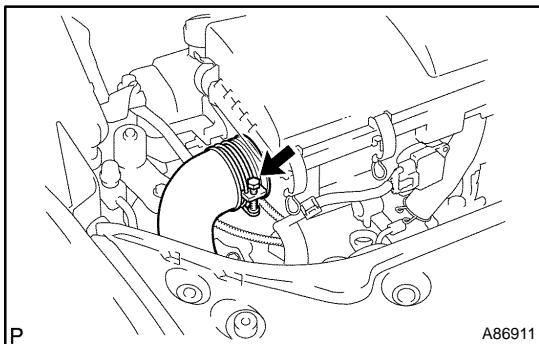


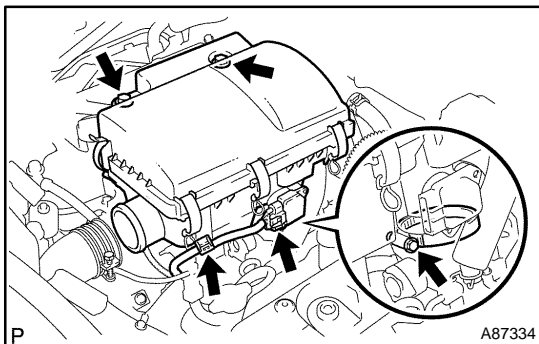
## REPLACEMENT

1. REMOVE REAR FLOOR BOARD NO.2 (See page 21-1 16)
2. REMOVE DECK FLOOR BOX REAR (See page 21-1 16)
3. REMOVE REAR FLOOR BOARD NO.3 (See page 21-1 16)
4. DISCONNECT BATTERY NEGATIVE TERMINAL (See page 21-1 16)
5. REMOVE RADIATOR SUPPORT OPENING COVER (See page 16-1 1)
6. REMOVE FRONT WHEEL RH
7. REMOVE ENGINE UNDER COVER LH
8. REMOVE ENGINE UNDER COVER RH
9. DRAIN ENGINE COOLANT (See page 16-1 1)
10. DRAIN ENGINE OIL
11. REMOVE WINDSHIELD WIPER LINK ASSY (See page 66-14 )
12. REMOVE COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 11-15 )

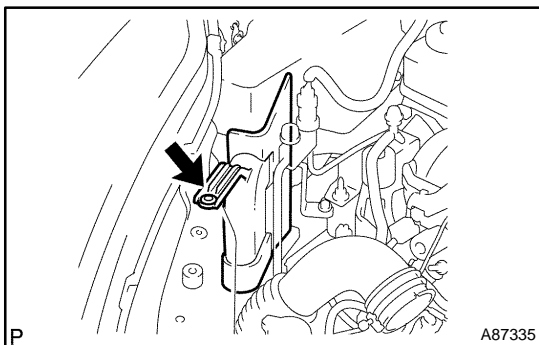


### 13. REMOVE AIR CLEANER ASSY

- (a) Loosen the clamp, then disconnect the air cleaner inlet No. 1 from the air cleaner case.

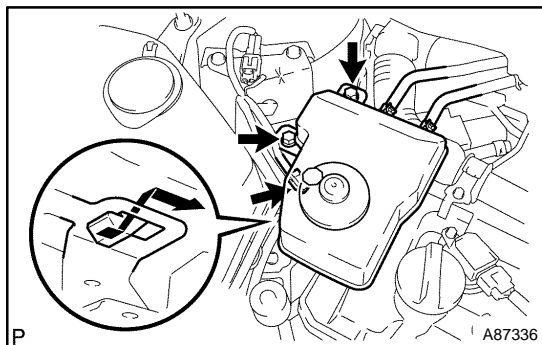


- (b) Disconnect the intake air flow meter connector, then remove the wire harness clamp.
- (c) Loosen the clamp, then remove the 2 bolts and air cleaner assembly.



### 14. REMOVE AIR CLEANER INLET NO.2

- (a) Remove the clip and air cleaner inlet No. 2.

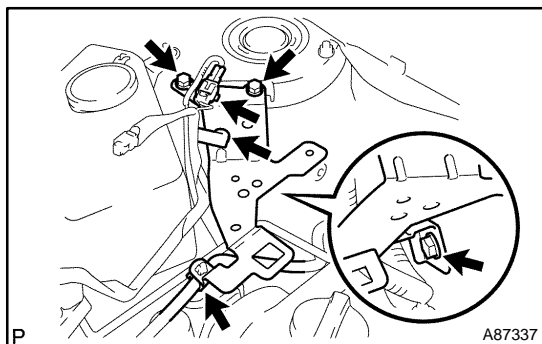


### 15. SUSPEND BRAKE MASTER CYLINDER RESERVOIR SUB-ASSY

- Disconnect the connector.
- Remove the 2 bolts.
- Separate the claw fitting, then suspend the brake master cylinder reservoir with rope.

