

Difficult Bell Housing Restoration

By Tom Endy 2025

The beginning of a restoration of a very rough looking bell housing salvaged from the trash heap. Note the professional certified weld repair to the clutch release lever. Also note the locking pin on the pedal shaft. The bell housing showed signs of considerable service. The housing bushing on the clutch release lever side was worn clear through. It also showed signs of having been overhauled at some time in the past..



This will be a challenging restoration. The clutch release shaft had to be sawed off in order to remove it. A pusher-outer tool had to be used in order to remove the pedal shaft. The pedal shaft was not a proper shaft, and it was bent. The bell housing was impacted with dried grease and dirt. Clean up before bead blasting was a lengthy process.



This is the clutch release lever after it was sawed off and bead blasted. The lever had cracked at the retaining pin hole. The Ford part number stamped on the side is A7511C2. The strange looking bolt used as a locking pin has a 3/8 square head with a hole through it.



The bell housing has been de-greased and is ready for bead blasting. Another era repair: apparently the pedal shaft was replaced in the past and a hole was drilled on the opposite side of the housing and lined up with the pedal shaft so that a punch could be inserted to drive the shaft out. A very clever idea, Henry should have put an access hole there for the that very purpose. On the other hand he would rather sell you a new one than have you repair the old one.



This is the tool I used to remove the pedal shaft. I made it years ago, it is crude but it works.

The pin securing the pedal shaft from the beginning of production until 1931 had a dome shaped head on the outside and was peened over on the inside. The best way to remove it, that I have found, is to knock the dome head off with a chisel and drive the pin out toward the inside. Best to avoid ever drilling the pin out.

Once the pin is out, the trick is to drive the shaft itself out and it can be in there very tight. There is no room inside the bell housing to swing a hammer, so any punch used has to attack the shaft at an angle through the throw-out bearing access window and if the shaft is in there tight it may not come out.

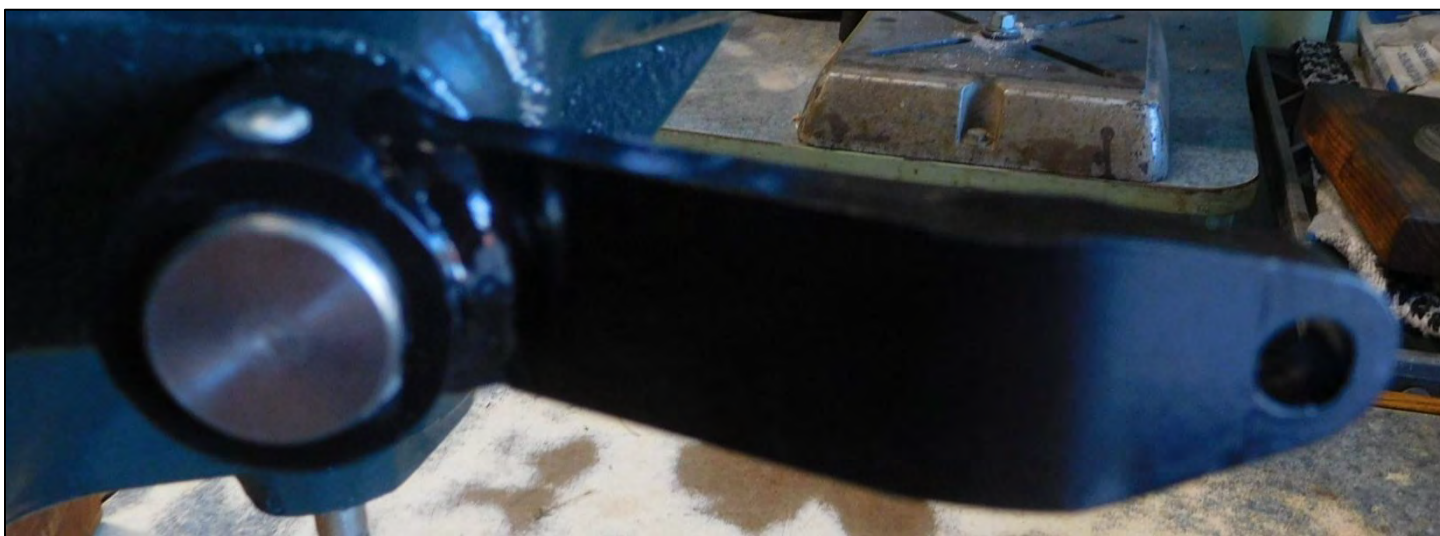
The tool is bolted to the bell housing using the four bolt holes where the transmission mounts. Once the tool is in place the large bolt is turned with a wrench and it easily pushes the shaft out.



The bell housing has been bead blasted inside and out to bare metal and looks like it did in Henry's Model A plant back in the era before it was painted. The next step is to paint it ford green.



The bell housing has been painted, the outside Ford green and the inside with a clear coat. It is now ready to have all the required parts installed. The parts will all come from Bratton's Antique Auto.



