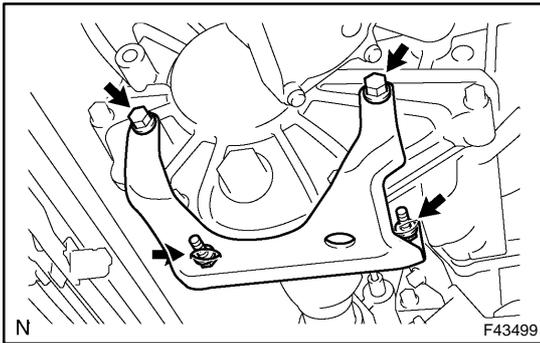


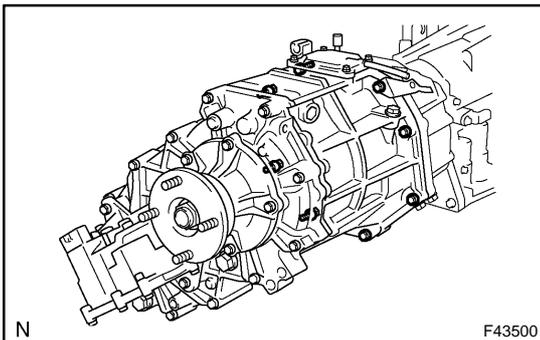
## OVERHAUL

1. REMOVE ENGINE UNDER COVER SUB-ASSY NO.1 (See page 14-34 )
2. REMOVE ENGINE UNDER COVER ASSY REAR (See page 14-34 )
3. DISCONNECT OXYGEN SENSOR (See page 14-34 )
4. REMOVE EXHAUST PIPE ASSY (See page 15-1 )
5. REMOVE PROPELLER SHAFT ASSY FRONT (See Pub. No. RM1001U, page 30-4)
6. REMOVE PROPELLER SHAFT ASSY (See Pub. No. RM1001U, page 30-11)
7. DRAIN AUTOMATIC TRANSMISSION FLUID (See page 40-9 )
8. DRAIN TRANSFER OIL
9. REMOVE FRONT SUSPENSION MEMBER BRACKET (See page 14-34 )
10. REMOVE FRONT SUSPENSION MEMBER BRACKET LH (See page 14-34 )
11. REMOVE TRANSMISSION OIL FILLER TUBE SUB-ASSY (See page 40-9 )
12. DISCONNECT OIL COOLER OUTLET TUBE NO.1 (See page 40-9 )  
SST 09023-12700
13. REMOVE OIL COOLER INLET TUBE NO.1 (See page 40-9 )  
SST 09023-12700
14. DISCONNECT TRANSMISSION CONTROL CABLE ASSY (See page 40-9 )
15. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO.1 (See page 40-9 )

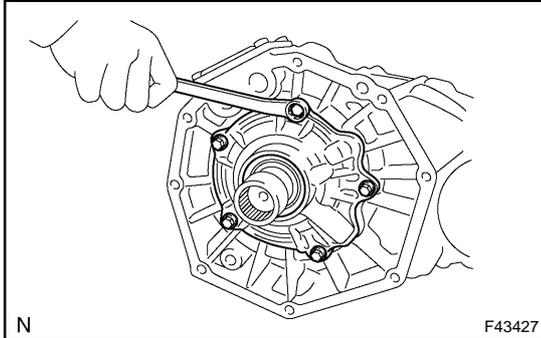


16. REMOVE TRANSFER CASE LOWER PROTECTOR
  - (a) Remove the 4 bolts and transfer case lower protector.

17. SUPPORT AUTOMATIC TRANSMISSION W/TRANSFER (See page 40-9 )
18. REMOVE FRAME CROSSMEMBER SUB-ASSY NO.3 (See page 40-9 )
19. DISCONNECT CONNECTOR (See page 40-9 )
20. DISCONNECT WIRE HARNESS (See page 40-9 )
21. REMOVE STARTER ASSY (See page 14-34 )
22. REMOVE MANIFOLD STAY (See page 14-34 )
23. REMOVE MANIFOLD STAY NO.2 (See page 14-34 )
24. SEPARATE FRONT DIFFERENTIAL ASSY (See page 40-9 )
25. REMOVE AUTOMATIC TRANSMISSION W/TRANSFER (See page 40-9 )



26. REMOVE TRANSFER ASSY
  - (a) Remove the 8 bolts and 2 clamps.
  - (b) Remove the transfer from the automatic transmission.

**27. REMOVE HOSE****28. REMOVE TRANSFER FRONT BEARING RETAINER SUB-ASSY**

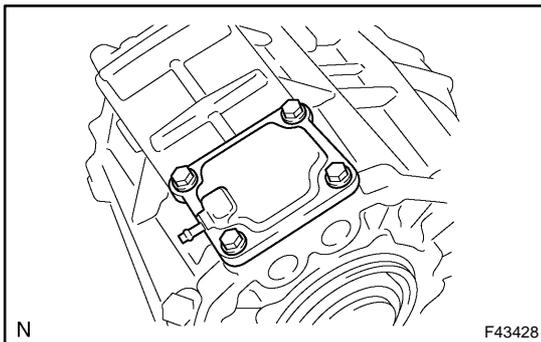
- (a) Remove the 5 bolts and front bearing retainer sub-assy.

HINT:

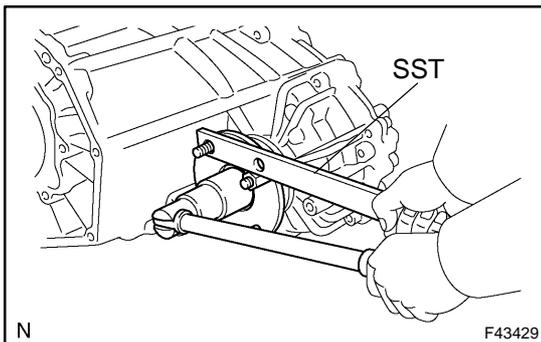
If necessary, tap the front bearing retainer sub-assy with a plastic hammer to remove it.

**29. REMOVE TRANSFER COVER TYPE T OIL SEAL**

- (a) Using a screwdriver and hammer, remove the oil seal from the front bearing retainer sub-assy.

**30. REMOVE TRANSFER CASE COVER SUB-ASSY**

- (a) Remove the 4 bolts and case cover sub-assy.

**31. REMOVE BREATHER OIL DEFLECTOR****32. REMOVE OUTPUT SHAFT COMPANION FLANGE SUB-ASSY**

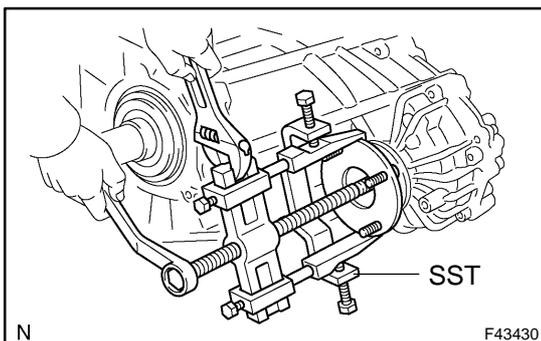
- (a) Using a chisel and hammer, loosen the staked part of the output shaft companion flange lock nut.

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

SST 09330-00021

- (c) Using SST, remove the output shaft companion flange sub-assy.

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



**33. REMOVE TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL**

- (a) Using a screwdriver and hammer, remove the oil seal from the output shaft companion flange sub-assy.

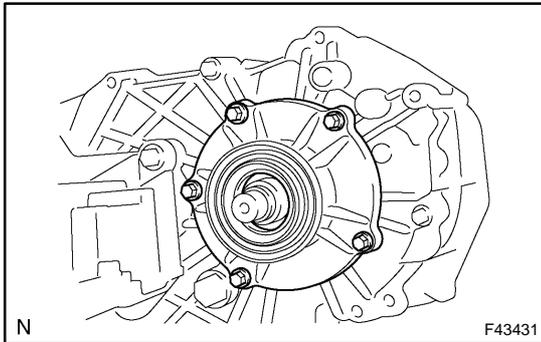
**34. REMOVE OUTPUT SHAFT COMPANION FLANGE SUB-ASSY**

- (a) Remove the rear output shaft companion flange sub-assy in the same way as the front output shaft companion flange sub-assy.

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

**35. REMOVE TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL**

- (a) Using a screwdriver and hammer, remove the oil seal from the rear output shaft companion flange sub-assy.

**36. REMOVE TRANSFER EXTENSION HOUSING SUB-ASSY REAR**

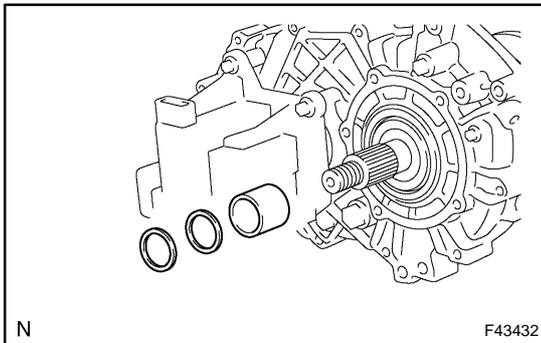
- (a) Remove the 5 bolts and extension housing sub-assy rear.

**HINT:**

If necessary, tap the extension housing sub-assy rear with a plastic hammer to remove it.

**37. REMOVE OIL (TRANSFER EXTENSION HOUSING SUB-ASSY REAR) SEAL**

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

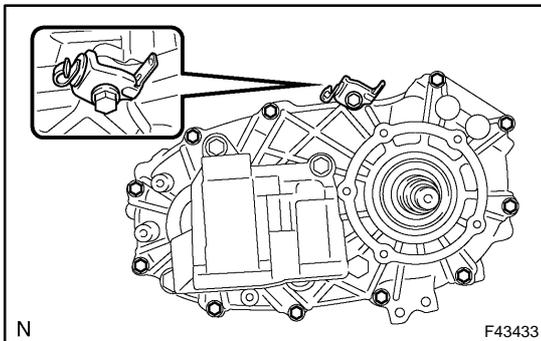
**38. REMOVE TRANSFER OUTPUT WASHER****39. REMOVE COLLAR****40. REMOVE TRANSFER CASE REAR**

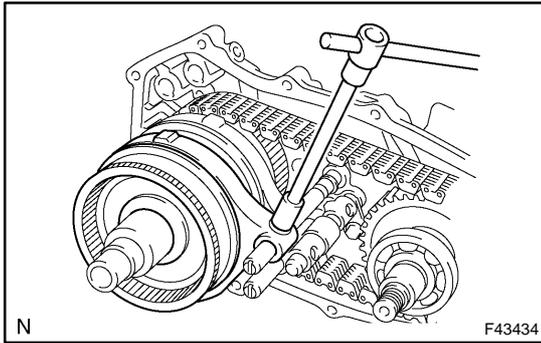
- (a) Remove the 12 bolts and clamp.

- (b) Remove the transfer case rear.

**HINT:**

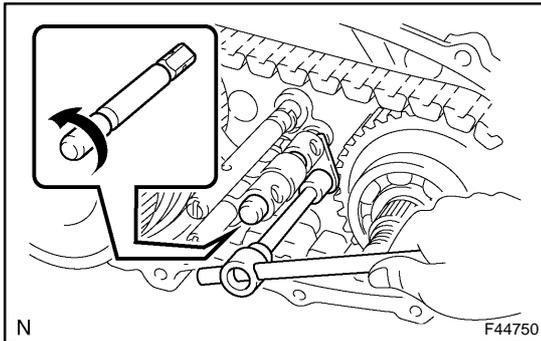
If necessary, tap the transfer case rear with a plastic hammer to remove it.





**41. REMOVE TRANSFER GEAR SHIFT FORK NO.2 W/TRANSFER HIGH AND LOW CLUTCH SLEEVE**

- (a) Remove the bolt, gear shift fork No.2 and high and low clutch sleeve.

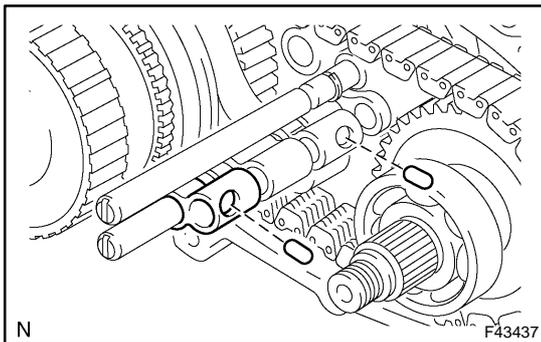


**42. REMOVE TRANSFER SHIFT SHAFT STOPPER**

- (a) Remove the bolt and shift shaft stopper.