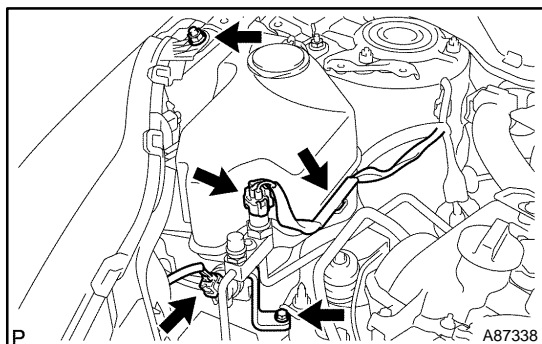
#### NOTICE:

Be careful of the angle of the brake master cylinder reservoir when suspending to prevent air from coming into the hose.



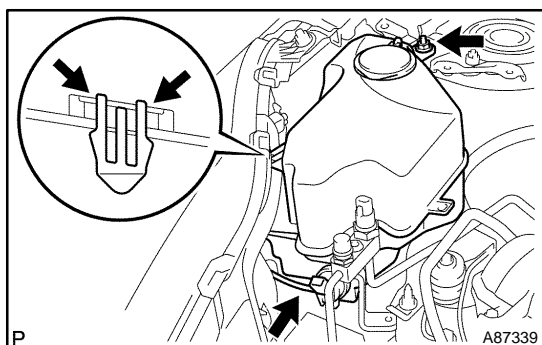
### 16. REMOVE RESERVOIR BRACKET

- Disconnect the hose from the brake master cylinder reservoir bracket.
- Remove the 3 bolts and wire harness clamp, then remove the brake master cylinder reservoir bracket.

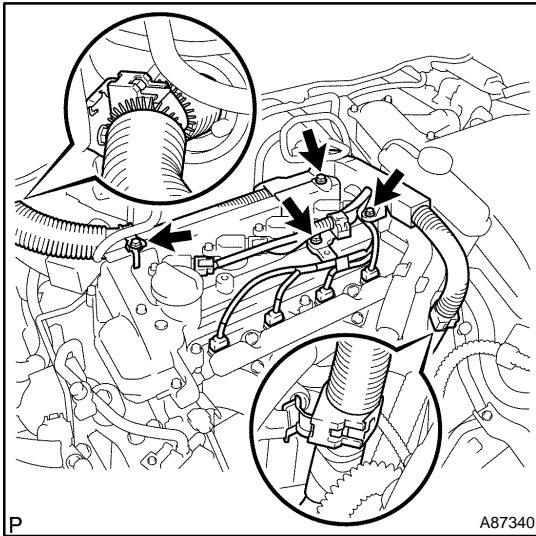


### 17. REMOVE WINDSHIELD WASHER JAR ASSY

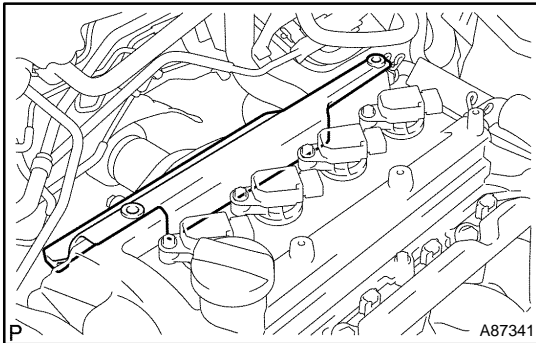
- Loosen the bolt which holds the head lamp RH.
- Disconnect the connector and remove the wire harness clamp.
- Remove the bolt and bracket.



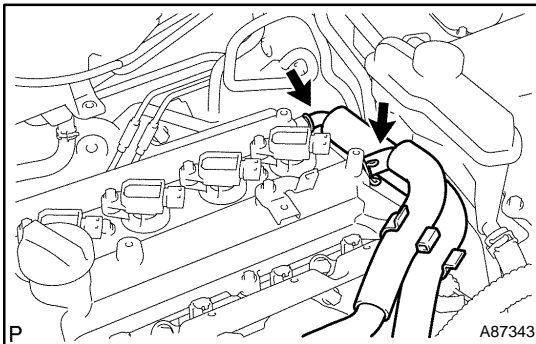
- Remove the nut.
- Slightly lift the head lamp RH and separate the claw fitting, then remove the washer jar assembly.
- Disconnect the hose from the washer jar assembly.

**18. REMOVE CYLINDER HEAD COVER SUB-ASSY**

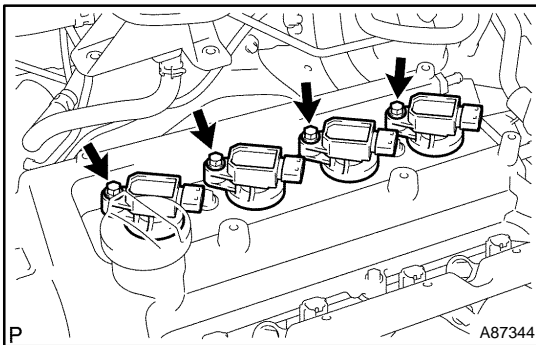
- (a) Disconnect the fuel injector connector and ignition coil connector.
- (b) Remove the 3 bolts and wire harness clamp, then disconnect the wire harness.



