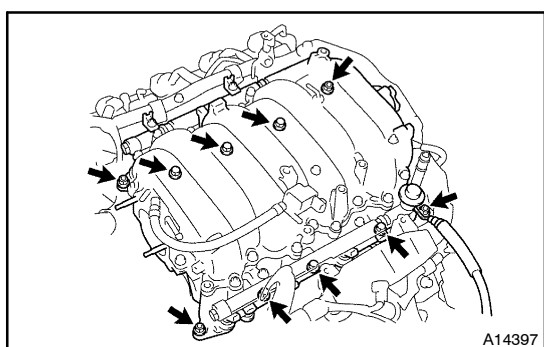


CYLINDER HEAD GASKET

REPLACEMENT

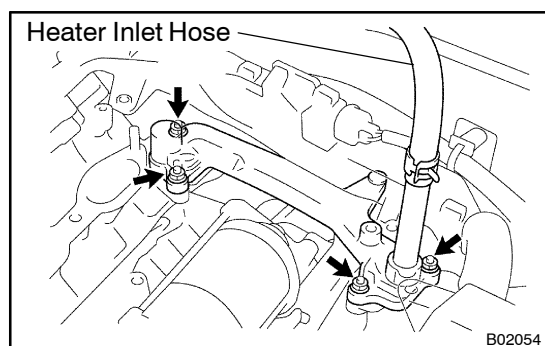
141MT-01

1. WORK FOR PREVENTING GASOLINE FROM SPILLING OUT (See page 11-6)
2. REMOVE CAMSHAFT (See page 14-81)
3. REMOVE THROTTLE BODY ASSY (See page 10-9)
4. REMOVE V-BANK COVER BRACKET NO.1
5. REMOVE V-BANK COVER BRACKET NO.2
6. REMOVE V-BANK COVER BRACKET NO.3
7. REMOVE V-BANK COVER BRACKET NO.4
8. REMOVE VACUUM SWITCHING VALVE ASSY
9. DISCONNECT FUEL PIPE SUB-ASSY NO.2 (See page 11-16)



10. REMOVE INTAKE MANIFOLD ASSY

- (a) Remove the 6 bolts, 4 nuts, upper and lower intake manifold assembly and 2 gaskets.

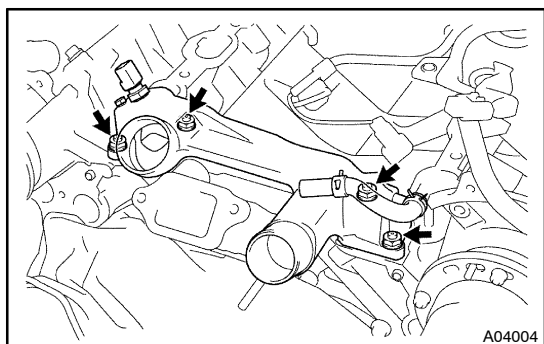


11. REMOVE WATER BY-PASS JOINT RR

- (a) Disconnect the heater inlet hose from the water by-pass joint.
- (b) Remove the 4 nuts, water by-pass joint and 2 gaskets.

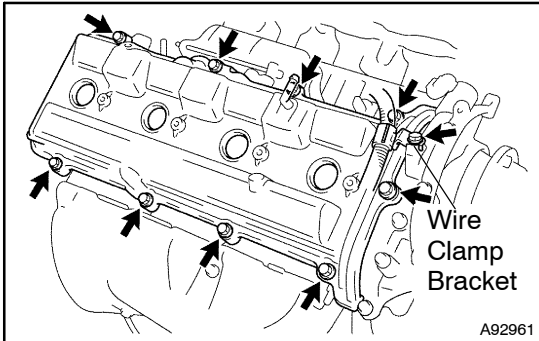
12. REMOVE WATER INLET HOUSING

- (a) Remove the 2 bolts and inlet housing.

