

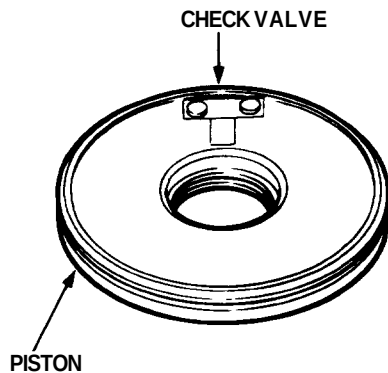
# Clutch

## Reassembly

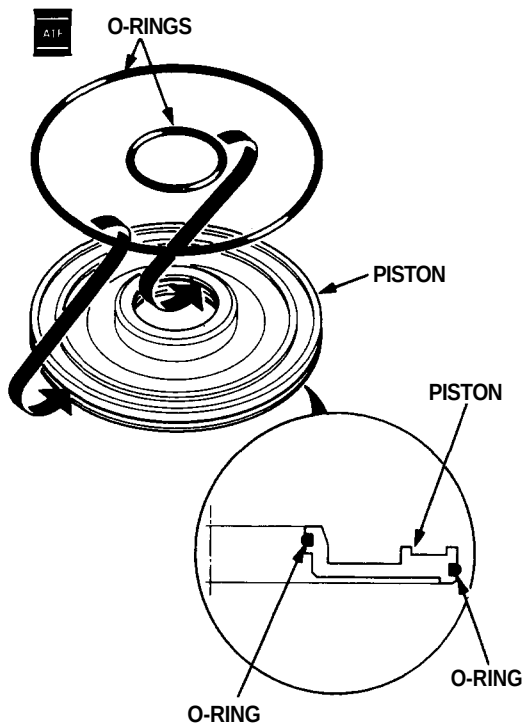
### NOTE:

- Clean all parts thoroughly in solvent or carburetor cleaner, and dry them with compressed air.
- Blow out all passages.
- Lubricate all parts with ATF before assembly.

1. Inspect the check valve; if it's loose, replace the piston.



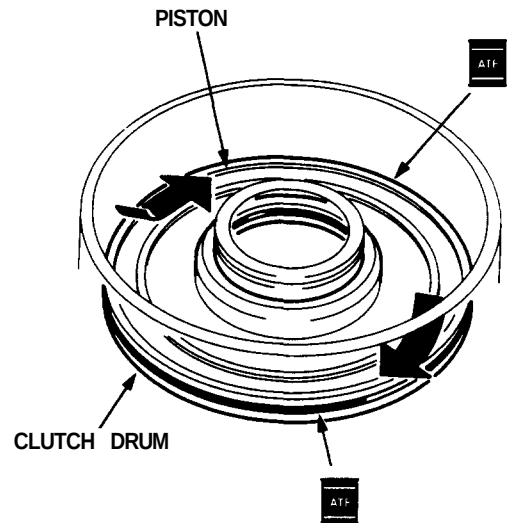
2. Install new O-rings on the piston.



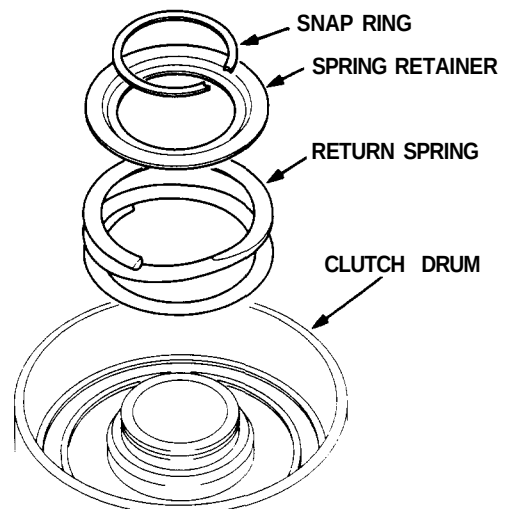
3. Install the piston in the clutch drum by applying pressure to the piston and rotate it to ensure proper seating.

NOTE: Lubricate the piston O-ring with ATF before installation.

