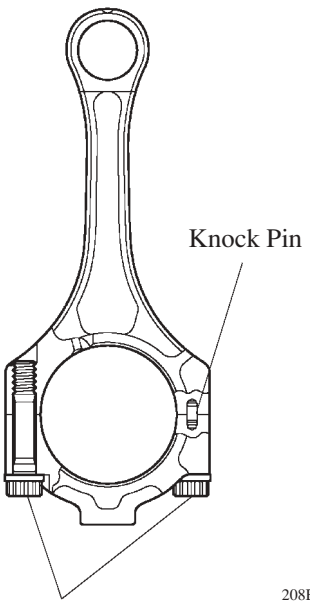
D012EG03

▶ Specifications ◀

Basic Diameter	mm (in.)	92.0 (3.62)
Piston Pin Offset	mm (in.)	1.0 (0.04)
Height	mm (in.)	55.2 (2.17)
Compression Height	mm (in.)	31.2 (1.23)
Material		Aluminum Alloy

6. Connecting Rod

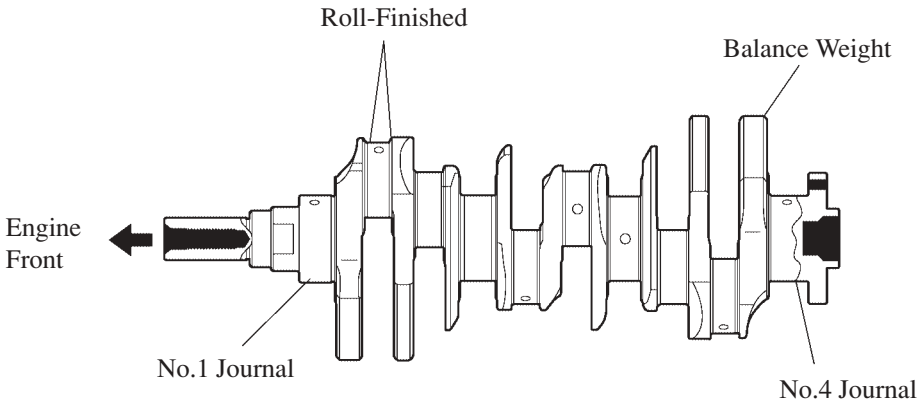
- Connecting rods that have been forged for high strength are used for weight reduction.
- An aluminum bearing with overlay is used for the connecting rod bearings.
- Plastic region tightening bolts are used.
- Knock pins are used at the mating surfaces of the bearing caps of the connecting rod to minimize the shifting of the bearing caps during assembly.



208EG106

7. Crankshaft

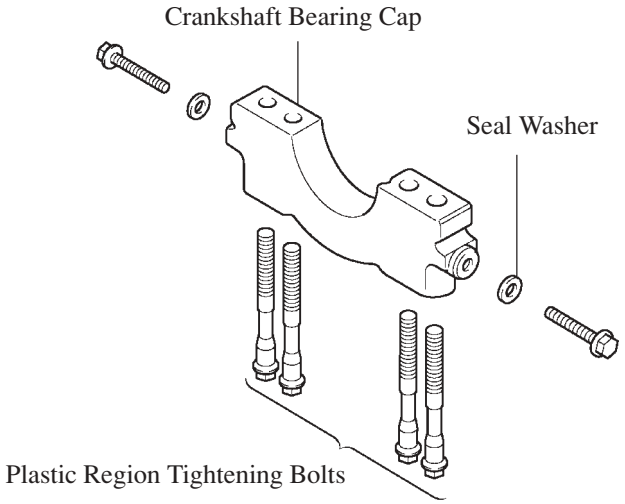
- The crankshaft is made of forged steel and has 4 journals and 9 balance weights.
- All pin and journal fillets are roll-finished to maintain adequate strength.
- The crankshaft bearings for the No.1 and No.4 journals are made wider to decrease noise and vibration, and those for the No.2 and No.3 journals are made narrower friction.



208EG72

8. Crankshaft Bearing Cap

The crankshaft bearing caps are tightened by using 4 plastic- region bolts for each journal. In addition, each cap is tightened laterally to improve its reliability.



187EG10

9. Crankshaft Pulley

- The crankshaft pulley hub is made of aluminum to reduce weight and vibration.
- The rigidity of the torsional damper rubber has been optimized to reduce noise.

