



The Amp Builder's Guide

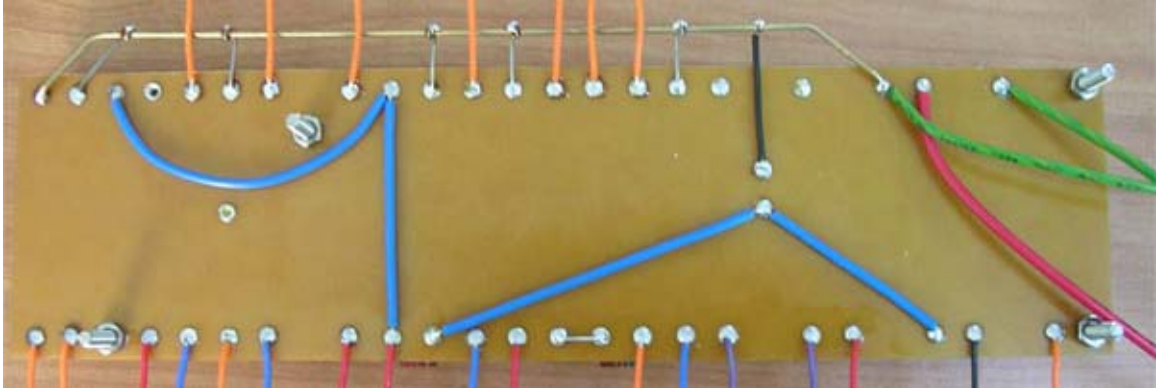
Photos

September 2005, Version 1.9

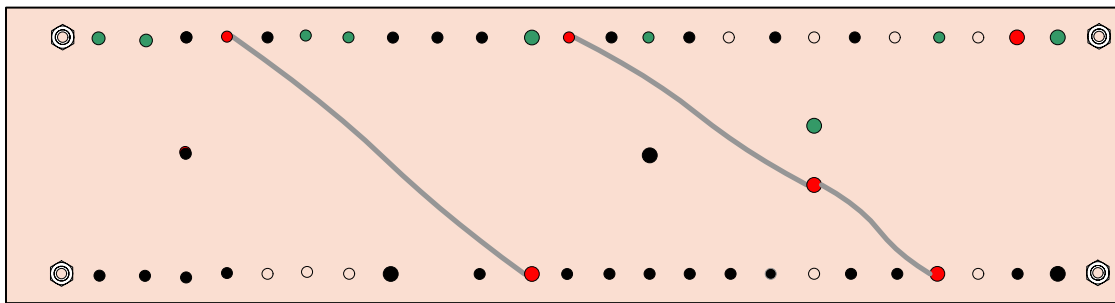
Parts © Trinity Amps 2005
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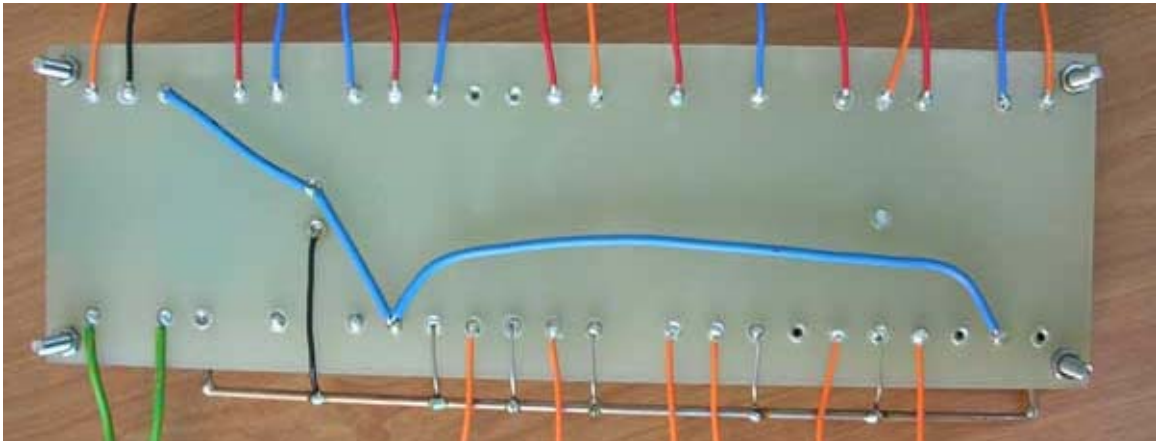
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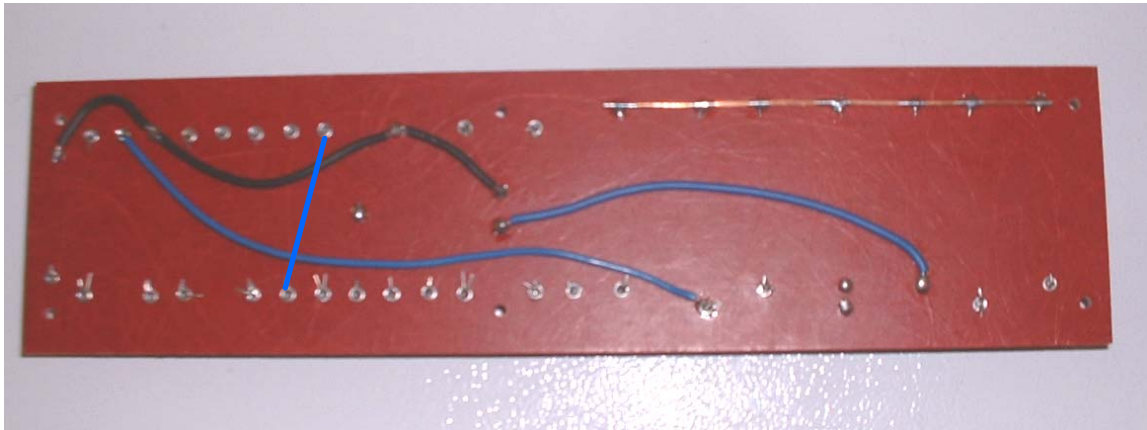
Trinity 18 TMB Board Underside



