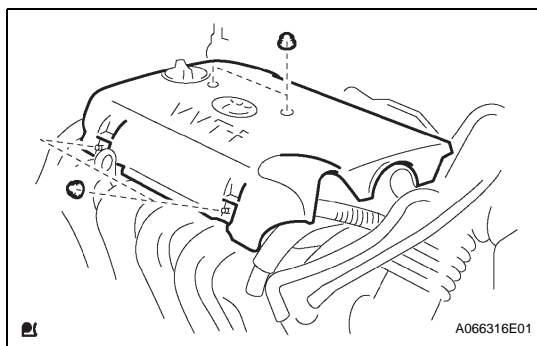
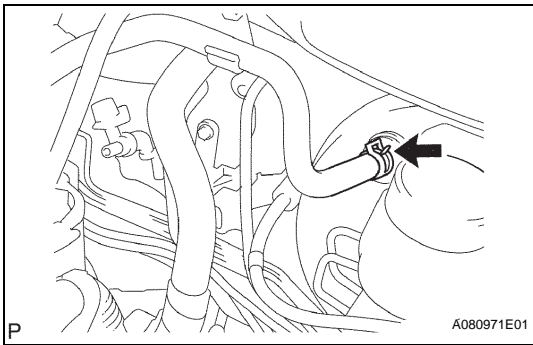


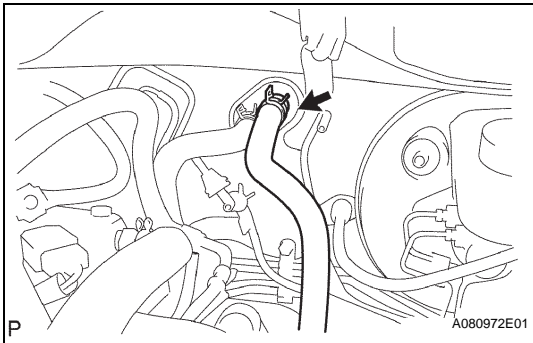
## REMOVAL

1. DISCHARGE FUEL SYSTEM PRESSURE (See page [FU-11](#))
2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL  
CAUTION:  
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
3. REMOVE ENGINE UNDER COVER RH
4. REMOVE ENGINE UNDER COVER LH
5. DRAIN ENGINE COOLANT (See page [CO-5](#))
6. DISCONNECT RADIATOR HOSE INLET
7. DISCONNECT RADIATOR HOSE OUTLET
8. DISCONNECT OIL COOLER INLET HOSE (for Automatic Transaxle)
9. DISCONNECT OIL COOLER OUTLET HOSE (for Automatic Transaxle)
10. REMOVE RADIATOR GRILLE (See page [ET-2](#))
11. REMOVE FRONT BUMPER COVER (See page [ET-2](#))
12. DISCONNECT HOOD LOCK (See page [CO-19](#))
13. REMOVE HOOD LOCK SUPPORT BRACE (See page [CO-19](#))
14. REMOVE RADIATOR SUPPORT OPENING COVER (See page [CO-20](#))
15. REMOVE UPPER RADIATOR SUPPORT (See page [CO-20](#))
16. REMOVE RADIATOR (See page [CO-20](#))
17. REMOVE FRONT WHEEL
18. REMOVE NO. 2 CYLINDER HEAD COVER  
(a) Remove the 4 nuts and No. 2 cylinder head cover.
19. REMOVE BATTERY
20. REMOVE AIR CLEANER (See page [ES-346](#))
21. DISCONNECT FUEL TUBE (See page [FU-12](#))
22. DISCONNECT ACCELERATOR CONTROL CABLE (See page [ES-346](#))
23. DISCONNECT TRANSMISSION CONTROL CABLE (for Manual Transaxle) (See page [MX-21](#))
24. DISCONNECT TRANSMISSION CONTROL CABLE (for Automatic Transaxle) (See page [AX-135](#))
25. DISCONNECT CLUTCH RELEASE CYLINDER (for Manual Transaxle) (See page [CL-13](#))

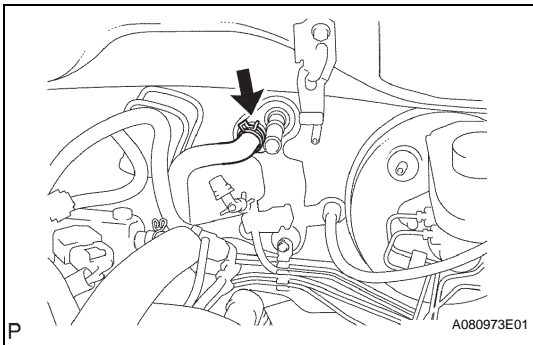


**26. DISCONNECT UNION TO CHECK VALVE HOSE**

- (a) Disconnect the union to check valve hose for the brake booster.

