140R2-01

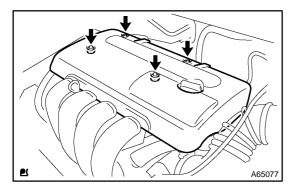
REPLACEMENT

- 1. WORK FOR PREVENTING GASOLINE FROM SPILLING OUT (See page 11–1)
- 2. REMOVE FRONT WHEELS
- 3. REMOVE ENGINE UNDER COVER RH
- 4. REMOVE ENGINE UNDER COVER LH
- 5. DRAIN COOLANT (See page 16-6)
- 6. DRAIN AUTOMATIC TRANSAXLE FLUID (4WD DRIVE TYPE)
- (a) Using a 10 mm 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·lbf)

- 7. DRAIN TRANSFER OIL (4WD DRIVE TYPE)
- (a) Install a new gasket and the drain plug.

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

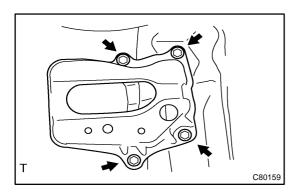


8. REMOVE CYLINDER HEAD COVER NO.2

(a) Remove the 2 nuts, 2 clips and cylinder head cover.

9. DISCONNECT RADIATOR HOSE INLET

- (a) Disconnect the radiator hose inlet from the radiator.
- 10. SEPARATE RADIATOR HOSE OUTLET
- (a) Disconnect the radiator hose outlet from the radiator.
- 11. DISCONNECT OIL COOLER INLET TUBE NO.1 (A/T TRANSAXLE)
- (a) Disconnect the oil cooler inlet tube from the radiator.
- 12. DISCONNECT OIL COOLER OUTLET TUBE NO.1 (A/T TRANSAXLE)
- (a) Disconnect the oil cooler outlet tube from the radiator.
- 13. REMOVE RADIATOR SUPPORT UPPER (W/ AIR CONDITIONER)
- (a) Remove the 2 bolts and 2 radiator support upper.
- 14. REMOVE RADIATOR ASSY (W/ AIR CONDITIONER)
- (a) Disconnect the connector and harness clamp, and remove the radiator.
- 15. REMOVE BATTERY



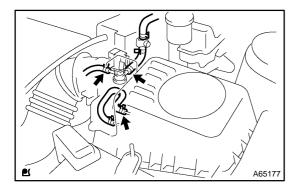
16. REMOVE BATTERY CARRIER

(a) Remove the 4 bolts and battery carrier.

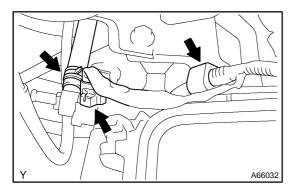
2003 COROLLA MATRIX 218W (RM940U)

17. REMOVE AIR CLEANER ASSEMBLY WITH HOSE

- (a) Separate an intake air flow meter connector.
- (b) Separate the VSV connector.

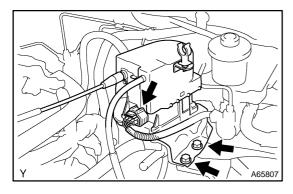


- (c) Disconnect 3 vacuum hoses, as shown in the illustration.
- (d) Loosen an air cleaner hose clump and separate an air cleaner hose.
- (e) Remove the air cleaner cap.
- (f) Remove the air filter.



- (g) Disconnect the wireharnnes clamp, connector and hose.
- (h) Remove the 3 bolts and the air cleaner case.

- 18. REMOVE EFI FUEL PIPE CLAMP (See page 11-10)
- 19. DISCONNECT FUEL TUBE SUB-ASSY (See page 11-10)
- 20. SEPARATE ACCELERATOR CONTROL CABLE ASSY
- (a) Loosen the nut, and remove the accelerator control cable.



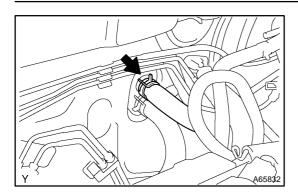
21. REMOVE CRUISE CONTROL ACTUATOR ASSY (W/ CRUISE CONTROL)

- (a) Disconnect the actuator connector.
- (b) Remove the 2 bolts, and disconnect the actuator from the body.

22. DISCONNECT UNION TO CONNECTOR TUBE HOSE

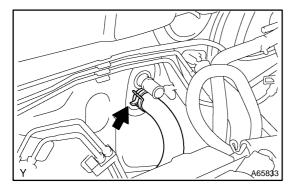
(a) Disconnect the union to connector tube hose from the brake booster.

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23. DISCONNECT HEATER INLET WATER HOSE

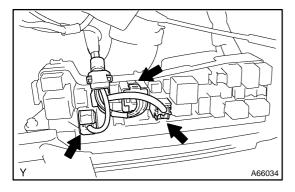
(a) Disconnect the heater inlet water hose from the air conditioner tube.



24. DISCONNECT HEATER OUTLET WATER HOSE

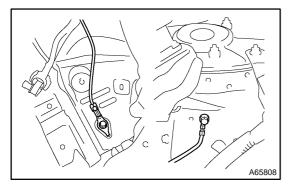
(a) Disconnect the heater outlet water hose from the air conditioner tube.