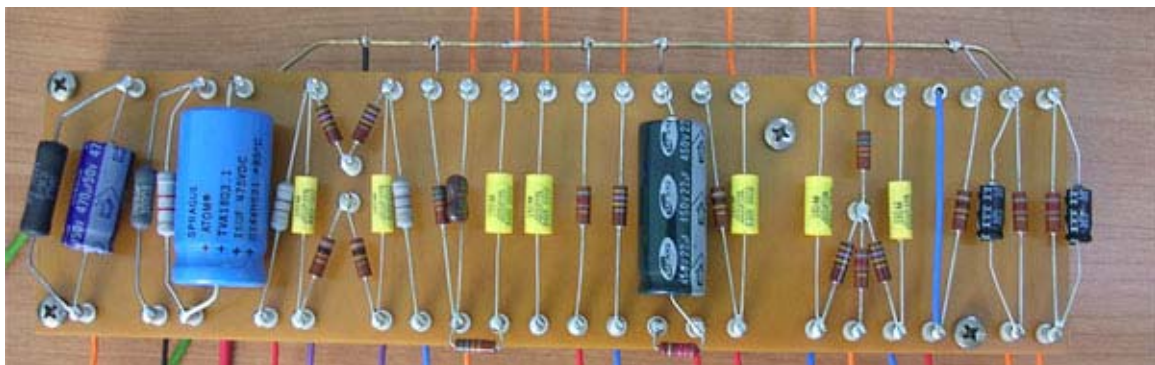
Trinity 18 sIII Underside



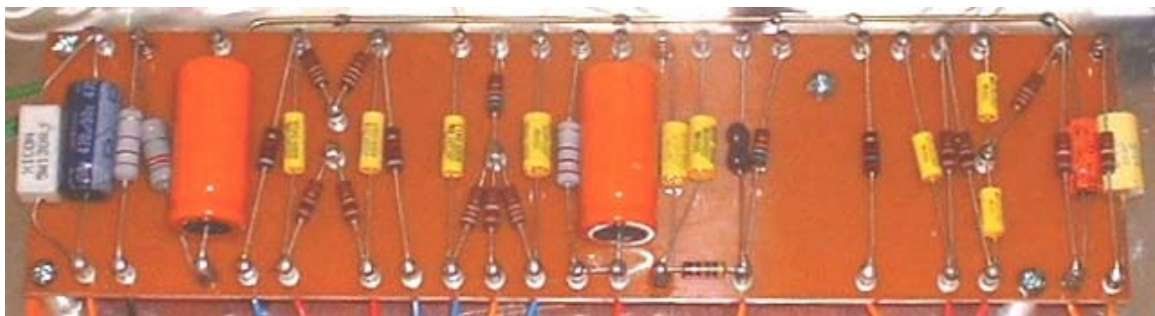
Trinity 18 Tremolo Underside



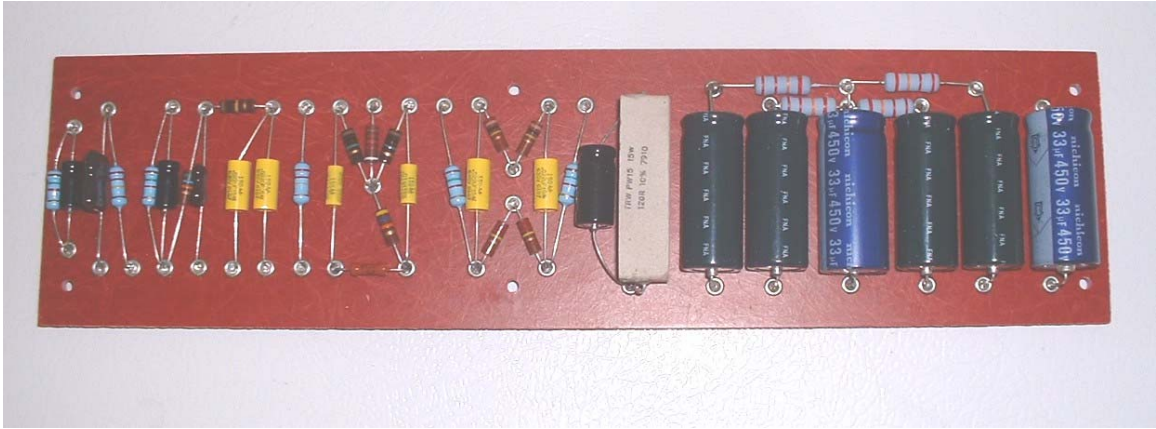
Trinity 15 Eyelet Board Underside



Trinity 18 TMB Completed Board Top View



Trinity 18 sIII TMB Completed Board Top View



Trinity 15 Completed Board Top View



Trinity 18 Tremolo Completed Board Top View



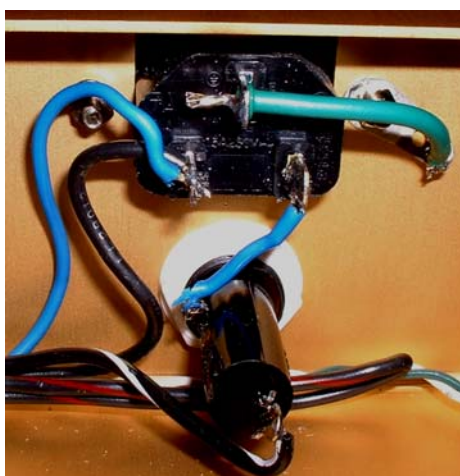
Trinity 18 TMB Front View



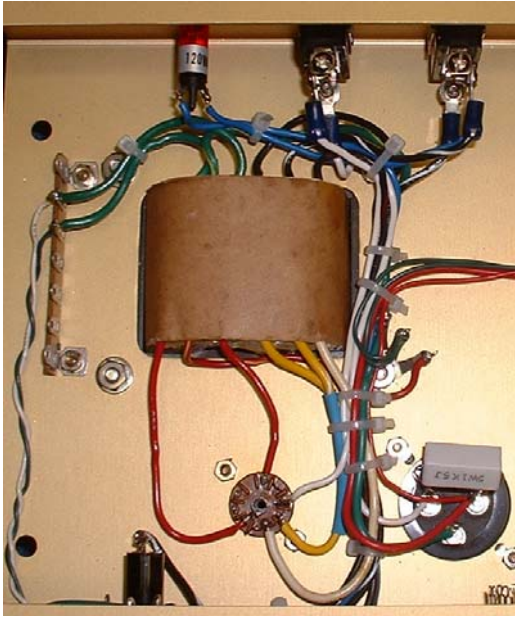
Trinity 18 SIII Front View



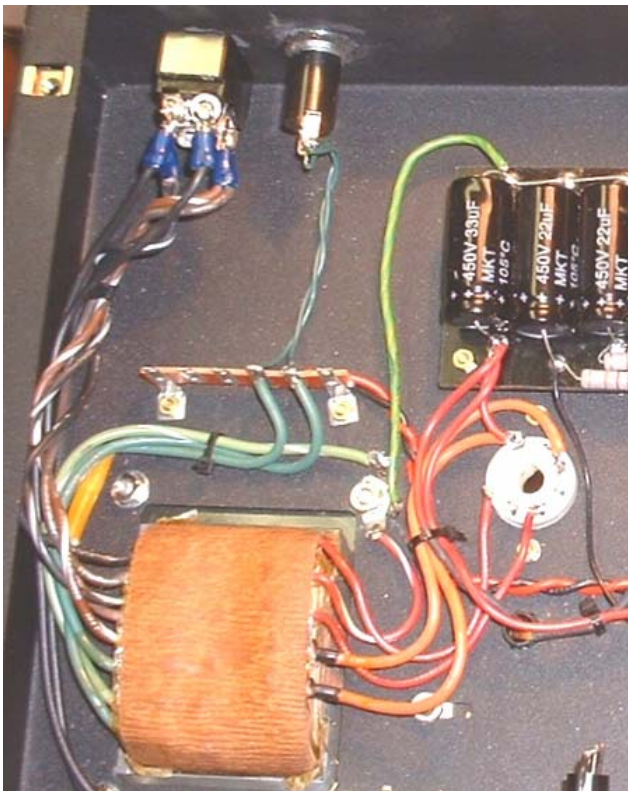
Trinity 15 Rear View (upside down)



