

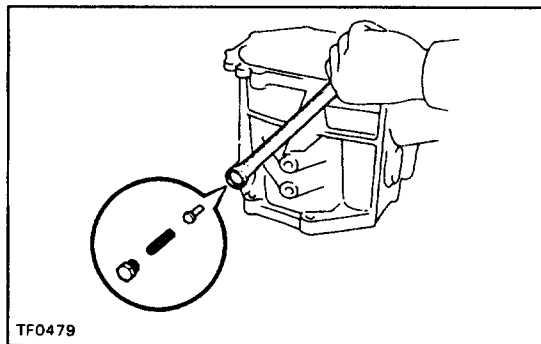
TRANSFER ASSEMBLY

(See pages **TR2-10** and **TR2-11**)

1. INSTALL PLANETARY RING GEAR

- (a) Install the planetary ring gear to the front case.

HINT: Ensure that the ring gear is installed in the correct direction.



- (b) Install the pin and spring.

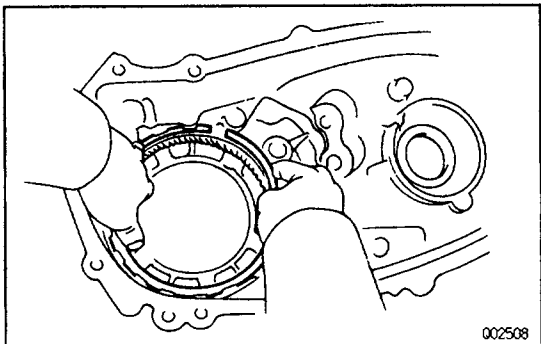
- (c) Apply liquid sealer to the plug.

Sealant:

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

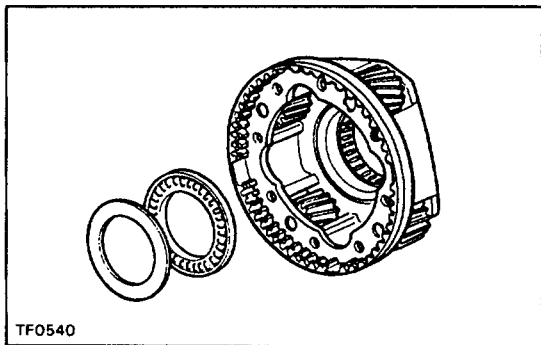
- (d) Install and torque the plug.

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



- (e) Install the snap ring.

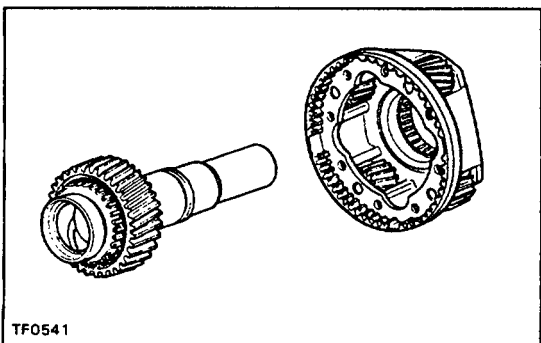
HINT: Ensure that the end gap of the snap ring is not aligned with the upper side of the case.



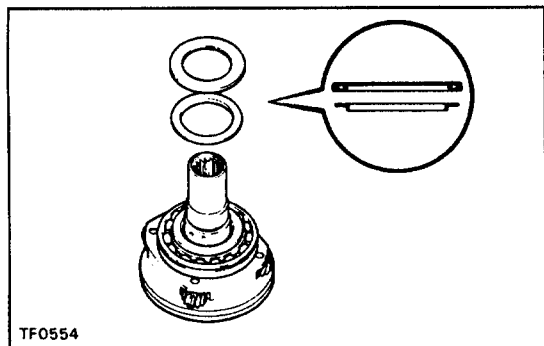
2. INSTALL INPUT SHAFT TO PLANETARY GEAR ASSEMBLY

- (a) Apply gear oil to the thrust bearing and race.

- (b) Install the race and thrust bearing.

