Instructions

Ford **E40D**, 4R100

# Oversized Converter Clutch Regulator Valve Kit

# Part No. 36424-11K

- Valve
- OE Calibration Spring Selective
- Elevated Pressure Spring Selective

**NOTE:** Fits Ford E40D and 4R100 with F1, F5, F8 and E9 stamped pump castings.

## **Tool Kit**



## Part No.

## F-36424-TL11C

- Carbide 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. It is recommended to use Sonnax oversized base plate **VB-06** in conjunction with VB-FIX when reaming pump bodies. More information and instructions can be found online at www.sonnax.com.

#### Also Available

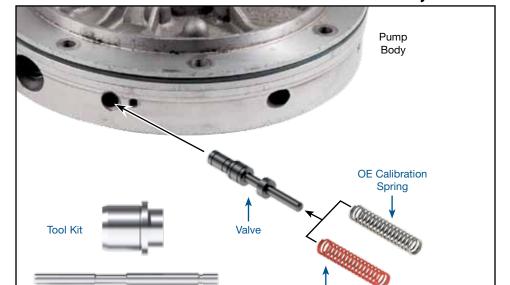
#### **Oversized TCC Control Valve**

**36424-15K** Fits F8 pumps only

Oversized Pressure Regulator Valve Kit

36424-16K

Fits F1, F5, F8 & E9 pumps



#### 1. Disassembly

- a. Remove the OE retaining clip and end plug, save for reuse.
- b. Remove and discard the OE converter clutch regulator valve and spring.

#### 2. Bore Preparation

- a. Clean the bore thoroughly in a solvent tank.
- b. Generously lubricate the bore and reamer with cutting fluid (i.e. Mobilmet S-122, Lubegard® Bio-Tap, Tap Magic™, etc.). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilmet S-122) during the reaming process.

Elevated

Pressure Spring

- c. The reamers should be turned using a low RPM, high-torque air drill regulated to a maximum of 200 RPM.
- d. Examine the bore after cleaning for surface finish, debris and burrs. Flashing and burrs on the exit side of land and in bores must be carefully removed. A small piece of Scotch-Brite™ material attached to a wire and powered with a drill motor is ideal for the task. Scotch-Brite™ is a very abrasive material and all residual debris must be cleaned to ensure particles do not migrate or remain imbedded into the surface. Post cleaning involves several progressive steps with solvent on a lint-free rag.

#### **CAUTIONS AND SUGGESTIONS:**

- Turning the reamer backward will dull it prematurely.
- Pushing on the reamer will result in poor surface finish and inadequate and sporadic material removal.
- Never use a crescent wrench, ratchet or pliers to turn the reamer.
- A dull reamer will cut a smaller hole. Reamers can be sharpened, but should only be done by a
  professional tool sharpener. Actual life of a Sonnax reamer before resharpening or replacing
  averages 50-70 bores.

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36424-11K-IN 12-28-12



#### TRANSMISSION PARTS

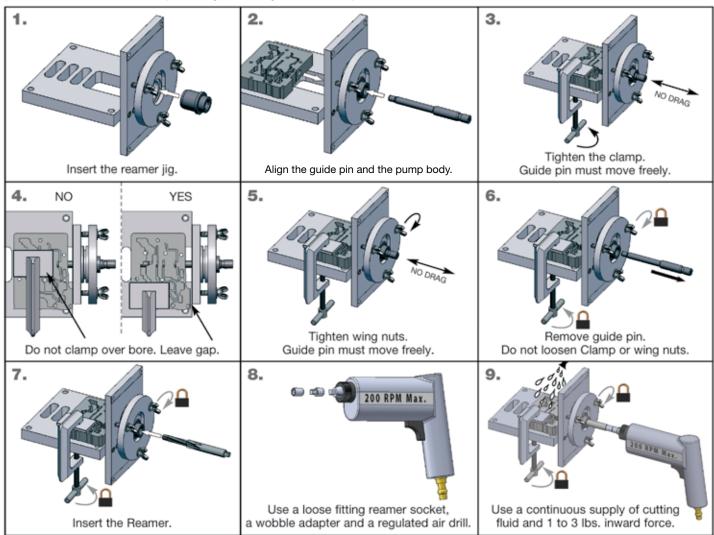
OVERSIZED CONVERTER CLUTCH REGULATOR VALVE KIT 36424-11K, F-36424-TL11C

Instructions

#### 3. Bore Reaming

Use the associated "F-Tool" F-36424-TL11C kit and VB-FIX reaming fixture as illustrated below to ream the bore.

**NOTE:** Reaming large pump bodies on the **VB-FIX** requires a special base plate **VB-06**. When reaming pump bodies, simply remove the existing base plate and bolt on the **VB-06** base plate using the existing socket head cap screws.

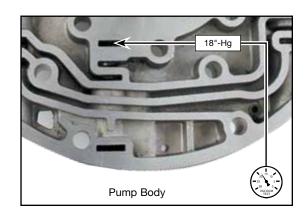


#### 4. Installation & Assembly

- a. Install the Sonnax valve into the bore as shown in main photo.
- b. Select one of the two springs according to the desired TCC apply pressure: Unpainted spring = OE TCC apply; Red spring = firmer TCC apply.
- c. Install the chosen spring and install over the installed valve stem.
- c. Reinstall the OE end plug and retaining clip.

#### 5. Final Testing

A vacuum test at the port indicated fails to hold at least 18 in-Hg.



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