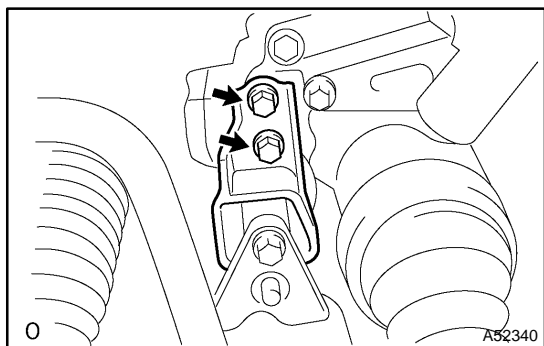


# CYLINDER HEAD GASKET (2AZ-FE)

141PA-02

## REPLACEMENT

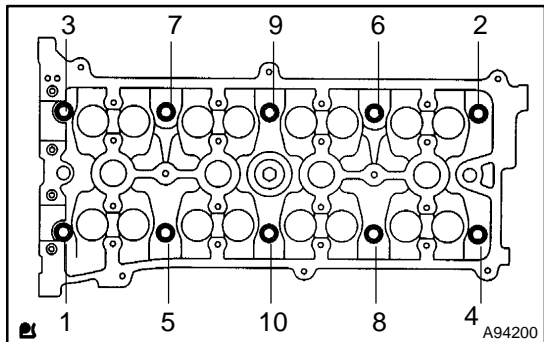
1. WORK FOR PREVENTING GASOLINE FROM SPILLING OUT (See page 11-1 )
2. REMOVE FRONT SUSPENSION BRACE SUB-ASSY UPPER CENTER (W/ FRONT SUSPENSION BRACE UPPER CENTER)
3. DRAIN COOLANT (See page 16-6 )
4. DRAIN TRANSFER OIL (4WD TYPE)
5. DISCONNECT RADIATOR HOSE OUTLET
6. DISCONNECT UNION TO CONNECTOR TUBE HOSE
7. DISCONNECT HEATER INLET WATER HOSE
8. DISCONNECT FUEL TUBE SUB-ASSY (See page 11-10 )
9. SEPARATE FRONT DRIVE SHAFT ASSY RH (4WD TYPE) (See page 30-21 )



10. SEPARATE ENGINE MOUNTING INSULATOR ASSY RR (4WD TYPE)

(a) Remove the 2 bolts and disconnect the engine mounting insulator.

11. REMOVE ENGINE MOUNTING BRACKET RR (4WD TYPE) (See page 14-24 )
12. REMOVE INTAKE MANIFOLD (See page 14-24 )
13. DISCONNECT ENGINE WIRE
14. REMOVE INTAKE MANIFOLD INSULATOR NO.1
15. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1
16. REMOVE EXHAUST MANIFOLD CONVERTER SUB-ASSY (See page 14-24 )
17. REMOVE CAMSHAFT TIMING OIL CONTROL VALVE ASSY
18. REMOVE CHAIN SUB-ASSY (See page 14-68 )
19. REMOVE NO.2 CAMSHAFT (See page 14-41 )
20. REMOVE CAMSHAFT (See page 14-41 )
21. REMOVE CAMSHAFT BEARING NO.2
22. REMOVE CAMSHAFT TIMING OIL CONTROL VALVE ASSY

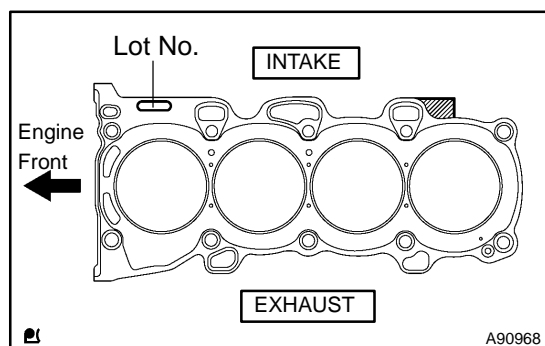


23. REMOVE CYLINDER HEAD SUB-ASSY

(a) Using a 10 mm Bi-hexagon wrench, uniformly loosen the 10 bolts in the sequence shown in the illustration. Remove the 10 cylinder head bolts and plate washers.