**CAUTION:** Do not pinch the O-ring by installing the piston with too much force.



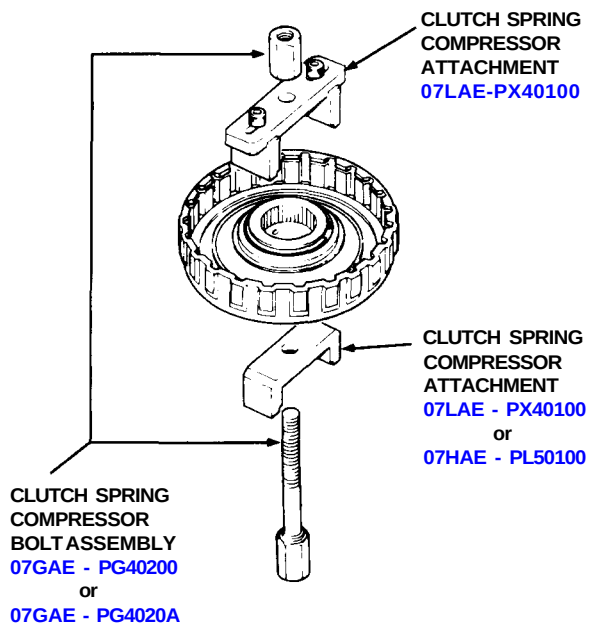
4. Install the return spring and spring retainer, and position the snap ring on the retainer.



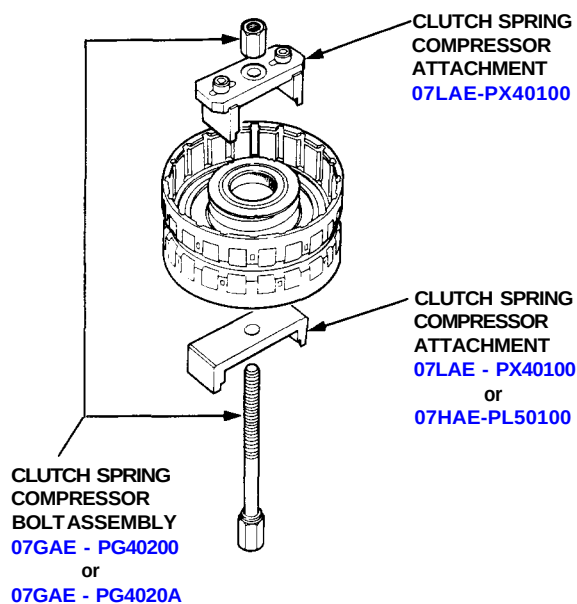


5. Install the special tools as shown.

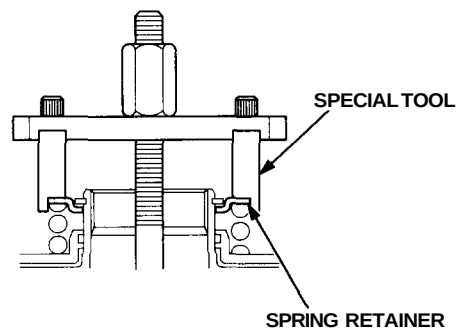
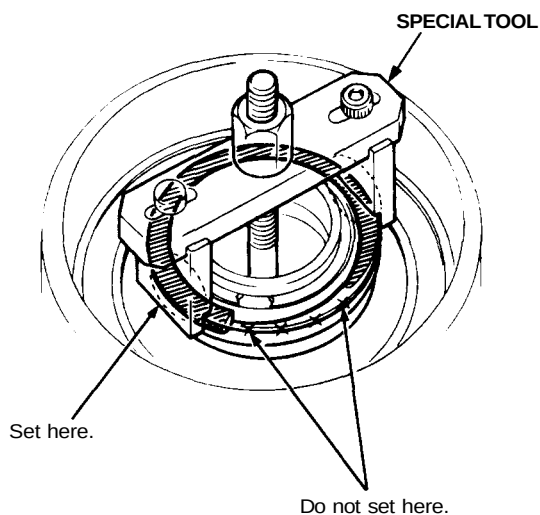
2nd, 3rd, 1st-hold and reverse clutches:



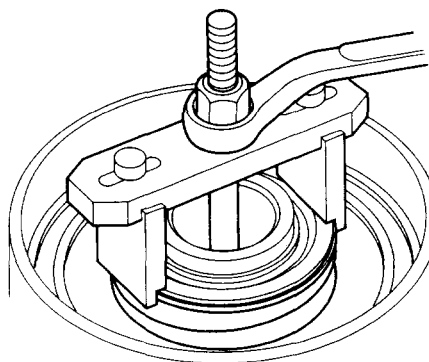
1st and 4th clutches:



**CAUTION:** If either end of the special tool is set over an area of the spring retainer which is unsupported by the return spring, the retainer may be damaged. Be sure the special tool is adjusted to have full contact with the spring retainer.



