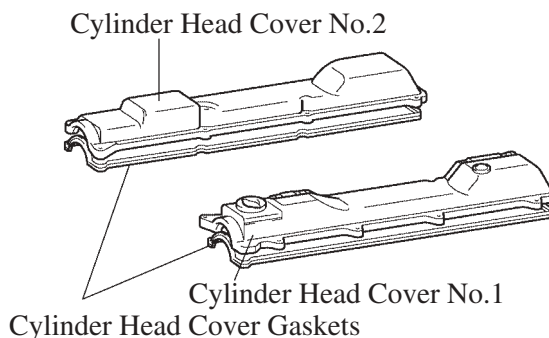


ENGINE PROPER

1. Cylinder Head Cover

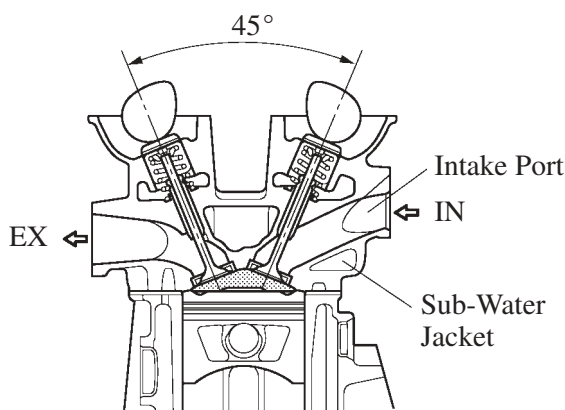
- No.1 and No.2 cylinder head covers are made of magnesium for weight reduction.
- The cylinder head cover gaskets are made of acrylic rubber with a superior heat resistance capacity.



204EG02

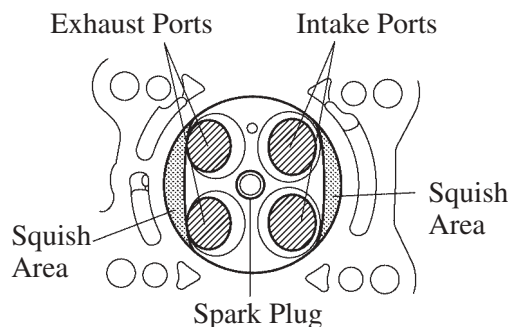
2. Cylinder Head

- The cylinder head is made of an aluminum alloy having good thermal conductivity.
- The spark plugs are located at the near center of the combustion chamber with a superior anti-knocking performance and combustion efficiency.
- This engine has upright and small-diameter intake ports.
- For cooling the intake ports, the sub-water jackets are provided.
- Plastic region tightening bolts are used for the cylinder head.
- The squish areas are adopted. It causes turbulence in the intake air for increased combustion efficiency.

