

Oversized Pressure Regulator & Boost Valve Kit

Part No.
104520-07K

- Pressure Regulator Valve
- Matching Outer Spring
- Boost Valve
- Boost Sleeve
- Checkballs (2) 1 Extra
- Drill Bit .040"



Tool Kit

Part No.
F-104520-TL7C

- 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.

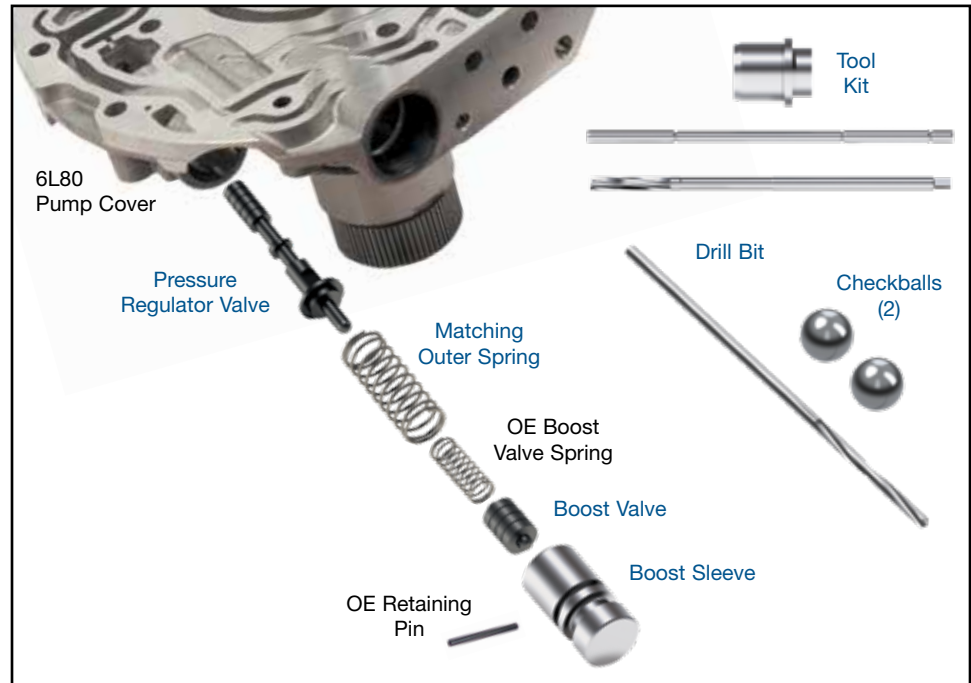
Required

Oversized Pump Base Plate
VB-06

NOTE: Use of the **VB-06** is required with the **VB-FIX** reaming fixture for this installation unless the stator support shaft is removed from the pump body.



GM 6L45, 6L50, 6L80, 6L90



NOTE: In GM 6L45, 6L50, 6L80 and 6L90 units the pressure regulator valve and boost assembly are located in the pump cover. Transmission must be removed from the vehicle to access pump and replace the pressure regulator valve and boost assembly.

1. Disassembly

- Remove OE pressure regulator valve train from pump body bore.
- Save OE retaining pin and boost valve spring for reuse and discard remainder of the OE valve train.

2. Bore Reaming

Ream pressure regulator bore (for reaming instructions/reamer care, please visit www.sonnax.com). Sonnax reaming tool kit **F-104520-TL7C** and **VB-FIX** are required for this operation.

3. Reroute Pressure Regulator Balance Feed Passage

- Locate OE balance feed orificed cup plug and adjacent inboard balance port for the pressure regulator valve.
- Drop one Sonnax 1/8" aluminum checkball into OE orificed cup plug. Drive checkball into cup plug with appropriately sized punch. Stake cup plug to prevent checkball displacement (**Figure 1**).
- Using included Sonnax drill bit, bore a new orifice from the cup plug bore to inboard balance port at an approximate 45° angle. Starting drill bit on counter-sunk surface of cup plug bore works best (**Figure 2**).

Reroute Pressure Regulator Balance Feed Passage (continued)

Tips For Success:

- Keep the drill bit length as short as possible (bury shank deep in the adapter).
- Be patient, it will take time to drill through the passage wall.
- Don't press the drill bit or it may break off.

Drilling is necessary to prevent excessive line pressure. Watch a quick video to learn more and see drilling demonstrated by visiting this product page at www.sonnax.com or by scanning the QR code shown here.



- d. Clean bore thoroughly, removing all debris and chips.

4. Installation & Assembly

- a. Install Sonnax pressure regulator valve.
- b. Install Sonnax matching outer spring.
- c. Reinstall OE boost valve spring.
- d. Install Sonnax boost valve and sleeve.
- e. Reinstall OE retaining pin.

5. Final Testing

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

