14120–04

# REPLACEMENT

1. **WORK FOR PREVENTING GASOLINE FROM SPILLING OUT (See page 11–1)**
2. **REMOVE ENGINE UNDER COVER SUB–ASSY NO.1**

(a) Remove the 4 bolts and engine under cover.

3. **REMOVE ENGINE UNDER COVER ASSY REAR**

(a) Remove the 4 bolts and engine under cover.

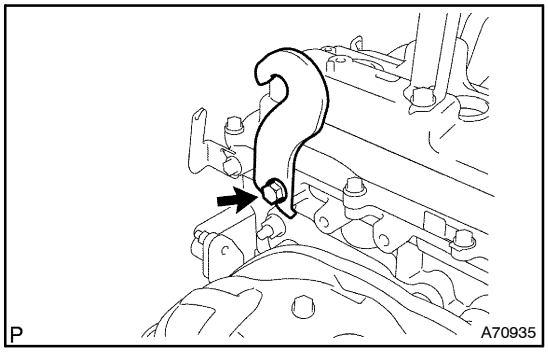
4. **DRAIN ENGINE COOLANT (See page 16–7)**
5. **REMOVE HOOD SUB–ASSY**

(a) Separate the 2 hood support from the body.

(b) Remove the 4 bolts and hood.

6. **REMOVE RADIATOR SUPPORT SEAL UPPER (See page 16–10)**
7. **DISCONNECT RADIATOR HOSE NO.1**
8. **DISCONNECT RADIATOR HOSE NO.2**
9. **DISCONNECT OIL COOLER INLET HOSE NO.1 (A/T TRANSAXLE)**
10. **DISCONNECT OIL COOLER OUTLET HOSE (A/T TRANSAXLE)**
11. **REMOVE RADIATOR ASSY (See page 16–10)**
12. **REMOVE FAN SHROUD**
13. **SEPARATE ACCELERATOR CONTROL CABLE ASSY**
14. **SEPARATE THROTTLE CABLE ASSY (A/T TRANSAXLE)**
15. **REMOVE AIR CLEANER CAP SUB–ASSY (See page 10–10)**
16. **REMOVE INTAKE AIR CONNECTOR SUB–ASSY (See page 10–10)**
17. **REMOVE VANE PUMP V BELT (See page 14–7)**
18. **REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1 (W/ AIR CONDITIONING) (See page 14–7)**
19. **SEPARATE VANE PUMP ASSY (See page 14–63)**
20. **SEPARATE COMPRESSOR AND MAGNETIC CLUTCH (W/ AIR CONDITIONING) (See page 17–8)**
21. **DISCONNECT FUEL VAPOR FEED HOSE ASSY**
22. **DISCONNECT VACUUM HOSE**
23. **DISCONNECT FUEL PIPE SUB–ASSY NO.1 (See page 11–14)**
24. **DISCONNECT FUEL HOSE NO.2**
25. **DISCONNECT HEATER WATER INLET HOSE A**
26. **DISCONNECT HEATER WATER OUTLET HOSE A(FROM HEATER UNIT)**
27. **REMOVE INSTRUMENT PANEL ORNAMENT (See page 71–13)**
28. **REMOVE INSTRUMENT PANEL UNDER COVER NO.2 (See page 71–13)**
29. **REMOVE GLOVE COMPARTMENT DOOR SUB–ASSY (See page 71–13)**
30. **REMOVE AUTOMATIC TRANSMISSION ASSY (A/T TRANSAXLE) (See page 40–6)**
31. **REMOVE MANUAL TRANSMISSION UNIT ASSY (M/T TRANSAXLE) (See page 41–4)**
32. **REMOVE THROTTLE CABLE CLAMP NO.1 (A/T TRANSAXLE)**

(a) Remove the bolt and throttle cable clamp.




**33. INSTALL ENGINE HANGER NO.2**

(a) Install the engine hanger with the bolt.

**Torque: 42 N·m (420 kgf·cm, 30 ft·lbf)**

**Part No:**

| Part name | Part No. |
|---|---|
| Engine hanger No. 2 | 12282–75020 |
| Bolt | 91512–B1020 |

**NOTICE:**

**Use a new attachment bolt for the engine hanger.**

**34. REMOVE ENGINE ASSEMBLY**

(a) Separate the engine wire.
  (1) Disconnect the ECM connectors.
  (2) Remove the grommet, and pull engine wire harness to the engine compartment.
  (3) Remove the 2 wire harness clamps.
  (4) Remove the bolt and ground terminal.

