***Slash #34 JCM 800 Mod***

**For Slash’s *Use Your Illusion* Amp Tone**

**(Specifications for PCB type JCM 800’s)**

***V06.17.11***

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*Original mod by Frank Levi*

*Modification instructions provided courtesy of Jay Linton - 2011*

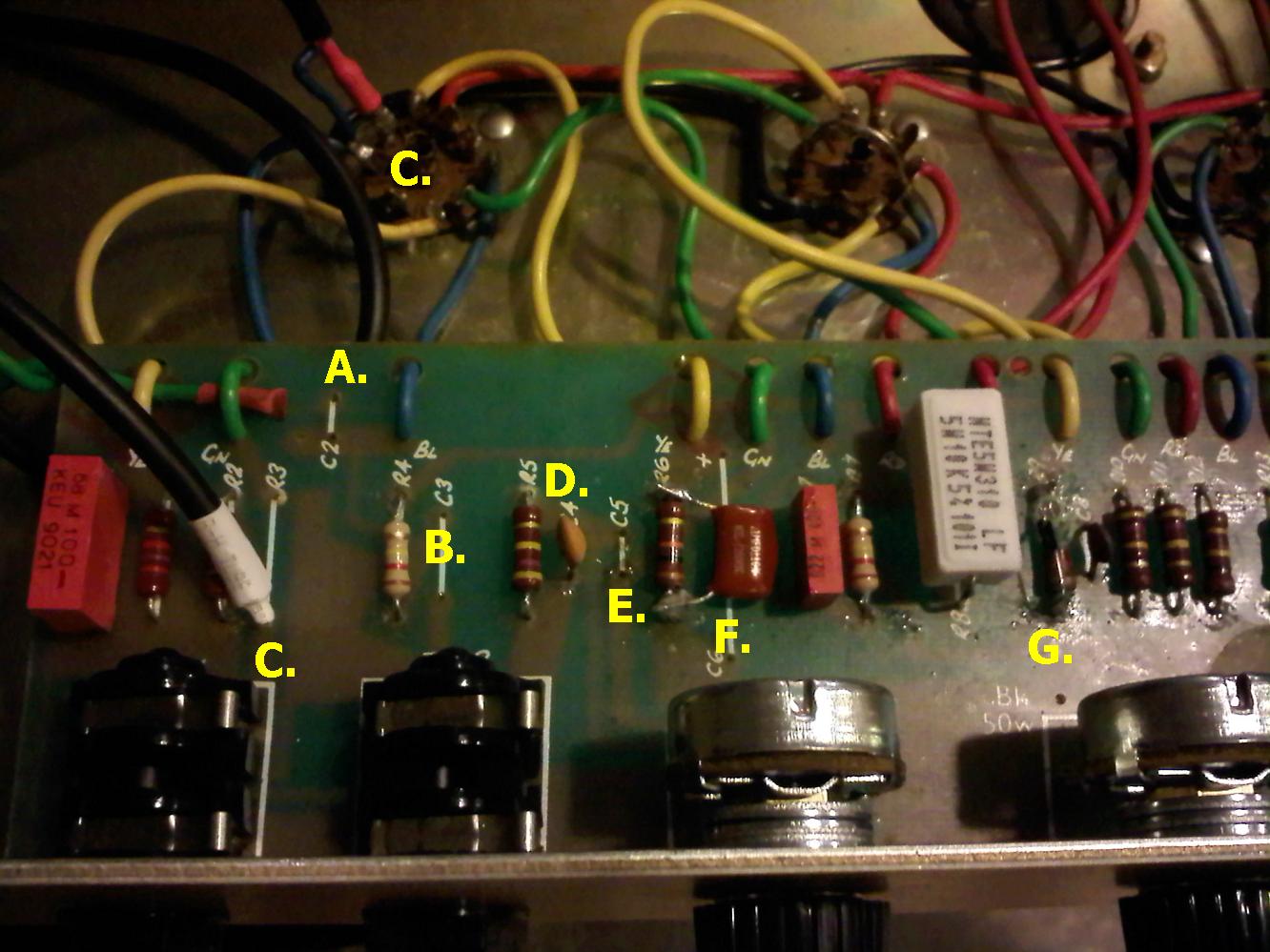
***WARNING!***

***IF YOU DO NOT HAVE ELECTRICAL KNOWLEDGE OR EXPERIENCE***

***WITH HIGH VOLTAGE AMPLIFIERS - DO NOT ATTEMPT THIS MOD!***

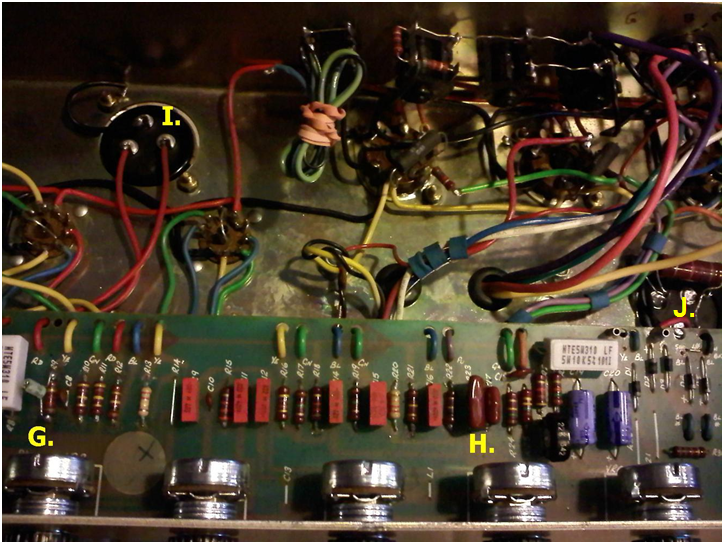
**Instructions**

1. **Remove C2** and leave it blank
2. **Replace C3** with a 500pf cap (this tightens the bass and increases mids)
3. **Remove R3** and solder a 33K resistor to pin 2 of V1a – solder the center conductor of your hot-shield to this resistor. Solder the shield braid of your hot-shield cable to pin 1 of V1a. Solder