

Installation Instruction for Turbo 400 Internal Brake Kit-Pro Tree (Part#22023)

Note: Valve body is full manual with reversed shift pattern. (PRN123) As a safety feature, the Trans brake is only functional in first gear. Although, engaging the solenoid in neutral will cause the transmission to go into reverse.

400 Pro Brake Components:

1. Valve body/machined, 2. Separator plate, 3. Manual valve, 4. Rear accumulator spring, 5. Solenoid and o-ring, 6. 16 Direct Clutch Springs, 7. Brake valve, 8. Brake valve spring

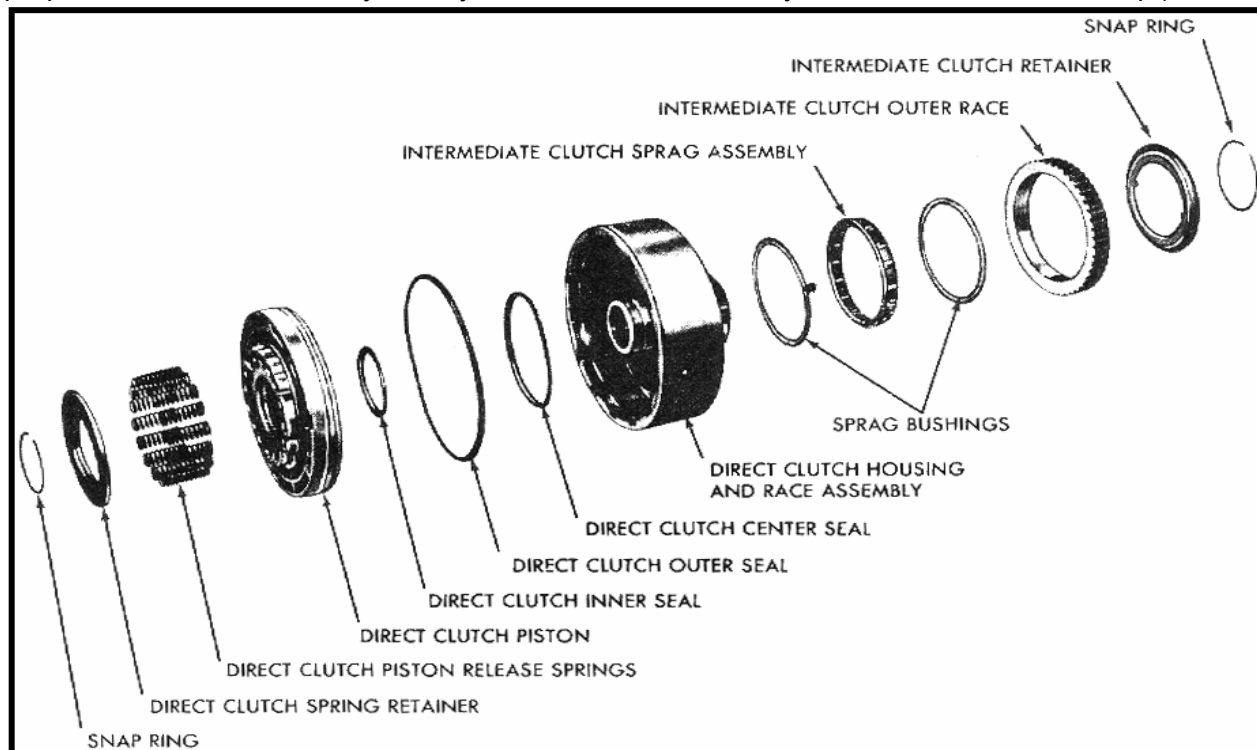
Pro Brake has reverse lockout feature, to activate reverse depress brake switch with shifter in neutral position.

**Caution: DO NOT neutral or downshift transmission during shutdown –
 LEAVE IN HIGH GEAR ONLY!**

If necessary, refer to a transmission manual for detailed instructions on disassembly and reassembly.

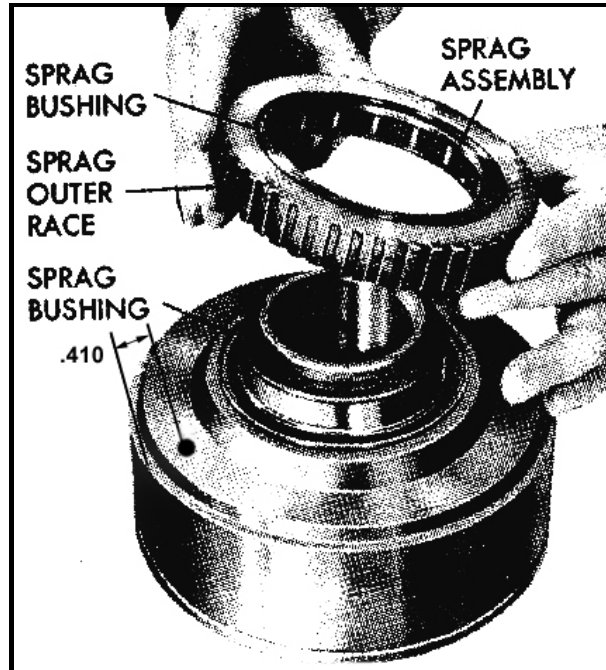
Disassembly of Direct Drum

Step 1: Remove direct clutch drum from transmission. Pry out snap ring to remove pressure plate and clutch pack. Compress spring retainer to remove release springs and piston. (If proper tool is not available, you may need the assistance of your local transmission shop.)



