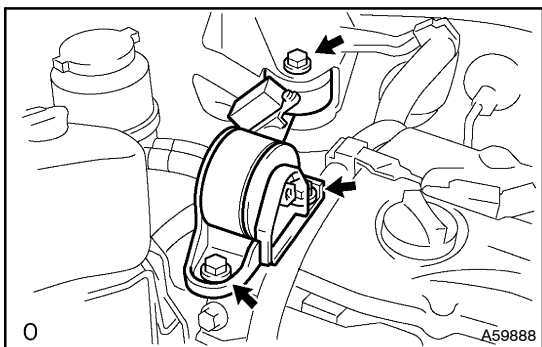


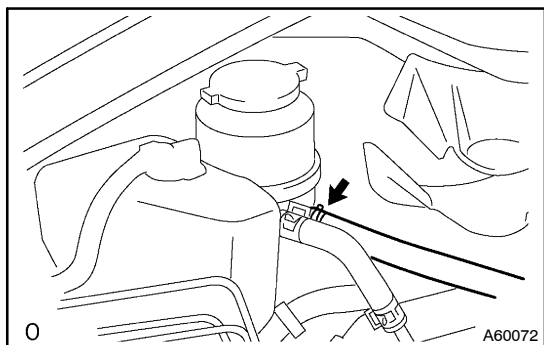
## REPLACEMENT

1. WORK FOR PREVENTING GASOLINE FROM SPILLING OUT (See page 11-1)
2. REMOVE FRONT WHEEL
3. REMOVE ENGINE UNDER COVER LH
4. REMOVE ENGINE UNDER COVER RH
5. REMOVE FRONT FENDER APRON SEAL RH
6. DRAIN COOLANT (See page 16-6)
7. DRAIN AUTOMATIC TRANSAXLE FLUID
  - (a) Using a 10mm hexagon wrench, remove the drain plug and a gasket. Drain automatic transaxle fluid.
  - (b) Install a new gasket and the drain plug.  
Torque: 49 N·m (500 kgf·cm, 36 ft·lb)
8. REMOVE BATTERY
9. REMOVE AIR CLEANER ASSY
10. REMOVE ENGINE COVER SUB-ASSY NO.1
11. DISCONNECT RADIATOR HOSE INLET
12. DISCONNECT RADIATOR HOSE OUTLET
13. DISCONNECT OIL COOLER INLET HOSE
14. DISCONNECT OIL COOLER OUTLET HOSE

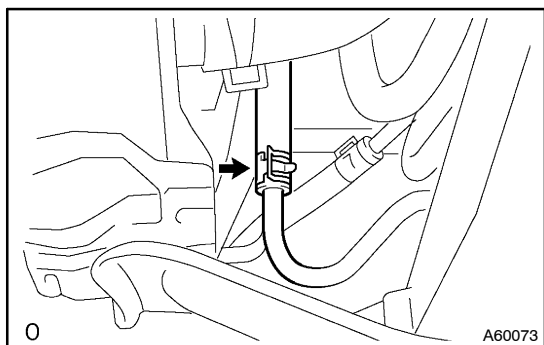


15. REMOVE ENGINE MOVING CONTROL ROD W/BACKET
  - (a) Remove the 3 bolts and the engine moving control rod w/ bracket.

16. REMOVE ENGINE MOUNTING STAY NO.2 RH
17. REMOVE ENGINE MOUNTING BRACKET NO.2 RH
18. REMOVE FAN AND GENERATOR V BELT  
(See page 14-5)  
SST 09249-63010
19. REMOVE VANE PUMP OIL RESERVOIR ASSY

**20. DISCONNECT OIL RESERVOIR TO PUMP HOSE NO.1**

- (a) Remove the clip and disconnect the hose.

**21. DISCONNECT RETURN TUBE SUB-ASSY**

- (a) Remove the clip and disconnect the return tube.

**22. DISCONNECT UNION TO CONNECTOR TUBE HOSE****23. DISCONNECT FLOOR SHIFT CABLE TRANSMISSION CONTROL SHIFT**

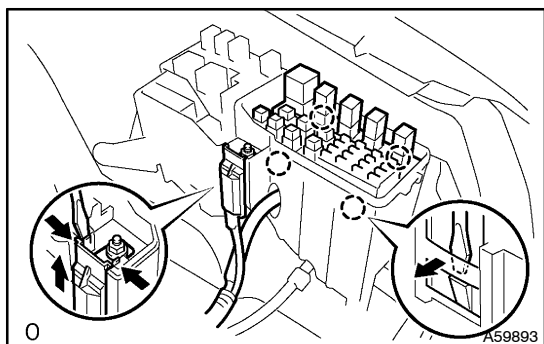
(See page 40-3)

**24. DISCONNECT HEATER INLET WATER HOSE****25. DISCONNECT HEATER OUTLET WATER HOSE****26. DISCONNECT FUEL TUBE SUB-ASSY**

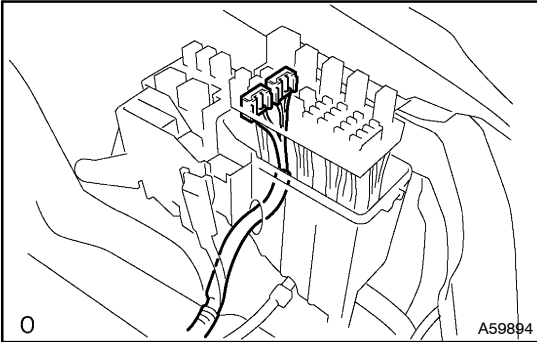
(See page 11-1)

**27. DISCONNECT ENGINE WIRE**

- (a) Disconnect the engine wire from engine ECU and junction block.
- (b) Disconnect the engine wire from engine room junction block.



- (1) Remove the nut fixing the wire harness.
- (2) Using a screwdriver, unlock the engine room junction block. Disconnect the engine wire by pulling it upward.



- (3) Disconnect the connectors.
- (c) Pull out the engine wire.
- (d) Disconnect the B terminal of the generator.
- (e) Remove the body ground.
- (f) Remove the starter connector.

## 28. DISCONNECT ENGINE WIRE NO.2

- (a) Remove the nut and disconnect the terminal 30 of the starter.

