

william wood-write

Shotgun shell key ring instructions



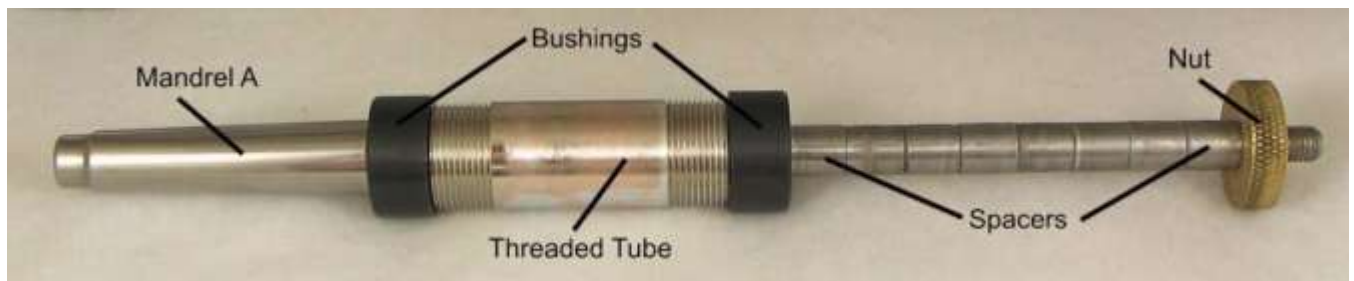
Needed:

Mandrel A, drill 18 mm,
bushing 27A, wood size 1" x 1"

Preparing the blank

1. Cut the blank slightly longer than the length of the tube so you can square the ends off once the tube has been glued in. Only one blank is required for this kit.
2. Drill through the center lengthwise with 18 mm drill. We recommend that you pre-drill the hole with a smaller bit (e.g. 10 mm) to prevent blow out of the blank.
3. Scuff up the tube with sandpaper to clean off the oxidation and give the glue a better adhesion surface.
4. Plug the ends of the tube with base plate wax or other material of your choice to keep the glue from getting into the tube. Push the tube ends into a thin section of the material to form a plug.
5. Wipe the outside of the tube clean after plugging with acetone or alcohol.
6. With a micrometer measure the inside diameter of the tube. One end is slightly larger than the other. Use the larger end for the end cap (the part that presses into the tube). If you try to press the end cap into the smaller end it will be too tight.
7. **Place a coating of petroleum jelly on the threads of only one end of the tube (end with smaller inside tube diameter).** Be careful to only put it on the threaded portion of the tube and only on one end. This keeps the blank from adhering to the threaded portion on that end. Mark this end of the tube – this will be parted off later.
8. Prepare your glue. We recommend two part epoxy but you can use other types of glue as well.
9. Roll the tube in the epoxy but try not to get glue into the lubricated threads.
10. Insert the tube, **non-lubricated end first**, into the blank using a twisting motion.
11. When the glue has cured, use a hobby knife to remove the plugs from the ends
12. Square off the ends of the blanks until you can see the tube. STOP at this point. This can be done with the proper jig and a disk sander.

Turning the blank



1. Assemble the blank and bushings on the mandrel following the diagram above.
2. Tighten the tailstock and lightly tighten the nut that holds the blanks. You may use spacers to give you more room between the thumbnut and the last bushing.
3. Turn the blank to the desired contour, using the bushings as a sizing guide.
4. Measure $\frac{1}{4}$ " from the end marked lubricated and mark or score a line.
5. Carefully cut a tenon all the way to the threaded portion of the tube. Be careful not to damage the threads. As you get close, the material should pull away from the threads easily.
6. Sand the surface in progressive steps until you get to 400 or 500 grit.
7. For a smooth finish, sand with Micro Mesh to 12,000 grit and use your choice of finish. Remove from the mandrel.

Assembling the parts



1. Press the key ring attachment into the end of the shot gun shell cap.
2. Attach the key ring
3. Press the end cap into the end of the tube that has no exposed threads.
4. Screw the top on the exposed threads.