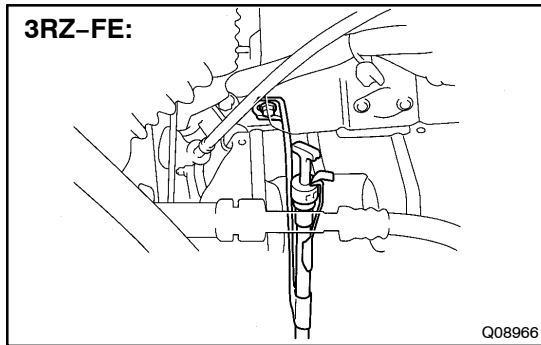
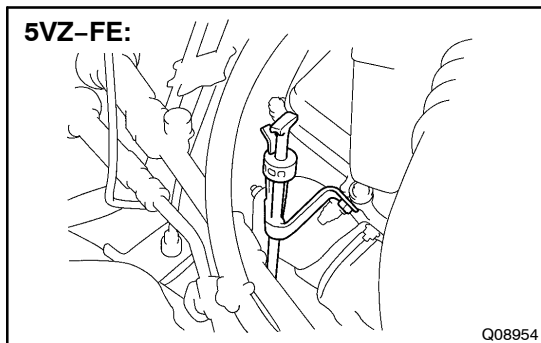


REMOVAL

1. **DISCONNECT THROTTLE CABLE**
 - (a) Loosen the 2 nuts and disconnect the throttle cable.
 - (b) Disconnect the throttle cable from cable clamps in the engine compartment.



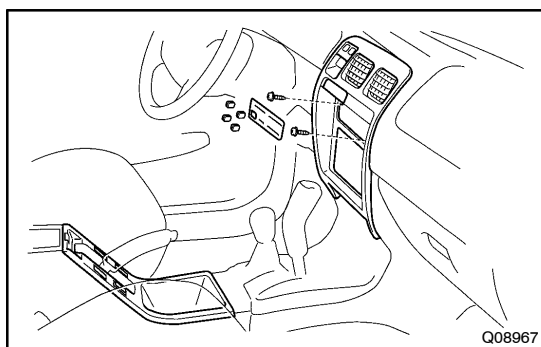
2. **REMOVE ATF LEVEL GAUGE**
3. **3RZ-FE:**
REMOVE OIL FILLER PIPE UPPER SIDE BOLT
Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)



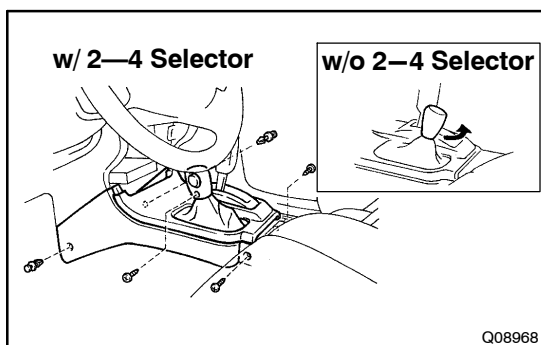
4. **5VZ-FE:**
REMOVE OIL FILLER PIPE
Remove the bolt and oil filler pipe with O-ring.
Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)

HINT:

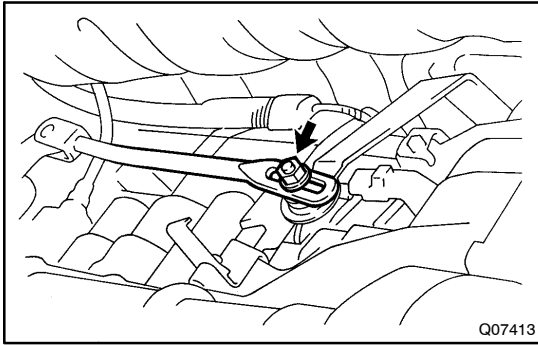
At the time of installation, please refer to the following item.
Replace the used O-ring with a new one.



