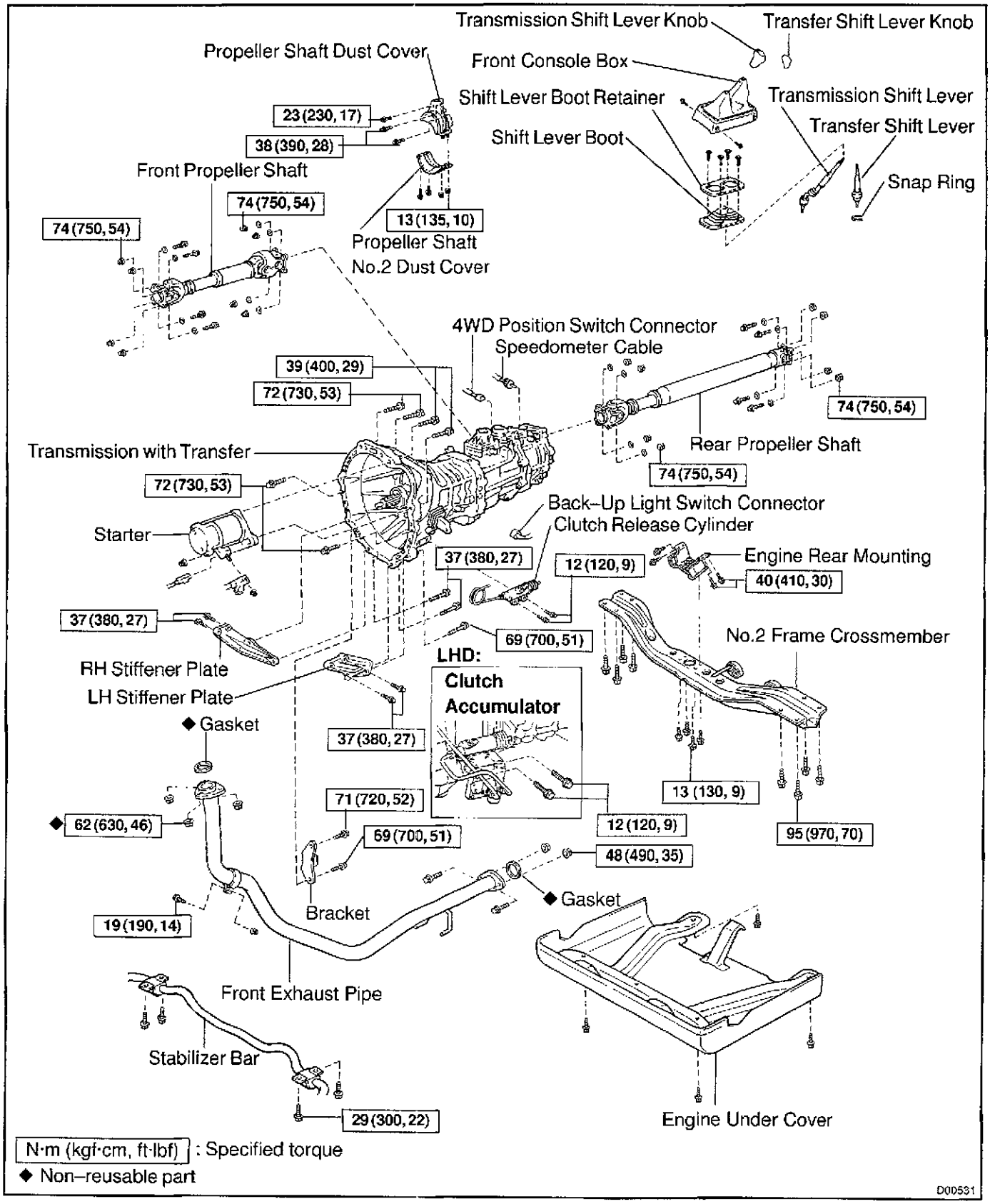
MANUAL TRANSMISSION UNIT (Diesel Engine)

COMPONENTS

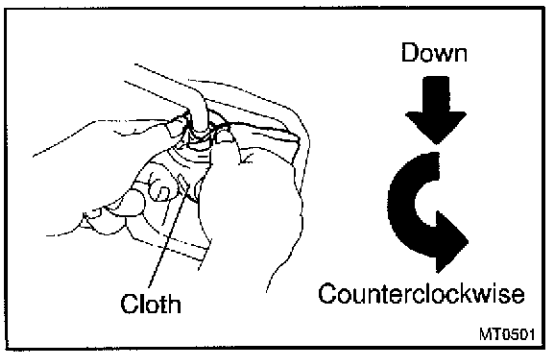


N·m (kgf·cm, ft·lbf) : Specified torque
◆ Non–reusable part

D00531

MT0BC-01

REMOVAL



1. REMOVE TRANSMISSION SHIFT LEVER

(a) Remove the 4 screws, shift lever boot and retainer.

(b) Cover the shift lever with a cloth.

