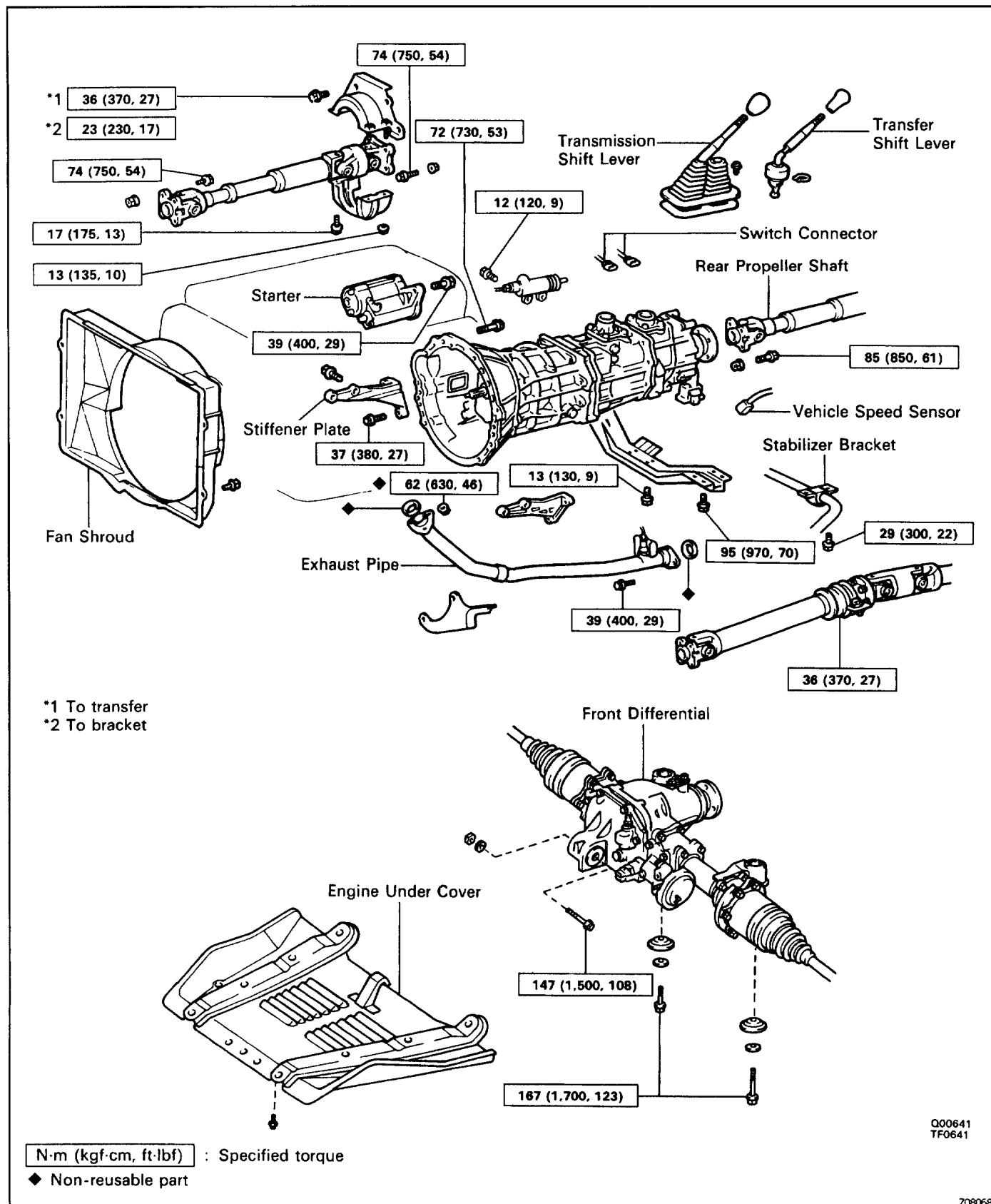
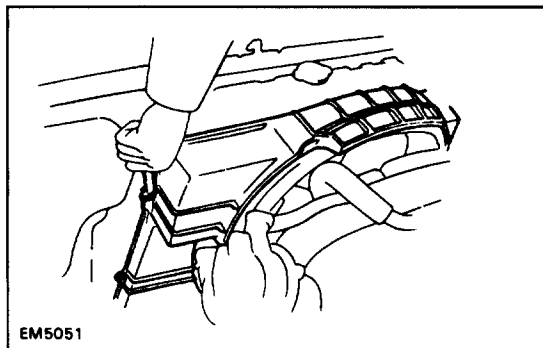


