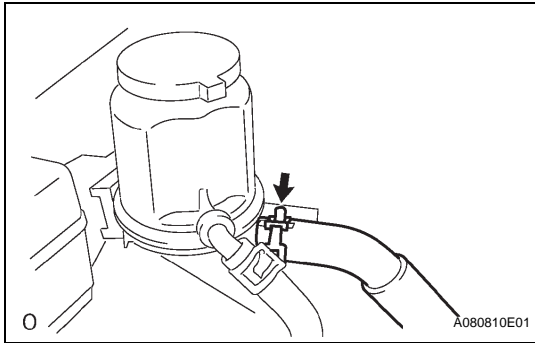


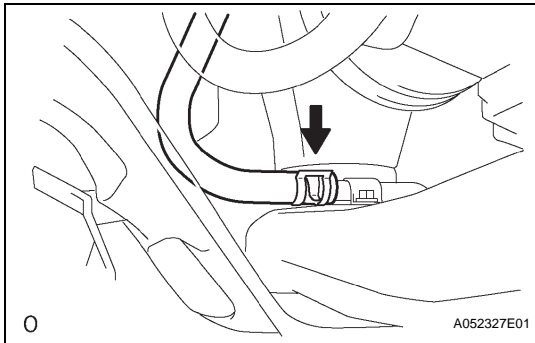
## REMOVAL

1. **DISCHARGE FUEL SYSTEM PRESSURE**
  - (a) Discharge fuel system pressure (See page [FU-1](#)).
2. **REMOVE FRONT WHEELS**
3. **REMOVE ENGINE UNDER COVER ASSEMBLY**
  - (a) w/ engine under cover assembly
4. **REMOVE ENGINE UNDER COVER NO.1**
5. **REMOVE ENGINE UNDER COVER NO.2**
  - (a) w/ engine under cover No.2
6. **REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH**
7. **REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH**
8. **REMOVE FRONT FENDER APRON SEAL LH**
9. **REMOVE FRONT FENDER APRON SEAL RH**
10. **DRAIN ENGINE COOLANT**
  - (a) Drain engine coolant (See page [CO-7](#)).
11. **DRAIN ENGINE OIL**
  - (a) Drain engine oil (See page [LU-5](#)).
12. **DRAIN AUTOMATIC TRANSAXLE FLUID**
  - (a) Drain automatic transaxle fluid (See page [AX-166](#)).
13. **DRAIN TRANSFER OIL (for 4WD)**
14. **REMOVE FR WIPER ARM RH**
  - (a) Remove the FR wiper arm RH (See page [WW-37](#)).
15. **REMOVE FR WIPER ARM LH**
  - (a) Remove the FR wiper arm LH (See page [WW-37](#)).
16. **REMOVE COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY**
  - (a) Remove the cowl top ventilator louver sub-assembly (See page [WW-37](#)).
17. **REMOVE WINDSHIELD WIPER LINK ASSEMBLY**
  - (a) Remove the windshield wiper link assembly (See page [WW-37](#)).
18. **REMOVE COWL TOP PANEL SUB-ASSEMBLY OUTER**
  - (a) Remove the cowl top panel sub-assembly outer (See page [FU-10](#)).
19. **REMOVE V-BANK COVER SUB-ASSEMBLY**
  - (a) Remove the V-bank cover sub-assembly (See page [EM-8](#)).
20. **REMOVE BATTERY**
21. **REMOVE AIR CLEANER CAP SUB-ASSEMBLY**
  - (a) Remove the air cleaner cap sub-assembly (See page [FU-10](#)).

