ATI PERFORMANCE PRODUCTS

Installation Instructions

6718 Whitestone Road • Gwynn Oak, Maryland 21207 • (410) 298-4343
FAX: (410) 298-3579 • www.atiracing.com

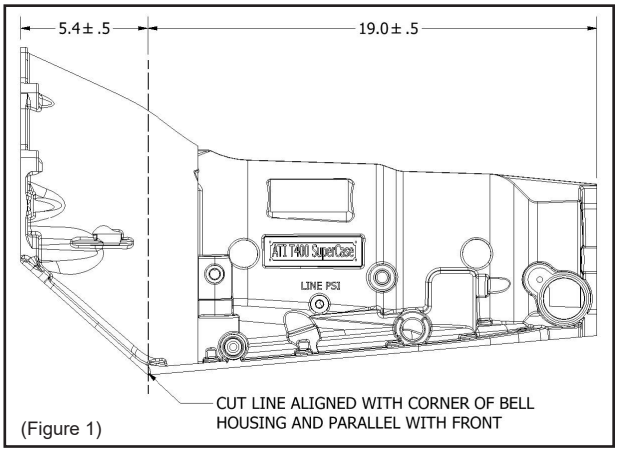
Fitting an ATI Direct Fit Bell (200044A) to an OEM T400 Transmission Case

An ATI Direct-Fit Bellhousing accurately mounts on the face of the pump and centers on the outside diameter of the pump. The purpose of the machining process described below is to cut away parts of the OEM transmission case so the bellhousing does not contact any part of the OEM transmission case and only contacts the pump

CAUTION – Machining past the areas indicated may result in breaking into the interior of the transmission resulting in fluid leak or transmission failure.
This process must be done by a qualified machinist on a milling machine.

Step 1. Rough cut OEM bellhousing

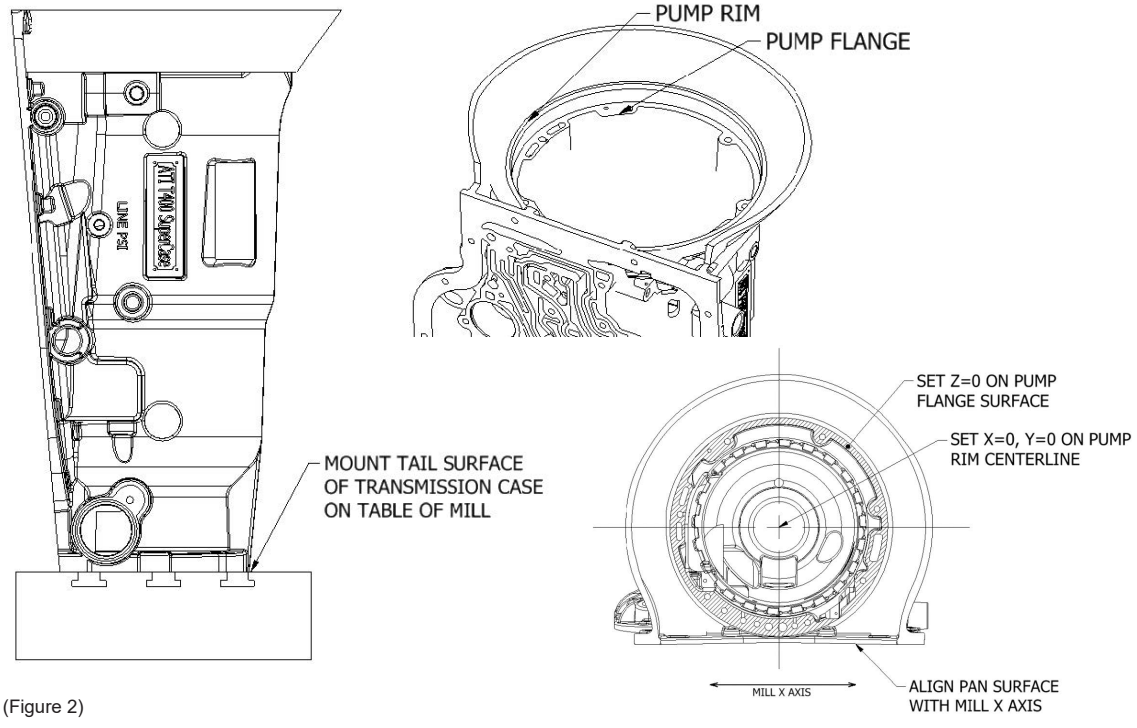
Mark a cut line on the bellhousing in it the area indicated. Carefully cut the bellhousing using suitable tool, such as a reciprocating saw, to gain access to the areas needing machining. (Figure 1)



(Figure 1)

Step 2. Mount transmission case on milling a machine.

