UNDERDRIVE CLUTCH ASSY (U241E)

4006T–01

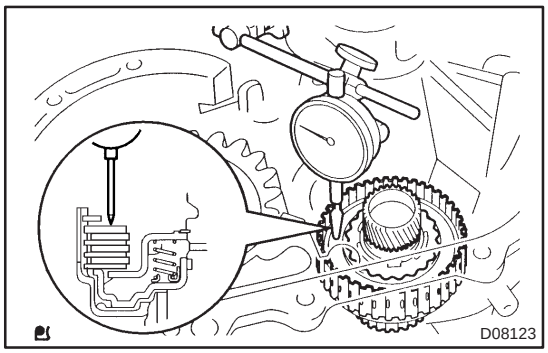
OVERHAUL

1. INSPECT UNDERDRIVE PACK CLEARANCE

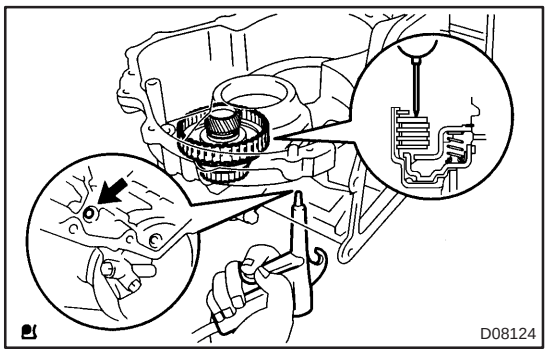
(a) Inspect the U/D clutch to the transaxle case.

NOTICE:

Be careful not to damage the oil seal rings.



(b) Install a dial indicator as shown in the illustration.

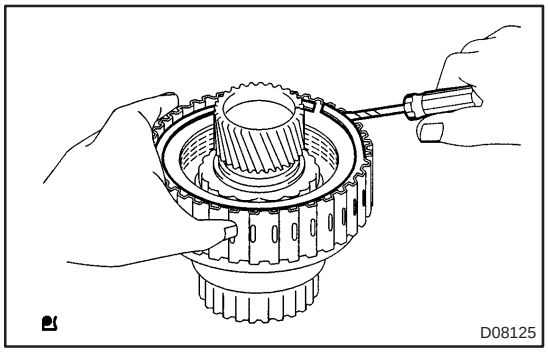


(c) Measure the U/D clutch pack clearance while applying and releasing compressed air (392 kPa, 4.0 kgf/cm^2, 57 psi).

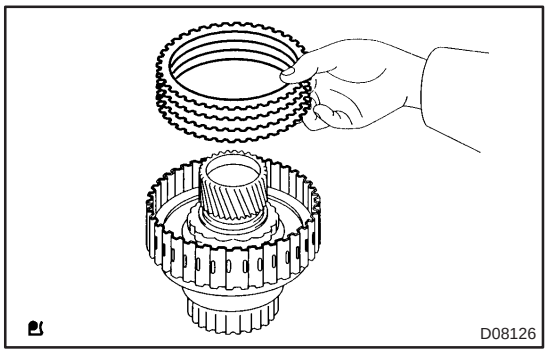
Pack clearance: 1.51 – 1.90 mm (0.0594 – 0.0748 in.)

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

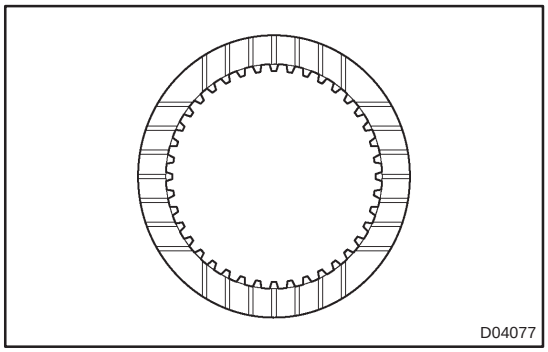
2. REMOVE UNDERDRIVE CLUTCH DISC NO.1



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



(b) Remove the flange, 3 discs and 3 plates from the U/D clutch drum.

