

REASSEMBLY

HINT:

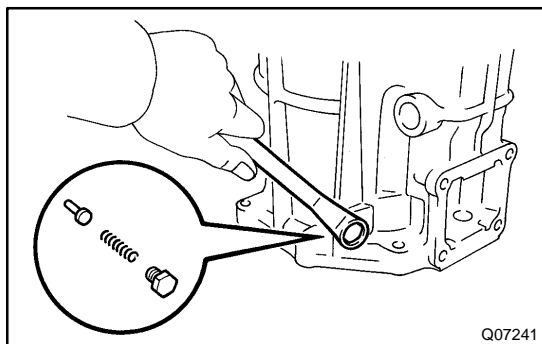
Coat all of the sliding and rotating surfaces with gear oil before reassembly.

1. INSTALL PLANETARY RING GEAR

- (a) Install the planetary ring gear.

NOTICE:

Make sure that the planetary ring gear is installed in the correct direction.



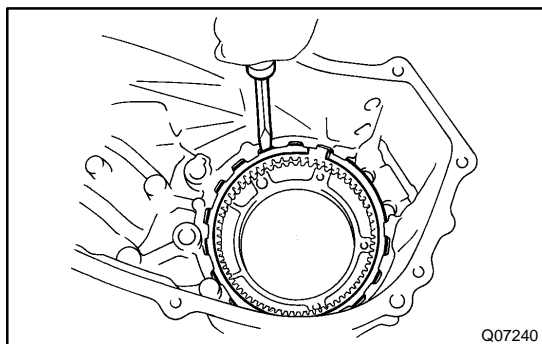
- (b) Install the pin and spring.
(c) Apply sealant to the head screw plug threads.

Sealant:

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

- (d) Install the head screw plug.

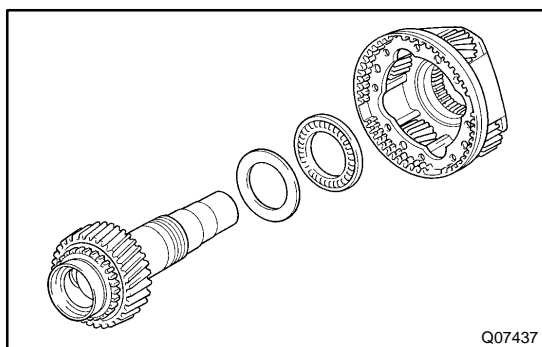
Torque: 19 N·m (190 kgf-cm, 14 ft-lbf)



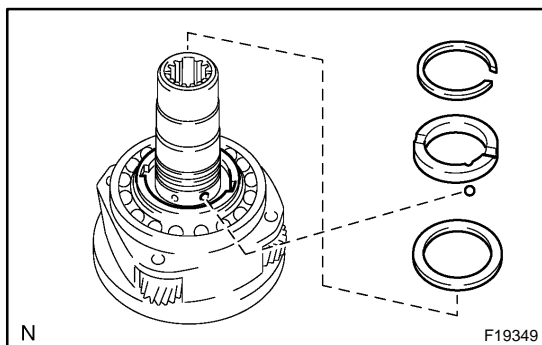
- (e) Using a screwdriver, install the snap ring.

NOTICE:

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



2. INSTALL INPUT SHAFT ASSEMBLY, THRUST BEARING AND RACE

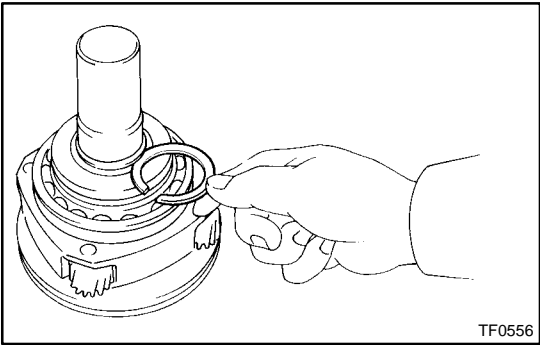


3. INSTALL THRUST WASHER AND INPUT GEAR STOPPER

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

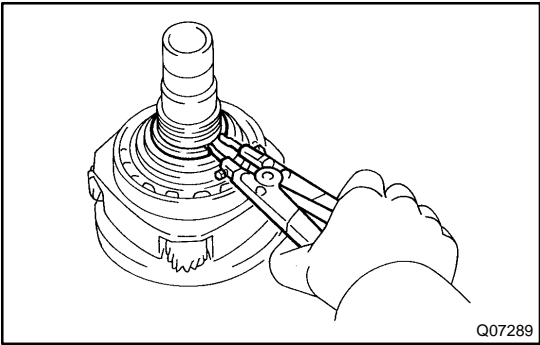
HINT:

Apply gear oil to the input gear stopper and thrust washer.

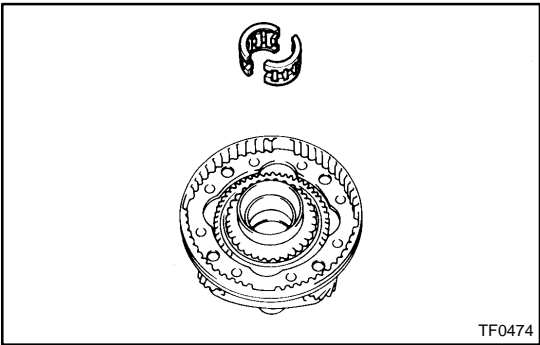


- (b) Select a snap ring that allows for 0.05 to 0.15 mm (0.0020 to 0.0059 in.) axial play.

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

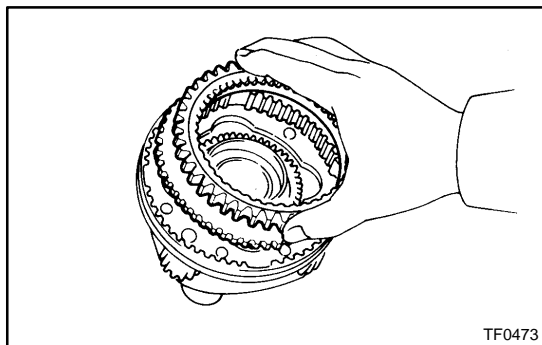


- (c) Using a snap ring expander, install a snap ring.



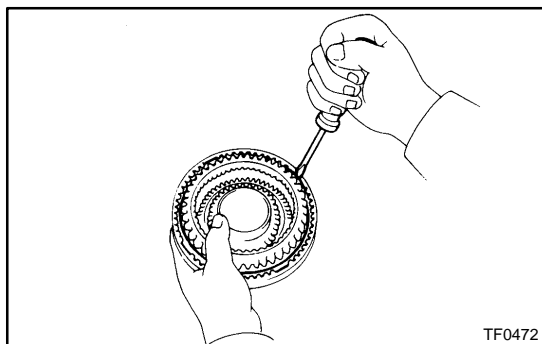
4. INSTALL NEEDLE ROLLER BEARING TO INPUT SHAFT ASSEMBLY

HINT:
Apply gear oil to the needle roller bearing.



5. INSTALL LOW GEAR SPLINE PIECE

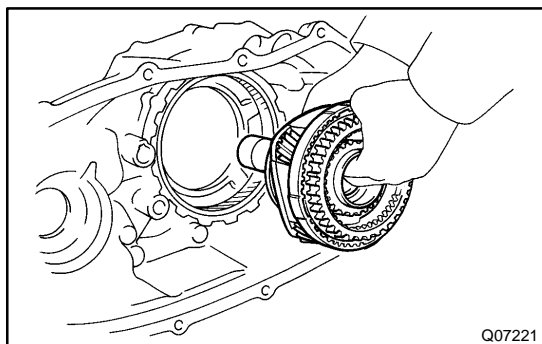
- (a) Install the low gear spline piece.



- (b) Using a screwdriver, install the snap ring.

NOTICE:

Make sure the end gap of the snap ring is not aligned with the cutout portion of the planetary carrier.