(b) Separate the engine wire No.2.
  (1) Disconnect the generator connector.
  (2) Remove the terminal cap.
  (3) Remove the nut and generator wire.

(c) Attach the engine sliding device and chain block to the engine hangers.

(d) Remove the 4 bolts and 4 nuts.

(e) Lift the engine out of the vehicle slowly and carefully by operating the engine sliding device and chain block..

**NOTICE:**

**Make sure the engine is clear of all wiring and hoses.**

**35. REMOVE VANE PUMP DRIVE PULLEY (See page 17–8)**

**36. REMOVE VANE PUMP DRIVE PULLEY SPACER (W/O AIR CONDITIONING)**

**37. REMOVE CRANKSHAFT PULLEY (W/ AIR CONDITIONING)**

**38. REMOVE DRIVE PLATE & RING GEAR SUB–ASSY (A/T TRANSAXLE) (See page 14–70)**

**39. REMOVE CLUTCH COVER ASSY (M/T TRANSAXLE) (See page 42–15)**

**40. REMOVE CLUTCH DISC ASSY (M/T TRANSAXLE)**

**41. REMOVE FLYWHEEL SUB–ASSY (M/T TRANSAXLE) (See page 14–70)**

**42. REMOVE REAR END PLATE**

(a) Remove the 2 bolts and rear end plate.

**43. REMOVE FLUID COUPLING ASSY (See page 16–5)**

**44. REMOVE FAN AND GENERATOR V BELT**

**45. REMOVE FAN PULLEY**

**46. REMOVE POWER STEERING IDLE PULLEY ASSY**

(a) Remove the 3 bolts and power steering idle pulley.

**47. REMOVE PUMP BRACKET**

(a) Remove the 4 bolts and pump bracket.

**48. REMOVE WATER INLET (See page 16–9)**

**49. REMOVE THERMOSTAT**

**50. REMOVE GENERATOR ASSY (See page 19–8)**

**51. REMOVE FAN BELT ADJUSTING BAR (See page 17–8)**

**52. REMOVE GENERATOR BRACKET NO.1 (See page 18–6)**

**53. REMOVE IGNITION COIL BRACKET (LEADED GASOLINE) (See page 14–51)**

**54. REMOVE IGNITION COIL NO.1 (UNLEADED GASOLINE) (See page 14–9)**

**55. REMOVE ACCELERATOR AUTO–DRIVE CABLE SUPPORT (LHD STEERING POSITION TYPE)**
(a) Remove the bolt and accelerator auto–drive cable support.
**56. REMOVE THROTTLE CABLE CLAMP NO.3 (A/T TRANSAXLE)**
(a) Remove the bolt and throttle cable clamp.
**57. REMOVE THROTTLE CABLE CLAMP NO.2 (A/T TRANSAXLE)**
(a) Remove the bolt and throttle cable clamp.
**58. REMOVE EGR PIPE SUB–ASSY NO.1 (W/ EGR) (See page 14–63)**
**59. DISCONNECT VENTILATION HOSE**
**60. DISCONNECT VENTILATION HOSE NO.2**
**61. DISCONNECT WATER BY–PASS HOSE**
**62. DISCONNECT WATER BY–PASS HOSE NO.3**
**63. REMOVE SURGE TANK STAY NO.1 (See page 14–63)**
**64. REMOVE INTAKE AIR SURGE TANK (See page 14–63)**
**65. REMOVE FUEL PIPE SUB–ASSY NO.1**
(a) Remove the fuel pressure pulsation damper and 2 gaskets.
(b) Remove the bolt and fuel pipe.
**66. REMOVE FUEL DELIVERY PIPE SUB–ASSY (See page 11–11)**
**67. REMOVE COMPRESSOR MOUNTING BRACKET NO.1 (W/ AIR CONDITIONING) (See page 17–8)**
**68. REMOVE ENGINE WIRE**
(a) Disconnect the engine oil pressure switch connector.
(b) Remove the 6 bolts and 6 wire harness clamp brackets.
(c) Remove the 2 bolts and ground terminal.
(d) Remove the clamp and engine wire.
**69. REMOVE INTAKE MANIFOLD**
(a) Remove the 3 bolts, 2 nuts, intake manifold and gasket.
**70. REMOVE OIL LEVEL GAGE SUB–ASSY**
**71. REMOVE OIL LEVEL GAGE GUIDE**
(a) Remove the bolt and oil level gage guide.
**72. REMOVE ENGINE MOUNTING BRACKET FRONT NO.1 LH**
(a) Remove the 4 bolts and engine mounting bracket.
**73. DISCONNECT WATER BY–PASS HOSE NO.6 (W/ OIL COOLER)**
**74. REMOVE WATER BY–PASS PIPE NO.1**
(a) Remove the bolt, 2 nuts, water by–pass pipe and gasket.
**75. REMOVE KNOCK SENSOR (See page 10–13)**
**76. REMOVE CYLINDER HEAD PLATE REAR**
(a) Remove the 3 bolts, cylinder head plate and gasket.
**77. REMOVE WATER OUTLET**
(a) Remove the 2 bolts, water outlet and gasket.
**78. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1**
(a) Remove the 2 bolts, 2 nuts and exhaust manifold heat insulator.
**79. REMOVE EXHAUST MANIFOLD**
(a) Remove the 6 nuts, exhaust manifold and gasket.
**80. REMOVE ENGINE HANGER NO.2**
(a) Remove the bolt and engine hanger.
**81. REMOVE WATER BY–PASS HOSE NO.4 (W/ OIL COOLER)**
**82. REMOVE WATER BY–PASS PIPE NO.2 (W/ OIL COOLER)**
(a) Disconnect the water by–pass hose.
(b) Remove the 2 bolts and water by–pass pipe.
**83. REMOVE ENGINE OIL PRESSURE SWITCH ASSY (See page 17–1)**