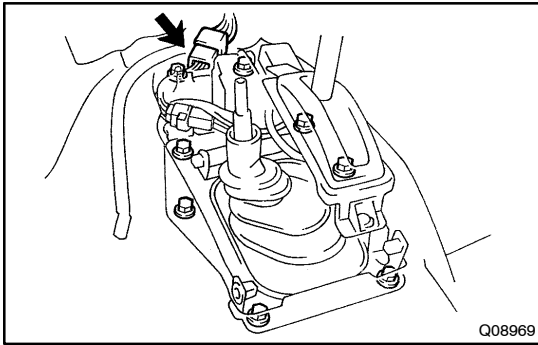
5. **REMOVE TRANSMISSION SHIFT LEVER ASSEMBLY AND TRANSFER SHIFT LEVER**
 - (a) Remove the rear console upper panel and disconnect the connectors.
 - (b) Pull off the heater control knobs.
 - (c) Using a screwdriver, pry out the heater control plate.
 - (d) Remove the 2 screws.
 - (e) Remove the center cluster finish panel and disconnect the connectors.



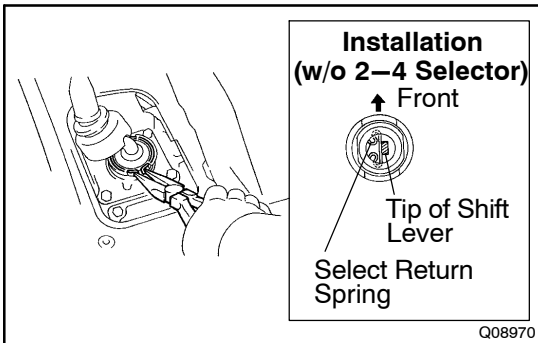
- (f) w/o 2-4 selector:
Remove the transfer shift lever knob.
- (g) w/ 2-4 selector:
Remove the screw and disconnect the transfer shift lever knob.
- (h) Remove the front console upper panel.
- (i) w/ 2-4 selector:
Disconnect the 2-4 selector connector and remove the transfer shift lever knob.
- (j) Remove the 2 clips, screws and front console box.



- (k) Remove the nut and washer and disconnect the shift control rod.
Torque: 13 N·m (130 kgf·cm, 10 ft·lbf)



- (l) Disconnect the connector and remove the 8 screws and transmission shift lever assembly.
Torque: 5.9 N·m (60 kgf·cm, 52 in·lbf)

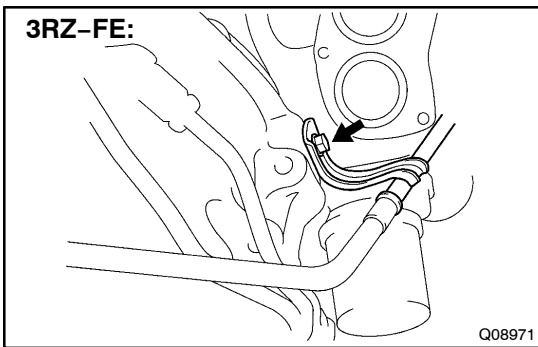


- (m) Using pliers, remove the snap ring and pull out the shift lever from the transfer.

HINT:

At the time of installation, please refer to the following item.
 Apply MP grease to the transfer shift lever.

- 6. REMOVE ENGINE UNDER COVER**
- 7. REMOVE FRONT AND REAR PROPELLER SHAFT (See page PR-8)**
- 8. REMOVE FRONT EXHAUST PIPE**



- 9. 3RZ-FE: REMOVE OIL FILLER PIPE**

Remove the bolt and oil filler pipe with O-ring.

Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)

HINT:

At the time of installation, please refer to the following item.
 Replace the used O-ring with a new one.

