

HIPSTERS TURBO 400 TRANSBRAKE

This is the quickest and most consistent turbo 400 brake available. As with any new product there are certain steps that need to be followed to insure your success with it. *Please read all of these instructions before proceeding.*

CAUTION

This or any transbrake should be installed only by a qualified race transmission technician. If you are unfamiliar with any of the operations or terms, take your trans to a qualified race trans shop. Improper installation may cause property damage or death.

Your transbrake kit should include the following parts:

- 16 direct drum return springs
- 1 pressure regulator spring
- 1 brake valve return spring (shiny)
- 1 separator plate
- 1 solenoid
- 1 T400 transbrake valve body
- instruction sheets and decals

SOLENOID WIRING

Wiring to solenoid should be 12 or 14 gauge wire. Use a switch that you are comfortable with and that has 20 amp 12 volt DC capacity. Install a 10-15 amp fuse in power line to switch or use fusible link of sufficient capacity at solenoid.

TO ENGAGE REVERSE

Put shifter in neutral and push brake button or put in reverse. There is no line pressure drop...solid reverse.

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 warrantee 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.

INSTRUCTIONS FOR SUCCESSFUL INSTALLATION OF T400 TRANSBRAKE

1. Disassemble transmission.
2. Disassemble direct drum.
3. Drill 1/16" hole in drum as shown in figure 1.
4. Replace piston lip seals; discard center seal in drum.
5. Install piston in drum; install 16 new return springs, and install new clutches. Clutch pack clearance: .050" to .070".
6. Discard intermediate brake band and apply servo.
7. Check pump and forward drum for wear; replace as needed.
8. Replace stock PR spring with the one provided. Use *no* shims.
9. Reinstall gear train, drums and pump assembly.
10. Remove low/reverse servo piston and spring;
11. Discard accumulator piston and spring.
12. Use blunt drift to install stock T400 1/4" steel check ball into accumulator feed passage in case, as shown in figure 3. **DO NOT install checkballs in stock locations in case.**
13. Flat file or wet stone entire channel passage area of case; absolutely no high spots or burrs allowed especially at area shown in figure 4.
14. Install rear servo with new seal and steel gasket; air check to insure apply.
15. Modify modulator and manual valves as shown in drawing.
16. Install small shiny spring on modulator valve and install valve into case.
17. Install o-ring on solenoid, install into case.
18. Check valve phasing when solenoid is applied and released. Refer to figure 2.
19. **DO NOT install any gaskets on the case or valvebody!** Install transbrake valve body. Start all valve body bolts before tightening!
20. Omit governor feed tubes and governor.
21. Install new filter; Allison screen type is preferred.
22. Install pan.

Notes

Insure solenoid plunger bottoms on solenoid back when stroked; shims on bracket bolt may be needed when there is a shim on the solenoid.

Check brake valve phasing before valve body installation:

Brake on: Lands 3 & 4 are connected

Brake off: Lands 2 & 3 are connected

Refer to figure 2 to determine land locations

Use Teflon sealing rings on pump and center support.

Have a T400 shop manual handy during installation steps.

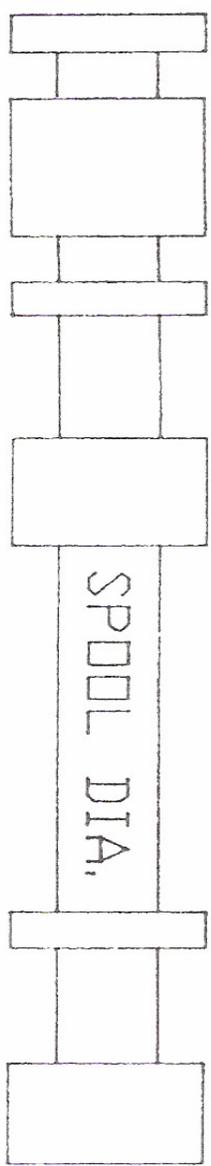
This transbrake employs reverse shift pattern: P R N 1 2 3

DO NOT NEUTRAL THIS OR ANY 3 SPEED TRANS.....THEY WILL EXPLODE!!

