



## **BH117 – GM TURBO SFI BELLHOUSING**

We recommend the following procedures to be performed by a professional transmission builder.

Bellhousing can be used with 6-bolt, 7-bolt, or 8-bolt case.

The 7-bolt cases can be easily modified to use all eight bolts by drilling and tapping for the 8th bolt.

For 6-bolt cases, simply drill and tap one additional hole in the same location as the 7-bolt version. The pump bolt hole can be drilled and tapped to accommodate a heli-coil for the 8th bolt, allowing for a 5/16" bolt.

It's best to start with a clean, empty case. Although it's possible to cut an assembled transmission, we do not recommend it. If you decide to perform this operation on an assembled transmission, make sure to thoroughly cover all openings to prevent metal shavings from getting inside, as these could cause premature failure.

For Powerglide, T350, or T400 transmissions, remove the tail housing to provide an accurate measuring base. Place a straight edge across the rear of the case, and measure forward to mark the bell for the initial "rough" cut. Once the marks are made, connect them to create a straight line, which will guide your cutting tool. Refer to the chart below for the required measurements based on the unit you're working on.

<b>APPLICATION</b>	<b>REQUIRED MEASUREMENT</b>
Powerglide	254mm
T350	381mm
T400	431.8mm

Ensure that the pump face is free of burrs or casting imperfections. Carefully remove any debris or defects that could prevent the bell from sitting flush on the pump. A smooth, clean mating surface is essential for proper installation.

For mock-up purposes, place the complete pump into the case without an o-ring or gasket. Then, position the bell and secure both with a few bolts. Inspect the entire 360-degree contact area for any interference. If you notice any spots where the bell is touching the case, mark them.

Remove the bell and pump, then grind the problem areas until a proper fit is achieved. There should be a minimum clearance of .100" all the way around.

Once the transmission is fully assembled and ready for the bell installation, double-check your end play and ensure the correct 'pump to case' gasket is in place. Next, Use the provided hardware to secure the bell to the transmission, torque the bolts to 25 ft-lbs and applying Loctite 243 Thread locker.

