

REASSEMBLY

HINT:

Coat all of the sliding and rotating surface with gear oil before reassembly.

1. INSTALL LOW PLANETARY RING GEAR

- (a) Install the low planetary ring gear.

NOTICE:

Make sure to install the low planetary ring gear in the correct direction.

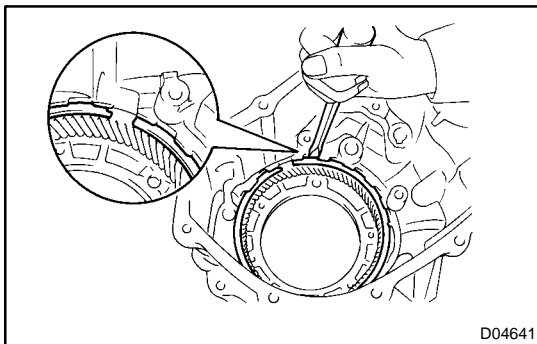
- (b) Install the spring and pin.
(c) Apply sealant to the head screw plug threads.

Sealant:

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

- (d) Install the head screw plug.

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

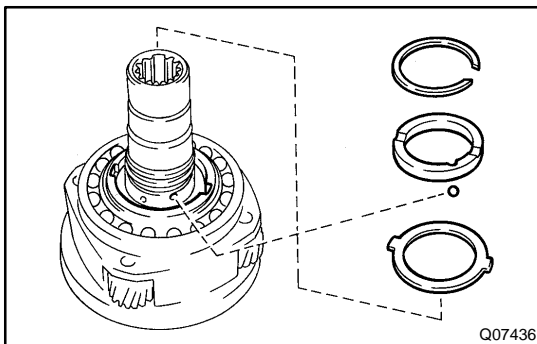


- (e) Using a screwdriver, install the low planetary ring gear hole snap ring.

NOTICE:

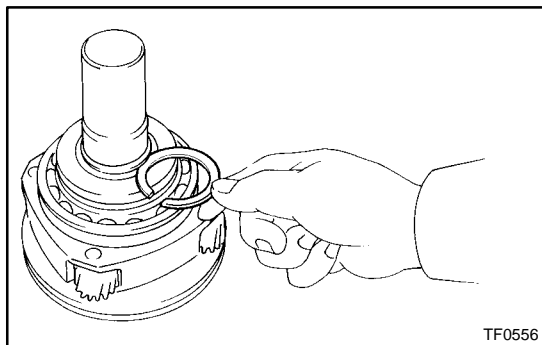
Be sure the end gap of the snap ring is not aligned with the upper side of the case.

2. INSTALL NO. 2 THRUST BEARING RACE, LOW PLANETARY GEAR BEARING AND INPUT SHAFT ASSEMBLY



3. INSTALL INPUT GEAR STOPPER BALL, LOW PLANETARY CARRIER THRUST WASHER AND INPUT GEAR STOPPER

- (a) Install the input gear stopper ball, low planetary carrier thrust washer and input gear stopper.



- (b) Select a input gear stopper snap ring that allows 0.05 - 0.15 mm (0.0020 - 0.0059 in.) axial play.

Mark	Thickness mm (in.)
A	2.10 - 2.15 (0.0827 - 0.0846)
B	2.15 - 2.20 (0.0846 - 0.0866)
C	2.20 - 2.25 (0.0866 - 0.0886)
D	2.25 - 2.30 (0.0886 - 0.0906)
E	2.30 - 2.35 (0.0906 - 0.0925)
F	2.35 - 2.40 (0.0925 - 0.0945)
G	2.40 - 2.45 (0.0945 - 0.0965)
H	2.45 - 2.50 (0.0965 - 0.0984)
J	2.50 - 2.55 (0.0984 - 0.1004)
K	2.55 - 2.60 (0.1004 - 0.1024)
L	2.60 - 2.65 (0.1024 - 0.1043)
M	2.65 - 2.70 (0.1043 - 0.1063)
N	2.70 - 2.75 (0.1063 - 0.1083)
P	2.75 - 2.80 (0.1083 - 0.1102)
Q	2.80 - 2.85 (0.1102 - 0.1122)
R	2.85 - 2.90 (0.1122 - 0.1142)
S	2.90 - 2.95 (0.1142 - 0.1161)
T	2.95 - 3.00 (0.1161 - 0.1181)
U	3.00 - 3.05 (0.1181 - 0.1201)

- (c) Using a snap ring expander, install a new input gear stopper snap ring.

