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HF1A TRANSFER / 4WD / AWD TRANSFER CASE FRONT OIL SEAL REPLACEMENT

## **PROCEDURE**

**■ 1.DRAIN TRANSFER OIL** 

Click hereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER OIL>REPLACEMENT

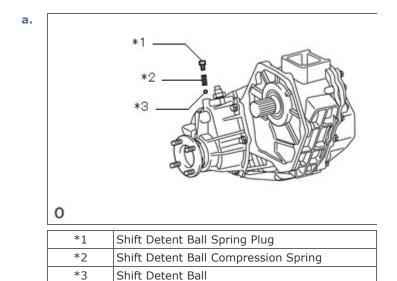
2.REMOVE NO. 1 TRANSFER INDICATOR SWITCH

84222

Click hereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER INDICATOR SWITCH>REMOVAL

3.REMOVE SHIFT DETENT BALL SPRING PLUG

36275

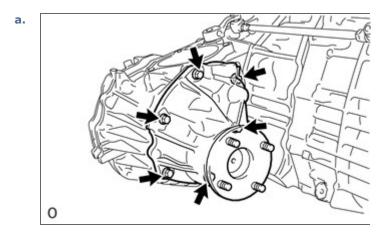


Using a T40 "TORX" socket wrench, remove the shift detent ball spring plug.

b. Using a magnet hand, remove the shift detent ball compression spring and shift detent ball.

# **4.REMOVE FRONT TRANSFER EXTENSION HOUSING SUB-ASSEMBLY**

36105



Remove the 6 bolts and front transfer extension housing sub-assembly. If necessary, tap the front transfer extension housing sub-assembly with a plastic-faced hammer.

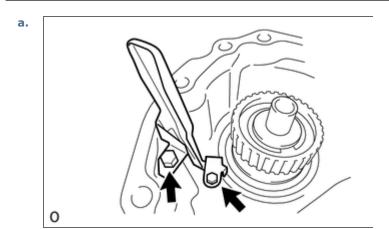
#### NOTICE:

Do not drop the front drive clutch sleeve.

https://toyotamanuals.com.au/docs/landcruiser-70-series-service-repair-manual-aug-2014-current/N001... 6/01/2023

# **5.REMOVE TRANSFER OIL RECEIVER PIPE**

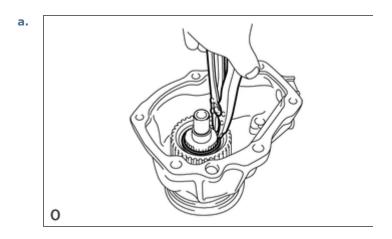
33124E



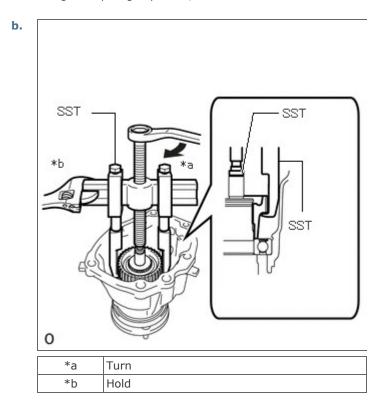
Remove the 2 bolts and transfer oil receiver pipe.

# **■** 6.REMOVE TRANSFER DRIVE CLUTCH HUB

36239



Using a snap ring expander, remove the transfer drive clutch hub shaft snap ring.



Using SST, remove the transfer drive clutch hub.

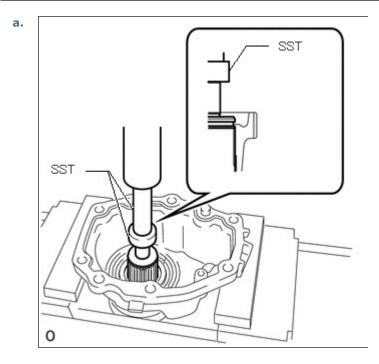
09950-40011 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04061, 09957-04010)

## **NOTICE:**

Do not to damage the transfer drive clutch hub.

## **7.REMOVE FRONT TRANSFER OUTPUT SHAFT**

36209A



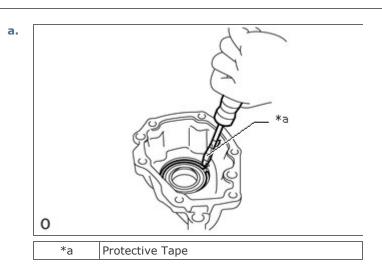
Using SST and a press, remove the front transfer output shaft.

09527-20011

09950-60010 (09951-00300) 09950-70010 (09951-07100)

#### \_ 8.REMOVE FRONT TRANSFER OUTPUT SHAFT RADIAL BALL BEARING

36231H

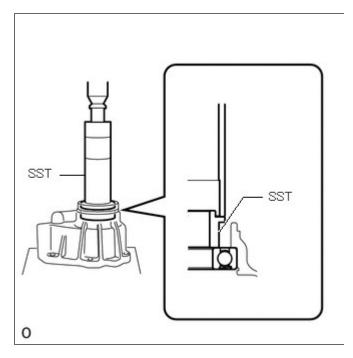


Using a screwdriver, remove the front transfer output shaft bearing snap ring.

