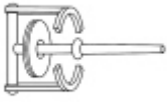



Direct Clutch Drum Assembly

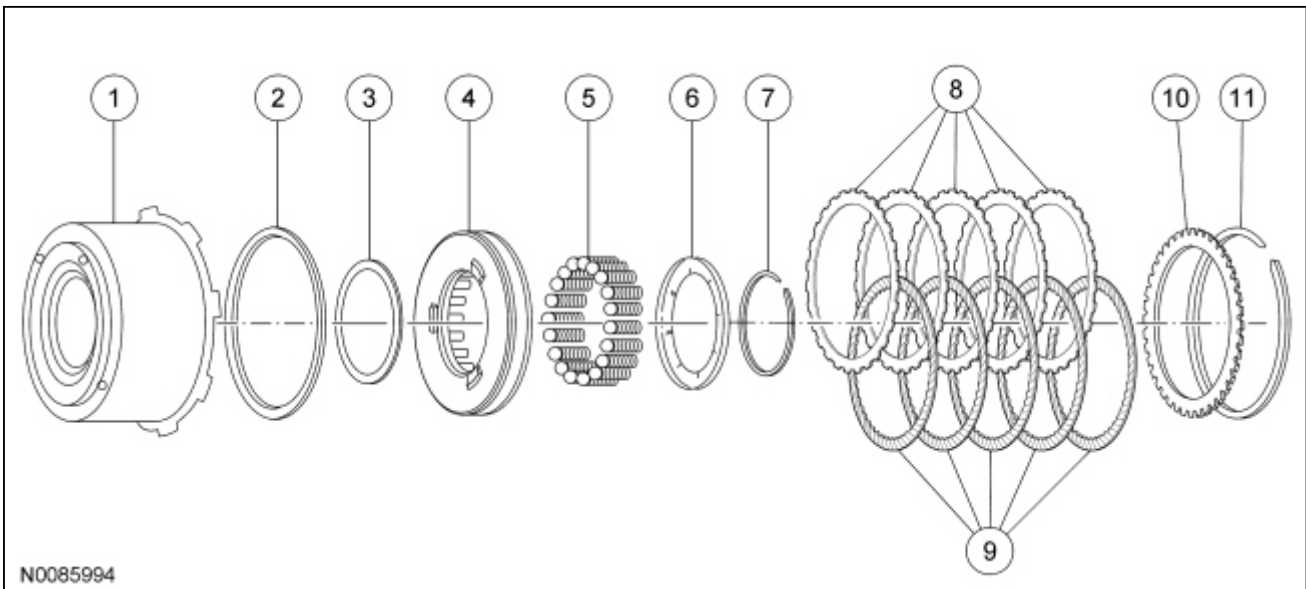
Special Tool(s)

 ST1190-A	Compressor, Clutch Spring 307-015 (T65L-77515-A)
 ST2431-A	Protector, Piston Seal 307-049 (T74P-77404-A)

Material

Item	Specification
MERCON® V Automatic Transmission Fluid XT-5-QM (or XT-5-QMC) (US); CXT-5-LM12 (Canada)	MERCON® V

Direct Clutch Drum Assembly

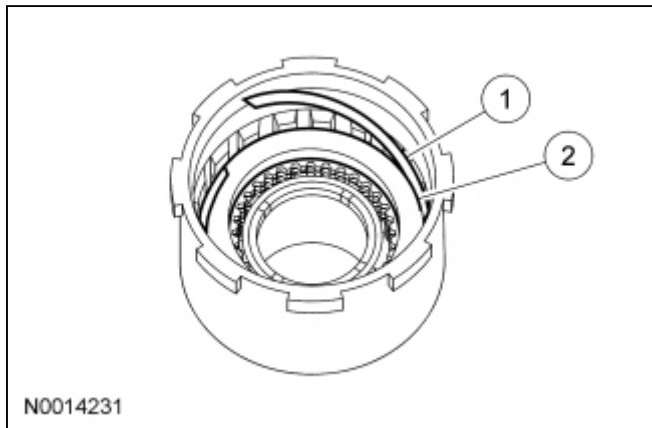


Item	Part Number	Description
1	7D044	Intermediate brake drum assembly
2	7A548	Direct piston outer seal ring
3	7D404	Direct piston inner seal ring
4	7A262	Direct clutch piston
5	7A480	Direct piston spring (20 required)
6	7A527	Direct clutch piston spring retainer

