

# **ADA MP-1 MODS**

By Mark Howell

## **Token Disclaimer:**

Perform these mods at you own risk. I will not be responsible for you trashing your MP-1 or electrocuting yourself. Unplug it first!! Don't do these mods if you don't know which end of a soldering iron to hold. Also, tone is very subjective so if you don't like the sound of these mods, don't blame me. Everyone has a different setup (post-processing, effects, power amp, speakers, etc), so it's difficult to determine what YOUR end result will be. These mods are reversible, save for one cut trace, which can be easily rebridged. I've done these mods to my own MP-1, and they sound great!

## **Warning:**

These mods change the sound of your MP-1!! But then again, you wouldn't be doing these mods if didn't want to change the sound of your MP-1 😊

## **MOD #1**

This mod changes the last tube gain stage into a cathode-follower. The gain stage/cathode follower configuration is the cornerstone of Marshall crunch, and is used in plexis, master volume series, JCM 800s, Lee Jackson designs, and countless others. [Here](#) is the schematic of the stock MP-1 circuit, and [here](#) we see V2B reconfigured as a cathode follower. This mod involves removing a bunch of components, cutting a trace, and installing 3 jumpers (pieces of wire).

### **Advantages:**

Authentic Marshall crunch! More "bite" and "edge" to the sound".  
Tube clean sounds "cleaner".

### **Disadvantages:**

You lose some gain. No problem, the gain you had with OD1+2 at "6" is now at "10", with the same amount of noise.

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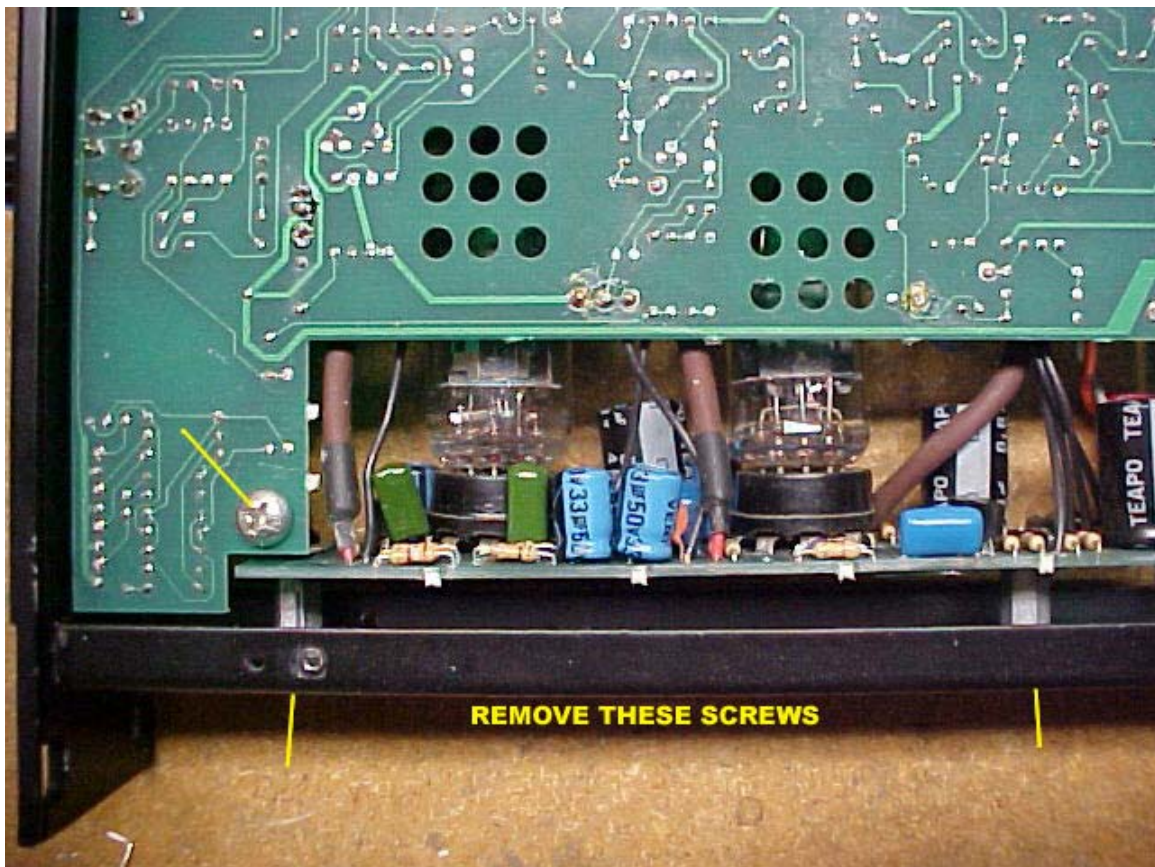
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### **The Procedure:**