## 29. REMOVE GENERATOR ASSY

## 30. SEPARATE COMPRESSOR AND MAGNETIC CLUTCH

HINT:

Hang up the hoses instead of detaching.

## 31. REMOVE EXHAUST PIPE ASSY FRONT

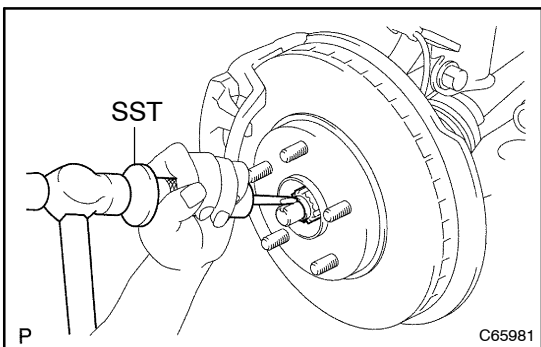
## 32. REMOVE FRONT STABILIZER LINK ASSY LH

- (a) Using a 6 mm socket hexagon wrench to fix the stud bolt.
- (b) Remove the nut and the stabilizer bar link.

## 33. REMOVE FRONT STABILIZER LINK ASSY RH

HINT:

Perform the same procedure as above on the opposite side.



## 34. REMOVE FRONT AXLE HUB LH NUT

- (a) Using SST and a hammer, unstake the staked part of the lock nut.  
SST 09930-00010

### NOTICE:

- When removing the nut, unstake the staked part of it completely.
- Do not damage the threads of the drive shaft.
- Be sure not to sharpen the tip of the SST.
- Set the SST to the groove with the flat face upward.
- (b) Using a 30 mm socket wrench, remove the lock nut.

## 35. REMOVE FRONT AXLE HUB RH NUT

SST 09930-00010

HINT:

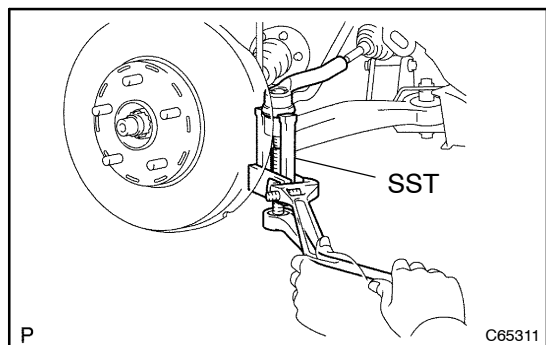
Perform the same procedure as above on the opposite side.

**36. REMOVE SPEED SENSOR FRONT LH****NOTICE:**

Keep the tip and connection part of speed sensor off foreign materials.

**37. REMOVE SPEED SENSOR FRONT RH****HINT:**

Perform the same procedure as above on the opposite side.

**38. DISCONNECT TIE ROD ASSY LH**

- (a) Remove the cotter pin and a castle nut.
- (b) Using SST, disconnect the tie rod end from the steering knuckle.

SST 09628-62011

**NOTICE:**

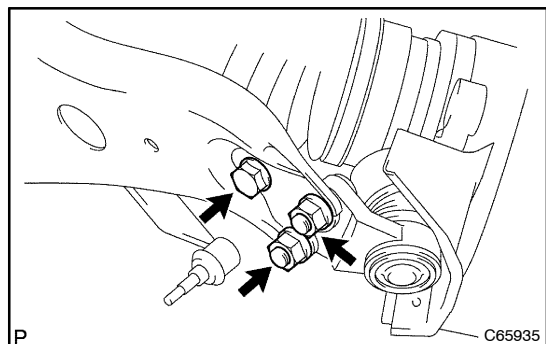
Be careful not to damage the cover of the ball joint.

**39. DISCONNECT TIE ROD ASSY RH**

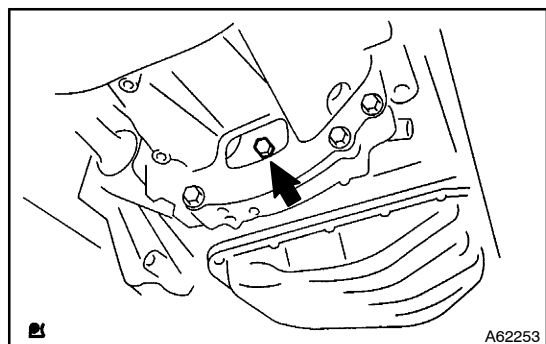
SST 09628-62011

**HINT:**

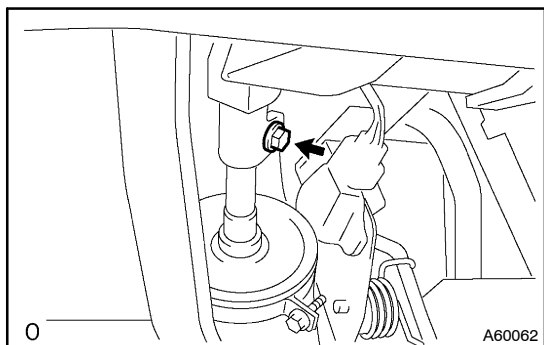
Perform the same procedure as above on the opposite side.

**40. DISCONNECT FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH****41. DISCONNECT FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 RH****HINT:**

Perform the same procedure as above on the opposite side.

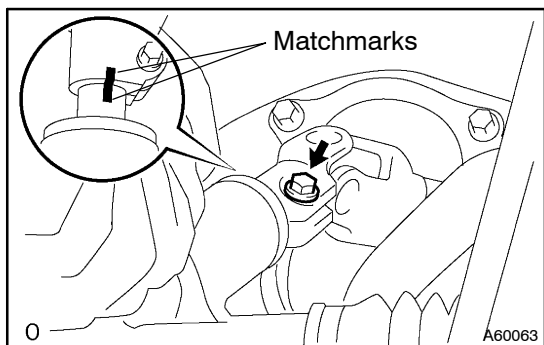
**42. REMOVE DRIVE PLATE & TORQUE CONVERTER CLUTCH SETTING BOLT**

- (a) Fix the crankshaft and remove the 6 set bolts.

