

# ***SIR #34 JCM 800 Mod***

**For Slash's Use Your Illusion Amp Tone**  
(Specifications for PCB type JCM 800's)

*Revision*  
**V06.22.12**

**SIR-LA #34 -- SERIAL NUMBER: S/A S01796 -- MODEL: 2203 MkII - D.O.M. 01/20/1984**



*Original mod by Frank Levi*

*Modification instructions provided by Jay Linton*  
*Modification specs provided courtesy of Duane Cromer*

**WARNING!**  
**IF YOU DO NOT HAVE ELECTRICAL KNOWLEDGE OR EXPERIENCE**  
**WITH HIGH VOLTAGE AMPLIFIERS - DO NOT ATTEMPT THIS MOD!**

### Instructions

(These specifications were completed using a 1984 (PCB) type JCM 800)

- A. Remove C2 (100pF) capacitor and leave blank (photo A.).
- B. Remove R3 (stock resistor is 33K or 68K ohm) from the board and solder a 33K ohm 1/2 watt carbon film resistor to pin 2 of V1a (photo C.). Solder the center conductor of your *\*hot-shield* to this resistor and then heat-shrink (photo C.). Solder the other end of the *\*hot-shield* cable to the board closest to the front panel where R3 was removed earlier (photo A.).
- C. Bypass R4 (100K) with a 220pF capacitor (photo A.).
- D. Replace C4 (470pF) with a 2200pF capacitor (photo A.).
- E. Bypass R6 (10K) with a .1uF capacitor (photo A.).
- F. Bypass R9 (820 ohm) resistor with a .47uF capacitor (photo A.).
- G. Replace R20 (10K) resistor with a 22K ohm resistor (photo B.).
- H. Replace C17 (.1uF) with a .68uF capacitor (photo B.).
- I. Solder a 150K ohm resistor from the center lug of the Preamp pot to ground (photo E.).

#### ***\*Hot-Shield cable trimming and heat-shrinking:***

Trim both ends of a 10 to 12 inch shielded coax cable (see photo D. for length reference) so that the center conductor is the only wire exposed. Cut off the shield braid and shrink wrap both ends so that it cannot short from the center wire to the outer shield. Now solder one end of your hot-shield cable to the board where R3 was removed. Solder the other end of this cable to the resistor that you soldered to pin 2 of the V1 tube socket. **YOU DO NOT WANT TO ALLOW THE SHIELD OF THIS CABLE TO SHORT TO THE CENTER WIRE, NOR ANY SURROUNDING COMPONENTS OR SURFACES. YOU COULD BE SERIOUSLY SHOCKED IF A SHORT OCCURS!!!!**

