

INSTALLATION

1. INSTALL HEATER INLET WATER HOSE

2. INSTALL RADIATOR HOSE INLET

3. INSTALL WATER BY-PASS HOSE NO.2

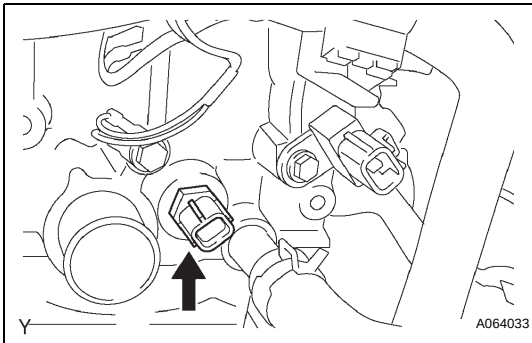
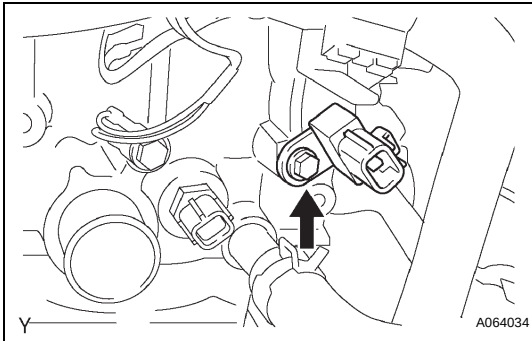
4. INSTALL RADIO SETTING CONDENSER

- (a) Install the condenser with the bolt.

Torque: 10 N*m (102 kgf*cm, 7 ft.*lbf)

5. INSTALL ENGINE COOLANT TEMPERATURE SENSOR

- (a) Install a new gasket onto the engine coolant temperature sensor.



- (b) Using SST, install the engine coolant temperature sensor.

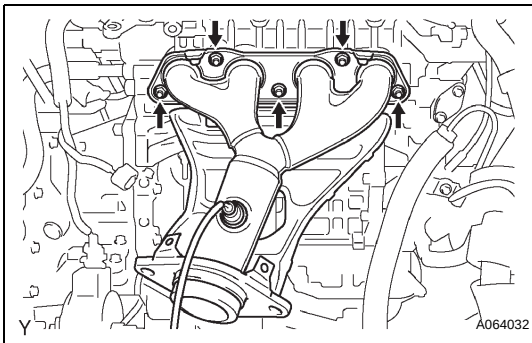
SST 09817-33190

Torque: 19.6 N*m (200 kgf*cm, 14 ft.*lbf)

6. INSTALL EXHAUST MANIFOLD

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

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

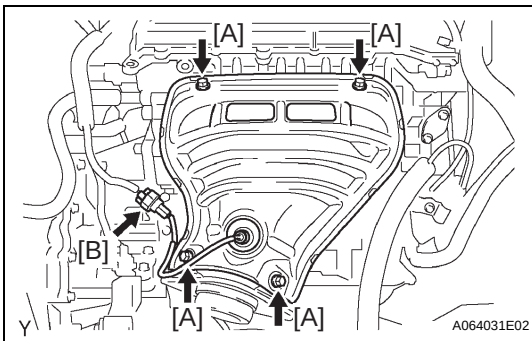


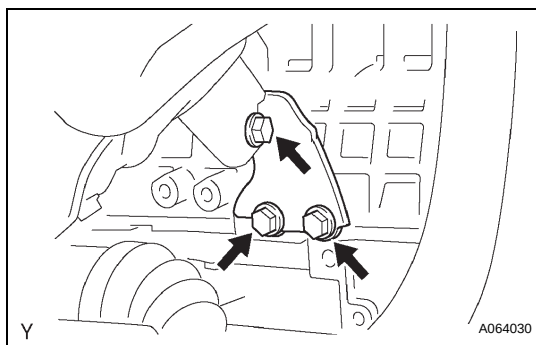
7. INSTALL EXHAUST MANIFOLD HEAT INSULATOR NO.1

- (a) Install the exhaust manifold heat insulator with the 4 bolts [A].

