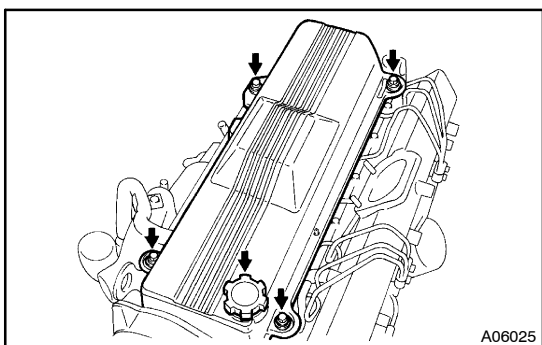


REMOVAL

1. REMOVE INTAKE PIPE ASSEMBLY

- (a) Disconnect the vacuum hose to the clamp and timing belt cover.
- (b) Disconnect the 5 vacuum hose to the No.2 cylinder head cover.
- (c) w/EGR:
Remove the 4 nuts, 2 gaskets and the EGR pipe.
- (d) Remove the 2 bolts and intake pipe assembly bracket.
- (e) Remove the 2 bolts, 2 nuts, gasket and intake pipe assembly.



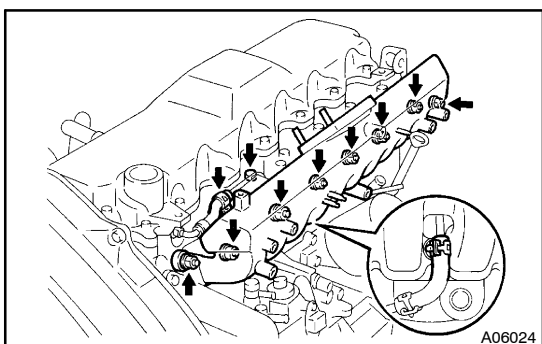
2. REMOVE NO.2 CYLINDER HEAD COVER

- (a) Remove the oil filler cap.
- (b) Remove the 4 bolts and cylinder head No.2 cover.

3. REMOVE INJECTION PIPE

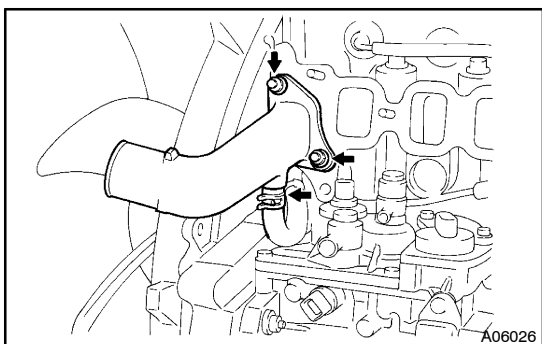
(See page FU-33)

4. REMOVE 2 INTAKE MANIFOLD INSULATOR



5. REMOVE INTAKE MANIFOLD

- (a) Remove the fuel hose from the injection pump.
- (b) Remove the 8 nuts, 8 seal washers, 2 gasket and intake manifold insulator.



6. REMOVE WATER OUTLET

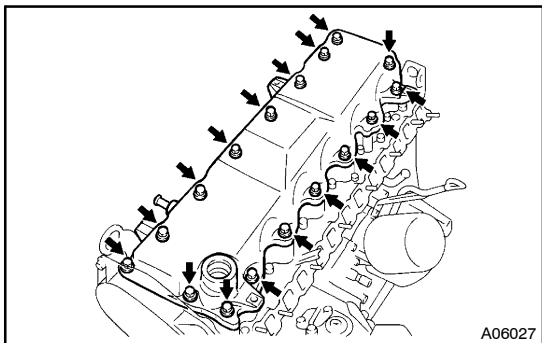
- (a) Disconnect the water bypass hose from the water outlet.
- (b) Remove the 2 bolts, water outlet and gasket.

7. REMOVE TURBOCHARGER AND EXHAUST MANIFOLD ASSEMBLY

(See page TC-8)

8. REMOVE EXHAUST MANIFOLD FROM TOURBO-CHARGER

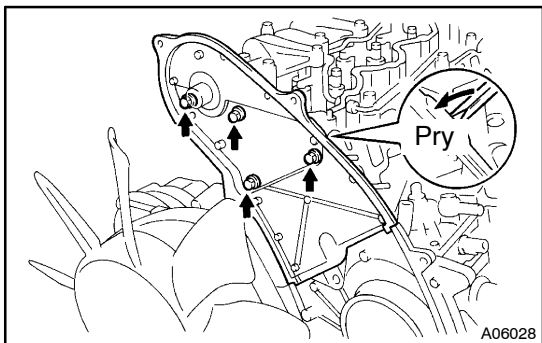
(See page TC-8)

**9. REMOVE NO.1 CYLINDER HEAD COVER**

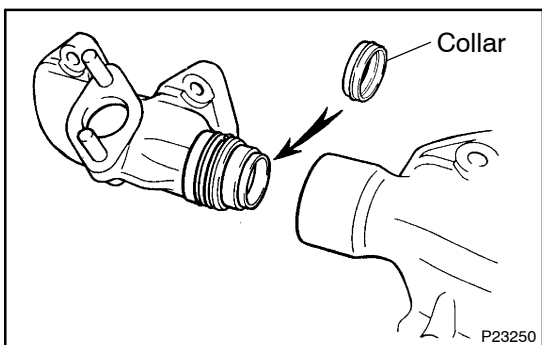
Remove the 17 bolts, 17 seal washers, No.1 cylinder head cover and gasket.