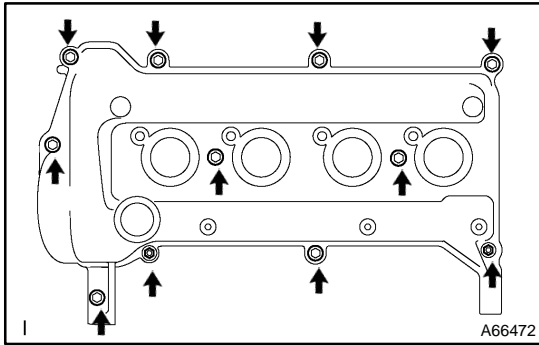
- (c) Remove the brake master cylinder reservoir cover.



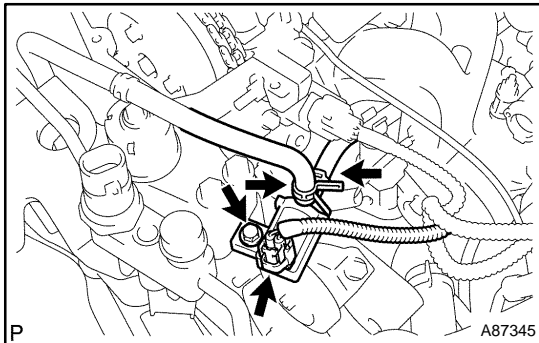
- (d) Disconnect the ventilation hose and ventilation hose No. 2.



- (e) Remove the bolt and ignition coil.



- (f) Remove the 9 bolts and 2 nuts, then remove the cylinder head cover.



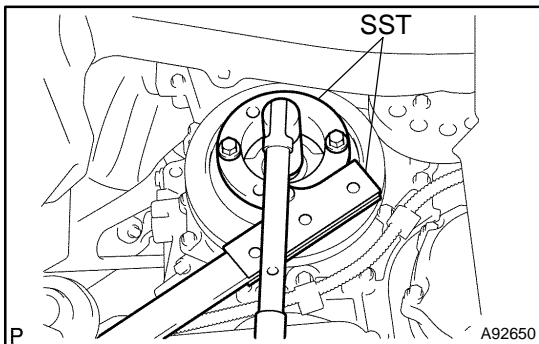
#### 19. REMOVE VACUUM SWITCHING VALVE ASSY NO.2

- Disconnect the connector and hose.
- Remove the bolt and vacuum switching valve assembly.

#### 20. REMOVE FAN AND GENERATOR V BELT

#### 21. REMOVE WATER PUMP ASSY

SST 09960-10010 (09962-01000, 09963-00600)



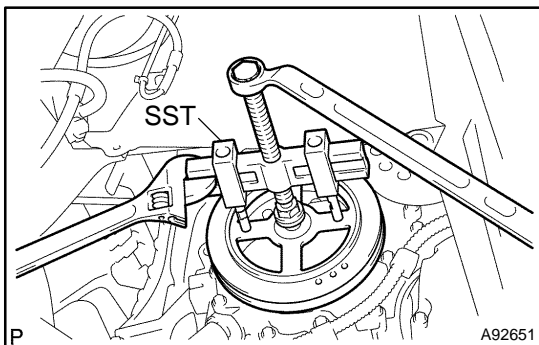
#### 22. REMOVE CRANKSHAFT DAMPER SUB-ASSY

- Using SST, hold the crankshaft damper and loosen the crankshaft bolt.

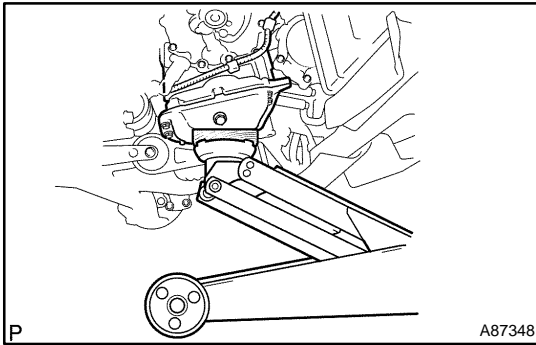
SST 09213-58013 (91111-50845), 09330-00021

#### NOTICE:

**When installing SST, be careful that the bolt which holds SST does not interfere with the chain cover.**

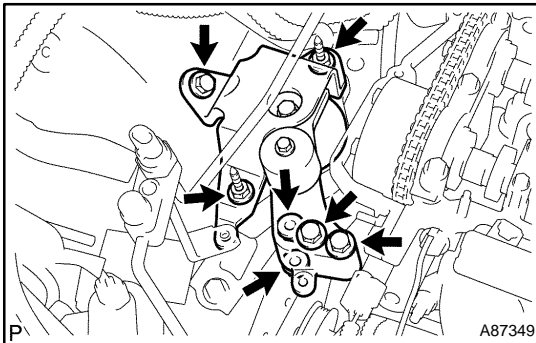


- Loosen the crankshaft bolt until the 2 to 3 threads of the bolt is tightened to the crankshaft.
- Using SST, remove the crankshaft damper.  
SST 09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05021)
- Remove the crankshaft bolt.

