

# Clutch

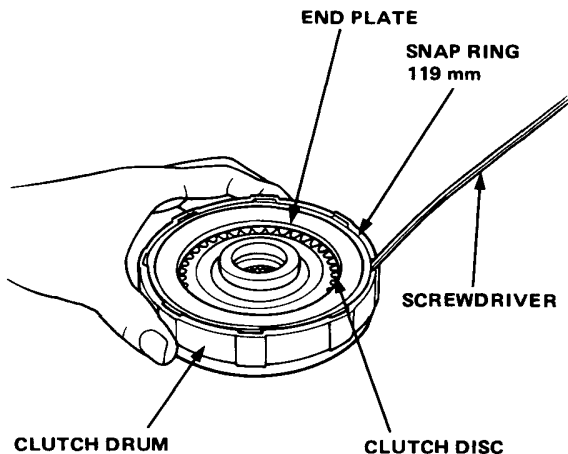


## Disassembly

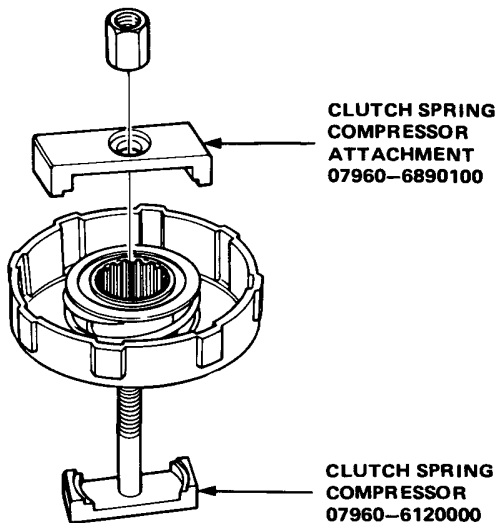
### NOTE:

- The 1st and 3rd clutches are identical.
- To disassemble the 2nd/4th clutch, use the special tool in Step 3 in the same manner as for the 1st and 3rd clutches.

1. Remove the snap ring.

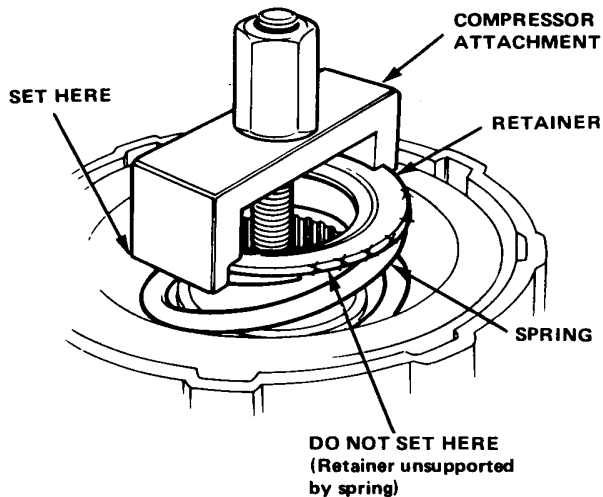


2. Remove the end plate, clutch discs and plates.
3. Install the clutch spring compressor as shown.

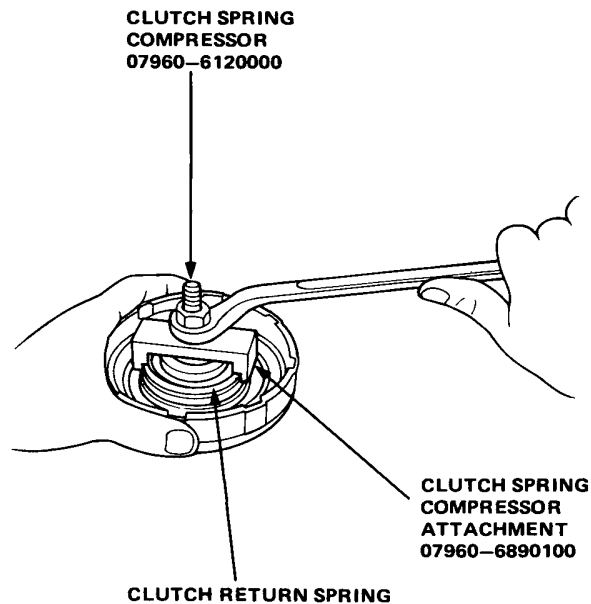


### 1st and 3rd Clutches

**CAUTION:** If either end of the compressor attachment is set over an area of the retainer which is unsupported by the spring, the retainer may be damaged.



