

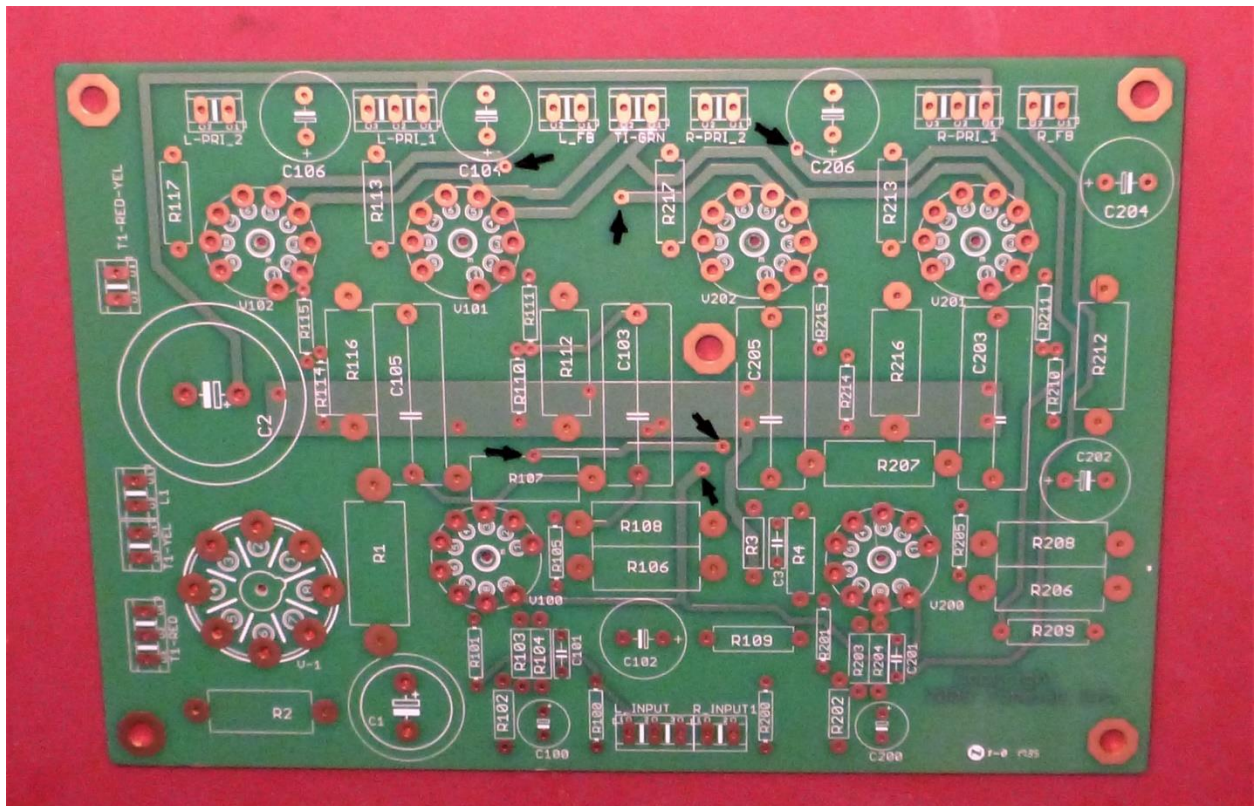
### Part 3, Attachment 1. Board Prep. & Tube Socket Assembly

