Instructions

# **Oversized Converter Feed Limit Valve**



### Part No. 104520-1

### **Tool Kit**



# Part No.

### F-104520-

- 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 can be found online at www.sonnax.com.

#### Required

## **Oversized Pump Base Plate**



NOTE: Use of the VB-06 is required with the VB-FIX reaming fixture for this installation unless the stator support shaft is removed from the pump body.



# GM 6L45, 6L50, 6L80, 6L90



#### 1. Disassembly

- a. Remove OE retaining clip and spring, saving both for reuse.
- b. Remove and discard OE converter limit valve.

#### 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<sup>™</sup> 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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#### TRANSMISSION PARTS

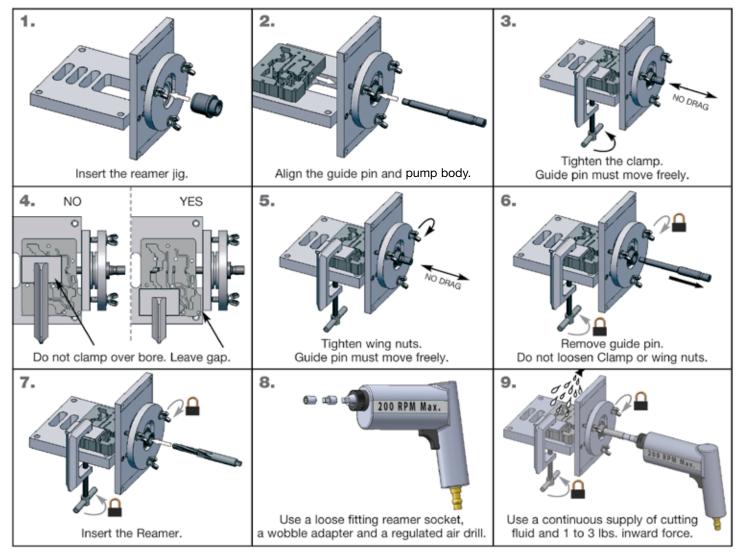
OVERSIZED CONVERTER FEED LIMIT VALVE 104520-11, F-104520-TL11C

Instructions

#### 3. Bore Reaming

Use the associated "F-Tool" F-104520-TL11C kit and VB-FIX reaming fixture as illustrated below to ream the bore.

NOTE: Requires the use of the pump plate VB-06 on the VB-FIX, unless the stator support shaft is removed from the pump body.

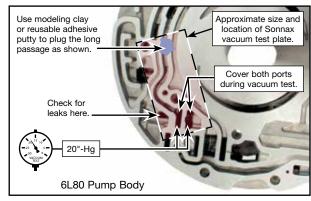


#### 4. Installation & Assembly

- a. Install the Sonnax valve with the spring guide facing out as shown in main photo.
- b. Reinstall the OE spring, ensuring the spring goes over the valve spring guide.
- c. Reinstall the OE retaining clip.

#### 5. Final Testing

A vacuum test at the port indicated holds 20 in-Hg or more.



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