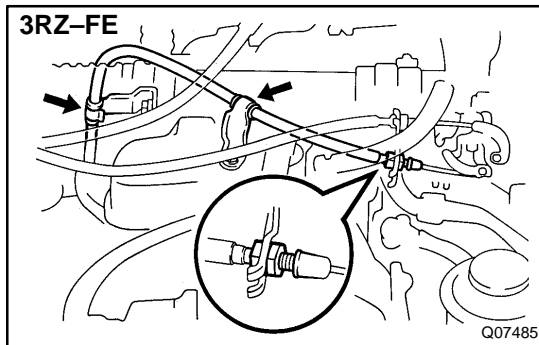
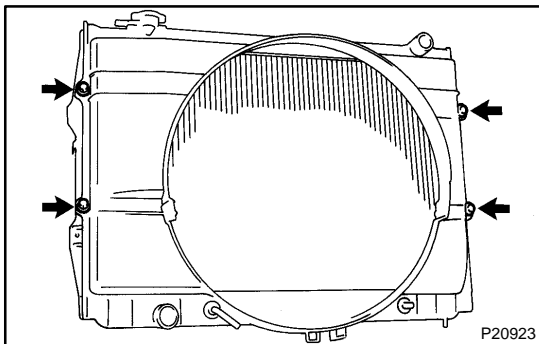


## REMOVAL

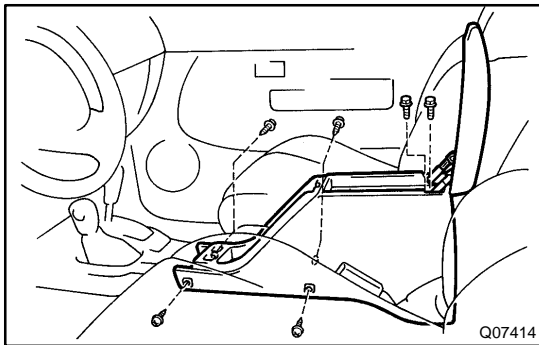
1. REMOVE ATF LEVEL GAUGE
2. REMOVE ENGINE UNDER COVER  
Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)



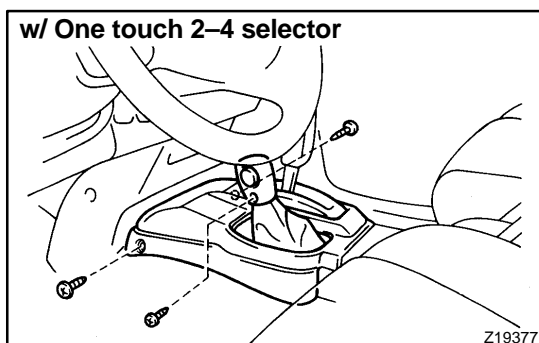
3. 3RZ-FE:  
**DISCONNECT THROTTLE CABLE**
  - (a) Loosen the nut and disconnect the cable.
  - (b) Separate the throttle cable from the clamp.



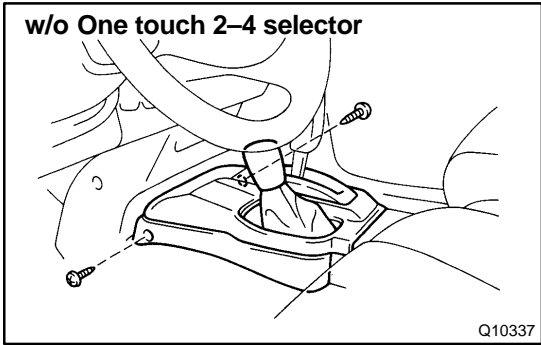
4. **REMOVE NO.1 FAN SHROUD**  
Remove the 4 bolts and No.1 fan shroud.