Wall of Sound.ca Tubelab DIY EL84 Amp

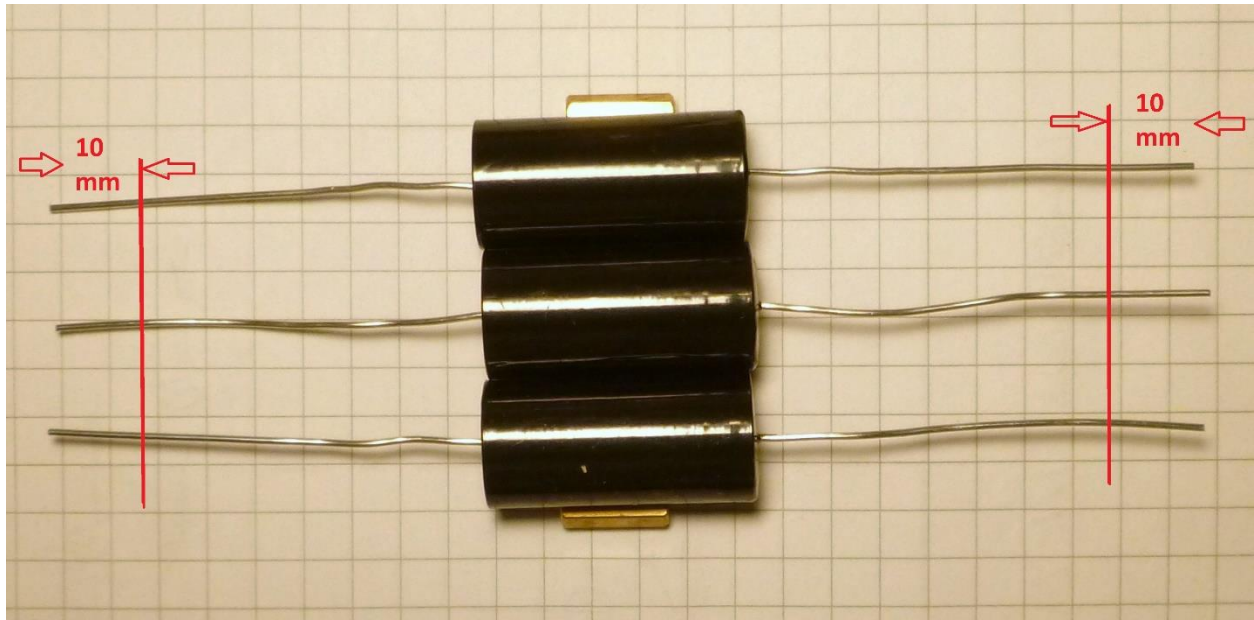
#### Tools Required:

- Solder Iron, temperature-controlled type preferred.
- Side-cutting and needle-nosed pliers
- Small screw drivers

Wipe both sides of the board thoroughly with alcohol or acetone.

