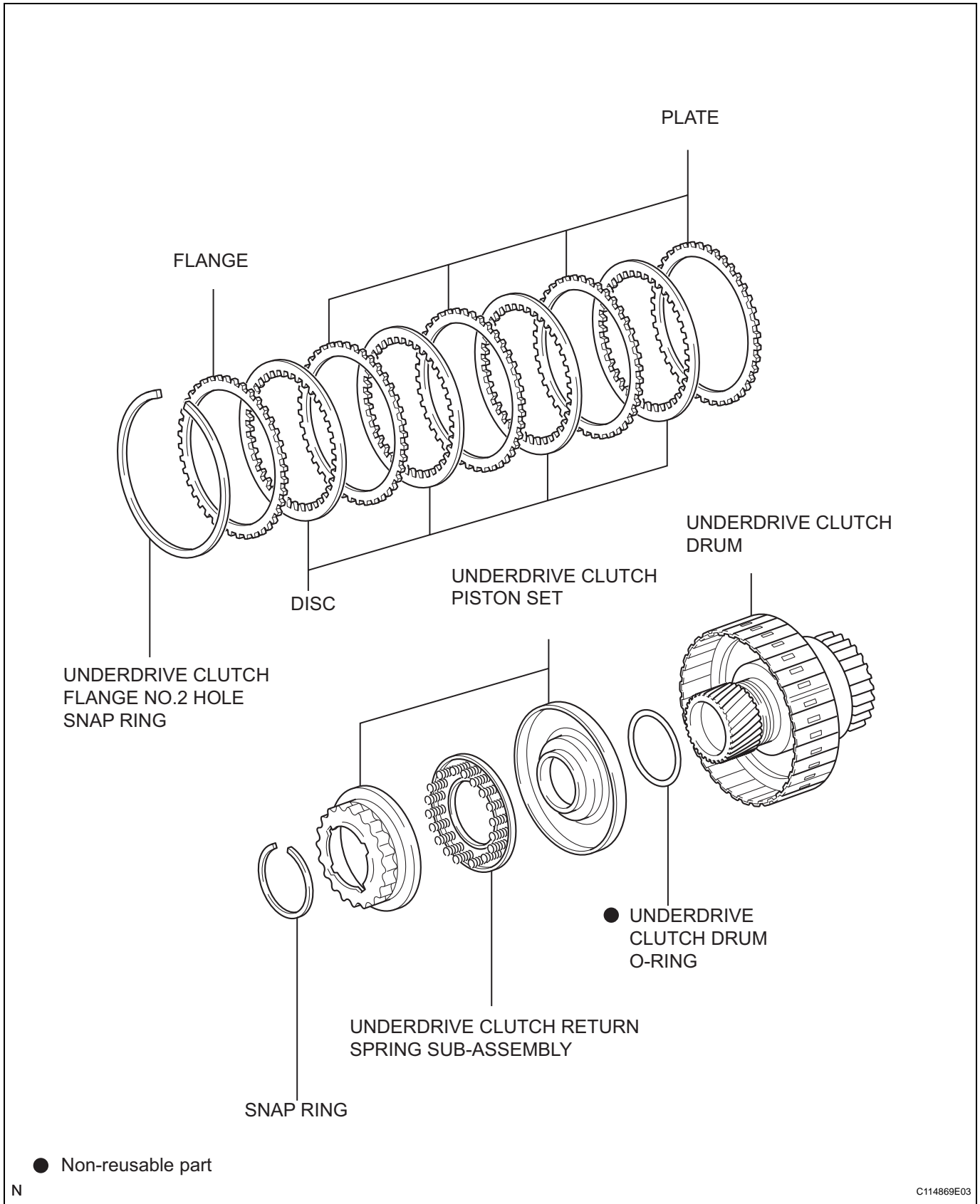


UNDERDRIVE CLUTCH

COMPONENTS



AX

DISASSEMBLY

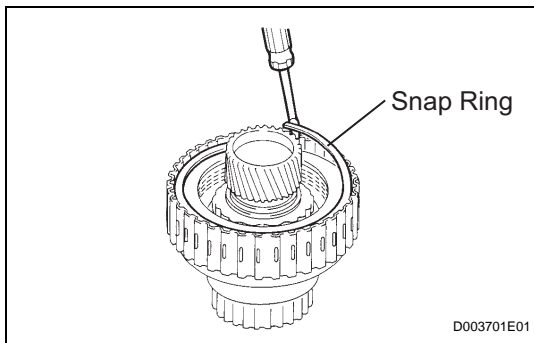
1. INSPECT UNDERDRIVE PACK CLEARANCE

HINT:

(See page [AX-281](#))

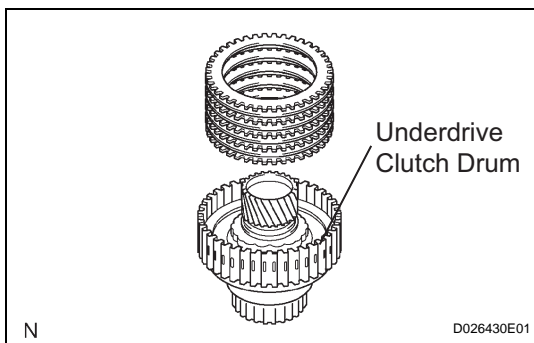
2. REMOVE UNDERDRIVE CLUTCH FLANGE NO.2 HOLE SNAP RING

- (a) Using a screwdriver, remove the underdrive clutch flange No.2 snap ring.



3. REMOVE UNDERDRIVE CLUTCH DISC NO.1

- (a) Remove the flange, 4 discs and 4 plates from the underdrive clutch drum.



4. REMOVE UNDERDRIVE CLUTCH RETURN SPRING SUB-ASSEMBLY

- (a) Place SST on the clutch balancer and compress the spring with a press.

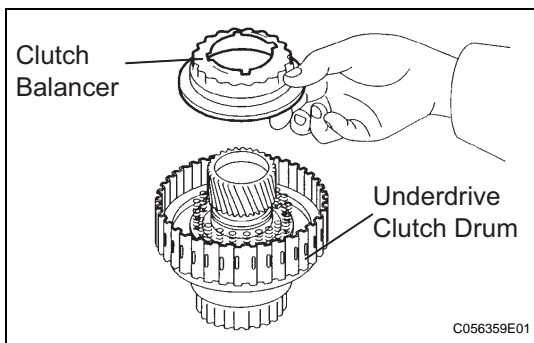
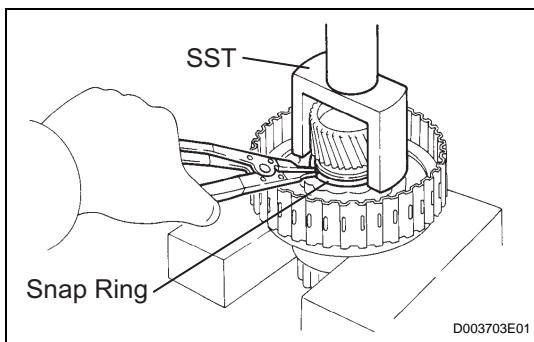
SST 09350-32014

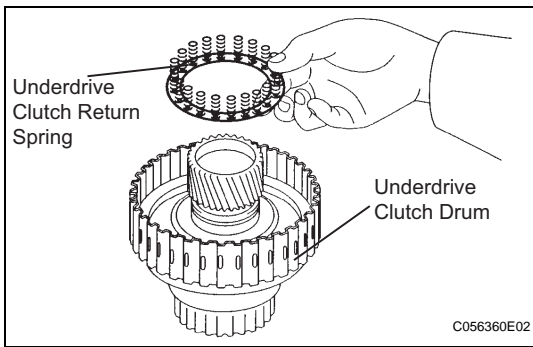
- (b) Using a snap ring expander, remove the snap ring.

NOTICE:

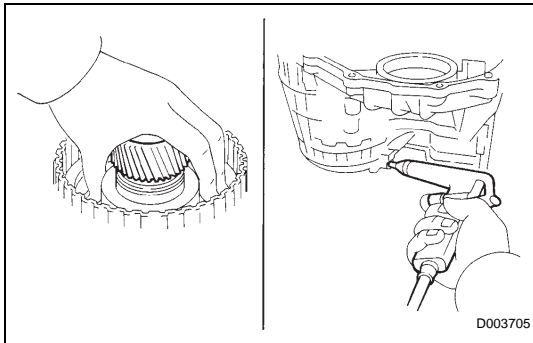
- Stop the press when the spring seat is lowered to the place 1 to 2 mm (0.039 to 0.078 in.) from the snap ring groove.
- This prevents the spring seat from being deformed.
- Do not expand the snap ring excessively.

- (c) Remove the clutch balancer from the underdrive clutch drum.



