Part 4, Attachment 1. <u>Top Plate Assembly</u>

Wall of Sound.ca Tubelab DIY EL84 Amp

Tools Required:

-Screw drivers

-Hex keys

-Heat gun. (I have an ancient Weller that works well (har). Inexpensive alternatives are available on Amazon. Search: SMT rework stations.)

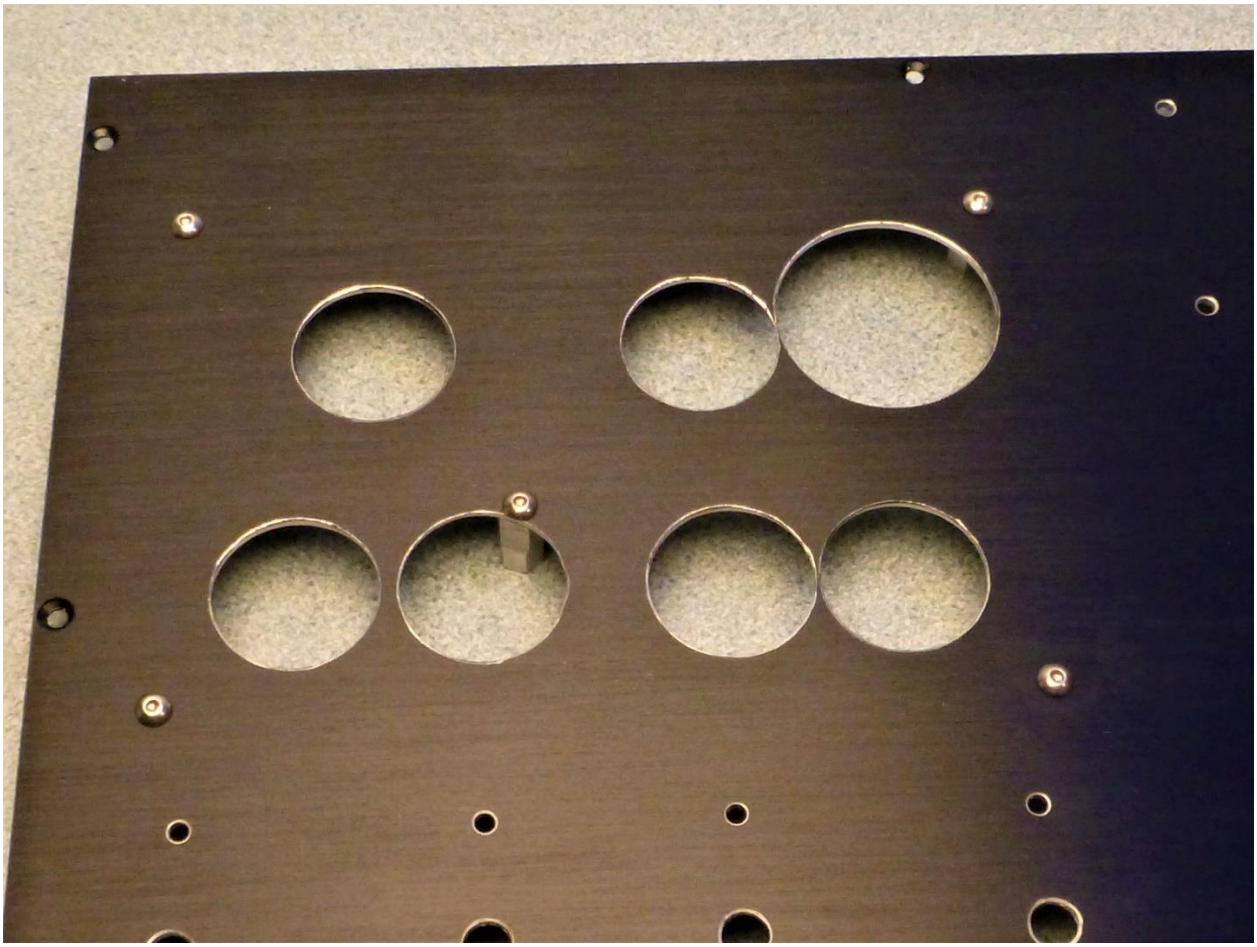
-Painter's tape

-Clear nail polish

- 5-minute epoxy

