

TURBO ACTION

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CHEETAH MANUAL VALVE BODY

Part #24141

Reverse Shift Pattern (PRN123)

No Engine Braking in 1st & 2nd
(Not for Street Application)

Turbo Hydro "400"

1965 – Up

Installation Instructions

FIRST, READ INSTRUCTIONS CAREFULLY, THEN PROCEED TO INSTALL VALVE BODY BY FOLLOWING EACH STEP INDIVIDUALLY.

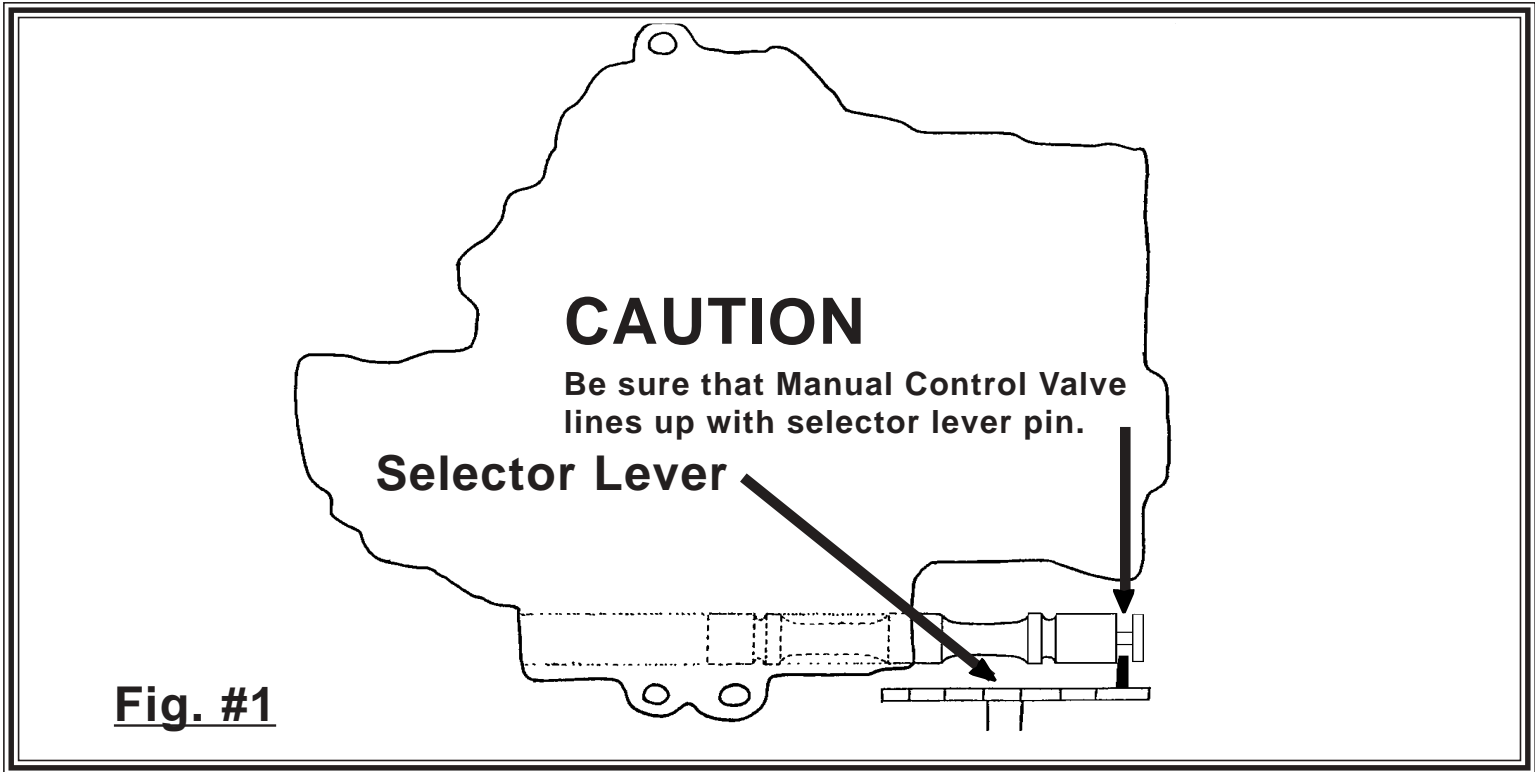
Valve Body	1 – 24141	Valve Body 1965-Up
Kit Includes:	1 – 24116	Special Valve Body Spacer Plate
	2 – 24157	Special Valve Body Gaskets
	1 – 24118	Expansion Plug (See STEP #12)
	1 - 24148C	Pan Gasket