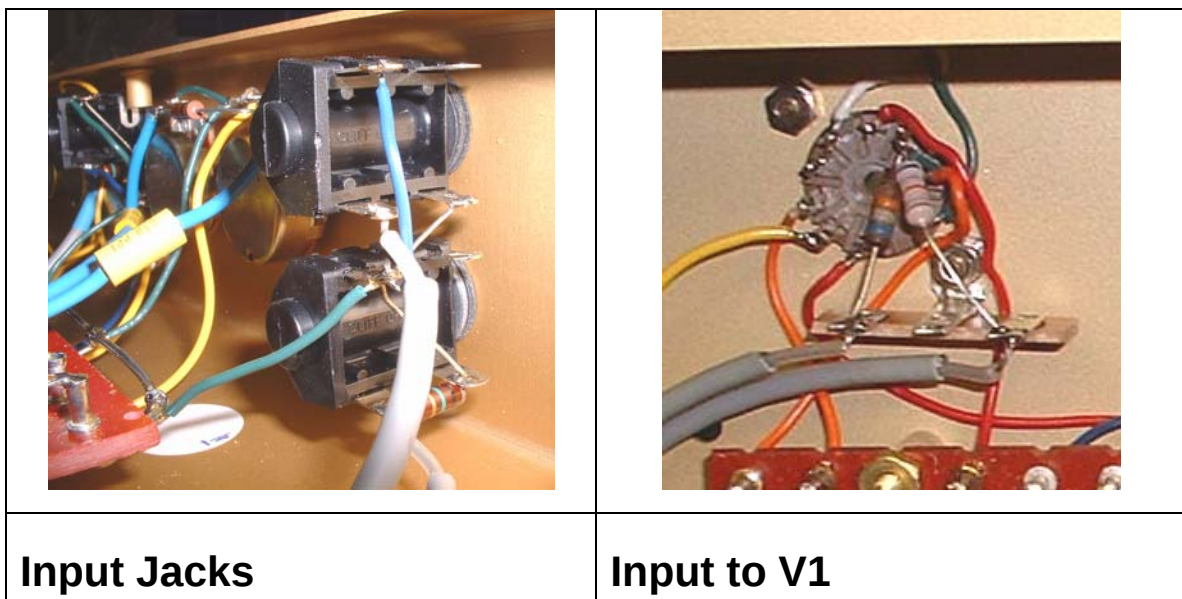
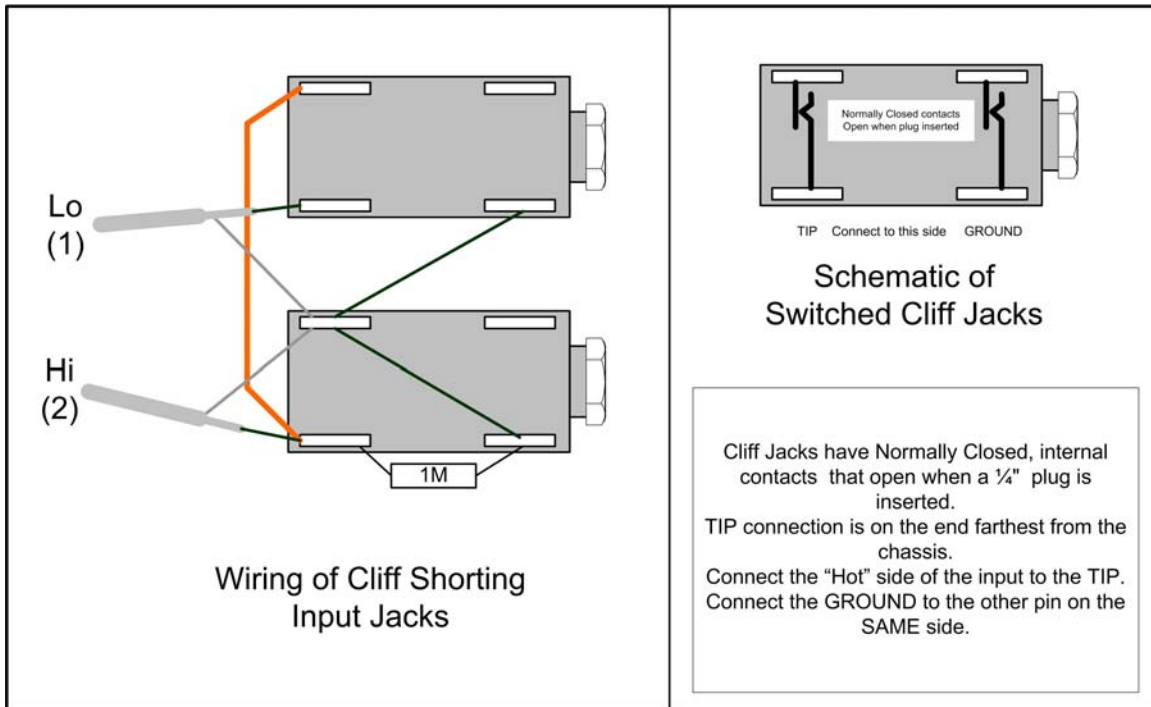
IEC & Fuse Wiring

