

WARNING! - Please Read this Information Carefully:

The project described in these pages utilizes **POTENTIALLY FATAL HIGH VOLTAGES**. If you are in any way unfamiliar with high voltage circuits or are uncomfortable working around high voltages, **PLEASE DO NOT RISK YOUR LIFE BY BUILDING THEM**. Seek help from a competent technician before building any unfamiliar electronics circuit. While efforts are made to ensure accuracy of these circuits, no guarantee is provided, of any kind!

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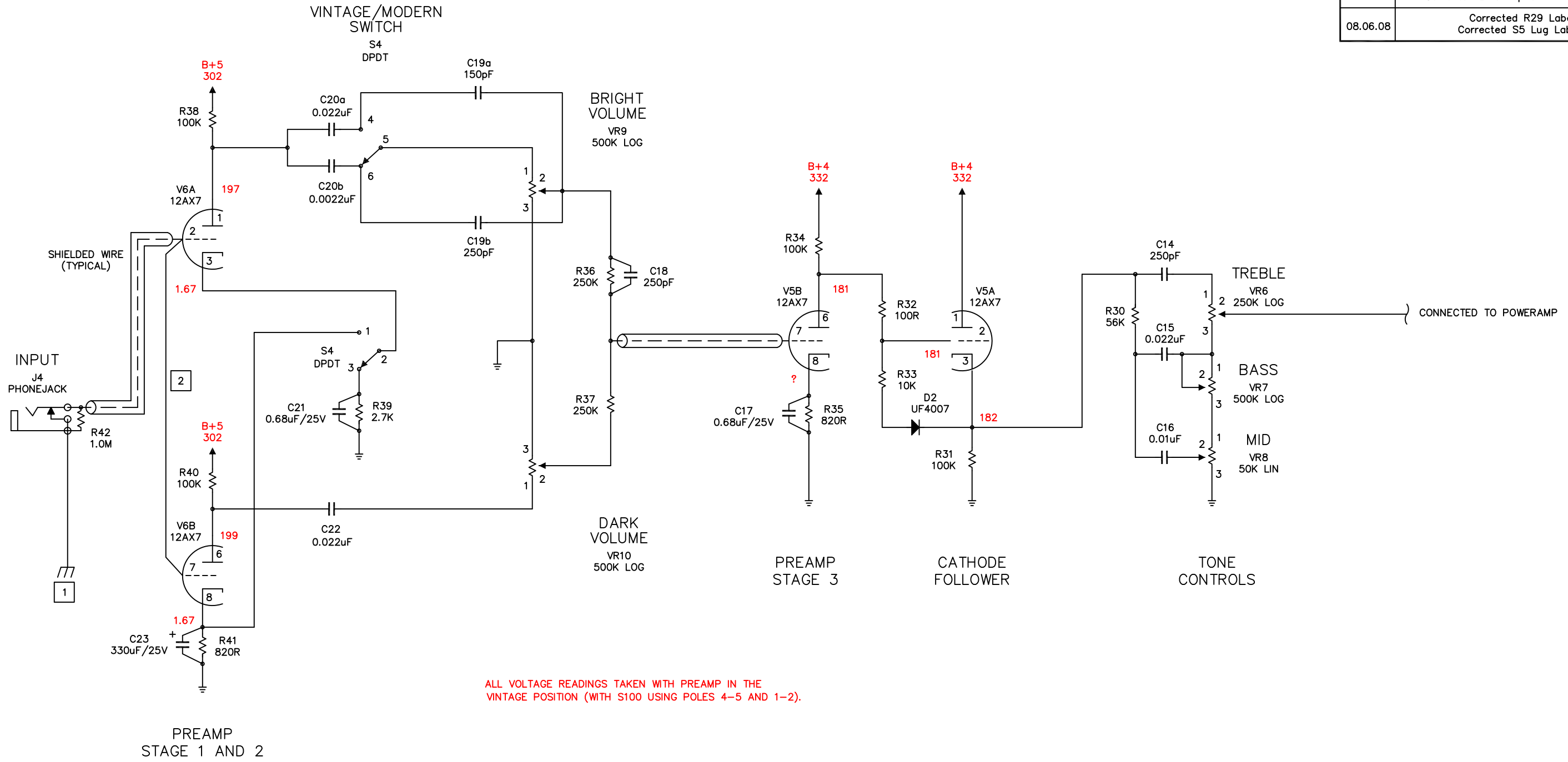
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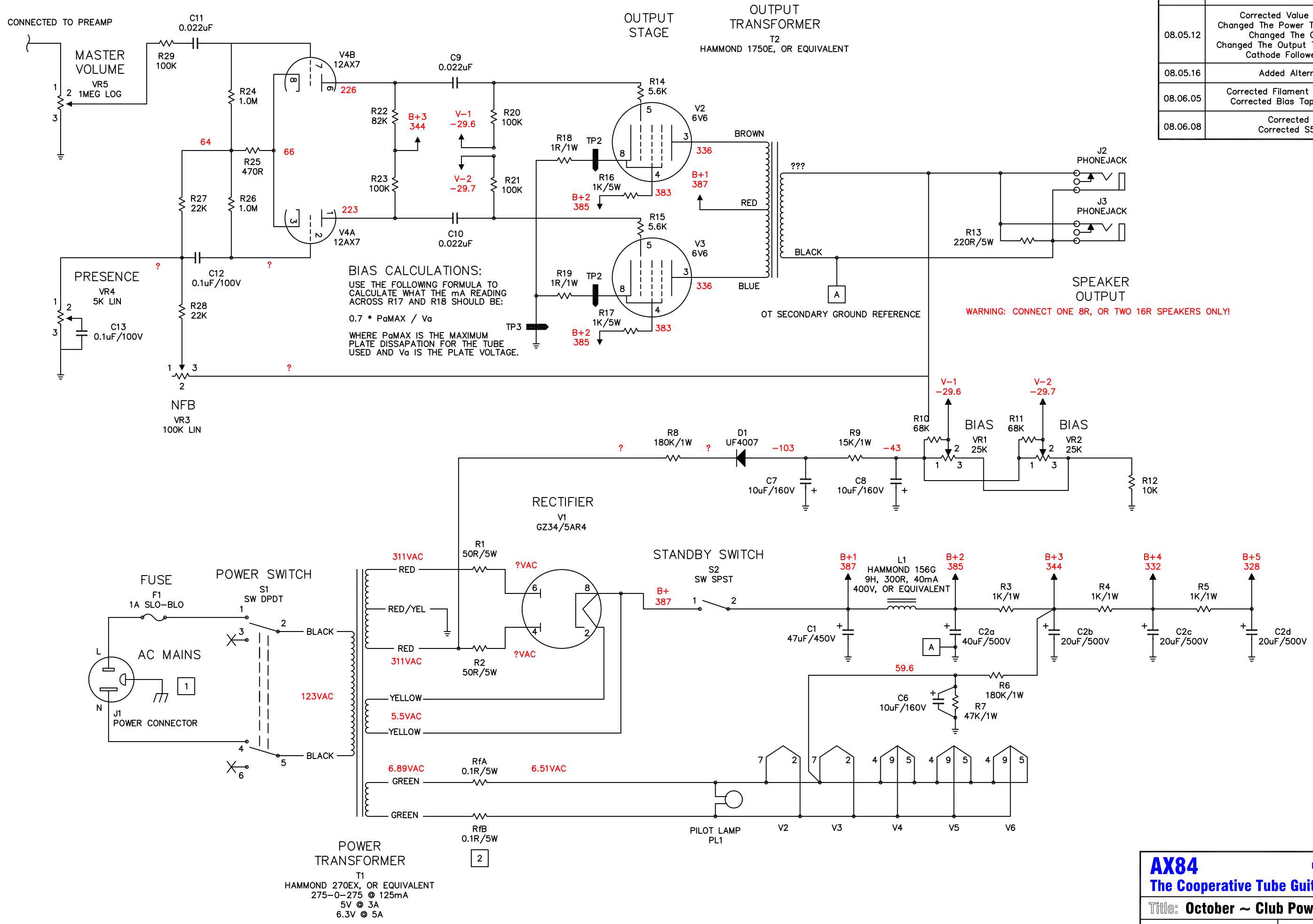
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Revision	Description
08.05.12	Corrected Value Of R16 And R17 Changed The Power Transformer To 270EX Changed The Choke To 156G Changed The Output Transformer To 1750E Cathode Follower Modifications
08.05.16	Added Alternate Preamp
08.06.05	Corrected Filament Wiring On V2 & V3 Corrected Bias Tap on PT Secondary
08.06.08	Corrected R29 Label Corrected S5 Lug Labels