**84. REMOVE ENGINE MOUNTING BRACKET FRONT NO.1 RH**

(a) Remove the 4 bolts and engine mounting bracket.

**85. INSTALL ENGINE MOUNTING BRACKET FRONT NO.1 RH**

(a) Install the engine mounting bracket with the 4 bolts.
**Torque: 51 N·m (520 kgf·cm, 38 ft·lbf)**

**86. INSTALL ENGINE OIL PRESSURE SWITCH ASSY (See page 17–1)**

**87. INSTALL WATER BY–PASS PIPE NO.2 (W/ OIL COOLER)**

(a) Install the water by–pass pipe with the 2 bolts.
**Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)**

(b) Connect the water by–pass hose.

**88. CONNECT WATER BY–PASS HOSE NO.4 (W/O OIL COOLER)**

**89. INSTALL ENGINE HANGER NO.2**

(a) Install the engine hanger with the bolt.
**Torque: 42 N·m (420 kgf·cm, 30 ft·lbf)**

**90. INSTALL EXHAUST MANIFOLD**

(a) Install a new gasket and the exhaust manifold with the 6 new nuts.
**Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)**

**91. INSTALL EXHAUST MANIFOLD HEAT INSULATOR NO.1**

(a) Install the exhaust manifold heat insulator with the 2 bolts and 2 nuts.
**Torque: 12 N·m (115 kgf·cm, 8 ft·lbf)**

**92. INSTALL WATER OUTLET**

(a) Install a new gasket and water outlet with the 2 bolts.
**Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)**

**93. INSTALL CYLINDER HEAD PLATE REAR**

(a) Install a new gasket and cylinder head plate with the 3 bolts.
**Torque: 14 N·m (135 kgf·cm, 10 ft·lbf)**

**94. INSTALL KNOCK SENSOR (See page 10–13)**

**95. INSTALL WATER BY–PASS PIPE NO.1**

(a) Install a new gasket and water by–pass pipe with the bolt and 2 nuts.
**Torque:**
**37 N·m (380 kgf·cm, 28 ft·lbf) for bolt**
**20 N·m (200 kgf·cm, 14 ft·lbf) for nut**

**96. CONNECT WATER BY–PASS HOSE NO.6 (W/ OIL COOLER)**

**97. INSTALL ENGINE MOUNTING BRACKET FRONT NO.1 LH**

(a) Install the engine mounting bracket with the 4 bolts.
**Torque: 51 N·m (520 kgf·cm, 38 ft·lbf)**

**98. INSTALL OIL LEVEL GAGE GUIDE**

(a) Using a brass bar, tap in the oil level gage guide.

(b) Tighten the bolt.
**Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)**

**99. INSTALL OIL LEVEL GAGE SUB–ASSY**

**100. INSTALL INTAKE MANIFOLD**

(a) Install a new gasket and intake manifold with the 3 bolts and 2 nuts.
**Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)**

**101. INSTALL ENGINE WIRE**

(a) Install the engine wire with the clamp.

