

HIPSTER'S BRAKE

INSTALLATION INSTRUCTIONS

CONGRATULATIONS! You have purchased the quickest and most consistent releasing transbrake available. As with any innovative new product there are certain things that must be done to make this product perform as it was designed. *Please read all instructions before proceeding!*

CAUTION

The transbrake 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 trans shop. Improper installation may cause property damage, personal injury or death.

1. Carefully remove the old valve body; do not damage the low servo apply tube.
2. Modify the transmission case and set clearances; see below and page two.
3. Install your low servo tube and your stock shift valve or the enclosed shift valve, if included, into the new valve body.
4. Be sure the mating surfaces of the trans case are perfectly flat as this valve body uses no gasket at the case area. Flat file or stone the case.
5. Install the new valve body and torque the bolts to 15 ft/lbs.
6. Install your manual shift valve guide plate, ensuring the valve to shift lever engagement. Install your detent spring.
7. Install the brake valve and solenoid.
8. Install your filter and pan.
9. Brake solenoid draw is 8 amps or less; use a switch of sufficient capacity and one you are comfortable with. Use 14 to 16 gauge wire, tight connectors and an in-line fuse(10-15 amp)
10. Fill the transmission with fluid and raise on jackstands.
11. Run the trans through all gear ranges. Test the transbrake a few times. To engage reverse have shifter in reverse and press the brake button.

For technical help call (262)251-7777 9am-6pm CST

TRANSMISSION MODIFICATION INSTRUCTIONS

When using this valve body on transmissions already set up for transbrake use, we have found a slight improvement in reaction time by increasing the reverse apply/release case passage to 3/8 inch for suspended chassis cars. Dragsters and unsuspended altered should only need a 5/16 inch hole.

HOW TO DRILL THE STOCK CASE

Do not modify any aftermarket cases (Dedenbear, JW, etc.). With the transmission disassembled, locate the reverse apply/release passage in the case. Using a 5/16 inch or 3/8 inch drill bit, drill from the valve body side of the case up to the intersection of the hole in the back of the reverse piston area. Then drill from inside the case using the same bit until you intersect the drilled passage from the bottom. **Do not drill through the back of the case or you will ruin the transmission case.** If you have an early model case (rear pump style) with the hole at the top of the piston area, please see the included sheets for modifications.

REVERSE CLUTCH CLEARANCE

To insure quick set-up and release, clearance reverse clutches between .050 and .065 inch. Use five clutches for small blocks, six for big blocks.

BAND ADJUSTMENT

Tighten to 72 inch lbs, then back off 4 turns.

SPECS AND OTHER INFO

Brake release time: .018 second

Brake solenoid draw: 7 amps

Solenoid wiring: One wire to a known good ground, the other wire to a switched 12 volt source.

Safety reverse: Transbrake button must be depressed to engage reverse allowing the driver to safely neutral the car in the traps.

TROUBLESHOOTING

Install pressure gauge in low servo cover. With the trans in low at 2000 RPM you should have 200-210 psi. Depress the brake button, pressure should instantly drop to about 50 psi and then instantly return to within 5% of original reading.

WARRANTY

Your product from Automatic Transmission Design, Inc. is warranted for twelve (12) months from date of purchase against defects in material or workmanship. During this period such defects will be repaired for the product exchanged at the option of Automatic Transmission Design, Inc. without charge. This warrantee does not cover damage caused by misuse, alteration, or negligence. **ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY ARE LIMITED IN DURATION. UNDER NO CIRCUMSTANCES WILL AUTOMATIC TRANSMISSION DESIGN, INC. BE RESPONSIBLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR COSTS ARISING FROM OR IN CONNECTION WITH THE INSTALLATION OR USE OF ANY PRODUCT OF AUTOMATIC TRANSMISSION DESIGN, INC.** Automatic Transmission Design, Inc. parts are sold "as is" and acceptance of delivery of said parts manufactured by Automatic Transmission Design, Inc. hereby release said Automatic Transmission Design, Inc. of all liability of any type whatsoever from accidents and /or injuries. Our products are sold as finished products and proper installation and operation are purchaser's sole responsibility and Automatic Transmission Design, Inc. assumes no responsibility for the installation of said products.

POWERGLIDE CASE MODIFICATION

REVERSE PISTON MUST BE REMOVED FROM CASE

STEPS 1 AND 2 ARE FOR REAR PUMP STYLE CASES!

1. Refer to Figure 1 if the hole at the top of the case is drilled through the case, tap the hole 5/16-18 and install set screw below flush.
2. Refer to the bottom of Figure 1. Drill this hole all the way through using a 1/8" drill bit to create a pilot drill hole. Tap and plug hole with 5/16-18 setscrew below flush.
3. Refer to Figure 2. In the reverse apply passage, drill the case 5/16" or 3/8" to intersect the 1/8" hole in the piston area.
4. From the piston side of the case, locate the 1/8" hole and enlarge to match the hole drilled in the reverse apply passage. Be sure to intersect the hole drilled in the reverse apply passage.

