sonnax®

**TRANSMISSION** PARTS

*Instructions*

# Ford 4F50N, AX4N, AX4S, AXODE

## Oversized Solenoid Regulator Valve Kit

**Part No.**
**96201-21K**

- Valve
- Spring
- Clip

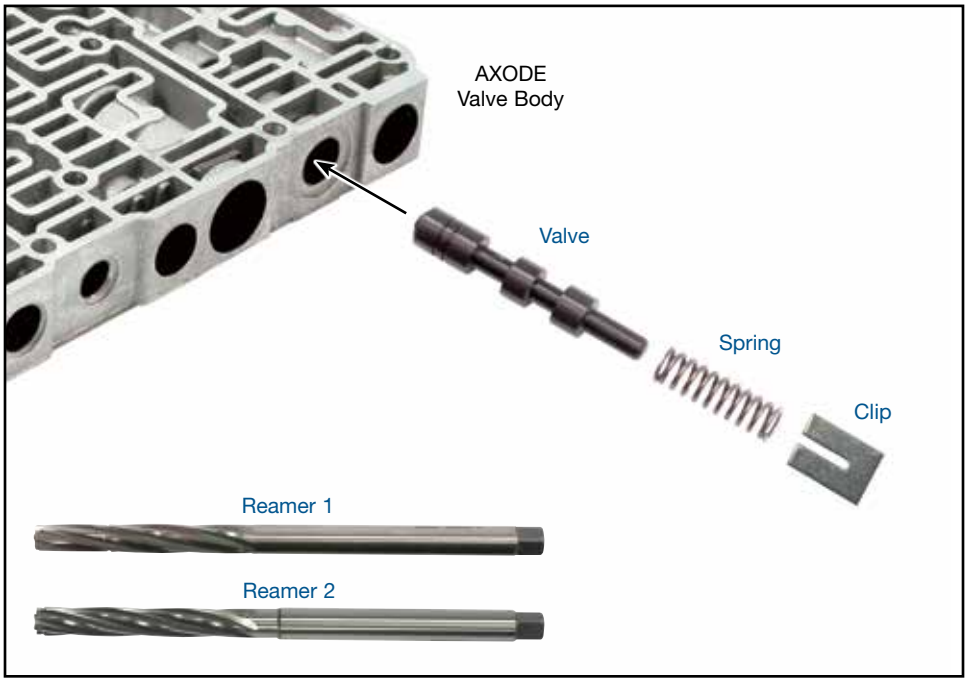
**NOTE:** If replacing complete bore line-up Sonnax regulator valve kit **96201-23K** is also available.

## Tool Kit

**Part No.**
**96201-TL2**

- Reamer 1
- Reamer 2

**WARNING!** Required tool kit **96201-TL2** is no longer in production. Check with your distributor for availability.




### 1. Disassembly

a. Remove all components from the bore.

b. Discard worn solenoid regulator valve lineup.

c. Save OE converter regulator valve lineup for reuse, if parts are not worn. If parts are worn, replace with Sonnax **96201-23K**.

### 2. Bore Reaming

Ream solenoid regulator valve bore, first using reamer #1 and then repeating the process with reamer #2 (for reaming instructions/reamer care, please visit www.sonnax.com). Sonnax reaming tool kit **96201-TL2** is required for this operation.

### 3. Installation & Assembly

#### A. If installing OE or Sonnax 4-Spooled Converter Regulator Valve

1. Lubricate the oversized solenoid regulator valve and reamed bore with ATF.
2. Place Sonnax spring over long stem of Sonnax valve, then push this assembly into the bore, with stem side facing outward.
3. Compress the spring with a flathead screwdriver, and insert Sonnax inner retainer clip into valve body casting.
4. Install Sonnax or reinstall OE converter regulator valve and spring as oriented (**Figures 1 & 2**).