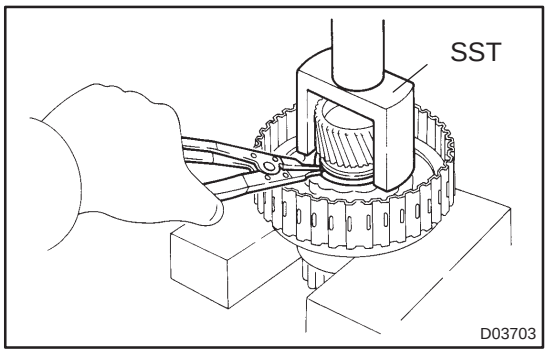


3. INSPECT UNDERDRIVE CLUTCH DISC NO.1

(a) 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.



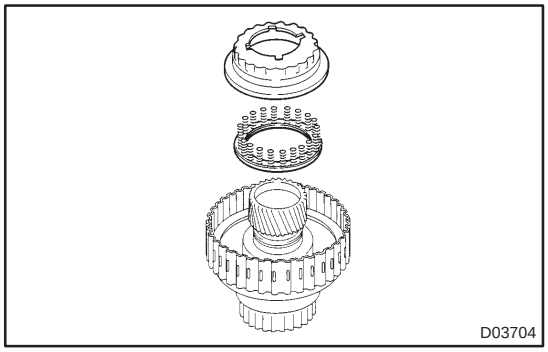
4. REMOVE UNDERDRIVE CLUTCH PISTON SET

(a) Place SST on the clutch balancer and compress the spring with a press.
SST 09350–32014 (09351–32070)

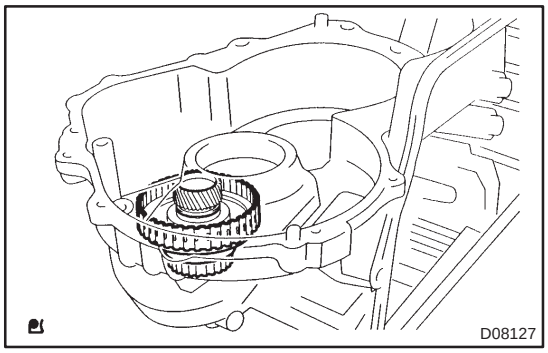
(b) Using a snap ring expander, remove the snap ring.

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 grove.**
- **This prevents the spring sheet from being deformed.**
- **Do not expand the snap ring excessively.**



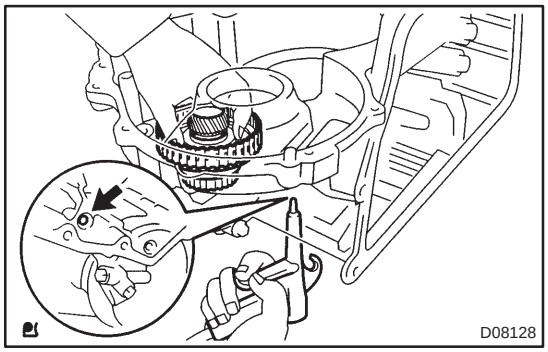
(c) Remove the clutch balancer and piston return spring from the U/D clutch drum.



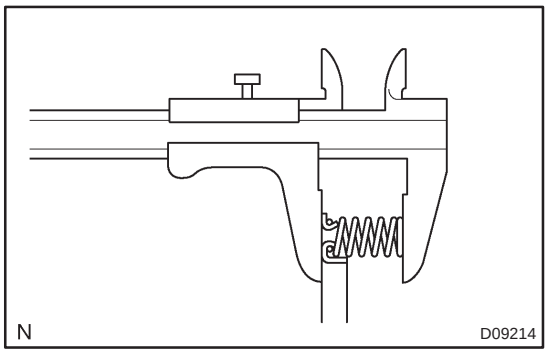
(d) Install the U/D clutch to the transaxle case.

NOTICE:

Be careful not to damage the oil seal rings.

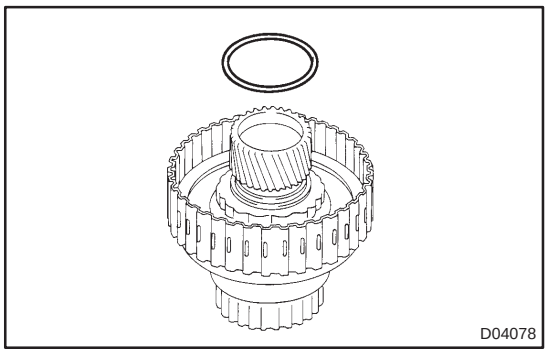


(e) Holding the U/D clutch piston with your hand, apply compressed air (392 kPa, 4.0 kgf/cm^2, 57 psi) to the transaxle case to remove the U/D clutch piston.