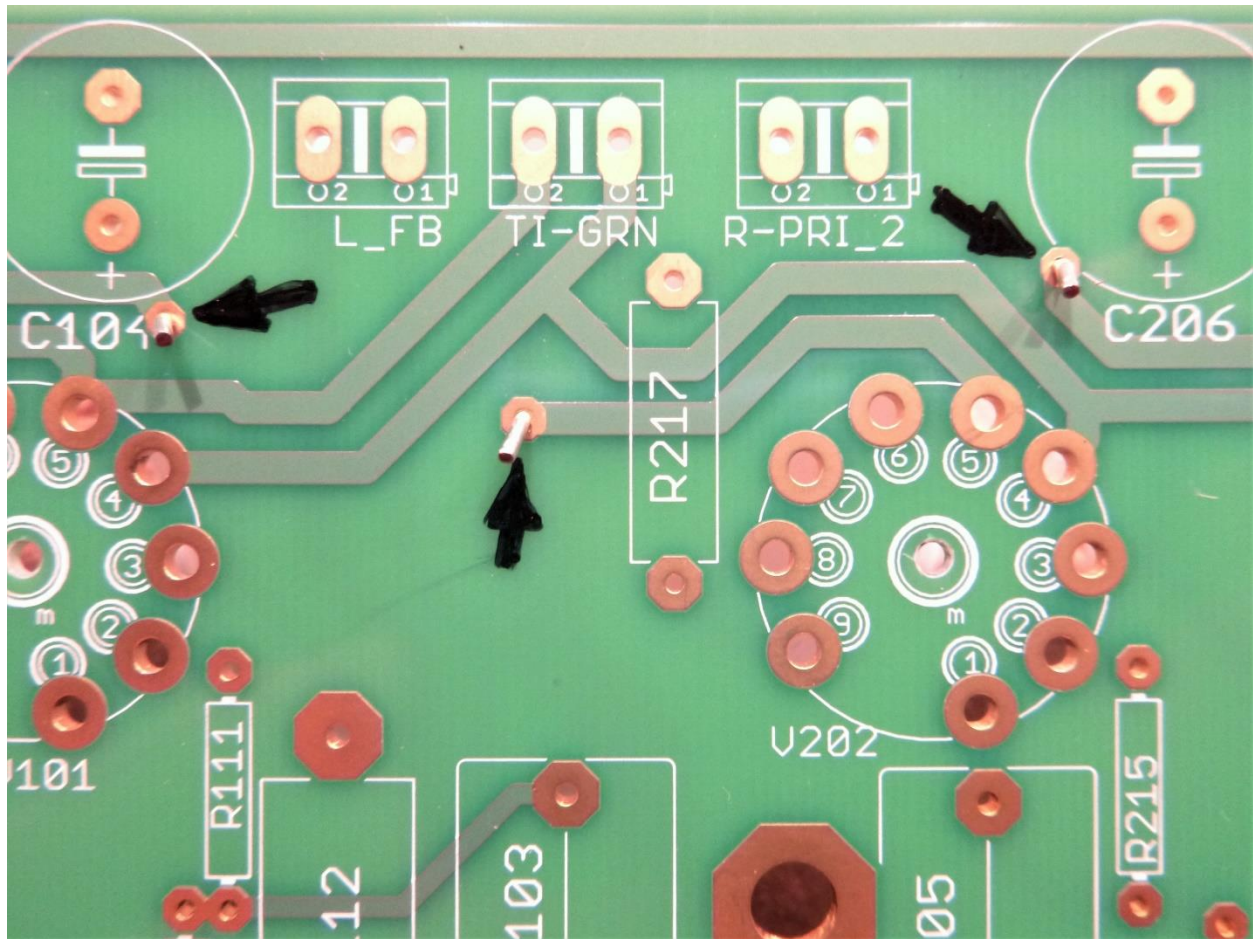


Though not absolutely necessary, my preference is to reinforce the plated-through holes carrying the high-current filament supply. The positions, 6, are shown in the picture above.



Get 3 of the coupling capacitors out of the kit of parts. Both the Mundorfs shown and the CDEs in the parts list have lots of extra lead length.

Cut 10mm (3/8") off of each end as shown above.



Put the six cut-off leads through the holes shown 2 pages back near C104, R217, C206, R107 and two places between C103 and C205.

