

Installation Instructions Transpak for Torqueflite

Part No. 10227 (1978½-1996)
Part No. 10228 (1962-1978)

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Congratulations. You have just purchased the most complete and versatile transmission recalibration kit available.

The 10228 Transpak fits all Chrysler three speed Torqueflite and Loadflite transmissions between 1962 and 1978. These are the A-727, A-904, A-998 and A-999 transmissions. (The A-998 and A-999 are heavy duty, eight cylinder versions of the A-904 transmission that are essentially identical in appearance.) None of these transmissions have lock-up torque converters.

The 10227 Transpak fits all three and four speed (overdrive) transmissions made between 1978½ and 1996. These are A-904, A-998, A-999 and A-727 three speed transmissions and A-500 and A-518 four speed (Overdrive) transmissions. These transmissions are also referred to as TC6, TF6, TF8, 42-44-45-46-47 RH AND RE. All of these transmissions have lock-up torque converters.

The Transpak is not a cure-all for ailing transmissions. If your transmission is slipping or in poor general shape, the installation of a Transpak kit may worsen these conditions. However, on a good operating transmission in average condition the Transpak will provide the kind of transmission performance that you're looking for.

INTRODUCTION

Read all instructions first to familiarize yourself with the parts and procedures. Some assembly may require the assistance of a professional transmission mechanic. Work slowly and do not force any parts. Transmission components and valves are precision fit parts. Burrs and dirt are the number one enemies of an automatic transmission. Cleanliness is very important, so a clean work area or bench is necessary. We suggest a clean work bench top from which oil can easily be cleaned

or a large piece of cardboard.

This kit contains all parts necessary to obtain three levels of performance depending on intended use:

- 1. Heavy Duty:** For towing, campers, motorhomes, police, taxi, etc. Firm shift feel without loss of driver comfort.
- 2. Street:** Street driven hi-performance cars, extra firm shift feel, minor loss of driver comfort.
- 3. Off-Road Racing:** High performance vehicles on loose surfaces where full manual control of shifting is desired. Optional feature for 3 speed transmission only (NOTE: complete ALL steps that indicate "FOR 3-SPEED OFF ROAD RACING APPLICATIONS ONLY").

DISASSEMBLY

STEP 1. Drain and remove the transmission oil pan. If you do not have a drain plug you should consider installing a B&M pan drain plug kit, #80250, at this time. Remove the valve body

(See Figure 1).

STEP 2. Remove and discard the filter. Carefully disassemble the valve body and lay out all the springs and valves as removed on a clean rag or paper towel (See Figure 2). Thoroughly clean each part (brake cleaner works well). Replace the stock limit valve spring with the supplied B&M limit valve spring (See Figure 2).

STEP 3. Install the supplied B&M drill guide as shown in figure 3. Wrap masking tape 3/8" above the tip of the supplied 3/16" diameter drill to use as a drill guide stop. Then drill through the hole in the guide keeping in mind the casting wall will be removed; but DO NOT drill through the valve body. If the indicated passage has a restrictor, drill the passage clear with the supplied #32 (.116 diameter) drill (See Figure 3).