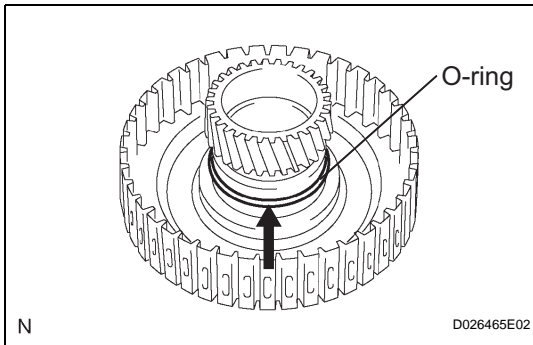


- (d) Remove the return spring from the underdrive clutch drum.



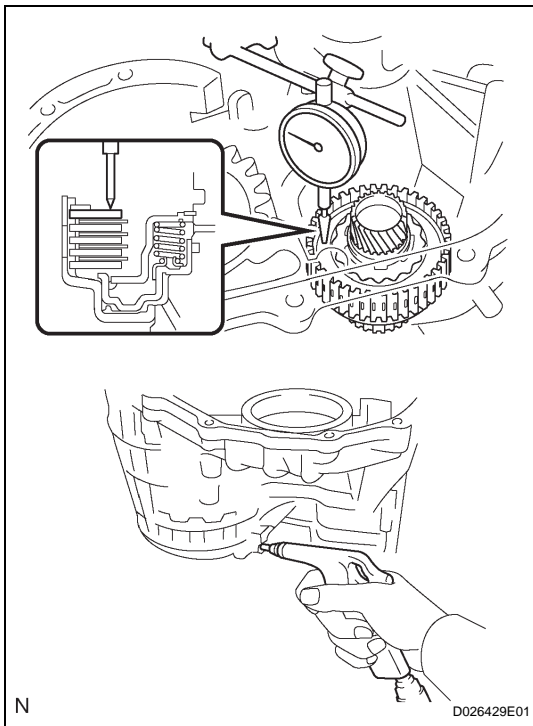
5. REMOVE UNDERDRIVE CLUTCH PISTON SET

- (a) Install the underdrive clutch to the transaxle case.
NOTICE:
Be careful not to damage the oil seal ring.
 (b) Holding the underdrive clutch piston by hand, apply compressed air (392 kPa, 4.0 kgf/cm², 57 psi) to the transaxle case to remove the underdrive clutch piston.



6. REMOVE UNDERDRIVE CLUTCH DRUM O-RING

- (a) Using a screwdriver, remove the O-ring from the underdrive clutch drum.



INSPECTION

1. INSPECT UNDERDRIVE PACK CLEARANCE

- (a) Install the underdrive clutch to the transaxle case.
NOTICE:
Be careful not to damage the oil seal rings.
 (b) Install a dial indicator as shown in the illustration.
 (c) Measure the underdrive clutch pack clearance while applying and releasing compressed air (392 kPa, 4.0 kgf/cm², 57 psi).

Pack clearance:

1.51 to 1.71 mm (0.0594 to 0.0673 in.)

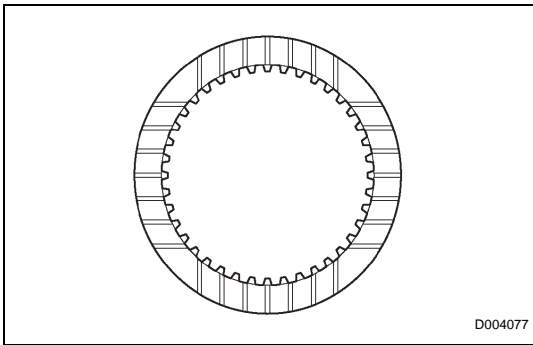
If the pack clearance is not as specified, inspect the discs, plates and flange.

HINT:

There are 5 flanges in different thickness.

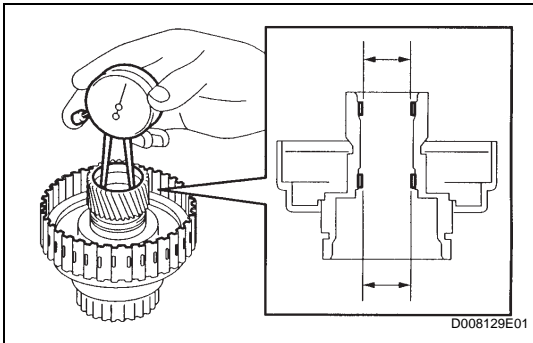
Flange thickness: mm (in.)

