PART NUMBERS 34994-22K, F-34994-TL22

# Oversized Accumulator Control Valve Kit

#### 34994-22K

- Oversized Valve
- Matched Spring
- Oversized End Plug

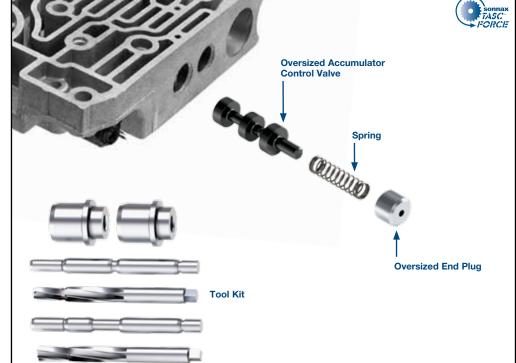


## **Tool Kit**

#### F-34994-TL22

- Reamer Jigs (2)
- Guide Pins (2)
- Reamers (2)

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

- a. Remove the OE retaining pin, end plug, spring and valve from the valve body.
- b. Set aside the retaining pin for reuse.
- c. Discard the remaining OE components.

#### 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. 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™ 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.

#### 3. Tool Selection & Bore Reaming

a. Use reamer jig **F-34994-RJ22** and align the appropriate guide pin for the valve body model year. For '91-'96, use guide pin **F-34994-GP22.** For '97-later, use guide pin **F-34994-GP23** 

**CAUTION:** Do not loosen valve body clamp or VB-FIX wing nuts until both reaming steps below have been completed.

- b. All model years require a two-step reaming process using both the reamers and reamer jigs in the order shown below:
  - 1. For ALL years, first use reamer jig F-34994-RJ22 and ream with reamer F-34994-RM22.
  - 2. When the first ream is complete, switch to reamer jig F-34994-RJ23 and ream with reamer F-34994-RM23.

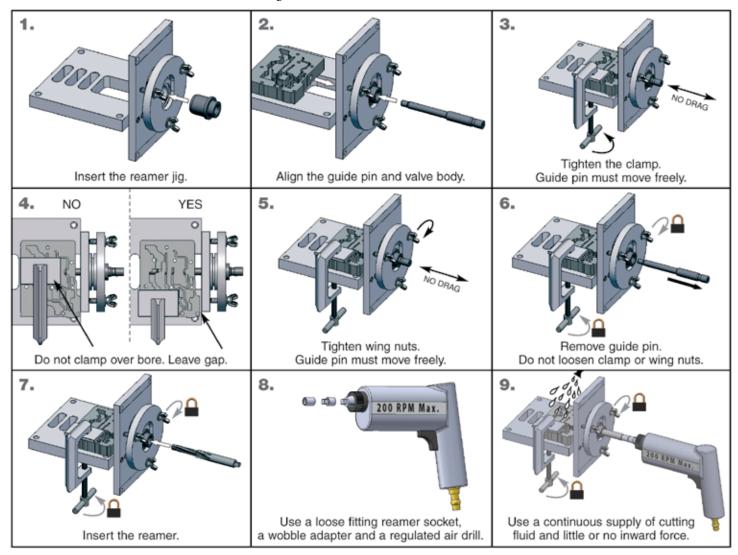


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**INSTRUCTION DATA SHEET** 

#### 3. Bore Reaming...continued

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



### 4. Installation & Assembly

- a. Be certain that both reaming steps have been completed, and that all debris has been removed from the valve bores and valve body.
- b. Install the new Sonnax oversized accumulator control valve, spring and end plug.
- c. Install the OE retaining pin.

#### 5. Final Testing

A vacuum test should yield the indicated 14 or 18 in-hg or greater, depending on the port tested as shown.