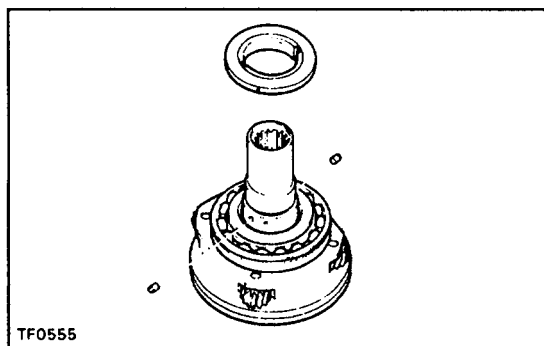


- (c) Install the input shaft into the planetary gear assembly.

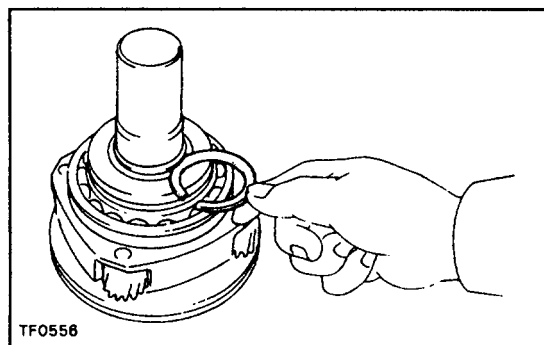


3. INSTALL THRUST BEARING AND INPUT SHAFT STOPPER

- (a) Apply gear oil to the thrust bearing and race.
- (b) Install the race and thrust bearing.



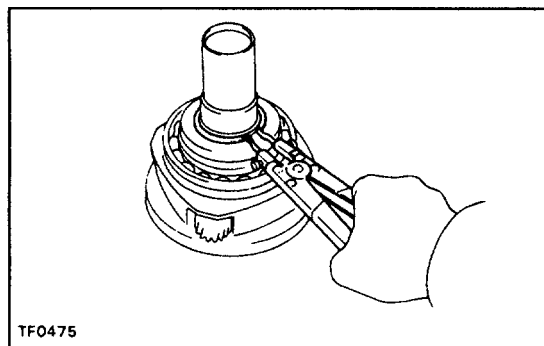
- (c) Install the 2 pins onto the input shaft.
- (d) Install the input shaft stopper.



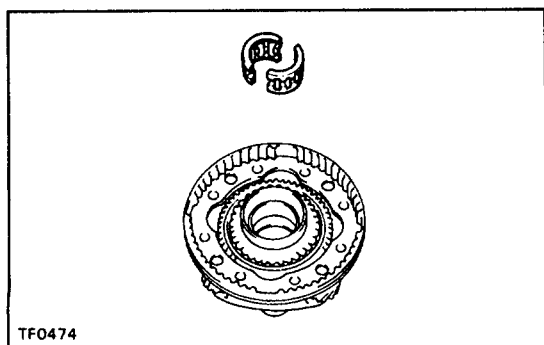
4. INSTALL SNAP RING

- (a) Select a snap ring that will allow 0.05–0.15 mm (0.0020–0.0059 in.) axial play.

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

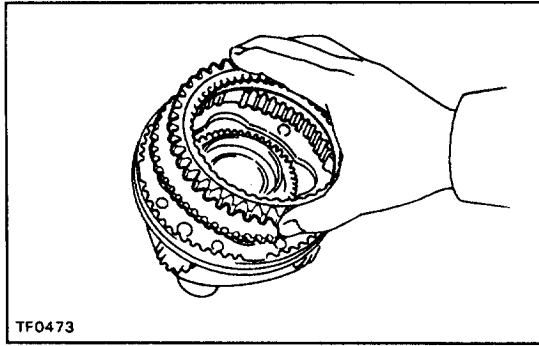


- (b) Using a snap ring expander, install the snap ring.