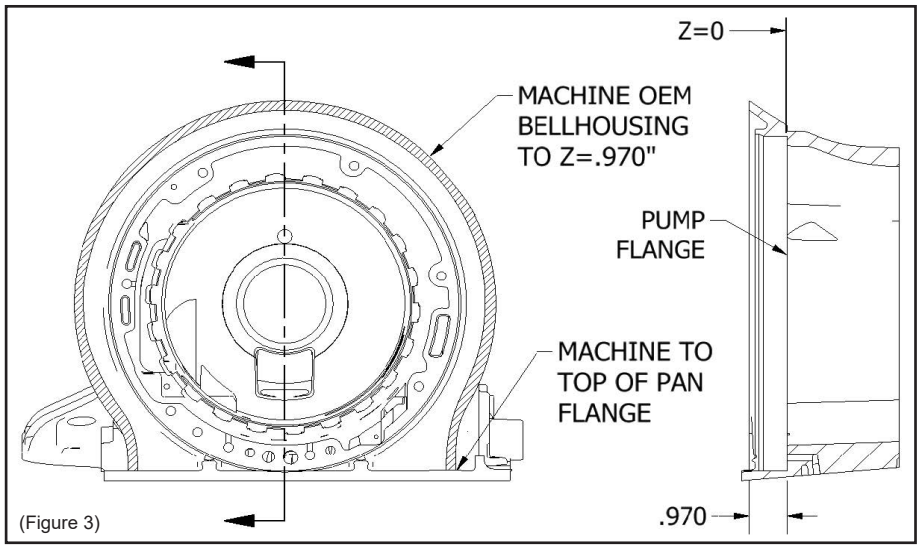
Mount the transmission case on the rear machined surface of the case. Zero X, Y, & Z on the pump mount surfaces. Rotate the OEM transmission case to make the pan mounting surface parallel with the X axis of the milling machine. (Figure 2)



(Figure 2)

Step 3. Machine front pan flange

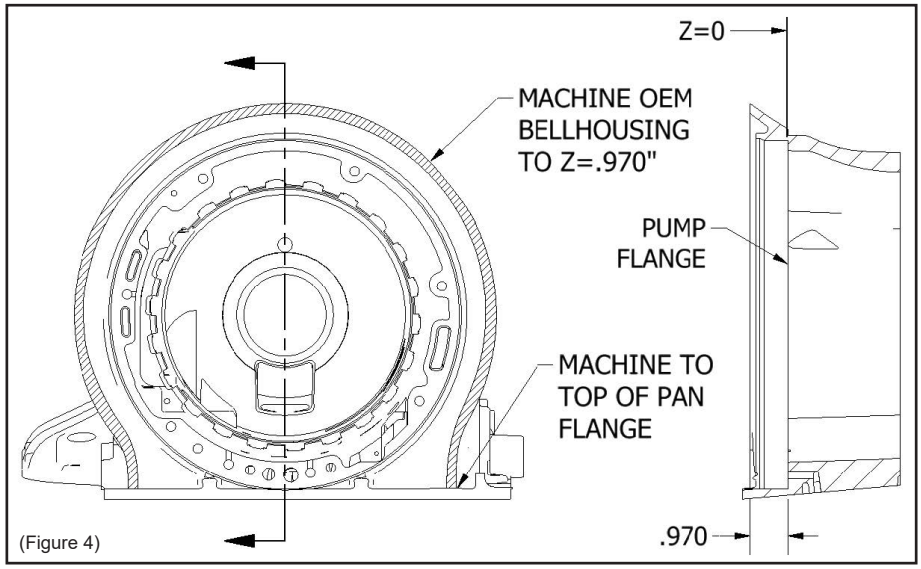
Trim the front transmission pan flange in area indicated. (Figure 3)



(Figure 3)

Step 4. Machine OEM bellhousing.

