

## Smart-Tech<sup>®</sup> Overdrive Clutch Housing Kit

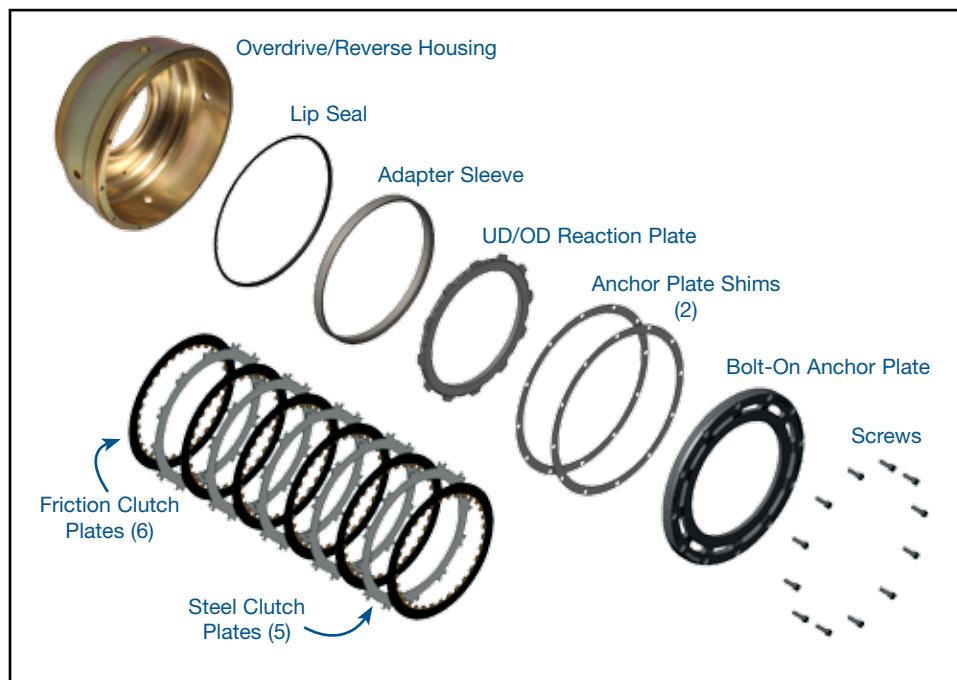
**Part No.**  
**72960-06K**

- Overdrive/Reverse Housing
- Lip Seal
- Adapter Sleeve
- UD/OD Reaction Plate
- Anchor Plate Shims (2)
- Bolt-On Anchor Plate
- Screws (12)
- Friction Clutch Plates (6)
- Steel Clutch Plates (5)
- Chisel Not Shown

