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CHEETAH POWER SHIFTS

A Shift Improvement Program Part #34810

The following kit fits the following C4 Transmissions: 1970-82 (Except: 1971-Up Pintos, 1970 Mavericks & 1970 Falcons, 1971-Up 4 & 6 Cylinder Capri, 1974-Up 4 & 6 Cylinder Mustang and some Mustang II-V8)

Installation Instructions

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

Valve Body				
Kit Includes:	1	-	34165-1	Special Separator Plate
	1	-	34137	Valve Body Gasket
	1	-	34105	Special Plug
	1	-	34104	Special Ball
	1	-	34130C	Pan Gasket

- STEP #1: Transmission should be cool before installing valve body kit. If vehicle is on the ground, secure so it will not roll. Drain transmission oil by carefully removing pan bolts. Recommend leaving a couple of bolts partially attached until some oil had drained off.
- Before removing valve body, take note how the small passing gear linkage on the outside of the case, STEP #2: driver's side, moves back and forth. Note how it springs back smoothly, no bind.
- STEP #3: Take 7/16" socket and remove the eight bolts which hold valve body in place. Carefully lower valve body.
- The valve body is a very intricate part of the transmission and, therefore, requires a clean place to STEP #4: be worked on. Also, you must take your time and you will have no problems installing the kit.
- Lay valve body with filter screen side down. Remove bolts with a 7/16" socket and lay them together STEP #5: to right side of your work area.
- STEP #6: Turn valve body over so that the filter screen is up. Remove eight screws holding the filter with a 5/16" socket. If filter is dirty, replace with a Turbo Action #34013. Lay the eight bolts and the filter next to the two large bolts on your right. Carefully remove Pressure Relief Spring and Valve that the filter held in place. See Figure #1.
- STEP #7: Carefully remove nine bolts holding the valve body together (5/16" socket). Note which bolt has tag on it, and where it is located (some valve bodies may not have this tag). Lay these bolts to your left side. Also note that one bolt has a Detent Bracket on it.

- STEP #8: Carefully lift top section of valve body and set over to your left with the nine bolts and Detent Bracket.
- STEP #9: Remove Servo Check Valve and Rubber Ball Shuttle Valve from Upper Valve Body (See Figure #2). Throw away Servo Check Valve, but place Rubber Ball Shuttle Valve next to filter.
- STEP #10: Remove 1-2 Acc. "L" shaped Retaining Pin, be sure to hold finger over Acc. Plug so that it won't pop out (See Figure #2). Now carefully remove Acc. Plug. Place Special Plug #34105 in hole where the Acc. Plug was removed. Next, place Acc. "L" shaped Retaining Pin into position. Be sure that pin is all the way in and that it is holding the Acc. Plug in place.
- STEP #11: This step gives you a choice of what kind of shift you desire:

<u>High Performance</u>: (Performance Street Vehicle) Very Firm 1-2 Shift

Remove Cutback End Plate (Figure #2). Be careful that the Transition Valve and Spring do not fall out. Now carefully remove Cutback Valve. Place Special Ball #34104 in hole where Cutback Valve was located. Now place Cutback Valve back into valve body. Place Cutback End Plate back onto valve body, making sure that the Transition Valve and Spring are in place. <u>CAUTION!</u> Be sure End Plate is <u>below</u> the surface of the valve body before tightening the screws.

Heavy Duty: (Tow Vehicle, Van, Pick-Up Truck)
Go on to STEP #12

- STEP #12: Place Rubber Ball Shuttle Valve back in valve body (Figure #2). Set valve body over to your right side.
- STEP #13: Take the Lower Valve Body (Figure #3) and remove separator plate and old gasket. Note the position of the bolts and Hold Down Plate(s). (Figure #3).
- STEP #14: Remove Release Check Ball and throw away. (Figure #3).
- STEP #15: Place new Gasket #34137 and new Separator Plate #34165-1 into place. (NOTE: Some valve bodies, this plate will overhang, but will function properly). CAUTION: Be sure you have Rubber Ball Shuttle Valve in place before placing new valve body gasket and Special Separator Plate into position (Figure #3).
- STEP #16: Place bolts and Hold Down Plate(s) into position. Be sure Special Separator Plate lines up with holes in valve body. Tighten bolts securely (Figure #3).
- STEP #17: Place Lower Valve Body onto the Upper Valve Body. Be careful that the Rubber Ball Shuttle Valve in Upper Valve Body stays in position. Start eight bolts and tighten with 5/16" socket to 40-50 inch/lbs.

 Leave on bolt and Detent Bracket out at this time. CAUTION: These small bolts will not take excessive tightening.
- STEP #18: Turn valve body over and start two bolts with 7/16" socket and tighten to 40-50 inch/lbs.
- STEP #19: Turn valve body over. Install Pressure Relief Spring & Valve (Figure #1). Place filter and eight bolts into place. Tighten bolts with 5/16" socket, but be sure that large hole in filter stays lined up with valve body.
- STEP #20: Before installing valve body, note the levers in the transmission which engage the Manual Control Valve and the passing gear valve (Figure #2). They must line up with the valve body properly.
- STEP #21: Lift the valve body into transmission, <u>carefully</u> aligning the Manual Control Valve with the Shift Lever (Figure #2). At the same time, wiggle the passing gear linkage on the outside of transmission case until it feels like mentioned in STEP #2.