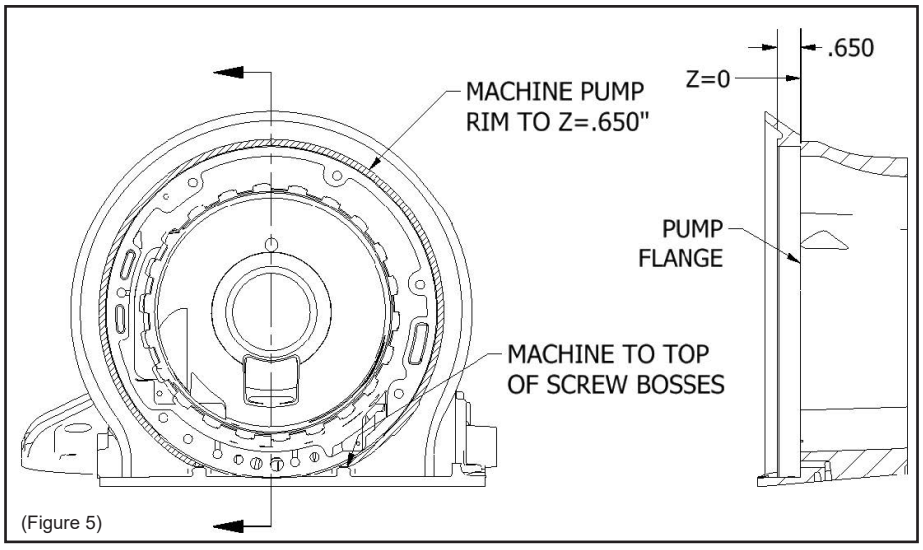
Trim the OEM bellhousing in area indicated
(Figure 4).



(Figure 4)

Step 5.
Machine Pump Rim

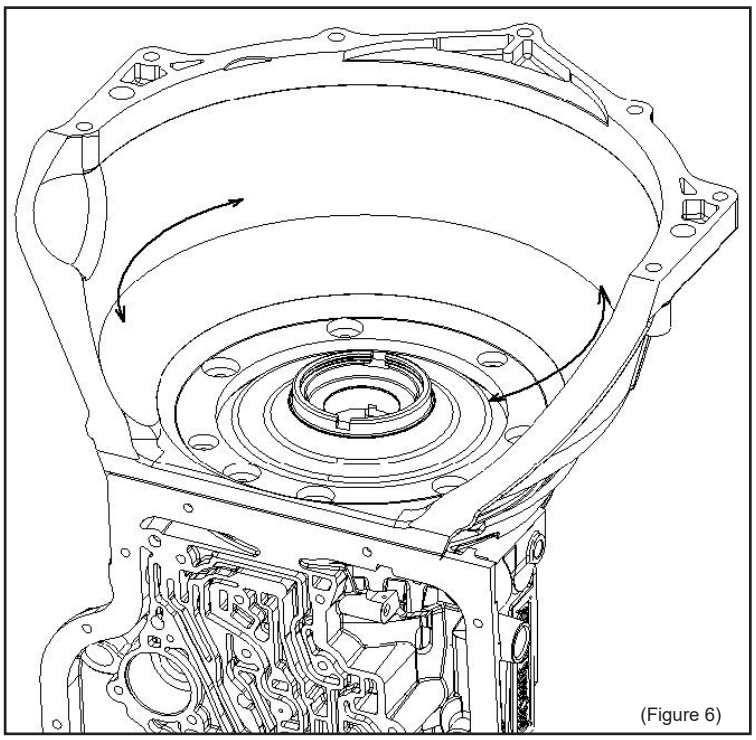
Trim the pump rim to allow the rim on the direct fit bellhousing to locate on the outside diameter of the pump. (Figure 5)



(Figure 5)

Step 6. Trial Fit Bellhousing

Place pump in transmission case. Place bellhousing on pump. Bellhousing should only contact outer rim and face of pump. Bellhousing should be able to rotate a few degrees in each direction. Any areas of contact between the transmission case and the bellhousing should be filed off to generate the necessary clearance. (Figure 6)



(Figure 6)

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Fitting an ATI Direct Fit Bell (200044A) to an OEM T350 Transmission Case

An ATI Direct-Fit Bellhousing accurately mounts on the face of the pump and centers on the outside diameter of the pump. The purpose of the machining process described below is to cut away parts of the OEM transmission case so the bellhousing does not contact any part of the OEM transmission case and only contacts the pump

CAUTION – Machining past the areas indicated may result in breaking into the interior of the transmission resulting in fluid leak or transmission failure.
This process must be done by a qualified machinist on a milling machine.