# ASSEMBLY REMOVAL AND INSTALLATION 4WD

Remove and install the parts, as shown below.



Q00641  
TF0641

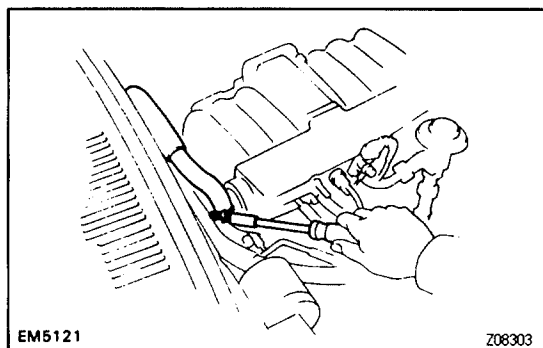


## TRANSMISSION REMOVAL

1. **DISCONNECT NEGATIVE (-) TERMINAL CABLE FROM BATTERY**

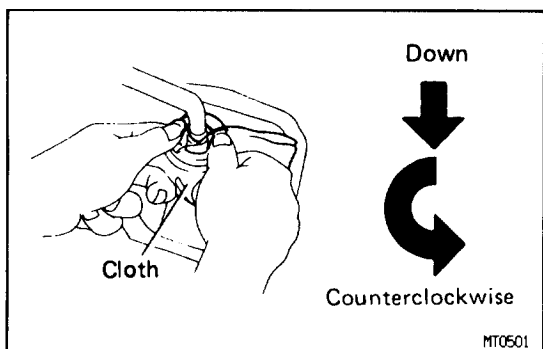
2. **REMOVE FAN SHROUD SET BOLTS**

Remove the 4 bolts.



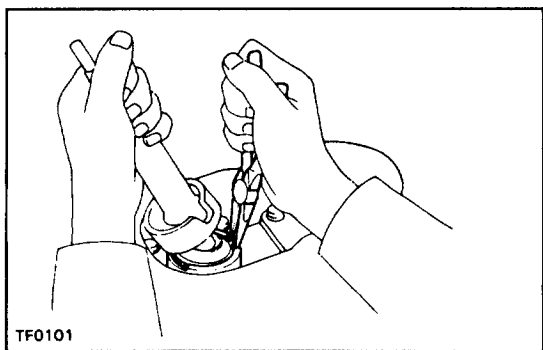
3. **REMOVE HEATER HOSE CLAMP**

- (a) Loosen the clamp bolt.
- (b) Move the clamp upside.



4. **REMOVE TRANSMISSION SHIFT LEVER FROM INSIDE OF VEHICLE**

- (a) Remove the 4 screws and remove the shift lever boot retainer.
- (b) Pull up the shift lever boot.
- (c) Cover the shift lever cap with a cloth.
- (d) Then, pressing down on the shift lever cap, rotate it counterclockwise to remove.
- (e) Remove the shift lever.

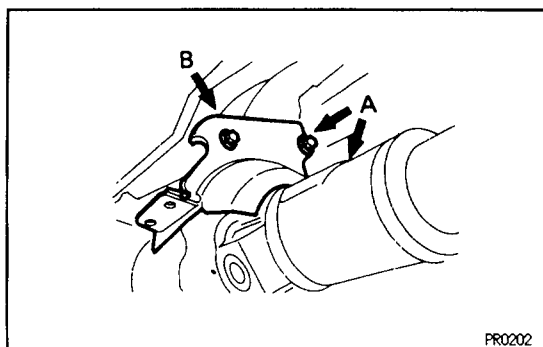


5. **REMOVE TRANSFER SHIFT LEVER FROM INSIDE OF VEHICLE**

Using a snap ring expander, remove the snap ring and pull out the shift lever from the transfer.