**43. REMOVE TRANSFER FRONT DRIVE SHIFT FORK SHAFT**

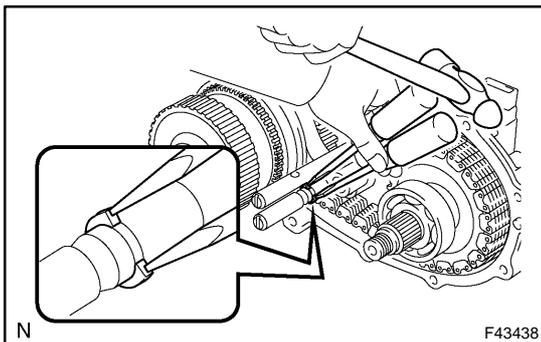
- (a) Turn the front drive shift fork shaft, and remove it from the rear case aligning the cut out position and the inter-lock pin position.



**44. REMOVE ROLLER SHIFT INTER-LOCK PIN**

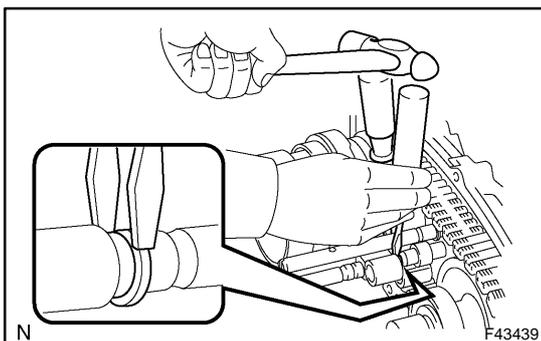
- (a) Using a magnetic finger, remove the 2 shift inter-lock pin.

**45. REMOVE NO.2 STOPPER TRANSFER SHIFT SHAFT**

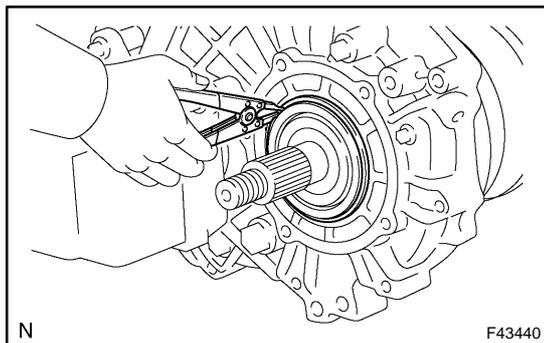


**46. REMOVE REAR OUTPUT SHAFT SUB-ASSY, GEAR SHIFT FORK NO.1, FRONT DRIVE CLUTCH SLEEVE, FRONT DRIVE CHAIN AND DRIVEN SPROCKET**

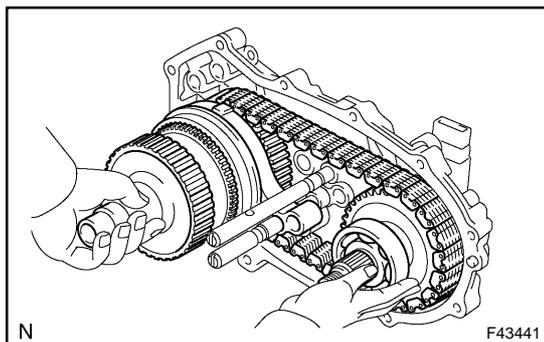
- (a) Using 2 screwdrivers and a hammer, tap out the snap ring.



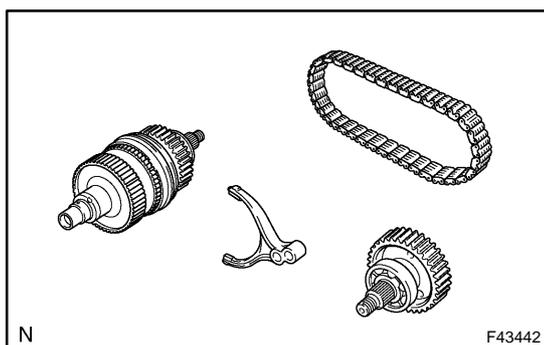
- (b) Using 2 screwdrivers and a hammer, tap out the snap ring.



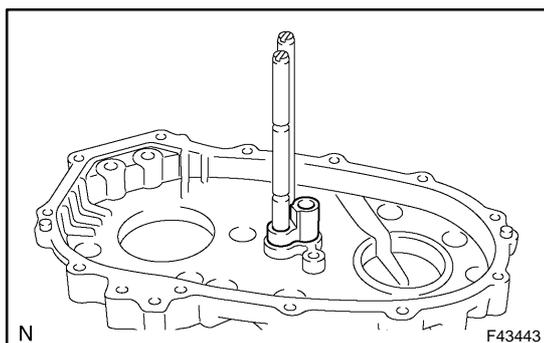
- (c) Using a snap ring expander, remove the snap ring.



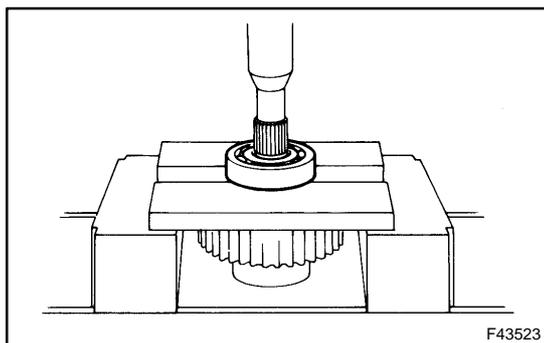
- (d) Mount the transfer case rear in a vise.  
 (e) Using a plastic hammer, carefully tap the transfer case rear, and remove the rear output shaft sub-assy together with gear shift fork No.1, front drive clutch sleeve, front drive chain and driven sprocket sub-assy.



- (f) Remove the rear output shaft sub-assy, gear shift fork No.1, front drive chain and driven sprocket sub-assy.

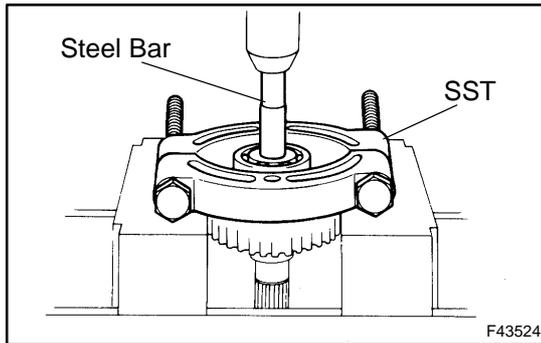


#### 47. REMOVE NO.2 STOPPER TRANSFER SHIFT SHAFT



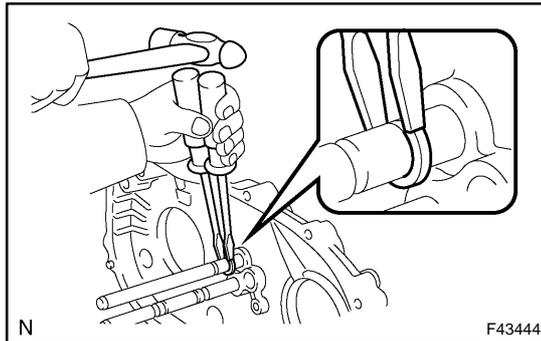
#### 48. REMOVE TRANSFER DRIVEN SPROCKET BEARING

- (a) Using a press, remove the driven sprocket bearing.



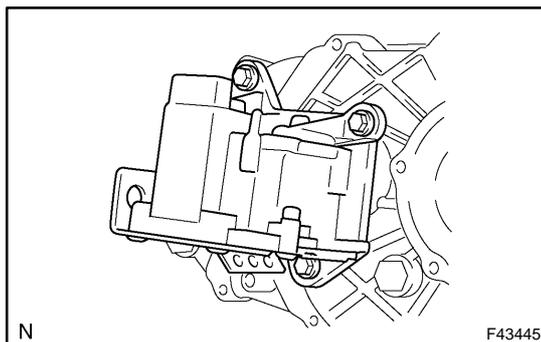
#### 49. REMOVE TRANSFER INPUT GEAR RADIAL BALL BEARING

- (a) Using SST, a press and steel bar, remove the transfer input gear radial ball bearing.  
SST 09555-55010



#### 50. REMOVE TRANSFER SHIFT ACTUATOR ASSY

- (a) Using 2 screwdrivers and a hammer, tap out the snap ring.



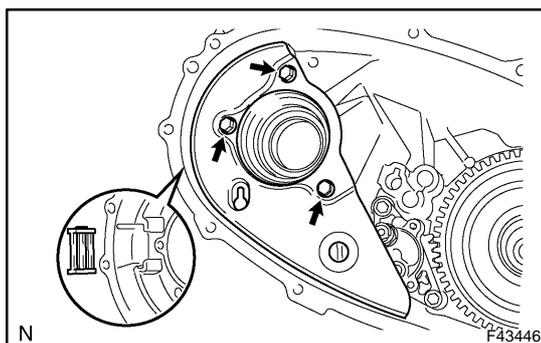
- (b) Remove the 3 bolts and transfer shift actuator assy.

#### 51. REMOVE TRANSFER CASE NO.1 PLUG

- (a) Remove the transfer case No.1 plug (filler plug) and gasket.

#### 52. REMOVE TRANSFER CASE NO.1 PLUG

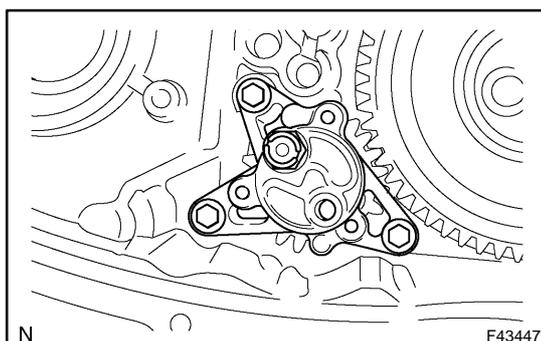
- (a) Remove the transfer case No.1 plug (drain plug) and gasket.



#### 53. REMOVE TRANSFER OIL SEPARATOR SUB-ASSY

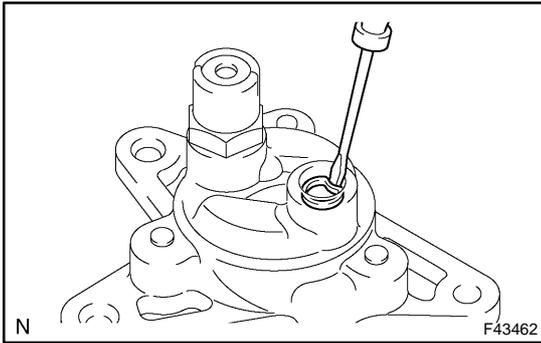
- (a) Remove the 3 bolts and oil separator sub-assy.

#### 54. REMOVE TRANSFER CASE MAGNET

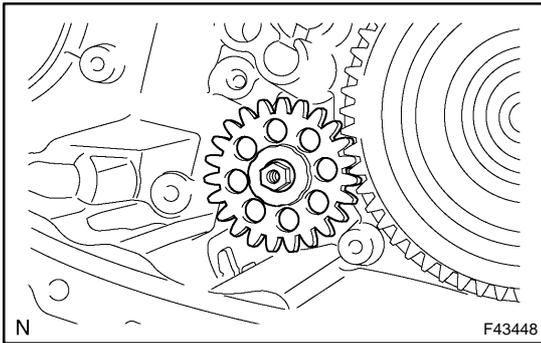


#### 55. REMOVE TRANSFER OIL PUMP BODY SUB-ASSY

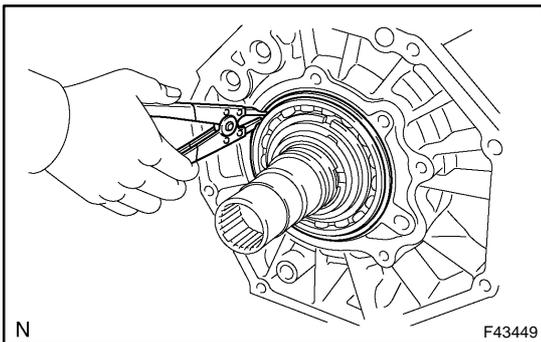
- (a) Remove the 3 bolts and oil pump body sub-assy.



