

5150 Bias Mod

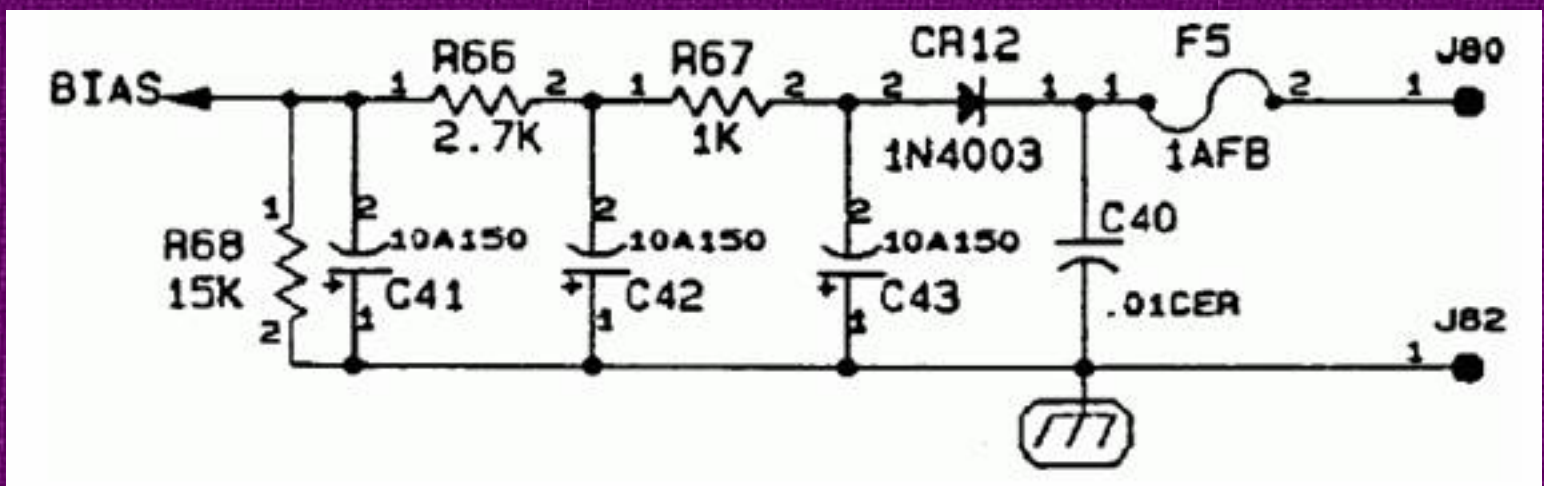
If you don't have knowledge of electronics and how to work around high voltages THEN DON'T! Read this thru completely before beginning any work. If you're not sure about something, don't start the mod till you are. It's possible to get hurt or dead by sticking your little fingers or tools where they don't belong.

You've been warned! I take no responsibility for any damage to you, your amp, your dog or cat.

You're on your own. Now unplug the amp from the wall.

