

# Cylinder Head Inspection for Warpage

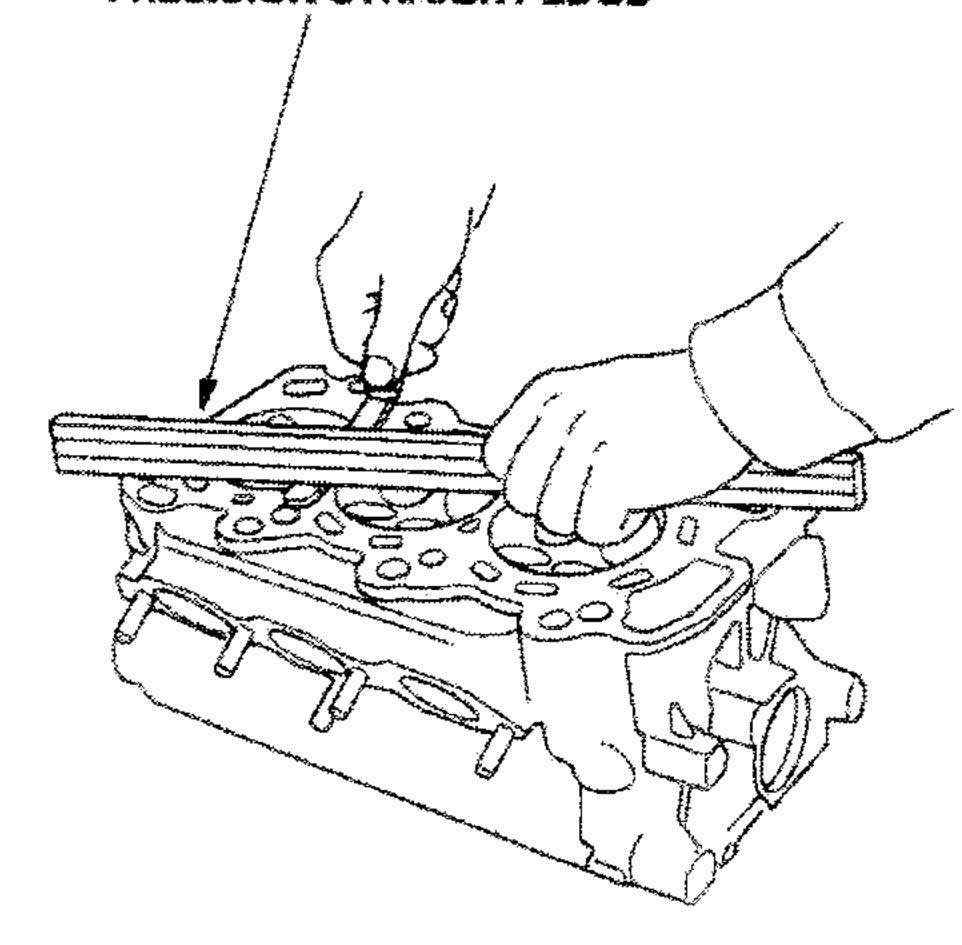
- 1. Remove the cylinder head (see page 6-39).
- 2. Inspect the camshaft (see page 6-49)
- Check the cylinder head for warpage.
  Measure along the edges, and three ways across the center.
  - If warpage is less than 0.05 mm (0.002 in.), cylinder head resurfacing is not required.
  - of warpage is between 0.05 mm (0.002 in.) and 0.2 mm (0.008 in.), resurface the cylinder head.
  - Maximum resurface limit is 0.2 mm (0.008 in.)
    based on a height of 121 mm (4.76 in.).