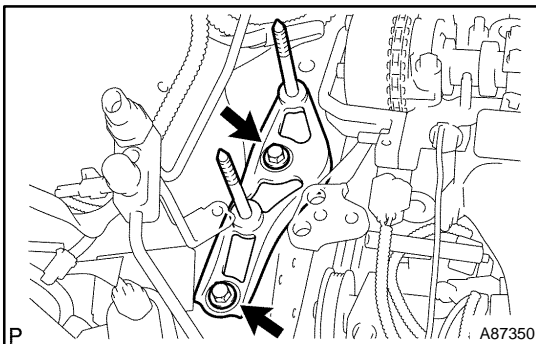


### 23. REMOVE ENGINE MOUNTING INSULATOR SUB-ASSY RH

- (a) Put a wooden block on a jack underneath the oil pan to support the oil pan.

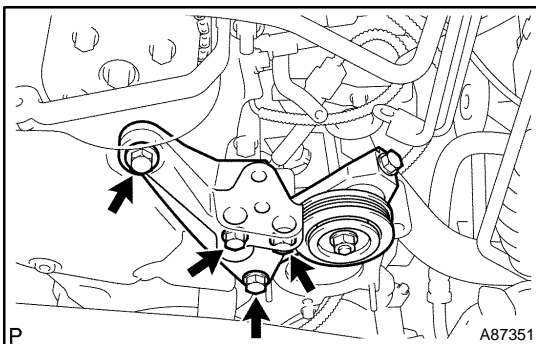


- (b) Remove the 3 bolts and 4 nuts, then remove the engine mounting insulator RH.



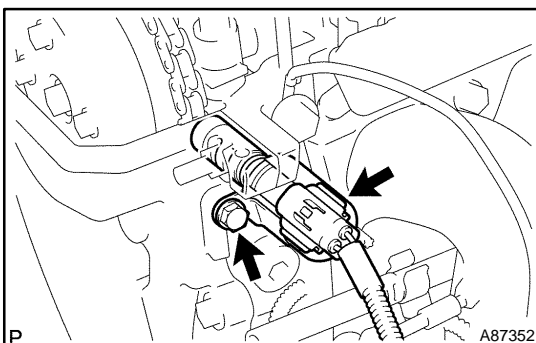
### 24. REMOVE ENGINE MOUNTING SPACER

- (a) Remove the 2 bolts and engine mounting spacer.



### 25. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET

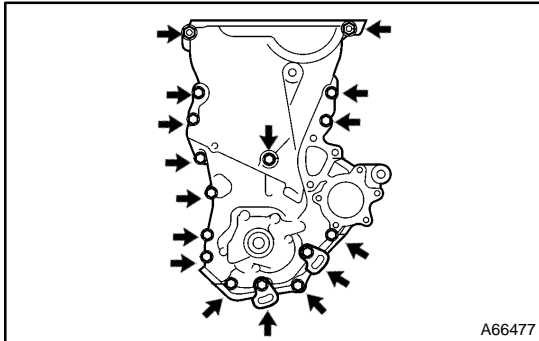
- (a) Remove the 4 bolts and engine mounting bracket.



### 26. REMOVE CAMSHAFT TIMING OIL CONTROL VALVE ASSY

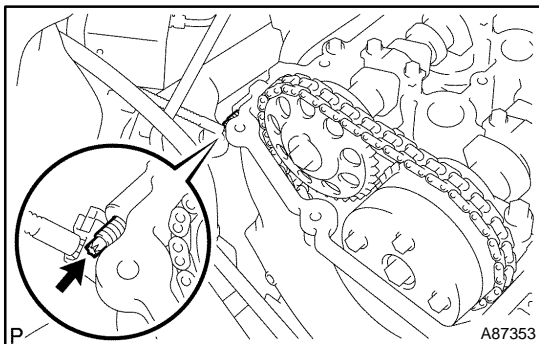
- (a) Disconnect the connector.  
(b) Remove the bolt and camshaft timing oil control valve assembly.

