Installation Instructions for 603110 Valve Body Kit

1962-1995 Mopar TF 727 & 904-999

(BEFORE YOU BEGIN) Which instructions to follow:
For 1962-1976 Models follow Steps 1-4. For 1977 and up follow steps 5-7. Follow steps 8-15 for all years.

STEP 1
Remove check valve, check balls and pressure regulator valve from valve body. Drill a 0.073 hole at X through wall to connect shaded areas with bit supplied.

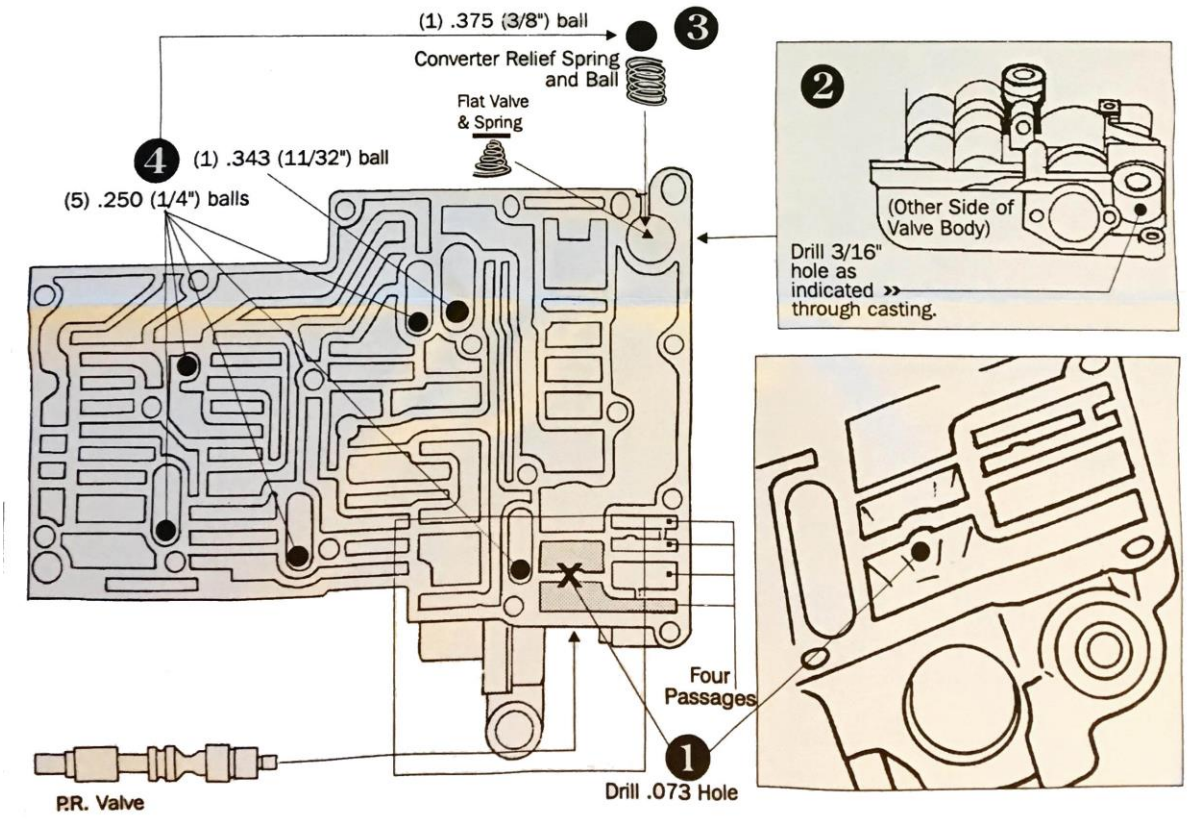
STEP 2
1968-1976 valve bodies have a converter relief ball and spring. Drill a 3/16 (0.187) hole thru knob area as illustrated. 1962-1965 valve bodies have a flat valve and tapered spring at this location. **Do not drill knob area with this type valve and spring.**
NOTE: 1977 and up will not have either check valve set up and requires no drilling. Thoroughly clean valve body and blow off with compressed air.