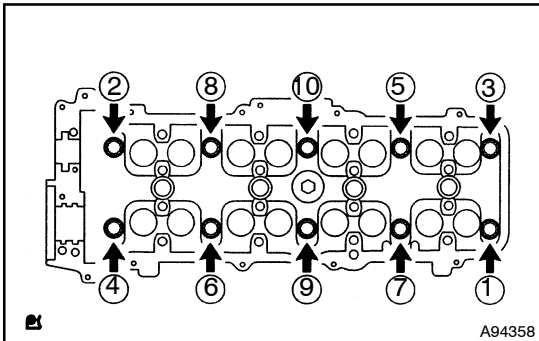


13. REMOVE WATER BY-PASS JOINT FR

- (a) Disconnect the ECT sensor connector.
- (b) Remove the 4 nuts, water by-pass joint and 2 gaskets.

14. REMOVE W/CATALYST CONVERTER ASSY**15. REMOVE CYLINDER HEAD SUB-ASSY**

- Remove the bolt, and disconnect the wire clamp bracket on the engine wire from the camshaft bearing cap.
- Remove the EVAP from the cylinder head cover sub-assy.
- Remove the 9 bolts, 9 seal washers, cylinder head cover sub-assy and gasket.

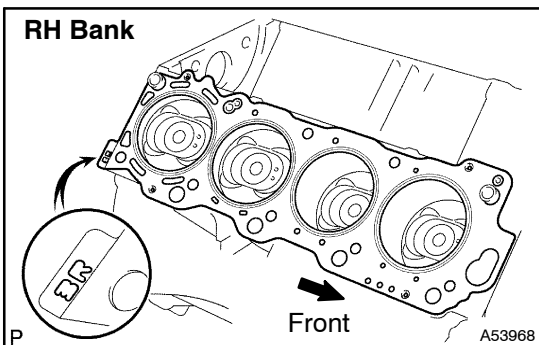


- Uniformly loosen and remove the 10 cylinder head bolts and plate washers the sequence shown in the illustration.

NOTICE:

Be careful not to drop washers into the cylinder head.

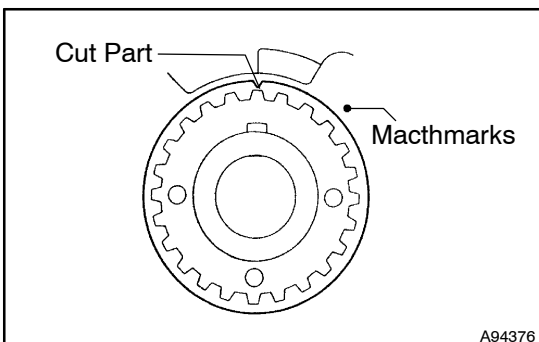
- Remove the cylinder head together with the RH manifold.

16. REMOVE CYLINDER HEAD GASKET**17. INSTALL CYLINDER HEAD GASKET**

- Place a new cylinder head gasket in position on the cylinder block.
- The rear side of the cylinder head gasket has marks so that the RH and LH banks can be distinguished. A "3R" mark is on the RH bank's gasket.

NOTICE:

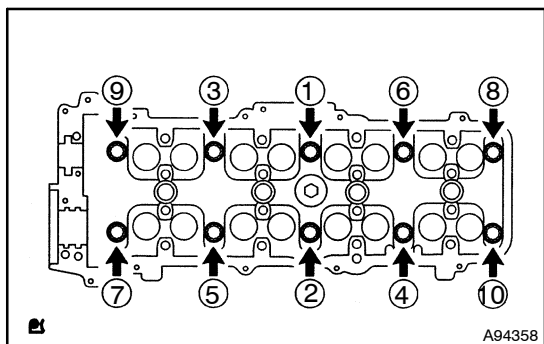
Be careful of the installation direction.

