

Woodturning Tip Dec. 2009

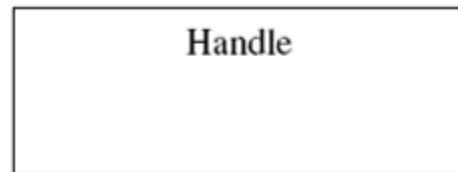
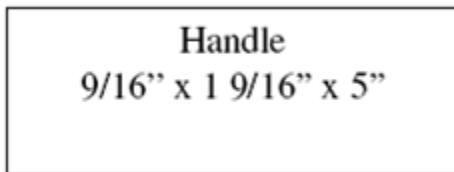
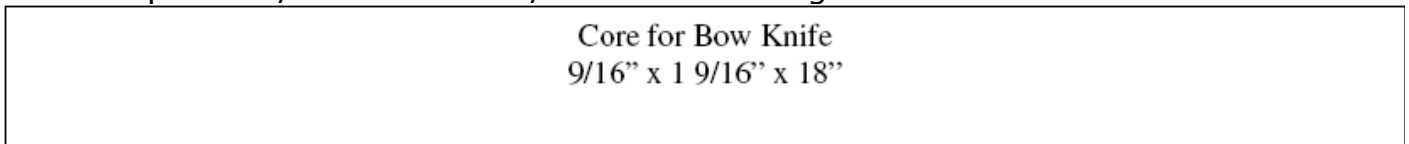
Make a Bow Knife

It's sure great to be back in the shop again. After several weeks of not being able to stand in front of the lathe for more that a couple of minutes before having to push a hernia back in, it's been wonderful to be turning with no discomfort. Apparently I had more problems that at first thought. They did a triple repair. Just before Thanksgiving. Everything is great now.

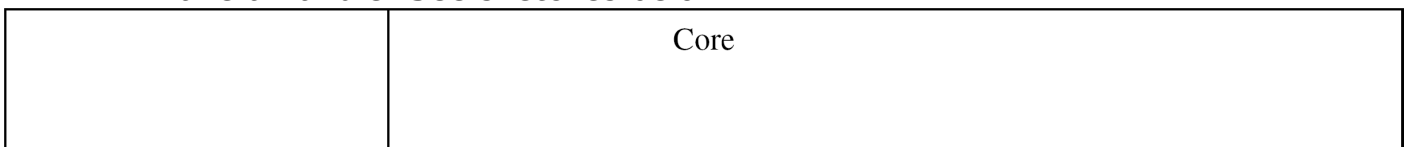
My first turning was finishing up some bow knives. Since they are easy to make and are great gifts, my tip this month will be on how I make them. I did a craft show Nov. 7th and sold all my inventory of bow knives and had orders for more. The last two years my crafts did exceptionally well at the local craft show. I think this economy has folks really liking hand/custom made crafts for gifts. Bow knives are great for slicing homemade bread.

The knife blades are available at Craft Supplies for \$5.99 each plus shipping, (P/N 425-0150). It comes with screws and a blade guard.
The wood is scrap hanging around the shop.

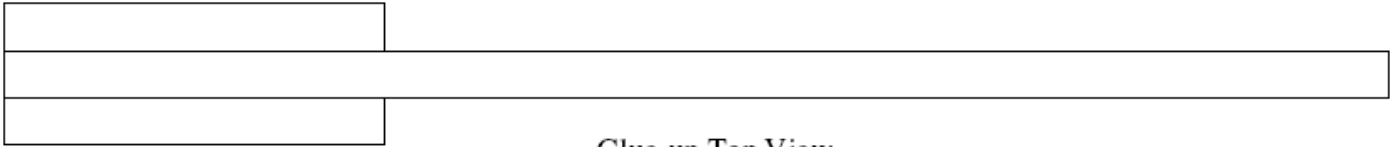
1. Start with one piece of wood 9/16" thick x 1 9/16 wide x 18" long and two pieces 9/16" thick x 1 9/16 wide x 5" long as shown below.