- 1- Unplug your MP-1 😊
- 2- All nasty voltages drop down to zero about 30 seconds after unplugging, so don't worry about getting zapped.
- 3- Remove the top and bottom covers. They fit inside a groove in the front panel, so slide them back first before lifting them off.



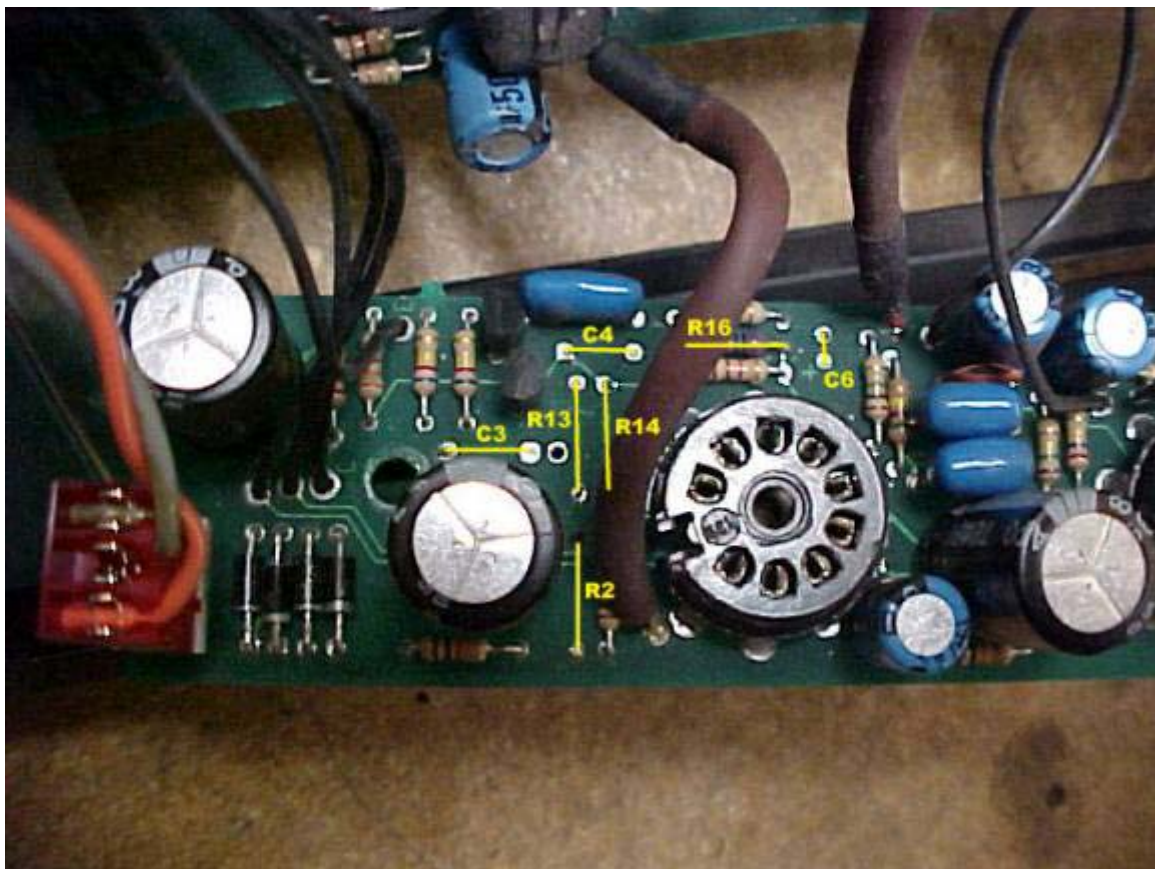
4- Remove the two tubes. Unfasten the tube board and flip it upwards so you can work on it.