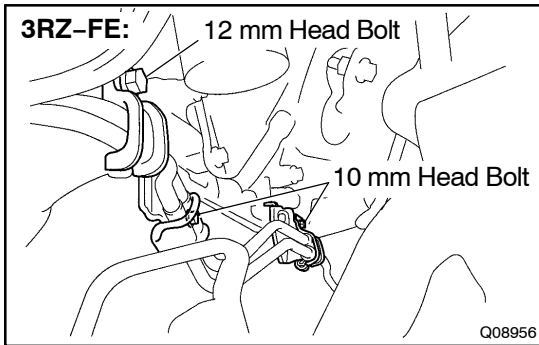
- 10. DISCONNECT FOLLOWING CONNECTOR FROM TRANSMISSION**

- No.2 vehicle speed sensor connector
- Solenoid connector
- ATF temperature sensor connector
- Park/neutral position switch connector

- 11. DISCONNECT FOLLOWING CONNECTOR FROM TRANSFER**

- No.1 vehicle speed sensor connector (3RZ-FE only)
- Transfer neutral position switch connector
- Transfer L4 position switch connector
- Transfer 4WD position switch connector
- Actuator connector (w/ 2-4 selector only)

12. SEPARATE WIRE HARNESS FROM TRANSMISSION AND TRANSFER



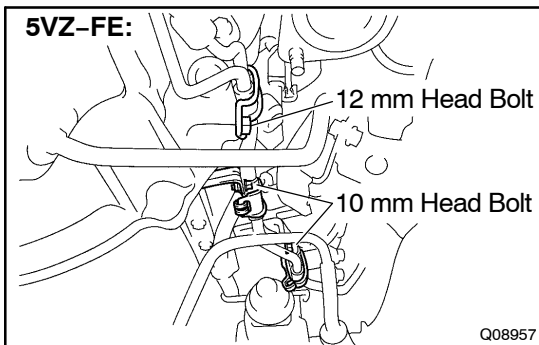
13. DISCONNECT OIL COOLER PIPE

(a) Remove the 3 bolts and oil cooler pipe clamps.

Torque:

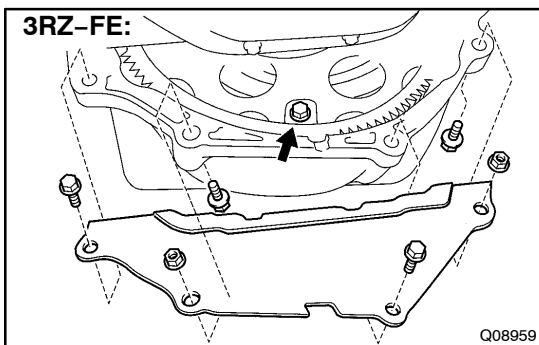
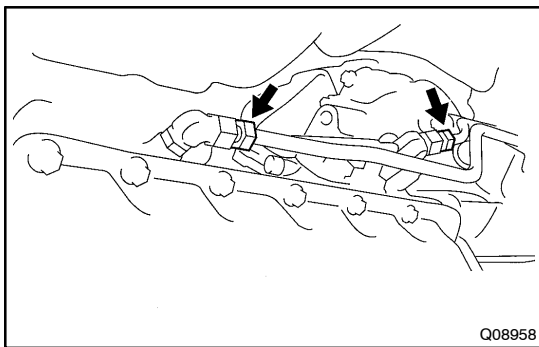
10 mm head bolt: 5.0 N·m (51 kgf·cm, 44 in·lbf)

12 mm head bolt: 12 N·m (120 kgf·cm, 9 ft·lbf)



(b) Disconnect the 2 oil cooler pipes.

Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)

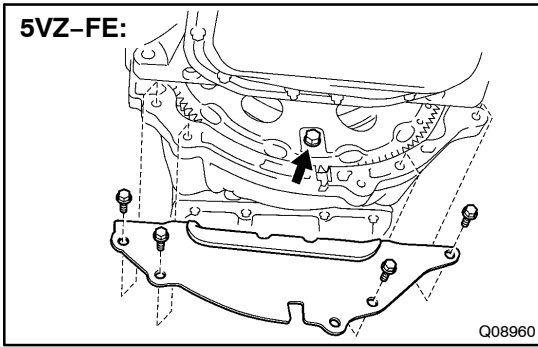


14. REMOVE REAR END PLATE AND TORQUE CONVERTER CLUTCH MOUNTING BOLT

(a) 3RZ-FE:

Remove the 2 nuts, 4 bolts and rear end plate.

