

## Pressure Regulator Valve & Sleeve Kit

### 55211-08K

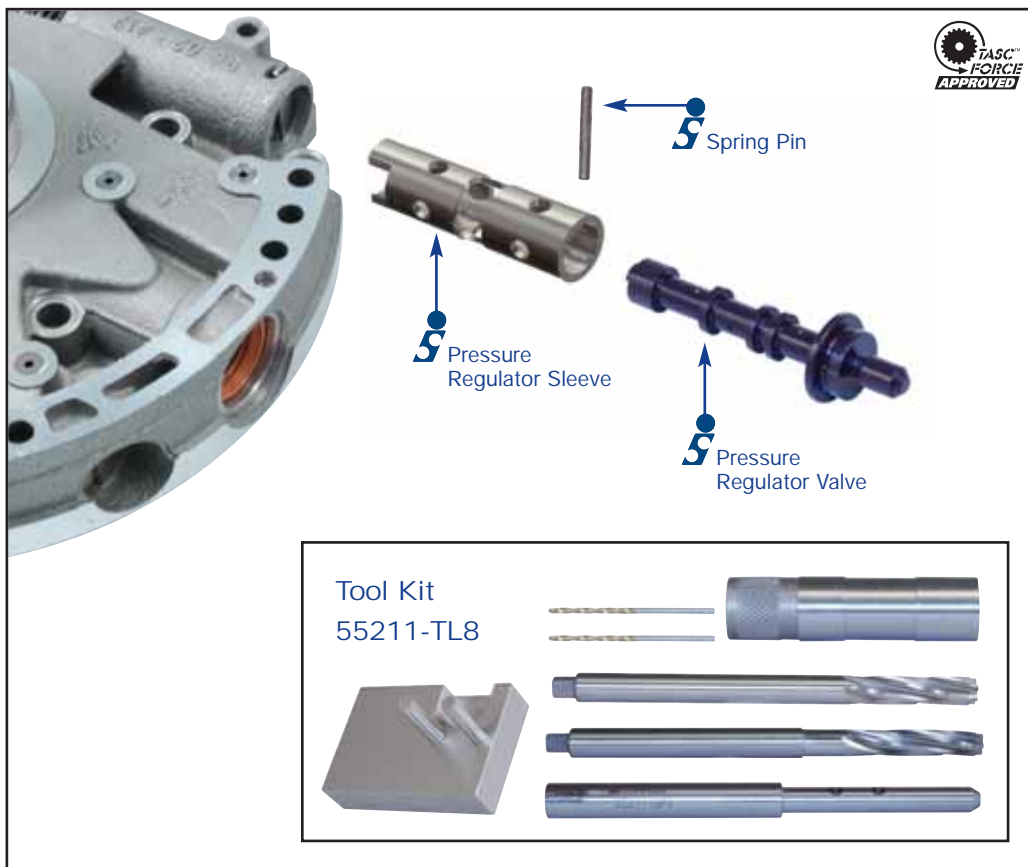
- 1 Pressure Regulator Valve
- 1 Pressure Regulator Sleeve
- 1 Spring Pin



### 55211-TL8

- 2 Drill Bits
- 1 Drill Guide
- 1 Guide Pin
- 1 Reamer Guide
- 2 Reamers

**NOTE:** This tool kit should not be used on the 4L60-E pump. The aluminum used on the 4L60-E pump is much harder than the 5L40-E, and will reduce reamer life.



