

Ford C-4 Trans-Brake Installation Instructions Reversed Pattern Manual (PRN123) #72021

This valve body is for push in modulator style cases only (1972 and up)

Recommended Options:

72803 6 Clutch Drum Assembly

72203 Direct Clutch Kit (6) Blue

List of Enclosed Parts

(1) Valve Body Assembly

(1) Billet Intermediate Servo Cover

(1) Solenoid Mounting Block

(1) Solenoid Mounting Clip

(1) 5/16-18 X 5/8 Whiz Lock Bolt
(Solenoid Mounting)

(1) Brake Valve

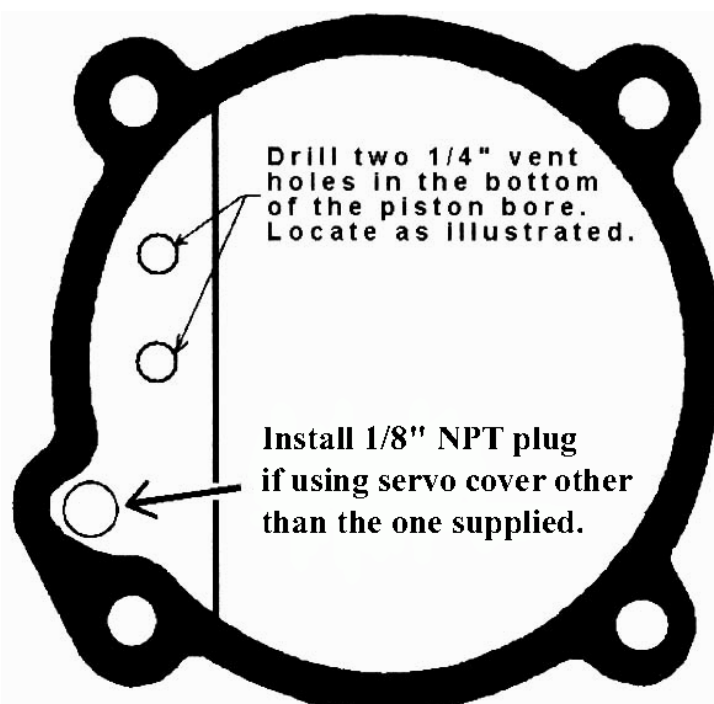
(1) Brake Valve Spring

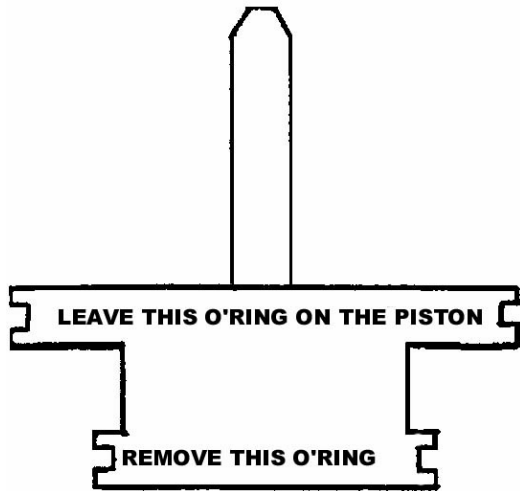
(1) Solenoid and Pin

Note: Prior to beginning installation of this Trans-Brake kit it is recommended that you be knowledgeable in the assembly of your transmission. If necessary consult a manual or seek the advice of a transmission shop. The transmission must be properly rebuilt for racing before installation of this Trans-Brake.

1. Remove the transmission pan and existing valve body.

2. Ford designates its intermediate servos by letters which appear on the servo cover (A, H, R, K, O, etc.). Note this designation, if your transmission is equipped with a "K" or "R" servo it must be replaced with a servo which has a larger diameter that seals in the bore of the case rather than the bore in the cover. Remove the Intermediate servo from the case. Remove and discard the smaller sealing ring from the servo piston. See attached diagram for the necessary Modification: It is necessary for two 1/4" vent holes to be drilled behind the servo in the case as shown.





Using stock intermediate servo spring (make sure that the apply struts are properly aligned) and install the billet servo cover.

3. Remove the reverse servo cover and servo piston. Inspect molded seal on piston to assure proper sealing. If necessary replace the servo piston. Place the piston in the bore as it was removed (make sure apply struts are properly aligned) and reinstall the stock servo cover.

4. Remove the direct clutch drum and inspect. It is necessary that the return spring have a minimum wire diameter of .235. It is also highly recommended that 6 clutches be used in direct although a minimum of 4 must be used. Set clearance at .010 per clutch minimum.

5. Remove and inspect the Forward drum, making sure to maintain a minimum clutch pack clearance of .025 - .040.

6. Tighten the intermediate band adjustment screw to 120 in-lbs, then back one turn (course thread adjuster) or three turns (fine thread adjuster). Install lock nut. Remove reverse band screw lock nut and position the Solenoid mounting block over the screw and reinstall lock nut. Tighten this band to 120 in-lbs, back off 3 turns and tighten lock nut.

7. Remove and discard stock modulator, modulator valve, and governor assembly. Install Trans-Brake valve and spring in stock modulator valve bore, making sure the valve operates freely. Install solenoid and mounting clip (Push-in). The case may require grinding for solenoid clearance. Apply 12 volts to the solenoid and note the movement of the brake valve. The valve **must not** bottom out in the case.

8. Install the new Trans-Brake valve body in the case using your manual valve, make sure it is properly positioned with shift lever. Proper bolt torque is crucial to the operation of this valve body. Torque the valve body to case bolts at 100 in-lbs., Torque the long filter bolts at 70 in-lbs.

9. Be sure to use the correct dipstick and tube so the fluid level will read correctly. Approximately 1/4" above the pan rail.

10. Reinstall pan using a new pan gasket. Wire the red lead of the solenoid to 12 volts through a momentary push button, ground the black lead.

Notice: This Trans-Brake is equipped with a positive reverse lockout safety feature. To select reverse, the shifter must be placed in the reverse position and the momentary push button must be depressed.

For Technical questions, please feel free to call (765)-456-3957

