

TCC Regulated Apply Valve Kit



Part No.

84754-34K

- Valve
- Sleeve
- Recalibrated Spring
- O-Ring

Tool Kit

Part No.

84754-TL3

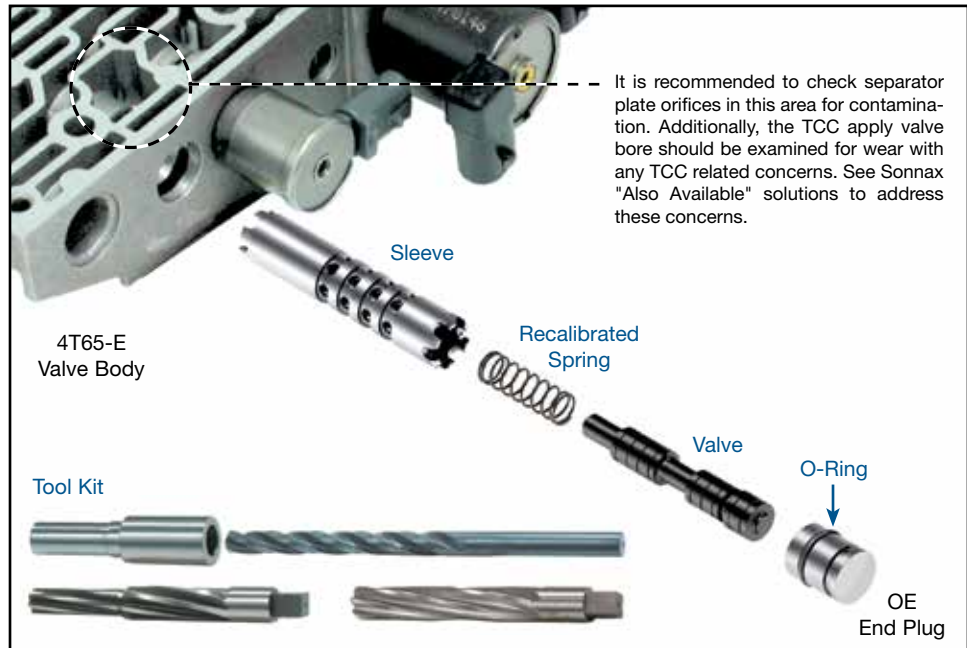
- Reamers (2)
- Drill
- Drill Jig

Also Available

TCC Apply Valve Kit

84754-43K

GM 4T65-E



1. Disassembly

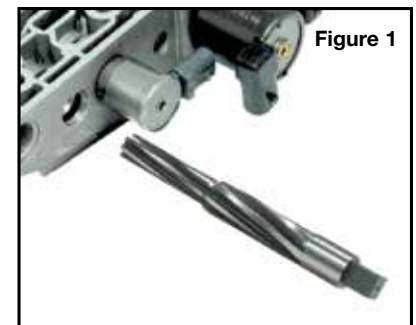
Remove OE retainer, end plug, valve and spring. Save OE end plug and retainer for reuse, but discard other parts.

2. Bore & Reaming Preparation

- Clean the bore thoroughly in a solvent tank.
- Securely clamp the housing to a bench or vise, making sure not to clamp directly over the bore to be reamed.

CAUTIONS AND SUGGESTIONS:

- The reaming action must be clockwise in a smooth and continuous motion.
- Turning the reamer backward will dull it prematurely.
- Pushing on the reamer results in poor surface finish and inadequate and sporadic material removal.
- Never use a crescent wrench, ratchet or pliers to turn the reamer.
- A dull reamer will cut a smaller hole. Reamers can be sharpened, but should only be done by a professional tool sharpener. Actual life of a Sonnax reamer before resharpening or replacing averages 50-70 bores.



3. First Reaming Operation

- Generously lubricate the bore and self-piloting reamer marked "4T65E TCC Reg Reamer #1" (**Figure 1**) with cutting fluid (i.e. Mobilmet S-122, Lubegard® Bio-Tap, Tap Magic™, etc.). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilmet S-122) during the reaming process.