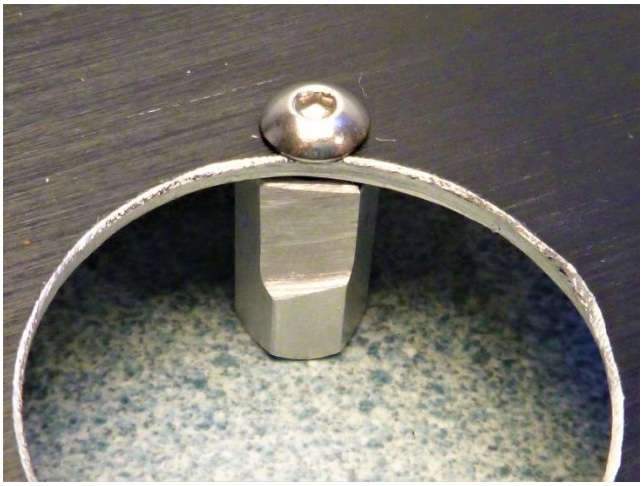
-Sandpaper 180 to 240 Grit

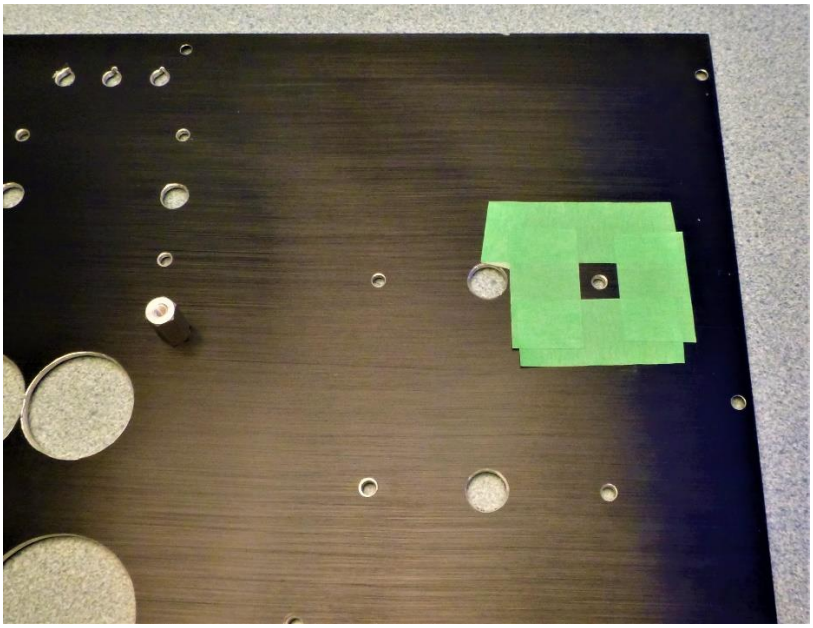
Apply clear nail polish to five 8-32 x 3/8" screws.



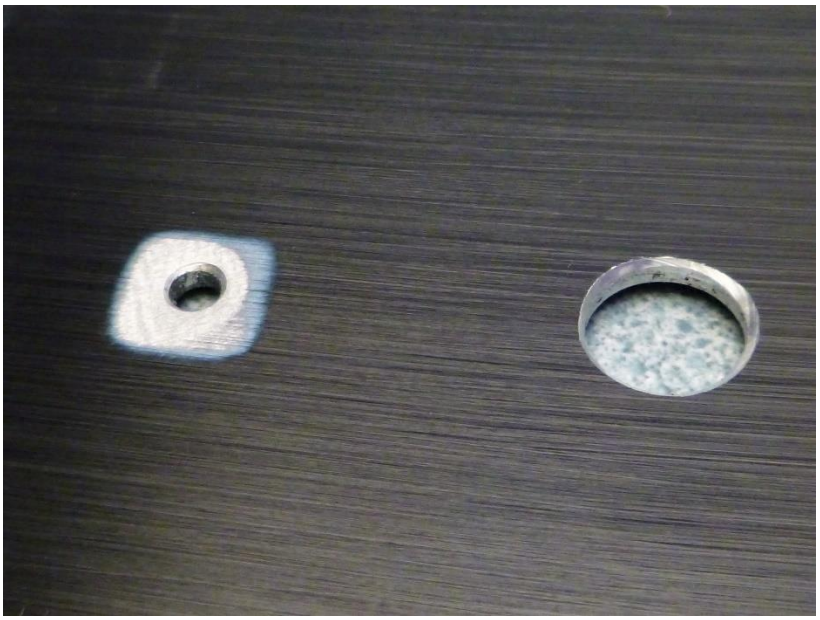
Assemble the screws and five 8-32 x ¾” spacers to the board locating positions.

Note: The spacer with the flat prepared earlier is located at the middle hole as shown above and below.