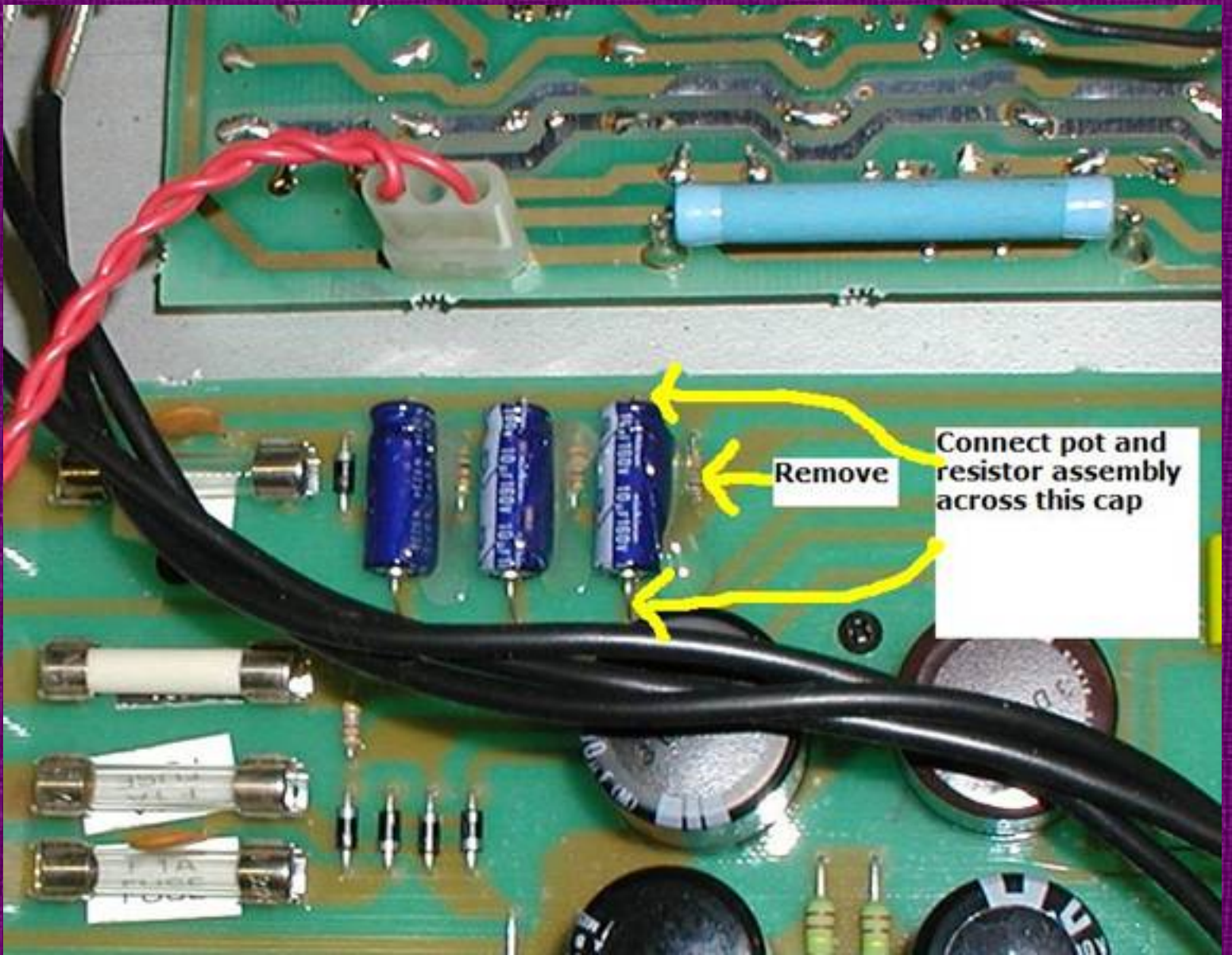
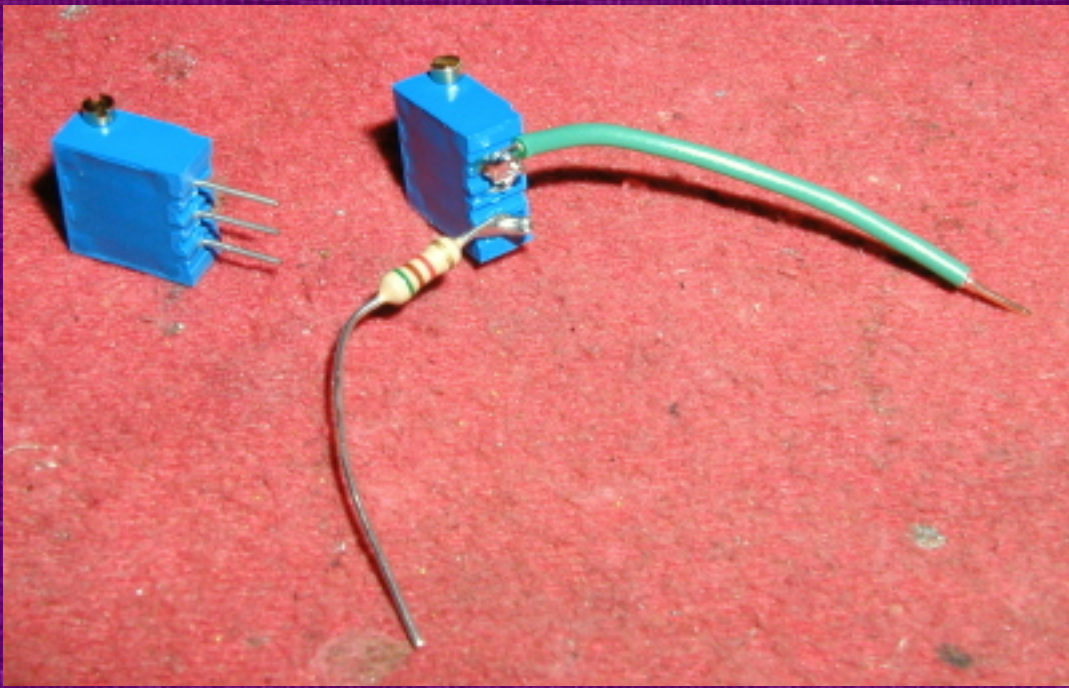
This is a basic description of the 5150 bias mod

