

CYLINDER HEAD GASKET

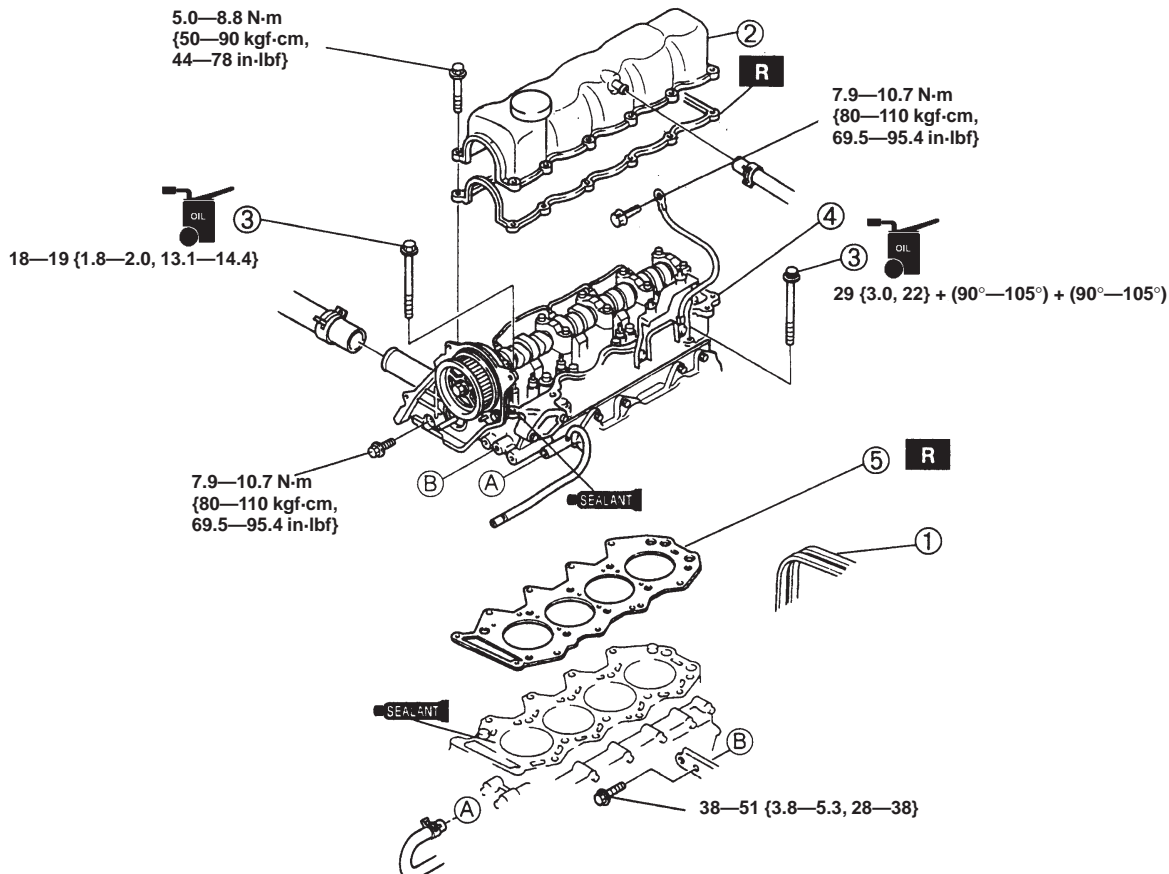
CYLINDER HEAD GASKET

CYLINDER HEAD GASKET REPLACEMENT

Warning

- Fuel vapor is hazardous. It can very easily ignite, causing serious injury and damage. Always keep sparks and flames away from fuel.
- Fuel line spills and leaks are dangerous. Fuel can ignite and cause serious injuries or death and damage. Fuel can also irritate skin and eyes. To prevent this, always complete the "Fuel Line Safety Procedures". (Refer to Section F2, FUEL SYSTEM, FUEL PRESSURE AND SERVICING FUEL SYSTEM.)

1. Disconnect the negative battery cable.
2. Drain the engine coolant. (Refer to Section E, COOLING SYSTEM SERVICE WARNINGS.) (Refer to Section E, ENGINE COOLANT, ENGINE COOLANT REPLACEMENT.)
3. Remove the intake manifold, air intake pipe and breather chamber. (Refer to Section F2, INTAKE-AIR SYSTEM, INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.)
4. Remove the injection nozzle. (Refer to Section F2, FUEL SYSTEM, INJECTION NOZZLE REMOVAL/INSTALLATION.)
5. Remove the turbocharger. (WL Turbo) (Refer to Section F2, EXHAUST SYSTEM, EXHAUST SYSTEM REMOVAL/INSTALLATION.)
6. Remove the timing belt. (Refer to TIMING BELT, TIMING BELT REMOVAL/INSTALLATION.)
7. Remove in the order indicated in the table.
8. Install in the reverse order of removal.
9. Adjust the drive belt deflection. (Refer to DRIVE BELT, DRIVE BELT ADJUSTMENT.)
10. Check the engine oil level. (Refer to Section D, ENGINE OIL, ENGINE OIL INSPECTION.)
11. Bleed air in the fuel line. (Refer to Section F2, FUEL SYSTEM, FUEL FILTER AIR BLEEDING.)
12. Start the engine and
 - (1) Inspect for engine oil, engine coolant, and fuel leakage.
 - (2) Inspect the idle speed. (Refer to Section F2, ENGINE TUNE-UP, PREPARATION, Idle Speed Adjustment.)
13. Inspect the compression. (Refer to COMPRESSION INSPECTION.)