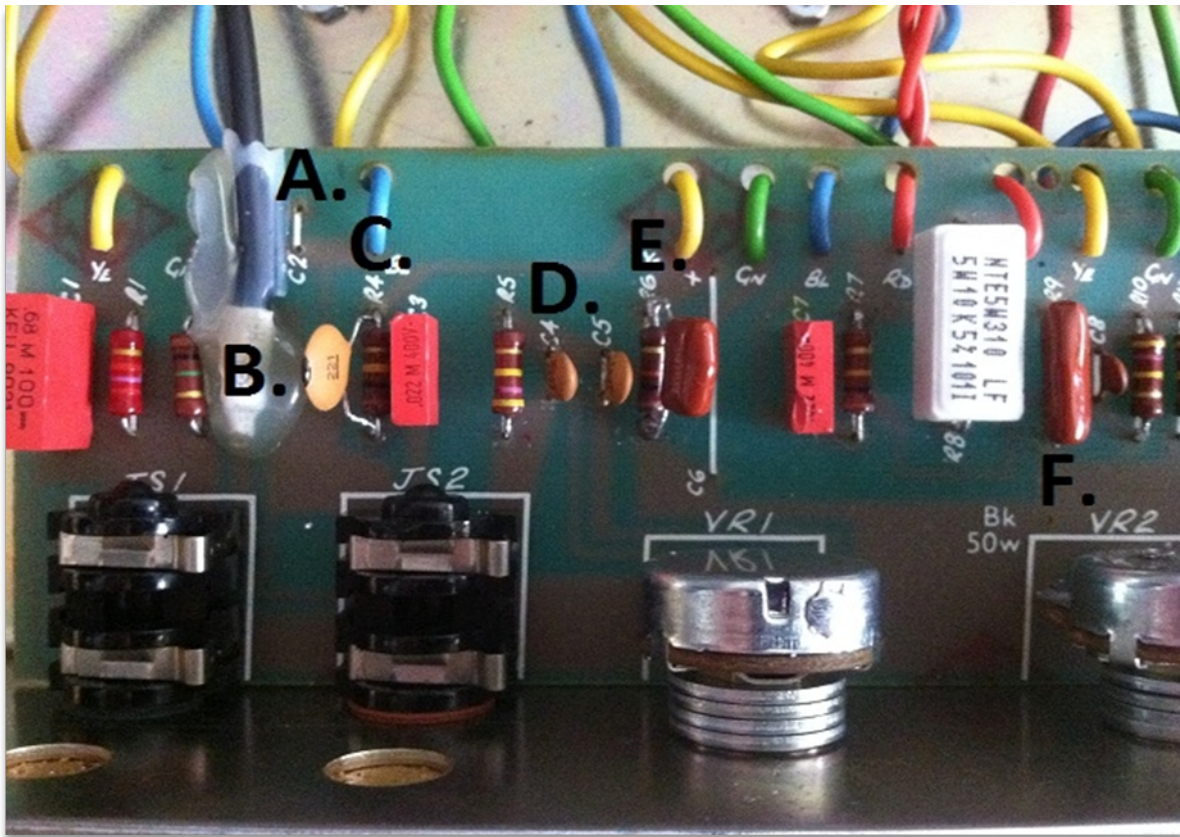


Photo A.



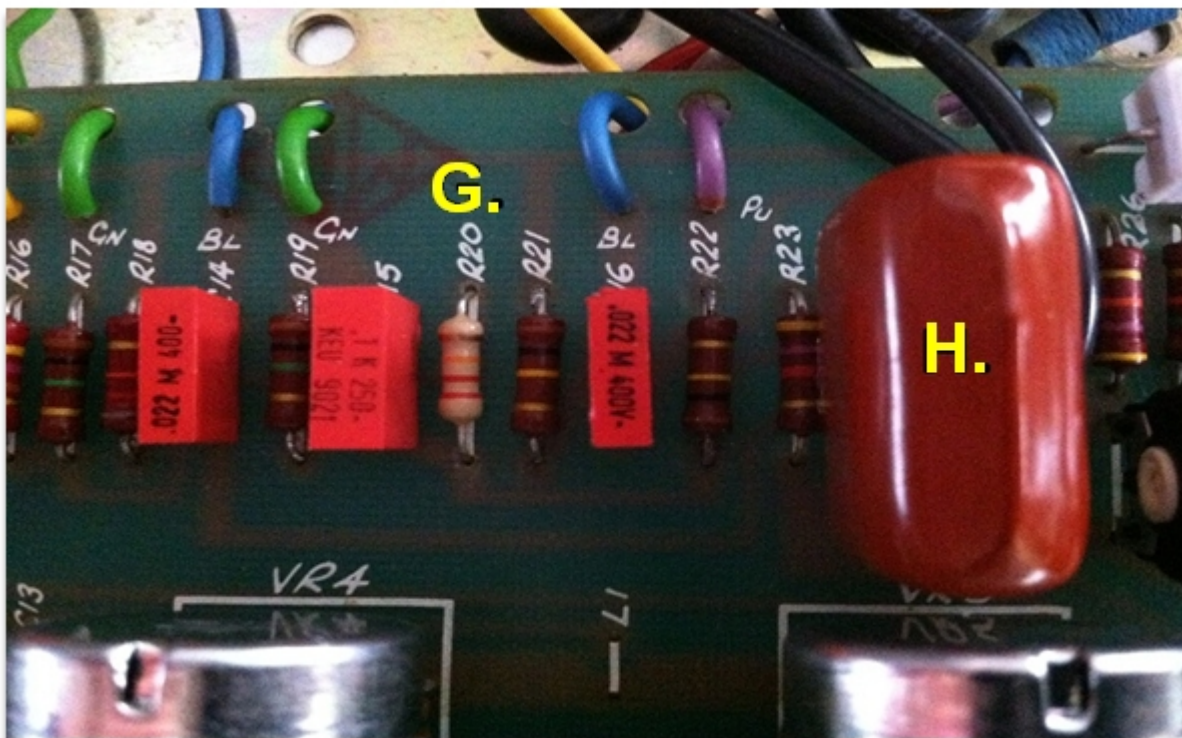
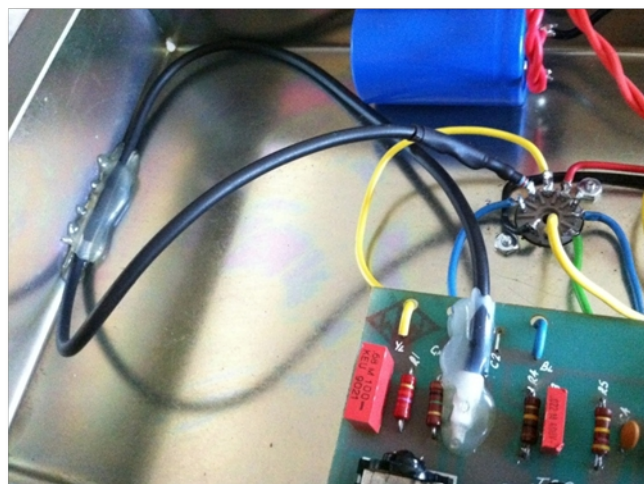