800-843-2600 • 802-463-9722 • F: 802-463-4059 • www.sonnax.com

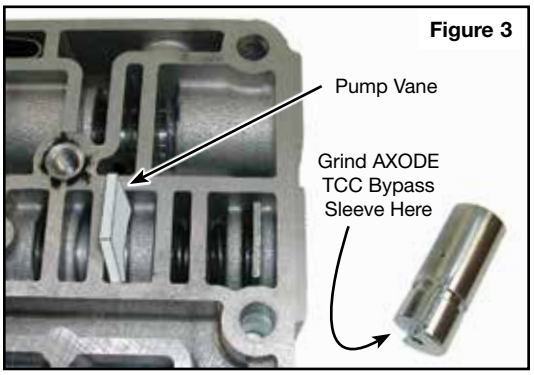
## 3. Installation & Assembly (continued)

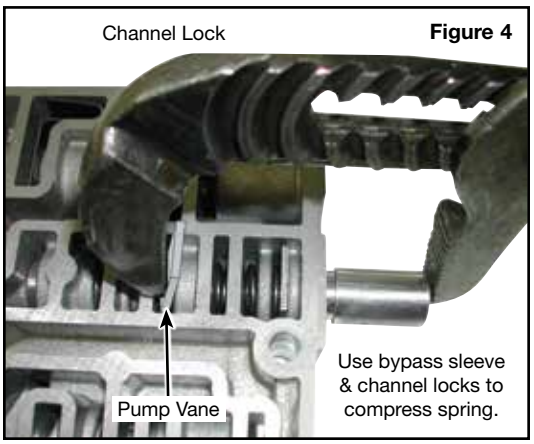
### B. If installing OE 2-Spooled Converter Regulator Valve

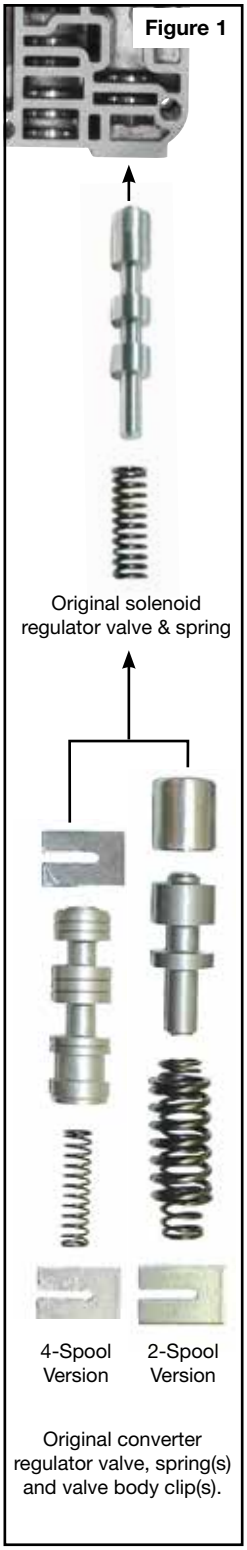
1. Lubricate the oversized solenoid regulator valve and reamed bore with ATF.
2. Place Sonnax spring over long stem of Sonnax valve, then push this assembly into the bore, with stem side facing outward.
3. Reinstall OE solenoid regulator plug.

**NOTE:** The Sonnax inner valve body clip will NOT be used.

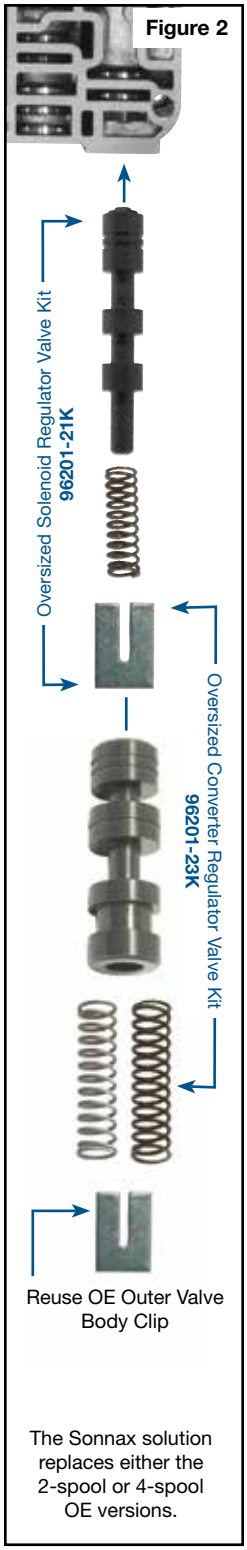
4. Due to heavy duty springs used with the 2-spooled TCC regulator valve, it is very difficult to reinstall these components into the valve bore. The following is a suggestion:
   a. Insert a 700-R4 pump vane into circuit as shown (**Figure 3**).
   b. Use an AXODE TCC bypass sleeve with about 1/3 of its diameter ground back the width of the OE retainer (**Figure 3**).
   c. Use a channel lock between the sleeve and the vane to compress the two OE springs (**Figure 4**).
   d. Insert the retainer.




**OE Line-Up**




**Sonnax Line-Up**