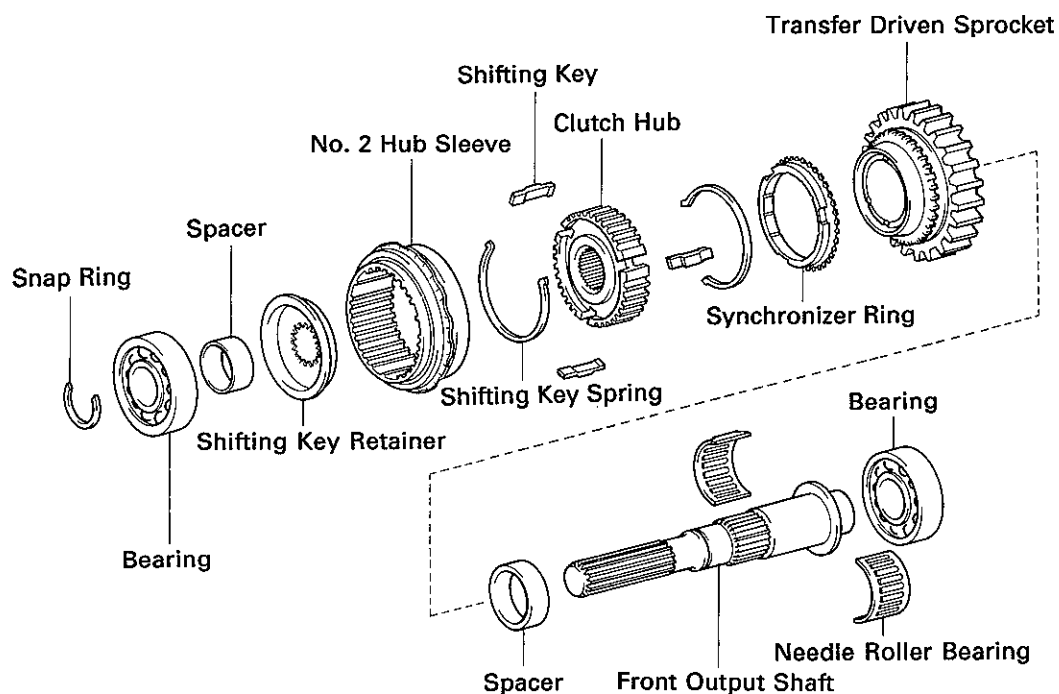
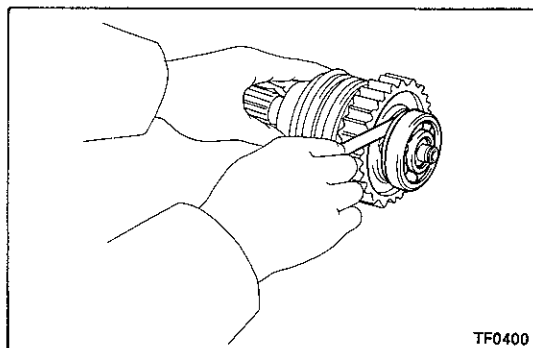


## Front Output Assembly

### COMPONENTS



E1077



TF0400

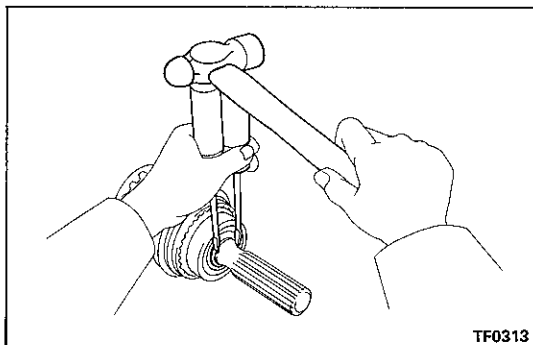
### DISASSEMBLY OF FRONT OUTPUT ASSEMBLY

#### 1. MEASURE DRIVEN SPROCKET THRUST CLEARANCE

Using a feeler gauge, measure the driven sprocket thrust clearance.