Photo B.



V1 socket and hot-shield cable – photo C.



Hot-shield cable shown for length reference – photo D.

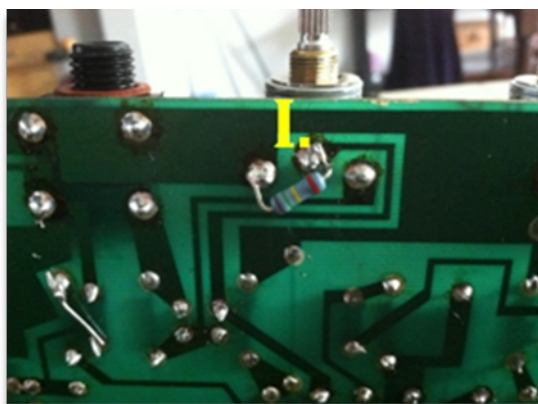


Photo E.







Web-shots of the interior of #34.



**Left:** Santiago is taking some measurements as part of the AFD100 R&D.

**Right:** The exterior of #34 during a recordings session – sound samples for Santiago to take back to Marshall.



**Left:** Santiago taking photos of the PCB of Slash's #34 for the AFD100 R&D.

**Right:** Sticker on the front top left of #34... "Max Recording - (?)set". I don't know what this (?) character is though...