- 22. REMOVE AIR CLEANER FILTER ELEMENT SUB-ASSEMBLY**
- 23. REMOVE AIR CLEANER INLET NO.2**
  - (a) Remove the air cleaner inlet No.2 (See page [ST-5](#)).
- 24. REMOVE AIR CLEANER CASE**
  - (a) Remove the air cleaner case (See page [ST-5](#)).
- 25. REMOVE AIR CLEANER BRACKET**
  - (a) Remove the air cleaner bracket (See page [ST-5](#)).
- 26. REMOVE AIR CLEANER INLET NO.1**
  - (a) Remove the air cleaner inlet No.1 (See page [ST-5](#)).
- 27. REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
  - (a) Remove the V (cooler compressor to crankshaft pulley) belt No.1 (See page [EM-6](#)).
- 28. REMOVE GENERATOR ASSEMBLY**
  - (a) Remove the generator assembly (See page [CH-7](#)).
- 29. REMOVE ENGINE MOVING CONTROL ROD**
  - (a) Remove the engine moving control rod (See page [EM-22](#)).
- 30. REMOVE ENGINE MOUNTING STAY NO.2 RH**
  - (a) Remove the engine mounting stay No.2 RH (See page [EM-22](#)).
- 31. REMOVE GENERATOR BRACKET NO.2**
  - (a) Remove the generator bracket No.2 (See page [EM-22](#)).
- 32. REMOVE GENERATOR BELT ADJUSTING BAR**
  - (a) Remove the generator belt adjusting bar (See page [LU-14](#)).
- 33. SEPARATE COMPRESSOR AND MAGNETIC CLUTCH**
  - (a) Separate compressor and magnetic clutch (See page [LU-14](#)).
- 34. SEPARATE TRANSMISSION CONTROL CABLE ASSEMBLY**
  - (a) Separate transmission control cable assembly (See page [AX-160](#)).
- 35. DISCONNECT UNION TO CHECK VALVE HOSE**
- 36. DISCONNECT FUEL VAPOR FEED HOSE**
- 37. DISCONNECT FUEL PIPE SUB-ASSEMBLY NO.1**
  - (a) Disconnect the fuel pipe sub-assembly No.1 (See page [FU-1](#)).
- 38. DISCONNECT HEATER INLET WATER HOSE**
- 39. DISCONNECT HEATER OUTLET WATER HOSE**
- 40. DISCONNECT RADIATOR HOSE INLET**
- 41. DISCONNECT RADIATOR HOSE OUTLET**

**42. DISCONNECT OIL COOLER INLET TUBE NO.1****43. DISCONNECT OIL COOLER OUTLET TUBE NO.1****44. DISCONNECT OIL RESERVOIR TO PUMP HOSE NO.1**

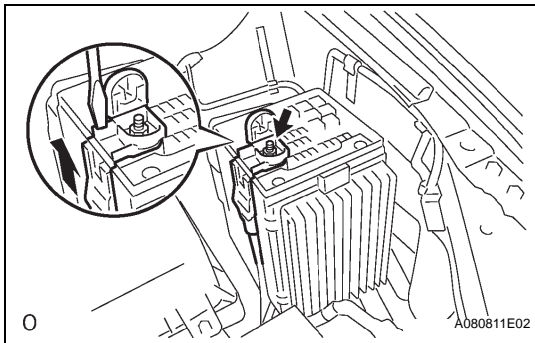
- (a) Remove the clamp and disconnect the oil reservoir to pump hose No. 1.

**45. DISCONNECT STEERING GEAR OUTLET RETURN TUBE**

- (a) Remove the clamp and disconnect the steering gear outlet return tube.

**46. REMOVE GLOVE COMPARTMENT DOOR ASSEMBLY****47. SEPARATE ENGINE WIRE**

- (a) Disconnect the engine wire harness from the ECM and the junction block.
- (b) Disconnect the engine wire harness from the engine room junction block.
- (1) Remove the nut and separate the wire harness.
  - (2) Using a screwdriver, release the engine room junction block. Separate the engine wire by pulling it up-ward.
- (c) Remove the 2 nuts and pull out the engine wire harness.
- (d) Remove the body ground.

**48. REMOVE PROPELLER SHAFT (for 4WD)  
SST 09325-20010**

- (a) Remove the propeller shaft (See page [PR-3](#)).

**49. REMOVE EXHAUST PIPE SUB-ASSEMBLY FRONT NO.3**

- (a) Remove the exhaust pipe sub-assembly front No.3 (See page [EX-3](#)).

**50. REMOVE EXHAUST PIPE ASSEMBLY FRONT**

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

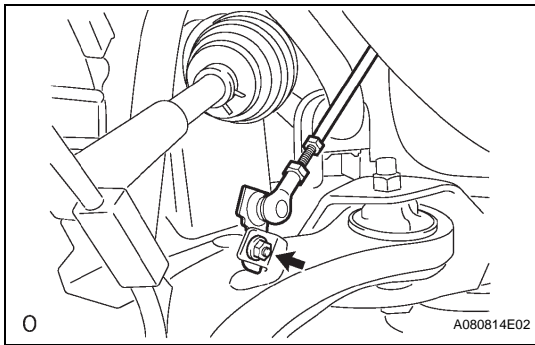
**51. REMOVE EXHAUST PIPE SUPPORT BRACKET NO.1****52. REMOVE FRONT STABILIZER LINK ASSEMBLY LH**

- (a) Remove the front stabilizer link assembly LH (See page [DS-5](#)).