Patent Pending

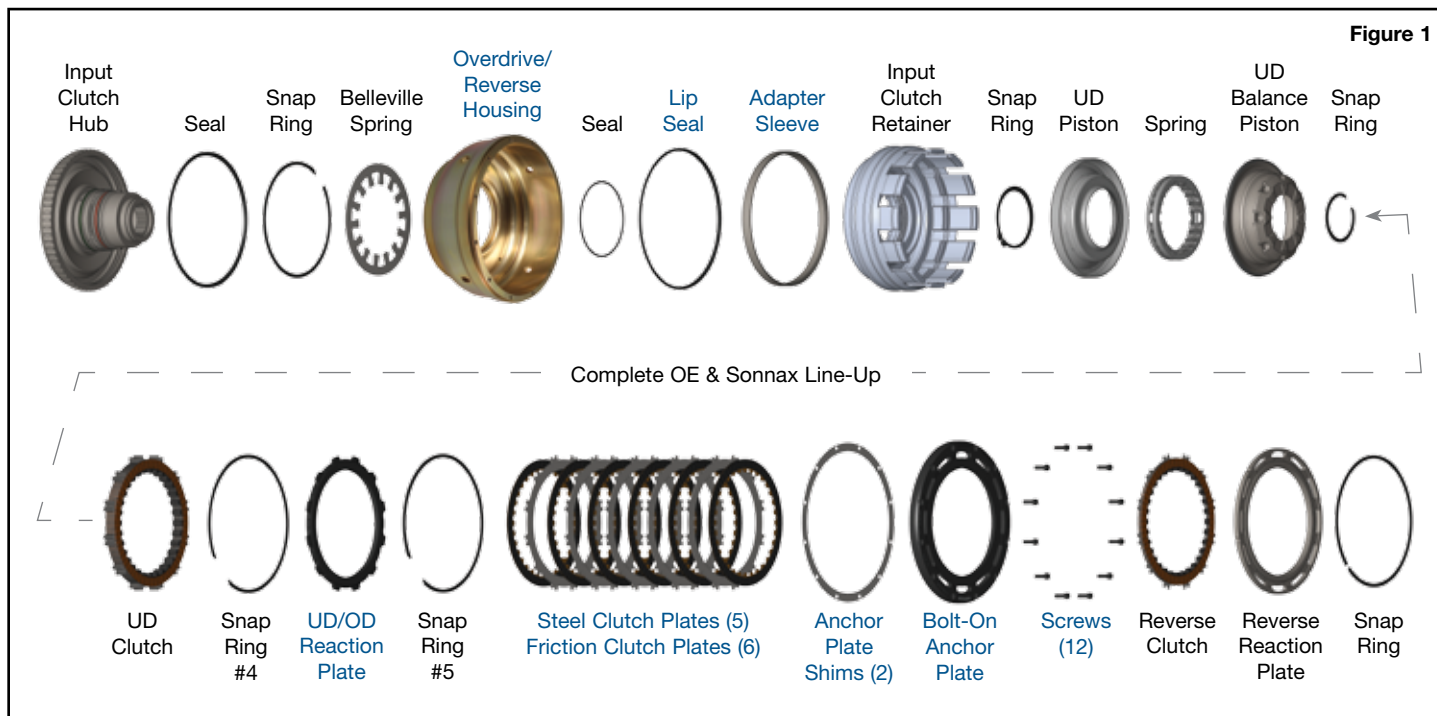
**NOTE:** Pre-soak overdrive frictions and steels in ATF+4 transmission fluid before final assembly. ATF+4 is the recommended fill oil.

