

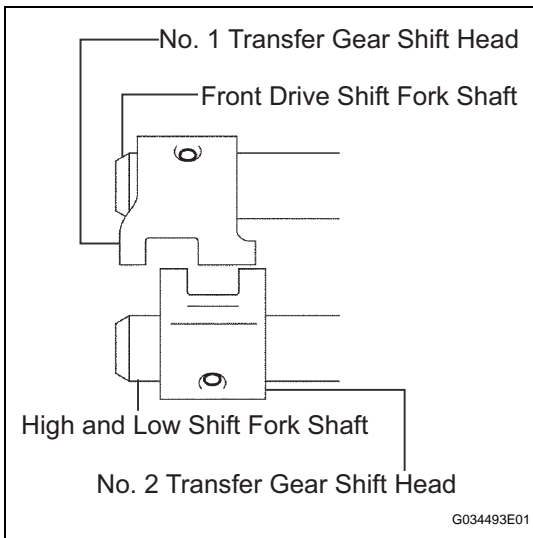
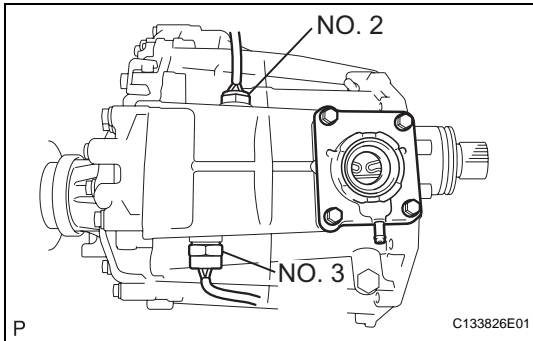
## REMOVAL

1. DRAIN TRANSFER OIL
2. REMOVE LOWER TRANSFER CASE PROTECTOR  
(See page TF-8)
3. REMOVE MANUAL TRANSMISSION ASSEMBLY  
(a) Remove the manual transmission (see page MT-8).
4. REMOVE TRANSFER ASSEMBLY  
(a) Remove the 8 bolts and 2 clamps.  
(b) Remove the transfer from the transmission.

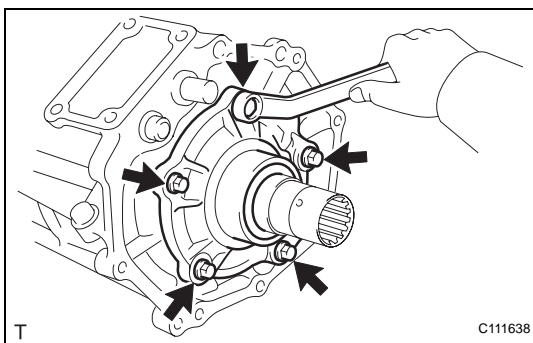
## DISASSEMBLY

1. REMOVE TRANSFER INDICATOR SWITCH  
(a) Remove the indicator switches and gaskets.  
HINT:  
Indicator switch:

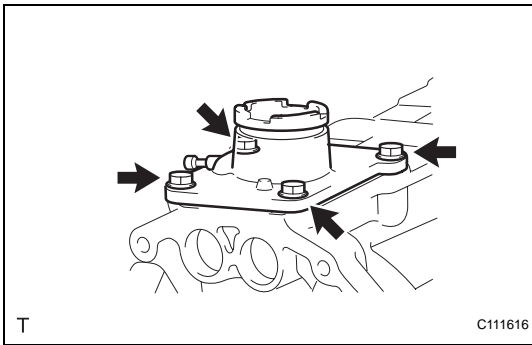
No. 2	Indicator switch (L4 position)
No. 3	Indicator switch (differential lock)



2. REMOVE TRANSFER GEAR SHIFT HEAD  
(a) Using a pin punch and hammer, tap out the 2 slotted pins from the No. 1 and No. 2 gear shift heads.  
(b) Remove the No. 1 and No. 2 gear shift heads from the front drive shift fork shaft and the high and low shift fork shaft.



3. REMOVE TRANSFER BEARING RETAINER SUB-ASSEMBLY  
(a) Remove the 5 bolts and the bearing retainer.  
HINT:  
If necessary, tap the bearing retainer with a plastic-faced hammer to remove it.
4. REMOVE TRANSFER COVER TYPE T OIL SEAL  
(a) Using a screwdriver and hammer, tap out the oil seal from the bearing retainer.  
**NOTICE:**  
**Be careful not to damage the oil seal and bearing retainer contact surfaces.**



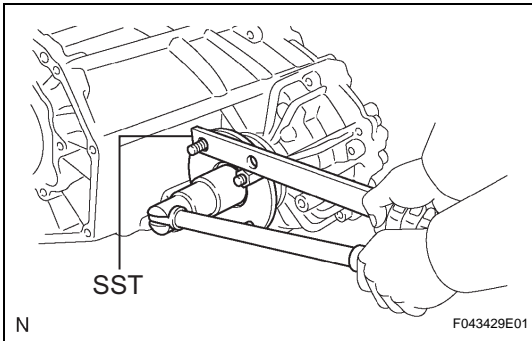
**5. REMOVE TRANSFER CONTROL SHIFT LEVER RETAINER SUB-ASSEMBLY**

(a) Remove the 4 bolts and retainer.

**6. REMOVE BREATHER OIL DEFLECTOR**

**7. REMOVE OUTPUT SHAFT COMPANION FLANGE SUB-ASSEMBLY (for Front)**

(a) Using a chisel and hammer, loosen the staked part of the lock nut.

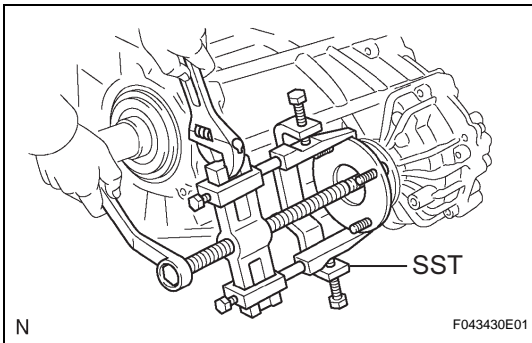


(b) Using SST to hold the companion flange, remove the lock nut.

**SST 09330-00021**

(c) Using SST, remove the companion flange.

**SST 09950-40011 (09951-04020, 09952-04010, 09953-04030, 09954-04010, 09955-04051, 09957-04010, 09958-04011)**



**8. REMOVE TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL (for Front)**

(a) Using a screwdriver and hammer, tap out the oil seal from the companion flange.

**NOTICE:**

**Be careful not to damage the oil seal and companion flange contact surfaces.**

**9. REMOVE OUTPUT SHAFT COMPANION FLANGE SUB-ASSEMBLY (for Rear)**

(a) Remove the companion flange (rear) in the same way as the companion flange (front).

**SST 09330-00021, 09950-40011 (09951-04020, 09952-04010, 09953-04030, 09954-04010, 09955-04051, 09957-04010, 09958-04011)**

**10. REMOVE TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL (for Rear)**

(a) Using a screwdriver and hammer, tap out the oil seal from the companion flange.

**NOTICE:**

**Be careful not to damage the oil seal and companion flange contact surfaces.**

**11. REMOVE SPEEDOMETER DRIVEN GEAR ASSEMBLY WITH VEHICLE SPEED SENSOR (See page [TF-47](#))**

**12. REMOVE TRANSFER EXTENSION HOUSING SUB-ASSEMBLY**

- (a) Remove the 5 bolts and the extension housing.  
**HINT:**  
 If necessary, tap the extension housing with a plastic-faced hammer to remove it.

**13. REMOVE TRANSFER EXTENSION HOUSING TYPE T OIL SEAL**

- (a) Using a screwdriver and hammer, tap out the oil seal.

**NOTICE:**

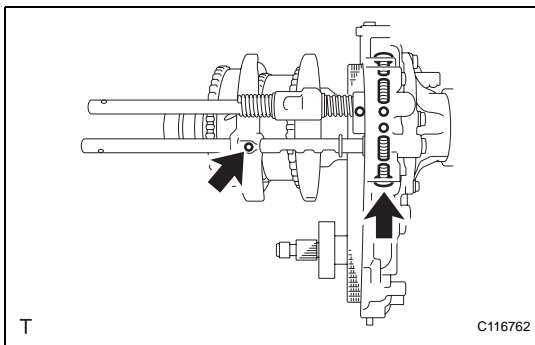
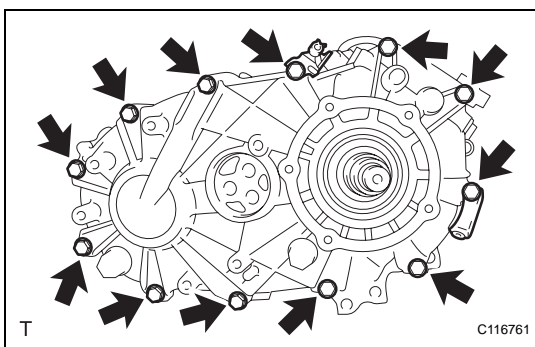
**Be careful not to damage the oil seal and extension housing contact surfaces.**

**14. REMOVE TRANSFER OUTPUT WASHER**

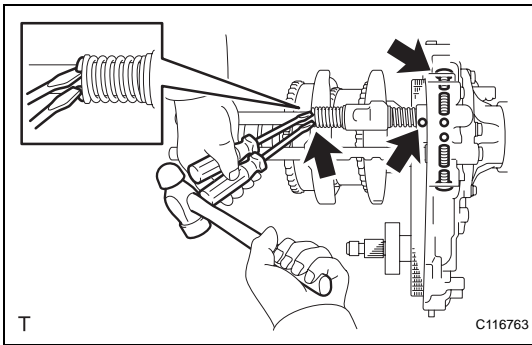
- (a) Remove the 2 washers and the drive gear.

**15. REMOVE REAR TRANSFER CASE**

- (a) Remove the 12 bolts and 2 clamps.  
 (b) Remove the rear case.  
**HINT:**  
 If necessary, tap the rear case with a plastic-faced hammer to remove it.

**16. REMOVE NO. 2 TRANSFER GEAR SHIFT FORK WITH TRANSFER HIGH AND LOW CLUTCH SLEEVE**

- (a) Mount the rear case in a vise.  
**NOTICE:**  
**Place aluminum plates on the vise to prevent damage to the rear case.**
- (b) Using a pin punch and hammer, drive out the slotted spring pin.  
 (c) Using a hexagon wrench, remove the No. 1 plug.  
 (d) Using a magnetic finger, remove the spring and ball from the hole.  
 (e) Remove the No. 2 gear shift fork and high and low shift fork shaft.  
 (f) Using a magnetic finger, remove the straight pin.  
 (g) Automatic transmission:  
 Remove the high and low clutch sleeve.  
 (h) Manual transmission:  
 Remove the high and low clutch sleeve, 3 shifting keys and 2 No. 1 springs.



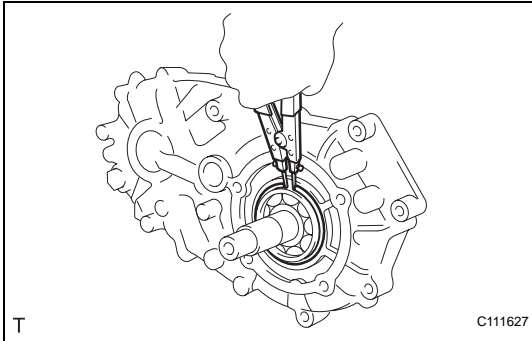
### 17. REMOVE CENTER DIFFERENTIAL LOCK FORK SUB-ASSEMBLY WITH FRONT DRIVE CLUTCH SLEEVE

- (a) Mount the rear case in a vise.

**NOTICE:**

**Place aluminum plates on the vise to prevent damage to the rear case.**

- (b) Using a pin punch and hammer, drive out the slotted spring pin.
- (c) Using 2 screwdrivers and a hammer, tap out the snap ring.
- (d) Using a hexagon wrench, remove the No. 2 plug.
- (e) Using a magnetic finger, remove the spring and ball from the hole.
- (f) Remove the center differential lock fork, shift shaft stopper, 2 springs, 3 stoppers, front drive shift shaft and front drive clutch sleeve.