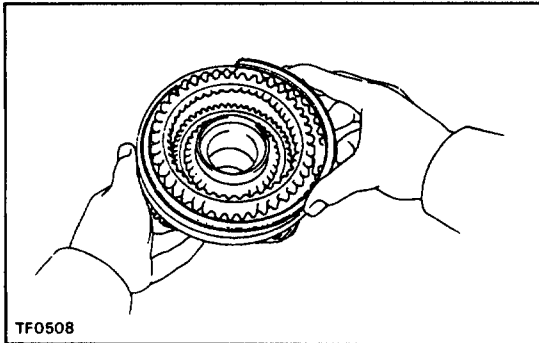
5. INSTALL NEEDLE ROLLER BEARING INTO INPUT SHAFT

- (a) Apply gear oil to the needle roller bearing.
- (b) Install the needle roller bearing into the input shaft.



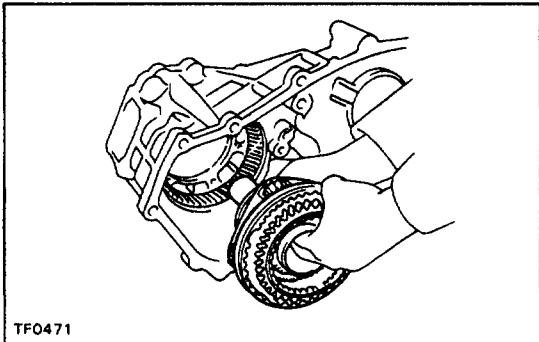
6. INSTALL LOW GEAR SPLINE PIECE

- (a) Install the low gear spline piece to the planetary carrier.



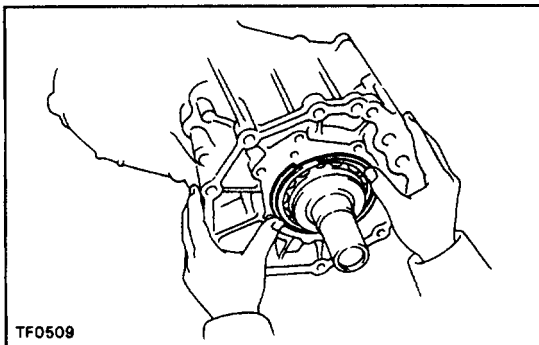
- (b) Install the snap ring.

HINT: Ensure that the end gap of the snap ring is not aligned with cutout portion of the planetary carrier.

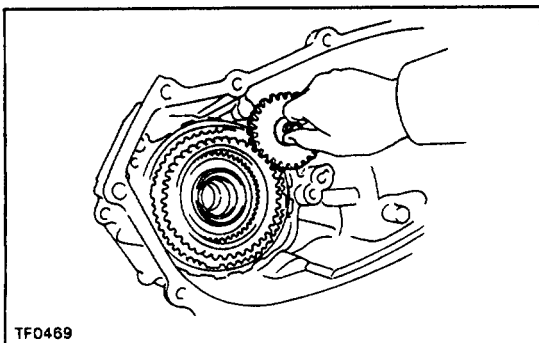


7. INSTALL PLANETARY GEAR ASSEMBLY TO FRONT CASE

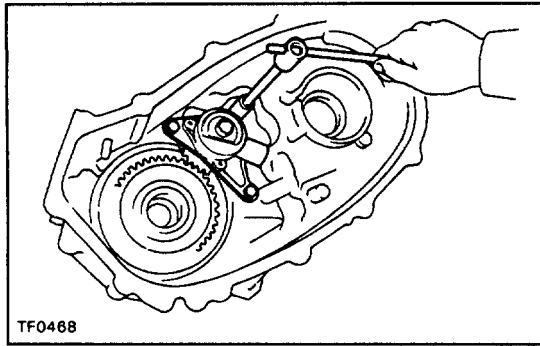
- (a) Install the planetary gear assembly with the input shaft.
HINT: If necessary, heat the front case to about 70°C (158°F).



- (b) Install the snap ring.