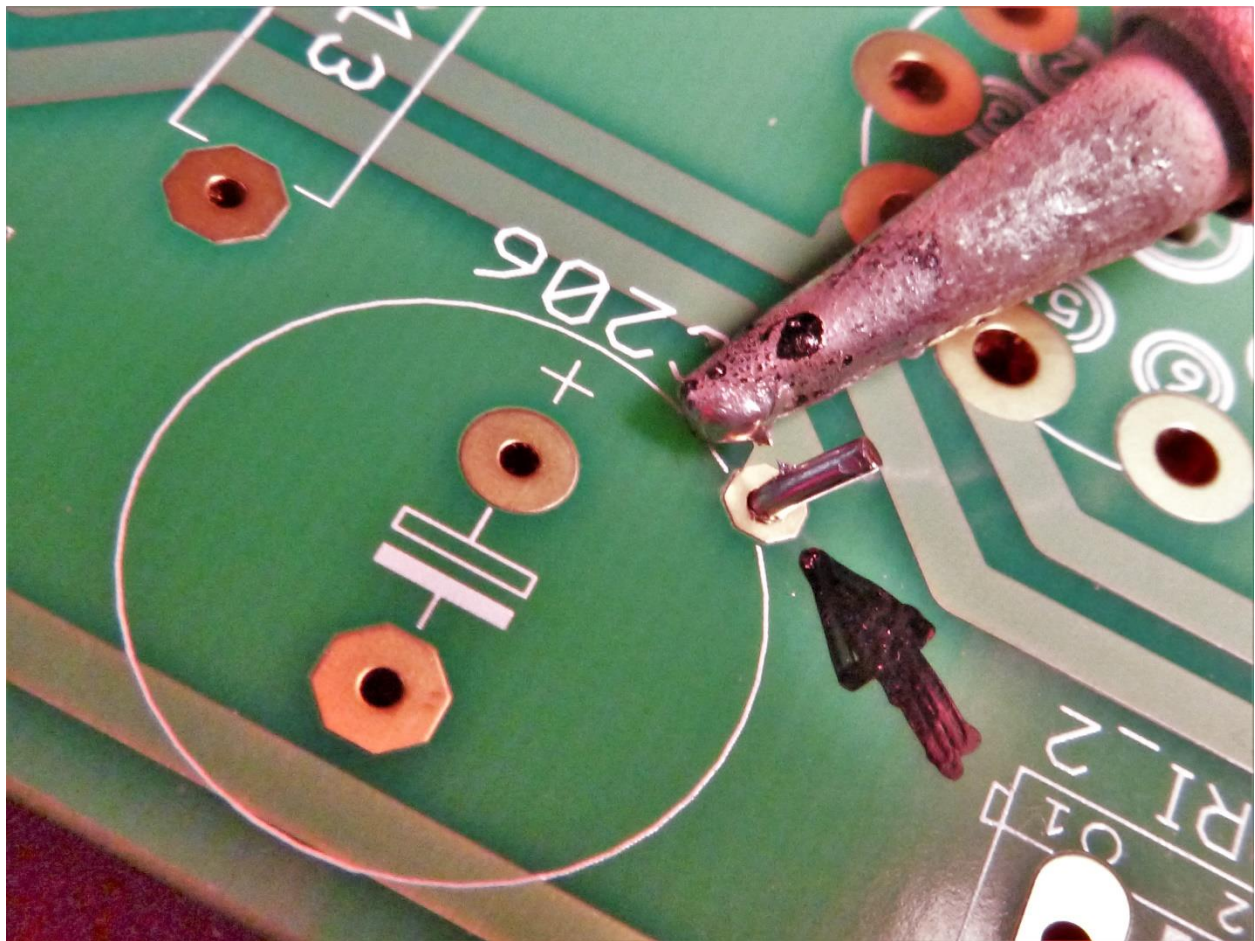
Bend to keep in place **however**, make sure the two near capacitors C104 and C206 are bent away from the cap locations **on both sides** of the board, as shown above.



### A word of advice on soldering:

Most projects are torpedoed by poor soldering and rushed assembly. My advice is don't rush the assembly, enjoy the process.

As far as soldering goes, you want good flow. In order to get good flow, heat is needed. The classic advice for soldering is to let the work (the parts you are soldering) melt the solder. While good advice, it's not entirely correct. You must first get heat to the work. My preference, see picture below, is to melt a small bit of solder on to the iron tip first. Then touch the tip to the work. This will facilitate heat transfer. Then apply solder to the work and when it flows and wicks into and/or around the parts being soldered you will have a good connection.