- 25. SEPARATE FLOOR SHIFT CABLE TRANSMISSION CONTROL SELECT (M/T TRANSAXLE) (See page 41–17)
- 26. SEPARATE FLOOR SHIFT CABLE TRANSMISSION CONTROL SHIFT (M/T TRANSAXLE) (See page 41–17)
- 27. SEPARATE FLOOR SHIFT CABLE TRANSMISSION CONTROL SHIFT (A/T TRANSAXLE) (See page 40–90)
- 28. SEPARATE CLUTCH RELEASE CYLINDER ASSY (M/T TRANSAXLE) (See page 41–17)
- 29. REMOVE GLOVE COMPARTMENT DOOR ASSY (See page 71–10)



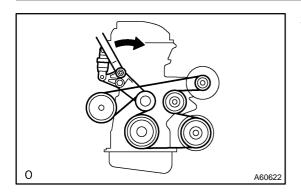
30. DISCONNECT ENGINE WIRE

- (a) Remove the engine room relay block cover.
- (b) Disconnect the 3 engine wire connectors from the engine room relay block.



- (c) Disconnect the 2 ground cables from the vehicle.
- (d) Disconnect the engine wire from the engine ECM and junction block.
- (e) Pull out the engine wire from the cabin.

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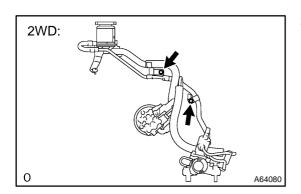
31. REMOVE FAN AND GENERATOR V BELT

(a) Turn the V-ribbed belt tensioner slowly clockwise and loosen it. Then, remove the fan and generator V belt and put back the V-ribbed belt tensioner little by little and fix it quietly.

32. SEPARATE COMPRESSOR AND MAGNETIC CLUTCH (W/ AIR CONDITIONER) (See page 55-40)

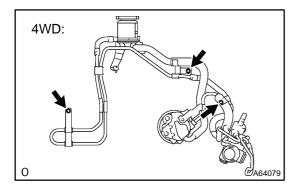
HINT:

Hung up the hoses instead of detaching.



33. SEPARATE RETURN TUBE SUB-ASSY

- (a) Disconnect the vane pump oil reservoir from the oil reservoir bracket.
- (b) 2WD
 - (1) Remove the 2 bolts installing the return tube.



- (c) 4WD
 - (1) Remove the 3 bolts installing the return tube.

- 34. REMOVE FRONT DOOR SCUFF PLATE RH (See page 76-17)
- 35. REMOVE COWL SIDE TRIM BOARD RH (See page 71-10)
- 36. REMOVE REAR DOOR SCUFF PLATE RH (4WD DRIVE TYPE) (See page 76-17)
- 37. REMOVE CENTER PILLAR GARNISH LOWER RH (4WD DRIVE TYPE) (See page 76-17)
- 38. REMOVE FRONT SEAT ASSY RH (4WD DRIVE TYPE) (See page 72-2)
- 39. REMOVE COLUMN HOLE COVER SILENCER SHEET
- (a) Remove the 2 clips and column hole cover silencer sheet.
- 40. SEPARATE STEERING INTERMEDIATE SHAFT (See page 51-22)
- 41. REMOVE FLOOR PANEL BRACE FRONT (2WD DRIVE TYPE)
- (a) Remove the 2 nuts and floor panel brace front.
- 42. REMOVE EXHAUST PIPE ASSY CENTER (4WD DRIVE TYPE) (See page 11–51)
- 43. REMOVE PROPELLER W/CENTER BEARING SHAFT ASSY (4WD DRIVE TYPE) (See page 30–6)
- 44. REMOVE EXHAUST PIPE ASSY FRONT (See page 15-4)

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45. REMOVE FRONT AXLE HUB LH NUT (See page 30-15)

SST 09930-00010

46. REMOVE FRONT AXLE HUB RH NUT

SST 09930-00010

HINT:

Perform the same procedure as above on the opposite side.

47. SEPARATE TIE ROD END SUB-ASSY LH (See page 30-15)

SST 09628-62011

48. SEPARATE TIE ROD END SUB-ASSY RH

SST 09628-62011

HINT:

Perform the same procedure as above on the opposite side.

49. SEPARATE FRONT STABILIZER LINK ASSY LH (See page 51-22)

50. SEPARATE FRONT STABILIZER LINK ASSY RH

HINT:

Perform the same procedure as above on the opposite side.

51. SEPARATE FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH (See page 30-15)

52. SEPARATE FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 RH

HINT:

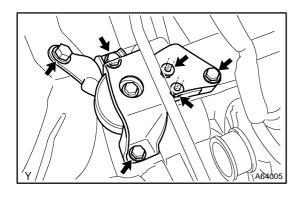
Perform the same procedure as above on the opposite side.

53. SEPARATE FRONT AXLE ASSY LH (See page 30–15)

54. SEPARATE FRONT AXLE ASSY RH

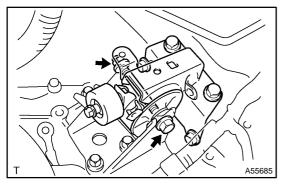
HINT:

Perform the same procedure as above on the opposite side.



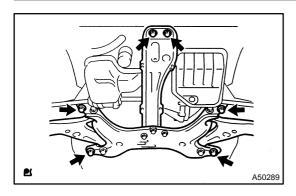
55. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE

- (a) Set the engine lifter.
- (b) Remove the 4 bolts, 2 nuts and engine mounting insulator.