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STEP #22: Start all bolts (Note: Long one goes through filter). Tighten all bolts down being sure that the shift lever and passing gear linkage are working properly. Bolts should be tightened to 8-10 ft./lbs. Also, place Detent Bracket into place at this time (Fig. #1). Tighten bolt with 5/16" socket to 40-50 inch/lbs.

STEP #23: Clean pan and install New Pan Gasket #34130C. Replace pan on transmission and tighten all bolts securely.

STEP #24: Adjust intermediate band located on driver's side near shift lever. Take a 3/4" box wrench and break loose. Now holding locknut from turning, take a small 3/8" open end wrench and turn square adjustment lug clockwise until wrench feels snug (10 inch/lbs.). CAREFULLY back off (CCW) one (1) full turn only. Holding the adjustment lug, tighten locknut to 35 ft./lbs. (tight).

STEP #25: Add three quarts of a well known brand of Type "F" transmission fluid.

STEP #26: Start motor and add transmission fluid until dipstick reads approximately one (1) pint low or the add mark.

STEP #27: Take vehicle out and drive normally around the block. Now recheck transmission oil level. Add oil if necessary, but DO NOT OVERFILL!

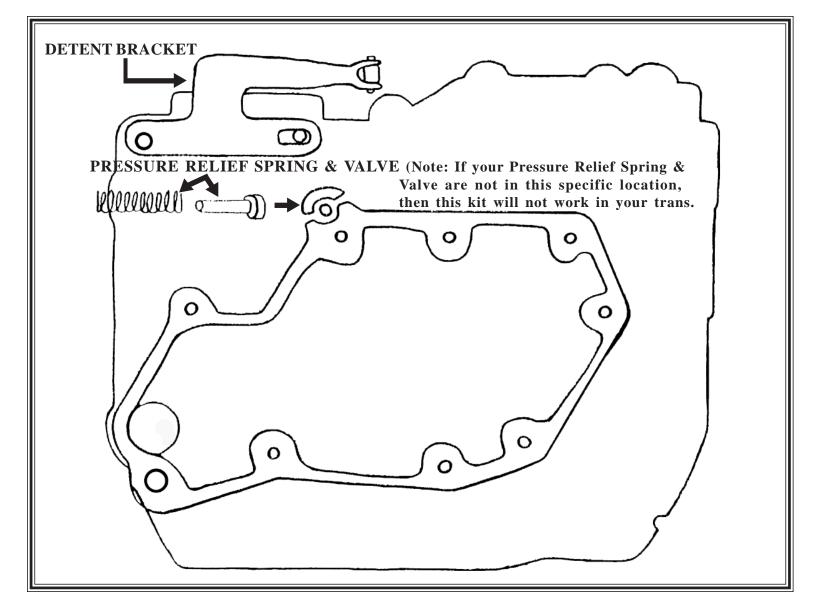
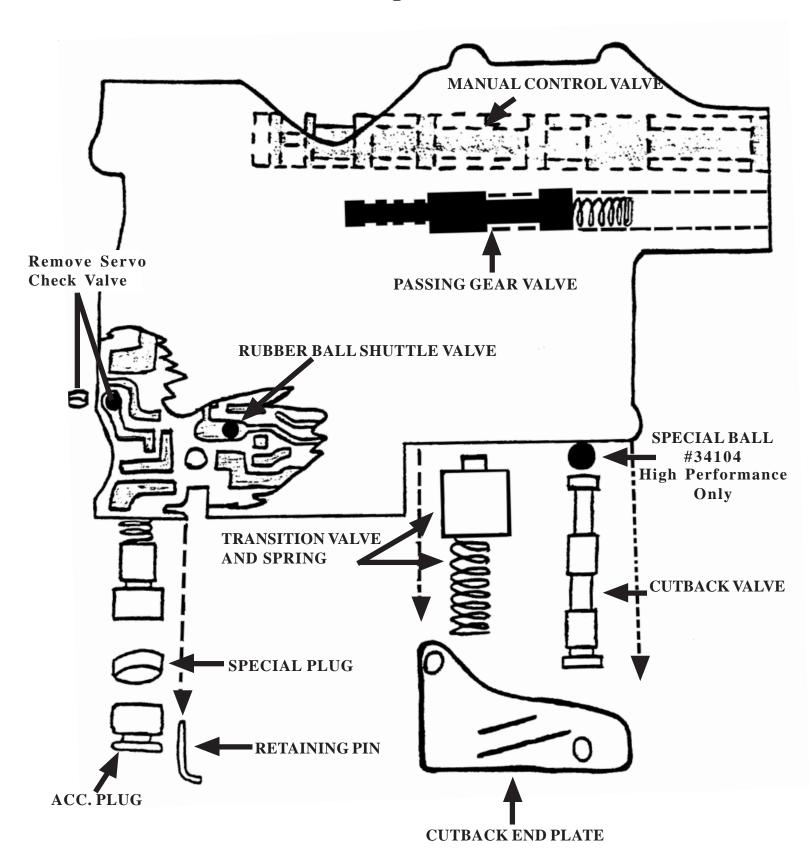


Fig.#1

UPPER VALVE BODY

Fig.#2



LOWER VALVE BODY

Fig.#3