**Left:** The rear of the #34 preamp section



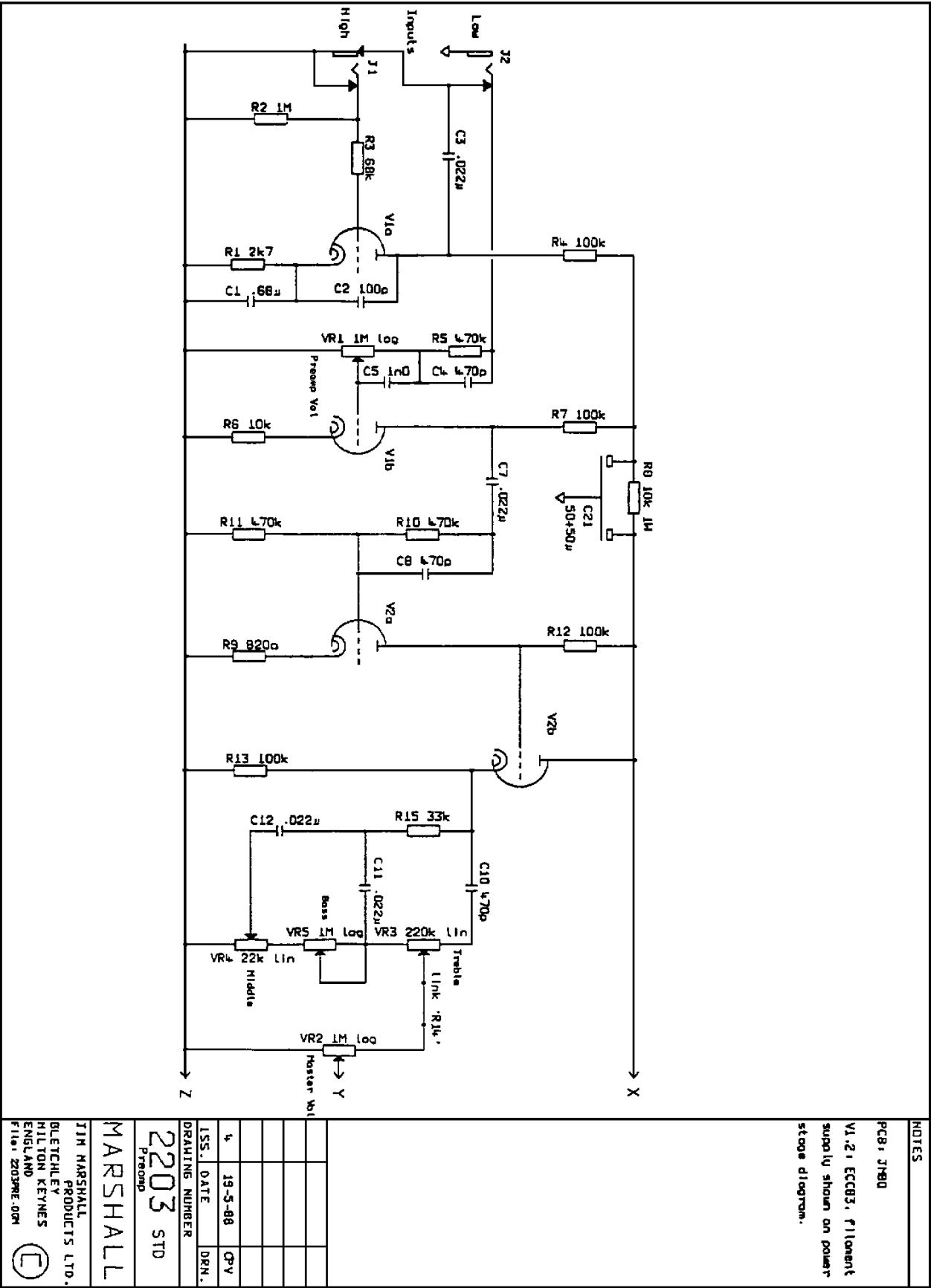
**Right:** The rear of the #34 power tubes section