2. The shorter pieces are glued onto both sides of one end of the long piece to make a handle. See sketches below.

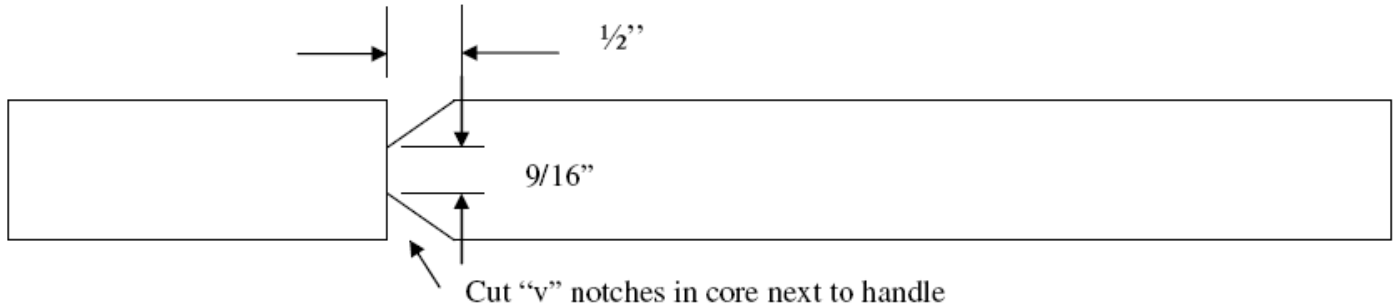


Glue-up Side View

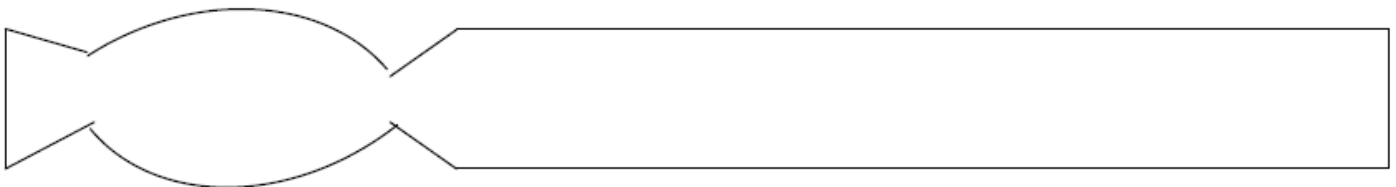


Glue-up Top View

3. Cut a "v" shape next to the handle as shown in the sketch. This will help prevent tear out of the knife shank when turning the handle. See sketch below.