## HINT:

Tape the screwdriver tip before use.

b.



Using SST and a press, remove the front transfer output shaft radial ball bearing.

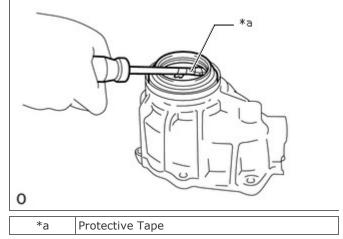
SST

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

9.REMOVE OIL SEAL (FRONT TRANSFER EXTENSION HOUSING SUB-ASSEMBLY)

36105A





Using a screwdriver, remove the oil seal (front transfer extension housing sub-assembly).

#### HINT:

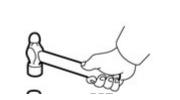
Tape the screwdriver tip before use.

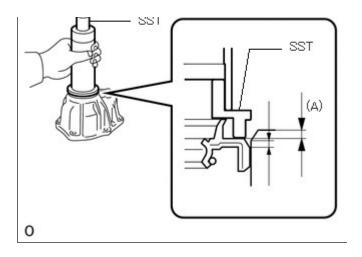
# **■ 10.INSTALL OIL SEAL (FRONT TRANSFER EXTENSION HOUSING SUB-ASSEMBLY)**

36105A

a. Apply MP grease to the lip of a new oil seal (front transfer extension housing sub-assembly).

b.





Using SST and a hammer, install the oil seal (front transfer extension housing sub-assembly) as shown in the illustration.

SST

09316-60011 (09316-00011, 09316-00061)

Drive in depth (A):

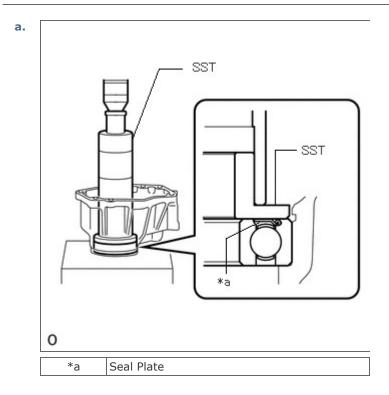
0 to 0.5 mm (0 to 0.0196 in.)

## **NOTICE:**

- · Install the oil seal (front transfer extension housing sub-assembly) so that its outer edge is positioned past the chamfered part of the front transfer extension housing sub-assembly.
- · Do not to damage the oil seal (front transfer extension housing sub-assembly).

# **■ 11.INSTALL FRONT TRANSFER OUTPUT SHAFT RADIAL BALL BEARING**

36231H



Using SST and a press, install a new front transfer output shaft radial ball bearing.

SST

09316-60011 (09316-00011, 09316-00031)

#### NOTICE:

Install the front transfer output shaft radial ball bearing so that its seal plate faces the transfer drive clutch hub side.

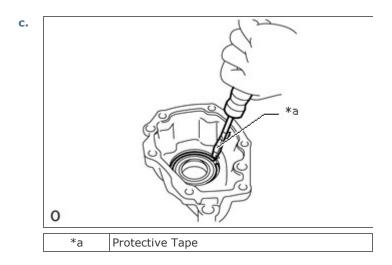
b. Select a new front transfer output shaft bearing snap ring that will allow minimum axial play and install it.

### **Standard Thickness:**

Mark	Thickness
A	1.7 mm (0.0669 in.)
В	1.8 mm (0.0709 in.)

## **NOTICE:**

Select a front transfer output shaft bearing snap ring so that the thrust clearance of the front transfer output shaft radial ball bearing is 0.1 mm or less.



Using a screwdriver, install the front transfer output shaft bearing snap ring.

#### NOTICE:

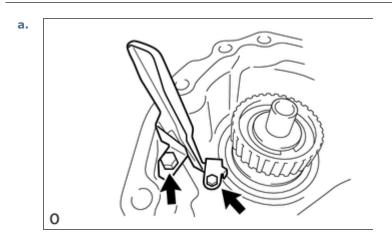
Do not to damage the front transfer extension housing sub-assembly.

#### HINT:

Tape the screwdriver tip before use.

# **■ 12.INSTALL TRANSFER OIL RECEIVER PIPE**

33124E



Install the transfer oil receiver pipe with the 2 bolts.

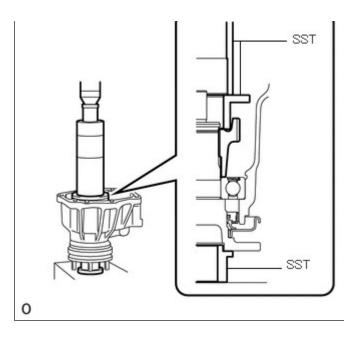
## **Torque:**

4.9 N\*m (50 kgf\*cm, 43 in.\*lbf)

# **■ 13.INSTALL TRANSFER DRIVE CLUTCH HUB**

36239

a.