## 27. REMOVE CRANK POSITION SENSOR (See page 18-10 )

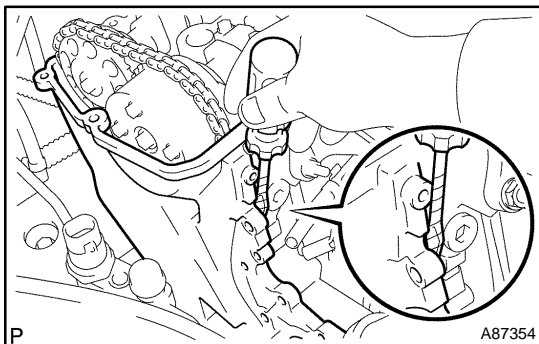


## 28. REMOVE OIL PUMP ASSY

(a) Remove the 15 bolts and nut.



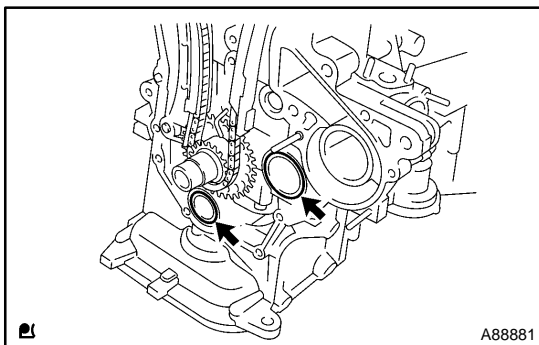
(b) Using a Torx socket wrench E8, remove the stud bolt.



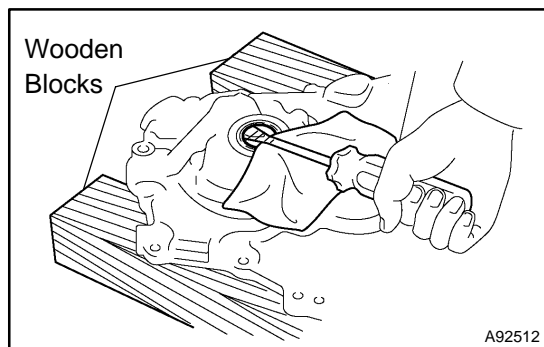
(c) Using a screwdriver with its tip wrapped in tape, remove the oil pump assembly by prying out between the cylinder head and cylinder block.

### NOTICE:

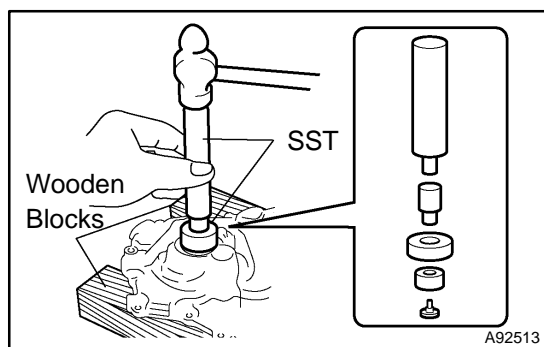
**Be careful not to damage the contact surfaces of the oil pump assembly, cylinder head and cylinder block.**



(d) Remove the 2 O-rings.

**29. REMOVE OIL PUMP SEAL**

- (a) Using a screwdriver with its tip wrapped in tape, remove the oil seal.

**30. INSTALL OIL PUMP SEAL**

- (a) Using SST, uniformly tap in a new oil seal until its surface is flush with the oil pump edge.

SST 09950-60010 (09951-00250, 09951-00380, 09952-06010), 09950-70010 (09951-07100)

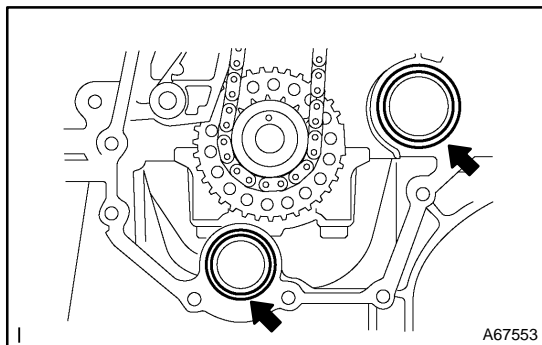
**HINT:**

Be careful not to tap the oil seal at an angle.

- (b) Apply a light coat of multipurpose grease No. 2 to the lip of the new oil seal.

**NOTICE:**

**Keep the lip free of foreign objects.**



### 31. INSTALL OIL PUMP ASSY

- Install 2 new O-rings to the 2 locations as shown in the illustration.
- Apply seal packing to the engine body and oil pump as shown in the illustration below.