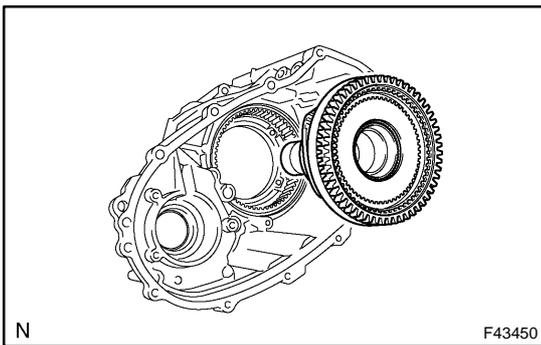
- 56. REMOVE TRANSFER OIL PUMP BODY O-RING**  
 (a) Using a screwdriver, remove the oil pump body O-ring.



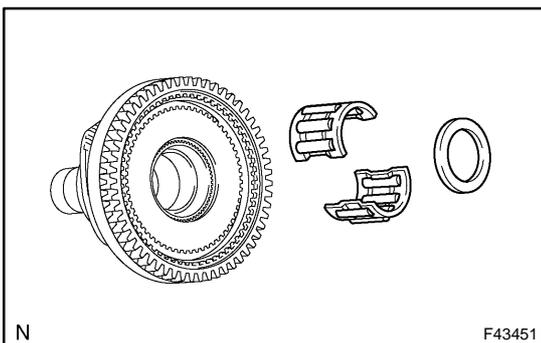
- 57. REMOVE TRANSFER OIL PUMP GEAR**



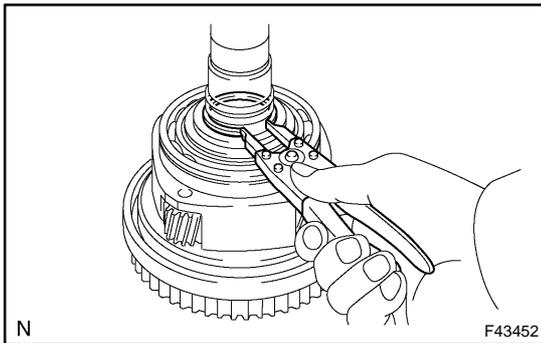
- 58. REMOVE LOW PLANETARY GEAR ASSY W/INPUT SHAFT SUB-ASSY**  
 (a) Using a snap ring expander, remove the snap ring.



- (b) Remove the low planetary gear assy and input shaft sub-assy.

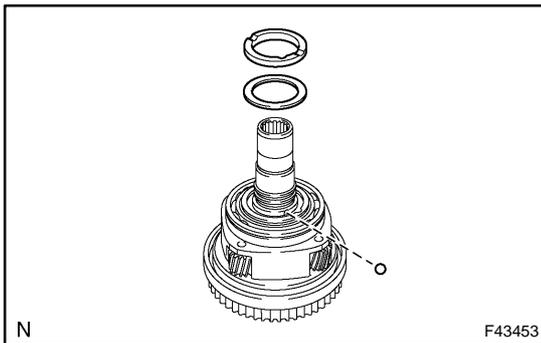


- 59. REMOVE TRANSFER OUTPUT SHAFT SPACER**  
**60. REMOVE TRANSFER OUTPUT SHAFT FRONT NEEDLE ROLLER BEARING**  
**61. REMOVE TRANSFER CASE OIL SEAL**  
 (a) Using a screwdriver and hammer, remove the transfer case oil seal.

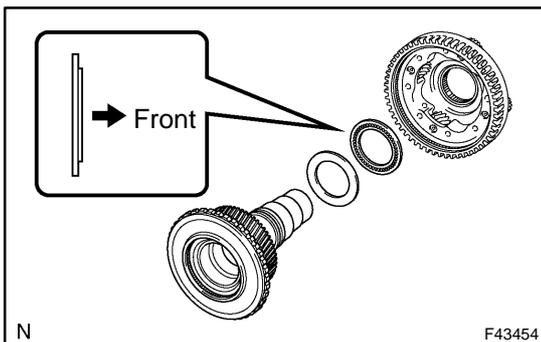


**62. REMOVE TRANSFER INPUT GEAR STOPPER SHAFT SNAP RING**

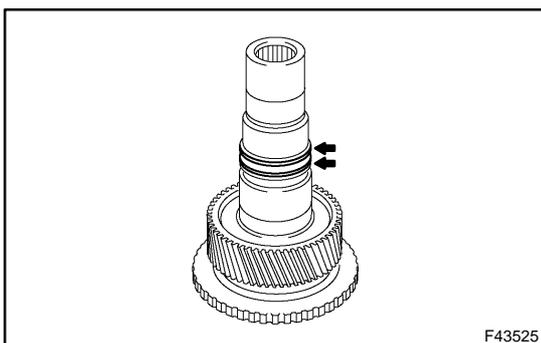
- (a) Using a snap ring expander, remove the input gear stopper shaft snap ring.



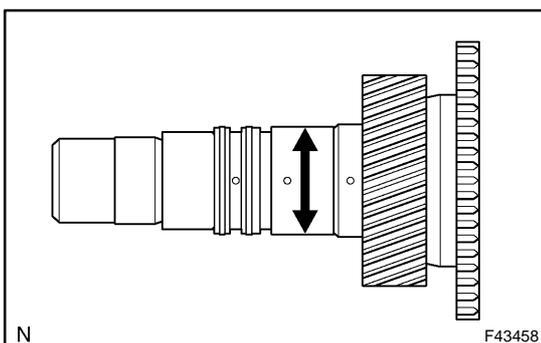
- 63. REMOVE TRANSFER INPUT GEAR STOPPER**  
**64. REMOVE TRANSFER INPUT GEAR STOPPER BALL**  
**65. REMOVE MANUAL TRANSFER PLANETARY CARR WASHER**



- 66. REMOVE SHAFT, TRANSFER INPUT**  
**67. REMOVE TRANSFER THRUST BEARING RACE NO.1**  
**68. REMOVE TRANSFER LOW PLANETARY GEAR BEARING**



- 69. REMOVE TRANSFER INPUT SHAFT SEAL RING NO.1**

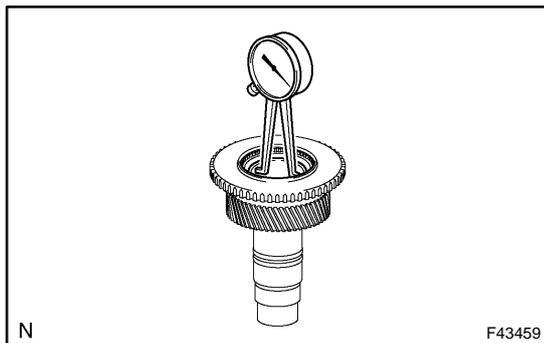


**70. INSPECT SHAFT, TRANSFER INPUT**

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

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

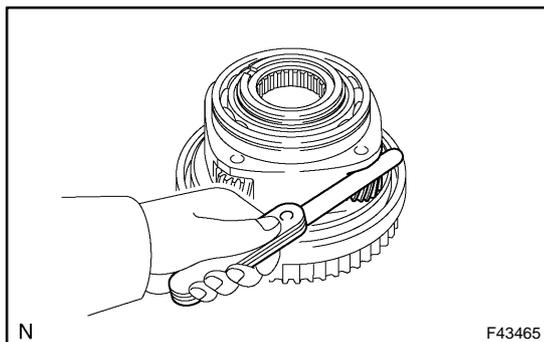
If the outer diameter is less than the minimum, replace the input shaft.



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

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

If the inside diameter exceeds the maximum, replace the input shaft.



#### 71. INSPECT PLANETARY PINION GEAR THRUST CLEARANCE

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

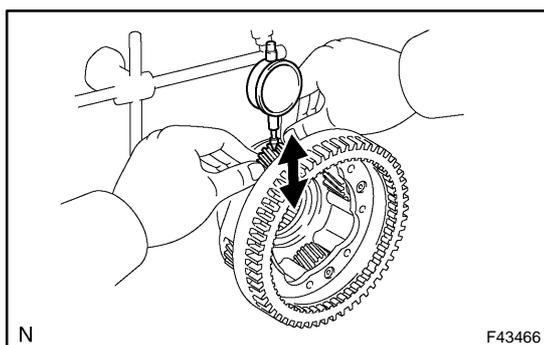
**Standard clearance:**

**0.11 - 0.84 mm (0.0043 - 0.0331 in.)**

**Maximum clearance:**

**0.84 mm (0.0331 in.)**

If the clearance exceeds the maximum, replace the planetary gear assy.



#### 72. INSPECT PLANETARY PINION GEAR RADIAL CLEARANCE

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

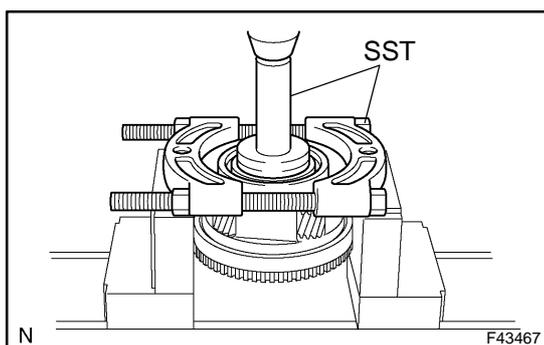
**Standard clearance:**

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

**Maximum clearance:**

**0.038 mm (0.0015 in.)**

If the clearance exceeds the maximum, replace the planetary gear assy.

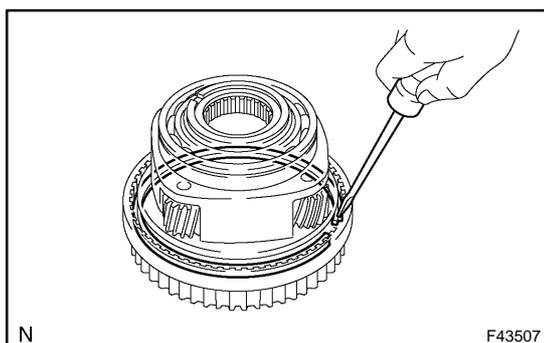


#### 73. REMOVE TRANSFER INPUT SHAFT BEARING

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

- (b) Using SST and a press, remove the input shaft bearing.

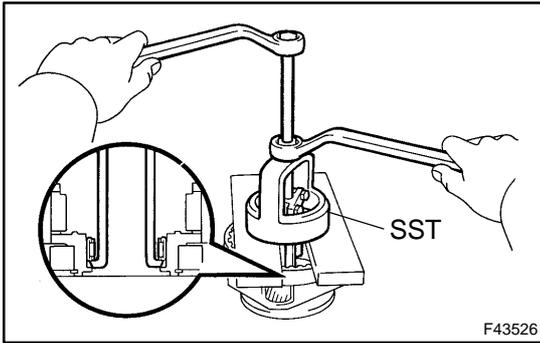
SST 09554-3001 1, 09555-55010



#### 74. REMOVE TRANSFER LOW PLANETARY GEAR SPLINE PIECE

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

- (b) Remove the low planetary gear spline piece.



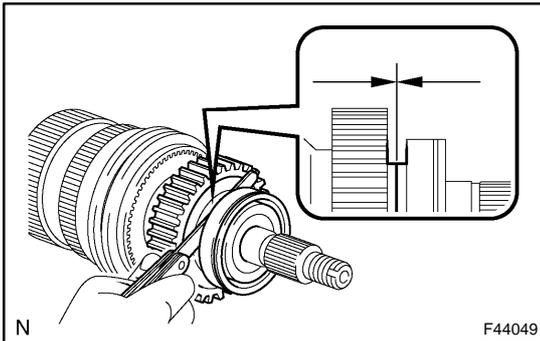
### 75. REMOVE TRANSFER LOW PLANETARY GEAR BEARING

- (a) Using SST, remove the low planetary gear bearing.

#### NOTICE:

Hang SST securely to the clearance between the bearing and low planetary gear.

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



### 76. INSPECT DRIVE SPROCKET THRUST CLEARANCE

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

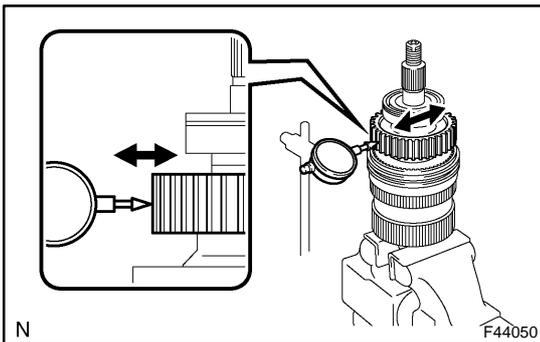
**Standard clearance:**

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

**Maximum clearance:**

**0.24 mm (0.0094 in.)**

If the clearance exceeds the maximum, replace the drive sprocket.