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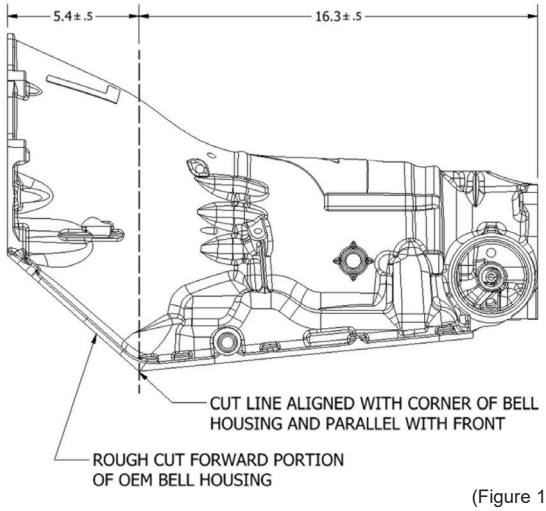
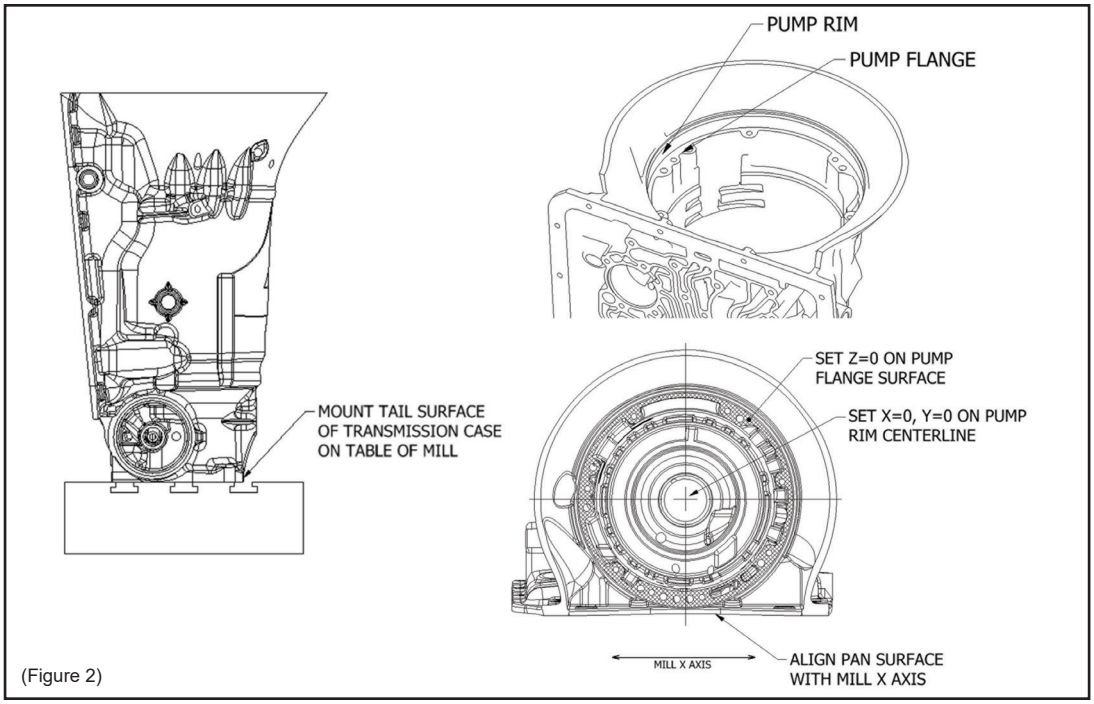


(Figure 1)

Step 2. Mount transmission case on milling machine.