Torque: 18 N*m (184 kgf*cm, 13 ft.*lbf)

- (b) Connect the air fuel ratio sensor connector [B].

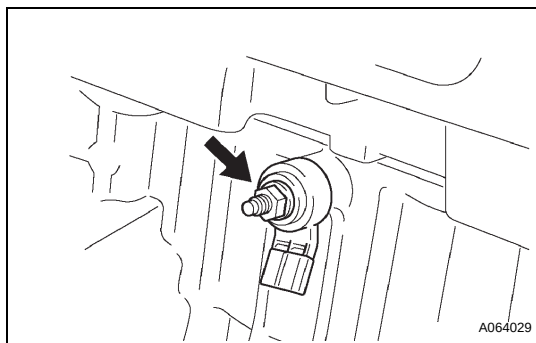


**8. INSTALL MANIFOLD STAY**

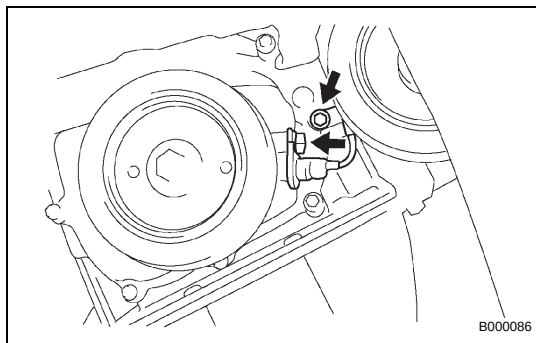
- (a) Install the manifold stay with 3 bolts.
Torque: 49 N*m (500 kgf*cm, 36 ft.*lbf)

9. INSTALL V-RIBBED BELT TENSIONER ASSEMBLY

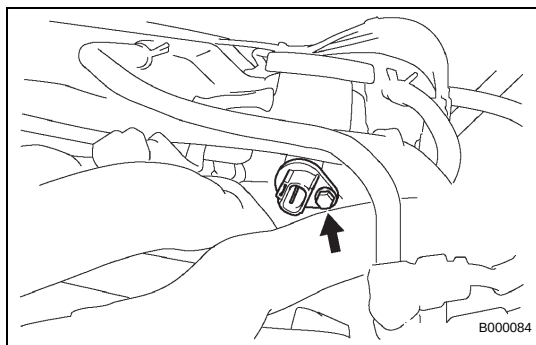
- (a) Install the V-ribbed belt tensioner assembly (See page [EM-20](#)).

**10. INSTALL KNOCK SENSOR**

- (a) Install the knock sensor with the nut.
Torque: 20 N*m (205 kgf*cm, 15 ft.*lbf)

**11. INSTALL CRANKSHAFT POSITION SENSOR**

- (a) Install the crankshaft position sensor with the 2 bolts.
Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)

**12. INSTALL CAMSHAFT POSITION SENSOR**

- (a) Install the camshaft position sensor with the bolt.
Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)

13. INSTALL ENGINE OIL PRESSURE SWITCH ASSEMBLY

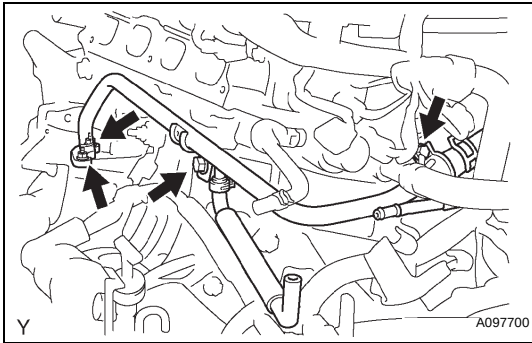
- (a) Install the engine oil pressure switch assembly (See page [LU-1](#)).

14. INSTALL THERMOSTAT

- (a) Install the thermostat (See page [CO-13](#)).