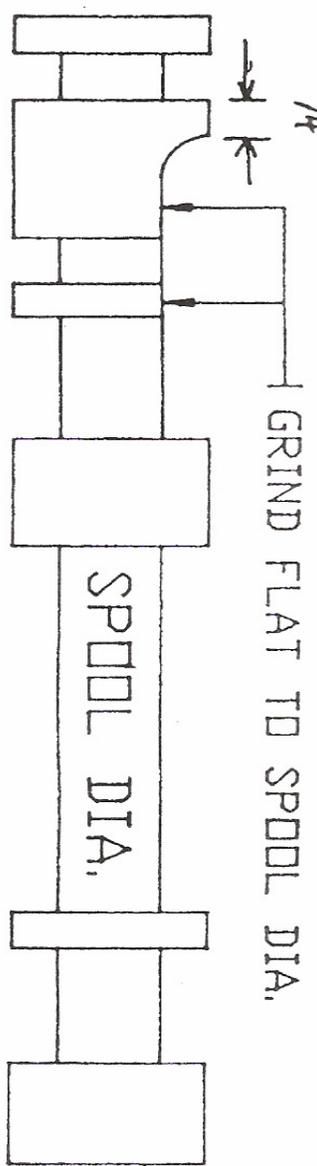
Release time: .028

Solenoid draw: 8 amps

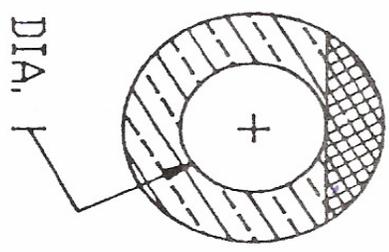
MANUAL VALVE 400 TURBO
(NORMAL)



MANUAL VALVE 400 TURBO
(MODIFIED)

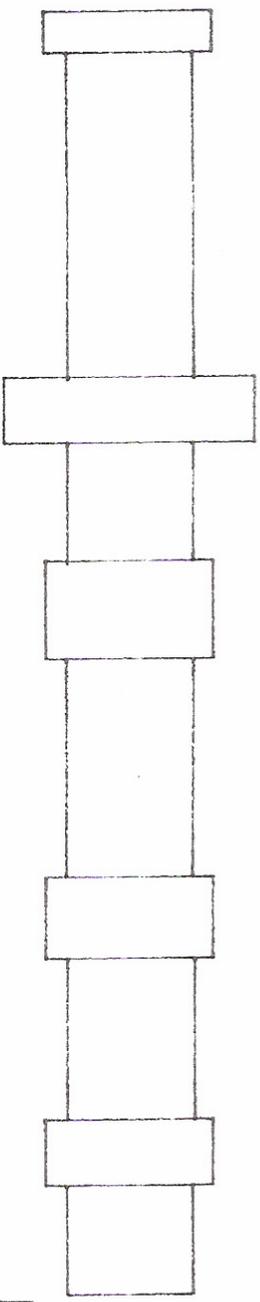


ENLARGED
CUT VIEW

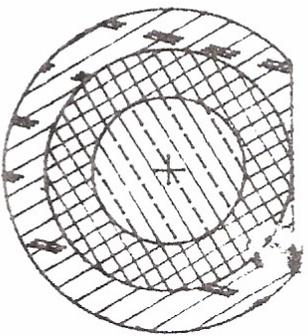


400MNUU

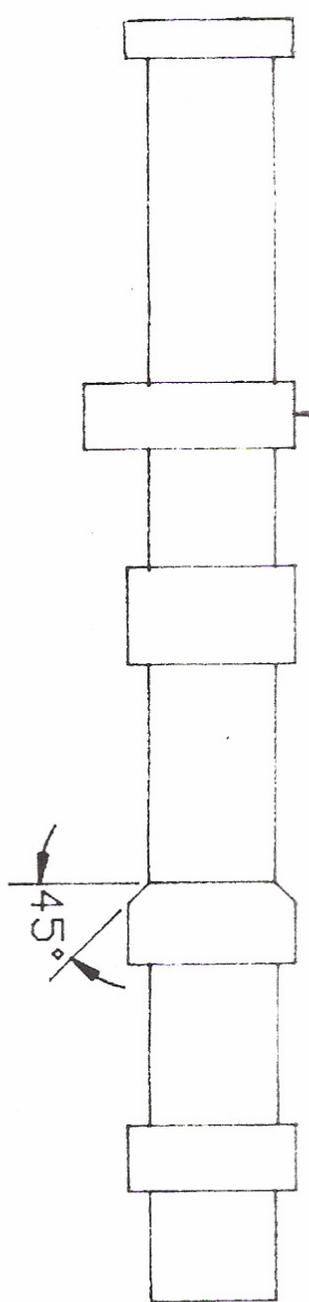
400 BRAKE VALVE
(NORMAL)



