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ATD BILLET T400 REVERSE MANUAL VALVEBODY W/ ENGINE BRAKING (P/N: 22148A)

CAUTION

Please read all of these instructions before proceeding with installation.

This or any valvebody should only be installed by a qualified race transmission technician. If you are unfamiliar with any of the operations or terms, take your transmission to a qualified race transmission shop.

Improper installation may cause property damage and/or death.

Your 22148A Reverse Manual Valvebody kit includes the following parts:

- (1) ATD T400 Billet Reverse Manual Valvebody,
- (2) Check Balls,
- (1) Separator Plate,
- (1) Heavy Duty Pressure Regulator Spring,
- (16) Heavy Duty Drum Springs,
- (1) Modulator Plug,
- Instructions & Decals.

SHIFT PATTERN

This valvebody employs a reverse shift pattern: Park - Reverse - Neutral - 1 - 2 - 3.

This valvebody is designed with engine braking.

Do not neutral this or any three speed transmission at speed or the transmission may explode!

WARRANTY

This product is warranted for 12 months from date of purchase against defects in material and workmanship. During this period such defects will be repaired or replaced at manufacturer's option. Return any defective products to your supplier. This warranty does not cover damage caused by misuse, alteration, or negligence. All implied warranties, including but not limited to implied warranties of fitness and merchantability are limited in duration. Under no circumstances will manufacturer be responsible for special, incidental, or consequential damages or costs arising from or in conjunction with the installation or use of any product of the manufacturer.

INSTALLATION INSTRUCTIONS FOR ATD BILLET T400 REVERSE MANUAL VALVEBODY

- 1. Disassemble transmission.
- 2. Disassemble direct drum. Drill 1/16" hole in direct drum at 45 degree angle as shown below.



- 3. Replace piston lip seals and discard center seal in drum. Be sure to install both seals on the piston, and none in the drum.
- 4. Install piston in direct drum using 16 new included return springs, and install new clutches. Clutch pack clearance: .050" to .070".
- 5. Check pump for wear and replace as needed.
- 6. Replace stock PR spring with the one provided. Use no shims.
- 7. Reinstall gear train, drums, and pump assembly.

 Note: This valvebody requires the intermediate band to be installed for engine braking functionality. We recommend using a HD Kevlar lined band (not included, but are available for purchase).
- 8. Flat file or wet stone entire channel passage area of case absolutely no high spots or burrs allowed especially at area shown below.



- 9. Install front servo and rear servo with new seal and steel gasket. Install 1-2 accumulator with new rings and factory spring. Air check to ensure apply.
- 10. Install one of the provided checkballs into the case at the area shown below. The second checkball should be preinstalled in the valvebody, greased in place.



- 11. DO NOT install any gaskets on the case or valvebody! Install valvebody. Start all valvebody bolts before tightening! Torque to 15 ft-lbs (5/16" bolts) and 10 ft-lbs (1/4" bolts).
- 12. Omit governor feed tubes and governor.
- 13. Install modulator valve and blocker plug.
- 14. Install new filter and pan.
- 15. Smoke the competition.