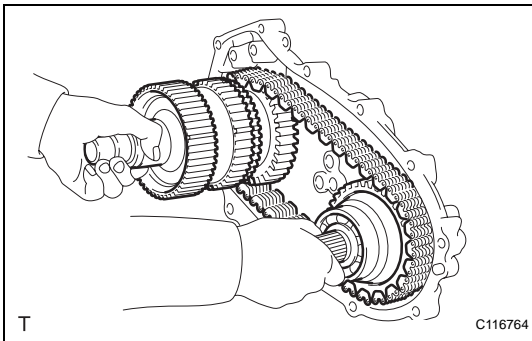
### 18. REMOVE REAR TRANSFER OUTPUT SHAFT, FRONT DRIVE CHAIN AND DRIVEN SPROCKET SUB-ASSEMBLY

- (a) Mount the rear case in a vise.

**NOTICE:**

**Place aluminum plates on the vise to prevent damage to the rear case.**

- (b) Using a snap ring expander, remove the snap ring.
- (c) Using a plastic-faced hammer, carefully tap the rear case, and remove the output shaft together with the front drive chain and driven sprocket.
- (d) Remove the output shaft and driven sprocket from the front drive chain.

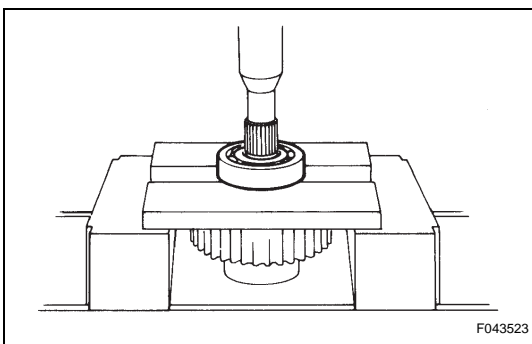


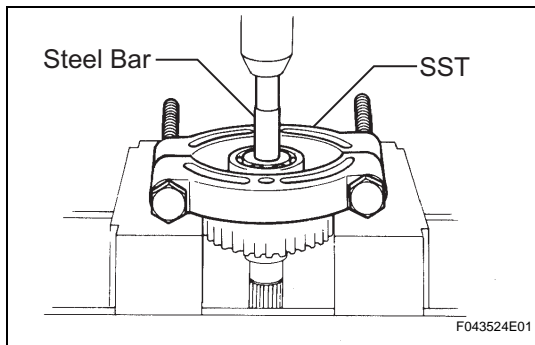
### 19. REMOVE TRANSFER DRIVEN SPROCKET BEARING

- (a) Using a press, press out the bearing.

**NOTICE:**

**Be careful not to drop or damage the driven sprocket.**





## 20. REMOVE TRANSFER INPUT GEAR RADIAL BALL BEARING

- (a) Using SST, a press and steel bar, press out the bearing.

**SST 09555-55010**

**NOTICE:**

**Be careful not to drop or damage the driven sprocket.**

## 21. REMOVE NO. 1 TRANSFER CASE PLUG (for Filler)

- (a) Remove the filler plug and gasket.

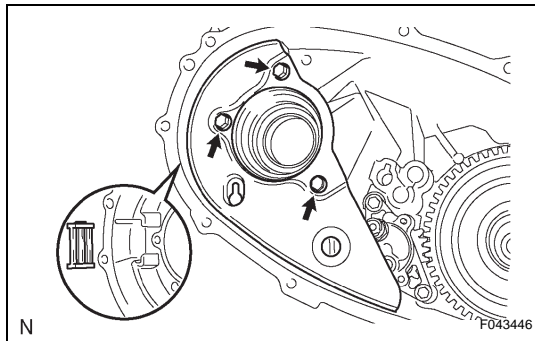
## 22. REMOVE NO. 1 TRANSFER CASE PLUG (for Drain)

- (a) Remove the drain plug and gasket.

## 23. REMOVE TRANSFER OIL SEPARATOR SUB-ASSEMBLY

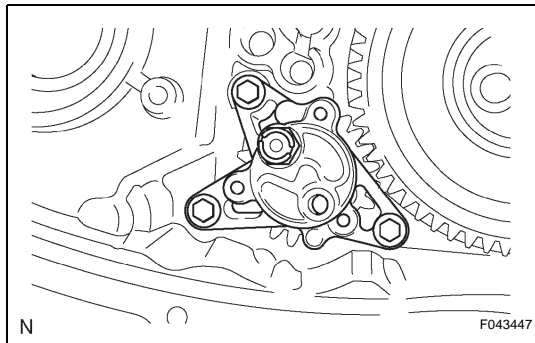
- (a) Remove the 3 bolts and separator.

## 24. REMOVE TRANSFER CASE MAGNET



## 25. REMOVE TRANSFER OIL PUMP BODY SUB-ASSEMBLY

- (a) Remove the 3 bolts and pump body.

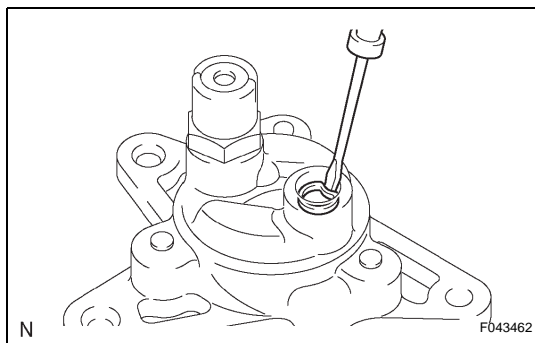


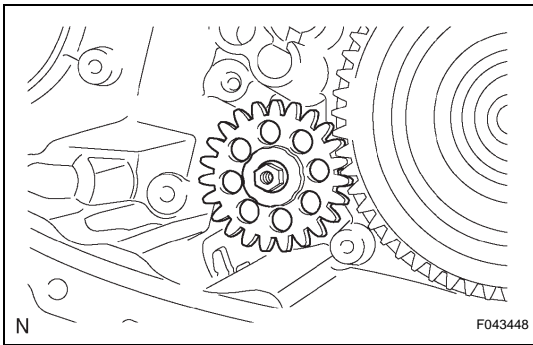
## 26. REMOVE TRANSFER OIL PUMP BODY O-RING

- (a) Using a screwdriver, remove the O-ring from the pump body.

**NOTICE:**

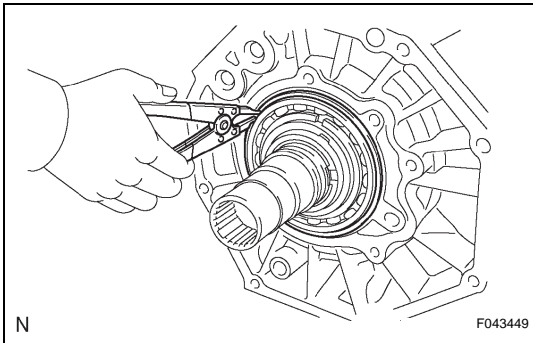
**Be careful not to damage the pump body.**





**27. REMOVE TRANSFER OIL PUMP GEAR**

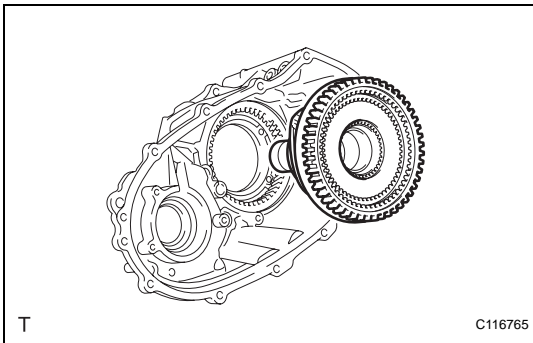
- (a) Remove the nut and pump gear.



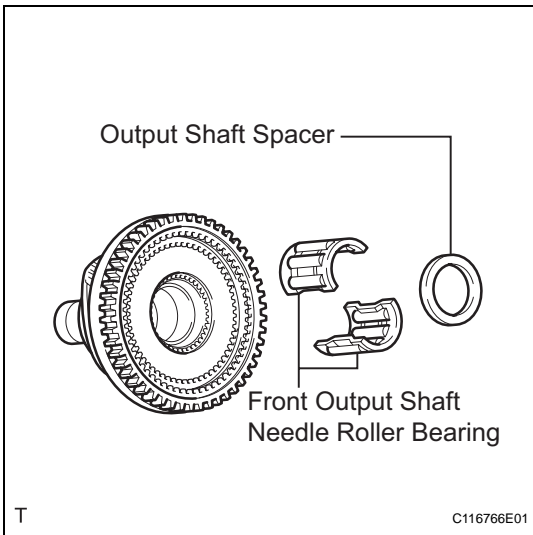
**28. REMOVE TRANSFER LOW PLANETARY GEAR ASSEMBLY WITH TRANSFER INPUT SHAFT**

- (a) Using a snap ring expander, remove the snap ring.

- (b) Remove the low planetary gear with input shaft.



**29. REMOVE TRANSFER FRONT DRIVE CLUTCH SYNCHRONIZER RING**



**30. REMOVE OUTPUT SHAFT SPACER**

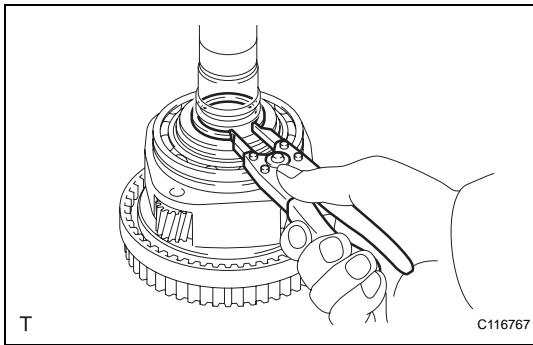
**31. REMOVE TRANSFER OUTPUT SHAFT FRONT NEEDLE ROLLER BEARING**

**32. REMOVE TRANSFER CASE OIL SEAL**

- (a) Using a screwdriver and hammer, tap out oil seal No. 1.
- (b) Using a screwdriver and hammer, tap out oil seal No. 2.

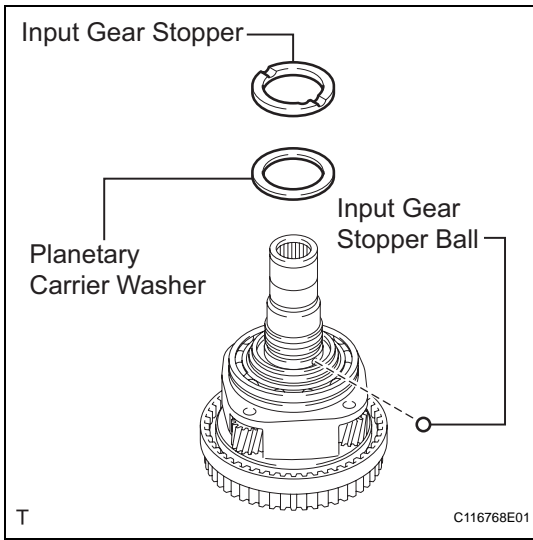
**NOTICE:**

**Be careful not to damage the oil seal and front case contact surfaces.**



### 33. REMOVE TRANSFER INPUT GEAR STOPPER SHAFT SNAP RING

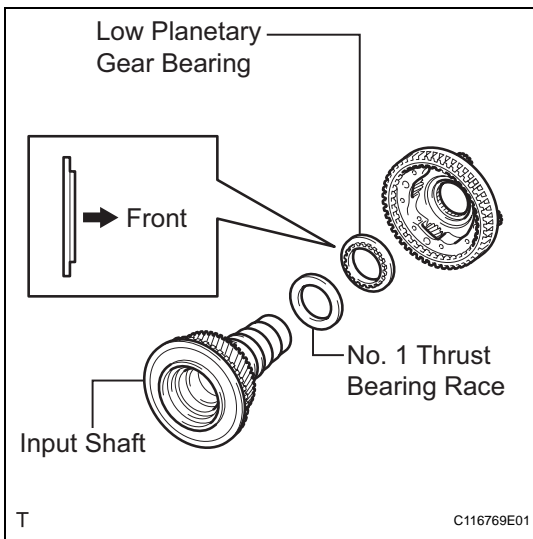
(a) Using a snap ring expander, pry out the snap ring.



