

TURBO ACTION

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CHEETAH Competition Manual Valve Body - (PRN321)

Part #27253

Turbo Hydro 200 - 1976-Up

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

CAUTION:

Working on this transmission will require the use of metric tools.
The following tools and items will be required:

- 1 - Screwdriver
- 1 - Ratchet and 3" Extension
- 1 - 13mm Socket (sometimes 1/2" will work)
- 1 - 10mm Socket
- Name Brand Type "F" or Dexron Transmission Fluid (Number of Qts. will vary depending on the size of your torque converter).

Kit Includes:

- 1 - 27253 Valve Body
- 1 - 27088-2 Special Valve Body Plate
- 1 - 27099C Pan Gasket
- 1 - 27097 Spacer Plate to Valve Body Gasket (Marked V.B.)
- 1 - 27098 Spacer Plate to Case Gasket (Marked C)
- 1 - 27103 Filter Gasket
- 1 - 23138 Set Screw (3/8"-16 x 5/16")
- 1 - 24126 Set Screw (5/16"-18 x 1/4")
- 2 - 50093 Contingency Decals

This Valve Body can be installed while in the car, however, for maximum durability and performance we suggest taking the transmission apart. See Optional Steps section. Steps #12 thru #15.

STEP #1: Transmission should be cool before installing the Valve Body. Also, place gear shift selector in park. If vehicle is on the ground, secure so it will not roll.

STEP #2: Drain transmission by dropping pan at one end. Recommend leaving a couple of bolts attached until most of the oil has drained (bolts 13mm).

STEP #3: **Remove transmission** oil filter by removing two bolts (10mm socket). Also, these two bolts are longer than other valve body bolts. (Fig. #2)

STEP #4: Being very careful, remove bolt which holds throttle lever and bracket assembly. See Fig. #3. You will no longer need the throttle lever and bracket assembly.

STEP #5: Remove bolt holding manual detent roller and spring. See Fig. #4.

STEP #6: Remove remaining six valve body bolts. Lower valve body carefully. **Be careful to not drop manual valve (Fig. #5).** Also, there will be one (1) ball sitting on the plate (remove) and four (4) balls sitting in the valve body. In addition, there will be a large spring sitting in the valve body. (Fig. #6). Discard the one (1) ball sitting on the plate, the spring, #1, #2 and #4 balls. See Fig. #8. Do Not discard #3 ball.

STEP #7: Remove old spacer plate and gaskets. Be sure all gasket material is removed from the transmission case.

STEP #8: Tap governor hole 5/16-18 and install Set Screw (#24126). This hole must be deep enough so that the Set Screw is below the surface of the case. Suggest Loctite on Set Screw. Fig. #9.

STEP #9: Be sure #3 Ball is placed into new valve body. See Fig. #8.

STEP #10: Place valve body gasket on valve body (V.B. marked on gasket #27097). See Fig. #7. Now place valve body spacer plate on top of gasket.

STEP #11: Place case gasket #27098 on top of valve body spacer plate. This is the gasket marked C. Fig. #7.

SPECIAL NOTE: Use petroleum jelly to keep gaskets from moving around.

Maximum Performance and Durability Do Steps #12- #15, otherwise skip to Step #16.

STEP #12: Remove front pump assembly and drum assemblies from transmission. **NOTE:** You should use lockup transmission parts for best results.

STEP #13: Remove direct clutch drum lip seal. **CAUTION: DO NOT** remove any lip seals from the direct clutch piston.

STEP #14: Remove ball check that is located in the front pump assembly.

STEP #14A Tap **Reverse Port** hole 3/8"-16 and install Set Screw (#23138). This hole must be deep enough so that the Set Screw is flush or slightly below the surface of the case. Suggest Loctite on Set Screw Fig. 10.

STEP #15: Reinstall all parts per General Motors specifications.

STEP #16: Raise valve body up carefully into transmission being sure that manual valve lines up properly with shift linkage. Fig. #5. **NOTE:** Do Not reinstall ball that set on plate or the big spring.