6. Compress the return spring with the special tool.

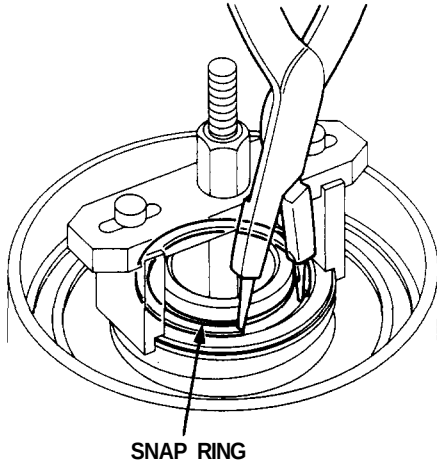


(cont'd)

# Clutch

## Reassembly (cont'd)

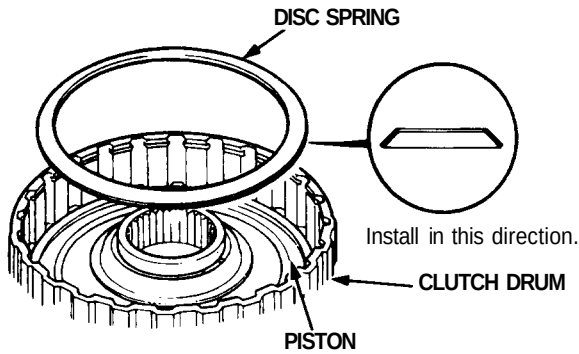
7. Install the snap ring.



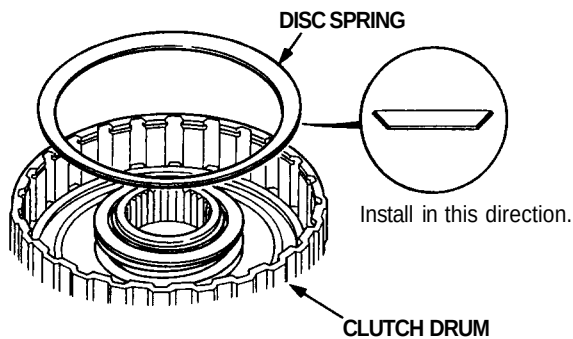
8. Remove the special tools.  
9. Install the disc spring in the direction shown.

NOTE: The 3rd and the 4th clutches do not have disc springs.

**2nd and 1st-hold clutches:**



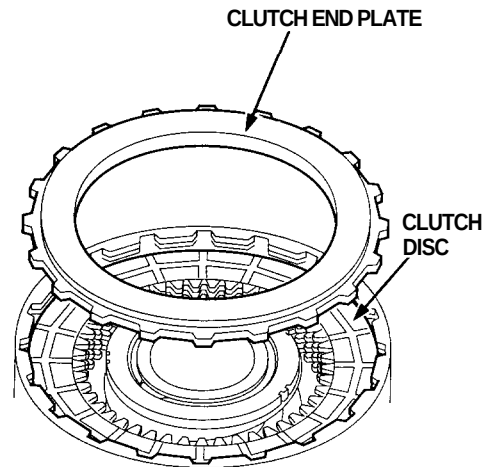
**Reverse and 1st clutches:**



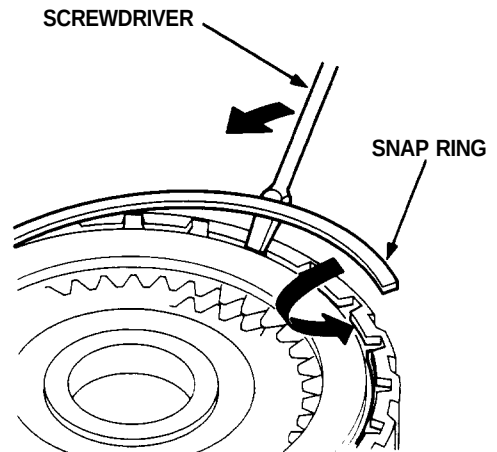
10. Soak the clutch discs thoroughly in ATF for a minimum of 30 minutes.

11. Starting with a clutch plate, alternately install the clutch plates and discs. Install the clutch end plate with the flat side toward the disc.

NOTE: Before installing the plates and discs, make sure the inside of the clutch drum is free of dirt and other foreign matter.



12. Install the snap ring.



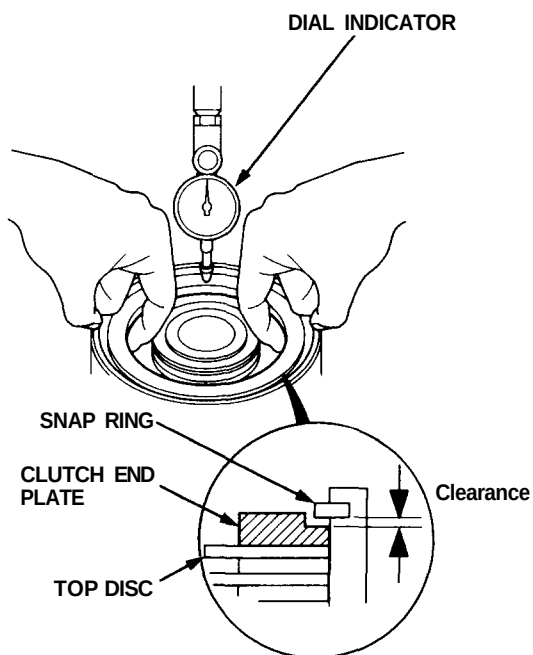


13. Measure the clearance between the clutch end plate and top disc with a dial indicator. Zero the dial indicator with the clutch end plate lowered, and lift it up to the snap ring. The distance that the clutch end plate moves is the clearance between the clutch end plate and top disc.

