

### Instructions

# Ford 5R55W/S

# Oversized Solenoid & Converter Feed Limit Valve Kit

## Part No. 56947J-61K

- Oversized Solenoid Feed Limit Valve
- Oversized Converter Feed Limit Valve

# **Tool Kit**

## Part No. F-56947J-TL61

- Reamer Guide
- Guide Pin
- Reamer

**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.



**IMPORTANT NOTE:** Before disassembly, observe and record the location of the flat metal keeper that retains the solenoid feed limit valve and spring.

During disassembly, be sure to identify and record the spring positions. Label the springs accordingly. Do not switch the springs at assembly.

#### 1. Disassembly

- a. Remove the OE valve train which contains retainer clip, end plug, converter feed limit valve and associated spring, flat keeper, solenoid feed limit valve and associated spring.
- b. Keep the end plug, retainer clip, flat keeper and both springs for reuse. Discard the OE valves.

## 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<sup>®</sup> Bio-Tap, Tap Magic<sup>™</sup>, etc.). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilmet S-122) during the reaming process.
- 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 lands and in bores must be carefully removed. A small piece of Scotch-Brite<sup>™</sup> material attached to a wire and powered with a drill motor is ideal for the task. Scotch-Brite<sup>™</sup> 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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## TRANSMISSION PARTS

OVERSIZED SOLENOID & CONVERTER FEED LIMIT VALVE KIT 56947J-61K, F-56947J-TL61

Instructions

#### **3. Bore Reaming**

Use the associated "F-Tool" F-56947J-TL61 kit and VB-FIX reaming fixture as illustrated below to ream the bore.



#### 4. Installation & Assembly

- 1. Make sure the reamed bore is thoroughly cleaned, then insert the Sonnax solenoid feed limit valve oriented as shown in the main photo.
- 2. Insert the OE solenoid feed limit spring.
- 3. Compress the OE solenoid feed limit spring far enough into the bore to allow installation of the OE flat metal spring keeper into the "worm-track" cavity in location shown in photo at right.
- 4. Insert the Sonnax converter feed limit valve oriented as shown in the main photo.
- 5. Insert the OE converter feed limit spring.
- 6. Insert the OE end plug oriented as shown in the main photo.
- 7. Install the OE end plug retainer clip as shown in photo at right.

#### **5. Final Testing**

Vacuum tests at the ports indicated hold the recommended minimum of in-Hg.

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