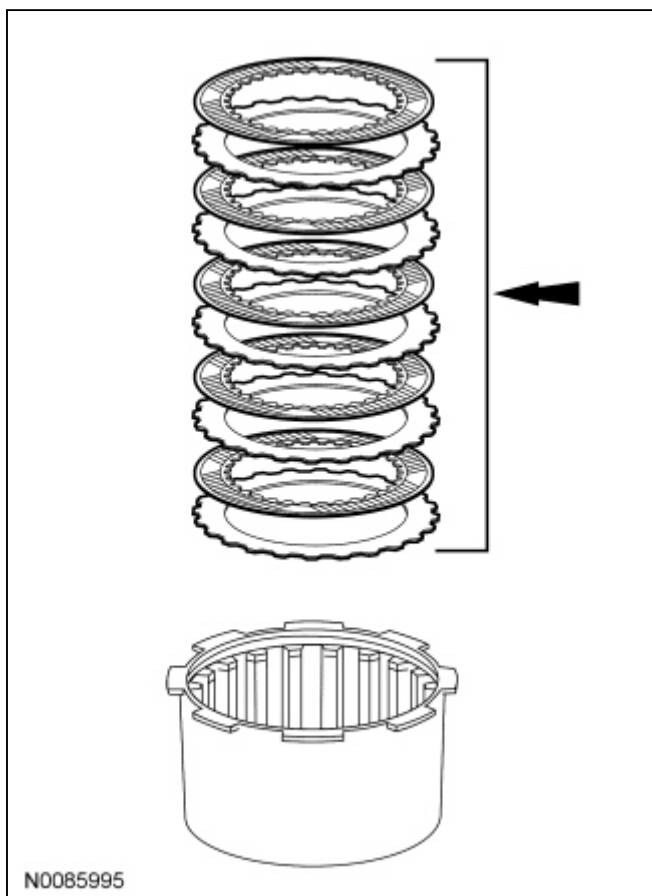
7	E860125-S	Retaining ring
8	7B442	Direct clutch external spline plates
9	7B164	Direct clutch internal spline plates
10	7B066	Direct clutch pressure plate
11	E860126S/129S	Retaining ring (select fit)


Disassembly

1. Remove the direct clutch retaining ring and the direct clutch pressure plate.
 1. Remove the direct clutch retaining ring.
 2. Remove the direct clutch pressure plate.



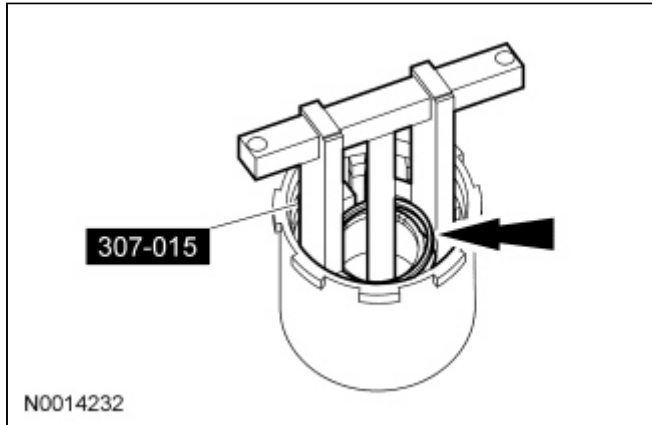
2. Remove the direct clutch disc pack.
 - Inspect and install new direct clutch external splined steel plates and internal splined friction plates if worn, damaged or overheated.