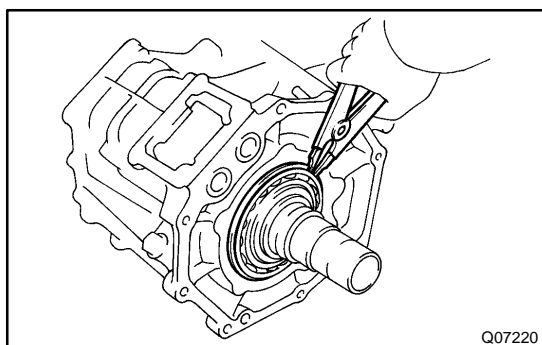


6. INSTALL PLANETARY GEAR ASSEMBLY WITH INPUT SHAFT ASSEMBLY

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

HINT:

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

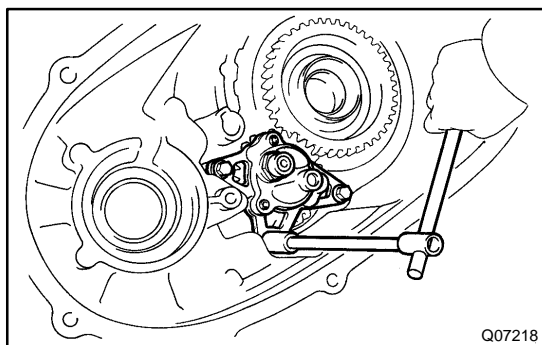


- (b) Using a snap ring expander, install the snap ring.

HINT:

Check that the planetary gear and input shaft assembly turn slightly.

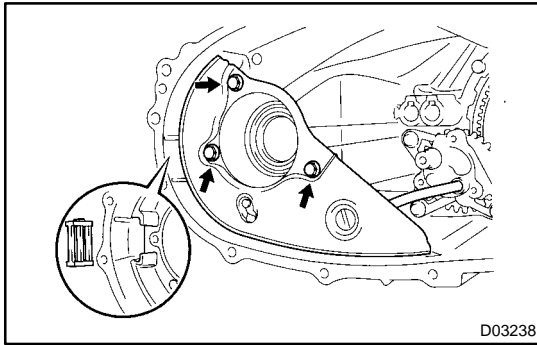
7. INSTALL OIL PUMP DRIVE GEAR



8. INSTALL OIL PUMP BODY ASSEMBLY

Install the oil pump body assembly with the 3 bolts.

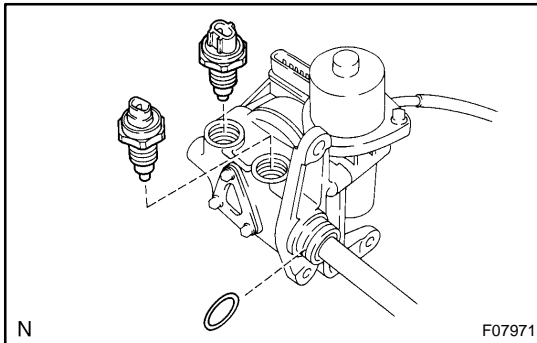
Torque: 7.5 N·m (76 kgf·cm, 66 in.-lbf)



9. INSTALL MAGNET AND SEPARATOR WITH OIL STRAINER

- Install the magnet to the front case.
- Install the separator with oil strainer with the 3 bolts.

Torque: 7.5 N·m (76 kgf-cm, 66 in.-lbf)



10. INSTALL ACTUATOR ASSEMBLY

- Install a new O-ring, 2 new gaskets, transfer 4WD position switch and transfer L4 position switch to the actuator assembly.