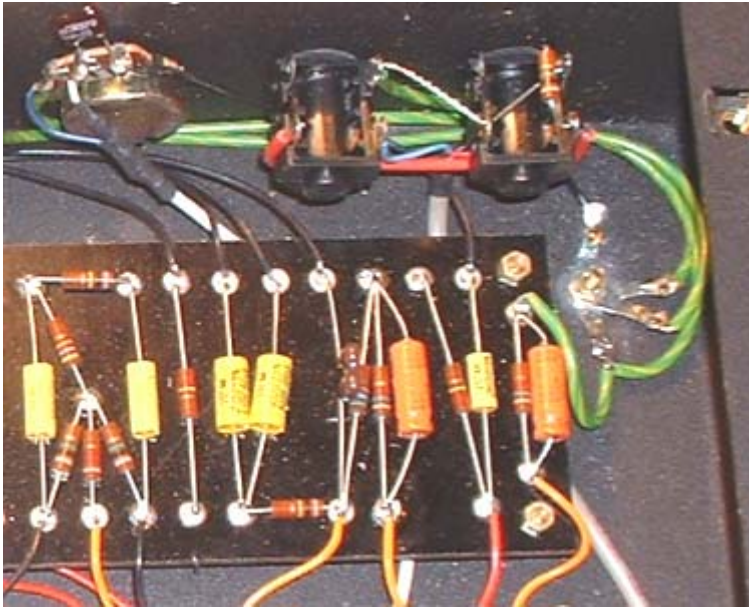


Wiring the 18 Rectifier

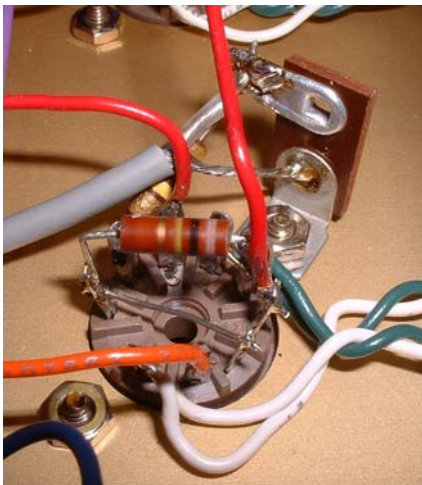


Wiring the 15 Rectifier

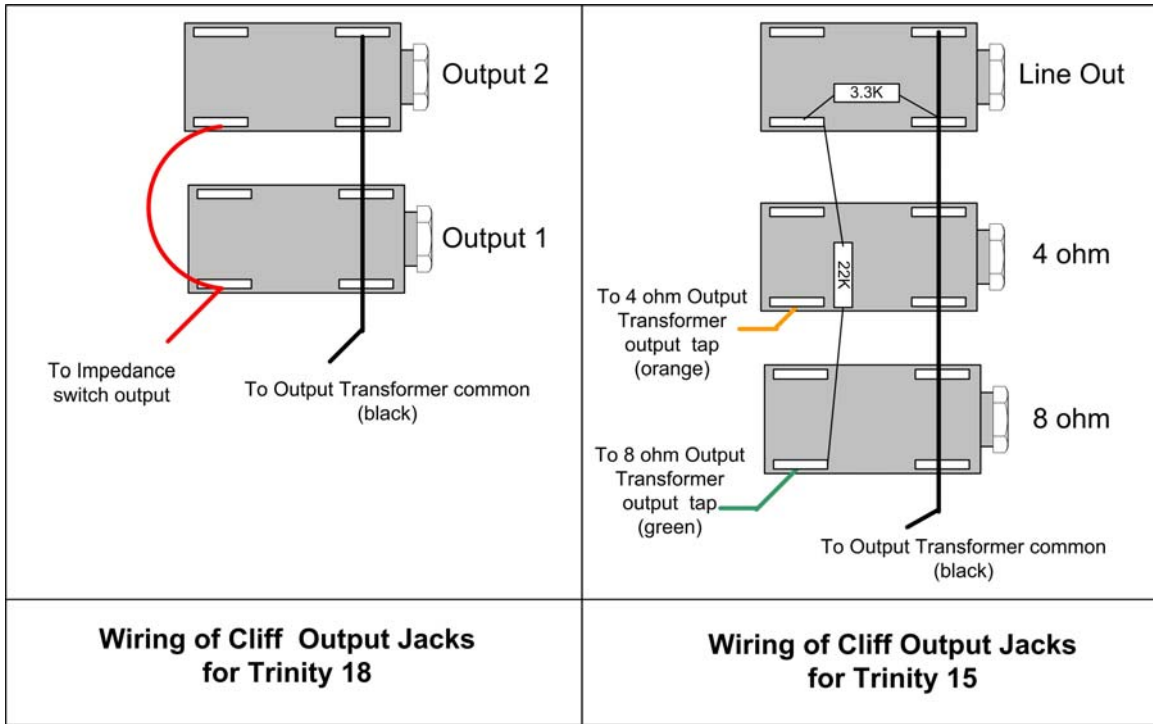




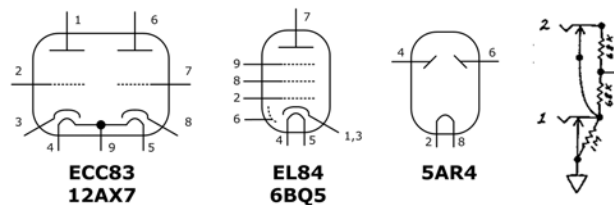
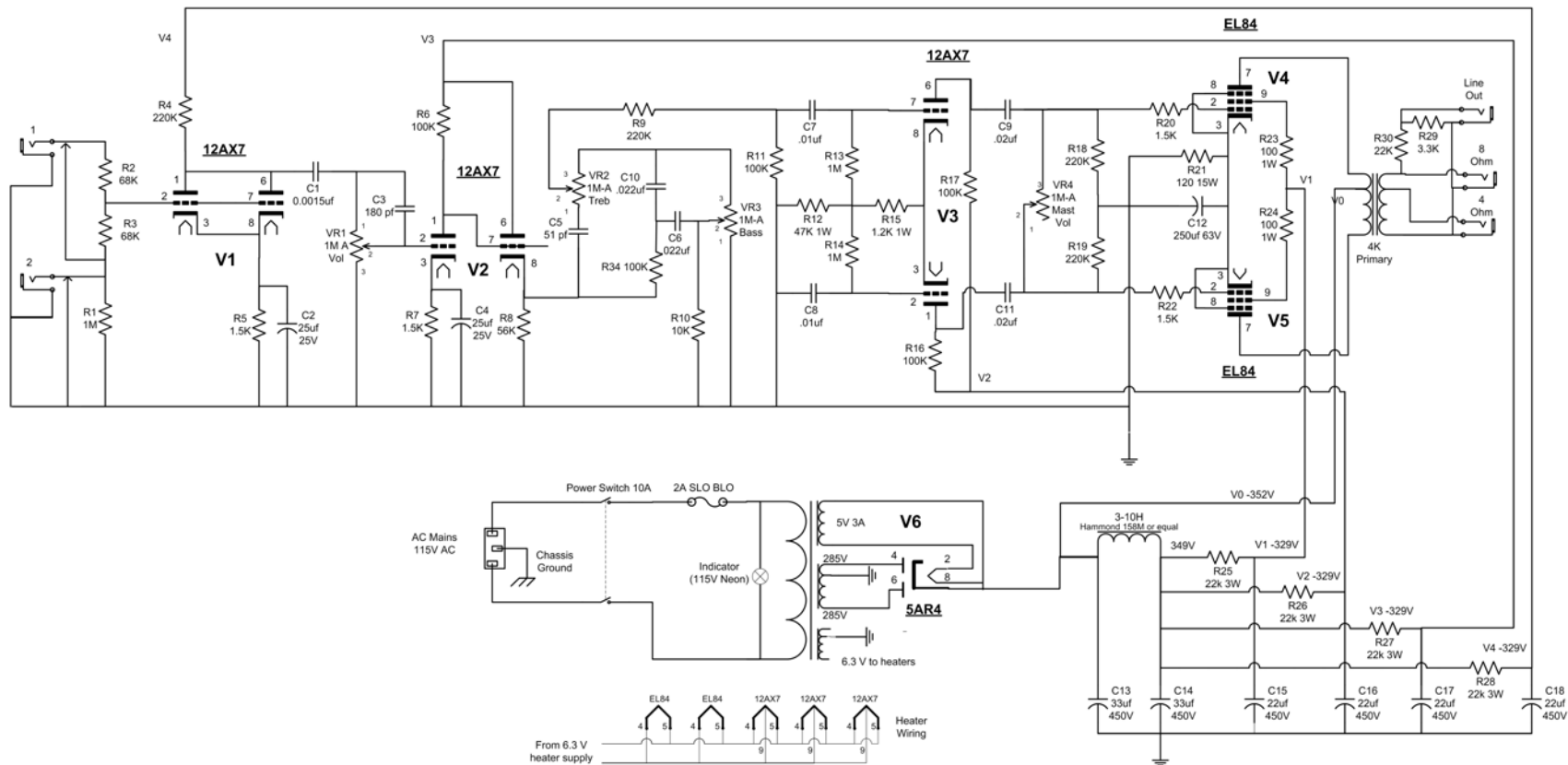
Trinity 15 Grounding Scheme