STEP #17: Install all valve body bolts finger tight, except manual detent roller spring bolt (Fig. #4). **Suggest using two filter bolts thru filter holes to guide valve body into place. This will keep gaskets lined up. Then install rest of bolts before tightening up any and be sure you keep manual valve lined up.**

STEP #18: Now place bolt and manual detent roller and spring into place, being sure that manual valve was lined up properly. See Fig. #4. Tighten all bolts 6-8 ft. lbs. starting from the center of valve body out.

STEP #19: Install filter and filter gasket using the two long filter bolts. Tighten 6-8 ft. lbs.

CAUTION: If installing a new filter, there are two types, one for lockup transmissions and one for non-lockup. This valve body requires the lock-up type pan and filter or an extra deep pan with proper filter.

Non-lockup pan is approximately 2 1/8" deep. Filter sits approx. 2" above pan rail.

Lockup pan is approximately 2 9/16" deep. Filter sits approx. 2 1/2 " above pan rail.

STEP #20: Be sure case is clean and then install pan gasket.

STEP #21: **Refill transmission** with a name brand transmission fluid. Dexron, Type "F" or AMSOIL Synthetic oil will all work well. If converter still has oil it will require 3-5 quarts.

STEP #22: Suggest warm-up shifts 1-2 (4200 rpm) and the 2-3 (4500 rpm) to test transmission on the return road or the jackstands. You will need to drag the rear brakes to feel the 1-2 shift on the jackstands.

STEP #23: Warm transmission up and **place in all gears**, then check to make sure transmission level is on the add mark. Take vehicle out and shift several times. Then **recheck** oil level. Add oil if necessary to bring up to the full mark. **DO NOT OVERFILL!** **NOTE: This valve body is PRN321.**



Fig. #1
Pan Marked Metric

Fig. #2
Filter Bolts & Filter

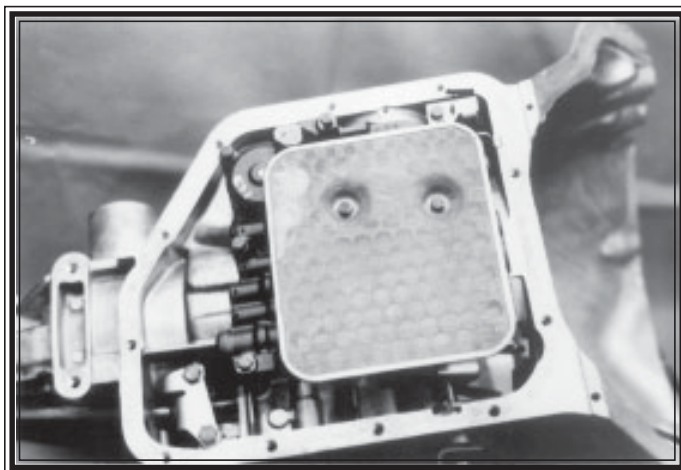
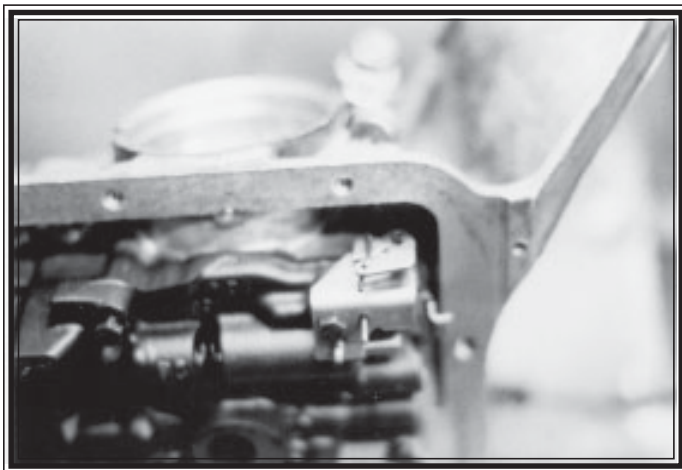


