

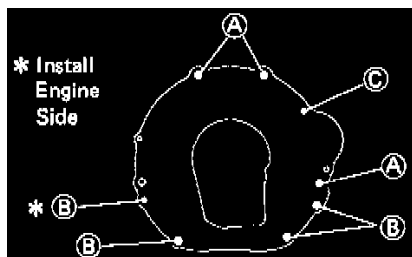
Manual Transmission/Transaxle: Service and Repair

Installation

INSTALLATION OF TRANSMISSION

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.

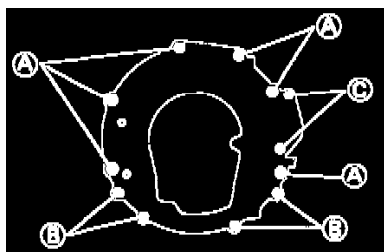


2.1 (22R-E)

INSTALL TRANSMISSION BOLTS AND STIFFENER BOLTS AND STARTER

Torque:

- [A] Transmission mounting bolt
730 kg-cm (53 ft-lb, 72 N-m)
- [B] Stiffener plate bolt
380 kg-cm (27 ft-lb, 37 N-m)
- [C] Starter bolt
400 kg-cm (29 ft-lb, 39 N-m)

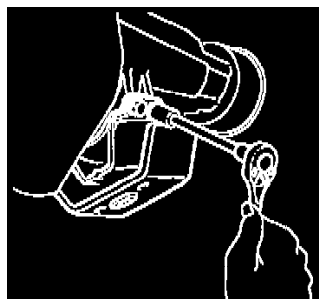


2.-2 (3VZ-E)

INSTALL TRANSMISSION BOLTS AND STIFFENER BOLTS

Torque:

- [A] Transmission mounting bolt
730 kg-cm (53 ft-lb, 72 N-m)
- [B] Stiffener plate bolt
380 kg-cm (27 ft-lb, 37 N-m)
- [C] Starter bolt
400 kg-cm (29 ft-lb, 39 N-m)

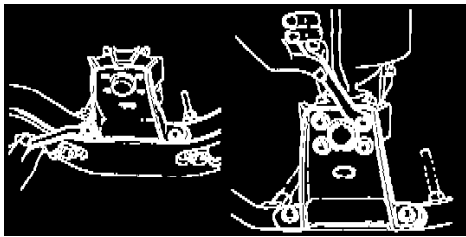


3. INSTALL ENGINE REAR MOUNTING AND BRACKET

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

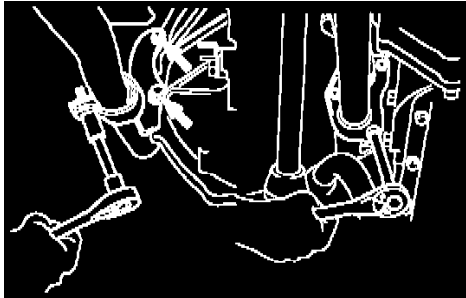
Torque: 260 kg-cm (19 ft-lb, 25 N-m)

(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: 620 kg-cm (45 ft-lb, 61 N-m)
- (d) Lower the transmission and rest it on the extension housing.
- (e) Install the bracket to the mounting. Torque the bolts.
Torque: 130 kg-cm (9 ft-lb, 13 N-m)

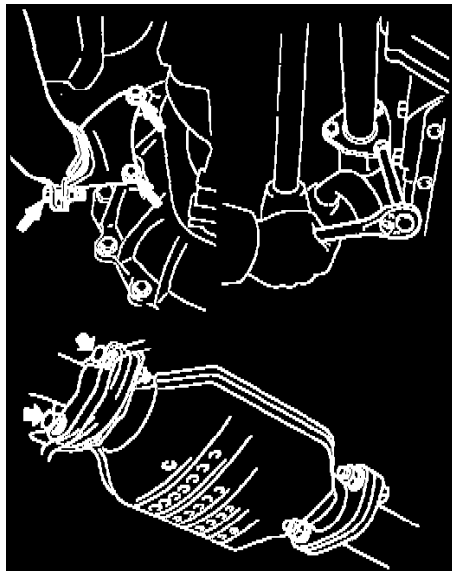
4. REMOVE PIECE OF WOOD FROM FRONT CROSSMEMBER