**27. DISCONNECT HEATER WATER INLET HOSE**

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

**28. DISCONNECT HEATER WATER OUTLET HOSE**

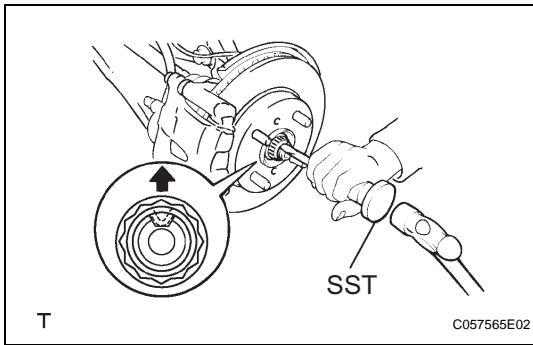
- (a) Disconnect the heater water outlet hose from the air conditioner tube.

**29. 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.

**30. REMOVE GENERATOR V BELT (See page [EM-7](#))****31. REMOVE COOLER COMPRESSOR (See page [AC-79](#))****32. REMOVE FRONT FLOOR PANEL BRACE (See page [EX-3](#))****33. REMOVE FRONT EXHAUST PIPE (See page [EX-3](#))****34. DISCONNECT STEERING INTERMEDIATE SHAFT (See page [SR-8](#))****35. REMOVE FRONT AXLE HUB LH NUT**

- (a) Remove the clip and nut.



- (b) Using SST and a hammer, unstake the lock nut.

**SST 09930-00010**

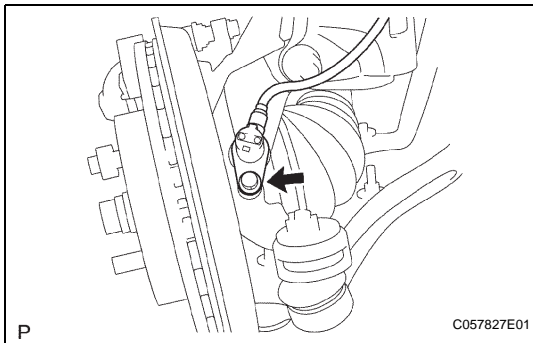
**NOTICE:**

- When removing the nut, unstake 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.

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

**HINT:**

Perform the same procedure as above on the opposite side.

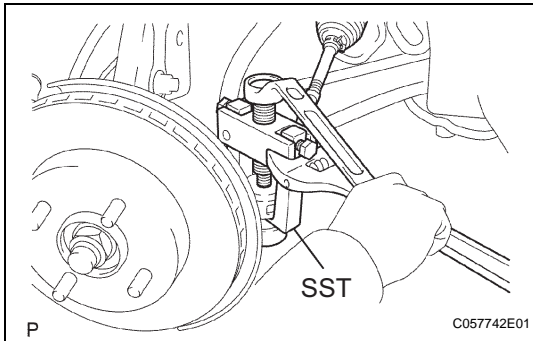


**36. DISCONNECT SPEED SENSOR FRONT LH (w/ ABS)**

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

**HINT:**

Perform the same procedure as above on the opposite side.



**37. DISCONNECT TIE ROD END LH**

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

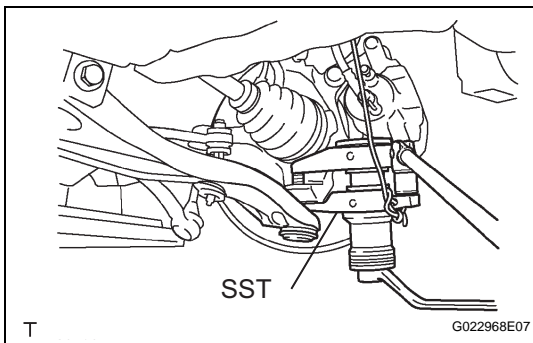
**SST 09628-62011**

**NOTICE:**

**Do not damage the dust cover of the ball joint.**

**HINT:**

Perform the same procedure as above on the opposite side.