### 34. REMOVE TRANSFER INPUT GEAR STOPPER

### 35. REMOVE TRANSFER INPUT GEAR STOPPER BALL

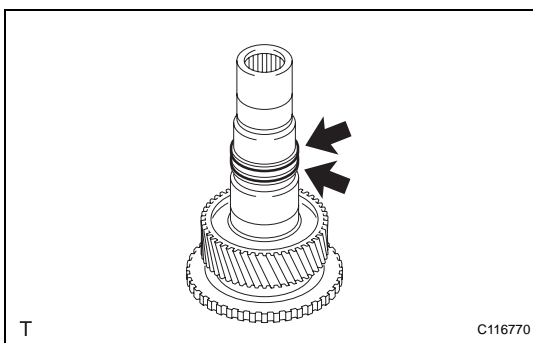
### 36. REMOVE MANUAL TRANSFER PLANETARY CARRIER WASHER



### 37. REMOVE TRANSFER INPUT SHAFT

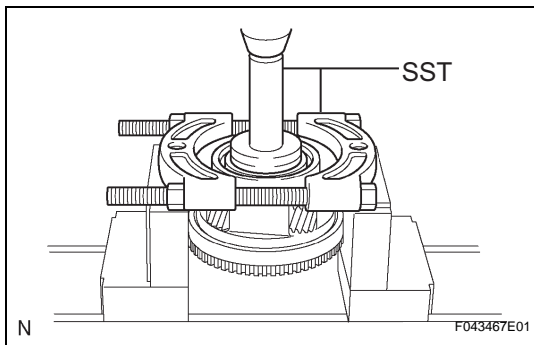
### 38. REMOVE NO. 1 TRANSFER THRUST BEARING RACE

### 39. REMOVE TRANSFER LOW PLANETARY GEAR BEARING



### 40. REMOVE NO. 1 TRANSFER INPUT SHAFT SEAL RING

(a) Remove the 2 seal rings.

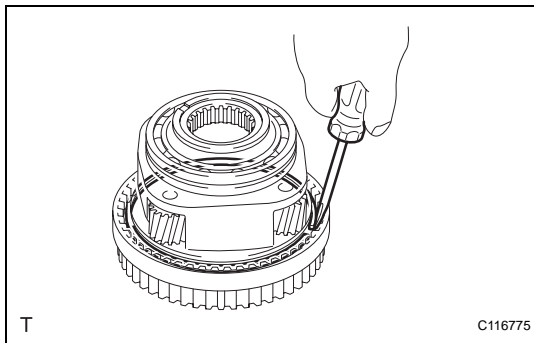
**41. REMOVE TRANSFER INPUT SHAFT BEARING**

- (a) Using a snap ring expander, remove the snap ring.
- (b) Using SST and a press, press out the bearing.

**SST 09554-30011, 09555-55010**

**NOTICE:**

**Be careful not to drop or damage the low planetary gear.**

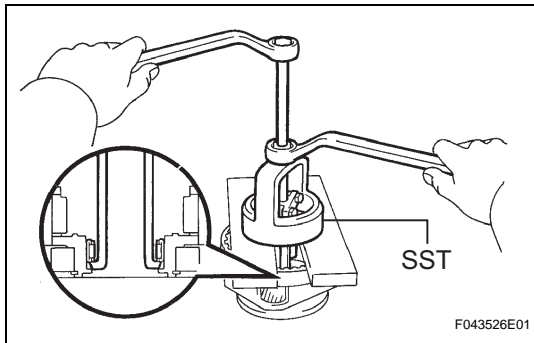
**42. REMOVE TRANSFER LOW PLANETARY GEAR SPLINE PIECE**

- (a) Using a screwdriver, remove the snap ring.

**NOTICE:**

**Be careful not to damage the spline piece.**

- (b) Remove the spline piece.

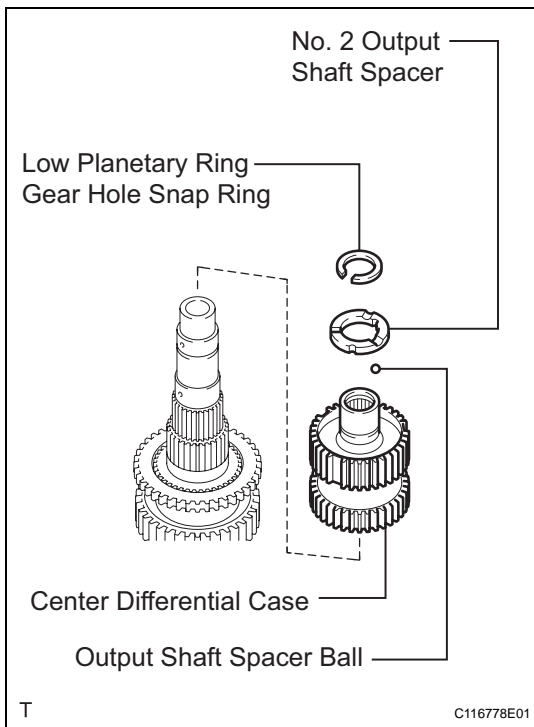
**43. REMOVE TRANSFER LOW PLANETARY GEAR BEARING**

- (a) Using SST, remove the bearing.

**SST 09612-65014 (09612-01030, 09612-01050)**

**NOTICE:**

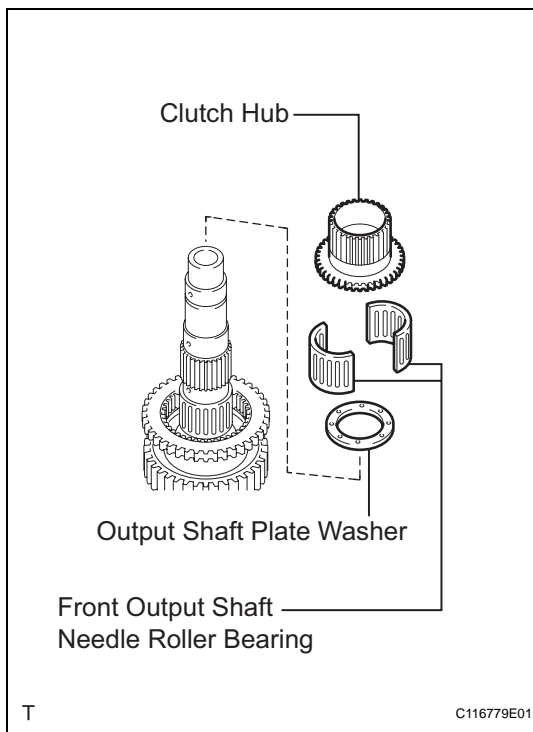
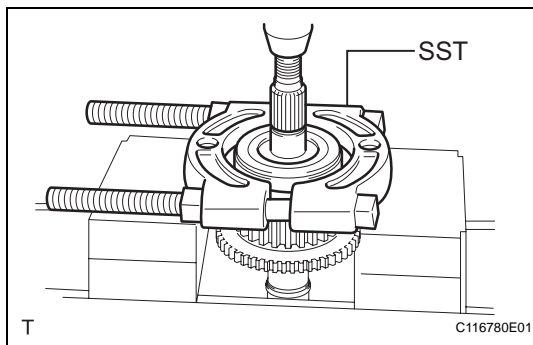
**Hang SST securely between the bearing and low planetary gear.**

**44. REMOVE TRANSFER LOW PLANETARY RING GEAR HOLE SNAP RING**

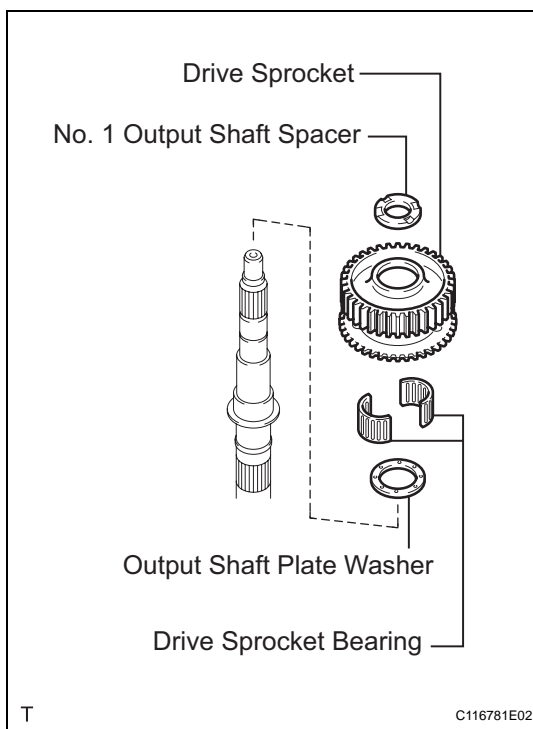
- (a) Using a snap ring expander, remove the snap ring.

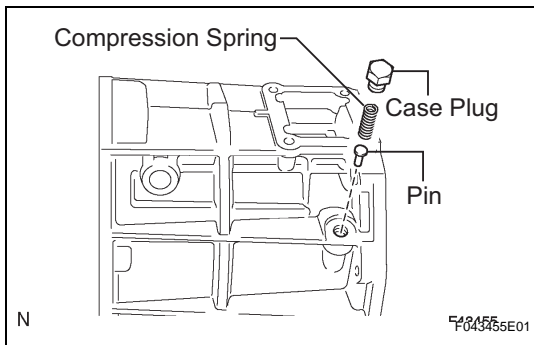
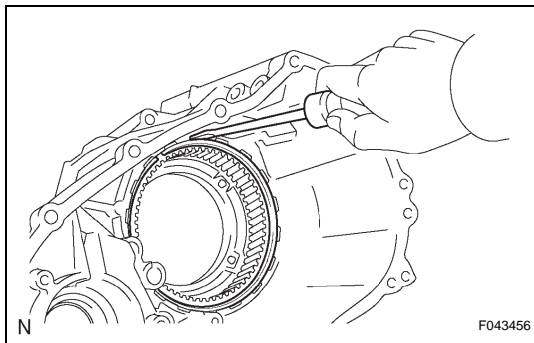
**45. REMOVE NO. 2 TRANSFER OUTPUT SHAFT SPACER****46. REMOVE TRANSFER OUTPUT SHAFT SPACER BALL****47. REMOVE CENTER DIFFERENTIAL CASE**



**48. REMOVE TRANSFER CLUTCH HUB****49. REMOVE TRANSFER OUTPUT SHAFT FRONT NEEDLE ROLLER BEARING****50. REMOVE TRANSFER OUTPUT SHAFT PLATE WASHER****51. REMOVE TRANSFER OUTPUT SHAFT REAR RADIAL BALL BEARING**

- (a) Using SST and a press, press out the bearing.  
SST 09555-55010

**52. REMOVE NO. 1 TRANSFER OUTPUT SHAFT SPACER****53. REMOVE TRANSFER DRIVE SPROCKET SUB-ASSEMBLY****54. REMOVE TRANSFER DRIVE SPROCKET BEARING****55. REMOVE TRANSFER OUTPUT SHAFT PLATE WASHER**

**56. REMOVE TRANSFER CASE PLUG****57. REMOVE COMPRESSION SPRING****58. REMOVE TRANSFER CASE STRAIGHT PIN****59. REMOVE TRANSFER LOW PLANETARY RING GEAR**

- (a) Using a screwdriver, pry out the snap ring.

**NOTICE:****Be careful not to damage the ring gear and front case.**

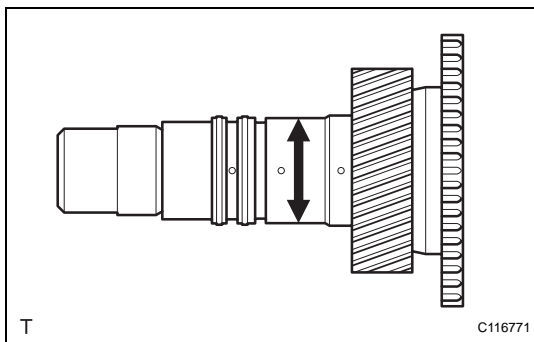
- (b) Remove the ring gear from the front case.

**INSPECTION****1. INSPECT TRANSFER INPUT SHAFT**

- (a) Using a micrometer, measure the diameter of the input shaft journal surface.

**Minimum diameter:****47.59 mm (1.8736 in.)**

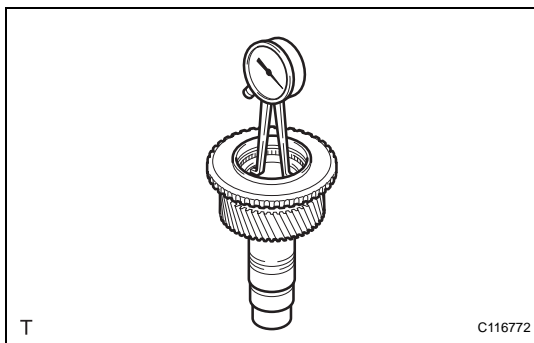
If the diameter is less than the minimum, replace the input shaft.



- (b) Using a caliper gauge, measure the inside diameter of the input shaft bushing.

