

INSTALLATION INSTRUCTIONS FOR PG CIRCLE TRACK II **VALVE BODY KIT REV. PATTERN (#12015A)**

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 ***

This kit is designed to be used in applications, which do not require the use of a torque converter. A converter eliminator drive kit, or direct drive converter is available separately, and is used instead of the torque converter. When eliminating the converter, the only way to apply power smoothly to first and reverse gear, is to control line pressure in the transmission.

Installation of this valve body requires the use of part #12250B solid aluminum reverse clutch disc. You will need to completely disassemble the transmission for this installation. Installation of this valve body requires no modifications to the case of the transmission. 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.

1. Remove transmission pan and existing valve body, noting how the manual valve connects to the manual valve lever.
2. Remove and discard stock modulator, modulator valve and governor.
3. Using the reverse piston in the transmission, stack separator plates on both sides of the aluminum disc until a clearance of 0.050" - 0.065" is obtained. This clearance may be checked with feeler gauges through the inspection hole in the case. Once the clearance is set, the transmission may be reassembled. Proper low band adjustment is crucial. Tighten adjusting screw to 70 in-lbs. Loosen screw 3 ½ turns and tighten lock nut.
4. Install new circle track II valve body making sure the manual selector valve is properly aligned with the linkage pin. Tighten valve body bolts to 132 in-lbs.
5. Install modulator plug with gasket/o-ring.
6. Install filter and tighten bolts to 36 in-lbs.
7. Reinstall pan and tighten bolts to 72 - 108 in-lbs.
8. When using a converter eliminator kit you will need to set the drive tube to front pump clearance. It is important that the pump drive tube has between 1/8" to 3/16" endplay. The drive tube has three snap ring groove locations on the drive flange end of tube. Select the proper snap ring location to allow 1/8" to 3/16" end play of tube to front pump. If you are using a direct drive converter you will be required to maintain the same endplay for converter to flexplate. This is checked by pushing the converter back into the pump of the transmission and measuring the



distance between the converter and the flexplate. Be sure to maintain 1/8" to 3/16". **Incorrect engagement will cause transmission failure.**

9. Check and maintain proper fluid level.

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

Proper Operation

This valve body is intended for use with a converter eliminator drive kit or a direct drive torque converter only. This valve body will allow low gear and reverse to be applied directly by the shifter with no other valves or clutches. This unique feature is controlled by pressure in the transmission, which is influenced by engine idle. If the idle is set too high, the engine will stall when placed in gear. Experiment with idle settings until smooth engagement is obtained in low and reverse gears. High gear can only be used after first taking off in low gear, and should always be used when driving at engine speeds in excess of 2500 rpm. (It is recommended that high gear be used for parade laps.) Always accelerate gradually when first taking off in either low or reverse. Reverse should be used sparingly; never halt motion of the car while the shifter is placed in reverse. Reverse longevity is increased by "bumping" the shifter between reverse & neutral positions. The circle track II valve body is not equipped to allow push starting the vehicle.

Vehicle must be raced in High Gear only!

Circle Track II Kit Components

1. Valve body assembly
2. Modulator plug
3. Modulator gasket/o-ring

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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Coan Engineering offers a limited warranty covering all new products for ninety days and all repair service for thirty days from the original date of purchase to be free from flaws in material and craftsmanship. The warranty is non-transferable. Under no circumstances will Coan Engineering extend its warranty to products, new or repaired, which have been abused, misused, or incorrectly installed. Disassembly of any product by means other than a Coan Engineering technician will void any potential warranty. All warranty claims must be accompanied by the original invoice and are subject to the approval of Coan Engineering.

The above stated warranty **does not include** any shipping charges or labor charges for installation or removal of any Coan Racing product.

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