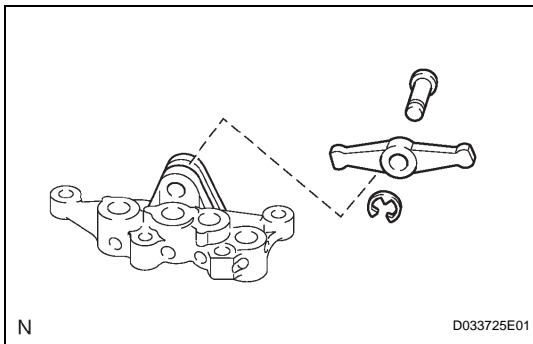


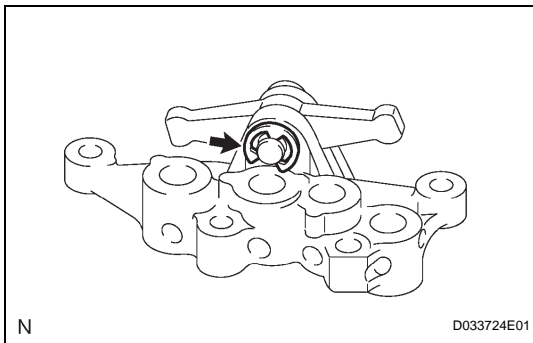
(b) Remove the shift arm pivot and shift arm.



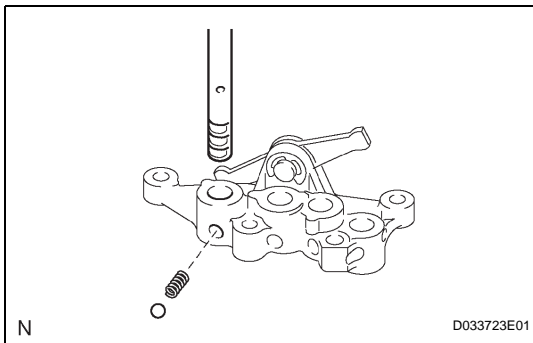
## REASSEMBLY

### 1. INSTALL 1ST AND REVERSE SHIFT ARM

(a) Install the shift arm and shift arm pivot onto the interlock bracket.

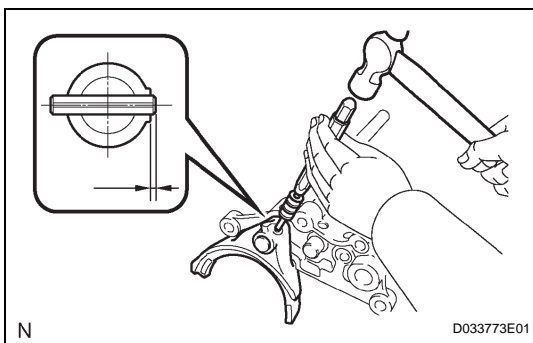


(b) Install a new E-ring onto the shift arm pivot.



### 2. INSTALL NO. 4 GEAR SHIFT FORK SHAFT

(a) Install the spring and ball onto the interlock bracket.  
(b) Install the shift fork shaft No. 4.

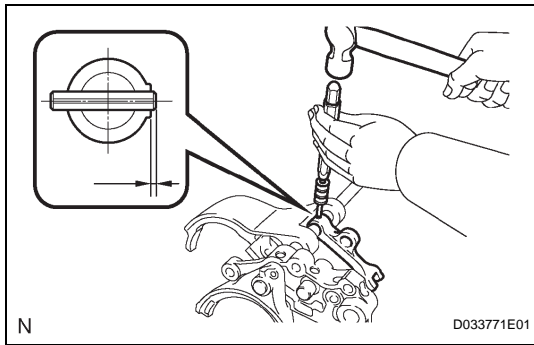


### 3. INSTALL NO. 4 GEAR SHIFT FORK

(a) Install the shift fork No. 4 onto the shift fork shaft No. 4.  
(b) Using a pin punch (5 mm (0.20 in.)) and hammer, tap the new slotted pin into the shaft fork No. 4 and shift fork shaft No. 4.

**Drive in depth:**

**0 to 0.5 mm (0 to 0.050 in.)**

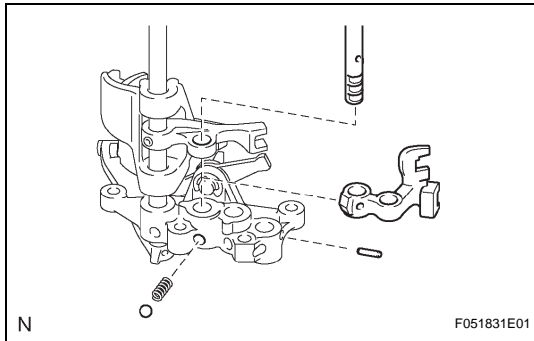


#### 4. INSTALL NO. 1 GEAR SHIFT FORK

- Install the shift fork No. 1 and shift head No. 2 onto the shift fork shaft No. 4.
- Using a pin punch (5 mm (0.20 in.)) and hammer, tap the new slotted pin into the shaft head No. 2 and shift fork shaft No. 4.

**Drive in depth:**

**0 to 0.5 mm (0 to 0.050 in.)**

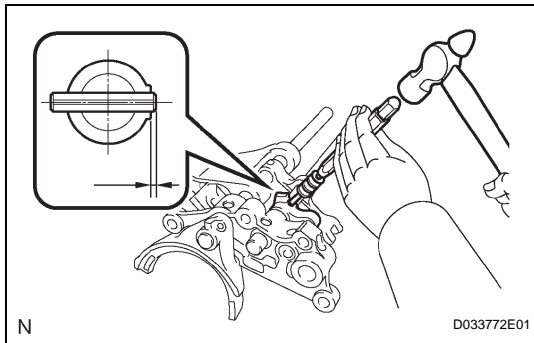


#### 5. INSTALL NO. 1 GEAR SHIFT FORK SHAFT

- Apply MP grease to the interlock pin No. 1 and install it onto the interlock bracket.
- Install the spring and ball onto the interlock bracket.
- Install the shift fork shaft No. 1 onto the interlock bracket.