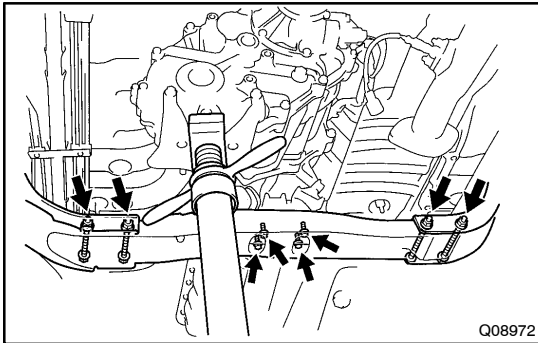
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)



- (b) 5VZ-FE:
Remove the 4 bolts and rear end plate.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)
- (c) Turn the crankshaft to gain access and remove the 6 bolts with holding the crankshaft pulley set bolt by a wrench.
Torque: 41 N·m (420 kgf·cm, 30 ft·lbf)

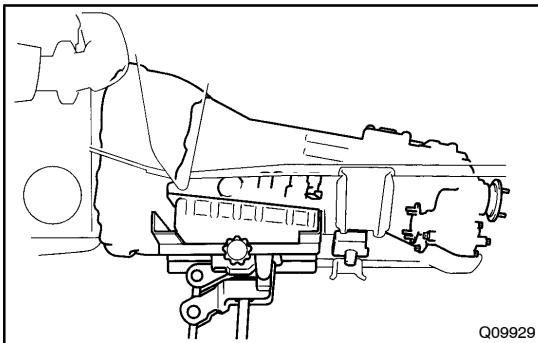
HINT:

At the time of installation, please refer to the following item.
First install green colored bolt and then 5 other bolts.

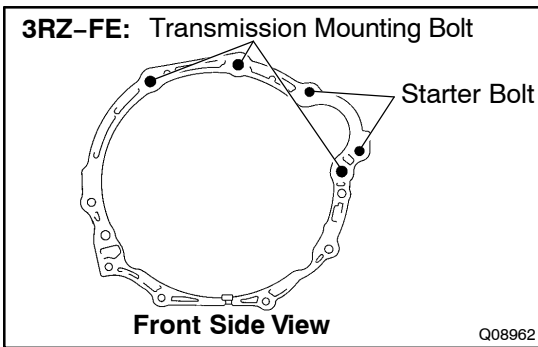


15. REMOVE CROSSMEMBER

- (a) Support the transmission rear side with a support stand.
- (b) Remove the 4 engine rear mounting bolts.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)
- (c) Remove the 4 nuts, bolts and crossmember.
Torque: 65 N·m (660 kgf·cm, 48 ft·lbf)



- (d) Support the transmission with a transmission jack.
- (e) Remove a support stand from the transmission rear side.

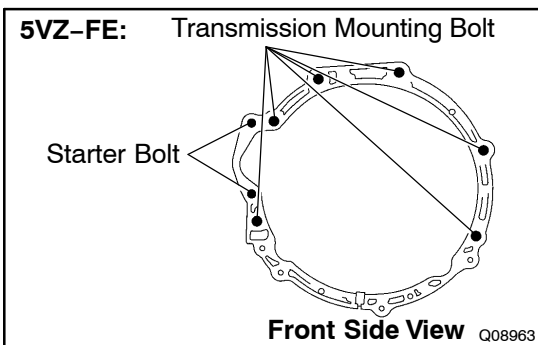


16. REMOVE STARTER

- (a) Remove the nut and disconnect the starter wire and connector.
- (b) Remove the 2 bolts and starter.
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

17. REMOVE TRANSMISSION

- (a) 3RZ-FE:
Remove the 3 bolts and transmission.
Torque: 71 N·m (730 kgf·cm, 53 ft·lbf)



- (b) 5VZ-FE:
Disconnect the stabilizer bar.
(See page [SA-77](#))
- (c) 5VZ-FE:
Remove the 6 bolts and transmission.
Torque: 71 N·m (730 kgf·cm, 53 ft·lbf)