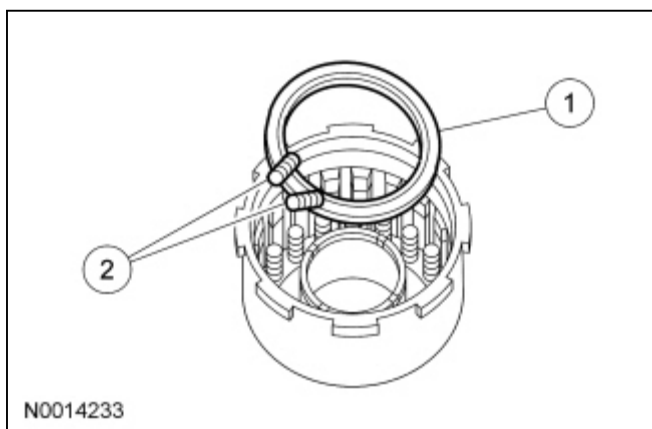
3.  **WARNING:** While removing or installing the retaining ring, slowly release tool pressure on clutch piston springs. Failure to follow this instruction may cause the assembly to separate forcefully, resulting in serious personal injury.


NOTICE: Do not fully compress the Clutch Spring Compressor or damage to the spring retainer may occur.

Using the Clutch Spring Compressor, remove the direct clutch piston retaining ring.



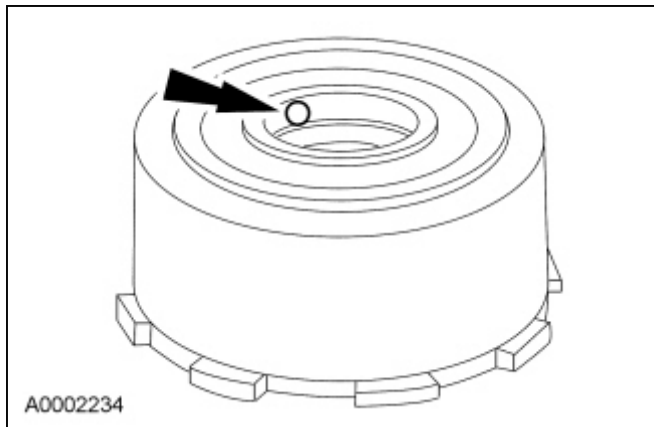
4. Relieve the direct clutch spring tension and remove the Clutch Spring Compressor.
5. Remove the direct clutch piston spring retainer and the direct clutch piston springs.
1. Remove the direct clutch piston spring retainer.
 2. Remove the direct clutch piston springs.



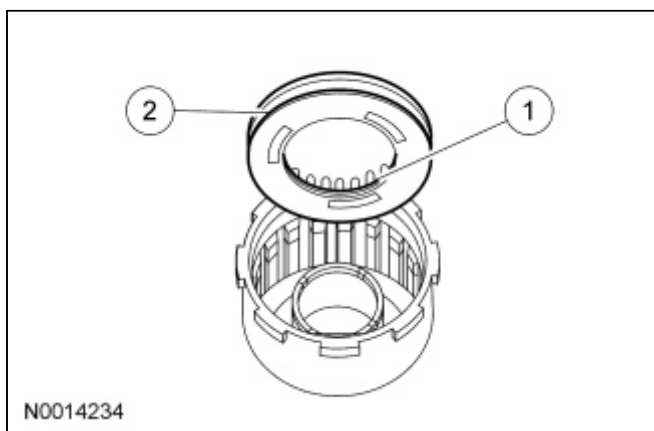
6.  **WARNING:** When using compressed air, never let air pressure exceed 138 kPa (20 psi) and always wear safety glasses. Compressed air may cause foreign material or parts to become airborne. Failure to follow this instruction may result in serious personal injury.

Using compressed air, remove the direct clutch piston from the direct clutch drum.

- Apply air pressure to the hole in the drum while blocking the other hole.



7. Remove and discard the direct clutch piston inner and outer seal.
 1. Remove and discard the direct clutch piston inner seal.
 2. Remove and discard the direct clutch piston outer seal.
 - Clean the components as necessary.