STEP 3

A. 1968-1976 - Replace converter relief ball spring with green spring supplied.

B. 1962-1965 - Replace front pump check valve and stock spring back into valve body.

STEP 4
Replace check balls as illustrated. (5) 1/4 (0.250) balls, (1) 11/32 (0.343) and (1) 3/8 (0.375) converter relief ball 1968-1976. Reinstall pressure regulator valve.



STEP 5
Remove check balls and pressure regulator valve from valve body. Drill a 0.073 hole at X through wall to connect shaded areas with drill bit supplied.

STEP 6

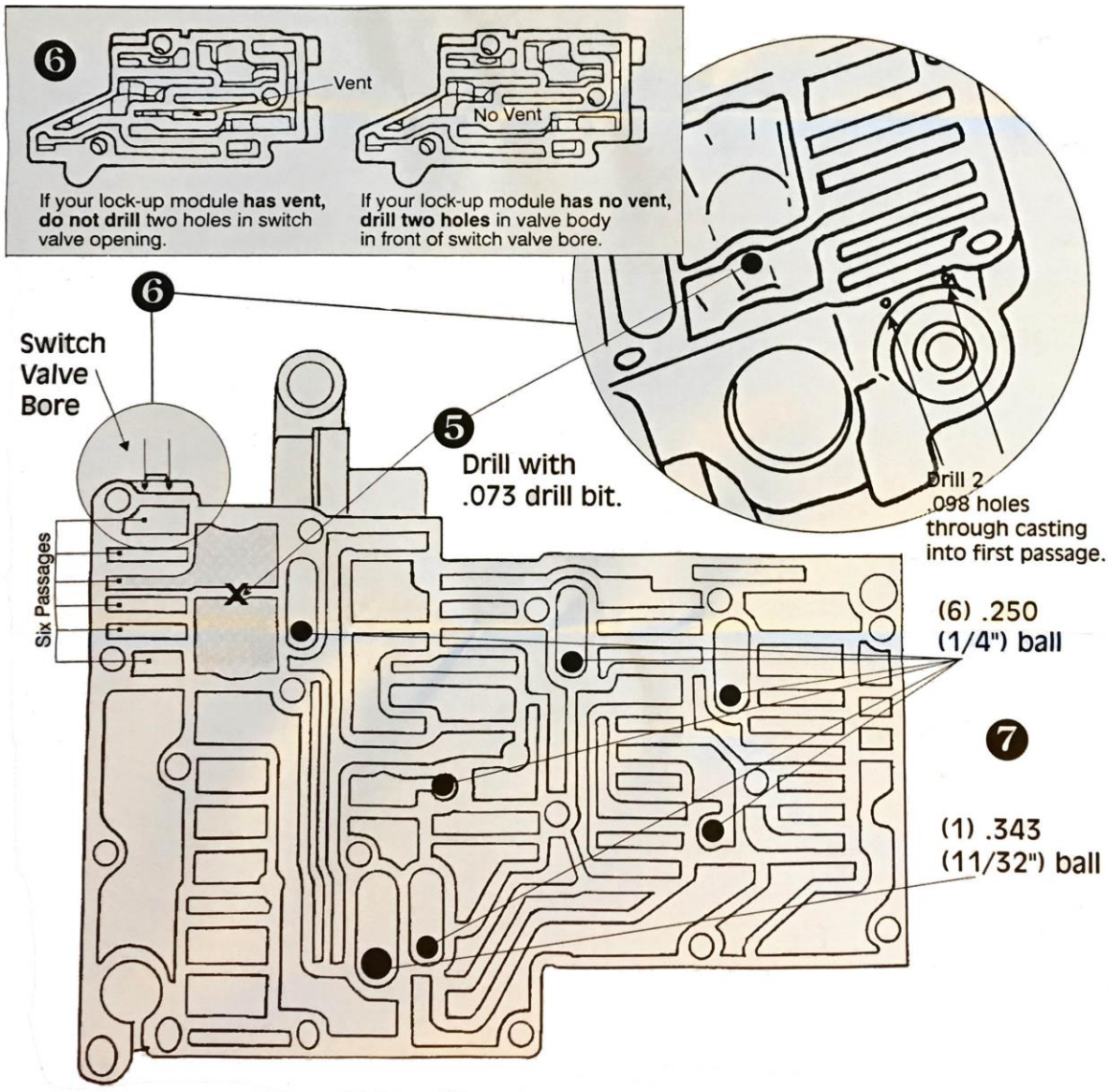
Inspect the lock-up module to determine if there is a vent or not. See illustration. If there is a vent channel move on to