### 77. INSPECT DRIVE SPROCKET RADIAL CLEARANCE

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

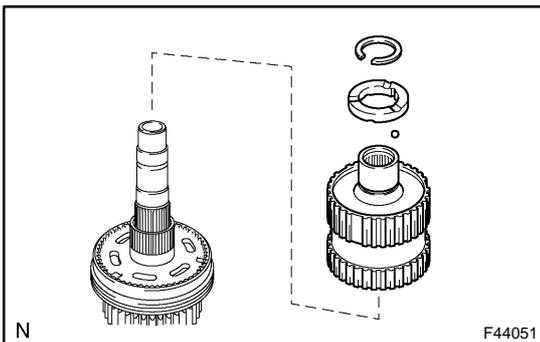
**Standard clearance:**

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

**Maximum clearance:**

**0.06 mm (0.0024 in.)**

If the clearance exceeds the maximum, replace the drive sprocket, output shaft rear or needle roller bearing.



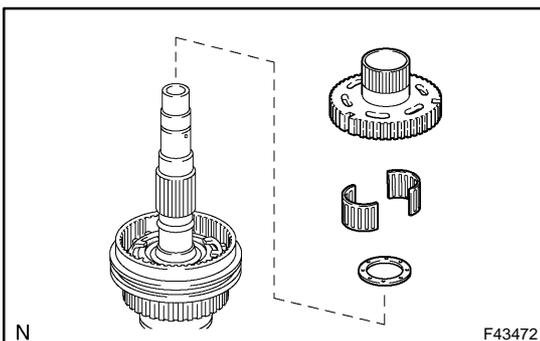
### 78. REMOVE TRANSFER LOW PLANETARY RING GEAR HOLE SNAP RING

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

### 79. REMOVE TRANSFER OUTPUT SHAFT SPACER NO.2

### 80. REMOVE TRANSFER OUTPUT SHAFT SPACER BALL

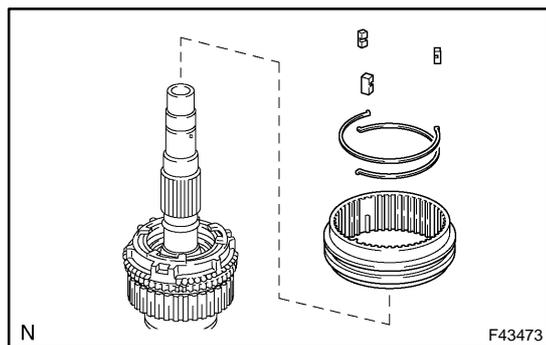
### 81. REMOVE CENTER DIFFERENTIAL CASE



### 82. REMOVE TRANSFER CLUTCH HUB

### 83. REMOVE TRANSFER OUTPUT SHAFT FRONT NEEDLE ROLLER BEARING

### 84. REMOVE TRANSFER OUTPUT SHAFT PLATE WASHER



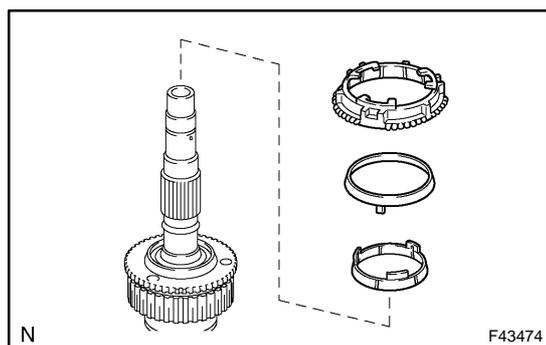
**85. REMOVE TRANSFER SYNCHROMESH SHIFTING KEY SPRING**

(a) Using a screwdriver, remove the 2 shifting key springs.

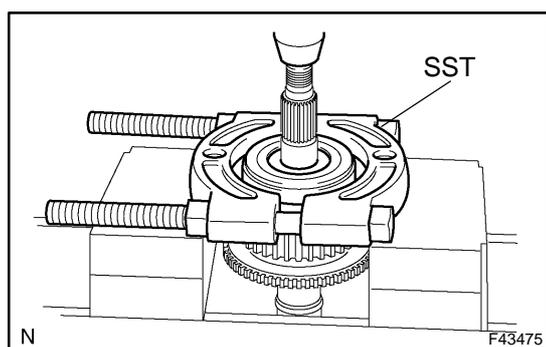
**86. REMOVE SYNCHROMESH SHIFTING KEY TRANSFER DRIVE**

(a) Remove the 3 shifting keys.

**87. REMOVE FRONT DRIVE CLUTCH SLEEVE**



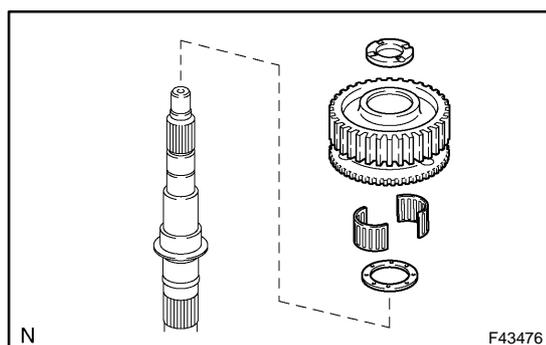
**88. REMOVE TRANSFER SYNCHRONIZER RING SET**



**89. REMOVE TRANSFER OUTPUT SHAFT REAR RADIAL BALL BEARING**

(a) Using SST and a press, remove the output shaft rear radial ball bearing.

SST 09555-55010

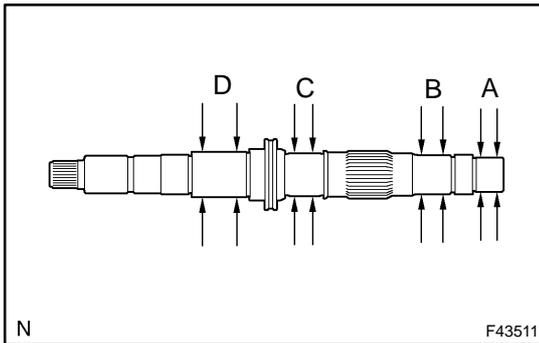


**90. REMOVE TRANSFER OUTPUT SHAFT SPACER NO.1**

**91. REMOVE TRANSFER DRIVE SPROCKET SUB-ASSY**

**92. REMOVE TRANSFER DRIVE SPROCKET BEARING**

**93. REMOVE TRANSFER OUTPUT SHAFT PLATE WASHER**

**94. INSPECT TRANSFER OUTPUT SHAFT REAR**

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

**Standard diameter:**

**Part A: 27.98 - 27.99 mm (1.1016 - 1.1020 in.)**

**Part B: 31.98 - 32.00 mm (1.2591 - 1.2598 in.)**

**Part C: 34.98 - 35.00 mm (1.3772 - 1.3780 in.)**

**Part D: 36.98 - 37.00 mm (1.4559 - 1.4567 in.)**

**Minimum Diameter:**

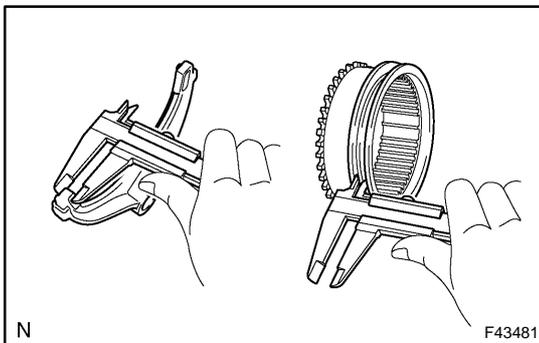
**Part A: 27.98 mm (1.1016 in.)**

**Part B: 31.98 mm (1.2591 in.)**

**Part C: 34.98 mm (1.3772 in.)**

**Part D: 36.98 mm (1.4559 in.)**

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

**95. INSPECT HIGH AND LOW CLUTCH SLEEVE AND GEAR SHIFT FORK NO.2 CLEARANCE**

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

**Thickness: 10 mm (0.3937 in.)**

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

**Distance: 10.5 mm (0.4134 in.)**

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

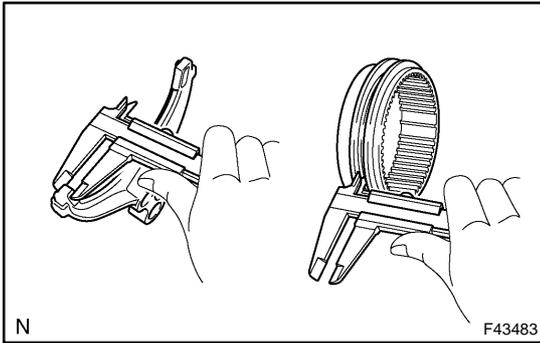
**Standard clearance:**

**0.26 - 0.84 mm (0.0102 - 0.0331 in)**

**Maximum clearance:**

**0.84 mm (0.0331 in.)**

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



**96. INSPECT FRONT DRIVE CLUTCH SLEEVE AND GEAR SHIFT FORK NO.1**

- (a) Using vernier calipers, measure the thickness of the gear shift fork No.1 claw.

**Thickness: 10 mm (0.3937 in.)**

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

**Distance: 10.5 mm (0.4134 in.)**

- (c) Calculate a clearance between the front drive clutch sleeve and gear shift fork No.1.

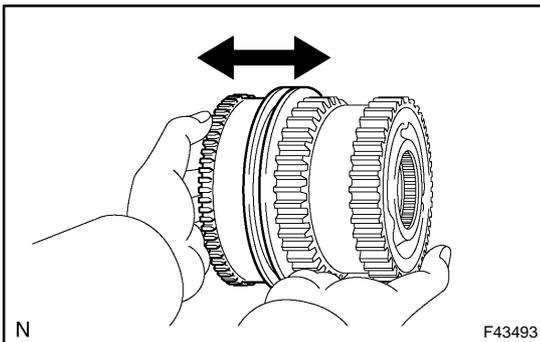
**Standard clearance:**

**0.26 - 0.84 mm (0.0102 - 0.0331 in.)**

**Maximum clearance:**

**0.84 mm (0.0331 in.)**

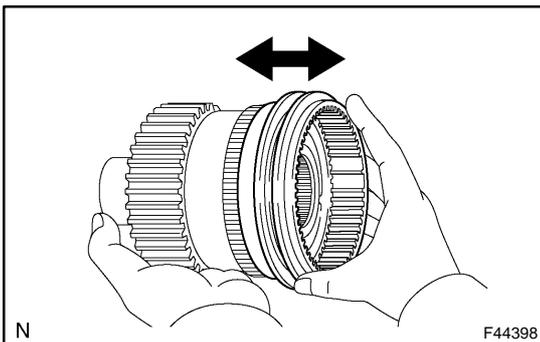
If the clearance exceeds the maximum, replace the front drive clutch sleeve or gear shift fork No.1.



**97. INSPECT CENTER DIFFERENTIAL CASE AND HIGH AND LOW CLUTCH SLEEVE**

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

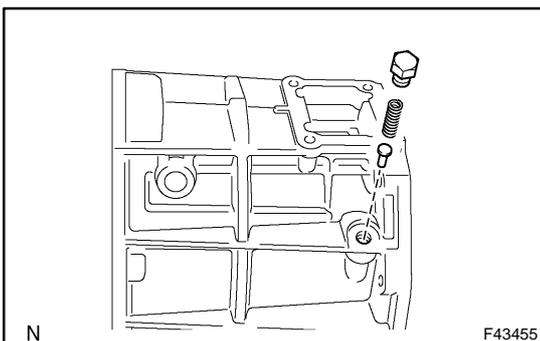
- (b) Install the front drive clutch sleeve to the center differential case and check that the front drive clutch sleeve moves smoothly.



