



**VINTAGE VIBE
5-PIN RHODES SUITCASE AMPLIFIER
POWER SUPPLY REBUILD KIT
INSTALLATION INSTRUCTIONS**



We highly recommend reading through the installation instructions in their entirety before beginning an install. This will provide an overview of what is involved and perhaps offer some tips / ideas that you may find helpful.

You may notice some variation between your unit and that pictured in the installation instructions. Wherever a difference may be relevant we have done our best to make note of it within the text.

If, after reviewing the material, you are not confident in your ability to successfully perform the installation, we recommend that you contact Vintage Vibe to discuss having us perform the service for you or a technician that you deem to be qualified.

Note:

Improper installation or use will void any and all warranty. Installation of this product is performed at your own risk. Working on electronic equipment poses an inherent risk to oneself, others and personal property. Vintage Vibe assumes no liability for the consequences of the attempted installation of this product.

INSTALLATION INSTRUCTIONS

1. Ensure that the power supply is drained of all stored voltage. Measure +Vdc and -Vdc terminals of their respective filter capacitors with a DC voltmeter referenced to ground. Confirm the readings are 0VDC.



2. Clip the three wires at the positive terminal of the positive supply filter capacitor.



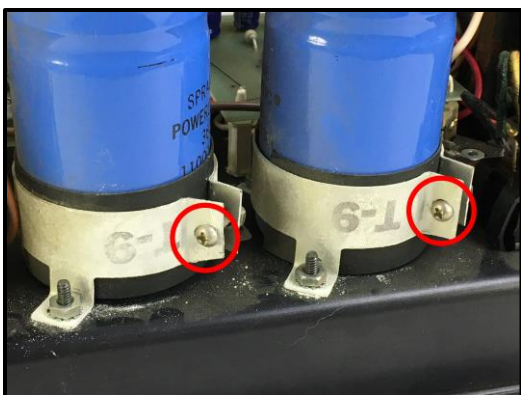
3. Clip the three wires at the negative terminal of the negative supply filter capacitor.



- Clip the four wires at the grounding buss bar between the two filter capacitors.



- Loosen the two filter capacitor clamp screws.

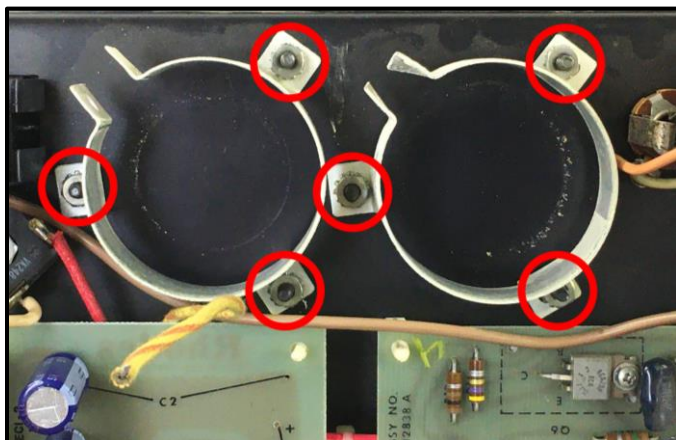


- Remove and dispose of the two filter capacitors.

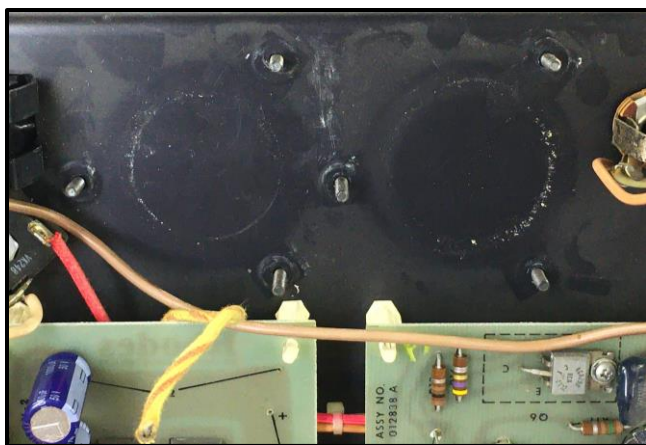


- With a 5/16" wrench or nut driver, remove the three nuts securing each capacitor clamp to the chassis. Discard the clamps and nuts.
*Do not remove the mounting screws.

