

PCA/PCB Modulator Valve Kit

56947J-49K

- Valve
- Plug
- Spring

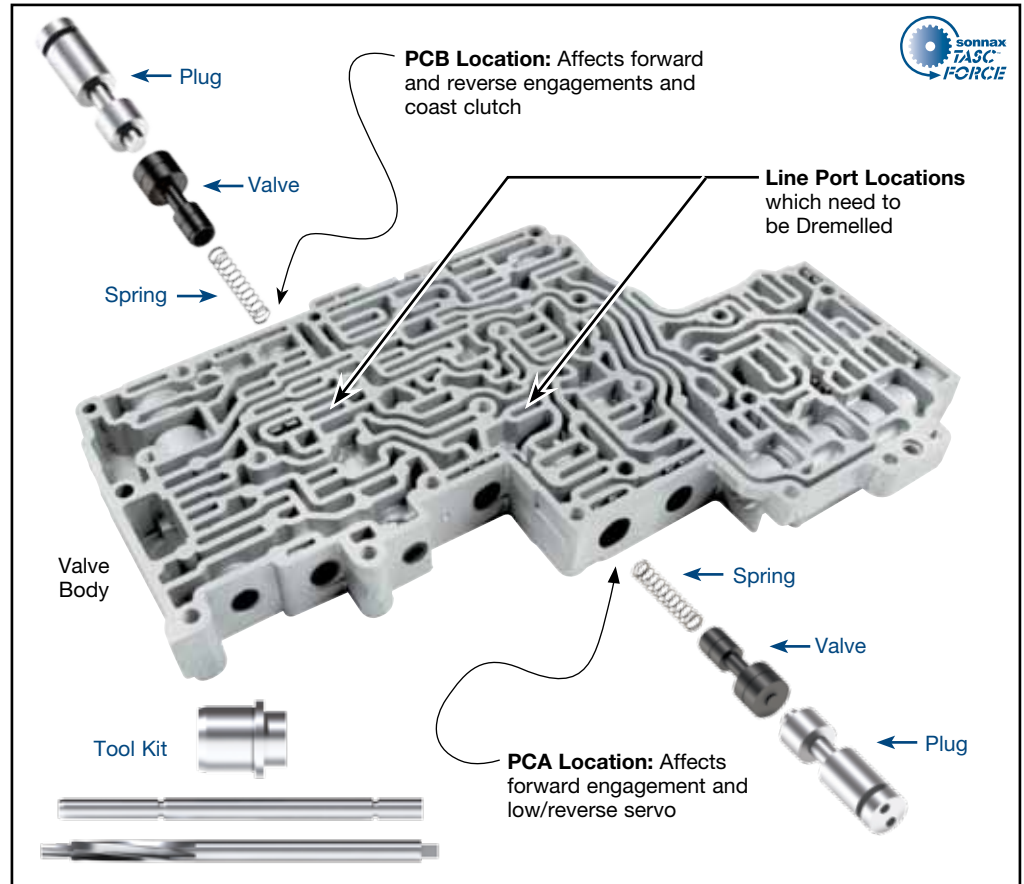


F-56947J-TL49

- Reamer
- Reamer Jig
- Guide Pin
- Dremel® Bit (not shown)



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.



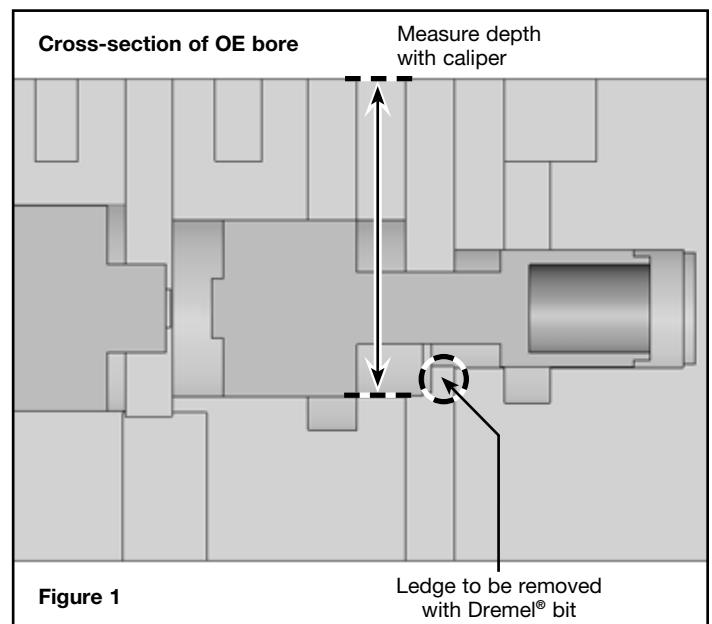
1. Disassembly

- Remove and discard the OE valve and spring. Keep the OE retainer for reuse.
- If the OE plug measures .472" dia., or is the same size as the large spool on the OE valve, discard the OE plug. The Sonnax replacement plug will be used instead.
- If the OE plug measures .551" dia., keep the OE plug for reuse.
- Prior to reaming, a casting ledge must be removed from the line port. This ledge is non-critical, but removal is mandatory to allow the reamer to travel fully (**Figure 1**).