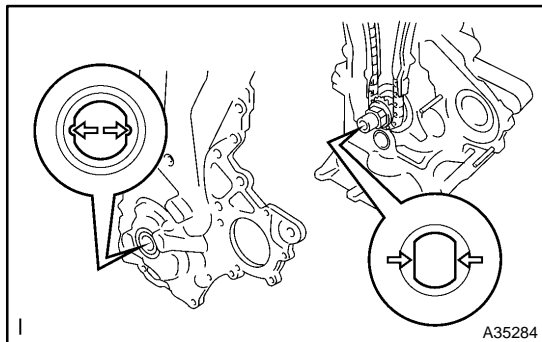
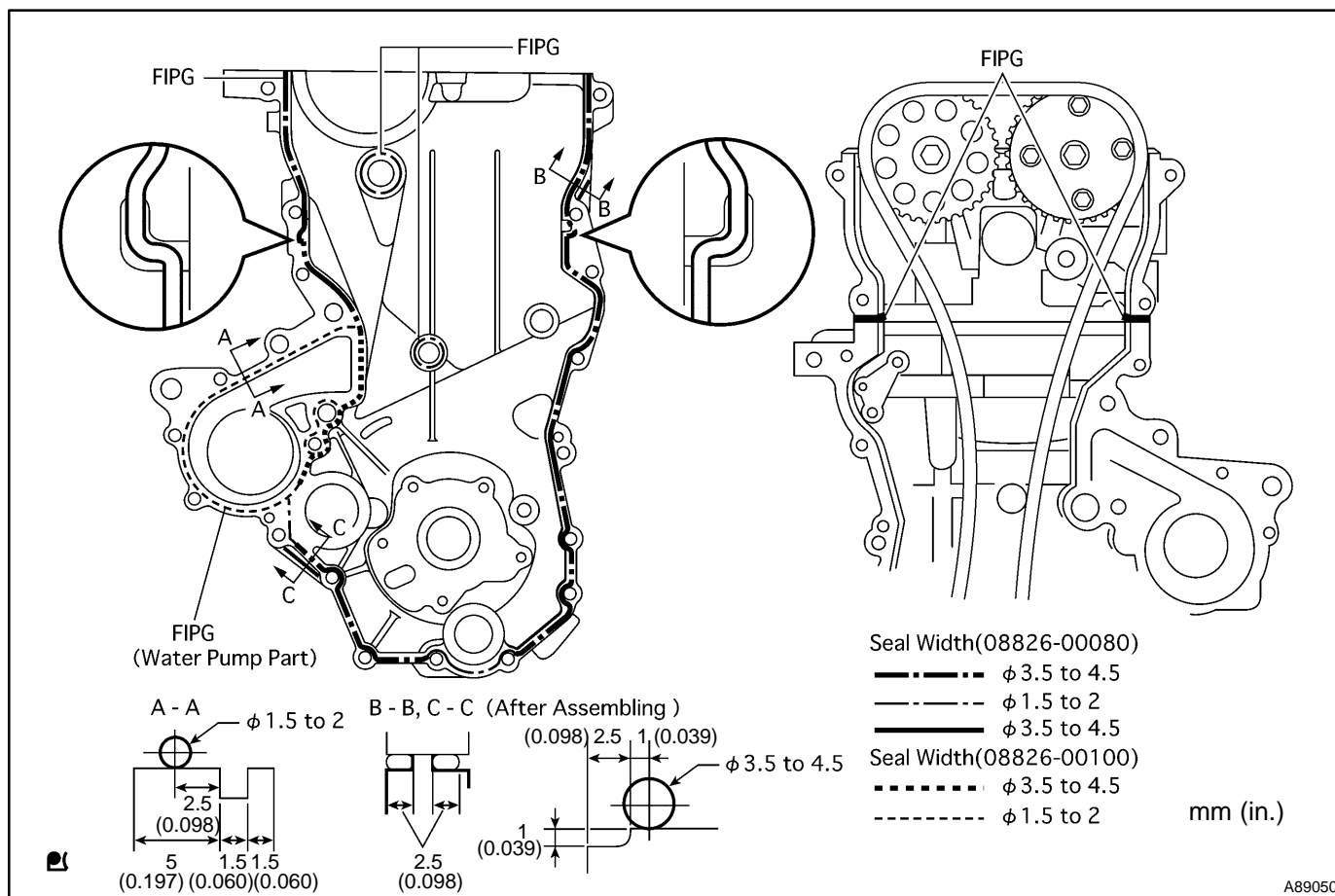
#### Seal packing:

Water pump part No. 08826-00100 or equivalent

Other part No. 08826-00080 or equivalent

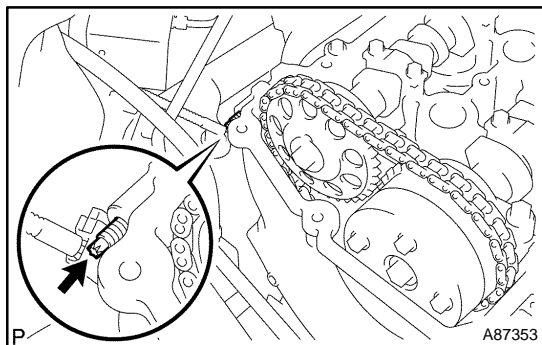
#### NOTICE:

- Remove pump any oil from the contact surface.
- Install the oil pump within 3 minutes, and tighten the bolts within 15 minutes after applying seal packing.
- Do not expose the seal packing to engine oil within 2 hours of installation.