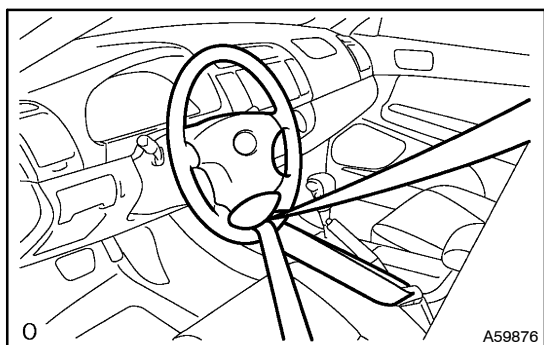


#### 43. REMOVE STEERING INTERMEDIATE SHAFT SUB-ASSY

- (a) Loosen the sliding yoke bolt.



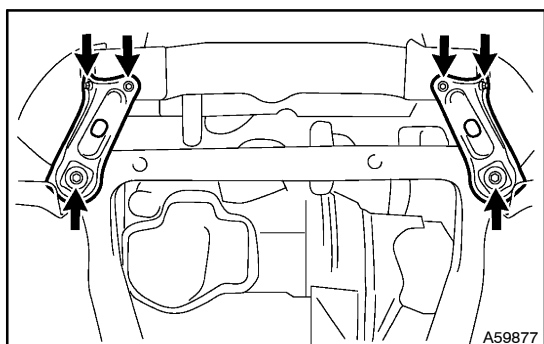
- (b) Place matchmarks on the intermediate shaft and control valve shaft.  
 (c) Remove the bolt, and the steering intermediate shaft.



- (d) To prevent from rotating the steering wheel, fix the wheel with seat belt.

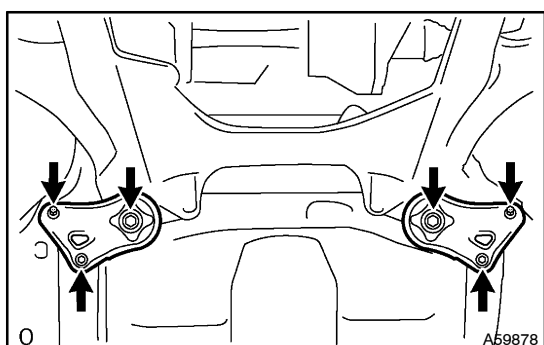
#### HINT:

The operation is useful to prevent the damage of the spiral cable.

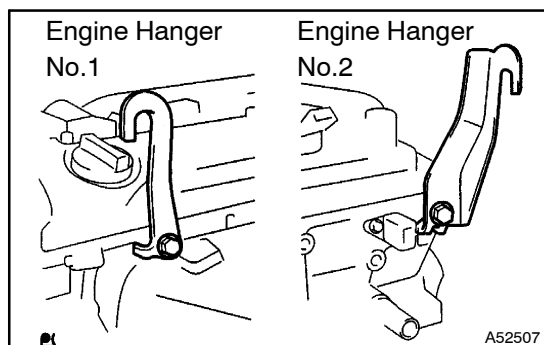


#### 44. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE

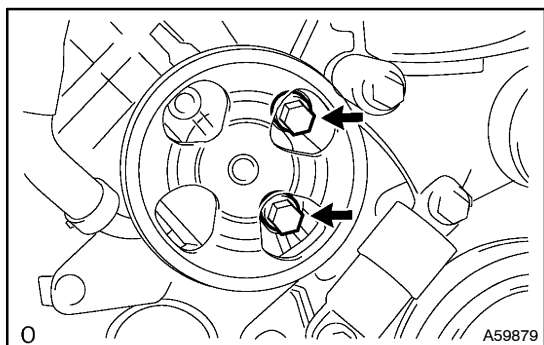
- (a) Set the engine lifter.  
 (b) Remove the 4 bolts, 2 nuts and frame side rail plate sub-assembly RH and LH.



- (c) Remove the 4 bolts, 2 nuts and front suspension member brace rear RH and LH.  
 (d) Carefully, remove the engine assembly from the vehicle.

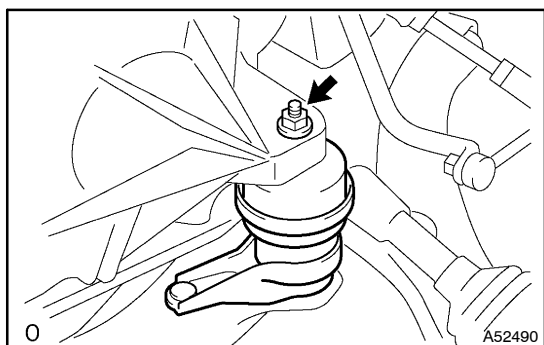


- (e) Install the 2 engine hangers as shown in the illustration.  
**Parts No. :**  
**No. 1 engine hanger 12281-28010**  
**No. 2 engine hanger 12282-28010**  
**Bolt 91512-61020**  
**Torque: 38 N·m (387 kgf·cm, 28 ft·lbf)**
- (f) Using the chain block and engine sling device, hang the engine assembly.



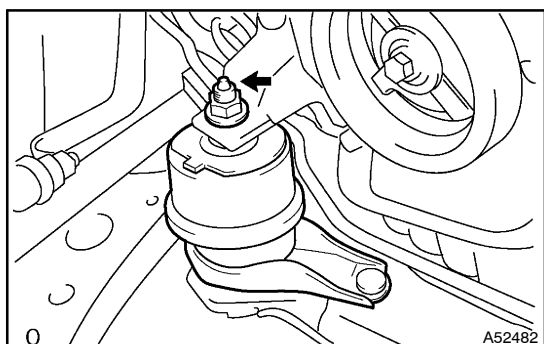
#### 45. REMOVE VANE PUMP ASSY

- (a) Disconnect the PS oil pressure switch connector.  
 (b) Remove the 2 bolts and the vane pump from the engine.