6. **RAISE VEHICLE AND DRAIN TRANSMISSION AND TRANSFER OIL**

**NOTICE:** Be sure the vehicle is securely supported.

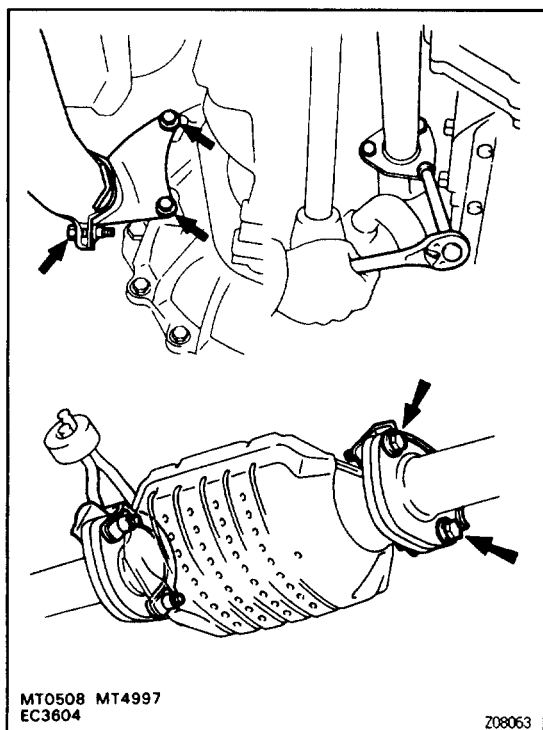


7. **REMOVE PROPELLER SHAFT DUST COVER SUBASSEMBLY**

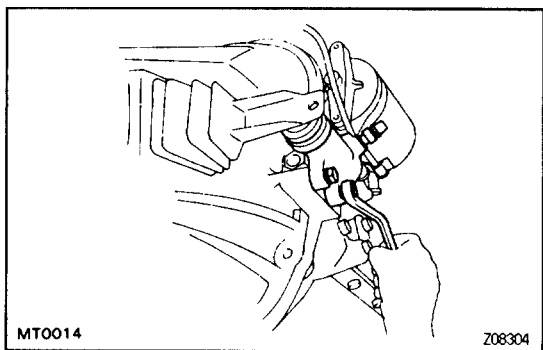
Remove the 3 bolts and cover.

**8. DISCONNECT PROPELLER SHAFT**

(See page [PR-7](#))

**9. DISCONNECT VEHICLE SPEED SENSOR, BACKUP LIGHT SWITCH CONNECTOR AND TRANSFER INDICATOR SWITCH CONNECTOR****10. REMOVE EXHAUST PIPE, BRACKET AND CLAMP**

- Remove the exhaust pipe clamp.
- Remove the exhaust pipe bracket from the clutch housing.
- Remove the exhaust pipe from the exhaust manifold.
- Disconnect the exhaust pipe from the catalytic converter front side.

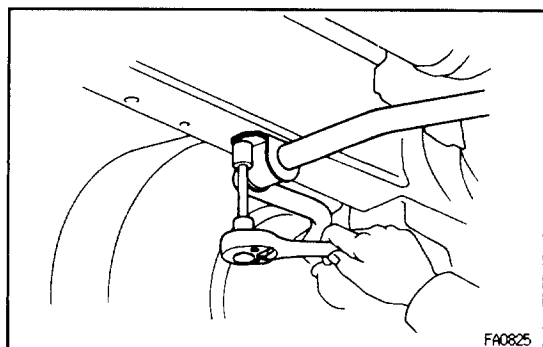
**11. REMOVE CLUTCH RELEASE CYLINDER**

Remove the 2 bolts and lay the release cylinder alongside the engine.