### NOTICE:

- Be careful not to drop washers into the cylinder head.
- Head warpage or cracking could result from removing bolts in an incorrect order.

**24. REMOVE CYLINDER HEAD GASKET****25. INSPECT CYLINDER HEAD SET BOLT (See page 14-41 )****26. INSTALL CYLINDER HEAD GASKET**

- (a) Place a new gasket on the cylinder block surface with the Lot No. stamp upward.

**NOTICE:**

- Remove any oil from contact surface.
- Be careful of the installation direction.
- To avoid damage to the gasket, place the cylinder head on the gasket carefully.

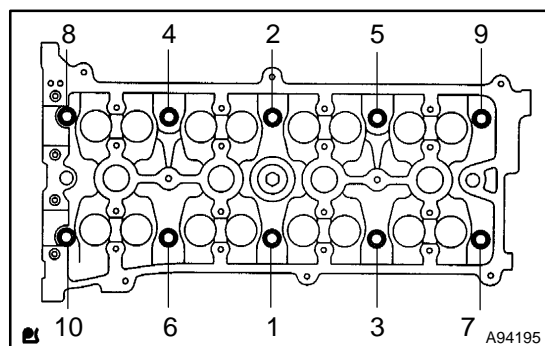
**27. INSTALL CYLINDER HEAD SUB-ASSY****HINT:**

The cylinder head bolts are tightened in 2 progressive steps.

- (a) Apply a light coat of engine oil to the bolt threads and the area beneath the bolt heads that come in contact with the washers.
- (b) Install the bolts and plate washers to the cylinder head.

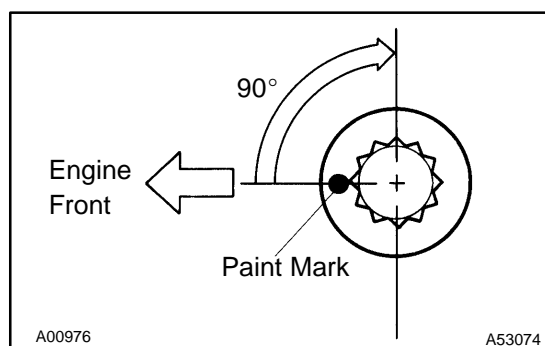
**NOTICE:**

**Do not drop the washers into the cylinder head.**



- (c) Using a 10 mm bi-hexagon wrench, uniformly tighten the 10 bolts in the sequence shown in the illustration.

**Torque: 79 N·m (806 kgf·cm, 58 ft·lbf)**

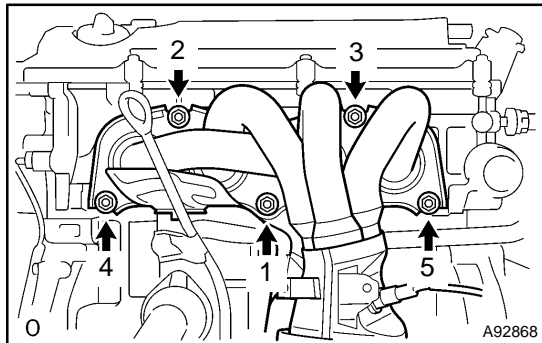


- (d) Mark the front side of the cylinder head bolt with paint.
- (e) Retighten the cylinder head bolts 90° in the sequence shown in the illustration.
- (f) Check that the painted mark is now at a 90° angle to the front.