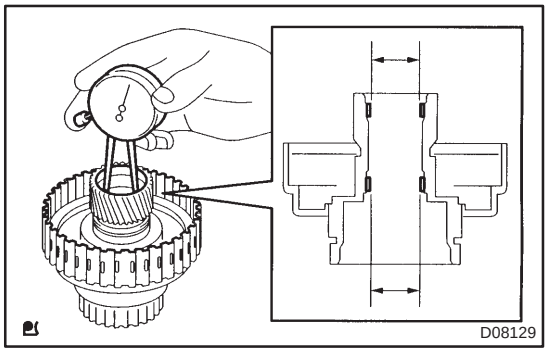


5. INSPECT UNDERDRIVE CLUTCH RETURN SPRING SUB–ASSY

(a) Using vernier calipers, measure the free length of the spring together with the spring seat.
Standard free length: 17.14 mm (0.6748 in.)



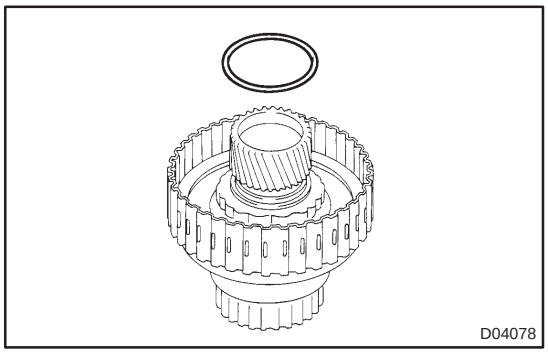
6. REMOVE UNDERDRIVE CLUTCH DRUM O–RING



7. INSPECT UNDERDRIVE CLUTCH DRUM SUB–ASSY

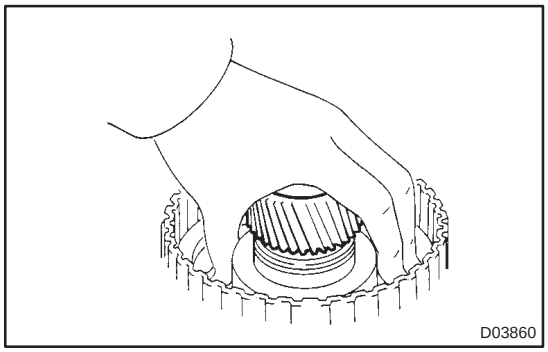
(a) Using a dial indicator, measure the inside diameter of the U/D clutch drum bushing.
Standard drum bushing:
32.56 – 32.58 mm (1.2818 – 1.2826 in.)
Maximum drum bushing: 32.63 mm (1.2846 in.)

If the inside diameter is greater than the maximum, replace the U/D clutch drum.



8. INSTALL UNDERDRIVE CLUTCH DRUM O–RING

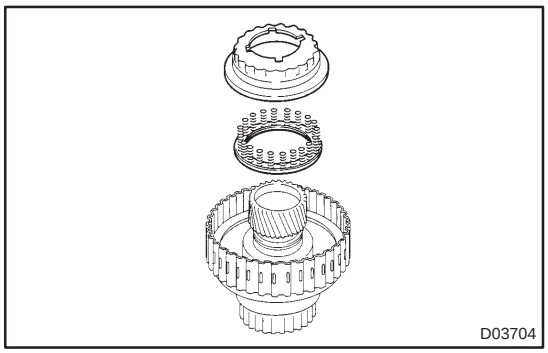
(a) Coat a new O–ring with ATF and install it to the U/D clutch drum.



9. INSTALL UNDERDRIVE CLUTCH PISTON SET

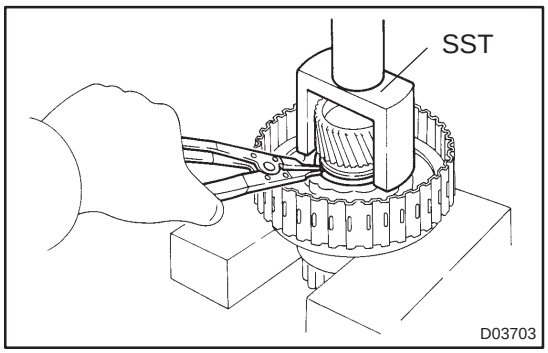
(a) Coat the U/D clutch piston with ATF, and install it to the U/D clutch piston drum.