**HINT:**

Place the shift fork shaft No. 4 in the neutral position.

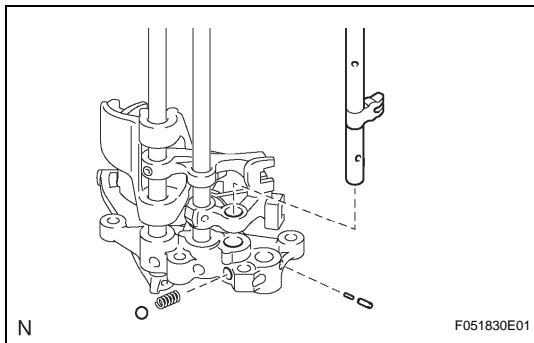


#### 6. INSTALL NO. 1 GEAR SHIFT HEAD

- Install the shift head No. 1 into the shift fork shaft No. 1.
- Using a pin punch (5 mm (0.20 in.)) and hammer, tap the new slotted pin into the shaft head No. 1 and shift fork shaft No. 1.

**Drive in depth:**

**0 to 0.5 mm (0 to 0.050 in.)**

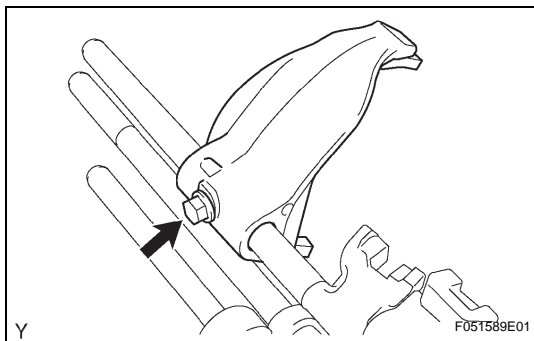


#### 7. INSTALL NO. 2 GEAR SHIFT FORK SHAFT

- Apply MP grease to the interlock pins No. 2 and No. 3, then install them onto the interlock bracket.
- Install the spring and ball the interlock bracket.
- Install the shift fork shaft No. 2 onto the interlock bracket.

**HINT:**

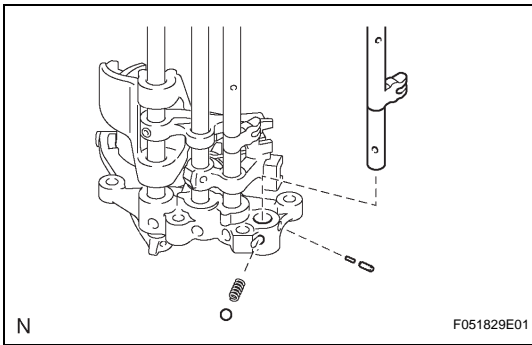
Place the shift fork shafts No. 3 and No. 4 in the neutral position.



#### 8. INSTALL NO. 2 GEAR SHIFT FORK

- Install the shift fork No. 2 with the bolt.

**Torque: 20 N\*m (199 kgf\*cm, 14 ft.\*lbf)**

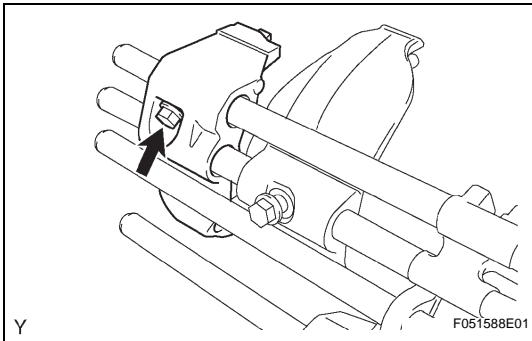


### 9. INSTALL NO. 3 GEAR SHIFT FORK SHAFT

- Apply MP grease to the interlock pins No. 2 and No. 3, then install them onto the interlock bracket.
- Install the spring and ball onto the interlock bracket.
- Install the shift fork shaft No. 3 onto the interlock bracket.

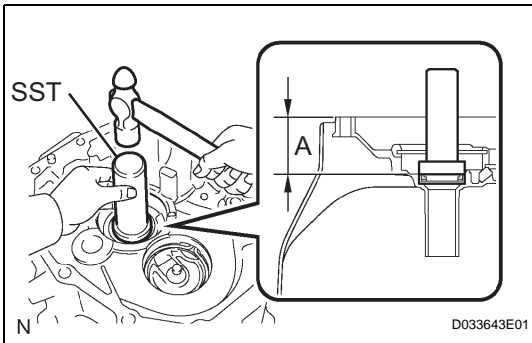
HINT:

Place the shift fork shafts No. 2, No. 1 and No. 4 in the neutral position.



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

- Install the shift fork No. 3 with the bolt.  
**Torque: 20 N\*m (199 kgf\*cm, 14 ft.\*lbf)**



### 11. INSTALL TRANSMISSION CASE OIL SEAL

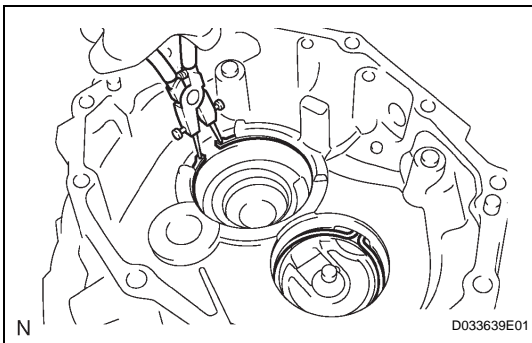
- Using SST and a hammer, tap a new oil seal into the front case in accordance with the dimension specified in the illustration.

