

3-4 Overlap Valve Kit

68942-31K

- Plunger Valve & Sleeve Assembly
- Overlap Valve
- Spring
- O-Ring

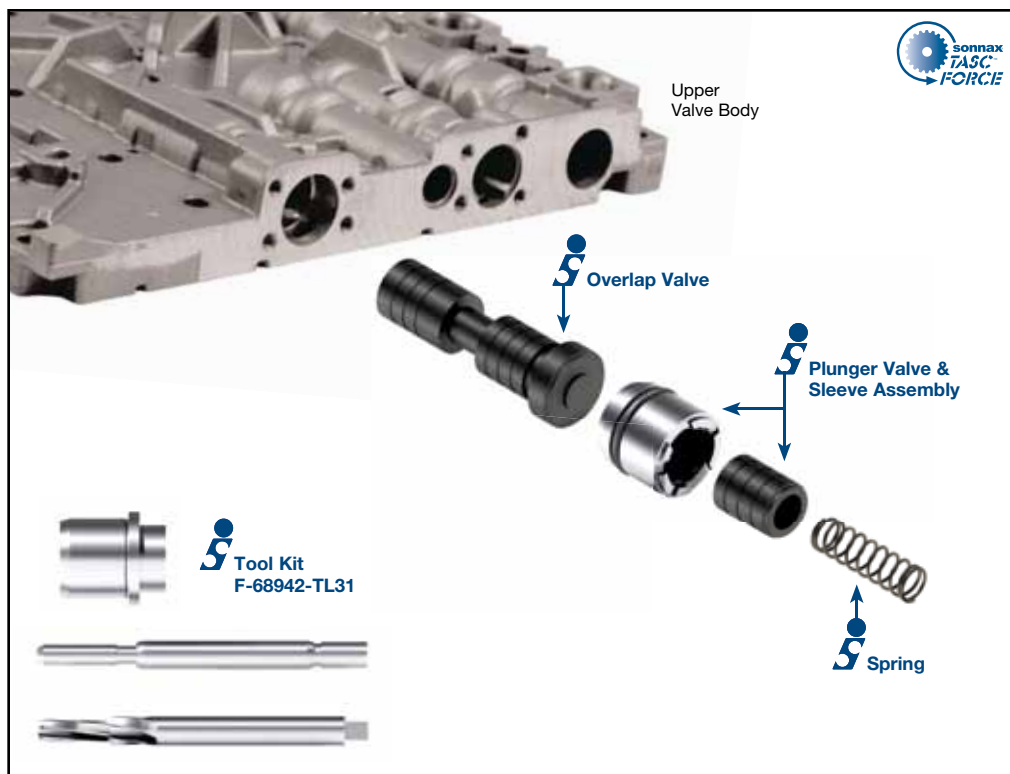


F-68942-TL31

- Reamer
- Reamer Jig
- Guide Pin



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



1. Disassemble valve.

Remove and discard the OEM overlap valve, plunger valve, plunger sleeve and spring.

2. Prepare the bore.

- Clean the bore thoroughly in a solvent tank.
- 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.
- The reamers should be turned using a low RPM, high-torque air drill regulated to a maximum of 200RPM.
- 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:

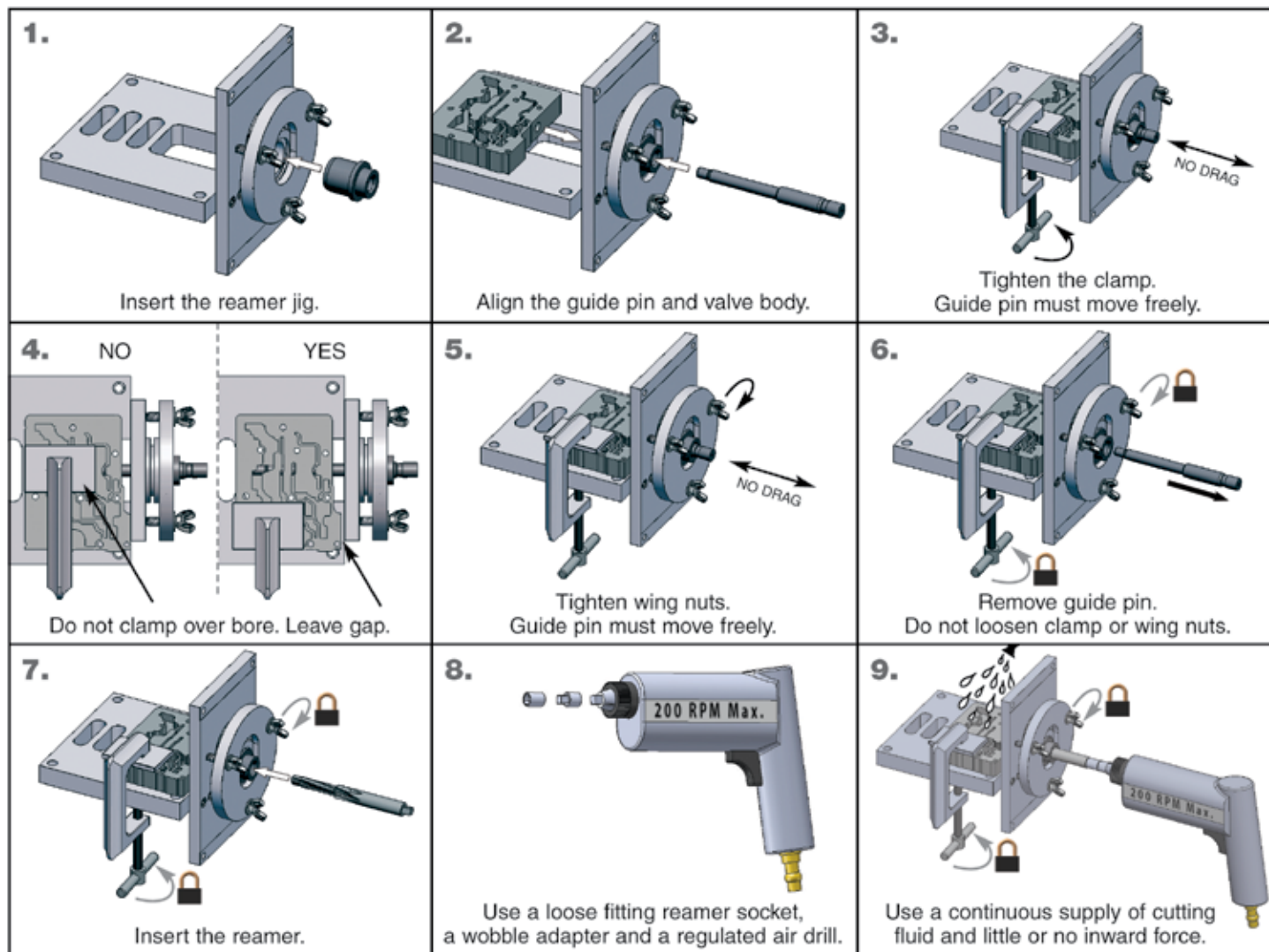
- Turning the reamer backward will dull it prematurely.
- Pushing on the reamer will result in poor surface finish and inadequate and sporadic material removal.
- Never use a crescent wrench, ratchet or pliers to turn the reamer.
- A dull reamer will cut a smaller hole. Reamers can be sharpened, but should only be done by a professional tool sharpener. Actual life of a Sonnax reamer before sharpening or replacing averages 50-70 bores.

MERCEDES 722.6

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PART NUMBERS 68942-31K, F-68942-TL31

3. Ream the bore using the Sonnax VB-FIX.



4. Install and assemble part(s).

- Insert the oversized overlap valve into reamed and cleaned bore.
- Install the O-ring into the sleeve groove and roll on the bench to resize the O.D. Lubricate the O-ring and sleeve.
- Install the spring into the plunger valve pocket. Slide the plunger valve into the sleeve, with the spring facing the grooved end face.
- Slowly install the sleeve assembly into the valve body bore, taking care not to shear the O-ring. Ensure the end face grooves are outward.

5. Perform final verification test.

A vacuum test at either port should hold 18" of vacuum or more.