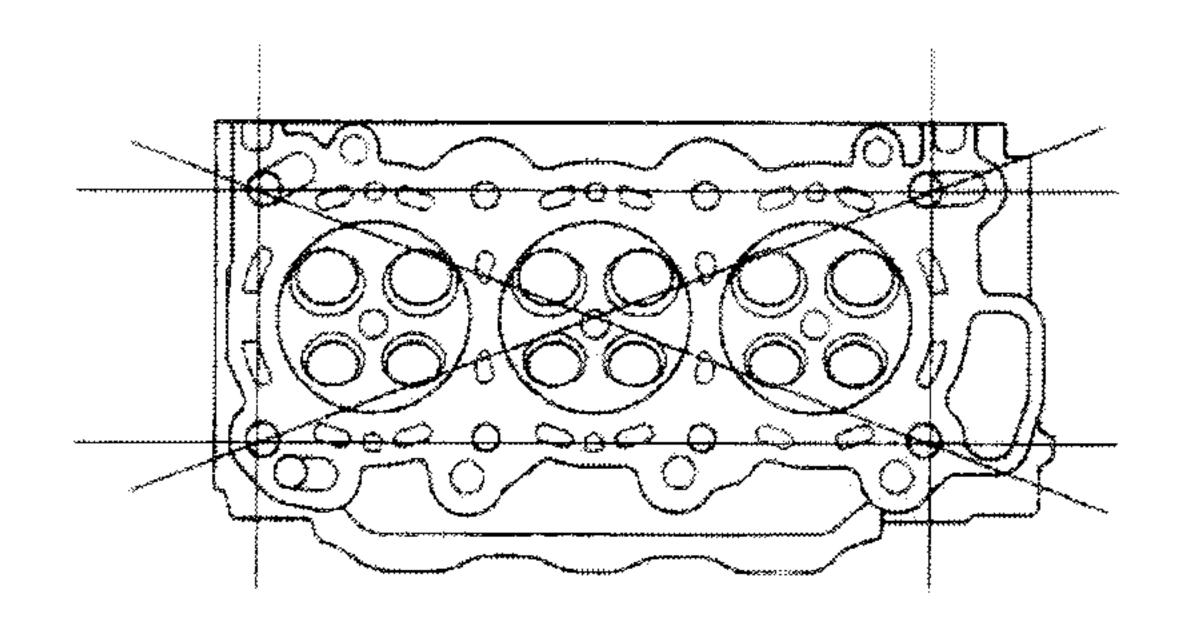
### Cylinder Head Height:

Standard (New): 120.95-121.05 mm

(4.762-4.766 in.)