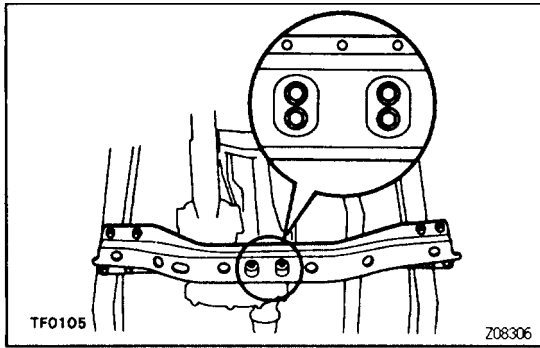
HINT: Do not disconnect the clutch line.

**12. REMOVE FRONT DIFFERENTIAL SET BOLTS**

- Remove the 3 bolts.
- Support the front differential.

**13. REMOVE STABILIZER BRACKET SET BOLTS**

Remove the 4 bolts.



#### 14. REMOVE NO.2 FRAME CROSSMEMBER FROM SIDE FRAME

- (a) Remove the 4 bolts from the engine rear mounting.
- (b) Raise the transmission slightly with a jack.
- (c) Remove the 8 bolts from the side frame and remove the No. 2 frame crossmember.

#### 15. LOW TRANSMISSION WITH TRANSFER

#### 16. REMOVE STARTER

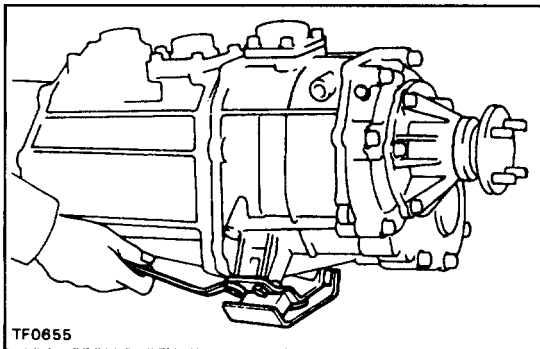
- (a) Remove the 2 bolts.
- (b) Lay the starter alongside the engine.

#### 17. REMOVE EXHAUST PIPE BRACKET AND STIFFENER PLATE BOLTS

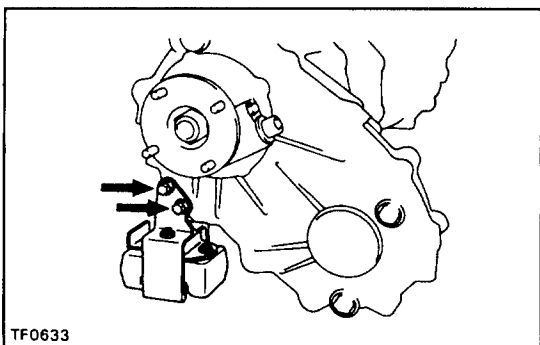
#### 18. REMOVE REMAINING TRANSMISSION BOLTS

#### 19. REMOVE TRANSMISSION WITH TRANSFER

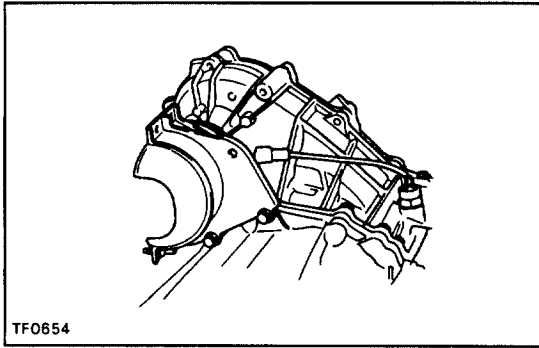
- (a) Draw out the transmission with the transfer toward the rear.
- (b) Lower the transmission with the transfer and remove it from the vehicle.