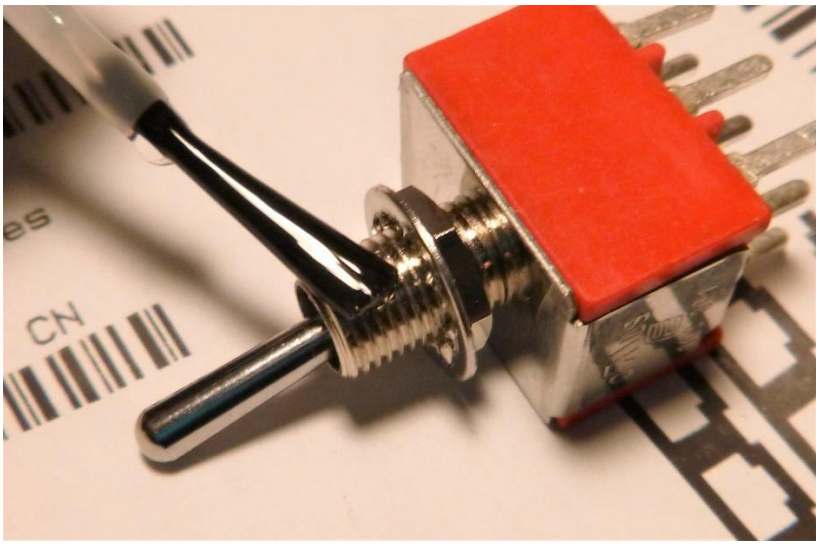




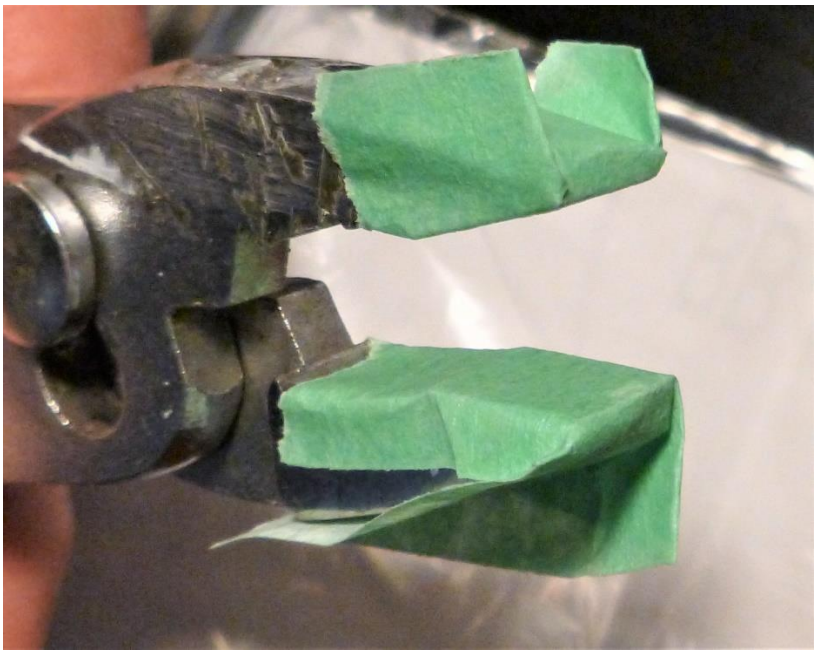
On the under-side of the top panel mask off a spot about 12mm (1/2”) square on the power transformer bolt hole as shown above.



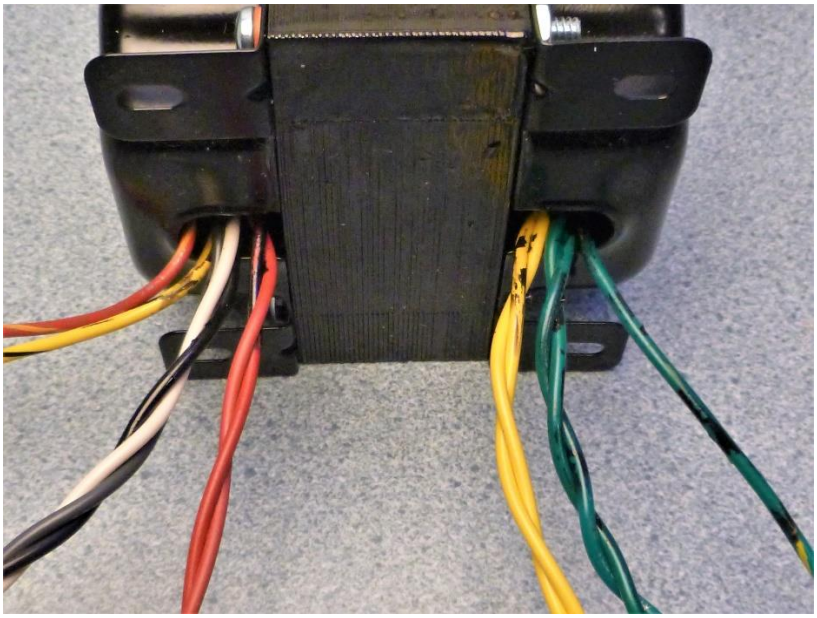
Sand through to bare metal, remove the tape and clean with solvent.



Prep the power switch as shown, apply nail polish to the thread, assemble to top panel and secure with a nut.



To avoid scratching the top surface apply a layer of tape to your pliers before tightening the nut.



