

Oversized Pressure Modulator Valve Kit

Part No.
85755-03K



- Oversized Pressure Modulator Valve
- Oversized Piston Valve
- Oversized End Plug

NOTE: Also fits VW/Audi 01V applications.

IMPORTANT: OE valve spool diameters must match dimensions noted in illustration. This kit cannot be used to repair valve bodies with valves of other sizes.

Tool Kit

Part No.
F-85755-TL3



- 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.

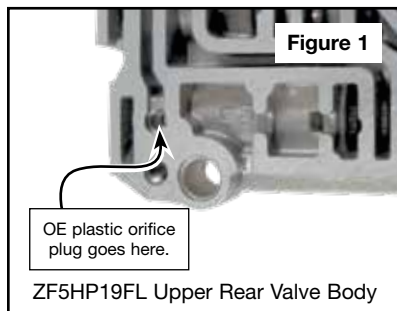
Adapter Plate Kit

Part No.
F-85755-TL3PL

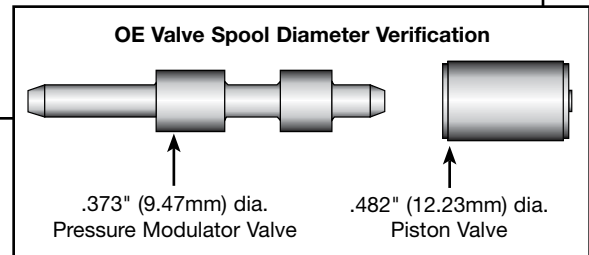
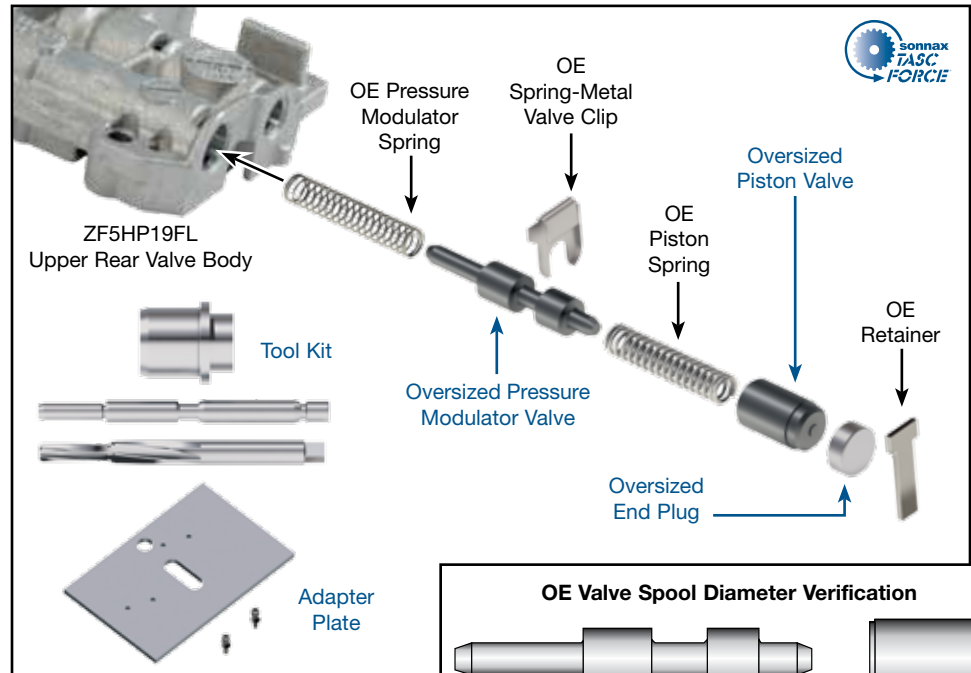


- Adapter Plate • Screws (2) • Washers (2)

NOTE: Use of this adapter plate is strongly recommended to secure upper rear valve body to **VB-FIX** for installation of **85755-03K**.



ZF5HP19, ZF5HP19FL, ZF5HP19FLA



1. Disassembly

- Remove the plastic orifice plug in the worm track cavity near the entry to the pressure modulator bore (**Figure 1**). Set this plug aside for reinstallation after the reaming and cleaning process is done.
- During disassembly, be sure to identify and record the spring positions. Label the springs accordingly. Do not switch the springs at assembly.
- Remove the OE valve train, including the retainer, end plug, piston valve and spring, spring-metal valve clip, pressure modulator valve and spring.
- Keep the OE end plug, retainer, spring-metal valve clip and both springs for reuse. Discard both OE valves.

2. Bore Preparation

- 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.