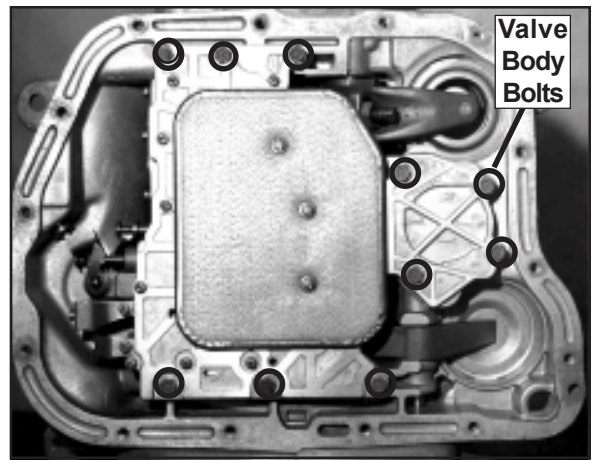


Figure 1

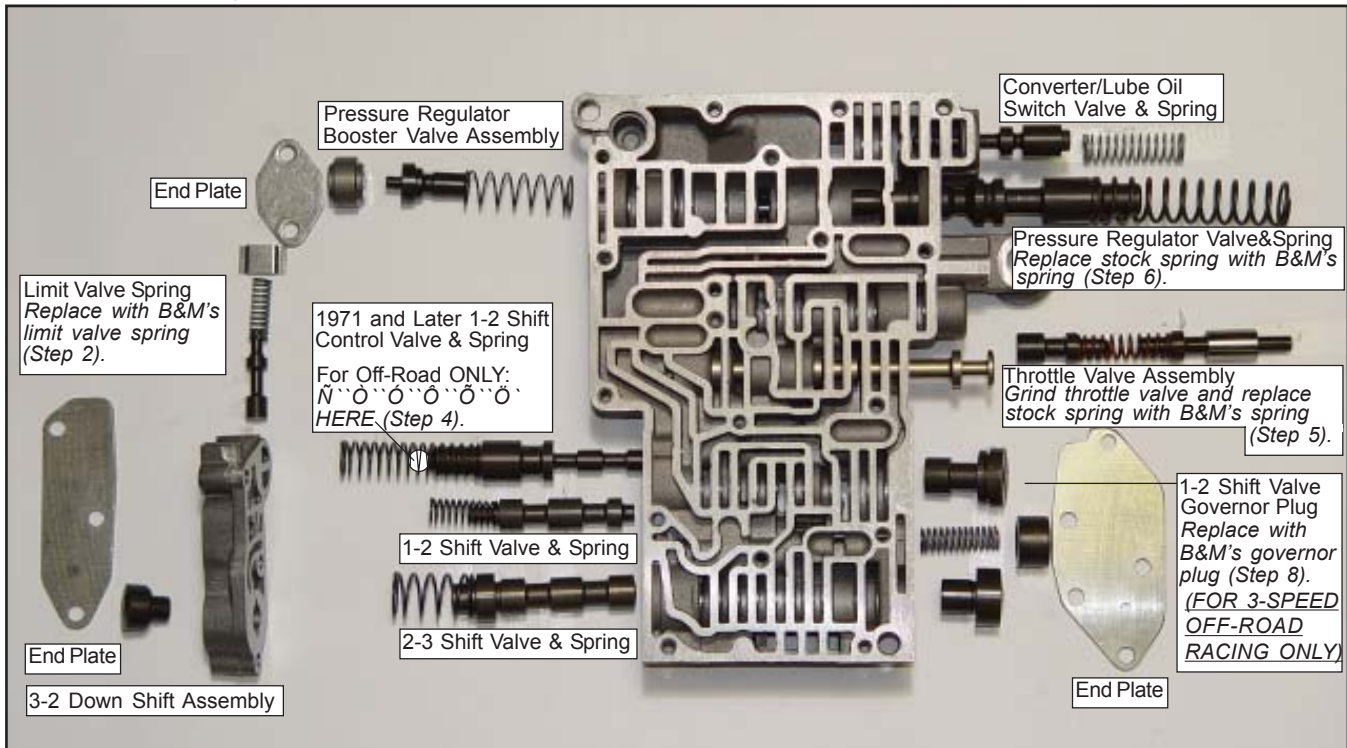


Figure 2

STEP 4. Referring to figure 2, reinstall the 2-3 shift valve and spring and the 1-2 shift valve and spring. Reinstall the 1-2 shift control valve and spring. For 3-SPEED OFF-ROAD RACING APPLICATIONS ONLY install the supplied B&M 1/4" check ball inside the spring on top of the 1-2 shift control valve. DO NOT install the 1/4" check ball in Heavy Duty and Street applications. Make sure all the valves and springs move freely, then install the down shift assembly and end plate. Reinstall the booster assembly (some early models do

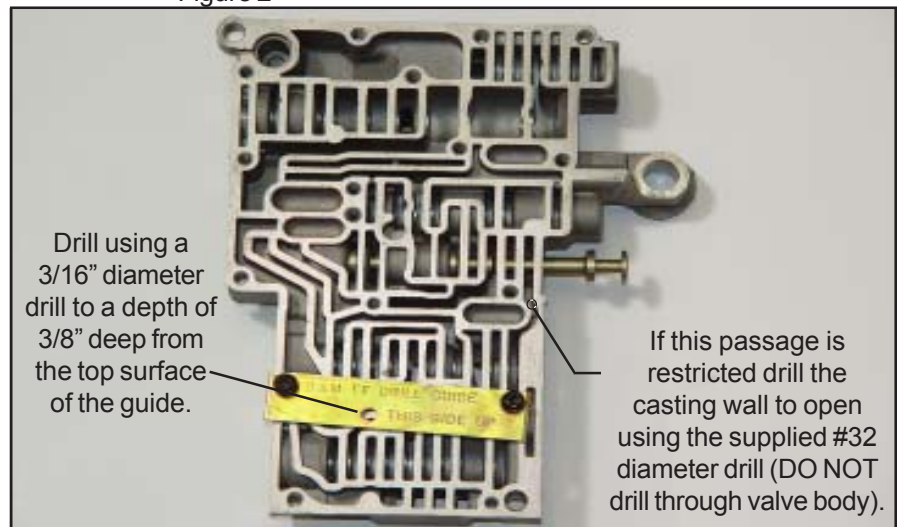


Figure 3

not have a spring), booster valve, sleeve, and end plate.

STEP 5. Modify the throttle valve as indicated in figure 4. Then install the supplied B&M Throttle Pressure Spring (red (supplied only with the 10228 kit) or green). Use the spring that is the closest diameter to the original spring. Then install the modified throttle valve assembly into the valve body (See Figure 2).

STEP 6. Reinstall the Pressure Regulator Valve using the supplied B&M Pressure Regulator Spring (See Figure 2).