TMB Volume Control Wiring for the 18



Trinity Amps Schematics and Layouts



Notes

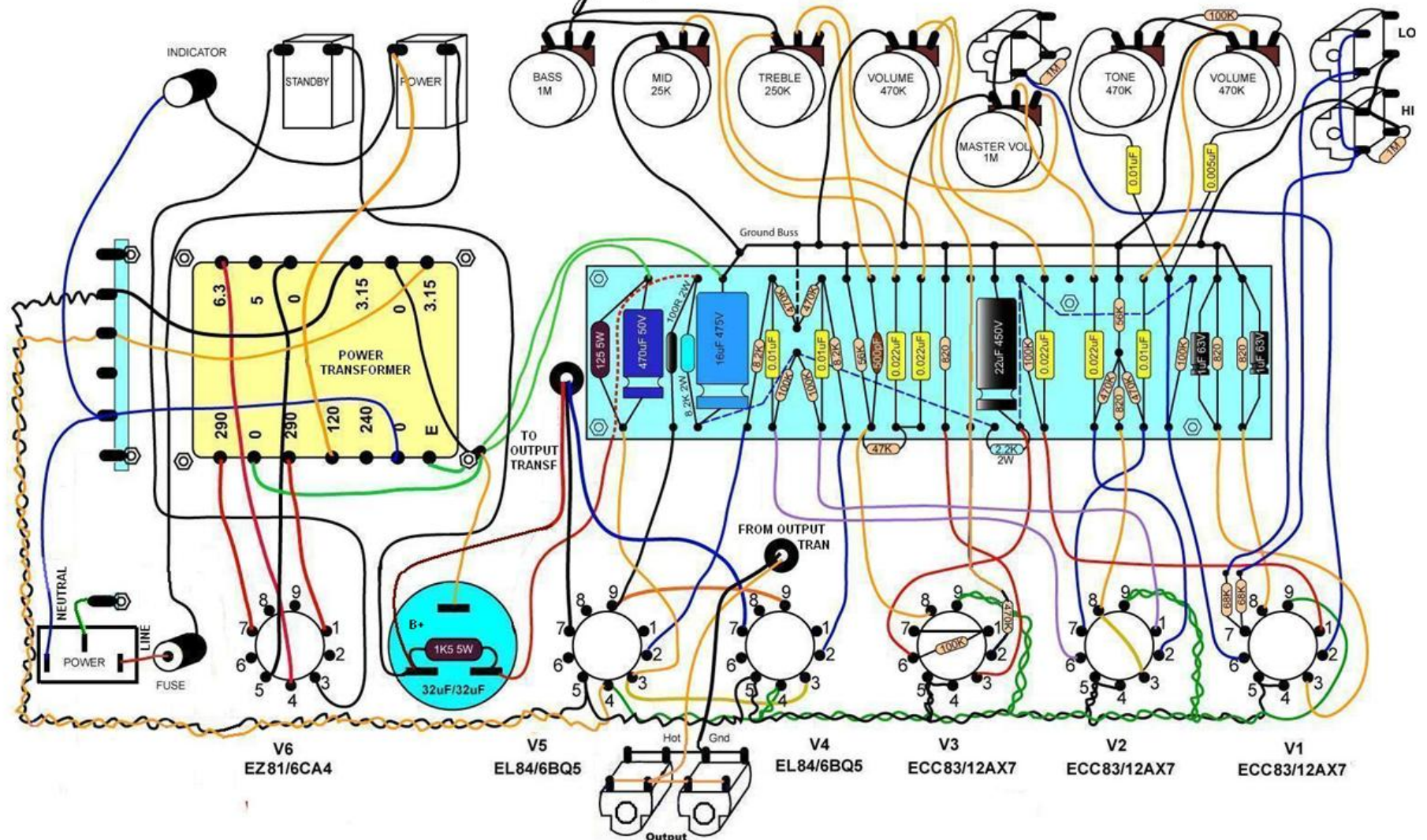
1. Resistors - 1 watt carbon film except as noted and input 68K & 1M which are Metal Film
2. 0.01 & 0.02 Coupling Caps Mallory 150 series
3. Metal oxide resistors throughout power supply & plates & on the P-tube screens.

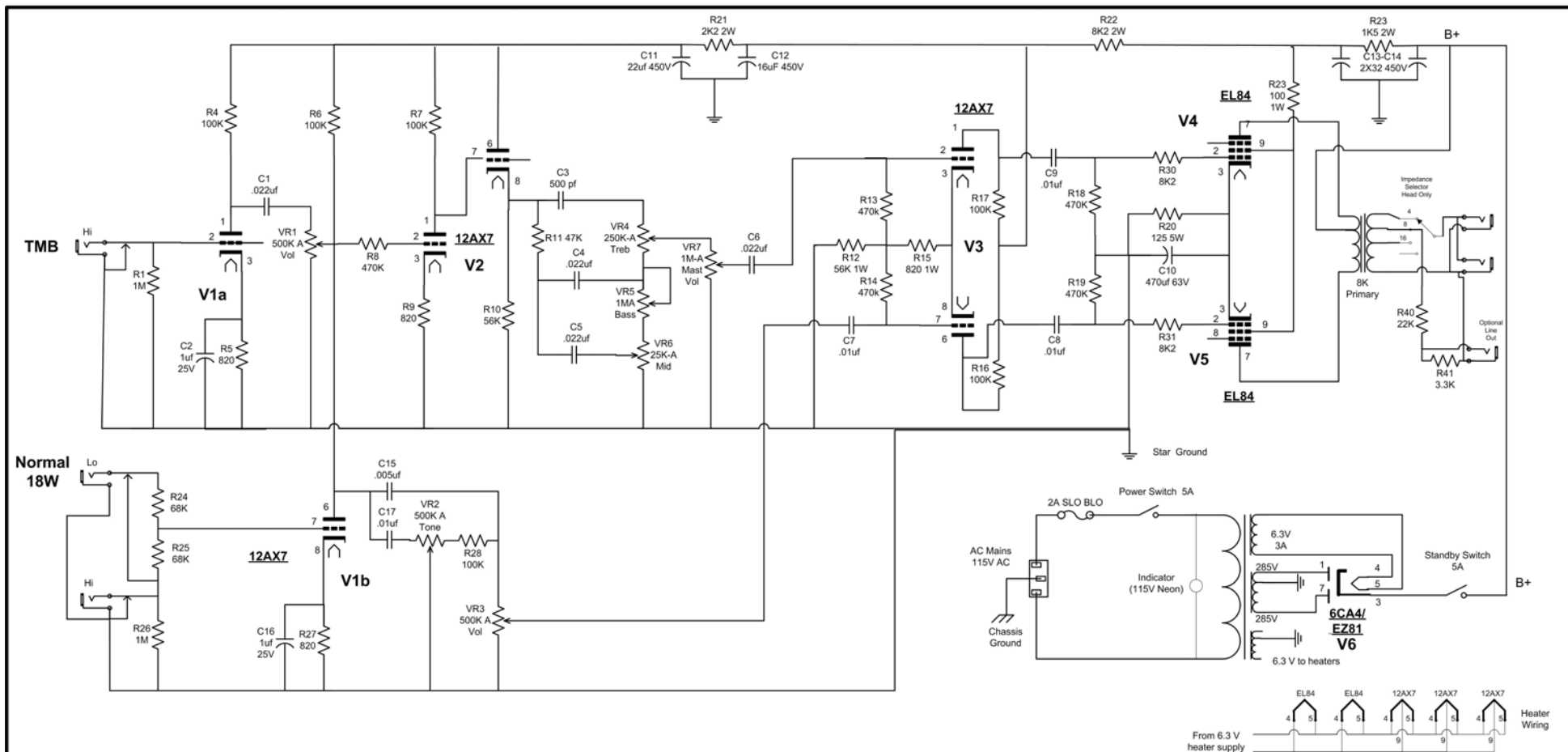
Trinity 15

www.trinityamps.com

Rev.	Date	Reason
0	2.9.9	Original schematic
1	19/04/04	SC First version based on 2.9.9
2	20/04/04	SC Corrected caps, added notes
3	21/04/04	SC Revised power supply filters
4	23/04/04	SC Added pot term nos.
5	22/05/04	SC Updated pot #; deleted C9
6	24/05/04	SC corrected res & cap numbers
9	17/03/05	SC added notes, new title
10	10/06/05	SC changed C1 value to .0015 uf
11	13/07/05	SC added 115v neon indicator

