## PAYNE BROS CUSTOM KNIVES KNIFE MAKING INSTRUCTIONS

Please take note! Make at your own risk ... wear appropriate safety equipment!

Take it slow; don't rush yourself with making your knife. It is going to take some time. Read ALL instructions first! Pay attention to the helpful hints, they will help avoid a headache.

Tools suggested: Clamps, ballping hammer, Scroll saw, Drill, drill bits, 5/32 & 5/16 drill bit (for male/female rivets), belt sander, Dremel type tool for high speed sanding.

Additional materials required: 5 minute Epoxy, wood finish, and duct tape

- 1. First, protect your finished blade. Cover your blade and anything else you don't want scratched, with some good duct tape.
- 2. If your blade has two small holes, these are pilot holes, you will need to drill them out for the appropriate size pins you are using (most kits are 1/8 inch). We have found that if you use a cobalt bit, with a little oil, it works out great.
- 3. Make a straight edge at the top of the wood blank you will be using.
- 4. Mark the nicest side of your two pieces of wood with an "O"
- 5. Attach one side of the wood blank to the blade with a clamp. Make sure the "O" side is facing out and the straight edge you just made sits tightly against the bolster (brass fitting) or if no bolster, where you want the handle to end.
- 6. Using the correct drill bit size use the holes in the blade as a guide to continue through the handle material. Repeat this step with the second piece of wood on the other side.
- 7. Using the pins, put one wood side on. Trace the outline of the blade handle onto the wood. Do this for the other side.
- 8. Using a scroll saw, cut the wood to shape on both pieces of wood. \*helpful hint: the closer you cut now, the less sanding you have later, but be sure NOT to go over the line, this will leave you with no wood on the handle.
- 9. Dry fit the wood handles to the steel handle. Measure the thickness. For the pins provided, it should not be more than <sup>3</sup>/<sub>4</sub> of an inch (one inch for pins). If it is more, you need to take down the thickness of your wood. Be sure to take it down on the NON-"O" side so that there is no need to re-drill the head holes. If using wood provided by us, it should be at the correct thickness.
- 10. Using 5 minute epoxy, mix enough to cover both sides of the blade handle (about the size of a nickel).
- 11. Brush the mixed epoxy on both sides of the handle.
- 12. I know I said to take it slow, but you need to hurry with this one. Place both wood pieces on the steel handle ("O" facing out).
- 13. Insert both sets of pins. Just slide the pins through the handle material blade and other side. Try to get some epoxy on the pin as you do this.
- 14. Clamp down the wood to the steel. Tighten the clamps to allow that excess epoxy to come out. I personally use four clamps around each knife to avoid any gaps.
- 15. Allow to cure for thirty minutes.

## PAYNE BROS CUSTOM KNIVES KNIFE MAKING INSTRUCTIONS

- 16. Using a Dremel type tool with a sander, drum sander, and /or belt sander start to sand down around the edges so that the wood takes on the shape of the handle. Be sure to sand down the steel handle that is sandwiched in between the wood. Lay the flat part ("O" side) on a belt sander. This will give a flat, even surface, and sands the metal heads flat. Sand down the pins flat. Be sure not to heat up the pins to the point that it burns the wood.
- 17. Sand down the corners so that it feels good in the hand (rounded) including near the bolster. \*Helpful hint: Use a rounding router bit to really take it down quick.
- 18. Using sandpaper, sand the handle completely. I use the following grits: 100, 150, 220, 320, steel wool 00, steel wool 0000. \*Helpful hint: the marks in the metal will come out increasing the number of grit. It takes time, and it takes work, but it will happen.
- 19. FINISH ... there are many ways to put a finish on your knife. I will give you two ways.

EPOXY FINISH (high shine, makes a hard shell around the knife, brings out the colors)

- 1. 20 minute epoxy. Mix enough epoxy to cover the knife. Brush the handle (including the sandwiched steel) with the mixed epoxy. Less is better, but be sure to cover it all. (This is available for purchase at www.knivesofpayne.com) \*Helpful hint: As it dries it may form a drip at its lowest point. Be sure to pay attention to this and wipe it away with your brush. This should only happen in the first ten or fifteen minutes. The lines from the brush will go away if you don't touch it after ten or fifteen minutes of drying.
- 2. Let dry for at least 12 hours. \*Helpful hint: I hang mine from the blade with some duct tape on a closet rod. Read the instructions on the epoxy! Mine requires it to be above 70 degrees ... if it isn't, it never cures and is tacky. If this happens to you sand the knife down to wood again.
- 3. After 12 hours lightly sand down with 320 grit sandpaper. Apply second coat paying attention to a nice even thin layer. This is the final coat. Again pay attention to the drip that will form.

## HAND POLISH FINISH

Continue to work up the grit number (sandpaper) prior to using the steel wool. You can get into the Ultra fine 1000's. This will give the wood a super fine polished look.

Apply finishing oil to the wood. This can be obtained from a wood turning supply store. It water proofs the handle and gives it a nice shine. You can also use Tru-oil (gun stock finish), a poly spray, but do something so that it is a little water resistant.

Buffing wheel.

We often use some Danish oil on the wood and then put it on a three part buffing wheel.

And you are done! We would LOVE to see your finished knife. Please post it to our Facebook page and let us know what you thought. If you have questions, please send us an e-mail paynebrosknives@gmail.com. Knife sheaths are available; please contact us if you are interested www.knivesofpayne.com.

We have a YOUTUBE channel with videos of us making knives in the shop. Look for Knives of Payne

WWW.KNIVESOFPAYNE.COM WWW.CRAFTSOFPAYNE.COM WWW.WOODSOFPAYNE.COM