(b) Install the ground terminal with the 2 bolts.
**Torque: 13 N·m (133 kgf·cm, 10 ft·lbf)**

(c) Install the 6 wire harness clamps with the 6 bolts.
**Torque:**
**6.7 N·m (68 kgf·cm, 59 in.·lbf) (Wire harness clamp bracket x Cylinder head cover)**
**13 N·m (133 kgf·cm, 10 ft·lbf) (Wire harness clamp bracket x Cylinder head)**
**21 N·m (214 kgf·cm, 16 ft·lbf) (Wire harness clamp bracket x Cylinder block)**

**102. INSTALL COMPRESSOR MOUNTING BRACKET NO.1 (W/ AIR CONDITIONING) (See page 17–8)**
**103. INSTALL FUEL DELIVERY PIPE SUB–ASSY (See page 11–11)**
**104. INSTALL FUEL PIPE SUB–ASSY NO.1**
(a) Install the fuel pipe with the bolt.
**Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)**
(b) Install the 2 gasket and fuel pressure pulsation damper.
**Torque: 29 N·m (300 kgf·cm, 21 ft·lbf)**
**105. INSTALL INTAKE AIR SURGE TANK (See page 14–63)**
**106. INSTALL SURGE TANK STAY NO.1 (See page 14–63)**
**107. CONNECT WATER BY–PASS HOSE NO.3**
**108. CONNECT WATER BY–PASS HOSE**
**109. CONNECT VENTILATION HOSE NO.2**
**110. CONNECT VENTILATION HOSE**
**111. INSTALL EGR PIPE SUB–ASSY NO.1 (W/ EGR) (See page 14–63)**
**112. INSTALL ACCELERATOR AUTO–DRIVE CABLE SUPPORT (LHD STEERING POSITION TYPE)**
(a) Install the accelerator auto–drive cable support with the bolt
**Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**
**113. INSTALL THROTTLE CABLE CLAMP NO.3 (A/T TRANSAXLE)**
(a) install the throttle cable clamp with the bolt.
**Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**
**114. INSTALL THROTTLE CABLE CLAMP NO.2 (A/T TRANSAXLE)**
(a) install the throttle cable clamp with the bolt.
**Torque: 12 N·m (122 kgf·cm, 9 ft·lbf)**
**115. INSTALL IGNITION COIL BRACKET (LEADED GASOLINE) (See page 14–51)**
**116. INSTALL IGNITION COIL NO.1 (UNLEADED GASOLINE) (See page 14–9)**
**117. INSTALL GENERATOR BRACKET NO.1 (See page 18–6)**
**118. INSTALL FAN BELT ADJUSTING BAR (See page 17–8)**
**119. INSTALL GENERATOR ASSY (See page 17–8)**
**120. INSTALL THERMOSTAT (See page 16–9)**
**121. INSTALL WATER INLET (See page 16–9)**
**122. INSTALL PUMP BRACKET**
(a) Install the pump bracket with the 4 bolts.
**Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)**
**123. INSTALL POWER STEERING IDLE PULLEY ASSY**
(a) Install the power steering idle pulley with the 3 bolts.
**Torque: 19 N·m (194 kgf·cm, 14 ft·lbf)**
**124. INSTALL FAN PULLEY**
**125. INSTALL FAN AND GENERATOR V BELT**
**126. INSTALL FLUID COUPLING ASSY (See page 16–5)**
**127. INSTALL REAR END PLATE**
(a) Install the rear end plate with the 2 bolts.
**Torque:**
**20 N·m (200 kgf·cm, 14 ft·lbf) (Rear end plate x Water by–pass pipe)**
**18 N·m (185 kgf·cm, 13 ft·lbf) (Rear end plate x Cylinder block)**

**128. INSTALL DRIVE PLATE & RING GEAR SUB–ASSY (A/T TRANSAXLE) (See page 14–70)**

**129. INSTALL FLYWHEEL SUB–ASSY (M/T TRANSAXLE) (See page 14–70)**

SST 09213–54015 (91651–60855), 09330–00021

**130. INSTALL CLUTCH DISC ASSY (M/T TRANSAXLE)**

SST 09301–00110

**131. INSTALL CLUTCH COVER ASSY (M/T TRANSAXLE) (See page 42–15)**

**132. INSTALL VANE PUMP DRIVE PULLEY SPACER (W/O AIR CONDITIONING)**

**133. INSTALL CRANKSHAFT PULLEY (W/ AIR CONDITIONING)**

**134. INSTALL VANE PUMP DRIVE PULLEY (See page 17–8)**

**135. INSTALL ENGINE ASSEMBLY**

(a) Attach the engine sliding device and chain block to the engine hangers.

