

## AFL Valve Kit



Part No.

**84596-02K**

- Sleeve
- Valve
- Regulating Spring
- Sleeve Retention Spring

## Tool Kit



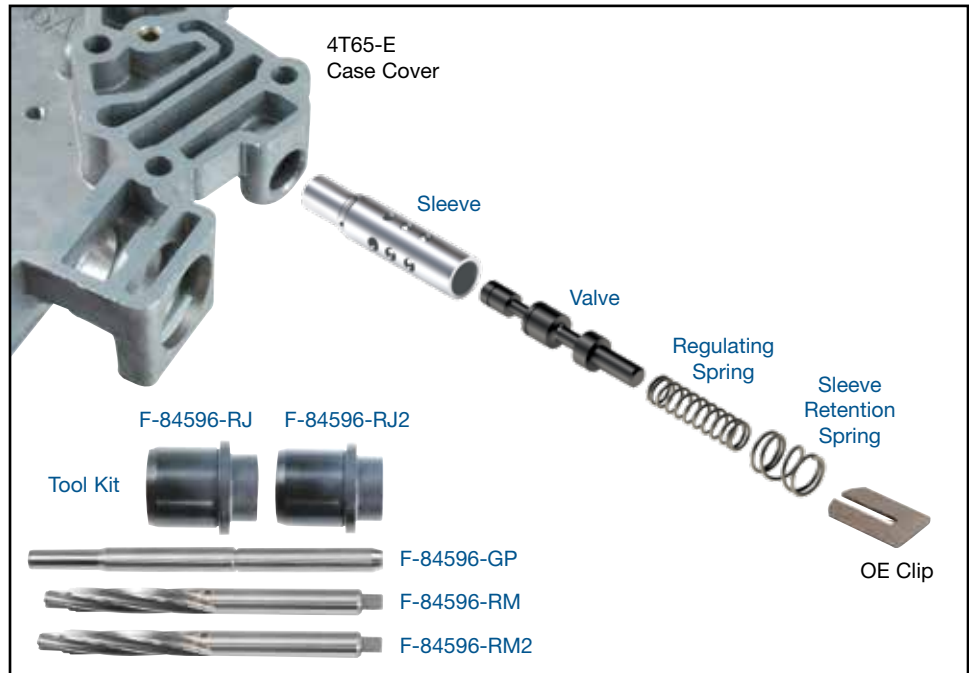
Part No.

**F-84596-TL**

- Reamers (2)
- Reamer Jigs (2)
- 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](http://www.sonnax.com).

**NOTE:** To eliminate codes 1811 and 741 and TCC-related issues, be sure to also inspect the boost valve assembly, TCC regulated apply valve and TCC apply valve. The PCM must be reset/relearned after any valve body repairs. Aftermarket scanner relearn procedure or battery disconnect for 12 hours may not restore drivability and line pressure control. Performing a dealer reflash or a web reflash is frequently the other method to properly restore control.



## GM 4T65-E

### 1. Disassembly

- Remove OE parts from AFL bore.
- Retain OE clip for reuse and discard other parts.

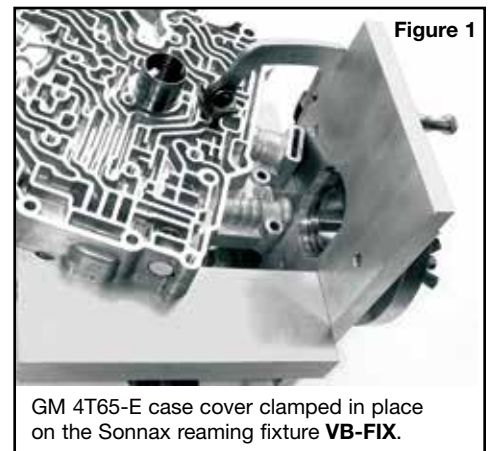
### 2. Bore Reaming

Use the VB-FIX reaming fixture (Figure 1) and the associated "F-Tool" kit F-84596-TL, specifically in the order explained below. See the part lineup for "F-Tool" kit part identification.