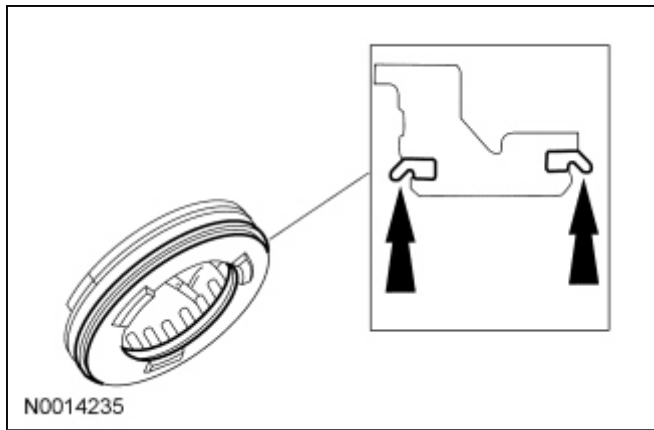


Assembly

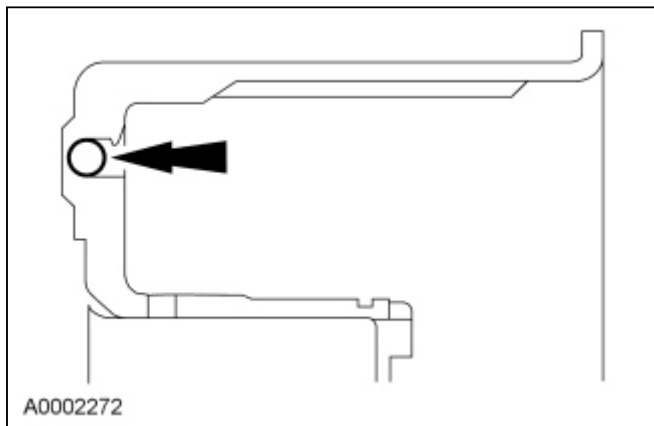
1. Inspect the clutch components for damage or wear. Install new components as necessary.
 - Inspect the drum surface for damage.
 - Inspect the clutch piston bore and piston.
 - Check the fluid passages for obstructions. All fluid passages must be clean and free of obstructions.
 - Inspect the clutch plates for damage.
 - Inspect the clutch springs.
2. **NOTICE: The lip seals must be positioned as shown. Care must be taken to prevent rollover of the lip seal.**

NOTE: Use new seals to help prevent seal failures.

Install the new direct clutch piston inner seal and the direct clutch piston outer seal.



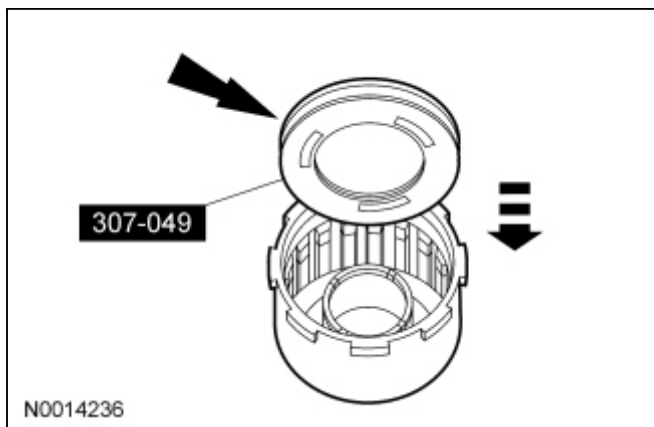
3. Verify the check ball is free to move.



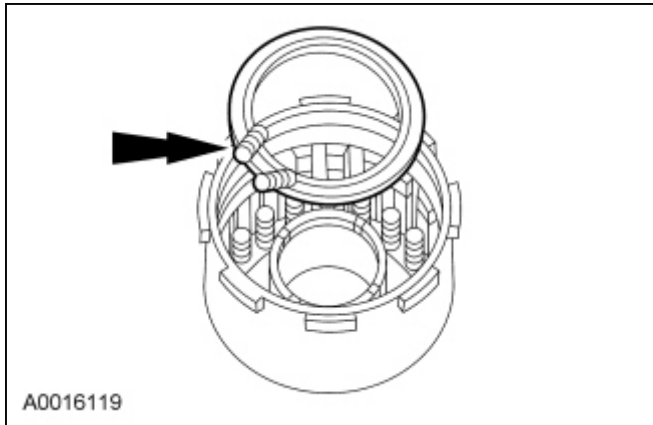
4. **NOTICE:** Care must be taken to prevent damage to the seals during installation.