2. Dremel Ledge Removal

- With a caliper, measure the depth of the bore from the flat surface (**Figure 1**).
- Use this measurement to set the Dremel® bit cutting depth from the collet, as shown in (**Figure 3**).

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2. Dremel Ledge Removal *continued*

- c. Remove the ledge indicated in **Figures 1 and 2**, taking care not to cut through the valve body wall.
- d. To ensure ledge has been successfully removed, clean the valve body and invert the OE valve into the bore as shown in (**Figure 4**).

3. Bore Preparation

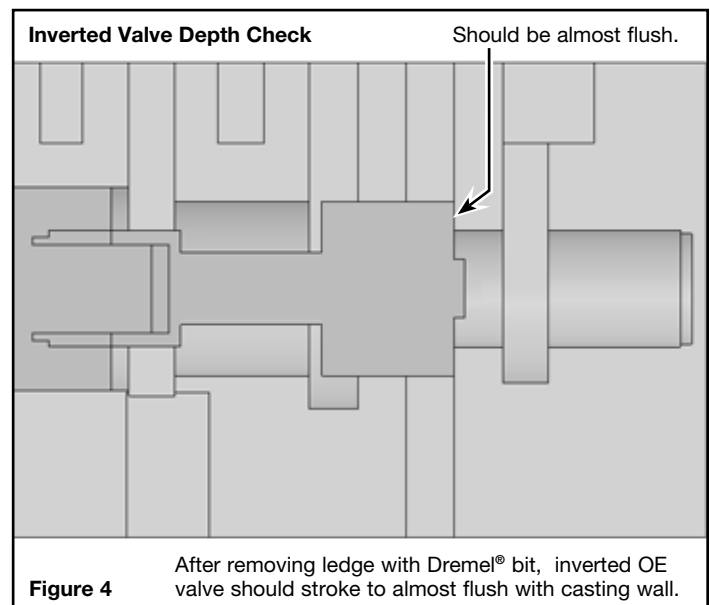
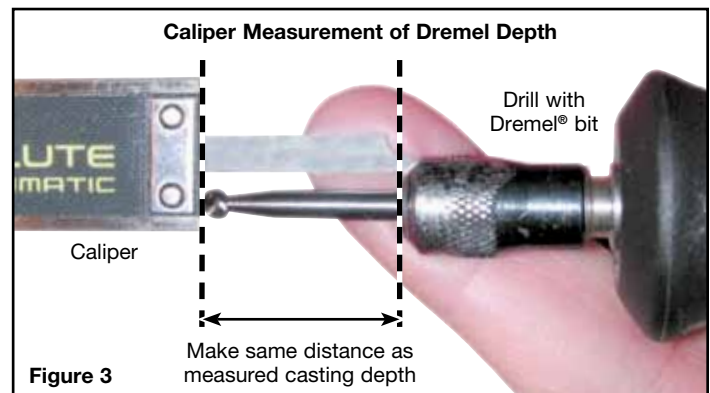
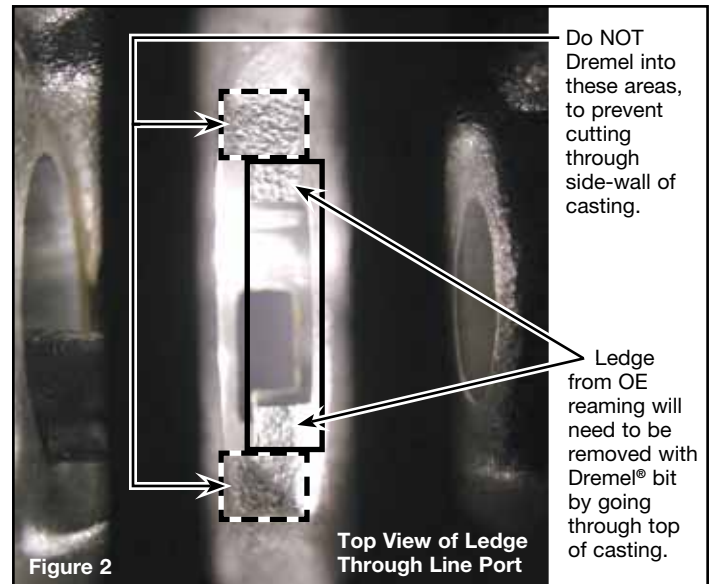
- a. Clean the bore thoroughly in a solvent tank.
- b. Generously lubricate the bore and reamer with cutting fluid (i.e. Mobilmet S-122, Lubegard® Bio-Tap, Tap Magic™, etc.). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilmet S-122) during the reaming process.
- 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.