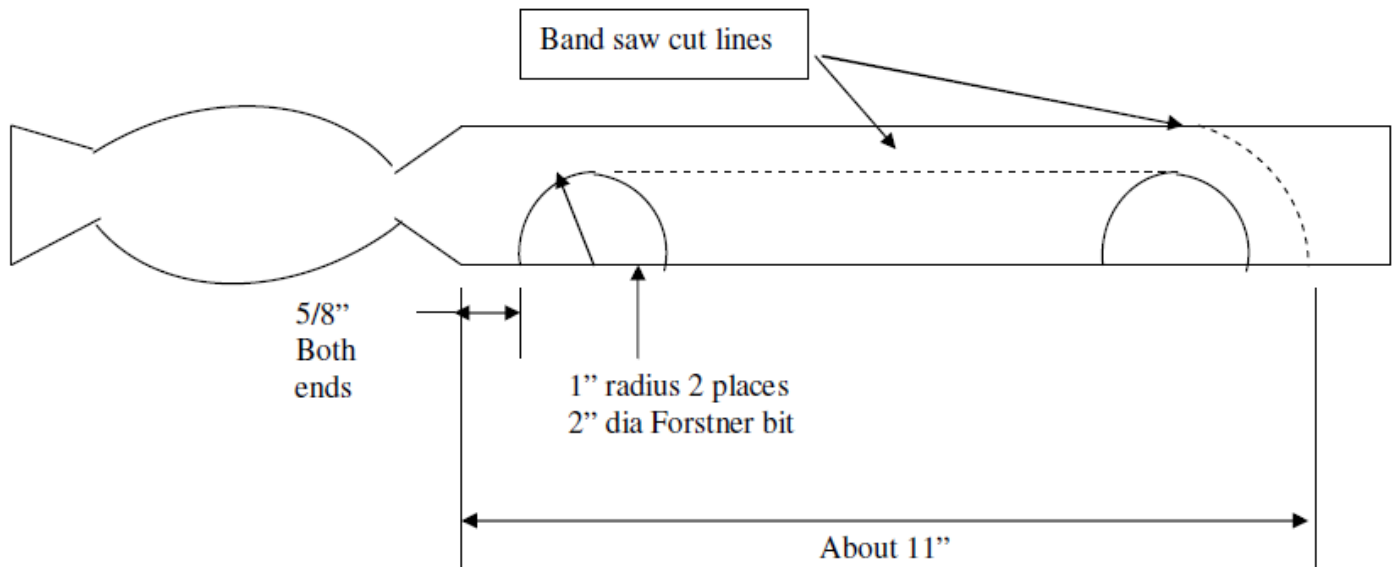


4. Center the glue-up on the lathe handle end to the tail stock and turn the handle to your desired shape. Since "I" have large hands my first handles were too large for those with smaller hands. I learned. I sand the handle while on the lathe as well as hand sand the "v" slot next to the handle for a nice appearance.



