SOMAX PERFORMANCE HIGH PERFORMANCE TORQUE CONVERTER PARTS

Instructions

GM 6L80 (245mm), Single-Plate

300mm Performance Converter Kit

Part No. GM-RK-16

- Pilot
- Front Cover
- Thrust Bearing
- Thrust Washer
 - asher Imp

• Turbine Hub • Shim

• Impeller Hub

• O-Ring

NOTE: Street/Strip applications only, not for truck towing. This kit must be completed with the additional required Sonnax or OE parts listed below. Some machining is required.

Required Piston Damper Assembly Parts

OPTION #1:

- GM-DA-6P Piston Plate
- GM-RV-9 Rivets (100/bag)
- S20300WC, B45300HTE or B45070HTE Friction Ring
- GM 258mm Damper Assembly Core

OPTION #2:

GM 258mm Piston/Damper Assembly

Required Stator Assembly Parts

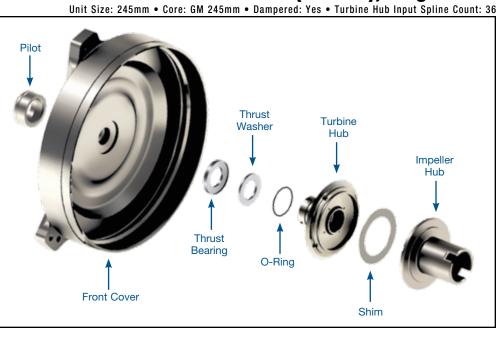
- CH-N-1 Thrust Bearing (2)
- GM-CS-5 Sprag Cartridge
- GM-ST-082 or GM-ST-086 Stator

Required OE Core Parts

- GM 245mm Impeller
- GM 245mm Turbine (requires machining)

Optional Assembly Parts

B78 Hex Head Screw (100/bag)



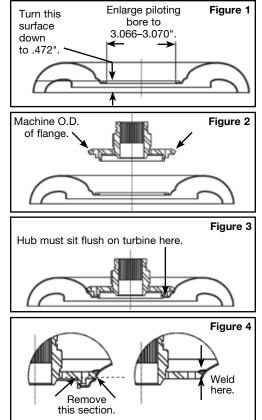
The Sonnax performance converter kit **GM-RK-16** is illustrated above. The entire torque converter lineup (complete with other required parts listed at left) is illustrated for reference on page 2.

1. Turbine Assembly

The Sonnax turbine hub **GM-HTCM-53** is designed for GM 245mm cores and allows the use of either stator **GM-ST-082** or **GM-ST-086** along with the sprag cartridge **GM-CS-5** (used with two **CH-N-1** thrust bearings).

NOTE: When used with Sonnax performance converter kits, the turbine assembly MUST be modified as described below.

- a. Enlarge piloting bore to 3.066-3.070" (Figure 1).
- b. Turn surface indicated (**Figure 1**) down to .472". To obtain the proper measurement of how much material to remove from this area, place the turbine on a flat surface and measure the start dimension through the enlarged bore.
- c. Machine the turbine hub flange O.D. for proper fit with turbine (**Figure 2**).
- d. Place the turbine hub flush on the turbine (Figure 3).
- e. Remove the section below the turbine hub flange and weld the hub to the turbine (**Figure 4**).



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300MM PERFORMANCE CONVERTER KIT GM-RK-16

2. Cover Assembly

The pilot GM-PI-20 will be a sliding fit to light press on the cover. Insert the pilot all the way to the cover back surface and weld in place.

3. Damper Assembly

- a. If piston/damper assembly **Option #1** is used, assemble the Sonnax piston plate **GM-DA-6P** to the GM 258mm damper assembly using **GM-RV-9** rivets.
- b. Install the piston/damper assembly (either **Option #1** or **Option #2**) to the turbine hub and press the aluminum thrust washer into the end of the turbine hub.
- c. Insert the thrust bearing into the front cover, then the complete piston/damper and turbine assemblies.

NOTE: The overall height should be 6.150" (156mm).

R&R NOTE: Use only the shorter .570" early-style hex head screws in the smallest cover bolt circle. Sonnax **B78** converter bolts can be used as a replacement. The long .890" OE torque converter hex head screws will bottom out when used in the smallest bolt circle.