- Compress the clutch return spring.



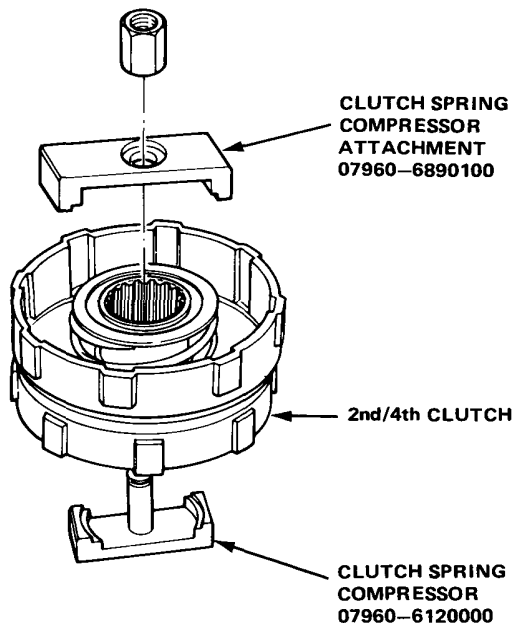
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# Clutch

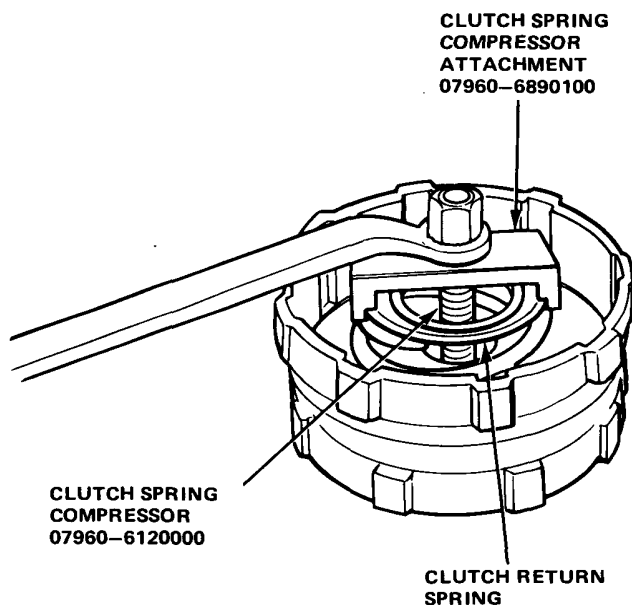
## Disassembly (cont'd)

### 2nd/4th Clutch

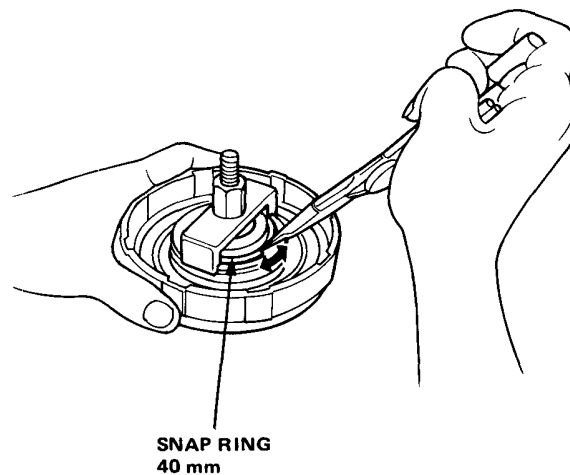
- Assemble the spring compressor on the clutch drum.



