WARNING

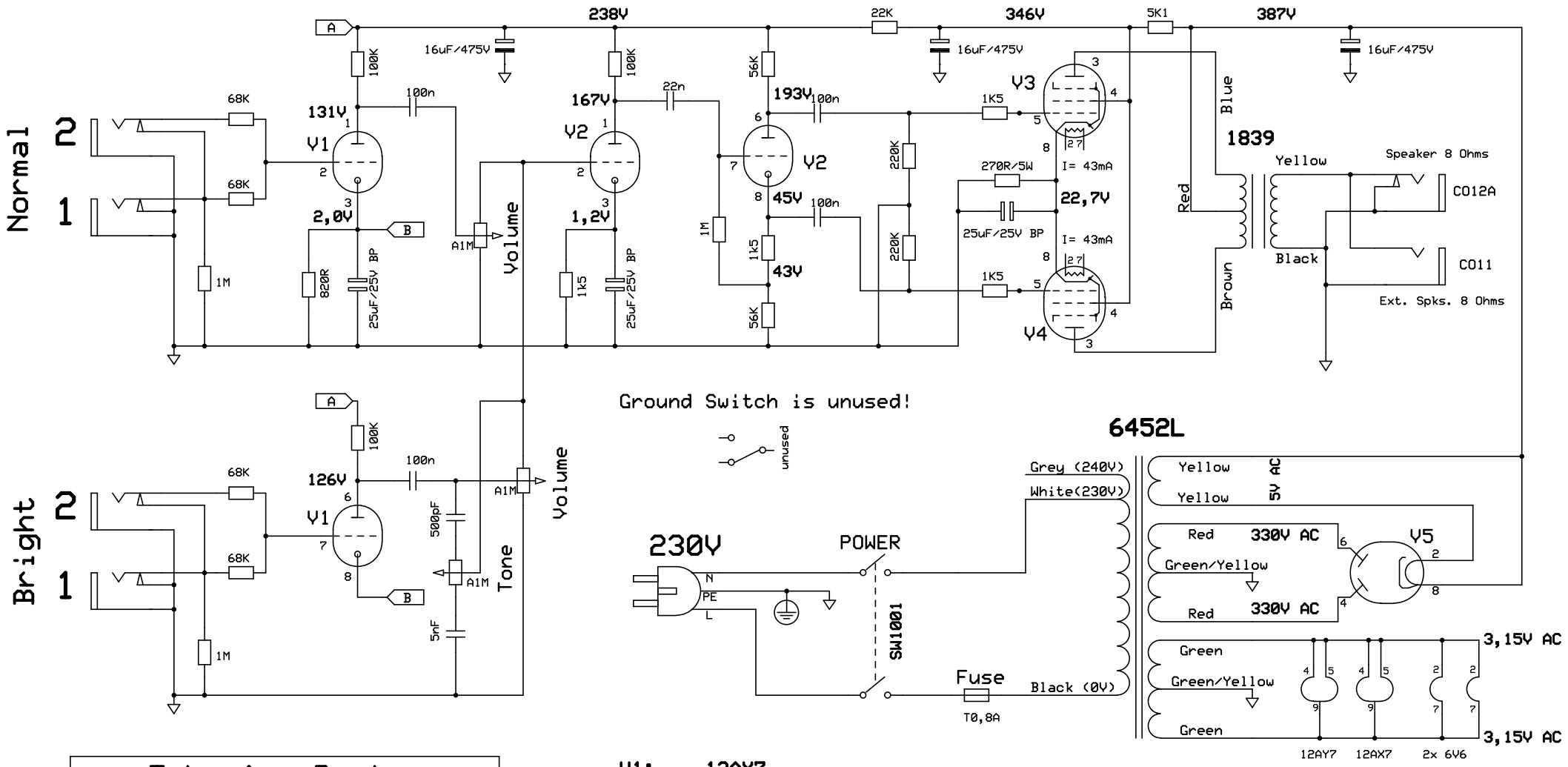
ATTENTION:
Please note that the Amp-Kit are not a beginners project but for experienced amp builders! Voltages inside tube amplifiers can exceed 500V and can cause serious damage and can even kill!
We only supply a complete compilation of excellent parts, a schematic and a layout plan. Tube Amp Doctor does not offer a general support for you DIY project.
We do not warranty for what you build out of the supplied components. If you get stuck with your DIY project then TAD might offer to finish assembly of your kit based on your service-order or refer you to a skilled technician. Questions and answers about the AMP-KITS will get collected and published at the F.A.Q. section at www.tubeampdoctor.com.

