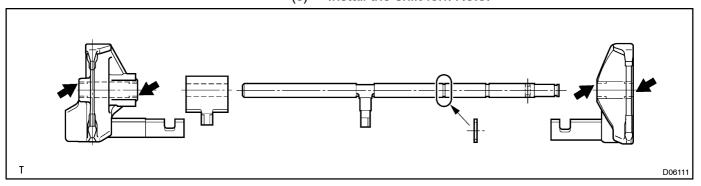
MT08Y-01

# REASSEMBLY

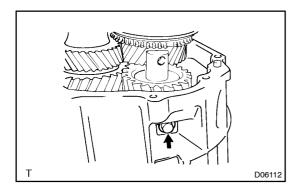
## 1. INSTALL INTERLOCK PIN NO. 1

- (a) Apply gear oil to bush of each shift forks.
- (b) Install the shift fork No.1 to gear shift fork shaft No. 1
- (c) Using a screwdriver, install the new snap ring.
- (d) Install the shift interlock pin No. 1
- (e) Install the shift fork No.3.

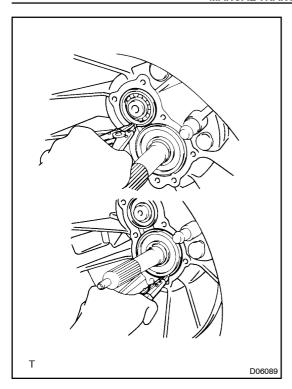


### 2. INSTALL OUTPUT SHAFT

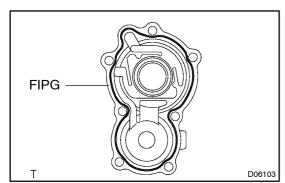
- (a) Apply gear oil to input shaft needle roller bearing and reverse idler gear shaft.
- (b) Install the input shaft to output shaft.
- (c) Install the input shaft, output shaft, counter shaft, reverse idler gear and shift fork shaft No. 1 to clutch housing.



- (d) Install a new gasket to idler gear shaft.
- (e) Install the idler gear shaft set bolt temporarily (clutch housing side).



(f) Using a snap ring expander, install the 2 snap ring.

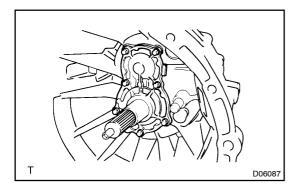


#### 3. INSTALL FRONT BEARING RETAINER

(a) Apply FIPG to the front bearing retainer, as shown in the illustration.

FIPG:

Part No. 08826-00090, THREE BOND 1281 or equivalent

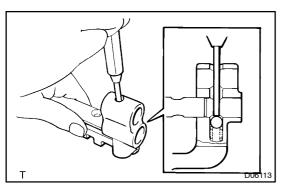


(b) Coat sealant to 7 bolts and install the front bearing retainer.

Torque: 17 N·m (170 kgf·cm, 12 ft·lbf)

Sealant:

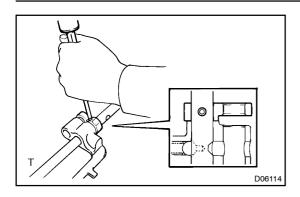
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent



# 4. INSTALL GEAR SHIFT HEAD NO. 3

- (a) Install the shift detente ball compression spring.
- (b) Using a pin punch, hold the shaft detente ball and install the gear shift detente ball and install the gear shift head No. 3 to gear shift fork shaft No. 2.

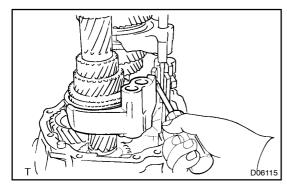
LEXUS IS200 (RM684E)



#### 5. INSTALL SHIFT INTERLOCK PLATE

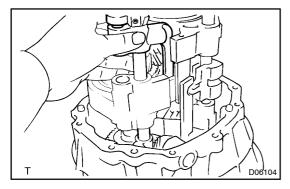
- (a) Install the shift interlock plate to gear shift fork shaft No. 2.
- (b) Using a pin punch and hammer, drive in the slotted spring pin.

