# SOMAX® PERFORMANCE HIGH PERFORMANCE TRANSMISSION PARTS

PTFE

# Instructions

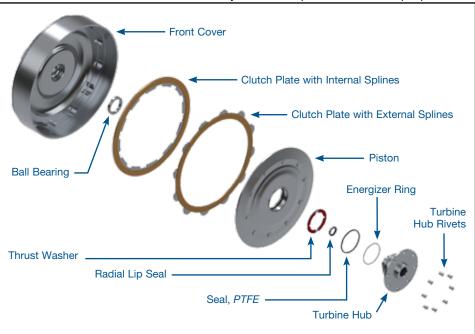
# **Chrysler 68RFE, Multi-Plate**

Unit Size: 13.5" • Core: Chrysler 68RFE • Dampered: No • Turbine Hub Input Spline Count: 27



# Part No. CH-RK-6

- Turbine Hub Rivets (8)
- Turbine Hub
- Energizer Ring
- Seal
- Radial Lip Seal
- Thrust Washer
- Piston
- Clutch Plate with External Splines
- Clutch Plate with Internal Splines
- Ball Bearing
- Front Cover



## **1. Impeller Assembly**

- a. Clean and inspect the OE impeller.
- b. If the blades are loose, either repair by brazing/welding or find a different impeller.
- c. If needed, remove the OE impeller hub and replace it with Sonnax impeller hub **CH-90CM-28G**.

## 2. Stator Assembly

- a. Disassemble the OE stator assembly.
- b. Clean and inspect the stator.
- c. Replace the rolls, springs, races, bearings and upgrade the OE stator cap to a Sonnax bearing adapter **BW-WA-7** and bearing **GM-N-8HLT**.

## **3. Turbine Assembly**

- a. Start by removing the OE rivets and separate the turbine hub from the existing damper plate.
- b. Clean and inspect the turbine. If any blades are loose, repair by brazing/welding or find a different turbine to use.
- c. Install the new turbine hub from the cover side and install new rivets from the impeller side. Weld the turbine hub in on high torque applications for extra security.
- d. Install the energizer ring (O-ring) into the groove on the turbine hub. Then install the PTFE ring in the same groove.
- e. Install the radial lip seal with the metal clad side out toward the front cover, until it bottoms in the turbine hub bore.

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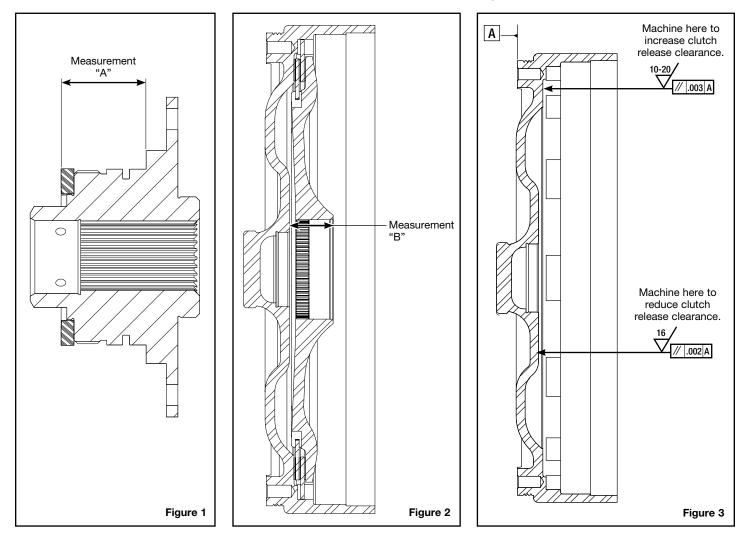
PERFORMANCE CONVERTER KIT CH-RK-6

# Instructions

#### 4. Measure & Set Clutch Release Clearance

The clutch release clearance should be measured and adjustments made if necessary.

- a. Measure from the piston stop of the turbine hub to the thrust face of the washer (Measurement "A" in Figure 1).
- b. Place the clutch plates and piston into the front cover, see 6.Final Assembly to ensure these are properly aligned (Figure 2).Measure from the inner lip of the piston bore to the thrust face on the front cover (Measurement "B" in Figure 2).
- c. The difference between the two measurements (A-B) is the amount of clutch release clearance. It is recommended to set clutch release clearance between .040–.060".
- d. If there is too much clutch release clearance, machine the thrust surface of the front cover by the amount that you want to reduce the clutch release clearance (**Figure 3**). Make sure to maintain a RA 16 micro-inches surface finish and keep the thrust surface parallel to the mounting pads within .002". If you want to increase the amount of clutch release clearance, machine the lock-up surface of the front cover by the amount you want to increase the clearance (**Figure 3**). Make sure to keep the surface finish better than RA 20 micro-inches and parallel to the mounting pads within .003". A poorly machined lock-up surface will greatly compromise friction paper life.
- e. After machining the front cover, re-measure A and B measurements and verify clutch release clearance.



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## HIGH PERFORMANCE TRANSMISSION PARTS

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## Instructions

#### 5. Cover Assembly

Clean inside of cover and install front cover ball bearing.

#### 6. Final Assembly

- a. Drop the internally splined (dual friction) clutch plate into the front cover (**Figure 4**).
- b. With the steel side towards the cover and the friction side towards the piston, install the externally splined (single friction) clutch plate into the front cover, rotating to engage the splines (Figure 4). Be sure this clutch plate fits freely without any binding in the cover.
- c. Install the piston and rotate it to engage the internally splined clutch plate.
- d. From this point on assemble the converter as normal.
- e. Continue converter assembly. The endplay should be between zero and .010" and internal clearance should be between .100–.110" for maximum efficiency after welding. The stator should be able to turn freely.
- f. Pressure check the unit.
- g. Balance finished unit.