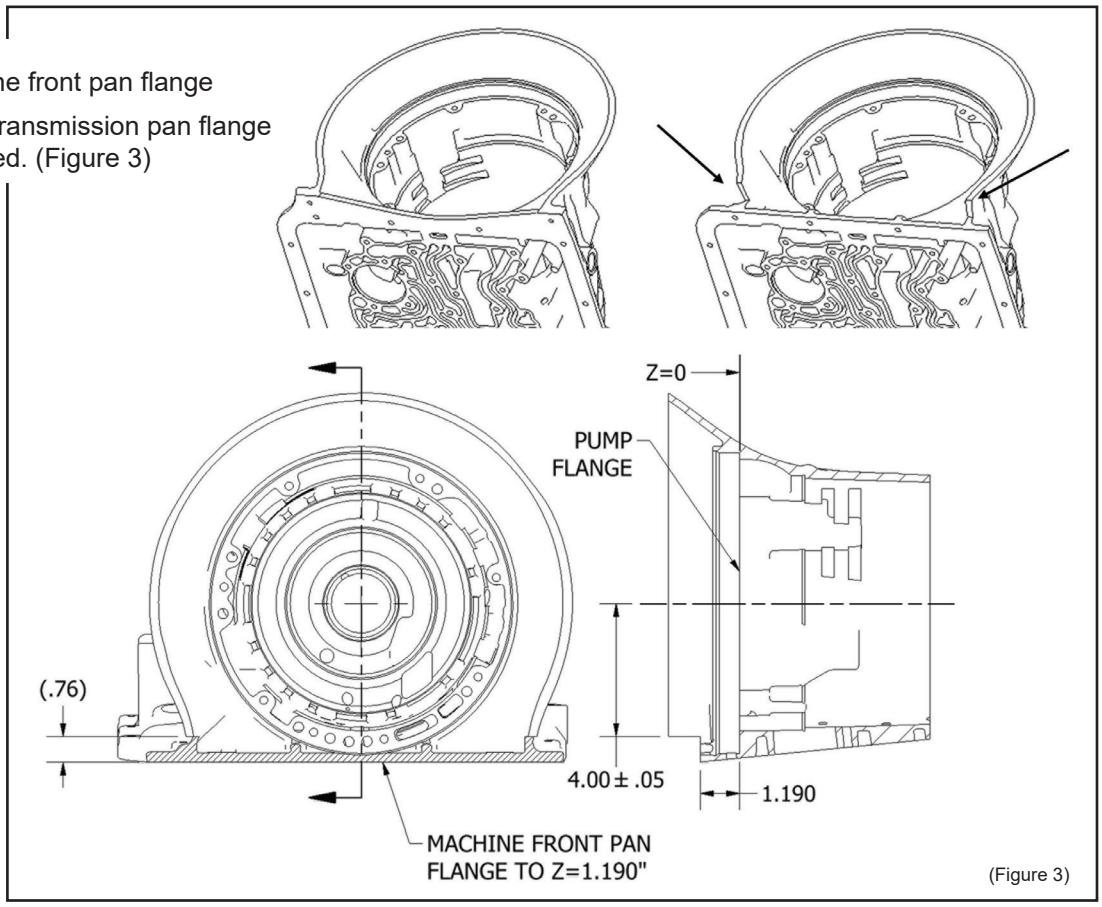
Mount the transmission case on the rear machined surface of the case. Zero X, Y, & Z on the pump mount surfaces. Rotate the OEM transmission case to make the pan mounting surface parallel with the X axis of the milling machine. (Figure 2)



(Figure 2)

