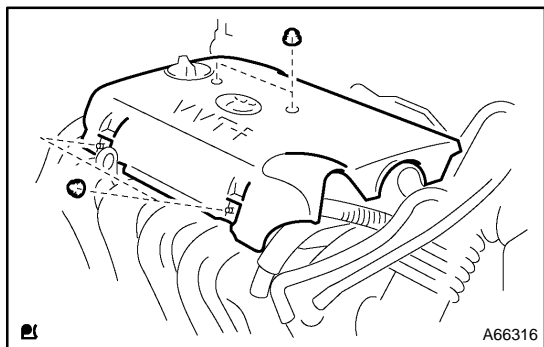


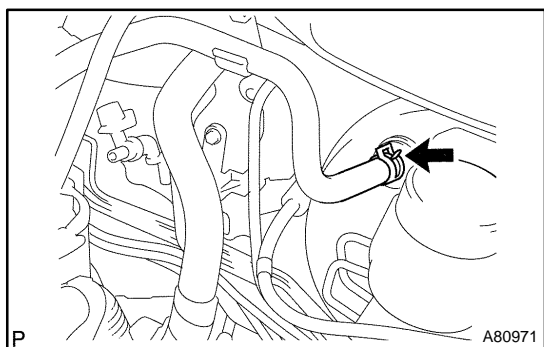
REPLACEMENT

1. DISCHARGE FUEL SYSTEM PRESSURE (See page 11-1)
2. REMOVE ENGINE UNDER COVER RH (See page 19-3)
3. REMOVE ENGINE UNDER COVER LH (See page 19-3)
4. DRAIN ENGINE COOLANT (See page 16-7)
5. REMOVE FRONT WHEELS
6. REMOVE RADIATOR GRILLE (See page 76-2)
7. REMOVE FRONT BUMPER COVER (See page 76-2)

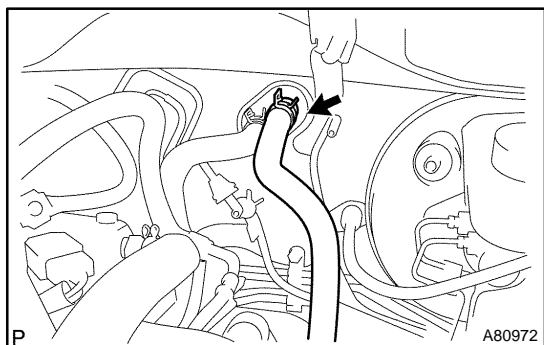


8. REMOVE CYLINDER HEAD COVER NO.2
 - (a) Remove the 4 nuts and cylinder head cover No.2.

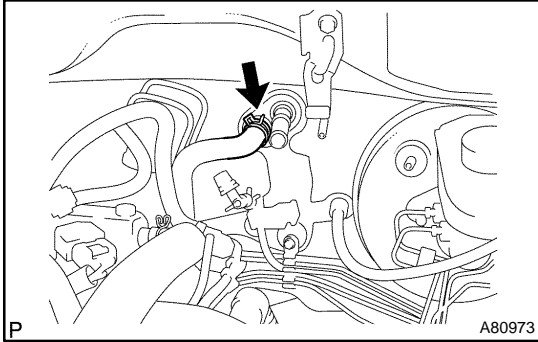
9. REMOVE BATTERY
10. REMOVE AIR CLEANER ASSY (See page 10-8)
11. DISCONNECT FUEL TUBE SUB-ASSY (See page 11-1)
SST 09268-21010
12. DISCONNECT ACCELERATOR CONTROL CABLE ASSY (See page 10-8)
13. REMOVE RADIATOR ASSY (See page 16-13)
14. DISCONNECT TRANSMISSION CONTROL CABLE ASSY (M/T TRANSAXLE) (See page 41-9)
15. DISCONNECT TRANSMISSION CONTROL CABLE ASSY (A/T TRANSAXLE) (See page 40-47)
16. SEPARATE CLUTCH RELEASE CYLINDER ASSY (M/T TRANSAXLE) (See page 42-14)



17. DISCONNECT UNION TO CHECK VALVE HOSE
 - (a) Disconnect the union to check valve hose from the brake booster.



18. DISCONNECT HEATER WATER INLET HOSE A
 - (a) Disconnect the heater water inlet hose from the air conditioner tube.



19. DISCONNECT HEATER WATER OUTLET HOSE A(FROM HEATER UNIT)

- (a) Disconnect the heater water outlet hose from the air conditioner tube.

20. DISCONNECT ENGINE WIRE

- (a) Remove the glove compartment door.
 (b) Disconnect the engine wire harness from the ECM and junction block.
 (c) Pull out the engine wire.
 (d) Disconnect the engine wire from the engine room junction block.
 (e) Remove the body ground.

