

Torres Engineering Amp Kit

Fender "Red Knob" Champ 12

1630 Palm Ave San Mateo CA
<http://www.torresengineering.com>

650 571 5887
tech@torresengineering.com

This modification is the easiest of any we have. The amp's circuit board is completely inaccessible to any of us, so all the modification is **outside** of the board.

Despite the simplicity, this mod is very effective.

Assemble the parts to the small terminal strip. They are shown exactly like they look and exactly where they go. The electrolytic capacitors have a + and - side. The side with a ridge, like a beer can, is the + side. If you can not find it - the caps also have a stylized arrow pointing towards the minus side. The other side is the +

Take the amp out of the chassis. The hardest part is unsoldering the speaker wires from the speaker. Do it carefully, don't drip solder on your speaker. (If you are in any doubt as to your soldering or the chance of any problem, tape up the opening in the speaker frame under the terminals you will be working on. No reason to take any chances.)

Set the chassis on the table with the knobs facing away from you.

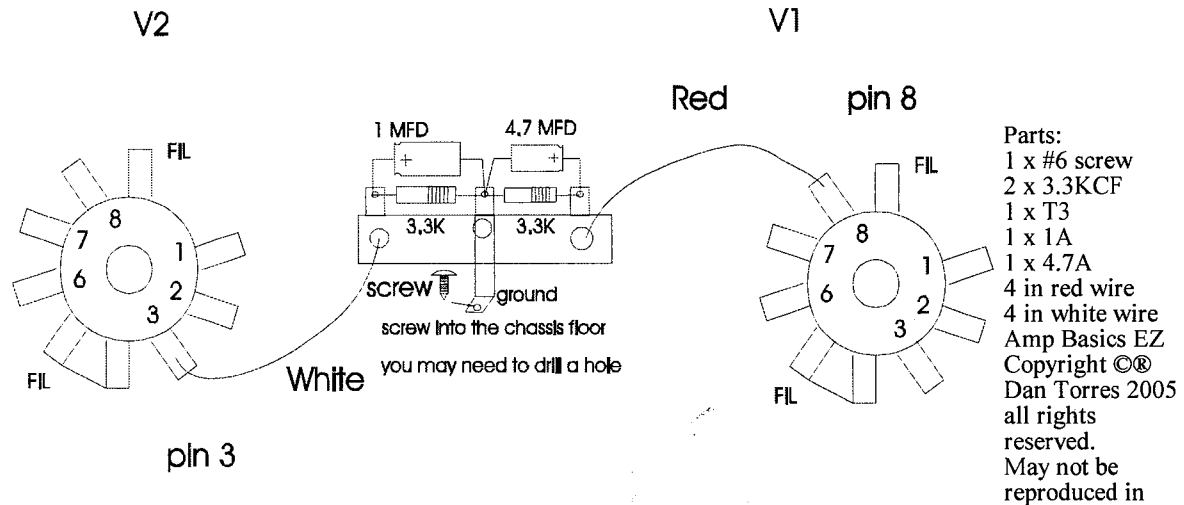
Locate the two 12AX7 tube sockets. Look at them and the drawing in "Basics" and identify the pins. You need to find pin 8 on the first one (on the right) and pin 3 on the second one (on the left.)

Drill a small 1/8 inch hole between the two tube sockets. Screw the terminal strip down with the screw. **It won't work if it isn't screwed down and grounded.**

Connect the red wire to pin 8 on V1, and the white wire to pin 3 on V2. **Leave the other wires there - don't take the wires already on the pins off - leave them there.**

Be sure you don't have any shorts and put the amp back together.

It will have a whole lot more tone, gain and power. Really amazing for such a simple project.



any media existing now
or to exist in the future.
For one time personal use only.