4. INSTALL OUTPUT SHAFT NEEDLE ROLLER BEARING TO INPUT SHAFT

5. INSTALL LOW PLANETARY GEAR SPLINE PIECE

- (a) Install the low planetary gear spline piece.
 (b) Using a screwdriver, install the low planetary gear snap ring.

NOTICE:

Be sure the end gap of the snap ring is not aligned with cut-out portion of the low planetary gear.

6. INSTALL LOW PLANETARY GEAR ASSEMBLY WITH INPUT SHAFT ASSEMBLY

- (a) Install the low planetary gear assembly with the input shaft assembly.

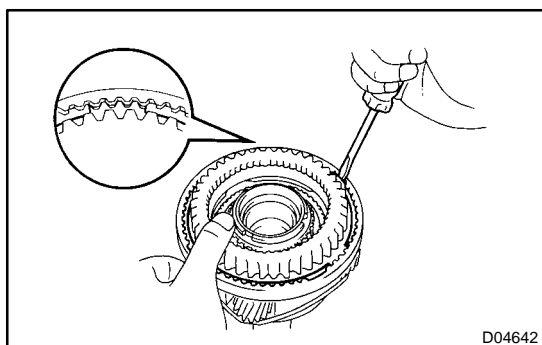
HINT:

If necessary, heat the front case to about 50 - 80°C (122 - 176°F).

- (b) Using a snap ring expander, install the low planetary gear bearing snap ring.

HINT:

Check that the low planetary gear assembly and input shaft assembly turn lightly.



7. INSTALL OIL PUMP GEAR TO FRONT CASE**8. INSTALL OIL PUMP BODY ASSEMBLY**

Install the oil pump body assembly with the 3 bolts.

Torque: 7.5 N·m (80 kgf-cm, 69 in.-lbf)

9. INSTALL MAGNET AND OIL SEPARATOR

(a) Install the magnet to the front case.

(b) Install the oil separator with the 3 bolts.

Torque: 7.5 N·m (80 kgf-cm, 69 in.-lbf)

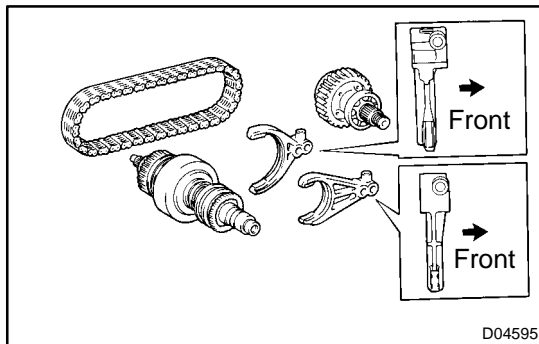
10. INSTALL ACTUATOR ASSEMBLY

(a) Install a new O-ring, No. 1 and No. 2 4WD position switches with 2 new gaskets.

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

(b) Install the actuator assembly with the 3 bolts.

Torque: 20 N·m (200 kgf-cm, 14 ft-lbf)

**11. INSTALL REAR OUTPUT SHAFT ASSEMBLY, NO. 1 GEAR SHIFT FORK, CENTER DIFF. LOCK FORK, DRIVEN SPROCKET ASSEMBLY AND FRONT DRIVE CHAIN**

(a) Install the No. 1 gear shift fork, center diff. lock fork, driven sprocket assembly and front drive chain to the rear output shaft assembly.

NOTICE:

Make sure to install the forks in the correct direction.

(b) Install the rear output shaft assembly with the driven sprocket assembly to the rear case.

NOTICE:

Do not let the clutch sleeve and shifting key drop.

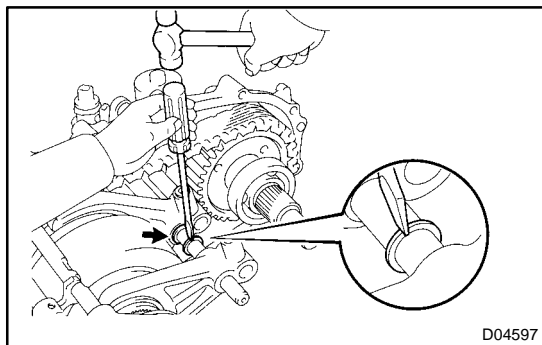
HINT:

If necessary, heat the rear case to about 50 - 80°C (122 - 176°F).