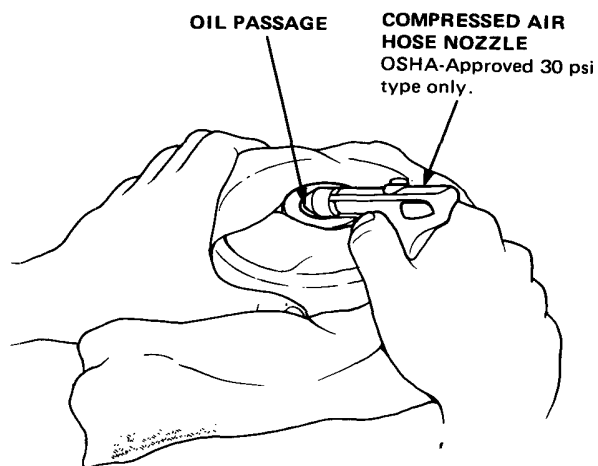
- Compress the clutch return spring.



- Remove the snap ring. Then remove the clutch spring compressor, spring retainer and spring.



- Wrap a shop rag around the clutch drum and apply air pressure to the oil passage to remove the piston. Place a finger tip on the other end while applying air pressure.

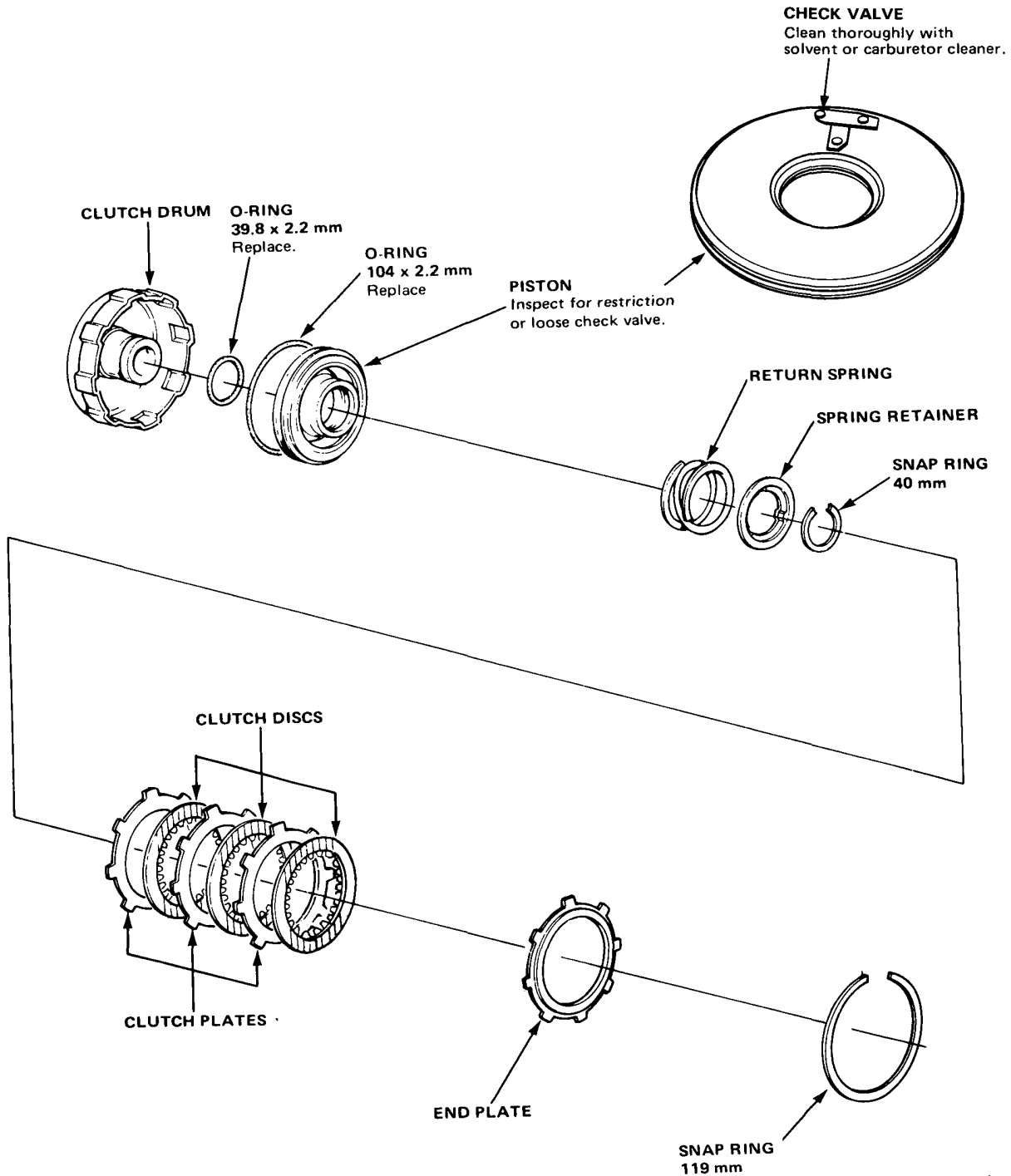


