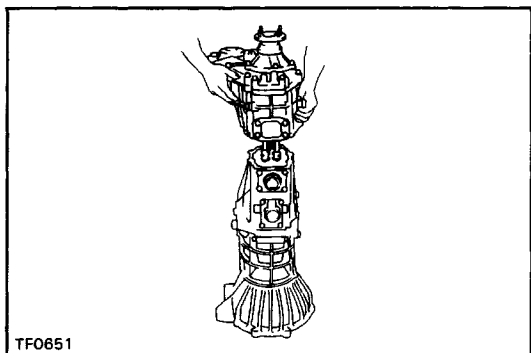


## INSTALLATION OF TRANSMISSION WITH TRANSFER

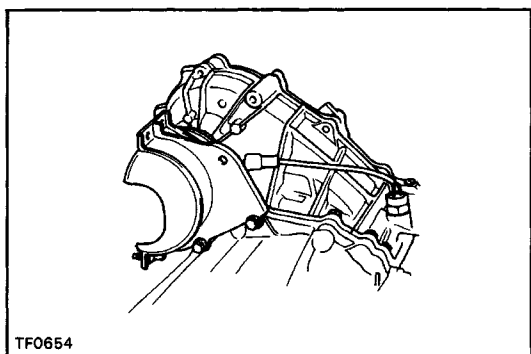
### 1. INSTALL TRANSFER AND PROPELLER SHAFT UPPER DUST COVER TO TRANSMISSION WITH NEW GASKET

- (a) Shift the two shift fork shafts to the high-four 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.

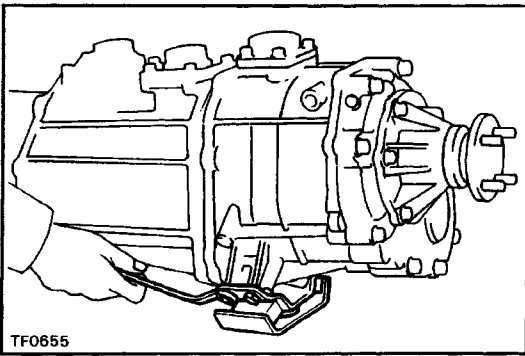
#### Torque:

W56                    39 N-m (400 kgf-cm, 29 ft-lbf )  
 R150F, G58        37 N-m (380 kgf-cm, 27 ft-lbf )

- (f) Install the dust cover bolt to the bracket.

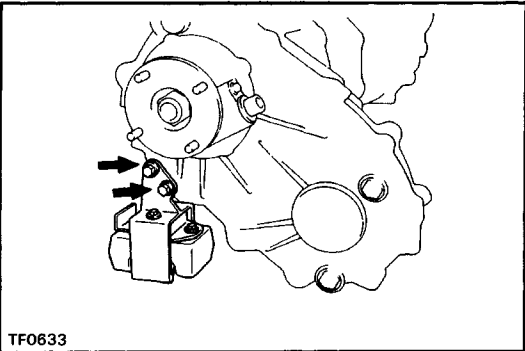
#### Torque:

R150F, G58        23 N-m (230 kgf -cm, 17 ft-lbf)  
 W56                    39 N-m (400 kgf-cm, 29 ft-lbf )



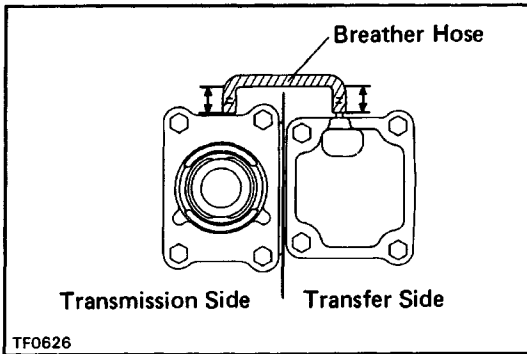
**2. INSTALL ENGINE REAR MOUNTING**

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)