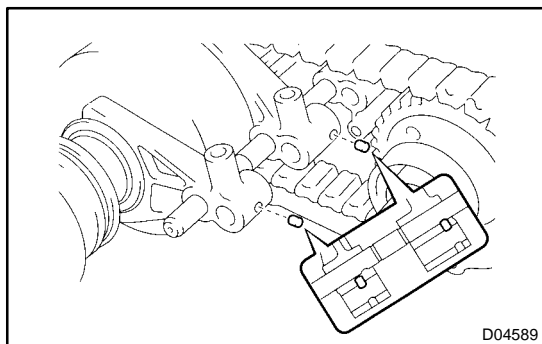
(c) Using a snap ring expander, install the output shaft snap ring.

HINT:

Check that the rear output shaft assembly and driven sprocket turn lightly.

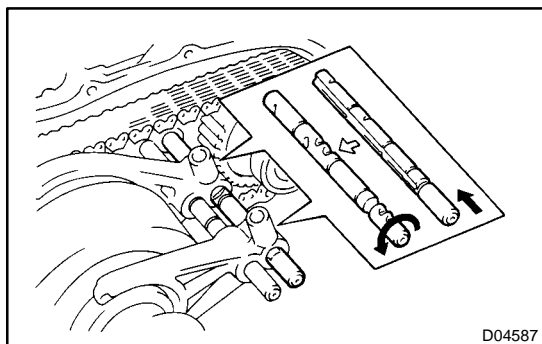


- (d) Using a screwdriver and hammer, drive in the 2 snap rings to the gear shift fork shaft of the actuator assembly.

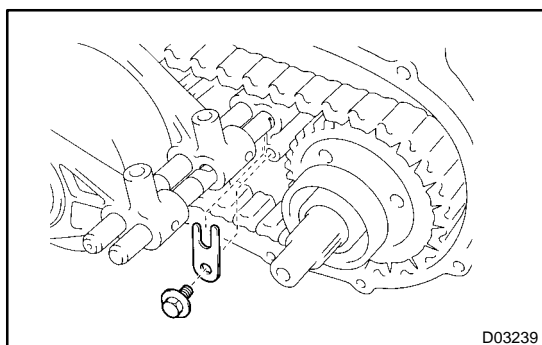


12. INSTALL GEAR SHIFT FORK SHAFT

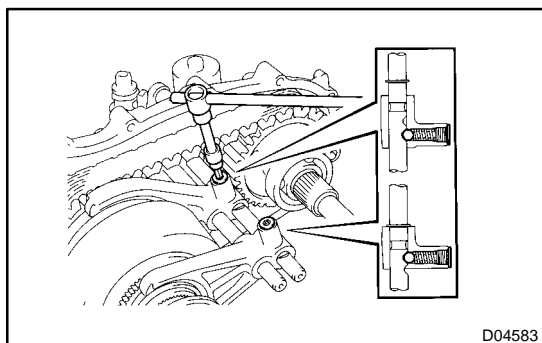
- (a) Using a magnetic finger, install the 2 No. 2 shift interlock pins to the No. 1 gear shift fork and center diff. lock fork.



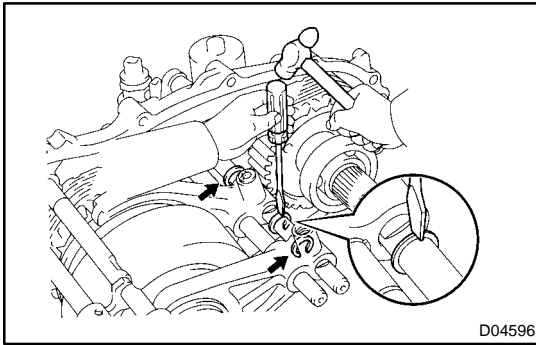
- (b) Install the slit portion of the gear shift fork shaft with it facing No. 2 interlock pin and rotate the gear shift fork shaft, as shown in the illustration.