**18. INSTALL CYLINDER HEAD SUB-ASSY**

- Check that the cut part of the crankshaft timing pulley is in the position shown in the illustration, and that the piston is below the TDC of compression.
- Install the cylinder head together with the manifold RH to the cylinder block.
- Apply a light coat of engine oil on the threads and under the head of the cylinder head bolts.
- Put the washer on the bolt, and insert the bolt with washer into the cylinder head.

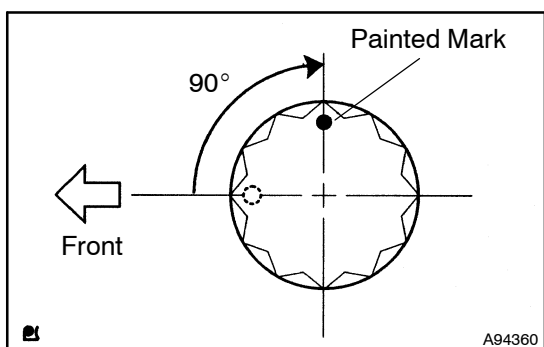
NOTICE:

Be careful not to drop washers into the cylinder head.

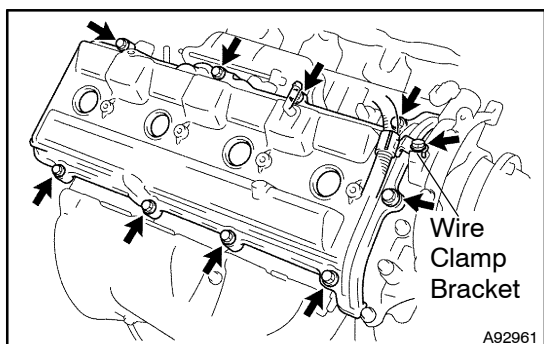


- (e) Install and uniformly tighten the 10 cylinder head bolts, and plate washers in the sequence shown in the illustration.

Torque: 59 N·m (602 kgf·cm, 44 ft·lbf)



- (f) Mark the front of the cylinder head bolt head with paint.
 (g) Retighten the cylinder head bolts by 90° in the sequence shown.
 (h) Check that the painted mark is now at a 90° angle to the front.

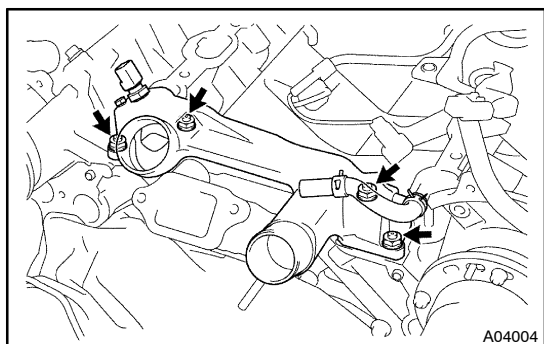


- (i) Install the gasket to the cylinder head cover.
 (j) Install the seal washer to the bolt.
 (k) Install the cylinder head cover with the 9 bolts. Uniformly tighten the bolts in several passes. Install the 2 cylinder head covers.

Torque: 6.0 N·m (61 kgf·cm, 53 in·lbf)

- (l) Install the wire clamp bracket on the engine wire to the camshaft bearing cap.

19. INSTALL W/CATALYST CONVERTER ASSY

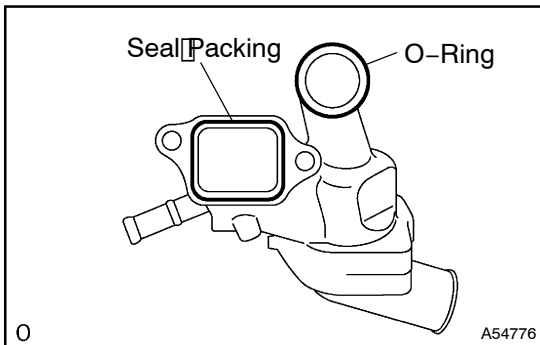


20. INSTALL WATER BY-PASS JOINT FR

- (a) Install 2 new gaskets and the water by-pass joint with the 4 nuts. Alternately tighten the nuts.

Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)

- (b) Connect the ECT sensor connector.



21. INSTALL WATER INLET HOUSING

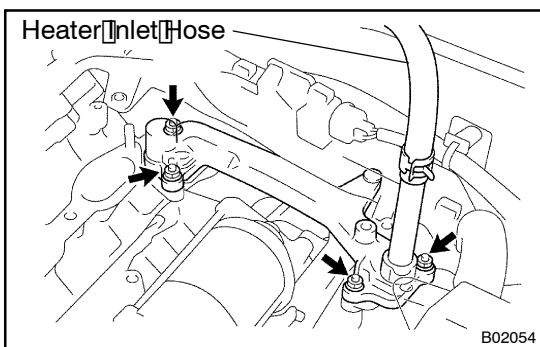
- Install a new O-ring to the inlet housing.
- Apply soapy water to the O-ring.
- Apply seal packing to the sealing groove of the inlet housing as shown in the illustration.

Seal packing: Part No. 08826-00100 or equivalent

- Install a nozzle that has been cut to a 2 to 3 mm (0.08 to 0.12 in.) opening.
- Parts must be assembled within 3 minutes of application. Otherwise the material must be removed and reapplied.

- Install the water inlet and housing assy with the 2 bolts. Alternately tighten the bolts.

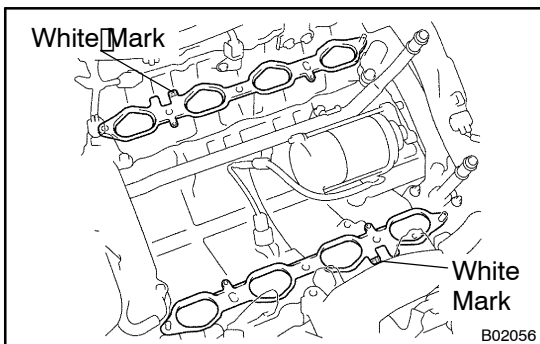
Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)



22. INSTALL WATER BY-PASS JOINT RR

- Install 2 new gaskets and the water by-pass joint with the 4 nuts. Alternately tighten the nuts.

Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)

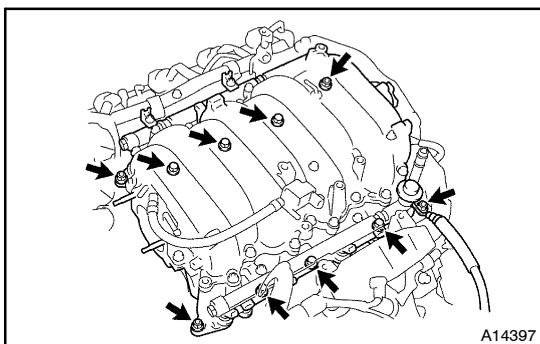


23. INSTALL INTAKE MANIFOLD ASSY

- Place 2 new gaskets on the cylinder heads with the white mark facing outward.

NOTICE:

Be careful of the installation direction.



- Install the upper and lower intake manifolds assembly with the 6 bolts and 4 nuts.

Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)

24. INSTALL FUEL PIPE SUB-ASSY NO.2 (See page 11-16)

25. INSTALL VACUUM SWITCHING VALVE ASSY

26. INSTALL V-VANK COVER BRACKET NO.4

27. INSTALL V-BANK COVER BRACKET NO.3

28. INSTALL V-BANK COVER BRACKET NO.2

- 29. INSTALL V-BANK COVER BRACKET NO.1
- 30. INSTALL THROTTLE BODY ASSY (See page 10-9)
- 31. INSTALL CAMSHAFT (See page 14-81)