Fig. #3
Throttle Lever
Bracket Assembly



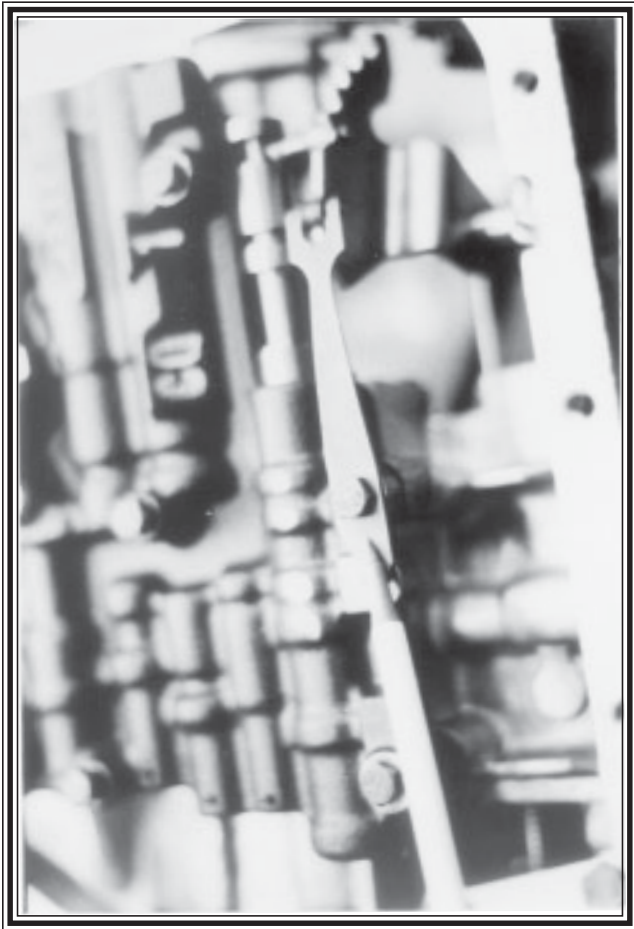


Fig. #4
Manual Detent Roller & Spring

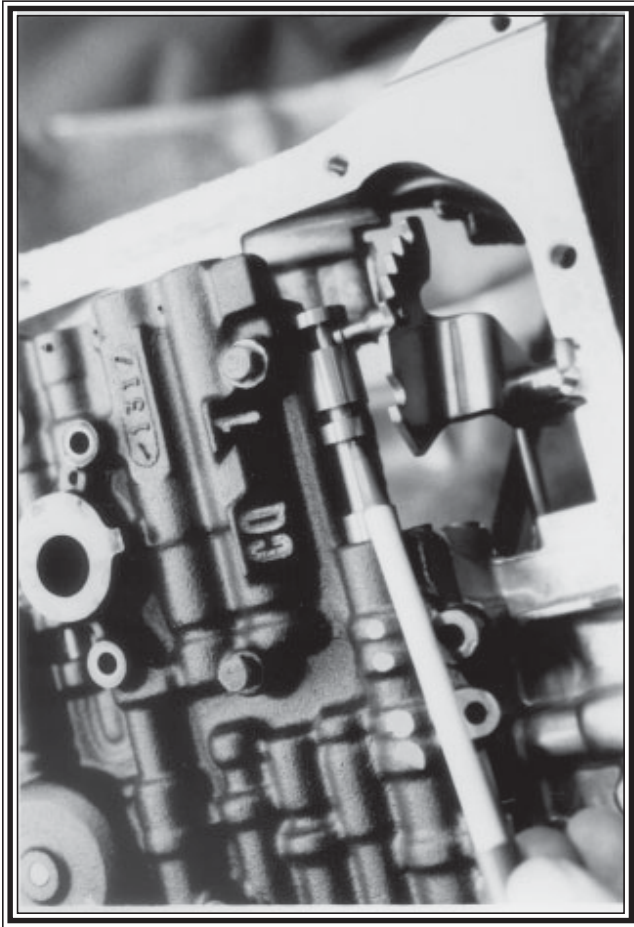