Drive in depth:  $0 \pm 0.5 \text{ mm}$  ( $0 \pm 0.0197 \text{ in.}$ )



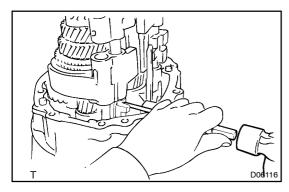
#### 6. INSTALL 3RD AND 4TH SHIFT FORK

Using a screwdriver, install the 3rd and 4th shaft fork to counter shaft.

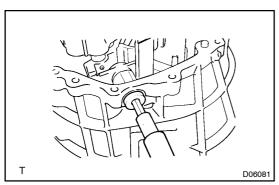


#### 7. INSTALL GEAR SHIFT FORK SHAFT NO. 2

- (a) Install the reverse shift arm head to clutch housing temporarily.
- (b) Install the gear shift fork shaft No. 2.



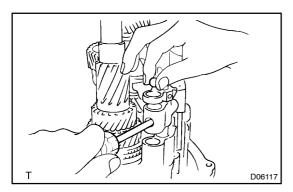
(c) Using a pin punch and hammer, dive in the slotted spring pin.



#### 8. INSTALL 5TH SHIFT ARM

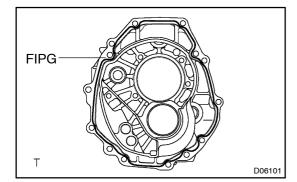
- (a) Install the 5th shift arm.
- (b) Using a hexagon wrench (8.0 mm, 0.31 in.), install the pivot holt

Torque: 39 N·m (390 kgf·cm, 29 ft·lbf)



#### 9. INSTALL TRANSMISSION CASE

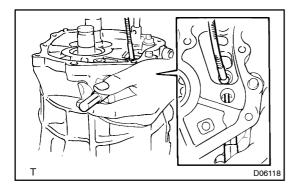
- (a) Apply MP grease to the shaft detente ball.
- (b) Using a screwdriver, install the shaft detente ball to gear shift head No. 3.



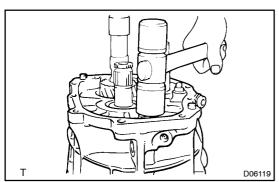
(c) Apply FIPG to transmission case, as shown in the illustration.

#### FIPG:

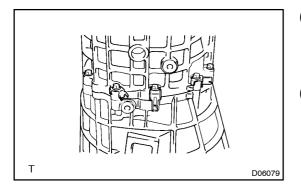
Part No. 08826-00090, THREE BOND 1281 or equivalent



- (d) Install the shaft detente ball compression spring No. 2.
- (e) Using a pin punch and magnetic finger, hold the shaft detente ball and install the transmission case temporarily.



(f) Using a plastic hammer, tap on the transmission case to install it.



(g) Coat sealant to 10 bolts.

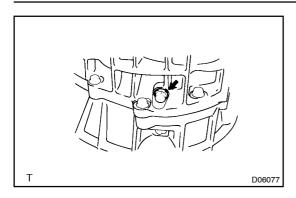
Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

(h) Install the 10 bolts.

Torque: 29 N·m (290 kgf·cm, 21 ft·lbf)

LEXUS IS200 (RM684E)

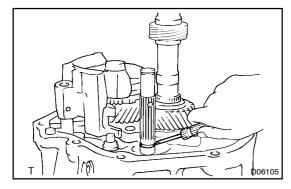


- (i) Install a new reverse idler gear shaft gasket.
- (j) Install the idler gear shaft set bolt (transmission case side).

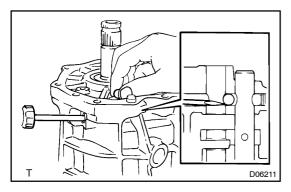
Torque: 28 N·m (290 kgf·cm, 21 ft·lbf)

(k) Tighten the idler gear shaft set bolt (clutch housing side).

Torque: 28 N·m (290 kgf·cm, 21 ft·lbf)

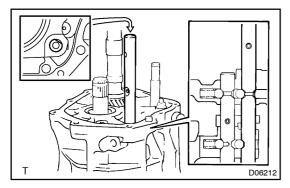


(I) Using a screwdriver, install a new snap ring.



#### 10. INSTALL SHIFT FORK SHAFT NO. 3

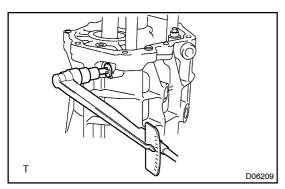
- (a) Apply MP grease to shaft detente ball No. 2.
- (b) Using a screwdriver, install the shaft detente ball to transmission case.