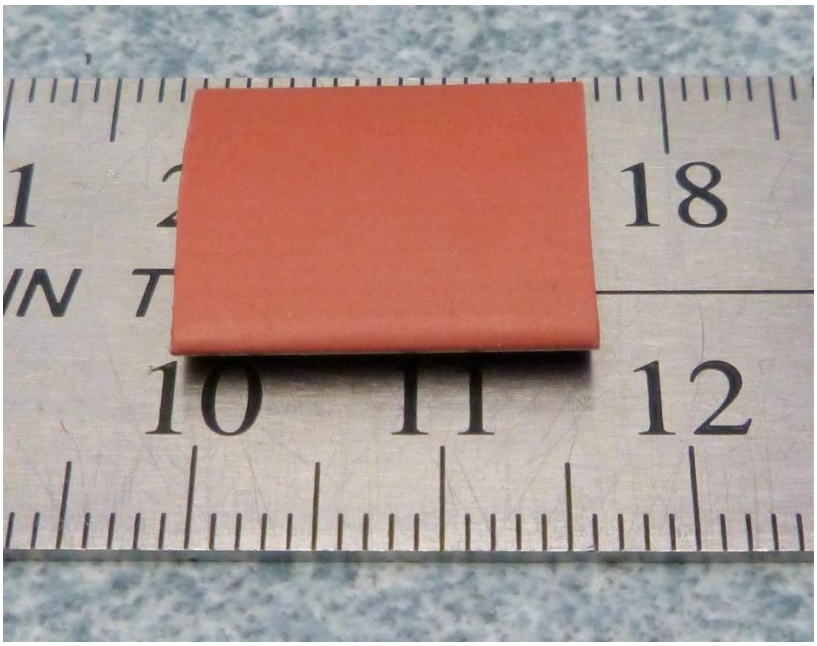
Locate the power transformer in the parts kit.

Twist the black, white and grey wires together.

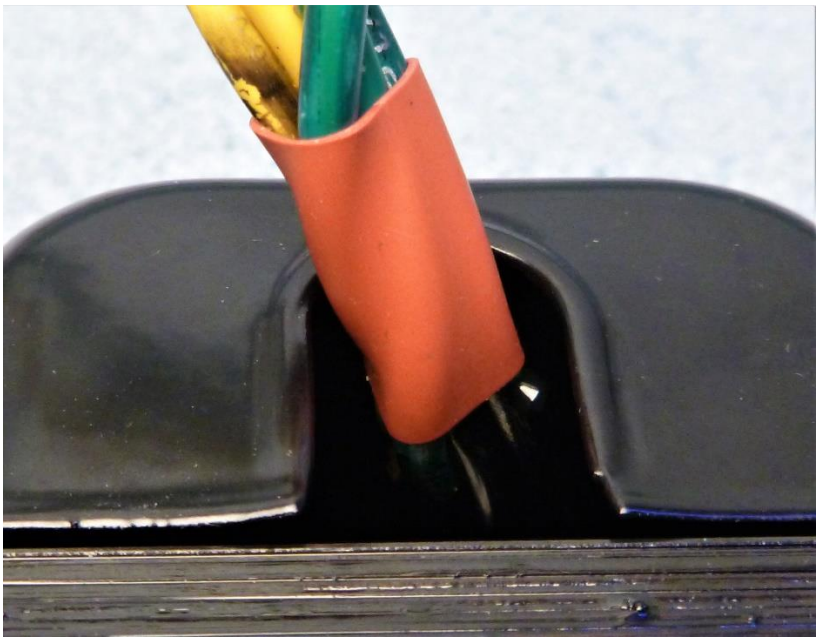
Twist the two solid red wires together (the red with yellow stripe is left singly).

Twist the two solid yellow wires together (the yellow with black stripe is left singly).

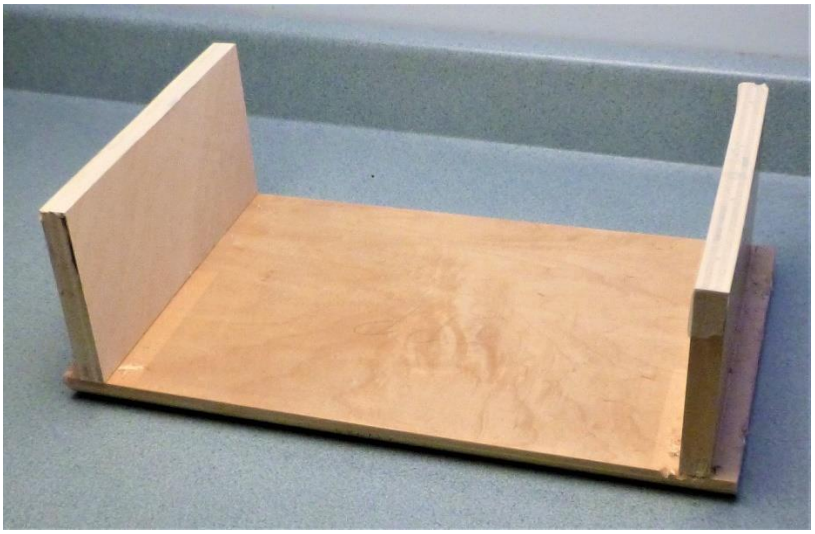
Twist the two solid green wires together (the green with yellow stripe is left singly).