Fig. #5
Manual Valve

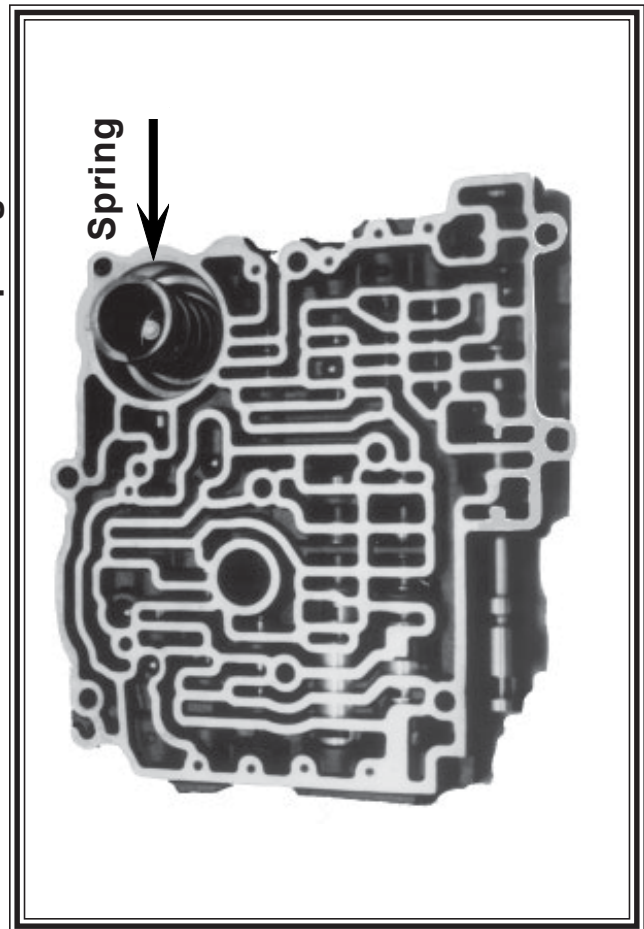


Fig. #6
Valve Body with Spring

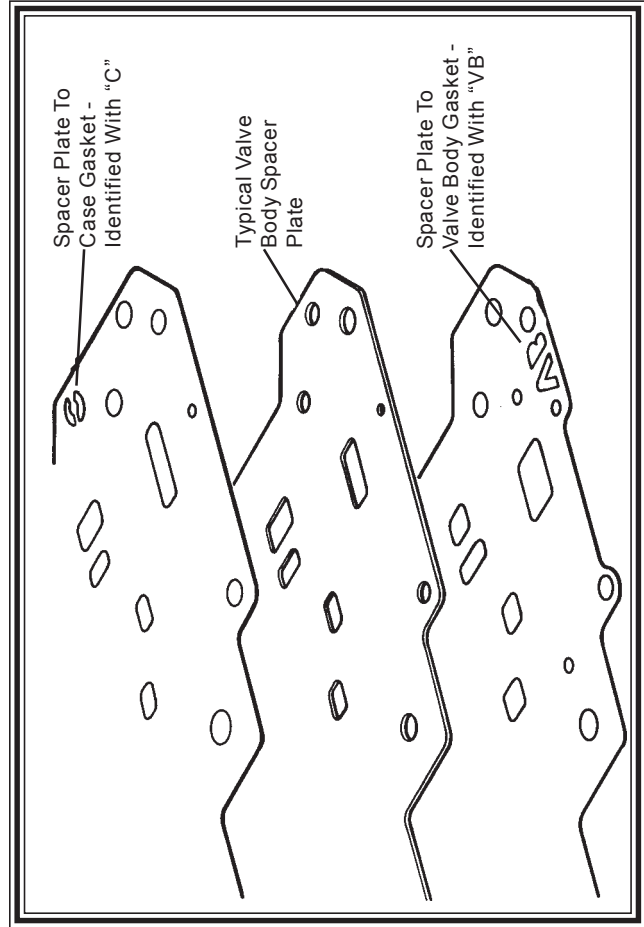