Step 7. If no vent channel, remove switch valve and drill 2 0.098 holes in valve body, in front of switch valve bore with drill bit supplied. See illustration for locations.

NOTE: Most six passage valve bodies have lock-up, but if your valve body does not have a lock-up module, do not drill the two holes in front opening. **(On Jeeps) Do not drill with either module.**

STEP 7

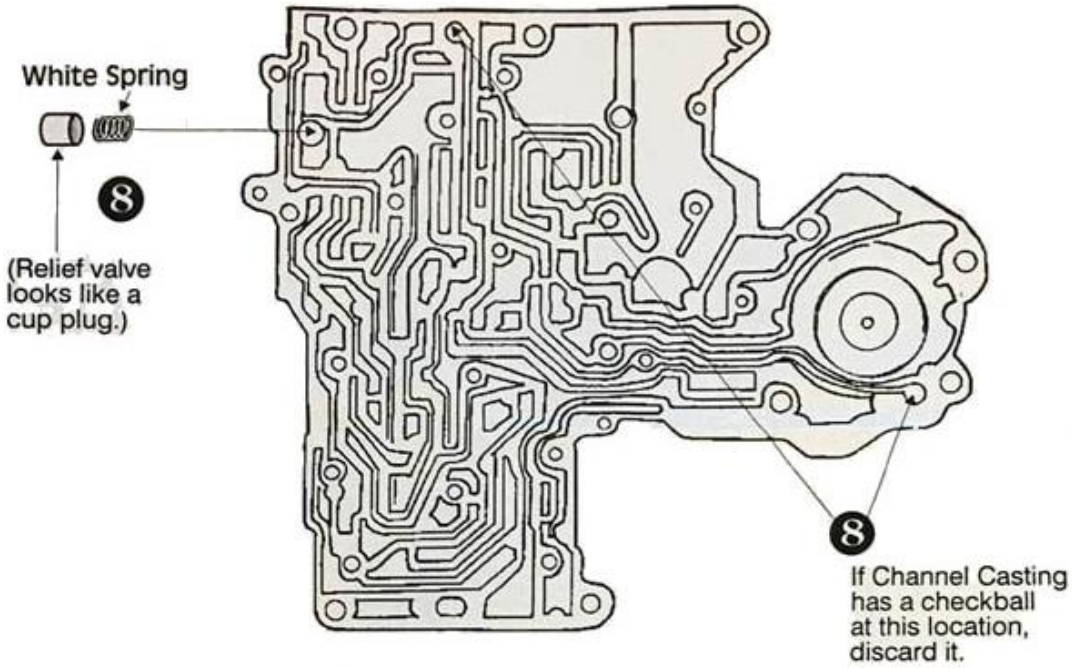
Thoroughly clean valve body and blow off with compressed air. Replace check balls as illustrated. (6) 1/4 (0.250) and (1) 11/32 (0.343). Reinstall pressure regulator valve and switch valve.

