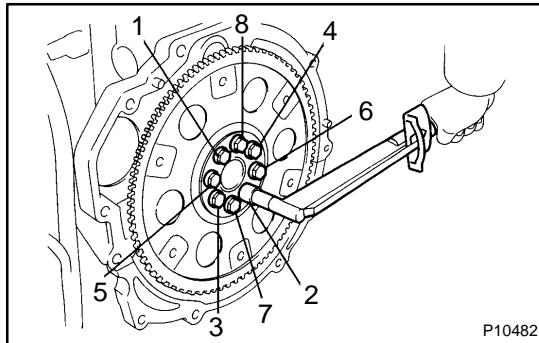


INSTALLATION

1. INSTALL DRIVE PLATE

- (a) Install the front spacer, drive plate and rear plate on the crankshaft.



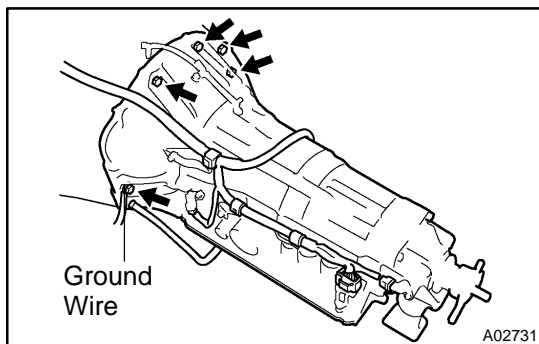
- (b) Apply adhesive to 2 or 3 threads of the mounting bolt end.

Adhesive:

Part No. 08833-00070, THREE BOND 1324 or equivalent

- (c) Install the uniformly tighten the 8 mounting bolts, in several passes, in the sequence shown.

Torque: 83 N·m (850 kgf-cm, 61 ft-lbf)



2. INSTALL TRANSMISSION TO ENGINE

- (a) Check the torque converter clutch installation.
(See page [AT-44](#))

- (b) Attach the transmission to the engine.

- (c) Install the ground wire and 5 bolts.

Torque: 72 N·m (730 kgf-cm, 53 ft-lbf)

3. CONNECT ENGINE WIRE TO TRANSMISSION

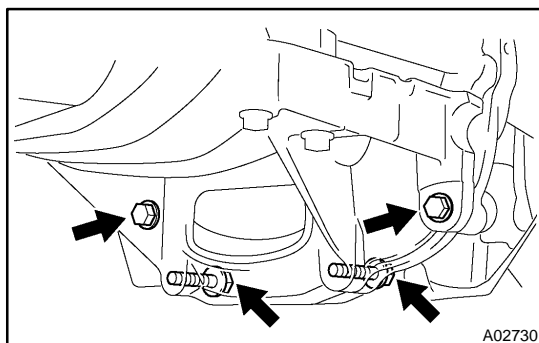
- (a) Connect the VSS connector.
- (b) Connect the PNP switch connector.
- (c) Connect the solenoid connector.
- (d) Connect the direct clutch speed sensor connector.
- (e) Connect the engine wire to the 3 wire clamps.

4. INSTALL STARTER

- (a) Install the starter and clamp bracket with the 2 bolts.

Torque: 37 N·m (380 kgf-cm, 27 ft-lbf)

- (b) Connect the starter connector.



5. INSTALL 4 BOLTS HOLDING NO.1 OIL PAN TO TRANSMISSION

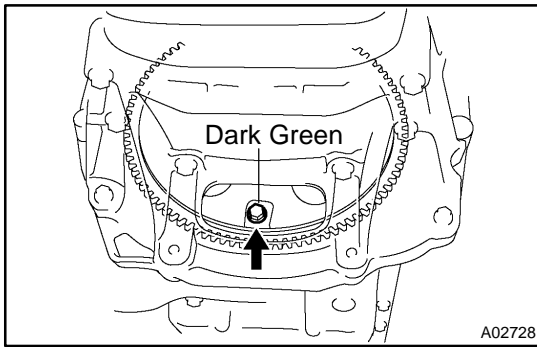
Torque: 37 N·m (380 kgf-cm, 27 ft-lbf)

6. INSTALL TORQUE CONVERTER CLUTCH BOLTS

- (a) Apply adhesive to 2 or 3 threads of the bolt end.

Adhesive:

Part No. 08833-00070, THREE BOND 1324 or equivalent



- (b) Hold the crankshaft pulley bolt with a wrench, and install the 6 bolts evenly.

