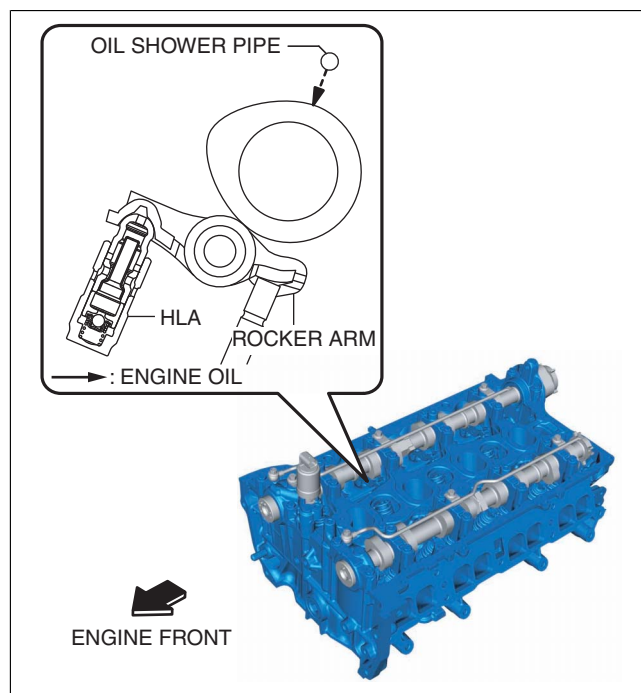


CYLINDER HEAD [SKYACTIV-G 2.5T]

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Outline

- A rocker arm (built in needle roller bearing) has been adopted to reduce sliding resistance.
- An HLA that maintains a constant **0 mm {0 in}** valve clearance has been adopted to achieve a maintenance-free design.
- The contact point of the rocker arm and cam is lubricated by the engine oil injected from the oil shower pipe.
- 4-3 type exhaust passages have been adopted in the cylinder head to improve the acceleration/environmental performance.



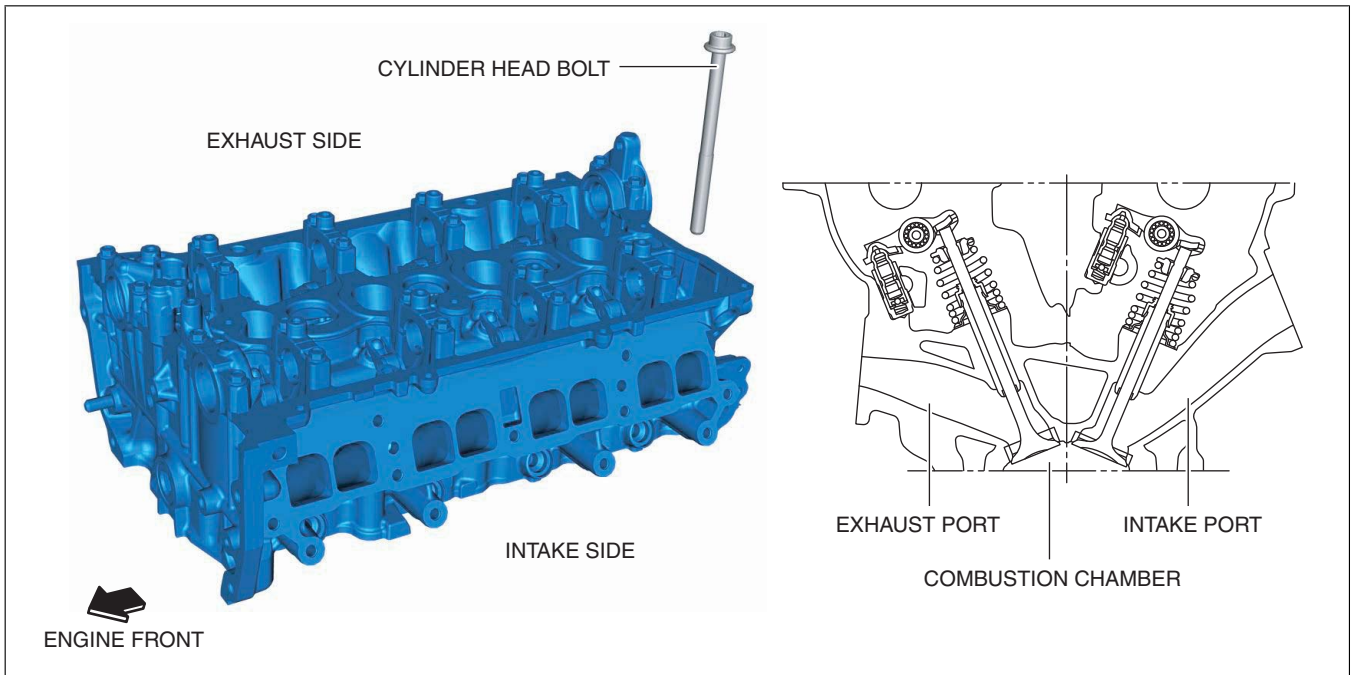
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Purpose, Function