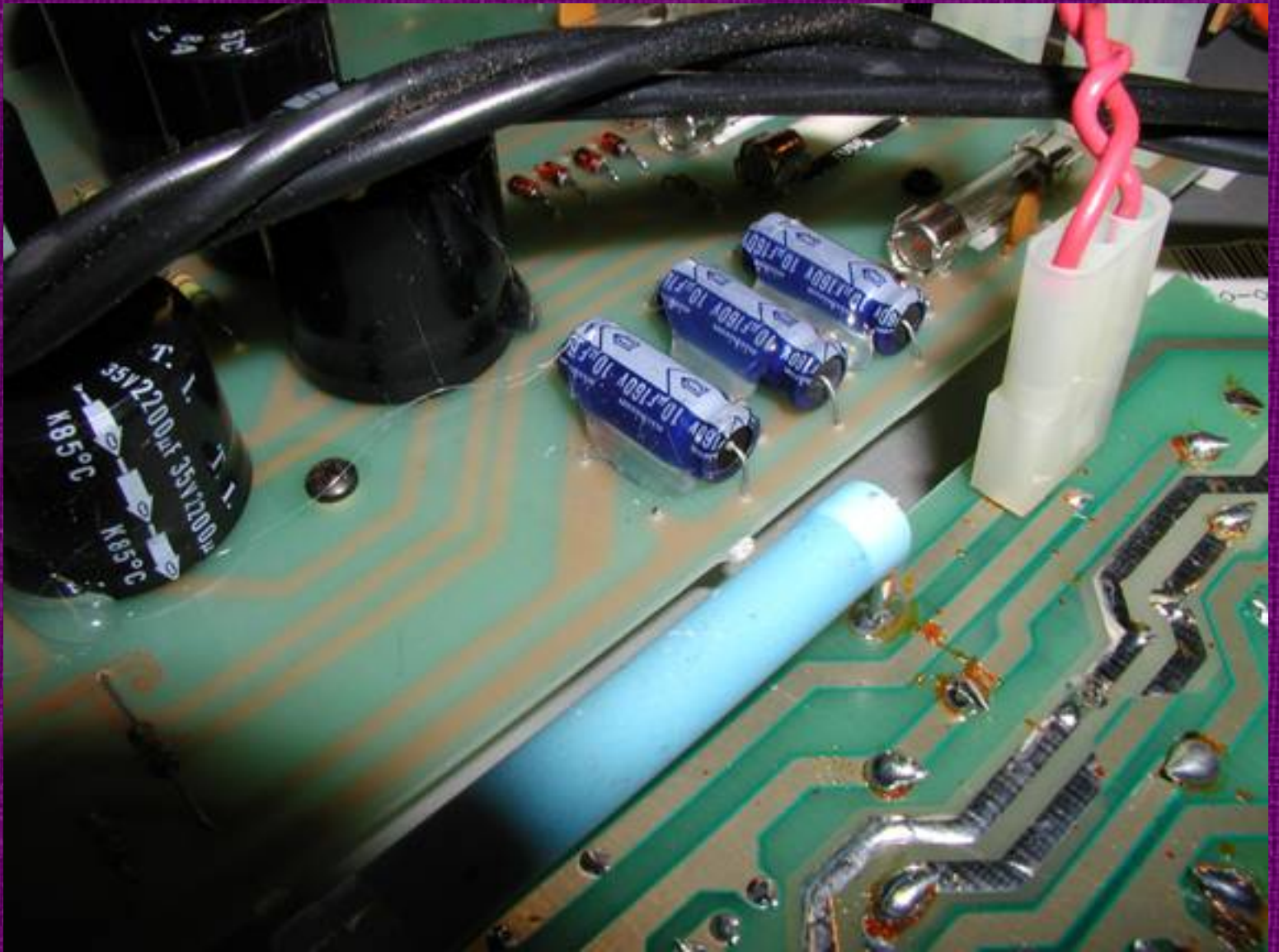
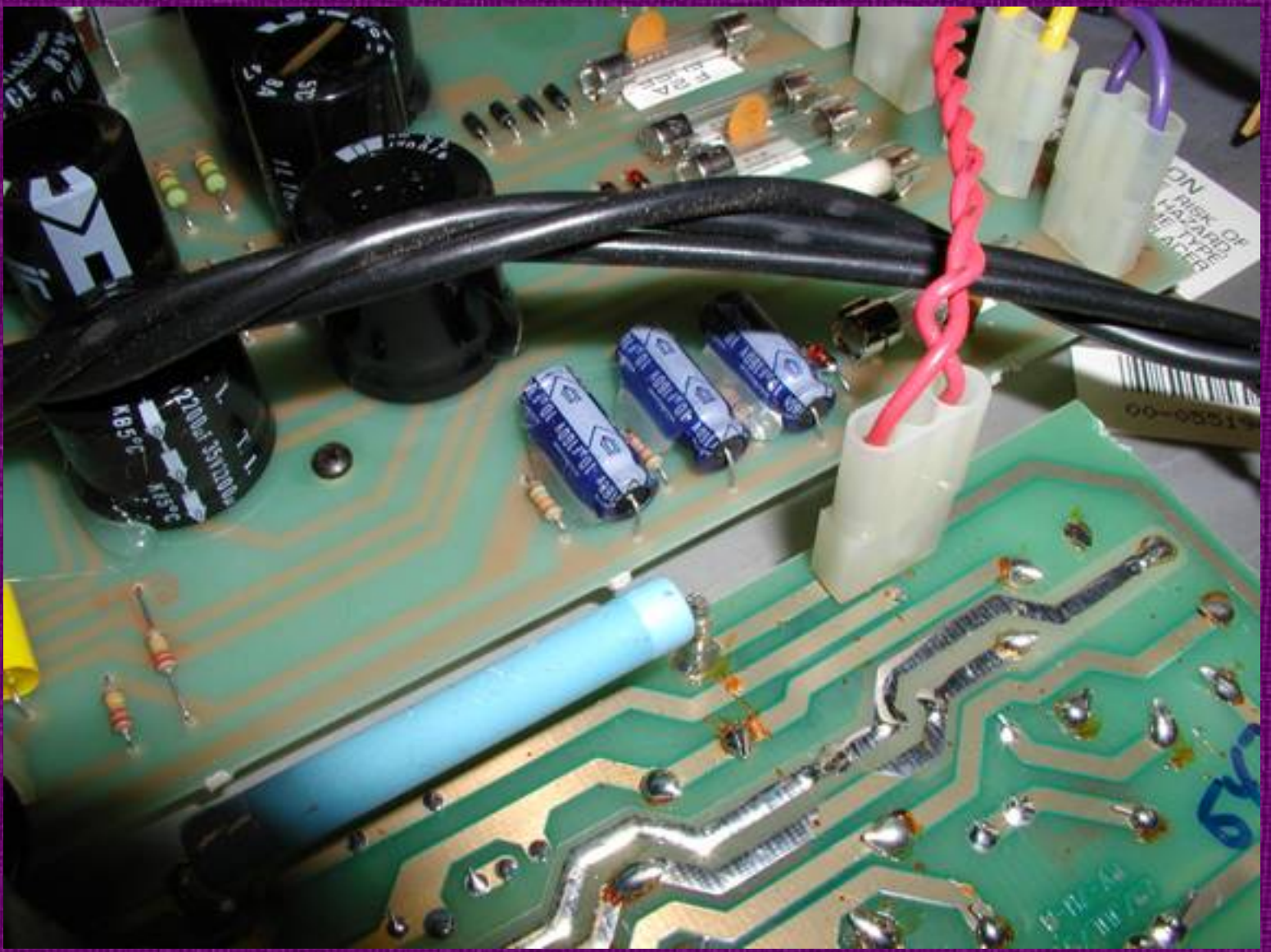
The object of the bias mod is to remove the 15K resistor R68 and replace it with a resistor and pot. The resistor should be between 5K and 7K. What ever you find in that range will be fine. I usually use 5.1K. The pot should be a 10K pot. I like to use mini trim pots. This mod will allow the tubes to be biased hotter. Solder the resistor to one of the outside terminals of the pot. Solder a piece of wire to the other outside terminal of the pot. The connect the center terminal of the pot to one of the outside terminals. Using an ohmmeter adjust the pot so your reading the highest resistance which should be something around 15K. This will let you start out with the tubes biased as cold as possible and you can adjust the bias from there.