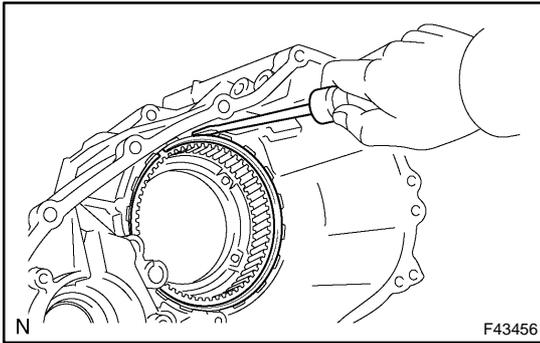
**98. INSPECT CENTER DIFFERENTIAL CASE AND FRONT DRIVE CLUTCH SLEEVE**

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

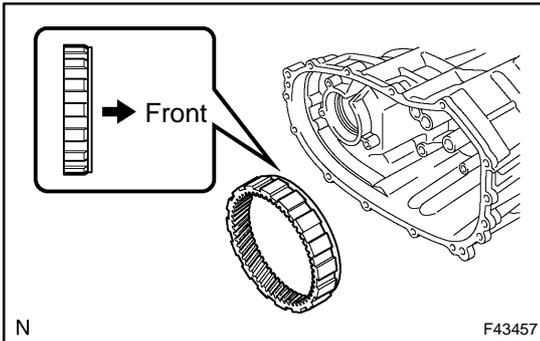
- (b) Install the front drive clutch sleeve to the center differential case and check that the front drive clutch sleeve moves smoothly.



- 99. REMOVE TRANSFER CASE PLUG**  
**100. REMOVE SPRING, COMPRESSION**  
**101. REMOVE PIN, W/HEAD**

**102. REMOVE TRANSFER LOW PLANETARY RING GEAR**

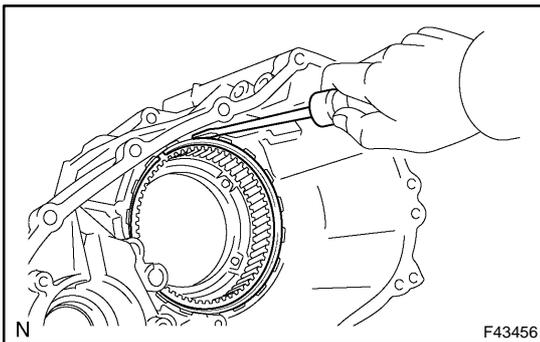
- (a) Using a screwdriver, remove the snap ring.



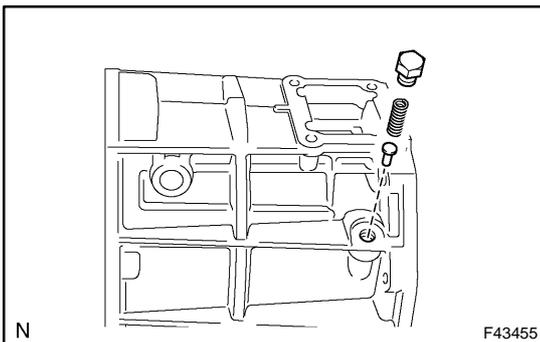
- (b) Remove the low planetary ring gear from the front case.

**103. INSTALL TRANSFER LOW PLANETARY RING GEAR**

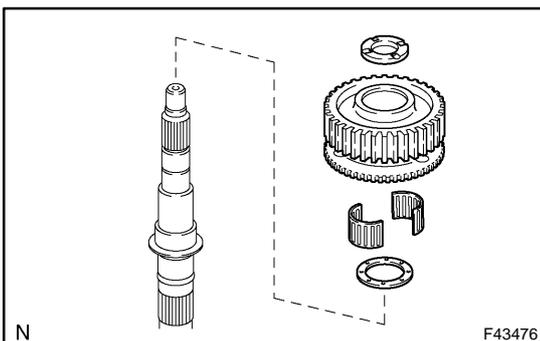
- (a) Install the low planetary ring gear to the front case.

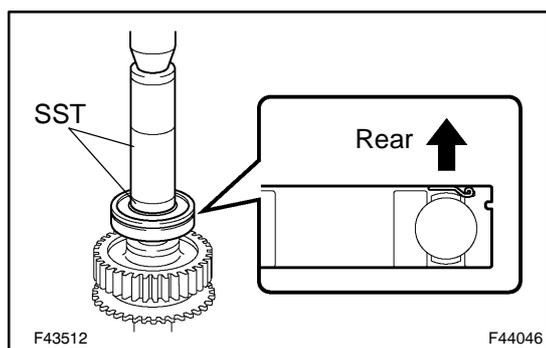


- (b) Using a screwdriver, install the snap ring.

**104. INSTALL PIN, W/HEAD****105. INSTALL SPRING, COMPRESSION****106. INSTALL TRANSFER CASE PLUG**

Torque: 18.6 N·m (190 kgf·cm, 14 ft·lbf)

**107. INSTALL TRANSFER OUTPUT SHAFT PLATE WASHER****108. INSTALL TRANSFER DRIVE SPROCKET BEARING****109. INSTALL TRANSFER DRIVE SPROCKET SUB-ASSY****110. INSTALL TRANSFER OUTPUT SHAFT SPACER NO.1**



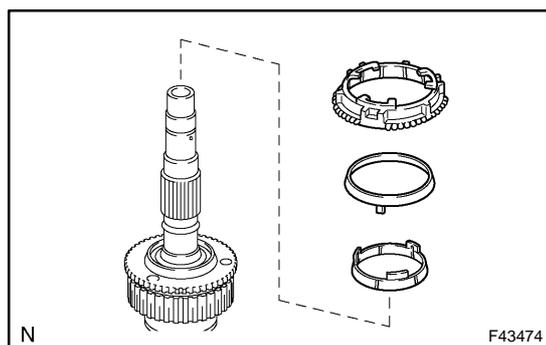
### 111. INSTALL TRANSFER OUTPUT SHAFT REAR RADIAL BALL BEARING

- (a) Using SST and a press, install a new output shaft rear radial ball bearing.

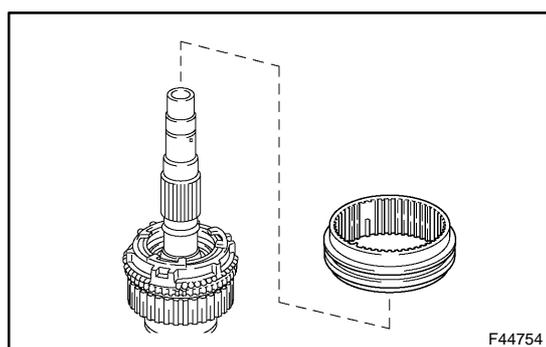
SST 09316-6001 1 (09316-00011, 09316-00071)

#### NOTICE:

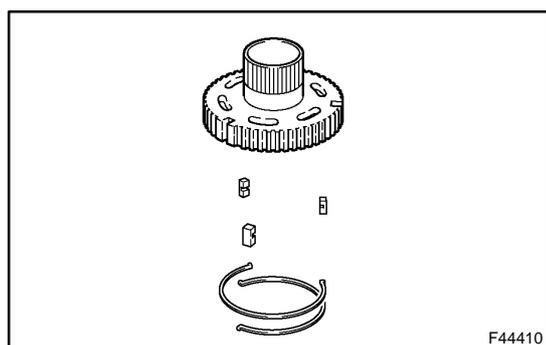
Install the output shaft rear radial ball bearing so that the bearing snap ring groove faces to the rear.



### 112. INSTALL TRANSFER SYNCHRONIZER RING SET



### 113. INSTALL FRONT DRIVE CLUTCH SLEEVE



### 114. INSTALL SYNCHROMESH SHIFTING KEY TRANSFER DRIVE

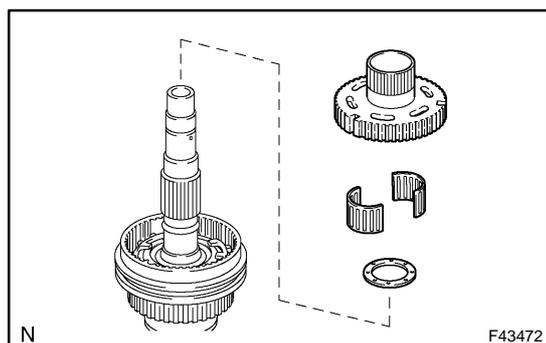
- (a) Install the 3 shifting keys to the clutch hub.

### 115. INSTALL TRANSFER SYNCHROMESH SHIFTING KEY SPRING

- (a) Install the 2 shifting key springs to the clutch hub.

#### NOTICE:

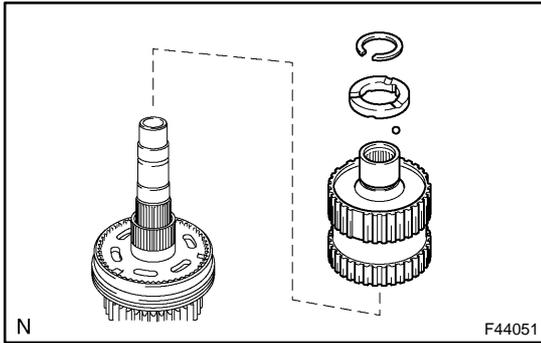
Position the shifting key springs so that their end gaps are not aligned.



### 116. INSTALL TRANSFER OUTPUT SHAFT PLATE WASHER

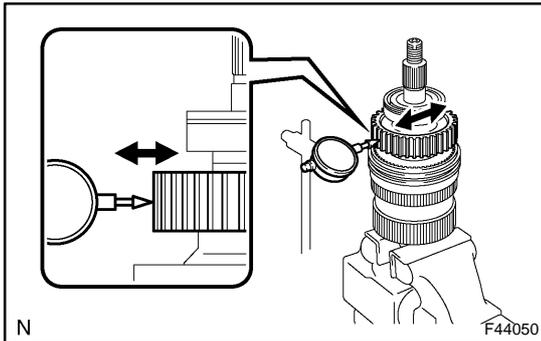
### 117. INSTALL TRANSFER OUTPUT SHAFT FRONT NEEDLE ROLLER BEARING

### 118. INSTALL TRANSFER CLUTCH HUB

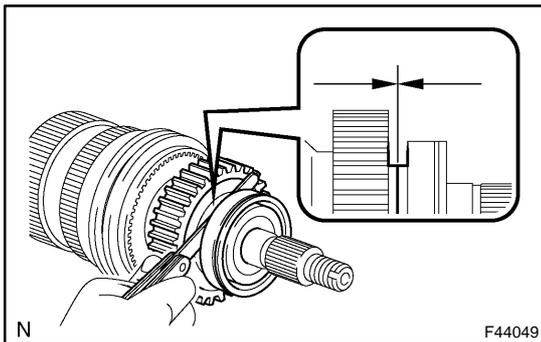


119. INSTALL CENTER DIFFERENTIAL CASE  
 120. INSTALL TRANSFER OUTPUT SHAFT SPACER BALL  
 121. INSTALL TRANSFER OUTPUT SHAFT SPACER NO.2  
 122. INSTALL TRANSFER LOW PLANETARY RING GEAR HOLE SNAP RING

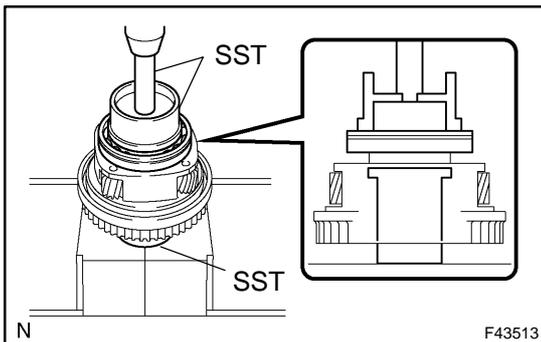
(a) Using a snap ring expander, install the snap ring.



123. INSPECT DRIVE SPROCKET RADIAL CLEARANCE  
 (See step 77)



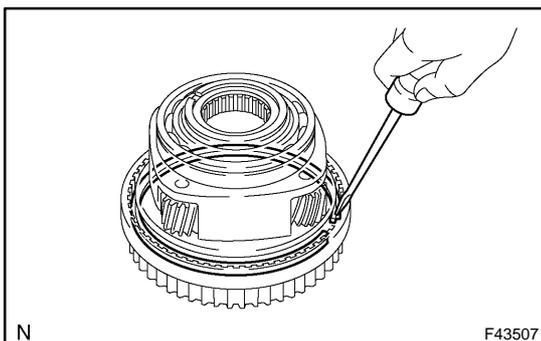
124. INSPECT DRIVE SPROCKET THRUST CLEARANCE  
 (See step 76)



125. INSTALL TRANSFER INPUT SHAFT BEARING

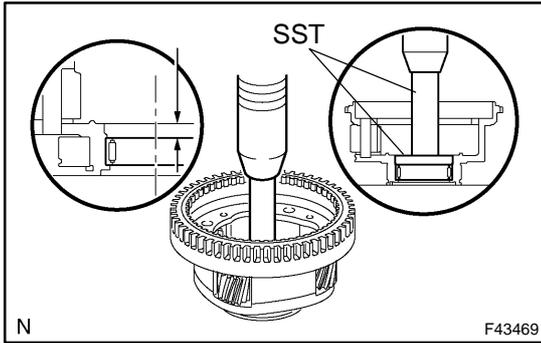
(a) Using SST and a press, install a new bearing with the groove facing forward.