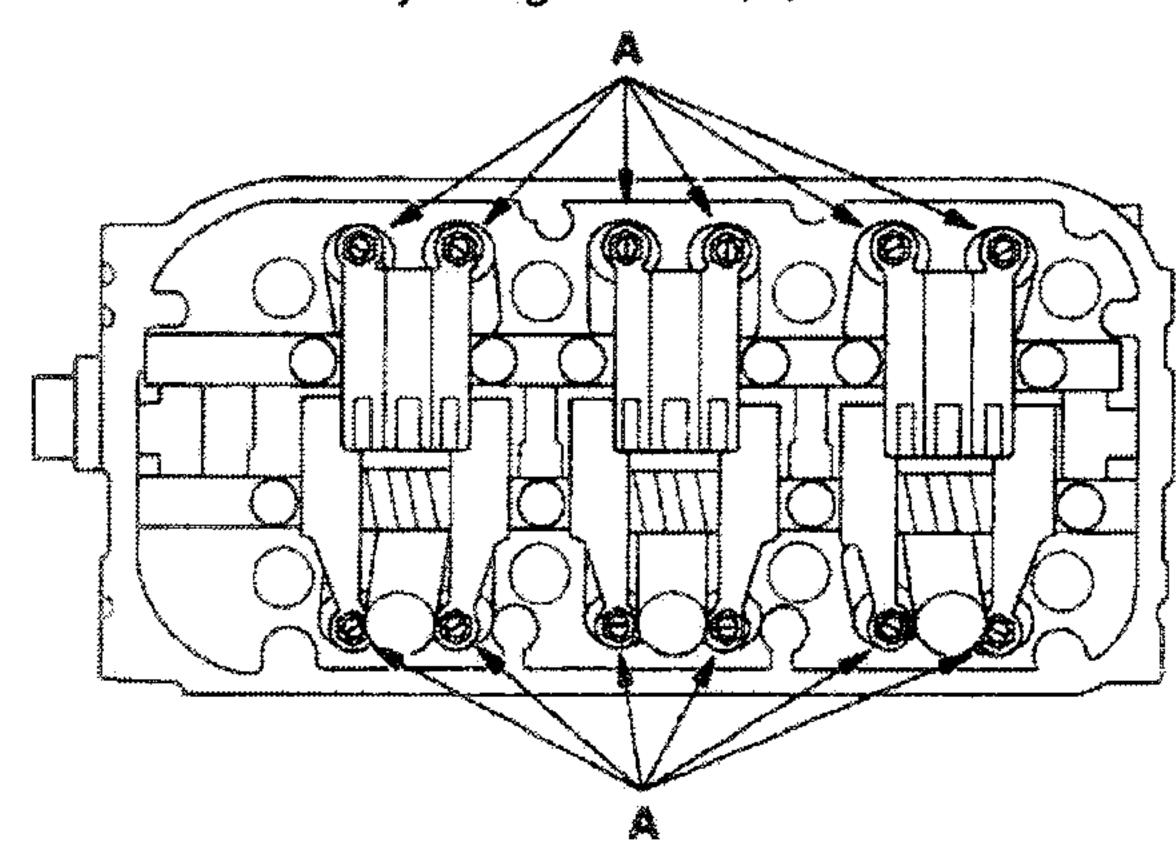
#### PRECISION STRAIGHT EDGE





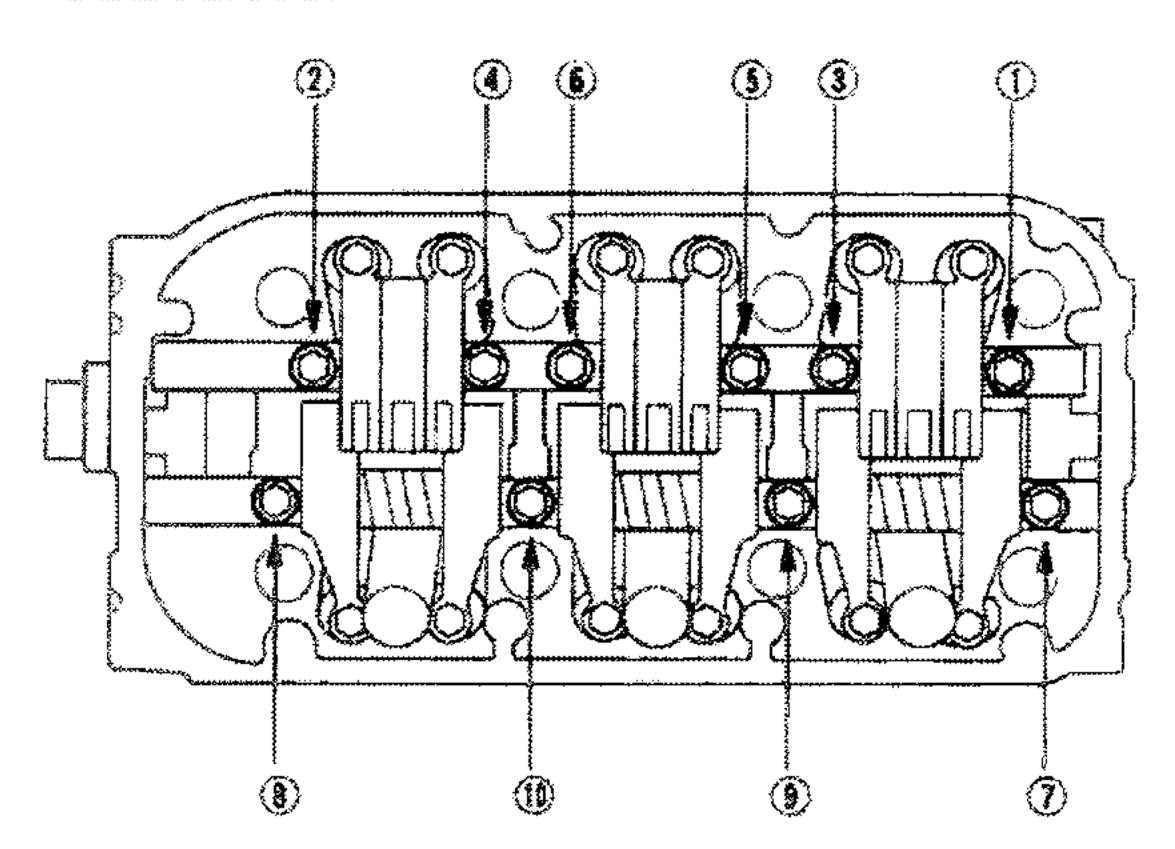
## Rocker Arm Assembly Removal

1. Loosen the adjusting screws (A).



- 2. Remove the bolts and the rocker arm assembly.
  - Inscrew the rocker shaft mounting bolts two turns at a time, in a crisscross