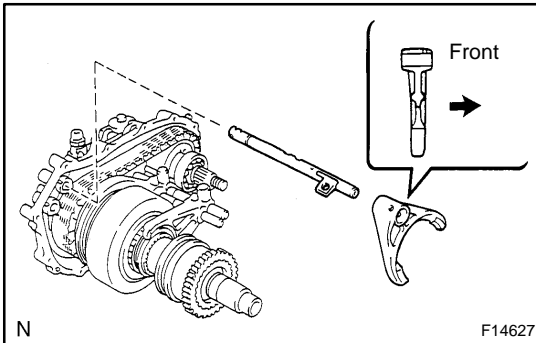
- (c) Install the shift shaft stopper with the bolt.
Torque: 19 N·m (190 kgf-cm, 14 ft-lbf)



- (d) Install the 2 springs and balls to the No. 1 gear shift fork and center diff. lock fork.
(e) Apply sealant to the straight screw plug threads.
Sealant:
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent
(f) Using a hexagon wrench, install the 2 straight screw plugs to the No. 1 gear shift fork and center diff. lock fork.
Torque: 19 N·m (190 kgf-cm, 14 ft-lbf)



- (g) Using a screwdriver and hammer, drive in the 3 snap rings to the gear shift fork shaft of the actuator assembly.

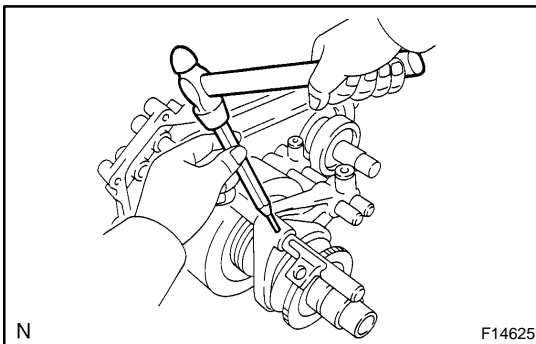


13. INSTALL HIGH AND LOW SHIFT FORK SHAFT AND NO. 2 GEAR SHIFT FORK

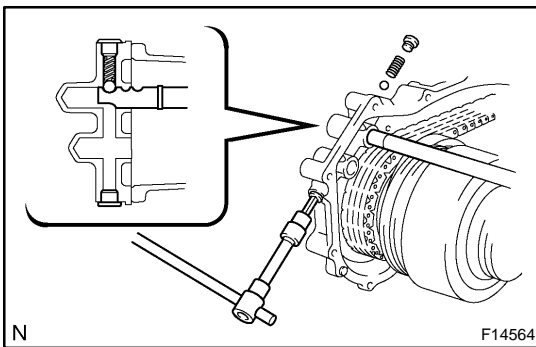
- (a) Install the high and low shift fork shaft and No. 2 gear shift fork.

NOTICE:

Make sure to install the No. 2 gear shift fork in the correct direction.



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



14. INSTALL STRAIGHT SCREW PLUG, SPRING AND BALL

- (a) Install the ball and spring.
(b) Apply sealant to the straight screw plug threads.

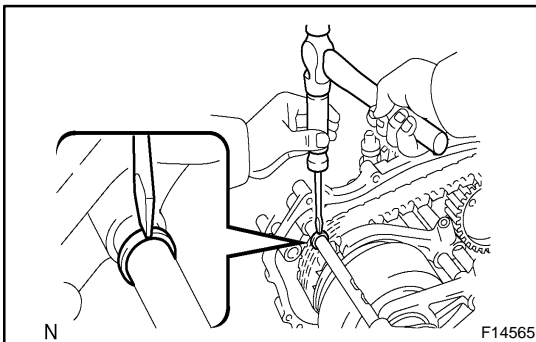
Sealant:

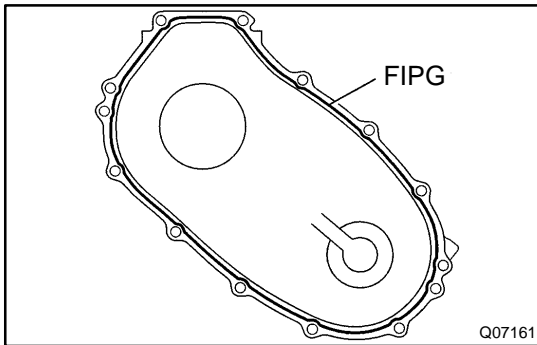
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (c) Using a hexagon wrench, install the 2 straight screw plugs.

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

- (d) Using a screwdriver and hammer, drive in the snap ring.



