



FD-RK-1

FORD AOD RACEKIT

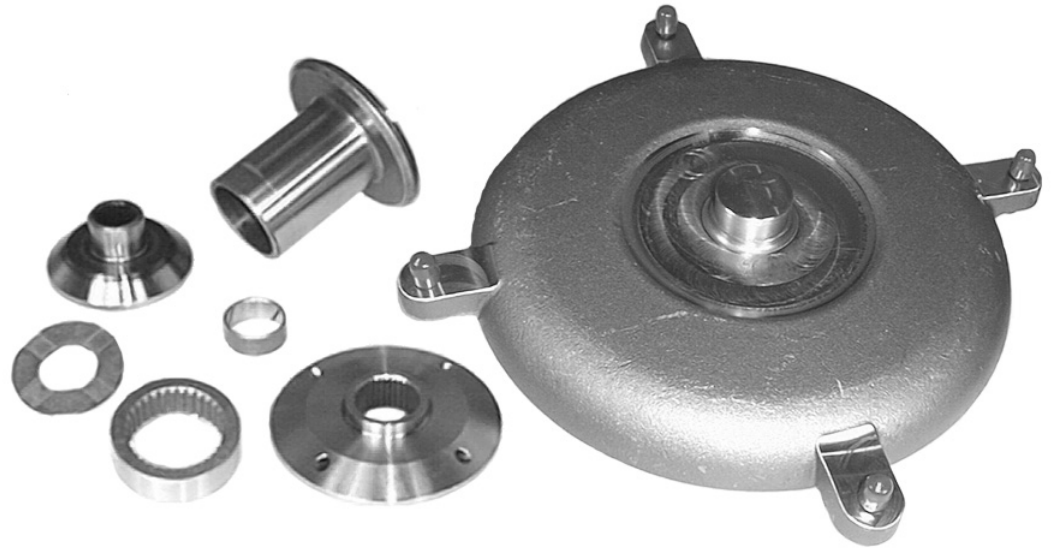
HIGH PERFORMANCE TORQUE CONVERTER PARTS

Part No.

FD-RK-1

Racekit includes:

- 1 Impeller Hub
- 1 Inner Stator Race
- 1 Turbine Hub
- 1 Clutch Eliminator
- 1 Thrust Washer
- 1 Front Cover Bushing
- 1 Front Cover
- 4 Cap Screws
- 4 Stud Covers



INSTRUCTIONS

FRONT COVER DRIVEN VS. TURBINE DRIVEN:

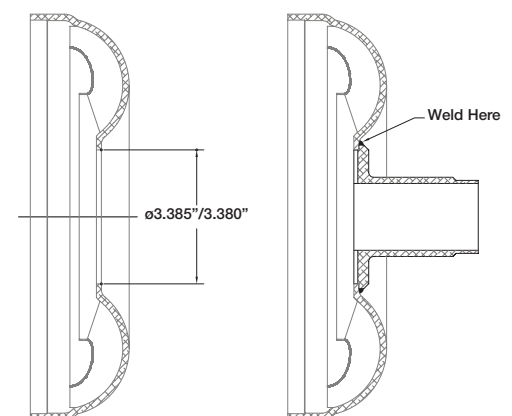
There are two ways to assemble the Sonnax Ford AOD racekit. One way is to eliminate the front cover damper and engage the front splines of the direct drive shaft via the optional "clutch eliminator" included in this kit. This method makes the converter more reliable, perform better and easier to build. However, the direct clutch is driven by the fluid coupling which will have a slight effect on gas mileage and converter temperatures. The 2-3 or the 3-4 shift will not be harsh as the fluid coupling acts as a damper.

The other way to build the unit allows the direct clutch to be driven by the front cover, resulting in the same power flow as the OEM Ford AOD torque converter. This will provide gas mileage and converter temperatures like the OEM Ford AOD torque converter. Using this method requires that the builder use an original Ford AOD damper assembly (not included in this kit). Only the late-style, heavy-duty damper units should be used.

IMPELLER ASSEMBLY (SEE FIGURE 1)

1. Remove the stock GM 245mm impeller hub by boring a 3.380"/3.385" diameter hole on center in the stock GM 245mm impeller.
2. Install the impeller hub from the outside. Make sure the impeller hub and impeller run concentric and then weld around the OD of the impeller hub as shown.

Figure 1



Ford AOD Racekit

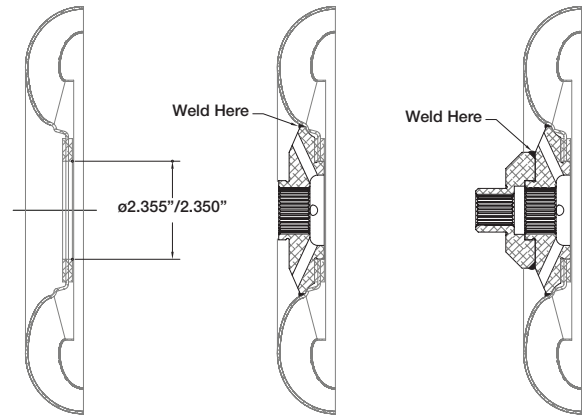
TURBINE ASSEMBLY FOR TURBINE DRIVEN (SEE FIGURE 2a)

1. Bore a 2.350"/2.355" diameter hole on center in the stock GM 245mm turbine. This will remove the OEM turbine hub.

Note: Both flanges of the OEM turbine assembly are retained and should **NOT** be removed.