**Standard clearance:** 0.10 – 0.25 mm  
(0.0039 – 0.0098 in.)

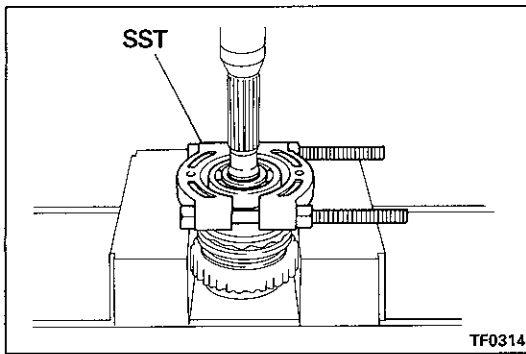
**Maximum clearance:** 0.40 mm (0.0157 in.)



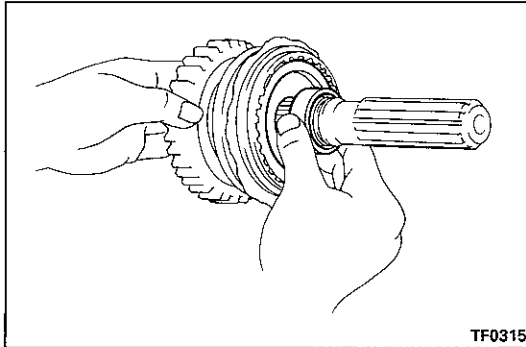
TF0313

#### 2. REMOVE FRONT OUTPUT SHAFT FRONT BEARING

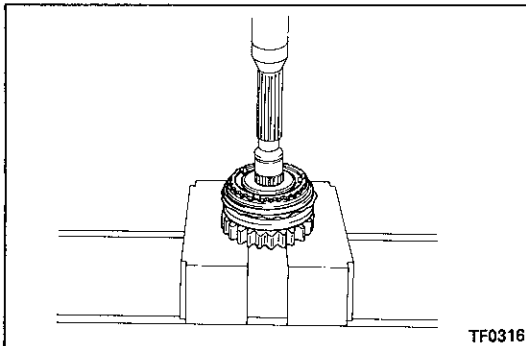
- (a) Using two screwdrivers and a hammer, tap out the snap ring.



- (b) Using SST and a press, remove the bearing.  
SST 09950-00020

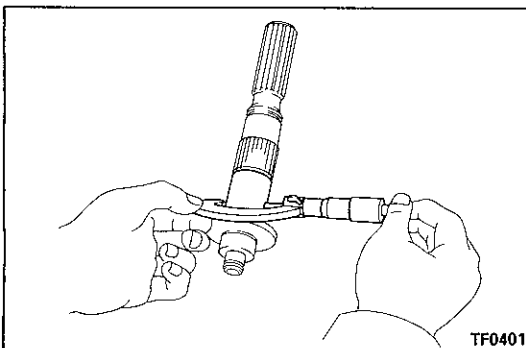


### 3. REMOVE SPACER AND SHIFTING KEY RETAINER



### 4. REMOVE NO. 2 HUB SLEEVE ASSEMBLY AND TRANSFER DRIVEN SPROCKET

- (a) Using a press, remove No. 2 hub sleeve assembly, synchronizer ring and transfer driven sprocket.  
(b) Remove the spacer and needle roller bearing.

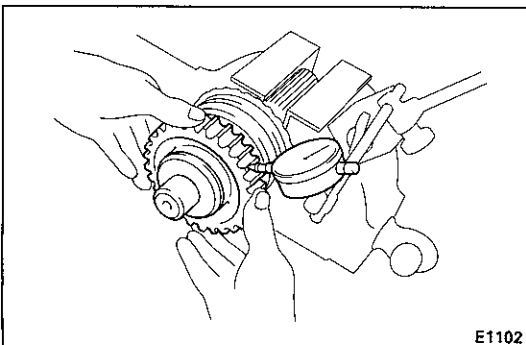


## INSPECTION OF FRONT OUTPUT ASSEMBLY

### 1. INSPECT FRONT OUTPUT SHAFT

Using a micrometer, measure the outer diameter of the front output shaft journal surface.