#### 20. REMOVE ENGINE REAR MOUNTING

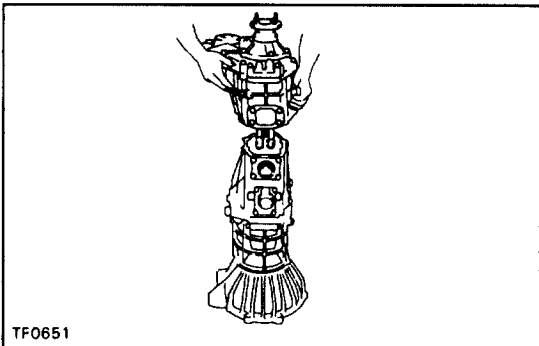


#### 21. Regular Cab w/Planetary Gear Type Transfer: REMOVE DYNAMIC DAMPER



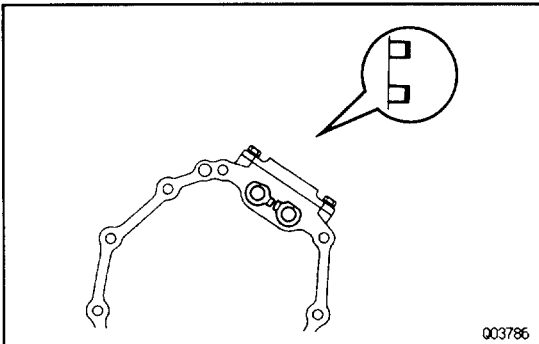
## 22. REMOVE PROPELLER SHAFT UPPER DUST COVER AND TRANSFER FROM TRANSMISSION

- (a) Remove the dust cover bolt from the bracket.
- (b) Remove the transfer adaptor rear mounting bolts.



- (c) Pull the transfer straight up and remove it from the transmission.

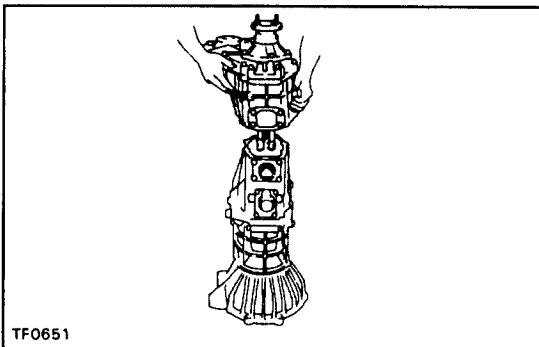
HINT: Take care not to damage the adaptor rear oil seal with the transfer input gear spline.



## TRANSMISSION INSTALLATION

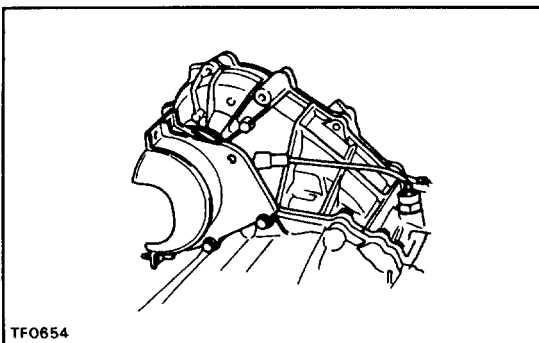
### 1. INSTALL TRANSFER AND PROPELLER SHAFT UPPER DUST COVER TO TRANSMISSION WITH NEW GASKET

- (a) Shift the 2 shift fork shafts to the high-4 position.



- (b) Apply MP grease to the adaptor oil seal.
- (c) Place a new gasket to the transfer adaptor.
- (d) Install the transfer to the transmission.

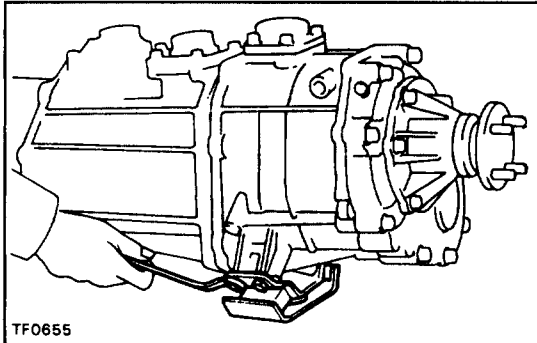
HINT: Take care not to damage the oil seal by the input gear spline when installing the transfer.