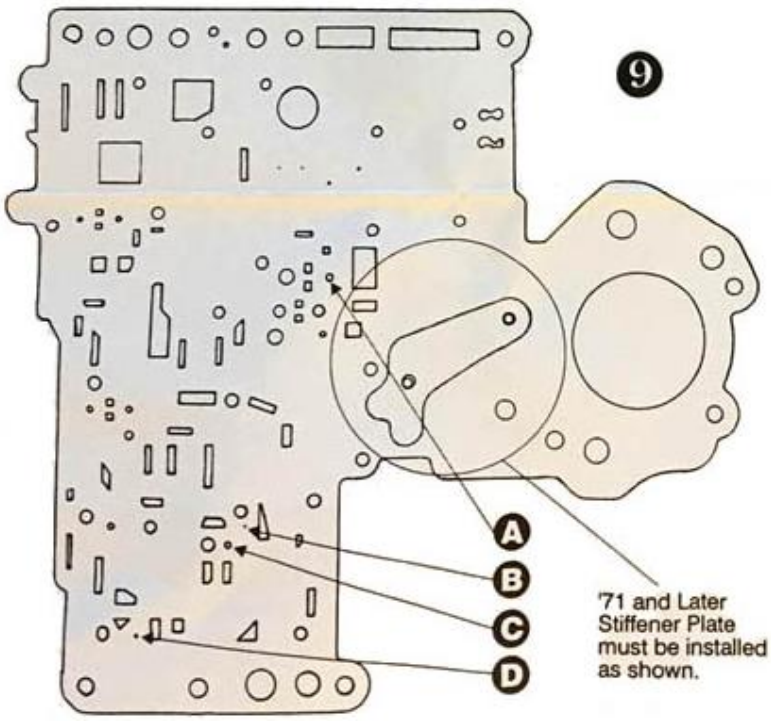


STEP 8
Channel Plate. (All Years) Remove all check balls from channel plate. Discard. Some channel plates have a converter pressure relief valve and spring. If your channel plate has this set up, replace spring with the white spring supplied.
STEP 9
Drill separator plate as follows with drill bits supplied.

Hole	Regular Duty	Heavy Duty
A	1/8" (0.125)	9/64" (0.140)
B	#44 (0.086)	#40 (0.098)
C	1/8" (0.125)	9/64" (0.140)
D	3/16" (0.187) all plates	

Note: If Hole D is triangular, **do not drill.**
Assemble Separator Plate to Channel Plate. Note: Ensure Stiffener Plate is placed as shown 1971 and later