STEP 7. Reinstall the original converter/lube oil switch valve and spring then set the valve

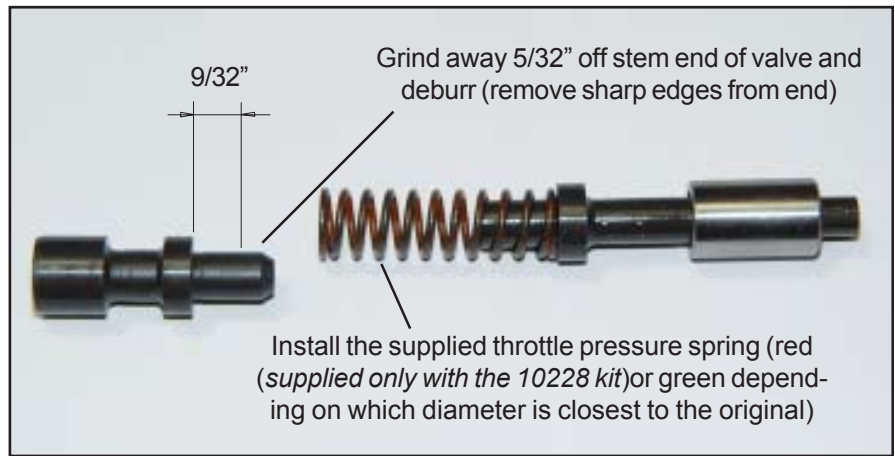


Figure 4

body aside.

STEP 8. FOR 3-SPEED OFF-ROAD RACING APPLICATIONS ONLY: Replace the 1-2 shift gov-

ernor plug with B&M's governor plug (See Figure 2).

STEP 9. Drill the separator plate as shown in figure 5.

HEAVY DUTY

- (A) #32 (.116")
- (B) 1/8" (.125")
- (C) 3/16" (.1875") Jeep do not drill
- (D) 5/32" (.156") Jeep do not drill
- (E) 5/32" (.156") If triangular do not drill

STREET PERFORMANCE

- (A) 1/8" (.125")
- (B) 3/16" (.1875")
- (C) 3/16" (.1875") Jeep do not drill
- (D) 5/32" (.156") Jeep do not drill
- (E) 5/32" (.156") If triangular do not drill

3-SPEED OFF-ROAD RACING

- (A) DO NOT drill
- (B) 3/16" (.1875")
- (C) 3/16" (.1875") Jeep do not drill
- (D) 5/32" (.156")
- (E) 5/32" (.156") If triangular do not drill

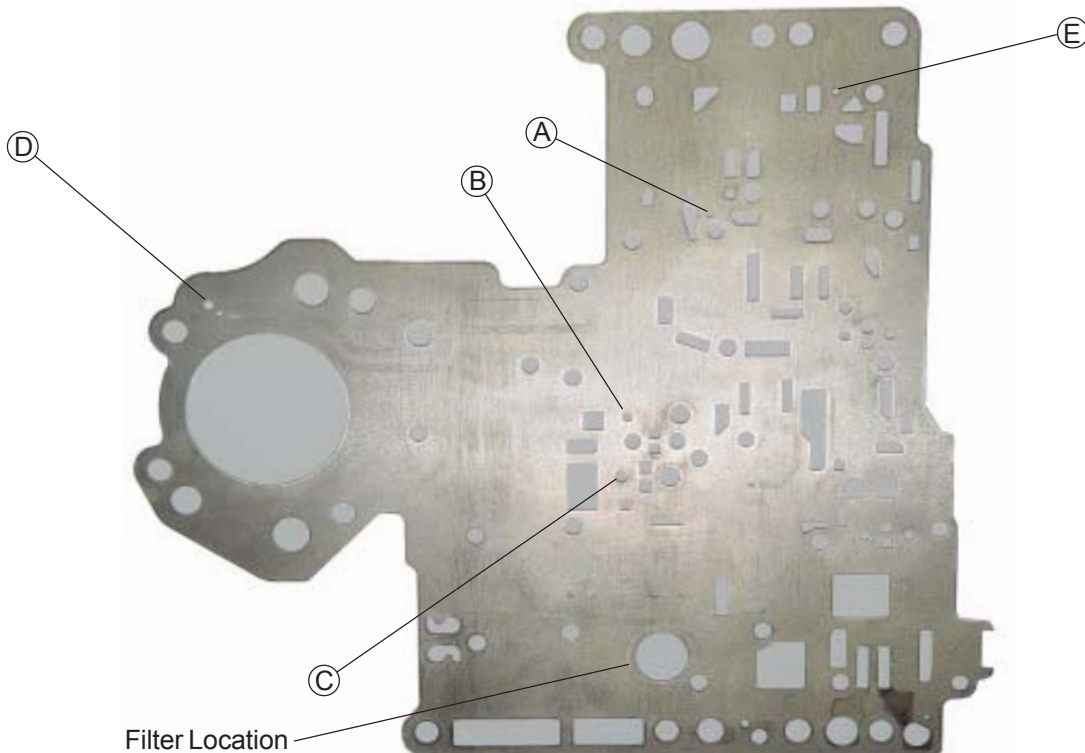


Figure 5

STEP 10. 4 Speeds ONLY: Install the piston as removed (See Figure 6) with the non-hollow end into the bore, replacing the original spring with the supplied B&M 3-4 accumulator spring. Install the B&M aluminum cup orifice plug in the location shown in figure 6 below the deck surface.

STEP 11. Remove check balls from the check ball location #1 and check ball location #2 from the transfer plate (See Figure 7). EXCEPTION FOR JEEPS: DO NOT remove check ball from check ball location #2.

STEP 12. Referring to figure 8, make sure all indicated check balls are of the proper size and location as indicated.