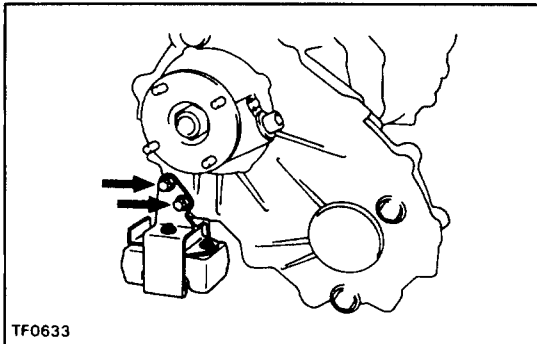
- (e) Install and torque the bolts with the propeller shaft upper dust cover.

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

- (f) Install the dust cover bolt to the bracket.  
Torque: 23 N·m (230 kgf·cm, 17 ft·lbf)



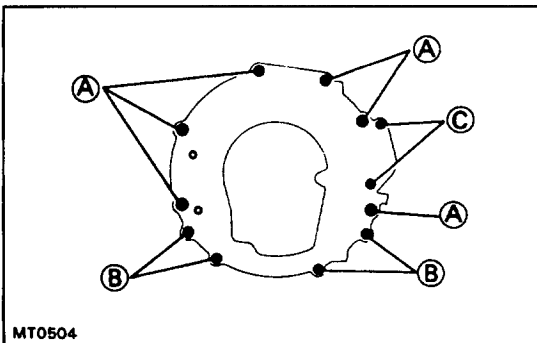
2. **INSTALL ENGINE REAR MOUNTING**  
Torque: 25 N·m (260 kgf·cm, 19 ft·lbf)



3. **Regular Cab w/Planetary Gear Type Transfer:**  
**INSTALL DYNAMIC DAMPER**  
Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)

4. **PLACE TRANSMISSION WITH TRANSFER AT INSTALLATION POSITION**

- (a) Support the transmission with a jack.  
(b) Align the input shaft spline with the clutch disc, and push the transmission with the transfer fully into position.



5. **INSTALL TRANSMISSION BOLTS, STIFFENER BOLTS AND STARTER**

(A) Transmission bolt

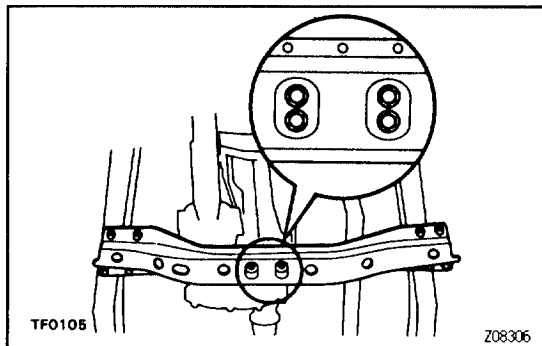
Torque: 72 N·m (730 kgf·cm, 53 ft·lbf)

(B) Stiffener plate bolt

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

(C) Starter bolt

Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)



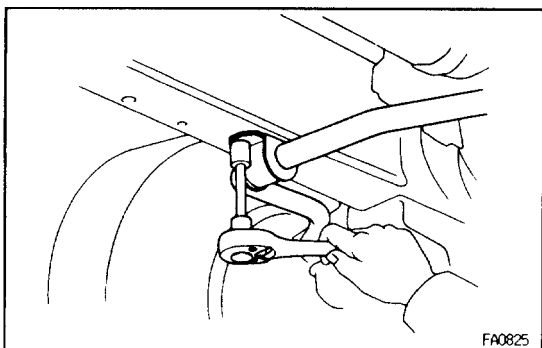
## 6. INSTALL NO.2 FRAME CROSSMEMBER

- (a) Raise the transmission slightly with a jack.
- (b) Install the No.2 frame crossmember to the side frame with the bolts. Torque the bolts.

**Torque: 95 N·m (970 kgf·cm, 70 ft·lbf)**

- (c) Lower the transmission and transfer.
- (d) Install the 4 mounting bolts to the engine rear mounting. Torque the bolts.