(c) Pressing down on the shift lever cap and rotate it counterclockwise to remove.

(d) Pull out the shift lever.

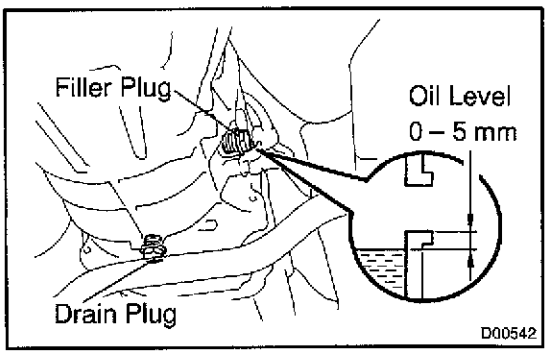
HINT:

At the time of installation, please refer to the following item.

Apply MP grease to the tip of the shift lever.

2. REMOVE TRANSFER SHIFT LEVER

VF1A Type Transfer: See page TR–3



3. RAISE VEHICLE AND DRAIN TRANSMISSION OIL

Oil grade: API GL–4 or GL–5

Viscosity: SAE 75W–90

Capacity: 2.5 liters (2.6 US qts, 2.2 Imp.qts)

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

4. REMOVE ENGINE UNDER COVER

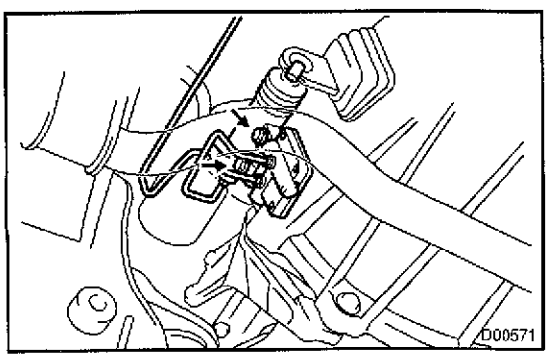
5. REMOVE FRONT AND REAR PROPELLER SHAFTS (See page PR–9)

6. DISCONNECT SPEEDOMETER CABLE, BACK–UP LIGHT SWITCH AND TRANSFER INDICATOR SWITCH CONNECTORS

7. DISCONNECT CLUTCH RELEASE CYLINDER

Remove the 2 bolts and disconnect the clutch release cylinder.

Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)

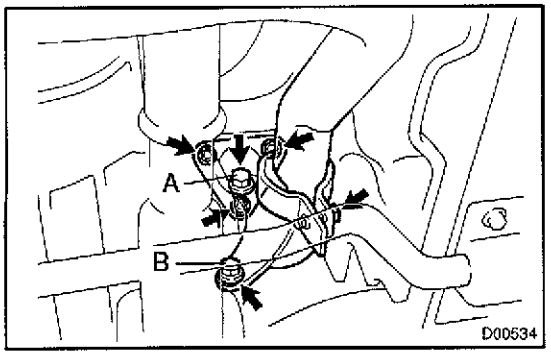


8. LHD:

DISCONNECT CLUTCH ACCUMULATOR AND RELEASE CYLINDER

Remove 2 bolts, and disconnect the clutch accumulator and the release cylinder.

Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)

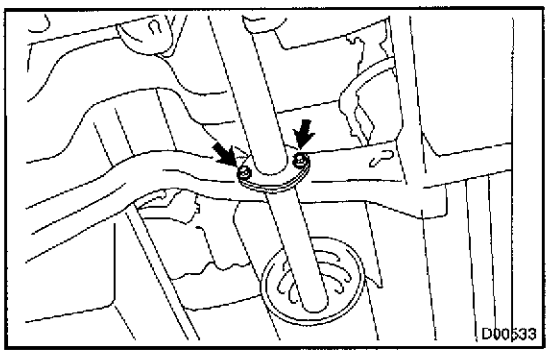


9. REMOVE FRONT EXHAUST PIPE

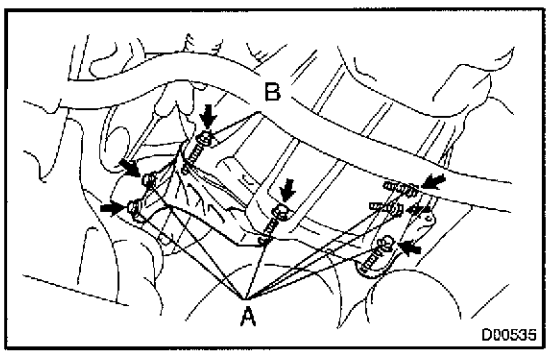
(a) Remove the set bolt of the clamp.
Torque: 19 N·m (190 kgf·cm, 14 ft·lbf)

(b) Remove the 2 bolts and support bracket.
Torque:
Bolt A: 71 N·m (720 kgf·cm, 52 ft·lbf)
Bolt B: 69 N·m (700 kgf·cm, 51 ft·lbf)

