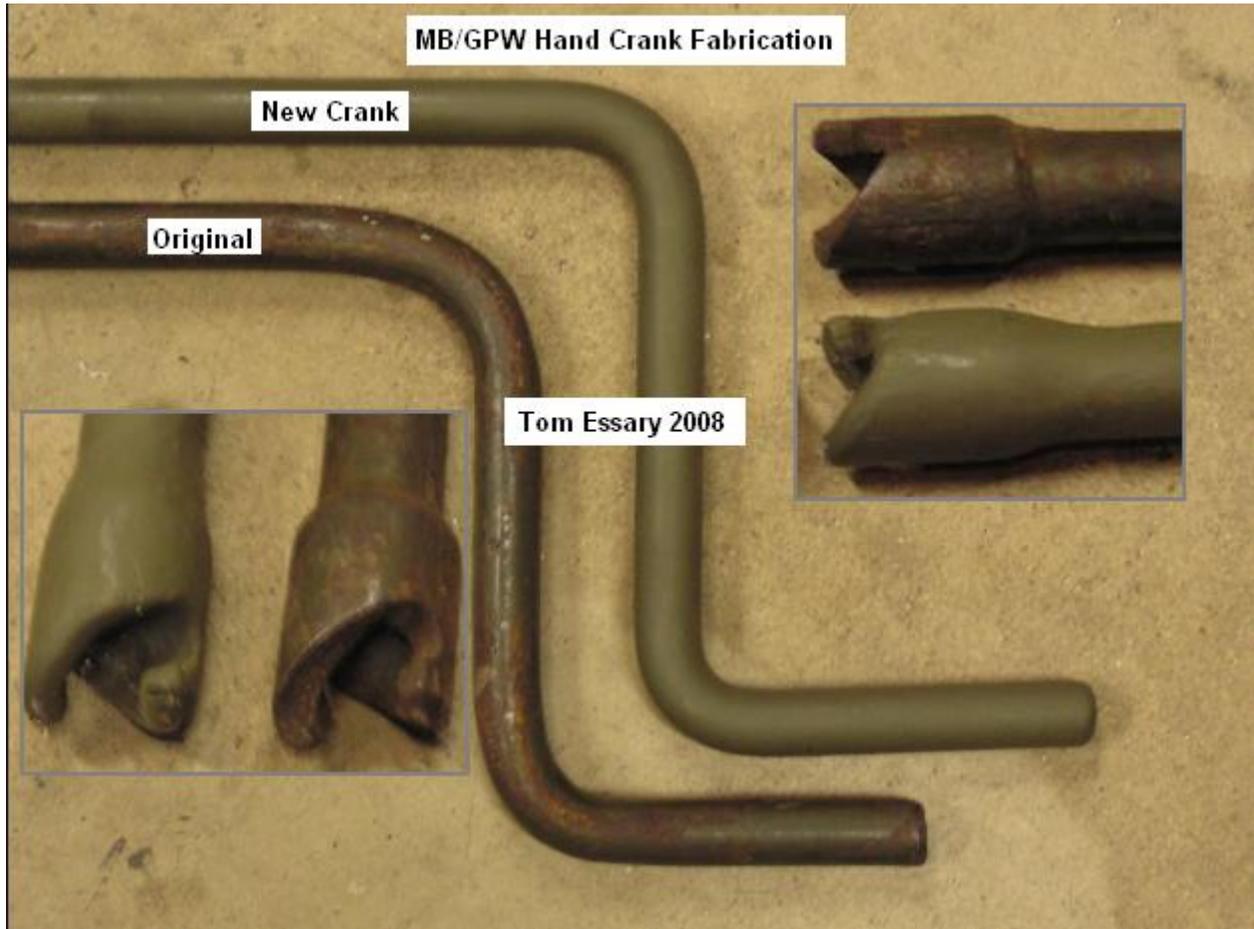


Making a World War II Jeep Hand Crank

The slot across a “factory” jeep crank handle is offset so that the sides of the slot contact the crank pin parallel. This fabrication does not drill the holes on a tangent so the leading edge of the hole is parallel to the crank pin. The hole is drilled through the center of the stock along a diameter, not offset as the original. It is almost indiscernible. If you have an original to copy ... you can make the holes offset.