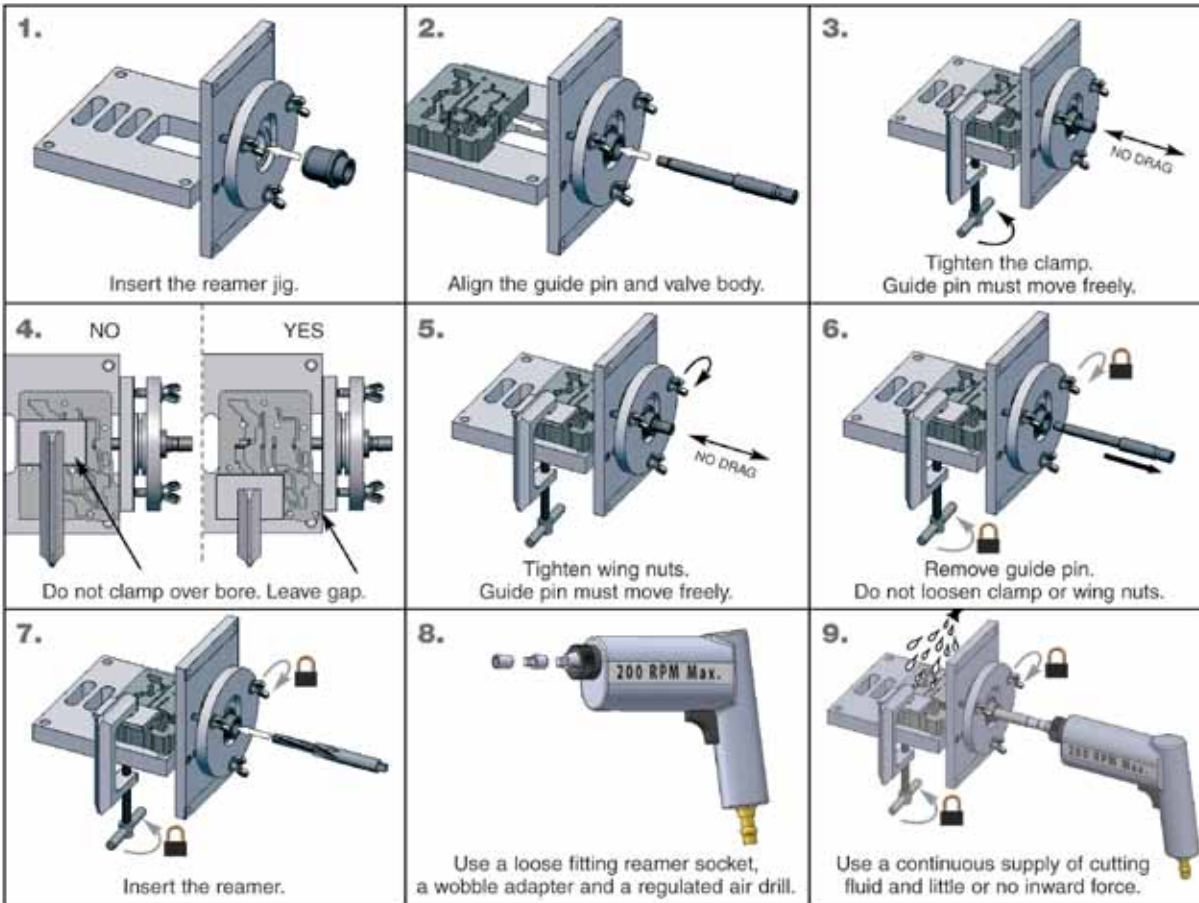
- The reamers should be turned using a low RPM, high-torque air drill regulated to a maximum of 200 RPM.
- Examine the bore after cleaning for surface finish, debris and burrs. Flashing and burrs on the exit side of land and in bores must be carefully removed. A small piece of Scotch-Brite™ material 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.
- 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.
- Never use a crescent wrench, ratchet or pliers to turn the reamer.

3. Bore Reaming

Use the associated “F-Tool” **F-85755-TL3** kit and **VB-FIX** reaming fixture as illustrated below to ream the bore. Sonnax adapter plate kit **F-85755-TL3PL** is highly recommended to secure upper rear valve body to **VB-FIX**. Bolt the valve body to the adapter plate. Make sure the bore to be reamed is visible through the large hole and slot in the plate.



4. Installation & Assembly (Orient parts as shown in main photo.)

- Insert the OE pressure modulator spring into the bore, followed by the Sonnax oversized pressure modulator valve.
- Push the Sonnax oversized pressure modulator valve far enough into the bore to allow installation of the OE spring-metal valve clip through the indicated “worm-track” cavity and over the center stem of the valve. Be certain the spring-metal valve clip is oriented as shown and has been installed into the correct cavity (**Figure 2**).
- Insert the OE piston spring, followed by the Sonnax oversized piston valve.
- Install the Sonnax oversized end plug and secure with the OE retainer.
- Reinstall the OE plastic orifice plug in the correct cavity location (**Figure 2**).

5. Final Testing

Vacuum tests at the ports indicated hold the recommended minimum of in-Hg.