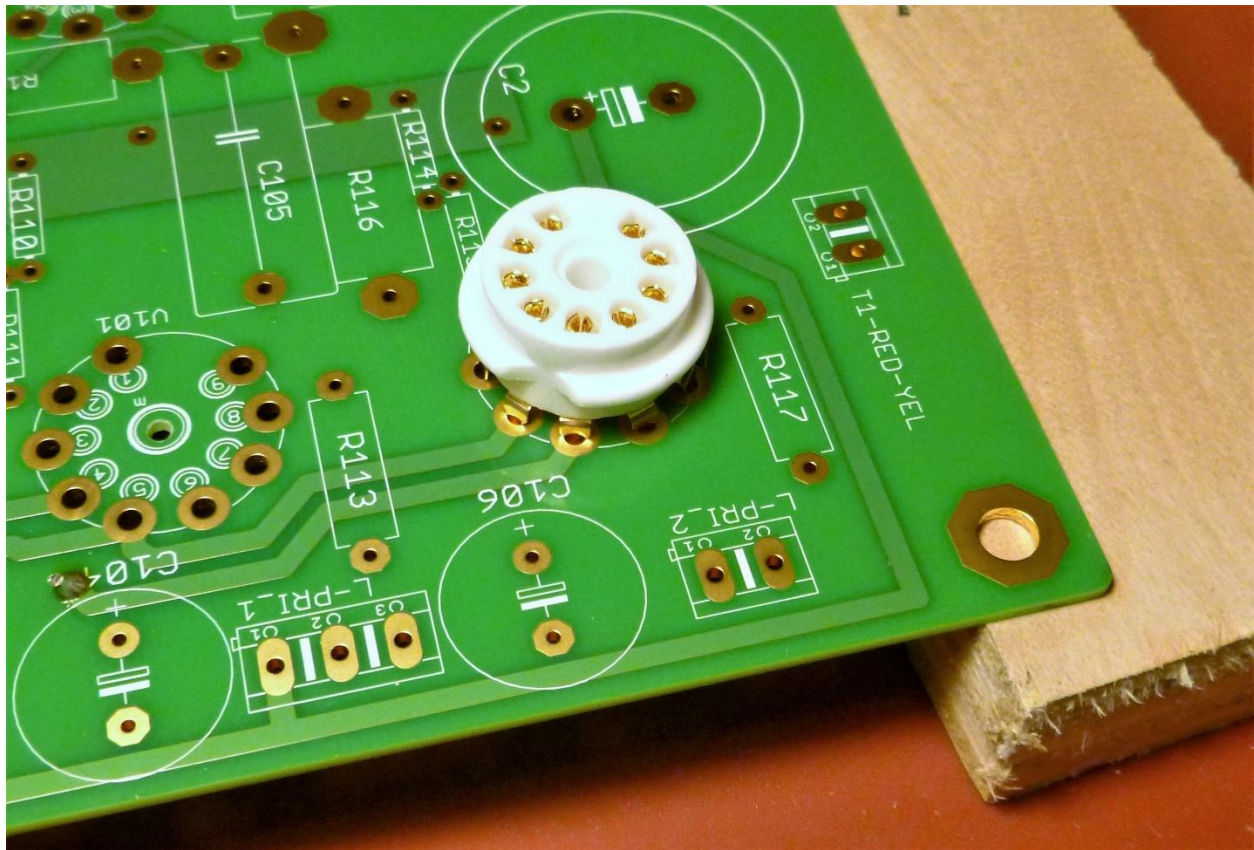
Solder the six feedthrough leads, **both sides of the board**, and trim the excess.

In the following steps when I state the "**TOP SIDE**" of the board , I'm referring to the screen-printed side with the component designations. The "**UNDER SIDE**", is the unprinted side.

I like to solder the tube sockets next as access that might be hindered later by other components.