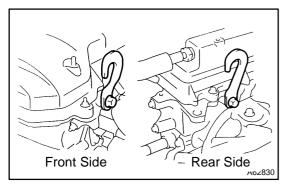


(c) Remove the through bolt and nut, detach the engine mounting insulator from the vehicle.

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- (d) Remove the 6 bolts, as shown in the illustration.
- (e) Carefully, remove the engine with transaxle from the vehicle.



(f) Install the 2 engine hangers with the 2 bolts.

Part No.:

No. 1 engine hanger 12281–15040 No. 2 engine hanger 12281–22021 Bolt 91512–B1016

Torque: 38 N·m (387 kgf·cm, 28 ft·lbf)

HINT:

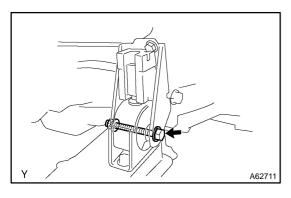
Be sure to install engine hanger (12281–22021) to the front side of the engine and engine hanger (12281–15040) to the rear side.

(g) Using the chain block and engine sling device, hang the engine assembly.

56. SEPARATE VANE PUMP ASSY (See page 51–8) NOTICE:

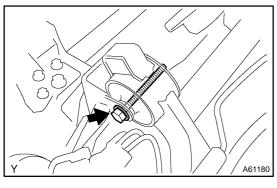
Do not disconnect the hose.

57. REMOVE RACK & PINION POWER STEERING GEAR ASSY (4WD DRIVE TYPE) (See page 51-8)



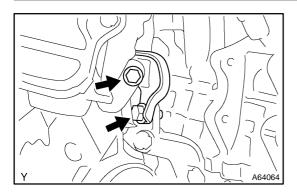
58. REMOVE FRONT SUSPENSION CROSSMENBER W/CENTER MENBER

(a) Remove the through bolt and a nut, detach the engine mounting insulator FR from the engine mounting bracket.



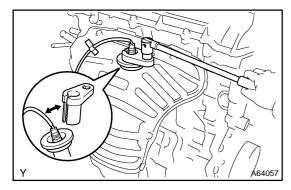
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- (b) Remove the through bolt, detach the engine mounting insulator RR from the suspension crossmember.
- (c) Separate the engine and transaxle assembly from the suspension crossmember and engine mounting member.



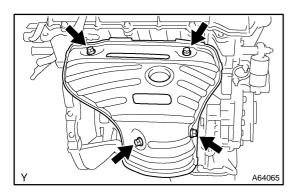
59. REMOVE MANIFOLD STAY (4WD DRIVE TYPE)

(a) Remove the 2 bolt and manifold stay.



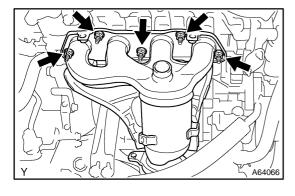
60. REMOVE OXYGEN SENSOR (4WD DRIVE TYPE)

(a) Using SST, remove the oxygen sensor. SST 09224–00010



61. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1 (4WD DRIVE TYPE)

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



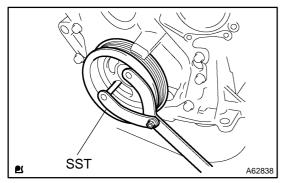
62. REMOVE EXHAUST MANIFOLD (4WD DRIVE TYPE)

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

- 63. REMOVE STARTER ASSY (See page 19–3)
- 64. REMOVE MANUAL TRANSAXLE ASSY (M/T TRANSAXLE) (See page 41–17)
- 65. REMOVE FRONT DRIVE SHAFT ASSY RH (4WD DRIVE TYPE) (See page 31-11)
- 66. TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (4WD DRIVE TYPE) (See page 31-11)
- 67. REMOVE TRANSFER STIFFENER PLATE CENTER (4WD DRIVE TYPE) (See page 31–11)
- 68. REMOVE TRANSFER STIFFENER PLATE RH (4WD DRIVE TYPE) (See page 31-11)
- 69. REMOVE TRANSFER ASSY (4WD DRIVE TYPE) (See page 31–11)
- 70. REMOVE AUTOMATIC TRANSAXLE ASSY (A/T TRANSAXLE, 2WD DRIVE TYPE) (See page 40–12)

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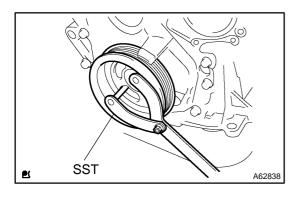
- 71. REMOVE AUTOMATIC TRANSAXLE ASSY (A/T TRANSAXLE, 4WD DRIVE TYPE) (See page 40–36)
- 72. REMOVE CLUTCH COVER ASSY (M/T TRANSAXLE) (See page 42-18)
- 73. REMOVE CLUTCH DISC ASSY (M/T TRANSAXLE) (See page 42–18)



74. REMOVE FLYWHEEL SUB-ASSY (M/T TRANSAXLE)

(a) Fix the crankshaft with SST, then remove the 8 bolts and flywheel.

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

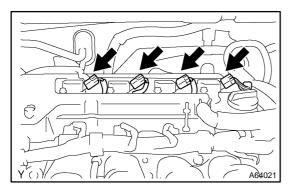


75. REMOVE DRIVE PLATE & RING GEAR SUB-ASSY (A/T TRANSAXLE)

(a) Fix the crankshaft with SST, then remove the 8 bolts and drive plate & ring gear.