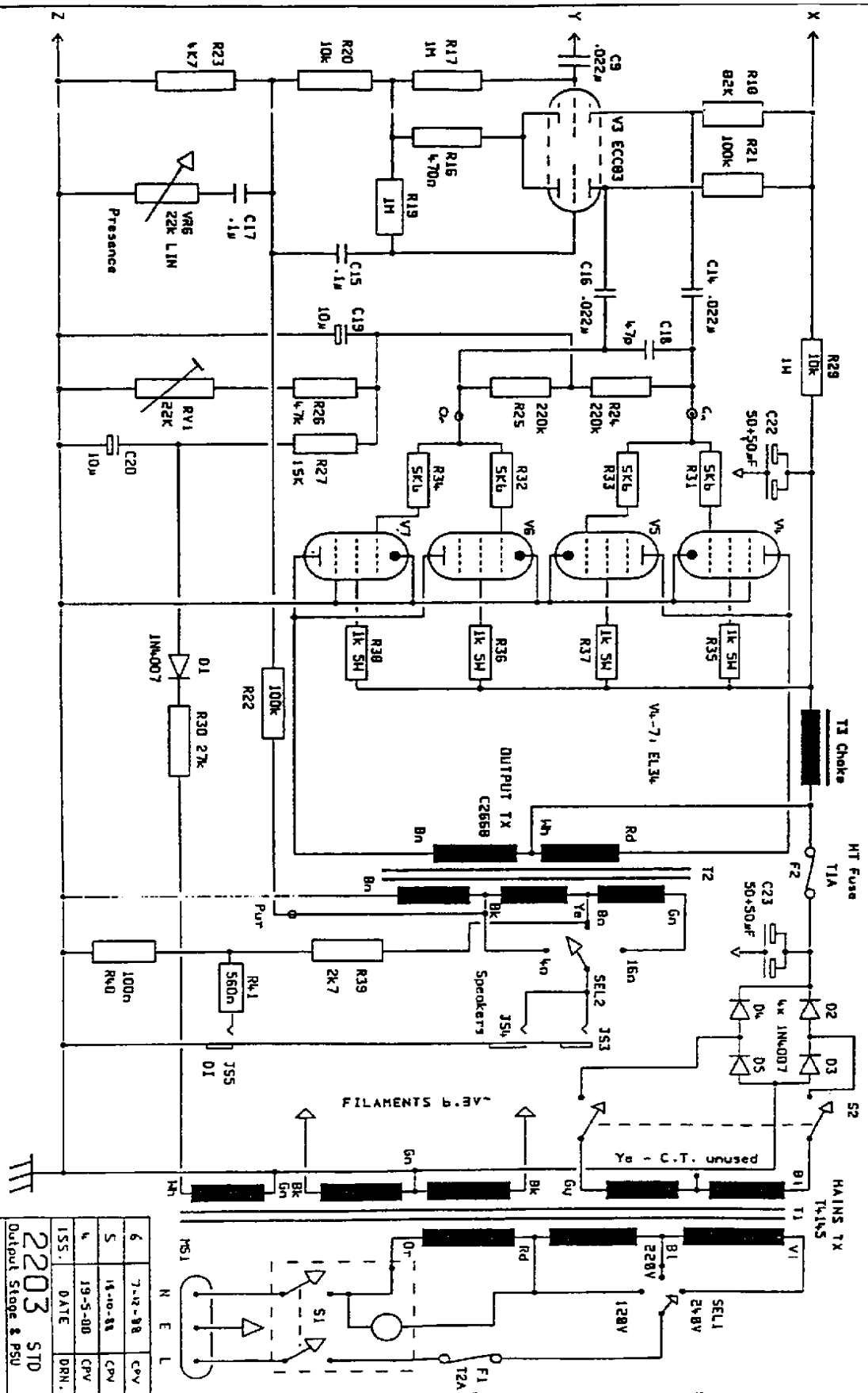


A photo of Slash's #34 with his AFD100's setup in the *Barefoot recording studios* for the recording of *Apocalyptic Love*.



Here's a photo collage of the left side of the #34. The duct tape was probably put there to cover something that SIR had written or spray painted there. Until it comes off, I guess we'll actually never know.





JCM 800 2203 100 Watt power amp section diagram





***THERE ARE VERY HIGH VOLTAGES INSIDE TUBE GUITAR AMPLIFIERS THAT CAN SEVERLY INJURE OR KILL A PERSON – CAUTION IS STRONGLY ADVISED!!!***

\*\*\*If you do not possess the skills or knowledge necessary to work on high-voltage tube amplifiers, or if you are uncomfortable and/or apprehensive, it is highly advised that you take your amp to a qualified amp tech to perform this mod and any other services that may be required\*\*\*

## **Notice!!!!**

**If you are determined to work on your own amp, here are a few things that you should absolutely know before attempting *any* work on a tube amplifier or electrical equipment:**

- 1 - Tube amps are voltage driven and have very high voltages within them – upwards of 500 volts.
- 2 – Always make sure the amp is unplugged before beginning any work on your amp.
- 3 – \*Always discharge the filter caps before attempting any work inside your amp.
- 4 – If you have to work on a live amp, make sure you work with one hand behind your back to prevent electrocution.
- 5 – Always follow these rules when working on any electrical device, especially high voltage equipment.

\*For more detailed information on how to discharge filter caps and other tube amp related information, there are many places on the internet that are a good source of information regarding tube amplifier mods and servicing.

**Credits:** Thank you to Duane Cromer (aka: Coffeetones) of the MetroAmp forum for all of his input, and most importantly his patience. These instructions wouldn't have been possible without his input. I also want to thank the MetroAmp forum and its members for their suggestions and input as well. An honorable mention goes out to Santiago for sharing and confirming what the forum members (for the most part) already knew.

If you have questions or comments about these instructions, you can contact me on the MetroAmp forum (aka: bmwfreq), or, at my personal email address: [bmwfreq64@gmail.com](mailto:bmwfreq64@gmail.com)