Using the Piston Seal Protector, install the direct clutch piston.

- Lubricate the seals with transmission fluid before installing.



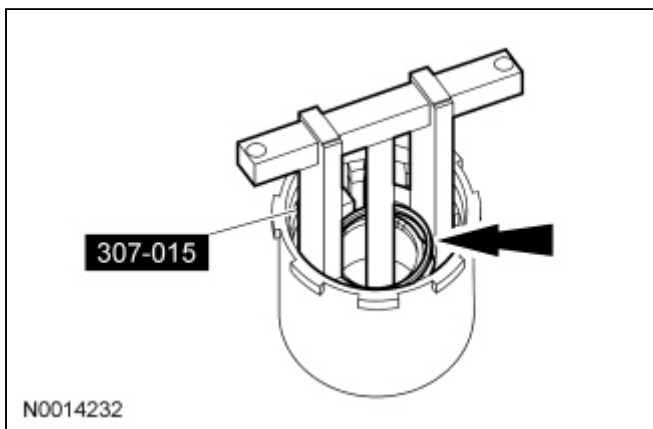
5. Install the direct clutch piston springs and the retainer.



6.  **WARNING:** While removing or installing the retaining ring, slowly release tool pressure on clutch piston springs. Failure to follow this instruction may cause the assembly to separate forcefully, resulting in serious personal injury.

NOTICE: Do not fully compress the Clutch Spring Compressor or damage to the spring retainer may occur.

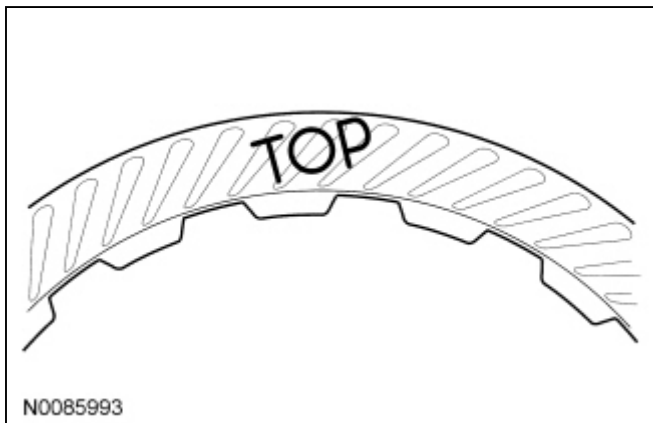
Using the Clutch Spring Compressor, install the direct clutch piston retaining ring.



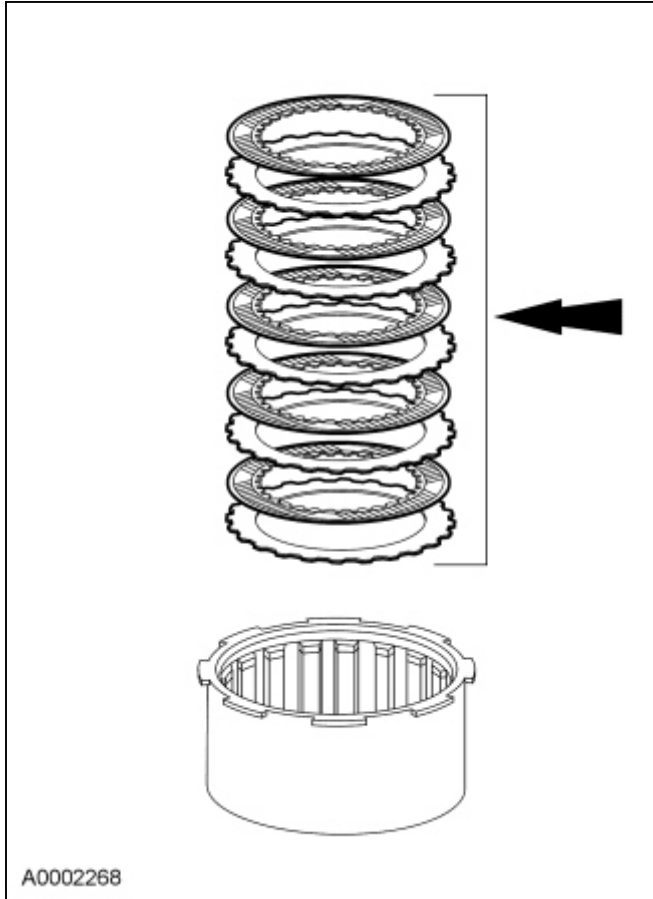
7. **NOTICE:** The direct clutch friction plates are directional and must be installed correctly. Alternate between steel separator plates and friction plates. When installing friction plates, the word TOP should face up.