**SST 09950-70010 (09951-07100), 09950-60010 (09951-00470)**

**Dimension A:**

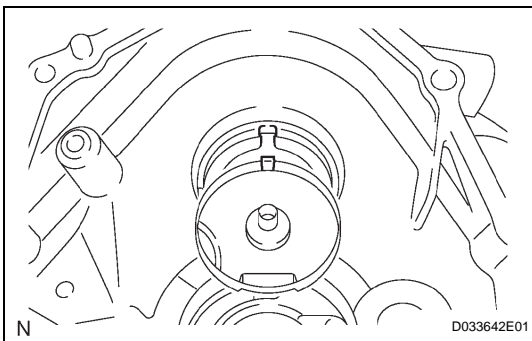
**60.0 to 60.8 mm (2.362 to 2.394 in.)**

- Apply gear oil to the lip of the oil seal.



### 12. INSTALL FRONT BEARING SHAFT SNAP RING

- Using a snap ring plier, install the 2 snap rings.

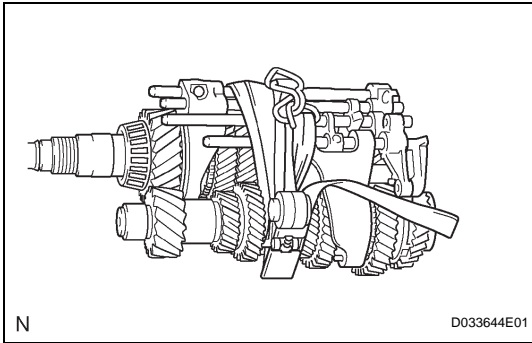


### 13. INSTALL NO. 1 OIL RECEIVER PIPE

- Install the oil receiver pipe No. 1 onto the transmission front case.

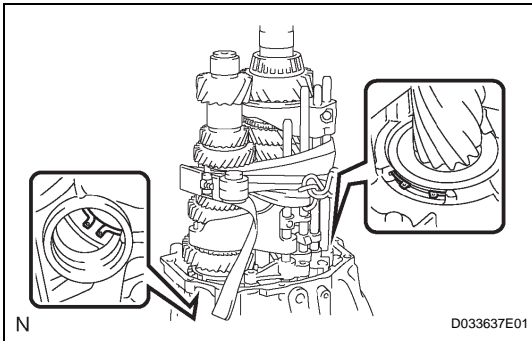
HINT:

Align the convex portion of the oil receiver pipe with the cutout of the front case and install the oil receiver pipe onto the clutch housing.



#### 14. INSTALL TRANSMISSION FRONT CASE

- (a) Apply gear oil to all sliding and rotating parts.
- (b) Provisionally install the output shaft, input shaft, counter gear shaft and control assembly, and tie them with a rope or string.

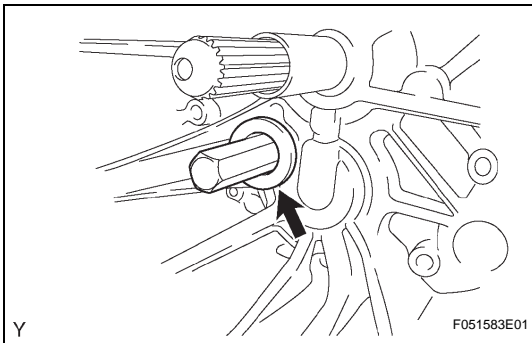


- (c) Using a snap ring expander, extend the 2 snap rings and install the output shaft, input shaft, counter gear shaft and control assembly.

##### HINT:

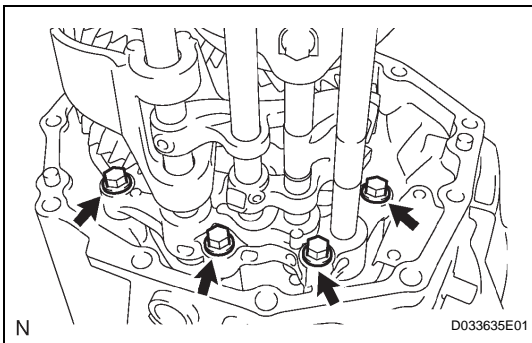
Make sure that the snap ring is fitted into the grooves of the input shaft and front bearing of the counter gear shaft.

- (d) Untie the output shaft, input shaft, counter gear shaft and control assembly.

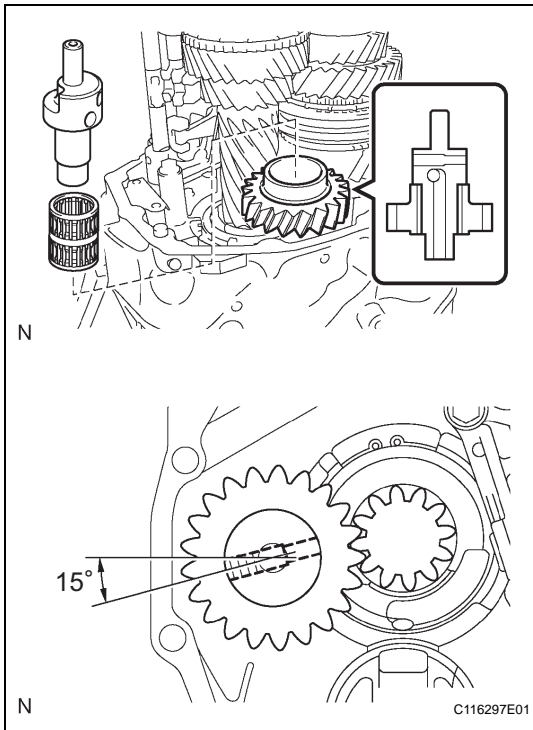


- (e) Using a hexagonal wrench (24 mm), install the plug onto the front case.

