Making Large Jump Rings

Technique/Reference Article

Have you ever needed large jump rings, 3/4ths of an inch and larger, for a project? You can buy longer screws for the coil holder for your jump ring cutter, but the larger the diameter of the coil the more unstable the process becomes as the rings are cut. One solution to the problem is to make a coil holder that holds the coil from the inside of the coil instead of from the outside.

Large Mandrels



I had a friend make a set of large mandrels on his wood lathe that fit in my winder, but just using dowels and hand winding the coil will also work.

Making a Large Coil Holder

This large coil holder holds the coil securely while it is being cut, without deforming the rings, and also holds the rings in place after they have been cut. The dimensions and screw sizes listed fit my Koil Kutter, but may need to be modified to fit other cutters.

Materials:

- ³/₄" diameter oak dowel
- 2-10-32 tee nuts
- 4 4x3/8" pan head Phillips screws

Tools required:

- Table saw
- Drill (or better yet, a drill press)
- 9/32" drill bit
- countersink drill bit
- 5/64" drill bit
- wood rasp

1. Cut a 15-16 inch length of dowel and rip it lengthwise to expose a flat surface the same width as the outside of the tee nuts.



2. Using the cover plate from your coil holder carefully mark the centers of the 2 holes on the round side of the dowel. Make sure the end of the cover plate is about 1/4" in from the end of the dowel so the edge of the tee nut will not extend beyond the end of the dowel



3. Drill the holes using a 9/32" drill bit.



4. Turn the dowel over, and on the flat side counter sink the holes to give a little "wiggle" room to adjust the tee nuts.



- 5. Insert the tee nuts into the holes from the flat side and attach the cover plate from your coil holder to the round side of the dowel with the socket head cap screws from the regular coil holder.
- 6. Snug the screws down to hold the cover plate securely. This will position and hold the tee nuts in the proper location. Turn the dowel over and drill pilot holes for the small screws to hold the tee nuts, and tighten the screws. You may need to file or grind the edge of the tee nuts flush with the edge of the dowel.
- 7. Turn the dowel in the side and mark where the little stop plate is on the bottom of the cover plate. Unscrew the cover plate and cut away enough material with the wood rasp to allow the cover plate to make full contact with the dowel.







Cutting Large Jump Rings

1. Carefully wind the wire on a large mandrel. Even with dead soft ware there will be significant spring back of the coil. Let the coil relax before cutting, otherwise there will be a large gap and the ring will be easy to deform when you close it.



2. Slide the coil onto the large coil holder to where it will almost be in contact with the stop plate on the bottom of the cover plate.



3. Apply a little burr life to the top of the coil. Attach the other end of the cover plate, and tighten the screws making sure the coil is against the stop plate.



4. Position the head of the Koil Kutter over the cover plate, turn it on, and move it to the left, cutting the jump rings. Make sure to have a good grip on both the large coil holder and the Koil Kutter as there will be some resistance from the wood against the blade.



5. Your large jump rings are now ready to use in your project.