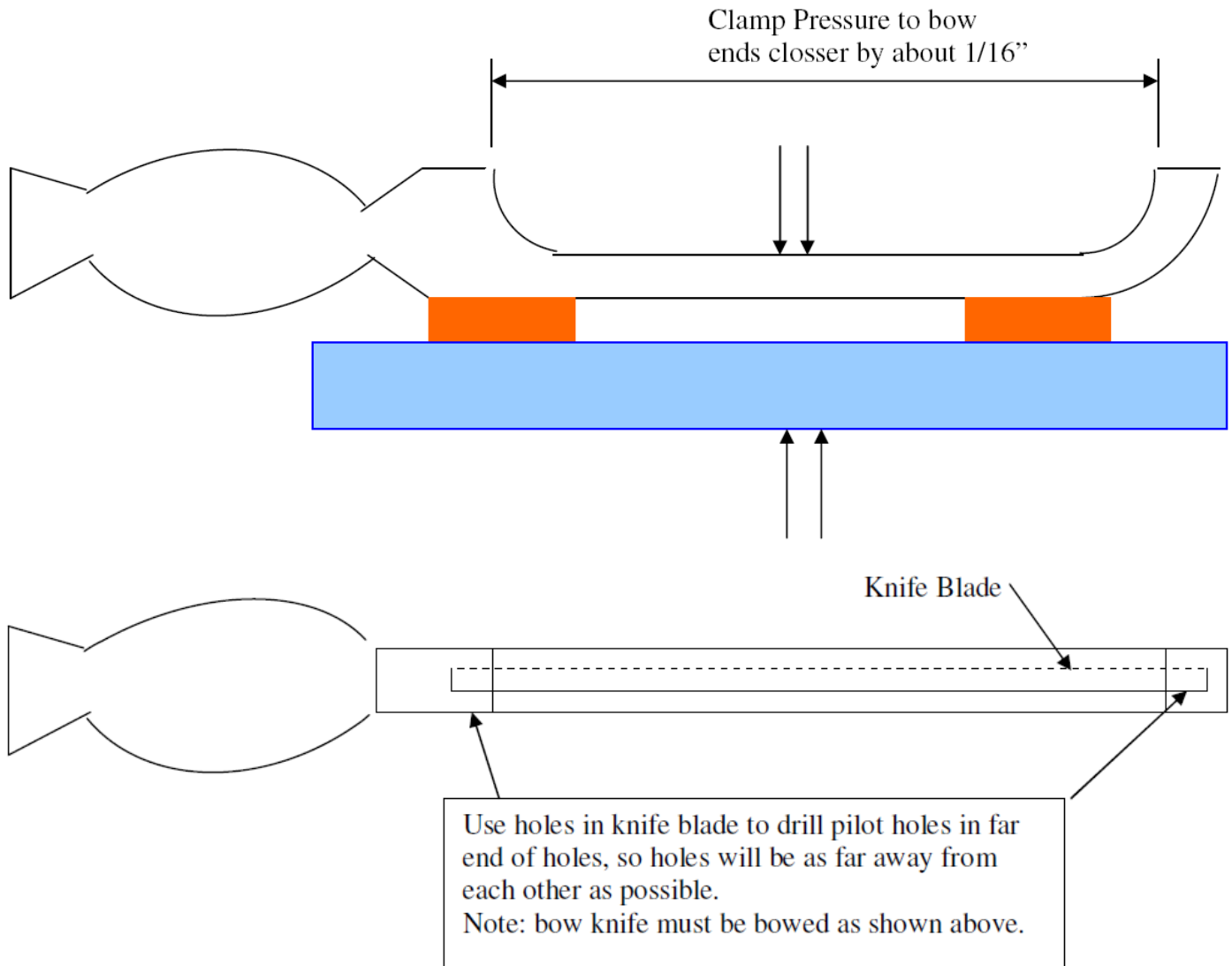
Bow Knife with turned handle

- Cut out the space needed for the knife blade as shown in the diagram. I made a drill press jig to make the job easier. (See photo.) Start by drilling 2 holes halves spaced 8" apart using a 2" dia. Forstner bit. Then I cut the wood out between the 1/2 holes with a band saw. I also round the tip end of the bow knife with the band saw. See sketch below.



- Sand the knife to 220 grit, rounding all edges a bit. I do it in a wood vise.
- Next I cut the tail stock end of the handle off and sand the end smooth.

8. Now it's time to mount the blade. It's important to have the blade under tension. I made a jig that I can take to the craft shows so that I can remount blades as required for left or right handed use. (See Photo). All that is required is to have the bow ends bent closer to each other when mounting the blade with the included screws. This can be done with a couple of blocks of wood at either end with a clamp holding the knife down in the center of the bow area. The screw pilot holes should be at the far ends of the holes in the knife. When the bow knife is released from the bent in position the blade will be in tension. See sketch below.



Your choice of finish. Don't try to apply a finish with the blade is place.. It is very, very sharp. Keep the blade guard in place. I usually apply the finish before installing the knife blade

Enjoy the fruits of your labor with a fresh slice of home made bread.

Use your imagination, there is an endless variety of wood choices and handle shapes.
MOST of all HAVE FUN!

Photos:

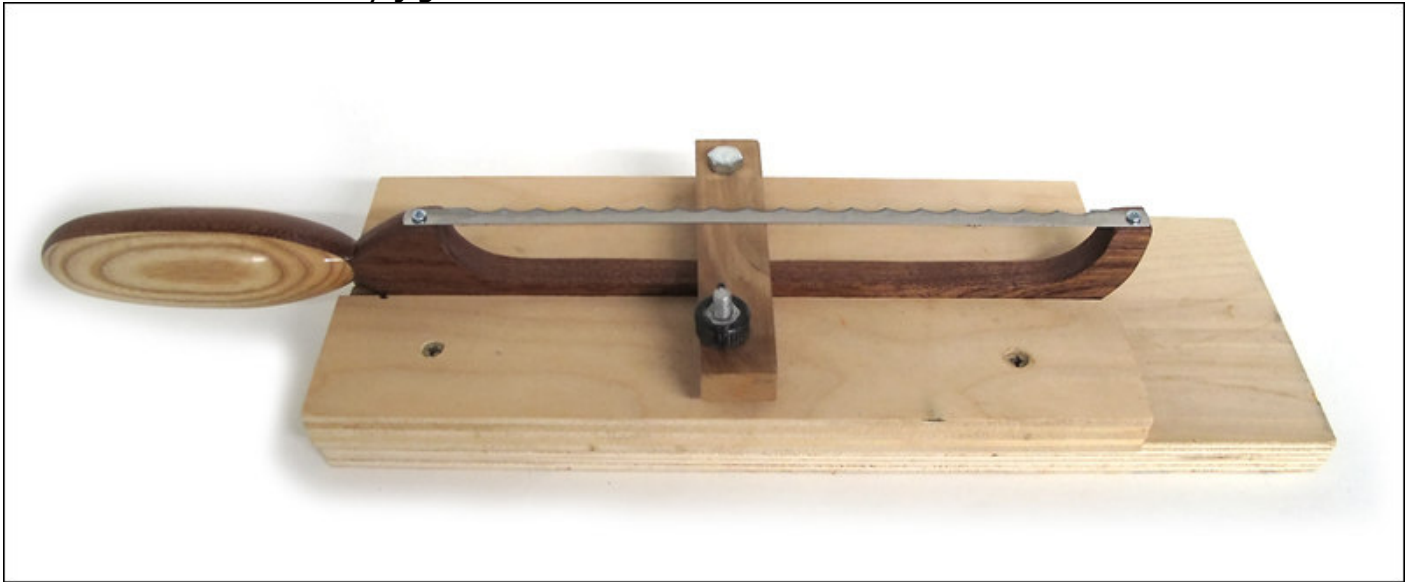
Knife blank parts:



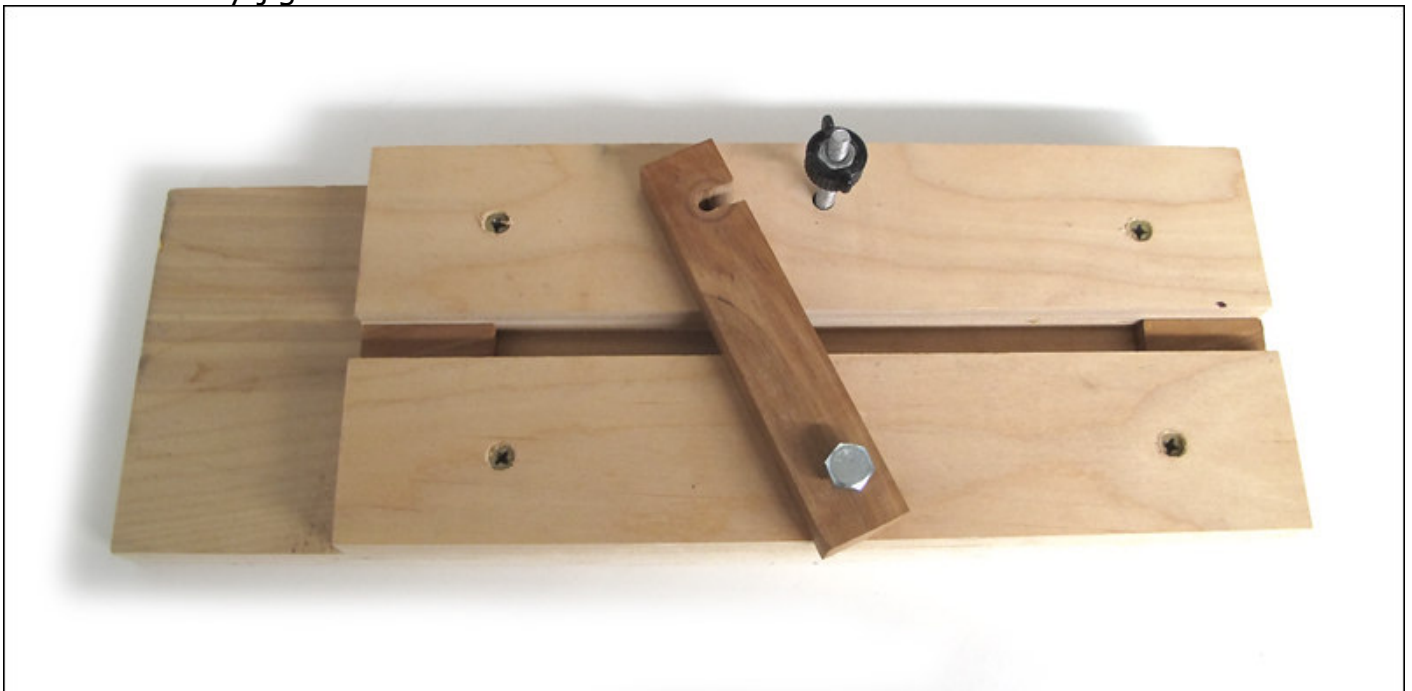
Turned knife in drill jig:



Knife in blade assembly jig:



Knife assembly jig:



Finished Bow Knives: Sapele with Ash handle and Tiger Maple with Zebrawood handle.

Note: They are the same size, apparent size difference is camera perspective.