Mark	Thickness	Mark	Thickness
1	3.0 (0.118)	4	3.6 (0.122)
2	3.2 (0.126)	5	3.8 (0.130)
3	3.4 (0.134)	-	-



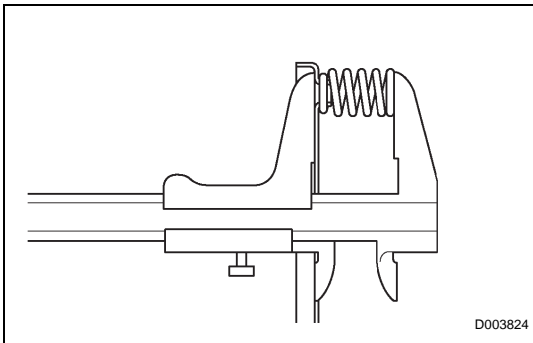
2. INSPECT UNDERDRIVE CLUTCH DISC NO.1

- (a) Check 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 comes off or discolors, or if a part of the groove is worn, replace all discs.
 - Before installing new discs, immerse them in ATF for at least 15 minutes.



3. INSPECT UNDERDRIVE CLUTCH DRUM SUB-ASSEMBLY

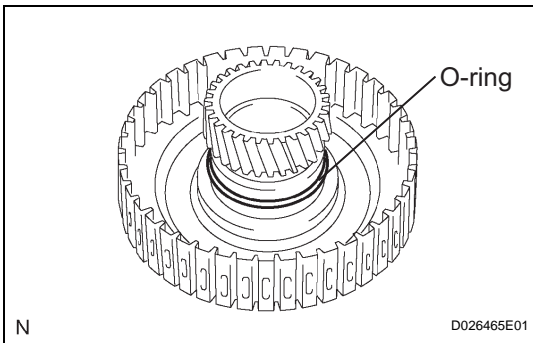
- (a) Using a dial indicator, measure the inside diameter of the underdrive clutch drum bushing.
Standard drum bushing:
 37.06 to 37.08 mm (1.4591 to 1.4598 in.)
Maximum drum bushing:
 37.13 mm (1.4618 in.)
 If the inside diameter is greater than the maximum, replace the underdrive clutch drum.



4. INSPECT UNDERDRIVE CLUTCH RETURN SPRING SUB-ASSEMBLY

- (a) Using a vernier calipers, measure the free length of the spring together with the spring seat.
Standard free length:
 17.14 mm (0.6752 in.)

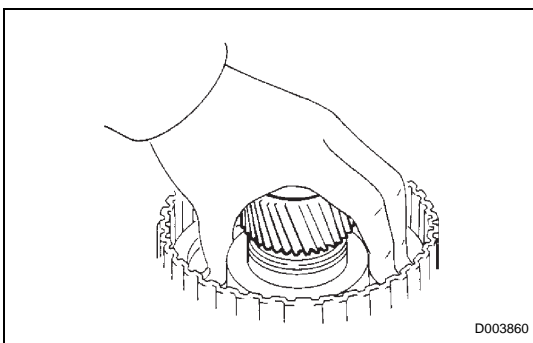
AX



REASSEMBLY

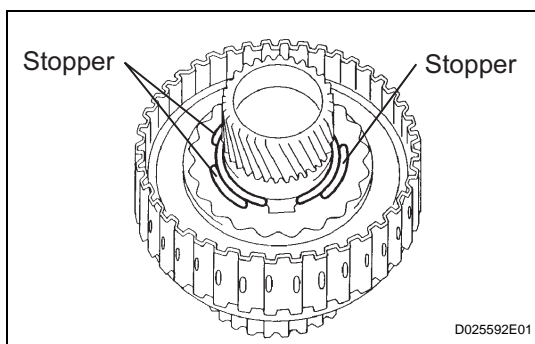
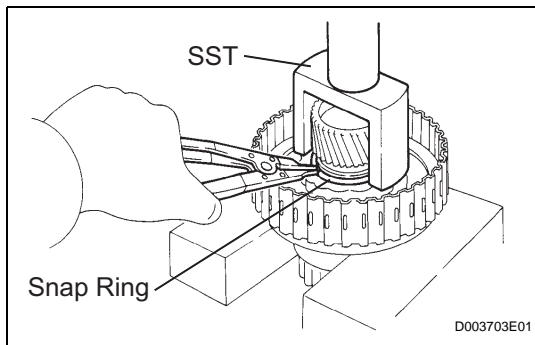
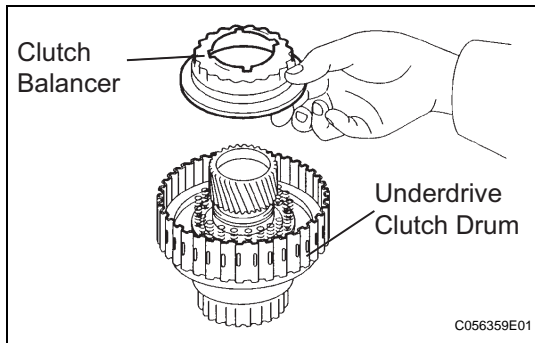
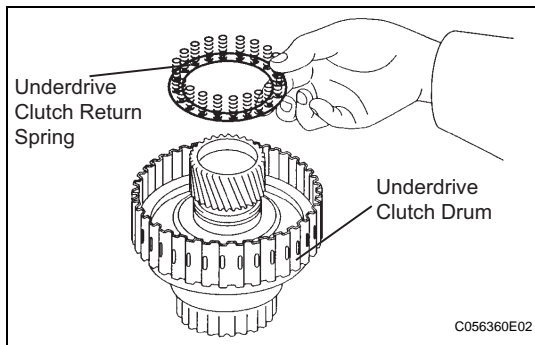
1. INSTALL UNDERDRIVE CLUTCH DRUM O-RING