- STEP #1: Transmission should be cool before installing. Be sure vehicle is secure to prevent rolling. Drain oil by carefully removing pan bolts. Recommend leaving a couple of bolts partially attached until some of the oil has drained.
- STEP #2: Remove transmission filter. If 1968 or newer model, hold pipe that filter is connected to so that it will not come out when you pull filter off.
- STEP #3: Before loosening valve body, note how the gear selector lever connects to the manual control valve in the valve body. Fig. #1
- STEP #4: Remove bolts from valve body and then carefully remove governor tubes and valve body together. **AVOID** bending governor tubes. If 1970 or newer model, disconnect white wire from the valve body. Also, be **sure** the manual control valve **doesn't slide out**.
- STEP #5: Remove the two bolts holding the downshift solenoid and valve body spacer plate. Make sure you support the spacer plate with your hand. Lower the plate with steel balls **carefully**.
- STEP #6: Remove intermediate front servo piston, washer, pin, retainer and spring from transmission case. See Fig. #2 for location of your servo parts. They will no longer be used. **OPTIONAL:** If transmission is out of car, remove intermediate (front) band.
- STEP #7: Remove rear servo. Discard inner accumulator piston oil seal rings. Fig. #3 & #4.
- STEP #8: Reinstall rear servo including accumulator piston and rear servo spring. Fig. #3.
- STEP #9: Remove manual control valve from old valve body and place into new valve body.

- STEP #10:** If transmission is being overhauled when installing this valve body, the following step will enhance the 2-3 shift. However, STEP #11 is not necessary for installation of this valve body.
- STEP #11:** Remove lip seal from direct clutch drum. **Do not** remove any lip seals from the direct clutch piston!
- STEP #12:** Use the enclosed drawing (Fig. #4) which indicates the location of the steel balls #1 thru #6
Note: If 1987-Up, it will have seven balls. **Use only one of these balls** with the manual control valve body and it will need to be placed in a different case location. Very carefully place special expansion plug #24118 in reverse hole shown in drawing. This plug must be carefully driven into hole till it stops on the ridge in the hole. Check to see that one of the original ¼" steel balls fits in the special expansion plug #24118 deep enough so that it doesn't show above the face of the case. If transmission is out of car, leave ball in the reverse hole. If transmission is still in car, place one special valve body gasket #24157 to each side of special spacer plate #24116, use petroleum jelly to hold gasket to plate. Locate steel ball on special plate #24116 so that as the valve body is lifted up into the case, the steel ball will go in the reverse hole of the transmission case. **CAUTION:** Before tightening bolts in valve body, be sure to line up the manual control valve as mentioned in STEP #3, otherwise the valve might get bent because the valve slides back and forth (Fig. #1). Torque all valve body bolts evenly to 8-10 ft./lbs. **DO NOT INSTALL** governor tubes or any other steel balls other than the one you placed in the special expansion plug #24118.
- STEP #13:** Install transmission filter being sure of good fit. **CAUTION:** If filter is not properly installed, a loss of oil pressure will occur. Recommend using our filter #24006 (1965-67) models and #24011 (1968 & Up) models.
- STEP #14:** Disconnect vacuum line to modulator. Block at carburetor. Our Aluminum Plug #24122 is available to replace vacuum modulator, **but valve must be left in the case.**
- STEP #15:** Replace old pan gasket with new one and bolt up oil pan.
- STEP #16:** Remove four bolts from governor cover, which is located to the rear of the transmission on the passenger side.
- STEP #17:** Remove governor assembly by pulling out slowly.
- STEP #18:** Replace governor cover and bolts, leaving the governor assembly out of transmission.
- STEP #19:** **OPTIONAL:** Disconnect kickdown wires located on driver's side of transmission.
- STEP #20:** This valve body, #24141, has no automatic features. The transmission must be shifted manually. The valve body shift pattern is "PRN123." No engine braking in 1st or 2nd gear.
- STEP #21:** Refill transmission with a good brand of Dexron Mercon or Type F transmission fluid. Warm transmission up and select all gears with foot on brake. Then check to make sure transmission level is on the add mark. Take vehicle out and shift through the gears at no more than 4000 RPM, at least two times. Then re-check oil level. Add oil if necessary to bring to the full mark. **DO NOT OVERFILL!**
- NOTE:** There will be a no 1-2 shift feel on jackstands.