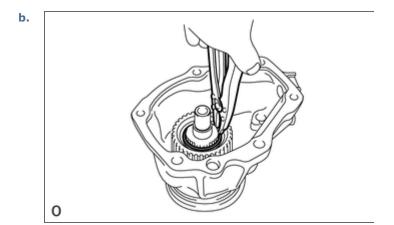
Using SST and a press, install the front transfer output shaft and transfer drive clutch hub.

#### SST

09316-20011 09316-60011 (09316-00011, 09316-00041, 09316-00071)

## **NOTICE:**

- Do not to damage the front transfer output shaft and front transfer output shaft radial ball bearing.
- · The front transfer output shaft should be installed completely.



Select a new transfer drive clutch hub shaft snap ring that will allow minimum axial play and install it.

## **Standard Thickness:**

Mark	Thickness
А	1.8 mm (0.0709 in.)
В	1.9 mm (0.0748 in.)
С	2.0 mm (0.0787 in.)
D	2.1 mm (0.0827 in.)
E	2.2 mm (0.0866 in.)

## **NOTICE:**

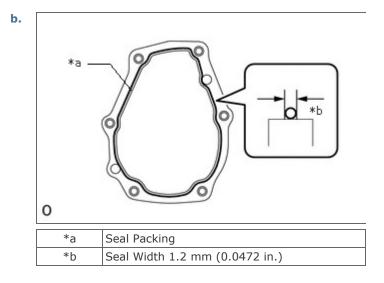
Select a transfer drive clutch hub shaft snap ring so that the clearance between the transfer drive clutch hub and transfer drive clutch hub shaft snap ring is 0.1 mm or less.

c. Using a snap ring expander, install the transfer drive clutch hub shaft snap ring.

**■ 14.INSTALL FRONT TRANSFER EXTENSION HOUSING SUB-ASSEMBLY** 

36105

a. Clean the threads of the front transfer extension housing sub-assembly with non-residue solvent.

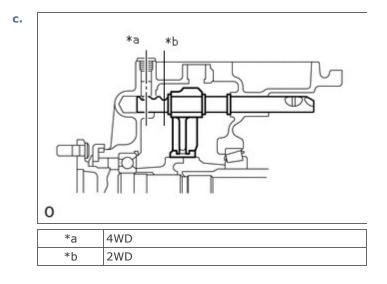


Apply seal packing to the front transfer extension housing sub-assembly as shown in the illustration. **Seal packing:** 

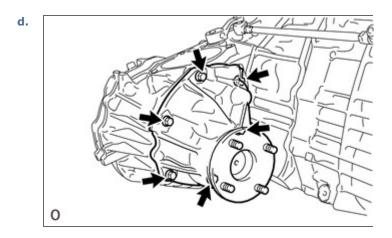
Toyota Genuine Seal Packing 1281, Three Bond 1281 or equivalent

#### HINT:

Install the front transfer extension housing sub-assembly as soon as the seal packing is applied.



Set the front drive clutch sleeve in 4WD, and install the front transfer extension housing sub-assembly.



Install the front transfer extension housing sub-assembly with the 6 bolts.

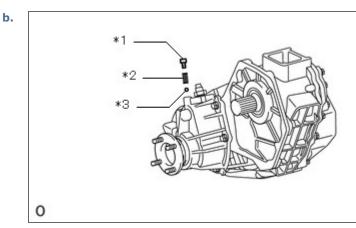
**Torque:** 

## 37.24 N\*m (380 kgf\*cm, 27 ft.\*lbf)

### 15.INSTALL SHIFT DETENT BALL SPRING PLUG

36275

a. Clean the threads of the shift detent ball spring plug and front transfer extension housing sub-assembly with non-residue solvent.



*1	Shift Detent Ball
*2	Shift Detent Ball Compression Spring
*3	Shift Detent Ball Spring Plug

Install the shift detent ball and shift detent ball compression spring.

c. Apply adhesive to 2 or 3 threads of the shift detent ball spring plug.
Adhesive:

Toyota Genuine Adhesive 1344, Three Bond 1344 or equivalent

d. Using a T40 "TORX" socket wrench, install the shift detent ball spring plug.

#### Torque:

18.62 N\*m (190 kgf\*cm, 14 ft.\*lbf)

## **■ 16.INSTALL NO. 1 TRANSFER INDICATOR SWITCH**

84222

Click hereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER INDICATOR SWITCH>INSTALLATION

**■ 17.ADD TRANSFER OIL** 

Click hereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER OIL>REPLACEMENT

**18. CHECK FOR TRANSFER OIL LEAK** 

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