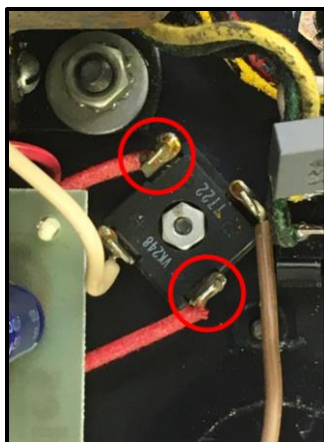
Before:



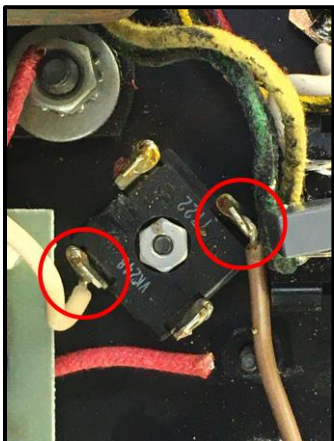
After:



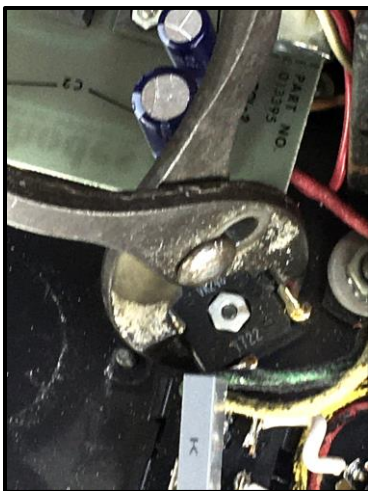
8. Clip the two red wires at the bridge rectifier.
*Clip these as close to the lugs as possible to preserve the maximum wire length.



9. Clip and dispose of the wires at the positive and negative lugs of the bridge rectifier.

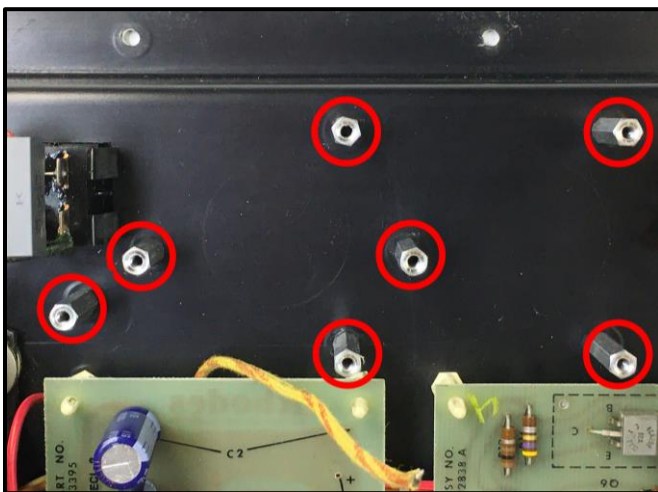


10. Loosen and remove the bridge rectifier.
Treating the entire bridge rectifier package as a “nut”, grip it with a pair of pliers and turn counterclockwise until you are able to unthread it. Once removed, dispose of the component.



11. Clean the newly exposed chassis area.
12. If installing a new power switch, this is the ideal time to pull out those instructions and perform that task.
13. Install the included standoffs onto the 7 chassis screws that previously secured the bridge rectifier and the filter capacitor clamps. Use a 1/4" nut driver to tighten the standoffs down.

*If you are unable to tighten up against a particularly loose screw, you may need to remove the heatsink on the opposite face of the power supply assembly in order to access and tighten down the screw.



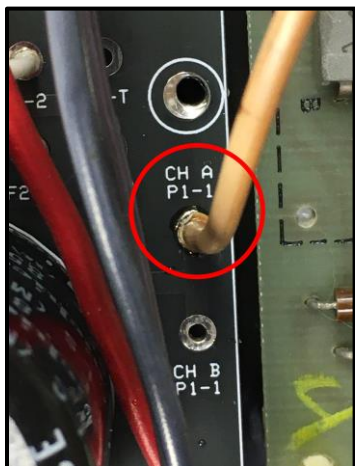
14. Place the power supply PCB onto the standoffs and temporarily install with 2 of the included screws.