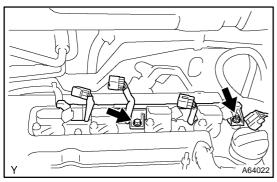
SST 09960-10010 (09962-01000, 09963-01000)

76. REMOVE GENERATOR ASSY (See page 19–15)



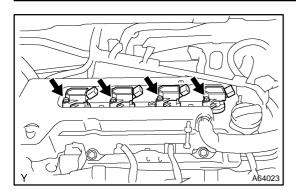
77. REMOVE IGNITION COIL ASSY

(a) Disconnect the 4 ignition coil connectors.



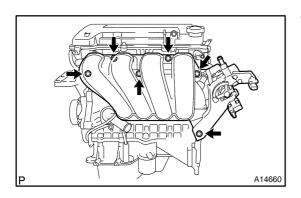
(b) Remove the bolt and nut installing the engine wire.

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(c) Remove the 4 bolts and 4 ignition coils.

78. REMOVE FUEL DELIVERY PIPE SUB-ASSY (See page 11-10)

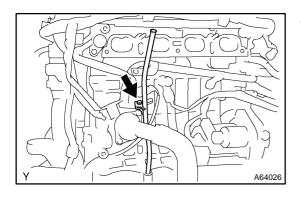


79. REMOVE INTAKE MANIFOLD

- (a) Disconnect the 2 water hoses from the throttle body.
- (b) Disconnect the 2 vacuum hoses from the intake manifold.
- (c) Remove the 4 bolts, 2 nut, 2 wire brackets, the intake manifold and throttle body assembly.
- (d) Remove the gasket from the intake manifold and throttle body assembly.

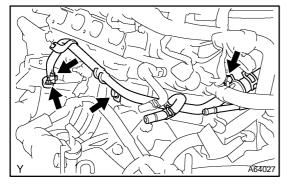
80. REMOVE OIL LEVEL GAGE SUB-ASSY

(a) Remove the oil level gage guide from the oil level gage guide.



81. REMOVE OIL LEVEL GAGE GUIDE

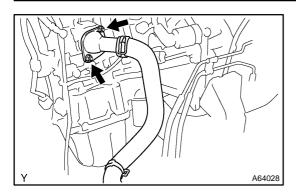
(a) Remove the bolt and oil level gage guide.



82. REMOVE WATER BY-PASS PIPE NO.1

(a) Remove the 2 bolts, 2 nuts, water by–pass pipe and gasket.

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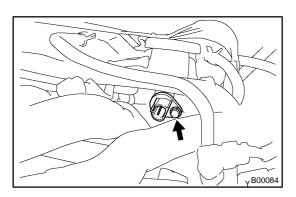
83. REMOVE WATER INLET

(a) Remove the 2 nuts and water inlet.

84. REMOVE THERMOSTAT

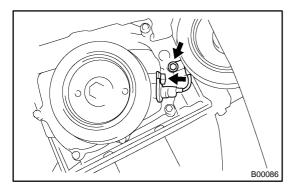
85. REMOVE ENGINE OIL PRESSURE SWITCH ASSY (See page 17-1)

SST 09268-46021



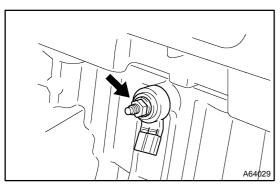
86. REMOVE CRANK POSITION SENSOR NO.1

(a) Remove the bolt and cam position sensor.



87. REMOVE CRANK POSITION SENSOR

(a) Remove the 2 bolts and crank position sensor.

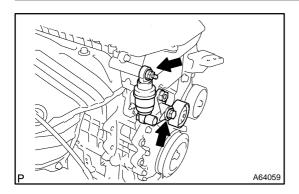


88. REMOVE KNOCK CONTROL SENSOR

(a) Remove the nut and knock control sensor.

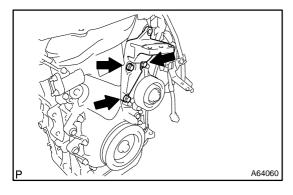
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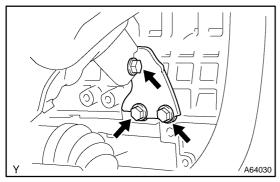
89. REMOVE V-RIBBED BELT TENSIONER ASSY

(a) Remove the bolts, nut and V-ribbed belt tensioner.



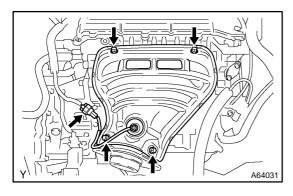
90. REMOVE TRANSVERSE ENGINE ENGINE MOUNTING BRACKET

(a) Remove the 3 bolts and transverse engine mounting bracket.



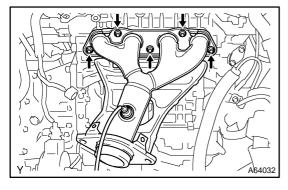
91. REMOVE MANIFOLD STAY (2WD DRIVE TYPE)

(a) Remove the 3 bolts and manifold stay.



92. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1 (2WD DRIVE TYPE)

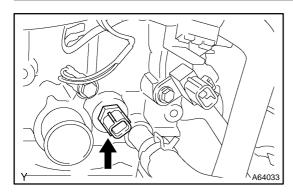
(a) Remove the 4 bolts and exhaust manifold heat insulator.



93. REMOVE EXHAUST MANIFOLD (2WD DRIVE TYPE)

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

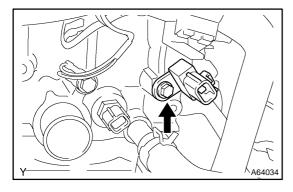
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94. REMOVE E.F.I. ENGINE COOLANT TEMPERATURE SENSOR

(a) Using SST, remove the E.F.I. engine coolant temperature sensor.

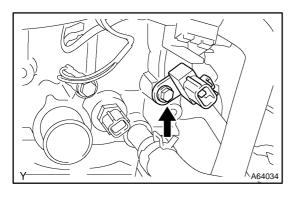
SST 09817-33190



95. REMOVE RADIO SETTING CONDENSER

(a) Remove the bolt and condenser.

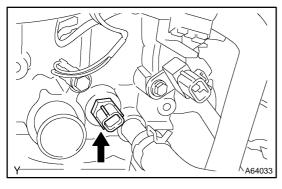
- 96. REMOVE WATER BY-PASS HOSE NO.2
- 97. REMOVE RADIATOR HOSE INLET
- 98. REMOVE HEATER INLET WATER HOSE
- 99. REPLACE ENGINE ASSY, PARTIAL



100. INSTALL RADIO SETTING CONDENSER

(a) Install the condenser with the bolt.

Torque: 10 N·m (102 kgf·cm, 7 ft·lbf)



101. INSTALL E.F.I. ENGINE COOLANT TEMPERATURE SENSOR

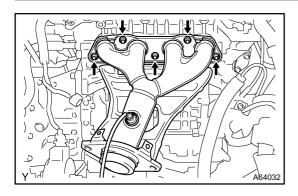
- (a) Install a new gasket to the E.F.I. engine coolant temperature sensor.
- (b) Using SST, install the E.F.I. engine coolant temperature sensor.

SST 09817-33190

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

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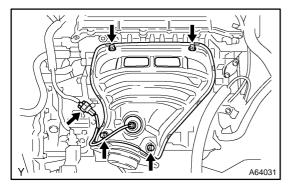
218W (RM940U)



102. INSTALL EXHAUST MANIFOLD (2WD DRIVE TYPE)

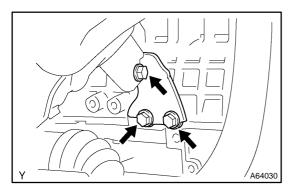
Install a new gasket and the exhaust manifold with the 5

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



103. INSTALL EXHAUST MANIFOLD HEAT INSULATOR **NO.1 (2WD DRIVE TYPE)**

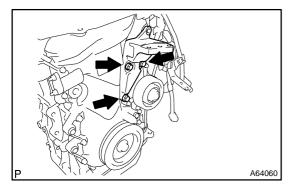
Install the exhaust manifold heat insulator with the 4 bolts. (a) Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)



104. INSTALL MANIFOLD STAY (2WD DRIVE TYPE)

Install the manifold stay with the 3 bolts.

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



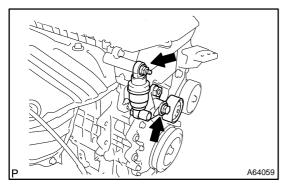
105. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING **BRACKET**

Install the transverse engine mounting bracket with the 3 (a)

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

106. INSTALL V-RIBBED BELT TENSIONER ASSY

Install the V-ribbed belt tensioner with the bolt and nut.



Nut 29 N·m (296 kgf·cm, 21 ft·lbf)

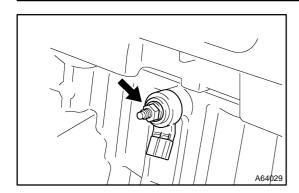
(a)

Torque:

Bolt 69 N·m (704 kgf·cm, 51 ft·lbf)

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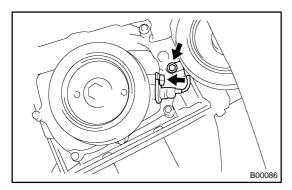
> **Author:** 1307 Date:



107. INSTALL KNOCK CONTROL SENSOR

(a) Install the knock control sensor with the nut.

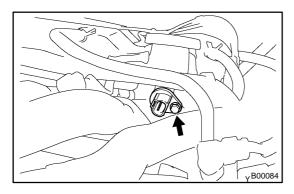
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)



108. INSTALL CRANK POSITION SENSOR

(a) Install the crank position sensor with the 2 bolts.

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



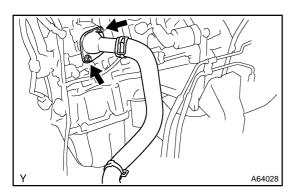
109. INSTALL CRANK POSITION SENSOR NO.1

(a) Install the cam position sensor with the bolts. Torque: 9.0 N·m (92 kgf·cm, 80 in.·lbf)

110. INSTALL ENGINE OIL PRESSURE SWITCH ASSY (See page 17–1)
Adhesive: Part No.08833 – 00080, THREE BOND 1344.

SST 09268–46021

111. INSTALL THERMOSTAT (See page 16-13)



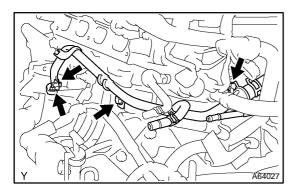
112. INSTALL WATER INLET

(a) Install the water inlet with the 2 nuts.

