Instructions

GM 5L40-E, 5L50-E

Solenoid

Protector

# TCC Regulator Valve Kit



# Part No. 55211-04K

- Sleeve
- Valve
- Retaining Clips (2) 1 Lg & 1 Small
- Spring
- Solenoid Protector

**NOTE:** Replaces OE valves with .511" & .437" dia. valve spools. Must measure OE valve spool to determine Sonnax replacement usage (**Figure 1**).

# **Tool Kit**



## Part No.

# F-55211-TL4

- 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.

# Retaining Clip, Small Spring Sleeve Valve

5L40-E

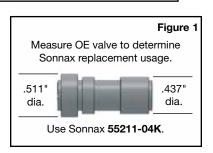
Front Control Valve Body

## 1. Disassembly

- a. Remove OE retainer, solenoid, valve and spring from the bore.
- b. Keep OE solenoid and discard other bore components.

#### 2. Bore Reaming

Ream TCC Regulator bore (for reaming instructions/reamer care, please visit www.sonnax.com). Sonnax reaming tool kit **F-55211-TL4** and **VB-FIX** are required for this operation.



Retaining Clip, Large

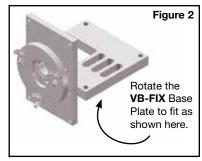
TCC PWM

Solenoid

NOTE: We suggest the VB-FIX base plate to be remounted 90 degrees from its standard position for the 55211-04K reaming. Use the four holes in the front plate as a guide to drill and tap new holes for the socket head screws. Tap 5/16-18 UNC at least 3/4" deep. If the VB-FIX is used as supplied, the casting is not supported well in the area of the TCC bore. Upon clamping the casting, it distorts and the reamed bore results in a loose sleeve (Figure 2). In addition, a very smooth action to insert and remove the guide pin after final securing is a must to provide easy, on-center reaming of this bore.

### 3. Installation & Assembly

- a. Be certain all debris has been removed from the valve bore and valve body.
- b. Insert Sonnax spring into the long, internal pocket in the valve.
- c. Push this Sonnx assembly into the reamed bore. The sleeve end with 2 notches should go inboard, and the end with 4 notches should face outboard.



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### TRANSMISSION PARTS

TCC REGULATOR VALVE KIT 55211-04K, F-55211-TL4

Instructions

#### 3. Installation & Assembly continued

- d. Install Sonnax small retaining clip into the inboard sleeve groove.
- e. Install Sonnax solenoid protector into sleeve, ensuring the tangs are seated in the four sleeve notches.
- f. Return OE solenoid to the valve bore. The end of the solenoid snout should contact the solenoid protector.
- g. Install Sonnax large retaining clip to secure the solenoid.
- h. If the Sonnax retainer does not fit into the solenoid groove, use a #194 Dremel bit and remove only enough material from the inboard casting walls to allow the sleeve to set deeper. This will allow the solenoid to move in as well.

#### 4. Final Testing

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