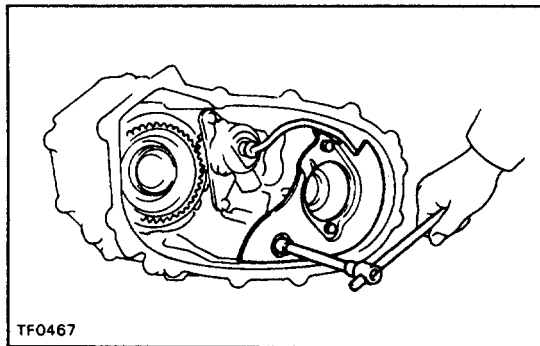
8. INSTALL OIL PUMP DRIVE GEAR



9. INSTALL OIL PUMP BODY ASSEMBLY

- (a) Install the oil pump body assembly.
- (b) Install and torque the 3 bolts.

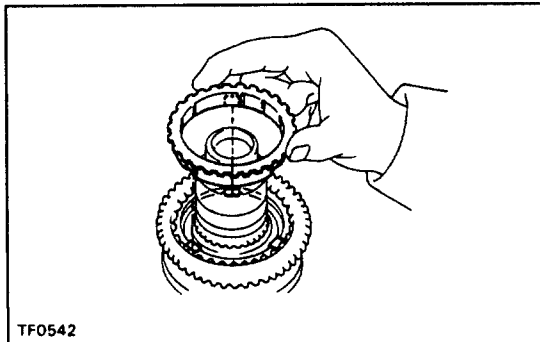
Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)



10. INSTALL SEPARATOR WITH OIL STRAINER

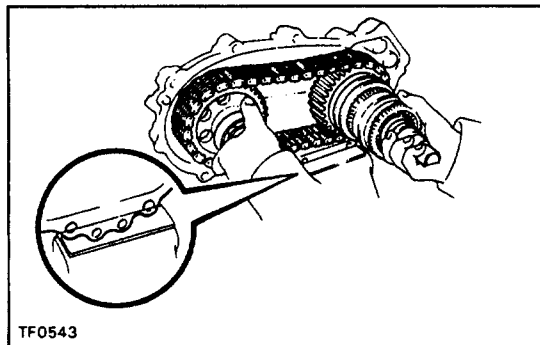
- (a) Coat a new O-ring with gear oil and install it to the oil strainer pipe.
- (b) Install the separator with the oil strainer.
- (c) Install and torque the 3 bolts.

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



11. INSTALL REAR OUTPUT SHAFT, DRIVEN SPROCKET AND CHAIN

- (a) Apply MP grease to the synchronizer ring (for M/T).
- (b) Align the synchronizer ring slots with the shifting keys, and install it on the high and low clutch hub.

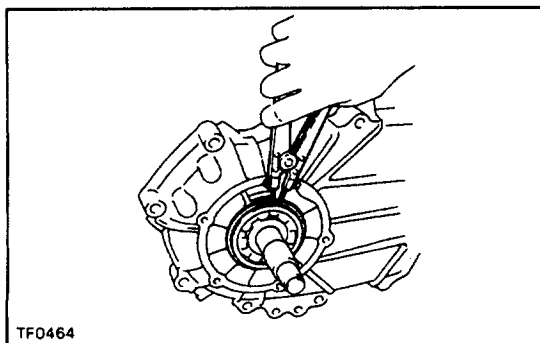


- (c) Assemble the rear output shaft, driven sprocket and chain.
- (d) Mount the rear case in the vise.

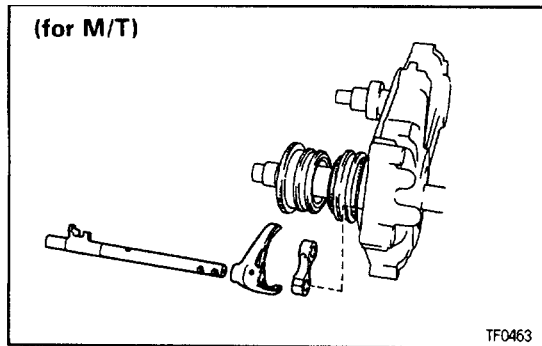
NOTICE: Be careful not to damage the sealing surface.

- (e) Using a plastic hammer, tap the rear case with pushing the rear output shaft and driven sprocket.

HINT: If necessary, heat the rear case to about 70°C (158°F).

