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TCI® 628200

Trans-Brake™ (Powerglide) Pro-Tree Style

Shift Pattern: P - R - N - 2 - 1

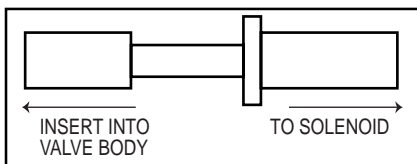
This kit should be installed by someone familiar with automatic transmission repair and assembly. TCI recommends following a Transmission Repair Manual for disassembly and assembly.

TCI's Pro-Tree Style Trans-Brake® functions only in low gear when the Trans-Brake® button is activated. Reverse will only function with the shifter in reverse or neutral location and Trans-Brake® button activated.

This kit **will not** repair a transmission that is not working properly. Inspect front pump - it **MUST** be in excellent condition to allow the Pro-Tree Style Trans-Brake® to work properly.

This **TCI® 628200 Kit Contains:**

Qty.	Description
One (1)	Powerglide Trans-Brake® Valve Body (Pro-Tree Style)
One (1)	Solenoid
One (1)	Brake Valve (See Brake Valve Illustration)
One (1)	Rear Plate
One (1)	Gasket
One (1)	TCI 628216 Heavy Duty Reverse Springs



Brake Valve Illustration

You will need to purchase: A TCI 628800 Powerglide Racing Overhaul Gasket, Seal Kit, and Automatic Transmission Fluid.

- Step 1** Remove pan, valve body, tailhousing, governor support, front pump, band, clutch drum, planetary, reverse clutches, reverse piston, and detent plate.
- Step 2** Enlarge hole (A) using a 5/16" drill. Drill through back of case, smooth and deburr both ends of hole (See Photo 1).
- Step 3** See Photo 1 – Area marked (B) will be the place to drill a new hole. You will drill into the reverse piston area 5/16" hole. **NOTE:** When you drill the

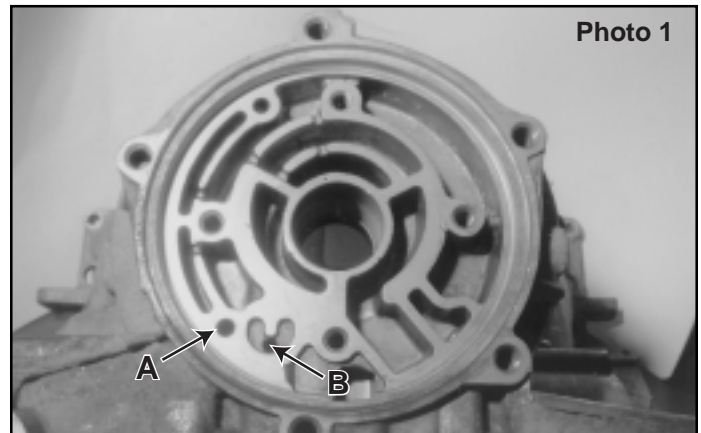


Photo 1

holes (A) and (B), you can see all the way through the case.

Step 4 Enlarge hole (C) to 5/16". This hole will intersect with hole (A) that was drilled in Step 2 (See Photo 2).

Step 5 Clean case thoroughly to remove any debris or

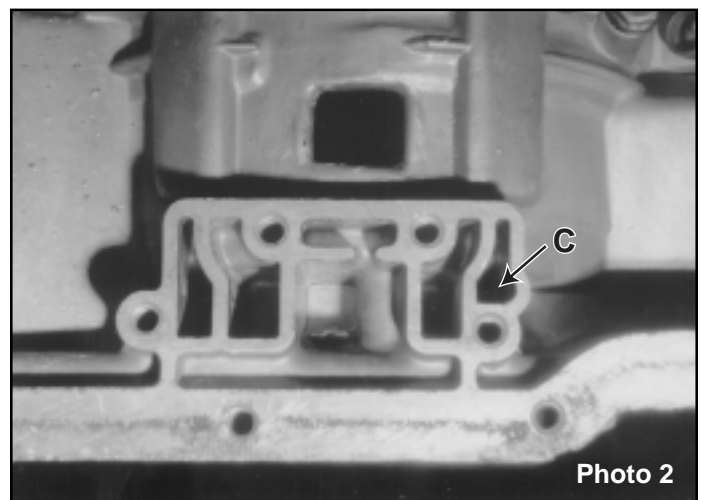


Photo 2

aluminum shavings.

- Step 6** Remove O.E.M. reverse springs. After modifications have been made to the transmission, install springs. See Options on next page.