Torque: 11 N·m (112 kgf·cm, 8 ft·lbf)

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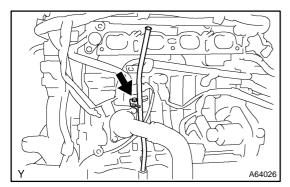
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113. INSTALL WATER BY-PASS PIPE NO.1

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

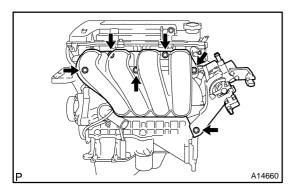
Torque: 9.0 N·m (92 kgf·cm, 80 in. lbf)



114. INSTALL OIL LEVEL GAGE GUIDE

- (a) Apply a light coat of a new O-ring and install it to 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)



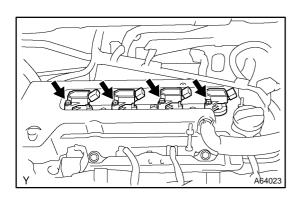
115. INSTALL INTAKE MANIFOLD

- (a) Install a new gasket to the intake manifold.
- (b) Install the intake manifold and throttle body assembly with the 2 brackets, 4 bolts and 2 nuts. Uniformly tighten the bolts and nuts in several passes.

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

- (c) Connect the 2 vacuum hoses to the intake manifold.
- (d) Connect the 2 water hoses to the throttle body.

116. INSTALL FUEL DELIVERY PIPE SUB-ASSY (See page 11-10)



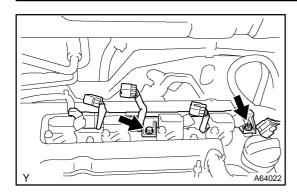
117. INSTALL IGNITION COIL ASSY

(a) Install the 4 ignition coils with the 4 bolts.

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

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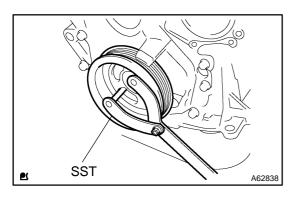
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(b) Install the engine wire with the bolt and nut.

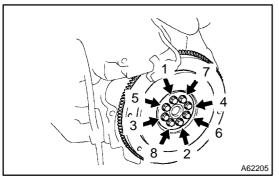
Torque: 9.0 N·m (92 kgf·cm, 80 in. lbf)

118. INSTALL GENERATOR ASSY (See page 19–15)



119. INSTALL FLYWHEEL SUB-ASSY (M/T TRANSAXLE)

(a) Fix the crankshaft with SST. SST 09960-10010 (09962-01000, 09963-01000)



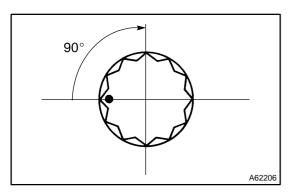
- (b) Clean the bolt and bolt hole.
- (c) Apply adhesive to the bolts.

Adhesive:

Part No. 09330-00070, THREE BOND or equivalent.

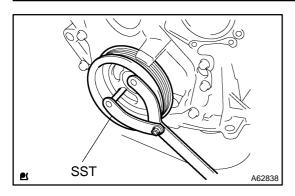
(d) Install and uniformly tighten the 8 bolts, in several passes, in the sequence shown.

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



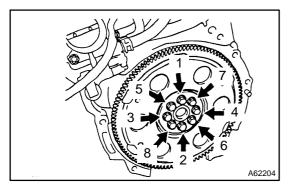
- (e) Mark the bolts with paint.
- (f) Retighten the bolts by an additional 90°.
- (g) Check that the point marked bolts are moved at 90° angle.

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120. INSTALL DRIVE PLATE & RING GEAR SUB-ASSY (A/T TRANSAXLE)

(a) Fix the crankshaft with SST. SST 09960–10010 (09962–01000, 09963–01000)



- (b) Clean the bolt and bolt hole.
- (c) Apply adhesive to the bolts.

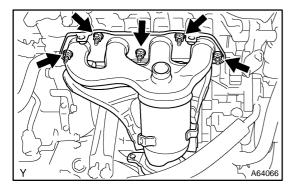
Adhesive:

Part No. 09330-00070, THREE BOND or equivalent.

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

Torque: 88 N·m (897 kgf·cm, 65 ft·lbf)

- 121. INSTALL CLUTCH DISC ASSY (M/T TRANSAXLE) (See page 42–18)
 SST 09301–00210
- 122. INSTALL CLUTCH COVER ASSY (M/T TRANSAXLE) (See page 42–18) SST 09301–00210
- 123. INSTALL MANUAL TRANSAXLE ASSY (M/T TRANSAXLE) (See page 41-17)
- 124. INSTALL AUTOMATIC TRANSAXLE ASSY (A/T TRANSAXLE, 2WD DRIVE TYPE) (See page 40–12)
- 125. INSTALL AUTOMATIC TRANSAXLE ASSY (A/T TRANSAXLE, 4WD DRIVE TYPE) (See page 40–36)
- 126. INSTALL TRANSFER ASSY (4WD DRIVE TYPE) (See page 31–11)
- 127. INSTALL TRANSFER STIFFENER PLATE RH (4WD DRIVE TYPE) (See page 31-11)
- 128. INSTALL TRANSFER STIFFENER PLATE CENTER (4WD DRIVE TYPE) (See page 31-11)
- 129. INSTALL TRANSVERSE ENGINE ENGINE MOUNTING BRACKET (4WD DRIVE TYPE) (See page 31–11)
- 130. INSTALL FRONT DRIVE SHAFT ASSY RH (4WD DRIVE TYPE) (See page 31-11)
- 131. INSTALL STARTER ASSY (See page 19-3)