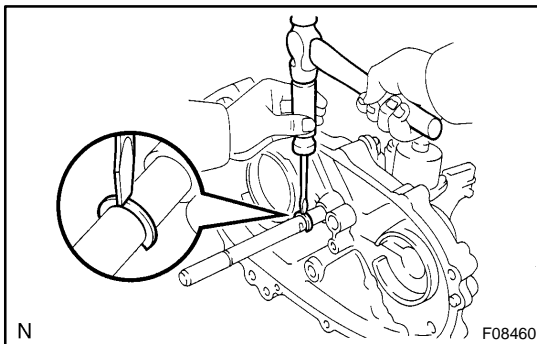
Torque: 37 N·m (377 kgf-cm, 27 ft-lbf)

HINT:

Coat a new O-ring with gear oil.

- Install the actuator assembly with the 3 bolts.

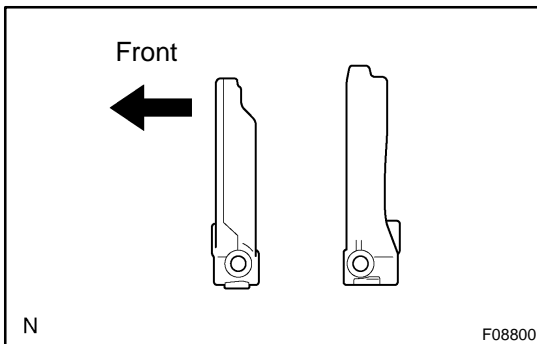
Torque: 20 N·m (204 kgf-cm, 15 ft-lbf)



- Using a screwdriver and hammer, drive in the snap ring to the shift fork shaft of the actuator assembly.

HINT:

Install only the snap ring on the rear side of the shift fork shaft.

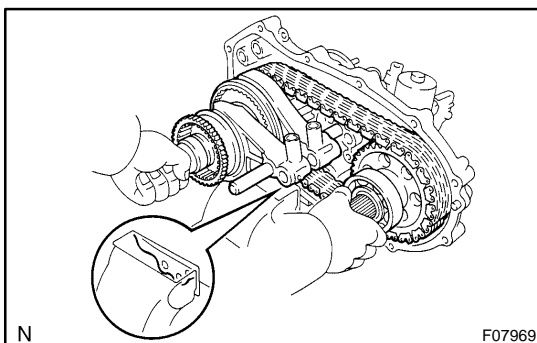


11. INSTALL REAR OUTPUT SHAFT ASSEMBLY, DRIVEN SPROCKET ASSEMBLY, CHAIN AND FRONT DRIVE AND HIGH AND LOW SHIFT FORKS

- Install the driven sprocket assembly, chain and front drive and high and low shift forks to the rear output shaft assembly.

NOTICE:

Make sure that the front drive and high and low shift forks are installed in the correct direction.



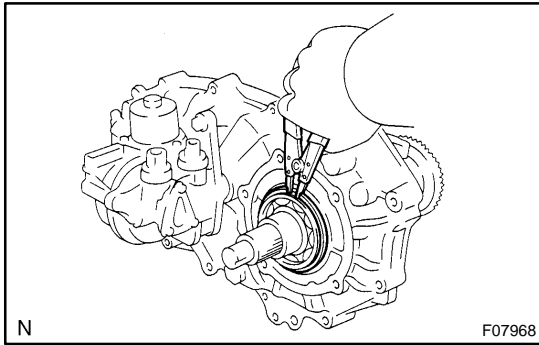
- Mount the rear case in a vise.
- Install the rear output shaft assembly, driven sprocket assembly, chain and front drive and high and low shift forks to the rear case as an assembly.

NOTICE:

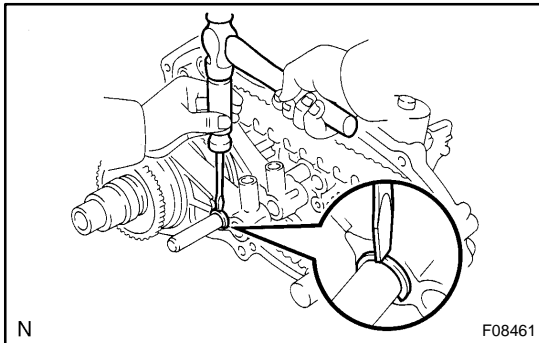
Do not drop the clutch sleeve or shifting key.