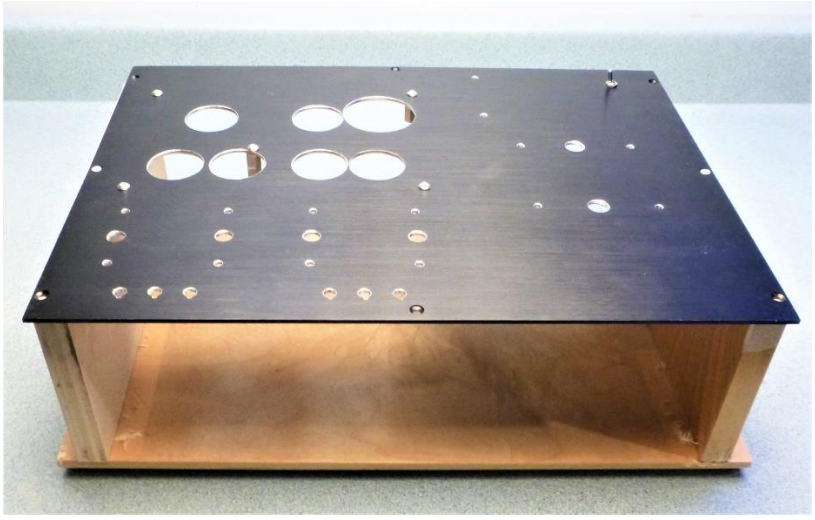
Cut two pieces of ½” shrink tubing about 19mm (3/4”) long.



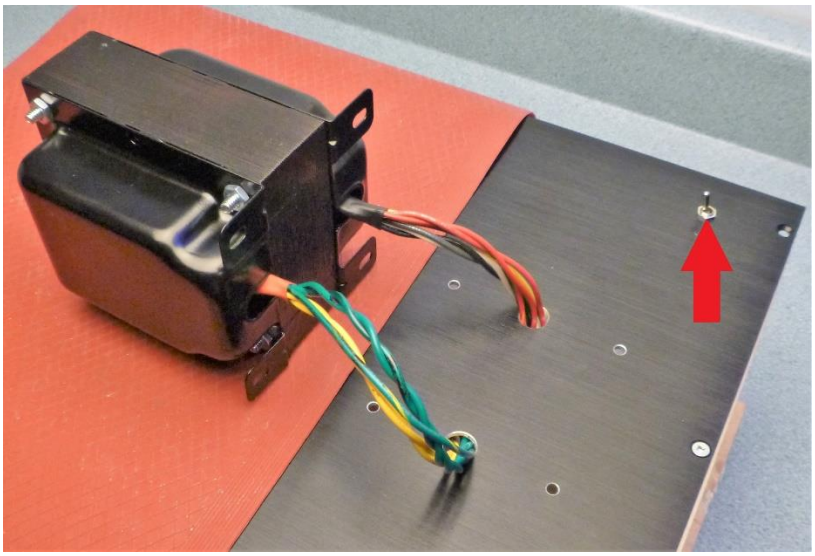
Slide the two pieces of shrink tube over the wires from the power trannie, one at each end. The tubing should go up inside the trannie a bit as shown above. Heat shrink both. The shrink tubing helps protect the wires from chafing on the chassis holes.



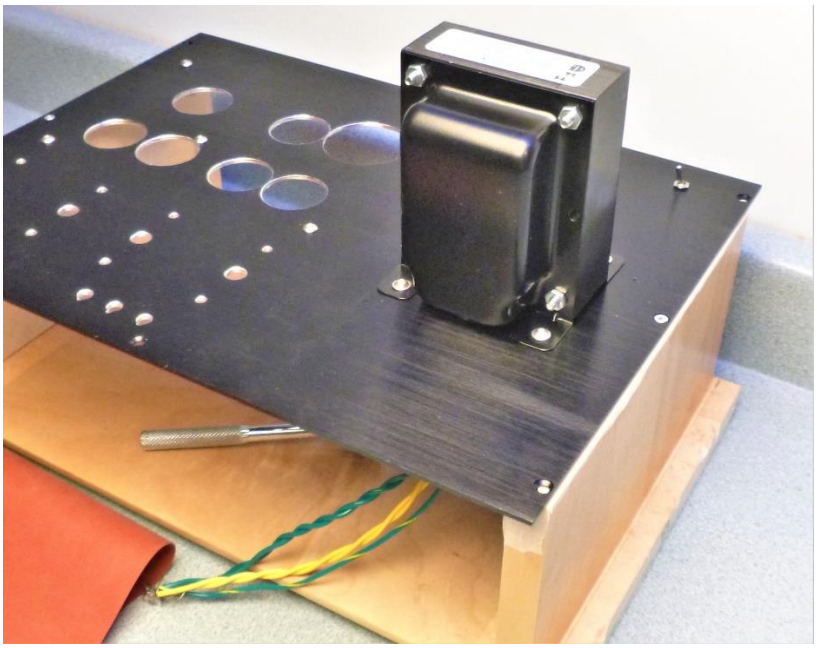
I made a stand from scrap plywood but a stack of books would work too.