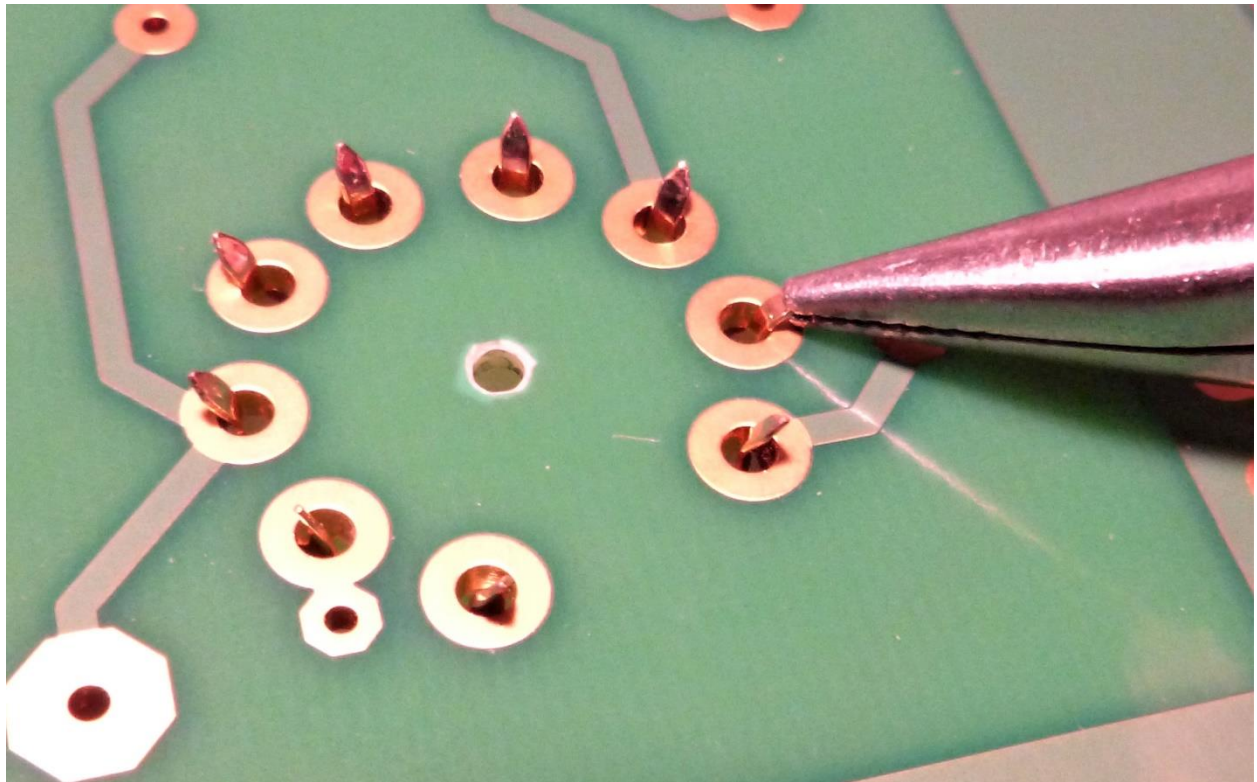


Clean all of the tube socket pins with a solvent-dampened swab.

