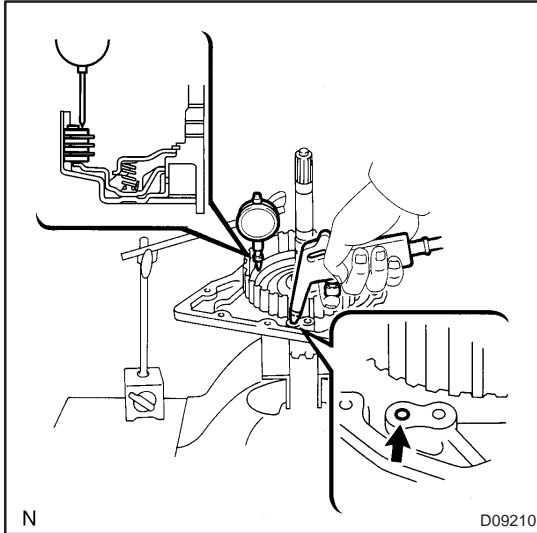


# DIRECT CLUTCH ASSY (U241E) OVERHAUL

4006R-01



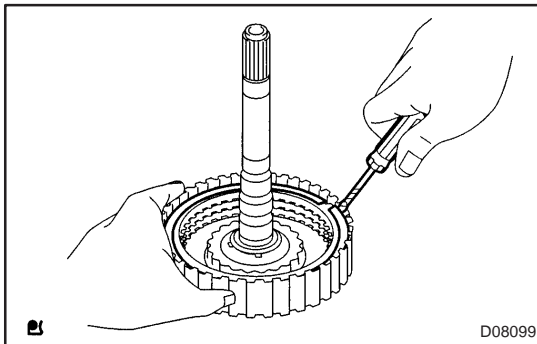
## 1. INSPECT PACK CLEARANCE OF DIRECT CLUTCH

- Install the direct clutch and needle roller bearing on the transaxle rear cover.
- Using a dial indicator, measure the direct clutch pack clearance while applying and releasing compressed air (392 kPa, 4.0 kgf/cm<sup>2</sup>, 57 psi).

### Pack clearance:

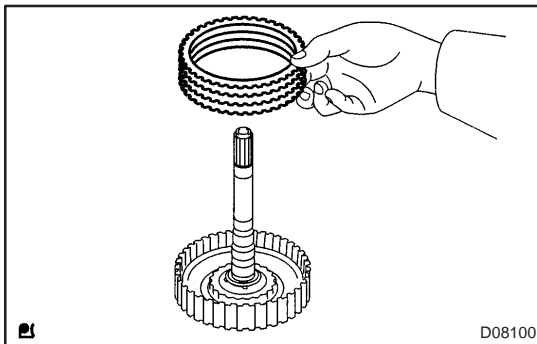
**0.605 – 0.825 mm (0.02382 – 0.03248 in.)**

If the pack clearance is non-standard, inspect the discs, plates and flange.

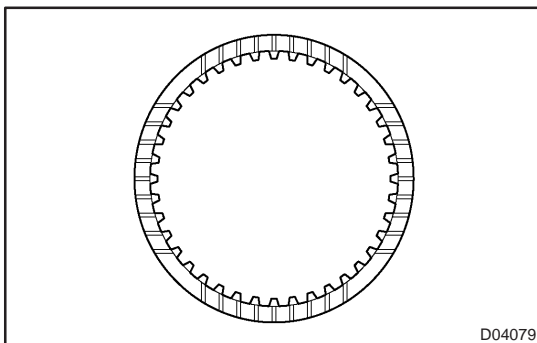


## 2. REMOVE DIRECT MULTIPLE DISC CLUTCH CLUTCH DISC

- Using a screwdriver, remove the snap ring from the direct clutch drum.



- Remove the flange, 3 discs and 3 plates from the direct clutch drum.