**Torque: 39 N\*m (400 kgf\*cm, 29 ft.\*lbf)**



- (f) Install the 4 bolts onto the interlock bracket.
- Torque: 21 N\*m (214 kgf\*cm, 15 ft.\*lbf)**



### 15. INSTALL REVERSE IDLER GEAR

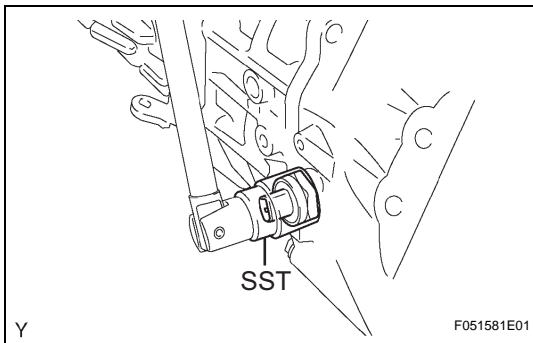
- (a) Install the reverse idler gear, reverse idler gear bearing and reverse idler gear shaft.

**HINT:**

Make sure that the reverse idler gear faces the correct direction as shown in the illustration.

**NOTICE:**

Make sure that the tapped hole portion of the reverse idler shaft is in the position shown in the illustration.

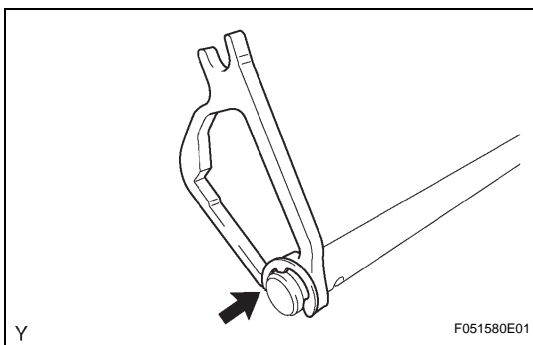


### 16. INSTALL BACK-UP LIGHT SWITCH ASSEMBLY

- (a) Using SST, install the back-up light switch with a new gasket onto the transmission front case.

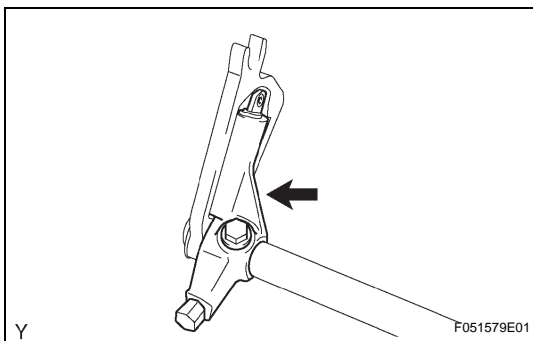
**SST 09817-16011**

**Torque: 44 N\*m (449 kgf\*cm, 33 ft.\*lbf)**



### 17. INSTALL SHIFT AND SELECT LEVER CAM

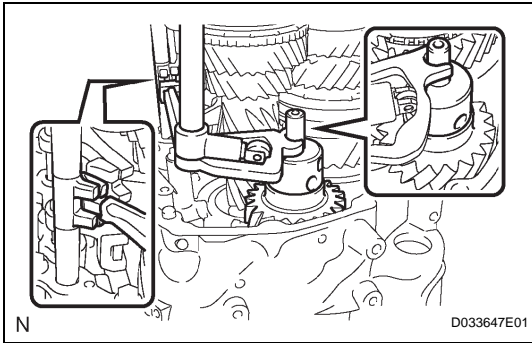
- (a) Install the shift and select lever cam onto the shaft and install a new E-ring.



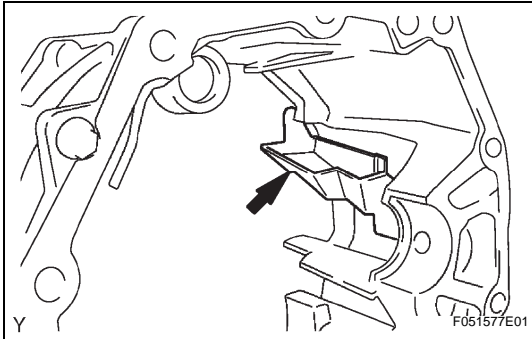
### 18. INSTALL SHIFT AND SELECT LEVER

- (a) Install the lock ball pin and spring onto the shift and select lever.
- (b) Install the shift and select lever onto the shift and select lever cam and shaft.
- (c) Install the bolt onto the shift and select lever.

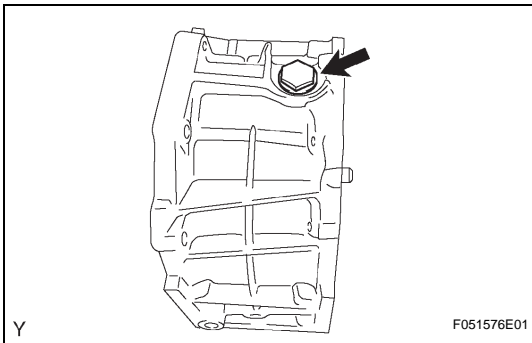
**Torque: 33 N\*m (340 kgf\*cm, 25 ft.\*lbf)**

**19. INSTALL SHIFT AND SELECT LEVER SHAFT**

- (a) Align the groove of the shift and select cam with the reverse idler shaft, and the claw with the groove of the control assembly, and install them.

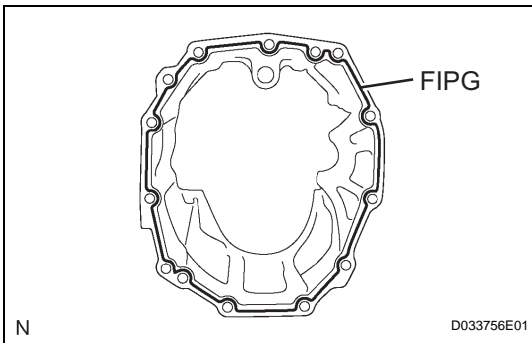
**20. INSTALL NO. 2 OIL RECEIVER PIPE**

- (a) Install the oil receiver pipe No. 2 into the transmission middle case.