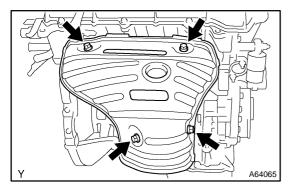


132. INSTALL EXHAUST MANIFOLD (4WD DRIVE TYPE)

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

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

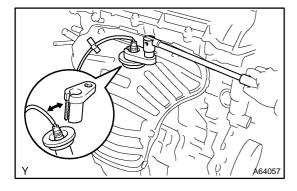
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133. INSTALL EXHAUST MANIFOLD HEAT INSULATOR NO.1 (4WD DRIVE TYPE)

(a) Install the exhaust manifold heat insulator with the 4 bolts.

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

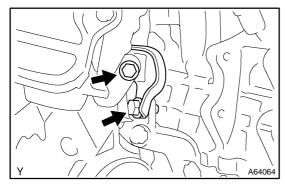


134. INSTALL OXYGEN SENSOR (4WD DRIVE TYPE)

(a) Using SST, install the oxygen sensor.

SST 09224-00010

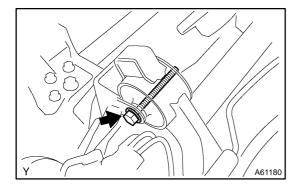
Torque: 44 N·m (450 kgf·cm, 33 ft·lbf)



135. INSTALL MANIFOLD STAY (4WD DRIVE TYPE)

(a) Install the manifold stay with the 2 bolts.

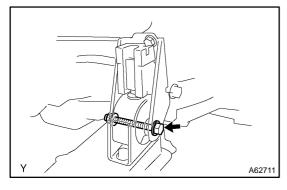
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)



136. INSTALL FRONT SUSPENSION CROSSMENBER W/CENTER MENBER

- (a) Attach the engine and transaxle assembly to the suspension crossmember and engine mounting member.
- (b) Install the bolt holding the rear engine mounting bracket to the mounting insulator.

Torque: 87 N·m (887 kgf·cm, 64 ft·lbf)



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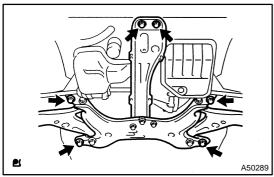
(c) Install the bolt holding the front engine mounting bracket to the mounting insulator.

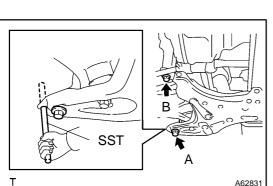
Torque: 52 N·m (530 kgf·cm, 38 ft·lbf)

137. INSTALL RACK & PINION POWER STEERING GEAR ASSY (4WD DRIVE TYPE) (see page 51–8)

SST 09023-38200

138. INSTALL VANE PUMP ASSY (See page 51-8)







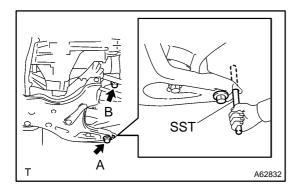
- (a) Set the engine with transaxle on the engine lifter.
- (b) Install the engine with transaxle to the vehicle.
- (c) Temporarily, install the suspension crossmember and 6 bolts.
- (d) Install the engine mounting insulator LH.

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

(e) Install the engine mounting insulator RH.

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

- (f) Insert SST to 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.



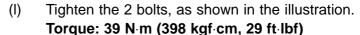
- (h) Insert SST to the positioning holes on the left handle crossmember and on the left–handle of the vehicle. SST 09670–00010
- (i) Temporarily tighten the bolt A first, then Bolt B.
- (j) Insert SST to the positioning holes on the right–handle crossmember and right–handle of the vehicle, then tighten the bolts with a specified torque.
- (k) Insert SST to the positioning holes on the right–handle crossmember and left–handle of the vehicle, then tighten the bolts with a specified torque.

SST 09670-00010

Torque:

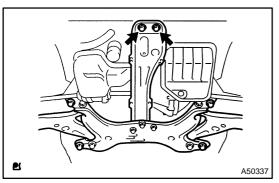
Bolt A 157N m (1,601 kgf cm, 116 ft lbf)

Bolt B 113N·m (1,152 kgf·cm, 83 ft·lbf)



NOTICE:

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



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140. INSTALL FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH (See page 30-15)

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

HINT:

Perform the same procedure as above on the opposite side.

142. INSTALL FRONT STABILIZER LINK ASSY LH (See page 51–22)

143. INSTALL FRONT STABILIZER LINK ASSY RH

HINT:

Perform the same procedure as above on the opposite side.

144. INSTALL TIE ROD END SUB-ASSY LH (See page 30-15)

145. INSTALL TIE ROD END SUB-ASSY RH

HINT:

Perform the same procedure as above on the opposite side.