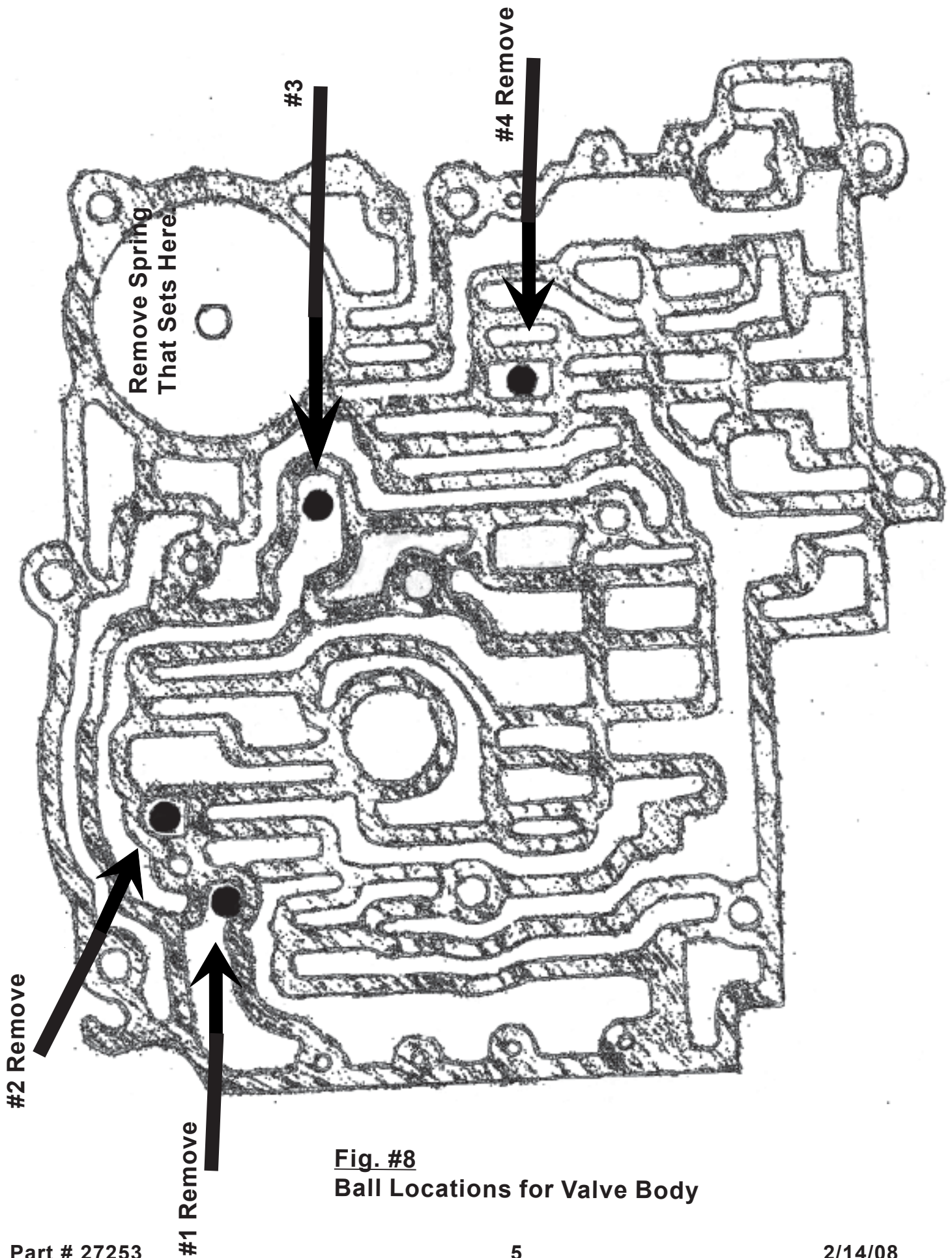


Fig. #7
Valve Body Gasket Identifications



Tap hole to governor 5/16-18 approximately 1/2" deep.