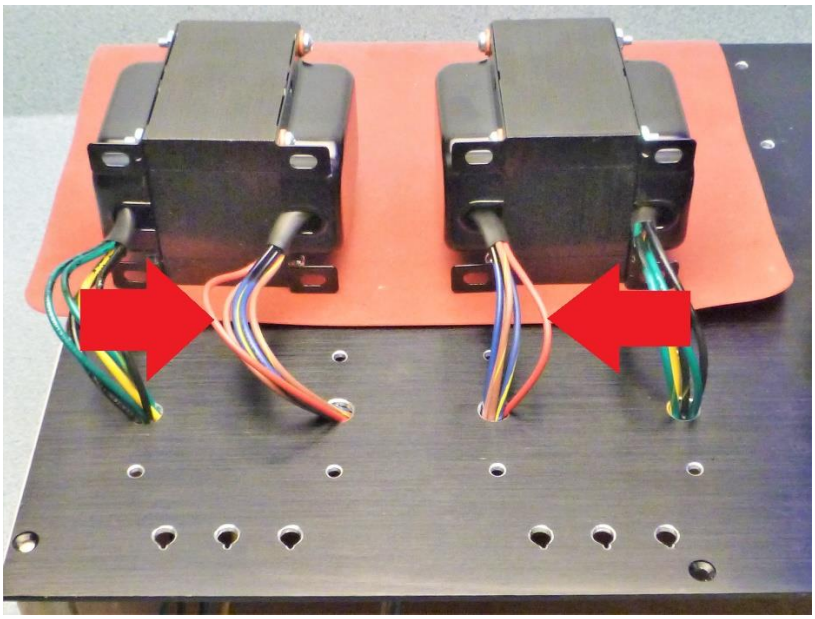
Place top side up on a stand or stack of books.



Lay the power transformer on a mat or other protective material as shown above. The bundle with the red wires should be closest to the power switch. Feed the wires through the holes.

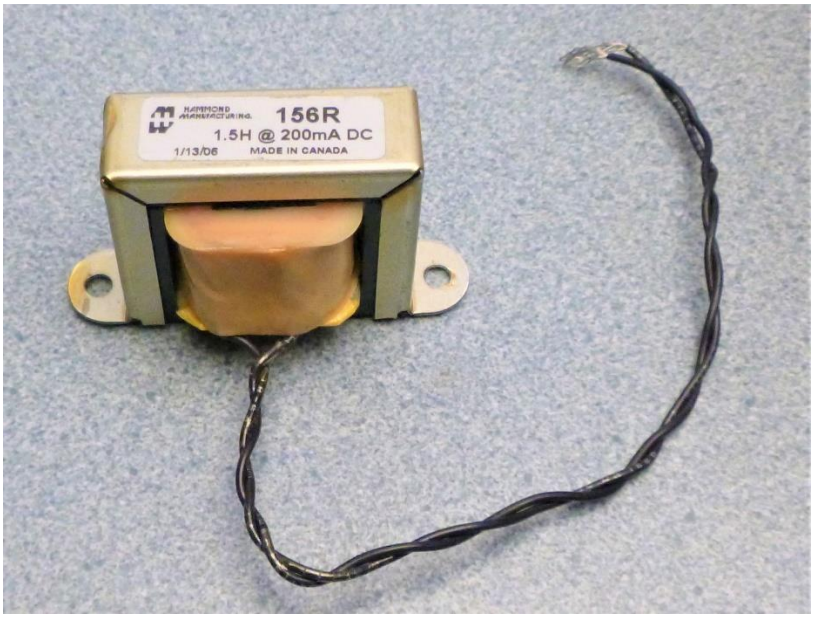


Stand the transformer up sliding the wires through the holes. Assemble four flat washers to four 8-32 or M4 screws. Apply nail polish to the threads. Assemble the screws through the transformer and top plate. Assemble a flat washer and nut to each screw and tighten. If using flanged screws and nuts, flat washers aren't needed.