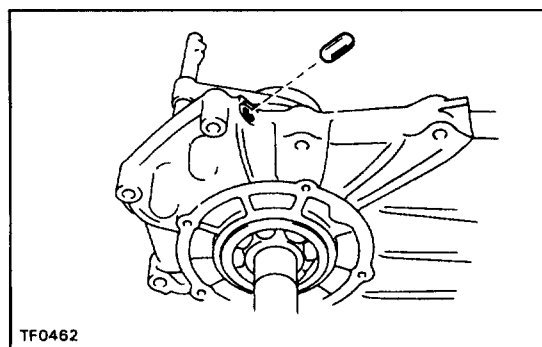
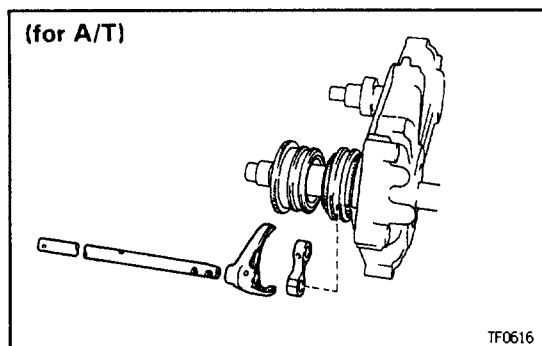


- (f) Using a snap ring expander, install the snap ring.



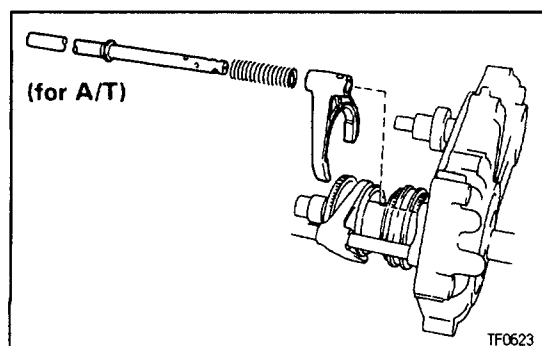
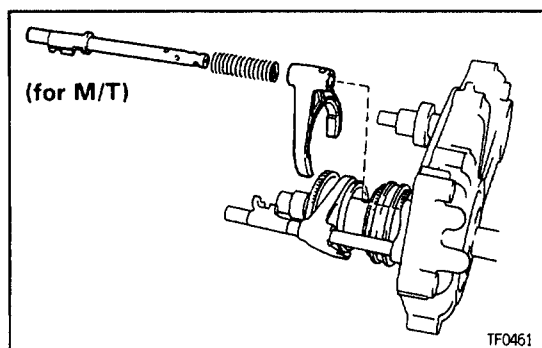
12. INSTALL HIGH AND LOW FORK SHAFT, FORK AND STOPPER

- (a) Place the high and low shift fork into the groove of the hub sleeve.
HINT: Ensure that the shift fork is installed in the correct direction.
- (b) Install the fork shaft to the rear case through the shift fork and stopper.

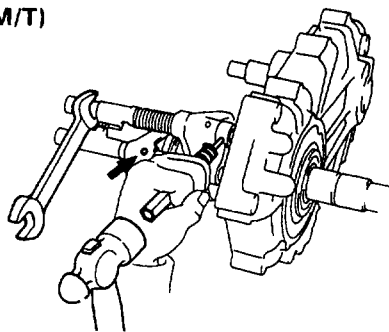


13. INSTALL FRONT DRIVE FORK SHAFT, FORK AND SPRING

- (a) Apply gear oil to the straight pin, and install it into the case hole.
- (b) Place the front drive shift fork into the groove of the hub sleeve.
HINT: Ensure that the shift fork is installed in the correct direction.
- (c) Install the spring to the fork shaft.
- (d) Install the fork shaft to the rear case through the shift fork and stopper.



