

Actuator Feed Limit Valve Tool Kit

77754-TL

- 1 Core Drill for 4L80-E only
- 1 Reamer
- 3 Guides 1 for 4L60-E, 2 for 4L80-E
- 1 Drill Bit, .051"

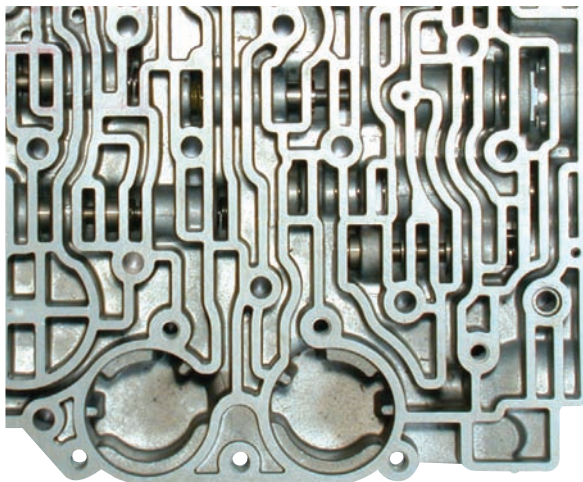
Note: This tool kit works for 4L60-E and 4L80-E AFL valve repairs.



For 4L80-E repairs, complete sections 1 & 2.
For 4L60-E, complete section 2 only.

Section 1 - (4L80-E Only) Drilling Instructions (must be done prior to reaming)

1. Clamp the valve body to a bench with the open circuits up.
2. Insert the drill jig and fill the bore with cutting fluid.
3. Drill the bore at approximately 1000 rpm until the drill bottoms out. Take care not to force the drill or let it "grab" as you drill the bore.



Section 2 - (For 4L60-E or 4L80-E) Reaming Instructions

1. Remove valves from the bore to be reamed. Pre-bore 4L80-E (see section 1).
2. Clean valve body using mineral spirits & degreaser.
3. Clamp the valve body to bench with open circuits up.
4. Fill bore with cutting fluid (kerosene, Tap Magic®, etc.).
5. Insert the correct reamer jig for the application into the bore. The reamer jigs are clearly marked as to which fits the 4L60-E or 4L80-E valve body.
6. Soak fluted end of reamer with cutting fluid.
7. Insert reamer into reamer jig until reamer tip contacts the first bore to be cut. Securely position the jig against the bore to remove any reamer wobble. The jig will help stabilize and center the reamer.
8. With the reamer carefully and securely positioned, use a speed handle to ream the bore. The reaming action should be clockwise in a smooth and continuous motion, at approximately 1 to 1½ revolutions per second.
9. The reamer should pull itself through the bore, so little or no forward pressure should be applied to the reamer or speed handle.
10. Continue reaming until the tip of the reamer bottoms in the bore. Spin the reamer 5-10 more times after bore bottoming to allow for excess material removal and better surface finish.
11. Using low air pressure, blow the chips free before removing the reamer.
12. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
13. Remove any remaining debris from the bore with low air pressure and mineral spirits/degreaser.

Cautions:

- Never turn the reamer backward.
- Pushing on the reamer will result in poor surface finish, inadequate and sporadic material removal, and material being left unremoved as the reamer exits a bore.
- Blow free any chips from the reamer after each use.
- Never use a crescent wrench, t-handle or ratchet to turn the reamer.

Note: The .051" drill bit will be used for separator plate modifications as outlined in the AFL valve kit instructions.