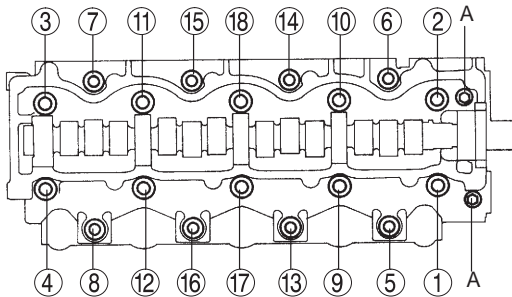
N·m {kgf·m, ft·lbf}

CYLINDER HEAD GASKET

1	Drive belt
2	Cylinder head cover + Installation Note
3	Cylinder head bolt + Removal Note + Installation Note
4	Cylinder head
5	Cylinder head gasket + Installation Note

Cylinder Head Bolt Removal Note

1. Remove bolts A.
2. Loosen the cylinder head bolts in two or three steps in the order shown.

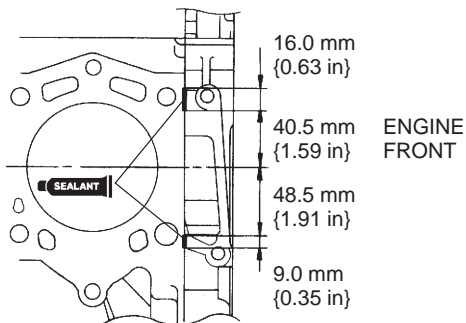


Cylinder Head Gasket Installation Note

- Apply silicone sealant to the cylinder head as shown.

Thickness

ø2.0—3.0 mm {0.08—0.11 in}



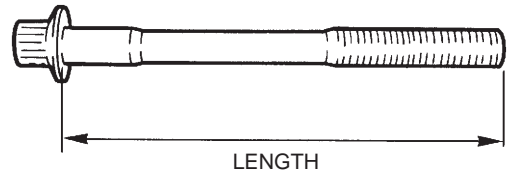
Cylinder Head Bolt Installation Note

1. Measure the length of each bolt. Replace the bolt if necessary.

Cylinder head bolt

(mm {in})

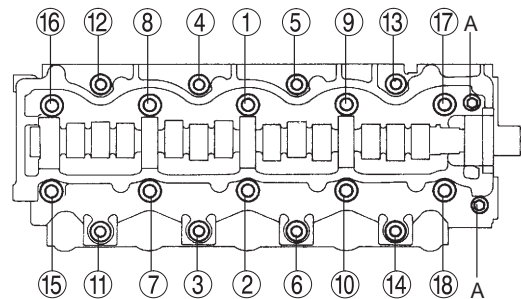
Bolt head mark	Standard length	Maximum length
W	101.2—101.8 {3.985—4.007}	102.5 {4.035}
N	113.2—113.8 {4.457—4.480}	114.5 {4.508}



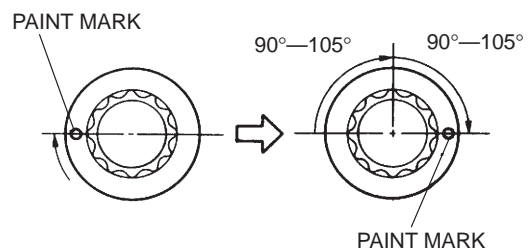
2. Apply clean engine oil to the threads and the seat face of each bolt and install them.
3. Tighten the bolts in two or three steps in the order shown in the figure.

Tightening torque

29 N·m {3.0 kgf·m, 22 ft·lbf}



4. Put a paint mark on each bolt head.
5. Using the marks as a reference, tighten the bolts by turning each **90°—105°** in the sequence shown.
6. Further tighten each bolt by turning another **90°—105°**.



7. Tighten bolts A.

Tightening torque

18—19 N·m {1.8—2.0 kgf·m, 13.1—14.4 ft·lbf}

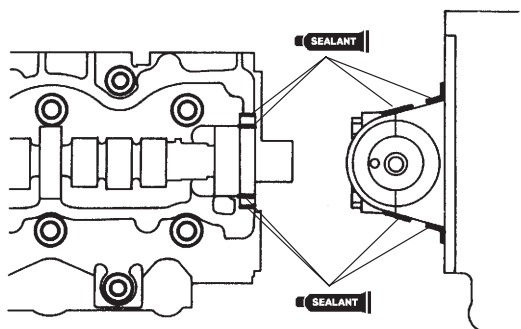
CYLINDER HEAD GASKET

Cylinder Head Cover Installation Note

1. Apply silicone sealant to the cylinder head as shown.

Thickness

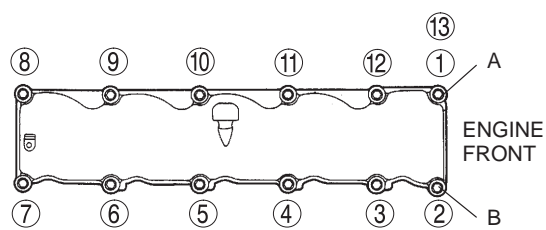
ø1.5—2.5 mm {0.060—0.098 in}



2. Tighten cylinder head cover bolts A and B.

Tightening torque

1.5—2.9 N·m {15—30 kgf·cm, 14—26 in·lbf}



3. Tighten the cylinder head cover bolts in the order shown.

Tightening torque

5.0—8.8 N·m {50—90 kgf·cm, 44—78 in·lbf}