**Maximum inside diameter:****48.14 mm (1.8953 in.)**

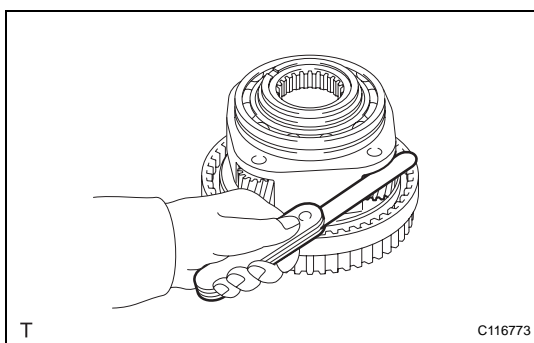
If the inside diameter is greater than the maximum, replace the input shaft.

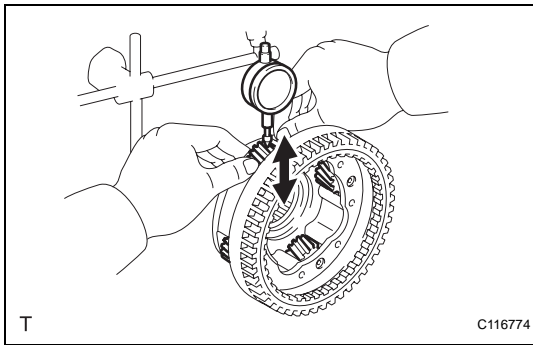
**2. INSPECT PLANETARY PINION GEAR THRUST CLEARANCE**

- (a) Using a feeler gauge, measure the thrust clearance of the pinion gear.

**Standard clearance:****0.11 to 0.84 mm (0.0043 to 0.0331 in.)****Maximum clearance:****0.84 mm (0.0331 in.)**

If the clearance is greater than the maximum, replace the planetary gear.





### 3. INSPECT PLANETARY PINION GEAR RADIAL CLEARANCE

- (a) Using a dial indicator, measure the radial clearance of the pinion gear.

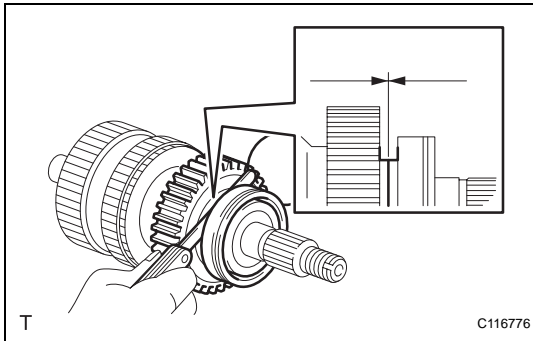
**Standard clearance:**

**0.009 to 0.038 mm (0.0004 to 0.0015 in.)**

**Maximum clearance:**

**0.038 mm (0.0015 in.)**

If the clearance is greater than the maximum, replace the planetary gear.



### 4. INSPECT TRANSFER DRIVE SPROCKET THRUST CLEARANCE

- (a) Using a feeler gauge, measure the thrust clearance of the drive sprocket.

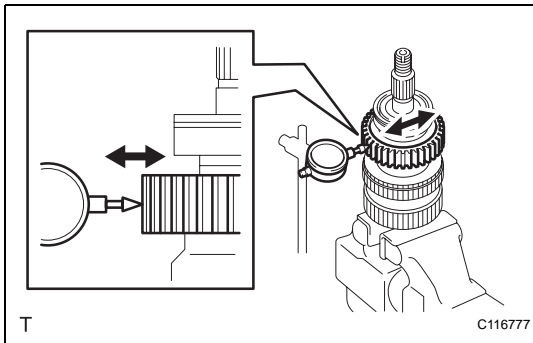
**Standard clearance:**

**0.15 to 0.24 mm (0.0059 to 0.0094 in.)**

**Maximum clearance:**

**0.24 mm (0.0094 in.)**

If the clearance is greater than the maximum, replace the drive sprocket.



### 5. INSPECT TRANSFER DRIVE SPROCKET RADIAL CLEARANCE

- (a) Using a dial indicator, measure the radial clearance of the drive sprocket.

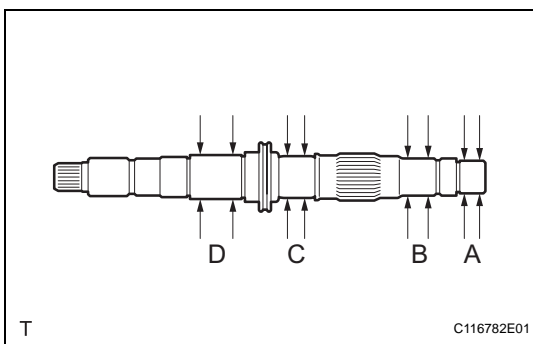
**Standard clearance:**

**0.01 to 0.06 mm (0.0004 to 0.0024 in.)**

**Maximum clearance:**

**0.06 mm (0.0024 in.)**

If the clearance is greater than the maximum, replace the drive sprocket, output shaft or needle roller bearing.



### 6. INSPECT REAR TRANSFER OUTPUT SHAFT

- (a) Using a micrometer, measure the diameter of the output shaft journal surface.

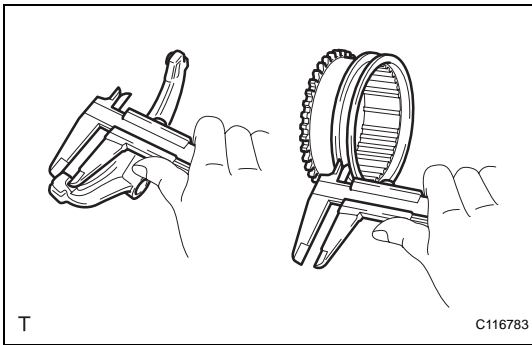
**Standard diameter**

Position	Specified Condition
A	27.98 to 27.99 mm (1.1016 to 1.1020 in.)
B	31.98 to 32.00 mm (1.2591 to 1.2598 in.)
C	34.98 to 35.00 mm (1.3772 to 1.3780 in.)
D	36.98 to 37.00 mm (1.4559 to 1.4567 in.)

**Minimum diameter**

Position	Specified Condition
A	27.98 mm (1.1016 in.)
B	31.98 mm (1.2591 in.)
C	34.98 mm (1.3772 in.)
D	36.98 mm (1.4559 in.)

If the diameter is less than the minimum, replace the output shaft.



### 7. INSPECT TRANSFER HIGH AND LOW CLUTCH SLEEVE AND NO. 2 TRANSFER GEAR SHIFT FORK CLEARANCE

- (a) Using vernier calipers, measure the thickness of the No. 2 gear shift fork claw.

**Standard thickness:**  
**10 mm (0.3937 in.)**

- (b) Using vernier calipers, measure the groove of the high and low clutch sleeve.

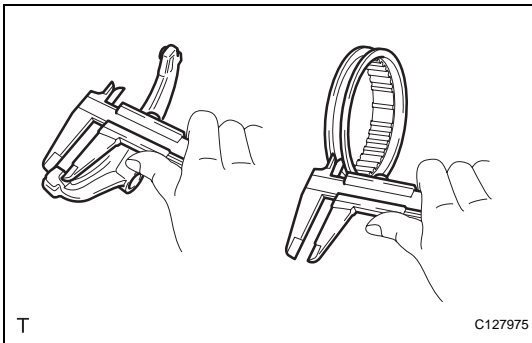
**Standard distance:**  
**10.5 mm (0.4133 in.)**

- (c) Calculate the clearance between the high and low clutch sleeve and No. 2 gear shift fork.

**Standard clearance:**  
**0.26 to 0.84 mm (0.0102 to 0.0331 in.)**

**Maximum clearance:**  
**0.84 mm (0.0331 in.)**

If the clearance is greater than the maximum, replace the high and low clutch sleeve or No. 2 gear shift fork.



### 8. INSPECT FRONT DRIVE CLUTCH SLEEVE AND CENTER DIFFERENTIAL LOCK FORK CLEARANCE

- (a) Using vernier calipers, measure the thickness of the center differential lock fork claw.

**Standard thickness:**  
**10 mm (0.3937 in.)**

- (b) Using vernier calipers, measure the groove of the front drive clutch sleeve.

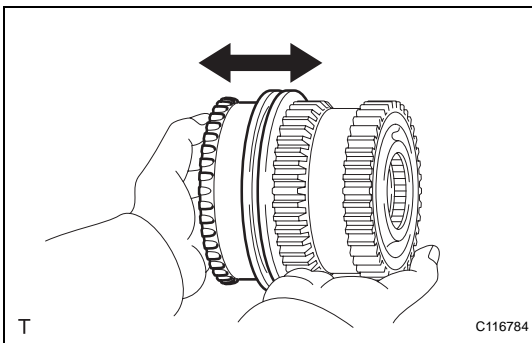
**Standard distance:**  
**10.5 mm (0.4133 in.)**

- (c) Calculate the clearance between the front drive clutch sleeve and center differential lock fork.

**Standard clearance:**  
**0.26 to 0.84 mm (0.0102 to 0.0331 in.)**

**Maximum clearance:**  
**0.84 mm (0.0331 in.)**

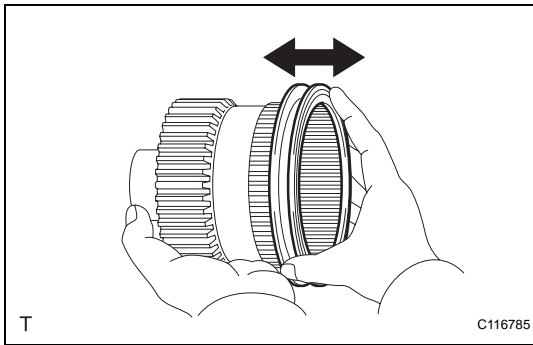
If the clearance is greater than the maximum, replace the front drive clutch sleeve or center differential lock fork.



### 9. INSPECT CENTER DIFFERENTIAL CASE AND TRANSFER HIGH AND LOW CLUTCH SLEEVE

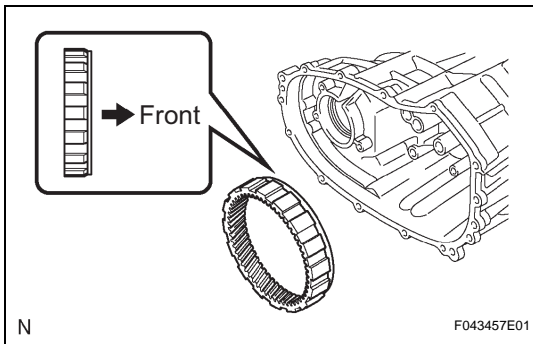
- (a) Check that the tip of the spline gear of the clutch sleeve is not worn.

- (b) Install the clutch sleeve onto the differential case and check that the clutch sleeve moves smoothly. If the results are not as specified, replace the differential case and clutch sleeve.



## 10. INSPECT CENTER DIFFERENTIAL CASE AND FRONT DRIVE CLUTCH SLEEVE

- (a) Check that the tip of the spline gear of the clutch sleeve is not worn.
- (b) Install the clutch sleeve onto the differential case and check that the clutch sleeve moves smoothly. If the results are not as specified, replace the differential case and clutch sleeve.



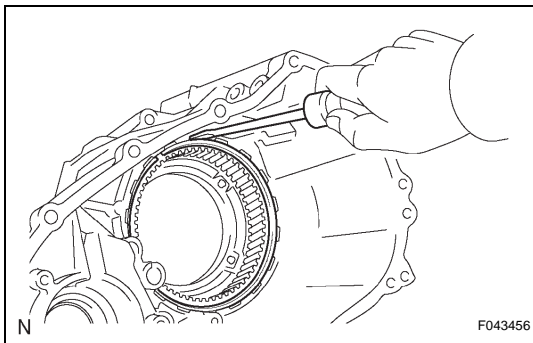
## REASSEMBLY

### 1. INSTALL TRANSFER LOW PLANETARY RING GEAR

- (a) Install the ring gear onto the front case.