**Minimum diameter:** 36.930 mm (1.4539 in.)



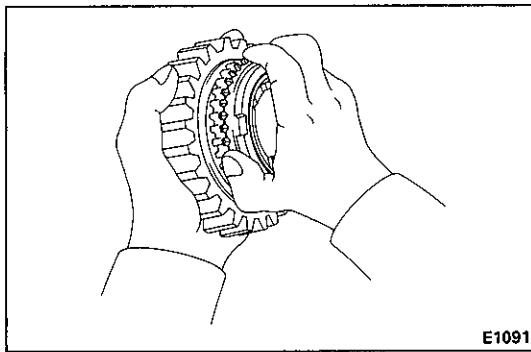
### 2. CHECK OIL CLEARANCE OF DRIVEN SPROCKET

Using a dial indicator, measure the oil clearance between the sprocket and shaft with the needle roller bearing installed.

**Standard clearance:** 0.010 – 0.057 mm  
(0.0004 – 0.0022 in.)

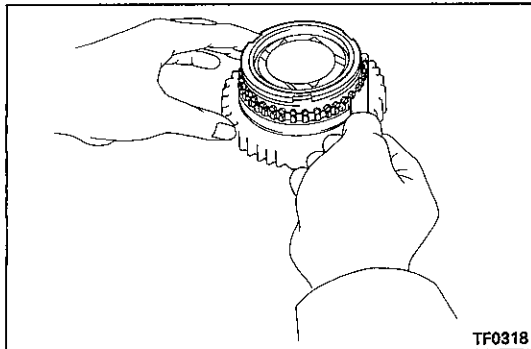
**Maximum clearance:** 0.15 mm (0.0059 in.)

If the clearance exceeds the limit, replace the driven sprocket, front output shaft or needle roller bearing.



### 3. INSPECT SYNCHRONIZER RING

- (a) Turn the ring and push it in to check the braking action.

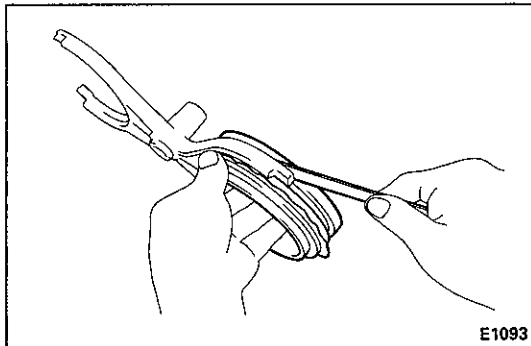


- (b) Measure the clearance between the synchronizer ring back and the sprocket spline end.

**Standard clearance:** 1.1 – 1.9 mm  
(0.043 – 0.075 in.)

**Minimum clearance:** 0.8 mm (0.031 in.)

If the clearance is less than the limit, replace the synchronizer ring.

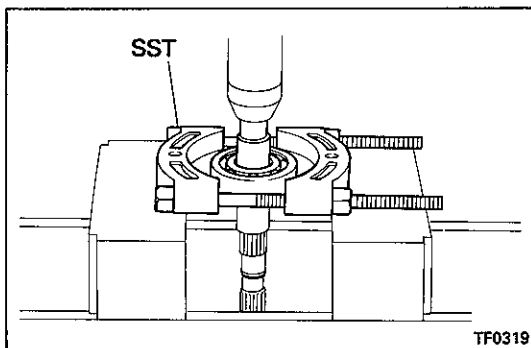


### 4. MEASURE CLEARANCE OF NO. 1 SHIFT FORK AND NO. 2 HUB SLEEVE

Using a feeler gauge, measure the clearance between No. 1 shift fork and No. 2 hub sleeve.