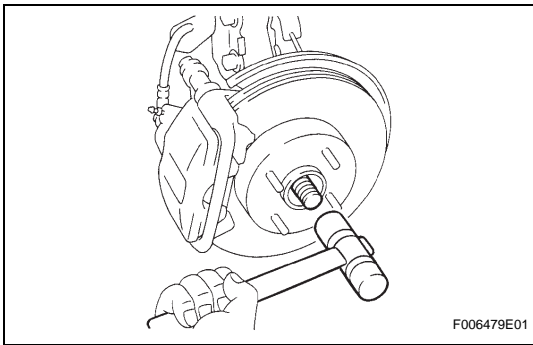
**38. DISCONNECT FRONT SUSPENSION ARM LOWER LH**

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

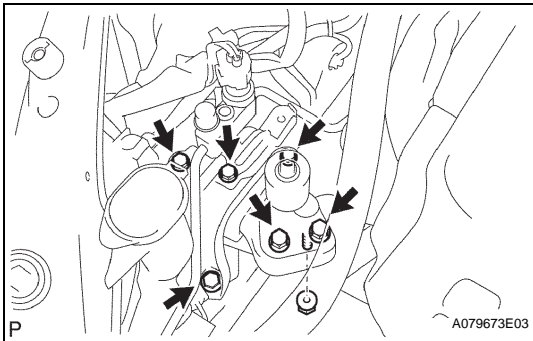
**SST 09628-00011**

**HINT:**

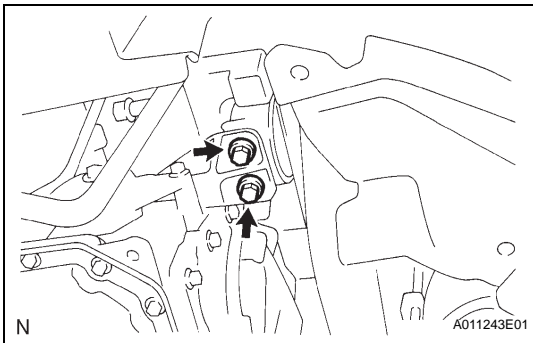
Perform the same procedure as above on the opposite side.

**39. DISCONNECT FRONT DRIVE SHAFT LH**

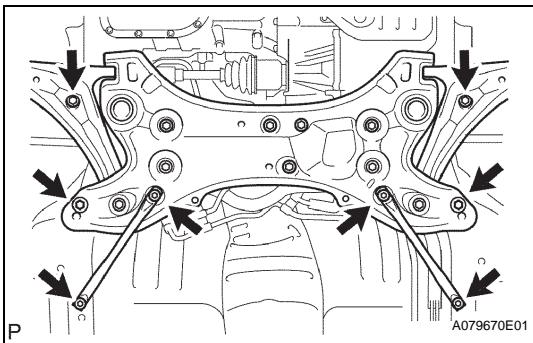
- (a) Using a plastic-faced hammer, detach the drive shaft from the axle hub by tapping the drive shaft.  
HINT:  
Perform the same procedure as above on the opposite side.

**40. REMOVE ENGINE AND TRANSAXLE ASSEMBLY**

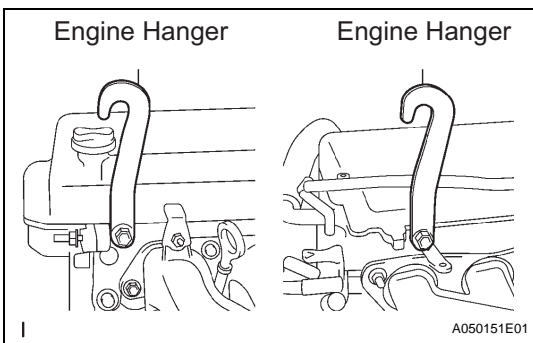
- (a) Set the engine lifter.  
(b) Remove the bolt which is used to fix the liquid tube to the engine mounting insulator RH.  
(c) Remove the 5 bolts, nut and engine mounting insulator RH.



