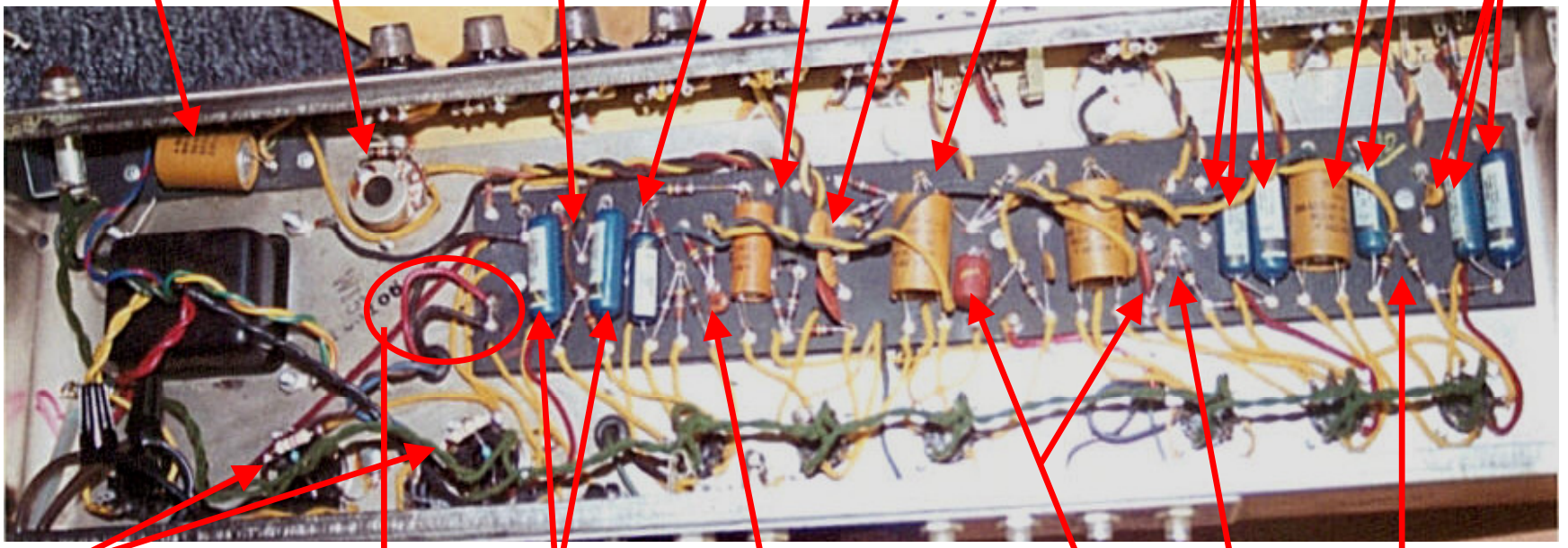
Inside a typical Fender amp (66 Deluxe Reverb)



Power Tube Grid Resistors
On Fenders there are usually 470 ohm 1 watt resistors affixed here. They help regulate current and dissipate heat.

Main B+ Voltage IN from OT
This is where voltage comes into the circuit board, supplying voltage to tubes.

Output Coupling Caps
These two caps are wired between the phase inverter output and grids of the power tubes. They carry the AC signal from the PI. Like the **Bias Splitter resistors** they should be matched as closely as possible and should be of high quality.

Phase Inverter Input Cap
This cap couples the pre-amp section to the power amp section. The value of this cap contributes to the low frequency cut-off point in the amp.

Coupling Caps
Check these, especially the disk type or the chocolate drops. Replace them with higher quality caps.

Plate Resistors
Help set gain. Higher values give more gain. Check to spec (100k in Fenders). If your amp crackles and makes noises at idle, often it is these resistors.

Tone Caps
2 axial lead caps and a ceramic disk cap. Many like to upgrade these to higher quality caps. Orange Drops in place of the axials and Silver Mica to replace the ceramic disk. It is an interesting area to change the tone of your amp.

Cathode Bypass cap and resistor
The resistor provides bias to the tube. The parallel capacitor adds gain to the stage it is in.

Reverb Driver Grid Resistor
This helps set the input signal to the reverb driver tube. If this were changed for pot, it would be just like the DWELL control on Fender Reverb units.

Tremolo "Speed" Caps
These 3 caps are the culprits in many Tremolo failures. Often one is broken off the board. You can also change values here to speed up or slow down the trem speed.

Tremolo Opto-Isolator
OK, photocell. This is where the tremolo action is generated. If you don't see a flickering light inside it, it could be dead.

Feedback Resistor
Part of the negative feedback loop (NFL). This one changes tone – affecting how the amp responds. More feedback flattens the frequency response and lowers gain.