- (a) Coat a new O-ring with ATF, and install it to the underdrive clutch drum.
NOTICE:
Make sure that the O-ring is not twisted or pinched.



2. INSTALL UNDERDRIVE CLUTCH PISTON SET

- (a) Coat the underdrive clutch piston with ATF, and install it to the underdrive clutch piston drum.
NOTICE:
- **Be careful not to damage the O-ring.**
 - **Be careful not to damage the lip of the piston.**



3. INSTALL UNDERDRIVE CLUTCH RETURN SPRING SUB-ASSEMBLY

- (a) Install the return spring to the underdrive clutch drum.

NOTICE:

Installing the spring sub-assembly, check that all of the springs are fit in the piston correctly.

- (b) Coat the clutch balancer with ATF.

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

NOTICE:

Be careful not to damage the lip of the clutch balancer.

- (d) Place SST on the clutch balancer and compress the piston return spring with a press.

SST 09350-32014 (09351-32070)

- (e) Using a snap ring expander, install the snap ring to the underdrive clutch drum.

- (f) Be sure that the end gap of the snap ring is not aligned with the spring retainer claw.

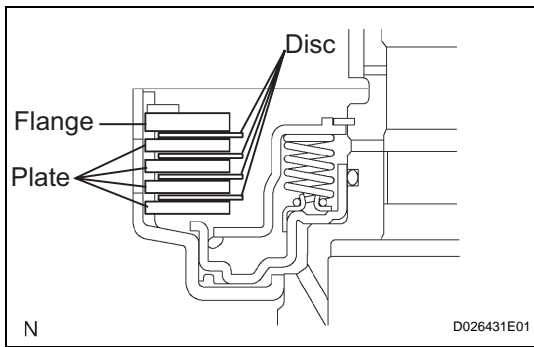
NOTICE:

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

- (g) Set the end gap of the snap ring in the underdrive clutch drum as shown in the illustration.

NOTICE:

The end gap of the snap ring should not align with any of the stoppers.

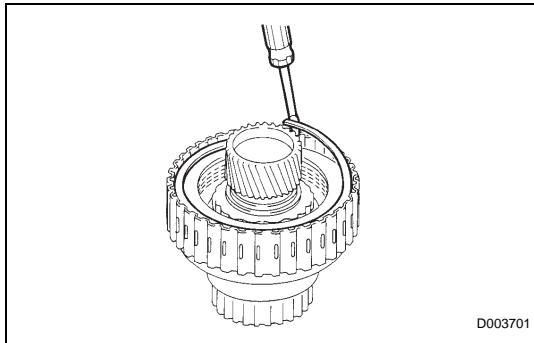


4. INSTALL UNDERDRIVE CLUTCH DISC NO.1

- (a) Coat the 4 discs with ATF.
- (b) Install the 4 plates, 4 discs and flange to the underdrive clutch drum.

NOTICE:

Make sure that the plates, discs, and flange are installed as shown in the illustration.



5. INSTALL 1ST & REVERSE BRAKE RETURN SPRING SHAFT SNAP RING

- (a) Using a screwdriver, install the underdrive clutch flange No.2 hole snap ring.
- (b) Check that the end gap of snap ring is not aligned with one of the cutouts.

NOTICE:

The snap ring should be fully engaged in the groove of the drum.

6. INSPECT UNDERDRIVE PACK CLEARANCE

HINT:

(See page [AX-281](#))