ENLARGED
GROUNDED
VIEW



400 BRAKE VALVE
(MODIFIED)
GRIND ON ONE
SIDE TO LOBE
HEIGHT



400BRAKE

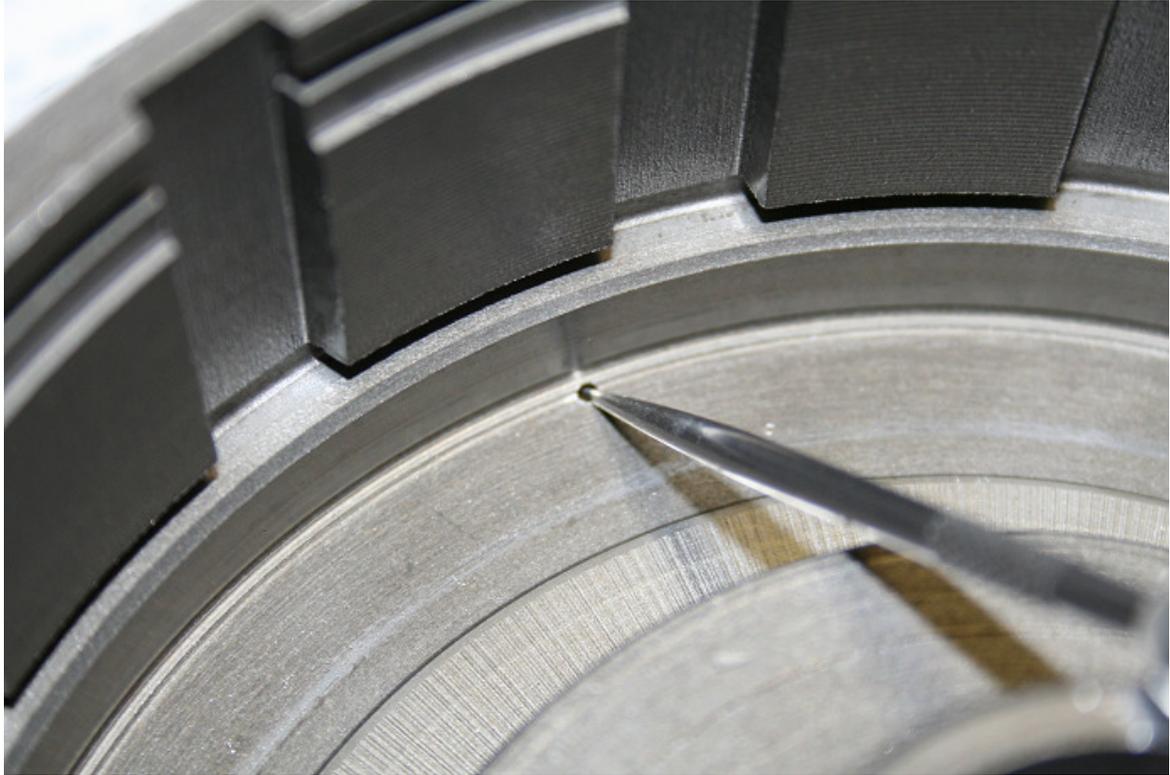


Figure 1