Step 3. Machine front pan flange

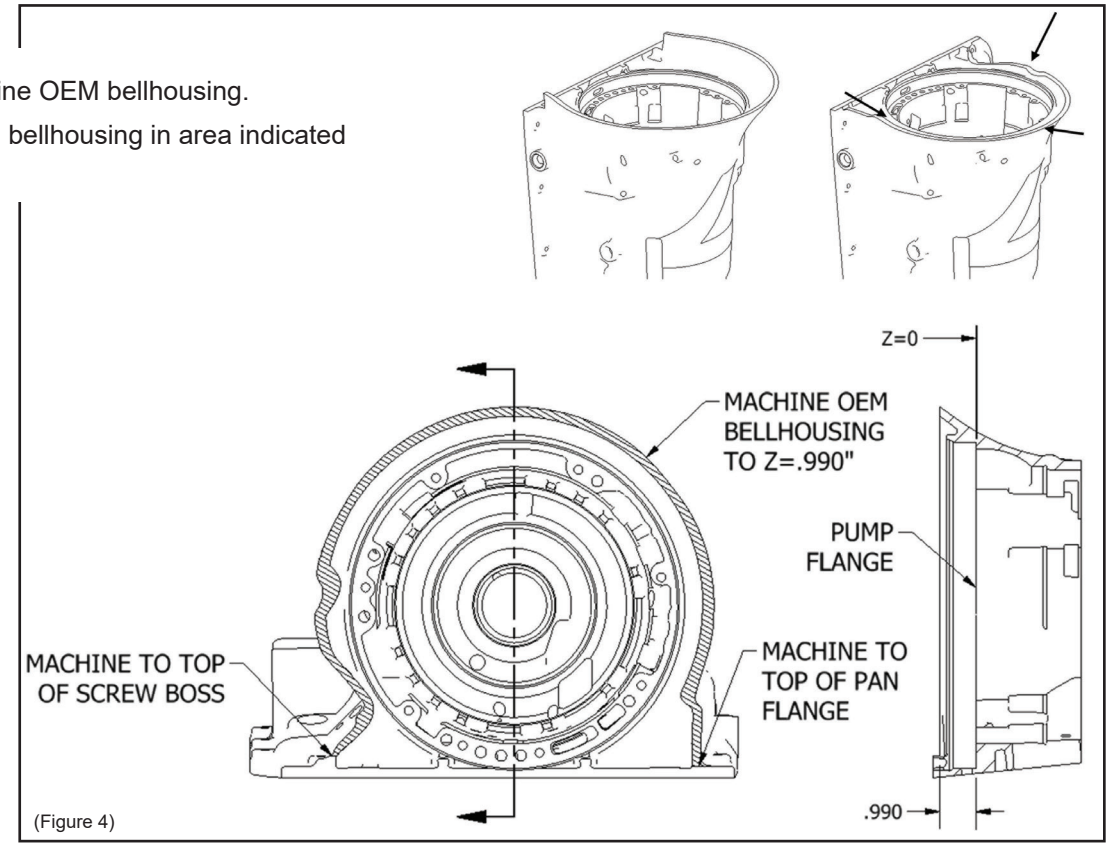
Trim the front transmission pan flange in area indicated. (Figure 3)



(Figure 3)

Step 4. Machine OEM bellhousing.

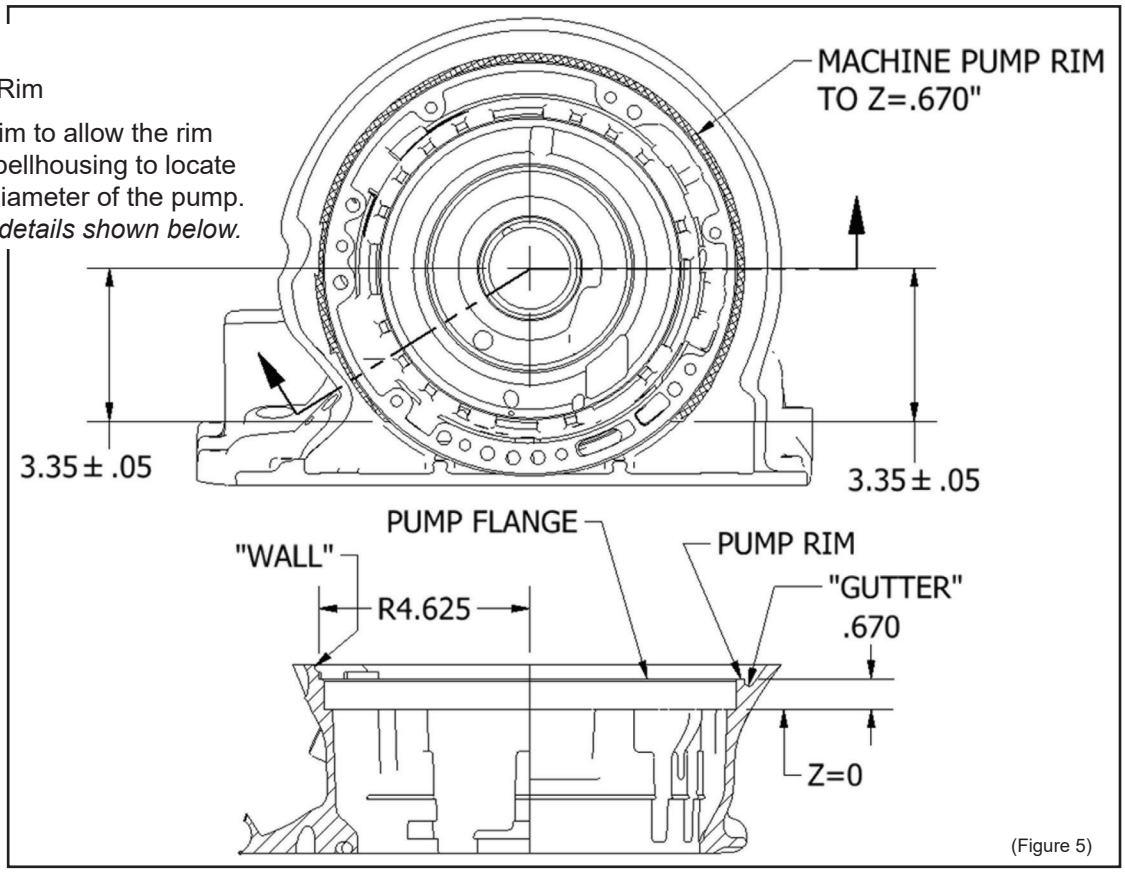
Trim the OEM bellhousing in area indicated (Figure 4).