**21. INSTALL DRAIN PLUG SUB-ASSEMBLY**

- (a) Install the drain plug with a new gasket onto the transmission middle case.

**Torque: 37 N\*m (377 kgf\*cm, 27 ft.\*lbf)**

**22. INSTALL TRANSMISSION MIDDLE CASE**

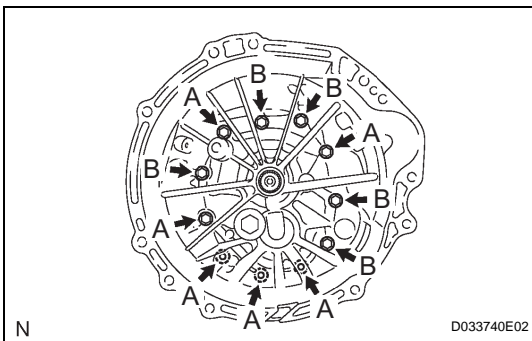
- (a) Apply FIPG to the transmission middle case, as shown in the illustration.

**FIPG:**

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

**NOTICE:**

**Parts must be assembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.**



- (b) Install the transmission middle case with the 11 bolts onto the transmission front case.

**Torque: 40 N\*m (408 kgf\*cm, 30 ft.\*lbf)**

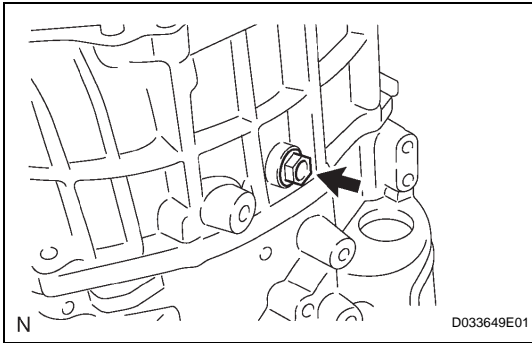
**Bolt length:**

**Bolt A:**

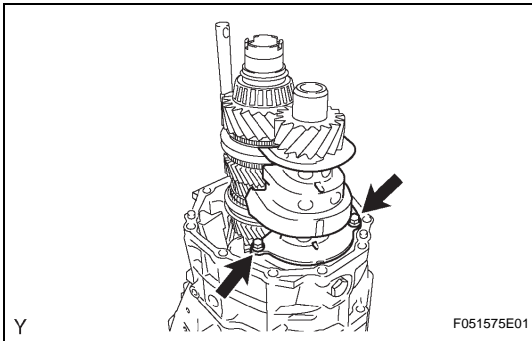
**40 mm (1.57 in.)**

**Bolt B:**

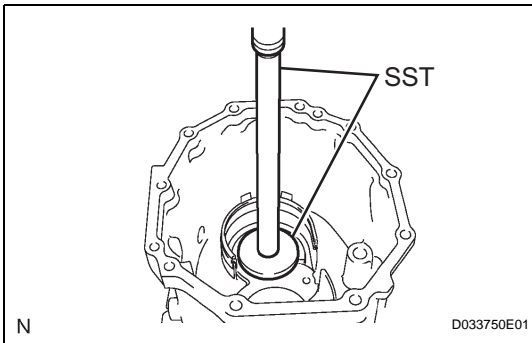
**80 mm (3.15 in.)**

**23. INSTALL REVERSE IDLER GEAR SHAFT BOLT**

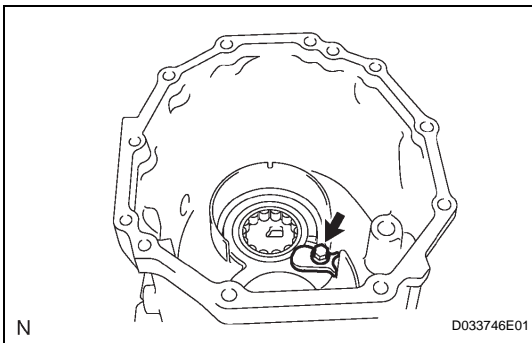
- (a) Install a new gasket and the reverse idler gear shaft bolt onto the reverse idler gear shaft.  
**Torque: 28 N\*m (286 kgf\*cm, 21 ft.\*lbf)**

**24. INSTALL TRANSMISSION OIL SEPARATOR**

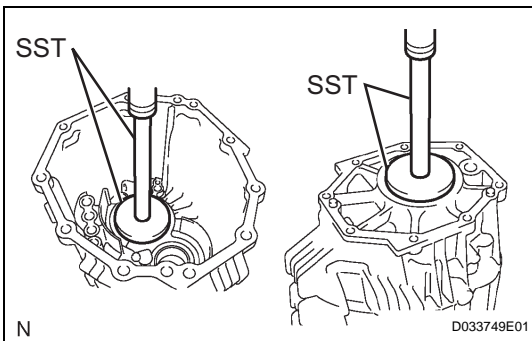
- (a) Install the transmission oil separator with the 2 bolts.  
**Torque: 8.5 N\*m (87 kgf\*cm, 75 in.\*lbf)**

**25. INSTALL COUNTER GEAR REAR RADIAL BALL BEARING**

- (a) Coat a new counter gear rear radial ball bearing with gear oil, and using SST and a press, install it into the transmission rear case.  
**SST 09950-70010 (09951-07360), 09950-60010 (09951-00650)**

