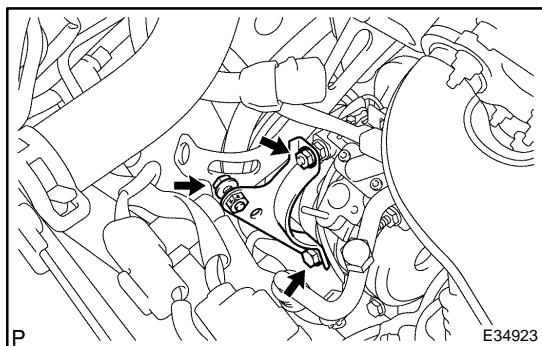


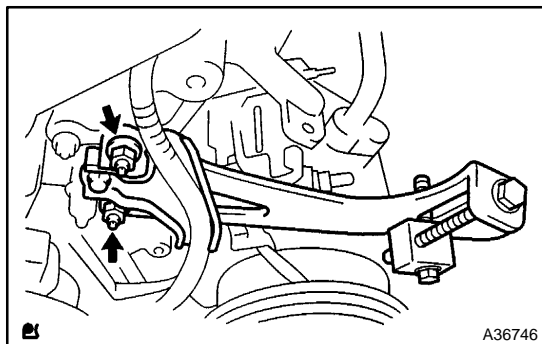
## REPLACEMENT

1. REMOVE FRONT WHEEL
2. REMOVE ENGINE UNDER COVER NO.1
3. REMOVE FRONT FENDER APRON SEAL RH
4. DRAIN ENGINE OIL
  - (a) Install a new gasket after draining engine oil.  
Torque: 45 N·m (459 kgf·cm, 33 ft·lbf)
5. REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1  
(See page 14-125 )
6. REMOVE VANE PUMP V BELT (See page 14-125 )
7. REMOVE ENGINE MOVING CONTROL ROD (See page 14-149 )
8. REMOVE ENGINE MOUNTING STAY NO.2 RH
9. REMOVE GENERATOR BRACKET NO.2
10. REMOVE EXHAUST PIPE SUPPORT BRACKET NO.1
11. REMOVE EXHAUST PIPE ASSY FRONT (See page 15-5 )

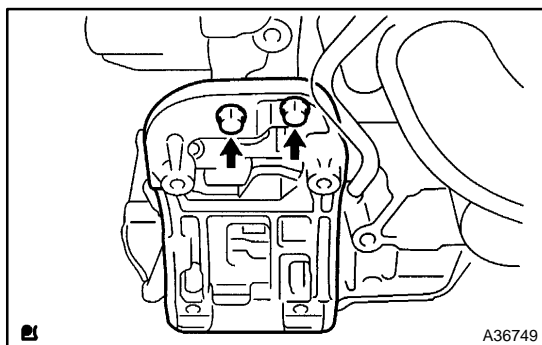


### 12. SEPARATE COMPRESSOR AND MAGNETIC CLUTCH

- (a) Remove the 2 bolts, nut and drive belt adjusting bar bracket.

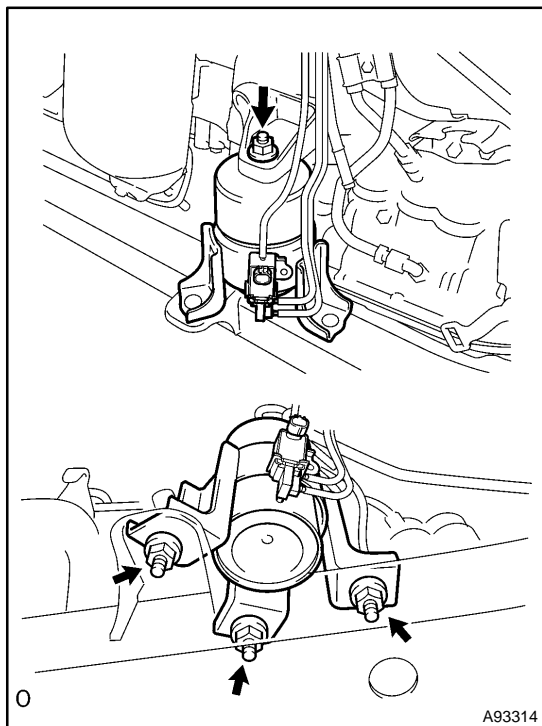


- (b) Remove the 2 nuts and the generator bracket adjusting bar together with the wire harness clamp bracket.
- (c) Disconnect the compressor, magnetic clutch connector and wire harness clamp.