- (c) Install the shift fork shaft No. 3.
- (d) Coat sealant to head straight screw plug No. 1.

#### Sealant<sup>\*</sup>

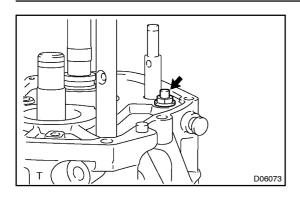
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent



- (e) Install the shaft detente ball and shift detente ball compression spring No. 2.
- (f) Using a torx wrench (T30), install the head straight screw plug No. 1.

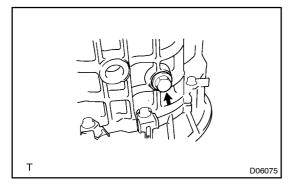
Torque: 19 N·m (190 kgf·cm, 14 ft·lbf)

LEXUS IS200 (RM684E)



(g) Install the shift and select lever stopper bolt.

Torque: 14 N·m (145 kgf·cm, 10 ft·lbf)



#### 11. INSTALL SHIFT INTERLOCK PLATE BOLT

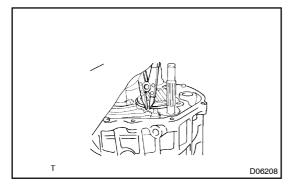
(a) Coat sealant to shift interlock plate bolt.

#### Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

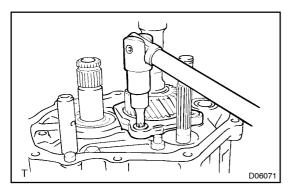
(b) Install the shift interlock plate bolt.

Torque: 31 N·m (320 kgf·cm, 23 ft·lbf)



#### 12. INSTALL OUTPUT SHAFT REAR BEARING RETAINER

(a) Using a snap ring expander, install the output shaft bearing snap ring.



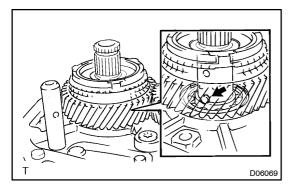
(b) Coat sealant to 4 bolts.

#### Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

(c) Using a torx wrench (T45), install the output shaft rear bearing retainer with 4 bolts.

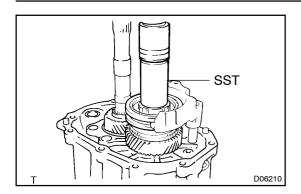
Torque: 30 N·m (305 kgf·cm, 22 ft·lbf)



# 13. INSTALL CLUTCH HUB NO. 4

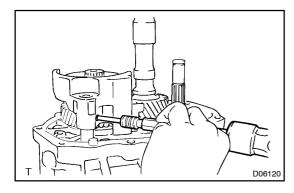
- (a) Install the gear thrust washer pin to counter shaft.
- (b) Apply gear oil to 6th gear thrust washer, 6th gear needle roller bearing, 6th counter gear synchronizer ring No. 3 and install them to counter shaft.

LEXUS IS200 (RM684E)



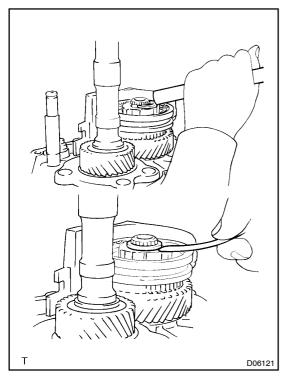
(c) Using SST and press, install the clutch hub No. 4 with 3rd and 4th shift fork.

SST 09632-36010



(d) Using a pin punch and hammer, drive in the slotted spring pin.

Drive in depth:  $0 \pm 0.5$  mm ( $0 \pm 0.02$  in.)

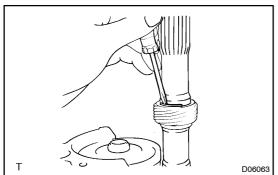


#### 14. INSTALL SHAFT SNAP RING

(a) Select a snap ring that will allow minimum axial play.