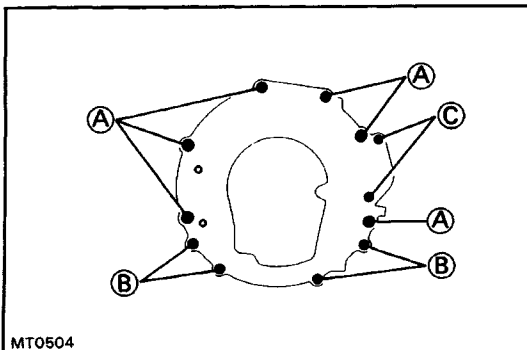
**4. ( 22R-E/G 58)  
INSTALL BREATHER HOSE**

Connect the breather hose for transfer upper cover and transmission control retainer as shown.

Hose depth: 13 mm (0.51 in.)

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

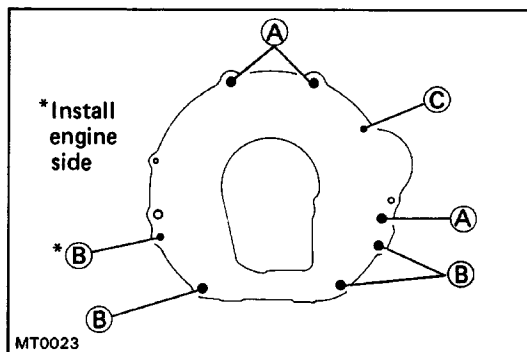
- (a) Support the transmission with a jack.
- (b) Align the input shaft spline with the clutch disc, and push the transmission with the transfer fully into position.



**6.-1 (3VZ-E)  
INSTALL TRANSMISSION BOLTS, STIFFENER BOLTS  
AND STARTER**

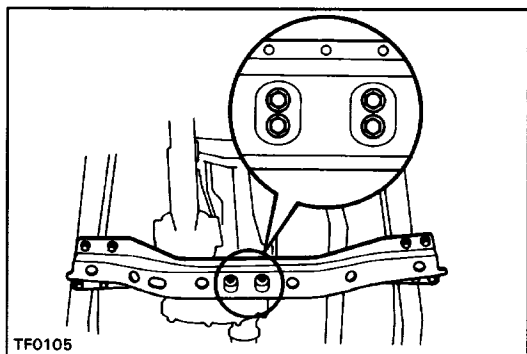
Torque:

- (A) Transmission bolt  
72 N-m (730 kgf-cm, 53 ft-lbf )
- (B) Stiffener plate bolt  
37 N-m (380 kgf-cm, 27 ft-lbf)
- (C) Starter bolt  
39 N-m (400 kgf-cm, 29 ft-lbf)

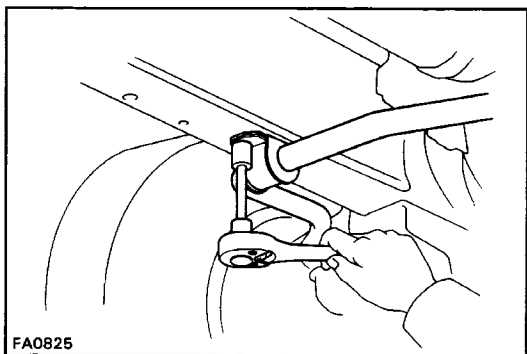
**6.-2(22R-E)****INSTALL TRANSMISSION BOLTS AND STIFFENER BOLTS**

Torque:

- (A) Transmission bolt  
72 N-m (730 kgf-cm, 53 ft-lbf)
- (B) Stiffener plate bolt  
37 N-m (380 kgf-cm, 27 ft-lbf)
- (C) Starter bolt  
39 N-m (400 kgf-cm, 29 ft-lbf)

**7. 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 four mounting bolts to the engine rear mounting. Torque the bolts.  
Torque: 13 N-m (130 kgf-cm, 9 ft-lbf)