21. REMOVE FAN AND GENERATOR V BELT (See page 14-5)

22. REMOVE A/C COMPRESSOR (See page 55-47)

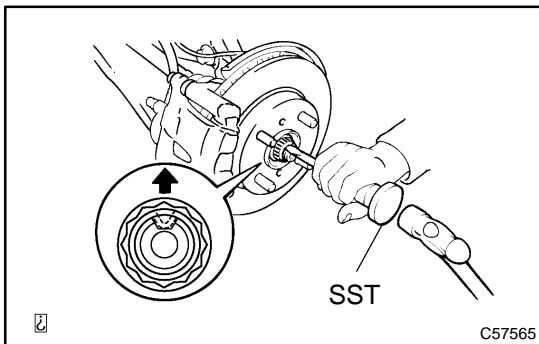
HINT:

Secure the hoses off to the side instead of detaching.

23. REMOVE FLOOR PANEL BRACE FRONT (See page 15-3)

24. REMOVE EXHAUST PIPE ASSY FRONT (See page 15-3)

25. SEPARATE SHAFT ASSY, STEERING INTERMEDIATE (See page 50-8)



26. REMOVE FRONT AXLE HUB LH NUT

- (a) Using SST and a hammer, unseat the lock nut.
 SST 09930-00010

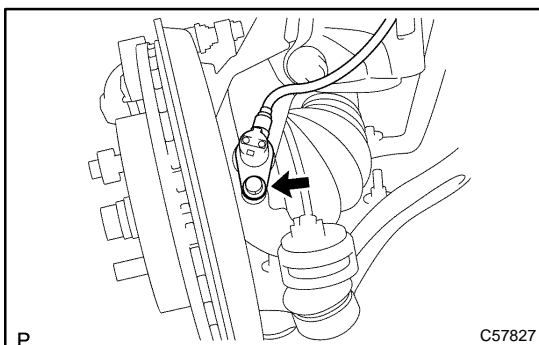
NOTICE:

- When removing the nut, unseat the lock nut completely.
- Do not damage the threads of the drive shaft.
- Do not use SST with the tip sharpened.
- Set SST to the groove with the flat face facing upward.

- (b) Using a 30 mm socket wrench, remove the lock nut.

HINT:

Perform the same procedure as above on the opposite side.

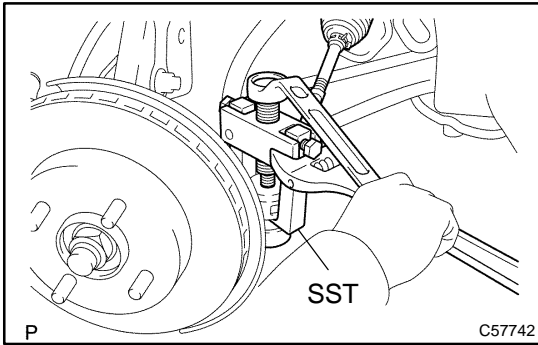


27. DISCONNECT SPEED SENSOR FRONT LH (W/ ABS)

- (a) Remove the bolt, disconnect the speed sensor from the steering knuckle.

HINT:

Perform the same procedure as above on the opposite side.

**28. SEPARATE TIE ROD END SUB-ASSY LH**

- (a) Using SST, disconnect the tie rod end from the steering knuckle.

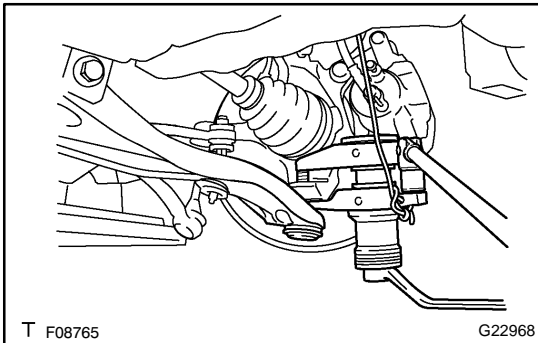
SST 09628-62011

NOTICE:

Do not damage the dust cover of the ball joint.

HINT:

Perform the same procedure as above on the opposite side.

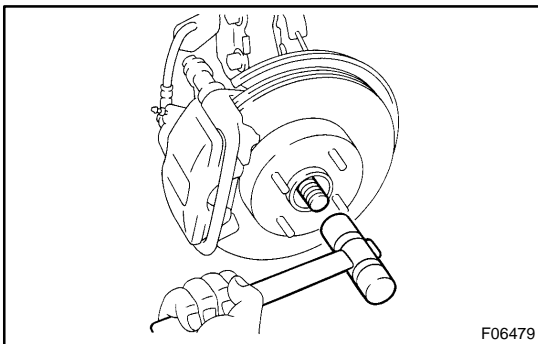
**29. SEPARATE FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH**

- (a) Using SST, disconnect the front suspension arm lower from the steering knuckle.

SST 09628-00011

HINT:

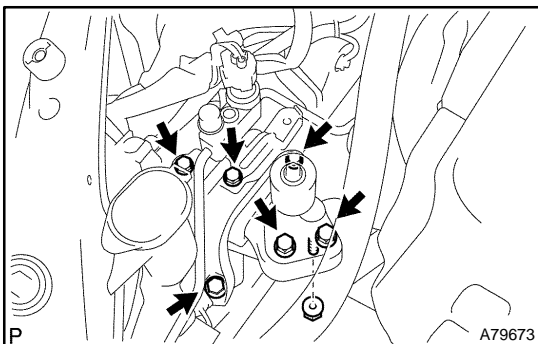
Perform the same procedure as above on the opposite side.

**30. SEPARATE FRONT DRIVE SHAFT ASSY LH**

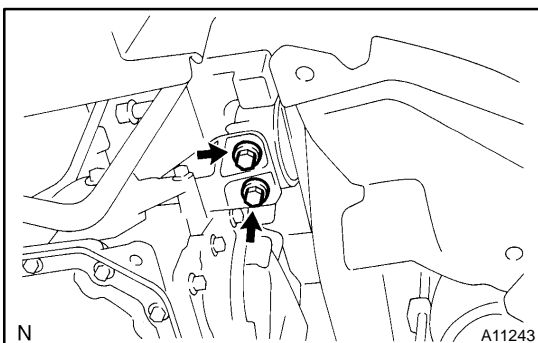
- (a) Using a plastic hammer, detach the drive shaft from the axle hub by tapping.

HINT:

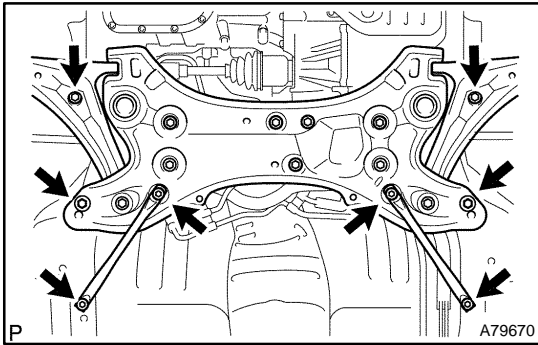
Perform the same procedure as above on the opposite side.

**31. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE**

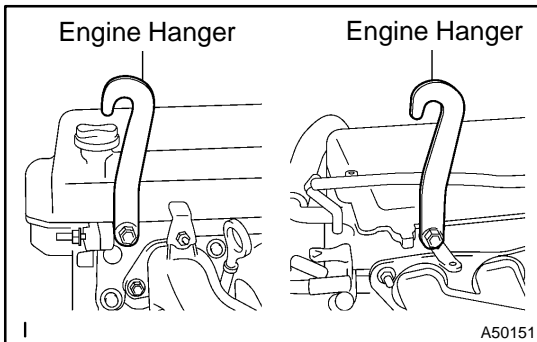
- (a) Set the engine lifter.
 (b) Remove the bolt which is used to fix the liquid tube to the engine mounting insulator RH.
 (c) Remove the 5 bolts and nut, and then remove the engine mounting insulator RH.



- (d) Remove the 2 bolts and detach the engine mounting bracket from the engine mounting insulator LH.



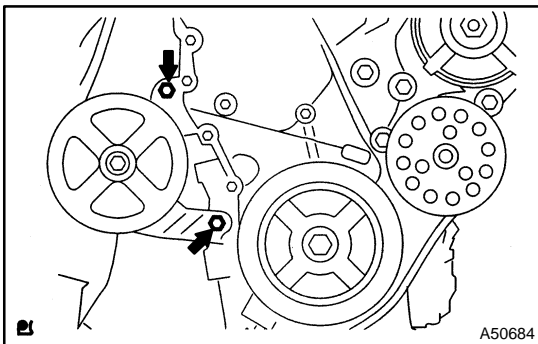
- (e) Remove the engine together with the transaxle.
- (1) Remove the 8 bolts shown in the illustration.
 - (2) Carefully remove the engine assembly from the vehicle.



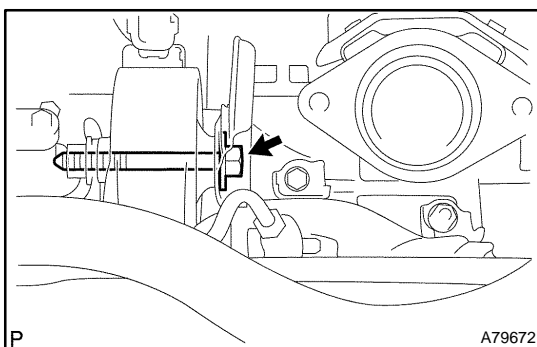
- (f) Remove the bolt and condenser.
 (g) Install the 2 engine hangers as shown in the illustration.

Parts No.:**No. 1 engine hanger 12281-21010****Bolt 91642-81025****Torque: 40 N·m (408 kgf·cm, 30 ft·lbf)**

- (h) Attach the engine sling and hang the engine with the chain block.

32. REMOVE VANE PUMP V BELT (See page 14-5)**33. REMOVE VANE PUMP ASSY**

- (a) Disconnect the power steering oil pressure sensor harness.
- (b) Remove the 2 bolts and vane pump assembly.

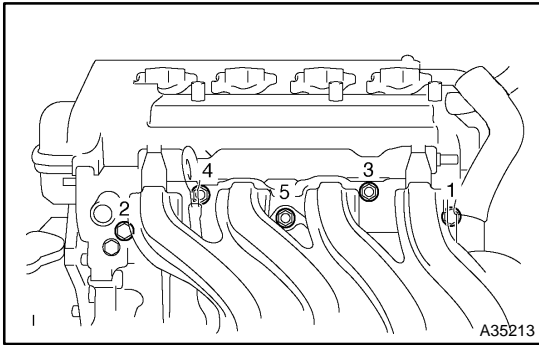
**34. REMOVE FRONT SUSPENSION CROSSMEMBER SUB-ASSY**

- (a) Remove the through bolt.
- (b) Separate the engine and transaxle assembly from the suspension crossmember.

35. REMOVE STARTER ASSY (See page 19-3)**36. REMOVE GENERATOR ASSY (See page 19-15)****37. REMOVE MANUAL TRANSAXLE ASSY (M/T TRANSAXLE) (See page 41-15)****38. REMOVE AUTOMATIC TRANSAXLE ASSY (A/T TRANSAXLE) (See page 40-9)****39. REMOVE CLUTCH COVER ASSY (M/T TRANSAXLE) (See page 42-17)****40. REMOVE CLUTCH DISC ASSY (M/T TRANSAXLE) (See page 42-17)****41. REMOVE DRIVE PLATE AND RING GEAR OR FLYWHEEL (See page 14-93)**

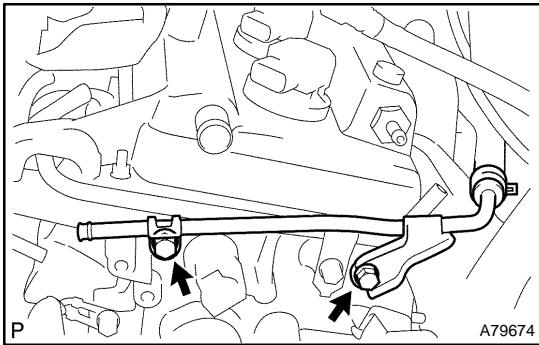
SST 09330-00021, 09213-58012 (91111-50845)

42. REMOVE VENTILATION HOSE**43. REMOVE VENTILATION HOSE NO.2**



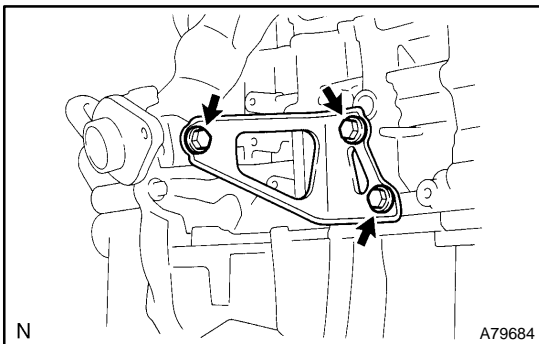
44. REMOVE INTAKE MANIFOLD

- (a) Using several steps, remove the 3 bolts and 2 nuts in the sequence shown in the illustration, then remove the intake manifold.
- (b) Remove the gasket from the intake manifold.



45. REMOVE BOOSTER VACUUM TUBE

- (a) Remove the 2 bolts and booster vacuum tube.

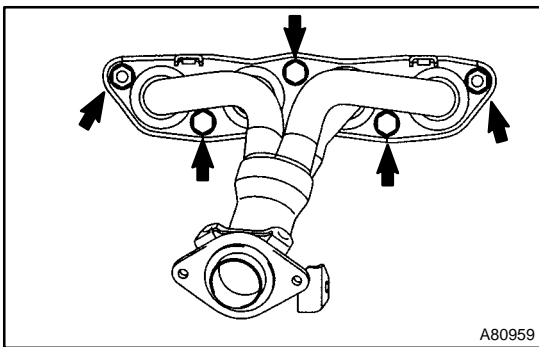


46. REMOVE MANIFOLD SUPPORT BRACKET

- (a) Remove the 3 bolts and manifold support bracket.

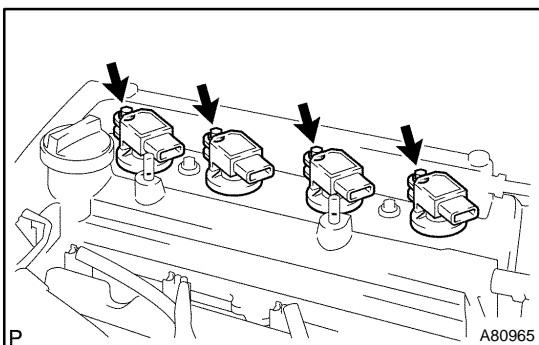
47. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1

- (a) Remove the 4 bolts and exhaust manifold heat insulator.



48. REMOVE EXHAUST MANIFOLD

- (a) Remove the 3 bolts and 2 nuts, and then remove the exhaust manifold.

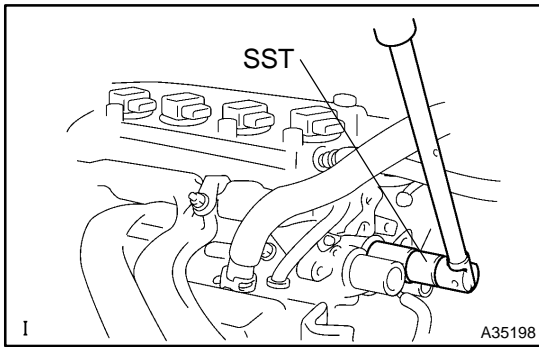


49. REMOVE IGNITION COIL NO.1

- (a) Remove the 4 bolts and pull out the 4 ignition coils.

50. REMOVE WATER BY-PASS PIPE NO.1

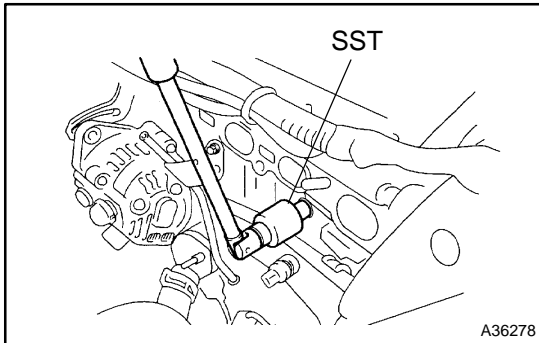
- (a) Remove the 2 nuts and 2 bolts and then remove the water by-pass pipe.



51. REMOVE ENGINE COOLANT TEMPERATURE SENSOR

- (a) Using SST, remove the engine coolant temperature sensor.

SST 09817-33190



52. REMOVE KNOCK SENSOR

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

SST 09816-30010

53. REMOVE ENGINE OIL PRESSURE SWITCH ASSY

- (a) Using SST, remove the oil pressure switch.

SST 09268-46021

54. REPLACE PARTIAL ENGINE ASSY

55. INSTALL ENGINE OIL PRESSURE SWITCH ASSY

- (a) Apply adhesive to 2 or 3 threads of the oil pressure switch.

Adhesive:

**Part No. 08833-00080, THREE BOND 1344,
LOCTITE 242 or equivalent**

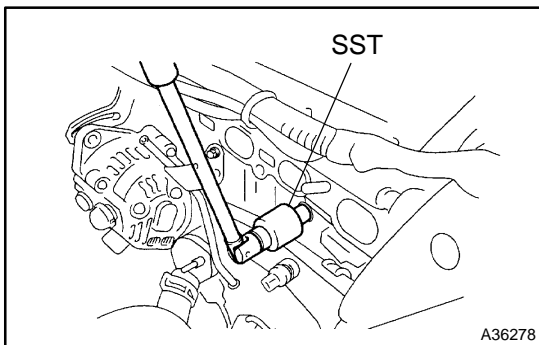
- (b) Using SST, install the oil pressure switch.

SST 09268-46021

Torque: 15 N·m (150 kgf·cm, 11 ft·lbf)

NOTICE:

Do not start the engine within 1 hour of installation.

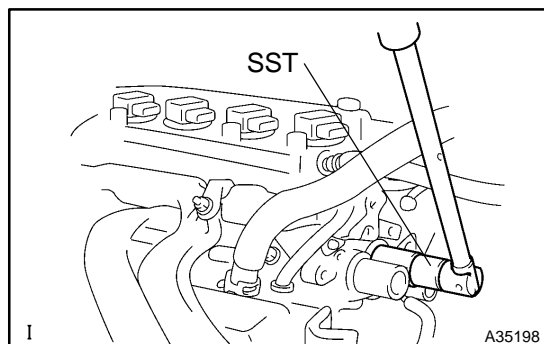


56. INSTALL KNOCK SENSOR

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

SST 09816-30010

Torque: 44 N·m (450 kgf·cm, 33 ft·lbf)



57. INSTALL ENGINE COOLANT TEMPERATURE SENSOR

- (a) Install a new gasket to the engine coolant temperature sensor.
- (b) Using SST, fix the engine coolant temperature sensor.
SST 09817-33190

Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

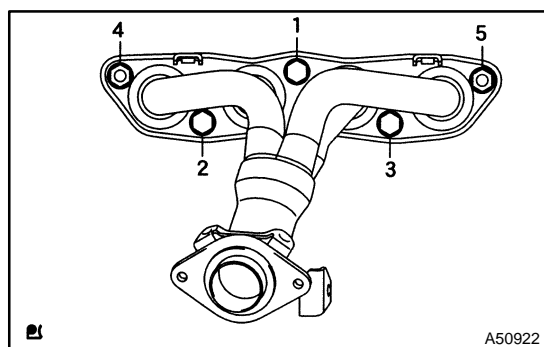
58. INSTALL WATER BY-PASS PIPE NO.1

- (a) Install a new gasket and the water by-pass pipe with the 2 bolts and 2 nuts.

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

59. INSTALL IGNITION COIL NO.1

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



60. INSTALL EXHAUST MANIFOLD

- (a) Using several steps, install a new exhaust manifold gasket and the exhaust manifold with the 3 bolts and 2 nuts in the sequence shown in the illustration.

Torque: 27 N·m (275 kgf·cm, 20 ft·lbf)

61. INSTALL EXHAUST MANIFOLD HEAT INSULATOR NO.1

- (a) Install the exhaust manifold heat insulator No.1 with the 4 bolts.

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

62. INSTALL MANIFOLD SUPPORT BRACKET

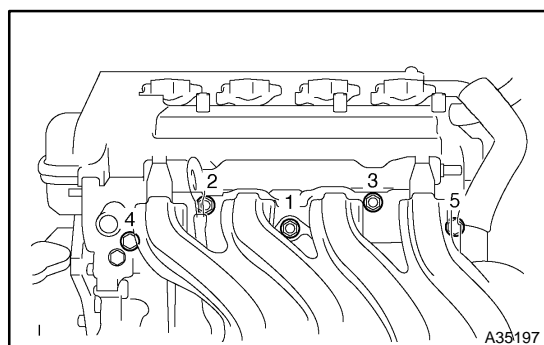
- (a) Install the manifold support bracket with the 3 bolts.

Torque: 37 N·m (377 kgf·cm, 27 ft·lbf)

63. INSTALL BOOSTER VACUUM TUBE

- (a) Install the booster vacuum tube with the 2 bolts.

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

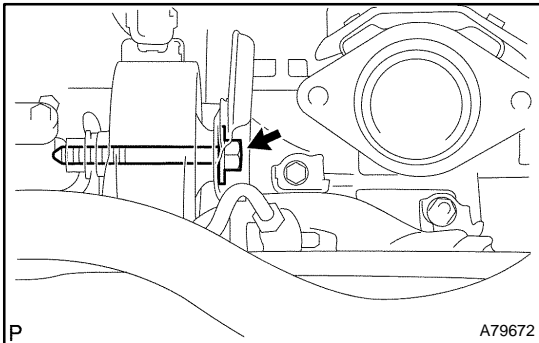


64. INSTALL INTAKE MANIFOLD

- (a) Install a new gasket to the intake manifold.
- (b) Install the intake manifold with the 3 bolts and 2 nuts. Using several steps, tighten the bolts and nuts uniformly in the sequence shown in the illustration.

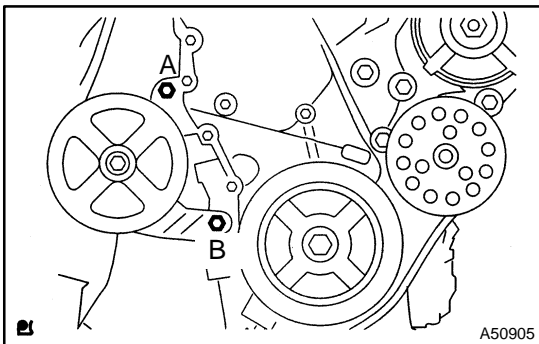
Torque: 30 N·m (306 kgf·cm, 22 ft·lbf)

65. **INSTALL DRIVE PLATE AND RING GEAR OR FLYWHEEL** (See page 14-93)
SST 09213-58012 (91111-50845), 09330-00021
66. **INSTALL CLUTCH DISC ASSY (M/T TRANSAXLE)** (See page 42-17)
67. **INSTALL CLUTCH COVER ASSY (M/T TRANSAXLE)** (See page 42-17)
68. **INSTALL MANUAL TRANSAXLE ASSY (M/T TRANSAXLE)** (See page 41-15)
69. **INSTALL AUTOMATIC TRANSAXLE ASSY (A/T TRANSAXLE)** (See page 40-9)
70. **INSTALL GENERATOR ASSY** (See page 19-15)
71. **INSTALL STARTER ASSY** (See page 19-3)



72. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSY

- (a) Fasten the bolt to secure the engine and transaxle assembly to the suspension crossmember.
Torque: 64 N·m (653 kgf·cm, 47 ft·lbf)



73. INSTALL VANE PUMP ASSY

- (a) Install the vane pump assembly with the 2 bolts.
Torque: 44 N·m (449 kgf·cm, 33 ft·lbf)

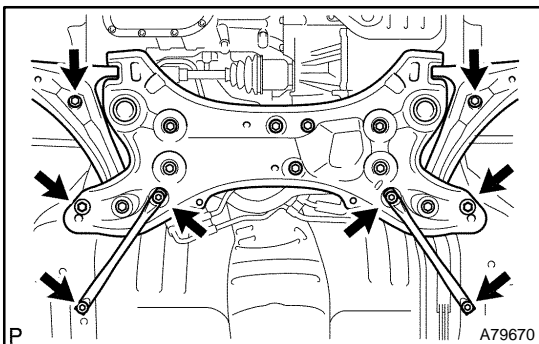
HINT:

After adjusting the V-ribbed belt, first tighten bolt A, then tighten bolt B.

74. INSTALL VANE PUMP V BELT

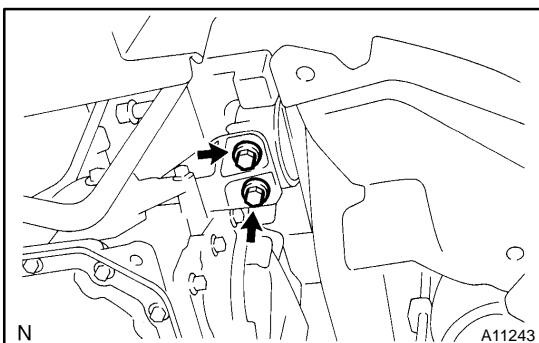
- (a) Temporarily install the V-ribbed belt on each pulley.

75. ADJUST VANE PUMP V BELT (See page 14-5)

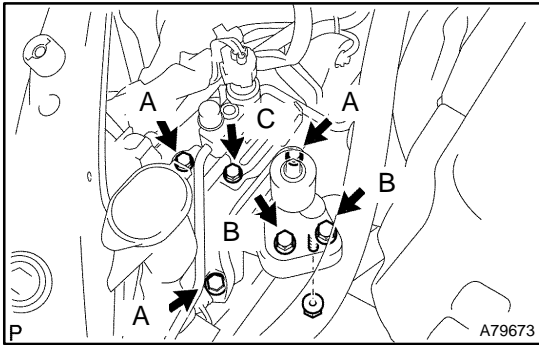


76. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE

- (a) Set the engine with the transaxle on the engine lifter.
(b) Install the engine with the transaxle to the engine compartment.
(c) Temporarily install the suspension crossmember with the 8 bolts.



- (d) Install the engine mounting bracket LH to the engine mounting insulator LH with the 2 bolts.
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)



- (e) Install the engine mounting insulator RH with the 5 bolts and nut.

Torque:

Bolt A 45 N·m (459 kgf·cm, 33 ft·lbf)

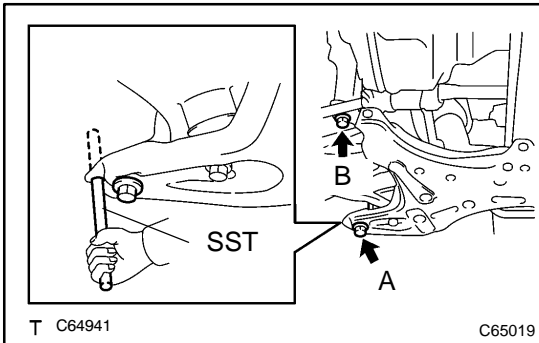
Bolt B 52 N·m (530 kgf·cm, 38 ft·lbf)

Nut 52 N·m (530 kgf·cm, 38 ft·lbf)

- (f) Install the liquid tube with the bolt.

Torque:

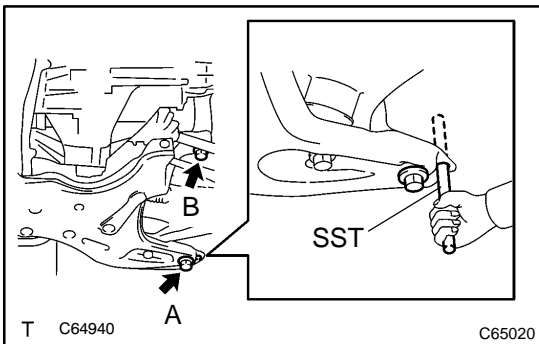
Bolt C 9.8 N·m (100 kgf·cm, 7.2 ft·lbf)



- (g) Insert SST to the positioning holes of the right hand cross-member and vehicle.

SST 09670-00010

- (h) Temporarily tighten bolt A, then tighten bolt B.



- (i) Insert SST to the positioning holes of the left-hand cross-member and vehicle.

SST 09670-00010

- (j) Temporarily tighten bolt A, then tighten bolt B.

- (k) Insert SST to the positioning holes of the right-hand crossmember and vehicle again, then tighten the bolts to the specified torque.

SST 09670-00010

Torque:

Bolt A 116 N·m (1,183 kgf·cm, 86 ft·lbf)

Bolt B 70 N·m (714 kgf·cm, 52 ft·lbf)

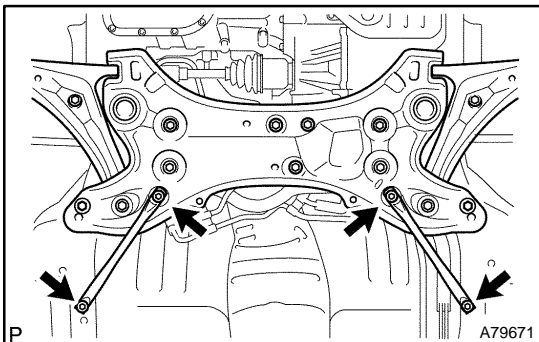
- (l) Insert SST to the positioning holes of the left-handle crossmember and vehicle again, then tighten the bolts to the specified torque.

SST 09670-00010

Torque:

Bolt A 116 N·m (1,183 kgf·cm, 86 ft·lbf)

Bolt B 70 N·m (714 kgf·cm, 52 ft·lbf)



- (m) Tighten the 4 bolts shown in the illustration.

Torque: 47 N·m (479 kgf·cm, 35 ft·lbf)

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

- (a) Install the front suspension arm lower to the steering knuckle with the nut.

Torque: 98 N·m (999 kgf·cm, 72 ft·lbf)

- (b) Install a new clip.

HINT:

Perform the same procedure as above on the opposite side.

78. INSTALL TIE ROD END SUB-ASSY LH

- (a) Connect the tie rod end to the steering knuckle with the nut.

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

- (b) Install a new cotter pin.

NOTICE:

- Be careful of the threads and tapered portions of the tie rod end not to make contact with oils.
- After tightening the castle nut, turn it clockwise within 60° to align the pin holes for the cotter pin.

HINT:

Perform the same procedure as above on the opposite side.

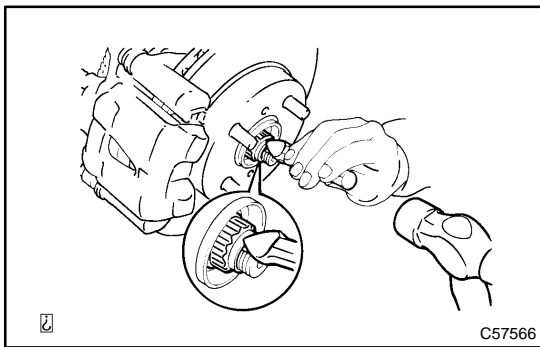
79. CONNECT SPEED SENSOR FRONT LH (W/ ABS)

- (a) Install the speed sensor with the bolt.

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

HINT:

Perform the same procedure as above on the opposite side.

**80. INSTALL FRONT AXLE HUB LH NUT**

- (a) Using a 30 mm socket wrench, install the new hub nut.

Torque: 216 N·m (2,203 kgf·cm, 160 ft·lbf)

- (b) Using a chisel, stake the hub nut.

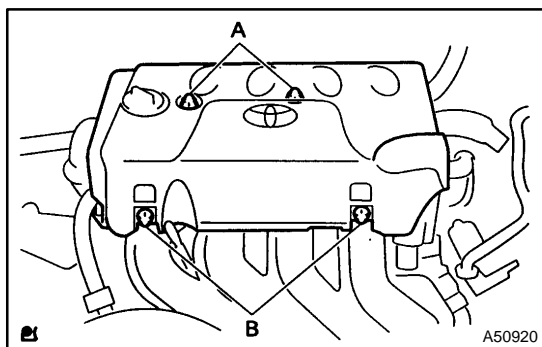
HINT:

Perform the same procedure as above on the opposite side.

81. INSTALL SHAFT ASSY, STEERING INTERMEDIATE (See page 50-8)**82. INSTALL EXHAUST PIPE ASSY FRONT (See page 15-3)****83. INSTALL FLOOR PANEL BRACE FRONT (See page 15-3)****84. INSTALL A/C COMPRESSOR (See page 55-47)****85. INSTALL FAN AND GENERATOR V BELT**

- (a) Temporarily install the V-ribbed belt on each pulley.

86. ADJUST FAN AND GENERATOR V BELT (See page 14-1)**87. INSTALL RADIATOR ASSY (See page 16-13)****88. CONNECT FUEL TUBE SUB-ASSY (See page 11-1)****89. INSTALL AIR CLEANER ASSY (See page 10-8)**



- 90. INSTALL CYLINDER HEAD COVER NO.2**
 (a) First tighten nut A, then tighten bolt B.
Torque: 7.0 N·m (71 kgf·cm, 62 in·lbf)

- 91. INSTALL FRONT BUMPER COVER (See page 76-2)**
92. INSTALL ENGINE UNDER COVER LH
 Torque:
 5.0 N·m (51 kgf·cm, 44 in·lbf) for Bolt
 5.0 N·m (51 kgf·cm, 44 in·lbf) for Nut
93. INSTALL ENGINE UNDER COVER RH
 Torque:
 5.0 N·m (51 kgf·cm, 44 in·lbf) for Bolt
 5.0 N·m (51 kgf·cm, 44 in·lbf) for Nut
94. ADD ENGINE OIL
95. ADD ENGINE COOLANT (See page 16-7)
96. CHECK FOR ENGINE OIL LEAKS
97. CHECK FOR ENGINE COOLANT LEAKS (See page 16-1)
98. CHECK FOR FUEL LEAKS
99. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT
100. CHECK IDLE SPEED AND IGNITION TIMING (See page 14-1)
101. INSPECT CO/HC (See page 14-1)
102. CHECK ABS SPEED SENSOR SIGNAL (W/ ABS)