(b) Lower the engine into the engine compartment.

(c) Keep the engine level, and align the RH and LH engine mounting brackets and body mountings.

(d) Attach the RH and LH engine mounting brackets to the body mountings, and install the 4 bolts and 4 nuts.

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

(e) Install the engine wire No.2.

(1) Install the generator wire with the nut.

**Torque: 9.8 N·m (100 kgf·cm, 7 ft·lbf)**

(2) Install the terminal cap.

(3) Connect the generator connector.

(f) Install the engine wire.

(1) Install the ground terminal with the bolt.

**Torque: 8.3 N·m (85 kgf·cm, 73 in.·lbf)**

(2) Install the 2 wire harness clamps.

(3) Insert the engine wire harness to the vehicle room, and install the grommet.

(4) Connect the ECM connectors.

**136. REMOVE ENGINE HANGER NO.2**

(a) Remove the bolt and engine hanger.

**137. INSTALL THROTTLE CABLE CLAMP NO.1**

(a) Install the throttle cable clamp with the bolt.

**Torque: 24 N·m (245 kgf·cm, 18 ft·lbf)**

**138. INSTALL AUTOMATIC TRANSMISSION ASSY (A/T TRANSAXLE) (See page 40–6)**

**139. INSTALL MANUAL TRANSMISSION UNIT ASSY (M/T TRANSAXLE) (See page 41–4)**

**140. INSTALL GLOVE COMPARTMENT DOOR SUB–ASSY**

**141. INSTALL INSTRUMENT PANEL UNDER COVER NO.2**

**142. INSTALL INSTRUMENT PANEL ORNAMENT**

**143. CONNECT HEATER WATER OUTLET HOSE A(FROM HEATER UNIT)**

**144. CONNECT HEATER WATER INLET HOSE A**

**145. CONNECT FUEL HOSE NO.2**

**146. CONNECT FUEL PIPE SUB–ASSY NO.1 (See page 11–14)**

**147. CONNECT VACUUM HOSE**

**148. CONNECT FUEL VAPOR FEED HOSE ASSY**

**149. INSTALL COMPRESSOR AND MAGNETIC CLUTCH (W/ AIR CONDITIONING) (See page 17–8)**

**150. INSTALL VANE PUMP ASSY (See page 14–63)**

**151. INSTALL V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1 (W/ AIR CONDITIONING) (See page 14–7)**

**152. INSTALL VANE PUMP V BELT (See page 14–7)**

**153. INSPECT DRIVE BELT (See page 14–1)**

**154. INSTALL INTAKE AIR CONNECTOR SUB–ASSY (See page 10–10)**
**155. INSTALL AIR CLEANER CAP SUB–ASSY**
**156. CONNECT THROTTLE CABLE ASSY (A/T TRANSAXLE)**
**157. CONNECT ACCELERATOR CONTROL CABLE ASSY**
**158. REMOVE FAN SHROUD**
**159. INSTALL RADIATOR ASSY (See page 16–10)**
**160. CONNECT OIL COOLER OUTLET HOSE (A/T TRANSAXLE)**
**161. CONNECT OIL COOLER INLET HOSE NO.1 (A/T TRANSAXLE)**
**162. CONNECT RADIATOR HOSE NO.2**
**163. CONNECT RADIATOR HOSE NO.1**
**164. INSTALL RADIATOR SUPPORT SEAL UPPER**
**165. INSTALL HOOD SUB–ASSY**
(a) Install the hood with the 4 bolts.
**Torque: 13 N·m (130 kgf·cm, 10 ft·lbf)**
(b) Tighten the 2 hood supports.
**Torque: 18 N·m (180 kgf·cm, 13 ft·lbf)**
**166. ADJUST HOOD SUB–ASSY (See page 75–2)**
**167. ADD ENGINE COOLANT (See page 16–7)**
**168. CHECK FOR ENGINE COOLANT LEAKS (See page 16–1)**
**169. CHECK FOR FUEL LEAKS (See page 11–1)**
**170. CHECK FOR EXHAUST GAS LEAKS**
**171. CHECK IDLE SPEED AND IGNITION TIMING (See page 14–1)**
SST 09843–18030
**172. INSPECT CO/HC (See page 14–1)**
**173. INSTALL ENGINE UNDER COVER ASSY REAR**
(a) Install the engine under cover with the 4 bolts.
**Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)**
**174. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1**
(a) Install the engine under cover with the 4 bolts.
**Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)**