### 13. REMOVE COMPRESSOR MOUNTING BRACKET NO.1

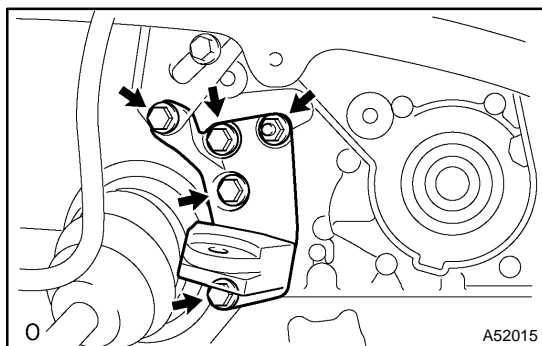
- (a) Remove the 2 bolts and mounting bracket.

**14. REMOVE OIL LEVEL GAGE SUB-ASSY****15. REMOVE OIL LEVEL GAGE GUIDE****16. REMOVE ENGINE MOUNTING**

- (a) Remove the 4 nuts and bolt, and disconnect the engine mounting insulator FR.

**NOTICE:**

**Do not remove the engine mounting insulator.**



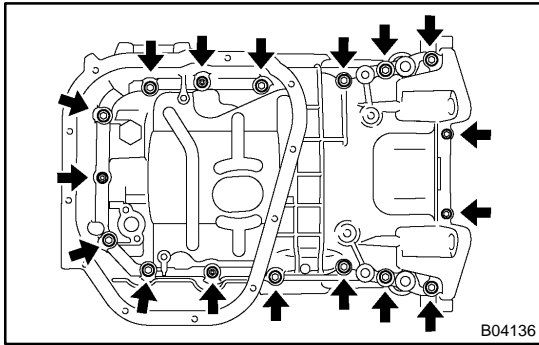
- (b) Remove the 4 bolts, nut and engine mounting bracket RH.

**17. REMOVE CRANKSHAFT PULLEY (See page 14-173 )****18. REMOVE TIMING BELT NO.1 COVER (See page 14-173 )****19. REMOVE TIMING BELT NO.2 COVER (See page 14-173 )****20. REMOVE TIMING BELT GUIDE NO.2****21. REMOVE TIMING BELT (See page 14-173 )****22. REMOVE TIMING BELT IDLER SUB-ASSY NO.1**

- (a) Using a socket hexagon wrench 10, remove the pivot bolt, timing belt idler No. 1 and plate washer.

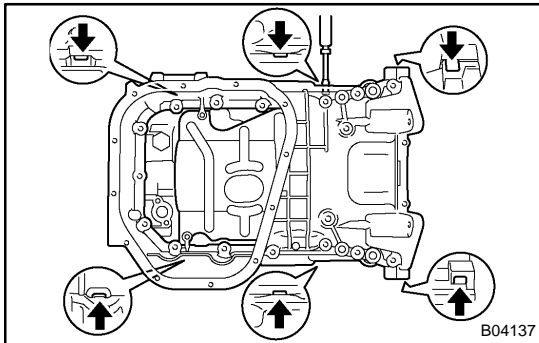
**23. REMOVE TIMING BELT IDLER SUB-ASSY NO.2****24. REMOVE CAMSHAFT TIMING PULLEY (See page 14-173 )****25. REMOVE TIMING BELT NO.3 COVER (See page 14-173 )****26. REMOVE CRANKSHAFT TIMING PULLEY (See page 14-173 )****27. REMOVE OIL PAN SUB-ASSY NO.2 (See page 14-173 )****28. REMOVE OIL STRAINER SUB-ASSY**

- (a) Remove the bolt and 2 nuts, then remove the oil strainer and the gasket.



## 29. REMOVE OIL PAN SUB-ASSY

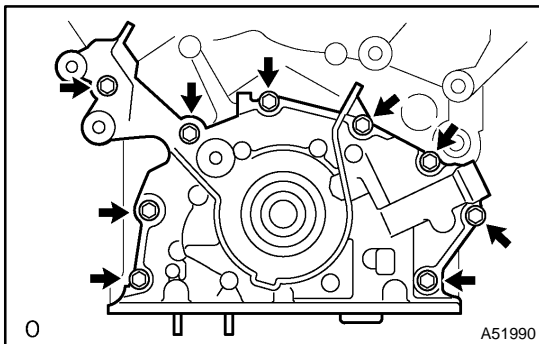
- (a) Uniformly loosen and remove the 15 bolts and 2 nuts, as shown in the illustration.



