

Making Tube Sockets



I recently found I had several tubes and no sockets. Time to learn to make sockets. My first attempts were not very successful. The process worked but was not very good. This method works well and is easy enough.

I use 2 ounce fiberglass cloth for the socket in the fuse and .75 oz for the wings or stab. Use the tube as a mandrel for wrapping the cloth. Use about 3 wraps of the light cloth and 2 or 3 winds for the fuse piece. To determine the width of the wrapping, use the circumference formula $\pi * \text{diameter}$. For a 7/8" tube that is a little less than 2-1/2" per layer. Slow cure epoxy or, if you need it now, CA is used to harden the glass. I've never used CA.

I cut a piece of wax paper larger than the glass cloth to wrap around the tube to keep the lay-up from sticking to the tube. 2 wraps or a little more should be sufficient. Use Vaseline as a binder to keep the wax paper from unraveling. **DO NOT** put the Vaseline on the tube. Start wrapping the paper around the tube then put a line of Vaseline on the wax paper just as you complete your first wind and continue the wrap. Finally put another line of Vaseline on the paper just before you finish the wrap to bind the end. Now you have a tube with a couple of layers of wax paper that will not unwind and no Vaseline is on the tube or will be on the glass cloth when it is added. Cut your cloth to size then brush a little epoxy on the wax paper where the wax paper wrap ended. This allows the end of the cloth to start sticking to the wax paper. Wind the cloth around the tube in the same direction as the wax paper while brushing epoxy resin on the cloth until all cloth is saturated. Let it dry and the lay-up will easily slide off the tube. You can remove the wax paper if you wish and the tube will still be tight without any play.

Try to get a tight lay-up and don't worry about the end of the cloth fraying. Once the epoxy is dry, sand and you have a great socket.



Adding the last line of Vaseline to seal the end of the wax paper.



Brushing on the epoxy.



I use a roller cutter to cut the cloth. The cut will have clean edges without fraying. It comes from a fabric shop.



Letting the layup dry.