**8. INSTALL STABILIZER BRACKET SET BOLTS**

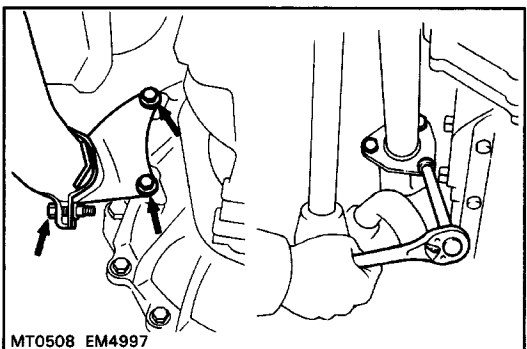
Torque: 29 N-m (300 kgf-cm, 22 ft-lbf)

**9.(22R-E)****REMOVE PIECE OF WOOD FROM FRONT AXLE****10. (3VZ-E)****INSTALL THE FRONT DIFFERENTIAL ASSEMBLY**

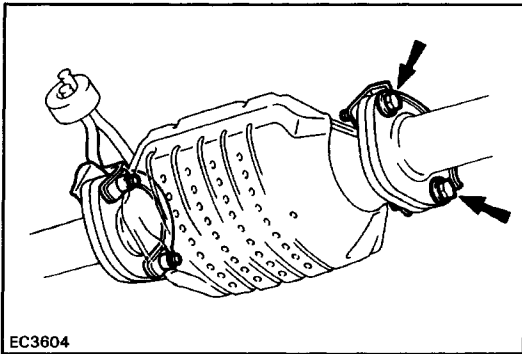
Install and torque the three bolts.

Torque:

- Differential carrier cover to frame  
147 N-m (1500 kgf-cm, 108 ft-lbf)
- Others  
167 N-m (1700 kgf-cm, 123 ft-lbf)

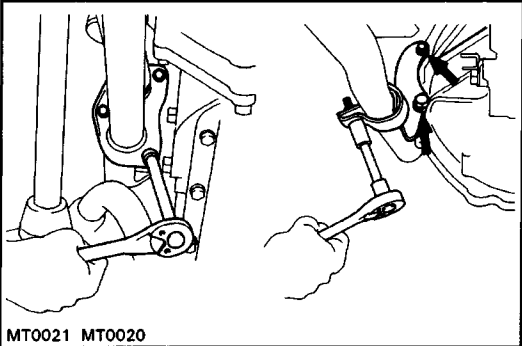
**11.-1(3VZ-E)****INSTALL EXHAUST PIPE, BRACKET AND CLAMP**

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



**11.-2(22R-E)**

**INSTALL EXHAUST PIPE, BRACKET AND CLAMP**

(a) Install the exhaust pipe to the manifold.

**Torque: 62 N – m (630 kgf – cm, 46 ft – lbf)**

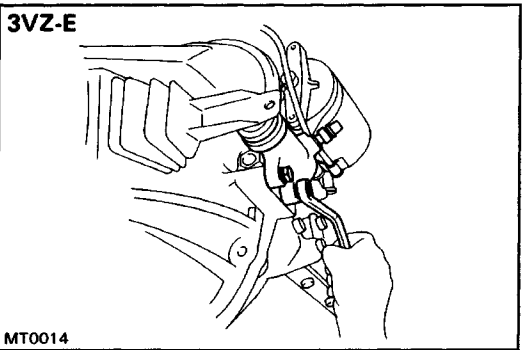
(b) Install the pipe bracket to the clutch housing.  
Torque the bolts.

**Torque: Upper 19 N-m (195 kgf-cm, 14 ft -lbf)**

**Lower 69 N – m (700 kgf – cm, 51 ft – lbf )**

(c) Install the exhaust pipe clamp.