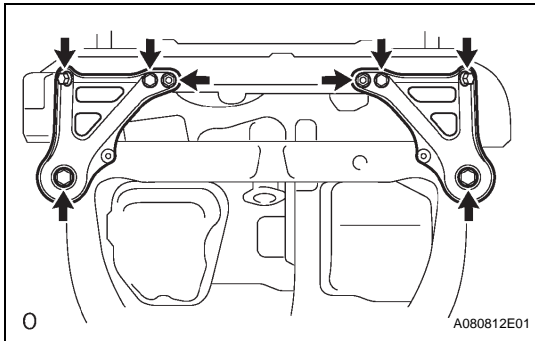
**53. REMOVE FRONT STABILIZER LINK ASSEMBLY RH****HINT:**

Perform the same procedure as above on the opposite side

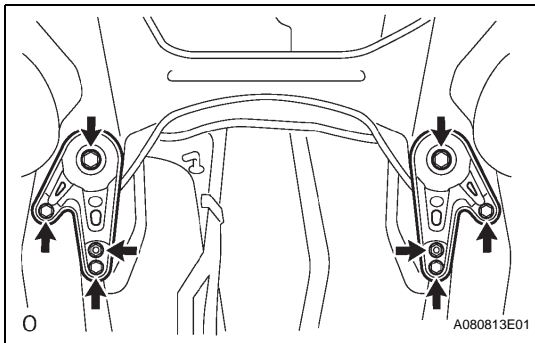
- 54. REMOVE FRONT AXLE HUB LH NUT**  
**SST 09930-00010**  
(a) Remove the front axle hub LH nut (See page [DS-5](#)).
- 55. REMOVE FRONT AXLE HUB RH NUT**  
**SST 09930-00010**  
HINT:  
Perform the same procedure as above on the opposite side.
- 56. SEPARATE SPEED SENSOR FRONT LH**  
(a) Separate the speed sensor front LH (See page [DS-5](#)).
- 57. SEPARATE SPEED SENSOR FRONT RH**  
HINT:  
Perform the same procedure as above on the opposite side.
- 58. SEPARATE TIE ROD END SUB-ASSEMBLY LH**  
**SST 09628-62011**  
(a) Separate the tie rod end sub-assembly LH (See page [DS-5](#)).
- 59. SEPARATE TIE ROD END SUB-ASSEMBLY RH**  
**SST 09628-62011**  
HINT:  
Perform the same procedure as above on the opposite side.
- 60. SEPARATE FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 LH**  
(a) Separate the front suspension arm sub-assembly lower No.1 LH (See page [DS-5](#)).
- 61. SEPARATE FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 RH**  
HINT:  
Perform the same procedure as above on the opposite side.
- 62. SEPARATE FRONT AXLE ASSEMBLY LH**  
(a) Separate the front axle assembly LH (See page [DS-5](#)).
- 63. SEPARATE FRONT AXLE ASSEMBLY RH**  
HINT:  
Perform the same procedure as above on the opposite side.
- 64. SEPARATE STEERING INTERMEDIATE SHAFT SUB-ASSEMBLY**  
(a) Separate the steering intermediate shaft sub-assembly (See page [PS-19](#)).



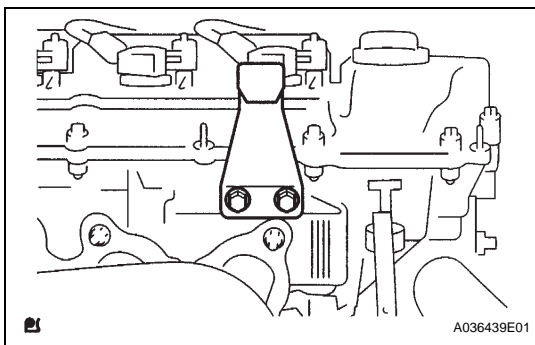
- 65. SEPARATE HEIGHT CONTROL SENSOR LINK SUB-ASSEMBLY FRONT**  
 (a) Remove the nut and separate the height control sensor link from the front frame (w/ air suspension).



- 66. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE**  
 (a) Set the engine lifter.