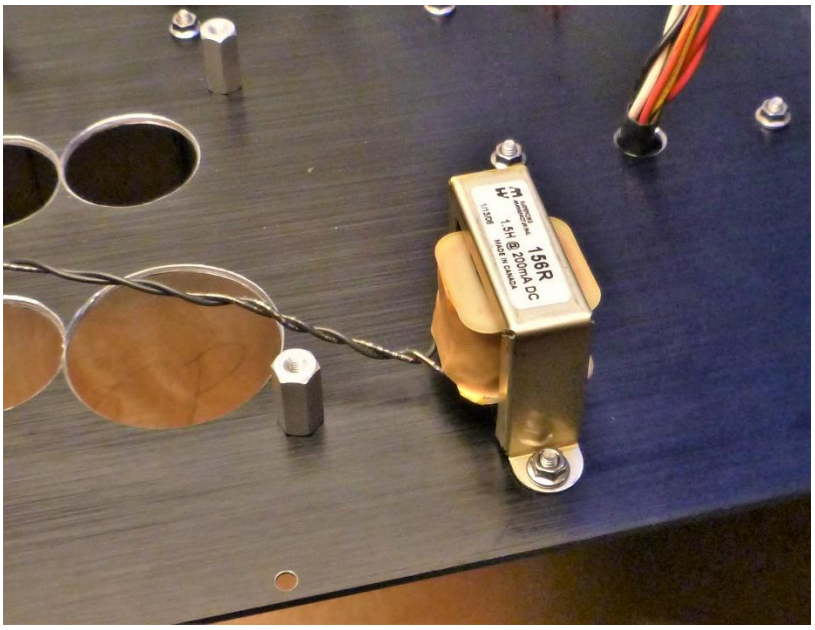


Prep the output transformers with shrink tubing and assemble to chassis with the bundles containing the red wire facing in. Secure with screws, washers and nuts similar to the manner done on the power transformer.

Flip the top plate over.



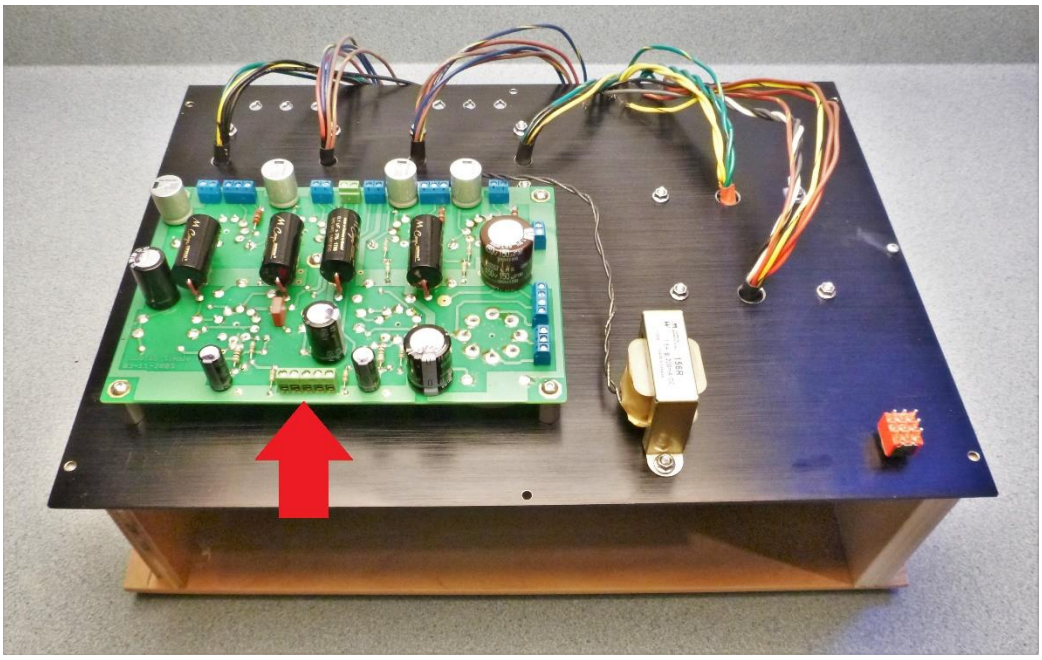
Twist the wires on the filter choke as shown above.



Assemble the choke to the UNDERSIDE of the top plate as shown above. Secure with screws and nuts in manner similar what was done with the transformers.

Bend one of the solder lugs as shown above.