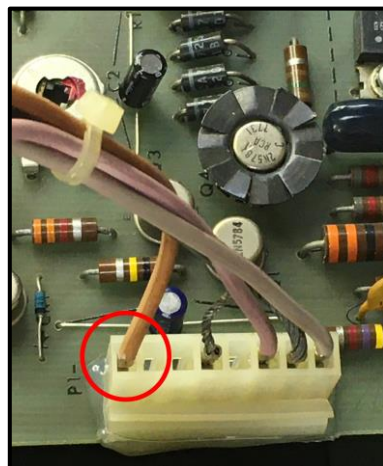
15. Dry install the wire from steps 2-4 to the PCB. Trim back any excess as you deem appropriate (be sure to allow for some strain relief), re-strip and tin.

Below you will find a photographic legend illustrating the wiring connections for this step. Please note that wire jacket colors will vary across units, however, the termination points of the wires will not.

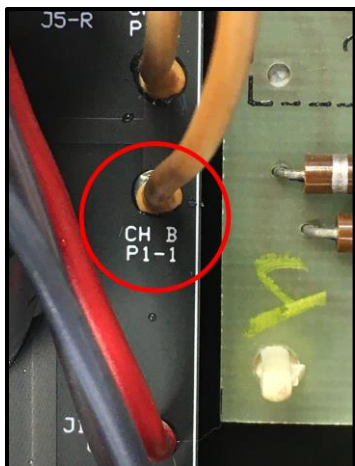
PCB: CH A / P1-1



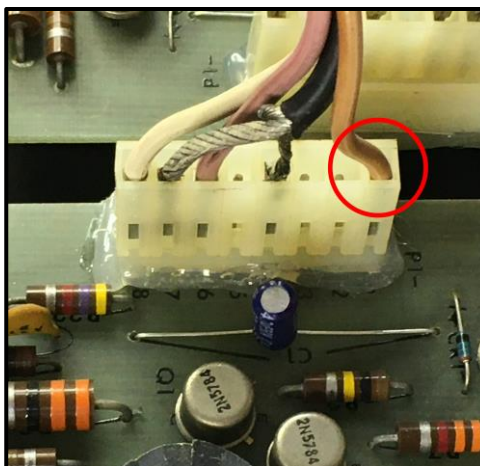
WIRE: Upper Module PCB P1, Pin 1



PCB: CH B / P1-1



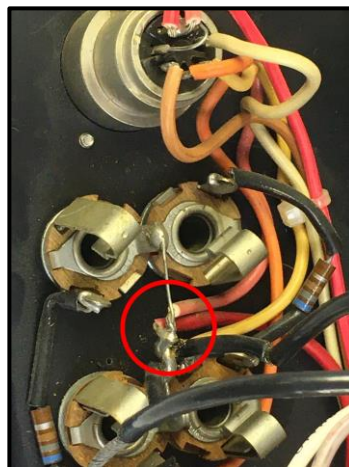
WIRE: Lower Module PCB P1, Pin 1