## 3. INSPECT DIRECT MULTIPLE DISC CLUTCH CLUTCH DISC

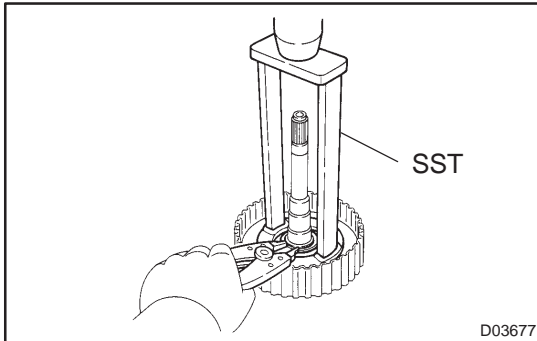
- Check to see if the sliding surface of the disc, plate and flange are worn or burnt.

If necessary, replace them.

### HINT:

- If the lining of the disc is peeling off or discolored, or even if a part of the printed mark is defaced, replace all discs.

- Before assembling new discs, soak them in ATF for at least 15 minutes.

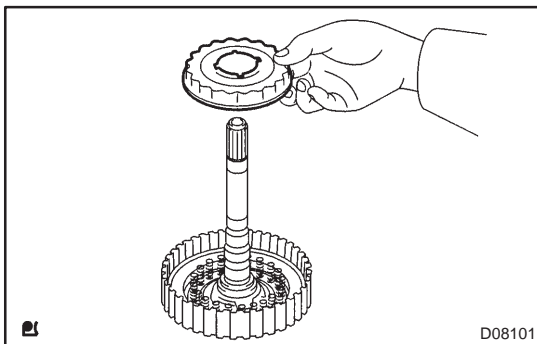


#### 4. REMOVE DIRECT CLUTCH RETURN SPRING SUB-ASSY

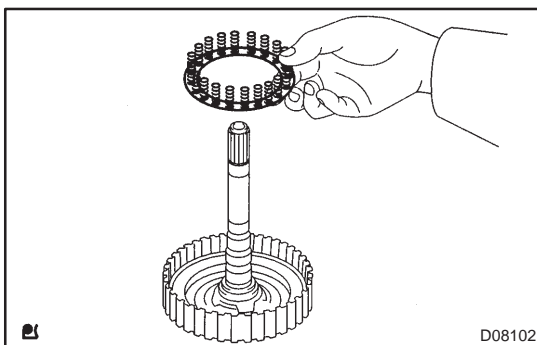
- Place SST on the clutch balancer and compress the spring with a press.  
SST 09387-00020
- Using a snap ring expander, remove the snap ring from the direct clutch drum.

##### NOTICE:

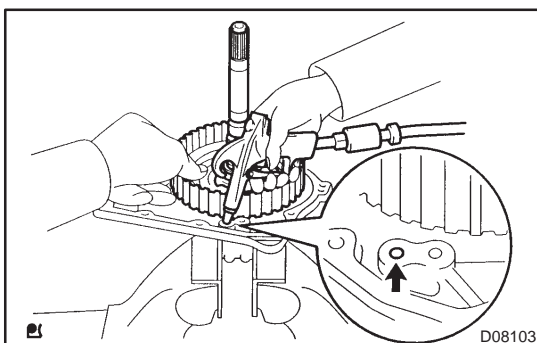
- Stop the press when the spring sheet is lowered to the place 1 – 2 mm (0.039 – 0.078 in.) from the snap ring groove.
- This prevents the spring sheet from being deformed.
- Do not expand the snap ring excessively.



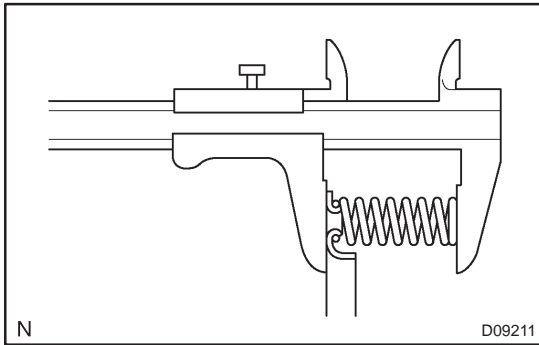
- Remove the clutch balancer from the direct clutch drum.



- Remove the piston return spring from the direct clutch drum.