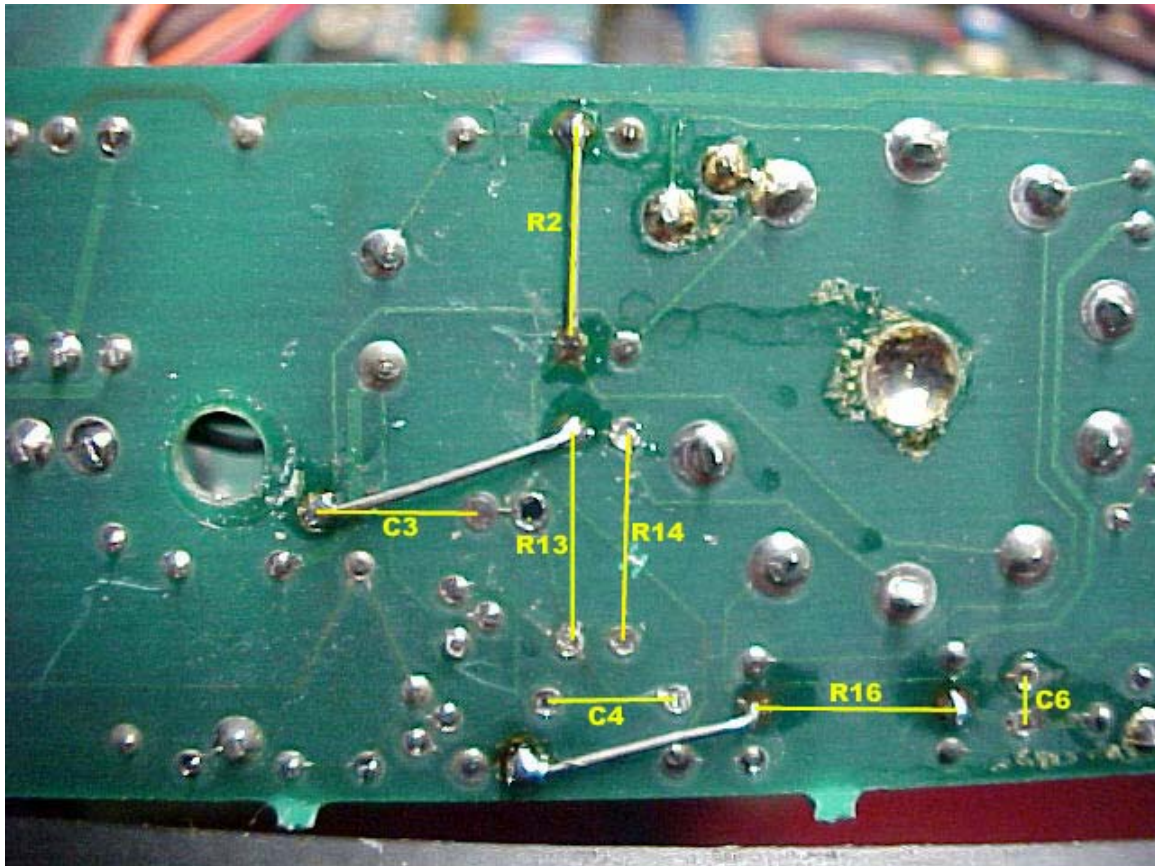


5- Remove these components:  
C3 (.0068 uF capacitor)

C4 (100pF capacitor)  
R13 (750k resistor)  
R14 (270k resistor)  
R16 (1.1k resistor)  
C6 (33uF capacitor)  
R2 (100k resistor) Set this one aside, we'll be using it later.