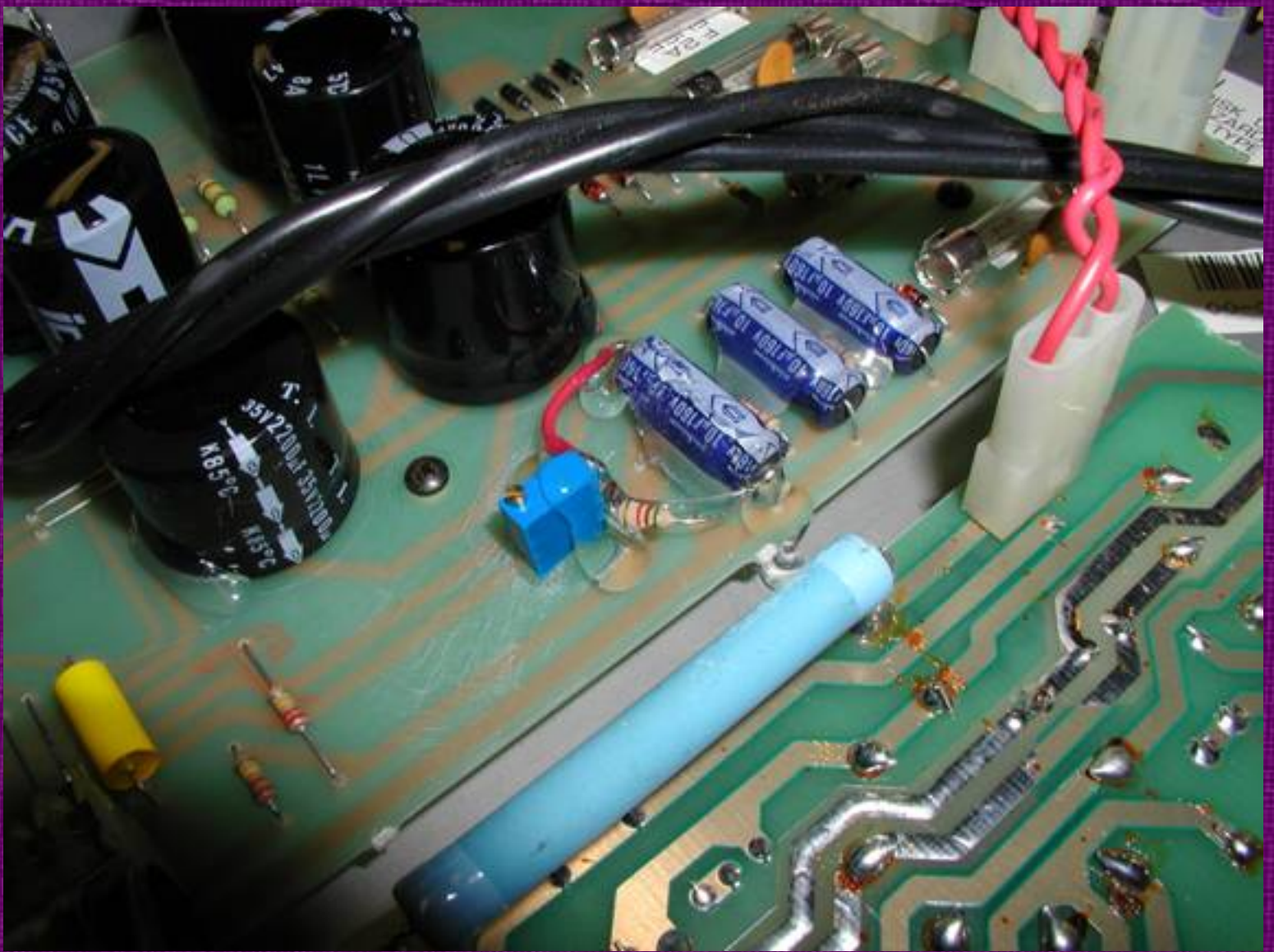


The 5150 has resistors that bleed down the caps when the amp is turned off. To be 100% sure they are discharged use a voltmeter to check for power in the amp. Clip out the resistor and solder the pot/resistor assembly across the cap in the picture. I use hot glue to hold the pot and keep connections from vibrating loose. Be very careful when soldering not to hold the soldering iron on the cap lead too long. Use a soldering iron, not a soldering gun made for automotive or heavier type work. Soldering guns get too hot. If you get the cap leads too hot they can become unsoldered from the bottom of the board. To have me fix that will cost \$120 so be careful. If you're not sure what you're doing.....don't do it!