NOTE: Measure at three locations.

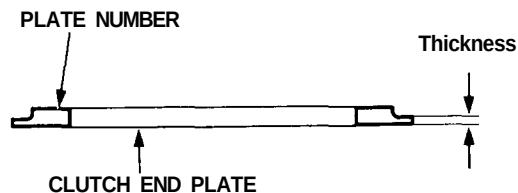
#### Clutch End Plate-to-Top Disc Clearance:

| Clutch   | Service Limit                     |
|----------|-----------------------------------|
| 1st      | 0.65 – 0.85 mm (0.026 – 0.033 in) |
| 2nd      | 0.60 – 0.80 mm (0.024 – 0.031 in) |
| 3rd      | 0.60 – 0.80 mm (0.024 – 0.031 in) |
| 4th      | 0.50 – 0.70 mm (0.020 – 0.028 in) |
| 1st-hold | 0.70 – 0.90 mm (0.028 – 0.035 in) |
| Reverse  | 0.75 – 0.95 mm (0.030 – 0.037 in) |



14. If the clearance is not within the service limits, select a new clutch end plate from the following table.

NOTE: If the thickest clutch end plate is installed, but the clearance is still over the standard, replace the clutch discs and clutch plates.



#### 1ST, 2ND, 3RD and 4TH CLUTCH END PLATES

| Plate No. | Part Number       | Thickness         |
|-----------|-------------------|-------------------|
| 1         | 22551 – PY4 – 003 | 2.1 mm (0.083 in) |
| 2         | 22552 – PY4 – 003 | 2.2 mm (0.087 in) |
| 3         | 22553 – PY4 – 003 | 2.3 mm (0.091 in) |
| 4         | 22554 – PY4 – 003 | 2.4 mm (0.094 in) |
| 5         | 22555 – PY4 – 003 | 2.5 mm (0.098 in) |
| 6         | 22556 – PY4 – 003 | 2.6 mm (0.102 in) |
| 7         | 22557 – PY4 – 003 | 2.7 mm (0.106 in) |
| 8         | 22558 – PY4 – 003 | 2.8 mm (0.110 in) |
| 9         | 22559 – PY4 – 003 | 2.9 mm (0.114 in) |

#### 1ST-HOLD CLUTCH END PLATES

| Plate No. | Part Number       | Thickness         |
|-----------|-------------------|-------------------|
| L1        | 22351 – PY4 – 003 | 2.1 mm (0.083 in) |
| L2        | 22352 – PY4 – 003 | 2.2 mm (0.087 in) |
| L3        | 22353 – PY4 – 003 | 2.3 mm (0.091 in) |
| L4        | 22354 – PY4 – 003 | 2.4 mm (0.094 in) |
| L5        | 22355 – PY4 – 003 | 2.5 mm (0.098 in) |
| L6        | 22356 – PY4 – 003 | 2.6 mm (0.102 in) |
| L7        | 22357 – PY4 – 003 | 2.7 mm (0.106 in) |
| L8        | 22358 – PY4 – 003 | 2.8 mm (0.110 in) |
| L9        | 22359 – PY4 – 003 | 2.9 mm (0.114 in) |

#### REVERSE CLUTCH END PLATES

| Plate No. | Part Number       | Thickness         |
|-----------|-------------------|-------------------|
| R1        | 22451 – PY4 – 003 | 4.1 mm (0.161 in) |
| R2        | 22452 – PY4 – 003 | 4.2 mm (0.165 in) |
| R3        | 22453 – PY4 – 003 | 4.3 mm (0.169 in) |
| R4        | 22454 – PY4 – 003 | 4.4 mm (0.173 in) |
| R5        | 22455 – PY4 – 003 | 4.5 mm (0.177 in) |
| R6        | 22456 – PY4 – 003 | 4.6 mm (0.181 in) |
| R7        | 22457 – PY4 – 003 | 4.7 mm (0.185 in) |
| R8        | 22458 – PY4 – 003 | 4.8 mm (0.189 in) |
| R9        | 22459 – PY4 – 003 | 4.9 mm (0.193 in) |