- (b) Remove the 6 bolts and 2 nuts, then remove the frame side rail plates RH and LH.  
 (c) Remove the 6 bolts and 2 nuts, then remove the front suspension member brace rear RH and LH.  
 (d) Carefully remove the engine assembly from the vehicle.

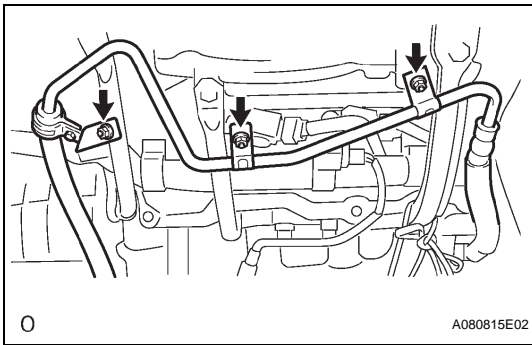


- (e) Install the No. 2 engine hanger in the correct direction (shown in the illustration).  
**Torque: 20 N\*m (199 kgf\*cm, 14 ft.\*lbf)**  
 HINT:

No.2 engine hanger	12282-20020	-
Bolt	91621-60822	TMC made
	90080-11331	TMMWV made

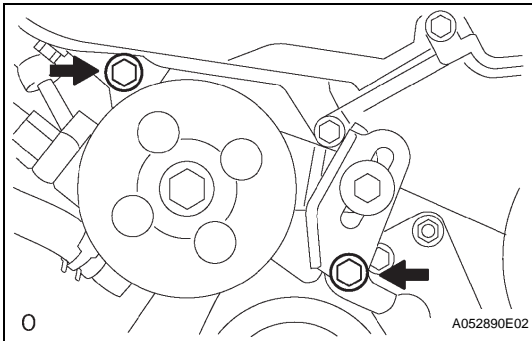
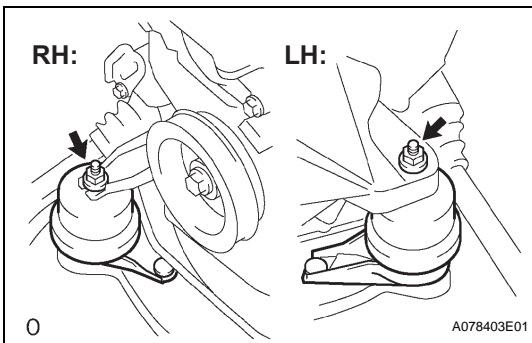
- (f) Attach the engine sling and hang the engine assembly with the chain block.

- 67. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1**
- 68. REMOVE MANIFOLD STAY**
- 69. REMOVE EXHAUST MANIFOLD CONVERTER SUB-ASSEMBLY**  
 (a) Remove the exhaust manifold converter sub-assembly (See page [EM-65](#)).
- 70. REMOVE VANE PUMP V BELT**  
 (a) Remove the vane pump V belt (See page [EM-6](#)).

**71. REMOVE VANE PUMP ASSEMBLY**

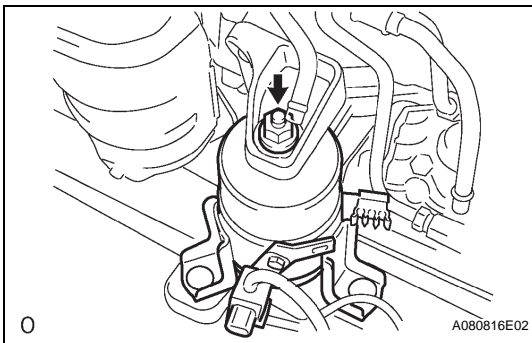
- (a) Remove the 3 nuts and disconnect the PS pressure tube.

- (b) Remove the 2 bolts and the vane pump.

**72. REMOVE STABILIZER BAR FRONT (for 4WD)****73. REMOVE POWER STEERING LINK ASSEMBLY (for 4WD)****74. REMOVE FRONT FRAME ASSEMBLY**

- (a) Remove the 2 nuts and separate the engine mounting insulators RH and LH.

- (b) Remove the nut and separate engine mounting insulator FR.