Now it is necessary to drill a constant bleed orifice in the drum, using a 1/16" drill. A drill press should be used for this operation. At any place on the outer circumference of the drum, measure in from the edge .410" and place a center punch mark. (Sprag side) Drill through the drum, being careful not to let the drill score the machined surface for the outer lip seal, as it breaks through.

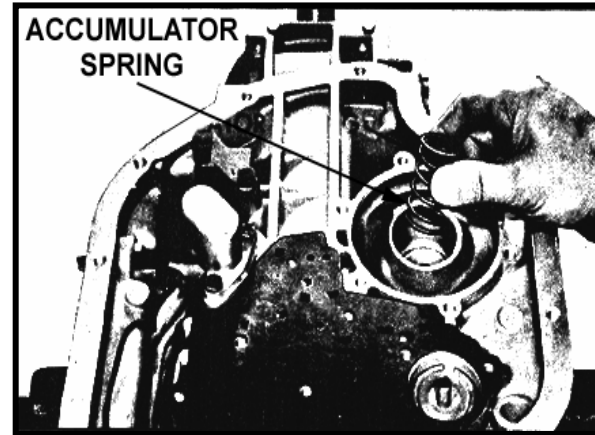
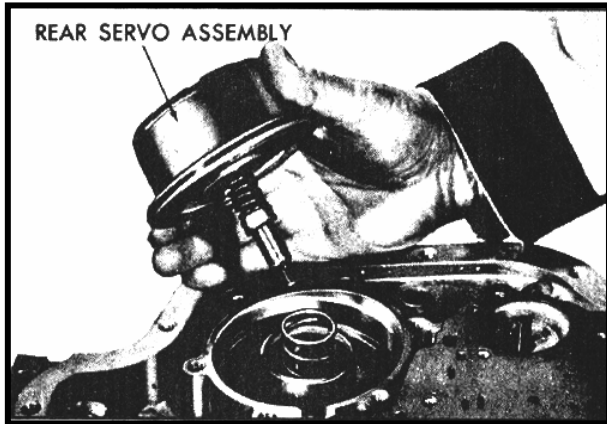
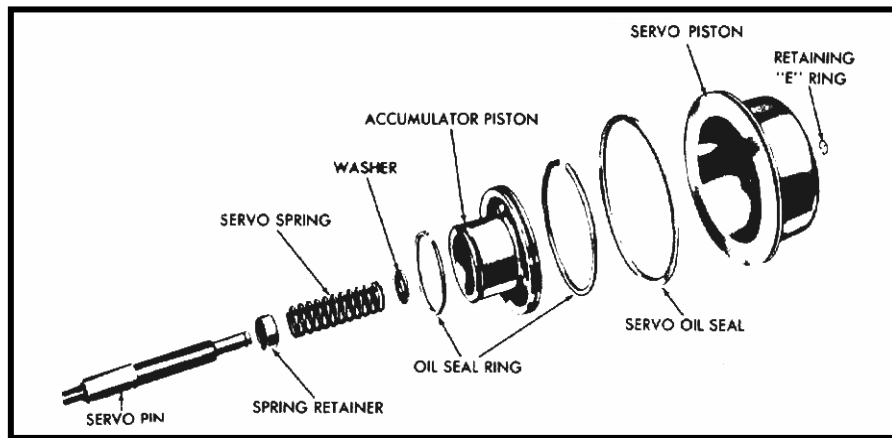
It is recommended to replace the std. Sprag with Pt# 22800 for any High Performance application.



ASSEMBLY OF DIRECT DRUM

After orifice has been drilled, drum is ready for reassembly. Before installing piston remove and discard center lip seal in drum. Install piston. Discard 16 stock release springs and replace with 16 new springs furnished. Replace retainer and snap ring. Assemble clutches and steels. Recommend .050 - .060 clutch pack clearance. Install drum, discard front band, and reassemble transmission.

Step 2: Remove valve body, separator plate, and gaskets. Discard ALL check balls. Remove rear servo assembly. Remove and discard oil-sealing rings from accumulator piston and discard stock accumulator spring. Install new accumulator spring furnished in kit and replace servo assembly and cover. For installations in late model cases that are equipped with a factory installed restriction in the Reverse Servo Piston apply hole, remove and discard the restrictor. The restrictor resembles a freeze plug installed in the apply hole.



Install new valve body. Governor tubes can be omitted, unless using old style long filter, in which case one tube can be replaced as a filter support.

Use new separator plate with no gaskets and manual control valve furnished.

Step 3: Remove and discard modulator and modulator valve. Place spring furnished over new valve and install in case making sure the new valve moves freely and the spring is functional. Next install the solenoid with "O" ring in the modulator position and tighten in place with the stock modulator clip.

Step 4: After assembly of transmission is completed, necessary wiring for the solenoid can be done. Position the micro switch on shifter or wherever it is comfortable. Run a wire from one lead of the switch to a 12 volt source, the other lead is connected to the + wire on the solenoid. The - wire is grounded.

FOR TECHNICAL QUESTIONS, PLEASE FEEL FREE TO CALL (765) 456-3957