**Torque: 19 N – m 1195 kgf – cm, 14 ft – lbf)**

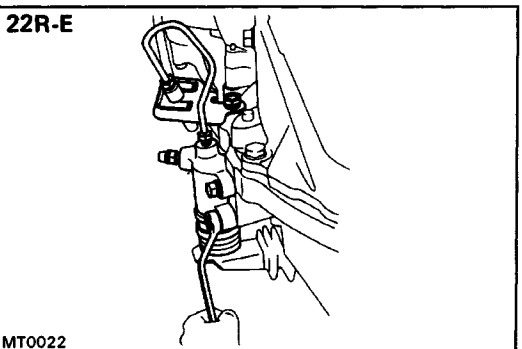


**12.-1(3VZ-E)**

**INSTALL CLUTCH RELEASE CYLINDER**

Install clutch release cylinder and torque the two bolts.

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



**12.-2(22R-E)**

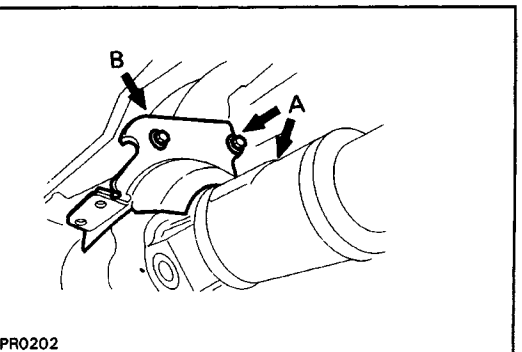
**INSTALL STARTER MOUNTING BOLTS, CLUTCH RELEASE CYLINDER AND TUBE BRACKET**

(a) Install tube bracket and torque the starter lower mounting bolt and nut.

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

(b) Install clutch release cylinder and torque the two bolts.

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



**13.(R150F, G58)**

**INSTALL PROPELLER SHAFT DUST COVER SUBASSEMBLY**

(a) Install the cover.

(b) Install and torque the three bolts.

**Torque:**

**A-bolt 36 N – m (370 kgf – cm, 27 ft-lbf )**

**B-bolt 23 N – m (230 kgf – cm, 17 ft – lbf )**

**14. CONNECT SPEEDOMETER CABLE, BACK-UP LIGHT SWITCH CONNECTOR AND TRANSFER INDICATOR SWITCH CONNECTOR**

**15. CONNECT PROPELLER SHAFT**

(See page PR-15)

**16. FILL TRANSMISSION AND TRANSFER WITH OIL**

(Transmission oil)

TIM (Engine) Items	R150F (3VZ-E)	G58 (22R-E)	W56 (22R-E)
Oil grade	API GL-4 or GL-5	API GL-4 or GL-5	API GL-4 or GL-5
Viscosity	SAE 75W-90	SAE 75W-90	SAE 75W-90 or 80W-90
Oil capacity	3.0 liters (3.2 US qts.) (2.6 Imp. qts.)	3.9 liters (4.1 US qts.) (3.4 Imp. qts.)	3.0 liters (3.2 US qts.) (2.6 Imp. qts.)

(Transfer oil)

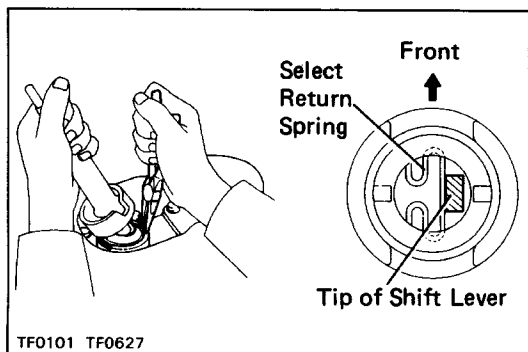
TIM (Engine) Items	R 150F (3VZ-E)	G58 (22R-E)	W56 (22R-E)
Oil grade	API GL-4 or GL-5	API GL-4 or GL-5	API GL-4 or GL-5
Viscosity	SAE 75W-90	SAE 75W-90	SAE 75W-90
Oil capacity	1.1 liters (1.2 US qts.) (1.0 Imp. qts.)	1.1 liters (1.2 US qts.) (1.0 Imp. qts.)	1.6 liters (1.7 US qts.) (1.4 Imp. qts.)