SST 09223-15020, 09515-30010, 09950-70010  
 (09951-07100)



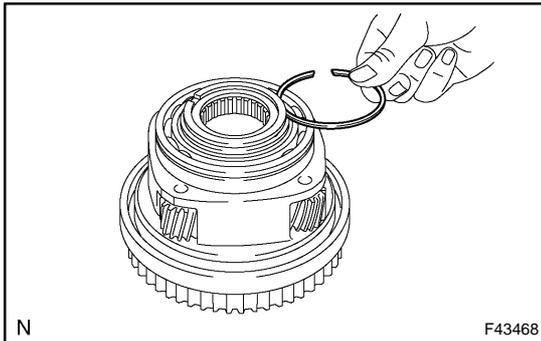
126. INSTALL TRANSFER LOW PLANETARY GEAR SPLINE PIECE

(a) Using a screwdriver, install the spline piece and low planetary gear with the snap ring.



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

- (a) Using SST and a press, drive in a new bearing.  
 SST 09950-60010 (09951-00570), 09950-70010 (09951-07100)  
**Bearing press in depth: 7.7 - 8.3 mm (0.303 - 0.327 in.)**

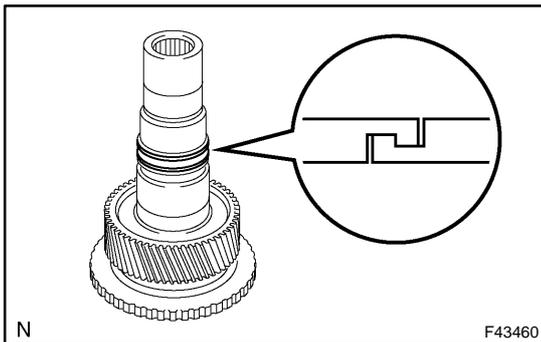


**128. INSTALL TRANSFER INPUT BEARING SHAFT SNAP RING**

- (a) Select a snap ring that allows the minimum axial play.

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

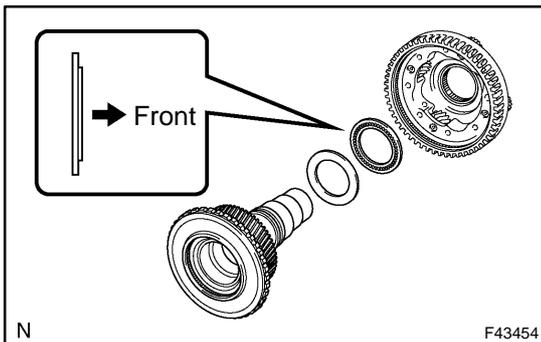
- (b) Using a snap ring expander, install a new snap ring.



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

HINT:

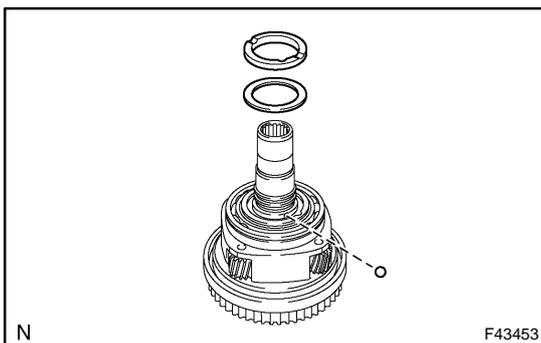
- Apply gear oil to the oil seal ring.
- Engage securely to eliminate clearance as shown in the illustration.



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

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

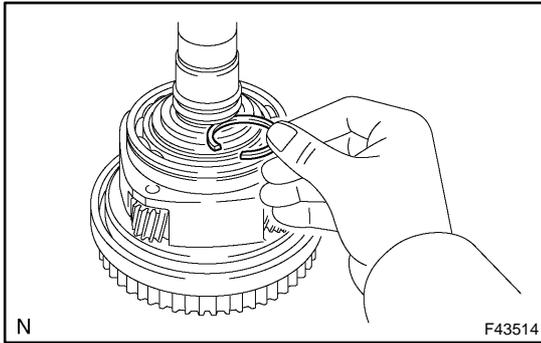
**132. INSTALL SHAFT, TRANSFER INPUT**



**133. INSTALL MANUAL TRANSFER PLANETARY CARR WASHER**

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

**135. INSTALL TRANSFER INPUT GEAR STOPPER**

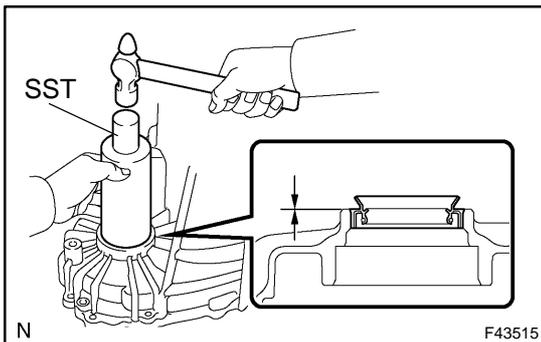


### 136. INSTALL TRANSFER INPUT GEAR STOPPER SHAFT SNAP RING

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

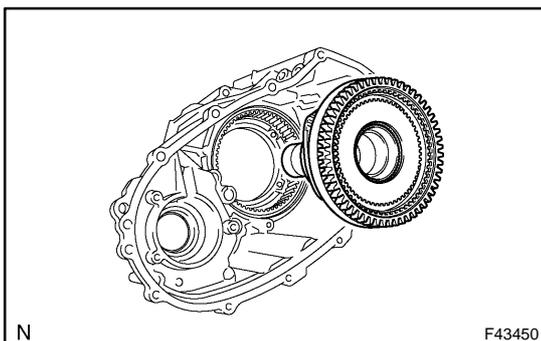
Mark	Thickness mm (in.)
A	2.10 - 2.15 (0.0827 - 0.0846)
B	2.15 - 2.20 (0.0846 - 0.0866)
C	2.20 - 2.25 (0.0866 - 0.0886)
D	2.25 - 2.30 (0.0886 - 0.0906)
E	2.30 - 2.35 (0.0906 - 0.0925)
F	2.35 - 2.40 (0.0925 - 0.0945)
G	2.40 - 2.45 (0.0945 - 0.0965)
H	2.45 - 2.50 (0.0965 - 0.0984)
J	2.50 - 2.55 (0.0984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

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



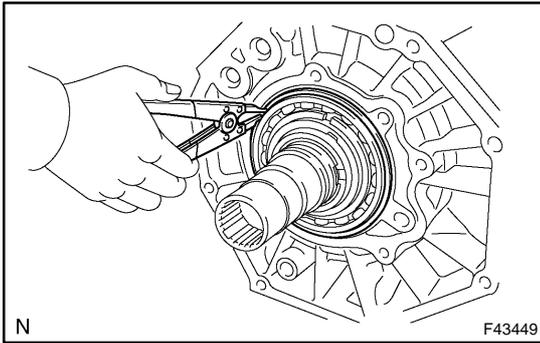
### 137. INSTALL TRANSFER CASE OIL SEAL

- (a) Using SST and a hammer, drive in a new oil seal until its surface is flush with the case upper surface.  
SST 09316-6001 1 (09316-00011)
- (b) Coat the lip of the oil seal with MP grease.

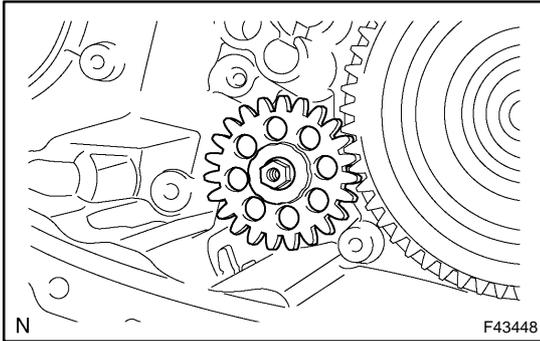


### 138. INSTALL LOW PLANETARY GEAR ASSY W/INPUT SHAFT SUB-ASSY

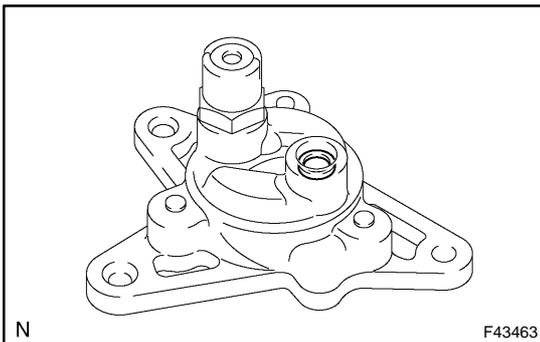
- (a) Install the low planetary gear assy and input shaft sub-assy.



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

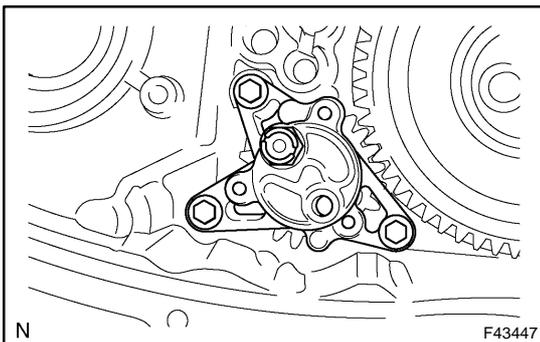


### 139. INSTALL TRANSFER OIL PUMP GEAR



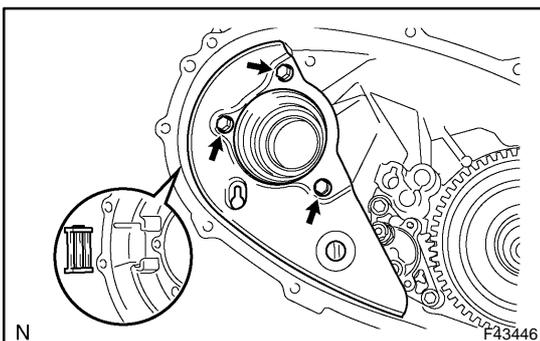
### 140. INSTALL TRANSFER OIL PUMP BODY O-RING

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



### 141. INSTALL TRANSFER OIL PUMP BODY SUB-ASSY

- (a) Install the oil pump body sub-assy with the 3 bolts.  
Torque: 7.5 N·m (80 kgf·cm, 69 in.-lbf)



### 142. INSTALL TRANSFER CASE MAGNET

### 143. INSTALL TRANSFER OIL SEPARATOR SUB-ASSY

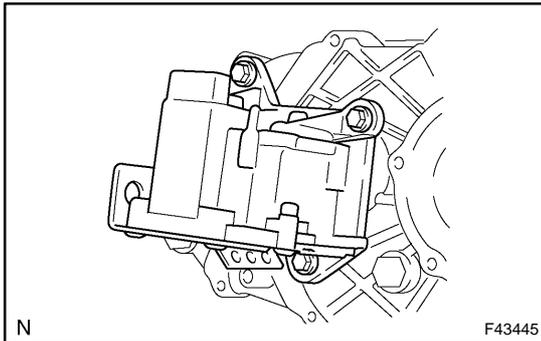
- (a) Install the oil separator sub-assy with the 3 bolts.  
Torque: 7.5 N·m (80 kgf·cm, 69 in.-lbf)

**144. INSTALL TRANSFER CASE NO.1 PLUG**

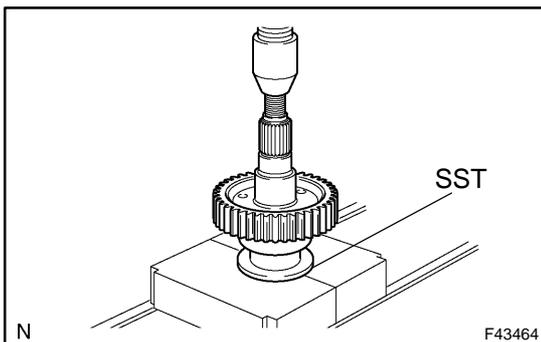
- (a) Install the case No.1 plug (filler plug) and a new gasket.  
**Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)**