The following parts should have been removed from transmission permanently with exceptions as noted and options as noted:

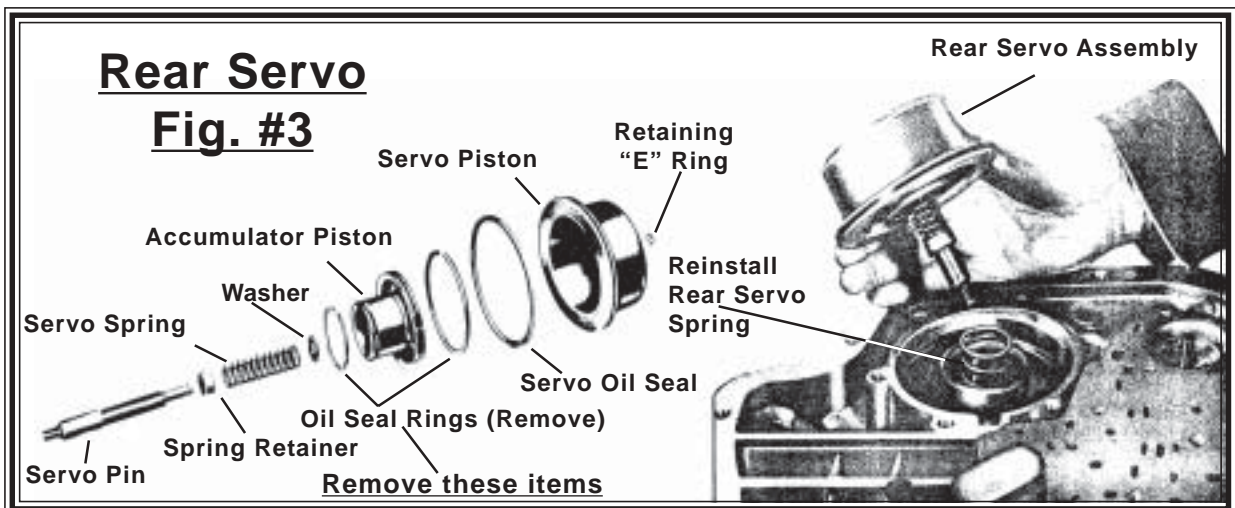
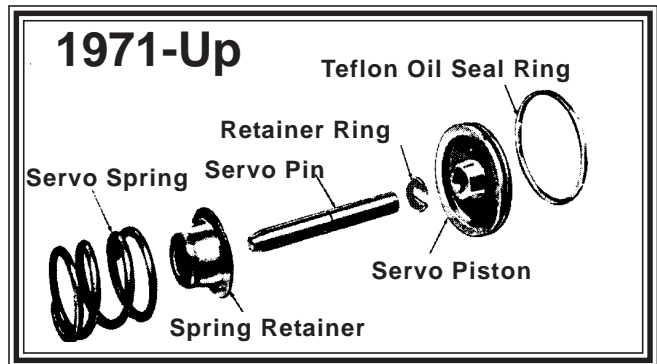
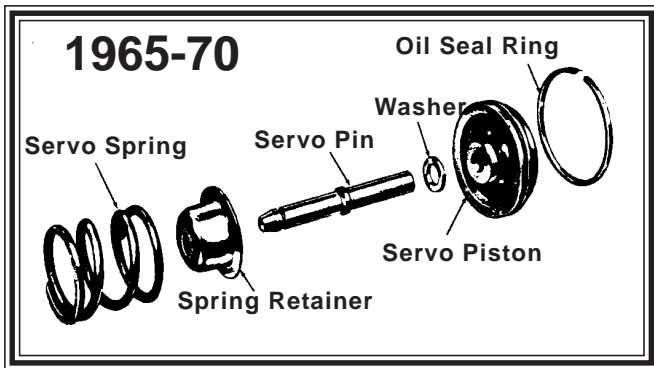
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| 1. Kickdown solenoid, wires & gasket (Remove) | 6. Vacuum line (Remove) |
| 2. Governor tubes (Remove) | 7. Governor assembly (Remove) |
| 3. Original valve body & spacer plate (Remove) | 8. Intermediate (front) band (Optional) |
| 4. All steel balls, except one (Remove) | 9. 1-2 accumulator oil seal rings (Remove) |
| 5. All intermediate front servo parts (Remove) | 10. Direct clutch drum lip seal (Optional) |

