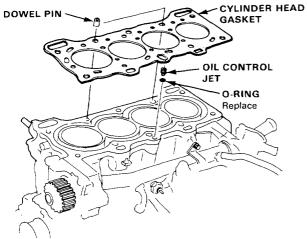
Cylidner Head

- Installation

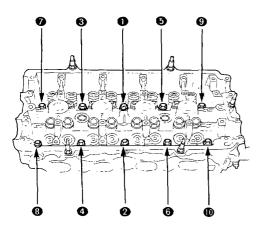
- 1. Install the cylinder head in reverse order of removal:
 - Always use a new head gasket.
 - Cylinder head and engine block surface must be clean.
 - "UP" mark on timing belt pulley should be at the top.

NOTE: Cylinder head dowel pins and oil control jet must be aligned.

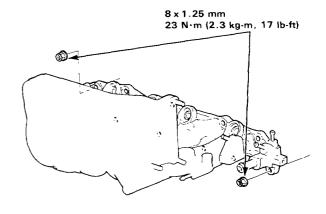


- Tighten cylinder head bolts in two steps. In the first step tighten all bolts, in sequence, to about 30 N·m (3.0 kg-m, 22 lb-ft); in the final step tighten, in same sequence, to 68 N·m (6.8 kg-m, 49 lb-ft) NOTE:
 - Apply engine oil to the cylinder head bolts and the washers
 - Use the longer bolts at the position No.1 and No.2 as shown.

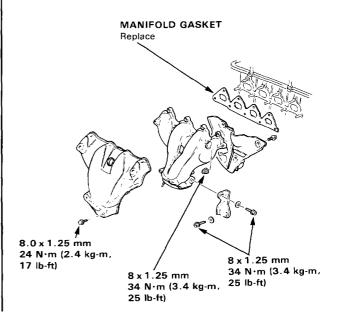
CYLINDER HEAD BOLTS TORQUE SEQUENCE



Install the intake manifold and tighten the nuts in a criss-cross pattern in 2 or 3 steps, beginning with the inner nuts.



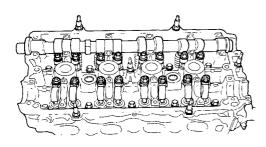
4. Install the exhaust manifold and bracket.





CAUTION:

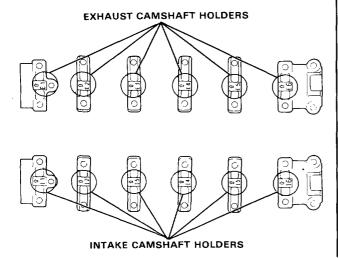
- Make sure that the keyways on the camshafts are facing up. (NO. 1 cylinder TDC).
- Valve locknuts should be loosened and adjust screws backed off before installation.
- Replace the rocker arms in these original positions.
- Place the rocker arms on the pivot bolts and the valve stems.



Install the camshafts and the camshaft seals with the open side (spring) facing in.

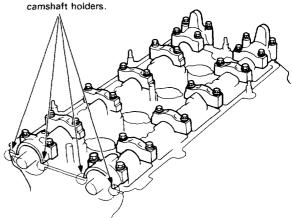
NOTE:

- "I" or "E" marks are stamped on the camshaft holders.
- Do not apply oil to the holder mating surface of camshaft seals.



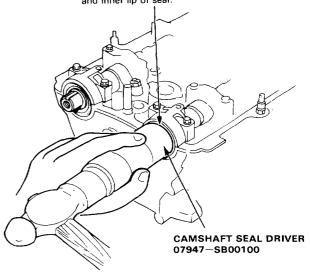
- Apply liquid gasket to the head mating surfaces of the No. 1 and No. 6 camshaft holders, then install them, along with the No. 2. 3. 4 and 5.
- 8. Tighten the camshaft holders temporarily.
 - Make sure that the rocker arms are properly positioned on the valve stems.

Apply non-hardening sealant to these areas (also opposite sides) before installing



Press in the camshaft oil seal securely with the special tool.

> Seal housing surface should be dry. Apply a light coat of oil to camshaft and inner lip of seal.

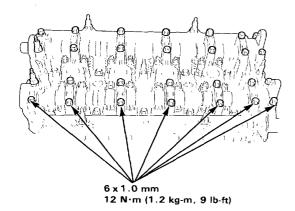


(cont'd)

Cylinder Head

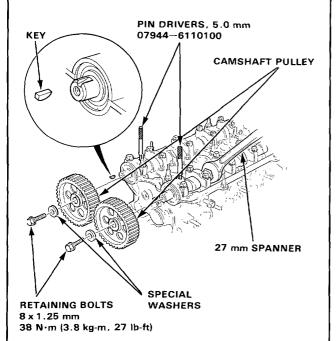
Installation (cont'd)

 Tighten each bolt two turns at a time in the sequence shown below to insure that the rockers do not bind on the valves.



11. Install keys into grooves in camshafts.

NOTE: To set the No. 1 piston at TDC, align the hole on the camshaft with the hole in the No.1 camshaft holders and drive 5.0 mm pin drivers into the holes.



- 12. Push camshaft pulleys onto camshafts, then tighten retaining bolts to torque shown.
- 13. Adjust the valve timing (page 5-9).
- 14. After installation, check that all hoses and connectors are installed correctly.