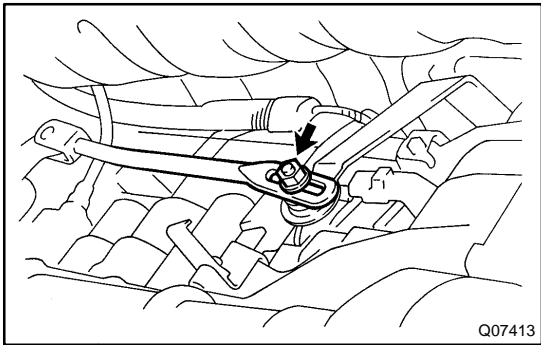
5. **REMOVE TRANSMISSION SHIFT LEVER ASSEMBLY AND TRANSFER SHIFT LEVER**
  - (a) Remove the 2 bolts, 4 screws and rear console box.



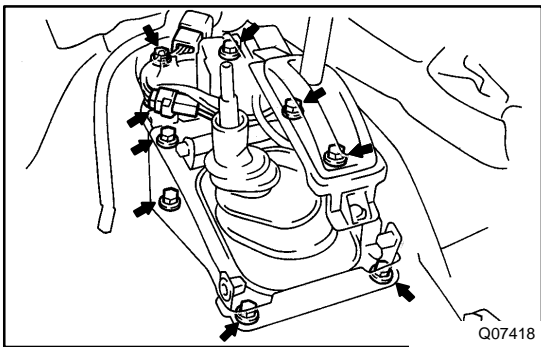
- (b) w/ One touch 2-4 selector:  
Remove the 3 screws and front console box with the transfer shift lever knob.



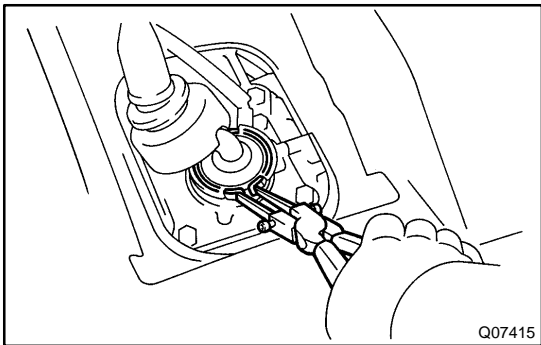
- (c) w/o One touch 2-4 selector:  
Remove the 2 screws and front console box with the transfer shift lever knob.
- (d) Disconnect the connectors.



- (e) Remove the nut and washer, and disconnect the shift control rod.



- (f) Disconnect the connector and remove the 8 screws and transmission shift lever assembly.



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

**HINT:**

At the time of installation, apply MP grease to the transfer shift lever.

**6. REMOVE OIL FILLER PIPE**

- (a) 3RZ-FE:  
Remove the 2 bolts and oil filler pipe with the O-ring.

**HINT:**

At the time of installation, replace the used O-ring with a new one.

- (b) 5VZ-FE:  
Remove the bolt and oil filler pipe with the O-ring.

**HINT:**

At the time of installation, replace the used O-ring with a new one.

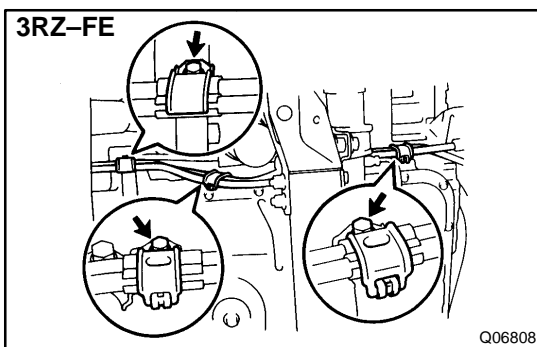
**7. REMOVE FRONT AND REAR PROPELLER SHAFT  
(See page PR-11)**

8. **REMOVE EXHAUST PIPE**  
 (3RZ-FE: See page [EM-108](#))  
 (5VZ-FE: See page [EM-105](#))

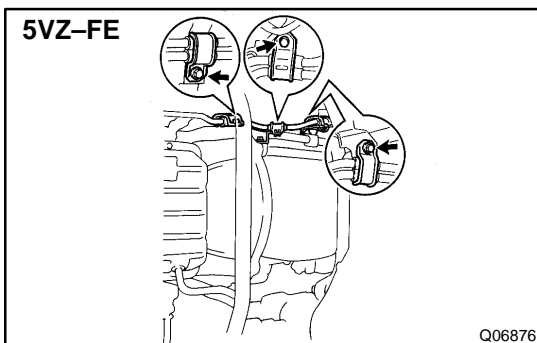
## HINT:

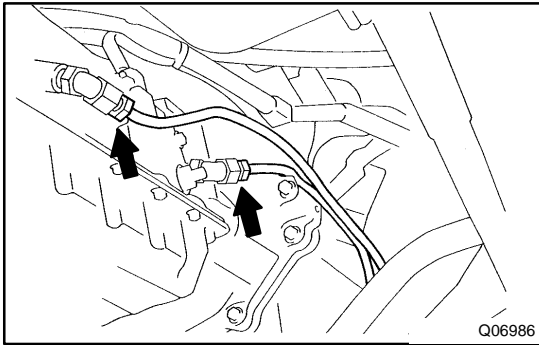
At the time of installation, please refer to the following item.  
 Replace the used gaskets and nuts with new ones.

9. **3RZ-FE:**  
**DISCONNECT NO.1 VEHICLE SPEED SENSOR CONNECTOR FROM TRANSMISSION**
10. **DISCONNECT NO. 2 VEHICLE SPEED SENSOR CONNECTOR FROM TRANSMISSION**
11. **DISCONNECT SOLENOID CONNECTOR FROM TRANSMISSION**
12. **DISCONNECT ATF TEMPERATURE SENSOR CONNECTOR FROM TRANSMISSION**
13. **DISCONNECT PARK/NEUTRAL POSITION SWITCH CONNECTOR FROM TRANSMISSION**
14. **DISCONNECT NO. 1 VEHICLE SPEED SENSOR CONNECTOR FROM TRANSFER**
15. **DISCONNECT TRANSFER NEUTRAL POSITION SWITCH CONNECTOR FROM TRANSFER**
16. **DISCONNECT TRANSFER L4 POSITION SWITCH CONNECTOR FROM TRANSFER**
17. **DISCONNECT TRANSFER 4WD POSITION SWITCH CONNECTOR FROM TRANSFER**
18. **DISCONNECT ACTUATOR CONNECTOR FROM TRANSFER**
19. **SEPARATE WIRE HARNESS FROM TRANSMISSION AND TRANSFER**

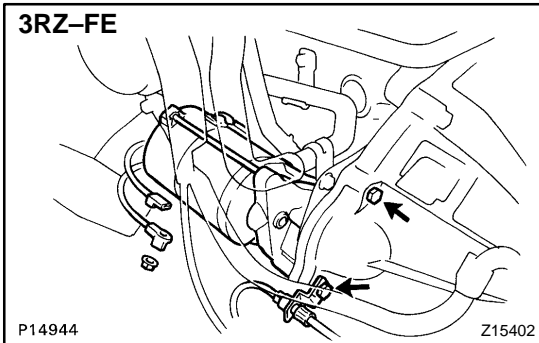


20. **DISCONNECT OIL COOLER PIPE**  
 (a) Remove the 3 bolts and clamps.

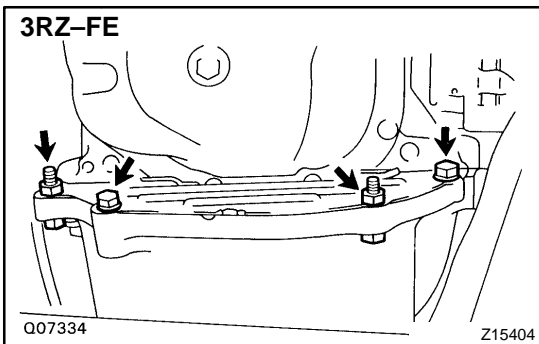
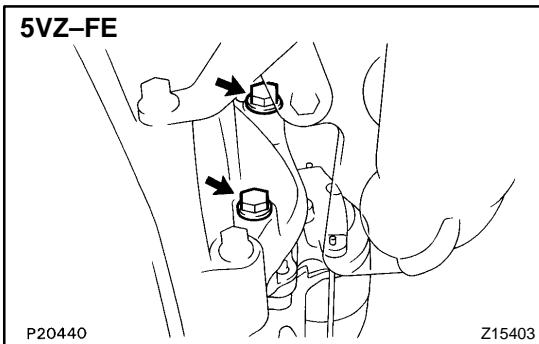