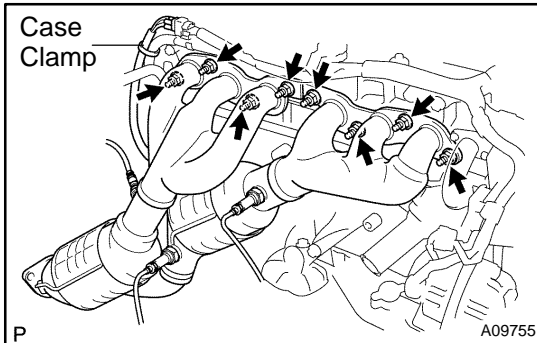
Torque: 48 N·m (490 kgf-cm, 35 ft-lbf)

HINT:

First install the dark green colored bolt, install the other bolts.

- (c) Install the hole plug.

7. INSTALL OIL COOLER PIPE FOR A/T



8. INSTALL EXHAUST MANIFOLD

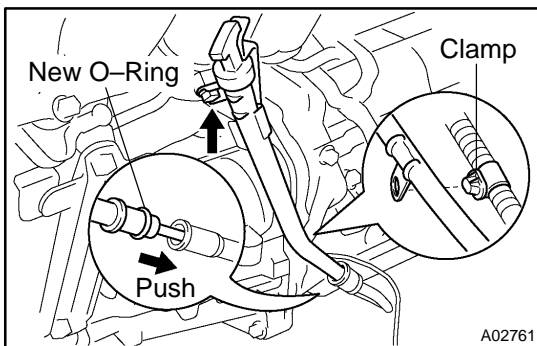
- (a) Install 2 new gaskets to the cylinder head.

- (b) Using a 14 mm deep socket wrench, install the exhaust manifold with the 8 nuts. Uniformly tighten the nuts in several passes.

Torque: 40 N·m (408 kgf-cm, 30 ft-lbf)

- (c) Connect the heated oxygen sensor (bank 2 sensor 1) connector.

- (d) Install the case clamp.



9. INSTALL OIL DIPSTICK GUIDE AND DIPSTICK FOR A/T

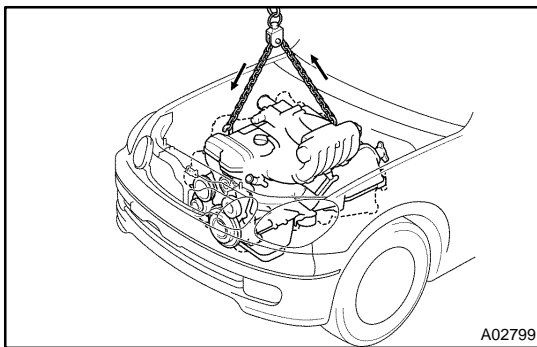
- (a) Install a new O-ring to the dipstick guide.

- (b) Push in the dipstick guide end to the dipstick tube of the oil pan.

- (c) Install the dipstick guide with the bolt.

- (d) Connect the engine wire clamp to the dipstick guide.

- (e) Install the dipstick.



10. INSTALL ENGINE AND TRANSMISSION ASSEMBLY IN VEHICLE

- (a) Attach the engine chain hoist to the engine hangers.

- (b) Slowly lower the engine and transmission assembly into the engine compartment.

- (c) Insert the stud bolts of the front engine mounting brackets into the stud bolt holes of the front suspension crossmember.

- (d) Keep the engine level.

- (e) Install the rear engine mounting member with the 4 bolts and 4 nuts.

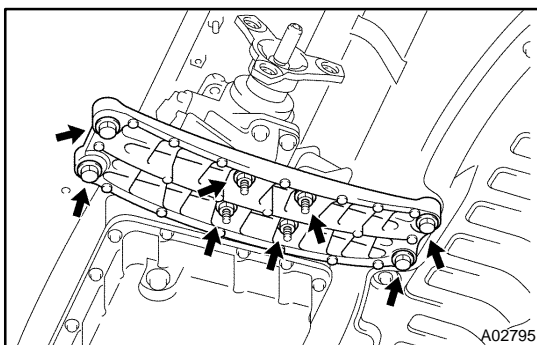
Torque:

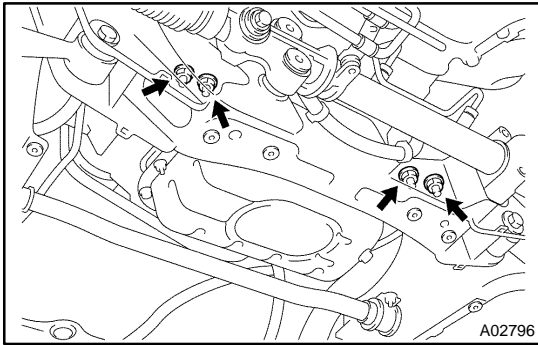
25.5 N·m (260 kgf-cm, 19 ft-lbf) for bolts

