

ATD'S ALUMINUM CIRCLE TRACK VALVE BODY INSTALLATION INSTRUCTIONS

Congratulations!! You have purchased the quickest and most consistent circle track valve body 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 valve body should only be installed 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, personal injury or death.

1. Carefully remove the valve body; do not damage the low servo apply tube.
2. Set clearances for clutches and band; see page 2.
3. Install the low servo and the stock shift valve into the new valvebody.
4. Be sure the mating surfaces of the trans case are perfectly flat as this valvebody uses no gasket at the case area. Flat file or stone the case.
5. Install your detent lever on the bolt attached to the side of the new aluminum valvebody.
6. You must have a twin lever shift arm assembly to operate the valvebody. Stock Powerglide linkage will work; ATD has universal levers available. Install shift arms with new seals. See page 2 for details.
7. Install the valve body and torque the bolts to 15 ft/lbs. Use the two 5/16-18 x 1 1/2 inch bolts supplied to bolt the valvebody to the case in the area under the new filter location. Replace the short valvebody bolt at top center with a stock length longer bolt. The six flat washers supplied should be used under the valve body to case bolts except at the guide plate location.
8. Install the manual shift valve guide plate, ensuring the valve to shift lever engagement. Install the detent spring and detent tab. Check clearance of detent guide plate under the new PR sleeve.
9. Install the filter and pan.
10. Fill the transmission with fluid and raise the car on jackstands.
11. Run the transmission through all gear ranges. Test the hydraclutch a few times. At idle with hydraclutch in and trans in first gear the trans should slip. Release hydraclutch and the wheels should turn. Shift to high; hydraclutch is not needed to upshift.

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

To adjust pressure: remove end plug from PR sleeve using 1/4 inch allen wrench. Turn inside allen plug "in" to increase, "out" to decrease. A half turn changes pressure approximately 30 psi. PR is preset to 160 psi.

HIGH CLUTCH CLEARANCE

Use a minimum of five clutches in high gear. Six clutches are preferred. With five clutches use .060 - .080 inch clearance; 6 clutches use .070 - .090 inch.

BAND ADJUSTMENT

Tighten band pin to 6 ft/lb., then back off 4 turns.

REVERSE CLUTCH CLEARANCE

For good apply and long life, clearance the reverse clutches at .085 - .125 inch. Use 4 or 5 clutches and install a stock wave steel against the piston.

HYDRACLUTCH LINKAGE

The hydraclutch valve is operated using stock PG kickdown linkage. The linkage must enter the driver's compartment for control. If stock linkage arms are used, the driver must pull the lever rod towards him to release the hydraclutch. The valve in the transmission is spring loaded and return to normal position on its own. See operation instructions.

TROUBLESHOOTING

Install pressure gauge in low servo cover. With trans in low gear at 2000 RPM you should have 160-180 psi. At idle with hydraclutch valve depressed, pressure should be 0-10 psi. As engine revs, pressure should slowly build. Release the hydraclutch and pressure should rise instantly.