Materials

- 1" dia. x 1.5" Solid Round Bar, Mild Steel
- 3/4" dia. x 34.75" Solid Round Bar, Mild Steel

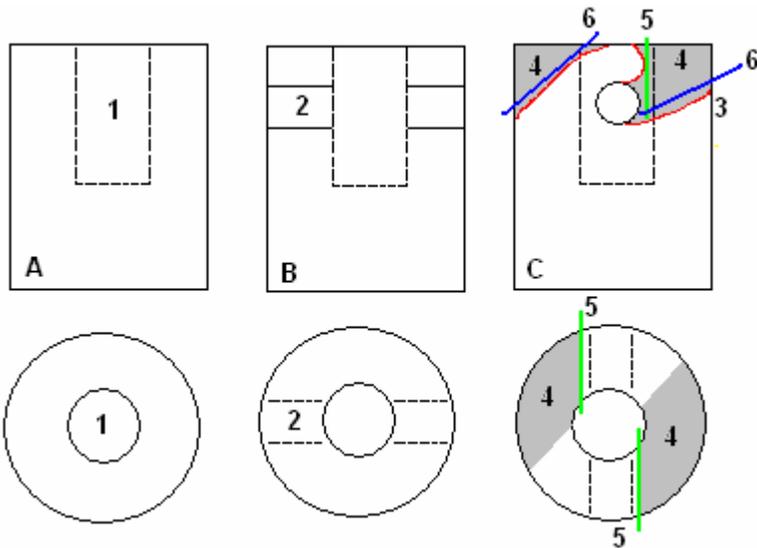
The head of the crank is made from 1" round mild steel. Start with a reasonably long section, say 6" and cut it to length after the machining is complete. This is mostly done because I do a great deal of the work by hand and the extra length provides for a “built in” handle, as it were. This comes from my blacksmith background ... as a long handle keeps the heat further away.

Making a World War II Jeep Hand Crank



View of the finished hand crank head.
The ink pen showing where the crank pin would go.

Detail for cutting the "head"



1. Drill 1/2" Hole
2. Drill 3/8" Hole
3. Mark Sides for the Teeth
4. Area to be removed (waste)
5. Cuts to get started.
6. Cuts to remove a great deal of the waste.

Making a World War II Jeep Hand Crank

Drill a 1/2" hole about 3/4" deep centered in one end. At about 3/4" from the drilled end, drill a 3/8" hole through from the side (ink pen in the pictures).

Draw the rough outline of the area to remove to make the "teeth". Make the first cut on one side, down to near your line and be careful not to cut any on the opposite side of the 1/2" hole. See Green Line in the drawing. I used a port-a-band to rough out the "teeth" and cleaned them up with a sanding disk and Dremel type tool. Cut the new head off at 1.5".

Check several times that the crank pin will not hang on the new teeth. If the pin hangs up in the hand crank and the engine starts ... look out ... the hand crank will be spin around wildly. Remember not to wrap your thumb around the hand crank.

Next weld the head to a mild steel 3/4" round handle. I tapered (chamfered) the end of the handle at about a 30 degree angle to give good penetration. The two parts are placed in a piece of long angle iron fastened in a vise etc. The handle is raised 1/16" on the two sides of the angle iron to center on the head. Tack weld the two pieces and check alignment. Ensure that the two are centered and straight. Complete the weld in short segments rotating often to prevent local heat warping. Dress up the weld with a fine sanding disk etc.

Heat the handle and bend to for the crank end. The first bend is 25.25" from the tip of the crank to the center of the bend. The next bend is 6.5" center to center. The "grip" is 4.5" center to the end of the handle. I used a 2" pipe as a mandrel for the bend radius. Paint it and start your engine! I started with a much longer piece than needed and cut it to final length after making the two bends.

The first time I used mine, the engine started in less than one full revolution of the hand crank.

Many thanks to Jesse Minton – VP of the Arrowhead MVPA for loaning me his original hand crank to copy.

"Tom and Laurie Essary live in Arlington TX and are in the Arrowhead MVPA, Arkansas Travelers and the MVPA. They have spent 5 months reviving 1943 GPW-I00709. Tom can be reached at tom "AT" ad5zo.com See ad5zo.com for more info about the jeep restoration etc. Tom spent about 8 years in the US Navy as an ET3 and LTjg. He served as the Damage Control Assistant (DCA) on the USS Luce DDG-38 in '85 and '86."*