

Viking Belt Buckle Feb 2014 SOFA Meeting Demo

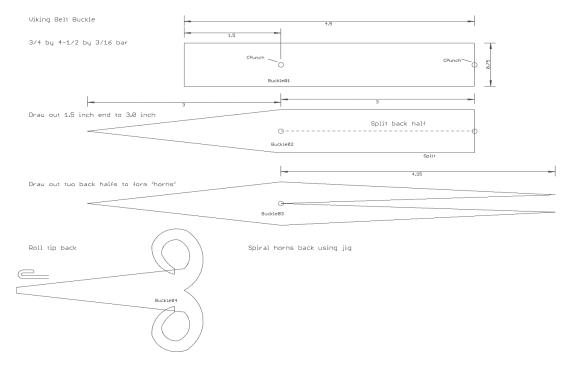
By Chip Brown (transcribed by Tom Wulf)

Stock: 3/16" X 3/4" (X 4 1/2") Leave on bar! (Large) These directions are for a large buckle.

3/16" X 1/2" (X 4 1/2") Leave on bar! (Small)

You can make a small or large buckle. These directions are for the large buckle. Initially leave the buckle on the bar and just work the end.

0 – Using *Blacksmith Braille* (use a prick punch to mark critical dimensions for the project that you will use as references as you forge it) mark a point 1 1/2" from the end and again 4 1/2" from the end. The 1 1/2" section will be tapered down from the mark to double its length this will be the hook/prong for the buckle. The other mark is where you will cut off the piece for the buckle. The 3" section will become the 'horns' of the buckle. See diagram by Bill Pollack.





1- Draw out the $1\ 1/2"$ end to a point being careful not to fish lip the end. The very end of the point will be the tongue and the prong of the buckle that penetrates the leather (about 1/16" wide). The taper will double the length of this section from $1\ 1/2"$ to 3" so the total length is 6" (although it is still on the end of the bar.)

2 – To give the buckle a rustic hand-forged look which is more popular to customers, facet the edges of the tapered section by hammering a chamfer on the outside edges of the top only. (Alternatively, you can use the peen to scallop the edges for a different effect.)

2 – Now cut the bar at the other marked point. If you are mass producing the buckles, work down the bar and repeat these steps for each buckle. (The piece will now be 6" long.

3 – Scribe a line down the center of the piece from the cut end to the 1st mark. This will be 3" long. Because the taper often exceeds the mark, you can use a pair of dividers from both sides to better eyeball the line. You want the line in the center as you will be cutting it to form the two 'horns' and you want them to be the same thickness (and length).

Cut the bar from the cut end to the mark along the scribed line. You can do this with a chisel but using a band saw especially if you are mass producing the buckles will be faster.





4 – Make a convenience bend to spread the horns out to form a Y shape so you can work them separately. Use the hardy cut to start the split and complete it on the edge of the anvil. The piece will want to distort and fold. Prevent this by returning it flat on the anvil face and straighten it.

5 – Now taper the two horns. Start by pointing the ends of the horns to avoid fish lips. This will take several heats. Work carefully to keep the horns the same length. Use a metal rule. The taper will make

them from 3 3/4 " to 4 1/2" long. You can experiment with the style of the buckle here. Refer to the diagram.

6 – Facet/chamfer the edges of the horns but this time, do both sides not just the top as you did for the other end of the buckle. (Alternatively, do not facet the horns. Leave them square and twist them like for a ram's head. Not shown.)

7 – Make a very small scroll on the very tip of the horns. Be sure to bend this scroll towards the inside. (Note not shown in the diagram. Refer to photo below.)



8 – Now bring the horns back together so the tips of the scrolled ends meet forming a small heart like shape. If the horns are not the same length adjust them. (You can do this by driving the tips straight down on the anvil face carefully to even them.) Note that here in the photo they have not been adjusted yet.

9 – Now use a bending jig to bend the horns out from the center of the bar. The jig will insure that the horns are symmetrical which is very tricky to do by hand. (Jig: vertical post of required bend diameter (about 1" for the large belt) with small adjacent peg to hold the end of the horn when you bend it.)



10 – Return to the tapered and bend the very tip over the anvil edge to form the prong of the buckle. This will penetrate the punched hole in the leather belt. It will be about 1/16" wide and should be long enough to pass just through the belt leather. Too short and it will mess up the leather. Too long and it will scratch the tip of the leather below. (Note that on the Viking belt, the end is under the buckle so it does not flap like on a Square Buckle belt. Similar to a mechanics or machinists belt.)



11 – The buckle is now complete but flat. Use a swage block or the widest part of the anvil horn to put a slight curve across the entire length of the buckle. The prong is on the concave side of the curve, the front outside face of the buckle is on the convex side.



12 - Chip does not finish his buckles. As long as they are not stored wet, the oils from being handled are enough. (But of course, you can do the finish of your choice.)

Notes:

- Chip mentioned that 1/8" thick stock is too thin and 1/4" too thick.
- Chip uses an oblong rather than round punch for the prong holes in the belt, this should fit the prong width.

• The buckle is fitted to the belt through two parallel oblong punched holes that are perpendicular to the length of the belt and about 1/2" apart and are sized to the width of the tapered end. If the fit is tight, you can wet the leather while inserting it. For safety, fit the buckle in loosely and then catch the prong over the edge of a table or anvil and tug the belt to pull the buckle into place. (Chip mentioned that he once took a nick out of his finger before he figured out this safer technique!)