# Clutch



## Disassembly/Inspection

### 1st and 3rd Clutches

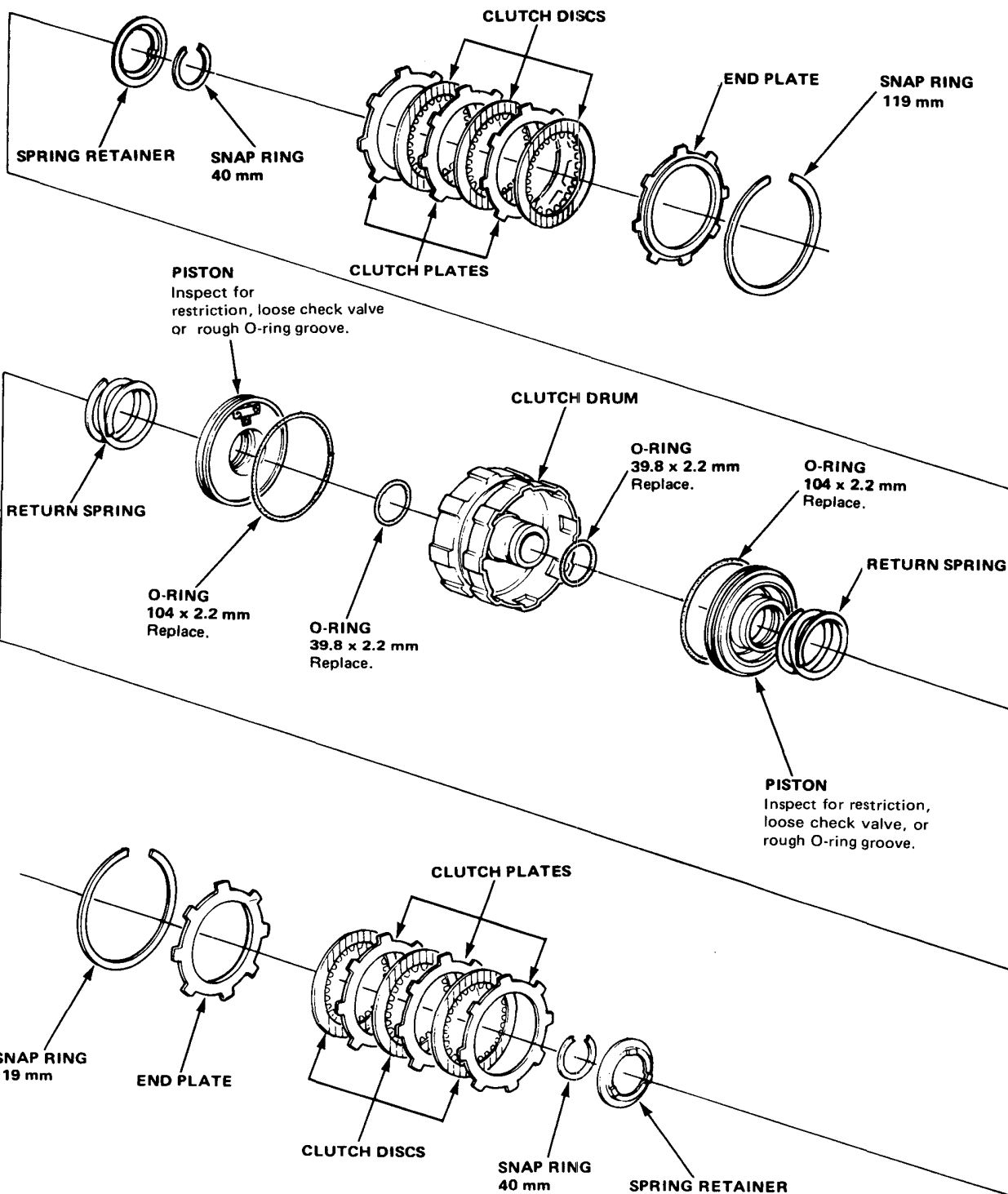


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# Clutch

## Disassembly/Inspection (cont'd)

### 2nd/4th Clutch



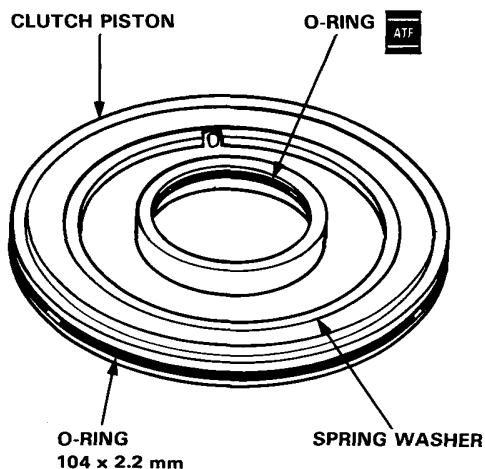


## Reassembly

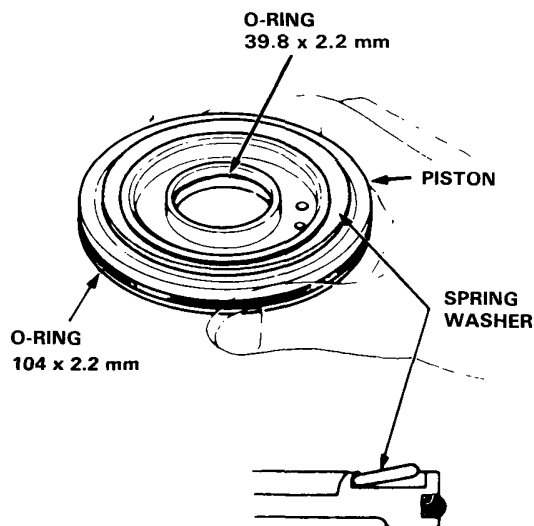
### NOTE:

- The 1st and 3rd clutches are identical.