**NOTICE:**

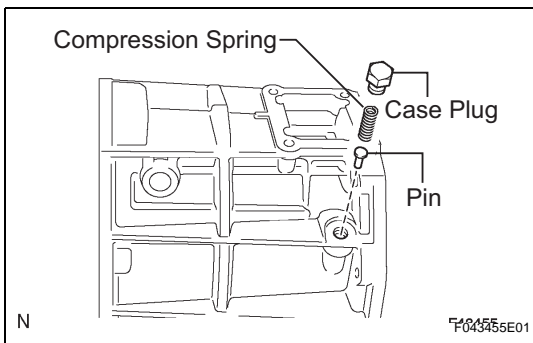
**Install the ring gear in the correct direction.**



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

**NOTICE:**

**Make sure that the snap ring is firmly installed into the groove.**



### 2. INSTALL TRANSFER CASE STRAIGHT PIN

### 3. INSTALL COMPRESSION SPRING

### 4. INSTALL TRANSFER CASE PLUG

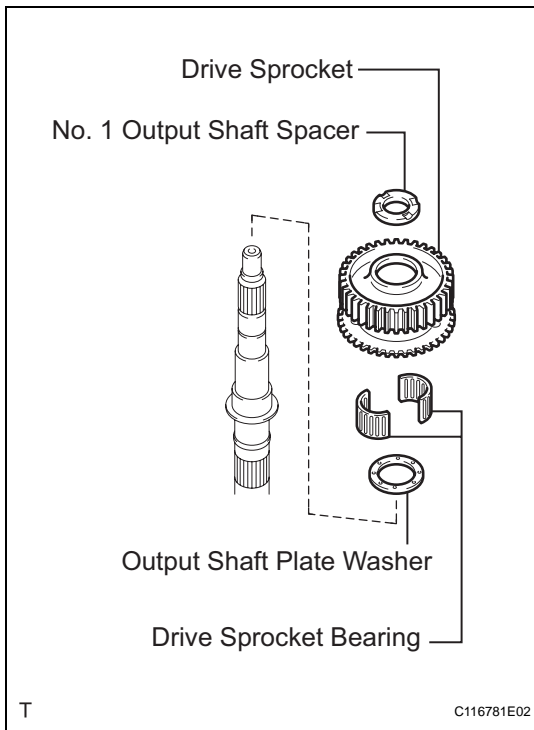
- (a) Apply sealant to the threads of the plug.

**Sealant:**

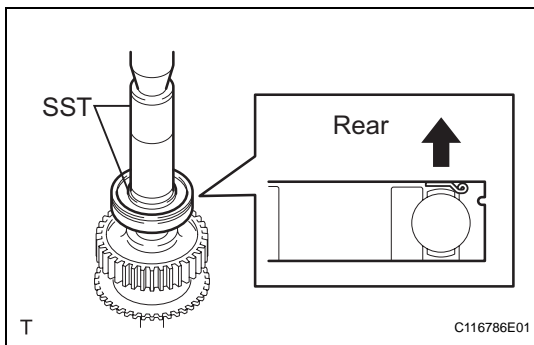
**Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or the equivalent**

- (b) Install the case plug.

**Torque: 19 N\*m (190 kgf\*cm, 14 ft.\*lbf)**

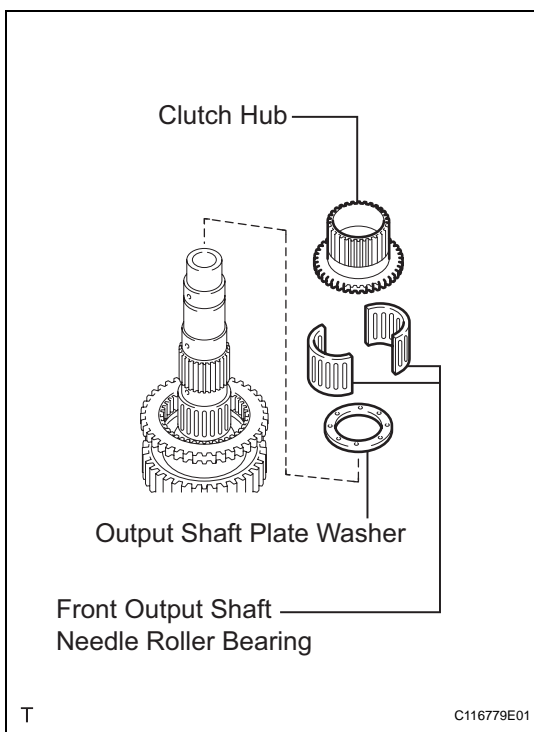


5. **INSTALL TRANSFER OUTPUT SHAFT PLATE WASHER**
6. **INSTALL TRANSFER DRIVE SPROCKET BEARING**
7. **INSTALL TRANSFER DRIVE SPROCKET SUB-ASSEMBLY**
8. **INSTALL NO. 1 TRANSFER OUTPUT SHAFT SPACER**



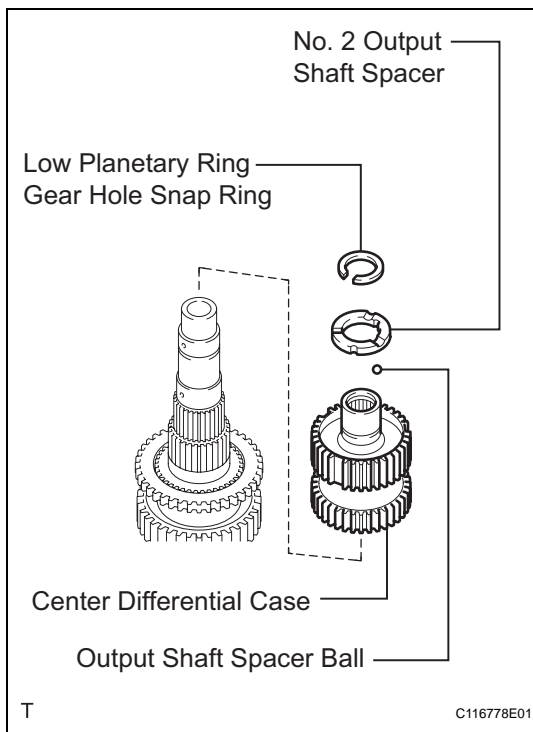
9. **INSTALL REAR TRANSFER OUTPUT SHAFT RADIAL BALL BEARING**
  - (a) Apply gear oil to the connecting areas of the output shaft and bearing.
  - (b) Using SST and a press, press in a new bearing with the outer race snap ring groove facing toward the rear.

**SST 09316-60011 (09316-00011, 09316-00071)**



10. **INSTALL TRANSFER OUTPUT SHAFT PLATE WASHER**
11. **INSTALL FRONT TRANSFER OUTPUT SHAFT NEEDLE ROLLER BEARING**
12. **INSTALL TRANSFER CLUTCH HUB**

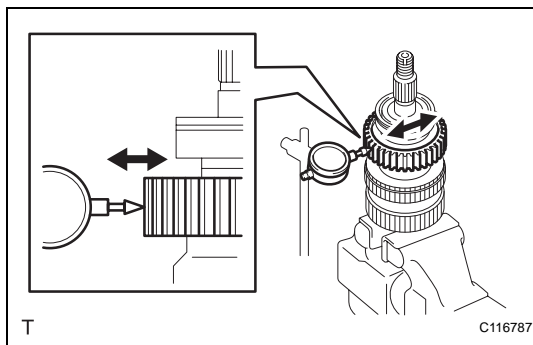
TF

**13. INSTALL CENTER DIFFERENTIAL CASE****14. INSTALL TRANSFER OUTPUT SHAFT SPACER BALL****15. INSTALL NO. 2 TRANSFER OUTPUT SHAFT SPACER****16. INSTALL TRANSFER LOW PLANETARY RING GEAR HOLE SNAP RING**

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

**NOTICE:**

**Make sure that the snap ring is firmly installed into the groove.**

**17. INSPECT TRANSFER DRIVE SPROCKET RADIAL CLEARANCE**

- (a) Using a dial indicator, measure the radial clearance of the drive sprocket.

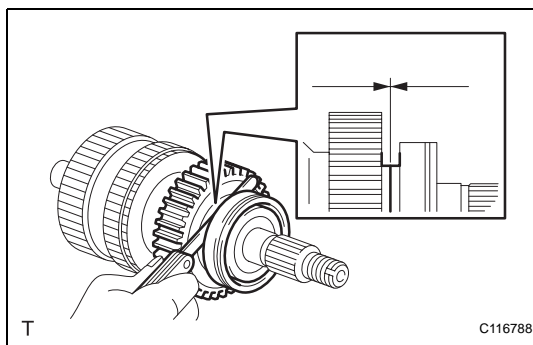
**Standard clearance:**

**0.01 to 0.06 mm (0.0004 to 0.0024 in.)**

**Maximum clearance:**

**0.06 mm (0.0024 in.)**

If the clearance is greater than the maximum, replace the drive sprocket, output shaft or needle roller bearing.

**18. INSPECT TRANSFER DRIVE SPROCKET THRUST CLEARANCE**

- (a) Using a feeler gauge, measure the thrust clearance of the drive sprocket.

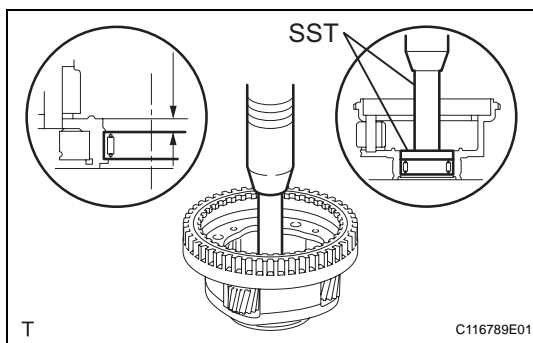
**Standard clearance:**

**0.15 to 0.24 mm (0.0059 to 0.0094 in.)**

**Maximum clearance:**

**0.24 mm (0.0094 in.)**

If the clearance is greater than the maximum, replace the drive sprocket.

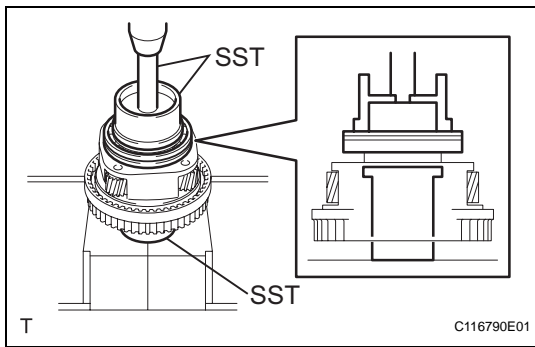
**19. INSTALL TRANSFER LOW PLANETARY GEAR BEARING**

- (a) Using SST and a press, press in a new bearing.

**SST 09950-60010 (09951-00570), 09950-70010 (09951-07100)**

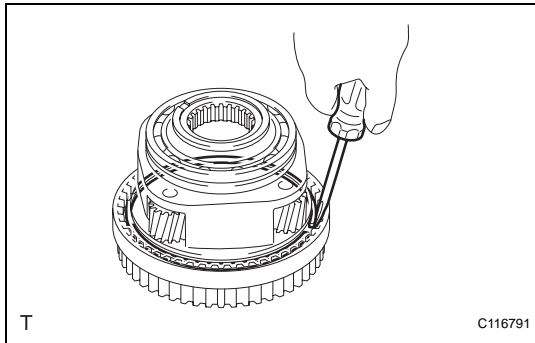
**Standard depth:**

**7.7 to 8.3 mm (0.303 to 0.327 in.)**



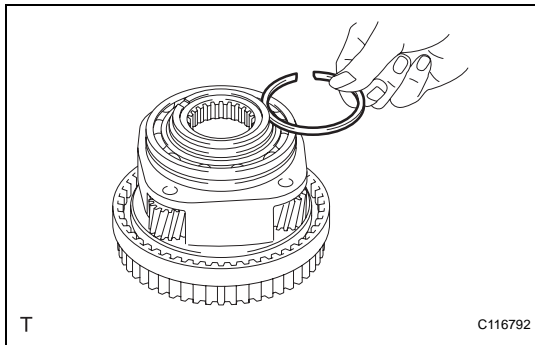
**20. INSTALL TRANSFER INPUT SHAFT BEARING**

- (a) Using SST and a press, press in a new bearing with the groove facing forward.  
**SST 09223-15020, 09515-30010, 09950-70010 (09951-07100)**



**21. INSTALL TRANSFER LOW PLANETARY GEAR SPLINE PIECE**

- (a) Using a screwdriver, install the spline piece and low planetary gear with the snap ring.
- NOTICE:**
- Be careful not to damage the spline piece.
  - Make sure that the snap ring is firmly installed into the groove.



**22. INSTALL TRANSFER INPUT BEARING SHAFT SNAP RING**

- (a) Select a new snap ring that allows 0.1 mm (0.0039 in.) or less of axial free play.

**Standard snap ring thickness**

Mark	Thickness
1	1.45 to 1.50 mm (0.0571 to 0.0591 in.)
2	1.50 to 1.55 mm (0.0591 to 0.0610 in.)
3	1.55 to 1.60 mm (0.0610 to 0.0630 in.)
4	1.60 to 1.65 mm (0.0630 to 0.0650 in.)
5	1.65 to 1.70 mm (0.0650 to 0.0669 in.)