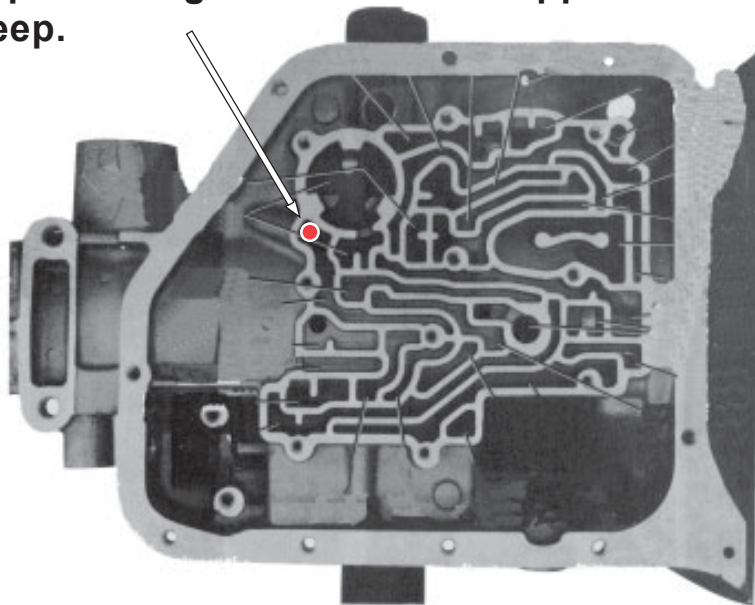


Fig. #9

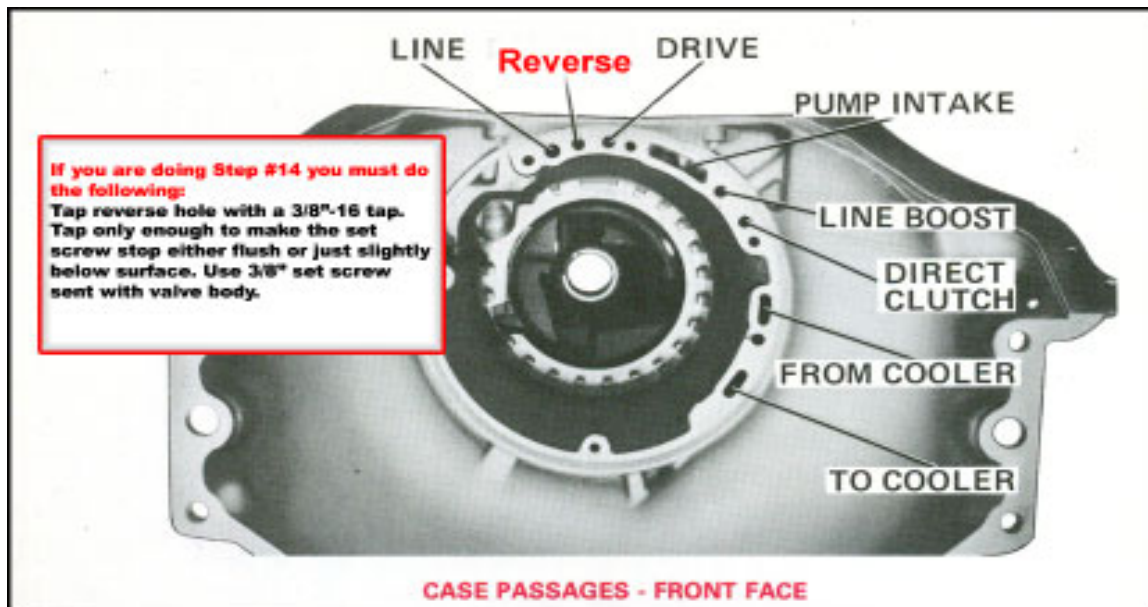


Fig. #10