

INSTALLATION INSTRUCTIONS FOR POWERGLIDE PRO TREE LOW AND HIGH GEAR BRAKE KIT (#12025)

Thank you for purchasing a Coan Racing performance product. Since 1976, Coan Engineering has been the leader in hi-performance race transmissions and converters. Our ongoing research and development assures that you have purchased the best products available.

*** COMMITMENT * PERFORMANCE * RELIABILITY *
* A WINNING COMBINATION ***

Caution: Trans-brake can be activated in low and high gears. It is imperative that you install a power interrupting device between trans-brake solenoid and 12V source. A power-interrupting device will totally disable trans-brake solenoid for a predetermined amount of time. This device will prevent accidental re-engagement of the trans-brake in high gear during the run. Re-engagement of the trans-brake in high or low gear will cause the rear tires to lock up.

The scope of these instructions will be aimed at the installation of this kit and it is assumed that the transmission will be rebuilt properly to work with this valve body. If necessary refer to a transmission manual for detailed instructions on disassembly and reassembly of the Powerglide transmission.

The transmission needs to be completely disassembled, including the reverse piston, and thoroughly cleaned.

1. Next it is necessary to drill the reverse passage. With a 3/16" drill, drill all the way through the case as shown [(Figure #1, & Figure #2,) (2 places.)] Then, from the inside, of the case, open up the holes to 13/32", until the drill intersects the ports from the bottom of the case (Figure #3).
2. Now drill 13/32" hole from the bottom port, until you intersect the previously drilled holes (Figure #4.)
 - After deburring the holes and cleaning the case, reassembly can be started.
3. It is recommended to stack the reverse pack with 5 frictions and 6 steels. With a reverse piston thickness of .900" you should get a clutch pack clearance of .050" - .060" which can be checked through the inspection hole in the bottom of the case. Replace the stock return springs with the springs furnished in the kit and reassemble the transmission.

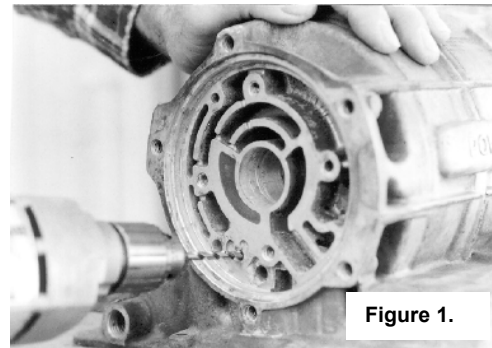


Figure 1.

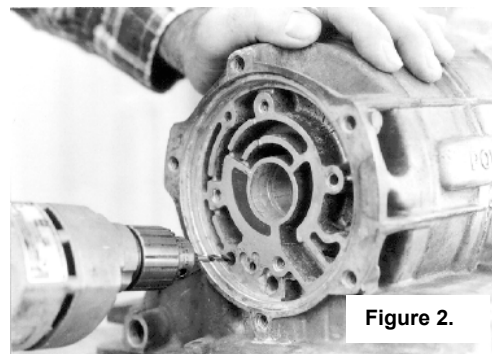


Figure 2.

5. Install new valve body. You must have the brake valve and spring in its bore as you put the valve body in place. *The brake valve will not fit through the hole in the case.* Make sure the manual selector valve is properly aligned with linkage pin. Tighten valve body bolts to 132 in-lbs
6. Install solenoid and gasket/o-ring.
7. On a shorty transmission, install a gasket between shorty plate and case. The block off plate is **not** required. On a standard length transmission, install block off plate in between rear support and case without gasket. This will prevent pressure leak in the reverse apply circuits. An improper seal between the case and rear support will cause trans-brake failure.
8. Install filter and tighten bolts to 36 in-lbs.
9. Reinstall pan and tighten bolts to 72 – 108 in-lbs.
10. Proper low band adjustment is crucial. Tighten adjusting screw to 70 in-lbs. Loosen screw 3 ½ turns and tighten lock nut.
11. Check and maintain proper fluid level

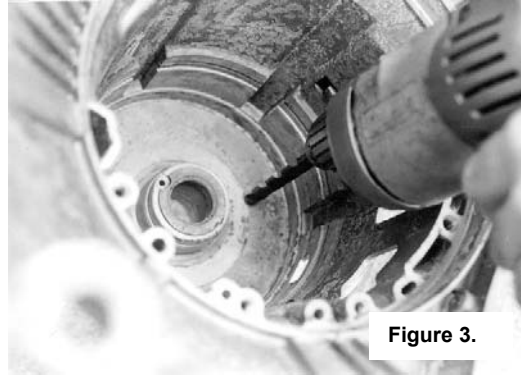


Figure 3.

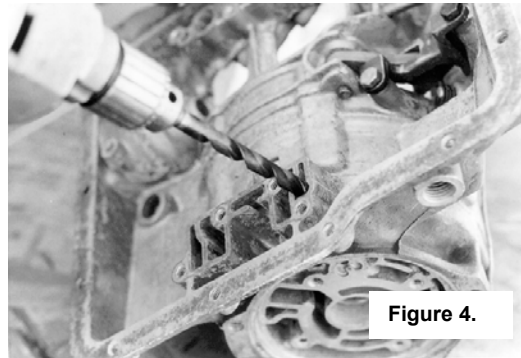


Figure 4.

- ***NOTE:** Cooler fittings should never be plugged. If a cooler is not used, connect the lines together with a loop.

After assembly of transmission is completed, necessary wiring for the solenoid can be done. Position the momentary switch on the shifter or wherever it is comfortable. Run a wire from lead of switch to a twelve volt source, the other lead is connected to the red (+) wire on the solenoid. The black (-) wire on the solenoid should be connected to a good clean chassis ground. Be sure to use good wiring connections.

**Adjustable Regulator Pre-Set at 235-240 PSI, Approximately 8 PSI Per Turn.
Adjustable operating range is 185 min. - 290 max. PSI.**

Your Pro Tree Low and High Gear Valve Body is designed to have a reverse lockout safety feature. To engage reverse, the shifter must be placed in reverse and the trans-brake switch must be depressed simultaneously.

Pro Tree 5 Kit Components

1. Valve body assembly with manual valve.
2. Modulator gasket/o-ring.
3. Solenoid.
4. Pro Tree brake valve and spring.
5. Rear block off plate.
6. Rev. clutch springs. (17)

If you have any questions regarding the proper installation and/or operation of a Coan Racing product, please call (765) 456-3957. You may also fax us at (765) 456-3960, or e-mail at coan@coanracing.com.



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