STEP 13. Reassemble the separator plate onto the transfer plate as shown in figure 9. NOTE: Figure 9 shows the 1970 and later model stiffener plate, other year model stiffener plates may vary in appearance.

STEP 14. Use a 3/16" allen wrench and turn the adjustment screw (See Figure 10) clockwise until the pressure regulator spring seat is sitting flush against the inside edge of the spring retainer. Then turn the adjustment screw five (5) full turns counter-clockwise for heavy duty applications or seven (7) full turns for street level and 3-speed off-road racing applications.

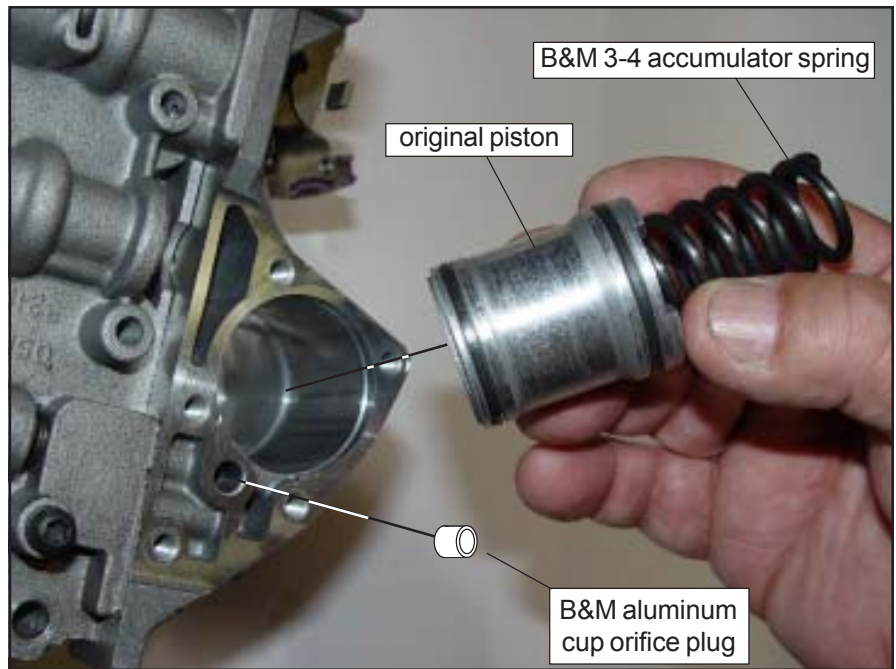


Figure 6

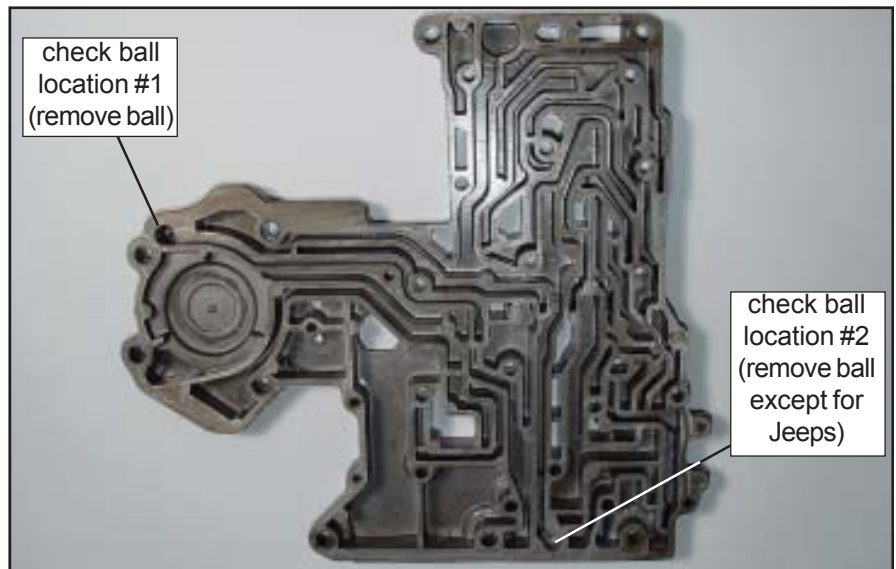