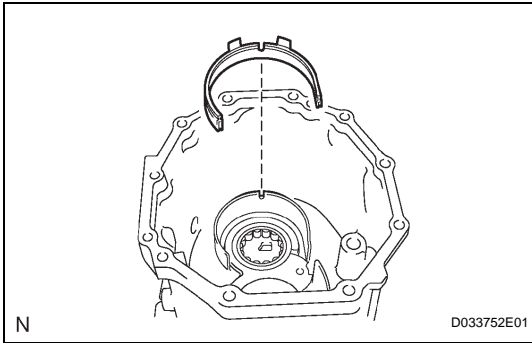


- (b) Install the bearing lock plate with the bolt.  
**Torque: 11 N\*m (115 kgf\*cm, 8.3 ft.\*lbf)**

**26. INSTALL OUTPUT SHAFT REAR BEARING OUTER RACE**

- (a) Using SST and a press, press in 2 new bearing outer races.  
**SST 09950-70010 (09951-07100, 09951-07360), 09950-60020 (09951-00790)**



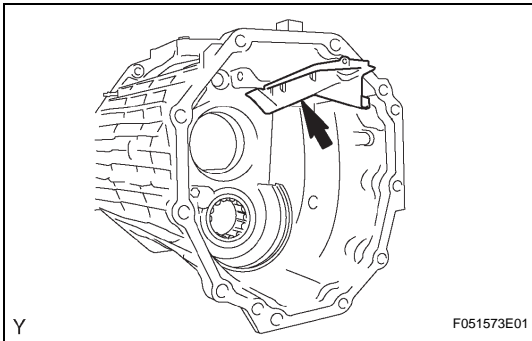


## 27. INSTALL OIL SEPARATOR PACKING SEAL

- (a) Install the oil separator packing seal onto the transmission rear case.

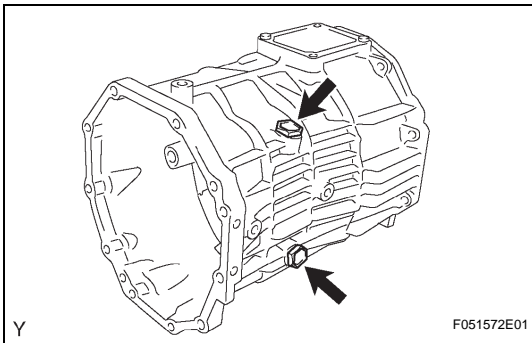
**HINT:**

Insert the protruding part of the oil separator packing seal into the groove on the transmission rear case.



## 28. INSTALL EXTENSION HOUSING OIL RECEIVER PIPE

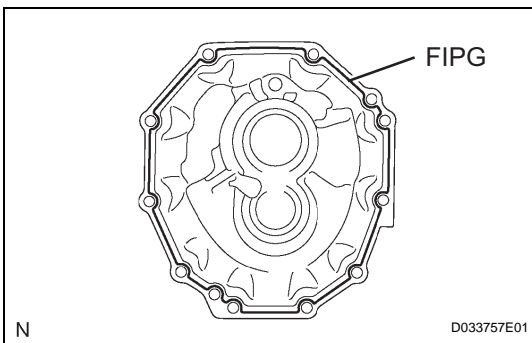
- (a) Install the extension housing oil receiver pipe onto the transmission rear case.



## 29. INSTALL MANUAL TRANSMISSION FILLER PLUG

- (a) Install the 2 transmission filler plugs with 2 new gaskets onto the transmission rear case.

**Torque: 37 N\*m (377 kgf\*cm, 27 ft.\*lbf)**



## 30. INSTALL TRANSMISSION REAR CASE

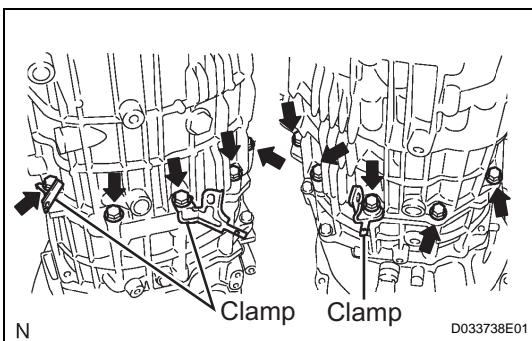
- (a) Apply FIPG to the transmission rear case, as shown in the illustration.

**FIPG:**

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

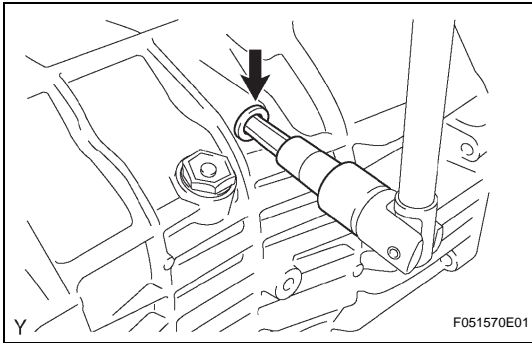
**NOTICE:**

**Parts must be assembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.**



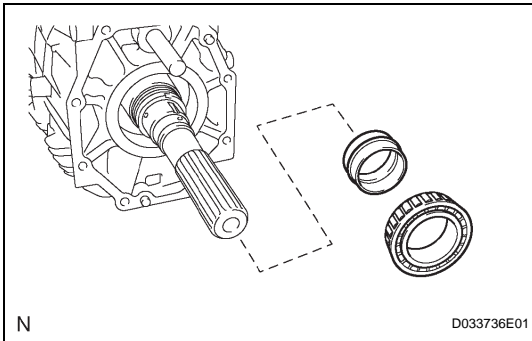
- (b) Install the transmission rear case with the 10 bolts and 3 brackets onto the transmission middle case.
- Torque: 40 N\*m (408 kgf\*cm, 30 ft.\*lbf)**



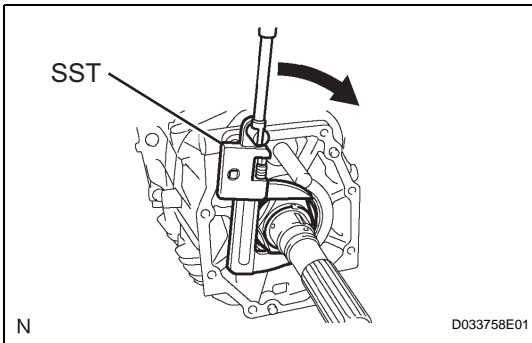
**31. INSTALL SHIFT DETENT BALL PLUG**

- (a) Install the ball and compression spring onto the transmission rear case.
- (b) Install a new shift detent ball plug, and install it onto the transmission rear case.