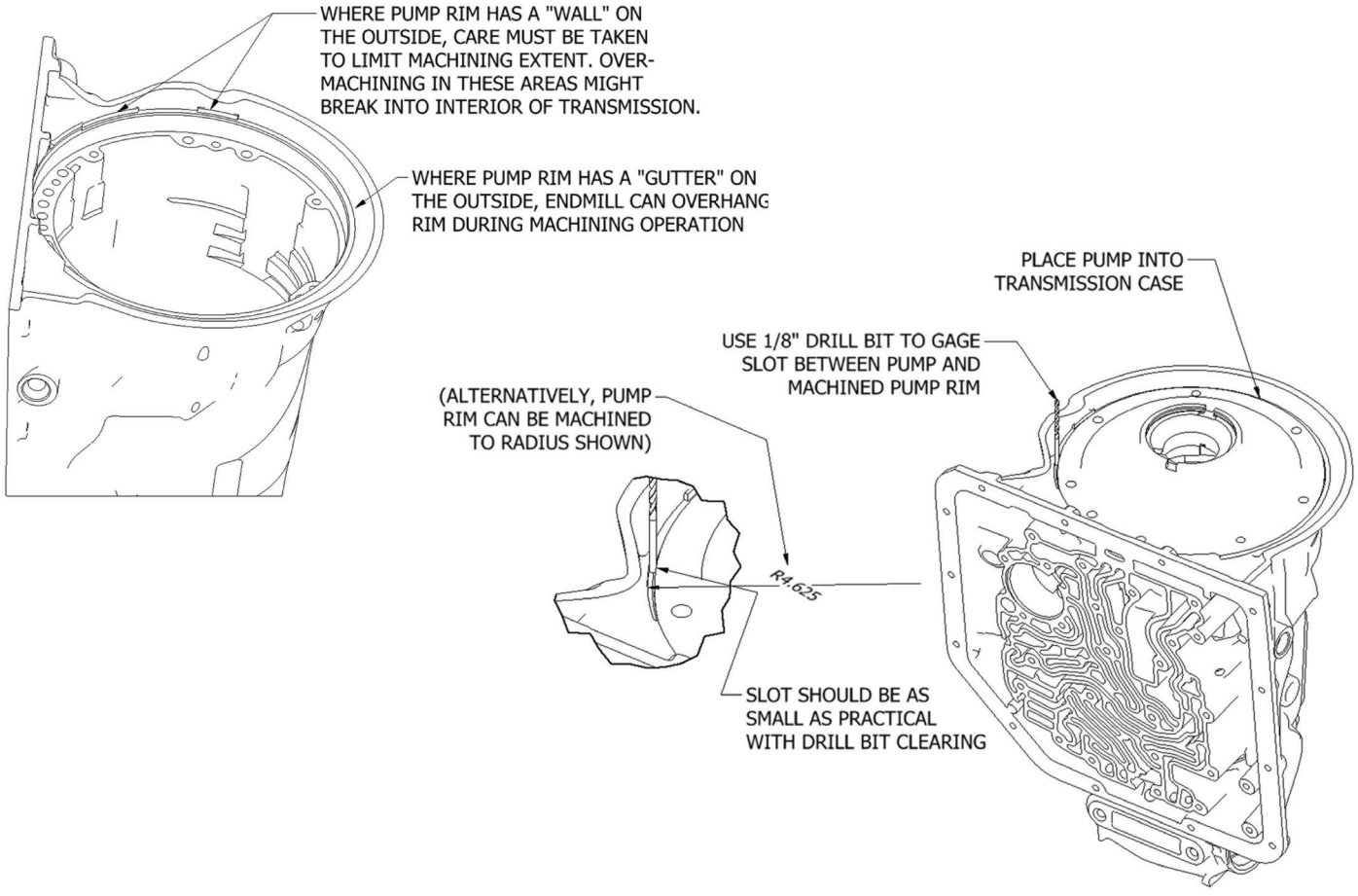
(Figure 4)