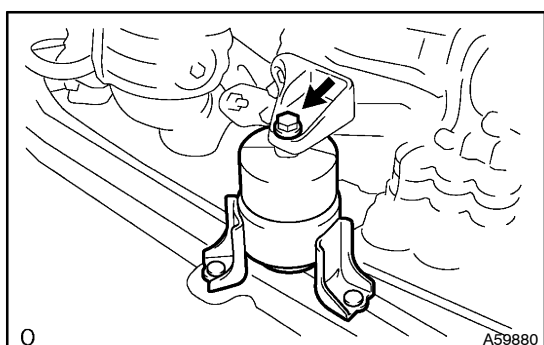


#### 46. REMOVE FRONT FRAME ASSY

- (a) Remove a nut installing the engine mounting insulator LH.

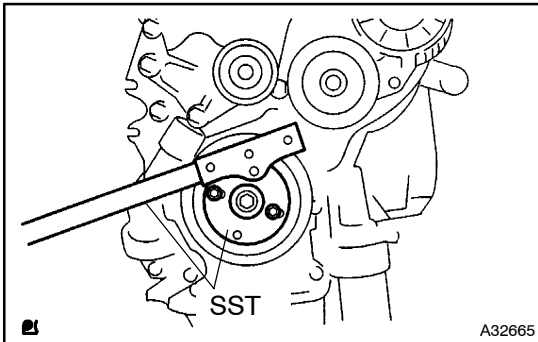


- (b) Remove a nut installing the engine mounting insulator RH.



- (c) Remove a bolt installing the engine mounting insulator FR.  
 (d) Raise the engine assembly and separate the front frame.

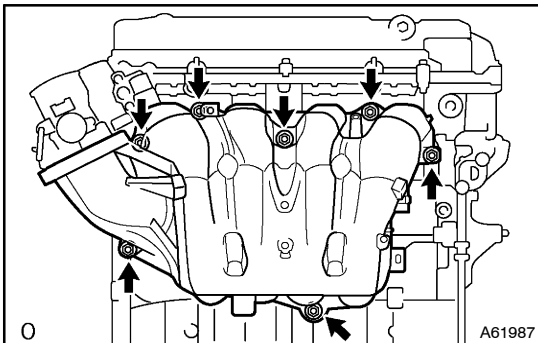
47. REMOVE FRONT DRIVE SHAFT ASSY LH  
(See page 30-8)
48. REMOVE FRONT DRIVE SHAFT ASSY RH  
(See page 30-8)
49. REMOVE STARTER ASSY  
(See page 19-3)
50. SEPARATE AUTOMATIC TRANSAXLE ASSY  
(See page 40-20)



#### 51. REMOVE DRIVE PLATE & RING GEAR SUB-ASSY

- (a) Fix the crankshaft with SST.  
SST 09213-54015 (91651-60855), 09330-00021
- (b) Remove the 8 bolts, rear spacer, drive plate and front spacer.

#### 52. INSTALL ENGINE STAND



#### 53. REMOVE INTAKE MANIFOLD

- (a) Remove the 5 bolts, 2 nuts, intake manifold and gasket.

#### 54. REMOVE VENTILATION HOSE

#### 55. REMOVE VENTILATION HOSE NO.2

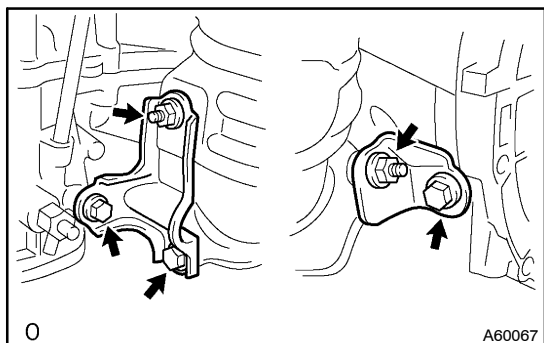
#### 56. REMOVE ENGINE WIRE

#### 57. REMOVE INTAKE MANIFOLD INSULATOR NO.1

#### 58. REMOVE OIL LEVEL GAGE SUB-ASSY

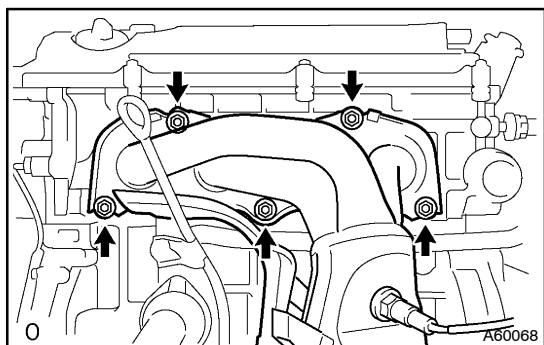
#### 59. REMOVE OIL LEVEL GAGE GUIDE

#### 60. REMOVE MANIFOLD CONVERTER INSULATOR NO.1



## 61. REMOVE EXHAUST MANIFOLD CONVERTER SUB-ASSY

(a) Remove the 3 bolts, 2 nuts No. 1 and No. 2 exhaust manifold stay.

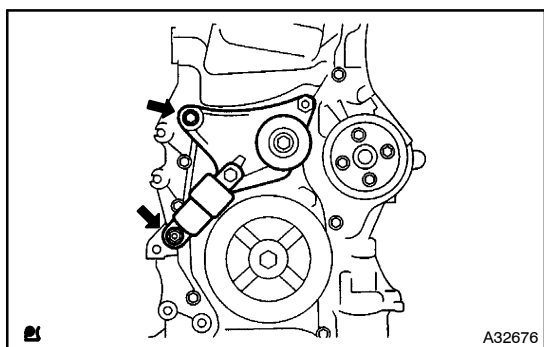


(b) Remove the 5 nuts, exhaust manifold converter and gasket.

## 62. REMOVE WATER INLET

## 63. REMOVE THERMOSTAT

## 64. REMOVE IGNITION COIL ASSY



## 65. REMOVE V-RIBBED BELT TENSIONER ASSY

(a) Remove the bolt, nut and the drive belt tensioner.