## Chrysler 68RFE, 66RFE, 65RFE, 545RFE, 45RFE



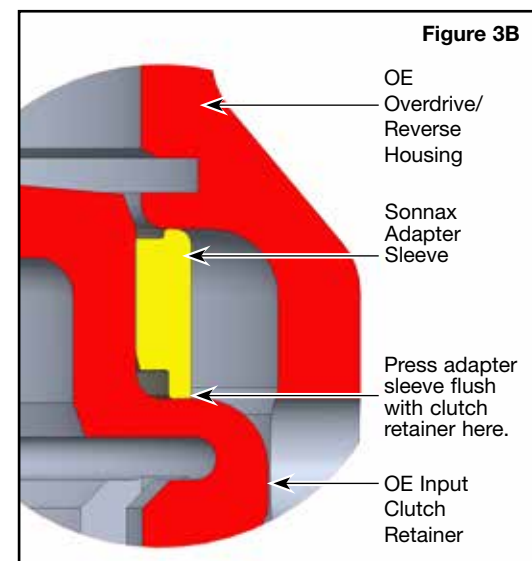
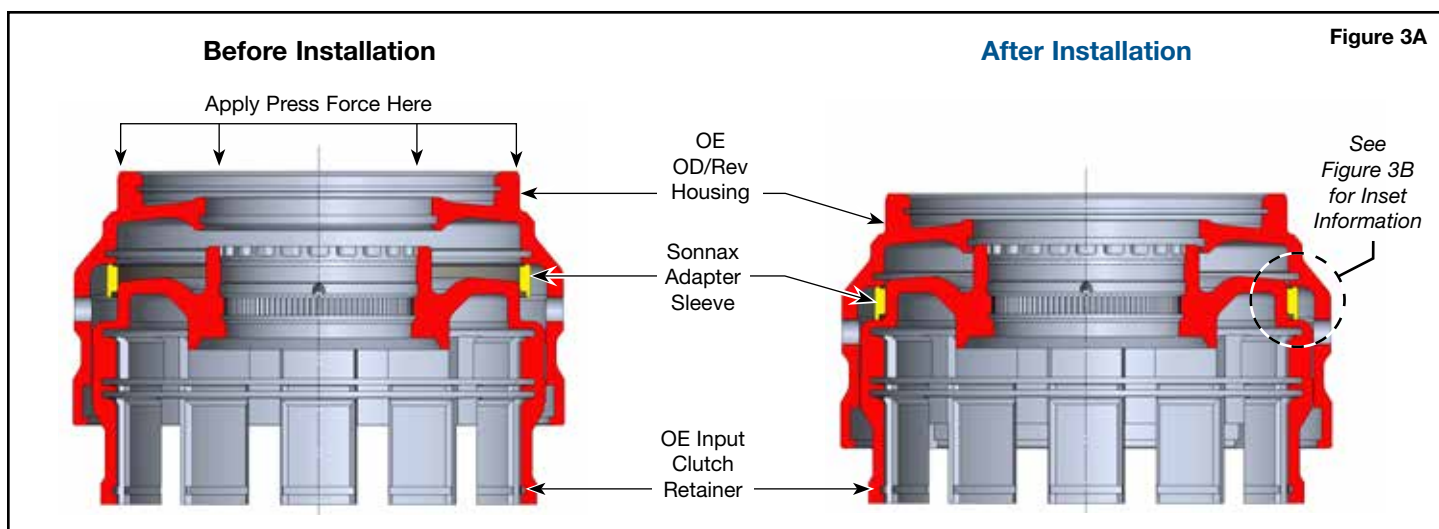
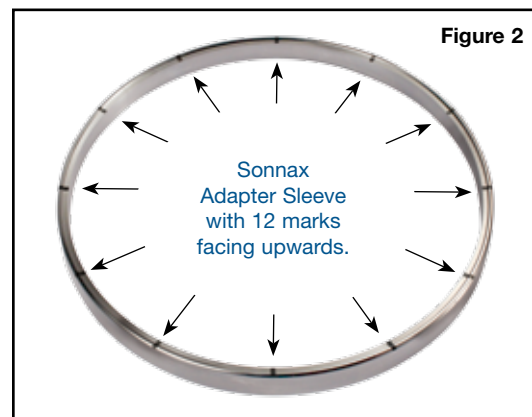
**WARNING:** This kit requires use of the input clutch retainer found in '07-later units (OE part number 04799648AB). All 68RFE, 66RFE, 65RFE should have this retainer. For 45RFE and 545RFE '99-'06 applications, the input clutch retainer must be replaced with '07-later version. See page 4 for retainer identification and verification measurements.

Figure 1



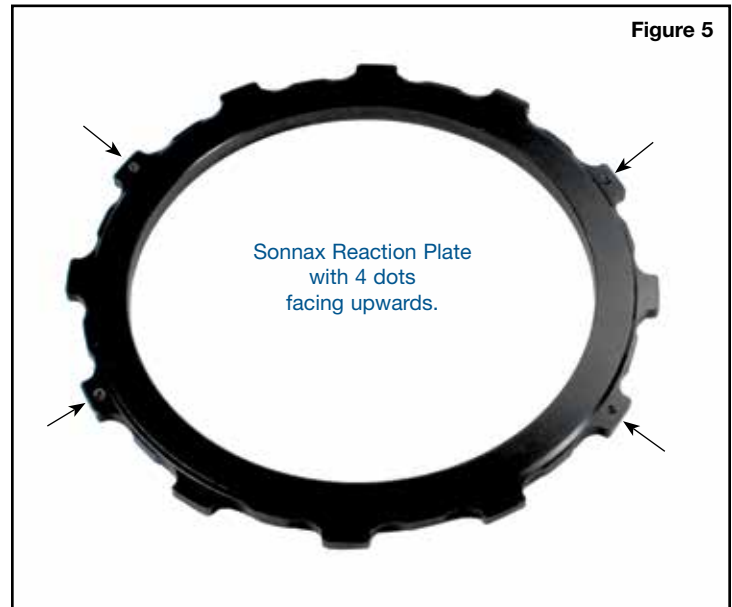
### 1. Inner Input Clutch Retainer Preparation