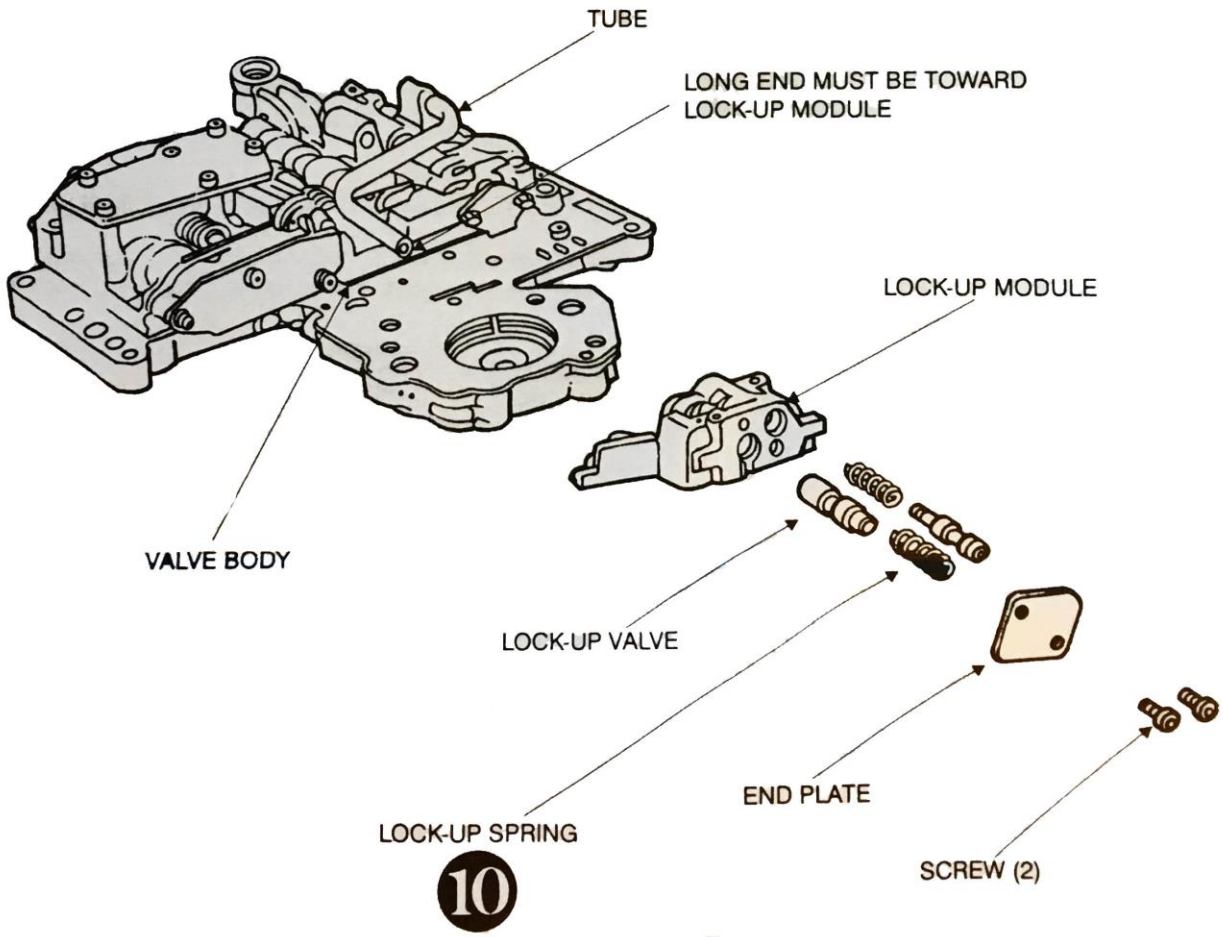




STEP 10

Late valve body with lock-up only. Lock-up spring.

- For an early lock-up install red spring supplied.
- For a later lock-up install black spring supplied.