13.5 N·m (135 kgf-cm 10 ft-lbf) for nuts

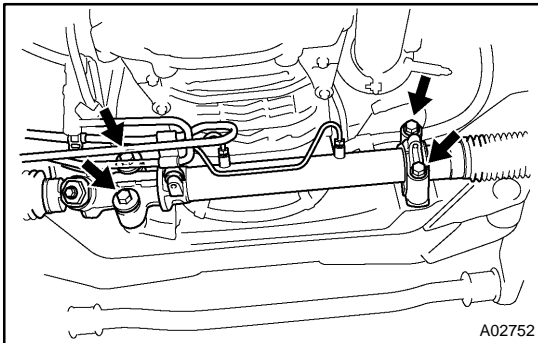
NOTICE:

Be careful of installation direction.



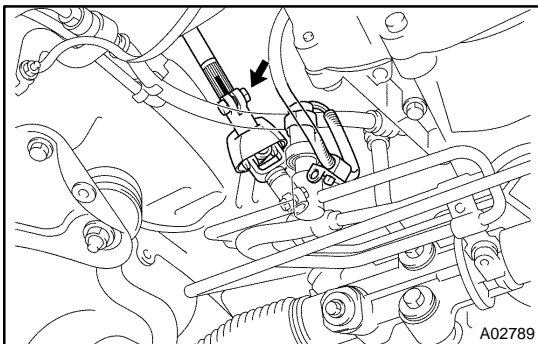


- (f) Install the 4 nuts holding the engine mounting brackets to the front suspension crossmember.
Torque: 70 N·m (714 kgf-cm, 52 ft-lbf)
- (g) Install the 2 hole plugs.
- (h) Remove the engine chain hoist.
- (i) Remove the bolt and No.1 engine hanger.

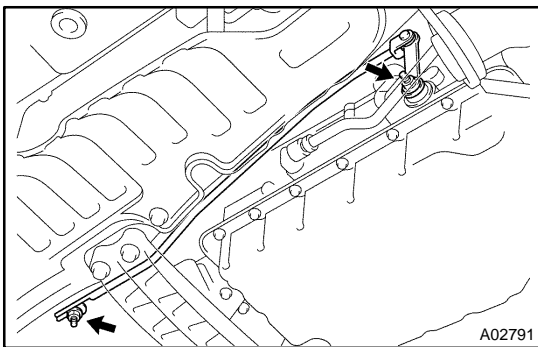


11. INSTALL PS GEAR HOUSING

- (a) Align the matchmarks and connect the sliding yoke to the steering intermediate shaft.
- (b) Install the PS gear housing with the 4 bolts.
Torque: 65 N·m (660 kgf-cm, 48 ft-lbf)



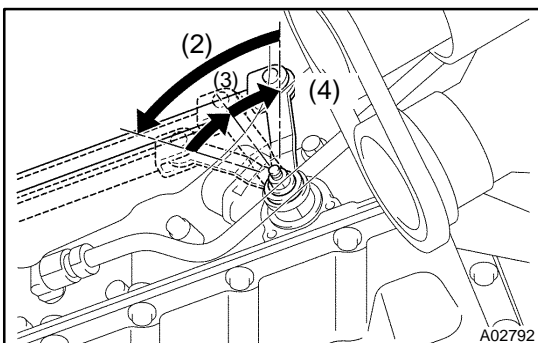
- (c) Install the bolt holding the sliding yoke to the steering intermediate shaft.
Torque: 35 N·m (360 kgf-cm, 26 ft-lbf)
- (d) Connect the PS pressure switch and wire clamp.



12. INSTALL TRANSMISSION CONTROL ROD

Install the control rod with the 2 nuts.

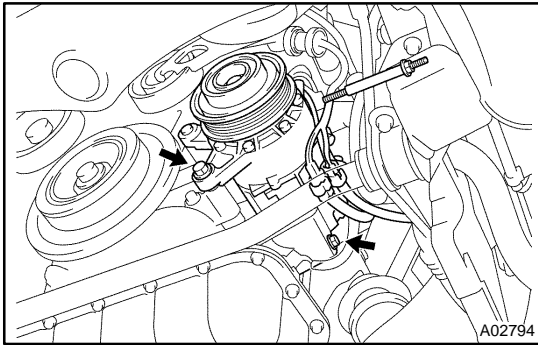
Torque: 13 N·m (130 kgf-cm, 9 ft-lbf)



If the indicator is not aligned with the correct position, carry out the following adjustment procedures.