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



## 7. INSTALL STABILIZER BRACKET SET BOLTS

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

## 8. INSTALL FRONT DIFFERENTIAL ASSEMBLY

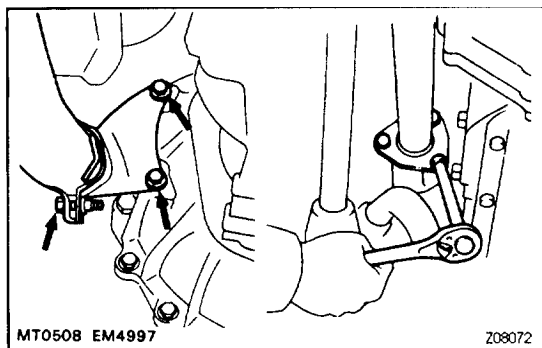
Install and torque the 3 bolts.

**Differential carrier cover to frame**

**Torque: 147 N·m (1,500 kgf·cm, 108 ft·lbf)**

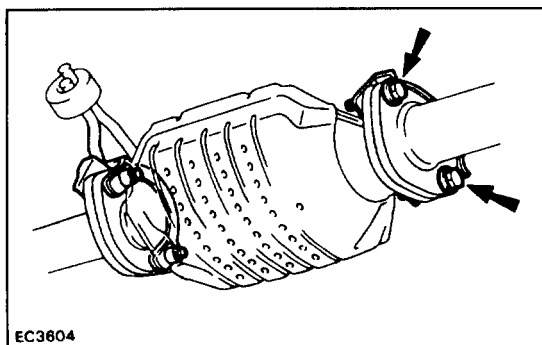
**Others**

**Torque: 167 N·m (1,700 kgf·cm, 123 ft·lbf)**



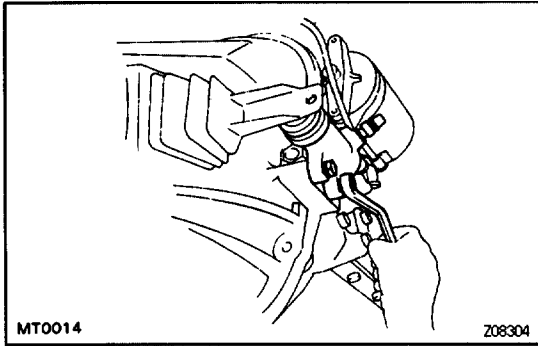
## 9. INSTALL EXHAUST PIPE, BRACKET AND CLAMP

- (a) Install the exhaust pipe to the manifold.  
**Torque: 62 N·m (630 kgf·cm, 46 ft·lbf)**
- (b) Install the exhaust pipe bracket to the clutch housing.  
**Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)**
- (c) Install the exhaust pipe clamp.  
**Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)**



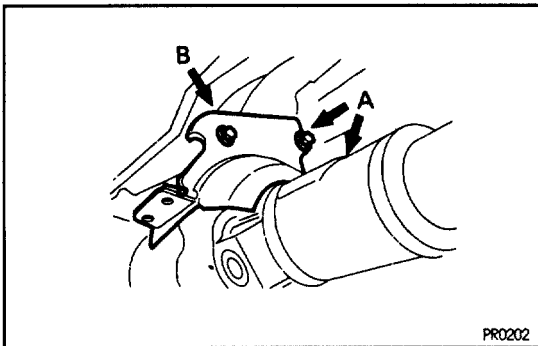
- (d) Connect the exhaust pipe to the catalytic converter front side, and torque the bolts.

**Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)**

**10. INSTALL CLUTCH RELEASE CYLINDER**

Install the clutch release cylinder and torque the 2 bolts.

**Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)**

**11. INSTALL PROPELLER SHAFT DUST COVER SUBASSEMBLY**

- (a) Install the cover.
- (b) Install and torque the 3 bolts.