For information on biasing check www.duncanamps.com

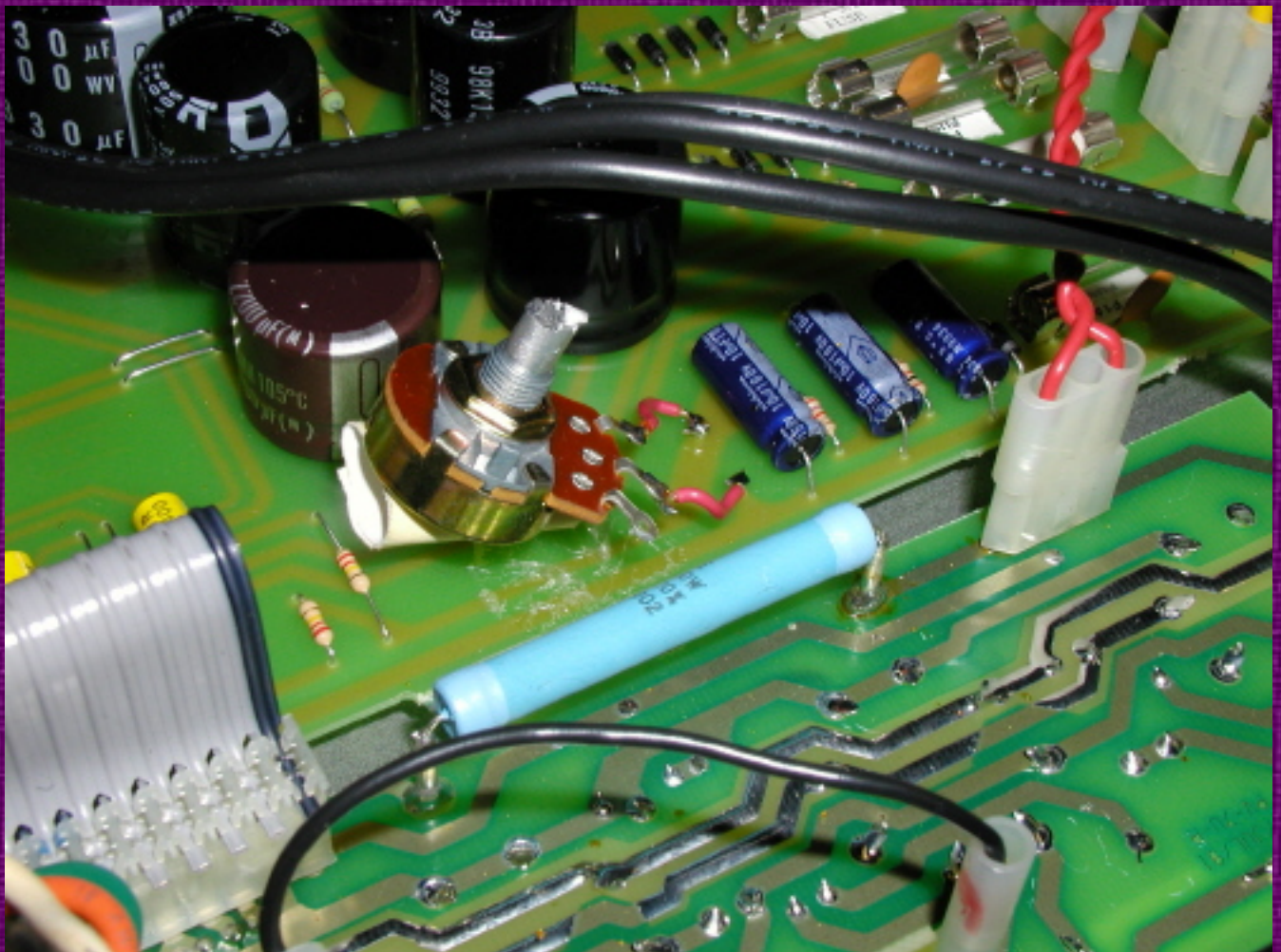


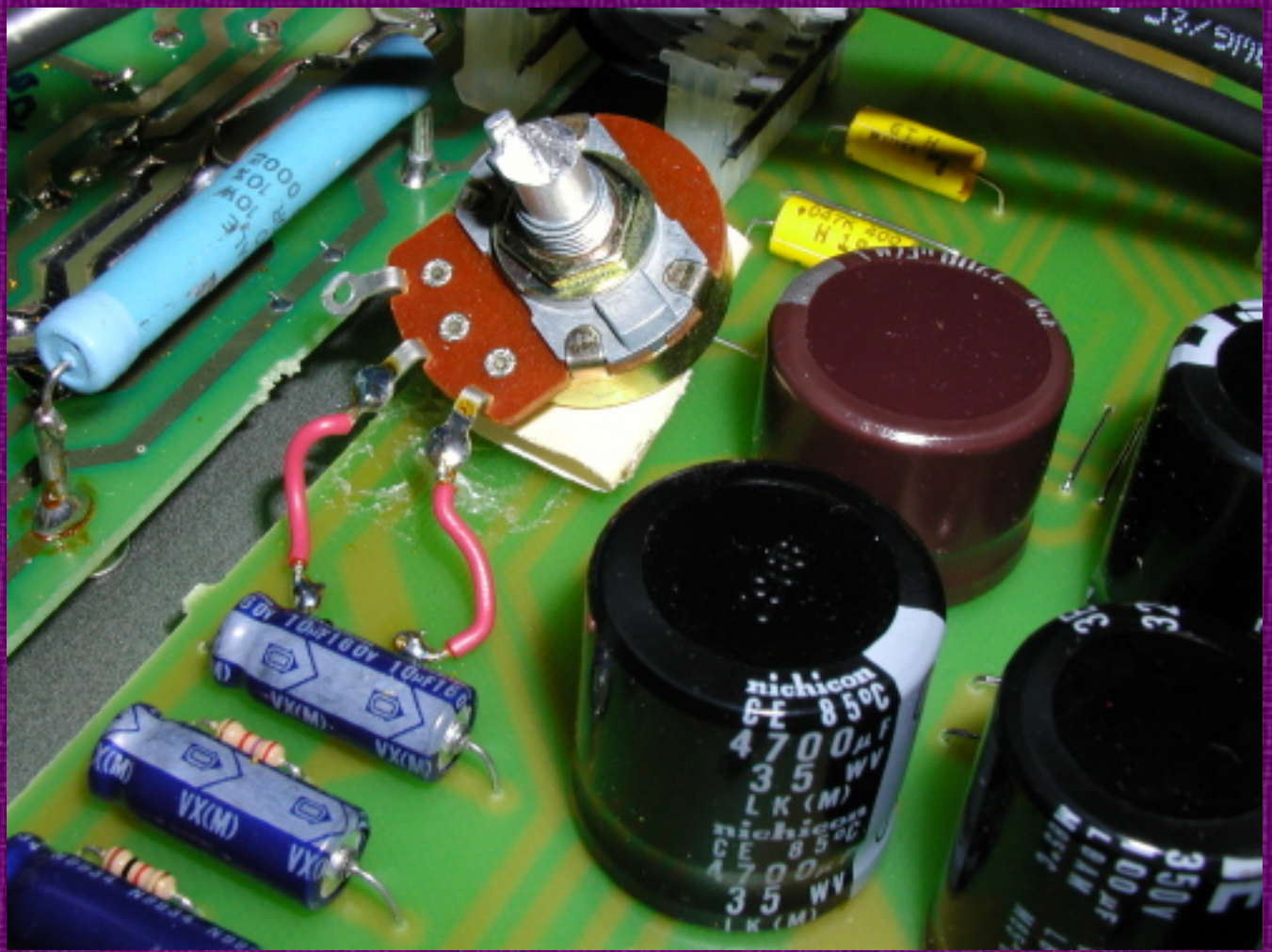




How **NOT** to do the bias mod !!!!!!!!!!!

This is some cob job bias mod that came rolling into my shop. There's no safety resistor and they have the 50K pot held down with tape which as you can see didn't hold. If that pot goes open or the pot flops around and shorts on something it won't be good.





FJA