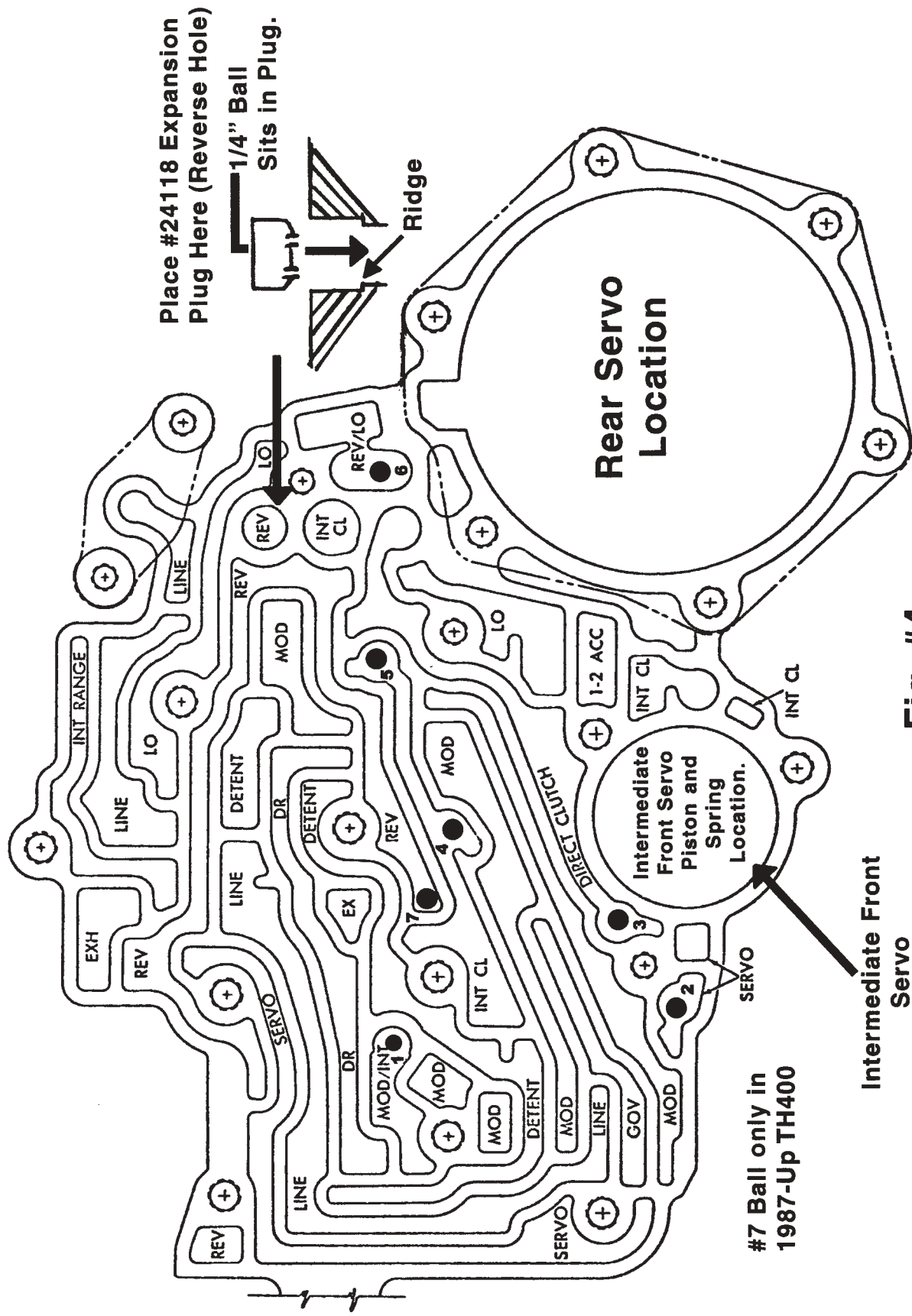


Intermediate Front Servo

Fig. #2

Sometimes the Intermediate Front Servo will fall out when lowering the spacer plate. **NOTE:** Intermediate Front Servo parts will not be reinstalled.





Place #24118 Expansion Plug Here (Reverse Hole) Sits in Plug.



Fig. #4

Case Oil Passages

#7 Ball only in 1987-Up TH400