- (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.



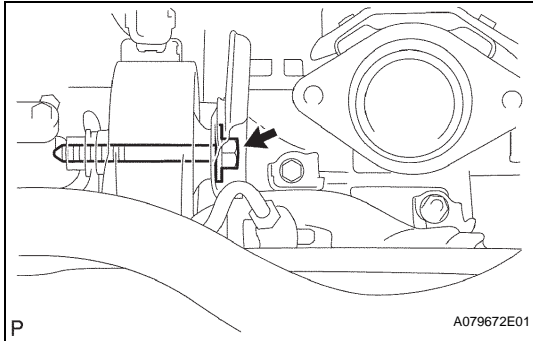
- (f) Install the 2 engine hangers as shown in the illustration.

**Part No.**

| Item                | Part        |
|---------------------|-------------|
| No. 1 engine hanger | 12281-21010 |
| Bolt                | 91642-81025 |

**Torque: 40 N\*m (408 kgf\*cm, 30 ft.\*lbf)**

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

**41. REMOVE VANE PUMP V BELT (See page EM-7)****42. REMOVE VANE PUMP**

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

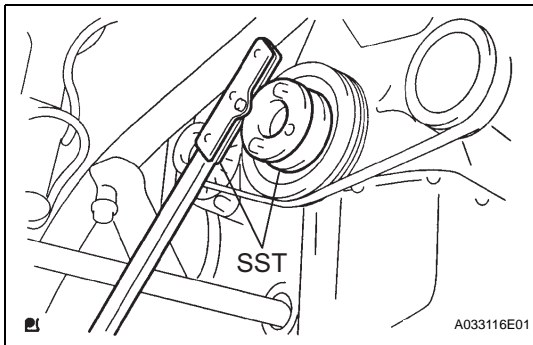
**43. REMOVE FRONT SUSPENSION CROSSMEMBER**

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

**44. REMOVE STARTER (See page ST-8)****45. REMOVE GENERATOR (See page CH-9)****46. REMOVE MANUAL TRANSAXLE (for Manual Transaxle) (See page MX-23)****47. REMOVE AUTOMATIC TRANSAXLE (for Automatic Transaxle) (See page AX-138)****48. REMOVE CLUTCH COVER (for Manual Transaxle) (See page CL-16)****49. REMOVE CLUTCH DISC (for Manual Transaxle)****50. REMOVE FLYWHEEL (for Manual Transaxle)**

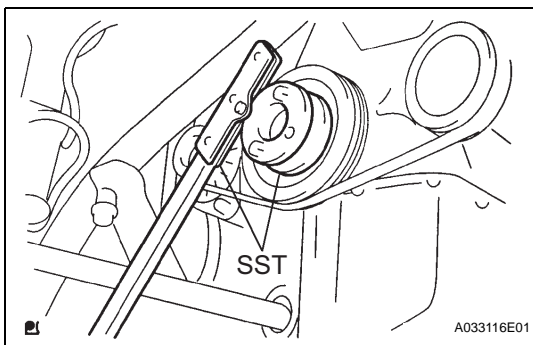
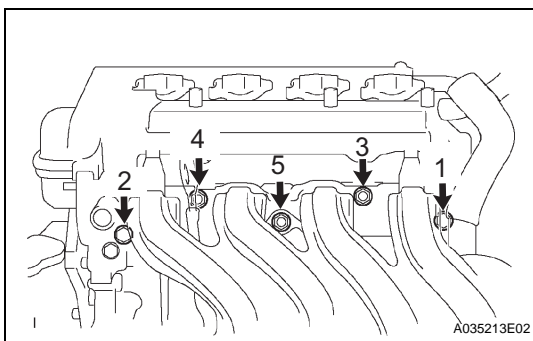
- (a) Hold the crankshaft pulley with SST, and then remove the 6 bolts and flywheel.

