PART NUMBERS 15741-41, F-15741-TL41

# Oversized Manual Valve

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15741-41

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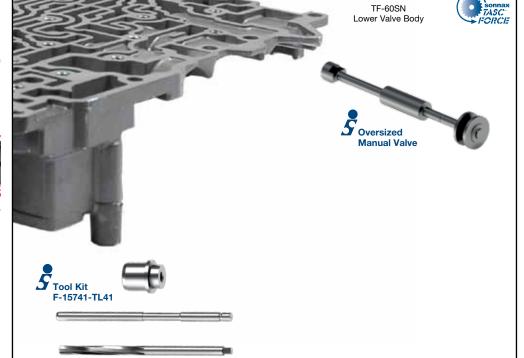


# **Tool Kit**

# F-15741-TL41

- Reamer
- Reamer Jig
- Guide Pin

NOTE: Sonnax "F-Tool" kits designed to service a specific bore require the VB-FIX, a self-aligning valve body reaming fixture. More information and instructions are available at www.sonnax.com.



# 1. Disassembly

Remove the OEM manual valve from the bore.

# 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 watersoluble cutting fluid (i.e. Mobilment 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 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<sup>™</sup> is a very abrasive material and all residual must be cleaned to insure 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.



15741-41 Rev:- F-15741-TL41 Rev:-, 15741-41-IN 08-27-10

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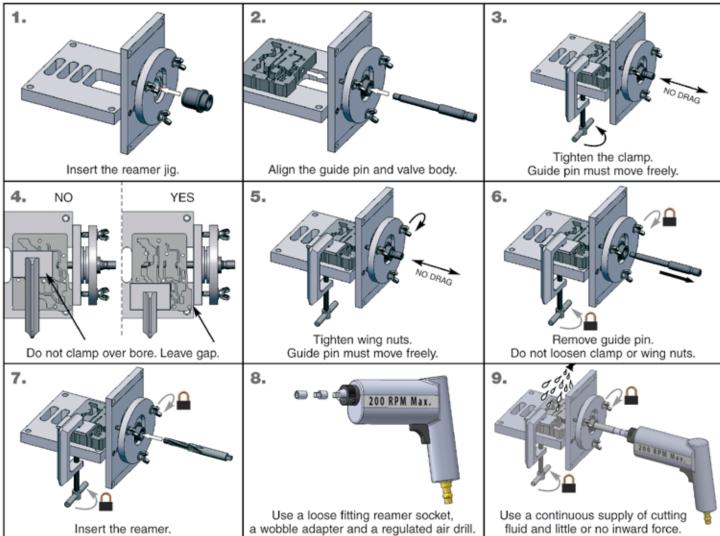
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# 3. Bore Reaming

Clamp the valve body to the VB-FIX baseplate using a small block located on the solenoid flange of the valve body.



Block on Solenoid Flange



# 4. Installation

Install Sonnax valve into reamed and cleaned bore.

### 5. Final Testing

A vacuum test at designated ports should hold 18" or 14" of vacuum or more.

# 6. Linkage Connection

Install the valve body into the transmission case and assemble the selector linkage connection per accepted procedures.

NOTE: After the linkage is connected to the manual valve, the distance from the end of the valve body casting to the edge of the inner spool when the selector is in the Park position should be .209" (5.31mm) +/- .015" (.38mm). This distance is referred to as the manual valve index measurement.