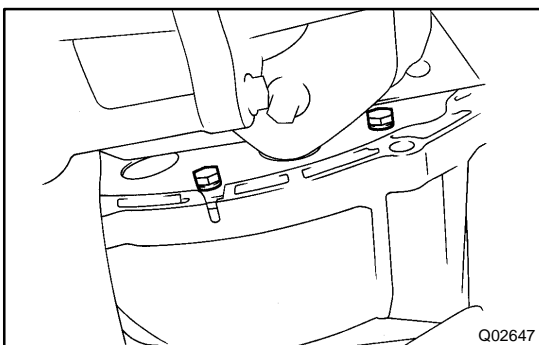
- (b) Loosen the 2 union nuts and disconnect the 2 oil cooler pipes.  
**Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)**



- 21. REMOVE STARTER**
  - (a) Remove the nut and disconnect the connector and terminal.
  - (b) Remove the 2 bolts and starter.  
**Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)**
- 22. REMOVE 4 STABILIZER BAR BRACKET MOUNTING BOLTS (See page SA-123)**

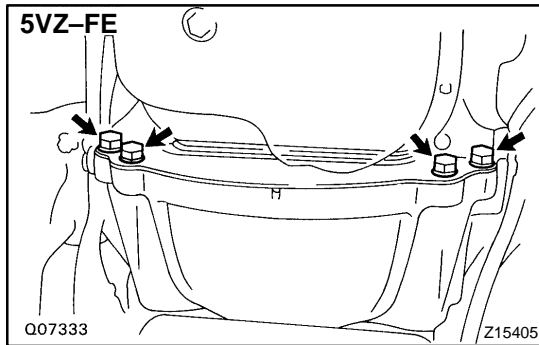


- 23. 3RZ-FE: REMOVE TORQUE CONVERTER CLUTCH MOUNTING BOLT**
  - (a) Remove the 2 nuts and bolts.
  - (b) Remove the 2 bolts and flywheel housing under cover.  
**Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)**



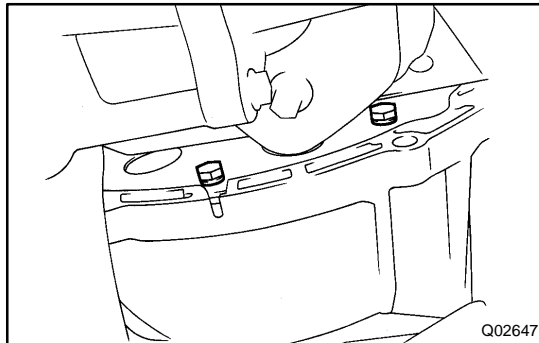
- (c) Turn the crankshaft to gain access to each bolt, remove the 6 bolts with holding the crankshaft pulley bolt with a wrench.  
**Torque: 41 N·m (420 kgf·cm, 30 ft·lbf)**

**HINT:**  
 At the time of installation, first install green colored bolt and then 5 other bolts.



**24. 5VZ-FE:  
REMOVE TORQUE CONVERTER CLUTCH MOUNTING BOLT**

- (a) Remove the 4 bolts and flywheel housing under cover.  
**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

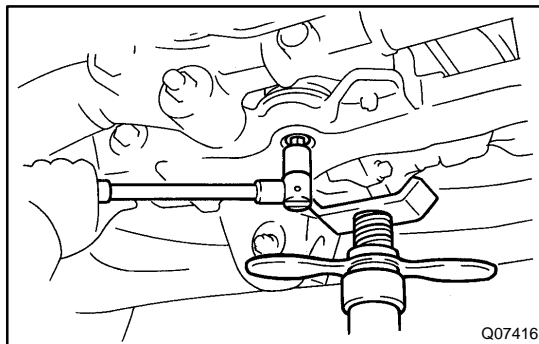


- (b) Turn the crankshaft to gain access to each bolt, remove the 6 bolts with holding the crankshaft pulley bolt with a wrench.

**Torque: 41 N·m (420 kgf·cm, 30 ft·lbf)**

**HINT:**

At the time of installation, first install green colored bolt and then 5 other bolts.