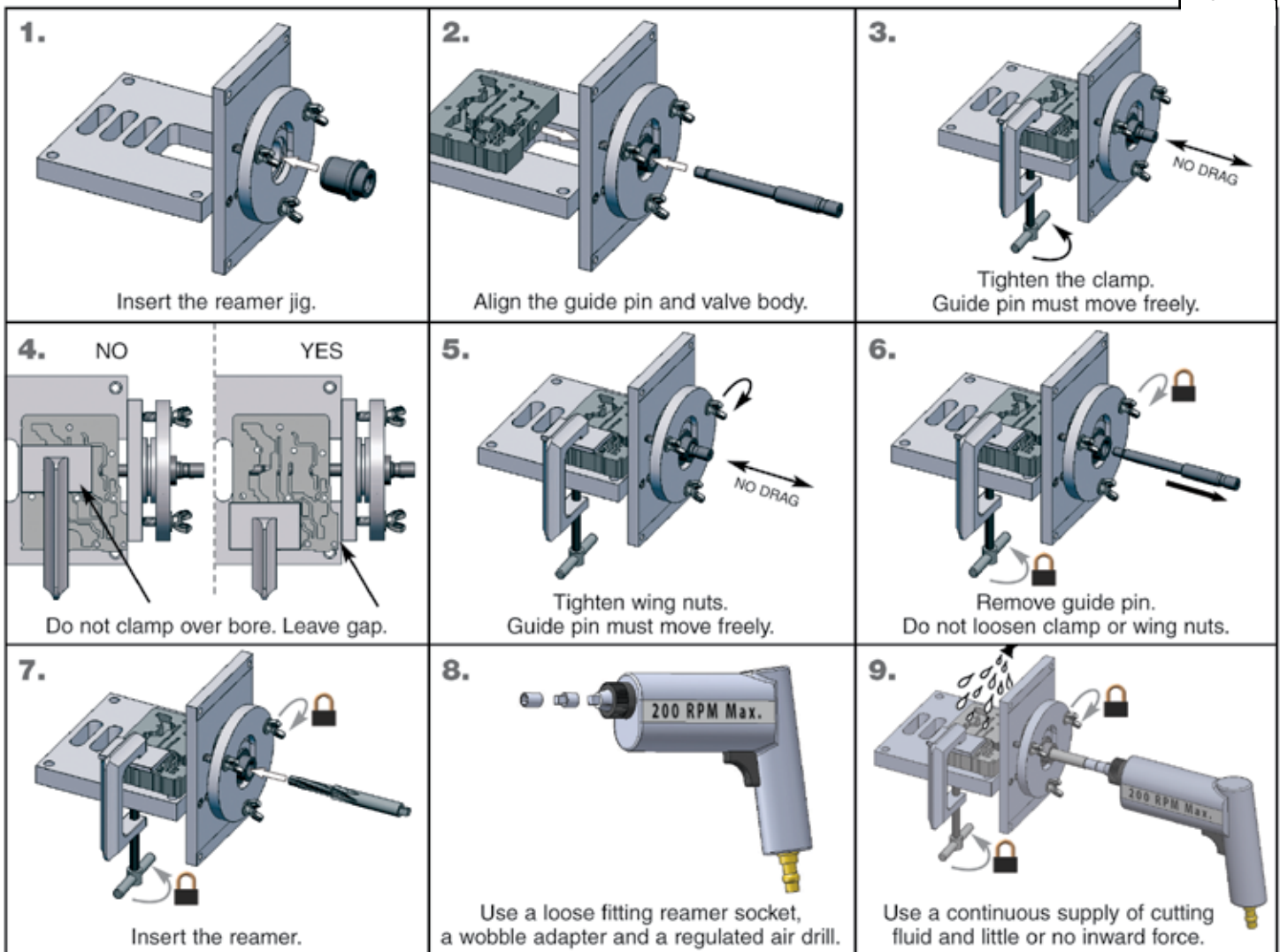
**CAUTION:** Do NOT loosen wing nuts on the VB-FIX reaming fixture or the valve body clamp until both reaming steps have been completed.

- Insert the reamer jig F-84596-RJ and use guide pin F-84596-GP for steps 1–6 illustrated on page 2.
- With the reamer jig F-84596-RJ still in place, use reamer F-84596-RM for steps 7–9 illustrated on page 2.
- Remove reamer jig F-84596-RJ and insert new reamer jig F-84596-RJ2.
- Use the new reamer jig F-84596-RJ2 with new reamer F-84596-RM2 and repeat steps 7–9 illustrated on page 2.



GM 4T65-E case cover clamped in place on the Sonnax reaming fixture VB-FIX.

Figure 2



### 3. Installation & Assembly

- Install Sonnax AFL sleeve and valve assembly into the bore.
- Install Sonnax regulating spring over the stem of the valve.
- Install Sonnax sleeve retention spring, seating the end against the face of the sleeve.
- Compress springs with a screwdriver and return the OE clip to the outboard exhaust port.
- Push on the valve at the inboard exhaust port to ensure that it strokes freely and the springs do not coil bind.

### 4. Final Testing

Vacuum testing at the port(s) indicated holds the recommended minimum 18 in-Hg (Figure 3).

