<sup>®</sup> 1535 OWENS ROAD, JACKSONVILLE, FLORIDA 32218 (904) 741-4850 FAX (904) 741-4853

## CHEETAH CIRCLE TRACK VALVE BODY (Manual Control Only)

Parts Included: 1 - 22597 Valve Body (Stock Shift Pattern)

1 - 22280B .Solenoid (Two Wire)

1 - 22072 Pan Gasket 1 - 22076 Filter Gasket

Modulator Gasket 1 - 22077 - 00781A Female Connector 2 - 00782A Male Connector

It is suggested that you do all modifications for maximum performance.

**STEP #1:** Place transmission in park.

STEP #2: Remove drain plug and drain oil. Remove pan.

STEP #3: Remove modulator and small rod if so equipped.

STEP #4: Remove 2 bolts holding shift lever guide plate. NOTE position of shift lever and manual valve. Also <u>note</u> position of the

small spring that gives detent pressure for shift lever. (See Fig. #1)

STEP #5: Remove 6 valve body bolts that hold valve body in place (See holes in new valve body included). (See Fig. #2)

STEP #6: If transmission in car, hold one hand on valve body and carefully pry with screwdriver under the Servo Tube connecting

the valve body to the servo. (See Fig. #3)

STEP #7: Let valve body drop down towards the converter.

STEP #8: Remove E-Clip and Detent Bracket from old valve body.

STEP #9: Place E-Clip and Detent Bracket on new valve body.

Remove Manual Slide Valve from old valve body. STEP #10:

STEP #11: Install Manual Slide Valve into new valve body.

Part: #22597

3/23/94 5/20/94 6/6/94

HIGH PERFORMANCE TRANSMISSIONS.

# Steps #12 thru #20 should be done for best results

STEP #12: Remove front pump assembly.

STEP #13: Remove front drum assembly.

STEP #14: Remove planetary assembly.

STEP #15: Remove rear clutches.

STEP #16: Remove rear piston.

STEP #17: The back of the case will have a small hole in it. Enlarge to 1/8".

STEP #18: Rear piston - drill a 1/16" bleed hole near outer edge of piston.



1/16" hole to be drilled

STEP #19: Re-install rear piston with bleed hole towards top of case and set rear clutch clearance to 0.080-0.100 using five clutches. It will most likely be necessary to switch around different thickness steels or machine piston for proper clearance.

STEP #20: Reassemble rest of transmission to stock specifications. Suggest a #22043 Direct Clutch Steel Hub for added dependability. Direct clutch clearance 0.065 to 0.070.

STEP #21: Installing valve body should be done very carefully.

STEP #22: It may be necessary to remove special modulator valve and spring from valve body to install valve body in the case.

STEP #23: Being very careful, place new valve body into transmission, guiding the Servo Tube, the Manual Valve Body and the Detent Spring Bracket into place. Sometimes it may be necessary to tap on Servo Tube to get into hole in case. Also be careful not to damage gasket. (See Fig. 2 &

STEP #24: Start 6 bolts in valve body. Be sure Servo Tube, Manual Valve and Detent Spring Bracket are properly in place. (See Fig. #2)

STEP #25: Tighten 6 bolts to 8-10 ft./lbs.

STEP #26: Place shift lever guide plate and 2 bolts'into place being sure the Manual Valve is properly lined up with the shift lever. (See Fig. #1)

STEP #27: Tighten bolts to 8-10 ft./lbs.

STEP #28: Connect Detent Spring to Detent Spring Bracket and Valve Body Bracket with pair of needle nose pliers. (See Fig. #2)

STEP #29: Install special modulator valve and spring back into valve body...

If you did not remove, go on to STEP #31.

STEP #30: Install solenoid and modulator gasket using a 1" wrench to tighten (10-15 ft./lbs. is adequate).

STEP #31: Manually push back of solenoid in and release to see if modulator valve is working freely and that it springs back when released. Note-Our two wire solenoid must be hooked up as follows: One wire to 12 Volt Source, the other wire to ground.

STEP #32: Take old filter and new filter gasket and install on new valve body.

If filter needs replacing, use a Turbo Action #22006.

STEP #33: Install new pan gasket and reinstall pan.

STEP #34:

IMPORTANT! ADJUST FRONT BAND:

Back off lock nut with 9/16" box end wrench. Use a 7/32" allen wrench and turn clockwise to 10 in./lbs. Be sure lock nut doesn't turn in while turning allen wrench. Now turn allen wrench counterclockwise (4) full turns and tighten lock nut being sure allen wrench doesn't turn.

STEP #35: Depending on your preference install a 10-20 amp momentary switch. Turbo Action offers a completely sealed micro switch with industrial stretch cord for the steering wheel, #00774. Use a good 12 volt source with #14 gauge wire (See Fig. #4).

STEP #36: Refill transmission with a good brand of type "F" or Dexron fluid. Add approximately only 3 quarts. Warm transmission up and place in all gears, then check to make sure transmission level is on the add mark. Add oil if necessary to bring to the full mark. DO NOT OVERFILL!

#### SHIFT PATTERN

### Part #22597 PRN21

#### ADDITIONAL INFORMATION:

The Circle Track Valve Body takes some getting use too. Before putting into gear engage switch, then put into gear and proceed slowly till you get up to speed then release switch. This valve body works same as our standard Cheetah Valve Body if you do not engage momentary switch.

#### OPTIONAL:

- 1. Governor assembly can be removed.
- 2. Remove vacuum modulator lines.
- 3. Passing gear (throttle) linkage may be removed.

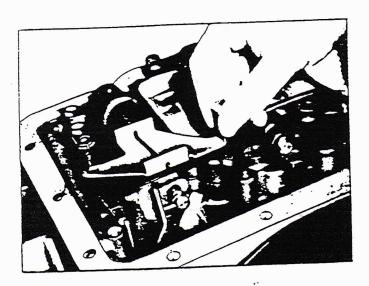


Fig. #1

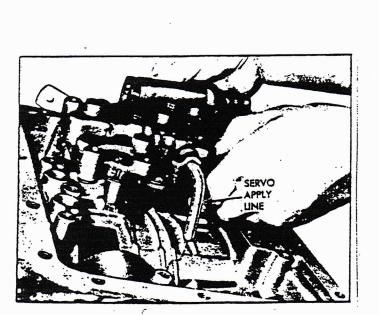


Fig. #3

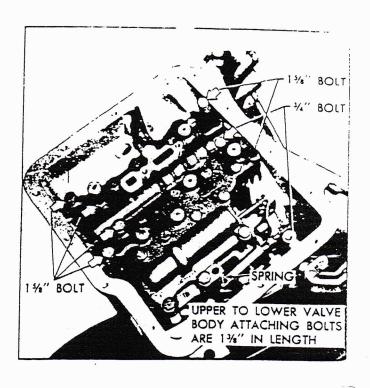


Fig. #2

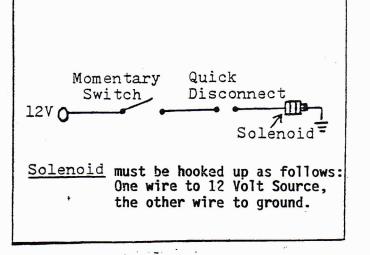


Fig. #4