- (b) Using a screwdriver, remove the oil pan by prying between the cylinder block and the oil pan.

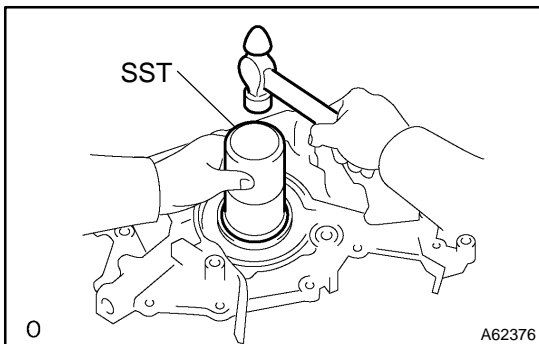
### NOTICE:

**Be careful not to damage the contact surfaces of the oil pan and cylinder block.**



## 30. REMOVE OIL PUMP ASSY

- (a) Remove the 9 bolts.  
 (b) Using a screwdriver, remove the oil pump by prying between the oil pump and the main bearing cap.  
 (c) Remove the O-ring.

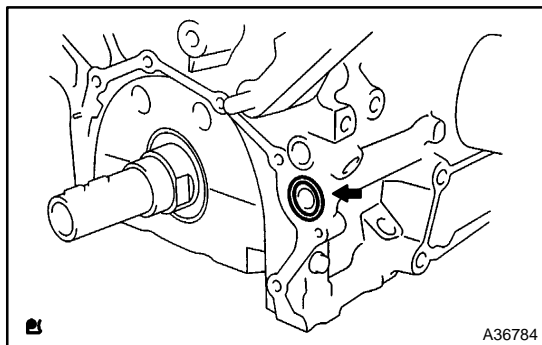


## 31. INSTALL OIL PUMP ASSY

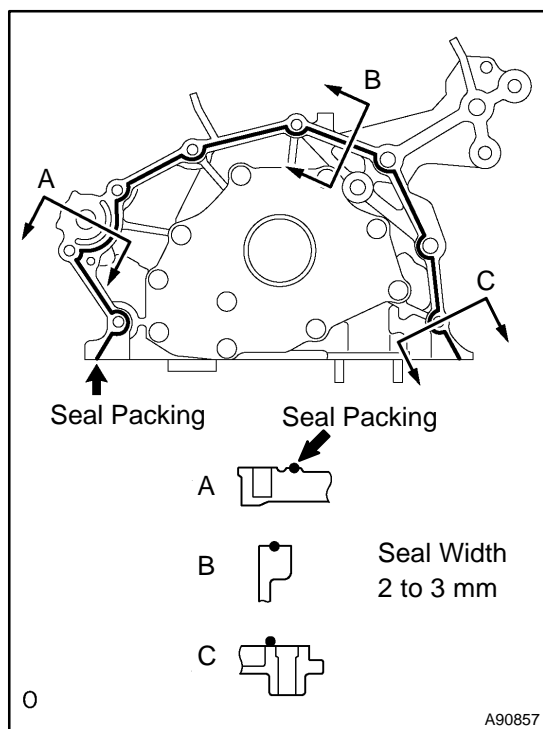
- (a) Using SST and a hammer, install a new oil seal. Tap the surface of the SST with the hammer until the oil seal's surface is flush with the oil pump body edge.  
 SST 09223-00010

### NOTICE:

- **Be careful not to tap the oil seal at an angle.**
  - **Keep the gap between the oil pump body edge and the oil seal free from contamination.**
- (b) Apply a small amount of MP grease to the oil seal lip.  
 (c) Remove any old seal packing material from the contact surface.



- (d) Apply a light coat of engine oil to a new O-ring and place it on the cylinder block.

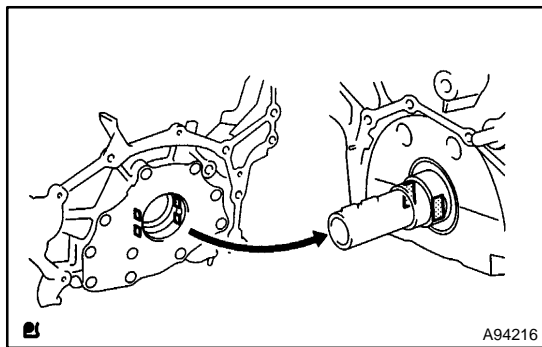


- (e) Apply a continuous bead of seal packing (seal width: 2 to 3 mm (0.08 to 0.12 in.)) as shown in the illustration.