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

Construction

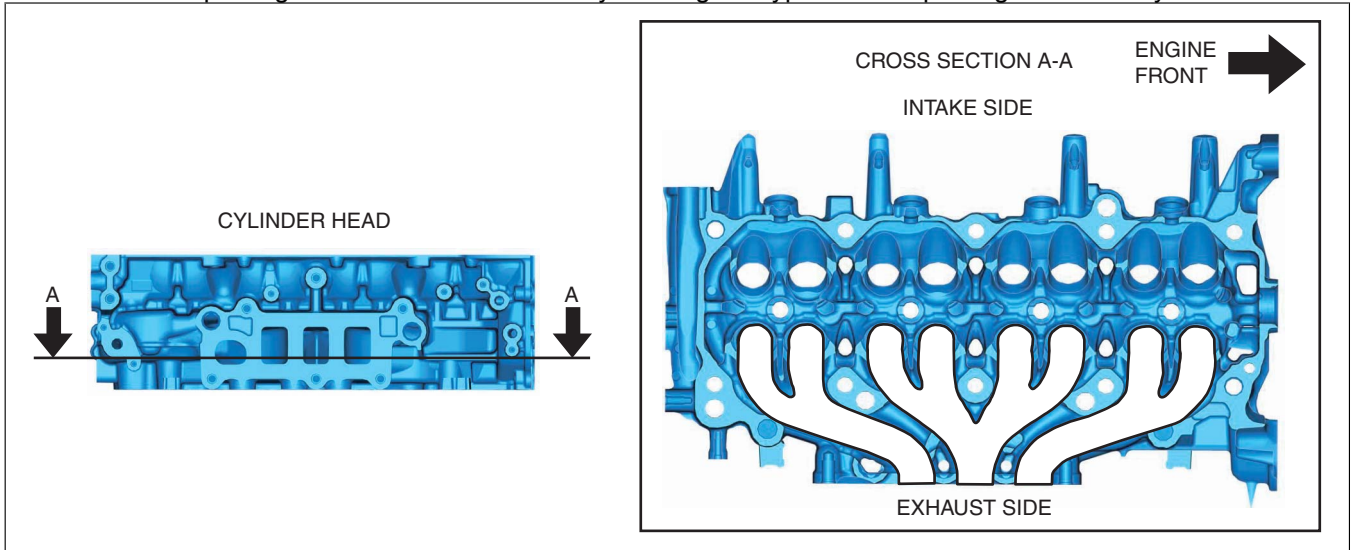
- The lightweight cylinder head is made of aluminum alloy with excellent thermal conductivity.
- Designing a compact pentroof combustion chamber and positioning the spark plug on the top of the combustion chamber has improved the combustion efficiency.
- There are two intake valves and two exhaust valves 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.
- The tumble ratio is improved by optimizing the intake port entry angle and valve included angle which suppress knocking by increasing the combustion speed.
- 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 and suppressing the variations in the axial force by tightening the bolt until its deformation does not return to its original condition (plastic region).

- The exhaust passages have been shortened by building 4-3 type exhaust passages into the cylinder heads.



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