- (1) Loosen the nut on the shift lever.
- (2) Push the control shaft lever fully rearward.
- (3) Return the control shaft lever 2 notches to the N position.
- (4) Set the shift lever to the N position.
- (5) While holding the shift lever lightly toward the R position side, tighten the nut.

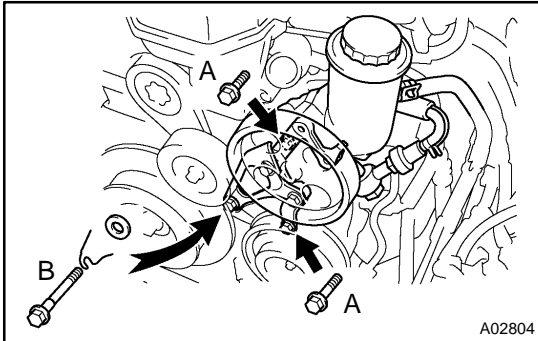
Torque: 13 N·m (130 kgf-cm, 9 ft-lbf)

**13. INSTALL A/C COMPRESSOR AND PS PUMP**

- (a) Temporarily install the compressor with the 2 bolts.
- (b) Using a torx socket (E10), install the stud bolt.

Torque: 26 N·m (265 kgf-cm, 19 ft-lbf)

- (c) Tighten the nut and 2 bolts.
- Torque: 52 N·m (530 kgf-cm, 38 ft-lbf)**
- (d) Connect the compressor connector.
- (e) Connect the PPS solenoid valve connector.

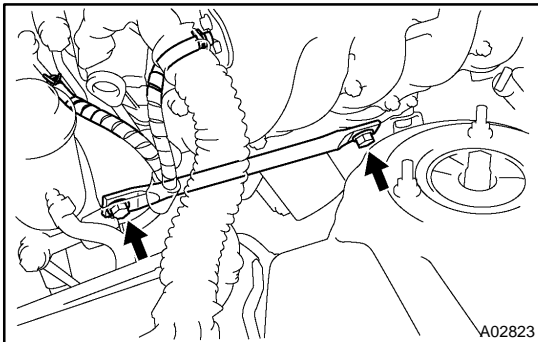


- (f) Install the vane pump assembly with the 3 bolts and plate washer.

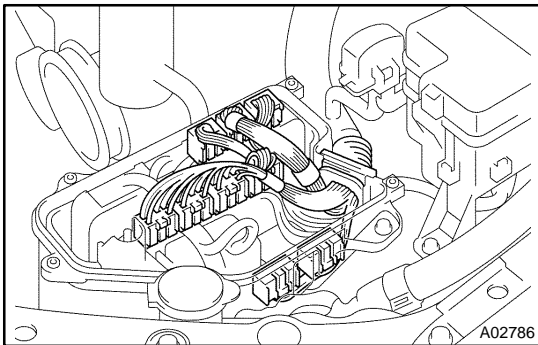
Torque:

57.9 N·m (590 kgf-cm, 43 ft-lbf) for A bolts

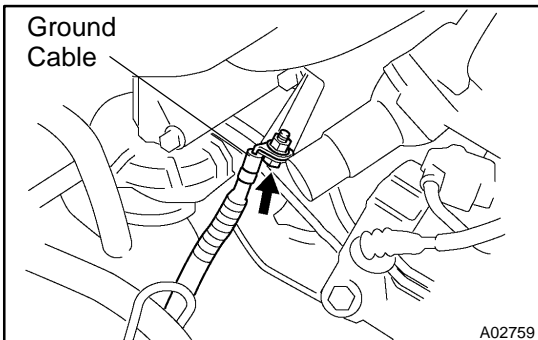
52 N·m (530 kgf-cm, 38 ft-lbf) for B bolt



- (g) Install the pump rear stay with the 2 bolts.
- Torque: 39.2 N·m (400 kgf-cm, 29 ft-lbf)**
- (h) Connect the PS air hose to the No.4 timing belt cover.
- (i) Connect the PS air hose to the air intake chamber.