**145. INSTALL TRANSFER CASE NO.1 PLUG**

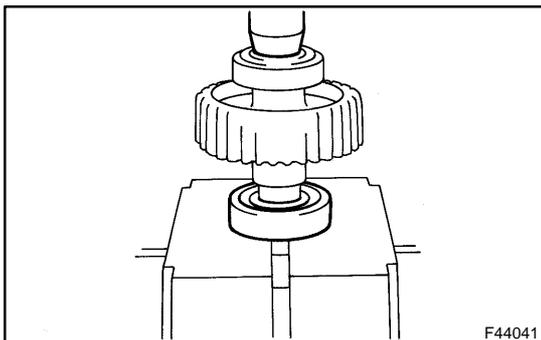
- (a) Install the case No.1 plug (drain plug) and a new gasket.  
**Torque: 37 N·m (380 kgf·cm, 27 ft·lbf)**

**146. INSTALL TRANSFER SHIFT ACTUATOR ASSY**

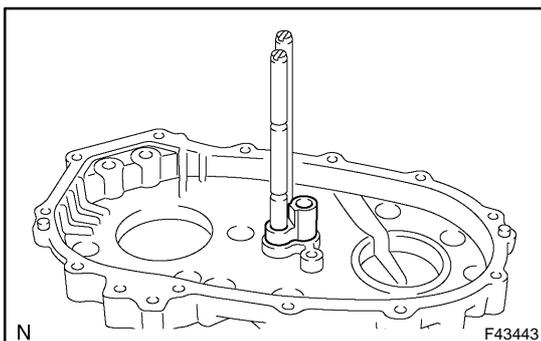
- (a) Install the actuator assy with the 3 bolts.  
**Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)**  
 (b) Using a screwdriver and hammer, drive in the snap ring.

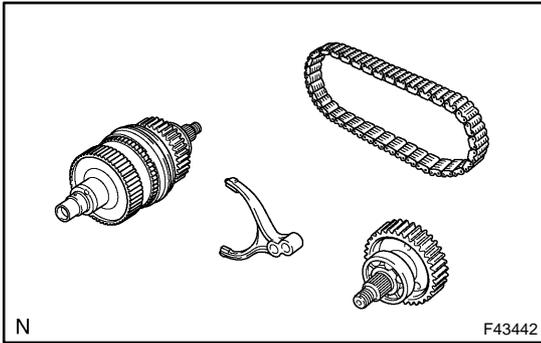
**147. INSTALL TRANSFER INPUT GEAR RADIAL BALL BEARING**

- (a) Using SST and a press, install a new input gear radial ball bearing.  
 SST 09316-6001 1 (09316-00031)

**148. INSTALL TRANSFER DRIVEN SPROCKET BEARING**

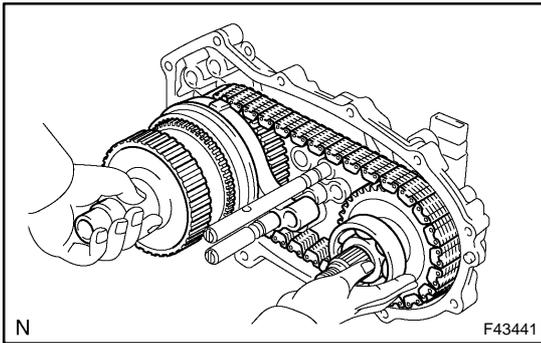
- (a) Using a press, install a new driven sprocket bearing.

**149. INSTALL NO.2 STOPPER TRANSFER SHIFT SHAFT**



**150. INSTALL REAR OUTPUT SHAFT SUB-ASSY, GEAR SHIFT FORK NO.1, FRONT DRIVE CLUTCH SLEEVE, FRONT DRIVE CHAIN AND DRIVEN SPROCKET**

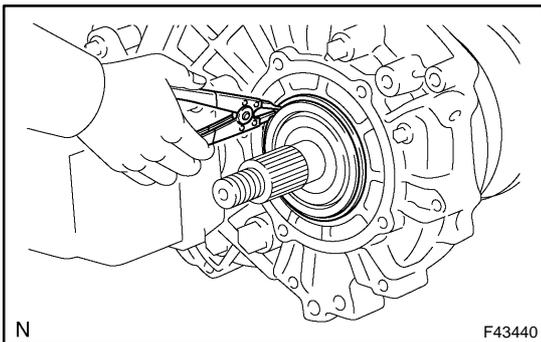
(a) Install the rear output shaft sub-assy, gear shift fork No.1 and drive sprocket to the front drive chain.



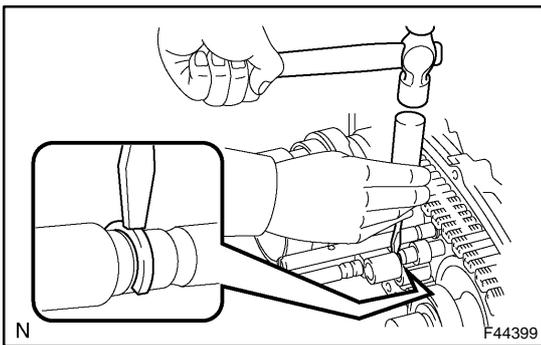
(b) Install the rear output shaft sub-assy, gear shift fork No.1, front drive clutch sleeve, front drive chain and driven sprocket sub-assy to the case rear.

**HINT:**

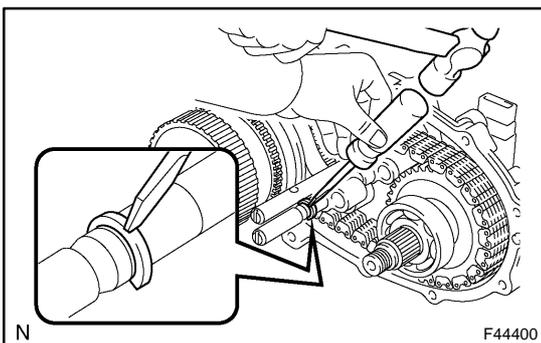
Check that the rear output shaft sub-assy and driven sprocket sub-assy turn lightly.



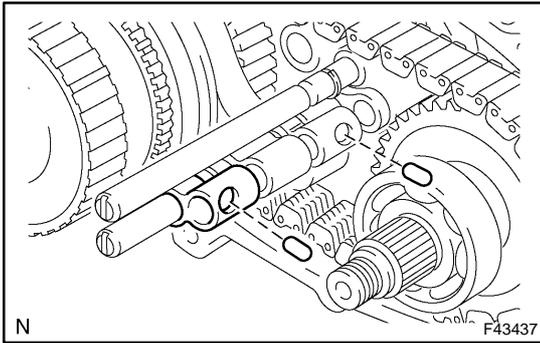
(c) Using a snap ring expander, install the snap ring.



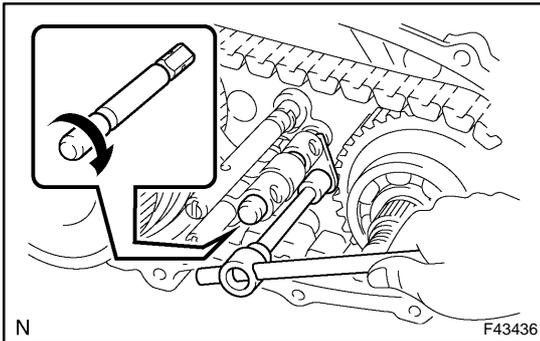
(d) Using a screwdriver and hammer, drive in the snap ring.



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



- 151. INSTALL NO.2 STOPPER TRANSFER SHIFT SHAFT**  
**152. INSTALL ROLLER SHIFT INTER-LOCK PIN**

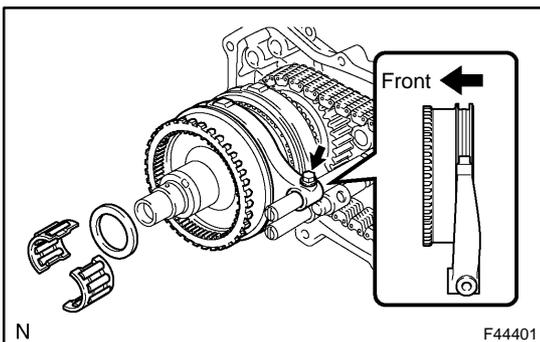


- 153. INSTALL TRANSFER FRONT DRIVE SHIFT FORK SHAFT**

- (a) Turn the front drive shift fork shaft, and install it on the rear case aligning the cut out position and the inter-lock pin position.

- 154. INSTALL TRANSFER SHIFT SHAFT STOPPER**

- (a) Install the shift shaft stopper with the bolt.  
**Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)**



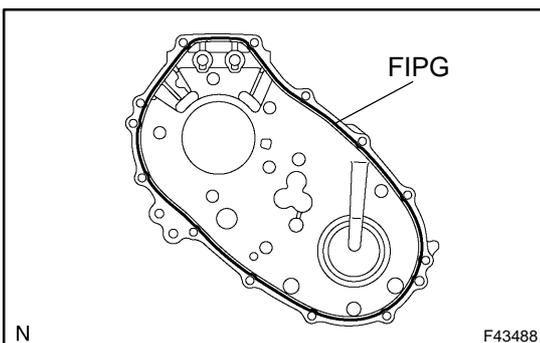
- 155. INSTALL TRANSFER GEAR SHIFT FORK NO.2 W/TRANSFER HIGH AND LOW CLUTCH SLEEVE**

- (a) Install the gear shift fork No.2 and high and low clutch sleeve.  
 (b) Install the bolt.

**Torque: 24 N·m (245 kgf·cm, 18 ft·lbf)**

- 156. INSTALL TRANSFER OUTPUT SHAFT SPACER**

- 157. INSTALL TRANSFER OUTPUT SHAFT FRONT NEEDLE ROLLER BEARING**

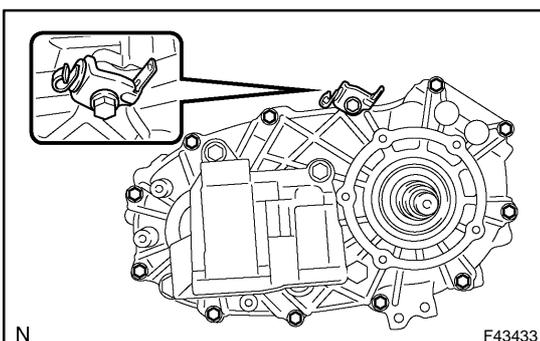


- 158. INSTALL TRANSFER CASE REAR**

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

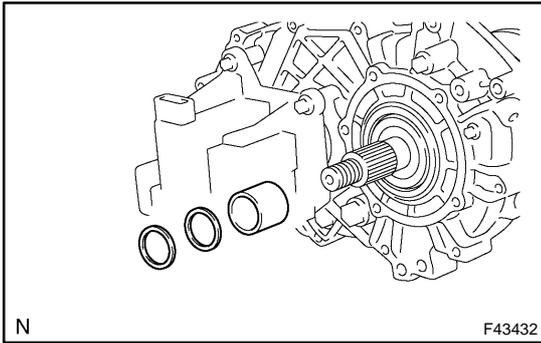
**FIPG:**

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

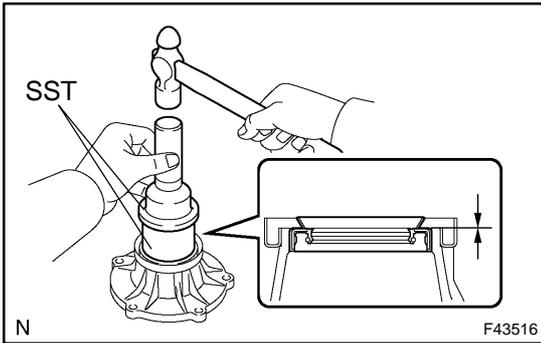


- (b) Install the clamp and case rear with the 12 bolts.

