

Pressure Regulator Valve Kit



Part No.
55211-08K

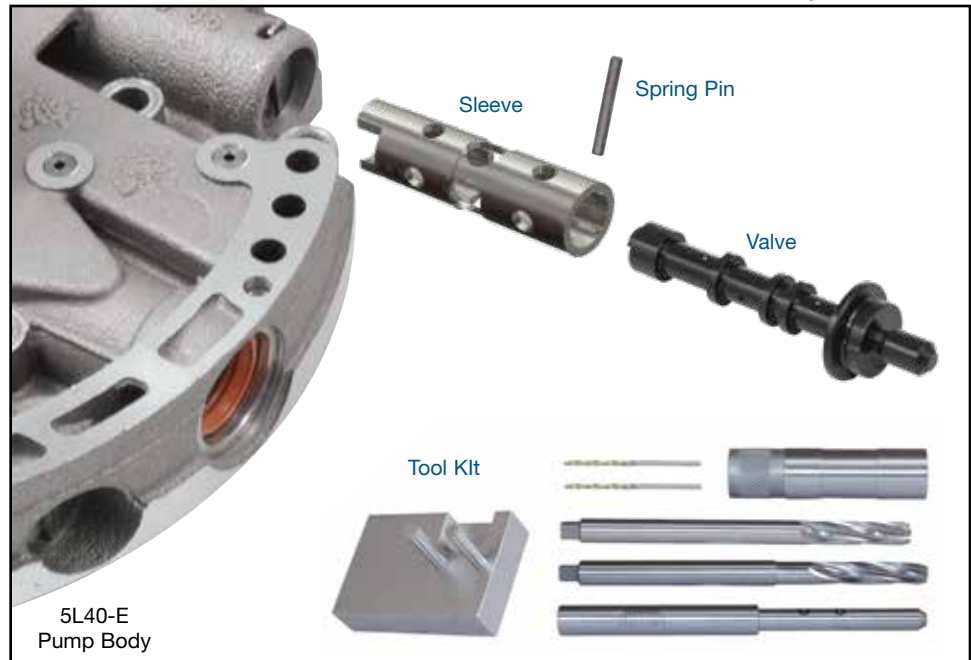
- Valve
- Sleeve
- Spring Pin

Tool Kit

Part No.
55211-TL8

- Drill Bits (2)
- Drill Guide
- Guide Pin
- Reamer Guide
- Reamers (2)

GM 5L40-E, 5L50-E



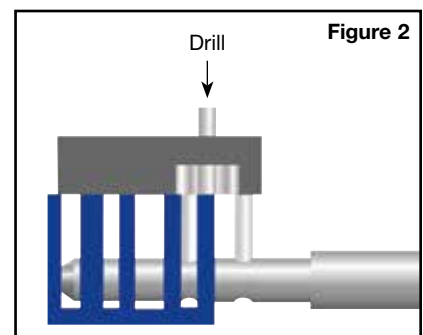
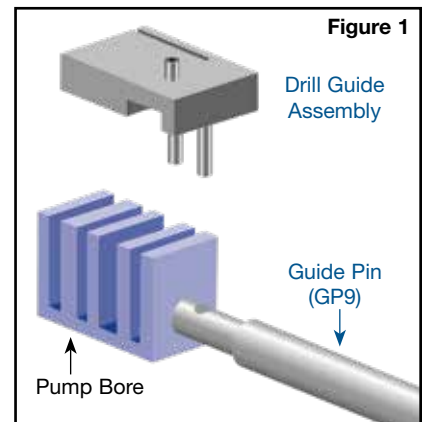
1. Disassembly

- Remove OE pressure regulator bore lineup.
- Keep springs, boost valve and boost sleeve for reuse.
- Discard pressure regulator valve.
- Be certain all debris has been removed from the valve bore and valve body.

2. Drill Spring Retainer Pin Hole

NOTE: The spring pin hole must be drilled before reaming.

- Set up the drill stop with guide plate. Set .078" bit into the groove and secure in drill chuck. The drill bit should line up with the bottom of the pins once the chuck contacts the tool, a depth of 1.498".
- Install guide pin marked **55211-GP9** in the unreamed OE bore (**Figure 1**).
- Set the drill guide plate through the holes of the pin (**Figure 2**). The milled slot (for chips) will be toward the outside of the pump. The drill guide (peg hole) in the plate will be toward the outside of bore centerline or outside the pump. Verify the hold is correct by touching the bit onto the casting (**Figure 3**).



2. Drill Spring Retainer Pin Hole (continued)

NOTE: You must secure the drill guide plate with a C-clamp.

- d. Drill the pin hole into the pump body until the drill chuck stops on the guide. The depth of the pin hole in the pump should be .7500".

3. Bore Reaming

For Sonnax reaming instructions/reamer care, please visit www.sonnax.com. Sonnax reaming tool kit 55211-TL8 is required for this operation.

- a. Install reamer jig 55211-RJ8 in boost valve bore.
- b. First ream the bore with reaming tool 55211-RM8.
- c. Finish reaming the bore with reaming tool 55211-RM9.
- d. After reaming, flush and clean bore thoroughly.

4. Installation & Assembly

- a. Be certain all debris has been removed from the valve bore and valve body.
- b. Verify the spring pin hole is half exposed. Install and index Sonnax sleeve with bridges at 12 o'clock and 6 o'clock. Use a .062" drill bit to verify that the hole and sleeve align (Figure 4).

NOTE: If cure time allows, use Loctite® 620 on the sleeve. Use a paper clip to set drops of Loctite® on the sleeve just prior to last 1/8" install.

- c. After the sleeve is installed, ensure it is positioned properly and will not rotate or move fore and aft. Install the proper valve and telescope: It must float freely. If it does not, the 55211-GP9 guide pin can be used to carefully form the sleeve.
- d. Recess the spring pin. Tap the pin just below flush with pin punch, then run a flat file over the pump.
- e. Install Sonnax valve into Sonnax sleeve.
- f. Reassemble with OE springs, boost valve and boost sleeve.

4. Final Testing

Vacuum testing at the port(s) indicated holds the recommended minimum 18 in-Hg (Figures 5 & 6).