HINT:

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



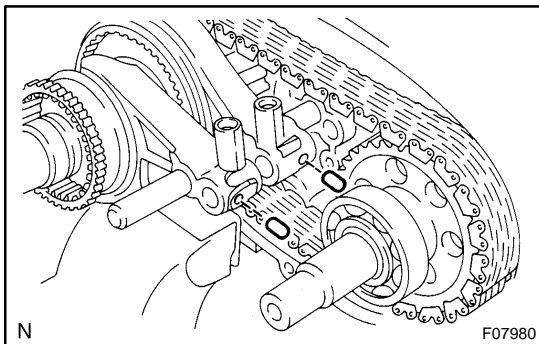
- (d) Using a snap ring expander, install the snap ring.



- (e) Using a screwdriver and hammer, drive in the snap ring to the shift fork shaft of the actuator assembly.

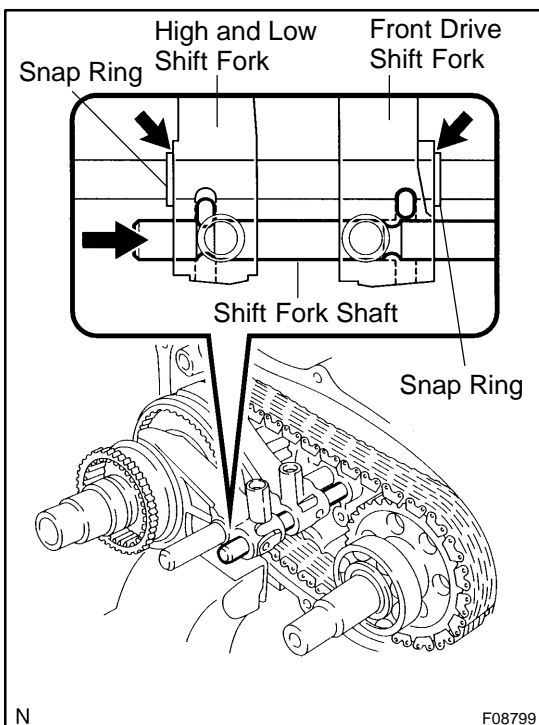
HINT:

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



12. INSTALL SHIFT FORK SHAFT

- (a) Using a magnetic finger, install the 2 straight pins to the front drive and high and low shift forks.

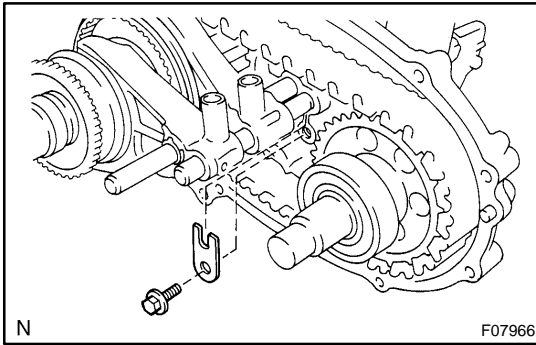


- (b) To push into the shift fork shaft, shift the front drive and high and low shift forks to the positions as shown in the illustration.

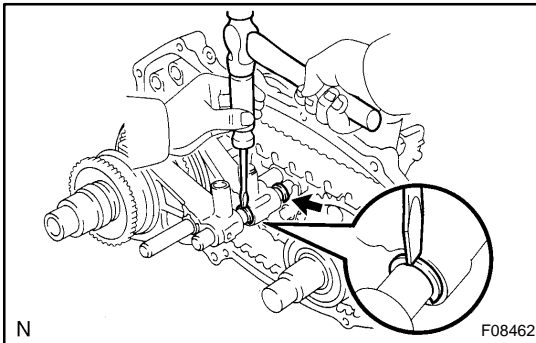
- (c) Push into the shift fork shaft.