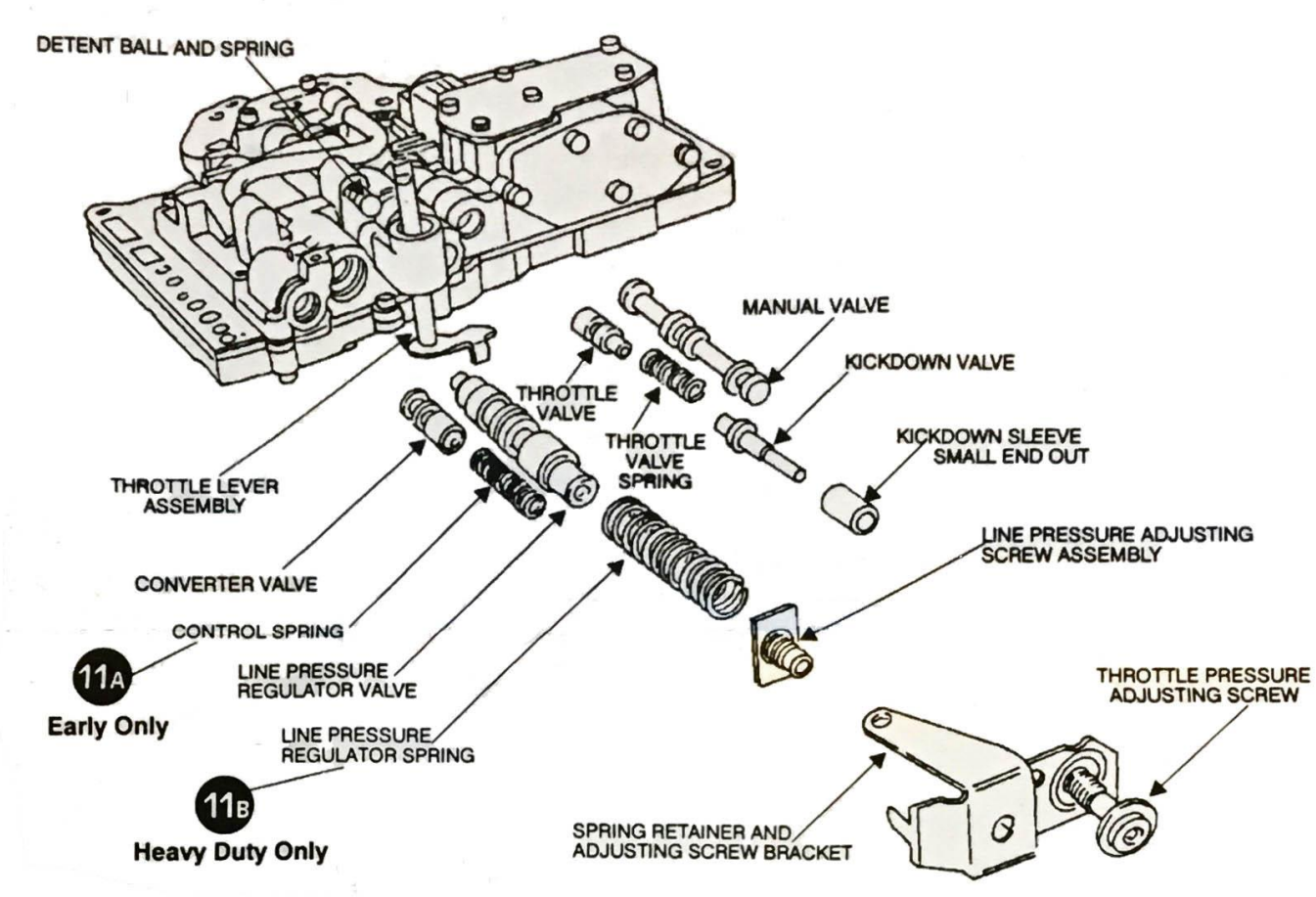


STEP 11
Reassemble spring retainer adjusting bracket as follows:

A. Early. Replace OE converter control valve spring with the pink spring supplied.
Late. Reuse OE spring.

B. **Regular Duty** - All years. Reuse OE pressure regulator spring.
Heavy Duty - All years. Replace line pressure regulator spring with the blue spring supplied. Install bracket with springs in place with screws only finger tight. NOTE: Insure kickdown sleeve is installed as illustrated.

STEP 12
Reinstall manual lever assembly.

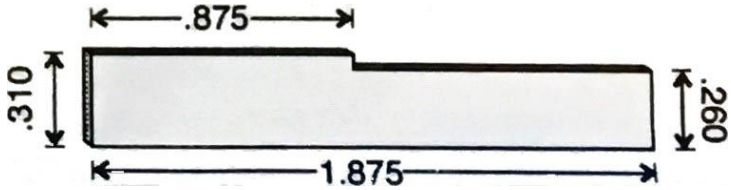


STEP 13

Use gauge strip supplied to make final adjustments.

A. Adjust spring retainer bracket to obtain 1-7/8 (1.875) distance between the edge of manual valve and edge of line pressure regulator adjustment threads. Tighten bracket screws.

B. Adjust throttle pressure adjustment screw to obtain 0.875 distance between spring retainer bracket and back side of pressure adjustment screw. NOTE: Some adjustment screws have a locknut. Make 0.875 adjustment from inside face of locknut to inside face of adjustment screw.



C. Set line pressure as follows:

Regular Duty - Using gauge strip, set distance between inside of spring retainer bracket and threaded spring stop to 0.260, for firmer shifts, 0.310.

Heavy Duty - With the replacement spring installed the adjustment screw must be backed off to bring threaded spring stop back flush with the spring retainer bracket. If even firmer shifts are desired adjust threaded spring stop inward. NOTE: Do not adjust inward any more than 0.260.

STEP 14

To help prevent reverse servo piston from cocking in bore, hone bore with cylinder hone, scotch brite or use 400-600 grit sand paper. If bore has nicks or grooves in lower area of bore, place an AXOD direct drum bushing in bore to move piston out of the nicked or grooved area. (AXOD direct clutch drum bushing from Ford #E6SP-7G123-AA not furnished.) This bushing will fit right in on 727s. 904s cut bushing and squeeze fit into bore. Thoroughly clean bore, install new lip seal on reverse servo piston, coat bore and piston with transmission oil, adjust band and air check several times to make sure piston is not cocking. For best results, always use a new reverse band.

STEP 15

Hone, sand, or scotch brite accumulator bore and install the two steel accumulator rings supplied.