4. Bore Reaming

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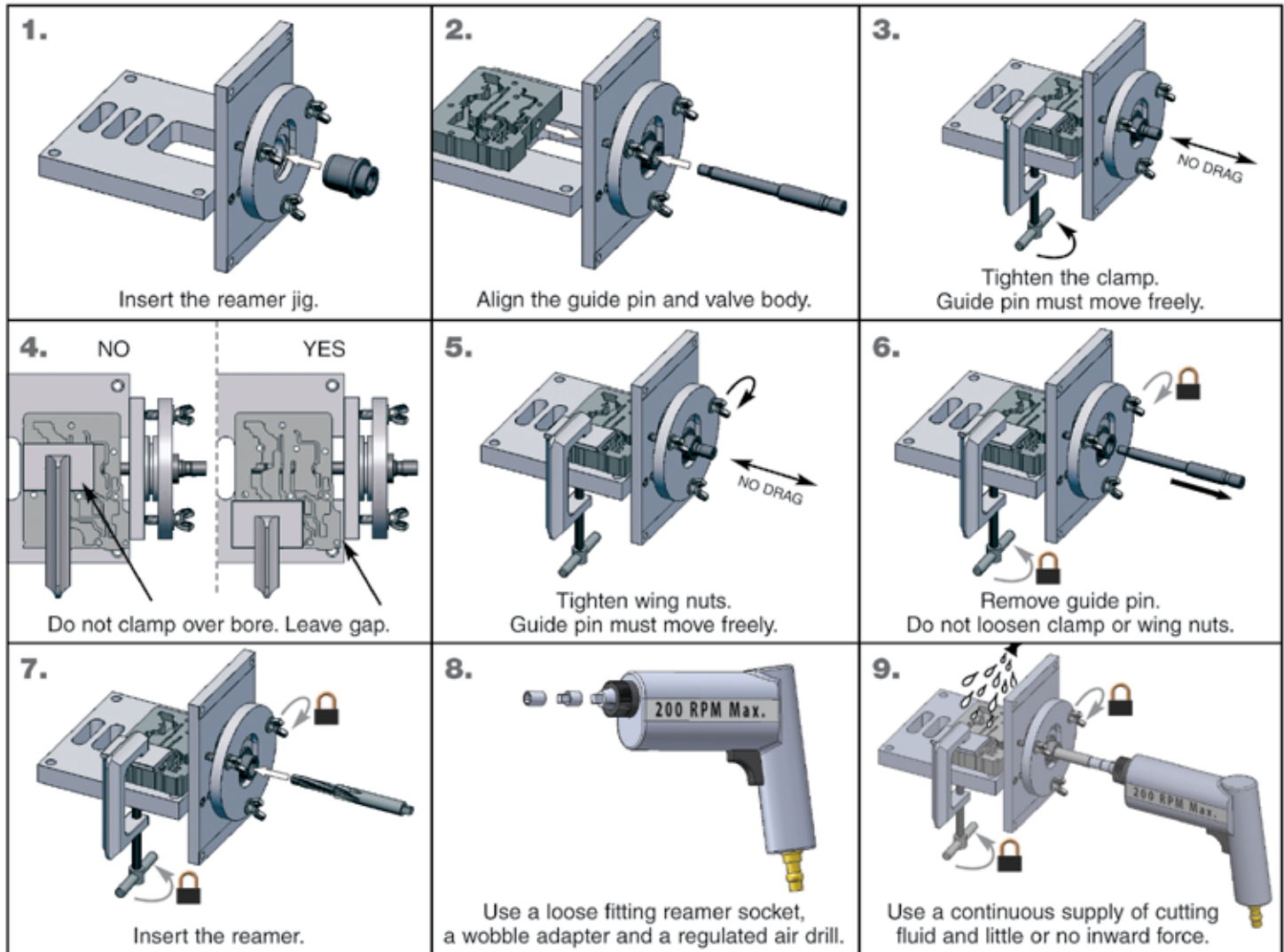
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Valve Kit

PART NUMBERS 56947J-49K, F-56947J-TL49

INSTRUCTION DATA SHEET

4. Bore Reaming

Use the associated "F-Tool" kit F-56947J-TL49 and VB-FIX reaming fixture as illustrated below to ream the bore.



5. Installation & Assembly

- Place replacement spring into valve spring pocket and insert into bore spring end first.
- Install appropriate plug and secure with OE retainer.

6. Final Testing

Perform a vacuum test and wet air test at both ports.