NOTICE:

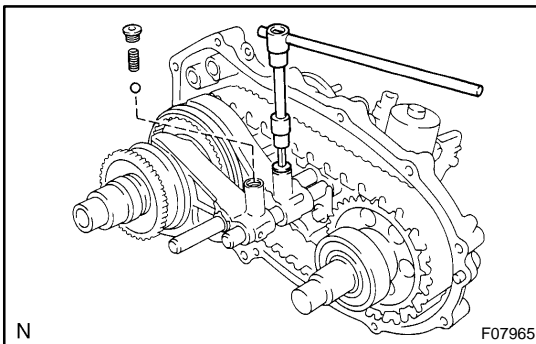
Make sure that the shift fork shaft is installed in the correct direction.



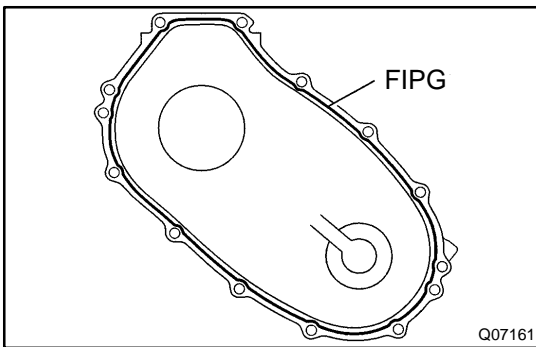
- (d) Install the shift fork shaft stopper with the bolt.
Torque: 19 N·m (190 kgf-cm, 14 ft-lbf)



- (e) Using a screwdriver and hammer, drive in the 2 snap rings to the shift fork shaft.



- (f) Install the 2 balls and springs to the front drive and high and low shift forks.
(g) Apply sealant to the straight screw plug threads.
Sealant:
Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent
(h) Using a hexagon wrench (6 mm), install the 2 straight screw plugs to the front drive and high and low shift forks.
Torque: 19 N·m (190 kgf-cm, 14 ft-lbf)

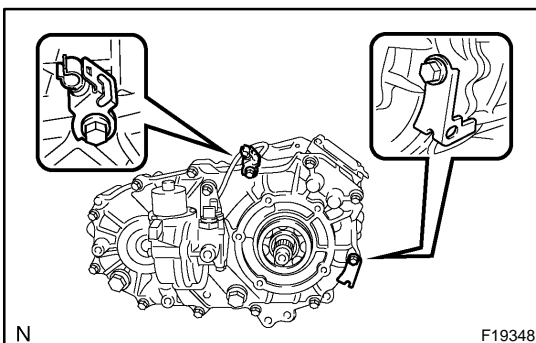


13. REASSEMBLE FRONT AND REAR CASE

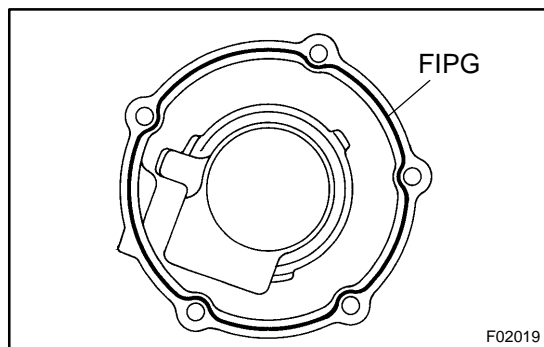
HINT:

Remove any FIPG material and be careful not to drop oil on the contacting surface of the rear case.

- (a) Apply FIPG to the rear case as shown in the illustration.
FIPG:
Part No. 08826-00090,
THREE BOND 1281 or equivalent



- (b) Install the 2 clamps and reassemble the front and rear case with the 12 bolts.
Torque: 28 N·m (285 kgf-cm, 21 ft-lbf)
14. INSTALL VEHICLE SPEED SENSOR DRIVE GEAR
(a) Install the ball to the rear output shaft.
(b) Install the vehicle speed sensor drive gear and 2 output washers.



15. INSTALL EXTENSION HOUSING

HINT:

Remove any FIPG material and be careful not to drop oil on the contacting surface of the extension housing.