PCB: J1-J4 GND



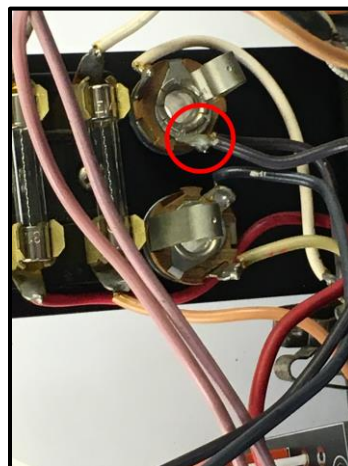
WIRE: Pre / Power Amp Jack Ground



PCB: J7 GND



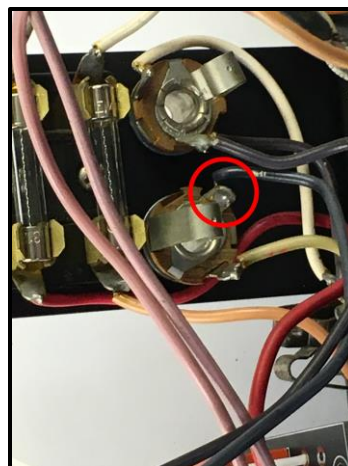
WIRE: Upper Speaker Jack Ground



PCB: J6 GND



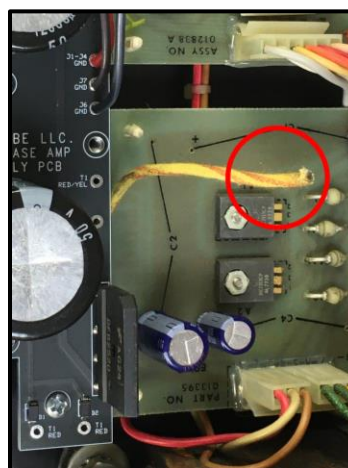
WIRE: Lower Speaker Jack Ground



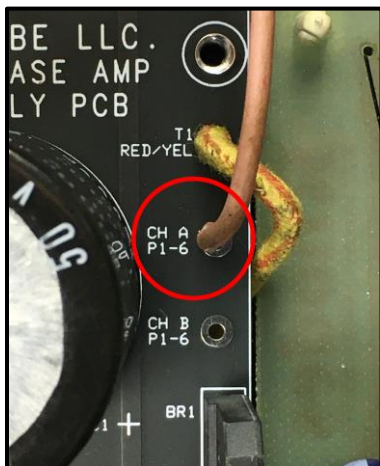
PCB: T1 RED/YLW



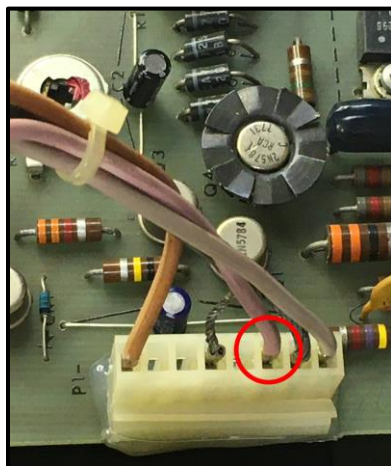
WIRE: Red/Yellow Center Tap



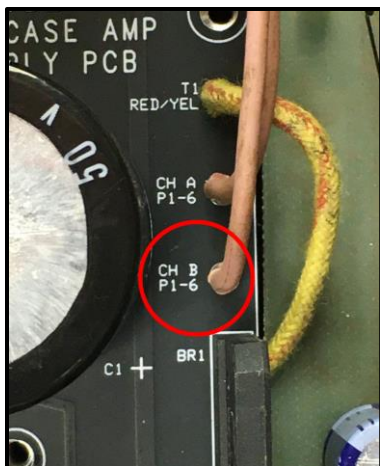
PCB: CH A / P1-6



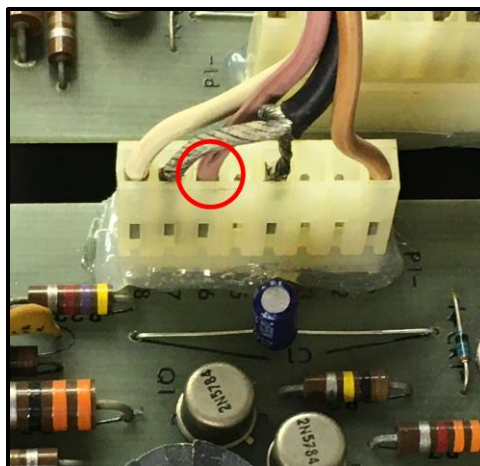
WIRE: Upper Module PCB P1, Pin 6



PCB: CH B / P1-6



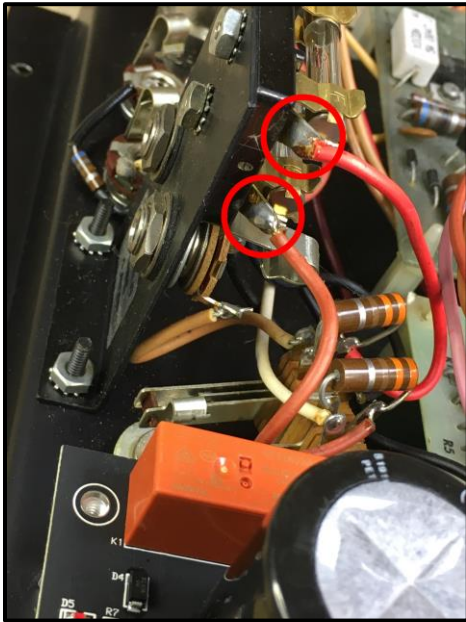
WIRE: Lower Module PCB P1, Pin 6