The Tube Amp Doctor
Worms, Germany

Tweed One-Twelve-16 Amp Kit Assembly-Instructions

1. Unpack all material and check for completeness.
2. Drill the missing holes into the chassis: 2x for the soldering strip and 1x sideways and centric on the side of the transformer for the cable holder.
3. Commence equipping the board: first the resistors (0.5W), power resistors, capacitors, and lastly the E capacitors. Pay attention to correct polarity.
4. Set up cable connections and bridges underneath the board.
5. Adjust the board, mark the chassis holes and drill (3.5mm).
6. Set up cable connections from under the board to other parts, according to enclosed list.
7. Mount transformer and Terminal Solder Lockwasher Lugs for earth/ground point.
8. Mount tube sockets; pay attention to correct orientation.
9. Connect transformer according to scheme, twist the secondary wires.
10. Mount lamp holder and fuse carrier.
11. Mount potentiometers with chopper discs and bend the lug.
12. After Pre-wiring the input jacks mount them with the washer.
13. Mount the speaker output jacks.
14. Insert rubber grommets (2x 10mm for the transformer, 1x 15mm for power cord)
15. Mount the transformer, feed the cable through. Twist blue and brown and connect.
16. Insert the board, adjust it and fix it.
17. Wire everything according to scheme.
18. Skin power cord for about 10cm and connect it.
19. Twist and install the green filament cable, 18AWG. (Positions “F” and “F1” of the layout)
20. Turn the cabinet upside down, slide in the chassis and adjust the back panel in order to draw the drill holes.
21. Drill the holes at 5.5mm.
22. Mount the loudspeakers.
23. Mount the chassis into the cabinet.
24. Connect the loudspeaker cable to the speaker.
25. Mount the power cord at the side of the cabinet using the cable relief.
26. Plug in the tubes.
27. Functioning test: visual check: wiring correct? Have you connected every earth point? Do the electrolytic capacitors have the correct polarity? Are the tube sockets correctly wired? Grounding safe and correct? Are the cable insulations undamaged?
28. Electronic functioning test with multimeter (Ω): do all earth points have connection to chassis, do all points carrying high voltage have no shorts to ground?
29. If possible, while gradually increasing the voltage, measure the voltage.

30. Without variac: turn all controls up to max. Switch on device: red pilot light should turn on immediately, high voltage (measured at the first electronic capacitor is 0V) should rise up to about 490V within 20 seconds and then slowly sink down to about 400V. The voltage at the cathode of the power tube (Pin 8) should slowly rise to circa 22V. Now, the amp should make a steady hiss. If not, switch off the device immediately (!!!) and go back to point 27. Conduct functioning test again thoroughly.
31. Screw on the back panel.



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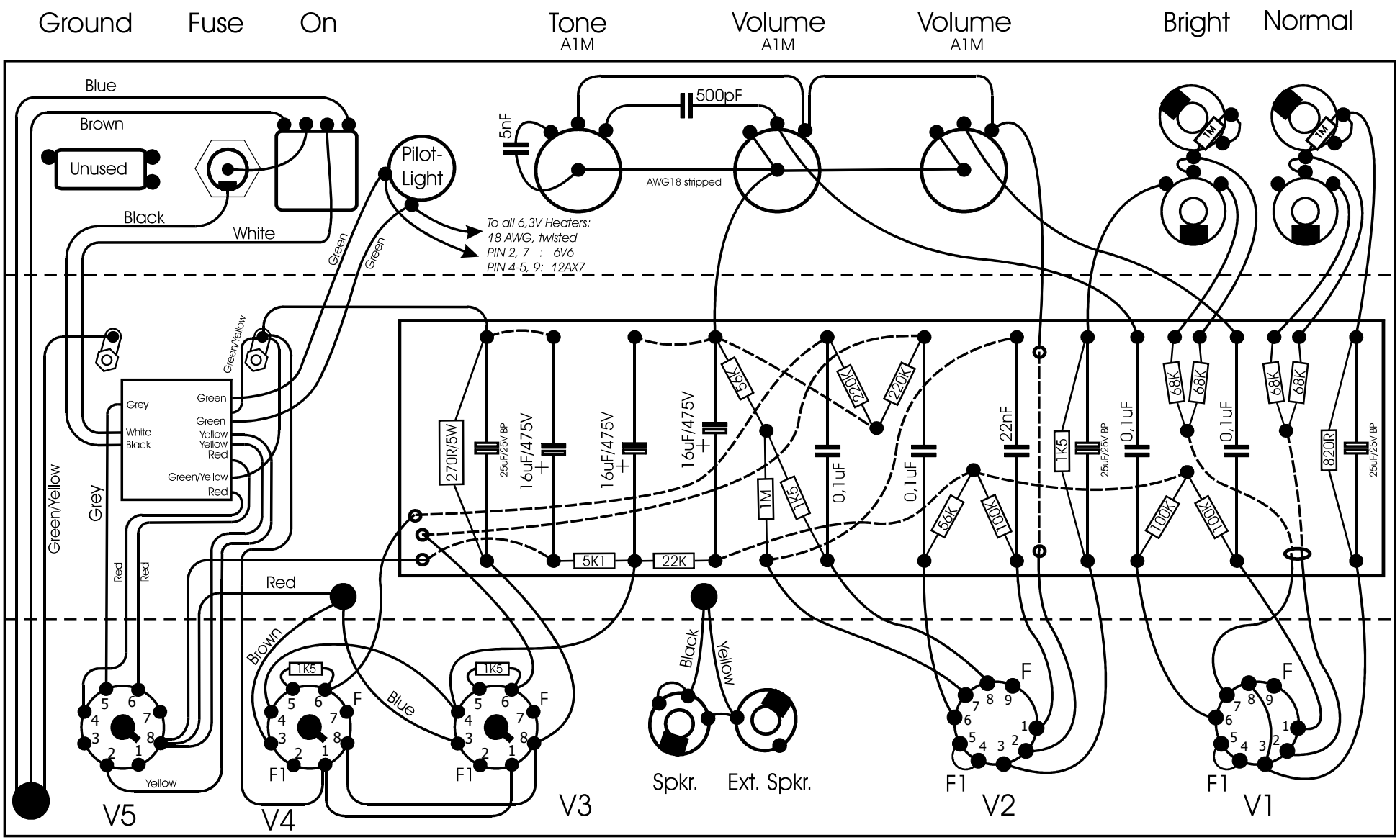
TAD Tweed One-Twelve-16		
SM #70005 PT	Rev 1.4 20.01.2022	For private use only Do not copy!