15. INSTALL WATER INLET

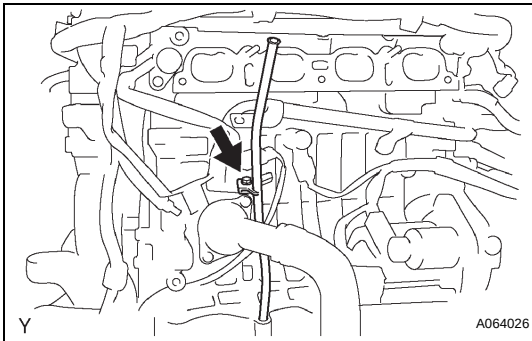
- (a) Install the water inlet (See page [CO-13](#)).

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

- (a) Install a new gasket and the water by-pass pipe No. 1 with the 2 nuts and 2 bolts.
Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)
- (b) Connect the knock sensor clamp.

17. INSTALL OIL LEVEL GAGE GUIDE

- (a) Apply a light coat of engine oil to a new O-ring and install it onto the oil level gage guide.



- (b) Install the oil level gage guide with the bolt.
Torque: 13 N*m (133 kgf*cm, 10 ft.*lbf)
- (c) Connect the crankshaft position sensor clamp.

18. INSTALL INTAKE MANIFOLD

- (a) Install the intake manifold (See page [EM-60](#)).

19. INSTALL OIL LEVEL GAGE SUB-ASSEMBLY**20. INSTALL FUEL DELIVERY PIPE SUB-ASSEMBLY**

- (a) Install the fuel delivery pipe sub-assembly (See page [FU-14](#)).

21. INSTALL IGNITION COIL ASSEMBLY

- (a) Install the ignition coil assembly (See page [EM-20](#)).

22. INSTALL FLYWHEEL SUB-ASSEMBLY (for Manual Transaxle)

- (a) Install the flywheel sub-assembly (See page [EM-72](#)).
SST 09960-10010 (09962-01000, 09963-01000)

23. INSTALL DRIVE PLATE & RING GEAR SUB-ASSEMBLY (for Automatic Transaxle)

- (a) Install the drive plate & ring gear sub-assembly (See page [EM-72](#)).
SST 09960-10010 (09962-01000, 09963-01000)

24. INSTALL CLUTCH DISC ASSEMBLY (for Manual Transaxle)

- (a) Install the clutch disc assembly (See page [CL-19](#)).
SST 09301-00210

25. INSTALL CLUTCH COVER ASSEMBLY (for Manual Transaxle)

- (a) Install the clutch cover assembly (See page [CL-19](#)).

26. INSTALL AUTOMATIC TRANSAXLE ASSEMBLY

- (a) Install the automatic transaxle assembly (See page [AX-130](#)).

27. INSTALL MANUAL TRANSAXLE ASSEMBLY (for Manual Transaxle)

- (a) Install the manual transaxle assembly (See page [MX-23](#)).

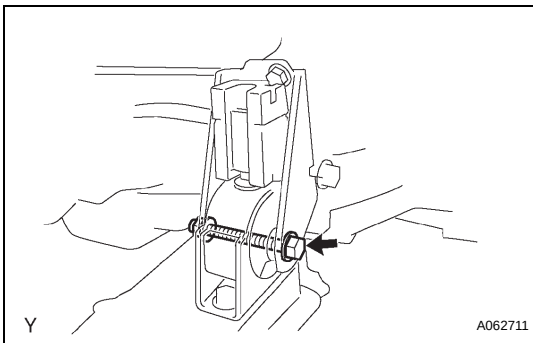
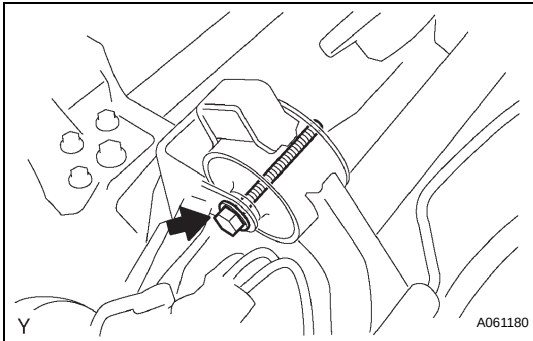
28. INSTALL STARTER ASSEMBLY

- (a) Install the starter assembly (See page [ST-14](#)).

29. INSTALL FRONT SUSPENSION CROSSMEMBER W/ CENTER MEMBER

- (a) Attach the engine and transaxle assembly to the suspension crossmember and engine mounting member.
- (b) Install the through bolt, which is used to secure the engine mounting insulator RR, into the engine mounting bracket RR.

Torque: 65 N*m (663 kgf*cm, 48 ft.*lbf)



- (c) Install the bolt, which is used to secure the engine mounting insulator FR, into the engine mounting bracket FR.

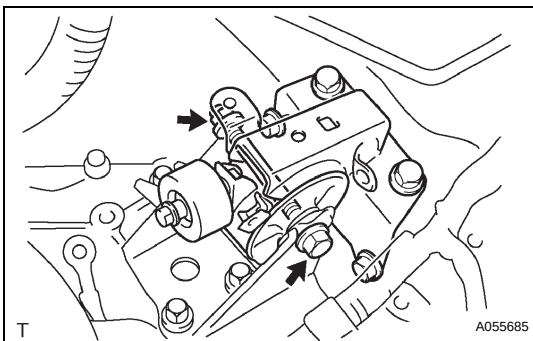
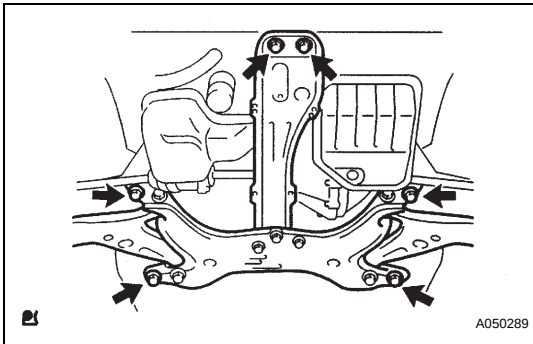
Torque: 52 N*m (530 kgf*cm, 38 ft.*lbf)

30. INSTALL VANE PUMP ASSEMBLY

- (a) Install the vane pump assembly (See page [PS-13](#)).

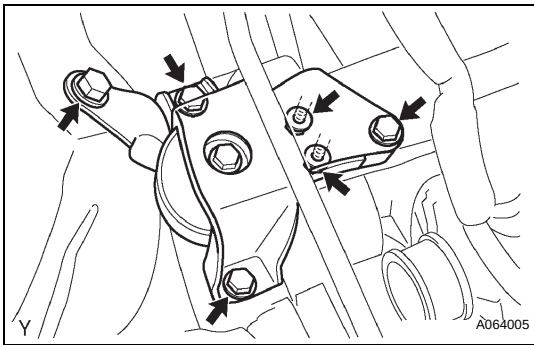
31. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE

- (a) Set the engine assembly with transaxle on the engine lifter.
- (b) Install the engine with transaxle onto the vehicle.
- (c) Temporarily install the suspension crossmember with the 6 bolts.



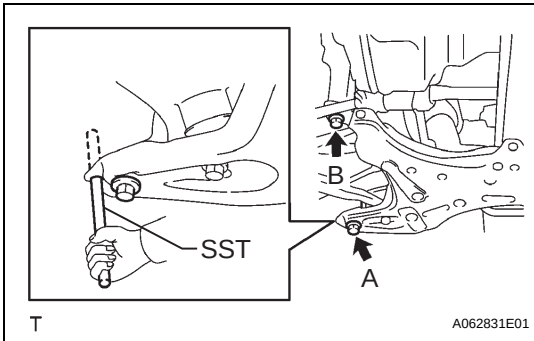
- (d) Install the engine mounting insulator LH with the through bolt and nut.

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



- (e) Install the engine mounting insulator RH with the 4 bolts and 2 nuts.

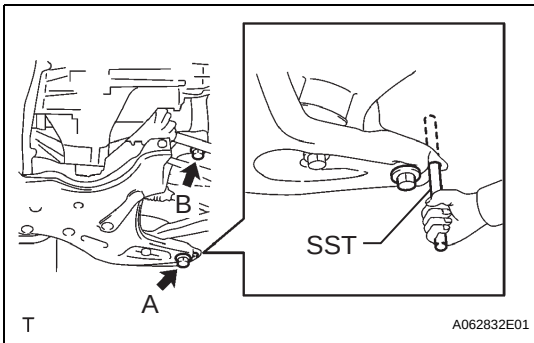
Torque: 52 N*m (530 kgf*cm, 38 ft.*lbf)



- (f) Insert SST into the positioning holes on the right handle crossmember and on the right-handle of the vehicle.

SST 09670-00010

- (g) Temporarily tighten the bolt A first, then bolt B.



- (h) Insert SST into the positioning holes on the left handle crossmember and on the left-handle of the vehicle.

SST 09670-00010

- (i) Temporarily tighten the bolt A first, then bolt B.
 (j) Insert SST into the positioning holes on the right-handle crossmember and right-handle of the vehicle, then tighten the bolts to the specified torque.
 (k) Insert SST into the positioning holes on the right-handle crossmember and left-handle of the vehicle, then tighten the bolts to the specified torque.

SST 09670-00010

Torque: Bolt A

157 N*m (1,601 kgf*cm, 116 ft.*lbf)

Bolt B

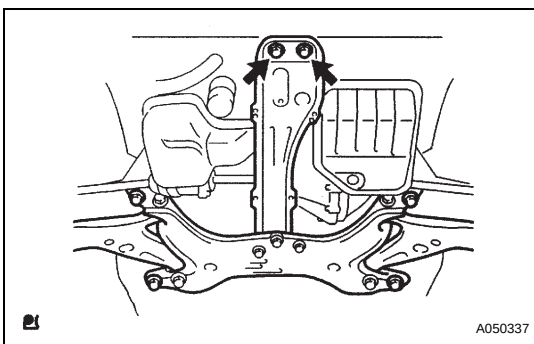
113 N*m (1,152 kgf*cm, 83 ft.*lbf)

- (l) Tighten the 2 bolts as shown in the illustration.

Torque: 60 N*m (612 kgf*cm, 44 ft.*lbf)

NOTICE:

When installing the crossmember, check that the positioning holes on the crossmember and vehicle are aligned with each other.



32. INSTALL FRONT AXLE ASSEMBLY LH

- (a) Install the front axle assembly LH (See page [DS-12](#)).

33. INSTALL FRONT AXLE ASSEMBLY RH

HINT:

Perform the same procedure as above on the opposite side.

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34. INSTALL FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 LH

- (a) Install the front suspension arm sub-assembly lower No. 1 LH (See page [DS-12](#)).

35. INSTALL FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 RH

HINT:

Perform the same procedure as above on the opposite side.

36. INSTALL TIE ROD END SUB-ASSEMBLY LH

- (a) Install the tie rod end sub-assembly LH (See page [DS-12](#)).

37. INSTALL TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as above on the opposite side.

38. INSTALL SPEED SENSOR FRONT LH (w/ ABS)

- (a) Install the speed sensor front LH (See page [DS-12](#)).

39. INSTALL SPEED SENSOR FRONT RH (w/ ABS)

HINT:

Perform the same procedure as above on the opposite side.

40. INSTALL FRONT STABILIZER LINK ASSEMBLY LH

- (a) Install the front stabilizer link assembly LH (See page [DS-12](#)).

41. INSTALL FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as above on the opposite side.

42. INSTALL FRONT AXLE HUB LH NUT

- (a) Install the front axle hub LH nut (See page [DS-12](#)).

43. INSTALL FRONT AXLE HUB RH NUT

HINT:

Perform the same procedure as above on the opposite side.

44. INSTALL STEERING INTERMEDIATE SHAFT

- (a) Install the steering intermediate shaft (See page [SR-10](#)).

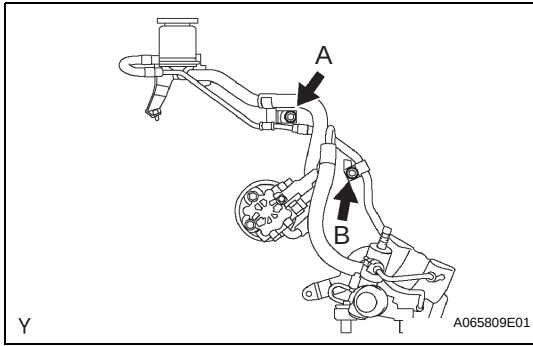
45. INSTALL COLUMN HOLE COVER SILENCER SHEET**46. INSTALL EXHAUST PIPE ASSEMBLY FRONT**

- (a) Install the exhaust pipe assembly front (See page [EX-3](#)).

47. INSTALL FLOOR PANEL BRACE FRONT

- (a) Install the floor panel brace front (See page [EX-3](#)).

48. CONNECT ENGINE WIRE**49. INSTALL COWL SIDE TRIM BOARD RH****50. INSTALL FRONT DOOR SCUFF PLATE RH**

**51. INSTALL GLOVE COMPARTMENT DOOR ASSEMBLY****52. INSTALL RETURN TUBE SUB-ASSEMBLY**

- (a) Install the return tube with the 2 bolts.

Torque: Bolt A

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

Bolt B

7.8 N*m (80 kgf*cm, 69 in.*lbf)

- (b) Install the vane pump oil reservoir onto the oil reservoir bracket.

53. INSTALL COMPRESSOR AND MAGNETIC CLUTCH (w/ Air Conditioning System)

- (a) Install the compressor and magnetic clutch (See page [AC-36](#)).

54. INSTALL GENERATOR ASSEMBLY

- (a) Install the generator assembly (See page [CH-14](#)).

55. INSTALL FAN AND GENERATOR V BELT**56. INSTALL CLUTCH RELEASE CYLINDER ASSEMBLY (for Manual Transaxle)**

- (a) Install the clutch release cylinder assembly (See page [MX-23](#)).

57. INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY (for Automatic Transaxle)

- (a) Install the transmission control cable assembly (See page [AX-130](#)).

58. INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY (for Manual Transaxle)

- (a) Install the transmission control cable assembly (See page [MX-23](#)).

59. CONNECT HEATER OUTLET WATER HOSE**60. CONNECT HEATER INLET WATER HOSE****61. CONNECT UNION TO CHECK VALVE HOSE****62. CONNECT FUEL TUBE SUB-ASSEMBLY**

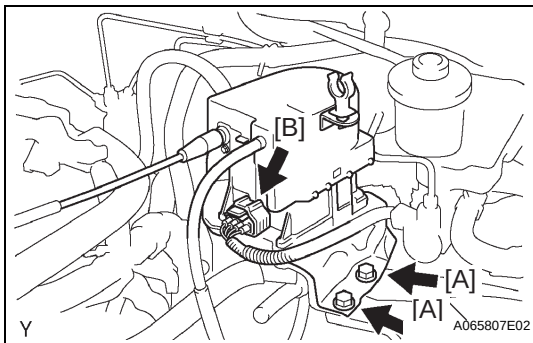
- (a) Connect the fuel tube sub-assembly (See page [FU-14](#)).

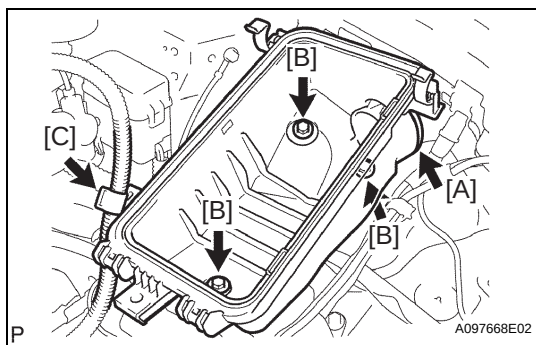
63. INSTALL CRUISE CONTROL ACTUATOR ASSEMBLY (w/ Cruise Control)

- (a) Install the actuator with the 2 bolts [A].

Torque: 6.0 N*m (61 kgf*cm, 53 in.*lbf)

- (b) Connect the actuator connector [B].

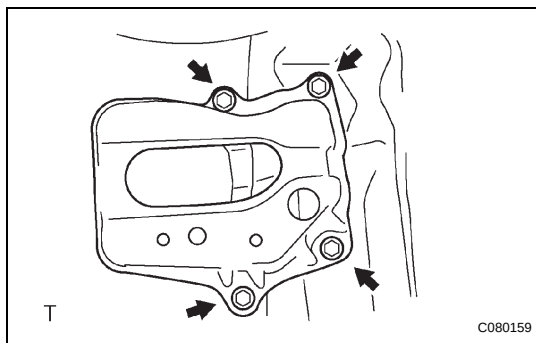


**64. INSTALL AIR CLEANER CASE SUB-ASSEMBLY**

- (a) Connect the air cleaner case to the air cleaner inlet No. 1 [A].
- (b) Install the air cleaner case with the 3 bolts [B].
Torque: 7.0 N*m (71 kgf*cm, 62 in.*lbf)
- (c) Connect the clamp [C] of the engine wire.

65. INSTALL AIR CLEANER CAP SUB-ASSEMBLY

- (a) Install the air cleaner cap sub-assembly (See page [ES-398](#)).

**66. INSTALL BATTERY CARRIER**

- (a) Install the battery carrier and bracket with the 4 bolts.
Torque: 12.8 N*m (131 kgf*cm, 9 ft.*lbf)

67. INSTALL BATTERY TRAY**68. INSTALL BATTERY**

Torque: Bolt

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

Nut

3.5 N*m (36 kgf*cm, 31 in.*lbf)

Terminal

5.4 N*m (55 kgf*cm, 48 in.*lbf)

69. INSTALL RADIATOR ASSEMBLY (w/ Air Conditioning System)

- (a) Install the radiator assembly (See page [CO-17](#)).

70. CONNECT OIL COOLER OUTLET HOSE NO.1 (for Automatic Transaxle)**71. CONNECT OIL COOLER INLET HOSE NO.1 (for Automatic Transaxle)****72. CONNECT RADIATOR HOSE OUTLET****73. CONNECT RADIATOR HOSE INLET****74. INSTALL FRONT WHEELS**

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

75. ADD ENGINE COOLANT

- (a) Add the engine coolant (See page [CO-5](#)).

76. CONNECT BATTERY NEGATIVE TERMINAL

Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)

77. INSPECT FOR ENGINE COOLANT LEAK

- (a) Check for the engine coolant leakage (See page [CO-1](#)).

78. INSPECT FOR ENGINE OIL LEAK**79. INSPECT FOR FUEL LEAK****80. INSPECT FOR EXHAUST GAS LEAK****81. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT**

- (a) Inspect and adjust the front wheel alignment (See page [SP-4](#)).

- 82. CHECK ABS SPEED SENSOR SIGNAL (w/ ABS)**
 - (a) Check the ABS speed sensor signal (See page [BC-1](#)).
- 83. INSPECT IGNITION TIMING**
 - (a) Inspect the ignition timing (See page [EM-1](#)).
SST 09843-18040
- 84. INSPECT ENGINE IDLING SPEED**
 - (a) Inspect the engine idling speed (See page [EM-1](#)).
- 85. INSPECT CO/HC**
 - (a) Inspect the CO/HC (See page [EM-1](#)).
- 86. INSTALL CYLINDER HEAD COVER NO.2**
 - (a) Install the cylinder head cover No. 2 (See page [EM-20](#)).
- 87. INSTALL ENGINE UNDER COVER LH**
- 88. INSTALL ENGINE UNDER COVER RH**