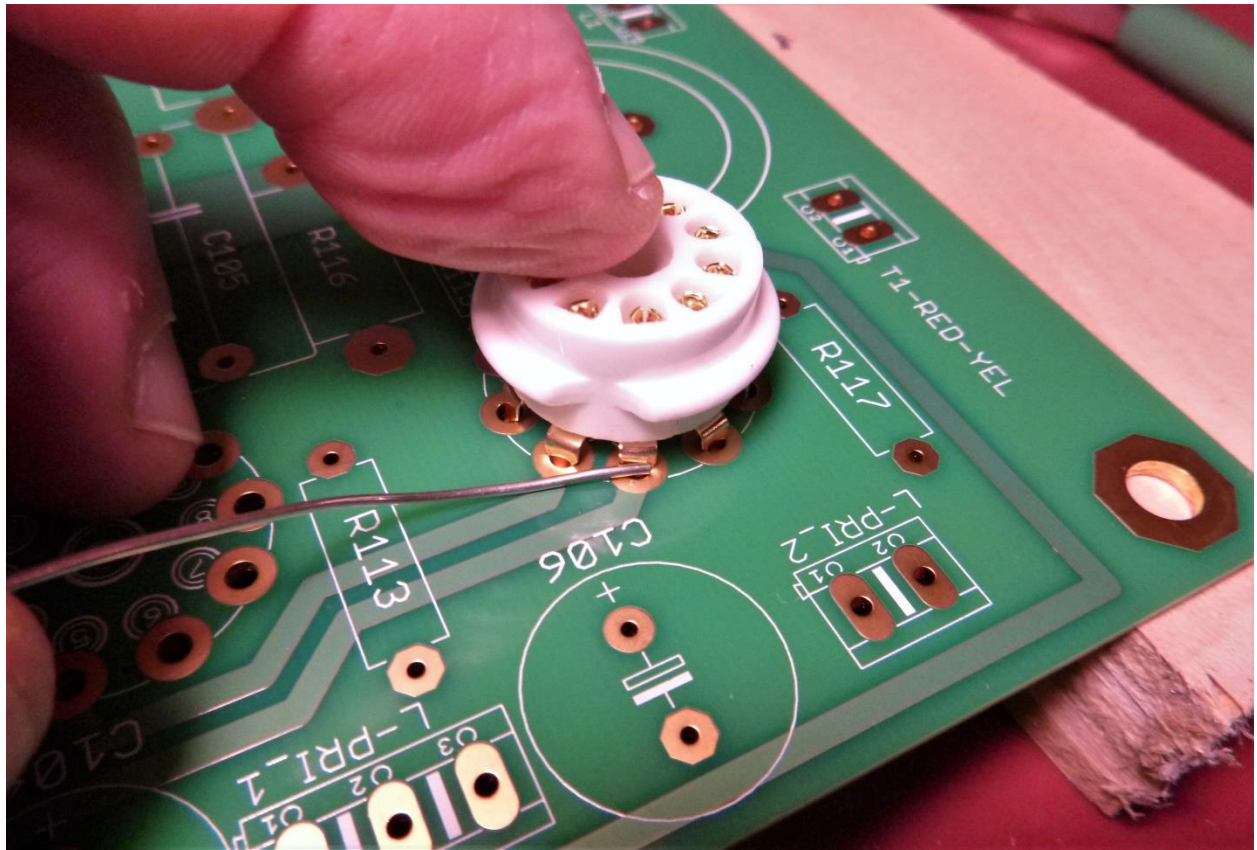


Insert the six 9-pin sockets, one at a time, on the TOP side of the board.





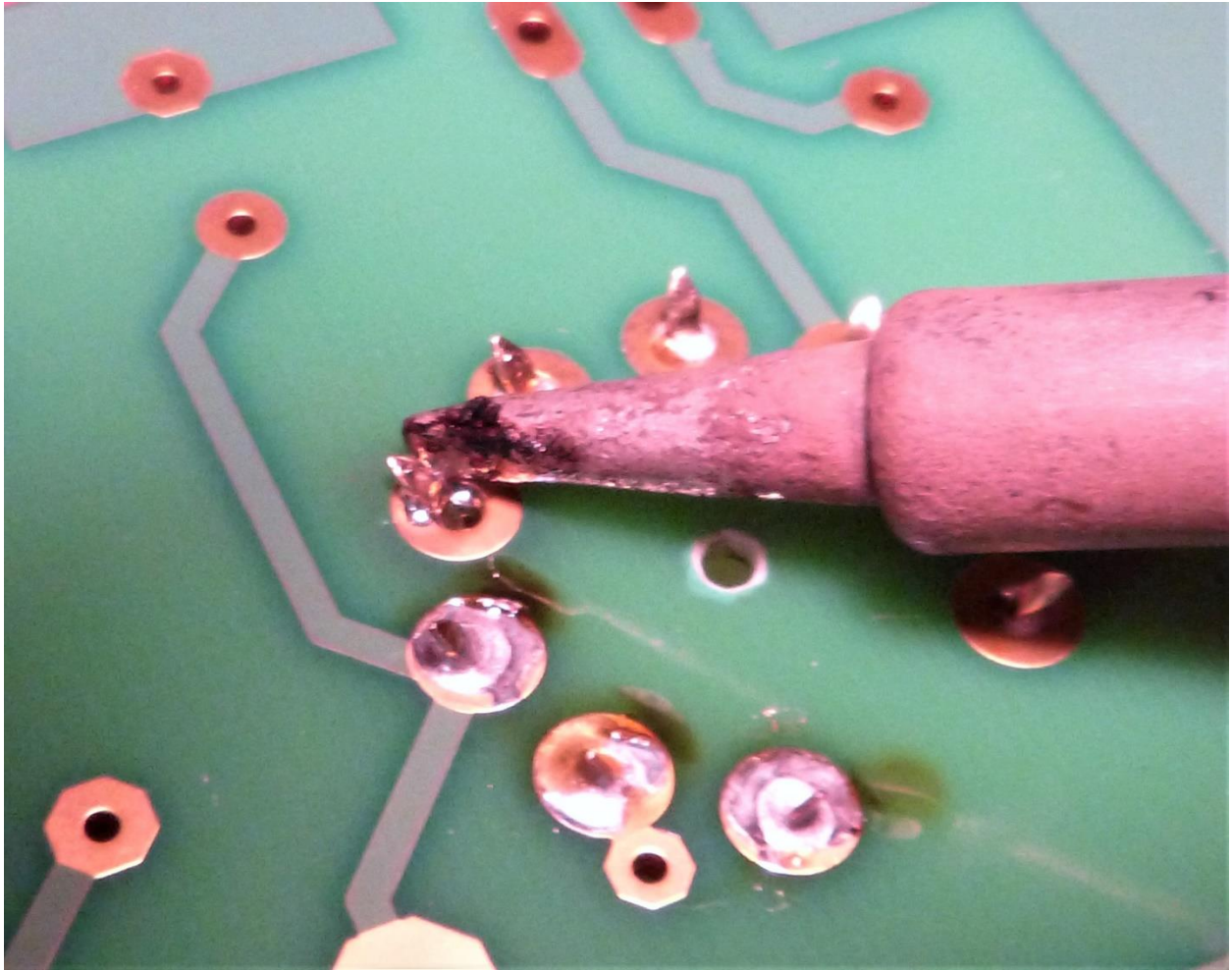
Flip the board over and while pressing the socket firmly to the top side, bend the pins over.