- To reassemble the 2nd/4th clutch, use the special tool in Step 7 in the same manner as for the 1st and 3rd clutches.

1. Clean all parts thoroughly in solvent, and dry with compressed air. Blow out all passages.
2. Lubricate all parts with ATF before reassembly.



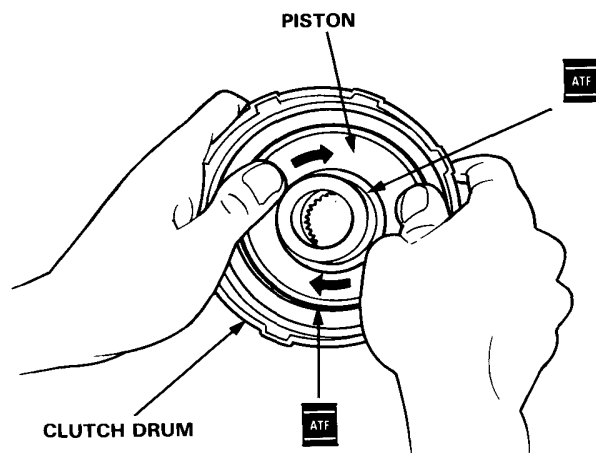
3. Install new O-ring on clutch piston. Make sure the spring washer is properly positioned as shown.



