

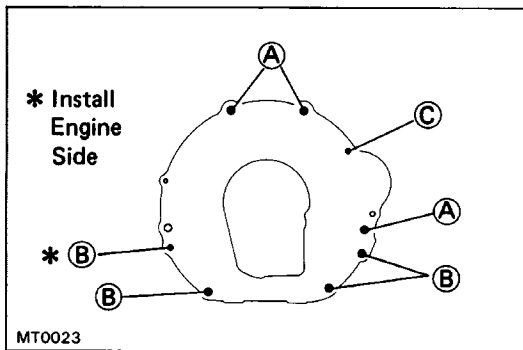
INSTALLATION OF TRANSMISSION

HINT: For the transmission with a transfer (4WD) refer to INSTALLATION OF TRANSMISSION WITH TRANSFER on page MT1-20.

1. PLACE TRANSMISSION AT INSTALLATION POSITION

Insert the extension housing between the member and floor and then slide the transmission forward.

Align the input shaft spline with the clutch disc, and push the transmission fully into position.

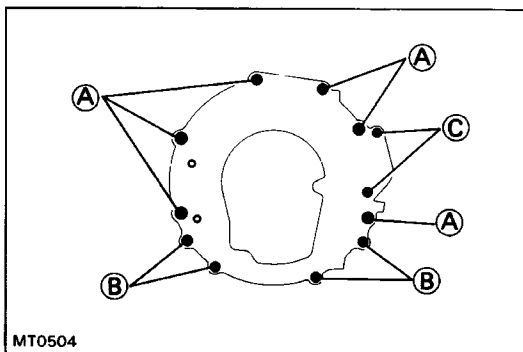


2.-1 (22R-E)

INSTALL TRANSMISSION BOLTS AND STIFFENER BOLTS AND STARTER

Torque:

- (A) Transmission mounting 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)

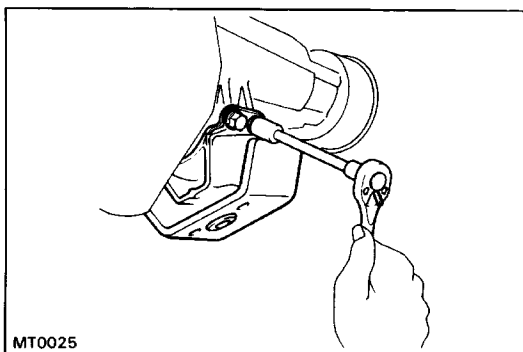


2.-2 (3VZ-E)

INSTALL TRANSMISSION BOLTS AND STIFFENER BOLTS

Torque:

- (A) Transmission mounting 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)

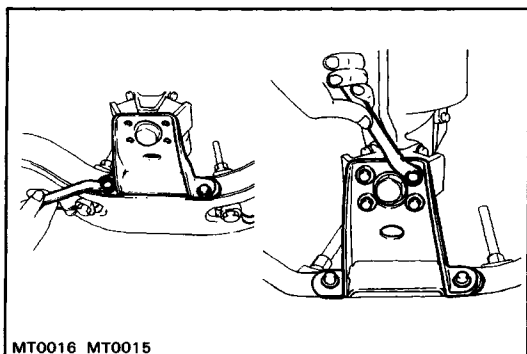


3. INSTALL ENGINE REAR MOUNTING AND BRACKET

(a) Install the engine rear mounting. Torque the bolts.

Torque: 25 N - m (260 kgf-cm, 19 ft-lbf)

(b) Raise the transmission slightly by raising the engine with a jack and a wooden block under the transmission.



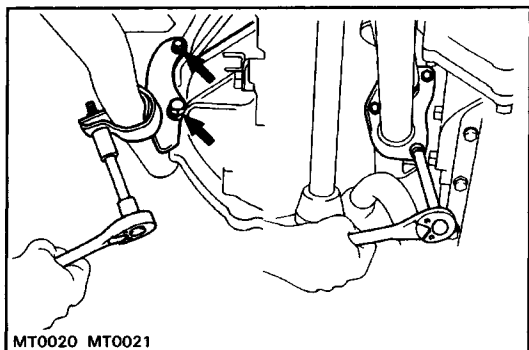
- (c) Install the engine rear mounting bracket to the support member. Torque the bolts.

Torque: 59 N – m (590 kgf – cm, 43 ft – lbf)

- (d) Lower the transmission and rest it on the extension housing.
 (e) Install the bracket to the mounting. Torque the bolts.

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

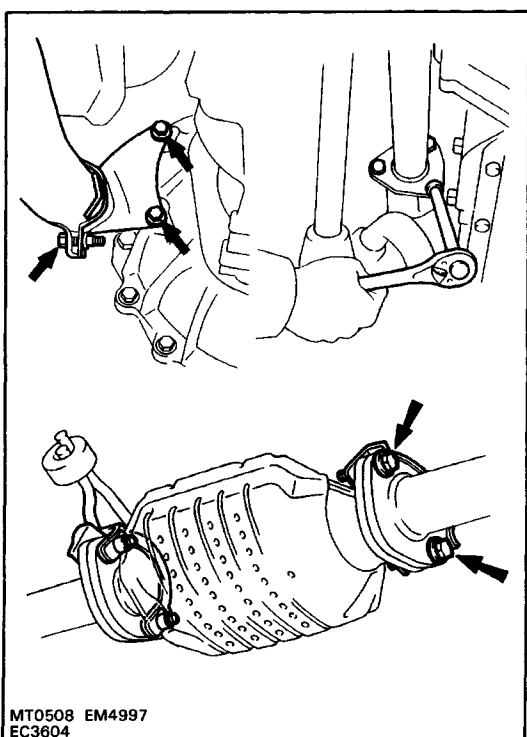
4. REMOVE PIECE OF WOOD FROM FRONT CROSSMEMBER



5.-1(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: 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.