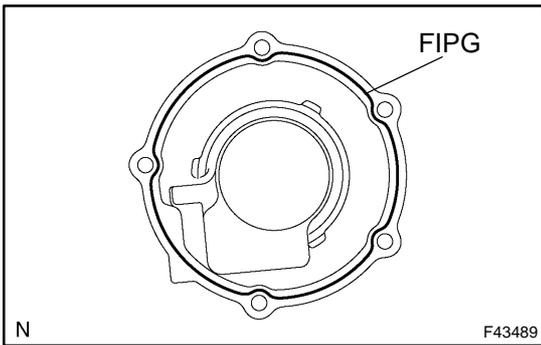
**Torque: 28 N·m (285 kgf·cm, 21 ft·lbf)**



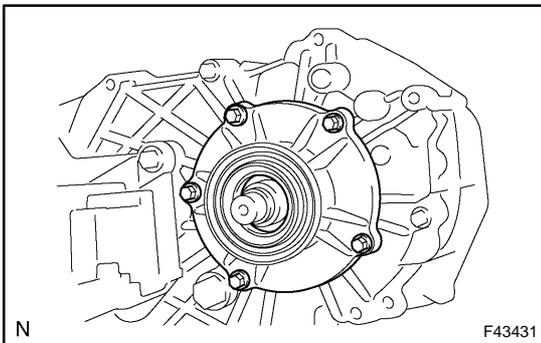
- 159. INSTALL COLLAR
- 160. INSTALL TRANSFER OUTPUT WASHER



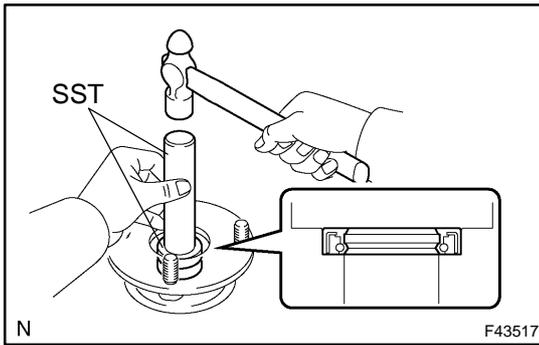
- 161. INSTALL OIL (TRANSFER EXTENSION HOUSING SUB-ASSY REAR) SEAL
  - (a) Using SST and a hammer, drive in a new oil seal until its surface is flush with the housing upper surface.  
SST 09223-4601 1, 09631-32020
  - (b) Coat the lip of the oil seal with MP grease.



- 162. INSTALL TRANSFER EXTENSION HOUSING SUB-ASSY REAR
  - (a) Apply FIPG to the extension housing sub-assy rear, as shown.  
**FIPG:**  
**Part No. 08826-00090, THREE BOND 1281 or equivalent**
  - (b) Apply sealant to the bolt threads.  
**Sealant:**  
**Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent**



- (c) Install the extension housing sub-assy rear with the 5 bolts.  
**Torque: 12 N·m (120 kgf·cm, 9 ft·lbf)**

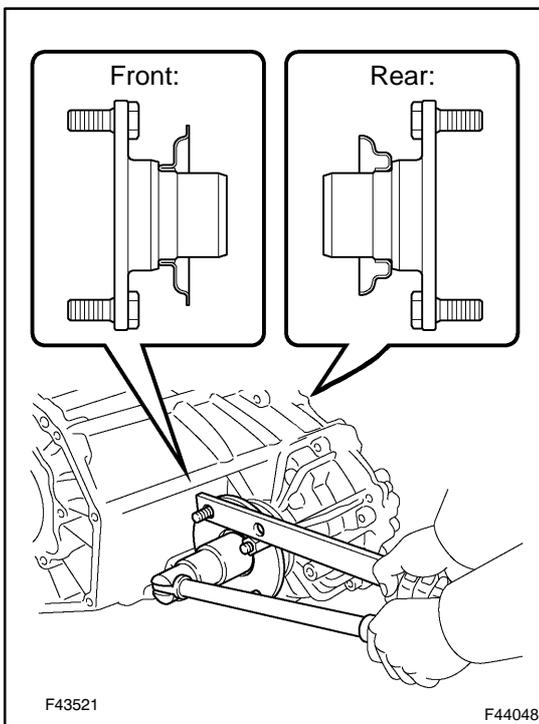


### 163. INSTALL TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL

- (a) Using SST and a hammer, drive in a new oil seal (front).  
SST 09950-60010 (09951-00320), 09950-70010 (09951-07100)
- (b) Coat the lip of the oil seal with MP grease.

### 164. INSTALL TRANSFER OUTPUT SHAFT COMPANION FLANGE OIL SEAL

- (a) Drive in a new oil seal (rear) in the same way as the oil seal (front).  
SST 09950-60010 (09951-00320), 09950-70010 (09951-07100)



### 165. INSTALL OUTPUT SHAFT COMPANION FLANGE SUB-ASSY

- (a) Install the companion flange sub-assy (front) to the drive sprocket sub-assy.
- (b) Using SST to hold the companion flange, install a new companion flange lock nut.

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

- (c) Using a chisel and hammer, stake the companion flange lock nut.

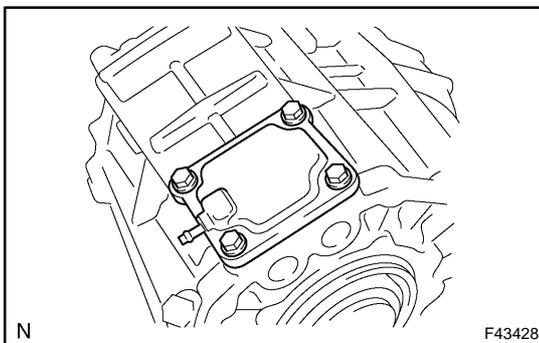
SST 09330-00021

### 166. INSTALL OUTPUT SHAFT COMPANION FLANGE SUB-ASSY

- (a) Using SST, install the companion flange sub-assy (rear) in the same way as the companion flange sub-assy (front).

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

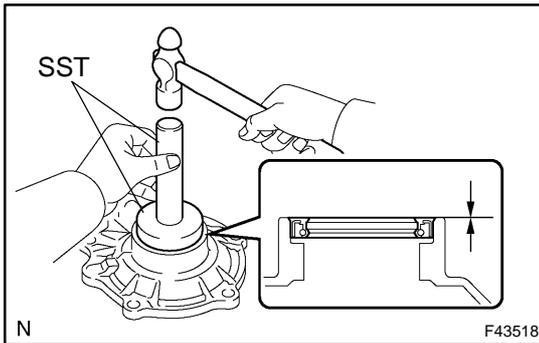
SST 09330-00021



### 167. INSTALL BREATHER OIL DEFLECTOR

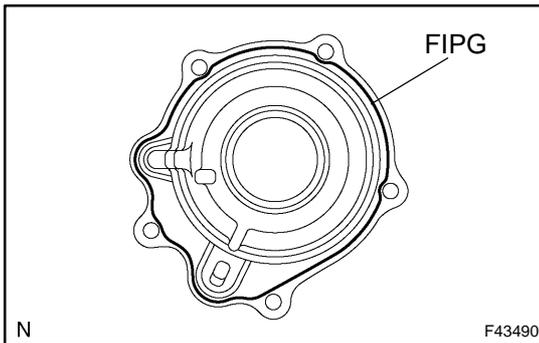
### 168. INSTALL TRANSFER CASE COVER SUB-ASSY

- (a) Install the case cover sub-assy with the 4 bolts.  
**Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)**

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

- (a) Using SST and a hammer, drive in a new oil seal until its surface is flush with the retainer upper surface.
- (b) Coat the lip of the oil seal with MP grease.

SST 09950-60010 (09951-00590), 09950-70010 (09951-07100)

**170. INSTALL TRANSFER FRONT BEARING RETAINER SUB-ASSY**

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

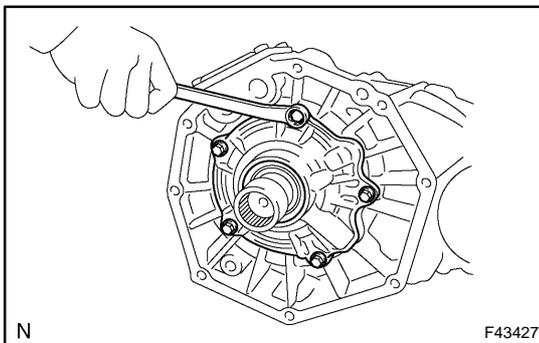
**FIPG:**

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

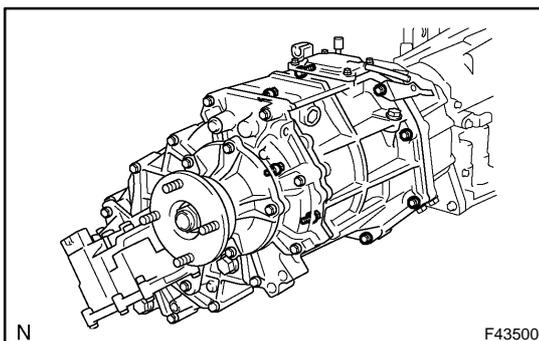
- (b) Apply sealant to the bolt thread.

**Sealant:**

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



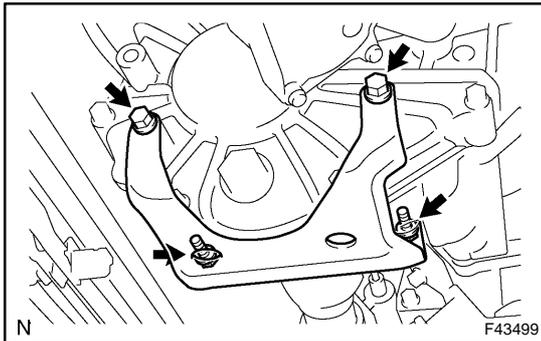
- (c) Install the front bearing retainer sub-assy with the 5 bolts.  
**Torque: 11.5 N·m (117 kgf·cm, 8 ft·lbf)**

**171. INSTALL HOSE****172. INSTALL TRANSFER ASSY**

- (a) Install the transfer to the automatic transmission.
- (b) Install the 2 clamps and 8 bolts.

**Torque: 24 N·m (240 kgf·cm, 17 ft·lbf)**

- 173. INSTALL AUTOMATIC TRANSMISSION W/TRANSFER (See page 40-9 )
- 174. INSTALL FLYWHEEL HOUSING UNDER COVER
- 175. INSTALL MANIFOLD STAY NO.2 (See page 14-34 )
- 176. INSTALL MANIFOLD STAY (See page 14-34 )
- 177. INSTALL STARTER ASSY (See page 14-34 )
- 178. CONNECT WIRE HARNESS (See page 40-9 )
- 179. CONNECT CONNECTOR (See page 40-9 )
- 180. INSTALL FRAME CROSSMEMBER SUB-ASSY NO.3 (See page 40-9 )



**181. INSTALL TRANSFER CASE LOWER PROTECTOR**

- (a) Install the transfer case lower protector with the 4 bolts.  
Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)

- 182. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO.1 (See page 40-9 )
- 183. CONNECT TRANSMISSION CONTROL CABLE ASSY (See page 40-9 )
- 184. INSTALL OIL COOLER INLET TUBE NO.1 (See page 40-9 )  
SST 09023-12700
- 185. CONNECT OIL COOLER OUTLET TUBE NO.1 (See page 40-9 )  
SST 09023-12700
- 186. INSTALL TRANSMISSION OIL FILLER TUBE SUB-ASSY (See page 40-9 )
- 187. INSTALL FRONT SUSPENSION MEMBER BRACKET LH (See page 40-9 )
- 188. INSTALL FRONT SUSPENSION MEMBER BRACKET (See page 40-9 )
- 189. ADD TRANSFER OIL
- 190. ADD AUTOMATIC TRANSMISSION FLUID (See page 40-9 )
- 191. INSPECT AUTOMATIC TRANSMISSION FLUID (See page 40-9 )
- 192. INSTALL PROPELLER SHAFT ASSY (See Pub. No. RM1001U, page 30-11)
- 193. INSTALL PROPELLER SHAFT ASSY FRONT (See Pub. No. RM1001U, page 30-4)
- 194. INSTALL EXHAUST PIPE ASSY (See page 15-1 )
- 195. CONNECT OXYGEN SENSOR (See page 15-1 )
- 196. INSTALL ENGINE UNDER COVER ASSY REAR (See page 14-34 )
- 197. INSTALL ENGINE UNDER COVER SUB-ASSY NO.1 (See page 14-34 )
- 198. INSPECT AUTOMATIC TRANSMISSION FLUID (See page 40-9 )
- 199. INSPECT SHIFT LEVER POSITION (See page 40-9 )
- 200. CHECK FOR EXHAUST GAS LEAKS
- 201. WARM UP
- 202. DRIVING TEST