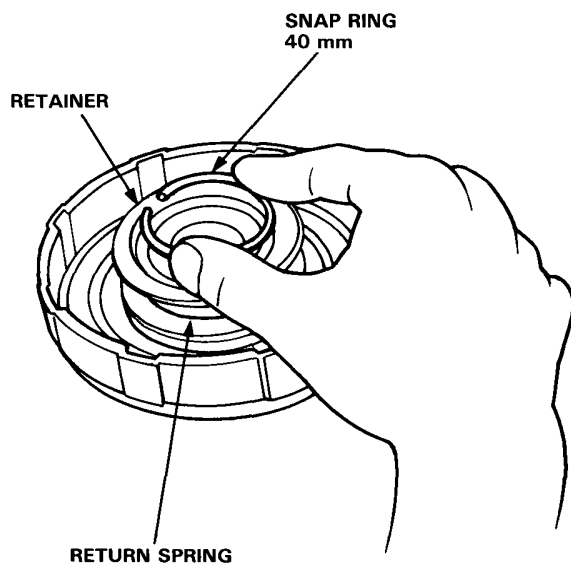
4. Install the piston in the clutch drum. Apply pressure and rotate to ensure proper seating.

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

**CAUTION:** Do not pinch O-ring by forcing piston installation.



5. Install the return spring and retainer.
6. Position the 40 mm snap ring on the spring retainer.



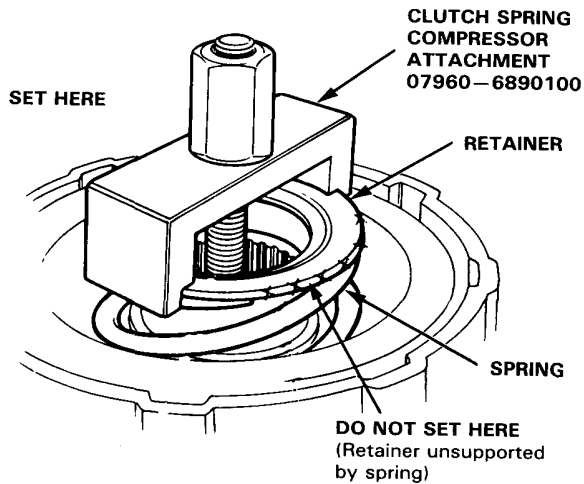
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# Clutch

## Reassembly (cont'd)

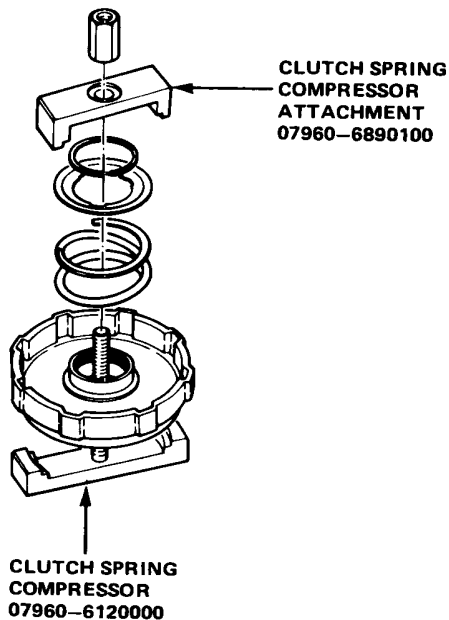
7. Assemble the spring compressor on the clutch drum.

**CAUTION:** If either end of the compressor attachment is set over an area of the retainer which is unsupported by the spring, the retainer may be damaged.