the other end of the hot-shield cable to the board where R3 was removed as shown in photo A. The shield at this end should be cut off and then heat shrink as shown in photo A.
4. **Replace C4** with a 5000pf cap
5. **Remove C5** and leave it blank
6. **Bypass R6** 10K resistor with a .1uf cap
7. **Bypass R9** with a .47uf to 10uf cap (*this adds punch and compression*)
8. **Replace C17** with a .22uf to .68uf cap (the stock .*1uf cap can causes squealing depending on the preamp tubes you are using – see notes for explanation*)
9. **Replace C21** with a 16uf/16uf 500v cap (see photo A. for location)
10. **Replace C22** with a 32uf/32uf 500v cap (see photo B. and notes for location)

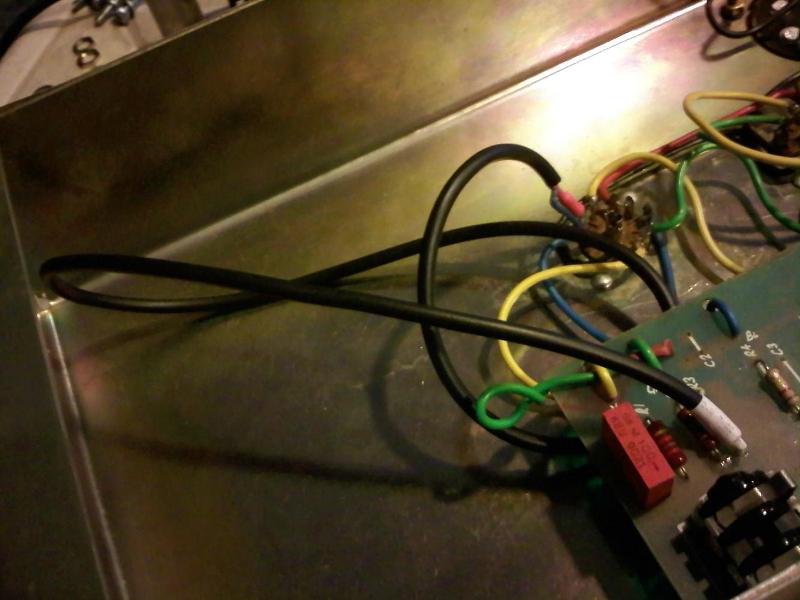


JCM 800 #34 PCB photo A.

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JCM 800 #34 PCB photo B.