NOTICE:
Be careful not to damage the O–ring.



(b) Install the piston return spring and clutch balancer to the U/D clutch drum.

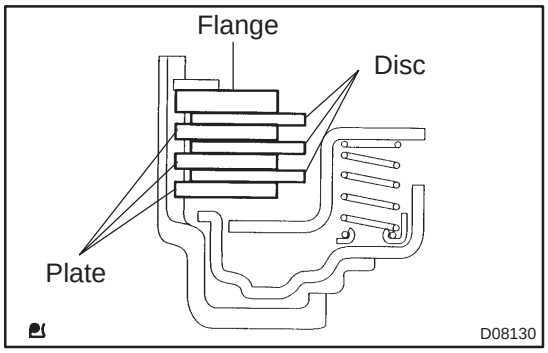
NOTICE:
Be careful not to damage the lip seal of the clutch balancer.



(c) Place SST on the clutch balancer and compress the piston return spring with a press.
SST 09350–32014 (09351–32070)

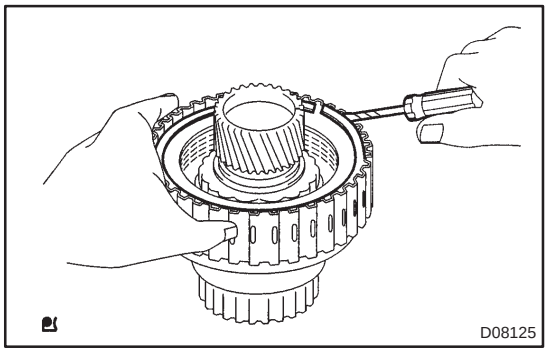
(d) Using a snap ring expander, install the snap ring to U/D clutch drum.

NOTICE:
- **Be sure the end gap of the snap ring is not aligned with the clutch balancer's 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.**



10. INSTALL UNDERDRIVE CLUTCH DISC NO.1

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



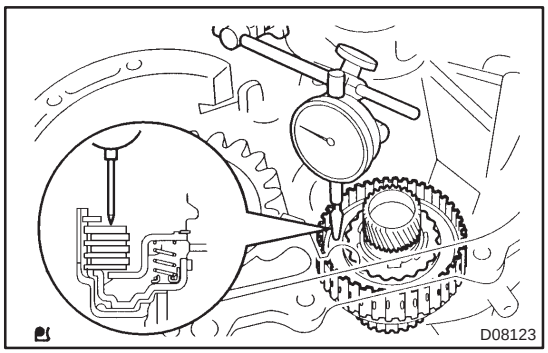
(b) Using a screwdriver, install the snap ring.
(c) Check that the end gap of the snap ring is not aligned with one of the cutouts.

11. INSPECT UNDERDRIVE PACK CLEARANCE

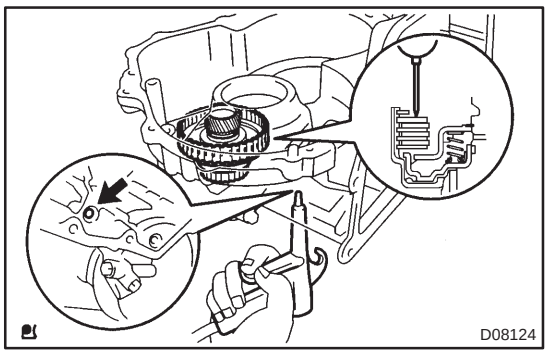
(a) Install the U/D clutch to the transaxle case.

NOTICE:

Be careful not to damage the oil seal rings.



(b) Set a dial indicator as shown in the illustration.



(c) Measure the U/D clutch piston stroke while applying and releasing compressed air (392 kPa, 4.0 kgf/cm^2, 57 psi).

Park clearance: 1.51 – 1.90 mm (0.0594 – 0.0748 in.)

If the pack clearance is less than the minimum, parts may have been assembled incorrectly, so check and reassemble again.
If the park clearance is non–standard, select another flange.
HINT:
There are 3 flanges in different thickness.

Flange thickness: mm (in.)

No.	Thickness	No.	Thickness
A	3.0 (0.118)	C	3.4 (0.134)
B	3.2 (0.126)	–	–