**Maximum clearance:** 1.0 mm (0.039 in.)

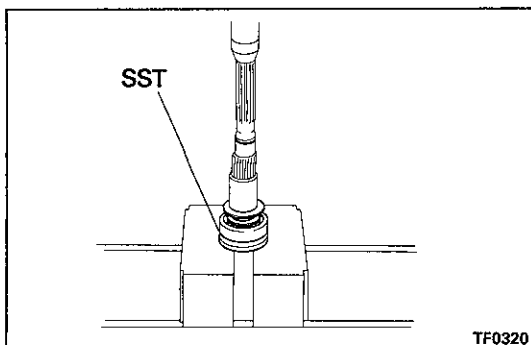
If the clearance exceeds the limit, replace the shift fork or hub sleeve.



### 5. IF NECESSARY, REPLACE FRONT OUTPUT SHAFT REAR BEARING

- (a) Using SST and a socket wrench, press out the bearing.

SST 09950-00020



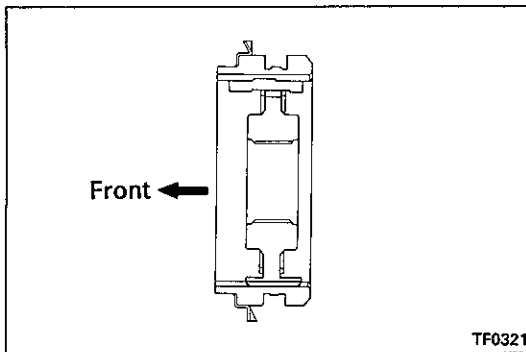
- (b) Using SST and a press, install a new bearing.

SST 09506-30012

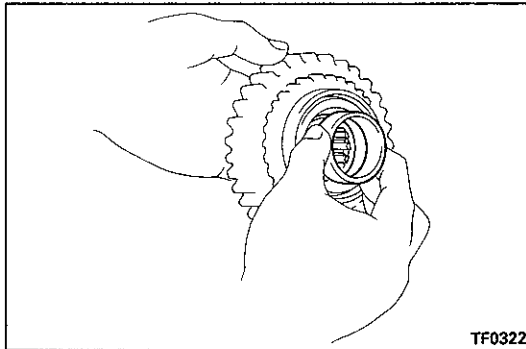
**ASSEMBLY OF FRONT OUTPUT ASSEMBLY****1. INSERT CLUTCH HUB INTO NO. 2 HUB SLEEVE**

- (a) Install the clutch hub and shifting keys to the hub sleeve.
- (b) Install the shifting key springs under the shifting keys.

**NOTICE:** Install the key springs positioned so that their end gaps are not in line.

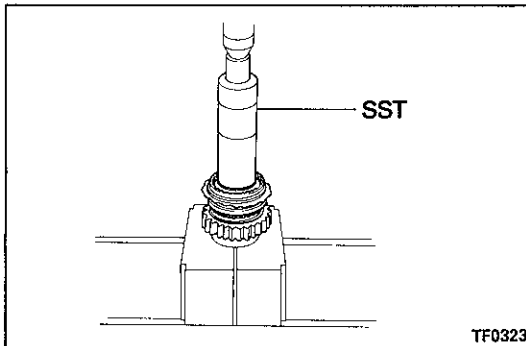
**2. INSTALL NO. 2 HUB SLEEVE ASSEMBLY AND TRANSFER DRIVEN SPROCKET**

- (a) Apply gear oil to the shaft and needle roller bearing.
- (b) Install the needle roller bearing and spacer in the driven sprocket.