Mark	Thickness mm (in.)
А	2.80 (0.1102)
В	2.85 (0.1122)
С	2.90 (0.1142)
D	2.95 (0.1162)
Е	3.00 (0.1181)
F	3.05 (0.1201)

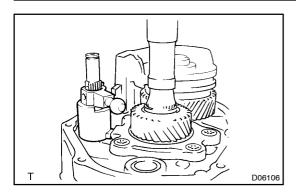
(b) Using a brass bar and hammer, tap in the snap ring.



# 15. INSTALL SPEEDOMETER DRIVE GEAR

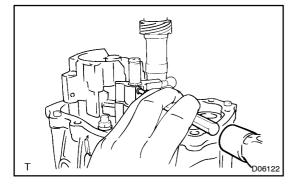
- (a) Put a clip on the speedometer drive gear and install the speedometer drive gear on the output shaft.
- (b) Using a screwdriver, install the clip.

LEXUS IS200 (RM684E)



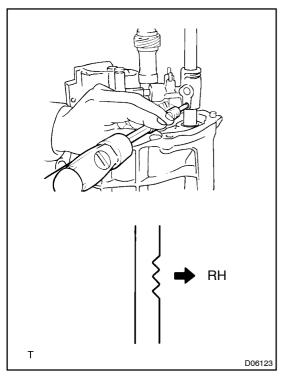
#### 16. INSTALL SHIFT AND SELECT LEVER

(a) Install the shift interlock block No. 2 and shift and select lever.



(b) Using a pin punch and hammer, drive in the slotted spring pin.

Drive in depth: 0 + 0.5 mm (0 + 0.02 in,)



### 17. INSTALL SHIFT LEVER HOUSING

- (a) Install the shift lever housing to gear shift fork shaft No.1.
- (b) Install the gear shift fork shaft No. 1 to transmission case.
- (c) Using a pin punch and hammer, drive in the slotted spring pin.

Drive in depth: 0 + 0.5 mm (0 + 0.02 in,)

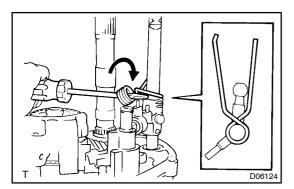
(d) Apply sealant to the bolt.

Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

(e) Install the bolt.

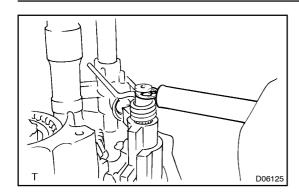
Torque: 30 N·m (305 kgf·cm, 22 ft·lbf)



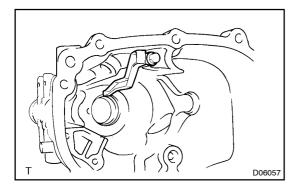
# 18. INSTALL SELECT RETURN TORSION SPRING

(a) Using a screwdriver, install the select return torsion spring.

LEXUS IS200 (RM684E)



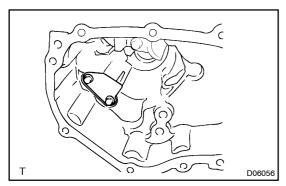
(b) Using a brass bar and hammer, install the shift fork shaft E-ring.



# 19. INSTALL EXTENSION HOUSING OIL RECEIVER PIPE NO. 1

Install the extension housing oil seal receiver pipe No. 1 with bolt.

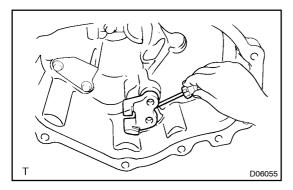
Torque: 8.5 N·m (85 kgf·cm, 74 in.·lbf)



# 20. INSTALL OIL FILTER PLATE

Install the oil filter plate with 2 bolts.

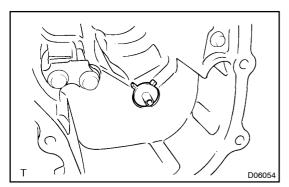
Torque: 8.5 N·m (85 kgf·cm, 74 in.·lbf)



# 21. INSTALL SELECT STOPPER BLOCK

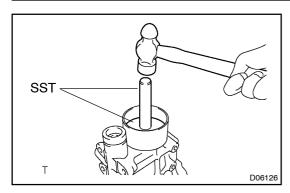
Install the select stopper block with the 2 bolts.

