Small Block Ford to 6R80 Adapter Kit Instructions

PA68507

This kit is designed to allow the installation of a 2011 and later 6R80 automatic transmission with the modular/coyote 3 bolt starter pattern case behind a small block Ford (289-351W-C) engine.

Before proceeding, check the parts provided against the supplied parts list to insure that all of these items have been received and once this has been verified you can proceed with the installation.

QTY 3 7/17-14 X 3 ½ BOLT 61869061

QTY 3 7/16 LOCK WASHER 54096656

QTY 2 3/8-16 X 2 BOLT 86853405

QTY 1 M10-1.50 X 65MM SOCKET CAP SCREW 68055003

QTY 3 7/16-14 X 1 FLAT SOCKET CAP SCREW 05593108

QTY 2 M10-1.50 X 25MM BOLT 09891383

QTY 2 CUSTOM DOWEL PINS

The 6R80 transmission requires the use of a 164 tooth flexplate, please note that aftermarket style flexplates may not accommodate a factory style torque converter. It is advised that you check for proper converter to flexplate clearance before bolting the transmission to the back of the engine.

Since the transmission will be installed .500 (1/2”) back from the engine, you will need to make up this difference in one of two ways:

1. **Have a torque converter custom made with .500 (1/2”) added to both the pads and converter pilot**

2. **If using a stock torque converter, you will also need the converter install kit part # 68509.**

Dowel Pin Install

1- Dowel Pin Install

Remove factory dowel pins from the back of your block. To install the new dowel pins provided thread one of the 3/8 x2 bolts into a dowel pin. Insert the knurled end of the dowel into the block and using a hammer insert until flush. Remove the bolt & repeat in the other dowel pin hole. Do not install the factory blockplate, no blockplate is used in this application.

2- 6R80 Case Mod/Starter Clearance

Depending on the starter you are using, the 6R80 trans case must be modified to accommodate the starter nose. See figure #3. Remove enough material from the section that is marked to clear the starter nose & gear.

You can clamp the right side of the spacer to the transmission and bolt your starter to it to see if you have the needed clearance.

3- Installing the Adapter Halfs

Place the left and right adapter and the dowel pins and secure to the engine block with the three 7/16 x3/4 allen head bolts. This will lock down the adapter and index it properly to the block and trans.

4- Before you bolt the flex plate to the crank shaft make sure the converter studs go thru the flex plate. Enlarge the holes in the flex plate with a drill or die grinder if needed.

5- Installing the transmission to the block

Align the converter studs to the flex plate. Make sure the converter is splined all the way into the transmission. You should have at least an inch (1 inch) of backspacing from the front of the bell housing to the pads on the converter where the studs are anchored. THIS IS IMPORTANT! If you do not have enough clearance transmission failure will occur. Align the transmission to the block and install bolts in the positions shown in figure 4. Make sure the converter studs have come thru the flex plate and are not bound up against the flex plate. Finish the install by installing your starter bolts and converter nuts. ** PLEASE NOTE FIGURE 4 IS FOR REFERENCE ONLY! THE SPACER PLATE IS NOT USED IN THIS APPLICATION! ******

Figure #3

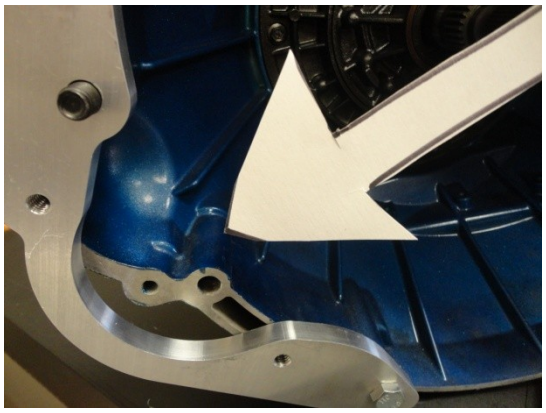

Figure #4