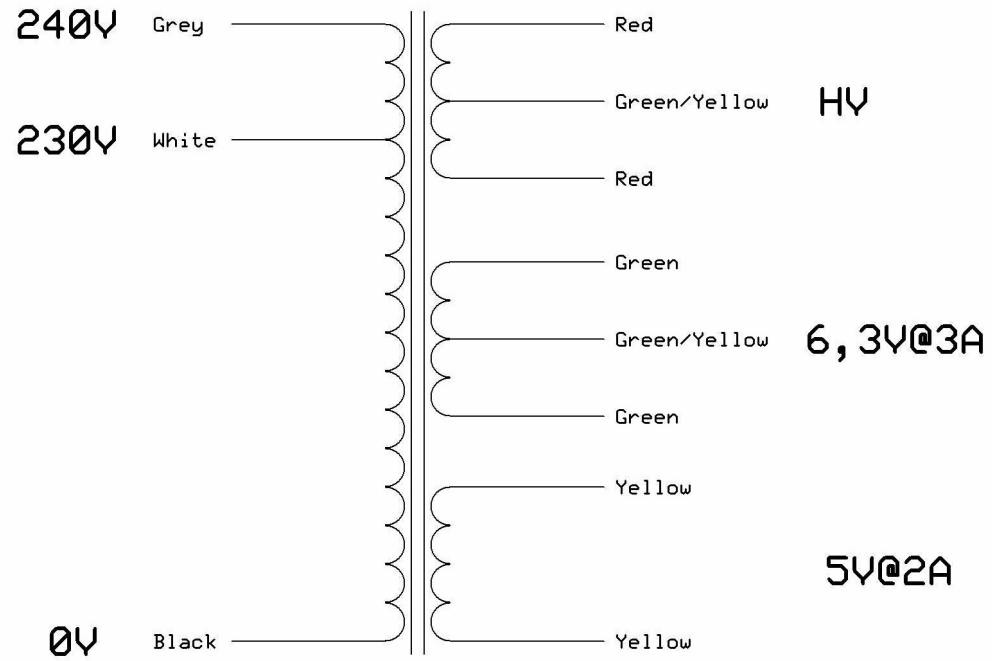
V1: 12AY7
V2: 12AX7
V3,4: 6V6GT
V5: 5Y3

All Voltages measured with DVM, may vary 10%



The Tube Amp Doctor, Worms, Germany	Scale: None	Units: Mm	1.5	
Drawing: Tweed One-Twelve-16 Layout	Drawn: SM	Date: 20.01.2022	©TAD: For private use only Do not copy Sw1001	

Wires not specified are CB3035, Yellow 22AWG
Dotted wires run under the board
Twist all wires of the power transformer and blue/brown of AC inlet cable.



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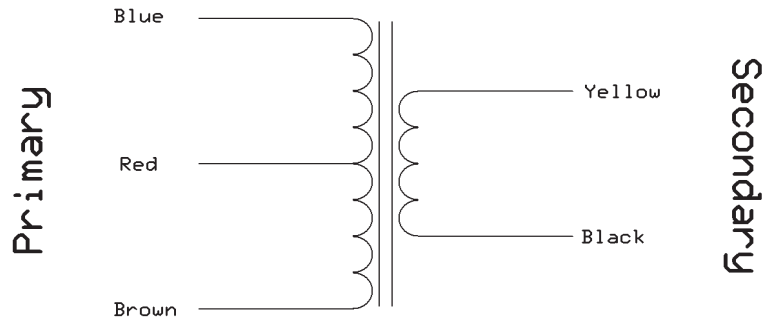

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SM	Rev 1.0 03.06.2004	Page # or name

TAD AMP KITS Mechanics

HR3110

HR3111

Used for: Tweed Chassis mounting

HR3120

HR3121

Used for: OT, Chokes PT, Speakers

HR3130

HR3131

Used for: 8-pin tube sockets, Fiberboards, Radial Caps

HR3140

HR3141

Used for: 9-pin tube sockets

Black screws can also be silver