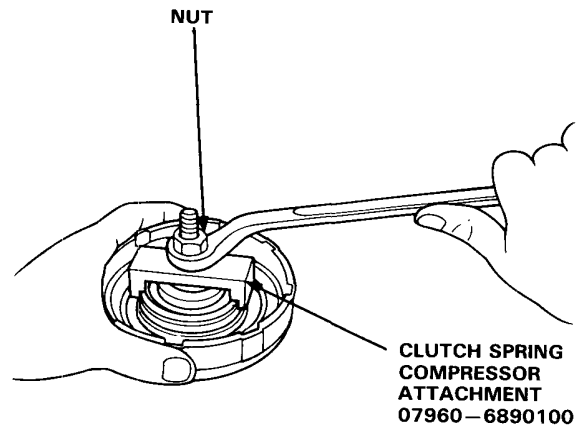


### 1st and 3rd clutches

- Assemble the spring compressor on the clutch drum.

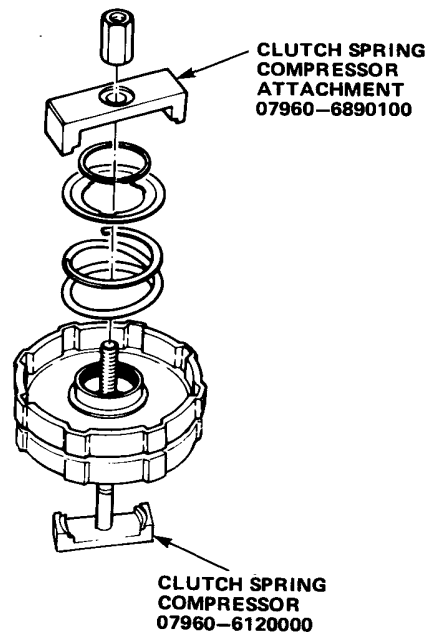


8. Compress the spring until the retainer is below the snap ring groove in the hub.



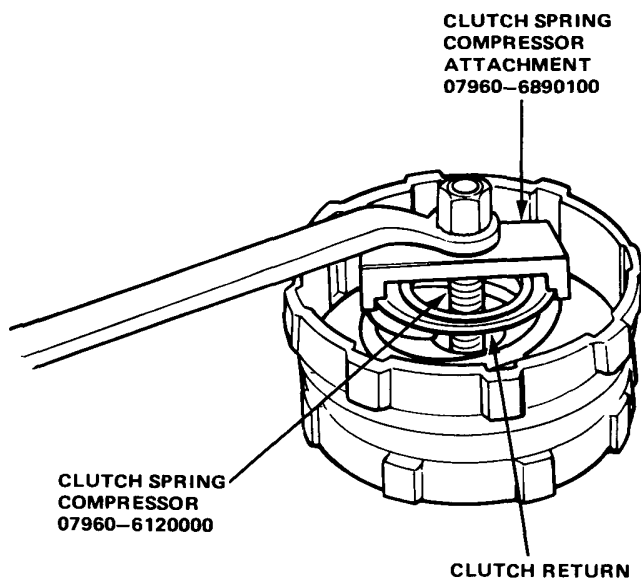
### 2nd/4th Clutch

- Assemble the spring compressor on the clutch drum.

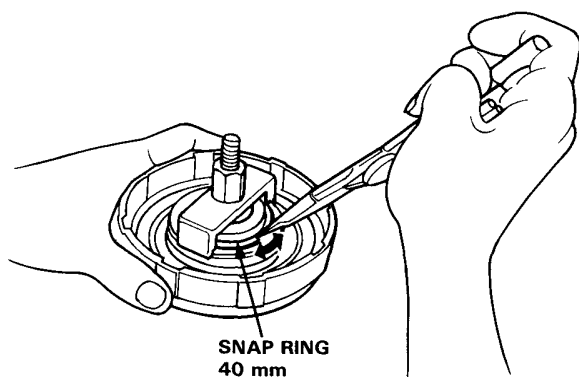




- Compress the clutch return spring.