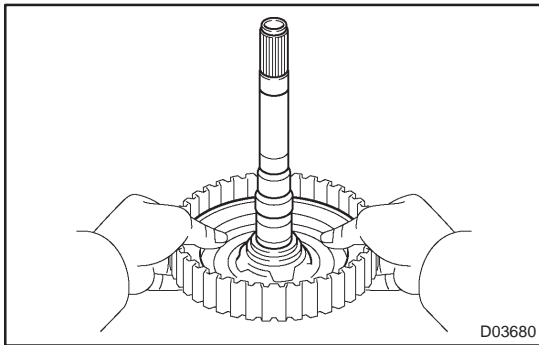


- Install direct clutch drum on the transaxle rear cover.
- Holding the direct clutch piston with your hand, apply compressed air (392 kPa, 4.0 kgf/cm<sup>2</sup>, 57 psi) to the transaxle rear cover to remove the direct clutch piston.



### 5. INSPECT DIRECT CLUTCH RETURN SPRING SUB-ASSY

- (a) Using vernier calipers, measure the free length of the spring together with the spring seat.  
**Standard free length: 22.58 mm (0.8890 in.)**

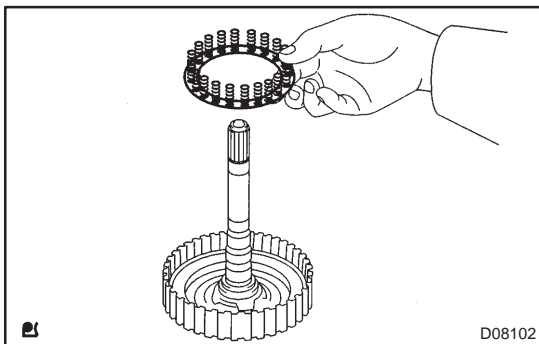


### 6. INSTALL DIRECT CLUTCH RETURN SPRING SUB-ASSY

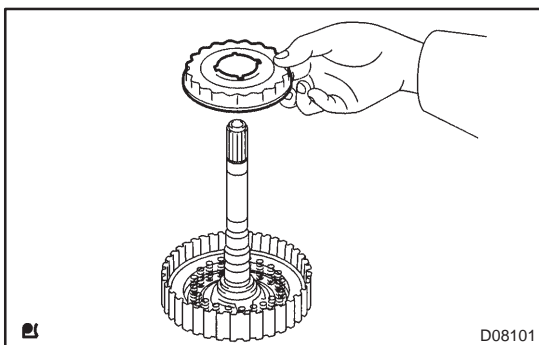
- (a) Coat the direct clutch piston with ATF, and install it to the direct clutch drum.

#### NOTICE:

**Be careful not to damage the lip seal of the direct clutch piston.**



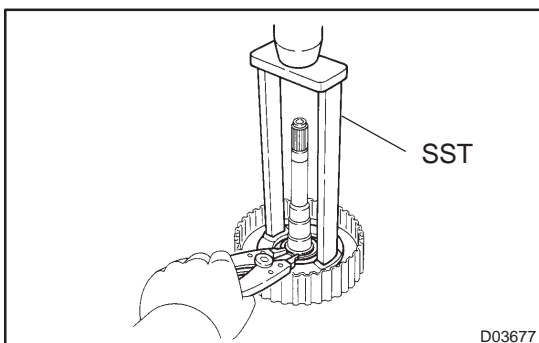
- (b) Install the piston return spring to the direct clutch drum.



- (c) Install the clutch balancer to the direct clutch drum.

#### NOTICE:

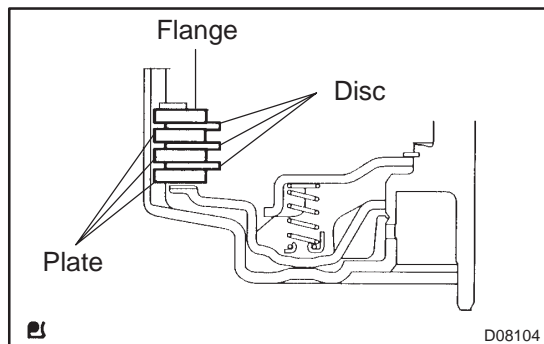
**Be careful not to damage the lip seal of the direct clutch balancer.**



- (d) Place SST on the clutch balancer and compress the piston return spring with a press.  
 SST 09387-00020
- (e) Using a snap ring expander, install the snap ring to the direct clutch drum.