Step 5.
Machine Pump Rim

Trim the pump rim to allow the rim on the direct fit bellhousing to locate on the outside diameter of the pump. (Figure 5) *Note details shown below.*

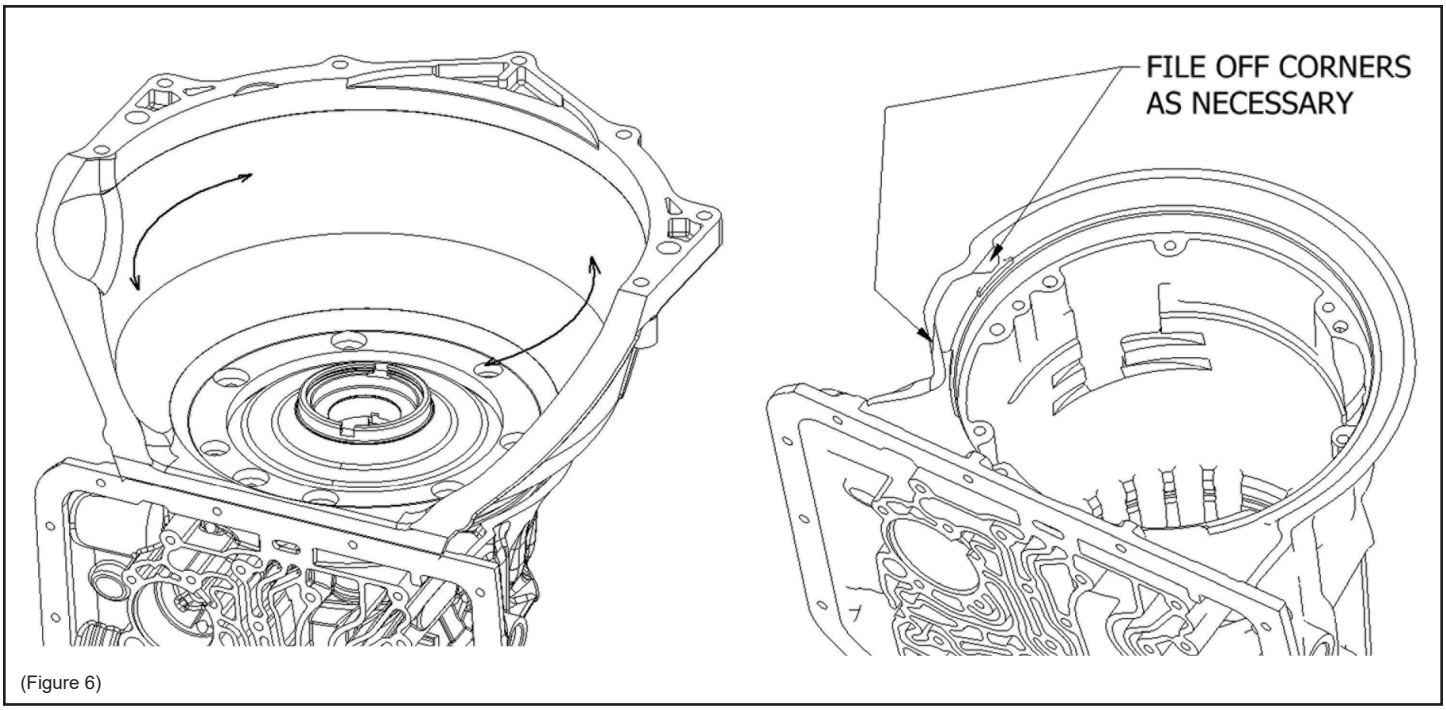


(Figure 5)



Step 6. Trial Fit Bellhousing

Place pump in transmission case. Place bellhousing on pump. Bellhousing should only contact outer rim and face of pump. Bellhousing should be able to rotate a few degrees in each direction. Any areas of contact between the transmission case and the bellhousing should be filed off to generate the necessary clearance. (Figure 6)



(Figure 6)