Figure 7

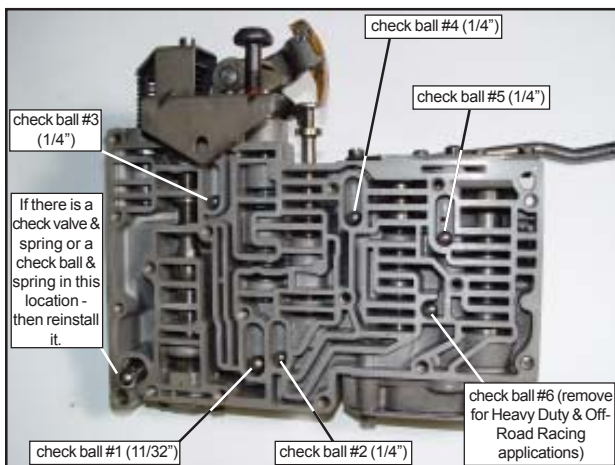


Figure 8



Figure 9

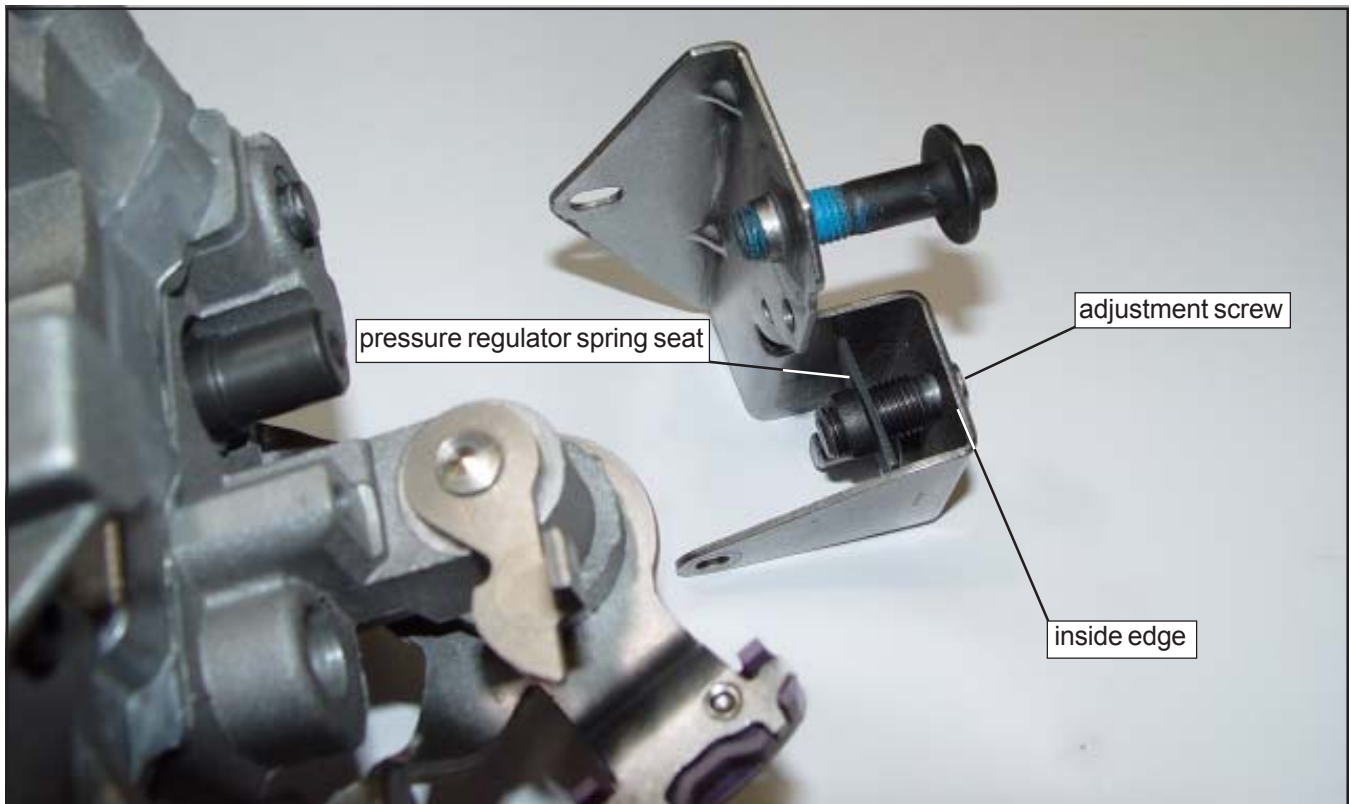


Figure 10

STEP 15. Remove 2nd gear accumulator spring (See Figure 11) and discard. **727 CASE ONLY:** install steel orifice plug just below the surface in

the indicated hole, using a flat nose punch. **STEP 16.** Install the B&M blocker rod as shown below (See Figure 12):



Figure 11

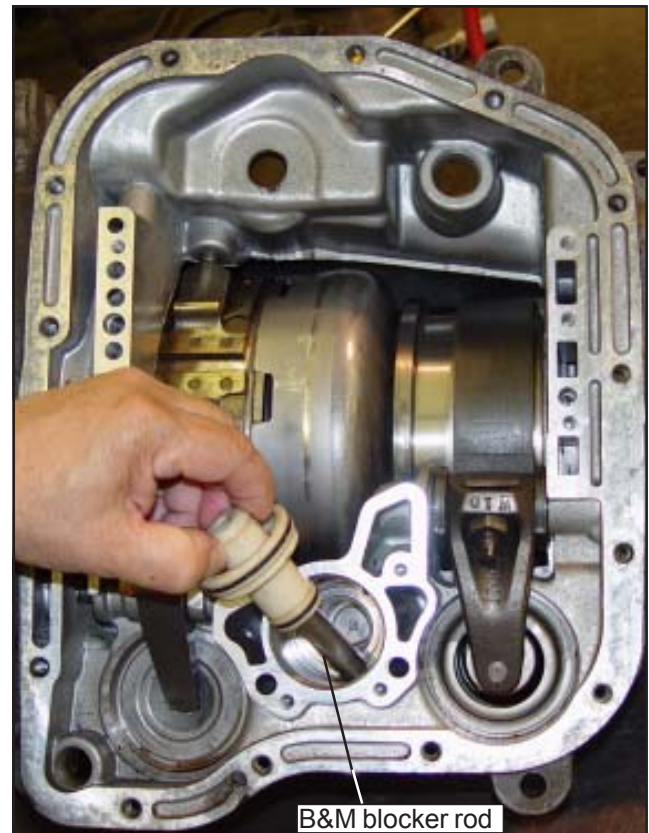


Figure 12

STEP 17. FOR 3-SPEED OFF-ROAD RACING APPLICATIONS ONLY (Manual down shifts to low gear at any speed)
 -!! NOT RECOMMENDED FOR STREET USE !!-

NOTE: This step may require the assistance of a professional transmission mechanic.