Remove the components by pulling them with a pair of needle-nose pliers on the component side of the board while heating the joint with a soldering iron on the other side. It would be helpful if someone was holding the board while you did this. Here are some pictures for locating the parts, unfortunately, they were taken after I modded the board, so you don't actually see the parts:

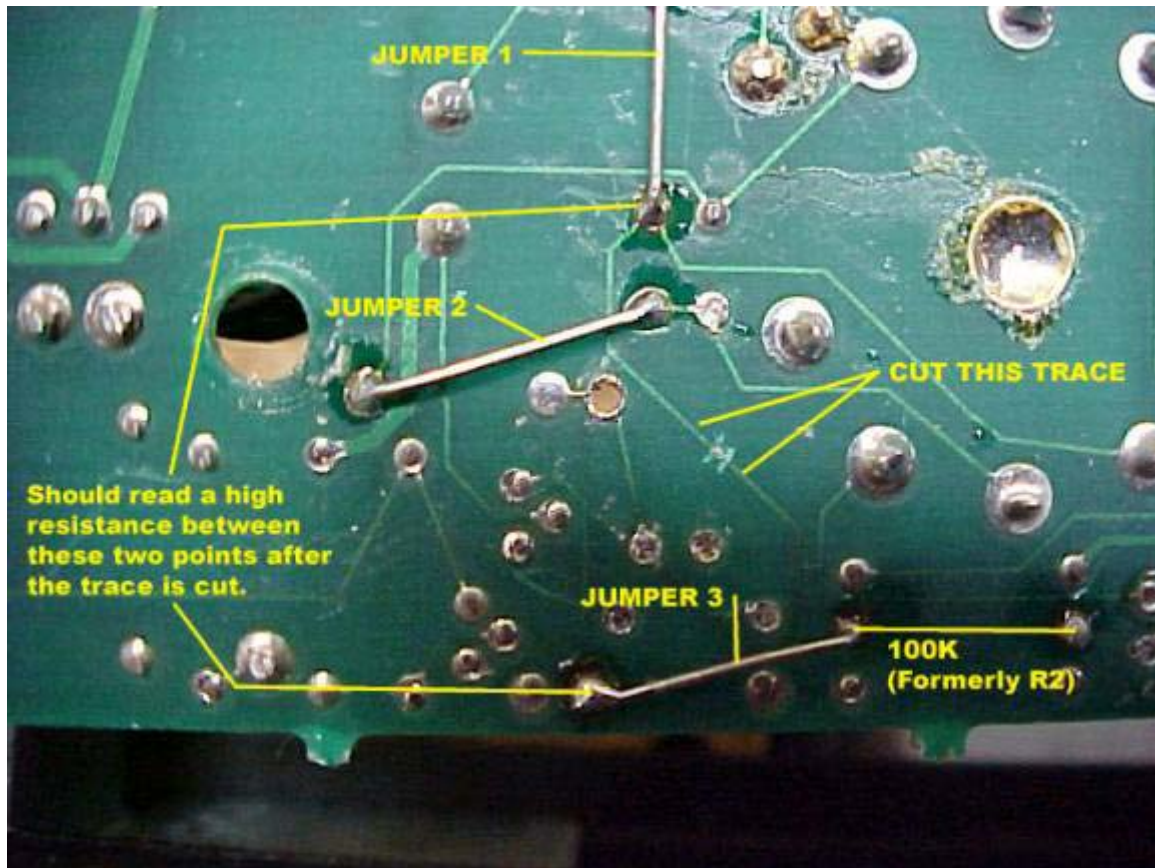




6- Now we need to add 3 jumpers, cut a trace, and reinstall that 100k resistor. Cut the trace shown with an X-Acto knife and make sure its cut properly by measuring the resistance between the 2 points shown.

Install the 100k resistor where R16 WAS.

For the jumper wire, I just cut the leads off of some resistors I had laying around. Jumper #1 goes where R2 was. Don't get too sloppy soldering jumper #2, you don't want it touching the standoff. Remove the standoff if it's in your way. It looks like jumper #3 is touching another solder pad but it's not, be careful with this also.



7- That's it, you're done! Screw the tube board back in, install the tubes, put the covers back on and fire it up.

Note- I will be experimenting with variants of this mod for some time before I move on to mods 2&3, so check for updates from time to time.

--end mod1