- Place adapter sleeve on inner input clutch retainer with 12 marks facing upwards (**Figure 2 & 4**).
- Begin adapter sleeve installation by carefully tapping adapter sleeve with a plastic hammer to get it started, or by heating adapter sleeve and placing it on the inner input clutch retainer.
- Finish adapter sleeve installation by using the old overdrive/reverse housing as a driver to push the adapter sleeve into place until lightly seated (**Figure 3A**).
- Verify adapter sleeve is fully seated against retainer housing (**Figure 3B**).
- Using Sonnax diamond point chisel, stake the aluminum inner input clutch retainer at each of the 12 marks on the adapter sleeve (**Figure 4**).



### 2. Overdrive Clutch Clearance Check

- Pre-soak overdrive frictions and steels in ATF+4 transmission fluid before final assembly.
- Install OE snap ring number 4 (flat .060" x .190" ) under Sonnax UD/OD reaction plate.
- Install Sonnax UD/OD reaction plate with four 'dots' facing upward (**Figure 5**).
- Install OE snap ring number 5 (tapered .095" x .180") above Sonnax UD/OD reaction plate.
- Install 6 friction plates and 5 steels, beginning with a friction plate and alternating with steel plates.
- Place one Sonnax anchor plate shim onto Sonnax Overdrive/Reverse housing.
- Temporarily secure Sonnax bolt-on anchor plate with six of the 12 screws.
- Measure overdrive clutch clearance, Mount a dial indicator to the assembly and zero the indicator against the Sonnax bolt-on anchor plate. Apply 20 psi of air pressure to the overdrive clutch and record the indicator reading. OE specification is 0.75-1.61 mm (.030"-.063"). With this kit, expect clearances to be near the low end of OEM specifications.
- Add or subtract anchor plate shim to adjust OD clutch clearance if necessary.



### 3. Final Assembly

- Build up complete input clutch housing assembly using normal OE step by step procedures.
- Fasten bolt-on anchor plate to Sonnax Overdrive/Reverse housing with 12 screws. All threads should be clean and dry prior to assembly. Apply a drop of Loctite<sup>®</sup> Threadlocker 262 or equivalent to the threads of each socket head cap screw. Install 12 Sonnax screws through the bolt-on anchor plate into the threaded holes in the housing and lightly tighten each screw.
- Torque each screw to 51 in-lb. Work around the housing in a crisscross (star) pattern to ensure even pressure on the bolt-on anchor plate.

### 4. Transmission Installation



**WARNING:** Before test drive, using capable scan tool, perform the clutch volume index (CVI) reset procedure so the control unit can adapt to the OD piston apply area.



**NOTE:** Due to the 16% larger apply area of the overdrive piston, the overdrive clutch will apply more quickly than OE. As a result it is normal for the OD CVI values to be lower. OE specification for OD CVI is 30-100. With this kit CVI's can be in the low 20's and still be normal.



**NOTE:** ATF+4 is the recommended fill oil.

### Retainer Identification & Verification



**WARNING:** This kit requires use of the input clutch retainer found in '07-later units (OE part number 04799648AB). All 68RFE, 66RFE, 65RFE should have this retainer. For 45RFE and 545RFE '99-'07 applications, the input clutch retainer must be replaced with '07-later version.

### Inspect 2007-Earlier OE Input Clutch Retainer for Compatibility

Measure input clutch retainer dimension "A" (**Figure 6**) and compare original UD/OD reaction plate (**Figure 7**) to verify original input clutch retainer.