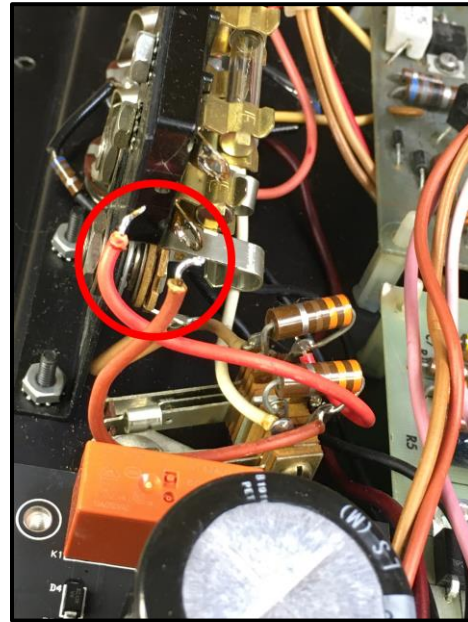
- Remove the 2 screws holding the PCB in place, install and solder the wires to their corresponding solder pads.

17. Desolder the wires from the lower ends of the speaker protection fuse holders.

Before:



After:

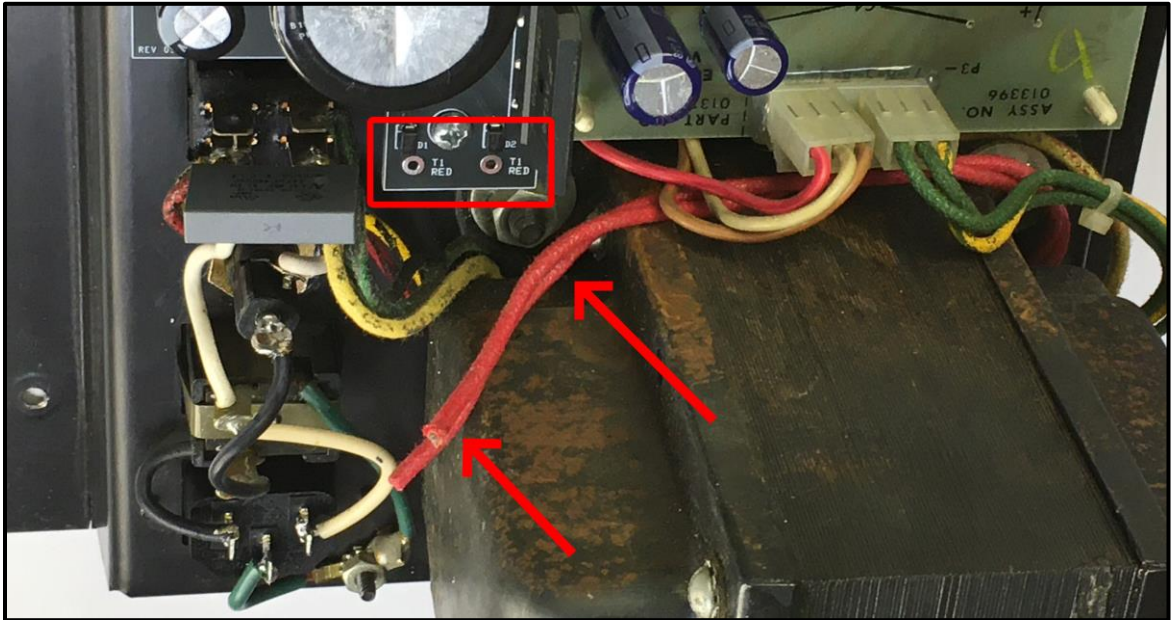


18. Solder the wire removed from the left fuse holder to the power supply PCB “J5-T” and the wire removed from the right fuse holder to the power supply PCB “J5-R”.

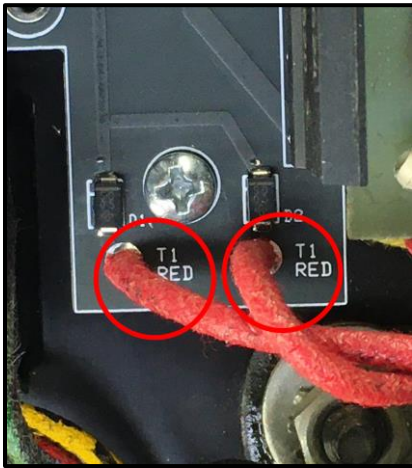


19. Redress the red transformer secondary wires routing them to the “T1 RED” pads on the power supply PCB. It is preferable that the wires be twisted.