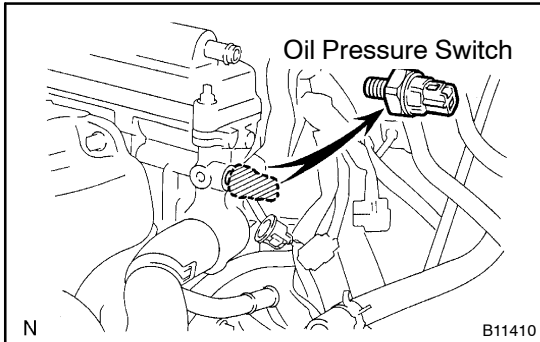
## 66. REMOVE DRIVE SHAFT BEARING BRACKET

## 67. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET

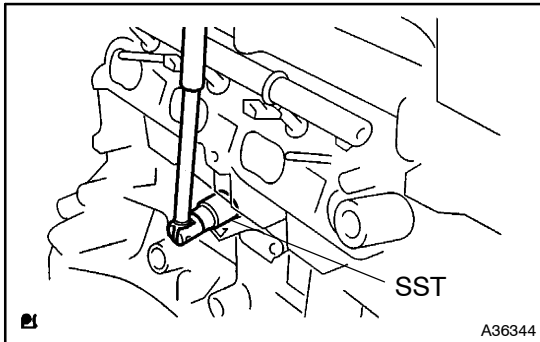
## 68. REMOVE FUEL DELIVERY PIPE W/INJECTOR (See page 11-11)

## 69. REMOVE WATER BY-PASS PIPE NO.1



**70. REMOVE ENGINE OIL PRESSURE SWITCH ASSY**

- (a) Remove the oil pressure switch.

**71. REMOVE KNOCK CONTROL SENSOR**

- (a) Using SST, remove the knock control sensor.  
SST 09816-30010

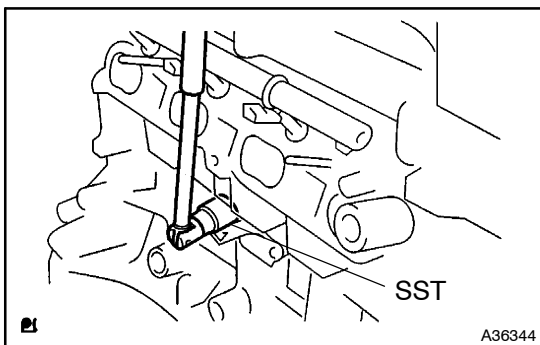
**72. REMOVE E.F.I. ENGINE COOLANT TEMPERATURE SENSOR**

- (a) Remove the water temperature sensor.

**73. REPLACE PARTIAL ENGINE ASSY****74. INSTALL E.F.I. ENGINE COOLANT TEMPERATURE SENSOR**

- (a) Install a new gasket to the water temperature sensor.  
(b) Install the water temperature sensor.

**Torque: 20 N·m (208 kgf·cm, 15 ft·lbf)**

**75. INSTALL KNOCK CONTROL SENSOR**

- (a) Using SST, install the knock control sensor.  
SST 09816-30010

**Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)**

**76. INSTALL ENGINE OIL PRESSURE SWITCH ASSY**

- (a) Clean the threads of the oil pressure switch, apply adhesive there.  
**Adhesive: Part No. 08833-00080 THREE BOND 1344 or equivalent**  
(b) Install the oil pressure switch.

**Torque: 15 N·m (153 kgf·cm, 11 ft·lbf)**

**77. INSTALL WATER BY-PASS PIPE NO.1**

- (a) Install a new gasket and the water by-pass pipe No. 1 with the bolt and 2 nuts.

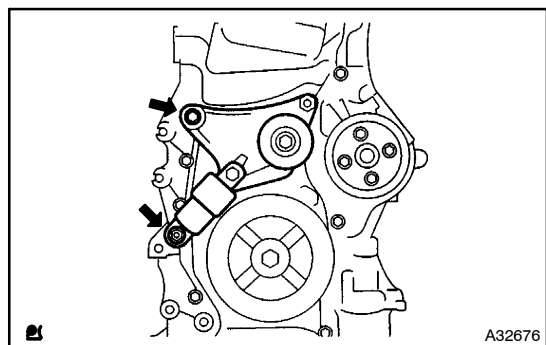
**Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)**

**78. INSTALL FUEL DELIVERY PIPE W/INJECTOR (See page 11-11)**

Torque: 54 N·m (551 kgf·cm, 40 ft·lbf)

**79. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET****80. DRIVE SHAFT BEARING BRACKET**

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

**81. INSTALL V-RIBBED BELT TENSIONER ASSY**

(a) Install the drive belt tensioner with the bolt and the nut.

Torque: 59.5 N·m (607 kgf·cm, 44 ft·lbf)

**82. INSTALL IGNITION COIL ASSY**

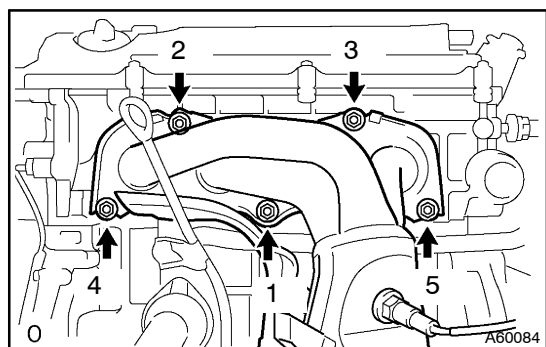
Torque: 9.0 N·m (92 kgf·cm, 80 in·lbf)

**83. INSTALL THERMOSTAT**

(See page 16-10)

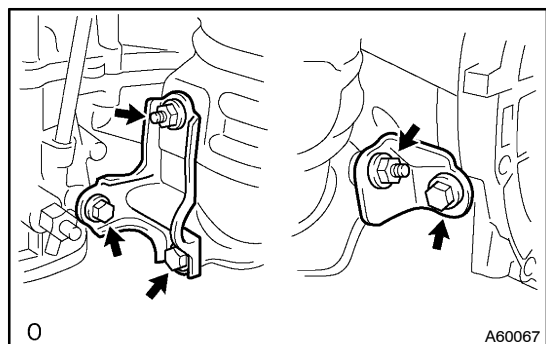
**84. INSTALL WATER INLET**

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

**85. INSTALL EXHAUST MANIFOLD CONVERTER SUB-ASSY**

(a) Install a new gasket and the exhaust manifold converter with the 5 nuts.