NOTICE: If new plates are used, they should be soaked in automatic transmission fluid before assembly, otherwise transmission damage can occur.

When installing the direct clutch friction plates, the word TOP should face up. Alternate between steel separator plates and friction plates.

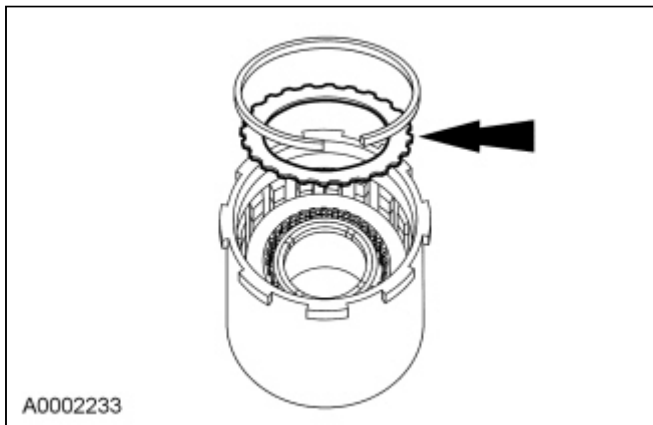



8. When installing the direct clutch friction plates, the word TOP should face up. Alternate between steel separator plates and friction plates.



9. **NOTE:** The retaining ring is a select fit.

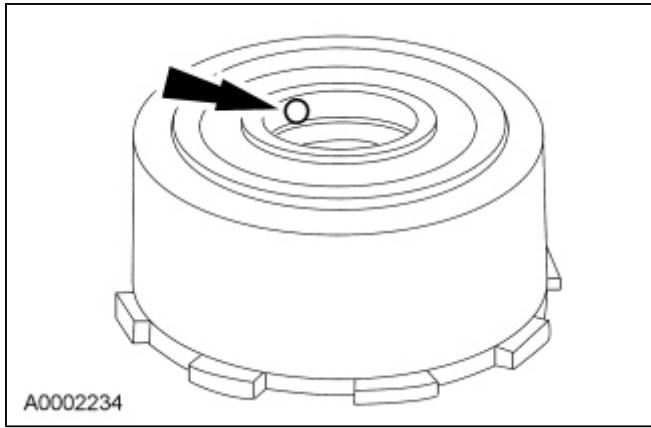
Install the direct clutch pressure plate using the original direct clutch retaining ring.



10.  **WARNING:** When using compressed air, never let air pressure exceed 138 kPa (20 psi) and always wear safety glasses. Compressed air may cause foreign material or parts to become airborne. Failure to follow this instruction may result in serious personal injury.

Air check the assembly.

- Apply air pressure to the hole in the drum while blocking the other hole.



11. Push down on the direct clutch disc pack and check the gap between the direct clutch retaining ring and the direct clutch pressure plate with a feeler gauge.
 - If the specifications do not match, use a select fit direct clutch retaining ring to match specifications and verify with a feeler gauge.

Direct Clutch

Part Number	Thickness		Diameter	
	mm	Inch	mm	Inch
E860126-S	1.37	0.053	130.1	5.122
E860127-S	1.73	0.068	130.1	5.122
E860128-S	2.08	0.081	130.1	5.122
E860129-S	2.44	0.096	130.1	5.122