**NOTICE:**

**Make sure that the snap ring is firmly installed into the groove.**

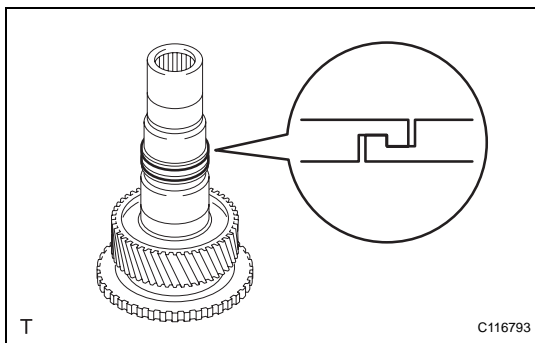
- (b) Using a snap ring expander, install the snap ring.

**23. INSTALL NO. 1 TRANSFER INPUT SHAFT SEAL RING**

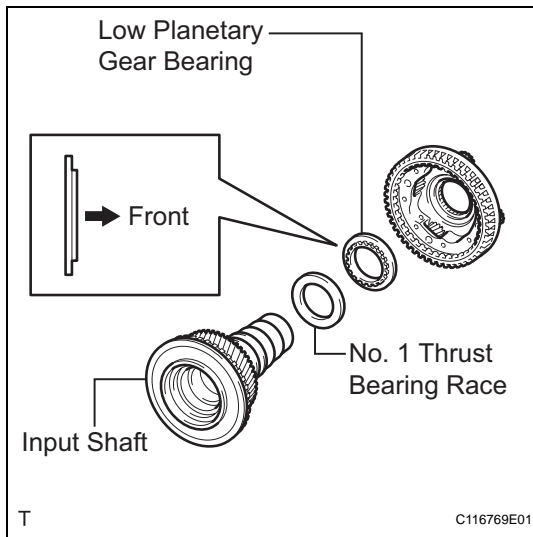
- (a) Apply gear oil to the 2 seal rings.
- (b) Install the 2 seal rings onto the input shaft.

**HINT:**

Engage the seal rings securely to eliminate clearance as shown in the illustration.







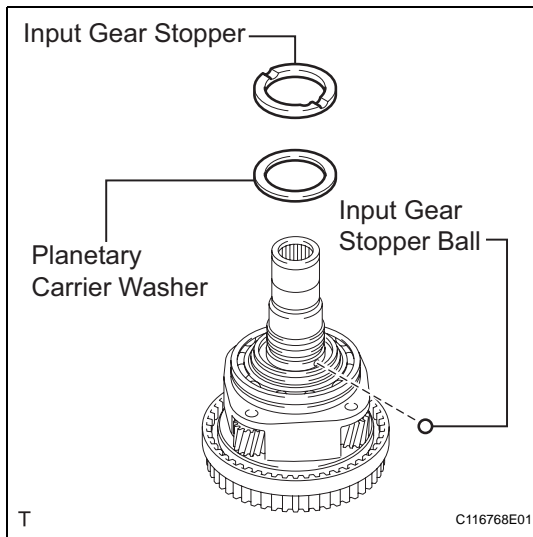
**24. INSTALL TRANSFER LOW PLANETARY GEAR BEARING**

- (a) Install the bearing onto the low planetary gear.
- NOTICE:**  
Install the bearing in the correct direction.

**25. INSTALL NO. 1 TRANSFER THRUST BEARING RACE**

**26. INSTALL TRANSFER INPUT SHAFT**

- (a) Apply gear oil to the contact surface of the input shaft and low planetary gear.
- (b) Install the input shaft onto the low planetary gear.

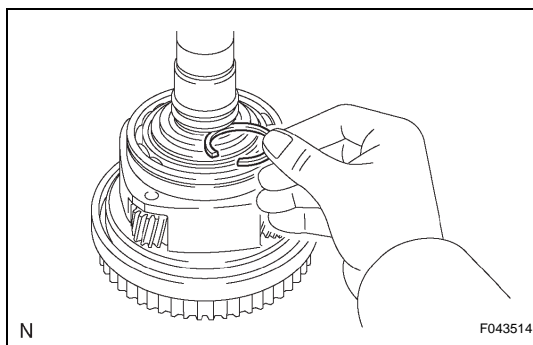


**27. INSTALL MANUAL TRANSFER PLANETARY CARRIER WASHER**

- (a) Apply gear oil to the washer.
- (b) Install the washer onto the low planetary gear.

**28. INSTALL TRANSFER INPUT GEAR STOPPER BALL**

**29. INSTALL TRANSFER INPUT GEAR STOPPER**



**30. INSTALL TRANSFER INPUT GEAR STOPPER SHAFT SNAP RING**

- (a) Select a new snap ring that allows 0.05 to 0.15 mm (0.0020 to 0.0059 in.) of axial free play.

**Standard snap ring thickness**

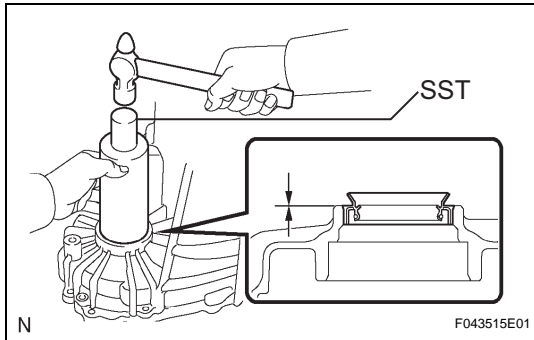
Mark	Thickness
A	2.10 to 2.15 mm (0.0827 to 0.0846 in.)
B	2.15 to 2.20 mm (0.0846 to 0.0866 in.)
C	2.20 to 2.25 mm (0.0866 to 0.0886 in.)
D	2.25 to 2.30 mm (0.0886 to 0.0906 in.)
E	2.30 to 2.35 mm (0.0906 to 0.0925 in.)
F	2.35 to 2.40 mm (0.0925 to 0.0945 in.)
G	2.40 to 2.45 mm (0.0945 to 0.0965 in.)
H	2.45 to 2.50 mm (0.0965 to 0.0984 in.)
J	2.50 to 2.55 mm (0.0984 to 0.1004 in.)
K	2.55 to 2.60 mm (0.1004 to 0.1024 in.)
L	2.60 to 2.65 mm (0.1024 to 0.1043 in.)
M	2.65 to 2.70 mm (0.1043 to 0.1063 in.)
N	2.70 to 2.75 mm (0.1063 to 0.1083 in.)
P	2.75 to 2.80 mm (0.1083 to 0.1102 in.)

Mark	Thickness
Q	2.80 to 2.85 mm (0.1102 to 0.1122 in.)
R	2.85 to 2.90 mm (0.1122 to 0.1142 in.)
S	2.90 to 2.95 mm (0.1142 to 0.1161 in.)
T	2.95 to 3.00 mm (0.1161 to 0.1181 in.)
U	3.00 to 3.05 mm (0.1181 to 0.1201 in.)

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

**NOTICE:**

**Make sure that the snap ring is firmly installed into the groove.**

**31. INSTALL TRANSFER CASE OIL SEAL**

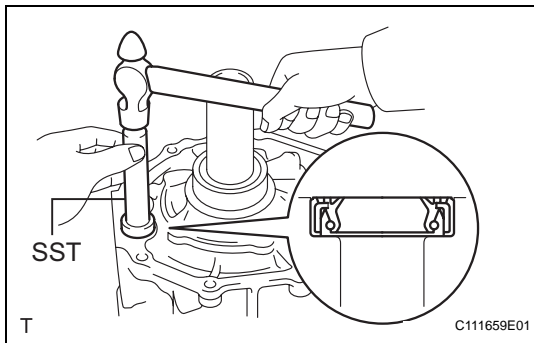
- (a) Using SST and a hammer, tap in a new oil seal until its surface is flush with the case upper surface (No. 1).

**SST 09316-60011 (09316-00011)**

**NOTICE:**

**Be careful not to damage the front case.**

- (b) Coat the lip of the oil seal with MP grease.



- (c) Using SST and a hammer, tap in a new oil seal until its surface is flush with the case upper surface (No. 2).

**SST 09304-12012**

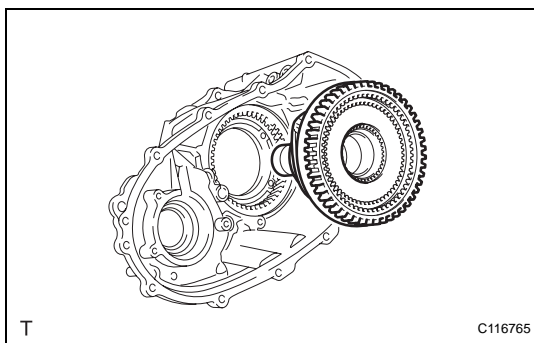
**Standard depth:**

**-0.5 to 0.5 mm (-0.020 to 0.020 in.)**

**NOTICE:**

**Be careful not to damage the front case.**

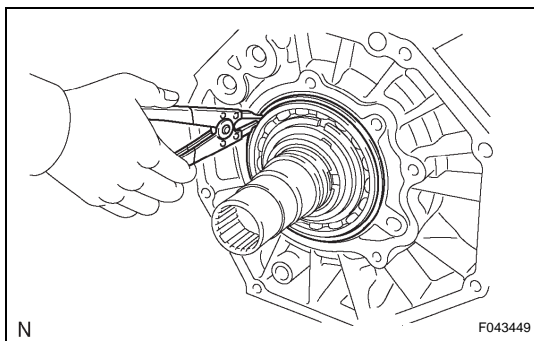
- (d) Coat the lip of the oil seal with MP grease.

**32. INSTALL TRANSFER LOW PLANETARY GEAR ASSEMBLY WITH TRANSFER INPUT SHAFT**

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

**HINT:**

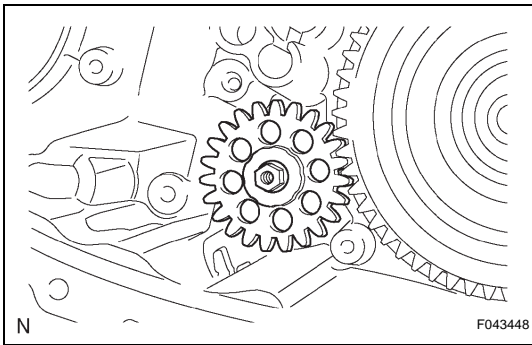
If necessary, heat the front case to about 50 to 80°C (122 to 176°F).



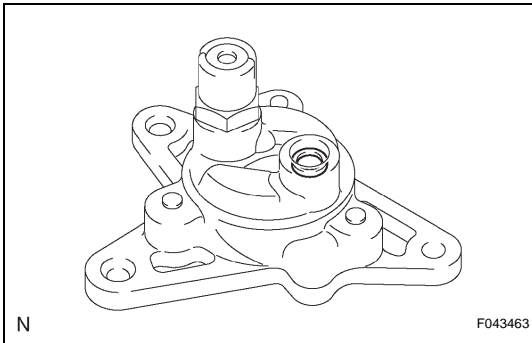
- (b) Using a snap ring expander, install the snap ring.

**NOTICE:**

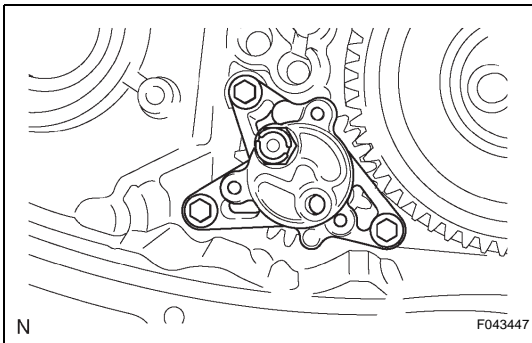
**Make sure that the snap ring is firmly installed into the groove.**

**33. INSTALL TRANSFER OIL PUMP GEAR**

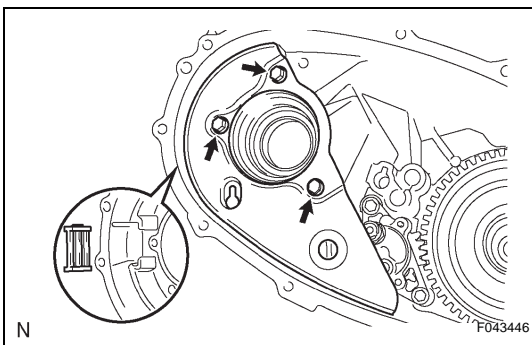
- (a) Apply gear oil to the sliding surface of the gear.
- (b) Install the gear with the nut.

**34. INSTALL TRANSFER OIL PUMP BODY O-RING**

- (a) Coat a new O-ring with gear oil and install it onto the oil pump body.

