4L60-E, 4L65-E, 4L70-E

PART NUMBERS 77754-42K, F-77754-TL42

3-4 Shift Valve Kit

77754-42K

- 3-4 shift valve
- Matched spring

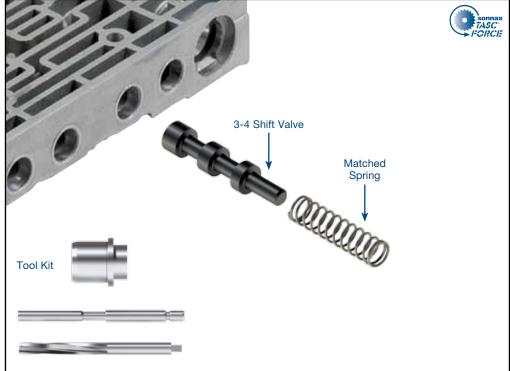


Tool Kit

F-77754-TL42

- Reamer
- Guide Pin
- Reamer Jig





1. Disassembly

- a. Remove the end plug retaining clip and extract the end plug, keep both for reuse.
- b. Remove and discard the OE 3-4 shift valve and spring.

2. Bore Preparation

- a. Clean the bore thoroughly in a solvent tank.
- b. Generously lubricate the bore and reamer 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.
- c. The reamers should be turned using a low RPM, high-torque air drill regulated to a maximum of 200 RPM.
- d. 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.

CAUTIONS AND SUGGESTIONS:

- Turning the reamer backward will dull it prematurely.
- Pushing on the reamer will result 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.



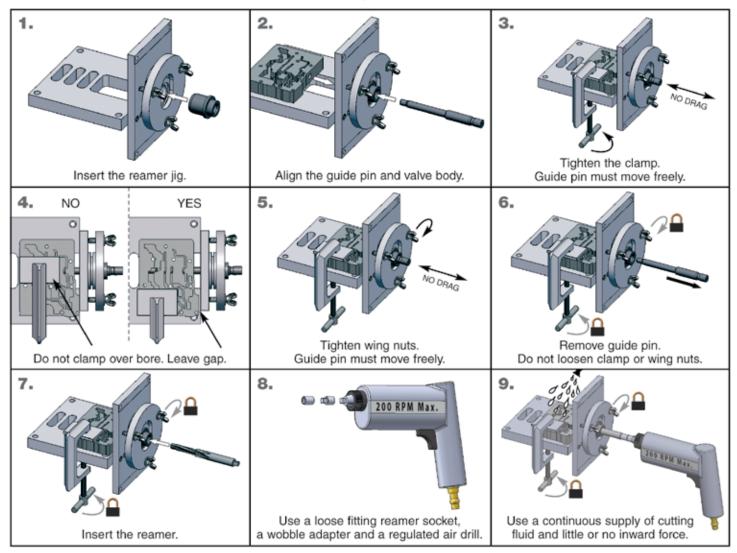
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INSTRUCTION DATA SHEET

3. Bore Reaming

Use the associated "F-Tool" kit F-77754-TL42 and VB-FIX reaming fixture as illustrated below to ream the bore.



4. Installation & Assembly

- a. Be certain all debris has been removed from the valve bore and valve body.
- b. Install Sonnax oversized 3-4 shift valve with stem outboard.
- c. Install Sonnax matched spring.
- d. Reinstall OE end plug and end plug retaining clip.

5. Final Testing

A wet air test or vacuum test at either port indicated should hold the recommended in-Hg of vacuum or more.