Support the board with some wood blocks or old copies of the The Absolute Sound.

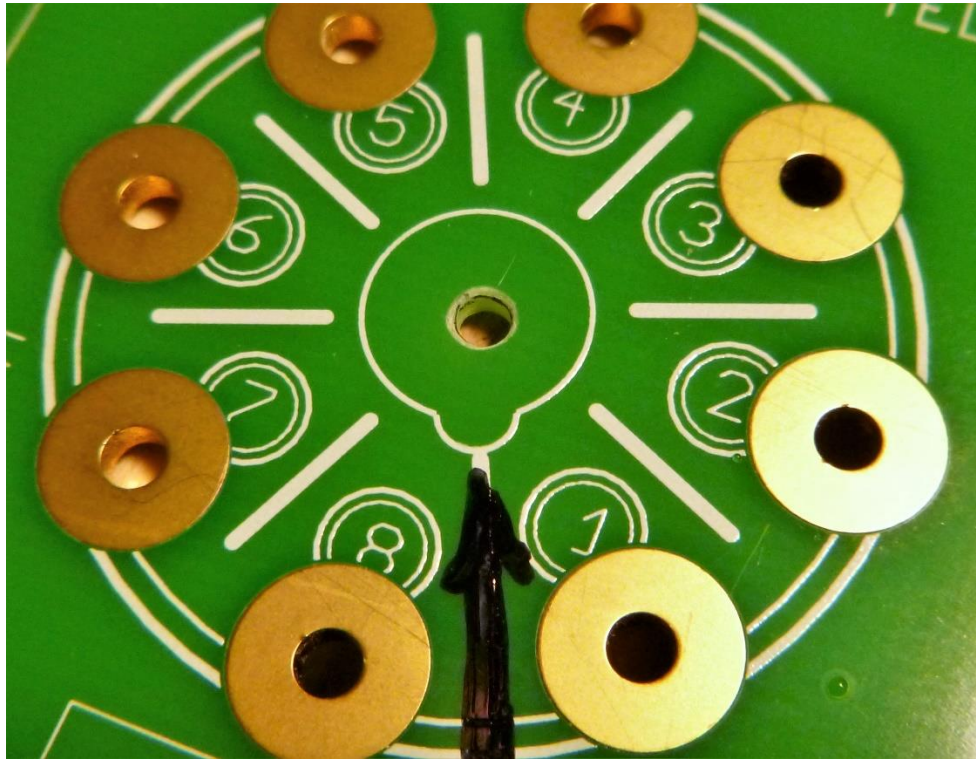
While pressing down on the socket, solder the pins to the board.





Flip the board over and solder the tube sockets on the UNDER SIDE as well for extra strength, especially when removing tubes.

The 9-pin tubes are easily oriented correctly, the octal socket for the rectifier tube is easy to get wrong. Please follow the instructions below carefully.



Notice the screened "NOTCH" at the rectifier socket location above, and the notch on the tube socket below.







Insert the socket pins into the board so that the two notches align as shown above.

As done with the other sockets, flip the board over and bend the pins, **inwards** towards the centre of the socket.

Solder the pins on both sides.

Proceed to Part 3, Attachment 2.