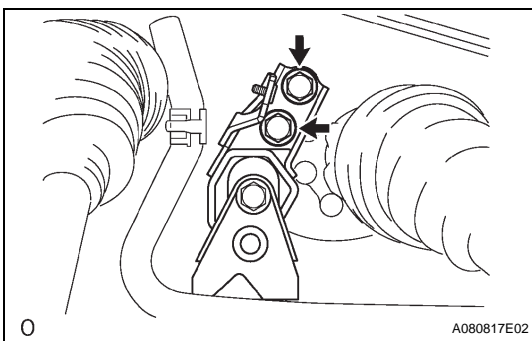
- (c) Remove the 2 bolts and separate the engine mounting insulator RR.

**75. REMOVE FRONT DRIVE SHAFT ASSEMBLY LH SST 09520-01010, 09520-24010 (09520-32040)**

- (a) Remove the front drive shaft assembly LH (See page [DS-5](#)).

**76. REMOVE FRONT DRIVE SHAFT ASSEMBLY RH (for 2WD)**

- (a) Remove the front drive shaft assembly RH (See page [DS-5](#)).



- 77. REMOVE FRONT DRIVE SHAFT ASSEMBLY RH (for 4WD)**  
**SST 09520-01010, 09520-24010 (09520-32040)**
  - (a) Remove the front drive shaft assembly RH (See page [DS-5](#)).
- 78. REMOVE STARTER ASSEMBLY**
  - (a) Remove the starter assembly (See page [ST-5](#)).
- 79. REMOVE ENGINE MOUNTING BRACKET FR**
  - (a) Remove the engine mounting bracket FR (See page [AX-169](#)).
- 80. REMOVE AUTOMATIC TRANSAXLE ASSEMBLY (for 2WD)**
  - (a) Remove the automatic transaxle assembly (See page [AX-169](#)).
- 81. REMOVE TRANSFER STIFFENER PLATE RH (for 4WD)**
  - (a) Remove the transfer stiffener plate RH (See page [TF-14](#)).
- 82. REMOVE AUTOMATIC TRANSMISSION W/ TRANSFER (for 4WD)**
  - (a) Remove the automatic transmission w/ transfer (See page [TF-14](#)).
- 83. REMOVE ENGINE MOUNTING BRACKET RR**
- 84. REMOVE DRIVE PLATE & RING GEAR SUB-ASSEMBLY**  
**SST 09213-54015 (91651-60855), 09330-00021**
  - (a) Remove the drive plate & ring gear sub-assembly (See page [EM-102](#)).
- 85. INSTALL ENGINE STAND**
- 86. REMOVE ENGINE HANGER NO.2**
- 87. REMOVE EMISSION CONTROL VALVE SET**
  - (a) Remove the emission control valve set (See page [EM-8](#)).
- 88. REMOVE INTAKE AIR SURGE TANK**
  - (a) Remove the intake air surge tank (See page [EM-8](#)).
- 89. REMOVE INTAKE MANIFOLD**
  - (a) Remove the intake manifold (See page [EM-65](#)).
- 90. REMOVE WATER OUTLET**
  - (a) Remove the water outlet (See page [EM-65](#)).
- 91. REMOVE IGNITION COIL ASSEMBLY**
- 92. REMOVE MANIFOLD CONVERTER INSULATOR NO.3**
- 93. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.2**
- 94. REMOVE MANIFOLD STAY NO.2**

**95. REMOVE EXHAUST MANIFOLD CONVERTER SUB-ASSEMBLY NO.2**

- (a) Remove the exhaust manifold converter sub-assembly No.2 (See page [EM-65](#)).

**96. REMOVE ENGINE MOUNTING BRACKET RH****97. REMOVE PUMP BRACKET****98. REMOVE GENERATOR BRACKET NO.1****99. REMOVE COMPRESSOR MOUNTING BRACKET NO.1**

- (a) Remove the compressor mounting bracket No.1 (See page [LU-14](#)).

**100. REMOVE WATER INLET PIPE**

- (a) Remove the water inlet pipe (TMC made) ( See page [CO-18](#)).

**101. REMOVE WATER INLET**

- (a) Remove the water inlet (TMC made) ( See page [CO-18](#)).

**102. REMOVE WATER INLET**

- (a) Remove the water inlet (TMMWV made) (See page [CO-18](#)).

**103. REMOVE THERMOSTAT****104. REMOVE ENGINE OIL PRESSURE SWITCH ASSEMBLY**

- (a) Using a deep socket wrench 24 mm, remove the oil pressure switch.

**105. REMOVE KNOCK SENSOR**

- (a) Remove the knock sensor (See page [ES-379](#)).

**106. REPLACE PARTIAL ENGINE ASSEMBLY**