V1 socket and hot-shield cable – photo C. Hot-shield cable shown for length reference

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**NOTES:**

1. ***Self explanatory***
2. ***Self explanatory***
3. Trim one end of the 12 to 14 inch shielded cable so that the center conductor is the only wire exposed. Cut off the shield braid and shrink wrap the cable so that the cut shield cannot short-out anywhere. Solder this to the board as shown in photo A. Trim the other end with the shield braid twisted long enough that it can be soldered to pin 1 of the V1 tube socket as shown in photo A.(I heat shrinked mine with blue shrink wrap to prevent any possibility of a short.) Solder the center of this cable to the 33K resistor that you soldered to pin 2 of the V1 tube socket. (photo C.) ***DO NOT SHORT THE SHIELD TO THE CENTER WIRE, OR YOU COULD BE SERIOUSLY SHOCKED!!!!!***
4. You can change the value of this cap to decrease or increase the treble response of your amp. Lower the value of C4 to decrease the treble response, or, raise the value to increase the treble response (1000pf~5000pf). 2200pf usually works fine, and is a good value to start with.
5. **Self explanatory**
6. **Self explanatory**
7. **Bypass R9** with a .47uf to 10uf 400v min. electrolytic cap. This increases the level of punch/gain/compression of the amp. Start out with a low value and work your way up. If you use too much capacitance here, the sound will become overly compressed and squashed. Make sure the negative lead of the electrolytic capacitor is soldered closest to the front of the amp where the pots are located
8. **Replace C17** with a .22uf to .68uf 400v min. cap (*with some preamp tubes the stock* .*1uf cap allows the amp to squeal when the controls are all set to zero)* You can use any value from .22uf to .68uf – adjust to taste
9. **Replace C21** with a 16uf/16uf 450v min. cap. C21 and C22 are changed to improve the string attack for that ‘*honk’* type effect you here so prominently on the UYI CD. It also improves the tone of the neck position pickup for the Sweet Child ‘O Mine tone. C21 is located on the chassis just above the preamp tubes. (photo A.)
10. **Replace C22** with a 32uf/32uf 450v min. cap. C22 is mounted to the chassis closest to the front panel under the board, and looks like the cap with the resistor marked with a ‘J.’ in the photo (photo B.)

***That’s it – crank it and enjoy!!!!***

***Side note:*** *I performed the actual #34 mod on my amp, exactly as it was taken from Slash’s JCM 800 by Santiago…well, the original #34 specs didn’t sound anything like what you hear on the UYI CD. If you want your JCM 800 to sound like Slash’s #34 on GNR’s Use Your Illusion CDs, this mod will get you very close, if not spot on. If it doesn’t, you may need to tweak the value of some of the components that you added. Do them one-at-a-time, and you will eventually have the sound you are after. If needed, do what I did…play the UYI CD, play your guitar, make adjustments; play the CD, play your guitar, make the necessary adjustments, play the CD…well, you get the idea. It worked for me. 8)*

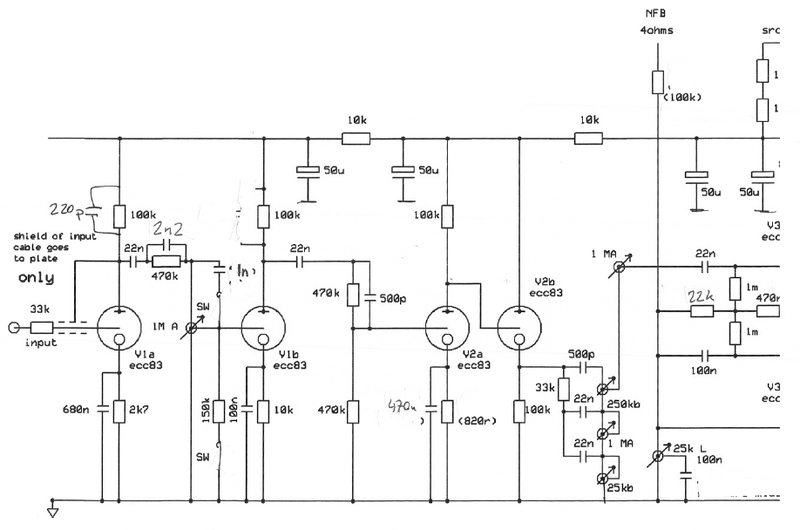
Good Luck!!!!

*\*\*\**Many special thanks to *Duane Cromer, a.k.a. CoffeeTones of the Metroamp Forum* for his patience, and for taking his time to help me perform the #34 mod on my amp, and in completing these specifications for everyone – many thanks Duane!!!