DRILL DRUM AT 45° (degree) ANGLE

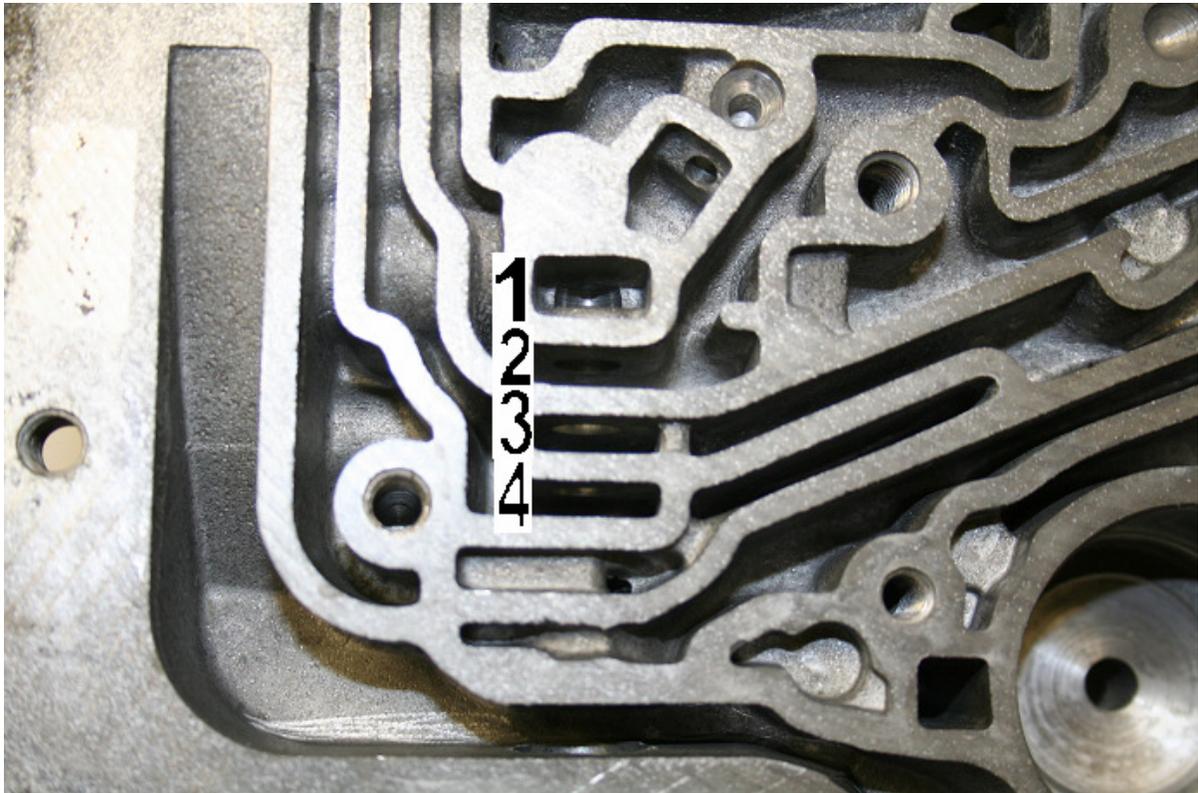


Figure 2
VALVE PHASE LOCATIONS

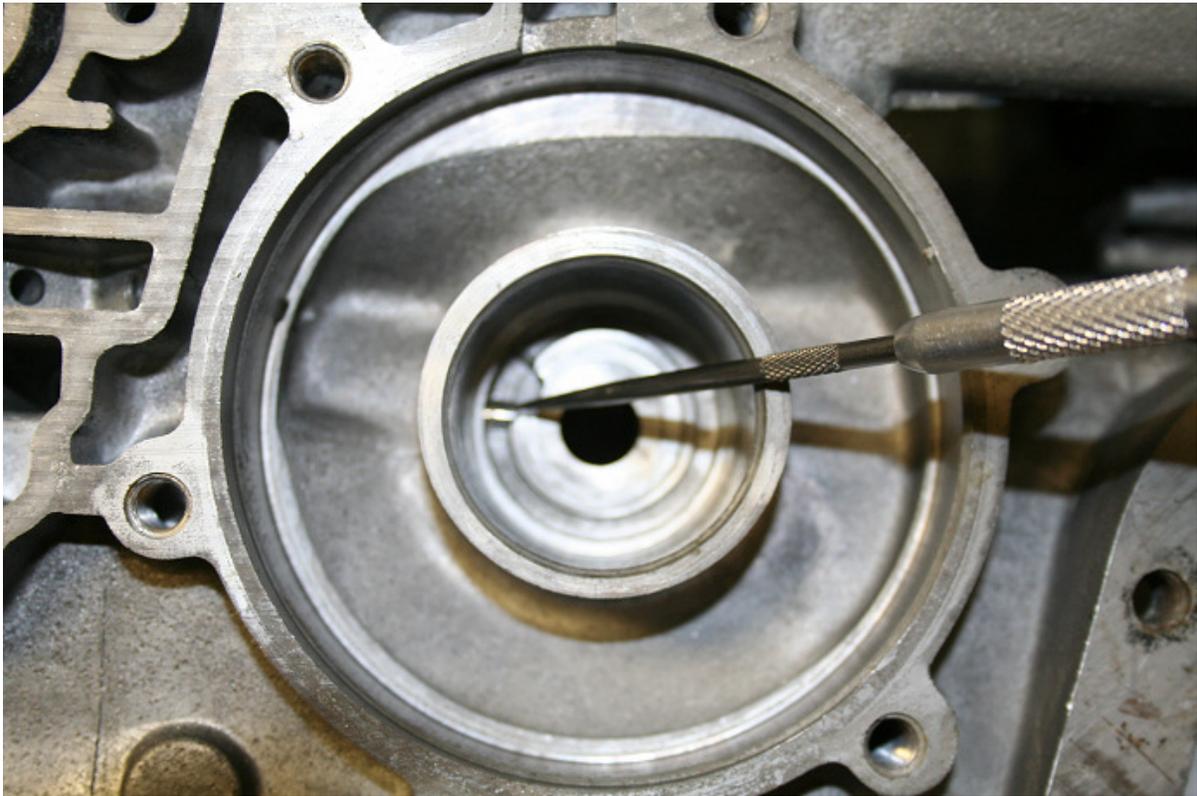