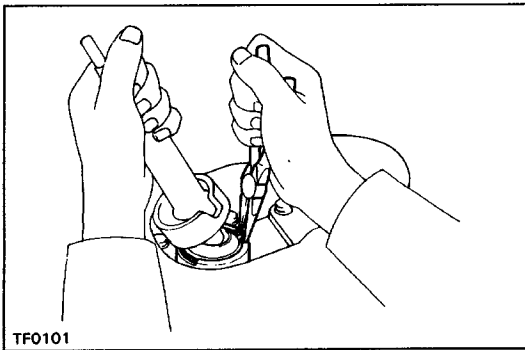
**17. LOWER VEHICLE**

**18.-1(R 150F, G58)**

**INSTALL TRANSFER SHIFT LEVER**

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

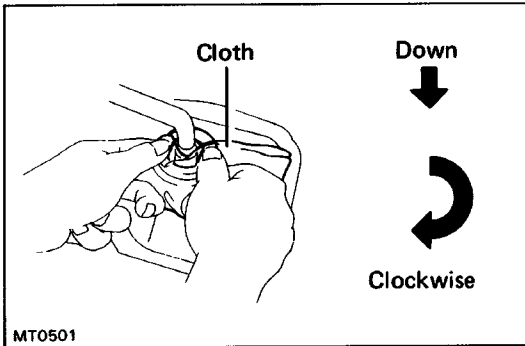




**18.–2(W56)**

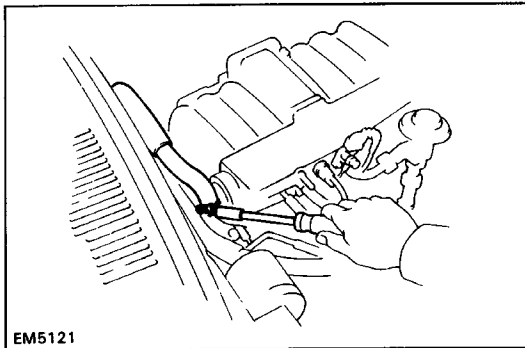
**INSTALL TRANSFER SHIFT LEVER**

- (a) Apply MP grease to the transfer shift lever.
- (b) Using pliers, install the shift lever and snap ring.



**19. INSTALL TRANSMISSION SHIFT LEVER**

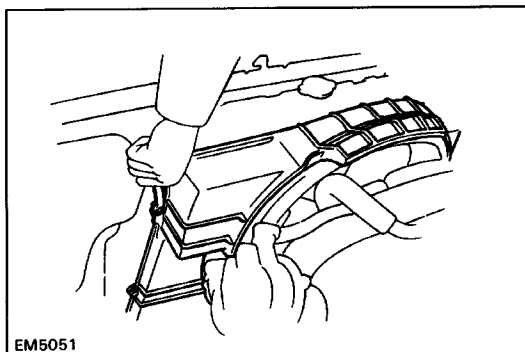
- (a) Apply MP grease to the transmission shift lever.
- (b) Align the groove of the shift lever cap and the pin part of the case cover.
- (c) Cover the shift lever cap with a cloth.
- (d) Then, pressing down on the shift lever cap, rotate it clockwise to install.



**20. (3VZ–E)**

**INSTALL HEATER HOSE CLAMP,**

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



**21. INSTALL FAN SHROUD SET BOLTS**

Install and torque the four bolts.

**22. CONNECT BATTERY CABLE TO NEGATIVE TERMINAL**

**23. PERFORM ROAD TEST**

Check for abnormal noise and smooth operation.