Trinity Amps - 18 Watt TMB with Master Volume





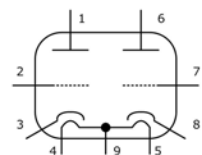
Notes

1. Resistors - 1 watt carbon film except as noted and input 68K & 1M which are Metal Film
2. 0.01 & 0.02 Coupling Caps Mallory 150 series
3. Metal oxide resistors throughout power supply & plates & on the P-tube screens.

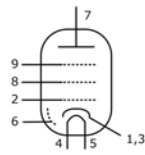
Trinity 18 TMB-MV Kit

www.trinityamps.com

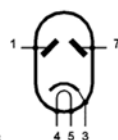
Rev.	Date	Reason
0	05/27/05	original schematic from 18W.com
1	06/12/05	first issue
2	06/12/05	rect. wiring updated
3	07/8/05	updated C11, C12, R23



**ECC83
12AX7**



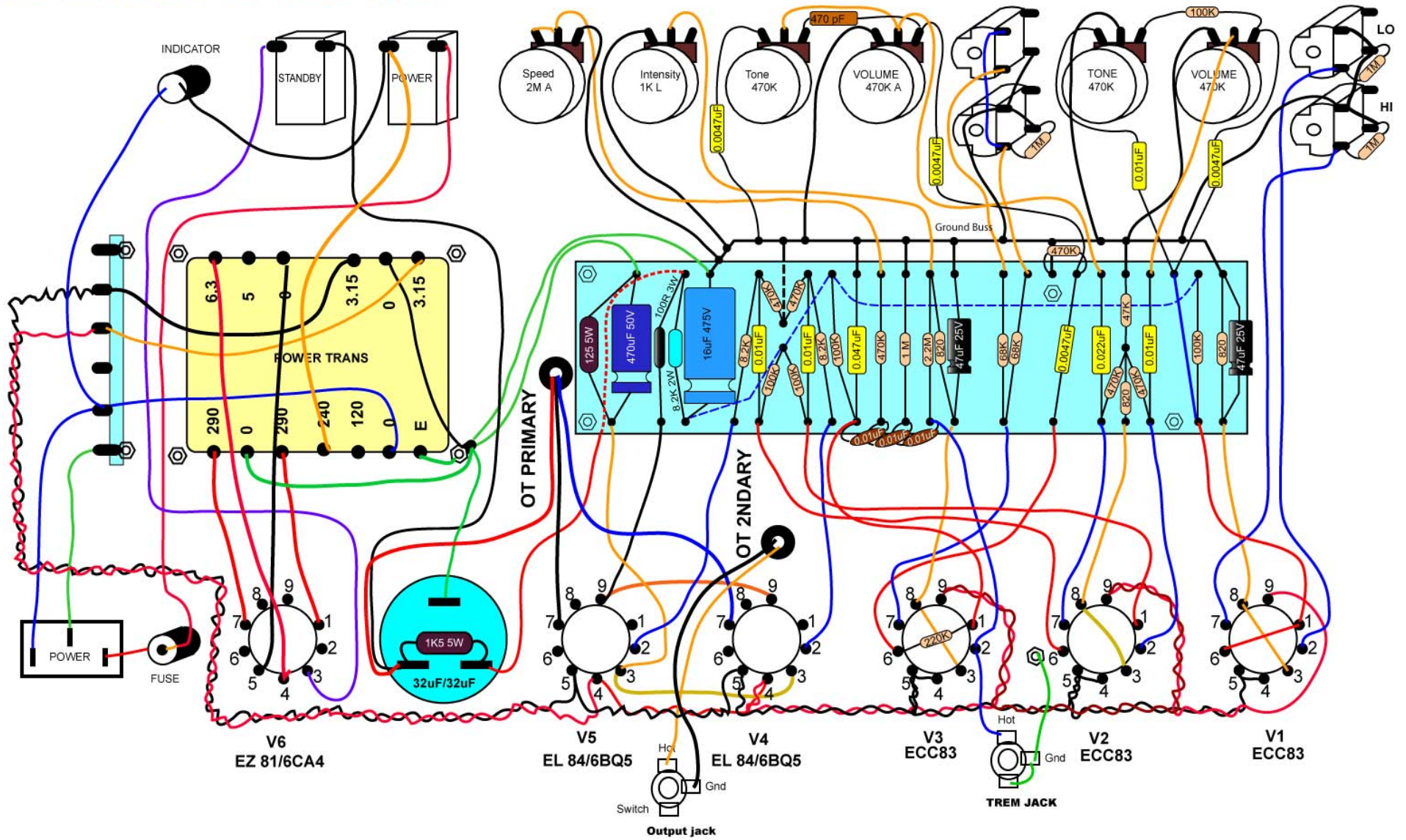
**EL84
6BQ5**



6CA4

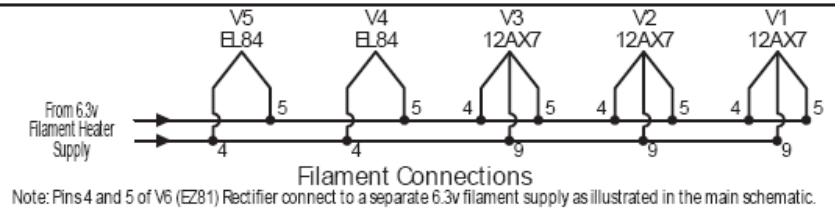
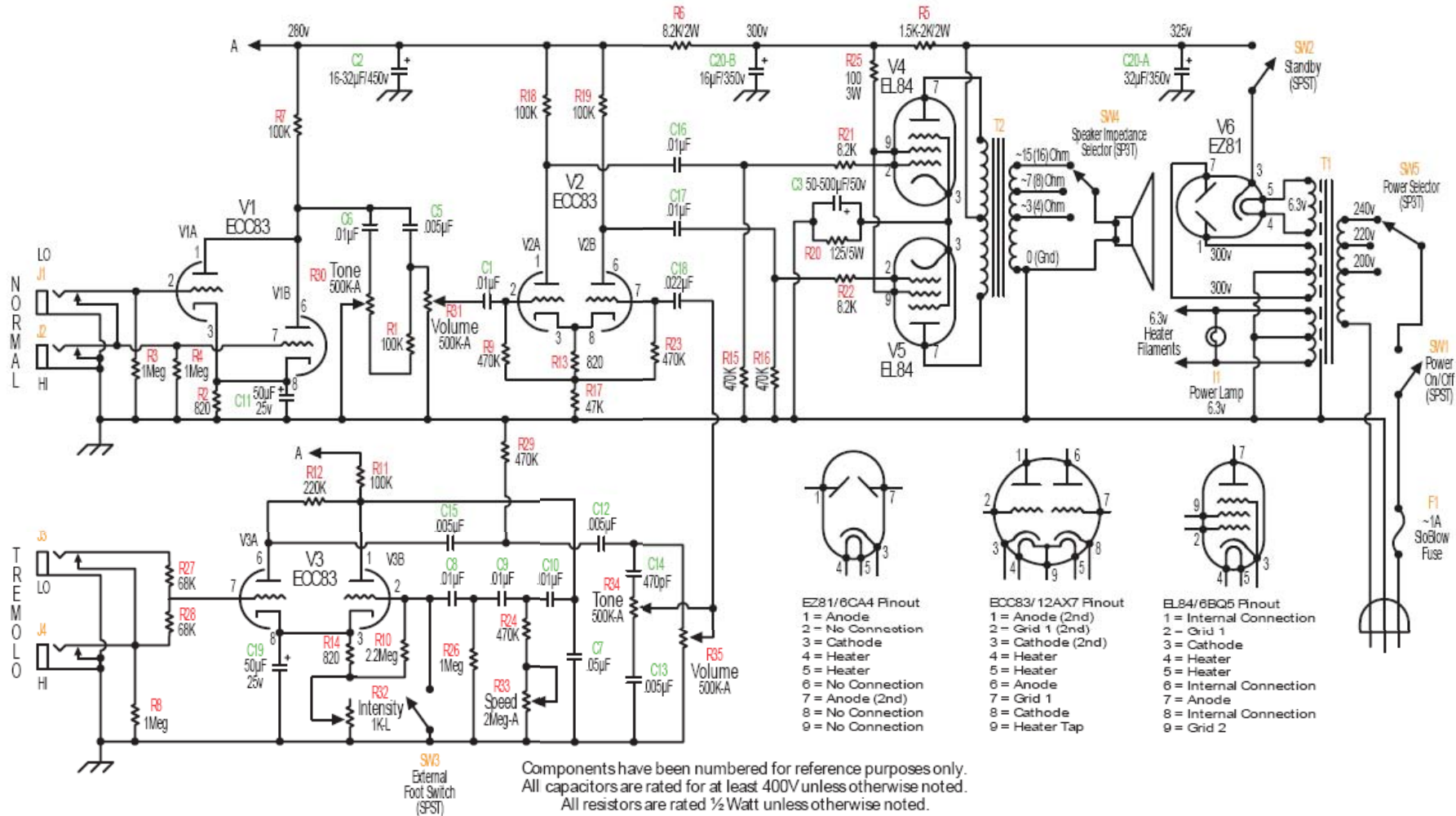