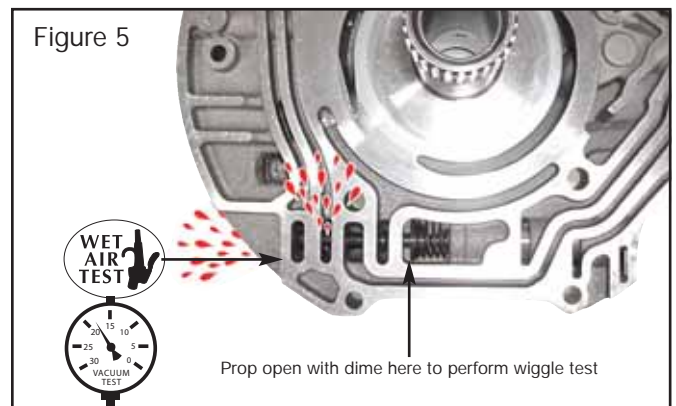
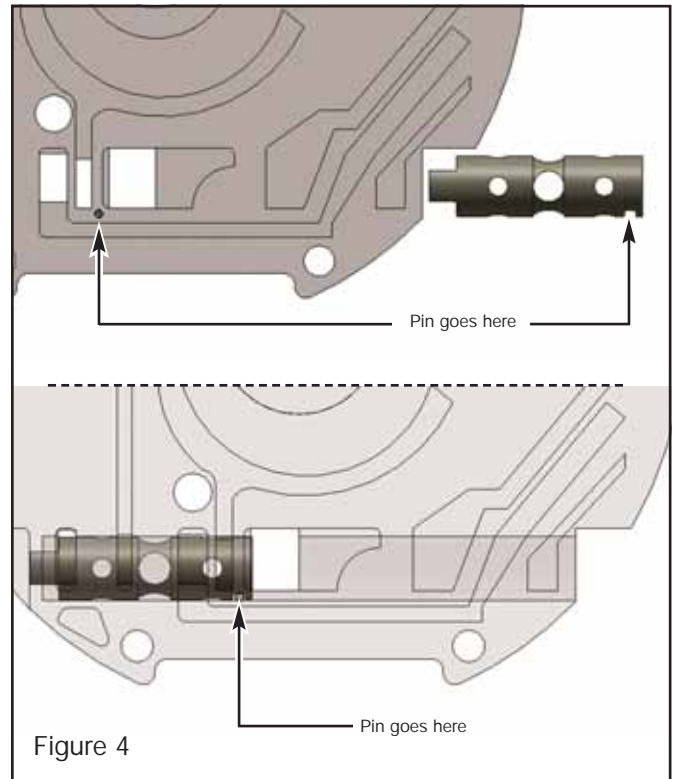
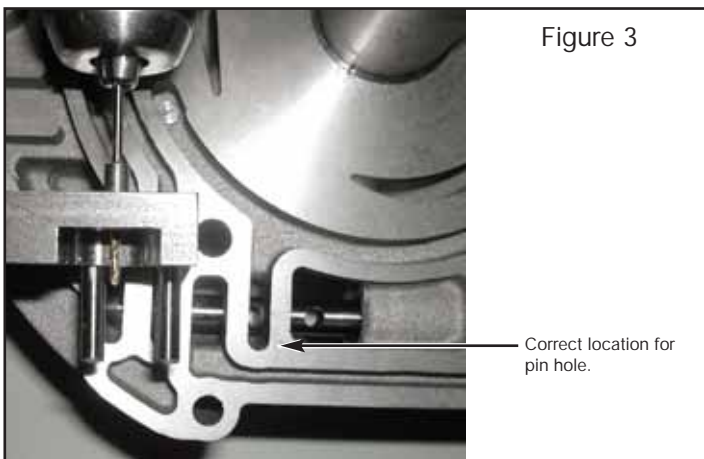
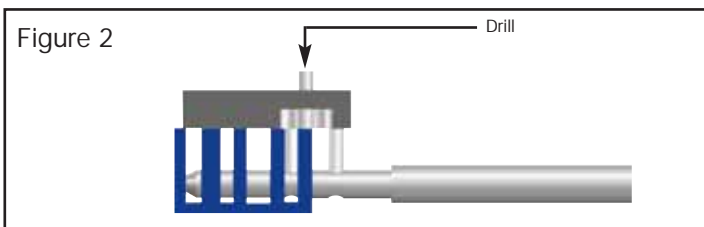
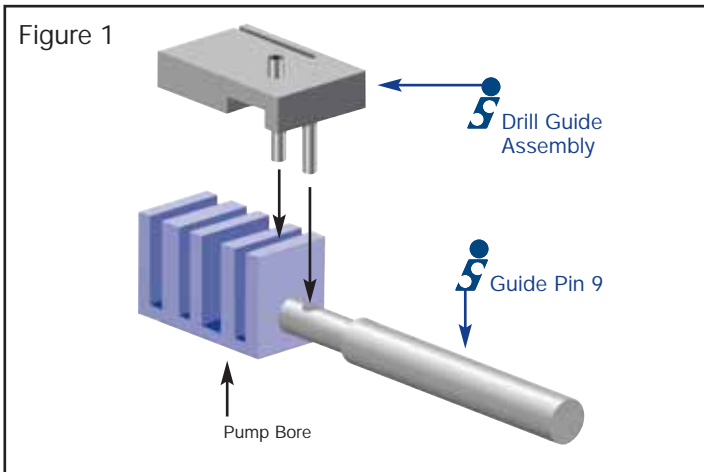
### Installation:

1. Remove the OEM valve and discard.
2. **Note:** The spring pin hole *must* be drilled *before* reaming.  
Follow steps 3 through 5 to drill the hole for the sleeve retaining pin before reaming the worn OEM bore.
3. Set up the drill stop with guide plate. Set a 5/64" or .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".
4. Install the guide pin marked **55211-GP9** in the unreamed OEM bore (see Figure 1).
5. Set the drill guide plate through the holes of the pin (see 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 of the pump. Verify the hole is correct by touching the bit onto the casting (see Figure 3).  
**Note:** You must secure the drill guide plate with a c-clamp.  
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 1.489".
6. Install reamer jig **55211-RJ8** in boost valve bore.
7. First ream the bore with reaming tool **55211-RM8**.
8. Finish reaming the bore with reaming tool **55211-RM9**.
9. After reaming, flush and clean bore thoroughly.
10. Verify the spring pin hole is half exposed. Install and index sleeve with bridges at 12 o'clock and 6 o'clock. Use a .062" - 1/16" drill bit to verify that the hole and sleeve align (see Figure 4).  
**Note:** If cure time allows, use #620 Loctite™ on the sleeve. Use paper clip to set drops of Loctite on the sleeve just prior to last 1/8" install.
11. 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.
12. Recess the spring pin. Tap the pin just below flush with pin punch, then run a flat file over the pump.
13. Install the new Sonnax valve in the sleeve.
14. Reassemble with OEM springs, boost valve and boost sleeve.

# 5L40-E

PART NUMBERS 55211-08K, 55211-TL8

Pressure Regulator  
Valve & Sleeve Kit



## VERIFICATION:

### Wet Air Test:

Test at location shown in Figure 5. There should be no leakage out of the adjacent ports.

### Vacuum Test:

Test at same location shown in Figure 5. A vacuum test with the new valve installed should reach 20" of vacuum. You must temporarily block the Internal Feed hole before testing. Be sure to un-block the Internal Feed hole when done.

### Wiggle Test:

Prop open the valve the thickness of a dime at location shown in Figure 5. Pry on/through the spring area. No movement should be felt.

For more information on valve body testing procedures, go to [www.sonnax.com](http://www.sonnax.com).