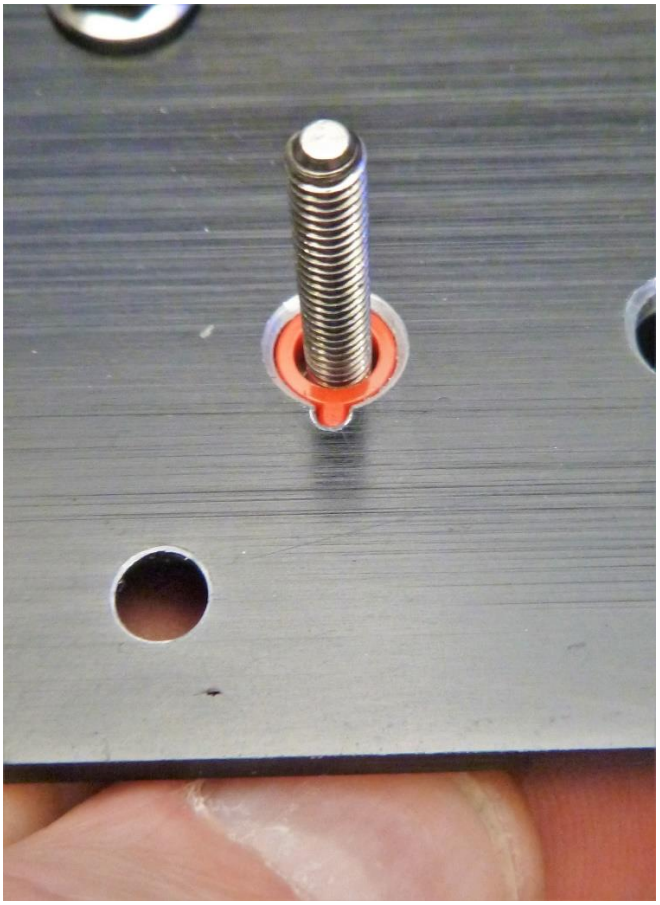
Remove the nut securing the power transformer that’s on the bare spot. Hold the screw in place, assemble the solder lug, reassemble the nut and tighten securely.



Place the circuit board over the spacers with the 5-terminal connector oriented as shown.

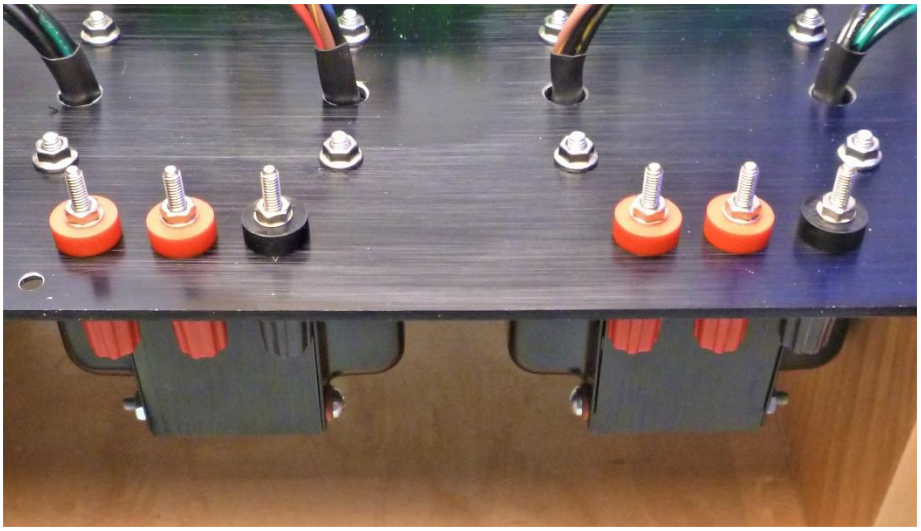
Apply nail polish to five, 8-32 screws and secure the board to the posts.

Place a nail through the hole in a speaker binding post and tighten the post. This will prevent distortion of the plastic body in the following steps.



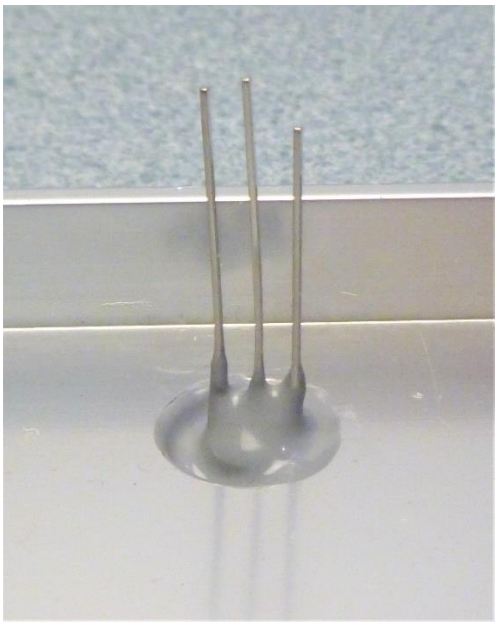
With the rear or the top panel facing you, start from the left, place a red post in the hole with the tab in the notch.

Place the plastic spacer and flat washer over the threaded post. Assemble the nut and tighten securely WHILE grasping the nail to prevent the binding post from rotating.



From left to right install 2 red, 1 black, 2 red and 1 black as shown above.

Since plastic compresses leave the assembly for several hours or overnight. The nuts will be tightened again later.



Clean the LED and its hole in the front panel with alcohol. Place the LED in the hole, mix some 5-minute epoxy and spread around the LED. Set aside for several hours to ensure a full cure.

Proceed with Part 4, Attachment 2.