(for M/T)

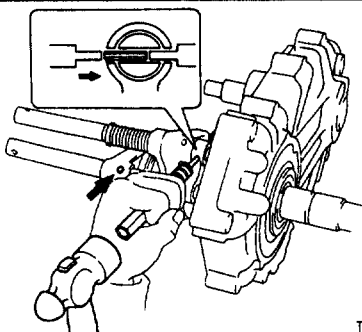


TF0558

- (e) Using a pin punch and hammer, drive in the 2 slotted spring pins.

HINT: When installing the pin in the front drive fork shaft, push the shaft towards the rear case and install the pin while the spring is compressed.

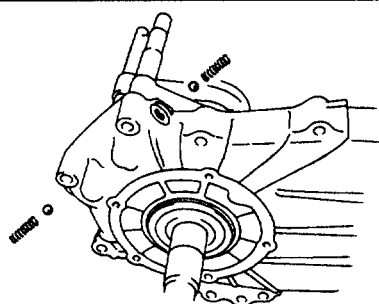
(for A/T)



TF0622

14. INSTALL STRAIGHT SCREW PLUGS, SPRINGS AND LOCKING BALLS

- (a) Install the ball and spring into the both holes.



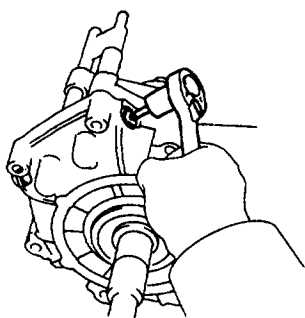
TF0458

- (b) Apply liquid sealer to the plugs.

Sealant:

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

- (c) Using a hexagon wrench, install and torque the 2 screws.
Torque: 19 N·m (190 kgf·cm, 14 ft·lbf)



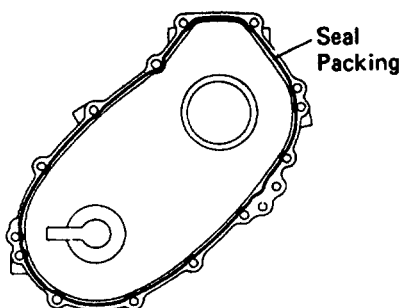
TF0457

15. ASSEMBLE FRONT CASE AND REAR CASE

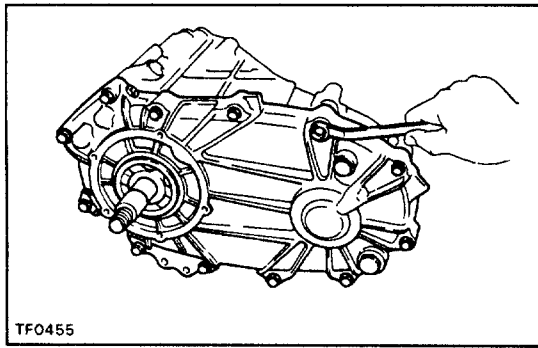
- (a) Apply FIGP to the rear case, as shown in the illustration.

FIPG:

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

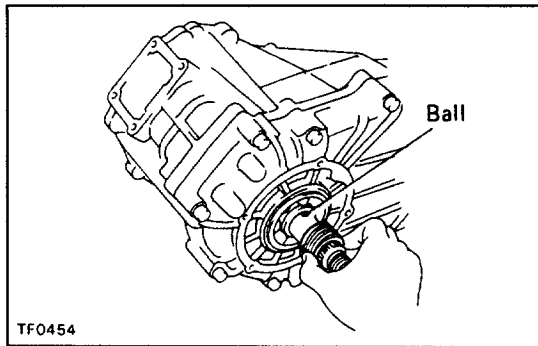


TF0510



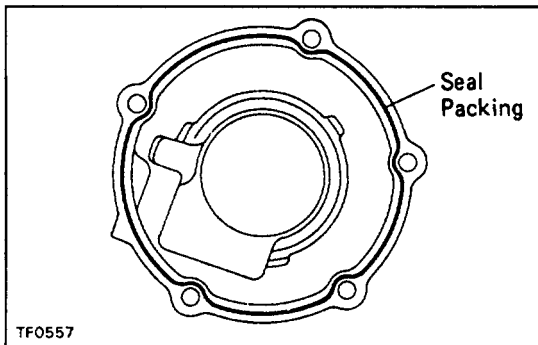
- (b) Shift the high and low hub sleeve to low side (rear side).
- (c) Assemble the front case and rear case.
- (d) Install and torque the 12 bolts.