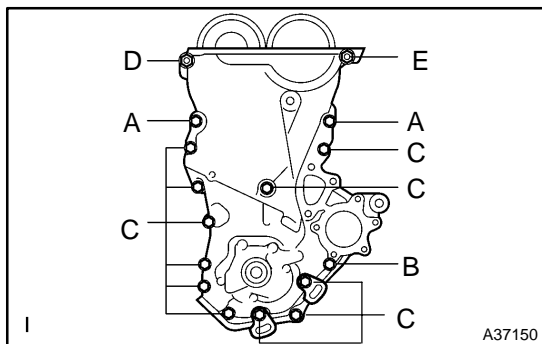


- Align the drive rotor spline of the oil pump with the rectangular portion of the crankshaft, then slide the oil pump assembly into place.





- (d) Using a Torx socket wrench E8, install the stud bolt.  
**Torque: 10 N·m (102 kgf·cm, 7.4 ft·lbf)**



- (e) Install the oil pump assembly with the 15 bolts and nut as illustrated.

**Torque:**

**32 N·m (326 kgf·cm, 24 ft·lbf) for bolt A**

**11 N·m (112 kgf·cm, 8.1 ft·lbf) for bolt B**

**11 N·m (112 kgf·cm, 8.1 ft·lbf) for bolt C**

**24 N·m (245 kgf·cm, 18 ft·lbf) for nut D**

**24 N·m (245 kgf·cm, 18 ft·lbf) for bolt E**

**NOTICE:**

- Be careful that the chain does not contact the seal packing when installing the oil pump assembly.
- Install the engine mounting bracket RH and water pump assembly within 15 minutes after installing the oil pump assembly.

**32. INSTALL CRANK POSITION SENSOR (See page 18-10 )**

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

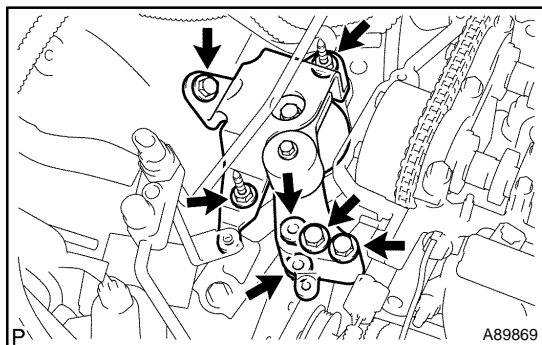
- (a) Apply a light coat of engine oil to the O-ring.  
 (b) Install the camshaft timing oil control valve assembly with the bolt.  
**Torque: 7.5 N·m (76 kgf·cm, 66 in·lbf)**

**34. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET**

**Torque: 55 N·m (561 kgf·cm, 41 ft·lbf)**

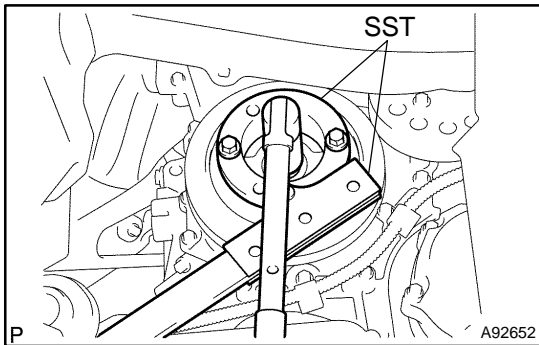
**35. INSTALL ENGINE MOUNTING SPACER**

**Torque: 52 N·m (530 kgf·cm, 38 ft·lbf)**



**36. INSTALL ENGINE MOUNTING INSULATOR SUB-ASSY RH**

- (a) Install the engine mounting insulator RH with the 3 bolts and 4 nuts.  
**Torque: 52 N·m (530 kgf·cm, 38 ft·lbf)**

**37. INSTALL CRANKSHAFT DAMPER SUB-ASSY**

- Align the hole of the crankshaft damper with the straight pin, then install the crankshaft damper.
- Using SST, hold the crankshaft damper and tighten the crankshaft bolt.

SST 09213-58013 (91111-50845), 09330-00021

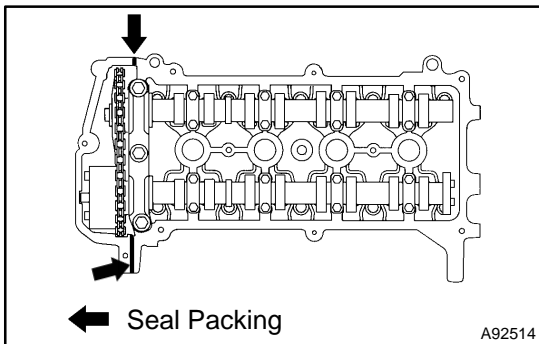
**Torque: 128 N·m (1305 kgf·cm, 95 ft·lbf)**

**NOTICE:**

When installing SST, be careful that the bolt which holds SST does not interfere with the chain cover.