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

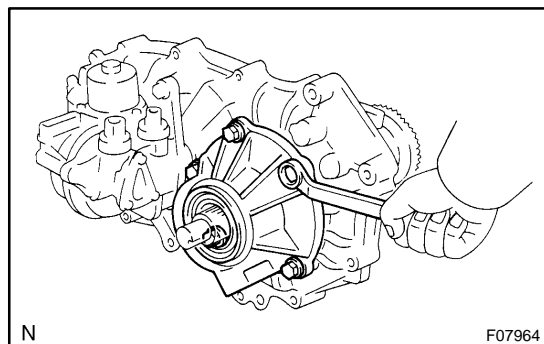
FIPG:

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

- (b) Apply sealant to the bolt threads.

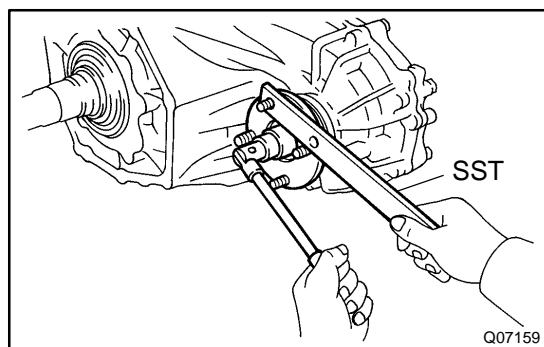
Sealant:

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



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

Torque: 12 N·m (122 kgf-cm, 9 ft-lbf)



16. INSTALL FRONT COMPANION FLANGE

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

SST 09330-00021

Torque: 118 N·m (1,203 kgf-cm, 87 ft-lbf)

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

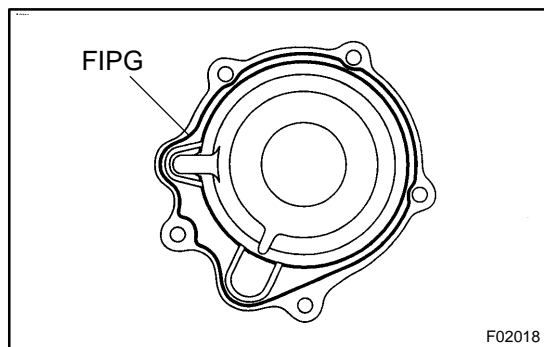
17. INSTALL REAR COMPANION FLANGE

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

18. INSTALL OIL DEFLECTOR AND UPPER COVER

Install 2 new gaskets, oil deflector and upper cover with the 4 bolts.

Torque: 18 N·m (184 kgf-cm, 13 ft-lbf)

**19. INSTALL FRONT BEARING RETAINER****HINT:**

Remove any FIPG material and be careful not to drop oil on the contacting surface of the front bearing retainer.

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

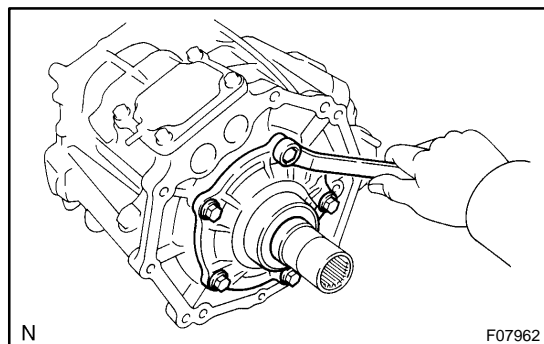
FIPG:

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

- (b) 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: 11.5 N·m (117 kgf-cm, 8 ft-lbf)

20. INSTALL PROTECTOR

Install the protector with the 4 bolts.

Torque: 18 N·m (184 kgf-cm, 13 ft-lbf)

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

21. INSTALL SPEEDOMETER DRIVEN GEAR HOLE COVER

- (a) Install a new O-ring to the speedometer driven gear hole cover.

HINT:

Coat a new O-ring with gear oil.

- (b) Install the speedometer driven gear hole cover with the bolt.

Torque: 11 N·m (112 kgf-cm, 8 ft-lbf)