Loosen the rear servo band lock nut and back the adjuster all the way out. Move the extension housing back far enough to pull the band anchor out (See Figure 13). When the apply arm is loose the band strut will fall out and the apply arm will be able to move out of the way to access the rear servo.

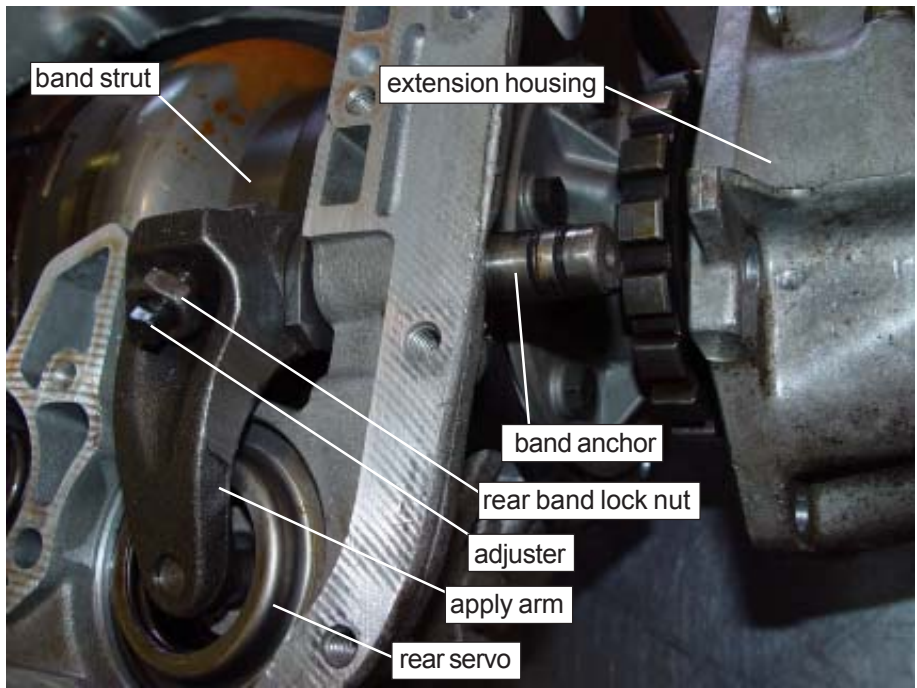


Figure 13

STEP 18. FOR 3-SPEED OFF-ROAD RACING APPLICATIONS ONLY

(Manual down shifts to low gear at any speed)

-!!NOT RECOMMENDED FOR STREET USE!!-

Push down on the spring retainer and remove the internal retaining ring. Take the spring retainer, original servo spring, and piston assembly out of the bore (See Figure 14).

STEP 19. FOR 3-SPEED OFF-ROAD RACING APPLICATIONS ONLY

(Manual down shifts to low gear at any speed)

-!!NOT RECOMMENDED FOR STREET USE!!-

Push down on the rear servo piston assembly and remove the external retaining ring (See Figure 15).

STEP 20. FOR 3-SPEED OFF-ROAD RACING APPLICATIONS ONLY

(Manual down shifts to low gear at any speed)