#### NOTICE:

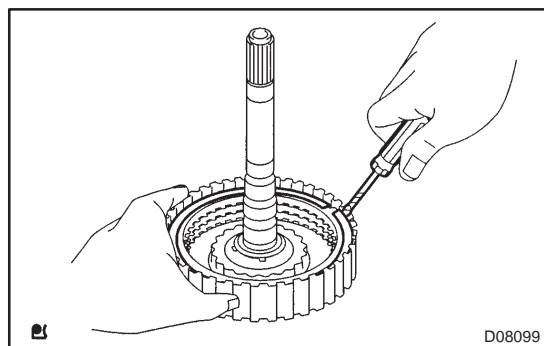
- Be sure the end gap of the snap ring is not aligned with the clutch balancer claw.**



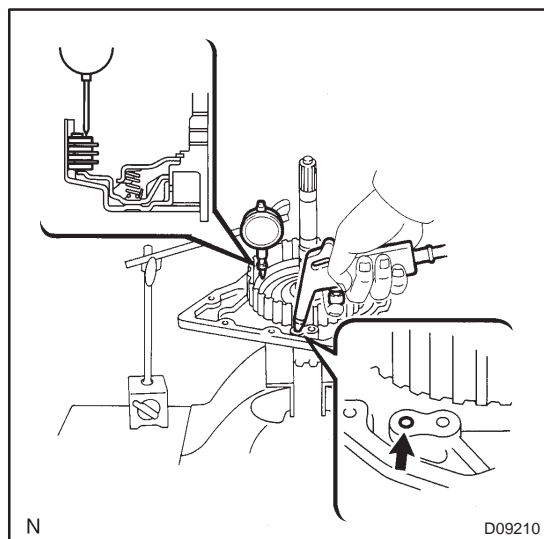
- Stop the press when the spring sheet is lowered to the place 1 – 2 mm (0.039 – 0.078 in.) from the snap ring groove.
- This prevents the spring sheet from being deformed.
- Do not expand the snap ring excessively.

## 7. INSTALL DIRECT MULTIPLE DISC CLUTCH CLUTCH DISC

- (a) Install the 3 plates, 3 discs and flange.



- (b) Using a screwdriver, install the snap ring.  
(c) Check that the end gap of the snap ring is not aligned with one of the cutouts.



## 8. INSPECT PACK CLEARANCE OF DIRECT CLUTCH

- (a) Install the direct clutch on the transaxle rear cover.  
(b) Using a dial indicator, measure the direct clutch pack clearance while applying and releasing compressed air (392 kPa, 4.0 kgf/cm<sup>2</sup>, 57 psi).

### Park clearance:

**0.605 – 0.825 mm (0.02382 – 0.03248 in.)**

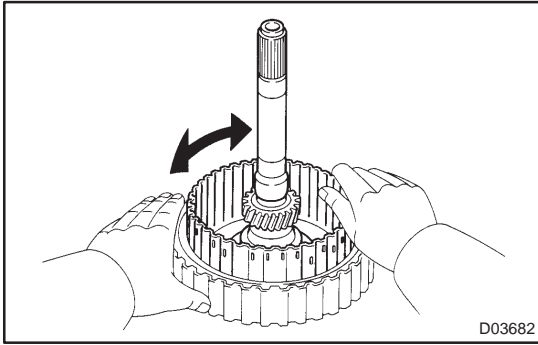
If the pack clearance is less than the minimum, parts may have been assembled incorrectly, so check and reassemble again. If the stroke is non-standard, select another flange.

### HINT:

There are 6 flanges in different thickness.

### Flange thickness: mm (in.)

No.	Thickness	No.	Thickness
1	3.0 (0.118)	4	3.3 (0.130)
2	3.1 (0.122)	5	3.4 (0.134)
3	3.2 (0.126)	6	3.5 (0.138)



## 9. INSPECT DIRECT MULTIPLE DISC CLUTCH CLUTCH DISC

- (a) Inspect the clutch disc rotation.
  - (1) Check that the disc rotates when rotating the disc after inserting the rear planetary sun gear.

### NOTICE:

**Do not place the rear planetary sun gear in a vise.**