Notes:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
  
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The following information and schematics are provided for reference purposes:



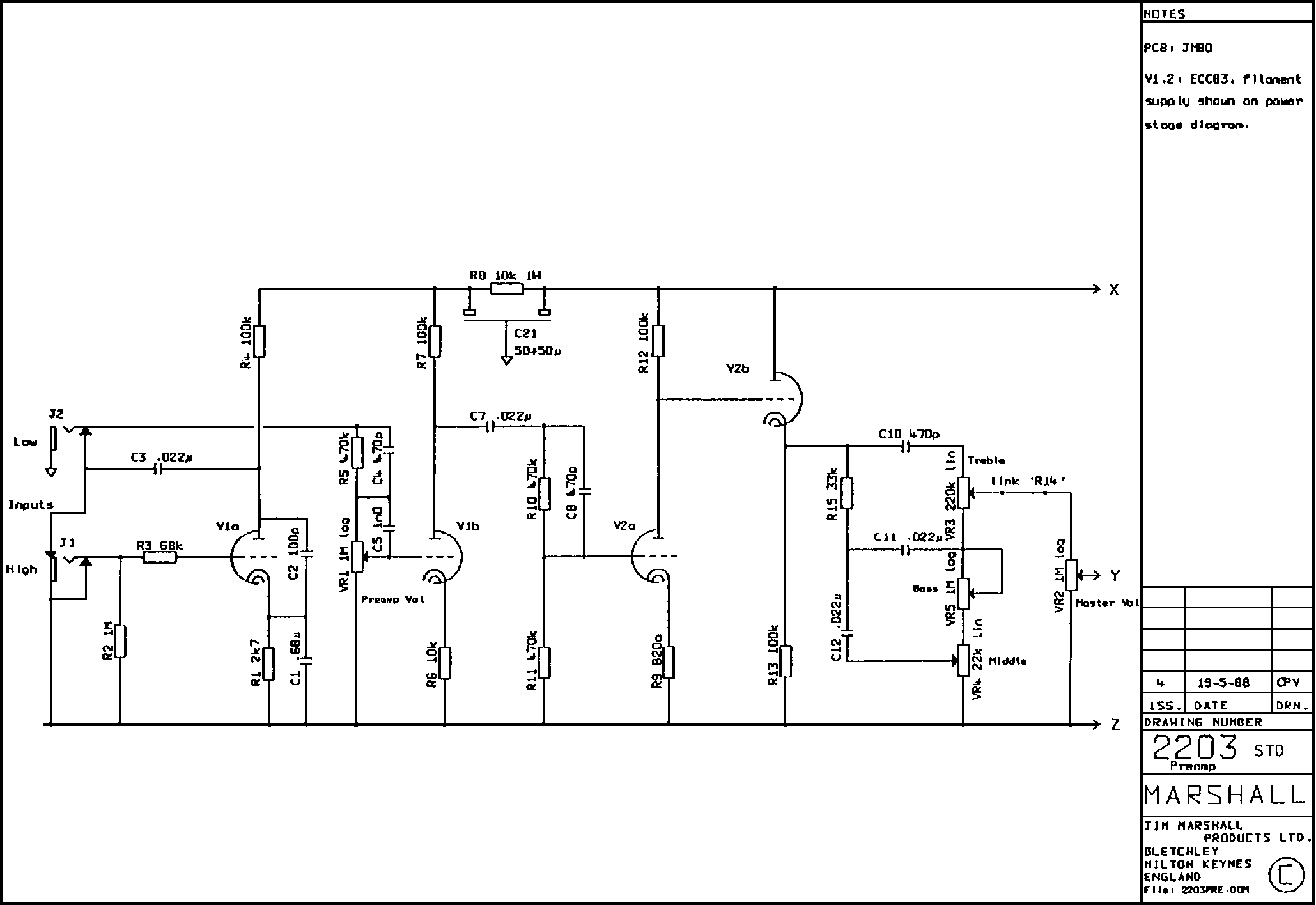
In the schematic above you can see Santiago’s hand written component values for the parts that Frank Levi added to Slash’s JCM 800 to create the #34 mod.

[](http://www.google.com/imgres?imgurl=http://img267.imageshack.us/img267/102/photo34mod02.png&imgrefurl=http://forum.metroamp.com/viewtopic.php?t=29759&p=337586&usg=__MrjoPgiTVVlT7ksS6x9fNBur8wo=&h=745&w=1325&sz=657&hl=en&start=6&zoom=1&tbnid=WZ4Tj2gMVYd2mM:&tbnh=84&tbnw=150&ei=XvHXTcG4Ioe-sQPRwYixBw&prev=/search?q=Slash's+#34+mod&um=1&hl=en&biw=1341&bih=644&tbm=isch&um=1&itbs=1)

Here’s a web-shot of Santiago taking a picture of the inside of Slash’s #34 JCM 800

