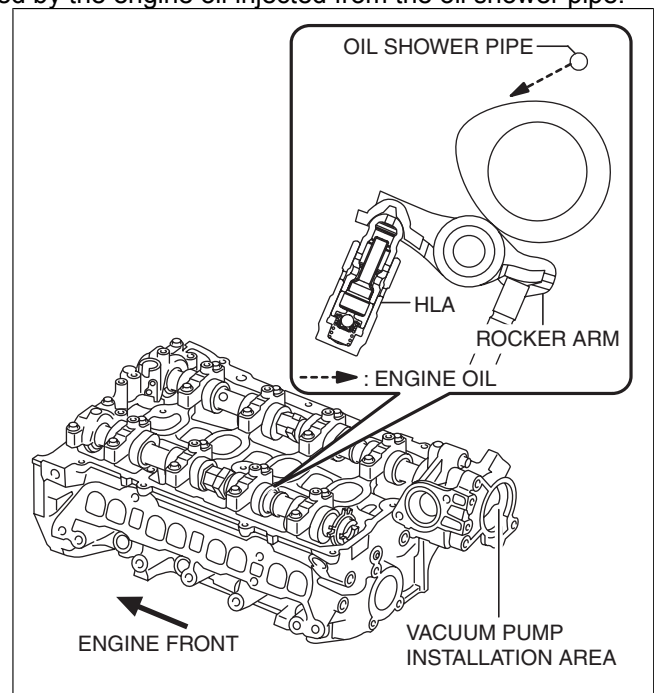


CYLINDER HEAD [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

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Outline

- With the adoption of the rocker arm (built into needle roller bearing), the sliding resistance has been reduced.
- With the adoption of the HLA, the valve clearance is maintained at 0 mm at all times.
- The contact point of the rocker arm and cam is lubricated by the engine oil injected from the oil shower pipe.
- Because the SKYACTIV-G 2.0 and SKYACTIV-G 2.5 are implemented on the Miller cycle, the intake manifold vacuum is insufficient during the intake valve opening timing. To improve this, the intake manifold vacuum insufficiency is supplemented by the adoption of the vacuum pump. (See VACUUM PUMP [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)



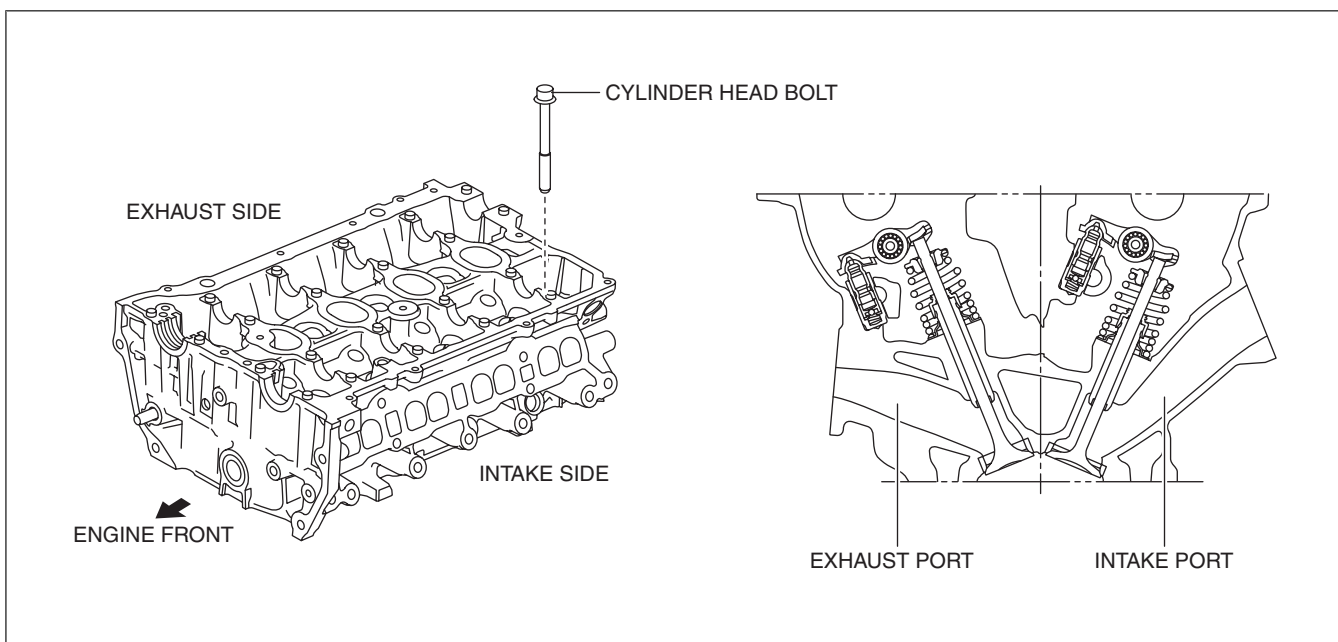
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Purpose, Function

- The cylinder head forms the combustion chamber and intake and exhaust ports.

Construction

- The lightweight cylinder head is made of aluminum alloy with excellent thermal conductivity.
- Designing a compact pentroof combustion chamber and positioning the spark plugs on the top of the combustion chamber has improved the combustion efficiency.
- There are two intake valves and two exhaust valves per cylinder for a total of four valves and the intake/exhaust type has been changed to a cross-flow type, improving intake and exhaust efficiency.
- High pressurization is achieved by optimizing the intake port shape, improving the tumble ratio, increasing the combustion speed, and suppressing knocking.
- With the adoption of plastic region tightening* for the cylinder head bolts, axial force has been stabilized.



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* : Plastic region tightening is a method of controlling the tightening using the rotation angle of a bolt. By tightening to the region (plastic tightening region) in which bolt deformation does not become irreversible, variation in axial force is suppressed.