146. INSTALL FRONT AXLE HUB LH NUT (See page 30–15)

147. INSTALL FRONT AXLE HUB RH NUT

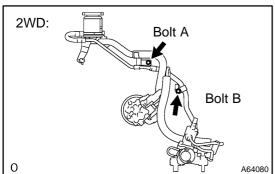
HINT:

Perform the same procedure as above on the opposite side.

- 148. TEMPORARY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSY (4WD DRIVE TYPE) (See page 30–6)
- 149. INSTALL EXHAUST PIPE ASSY FRONT (See page 15-4)
- 150. INSTALL EXHAUST PIPE ASSY CENTER (4WD DRIVE TYPE) (See page 11-51)
- 151. INSTALL FLOOR PANEL BRACE FRONT
- (a) Install front floor panel brace with the 2 nuts.

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

- 152. INSTALL FRONT SEAT ASSY RH (4WD DRIVE TYPE) (See page 72-2)
- 153. INSTALL STEERING INTERMEDIATE SHAFT (See page 51–22)



154. INSTALL RETURN TUBE SUB-ASSY

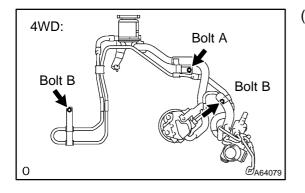
(a) 2WD

(1) Install the return tube with 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) 4WD

(1) Install the return tube with 3 bolts.

Torque:

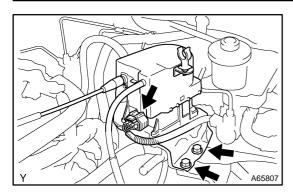
Bolt A 5.0 N·m (51 kgf·cm, 44 in. lbf)

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

155. INSTALL COMPRESSOR AND MAGNETIC CLUTCH (W/ AIR CONDITIONER) (See page 55–40)

156. INSTALL CLUTCH RELEASE CYLINDER ASSY (M/T TRANSAXLE)(See page 41–17)

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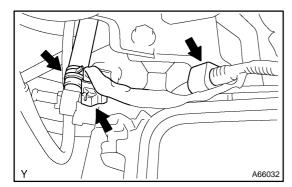


157. INSTALL CRUISE CONTROL ACTUATOR ASSY (W/ CRUISE CONTROL)

(a) Install the actuator with the 2 bolts.

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

(b) Connect the actuator connector.

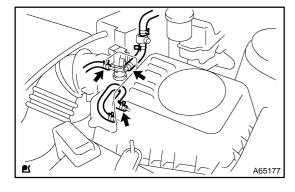


158. INSTALL AIR CLEANER ASSEMBLY WITH HOSE

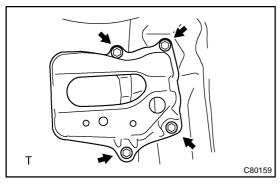
(a) Install the air cleaner case with the 3 bolts.

Torque: 7.0 N·m (71 kgf·cm, 62 in. lbf)

- (b) Connect the wireharnnes clamp, connector and hose.
- (c) Install the air filter.
- (d) Install the air cleaner cap.
- (e) Connect the air cleaner hose.



- (f) Connect 3 vacuum hoses, as shown in the illustration.
- (g) Connect the VSV connector.
- (h) Connect the intake air flow meter connector.



159. INSTALL BATTERY CARRIER

(a) Install the battery carrier with the 4 bolts.

Torque: 13 N·m (133 kgf·cm, 10 ft·lbf)

160. INSTALL BATTERY

Torque:

Bolt 5.0 N·m (51 kgf·cm, 44 in. lbf)

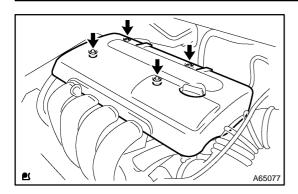
Nut 3.0 - 4.0 N·m (31 - 41 kgf·cm, 27 - 35 in.·lbf)

161. INSTALL RADIATOR SUPPORT UPPER (W/ AIR CONDITIONER)

(a) Install the 2 radiator support uppers with the 2 bolts.

Torque: 19 N·m (194 kgf·cm, 14 ft·lbf)

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162. INSTALL CYLINDER HEAD COVER NO.2

(a) Install the cylinder head cover with the 2 nuts and 2 clips.

Torque: 7.0 N·m (71 kgf·cm, 62 in.·lbf)

- 163. INSTALL FRONT WHEELS
 - Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
- 164. ADD TRANSFER OIL (4WD DRIVE TYPE)
- (a) Install a new gasket and the filler plug.

 Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)
- 165. ADD AUTOMATIC TRANSAXLE FLUID (4WD DRIVE TYPE)
- 166. ADD ENGINE OIL
- 167. ADD COOLANT (See page 16-6)
- 168. CHECK ENGINE OIL LEAK
- 169. CHECK ENGINE COOLANT LEAK (See page 16-6)
- 170. CHECK FUEL LEAK
- 171. CHECK EXHAUST GAS LEAK
- 172. INSPECT CHECK IDLE SPEED AND IGNITION TIMING (See page 14–1) SST 09843–18040
- 173. INSPECT CO/HC (See page 14-1)
- 174. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (See page 26-6)
- 175. CHECK ABS SPEED SENSOR SIGNAL