

Crate V8 [V508 + original V5] Mods
by Verne Andru [www.VerneAndru.com]

**** These amps store high voltage and should be serviced by a technician to avoid injury or death.**

Note: Some mods below provide a range of values. The component values I put on the schematic are the ones I'm using and know sound good.

Simple Tone Mod:

-Remove C2, C9 & C12 completely. C2 adds shrillness to opamp stage. C9 adds harshness and C12 adds midrange "honk" that is partially responsible for some of the boxiness.

Intermediate Mods:

-Replace TL072 opamp with TLE2072ACP Excalibur. Removes "fizziness."

-Change Resistors R10 & R15 to anywhere between 560 and 600 ohm. This lets more current through.

-Change Caps C7 & C13 to between 220 and 500uF. This adds more bass.

-Change C14 to 1.2uF 400V MTLPOLY. This adds more low-end and gain.

-Remove and jumper C6, C8 & R11. This allows the current/tone to pass without tone damaging alteration.

-Change C1 to .047uF. Better bottom.

-Change C5 to 390pF 500V. Removes some high end added by opamps.

Tone Stack Replacement:

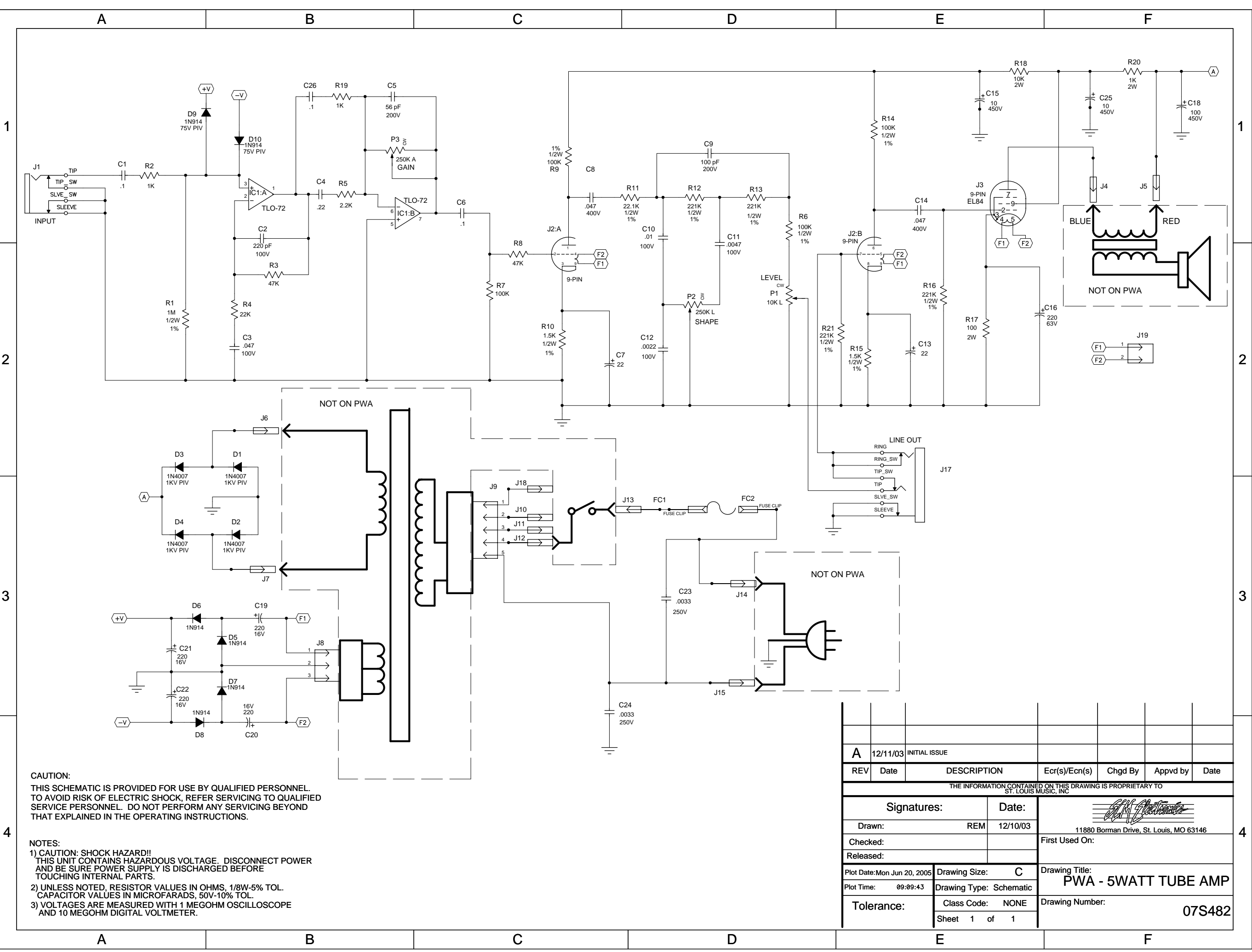
Drill 3 holes in the bottom of the chassis for the Boost Switch & midrange and treble rolloff pots. Requires a stacked, concentric 250K pot [Allparts] - the shaft is a bit bigger, so you'll need to make the existing tone pot hole a bit bigger.


-Remove R12, R13, C10, C11 and P2 [in addition to C9 & C12 noted earlier].

-Wire as per diagram. Some components [like C3 & C4] work better added at their respective pots as the stacked pot already has a fair bit going on.

-The "Boost" switch grounds out the tone stack, taking it out of the circuit. This gives a fair bit of added volume and gain but I found the tone quite bright. I added the Treble Rolloff pot to compensate for this plus it adds an extra level of tone control when the Boost switch is off.

Contact me at www.VerneAndru.com if you find any errors, etc. Good luck.



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12/11/03 INITIAL ISSUE						
REV	Date	DESCRIPTION	Ecr(s)/Ecn(s)	Chgd By	Appvd by	Date
THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC.						
Signatures:		Date:				
Drawn:		REM		12/10/03		
Checked:				First Used On:		
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Plot Date: Mon Jun 20, 2005		Drawing Size: C		Drawing Title: PWA - 5WATT TUBE AMP		
Plot Time: 09:09:43		Drawing Type: Schematic		Drawing Number: 07S482		
Tolerance:		Class Code: NONE				
		Sheet 1 of 1				