10. REMOVE TIMING BELT AND PULLEY

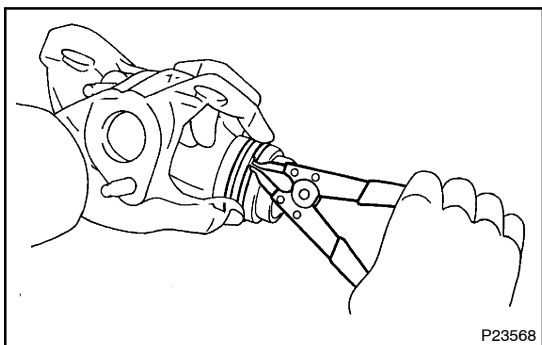
(See page EM-27)

**11. REMOVE CAMSHAFT OIL SEAL RETAINER**

- (a) Remove the 4 bolts.
- (b) Pry out the oil seal retainer.

12. REMOVE 2 ENGINE HANGER**13. SEPARATE EXHAUST MANIFOLDS**

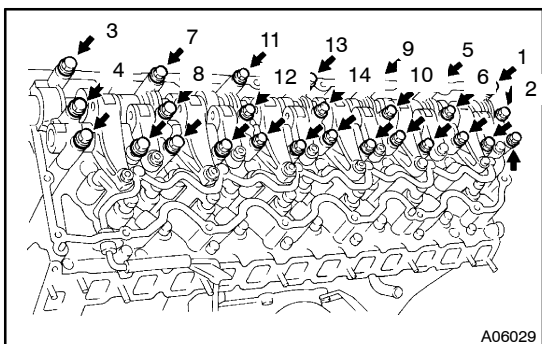
- (a) Separate the front and rear exhaust manifolds.
- (b) Remove the collar.



- (c) Using snap ring pliers, remove the 2 rings from the rear exhaust manifold.
- (d) Remove all the O-ring materials from the rear exhaust manifold grooves.

14. REMOVE SEMI-CIRCULAR PLUG**15. REMOVE INJECTION NOZZLES**

(See page FU-33)

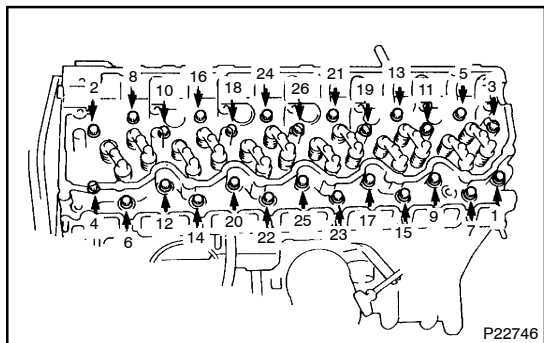
**16. REMOVE CAMSHAFT BEARING CAPS, VALVE ROCKER ARMS, NOZZLE HOLDER CLAMPS, ROCKER SHAFT ASSEMBLY AND CAMSHAFT**

- (a) Remove the 13 bolts.
- (b) Uniformly loosen and remove the 14 other bolts in several passes, in the sequence shown.
- (c) Remove the 7 bearing caps, 12 rocker arms, 6 holder clamps, rocker shaft assembly and 7 upper camshaft bearings.

- Keep the bearing caps, rocker arms and nozzle holder clamps installed with the rocker shaft.
 - Keep the bearings inserted with the bearing cap.
- (d) Remove the camshaft, thrust plate and 7 lower camshaft bearings.

HINT:

Arrange the bearings in correct order.

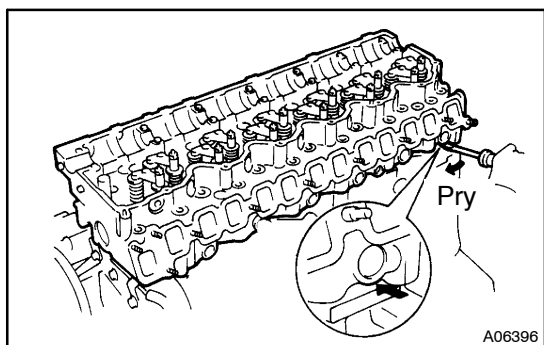


17. REMOVE CYLINDER HEAD ASSEMBLY

- (a) Disconnect the water bypass hose (from the injection pump) from the cylinder head.
- (b) Uniformly loosen and remove the 26 cylinder head bolts in several passes, in the sequence shown.

NOTICE:

Head warpage or cracking could result from removing bolts in incorrect order.



- (c) Lift the cylinder head from the dowels on the cylinder block, and place the cylinder head on wooden blocks on a bench.

HINT:

If the cylinder head is difficult to lift off, pry with a screwdriver between the cylinder head and block.

NOTICE:

Be careful not to damage the contact surfaces of the cylinder head and cylinder block.