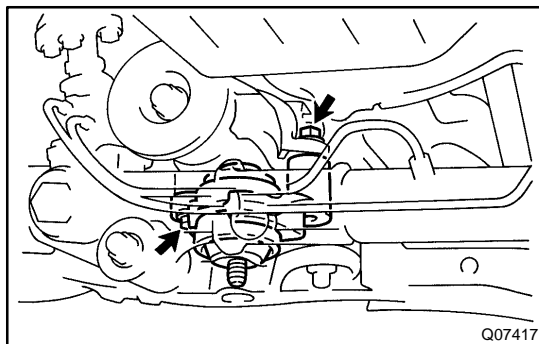


**25. REMOVE FRONT DIFFERENTIAL REAR MOUNTING CUSHION**

- (a) Using a hexagon wrench (12 mm), remove the nut.  
**Torque: 87 N·m (890 kgf·cm, 64 ft·lbf)**
- (b) Lift up the front differential with a support stand.

**NOTICE:**

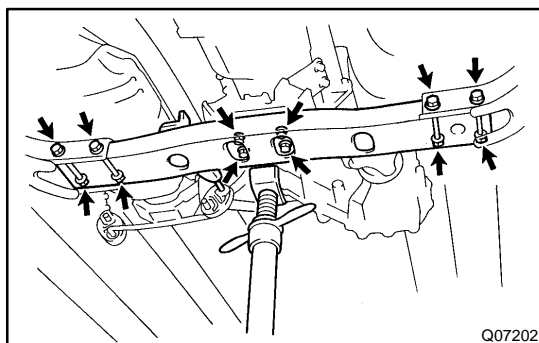
**Be careful not to touch the torque converter clutch housing and front differential companion flange.**



- (c) Remove the 2 rear mounting cushion mounting bolts.  
**Torque: 108 N·m (1,100 kgf·cm, 80 ft·lbf)**

**26. REMOVE CROSSMEMBER**

- (a) Support the transmission rear side with a support stand.



- (b) Remove the 4 engine rear mounting bolts.

**Torque: 18.5 N·m (189 kgf·cm, 14 ft·lbf)**

- (c) Remove the 4 nuts, bolts and crossmember.

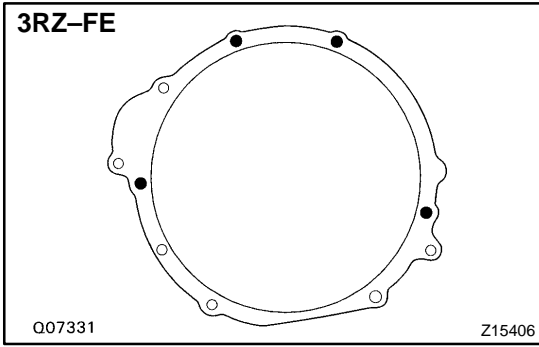
**Torque: 72 N·m (734 kgf·cm, 53 ft·lbf)**

- (d) Support the transmission with a transmission jack.

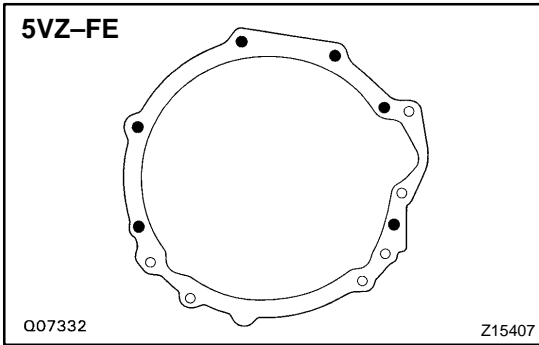
**27. REMOVE TRANSMISSION**

- (a) Lower the transmission rear side.

- (b) Separate the wire harness from the transmission.



- (c) 3RZ-FE:  
Remove the 4 bolts and transmission.  
**Torque: 71 N·m (730 kgf·cm, 53 ft·lbf)**



- (d) 5VZ-FE:  
Remove the 6 bolts and transmission.  
**Torque: 71 N·m (730 kgf·cm, 53 ft·lbf)**