**35. INSTALL TRANSFER OIL PUMP BODY SUB-ASSEMBLY**

- (a) Install the pump body with the 3 bolts.  
**Torque: 7.5 N\*m (76 kgf\*cm, 66 in.\*lbf)**

**36. INSTALL TRANSFER CASE MAGNET****37. INSTALL TRANSFER OIL SEPARATOR SUB-ASSEMBLY**

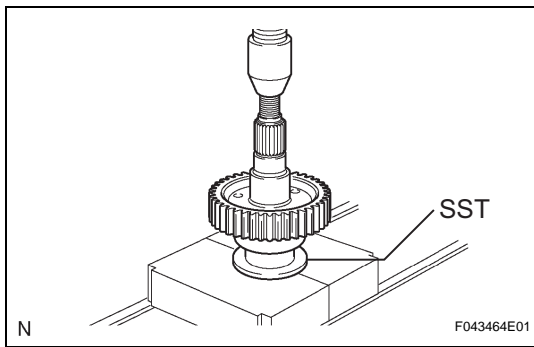
- (a) Install the oil separator with the 3 bolts.  
**Torque: 7.5 N\*m (76 kgf\*cm, 66 in.\*lbf)**

**38. INSTALL NO. 1 TRANSFER CASE PLUG (for Filler)**

- (a) Install a new gasket and the filler plug.  
**Torque: 37 N\*m (377 kgf\*cm, 27 ft.\*lbf)**

**39. INSTALL NO. 1 TRANSFER CASE PLUG (for Drain)**

- (a) Install a new gasket and the drain plug.  
**Torque: 37 N\*m (377 kgf\*cm, 27 ft.\*lbf)**



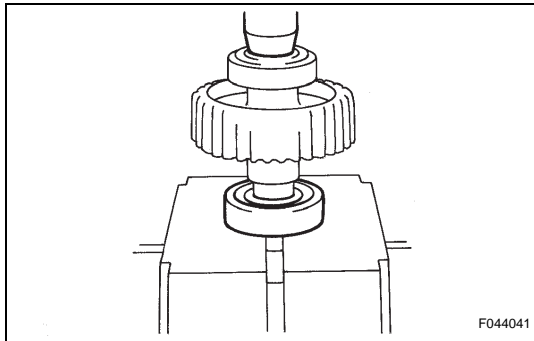
#### 40. INSTALL TRANSFER INPUT GEAR RADIAL BALL BEARING

- Apply gear oil to the contact surfaces of the bearing and the driven sprocket.
- Using SST and a press, press in a new bearing.

**SST 09316-60011 (09316-00031)**

**NOTICE:**

**After press-fitting the bearing to the driven sprocket, check that the bearing moves smoothly.**

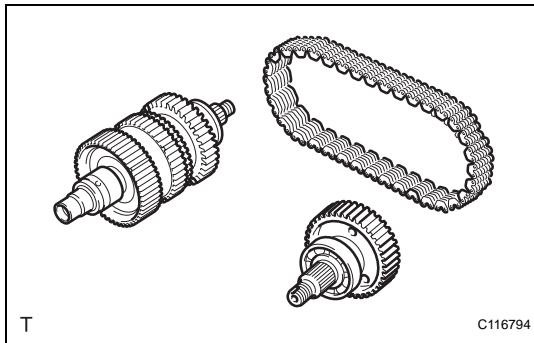


#### 41. INSTALL TRANSFER DRIVEN SPROCKET BEARING

- Apply gear oil to the contact surfaces of the bearing and driven sprocket.
- Using a press, press in a new bearing.

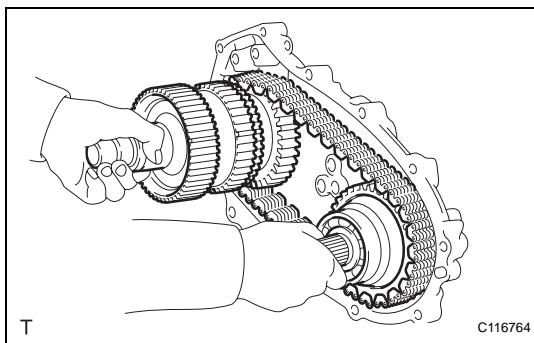
**NOTICE:**

**After press-fitting the bearing to the driven sprocket, check that the bearing moves smoothly.**



#### 42. INSTALL REAR TRANSFER OUTPUT SHAFT, FRONT DRIVE CHAIN AND DRIVEN SPROCKET SUB-ASSEMBLY

- Install the output shaft and driven sprocket onto the front drive chain.



- Mount the rear case in a vise.

**NOTICE:**

**Place aluminum plates on the vise to prevent damage to the rear case.**

- Install the output shaft, front drive chain and driven sprocket onto the rear case.

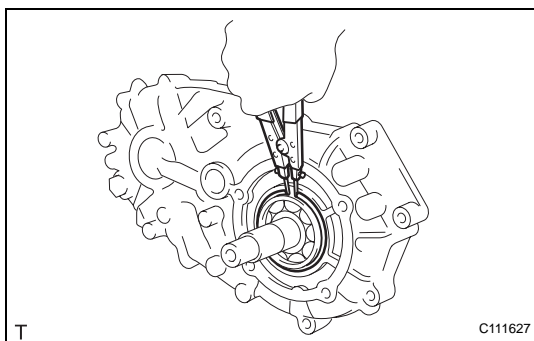
**HINT:**

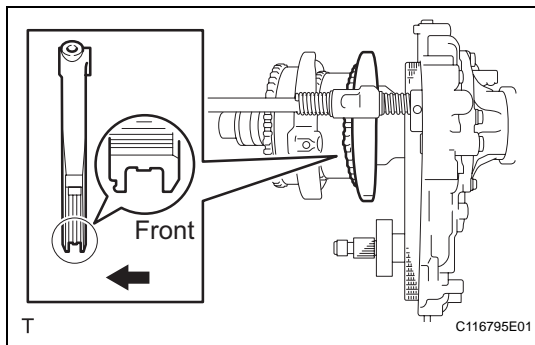
Check that the output shaft and driven sprocket turn smoothly. If necessary, heat the rear case to about 50 to 80°C (122 to 176°F).

- Using a snap ring expander, install the snap ring.

**NOTICE:**

**Make sure that the snap ring is firmly installed into the groove.**





#### 43. INSTALL CENTER DIFFERENTIAL LOCK FORK WITH FRONT DRIVE CLUTCH SLEEVE

- (a) Install the clutch sleeve.

**NOTICE:**

**Install the clutch sleeve in the correct direction.**

- (b) Install the front drive shift shaft, center differential lock fork, shift shaft stopper, 2 springs and 3 stoppers.  
 (c) Install the ball and spring into the hole.  
 (d) Apply sealant to the threads of the No. 2 plug.

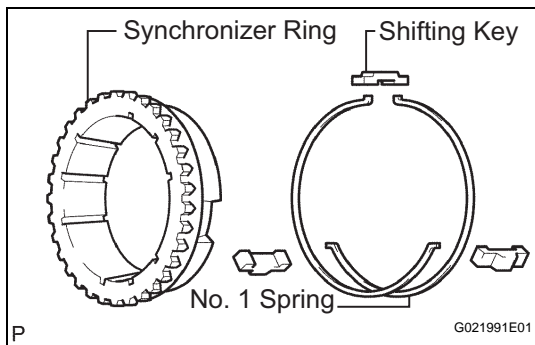
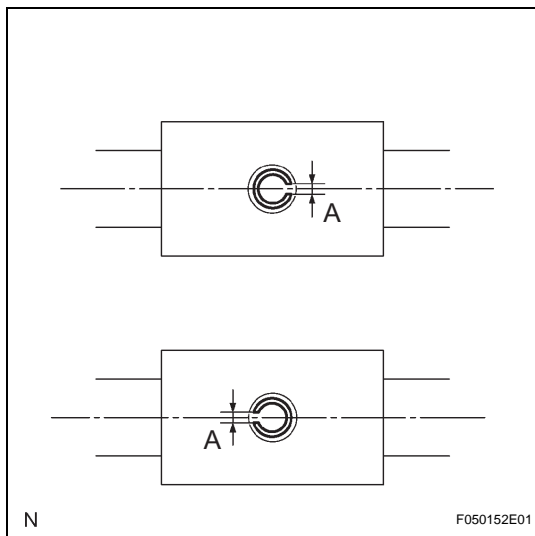
**Sealant:**

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

- (e) Install the No. 2 plug into the hole.  
**Torque: 19 N\*m (190 kgf\*cm, 14 ft.\*lbf)**  
 (f) Using a pin punch and hammer, tap in the slotted pin.

**NOTICE:**

**When installing the slotted pin, make sure the pin's groove (labeled A) is facing in the same direction as the shaft.**



#### 44. INSTALL NO. 2 TRANSFER GEAR SHIFT FORK WITH TRANSFER HIGH AND LOW CLUTCH SLEEVE

- (a) Manual transmission:

Install the synchronizer ring, 3 shifting keys and 2 springs.

**NOTICE:**

- **Set the No. 1 springs so that their openings do not overlap, as shown in the illustration.**
- **Make sure that the No. 1 springs are firmly connected to the shifting keys.**

- (b) Install the straight pin into the hole.

- (c) Install the No. 2 gear shift fork, high and low shift fork shaft and high and low clutch sleeve.

**NOTICE:**

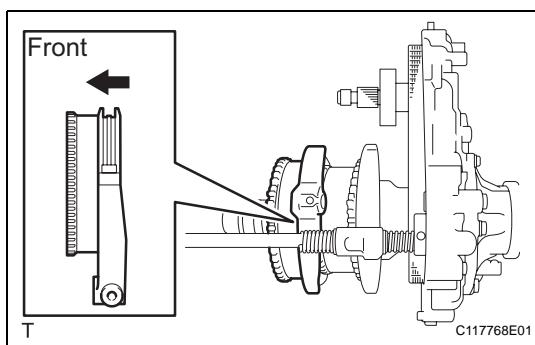
**Install the fork in the correct direction.**

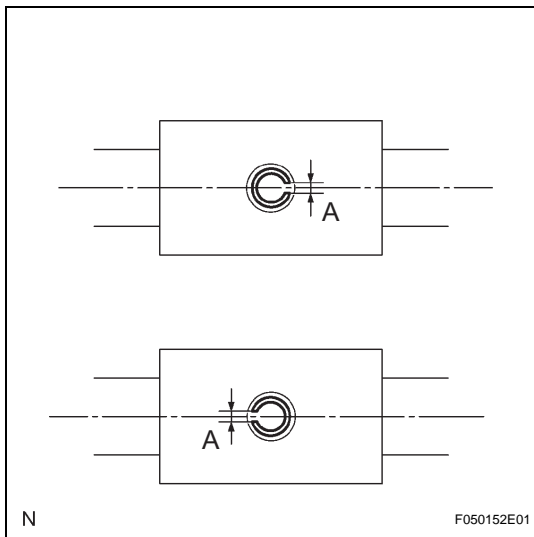
- (d) Install the ball and spring into the hole.  
 (e) Apply sealant to the threads of the No. 1 plug.

**Sealant:**

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

- (f) Install the No. 1 plug into the hole.





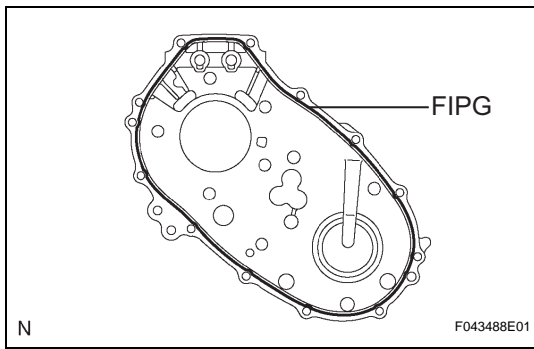
- (g) Using a pin punch and hammer, install the slotted pin.

**NOTICE:**

**When installing the slotted pin, make sure the pin's groove (labeled A) is facing in the same direction as the shaft.**

**45. INSTALL TRANSFER OUTPUT SHAFT FRONT NEEDLE ROLLER BEARING**

- (a) Apply gear oil to the bearing.  
 (b) Install the bearing onto the low planetary gear.