**Bolt A**

**Torque: 36 N·m (370 kgf·cm, 27 ft·lbf)**

**Bolt B**

**Torque: 23 N·m (230 kgf·cm, 17 ft·lbf)**

**12. CONNECT VEHICLE SPEED SENSOR, BACK-UP LIGHT SWITCH CONNECTOR AND TRANSFER INDICATOR SWITCH CONNECTOR****13. CONNECT PROPELLER SHAFT**

(See page [PR-19](#))

**14. FILL TRANSMISSION WITH OIL**

Oil grade:

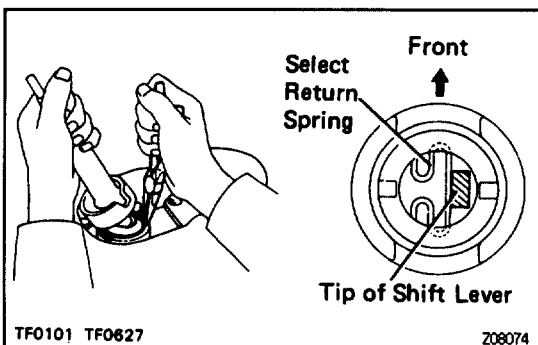
**API GL-4**

Viscosity:

**SAE 75W-90**

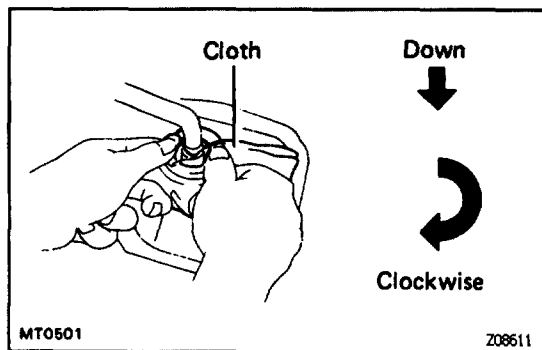
Capacity:

**3.0 liters (3.2 US qts, 2.6 Imp.qts)**

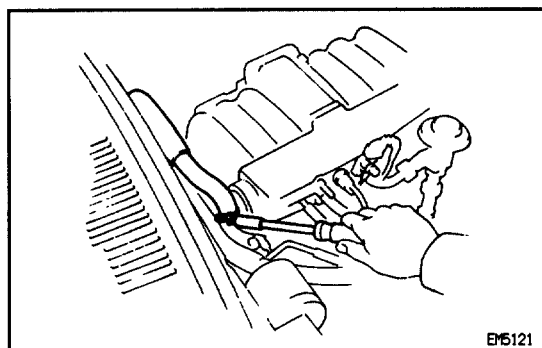
**15. LOWER VEHICLE****16. INSTALL TRANSFER SHIFT LEVER**

- (a) Apply MP grease to the transfer shift lever.
- (b) Install the shift lever, as shown.
- (c) Using a snap ring expander, install the snap ring.

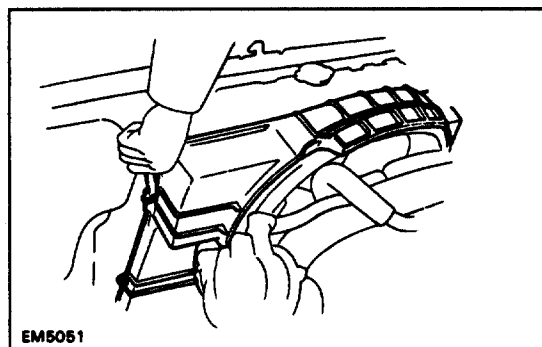


**17. INSTALL TRANSMISSION SHIFT LEVER**

- (a) Apply MP grease to the transmission shift lever.
- (b) Align the groove of the shift lever cap and the pin part of the case cover.
- (c) Cover the shift lever cap with a cloth.
- (d) Then, pressing down on the shift lever cap, rotate it clockwise to install.

**18. INSTALL HEATER HOSE CLAMP**

- (a) Move the clamp to correct position.
- (b) Torque the clamp bolt.

**19. INSTALL FAN SHROUD SET BOLTS**

Install and torque the 4 bolts.

**20. CONNECT NEGATIVE (-) TERMINAL CABLE TO BATTERY****21. PERFORM ROAD TEST**

Check for abnormal noise and smooth operation.