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



16. INSTALL SPEEDOMETER DRIVE GEAR

- (a) Install the ball on the rear output shaft.
 - (b) Install the speedometer drive gear.
- HINT:** Make sure to install the speedometer drive gear in the correct direction.

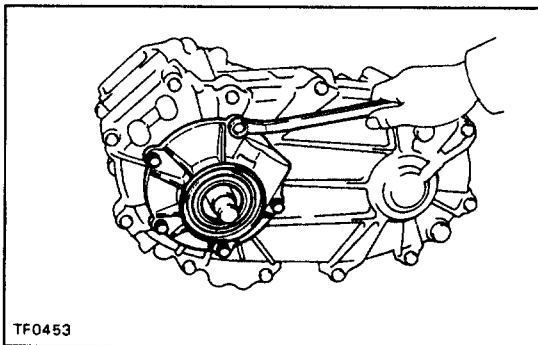


17. INSTALL EXTENSION HOUSING

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

FIPG:

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



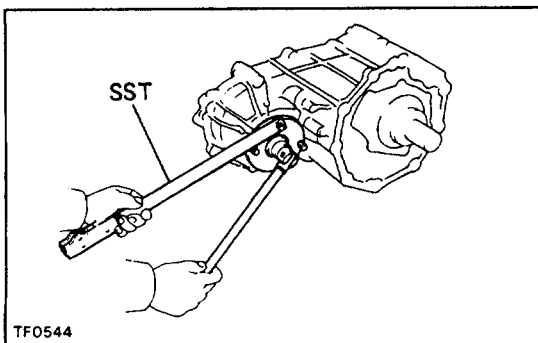
- (b) Install the extension housing to the rear case.
- (c) Apply liquid sealer to the bolts.

Sealant:

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

- (d) Install and torque the 5 bolts.

Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)



18. INSTALL FRONT COMPANION FLANGE

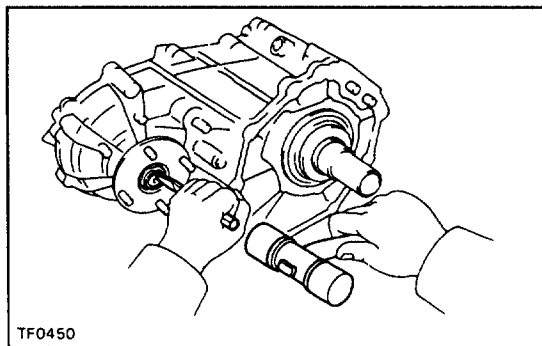
HINT: Front companion flange bolts are silver.

- (a) Apply gear oil to the companion flange inner surface.
- (b) Install the front companion flange to the driven sprocket shaft.
- (c) Using SST to hold the flange, install the companion flange lock nut.

SST 09330-00021

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

- (d) Stake the lock nut.

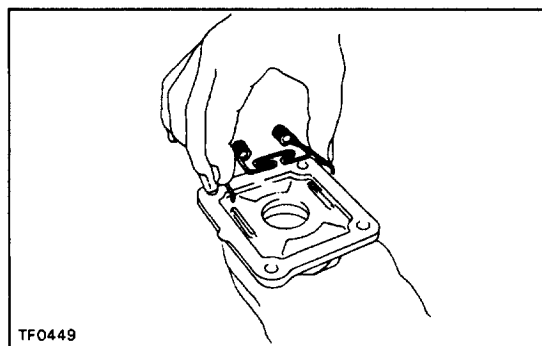


TF0450

19. INSTALL REAR COMPANION FLANGE

HINT: Rear companion flange bolts are black.