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

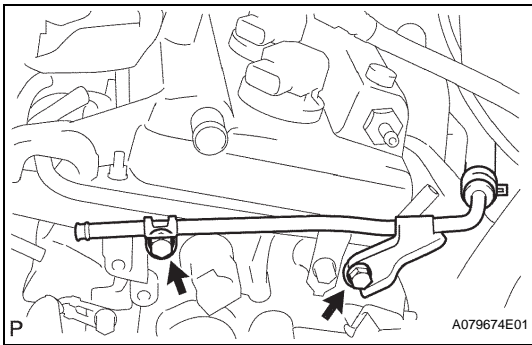
**51. REMOVE DRIVE PLATE (for Automatic Transaxle)**

- (a) Hold the crankshaft pulley with SST, and then remove the 6 bolts and drive plate.

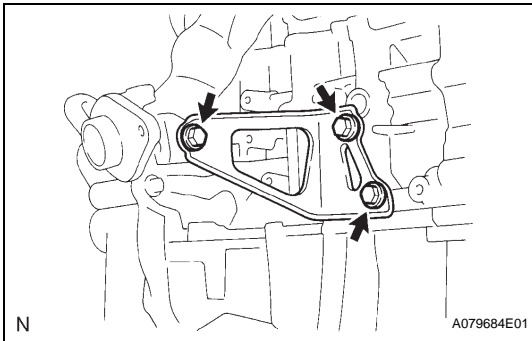
**SST 09213-58012 (91111-50845), 09330-00021**

**52. REMOVE VENTILATION HOSE (See page EM-25)****53. REMOVE NO. 2 VENTILATION HOSE (See page EM-25)****54. 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.

**55. REMOVE BOOSTER VACUUM TUBE**

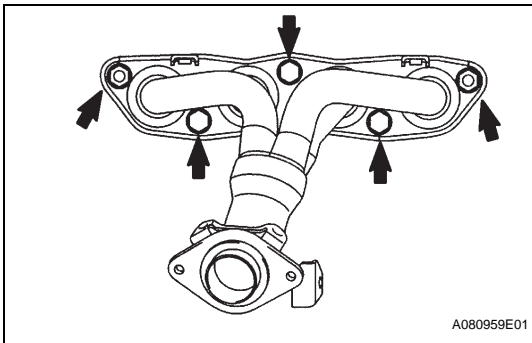
- (a) Remove the 2 bolts and booster vacuum tube.

**56. REMOVE MANIFOLD SUPPORT BRACKET**

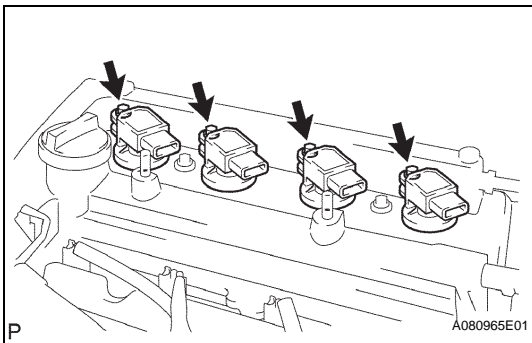
- (a) Remove the 3 bolts and manifold support bracket.

**57. REMOVE NO. 1 EXHAUST MANIFOLD HEAT INSULATOR**

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

**58. REMOVE EXHAUST MANIFOLD**

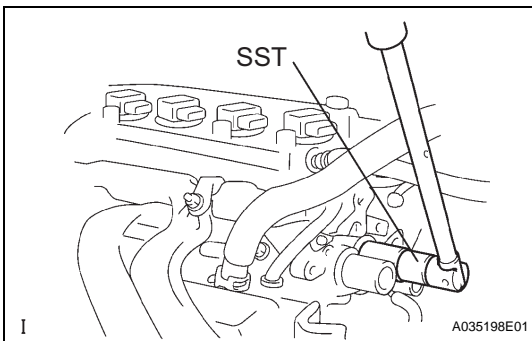
- (a) Remove the 3 bolts, 2 nuts and exhaust manifold.

**59. REMOVE IGNITION COIL**

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

**60. REMOVE NO. 1 WATER BY-PASS PIPE**

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

**61. REMOVE ENGINE COOLANT TEMPERATURE SENSOR**

- (a) Using SST, remove the sensor.  
**SST 09817-33190**

**62. REMOVE KNOCK SENSOR**

- (a) Remove the bolt and sensor.

**63. REMOVE ENGINE OIL PRESSURE SWITCH**

- (a) Using SST, remove the switch.  
**SST 09268-46021**