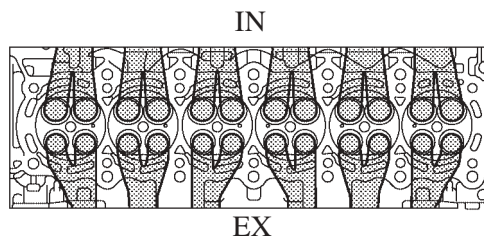


Pentroof Type Combustion Chamber

204EG03



204EG04

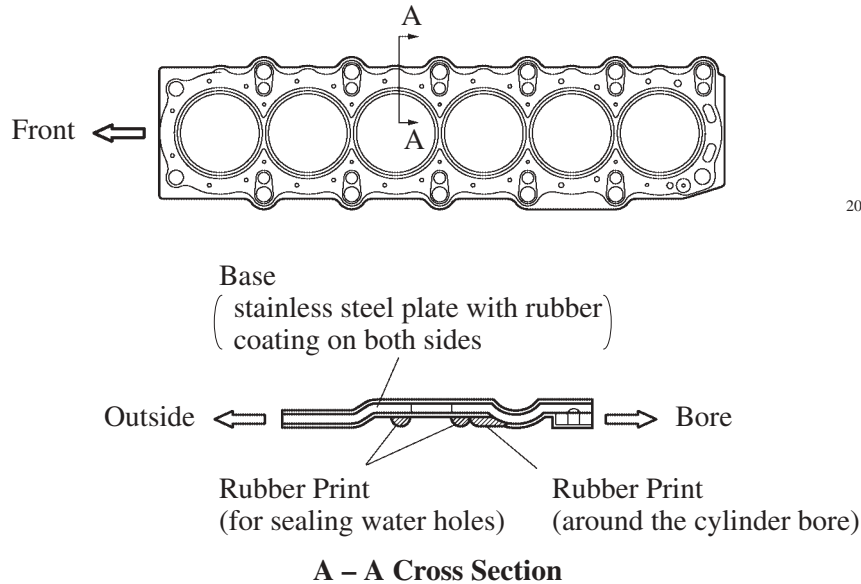


**Cross Flow Layout
(View of Back Side)**

204EG05

3. Cylinder Head Gasket

A single-layered metal gasket provides good sealing performance and durability.

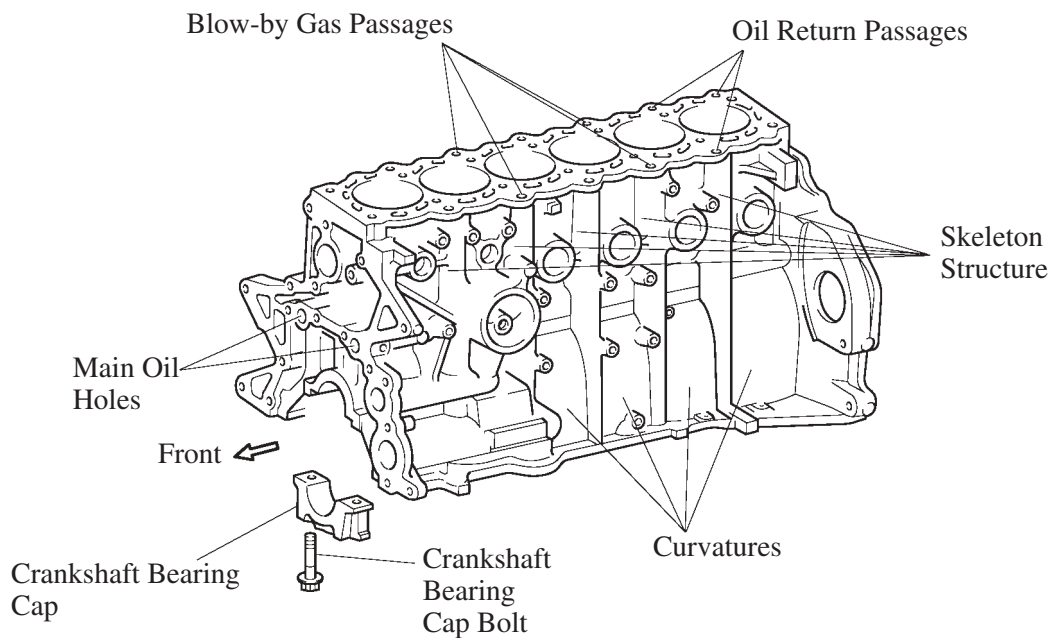


204EG06

204EG07

4. Cylinder Block

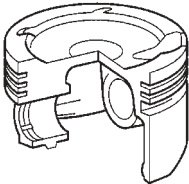
- The cylinder block is made of cast iron.
- The cylinder block is having a skeleton structure consisting the followings:
 - 1) Oil return and blow-by gas passages
 - 2) Main oil holes
- The external block walls are curved for noise reduction while enhancing rigidity.
- The air conditioner compressor, alternator and other auxiliary components are attached directly to the cylinder block.
- The crankshaft bearing caps are fitted using plastic region tightening bolts.



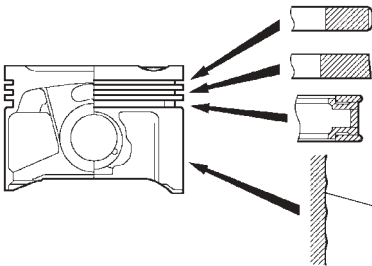
204EG08

5. Piston, Piston Pin and Piston Ring

- The piston is made of aluminum alloy.
- The short skirt construction has been adopted for weight reduction.
- The skirt area has been coated with resin for decreased friction characteristics.
- The piston rings used are highly wear resistance performance.
- Fully floating type piston pins are used.