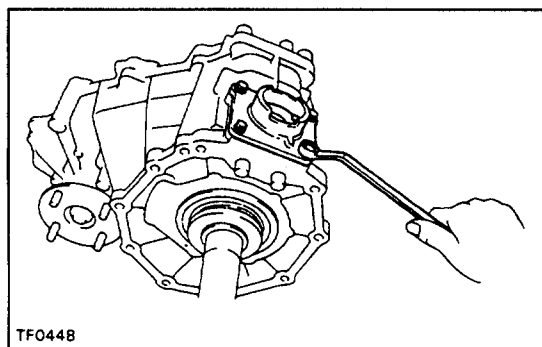
Install the rear companion flange in the same way as the front companion flange.



TF0449

20. M/T:**INSTALL CONTROL RETAINER**

- (a) Install the select return spring to the control retainer.



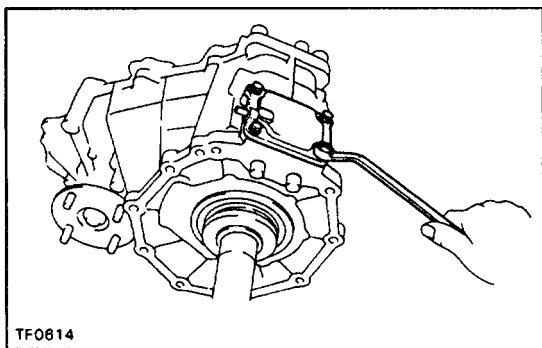
TF0448

- (b) Remove the gasket and install a new one to the control retainer.

- (c) Install the control retainer.

- (d) Install and torque the 4 bolts.

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



TF0614

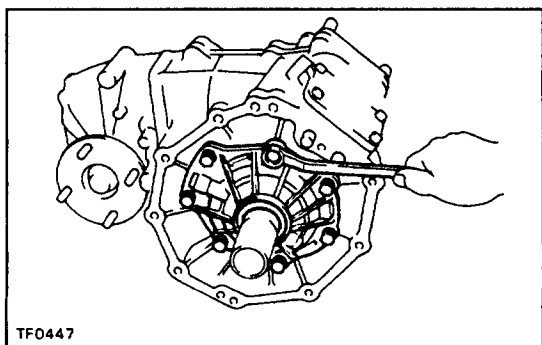
21. A/T:**INSTALL UPPER COVER AND BREATHER HOSE DEFLECTOR**

- (a) Remove the gasket and install a new one to the case cover.

- (b) Install the upper cover and breather hose deflector.

- (c) Install and torque the 4 bolts.

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



TF0447

22. INSTALL FRONT RETAINER

- (a) Remove the gasket and install a new one to the front retainer.

- (b) Install the front retainer.

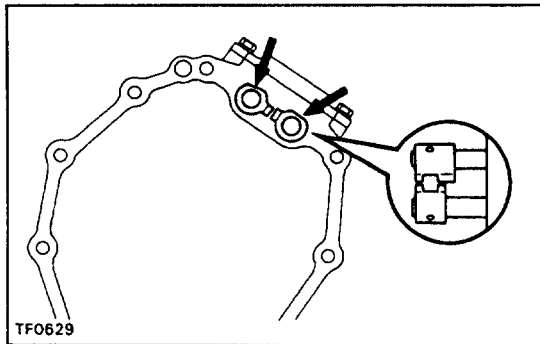
- (c) Apply liquid sealer to the bolts.

Sealant:

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

- (d) Install and torque the 7 bolts.

Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)



23. 22R-E/G58, A340F:

INSTALL SHIFT GEAR HEAD NO.1 AND NO.2

- (a) Install 2 shift gear heads.
- (b) Using a pin punch and hammer, drive in the 2 slotted springpins.

24. CHECK FOLLOWING ITEMS:

- Check to see that the input shaft and output shafts rotate smoothly.
- Check to see that shifting can be made smoothly to all positions.

25. INSTALL TRANSFER INDICATOR SWITCH

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

26. INSTALL NO.1 SPEED SENSOR

- (a) Install No.1 speed sensor.
- (b) Install and torque the bolt.

Torque: 11 N·m (115 kgf·cm, 8 ft·lbf)

27. 22R-E/ A340F:

INSTALL TRANSFER L4 AND NEUTRAL POSITION SWITCH

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