Figure 3
INSTALL ¼" STEEL CHECKBALL HERE

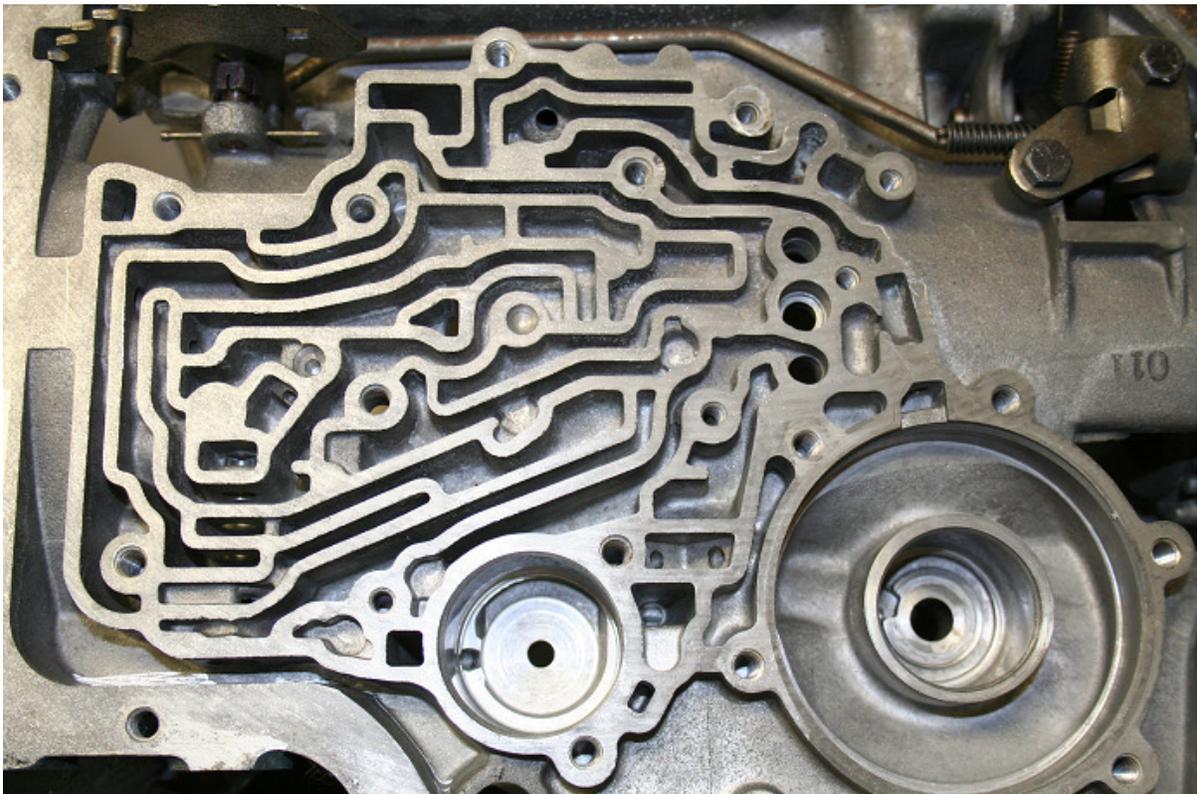


Figure 4
FILE CASE AREA FLAT!
NO UNEVEN SPOTS ALLOWED!