(c) Remove the 3 nuts, gasket and front exhaust pipe.
Torque: 62 N·m (630 kgf·cm, 46 ft·lbf)

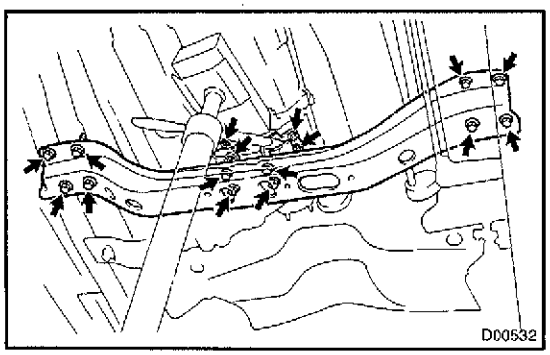


(d) Remove the 2 bolts, 2 nuts and gasket.
Torque: 48 N·m (490 kgf·cm, 35 ft·lbf)



10. REMOVE LH AND RH STIFFENER PLATES

Remove the 7 bolts, LH and RH stiffener plates.
Torque:
Bolt A: 37 N·m (380 kgf·cm, 27 ft·lbf)
Bolt B: 69 N·m (700 kgf·cm, 51 ft·lbf)



11. REMOVE NO.2 FRAME CROSSMEMBER

(a) Support the transmission rear side.

(b) Remove the 4 set bolts of engine rear mounting.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)

(c) Remove the 8 bolts and crossmember.
Torque: 95 N·m (970 kgf·cm, 70 ft·lbf)

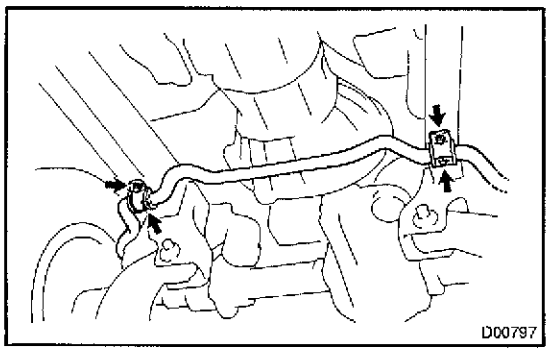
12. REMOVE ENGINE REAR MOUNTING

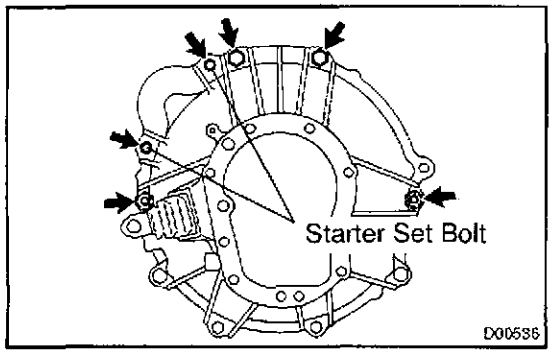
Remove the 4 bolts and engine rear mounting from the transmission.
Torque: 40 N·m (410 kgf·cm, 30 ft·lbf)

13. DISCONNECT STABILIZER BAR
Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

14. JACK UP TRANSMISSION SLIGHTLY

Using a transmission jack, support the transmission.





15. REMOVE TRANSMISSION

(a) Remove the 4 transmission mounting bolts from the engine.
Torque: 72 N·m (730 kgf·cm, 53 ft·lbf)

(b) Disconnect the wire harness from the transmission.

(c) Pull out the transmission toward the rear.

(d) Turn the transmission counterclockwise.

(e) Move the transmission backward again.

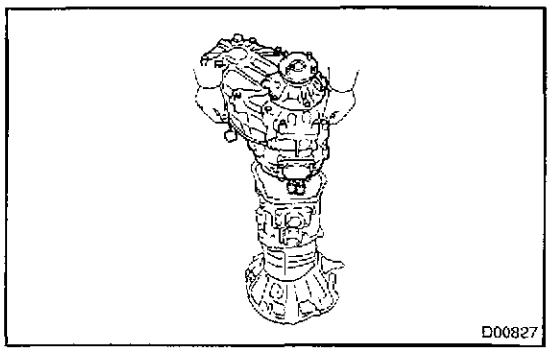
(f) Lower the front side of the transmission and remove it from the front side of the vehicle.

16. REMOVE STARTER

(a) Remove the set bolt of the starter lower side.
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

(b) Disconnect the connector and wire from the starter.

(c) Remove the set bolt of the starter upper side, nut and starter.
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)



17. REMOVE TRANSFER FROM TRANSMISSION

(a) Remove the transfer adaptor rear mounting bolts.
Torque: 38 N·m (390 kgf·cm, 28 ft·lbf)

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

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

HINT:
At the time of installation, please refer to the following item.
Apply MP grease to the transfer adaptor oil seal.

MT05P-01

INSTALLATION

Installation is in the reverse order of removal. (See page MT–14)

HINT:

After installation, do the road test.