*If your wires are too short to reach the PCB and maintain adequate strain relief it may be necessary to splice in additional wiring. If this is the case, we would recommend using 18AWG stranded wire.



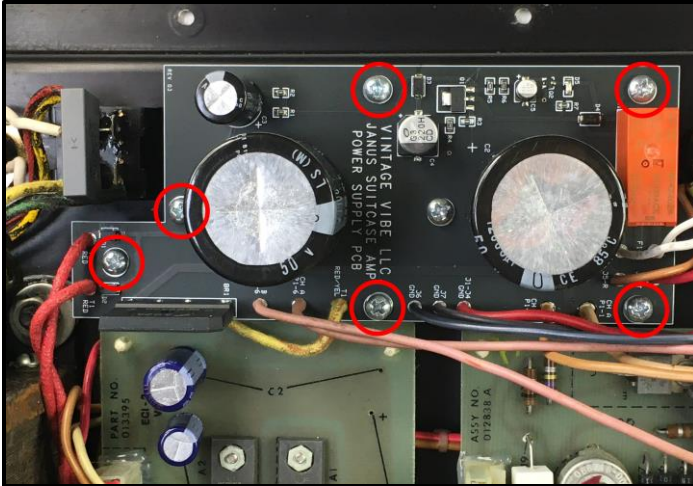
Install and solder the wires to the PCB.



20. Secure the PCB to the standoffs with the included screws and lock washers.

*After installing the standoffs it is possible that some do not line up perfectly with the PCB mounting holes. We would recommend you not fully tighten down any of the screw and lock washer sets until all 7 have been started; this will let you take advantage of any play and get all of the hardware installed without issue.

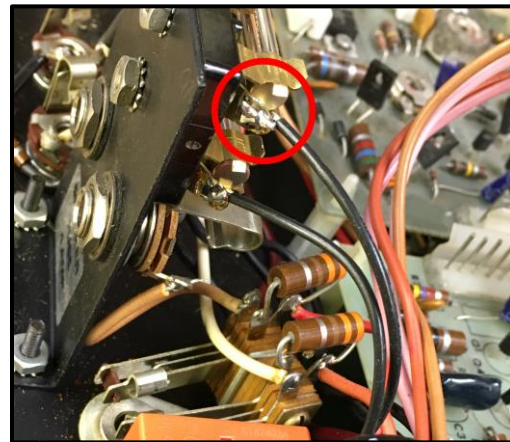
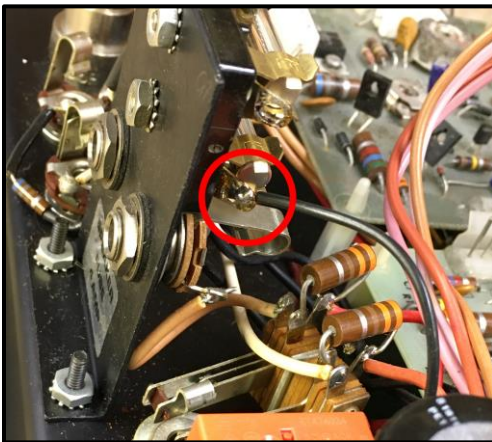
**In some cases it may be necessary to slightly loosen and retighten a standoff or two to ensure proper installation. This can be done easily with a small 1/4" open ended wrench.



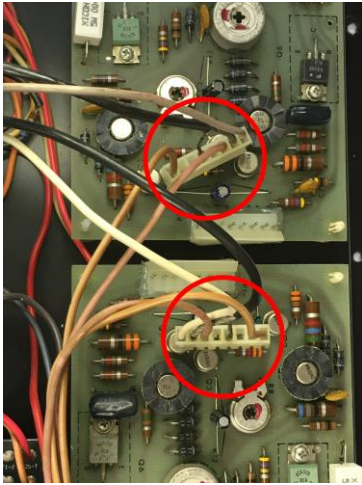
21. Neatly dress wires and secure the bundle together with the included zip tie.