-!!NOT RECOMMENDED FOR STREET USE!!-

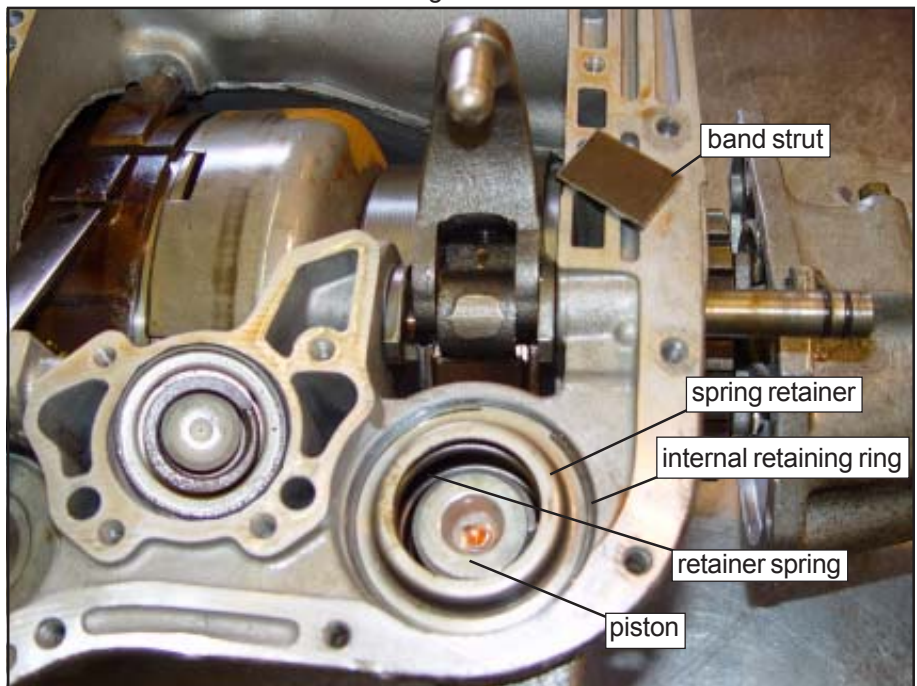


Figure 14

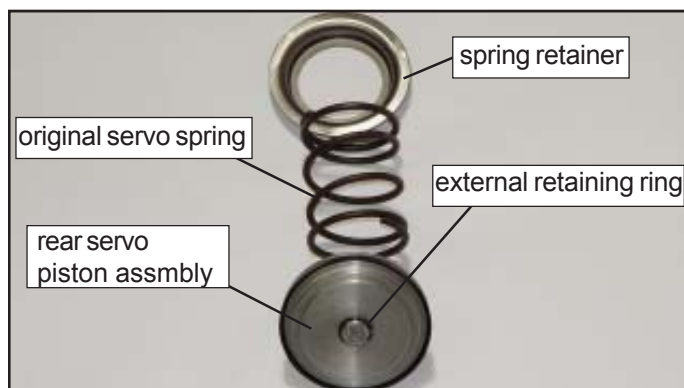


Figure 15

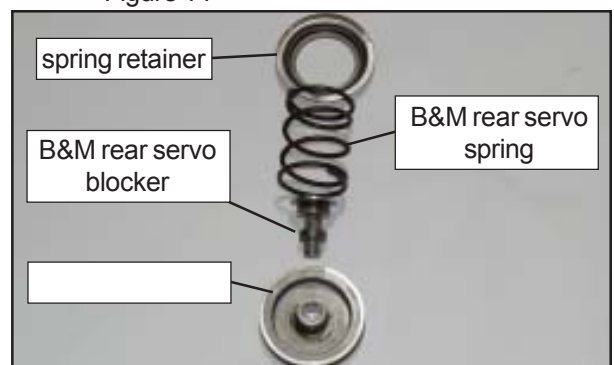


Figure 16

Install the supplied B&M rear servo blocker as indicated in figure 16. Reassemble the piston, the original piston spring, and the supplied external retaining ring (See Figure 16).

STEP 21. FOR 3-SPEED OFF-ROAD RACING APPLICATIONS ONLY

(Manual down shifts to low gear at any speed)

-!! NOT RECOMMENDED FOR STREET USE !!-

Reinstall the modified rear servo piston assembly, supplied B&M rear servo spring, spring retainer and internal retaining ring back into the bore. Reassemble the band strut, band anchor, and extension housing. Tighten the adjuster until it is snug and then back the adjuster off three (3) full turns. Secure the adjuster with the rear band lock nut.

STEP 22. (1966 thru 1969 transmissions only): Loosen the front servo adjusting screw, band anchor, and front band apply strut. Remove the front servo (See Figure 17).

STEP 23. (1966 thru 1969 transmissions only) Install the supplied B&M front servo inner return spring if not already equipped (later model transmissions do not require any front servo modification) (See Figure 18). The later model front servo piston has a larger (over 1/2") diameter center pin and does not require any disassembly or modification.

STEP 24. Reassemble in reverse order as disassembled.