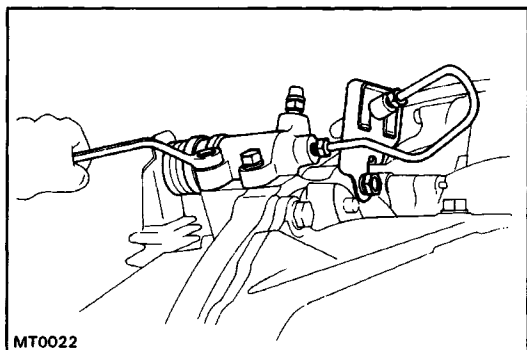


5.-2 (3VZ-E)

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) Connect exhaust pipe to catalytic converter front side.
Torque: 39 N – m (400 kgf – cm, 29 ft – lbf)

 (c) Install the pipe bracket to the clutch housing.
Torque: 39 N-m (400 kgf-cm, 29 ft-lbf)
 (d) Install the exhaust pipe clamp.



**6.-1 (22R-E)
INSTALL STARTER LOWER MOUNTING BOLT AND
CLUTCH RELEASE CYLINDER AND BRACKET**

Torque:

Starter

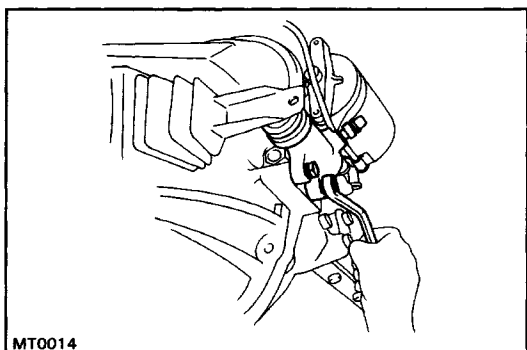
39 N-m (400 kgf-cm, 29 ft-lbf)

Tube Bracket

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

Clutch Release Cylinder

12 N-m (120 kgf-cm, 9 ft-lbf)

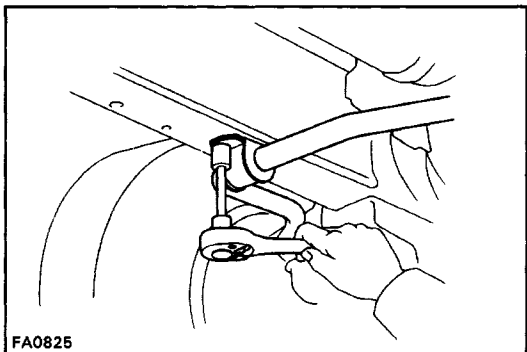


**6.-2(3VZ-E)
INSTALL CLUTCH RELEASE CYLINDER**

Torque:

Clutch Release Cylinder

12 N-m (120 kgf-cm, 9 ft-lbf)



7. INSTALL STABILIZER BRACKET SET BOLTS

Install and torque the four bolts.

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

8. INSTALL FRAME AUXILIARY CROSSMEMBER

Install and torque the four bolts.

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

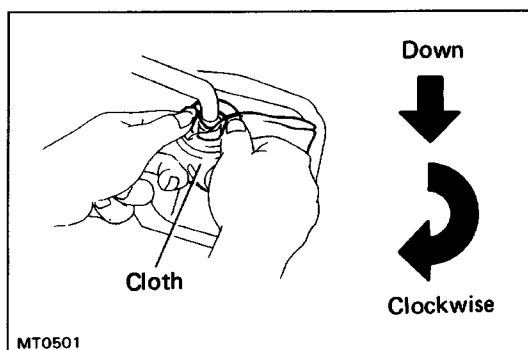
**9. CONNECT SPEEDOMETER CABLE AND BACK-UP
LIGHT SWITCH**

10. CONNECT PROPELLER SHAFT

(See page [PR-15](#))

11. FILL TRANSMISSION WITH OIL

Transmissions	R 150	W55
Items		
Oil grade	API GL-4 or GL-5	API GL-4 or GL5
Viscosity	SEA 75W-90	SEA75W-90 or 80W-90
Transmission oil capacity	3.0 liters (3.2 US qts 2.6 Imp. qts)	2.4 liters (2.5 US qts 2.1 Imp. qts)

**12. LOWER VEHICLE****13. INSTALL SHIFT LEVER**

- (a) Apply MP grease to the shift lever.
- (b) Align the groove of the shift lever cap and the pin part of 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.
- (e) Install the shift lever boot and retainer with four screws.

14. INSTALL FAN SHROUD SET BOLTS

Install and torque the four bolts.

15. CONNECT BATTERY CABLE TO NEGATIVE TERMINAL**16. PERFORM ROAD TEST**

Check for abnormal noise and smooth operation.