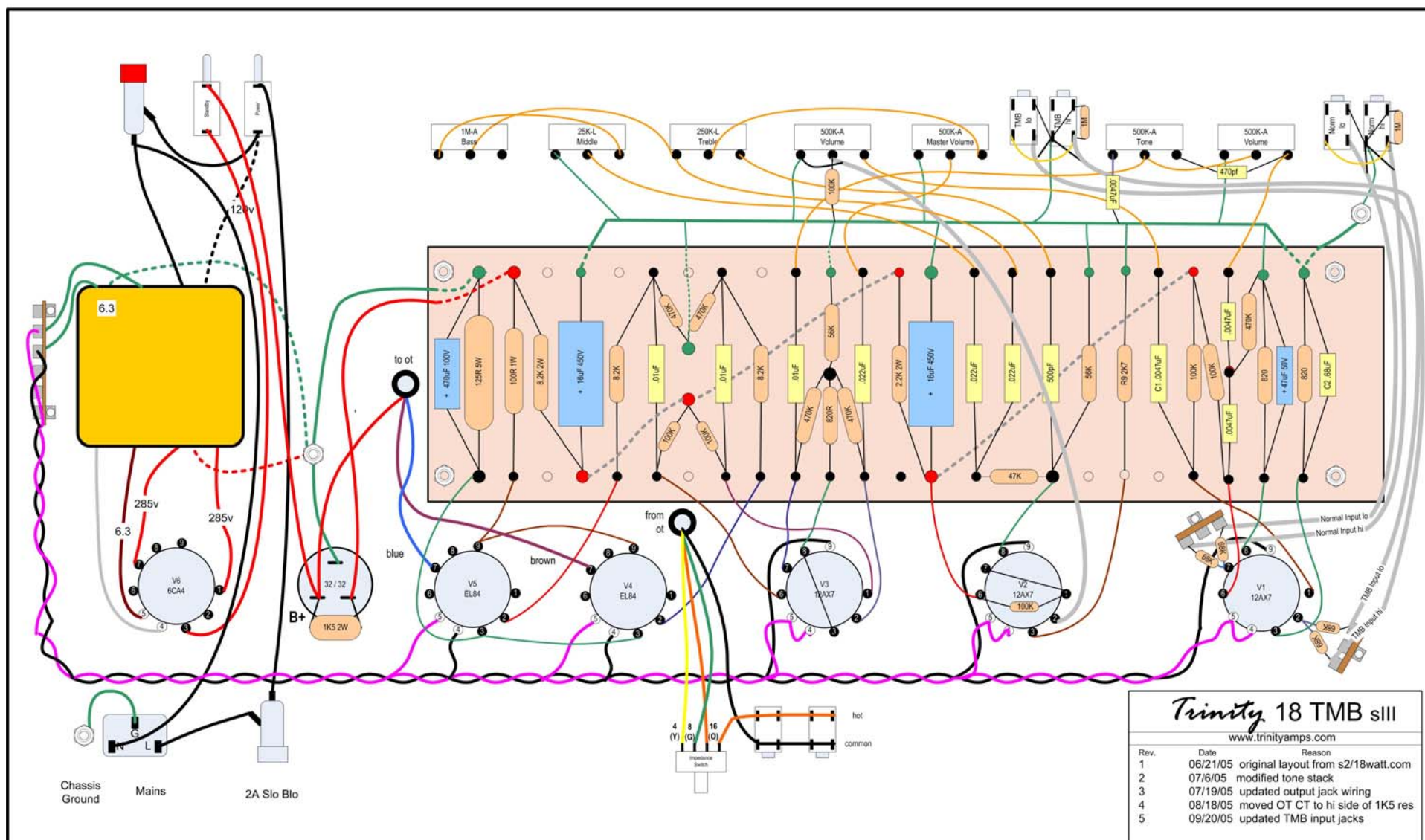
18 Watt Tremolo

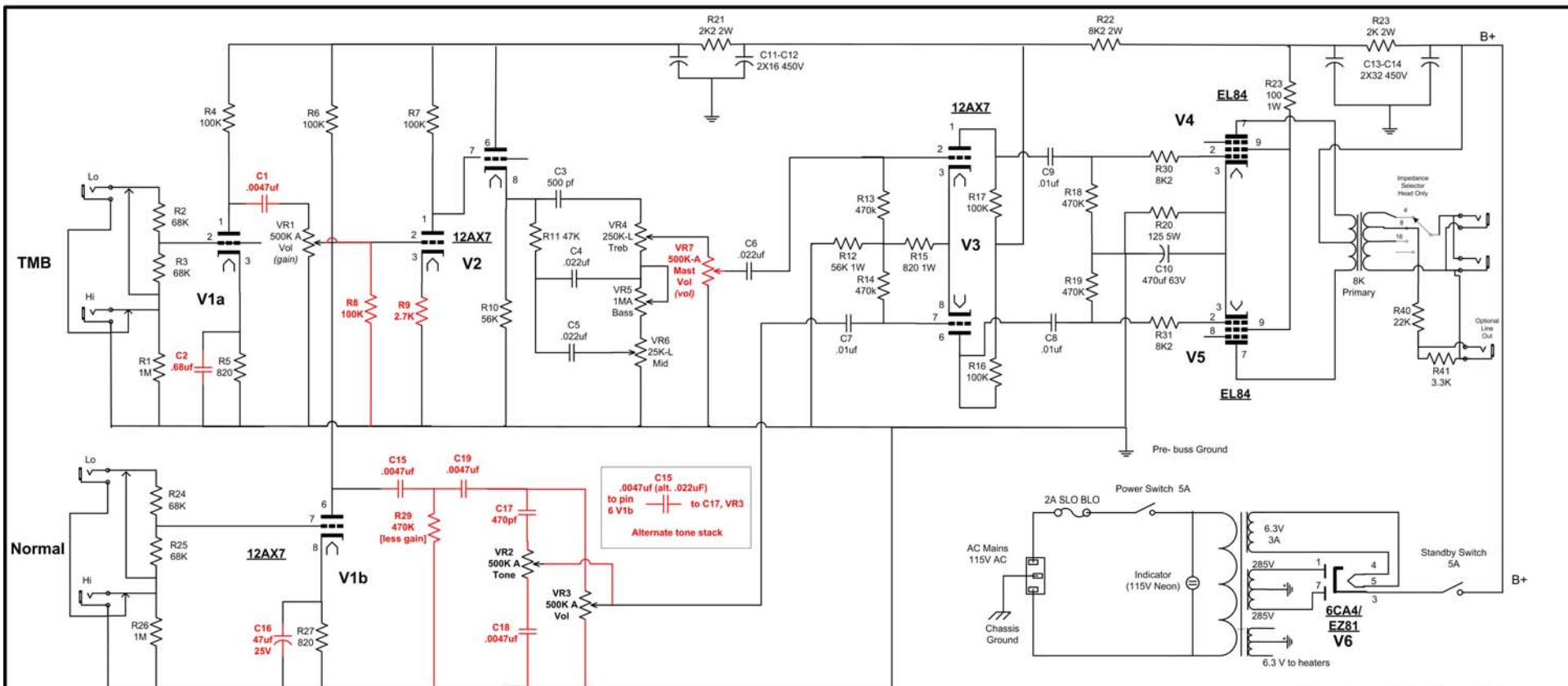


Marshall 18 Watt Combo Schematic

Revision 5

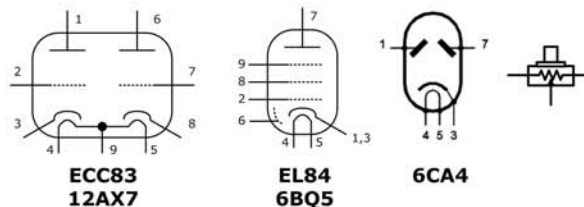






Notes

1. Resistors - 1 watt carbon film except as noted and input 68K & 1M which are Metal Film; 2. 0.01 & 0.02 Coupling Caps Mallory 150 series;
3. Metal oxide resistors throughout power supply & plates & on the P-tube screens.



To Fatten the TMB Channel Tone

1. Change C1 to 0.022uF
2. Change C2 to 2.2uF -OR- change R5 to 2.7K -OR- both
3. Change R11 to 33K
4. Change VR5 to 500K-A or 250K-A to give the bass control more useful range

There are several places to adjust gain and tone in the sIII circuit and each of them do it in a different way and to different effect. You may find you only need one of them, a few of them, all of them, or none of them.

To Increase Gain on TMB Channel

1. Remove R8; 2. Change VR1 to 1M-A
3. Change R9 to any value between 470R and 2.7K—lower values = more gain
4. Bypass R9 with a cap between 0.68uF and 47uF. Higher values = more bass
5. Increase R4 to 220K; 6. Increase R7 to 220K