**15. INSTALL REAR CASE**

- (a) Apply FIPG to the rear case, as shown.

FIPG:

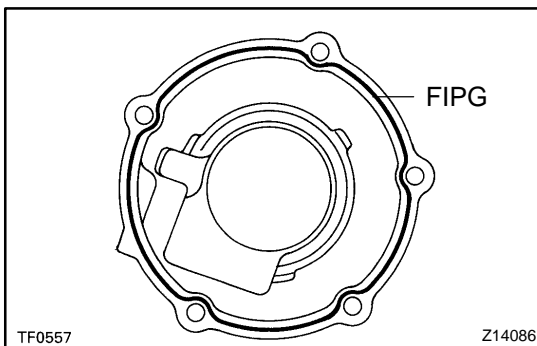
Part No. 08826-00090, THREE BOND 1281 or equivalent

- (b) Install the rear case and 2 clamps with the 12 bolts.

Torque: 28 N·m (285 kgf·cm, 21 ft·lbf)

16. INSTALL VEHICLE SPEED SENSOR DRIVE GEAR AND OUTPUT SHAFT WASHER

- (a) Install the ball on the rear output shaft.
 (b) Install the vehicle speed sensor drive gear and 2 output shaft washers.

**17. INSTALL EXTENSION HOUSING**

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

FIPG:

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

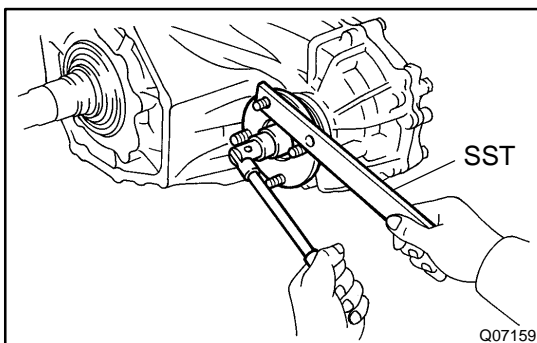
- (b) Apply sealant to the bolt threads.

Sealant:

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

- (c) Install the extension housing with the 5 bolts.

Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)

**18. INSTALL FRONT COMPANION FLANGE**

- (a) Install the front companion flange to the input shaft assembly.

- (b) Using SST to hold the front companion flange, install a new front companion flange lock nut.

SST 09330-00021

Torque: 118 N·m (1,200 kgf·cm, 87 ft·lbf)

- (c) Stake the front companion flange lock nut.

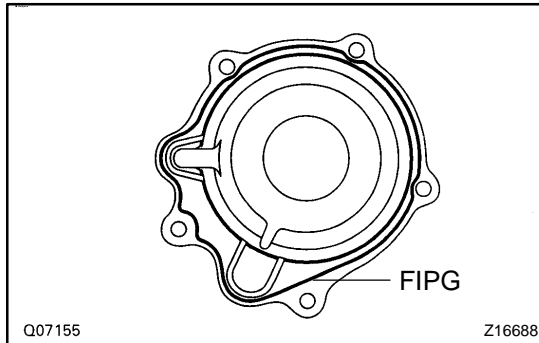
19. INSTALL REAR COMPANION FLANGE

Install the rear companion flange in the same way as the front companion flange.

20. INSTALL CONTROL SHIFT LEVER RETAINER

- (a) Install the select return spring to the control shift lever retainer.
- (b) Install the control shift lever retainer and a new oil deflector with the 4 bolts.

Torque: 18 N·m (185 kgf-cm, 13 ft-lbf)

**21. INSTALL FRONT BEARING RETAINER**

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

FIPG:

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

- (b) Apply sealant to the bolt threads.

Sealant:

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

- (c) Install the front bearing retainer with the 5 bolts.

Torque: 11 N·m (115 kgf-cm, 8 ft-lbf)

22. INSTALL L4 POSITION SWITCH, NEUTRAL POSITION SWITCH AND STRAIGHT SCREW PLUG WITH 3 NEW GASKETS

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

23. INSTALL VEHICLE SPEED SENSOR ASSEMBLY

- (a) Install the vehicle speed sensor driven gear to the vehicle speed sensor assembly with the clip.
- (b) Install a new O-ring to the vehicle speed sensor assembly.
- (c) Install the vehicle speed sensor assembly with the bolt.

Torque: 11 N·m (115 kgf-cm, 8 ft-lbf)