**Torque: 25 N\*m (250 kgf\*cm, 18 ft.\*lbf)**

**32. INSTALL OUTPUT SHAFT ADJUST NUT**

- (a) Using a belt and wooden block, fasten the transmission to the workbench.
- (b) Install a new spacer and output shaft taper roller bearing No. 2.



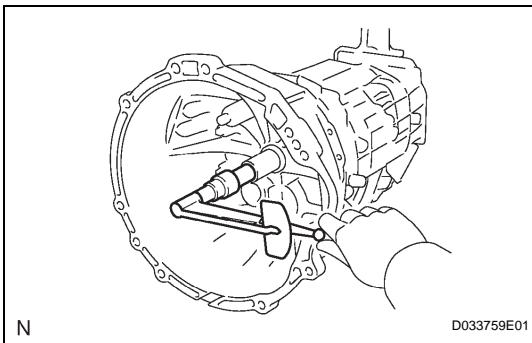
- (c) Using SST, provisionally tighten a new nut until there is no slack in the output shaft.

**SST 09922-10010**

**HINT:**

No preload should be applied to the nut.

- (d) Fit the bearing into the output shaft by turning the output shaft 15 times.



- (e) Place the gearshift into 5th gear and check the initial torque of the input shaft.

- (f) Using SST, tighten the nut.

**SST 09922-10010**

- (g) Place the gearshift into 5th gear and check the initial torque of the input shaft.

- (h) Confirm that the difference between (d) and (f) is within the specified values.

**Preload (at starting):**

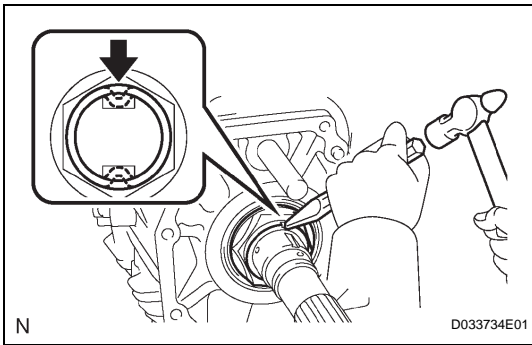
**0.45 to 1.35 N\*m**

**(4.59 to 13.77 kgf\*cm, 3.98 to 11.95 in.\*lbf)**

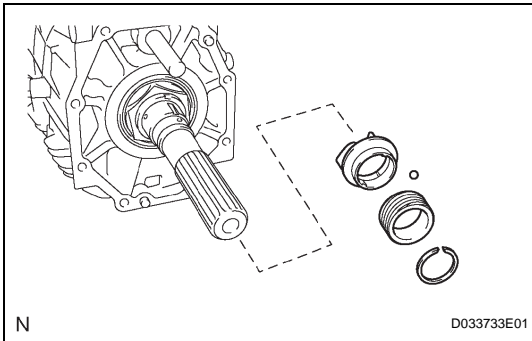
If the result is not as specified, tighten and adjust the output shaft adjusting nut.

**NOTICE:**

**If the output shaft adjusting nut is loose or removed due to a large preload, always replace the spacer with a new one.**

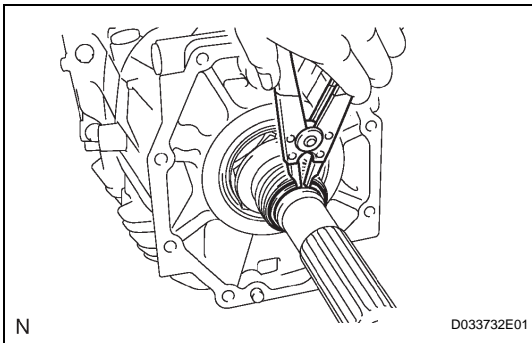


- (i) Using a chisel and hammer, caulk the output shaft adjust nut.

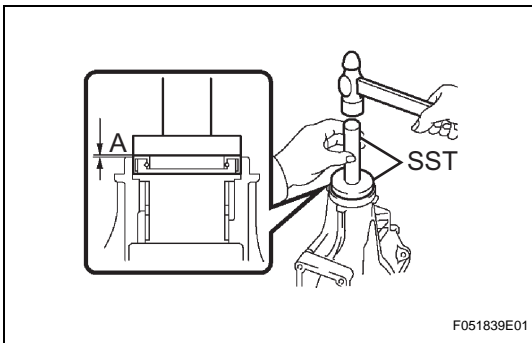


### 33. INSTALL SPEEDOMETER DRIVE GEAR

- (a) Install the oil receiver pipe, ball and speedometer drive gear.



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



### 34. INSTALL MANUAL TRANSMISSION EXTENSION HOUSING OIL SEAL

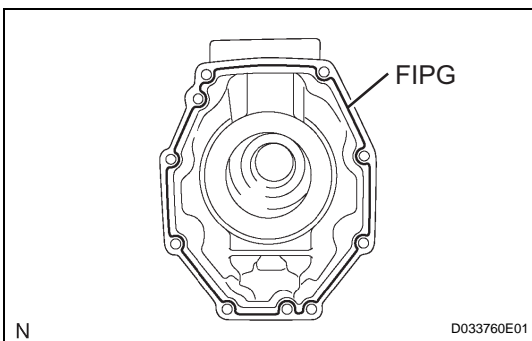
- (a) Using SST and a hammer, tap a new oil seal into the extension housing in accordance with the dimension specified in the illustration.