Torque: 37 N·m (378 kgf·cm, 27 ft·lbf)

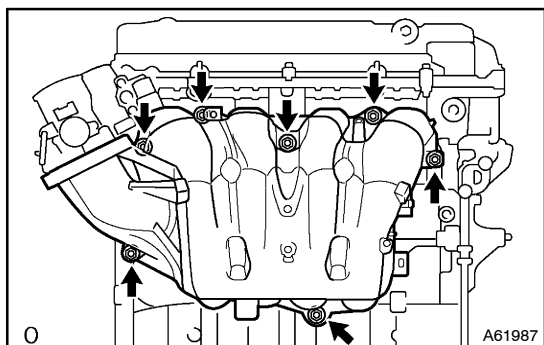


(b) Install the No. 1 and No. 2 exhaust manifold stay with the 3 bolts and 2 nuts.

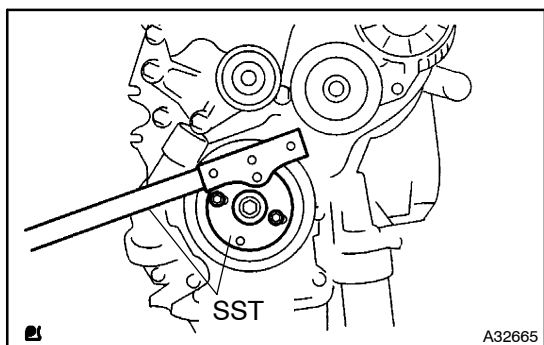
Torque: 44 N·m (449 kgf·cm, 32 ft·lbf)

**86. INSTALL MANIFOLD CONVERTER INSULATOR NO.1****Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)****87. INSTALL OIL LEVEL GAGE GUIDE**

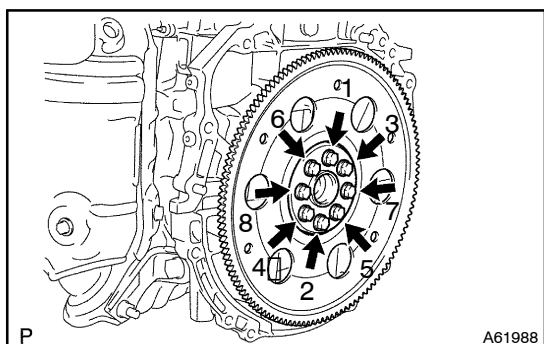
- (a) Apply a light coat of engine oil to the O-ring, install it to the guide.
- (b) Install the oil level gage and guide with the bolt.

**Torque: 9.0 N·m (92 kgf·cm, 80 in. lbf)****88. INSTALL INTAKE MANIFOLD**

- (a) Install a new gasket and the intake manifold with the 5 bolts and 2 nuts.

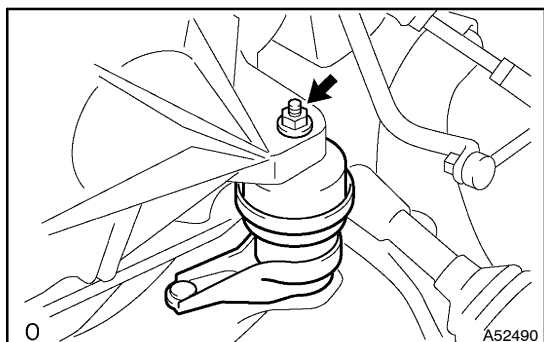
**Torque: 30 N·m (306 kgf·cm, 22 ft·lbf)****89. INSTALL DRIVE PLATE & RING GEAR SUB-ASSY**

- (a) Fix the crankshaft with SST.  
SST 09213-54015 (91651-60855), 09330-00021
- (b) Clean the bolt and the bolt hole.
- (c) Apply Adhesive to 2 or 3 threads of the bolt end.

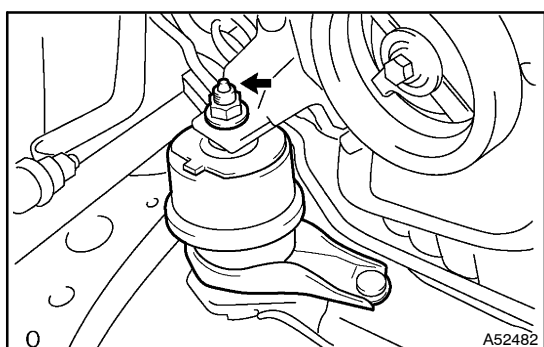
**Adhesive:****Part No. 08833-00070, THREE BOND or equivalent.**

- (d) Install and uniformly tighten the 8 bolts, in several passes, in the sequence shown.

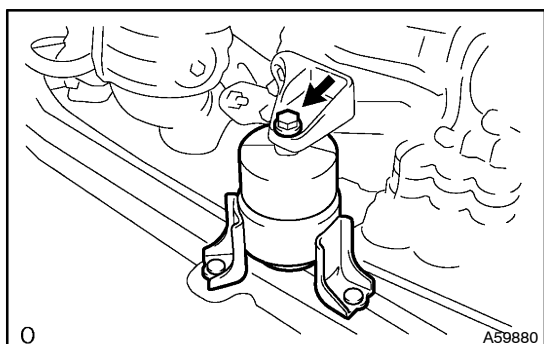
**Torque: 98 N·m (1,000 kgf·cm, 72 ft·lbf)****90. INSTALL AUTOMATIC TRANSAXLE ASSY****(See page 40-20)****91. INSTALL STARTER ASSY****92. INSTALL FRONT DRIVE SHAFT ASSY RH****(See page 30-8)****Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)****93. INSTALL FRONT DRIVE SHAFT ASSY LH****(See page 30-8)**

**94. INSTALL FRONT FRAME ASSY**

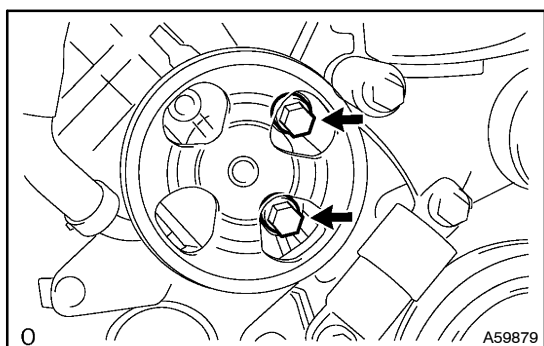
- (a) Install the engine mounting insulator LH with a nut (A/T).  
**Torque: 95 N·m (969 kgf·cm, 70 ft·lbf)**



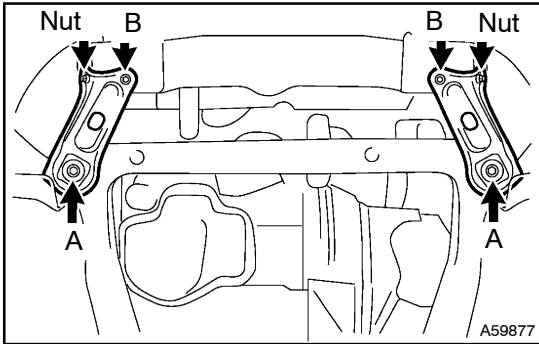
- (b) Install the engine mounting insulator RH with a nut.  
**Torque: 95 N·m (969 kgf·cm, 70 ft·lbf)**



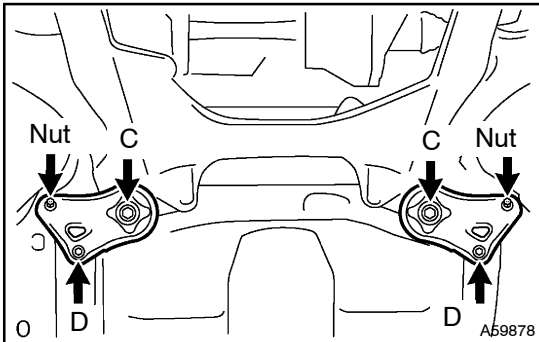
- (c) Install the engine mounting insulator FR with a bolt.  
**Torque: 87 N·m (888 kgf·cm, 64 ft·lbf)**

**95. INSTALL VANE PUMP ASSY**

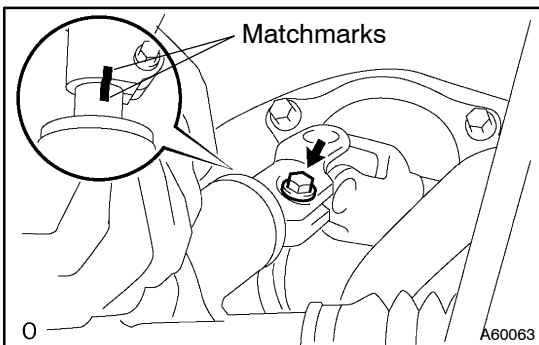
- (a) Connect the vane pump to the engine with the 2 bolts.  
**Torque: 43 N·m (439 kgf·cm, 31 ft·lbf)**

**96. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE**

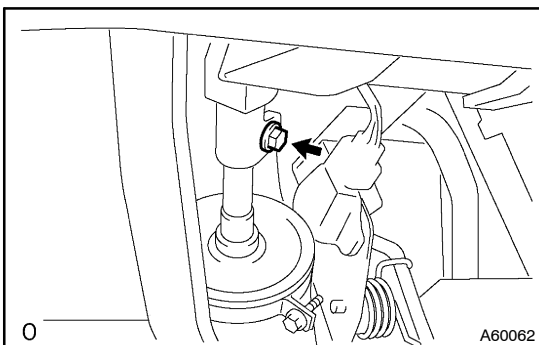
- (a) Set the engine assembly with transaxle on the engine lifter.
- (b) Install the engine assembly to the vehicle.
- (c) Install the frame side plate LH and RH with 4 bolts and 2 nuts.

**Torque:****Bolt A 85N·m (867 kgf·cm, 63 ft·lbf)****Bolt B, Nut 32 N·m (326 kgf·cm, 24 ft·lbf)**

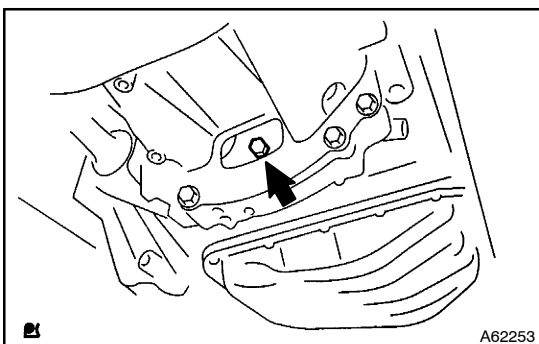
- (d) Install the front suspension member brace rear RH and LH with 4 bolts and 2 nuts.

**Torque:****Bolt C 85N·m (867 kgf·cm, 63 ft·lbf)****Bolt D, Nut 32 N·m (326 kgf·cm, 24 ft·lbf)****97. INSTALL STEERING INTERMEDIATE SHAFT SUB-ASSY**

- (a) Align the matchmarks on the intermediate shaft and control valve shaft.

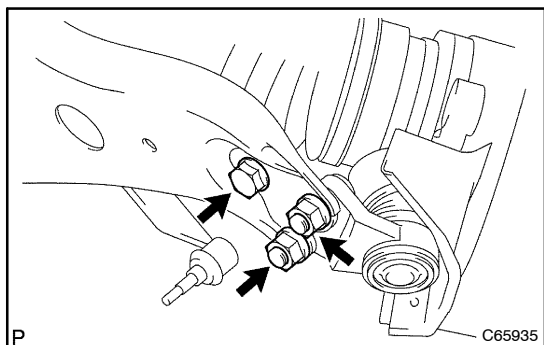
**Torque: 35 N·m (357 kgf·cm, 26 ft·lbf)**

- (b) Tighten the bolt.

**Torque: 35 N·m (357 kgf·cm, 26 ft·lbf)****98. INSTALL DRIVE PLATE & TORQUE CONVERTER CLUTCH SETTING BOLT**

- (a) Fix the crank shaft, and install the 6 set bolts.

**Torque: 41 N·m (418 kgf·cm, 30 ft·lbf)**



### 99. INSTALL FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH

- (a) Install the drive shaft to steering knuckle.
- (b) Install the suspension lower arm with the bolt and the 2 nuts.

