

HIGH PERFORMANCE TORQUE CONVERTER PARTS

Instructions

### GM 4L60-E (300mm), Single-Plate

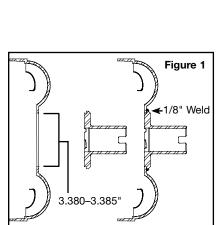
Unit Size: 10" • Core: GM 245mm • Dampered: Yes • Turbine Hub Input Spline Count: 30

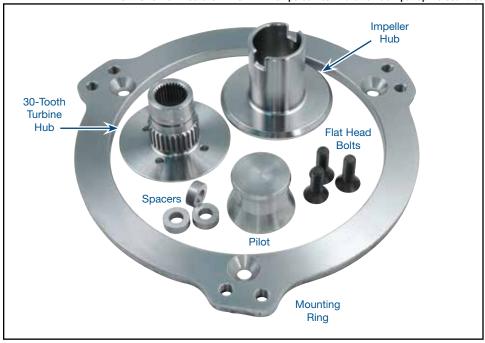
# **300mm Performance Converter Mounting Ring Kit**

## Part No. GM-RK-13

- Impeller Hub
- 30-Tooth Turbine Hub
- Pilot
- Spacers (3)
- Mounting Ring
- Flat Head Bolts (3)

**NOTE:** Turbine hub **GM-HTCM-57** adapts **GM-RK-13** for use with late 245mm cores.





#### 1. Impeller Assembly (Figure 1)

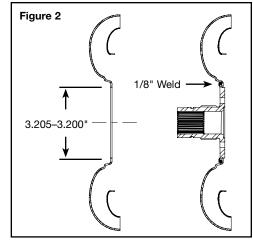
- a. Remove the stock GM 245mm impeller hub by boring a 3.380–3.385" dia. hole on center in the stock GM 245mm impeller.
- b. Install the Sonnax impeller hub from the outside. Weld around the O.D. of the impeller hub, making sure it is centered on the impeller. This weld should be leak-proof.

#### 2. Turbine Assembly (Figure 2)

a. Bore a 3.200–3.205" dia. hole on center in the stock GM 245mm turbine. This will remove the OE turbine hub.

**NOTE:** The mounting diameter is different than non-lockup race kit turbine hubs. Also different is that both flanges of the OE turbine hub assembly must be removed.

b. Install the Sonnax turbine hub into the turbine from the front cover side and then weld around the O.D. of the turbine hub.



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300MM PERFORMANCE CONVERTER MOUNTING RING KIT GM-RK-13

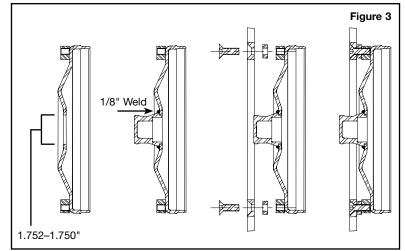
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#### 3. Front Cover Assembly (Figure 3)

**NOTE:** Any surface that needs to be cleaned up should be done before starting the assembly process.

- a. Remove the pilot of the stock GM 245mm front cover by boring a 1.750–1.752" dia. hole from the outside. The hole should run on center and perpendicular with the cover. Take a skim cut to true up the outside shoulder where the pilot will ride.
- b. Install the Sonnax pilot from the outside of the cover and then weld around the O.D. of the pilot. This weld should be leak-proof.
- c. Attach the Sonnax spacers and mounting ring to the cover assembly using Sonnax flathead bolts as shown.

  The use of Loctite® is recommended on the bolts.



#### 4. Clutch Assembly

This kit is designed to work with early-model GM 245mm piston/damper assemblies. The 4L60-E torque converter clutch controls are of the EC3 variety which should use only woven carbon or High Thermal Engaging (HTE) friction linings.

#### 5. Final Assembly

From this point, the kit can be assembled in the same manner as a stock GM 245mm converter.

**NOTE:** High torque applications can overpower the torque capacity of stock GM 245mm single disc clutch and damper assemblies. The ability of this single disc clutch to handle a specific torque load is dependent on many factors, including the amount of input torque and the strategy that is used in applying the torque converter clutch. Sonnax does not guarantee that the capability of the 245mm damper assembly will be adequate in all applications.