An aftermarket clutch lever was installed. It is slightly longer for better pedal leverage and is not prone to cracking at the mounting hole. A much better option than the original. **Bratton part number 11270, \$40.50**

Everything needed to complete the rebuild:

Bratton's Antique Auto Parts, Inc.

1606 Back Acre Circle
Mount Airy, MD 21771

Phone: 301-253-1929

Order Desk: 800-255-1929 FAX: 800-774-1930 or 301-253-4326

Date:

Ship to:

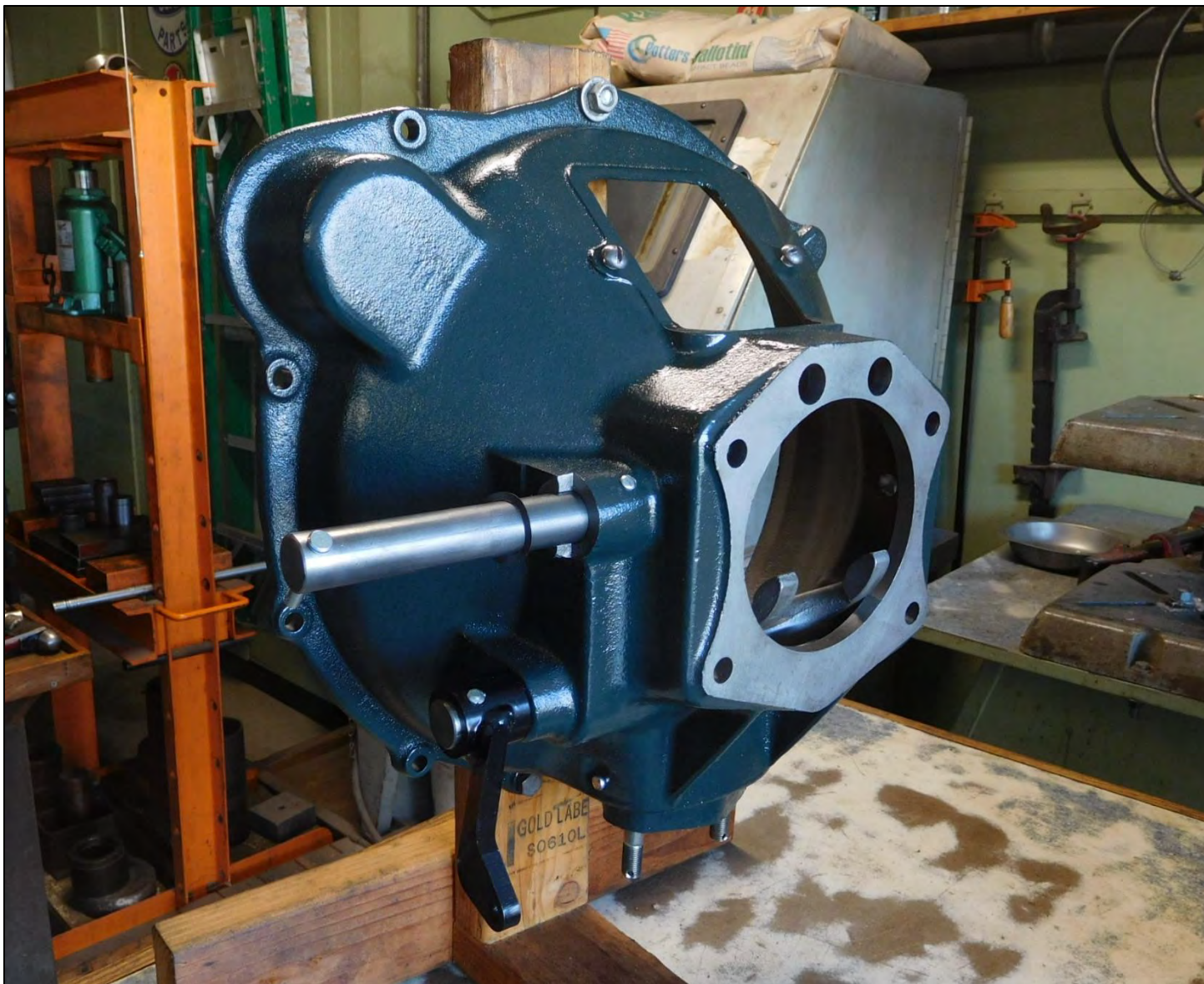
Please indicate method of payment:

<u>Qty</u>	<u>Part Number</u>	<u>Description of Item</u>	<u>Price Per Each</u>
1	11150	pedal shaft set	\$13.45
1	11230	clutch shaft set	\$12.00
1	11270	clutch lever (aftermarket)	\$40.50
1	4640	radius rod bolts	\$9.25\pair
1	4620	radius rod felt	\$2.10
1	4660	radius rod pin	\$1.95

The three radius rod parts are actually part of the front wishbone assembly. It is a good idea to install them in the bell housing while it is on a work bench rather than when it is installed in a car. I include them in all bell housing rebuilds.



New front wishbone bolts, felt, and pin installed along with a new clutch release shaft and housing bushings.



The pedal shaft has been installed.

The finished product. Good for another 100 years: