

WIRING STAINED GLASS LAMPS by Dale Grundon

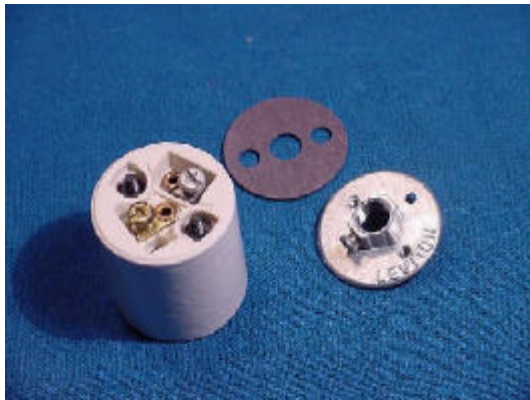
This paper will show the method to add the electrical portion to your stained glass lamp. If you do not feel comfortable working with electrical wiring, then I suggest you stop here and contact your local electrician.

This will deal mainly with the installation of items that would be used in a typical hanging lamp. At the end there are some comments that tie the same methods into the wiring of a floor or table lamp. Most often, unless you construct your own table bases as I do, the base you buy will already be wired and ready to use, but some day you may need to rewire an old lamp.

For hanging lamps the best type of socket is porcelain as these last a very long time. If you want to be able to turn on the lamp right at the lamp then you can use a brass socket with a pull chain or rotary switch.



The wire normally used is "Zip Cord" with a wire size of #18. In cases using multiple sockets it may be well to use #16 Zip Cord. The cord manufactured today always has a marking that differentiates the two wires. You can spot this on the outside of the insulation. One wire will have anywhere from one to three ribs on the insulation running the entire length. The other will be smooth all of its length. The one with the rib is the "common" wire and the smooth one is the "hot" wire.

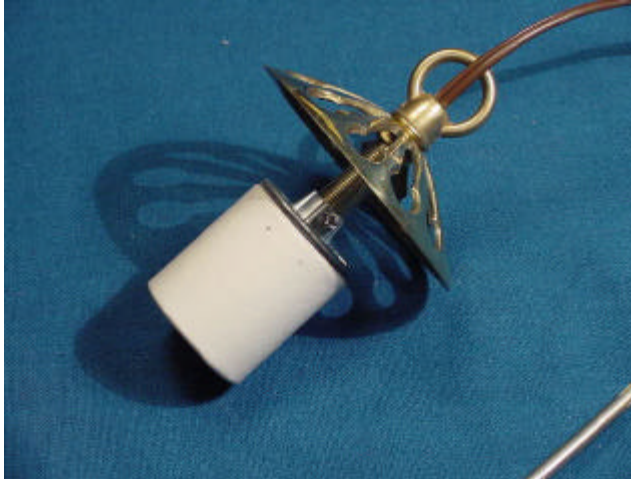


The porcelain socket has three pieces and may be disassembled by using the two screws that are inside the place where the light bulb is installed. **NEVER** work on wiring when the lamp cord is plugged into an a/c outlet. Once the socket is taken apart, notice the two screws that are on the back side of the socket. This is where the wires are attached. It is also the place where the rib marking on the common wire becomes important. The one screw is silver colored and the other has a brass color. The "common" ribbed wire connects to the silver screw. The smooth wire attaches to the brass "hot" connecting screw. The top piece is threaded to accept a 3/8" brass pipe and also has a screw that will be tightened to keep the socket from turning. When you reassemble the socket don't forget the pressed board insulator.



Here is the layout of the parts that would normally be used for a hanging lamp. The glass of the shade is not shown to provide clarity. Notice the 3/8" hex nut on the 3/8" brass pipe fitting. This will work in conjunction with the hanging eye at the top. Both are tightened to keep the socket from turning when you screw in a light bulb. The 3/8" brass pipe nipples are available in lengths of 1/2" increments. Shown is a 1-1/2".

You can use a longer length to have the light bulb further into the glass shade.



Here is the assembly when completed. When you are working on the assembly don't forget to thread the wire through each of the components. Otherwise, you will need to backtrack to complete project. The next step is to add the hanging chain in the desired length. The hanging loop and the 3/8" inch nut on the brass pipe are tightened to at this time. Also the screw on the top fitting of the socket is also tightened against the brass pipe. When that is done weave the wire through the chain for a neat installation.



The last step is to install the a/c plug on the wire. Notice that most plugs now are polarized having one blade wider than the other. When attaching the wire to the plug, the ribbed "common" wire is to go to the wider blade.



Here is a brass socket that could also be used in a hanging lamp. This version uses a pull chain, but is available with a turn switch or no switching at all. Notice the knot that is tied into the wire. This is done to prevent the wire from being pulled loose from the connections. Again the electrical connecting screws are color coded in silver for the ribbed "common" wire and in brass for the smooth "hot" wire.

This type of socket is the most common one used for table or floor lamps. Like the top part of the porcelain socket, this variety is threaded to accept

a 3/8" brass pipe and has a screw to be tightened against the pipe to retard turning of the socket.



Installation of the socket for a table or floor lamp is very similar to a hanging lamp, except a lamp harp assembly is installed. Here you can see that the sequence of parts is; the brass pipe at the top of the base with the harp attachment the then the socket base. After the wires is threaded from the bottom of the base through these components that same type knot is tied and the wires are then attached to the bulb unit. The last step it to slide the round pressed cardboard insulator and it's brass protector onto the attached bottom piece.