

Mesa Boogie 50/50 Mod Instructions

When the Fifty/Fifty was first introduced, it was designated as the companion poweramp for our Studio Preamp. Now, with the advent of the TriAxis Programmable Preamplifier, we are offering a single mod which greatly improves the compatibility between the TriAxis and the Fifty/Fifty by adding warmth and fullness plus a little additional power.

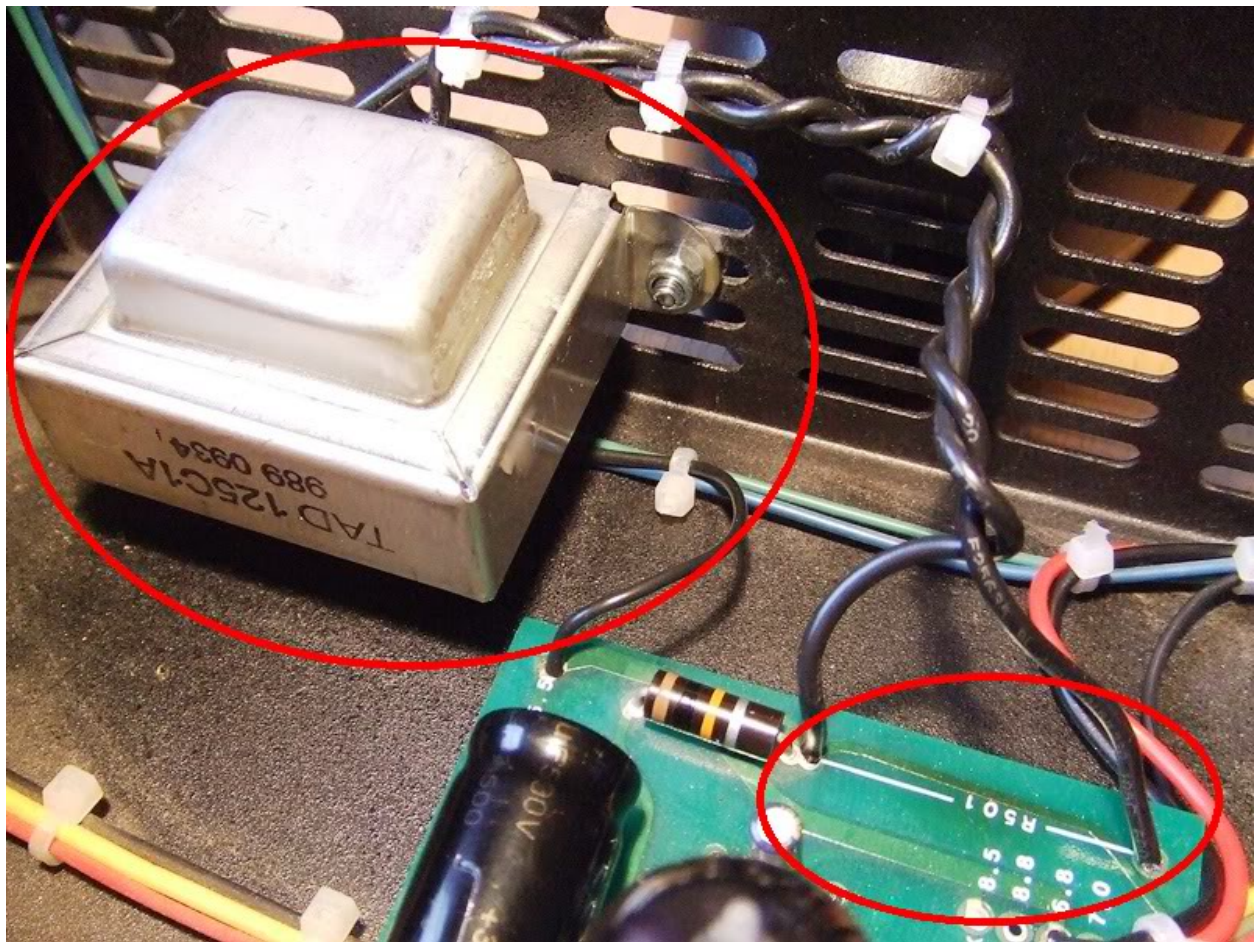
Although the procedure is simple and requires less than one hour, you must REFER THIS SERVICE TO A QUALIFIED TECHNICIAN.

1. Bolt the filter choke to the side of the chassis near the input jacks. It is not necessary to drill holes. Just run the pair of 8-32 screws through the cooling slots and mount the filter choke horizontally. NOTE: To ensure proper grounding, "metal-to-metal" contact must be made. Scratch a little paint off the inside of the chassis where the hardware mounting the choke will make contact, and use the star lock washers between the chassis and choke.

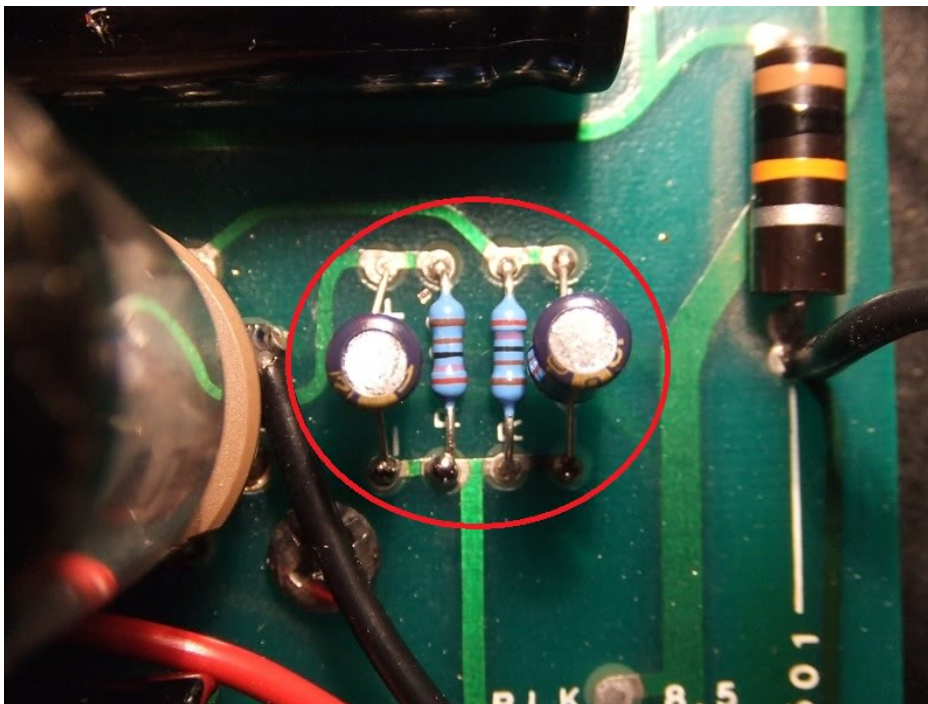
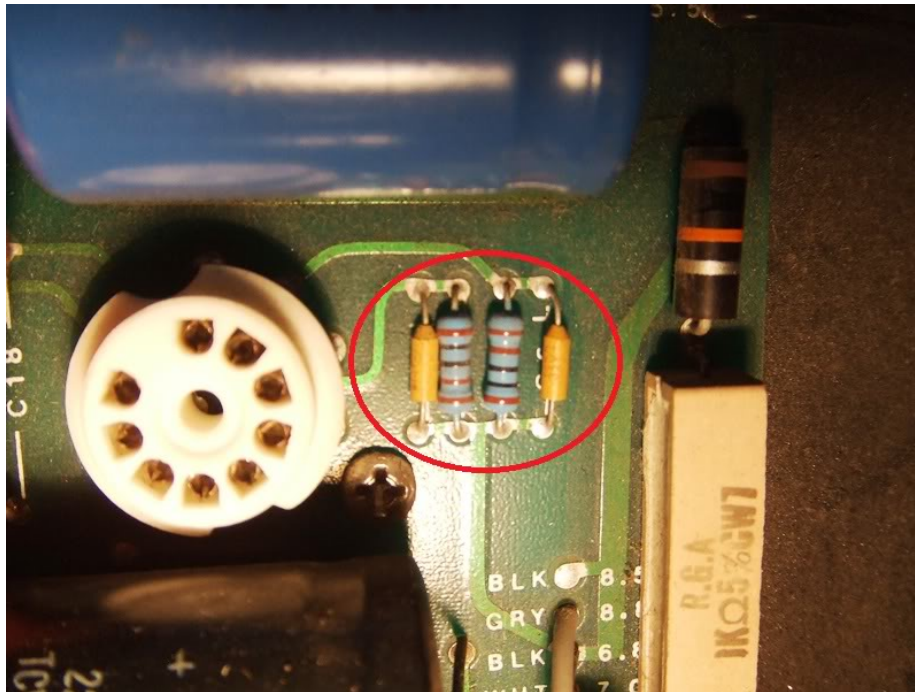
The best location is in the third row of slots up from the bottom, farthest slot toward the rear. Thread the nuts on the bolts and - before tightening - slight the choke toward the front of the amp as far as it will go on that rear slot.

2. Solder the two orange choke leads across the 1000 ohm, 7 watts sand block resistor, R501, one lead to each end.

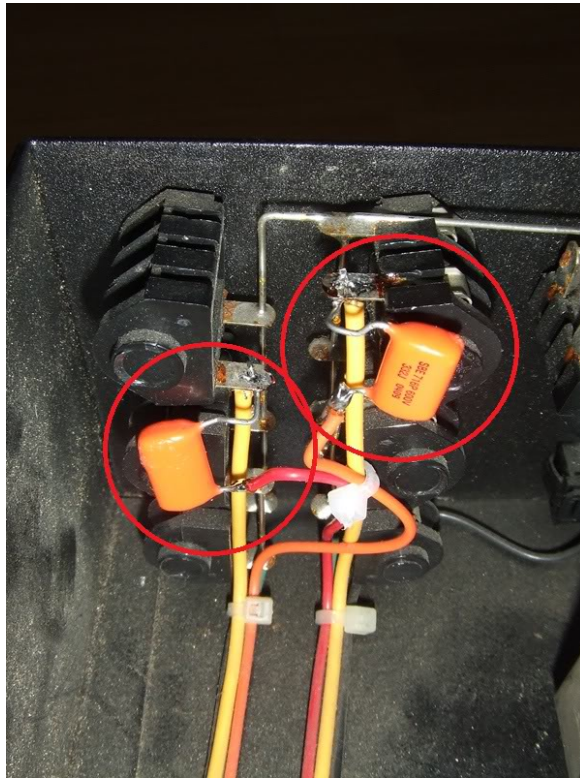
[color=black](I simply unsoldered R501 and put the choke leads in its place)



3. Replace the cathode resistors and capacitors at V1, the 12AX7 tube nearest the input jacks. These four parts are lined up next to each other just to the right of V1, as seen looking from the front towards the inside rear of the chassis. R202 and R203 each become 2.7k and C5 and C6 become 15.6 μ F/35v. Be certain to align the "+" ends with the "+" sign on the circuit board



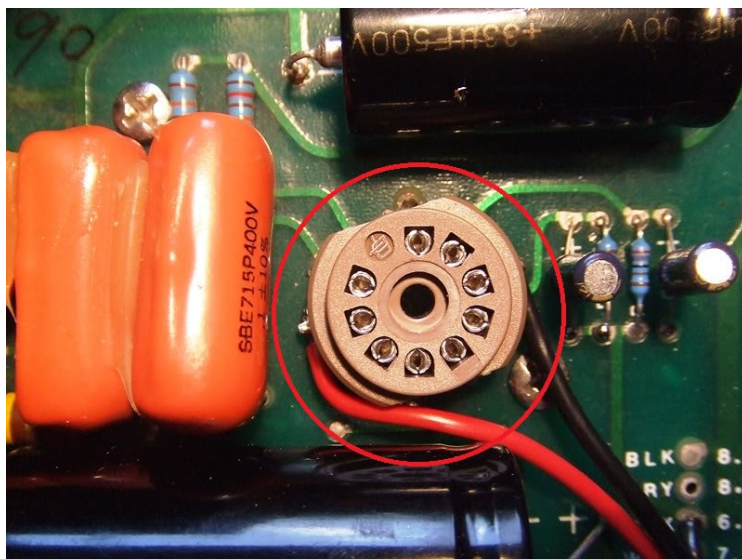
4. Look at the 8ohm speaker jacks and locate the red and orange wires. Unsolder these wires and add a .003 μ F disc capacitor between each wire and the jack where it was originally attached. Glue the capacitor bodies to the back of the jacks.



EXTRA MOD INFORMATION

If you have one of the early Fifty/Fifty's and it has a noticeable buzz in the background, here is a very simple cure:

1. On the V1 tube, remove pins 2 and 7 (counter-clockwise from the gap). These can be difficult to unsolder so it's ok to clip off pins 2 & 7 just flush with the PC-board. Be sure to leave enough of the pin material so you can bend and solder to them. Then unsolder the grey and white wires which come from the Level Controls to the circuit board just below the cathode parts. Bend up the remaining pieces of the pins from the socket and solder the wires to them directly. The white lead goes to pin 7, the grey goes to pin 2. Lift C18 .1/400v cap for easier access.



black = white
red = grey

Required parts:

- 1 Filter choke (I used a 125C1A from TAD @ 25€)
- 2 .003 μ F disc caps (I used Orange Drop 716P)
- 2 2.7k resistors (1w metalfilm)
- 2 15 μ F/50V caps (Panasonic)

edit: Since I had the complete board out of the chassis I went for "major overhaul" and replaced all filter caps ((4x 220 μ F/350V; 2x 50 μ F/100V; 1x 33 μ F/500V), all Orange Drop (there were 715Ps in which I replaced with 716Ps), a couple of resistors and all old ceramic tube sockets with new high-quality Belton-Micalex ones.

Mine was originally a 110V US Version so I got in contact with a small electronics workshop here in Germany who does custom power and output trannies and had them wire a customized 220V PT to the specs of the original (for 80€). It also has a higher quality WAGO connector. I also unsoldered all original wiring and rewired the whole amp with new 18gauge high-quality silicon wire and shielded wires for input and Volume.

All 4 pots where replaced with new Bourns pots.