**38. INSTALL WATER PUMP ASSY (See page 16-15 )**

SST 09960-10010 (09962-01000, 09963-00600)

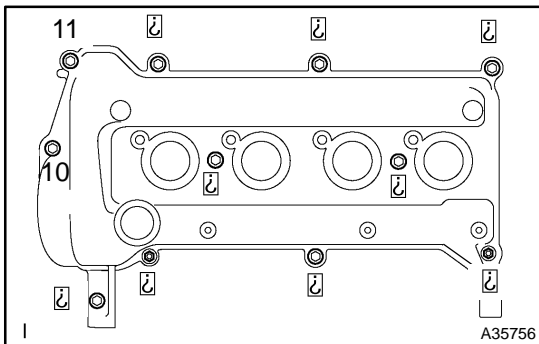
**39. INSTALL FAN AND GENERATOR V BELT (See page 14-5 )****40. INSPECT DRIVE BELT DEFLECTION AND TENSION (See page 14-1 )****41. INSTALL VACUUM SWITCHING VALVE ASSY NO.2****42. INSTALL CYLINDER HEAD COVER SUB-ASSY**

- Apply seal packing to the 2 locations as shown in the illustration, then install the cylinder head cover.

**Seal packing: Part No. 08826-00080 or equivalent**

**NOTICE:**

- Remove any oil from the contact surface.
- Install the cylinder head cover within 3 minutes after applying seal packing.
- Do not start the engine within 2 hours of installing.



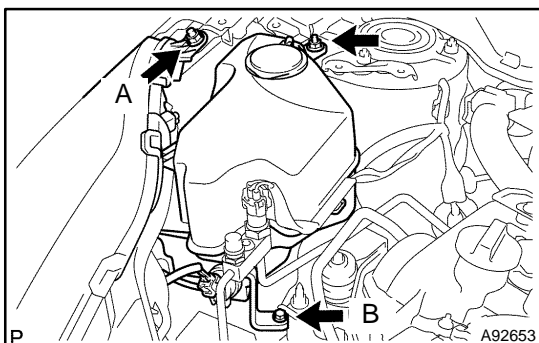
- Install the cylinder head cover with the 9 bolts and 2 nuts.
- Using several steps, tighten the bolts and nuts with the specified torque in the sequence shown in the illustration.

**Torque: 10 N·m (102 kgf·cm, 74 ft·lbf)**

- Install the ignition coil with the bolt.
- Install the brake master cylinder reservoir cover to the cylinder head cover.
- Install the wire harness and brake master cylinder reservoir cover with the 3 bolts.

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

- Connect the fuel injector connector and ignition coil connector.

**43. INSTALL WINDSHIELD WASHER JAR ASSY**

**Torque:**

**4.9 N·m (50 kgf·cm, 43 in·lbf) for bolt A**

**14 N·m (143 kgf·cm, 10 ft·lbf) for bolt B**

**5.5 N·m (56 kgf·cm, 49 in·lbf) for nut**

44. **INSTALL RESERVOIR BRACKET**  
Torque: 8.5 N·m (87 kgf·cm, 75 in·lbf)
45. **INSTALL BRAKE MASTER CYLINDER RESERVOIR SUB-ASSY**  
Torque: 8.5 N·m (87 kgf·cm, 75 in·lbf)
46. **INSTALL AIR CLEANER INLET NO.2**
47. **INSTALL AIR CLEANER ASSY**  
Torque:  
7.0 N·m (71 kgf·cm, 62 in·lbf) for Bolt  
3.0 N·m (31 kgf·cm, 27 in·lbf) for Clamp
48. **INSTALL COWL TOP PANEL SUB-ASSY OUTER FRONT (See page 11-15 )**
49. **INSTALL WINDSHIELD WIPER LINK ASSY (See page 66-14 )**
50. **ADD ENGINE OIL (See page 17-21 )**
51. **CONNECT BATTERY NEGATIVE TERMINAL**  
Torque: 6.0 N·m (61 kgf·cm, 53 in·lbf)
52. **INSTALL REAR FLOOR BOARD NO.3**
53. **INSTALL DECK FLOOR BOX REAR**
54. **INSTALL REAR FLOOR BOARD NO.2**
55. **ADD ENGINE COOLANT (See page 16-1 1)**
56. **CHECK FOR ENGINE COOLANT LEAKS (See page 16-2 )**
57. **INSPECT ENGINE OIL LEAKS**
58. **INSTALL RADIATOR SUPPORT OPENING COVER**
59. **INSTALL ENGINE UNDER COVER RH**
60. **INSTALL ENGINE UNDER COVER LH**
61. **INSTALL FRONT WHEEL RH**  
Torque: 103 N·m (1050 kgf·cm, 76 ft·lbf)
62. **POWER WINDOW CONTROL SYSTEM INITIALIZE (See page 01-28 )**