**28. INSTALL CAMSHAFT TIMING OIL CONTROL VALVE ASSY**

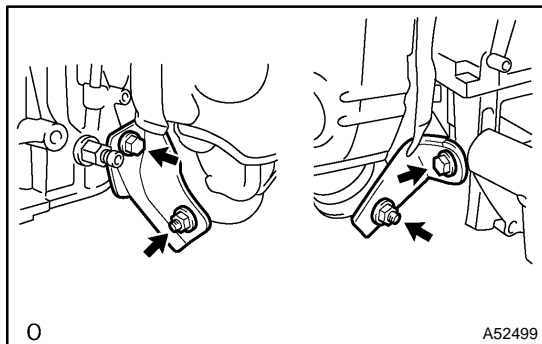
**Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)**

**29. INSTALL CAMSHAFT BEARING NO.2****30. INSTALL CAMSHAFT (See page 14-41 )****31. INSTALL NO.2 CAMSHAFT (See page 14-41 )**

**32. INSTALL CHAIN SUB-ASSY (See page 14-68 )****33. INSTALL CAMSHAFT TIMING OIL CONTROL VALVE ASSY****34. INSTALL EXHAUST MANIFOLD CONVERTER SUB-ASSY**

- (a) Install a new gasket and the exhaust manifold convert with the 5 nuts. Uniformly tighten the nuts in the sequence shown in the illustration.

**Torque: 37 N·m (337 kgf·cm, 27 ft·lbf)**

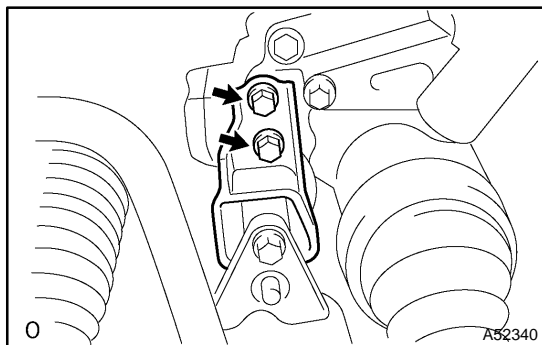


- (b) Install the No. 1 and No. 2 exhaust manifold stays with the 2 bolts and 2 nuts.

**Torque: 44 N·m (449 kgf·cm, 32 ft·lbf)**

**35. INSTALL EXHAUST MANIFOLD HEAT INSULATOR NO.1**

**Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**

**36. INSTALL INTAKE MANIFOLD INSULATOR NO.1****37. INSTALL ENGINE WIRE****38. INSTALL INTAKE MANIFOLD (See page 14-24 )****39. INSTALL ENGINE MOUNTING BRACKET RR (4WD TYPE) (See page 14-24 )****40. INSTALL ENGINE MOUNTING INSULATOR ASSY RR (4WD TYPE)**

- (a) Install the mounting insulator with bolts.

**Torque: 75 N·m (765 kgf·cm, 55 ft·lbf)**

**41. INSTALL FRONT DRIVE SHAFT ASSY RH (4WD TYPE) (See page 30-21 )****42. INSTALL CAMSHAFT TIMING OIL CONTROL VALVE ASSY**

**Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)**

**43. CONNECT FUEL TUBE SUB-ASSY (See page 11-10 )**

**44. INSTALL FRONT SUSPENSION BRACE SUB-ASSY UPPER CENTER**

Torque: 80 N·m (816 kgf·cm, 59 ft·lbf)

**45. ADD ENGINE OIL****46. ADD COOLANT (see page 16-6 )****47. ADD TRANSFER OIL (4WD TYPE)**

(a) Install a new gasket and the filler plug.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

**48. CHECK FOR OIL LEAKS****49. CHECK FOR ENGINE COOLANT LEAKS (See page 16-6 )****50. INSPECT FOR FUEL LEAKS (See page 11-4 )****51. CHECK IDLE SPEED AND IGNITION TIMING (See page 14-1 )****52. INSPECT CO/HC (See page 14-1 )****53. CHECK ABS SPEED SENSOR SIGNAL****54. INSPECT FRONT WHEEL ALIGNMENT (See page 26-7 )**