**46. INSTALL REAR TRANSFER CASE**

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

**FIPG:**

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

**NOTICE:**

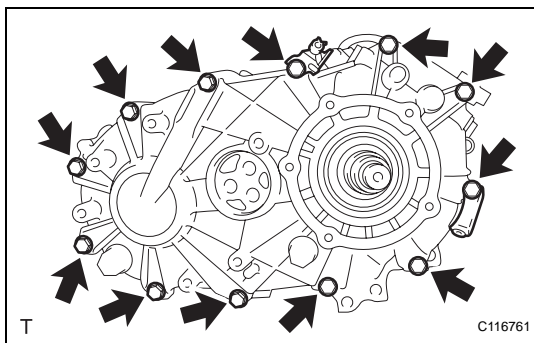
**If the removed rear case will be reused: After removing the case, be sure to perform the following before reinstalling it: 1) using a knife, cut off any old FIPG on the rear case's contact surface, 2) clean off any remaining old FIPG from the rear case's contact surface, and 3) apply FIPG to the rear case.**

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

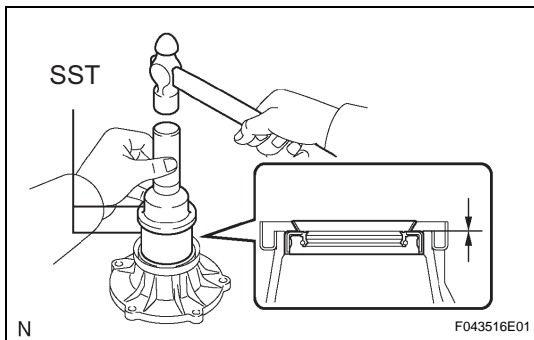
**Torque: 28 N\*m (285 kgf\*cm, 21 ft.\*lbf)**

**NOTICE:**

**Tighten the bolts of the rear case within 10 minutes of applying the FIPG. The FIPG will dry very quickly.**

**47. INSTALL TRANSFER OUTPUT WASHER**

- (a) Install the speedometer drive gear and 2 output washers.

**48. INSTALL TRANSFER EXTENSION HOUSING TYPE T OIL SEAL**

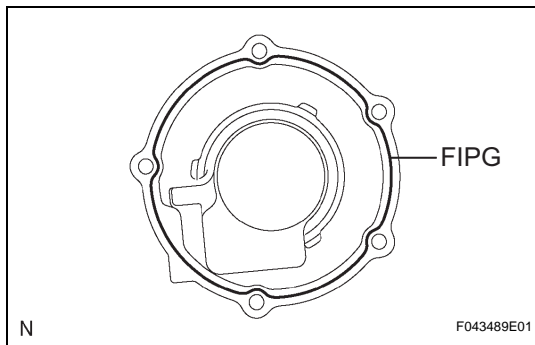
- (a) Using SST and a hammer, tap in a new oil seal until its surface is flush with the housing upper surface.

**SST 09223-46011, 09631-32020**

**NOTICE:**

**Be careful not to damage the extension housing.**

- (b) Coat the lip of the oil seal with MP grease.



#### 49. INSTALL TRANSFER 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 the equivalent**

**NOTICE:**

**If the removed extension housing will be reused: After removing the housing, be sure to perform the following before reinstalling it: 1) using a knife, cut off any old FIPG on the extension housing's contact surface, 2) clean off any remaining old FIPG from the extension housing's contact surface, and 3) apply FIPG to the extension housing.**

- (b) Apply sealant to the threads of the bolt.

**Sealant:**

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

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

**Torque: 12 N\*m (122 kgf\*cm, 9 ft.\*lbf)**

**NOTICE:**

**Tighten the bolts of the extension housing within 10 minutes of applying the FIPG. The FIPG will dry very quickly.**

#### 50. INSTALL SPEEDOMETER DRIVEN GEAR WITH VEHICLE SPEED SENSOR (See page [TF-48](#))

#### 51. INSTALL TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL (for Front)

- (a) Using SST and a hammer, tap in a new oil seal.  
**SST 09950-60010 (09951-00320), 09950-70010 (09951-07100)**

**NOTICE:**

**Be careful not to damage the companion flange.**

- (b) Coat the lip of the oil seal with MP grease.

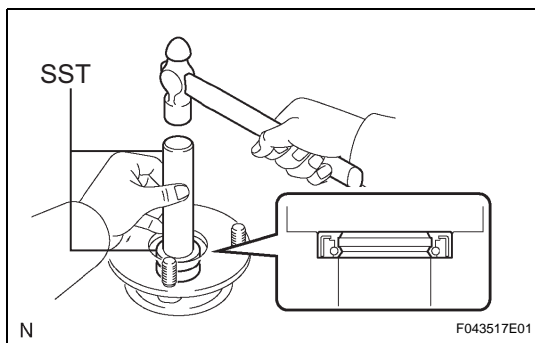
#### 52. INSTALL TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL (for Rear)

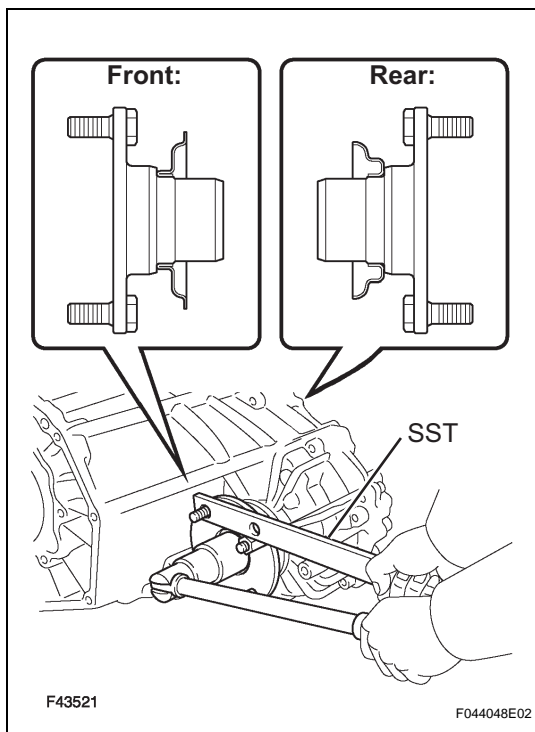
- (a) Using SST and a hammer, tap in a new oil seal (for rear) in the same way as the oil seal (for front).  
**SST 09950-60010 (09951-00320), 09950-70010 (09951-07100)**

**NOTICE:**

**Be careful not to damage the companion flange.**

- (b) Coat the lip of the oil seal with MP grease.



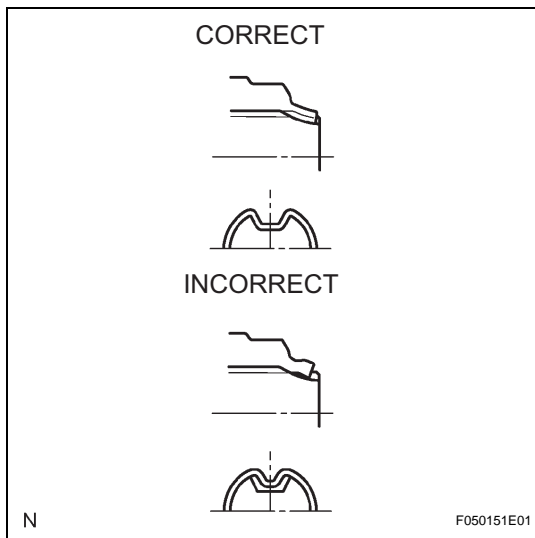


### 53. INSTALL OUTPUT SHAFT COMPANION FLANGE SUB-ASSEMBLY (for Front)

- Apply gear oil to the connecting areas of the companion flange and driven sprocket.
- Install the companion flange onto the driven sprocket.
- Using SST to hold the companion flange, install a new lock nut.

**SST 09330-00021, 09950-40011 (09951-04020, 09952-04010, 09953-04030, 09955-04051, 09957-04010, 09958-04011)**

**Torque: 118 N\*m (1,203 kgf\*cm, 87 ft.\*lbf)**



- Using a chisel and hammer, stake the lock nut to the driven sprocket.

**NOTICE:**

- Securely stake the shaft to the lock nut's groove.
- Be careful not to damage parts around the lock nut.
- Do not apply excessive force to the shaft.

### 54. INSTALL OUTPUT SHAFT COMPANION FLANGE SUB-ASSEMBLY (for Rear)

- Apply gear oil to the connecting area of the companion flange and output shaft.
- Install the companion flange onto the output shaft.
- Using SST to hold the companion flange, install a new lock nut.

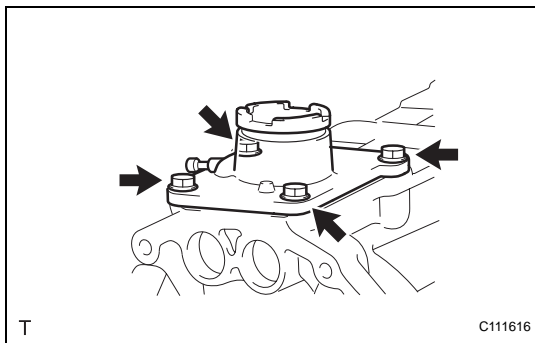
**SST 09330-00021, 09950-40011 (09951-04020, 09952-04010, 09953-04030, 09954-04010, 09955-04051, 09957-04010, 09958-04011)**

**Torque: 118 N\*m (1,203 kgf\*cm, 87 ft.\*lbf)**

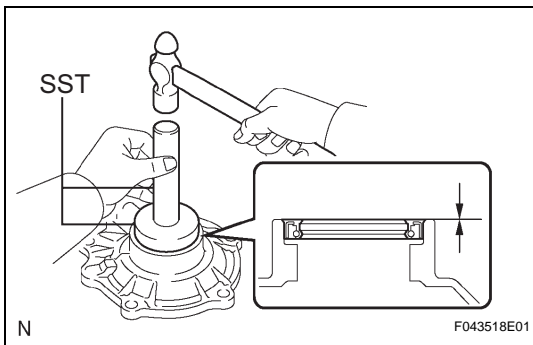
### 55. INSTALL BREATHER OIL DEFLECTOR

### 56. INSTALL TRANSFER CONTROL SHIFT LEVER RETAINER SUB-ASSEMBLY

- Install the retainer with the 4 bolts.  
**Torque: 18 N\*m (183 kgf\*cm, 13 ft.\*lbf)**



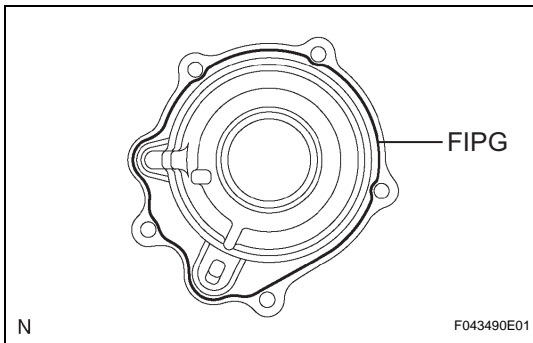


**57. INSTALL TRANSFER COVER TYPE T OIL SEAL**

- (a) Using SST and a hammer, tap in a new oil seal until its surface is flush with the retainer upper surface.  
**SST 09950-60010 (09951-00590), 09950-70010 (09951-07100)**

**NOTICE:**

Be careful not to damage the bearing retainer.

**58. INSTALL TRANSFER BEARING RETAINER SUB-ASSEMBLY**

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

**FIPG:**

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

**NOTICE:**

**If the removed bearing retainer will be reused: After removing the retainer, be sure to perform the following before reinstalling it: 1) using a knife, cut off any old FIPG on the bearing retainer's contact surface, 2) clean off any remaining old FIPG from the bearing retainer's contact surface, and 3) apply FIPG to the bearing retainer.**

- (b) Apply sealant to the threads of the bolt.

**Sealant:**

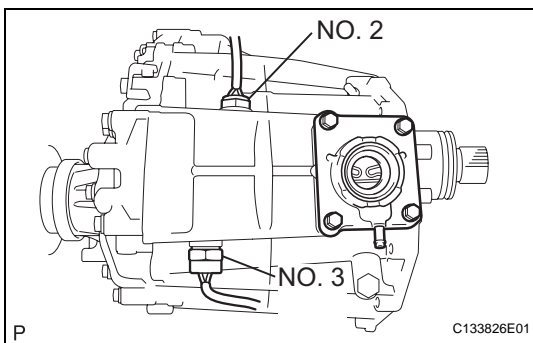
**Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or the equivalent**

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

**Torque: 12 N\*m (122 kgf\*cm, 9 ft.\*lbf)**

**NOTICE:**

**Tighten the bolts of the bearing retainer within 10 minutes of applying the FIPG. The FIPG will dry very quickly.**

**59. INSTALL TRANSFER INDICATOR SWITCH**

- (a) Install new gaskets and the indicator switches.

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

**HINT:**

Indicator switch:

No. 2	Indicator switch (L4 position)
No. 3	Indicator switch (differential lock)