**Torque: 127 N·m (1,296 kgf·cm, 94 ft·lbf)**

### 100. INSTALL FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 RH

#### HINT:

Perform the same procedure as above on the opposite side.

### 101. INSTALL TIE ROD ASSY LH

- (a) Connect the tie rod end to the steering knuckle and install a new castle nut.

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

#### NOTICE:

- Prevent any lubricant from the thread and the taper portions.
  - After tightening the castle nut, tighten it to the additional direction within 60° to put into a cotter pin.
- (b) Insert a new cotter pin.

### 102. INSTALL TIE ROD ASSY RH

#### HINT:

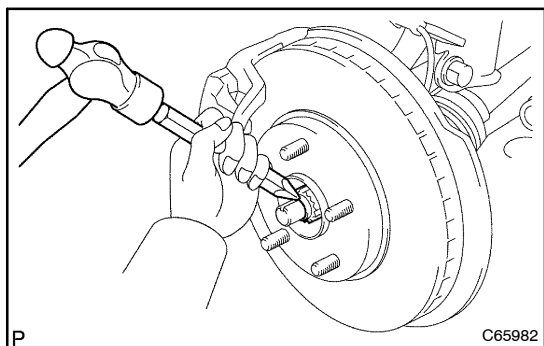
Perform the same procedure as above on the opposite side.

### 103. INSTALL SPEED SENSOR FRONT LH

**Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)**

### 104. INSTALL SPEED SENSOR FRONT RH

**Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)**



### 105. INSTALL FRONT AXLE HUB LH NUT

- (a) Using a 30 mm socket wrench, install a new hub nut.  
**Torque: 294 N·m (3,000 kgf·cm, 217 ft·lbf)**
- (b) Using a chisel, stake the hub nut.

### 106. INSTALL FRONT AXLE HUB RH NUT

#### HINT:

Perform the same procedure as above on the opposite side.

**107. INSTALL FRONT STABILIZER LINK ASSY LH**

(a) Install the nut by using a 51mm socket hexagon wrench to fix the stud bolt.

**Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)**

**108. INSTALL FRONT STABILIZER LINK ASSY RH**

HINT:

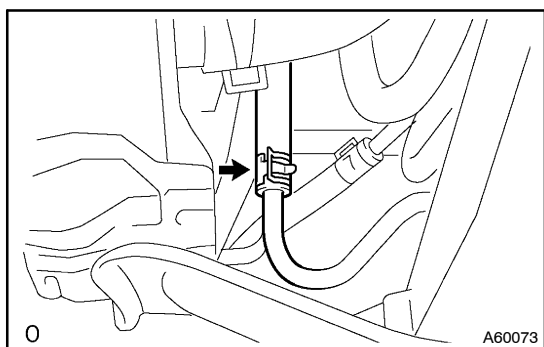
Perform the same procedure as above on the opposite side.

**109. INSTALL EXHAUST PIPE ASSY FRONT**

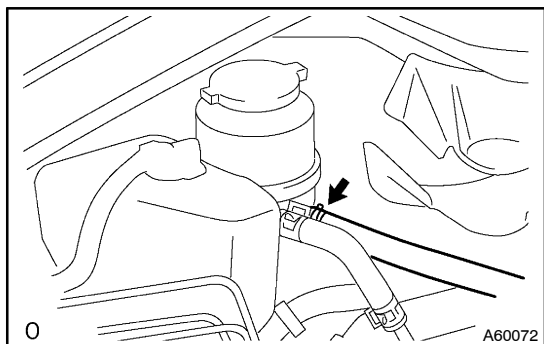
(See page 15-2)

**110. CONNECT FUEL TUBE SUB-ASSY**

(See page 11-1)

**111. INSTALL RETURN TUBE SUB-ASSY**

(a) Install the return tube.

**112. INSTALL OIL RESERVOIR TO PUMP HOSE NO.1**

(a) Install the hose No. 1.

**113. INSTALL COMPRESSOR AND MAGNETIC CLUTCH (See page 55-51)****114. INSTALL GENERATOR ASSY**

(See page 19-7)

**115. INSTALL FAN AND GENERATOR V-BELT**

(See page 14-5)

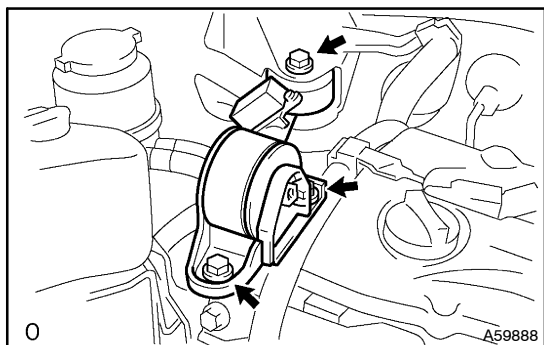
SST 09249-63010

**116. INSTALL ENGINE MOUNTING BRACKET NO.2 RH**

**Torque: 52 N·m (531 kgf·cm, 38 ft·lbf)**

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

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



# 118. INSTALL ENGINE MOVING CONTROL ROD W/BACKET

- (a) Install the engine mounting control rod w/bracket with 3 bolts.

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

# 119. INSTALL AIR CLEANER ASSY

**Torque:** 5.0 N·m (51 kgf·cm, 44 in. lbf)

# 120. ADD AUTOMATIC TRANSAXLE FLUID

# 121. ADD ENGINE OIL

# 122. ADD COOLANT (See page 16-6)

# 123. INSPECT OIL LEAK

# 124. CHECK ENGINE COOLANT LEAK (See page 16-6)

# 125. INSPECT FUEL LEAK (See page 11-1)

# 126. INSTALL FRONT WHEEL

**Torque:** 103 N·m (1,050 kgf·cm, 76 ft·lbf)

# 127. ADJUST FRONT WHEEL ALIGNMENT (See page 26-4)

# 128. INSPECT CHECK IDLE SPEED AND IGNITION TIMING (See page 14-1)

# 129. INSPECT CO/HC (See page 14-1)

# 130. CHECK ABS SPEED SENSOR SIGNAL (See page 05-451 or 05-511)