Torque: 21 N·m (210 kgf·cm, 15 ft·lbf)



22. INSTALL EXTENSION HOUSING OIL RECEIVER NO. 2

LEXUS IS200 (RM684E)

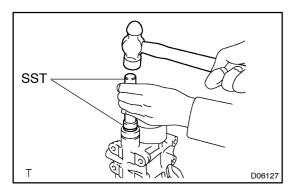


#### 23. INSTAL EXTENSION HOUSING DUST DEFLECTOR

Using SST and a hammer, drive in the extension housing dust deflector.

SST 09950-60020 (09951-00750), 09950-70010 (09951-07100)

Drive in depth:  $1.5 \pm 0.5 \text{ mm} (0.059 \pm 0.02 \text{ in.})$ 

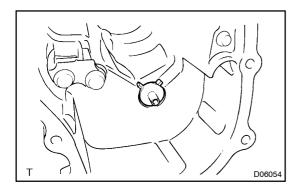


#### 24. INSTALL EXTENSION HOUSING REAR OIL SEAL

(a) Using SST and hammer, install a new extension housing rear oil seal.

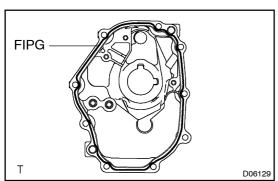
SST 09325-20010

(b) Apply MP grease to lip of extension housing oil seal.



#### 25. INSTALL EXTENSION HOUSING BLEEDER PLUG

Using a screwdriver, and hammer, install the extension housing bleeder plug.

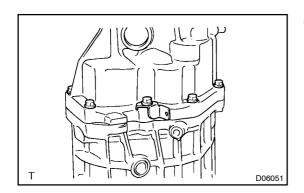


# 26. INSTALL EXTENSION HOUSING

(a) Apply FIPG to extension housing, as shown in the illustration.

FIPG:

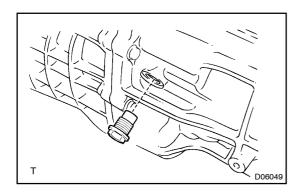
Part No. 08826-00090, THREE BOND 1281 or equivalent



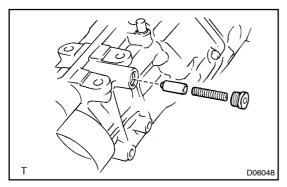
(b) Install the extension housing with 9 bolts and clamp.

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

LEXUS IS200 (RM684E)



# 27. INSTALL REVERSE RESTRICT PIN Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)



#### 28. INSTALL LOCK BALL PIN

(a) Apply sealant to head straight screw plug No. 2.

Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (b) Install the lock ball pin and shift and select spring.
- (c) Using a hexagon wrench (8.0 mm, 0.31 in.), install the head straight screw plug No. 2.

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)



#### 30. INSTALL FLOOR SHIFT LEVER HOUSING

- (a) Install the floor shift lever spring.
- (b) Using a pin punch and hammer, drive in the slotted spring pin until it is flush with floor shift lever housing.
- (c) Apply sealant to the bolt.

Sealant:

Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

(d) Install the bolt.

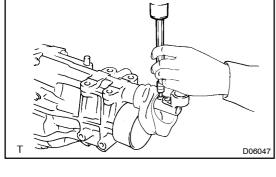
Torque: 38 N·m (390 kgf·cm, 28 ft·lbf)

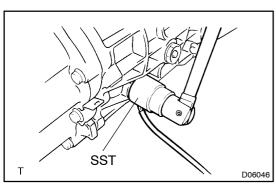
31. INSTALL BACK-UP SWITCH

Install the back-up switch together with new gasket.

SST 09817-16011

Torque: 44 N·m (450 kgf·cm, 33 ft·lbf)





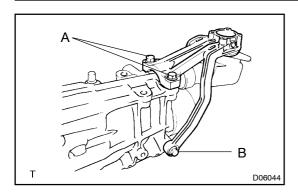
D06045

32. INSTALL VEHICLE SPEED SENSOR

Install the vehicle speed sensor with the bolt.

Torque: 14 N·m (140 kgf·cm, 10 ft·lbf)

LEXUS IS200 (RM684E)



**33. INSTALL CONTROL SHIFT LEVER RETAINER** Install the control shift lever retainer with the 4 bolts.

Torque:

Bolt (A): 29 N·m (300 kgf·cm, 27 ft·lbf) Bolt (B): 19.5 N·m (195 kgf·cm, 14 ft·lbf)

34. INSTALL CLUTCH RELEASE FORK SUPPORT

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