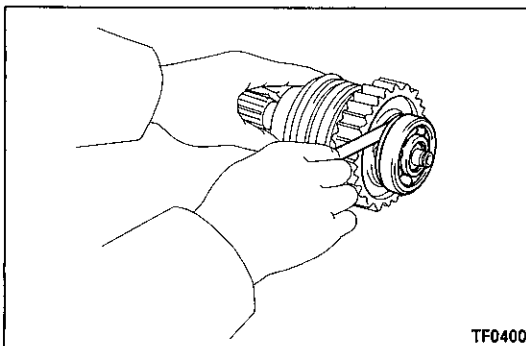
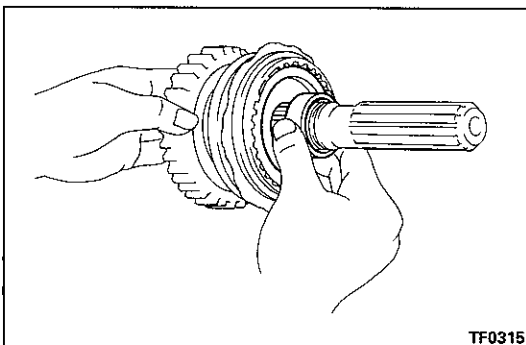
- (c) Place the synchronizer ring on the sprocket and align the ring slots with the shifting keys.
- (d) Using SST and a press, install the driven sprocket and No. 2 hub sleeve assembly.

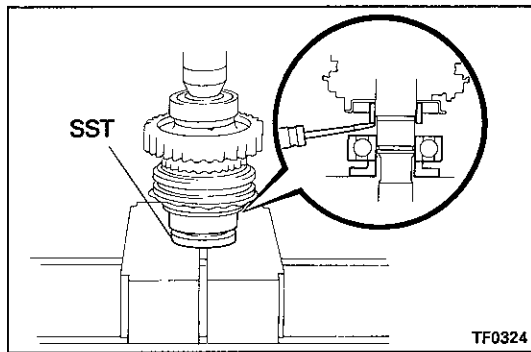
SST 09316-60010 (09316-00010, 09316-00070)

**3. MEASURE DRIVEN SPROCKET THRUST CLEARANCE**

Using a feeler gauge, measure the driven sprocket thrust clearance.

**Standard clearance:** 0.10 – 0.25 mm  
(0.0039 – 0.0098in.)

**4. INSTALL SHIFTING KEY RETAINER AND SPACER**

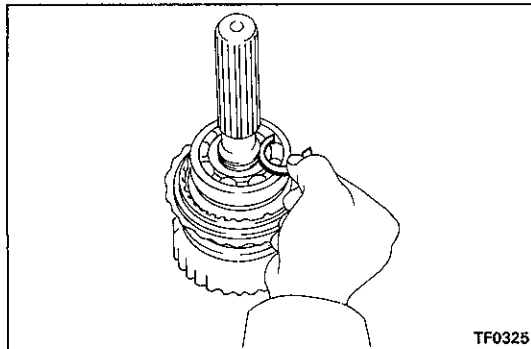


## 5. INSTALL FRONT OUTPUT SHAFT FRONT BEARING

Using SST and a press, install the bearing.

SST 09506-30012

**HINT:** Hold the spacer with a screwdriver to prevent it from falling.



## 6. INSTALL SNAP RING

(a) Select a snap ring that will allow minimum axial play.

Mark	Thickness mm (in.)	Mark	Thickness mm (in.)
1	1.95–2.00 (0.0768–0.0787)	7	2.25–2.30 (0.0886–0.0906)
2	2.00–2.05 (0.0787–0.0807)	8	2.30–2.35 (0.0906–0.0925)
3	2.05–2.10 (0.0807–0.0827)	9	2.35–2.40 (0.0925–0.0945)
4	2.10–2.15 (0.0827–0.0846)	10	2.40–2.45 (0.0945–0.0965)
5	2.15–2.20 (0.0846–0.0866)	11	2.45–2.50 (0.0965–0.0984)
6	2.20–2.25 (0.0866–0.0886)	12	2.50–2.55 (0.0984–0.1004)

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