3. First Reaming Operation (continued)

- b. Carefully ream the bore using a speed handle.
- c. Ream the bore until the smaller pilot diameter contacts the bottom of the bore.
- d. Remove the reamer and thoroughly clean the valve bore.
- e. Examine the bore after cleaning for surface finish, debris and burrs. Flashing and burrs on the exit side of land and in bores must be carefully removed. A small piece of Scotch-Brite™ material attached to a wire and powered with a drill motor is ideal for the task. Scotch-Brite™ is a very abrasive material and all residual debris must be cleaned to ensure particles do not migrate or remain imbedded into the surface. Post cleaning involves several progressive steps with solvent on a lint-free rag.
- f. Clean the reamer after each use and store in its protective tube.



Figure 2

4. Drilling Operation

- a. Install the drill jig into the bore that was reamed in the first reaming operation (Figure 2).
- b. Lubricate the valve body bore, drill jig and drill.
- c. Using an electric drill, drill to the bottom of the bore.
- d. Remove drill and guide and thoroughly clean the valve body.



Figure 3

5. Second Reaming Operation

- a. Lubricate the valve bore and reamer labeled "4T65E TCC Regulator Reamer #2" (Figure 3).
- b. Install the reamer into the bore made by the previous reamer.
- c. Using a speed handle, ream the remainder of the TCC regulator bore.
- d. Remove reamer and thoroughly clean valve body.

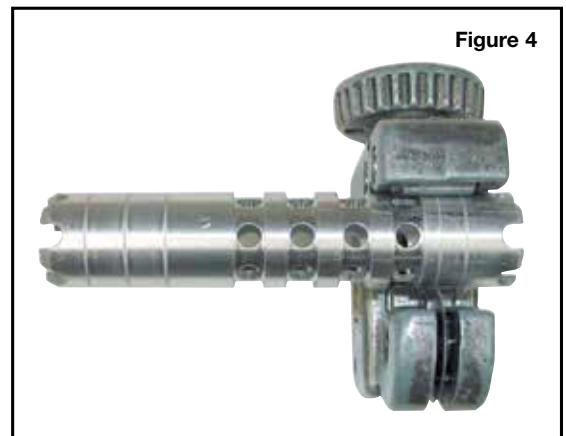


Figure 4

6. Installation & Assembly

- a. Install the Sonnax sleeve as pictured in main photo. The sleeve must fit snugly in the bore. If the sleeve is loose in the bore, then very lightly use a tube cutter to raise five ridges as pictured (Figure 4).

IMPORTANT: Use extra caution when using the tubing cutter. It only requires the slightest ridge to get a good, snug fit. Too much of a ridge can distort the sleeve, clamp down on the valve when inserted in the bore or cause the sleeve to become stuck before it is completely installed.

- b. Install the Sonnax spring and valve as pictured in main photo, ensuring the valve moves freely in the sleeve.
- c. Install the Sonnax O-ring onto the OE end plug in the groove closest to the chamfered end.
- d. Install the end plug, chamfer and O-ring end in first as shown in main photo.

7. Final Testing

Vacuum testing at the port(s) indicated holds the recommended minimum 16 in-Hg (Figure 5).

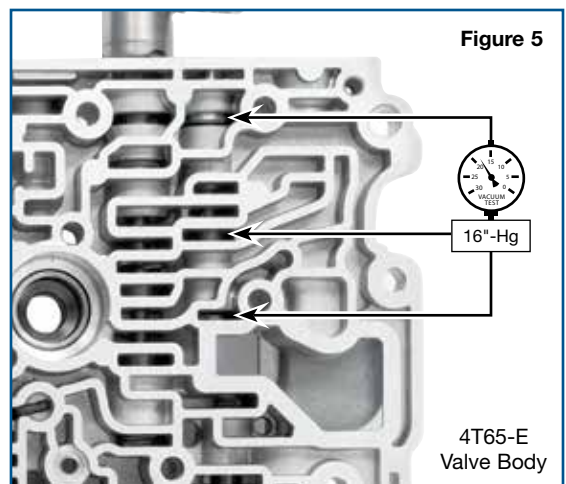


Figure 5

4T65-E
Valve Body