5.-1 (22R-E)

INSTALL EXHAUST PIPE, BRACKET AND CLAMP

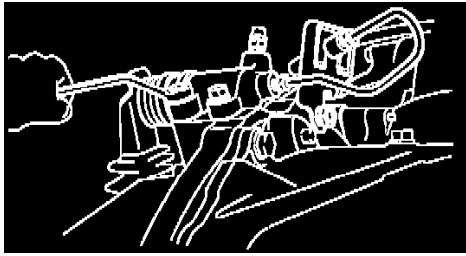
- (a) Install the exhaust pipe to the manifold.
Torque: 630 kg-cm (46 ft-lb, 62 N-m)
- (b) Install the pipe bracket to the clutch housing.
Torque: Upper 195 kg-cm (14 ft-lb, 19 N-m) Lower 700 kg-cm (51 ft-lb, 69 N-m)
- (c) Install the exhaust pipe clamp.



5.-2 (3VZ-E)

INSTALL EXHAUST PIPE, BRACKET AND CLAMP

- (a) Install the exhaust pipe to the manifold.
Torque: 630 kg-cm (46 ft-lb, 62 N-m)
- (b) Connect exhaust pipe to catalytic converter front side.
Torque: 400 kg-cm (29 ft-lb, 39 N-m)
- (c) Install the pipe bracket to the clutch housing.
Torque: 400 kg-cm (29 ft-lb, 39 N-m)
- (d) Install the exhaust pipe clamp.



6.-1 (22R-E)

INSTALL STARTER LOWER MOUNTING BOLT AND CLUTCH RELEASE CYLINDER AND BRACKET

Torque:**Starter**

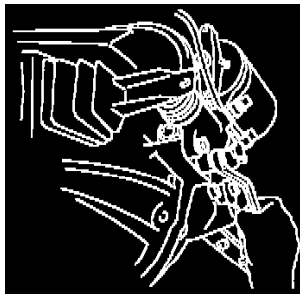
400 kg-cm (29 ft-lb, 39 N-m)

Tube Bracket

730 kg-cm (53 ft-lb, 72 N-m)

Clutch Release Cylinder

120 kg-cm (9 ft-lb, 12 N-m)

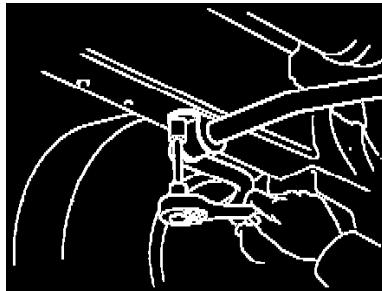


6.-2 (3VZ-E)

INSTALL CLUTCH RELEASE CYLINDER

Torque:**Clutch Release Cylinder**

120 kg-cm (9 ft-lb, 12 N-m)



7. INSTALL STABILIZER BRACKET SET BOLTS

Install and torque the four bolts.

Torque: 130 kg-cm (9 ft-lb, 13 N-m)

8. INSTALL FRAME AUXILIARY CROSSMEMBER

Install and torque the four bolts.

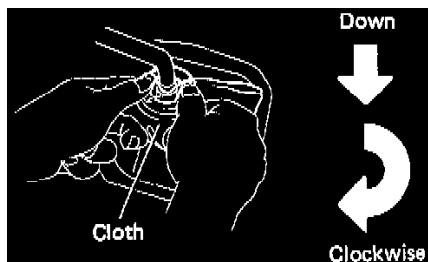
Torque: 970 kg-cm (70 ft-lb, 95 N-m)

9. CONNECT SPEEDOMETER CABLE AND BACK-UP LIGHT SWITCH

10. CONNECT PROPELLER SHAFT

Transmissions Items	R150	W55, W46	G57	G40
Oil grade	API GL-4 or GL-5	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 or 80W-90	SAE 75W-90	SAE 75W-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)	2.2 liters (2.3 US qts 1.9 Imp. qts)	2.4 liters (2.5 US qts 2.1 Imp. qts)

11. FILL WITH TRANSMISSION OIL
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.