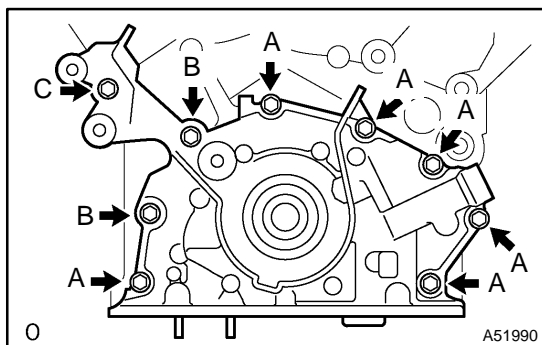
**Seal packing: Part No. 08226-00080 or equivalent**

**NOTICE:**

- Remove any oil from contact surface.
- Apply seal packing to the inner side of the bolt holes.
- Install the oil pump within 3 minutes after applying seal packing.
- Do not expose the seal to engine oil for at least 2 hours after installing the oil pump.



- (f) Align the key of the oil pump drive gear with the key way located on the crankshaft, and slide the oil pump into place.



- (g) Install the oil pump by tightening the 9 bolts uniformly.

**Torque:**

**8.0 N·m (82 kgf·cm, 71 in·lbf) for bolt A**

**20 N·m (204 kgf·cm, 15 ft·lbf) for bolt B**

**43 N·m (438 kgf·cm, 32 ft·lbf) for bolt C**

**32. INSTALL OIL PAN SUB-ASSY (See page 14-173 )****33. INSTALL OIL STRAINER SUB-ASSY**

- (a) Install a new gasket and the oil strainer with the bolt and 2 nuts.

**Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)****34. INSTALL OIL PAN SUB-ASSY NO.2 (See page 14-173 )****35. INSTALL CRANKSHAFT POSITION SENSOR****Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)****36. INSTALL COMPRESSOR AND MAGNETIC CLUTCH (See page 14-149 )****37. INSTALL OIL LEVEL GAGE GUIDE****38. INSTALL OIL LEVEL GAGE SUB-ASSY****39. INSTALL TIMING BELT IDLER SUB-ASSY NO.1**

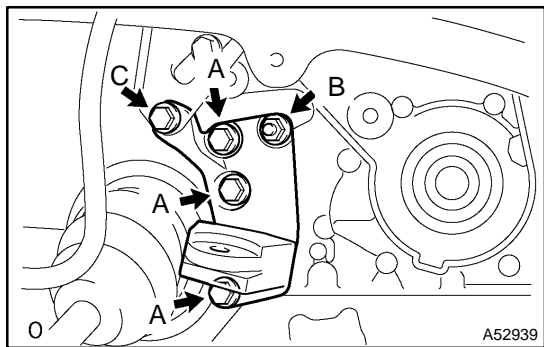
- (a) Using a socket hexagon wrench 10, install the plate washer and timing belt idler No. 1 with the pivot bolt.

**Torque: 34 N·m (347 kgf·cm, 25 ft·lbf)****40. INSTALL TIMING BELT IDLER SUB-ASSY NO.2****Torque: 43 N·m (438 kgf·cm, 32 ft·lbf)****41. INSTALL TIMING BELT NO.3 COVER (See page 14-173 )****42. INSTALL CAMSHAFT TIMING PULLEY (See page 14-173 )****43. INSTALL TIMING BELT (See page 14-173 )****44. INSTALL CHAIN TENSIONER ASSY NO.1 (See page 14-173 )****45. INSTALL TIMING BELT GUIDE NO.2 (See page 14-41 )****46. INSTALL TIMING BELT NO.2 COVER**

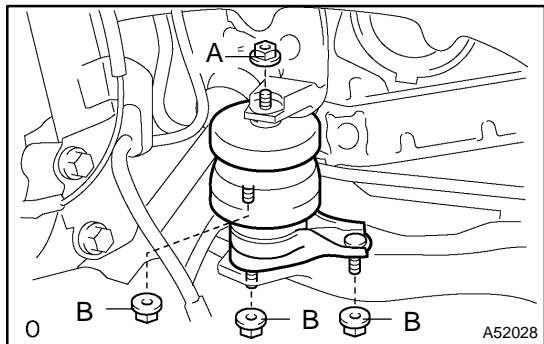
- (a) Visually check for cracks and breaks on the gasket of the timing belt cover.

If there is a trace that water is entering at the visual check, replace the timing belt cover.

- (b) Install the timing belt cover.

**Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)****47. INSTALL TIMING BELT NO.1 COVER (See page 14-173 )****48. INSTALL ENGINE MOUNTING**

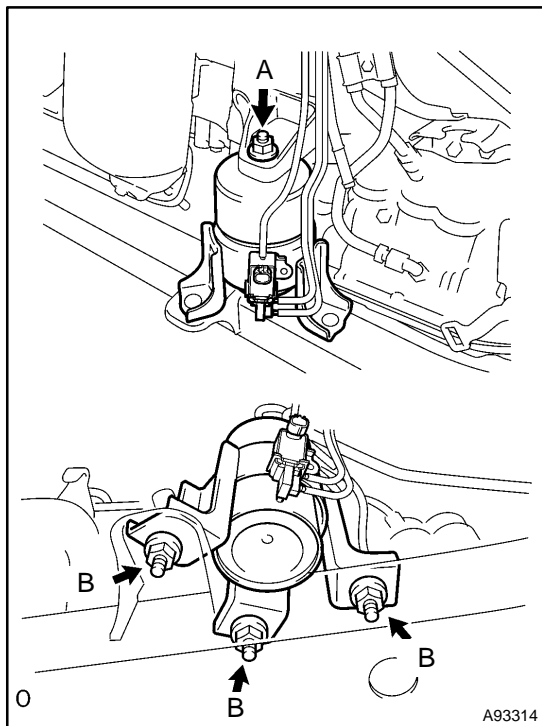
- (a) Install the engine mounting bracket RH with the 4 bolts and nut.

**Torque:****54 N·m (551 kgf·cm, 40 ft·lbf) for bolt A****54 N·m (551 kgf·cm, 40 ft·lbf) for nut B****43 N·m (438 kgf·cm, 32 ft·lbf) for bolt C**

- (b) Install the engine mounting insulator RH with the 4 nuts.

**Torque:****95 N·m (969 kgf·cm, 70 ft·lbf) for nut A****87 N·m (887 kgf·cm, 64 ft·lbf) for nut B****HINT:**

First, loosely install the nut labeled (A) with your hand. Then use a wrench to install the 3 nuts labeled (B). Finally, use a wrench to tighten nut (A).



- (c) Install the engine mounting insulator FR with the nut.

**Torque:**

**87 N·m (887 kgf·cm, 64 ft·lbf) for nut A**

**52 N·m (530 kgf·cm, 38 ft·lbf) for nut B**

**49. INSTALL CRANKSHAFT PULLEY (See page 14-173 )**

**50. INSTALL GENERATOR BRACKET NO.1**

- (a) Visually check for cracks and breaks on the gasket of the timing belt cover.  
If there is a trace that water is entering at the visual check, replace the timing belt cover.
- (b) Install the timing belt cover.

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

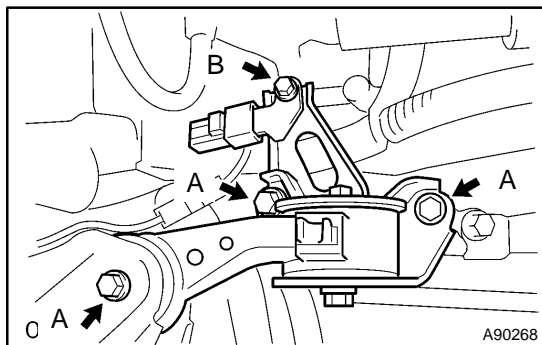
**51. INSTALL COMPRESSOR AND MAGNETIC CLUTCH**

- (a) Install the compressor with the 3 bolts.
- Torque: 25 N·m (255 kgf·cm, 18 ft·lbf)**
- (b) Install the adjusting bar bracket with the bolt and nut.

**Torque: 25 N·m (255 kgf·cm, 18 ft·lbf) for bolt**

**52. INSTALL ENGINE MOUNTING STAY NO.2 RH**

**Torque: 64 N·m (653 kgf·cm, 47 ft·lbf)**



**53. INSTALL ENGINE MOVING CONTROL ROD**

- (a) Install the control rod and bracket with the 4 bolts.

**Torque:**

**64 N·m (653 kgf·cm, 47 ft·lbf) for bolt A**

**23 N·m (235 kgf·cm, 17 ft·lbf) for bolt B**

**54. INSTALL VANE PUMP V BELT (See page 14-125 )**

**55. INSTALL V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**

**(See page 14-125 )**

**56. ADD ENGINE OIL**

**57. CHECK FOR ENGINE OIL LEAKS**