2. Install the turbine hub into the turbine from the front cover side. Weld around the OD of the turbine hub.
3. Fit the damper eliminator on the turbine hub and weld as shown.

Figure 2a



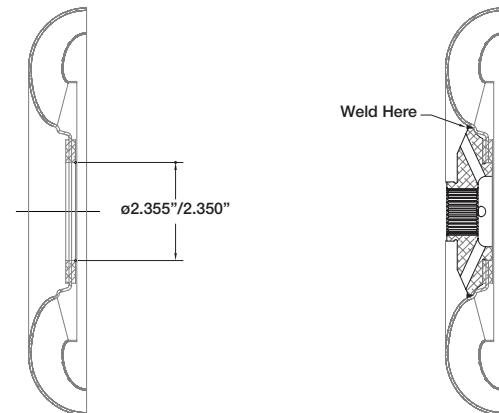
TURBINE ASSEMBLY FOR FRONT COVER DRIVEN (SEE FIGURE 2b)

1. Bore a 2.350"/2.355" diameter hole on center in the stock GM 245mm turbine. This will remove the OEM turbine hub.

Note: Both flanges of the OEM turbine assembly are retained and should **NOT** be removed.

2. Install the turbine hub into the turbine from the front cover side. Weld around the OD of the turbine hub.

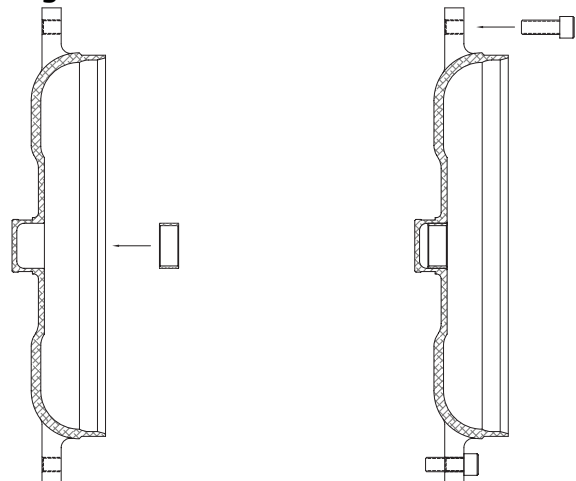
Figure 2b



FRONT COVER ASSEMBLY FOR TURBINE DRIVEN (SEE FIGURE 3a)

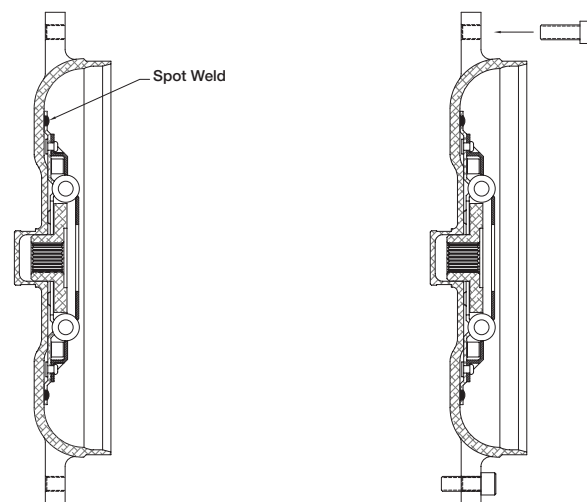
1. Install the front cover bushing. Make sure it is flush or below the front cover's thrust face.
2. Install the 4 cap screws from the impeller side. It is recommended that Loctite™ be used. Use the 4 stud covers after the converter is fully assembled.

Figure 3a



Ford AOD Racekit
FRONT COVER ASSEMBLY FOR FRONT COVER DRIVEN (SEE FIGURE 3b)

1. Install the OEM Ford AOD front cover damper into the front cover. Weld the damper in place using the holes that are left from milling the original spot welds.
2. Install the 4 cap screws from the impeller side. It is recommended that Loctite™ be used. Use the 4 stud covers after the converter is fully assembled.

Figure 3b

STATOR ASSEMBLY

Install the conversion stator race included with the kit as well as new springs and rolls. Install the stator cap and snap ring.

FINAL ASSEMBLY FOR TURBINE DRIVEN

Assemble all the components and use the front cover thrust washer included in the kit. Final endplay, after welding, should be between 0 and .010" and the stator assembly and turbine assembly should be able to turn with minimal effort.

FINAL ASSEMBLY FOR FRONT COVER DRIVEN

Assemble using a Ford AOD bimetal washer (Sonnax p/n **FD-WB-2**, not included with this kit). Final endplay, after welding, should be between 0 and .010" and the stator assembly and turbine assembly should be able to turn with minimal effort.