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Option 1 – O.E.M. Reverse Piston Springs: You may reuse the stock springs and maintain a very quick release time that will not contribute to tire spin. Average Release Time: .013/second.

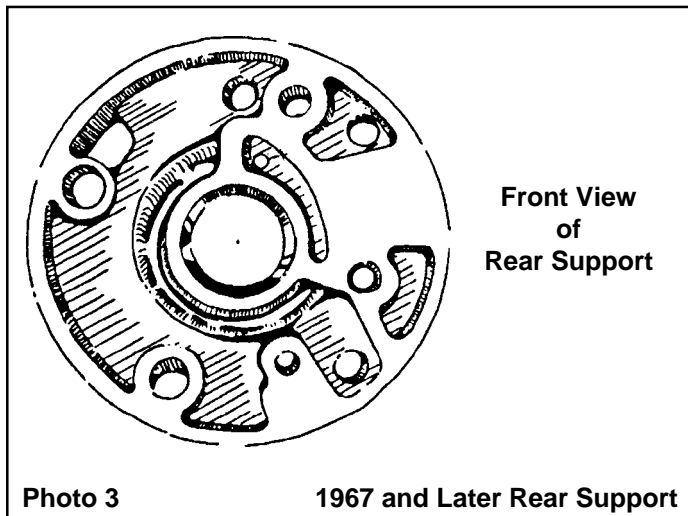
Option 2 – TCI Heavy Duty Reverse Springs: The TCI Trans-Brake comes with our 628216 Heavy Duty Gold Springs. You may select to use these springs. Use of these springs will develop maximum speed on reverse piston release. However, the release will be “harsh” and may contribute to excessive tire spin. Average Release Time: .010/second.

Step 7 Install reverse piston. Next, install five (5) lined and five (5) or more steel reverse clutch plates as needed for proper clearance. **DO NOT** use the steel wavy cushion plate if equipped. It should be replaced with a flat steel plate. Clutch clearance should be .050" to .060". (**Note: On some transmissions it may be necessary to machine pistons to get the proper clearance.**)

Step 8 Check high gear clutches. If there is a wavy cushion plate present, discard and replace with two flat steel ones. We recommend using our fully grooved competition clutch linings (TCI 724000) and our unbreakable steel (TCI 728200) or aluminum (TCI 743700) clutch hub. Clutch clearance should be .050" to .070.

Step 9 Transmission Case Identification: 1962-66 Early transmissions are equipped with a rear pump assembly and use a tin wear plate. The reverse piston feed orifice (hole) is located at the 11 o'clock position.

The 1967 and later rear support has no pump gears and uses a paper gasket. The reverse piston orifice (hole) is located at the 7 o'clock position (**See Photo 3**). You must use a late model (1967 & later) rear support on both model cases.



Before assembling transmission, remove the following, if equipped: Governor assembly, rear pump gears, vacuum modulator, modulator valve and spring. Governor support must be left in transmission except on “Shorty” transmissions.

Rear Plate Instructions: NOTE: Use rear plate on any model Powerglide transmission.

Regular Length Transmission:

- Install rear gasket
- Install rear TCI plate

Shorty Type Transmission:

- Install rear gasket
- Install TCI rear plate
- Install aluminum housing

Step 10 Reinstall servo tube in valve body.

Step 11 Install the O.E.M. manual control valve in valve body.

Step 12 DO NOT bolt stock detent plate on Trans-Brake valve body. TCI’s design does not require this stock item. (**Note: Be careful not to bend the brake valve body when installing the valve body.**)

Step 13 Install brake valve into top of valve body. See machined area. Now, install valve body into transmission.

Step 14 Install solenoid into modulator hole. Solenoid will activate brake valve.

Step 15 Connect solenoid and micro switch. Trans-Brake button using a 12-gauge wire.

Step 16 Adjust low band and fill transmission using Dexron Type or TCI 950600 RTF Transmission Fluid. **Do Not Overfill.**

Band Adjustment: 72 inch/pounds and back off 4 turns.

Step 17 TCI Trans-Brake must have a HOT 12-volt battery fully charged to make solenoid work properly. See solenoid instructions for additional information.

Step 18 Use a transmission cooler if you have one. If not, make sure cooler lines are **NOT** plugged or damaged will occur to planetary.

Note: Stock valve body gasket will not work! Use part number TRN6282VBG for replacement gasket.

IF YOU HAVE ANY QUESTIONS REGARDING INSTALLATION, PLEASE CONTACT OUR TECH SERVICE DEPARTMENT.