22. Solder the wire from the power supply PCB "F2-2" to the lower end of the right speaker protection fuse holder and the wire from the power supply PCB "F1-2" to the lower end of the left speaker protection fuse holder.

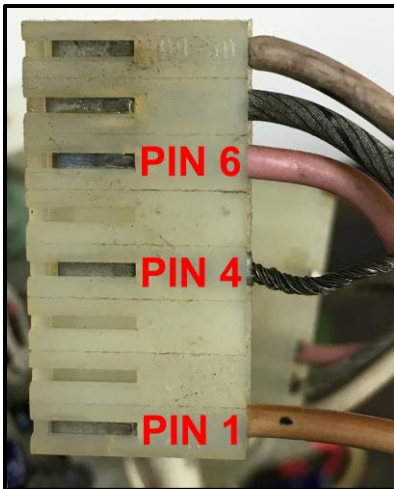


23. Unplug the P1 plugs from both amplifier module PCBs



24. Check all the fuses to ensure they are the correct ratings and that none are shorted. The mains fuse should be 3A Slow Blow for 120V units and 1.5A Slow Blow for 240V units. The speaker protection fuses should both be 4A Fast Blow.

25. Plug the unit into a wall outlet and power it on*.
Measure the voltage at both P1 plugs as described below:

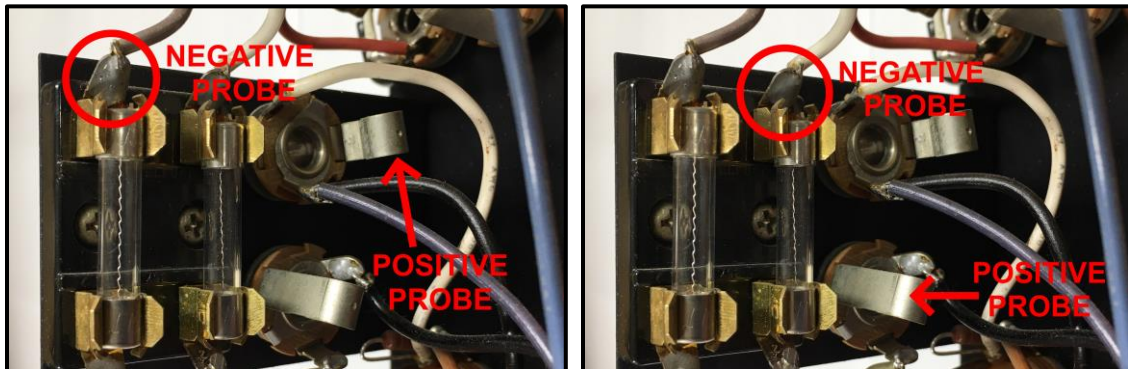


Measure -VDC (Pin 1) referenced to Ground (Pin 4) = -31VDC
Measure +VDC (Pin 6) referenced to Ground (Pin 4) = +31VDC

*It is recommended that the initial power-up be done with a variac while monitoring the AC current draw. The current consumption for an unloaded amplifier unit should be approximately .45A for 120V units and .23A for 240V units.

26. Upon power-on, after a short delay, the relay on the PCB should engage. You should hear an audible click as the relay contacts connect. A red LED should also illuminate on the PCB.

With the unit still powered, ensure the relay connections are being made at the speaker jacks by measuring the DC resistance (Ohms) of each connection as follows:



The measurement should confirm a direct connection (under 1 Ω).

27. Turn the unit off and unplug it from the outlet. Be aware that without the amplifier modules plugged in, it will take several minutes for the voltage to drain fully from the unit and therefore it should be considered “live”.
28. Ensure that all voltage has been drained from the capacitors by repeating the measurement portion of Step 25. Once verified, reinstall the P1 plugs at both amplifier module PCBs.
29. To ensure the relay is functioning properly with the power off, repeat the resistance measurements made at Step 25. These readings should read infinite resistance or overload; indicating an open circuit.
30. It is advisable to check and adjust Bias and DC Offset for both amplifier modules accordingly as they may have changed due to the new power supply installation.

Additional Notes:

1. A relay muting circuit is included to prevent power on and off transients from being fed to the speakers and creating undesirable pops/thumps. You may hear a slight “click” sound from within the speaker cabinet itself, this is the mechanical sound of the relay itself. For best performance it is recommended that the preamplifier volume control be set fully CCW before cycling power on or off.