pattern, to prevent damaging the valves or rocker arm assembly.
  - When removing the rocker arm assembly, do not remove the rocker shaft mounting bolts. The bolts will keep the springs and the rocker arms on the shafts.

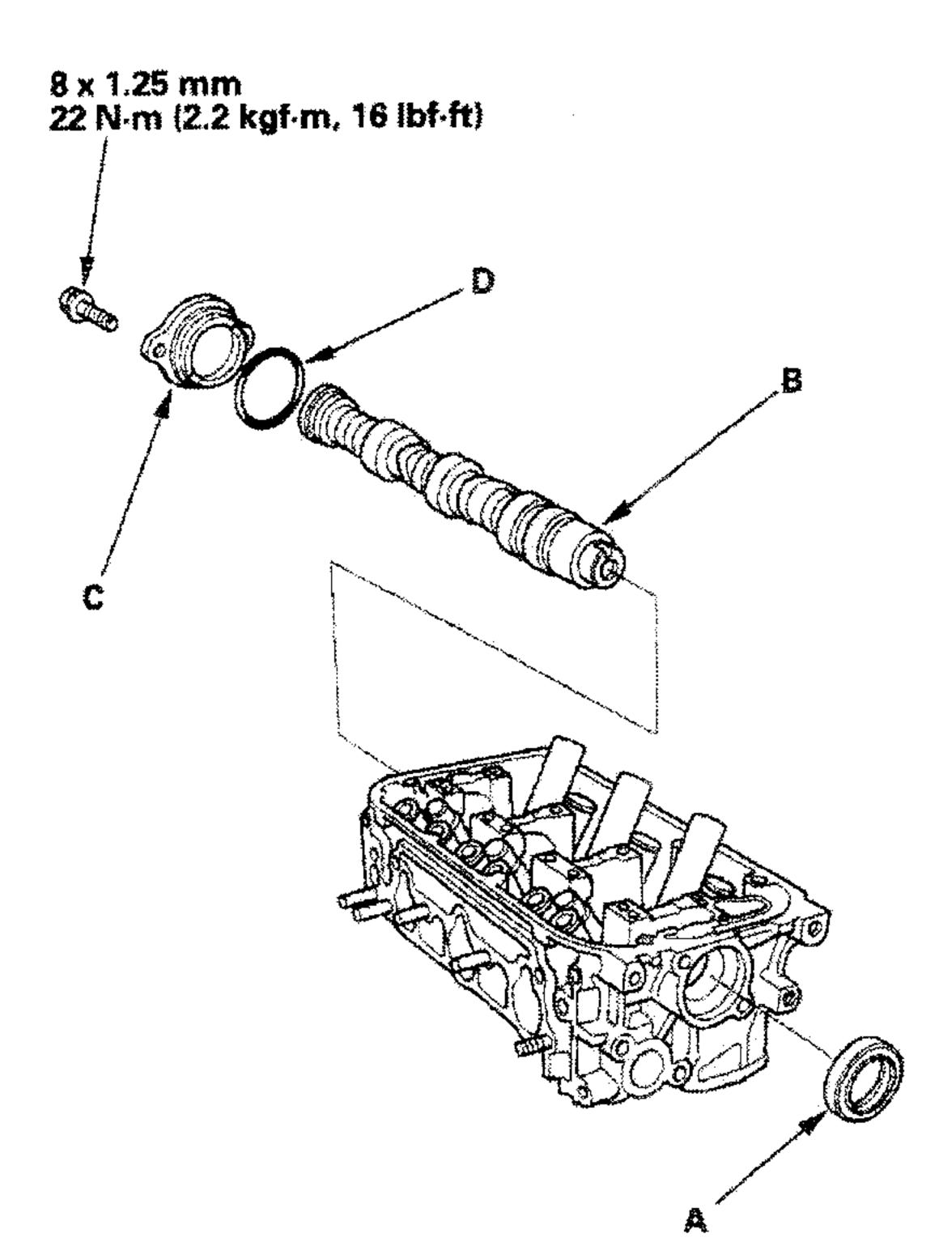
## CAMSHAFT HOLDER BOLT LOOSENING SEQUENCE:





## Camshaft/Rocker Arms, Camshaft Seal, and Pulley Installation

- 1. Apply a light coat of oil around the camshaft oil seal.
- 2. Gently tap the new camshaft oil seal (A) into the cylinder head.
  - -1 Tap the camshaft oil seal in squarely.
  - -2 Install the oil seal about 0.5—1.5 mm (0.02—0.06 in.) below the surface of the cylinder head.

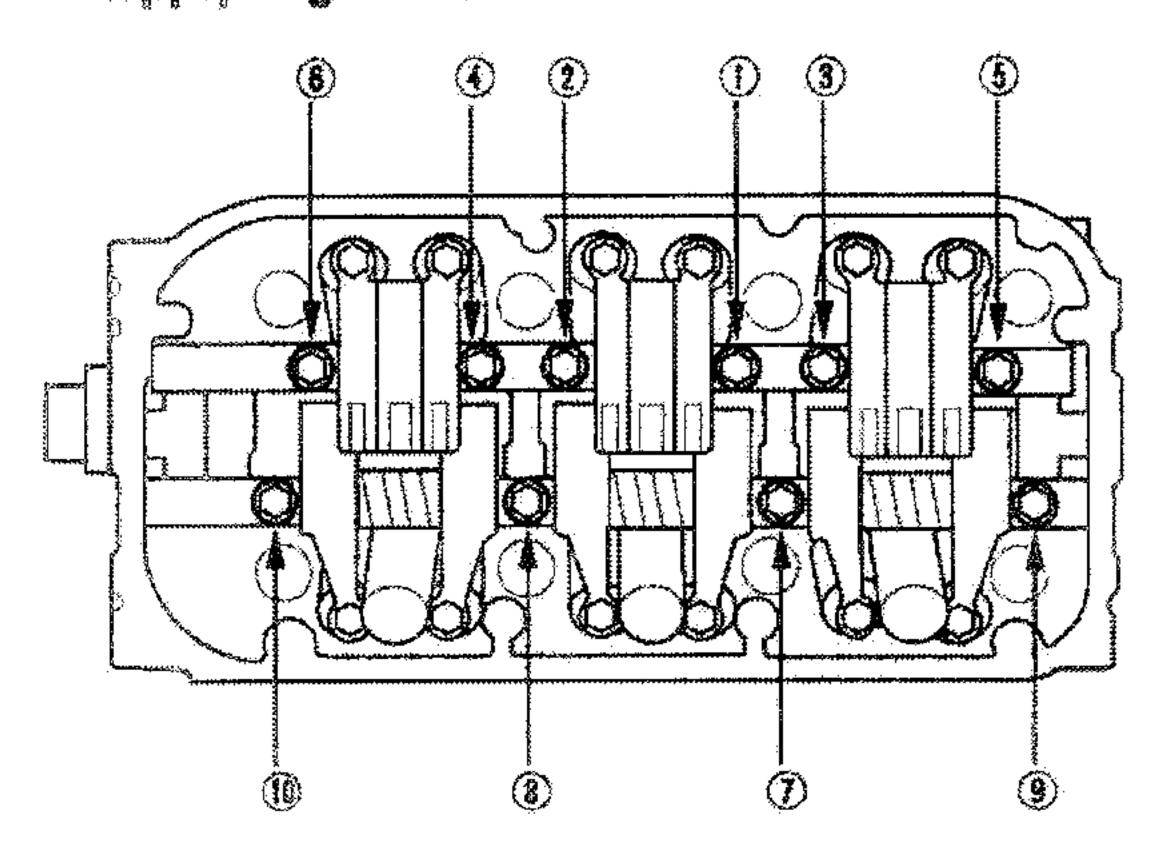


- 3. Insert the camshaft (B) into the cylinder head, then install the camshaft thrust cover (C). Always use a new O-ring (D).
- 4. Check that the oil seal lips are not distorted.