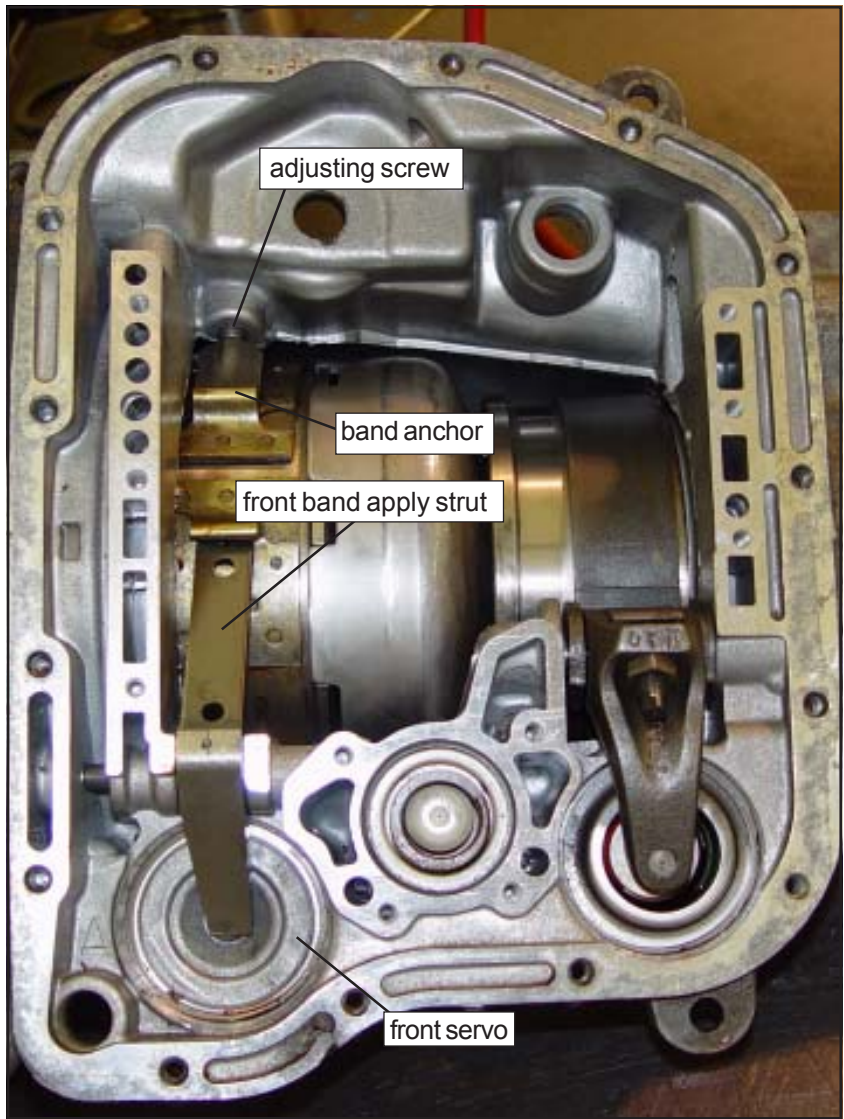
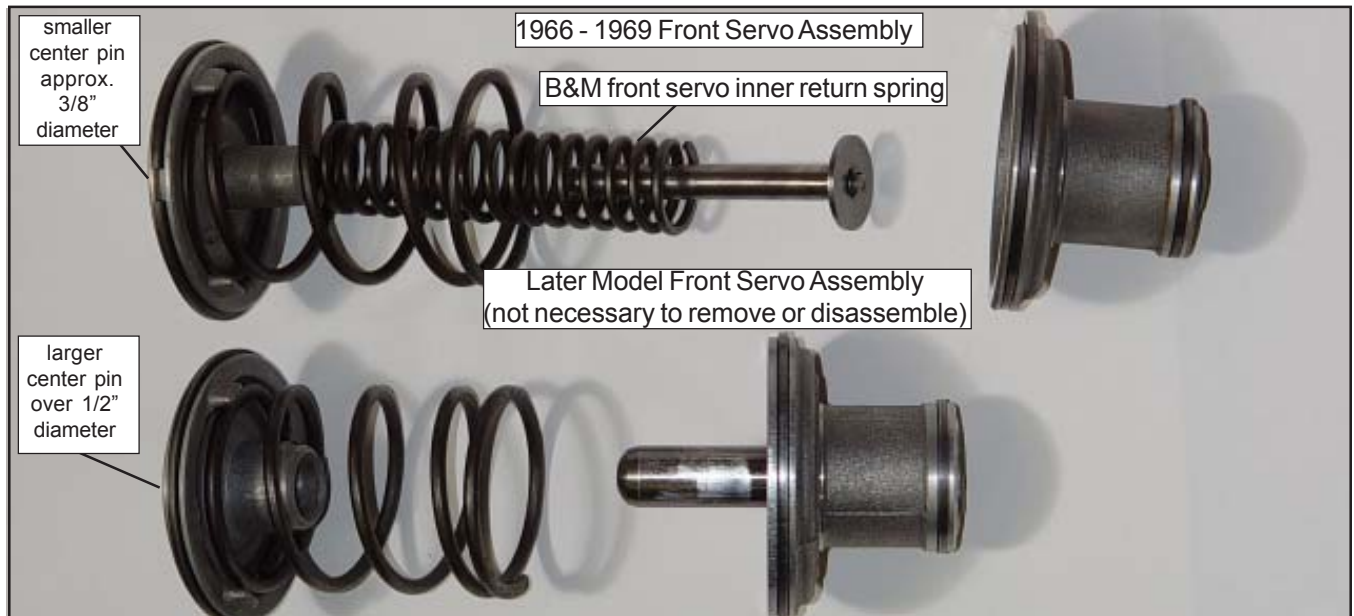


Figure 17

Figure 18



TROUBLE SHOOTING GUIDE

| Malfunction | Probable Cause | Malfunction | Probable Cause |
|--|--|--------------------------|---|
| No movement | On 1978 and later - Reversed torque converter valve. | Leaks | Clean transmission first and observe, check pan gasket and bolt torque. |
| Slips | Low fluid level. | Will not upshift | Throttle pressure linkage adjusted too high. Shift valves burred and sticking, loose bolts 1/4" steel ball installed behind 1-2 shift valve instead of 1-2 shift control valve. |
| Overheating, foaming oil at dipstick or breather | High fluid level. Clogged or blocked cooler. | Soft shifts under power | Throttle pressure linkage adjusted too high. Low fluid level. High fluid level. Pressure regulator. |
| Erratic Shifting | Throttle pressure link sloppy, loose or misadjusted. Shifter misadjusted. Low fluid level. High fluid level. Valve body bolts or end plates loose. | Engine revs on 2-3 shift | Check band adjustment. Remove cupped orifice plug. |
| Late Shifts | Throttle pressure linkage misadjusted. Kickdown detent sleeve installed backwards. | | |

B&M PARTS