204EG09



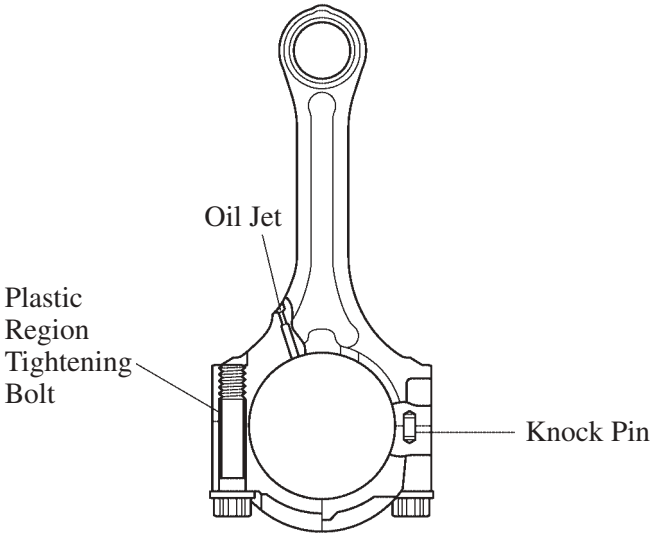
Piston Ring	Type	Surface Treatment
Compression Ring No.1	Barrel Face	Chromium Plating
Compression Ring No.2	Taper Face	—
Oil Ring	—	Chromium Plating

Resin
Coating

204EG10

6. Connecting Rod

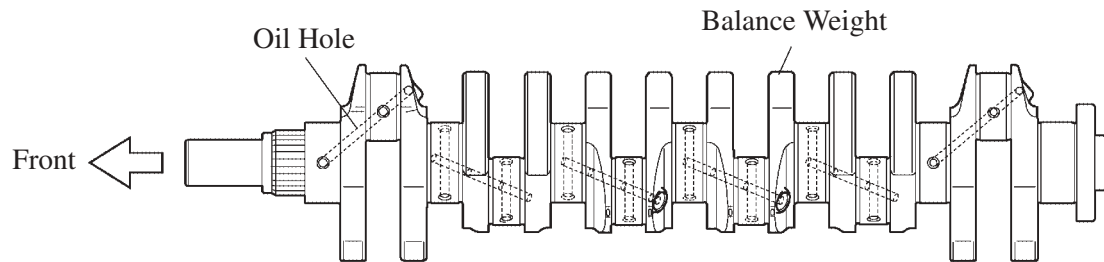
- The connecting rod is made of high-strength vanadium steel to realize weight reduction and high strength. In addition, to suppress the noise and vibration.
- The connecting rod and the connecting rod cap are joined with knock pins and plastic region tightening bolts.
- An oil jet is provided in the big end for cooling the piston.



204EG11

7. Crankshaft

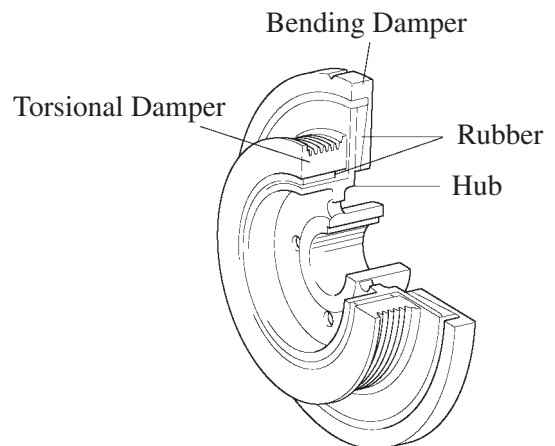
- The forged crankshaft has 7 journals and 12 balance weights.
- The pins and journals are induction-hardened to realize rigidity.
- Aluminum alloy bearings are used to realize wear resistance.



204EG13

8. Crankshaft Pulley

- The dual-mode damper pulley combines a torsional damper and a bending damper to suppress two types of crankshaft vibration-torsional vibration and bending vibration.
- An aluminum hub is used to realize weight and noise reduction.



204EG14