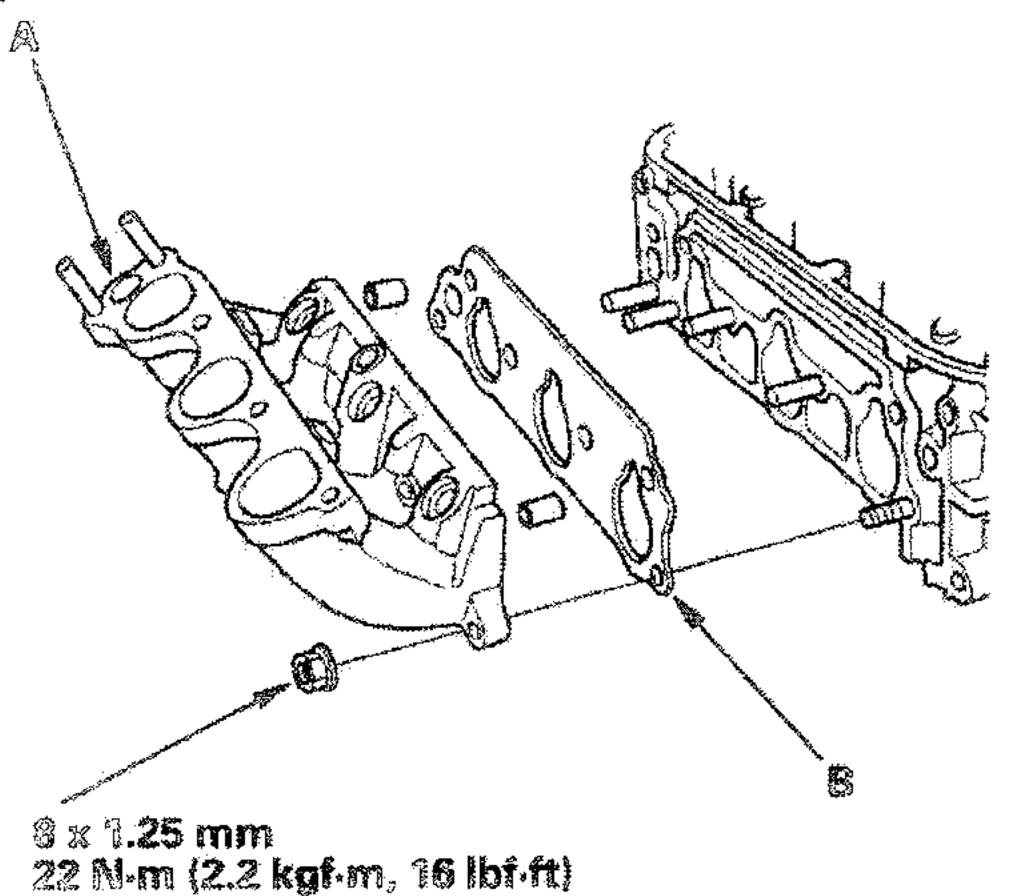
- 5. Loosen the valve adjusting screws.
- 6. Install the solid dowel pins in the rear of the cylinder head, and the hollow dowel pins in the timing belt end.
- 7. Set the rocker arm assembly in place and loosely install the bolts. Make sure that the rocker arms are properly positioned on the valve stems.
- 8. Tighten each bolt two turns at a time in the sequence shown below to ensure that the rockers do not bind on the valves.

### Specified torque:

8 x 1.25 mm 24 N·m (2.4 kgf·m, 17 lbf·ft) Apply engine oil to the bolt threads



9. Install the injector base (A). Always use a new gasket (B).



(cont'd)