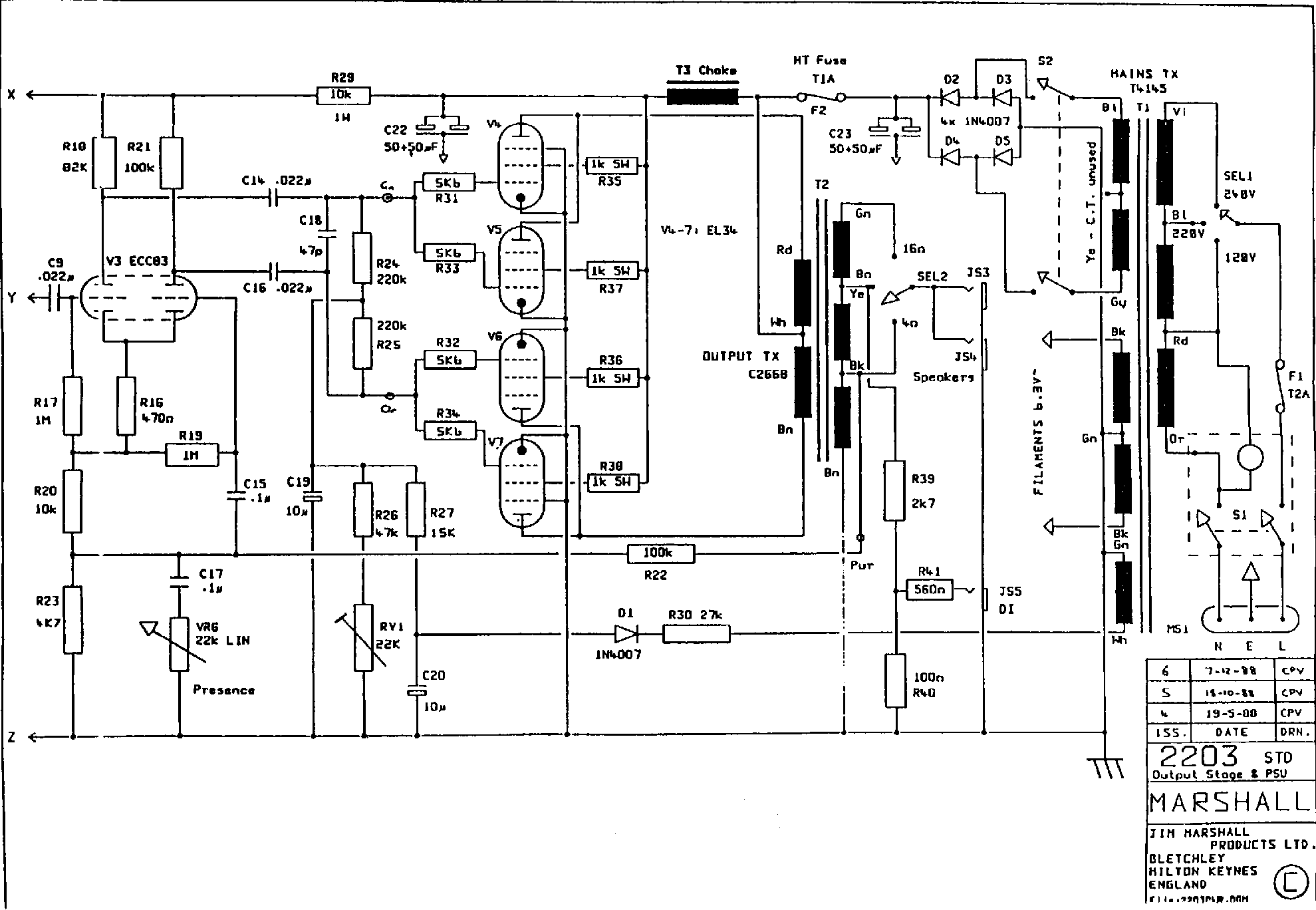
while doing his R&D for Marshall for the AFD100 amplifier.

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JCM 800 2203/2204 preamp section diagram

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JCM 800 2203/2204 power amp section diagram

The electrical parts needed to perform this mod, including the Dual Element capacitors for C21 and C22 can be found on the internet at most *guitar amplifier* *replacement parts stores*. There are also a number of electronic parts wholesale stores on the internet that will have these parts as well.

**WARNING/Disclaimer:** These instructions are written and intended for qualified electronic technicians. If you do not posess the skills and knowledge necessary to work on high-voltage electronics, **DO NOT ATTEMPT THIS MOD!!! THERE ARE VERY HIGH VOLTAGES INSIDE GUITAR AMPLIFIERS THAT CAN KILL A PERSON!!!**

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