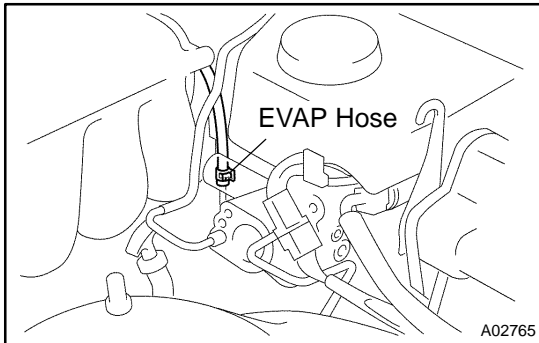
**14. CONNECT ENGINE WIRE TO ECM BOX**

- (a) Install the engine wire grommet to the ECM box.
- (b) Connect the 3 ECM connectors.
- (c) Connect the 4 wire harness connectors.
- (d) Connect the 2 junction connectors.
- (e) Install the ECM cover and ECM hood.

**15. CONNECT CLAMPS, WIRES, CONNECTORS, HOSES, CABLE AND STRAP**

- (a) Connect the 2 engine wire clamps to the clamp brackets.
- (b) Connect the DLC1.
- (c) Connect the igniter connector.
- (d) Connect the ground cable to the bracket on the cylinder block.
- (e) Connect the engine wire clamp to the wire clip of the generator.
- (f) Connect the generator wire.

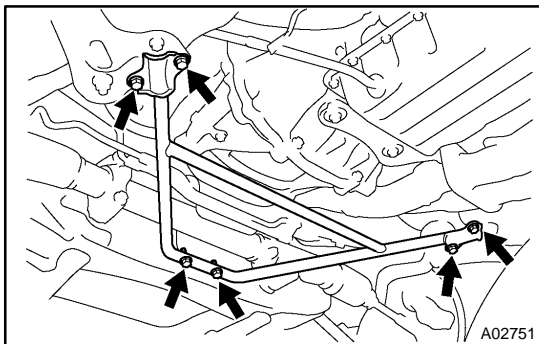
- (g) Connect the heated oxygen sensor (bank 1 sensor 1) connector.
- (h) Connect the heated oxygen sensor (bank 1 sensor 2) connector.



- (i) Connect the EVAP hose to the pipe (from charcoal canister).
- (j) Connect the heater hose to the heater pipe.
- (k) Connect the heater hose to the water bypass pipe.
- (l) Connect the ground strap to the dash panel.
- (m) Connect the fuel inlet hose to the fuel pipe support.

Torque: 29 N·m (300 kgf-cm, 22 ft-lbf)

- (n) Connect the starter wire to the terminal and manifold stay.
- (o) Connect the ground wire to the floor.



16. INSTALL FRONT SUSPENSION MEMBER BRACE

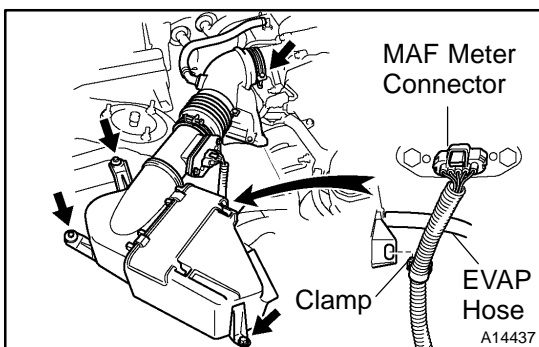
Install the brace with the 6 bolts.

Torque: 58 N·m (590 kgf-cm, 43 ft-lbf)

17. INSTALL DRIVE BELT (See page CH-1)

18. INSTALL RADIATOR ASSEMBLY (See page CO-23)

19. CONNECT ACCELERATOR CABLE TO ENGINE



20. INSTALL AIR CLEANER, MAF METER AND INTAKE AIR CONNECTOR PIPE ASSEMBLY

- (a) Connect the intake air resonator to the throttle body.
- (b) Install the air cleaner case with the 3 bolts.
- (c) Tighten the hose clamp bolt holding the intake air resonator to the throttle body.
- (d) Connect the MAF meter connector.
- (e) Connect the engine wire clamp to the air cleaner case.
- (f) Connect the EVAP hose to the air cleaner case.
- (g) Connect the PCV hose to the No.2 cylinder head cover.

21. INSTALL AIR CLEANER INLET

22. INSTALL ENGINE COVER

Install the engine cover with the 4 nuts.

23. FILL WITH ENGINE COOLANT

24. FILL WITH ENGINE OIL

25. START ENGINE AND CHECK FOR LEAKS

26. INSTALL ENGINE UNDER COVER

27. INSTALL HOOD**NOTICE:**

Be careful not to damage the body or glass with the hood end.

28. PERFORM ROAD TEST

Check for abnormal noise, shock, slippage, correct shift points and smooth operation.

29. RECHECK ENGINE COOLANT AND OIL LEVELS