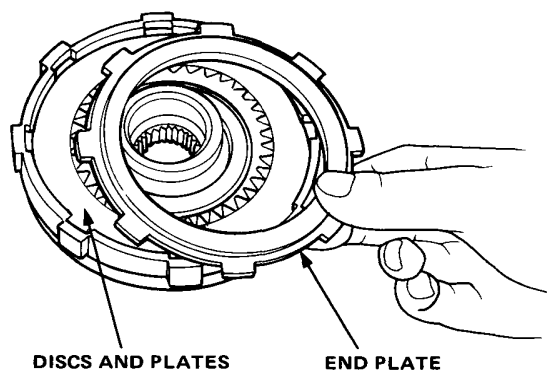
9. Then install the snap ring (with its rounded edge facing in ) in the hub groove and remove the spring compressor.



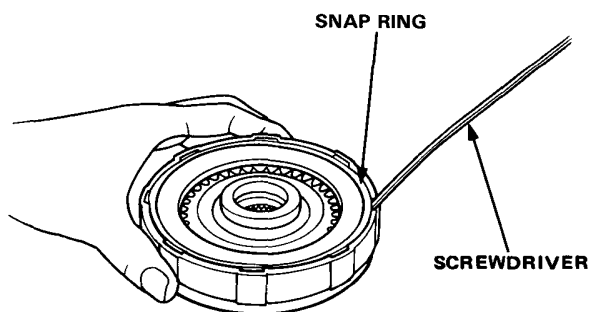
10. Soak the clutch discs thoroughly in automatic transmission fluid for a minimum of 30 minutes.

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

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



12. Install the 119 mm snap ring.



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# Clutch

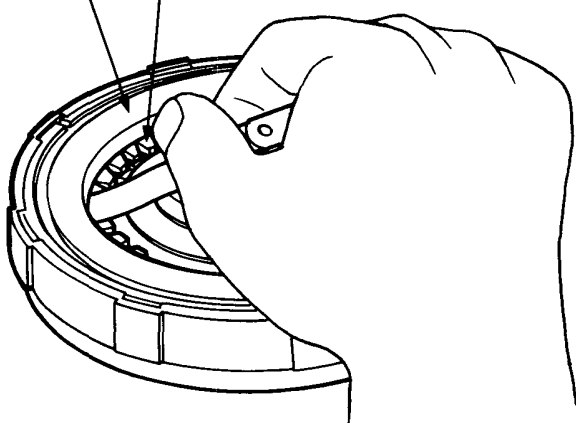
## Reassembly (cont'd)

13. Using bent feeler gauges, carefully measure the clearance between the clutch end plate and the top disc. Do not damage the disc.

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

	Service Limit	
LOW	0.4–0.7 mm	(0.016–0.028 in.)
2ND	0.65–0.8 mm	(0.026–0.031 in.)
3RD	0.4–0.6 mm	(0.016–0.023 in.)
4TH	0.4–0.6 mm	(0.016–0.023 in.)

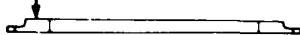
END PLATE TOP DISC



14. If not within service limit, select a new clutch end plate from following table.

P/N	PLATE NO.	THICKNESS
22551-PC9-000	1	2.4 mm (0.094 in.)
22552-PC9-000	2	2.5 mm (0.098 in.)
22553-PC9-000	3	2.6 mm (0.102 in.)
22554-PC9-000	4	2.7 mm (0.106 in.)
22555-PC9-000	5	2.8 mm (0.110 in.)
22556-PC9-000	6	2.9 mm (0.114 in.)
22557-PC9-000	7	3.0 mm (0.118 in.)
22558-PC9-000	8	3.1 mm (0.122 in.)
22559-PC9-000	9	3.2 mm (0.126 in.)
22560-PC9-000	10	3.3 mm (0.130 in.)

NUMBER



END PLATE

15. Check the clutch engagement by blowing air into the oil passage in the clutch drum hub. Remove the air pressure and check that the clutch releases.

CLUTCH ASSEMBLY OSHA APPROVED 30 psi NOZZLE