7. You may need to change VR7 to 250K-A or 100K-A to keep the PI from overloading from the increased gain

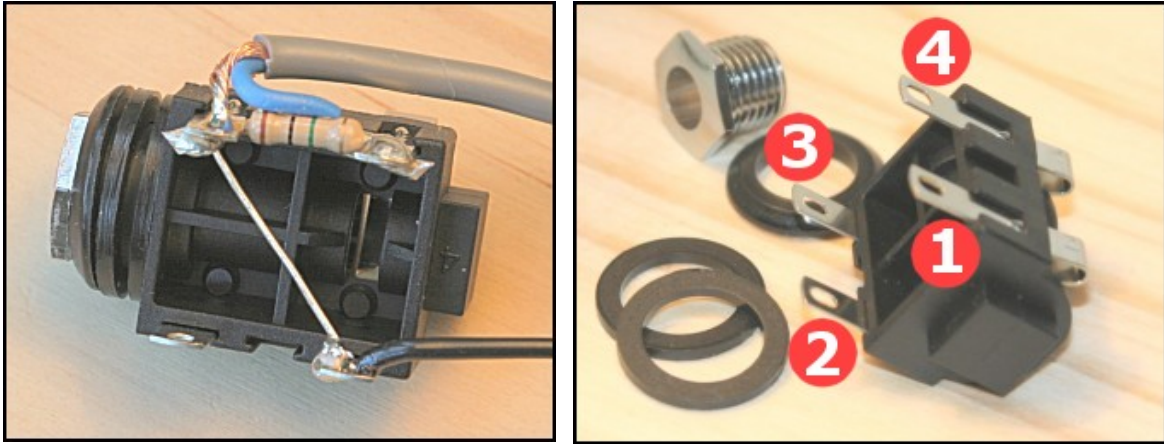
Trinity 18 sIII TMB

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Rev.	Date	Reason
0		Original from 18W.com/Richie
1	06/21/05	first issue
2	07/6/05	added alt tone stack info
3	08/12/05	changed VR4 & VR6 to linear
4	08/18/05	added notes; moved OT CT to B+

Cliff Jacks Explained

Here's a Cliff-style jack wired for a single input.



With no guitar plugged in, there's continuity to ground for lugs 2 and 4 (a direct connection) and also for lug 1 (it's not switched and therefore mechanically connected to lug 2 with the crossover wire).

With a guitar plugged in, the switching breaks, and now there's only continuity between lugs 2 and 4 and ground. Of course, with a guitar plugged in, you'll read a resistance of 6-12K for lug 1 to ground - depending on your pickups. If your guitar's Volume pot is at zero, you'll find continuity to ground instead.

You should get continuity between the tip and chassis with nothing plugged in because of the shorting jack and the cross over wire.

-18W Forum – loverocker & ebe