**SST 09950-60020 (09951-00640), 09950-70010 (09951-07100)**

**Dimension A:**

**-0.5 to 0.5 mm (-0.197 to 0.197 in.)**

- (b) Apply gear oil to the lip of the oil seal.



### 35. INSTALL EXTENSION HOUSING SUB-ASSEMBLY

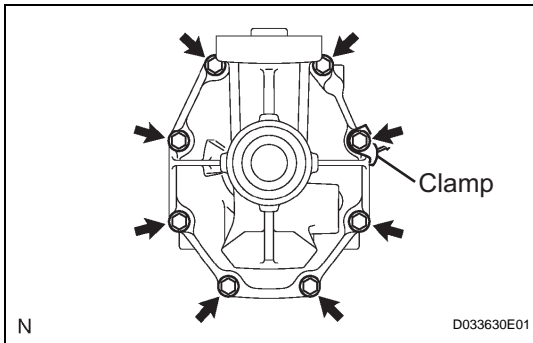
- (a) Apply FIPG to the extension housing, as shown in the illustration.

**FIPG:**

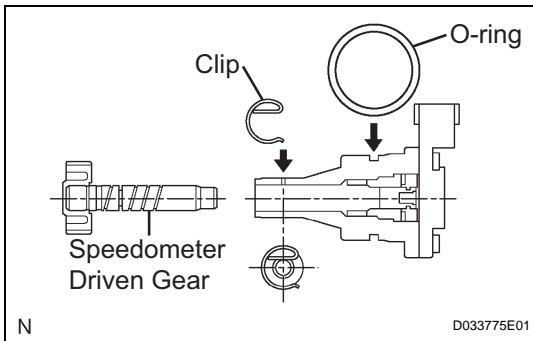
**Part No. 08826-00090, THREE BOND 1281 or equivalent**

**NOTICE:**

**Parts must be assembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.**



- (b) Install the extension housing with the 8 bolts.  
Torque: 29 N\*m (296 kgf\*cm, 21 ft.\*lbf)

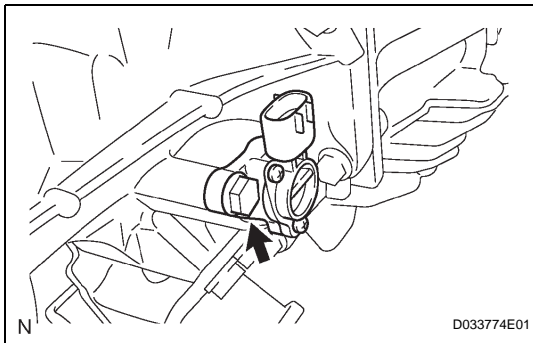


### 36. INSTALL SPEEDOMETER SENSOR

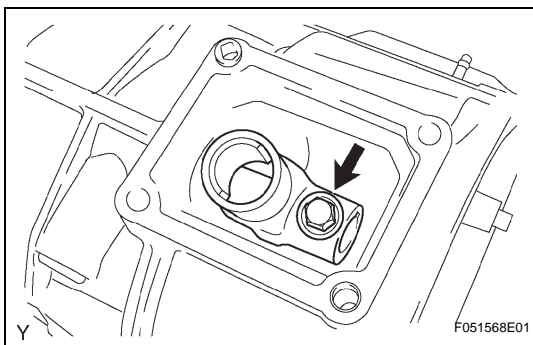
- (a) Install a new O-ring onto the speedometer sensor.  
(b) Install the speedometer driven gear into the speedometer sensor with the clip.

#### NOTICE:

Be sure to install the clip in the direction shown in the illustration.

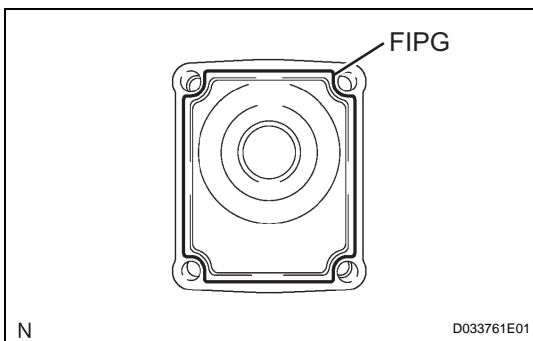


- (c) Install the speedometer driven gear with the bolt.  
Torque: 13 N\*m (133 kgf\*cm, 10 ft.\*lbf)



### 37. INSTALL SHIFT LEVER HOUSING

- (a) Install the shift lever housing with the bolt.  
Torque: 33 N\*m (340 kgf\*cm, 25 ft.\*lbf)



### 38. INSTALL FLOOR SHIFT CONTROL SHIFT LEVER RETAINER SUB-ASSEMBLY

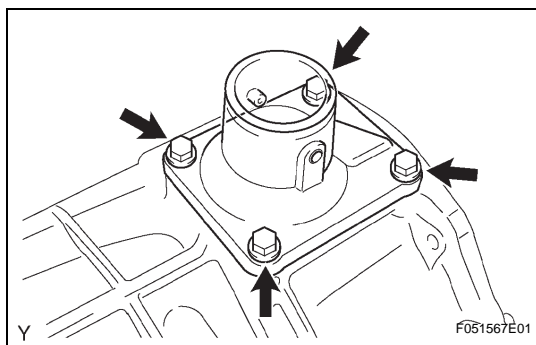
- (a) Apply FIPG to the floor shift control shift lever retainer, as shown in the illustration.

#### FIPG:

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

#### NOTICE:

Parts must be assembled within 10 minutes of application. Otherwise, the packing (FIPG) material must be removed and reapplied.



- (b) Install the floor shift control shift lever retainer with the 4 bolts.

**Torque: 20 N\*m (204 kgf\*cm, 15 ft.\*lbf)**