ALL VOLTAGE READINGS TAKEN WITH PREAMP IN THE VINTAGE POSITION (WITH S100 USING POLES 4-5 AND 1-2).

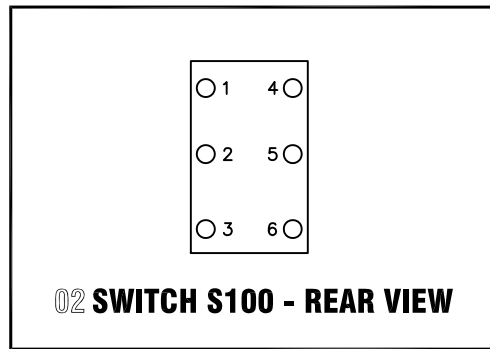
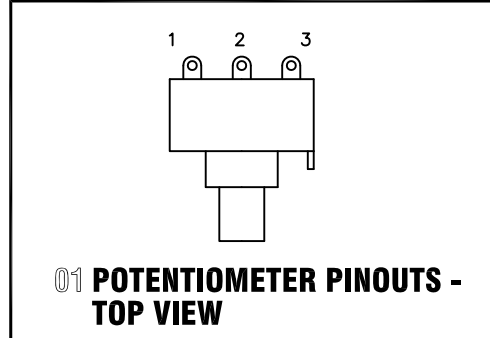
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BIAS CALCULATIONS:
 USE THE FOLLOWING FORMULA TO
 CALCULATE WHAT THE mA READING
 ACROSS R17 AND R18 SHOULD BE:
 $0.7 * P_{aMAX} / V_a$
 WHERE P_{aMAX} IS THE MAXIMUM
 PLATE DISSIPATION FOR THE TUBE
 USED AND V_a IS THE PLATE VOLTAGE.

WARNING: CONNECT ONE 8R, OR TWO 16R SPEAKERS ONLY!

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GENERAL NOTES:

1. ALL RESISTORS 1/2W MINIMUM UNLESS OTHERWISE NOTED.
2. ALL COUPLING CAPACITORS 400V OR GREATER.
3. VOLTAGE READINGS ARE THOSE TAKEN WITH 6V6-S. THE USE OF OTHER OUTPUT TUBES WILL ALTER YOUR READINGS.
4. THE  SYMBOL REPRESENTS SHIELDED CABLE.

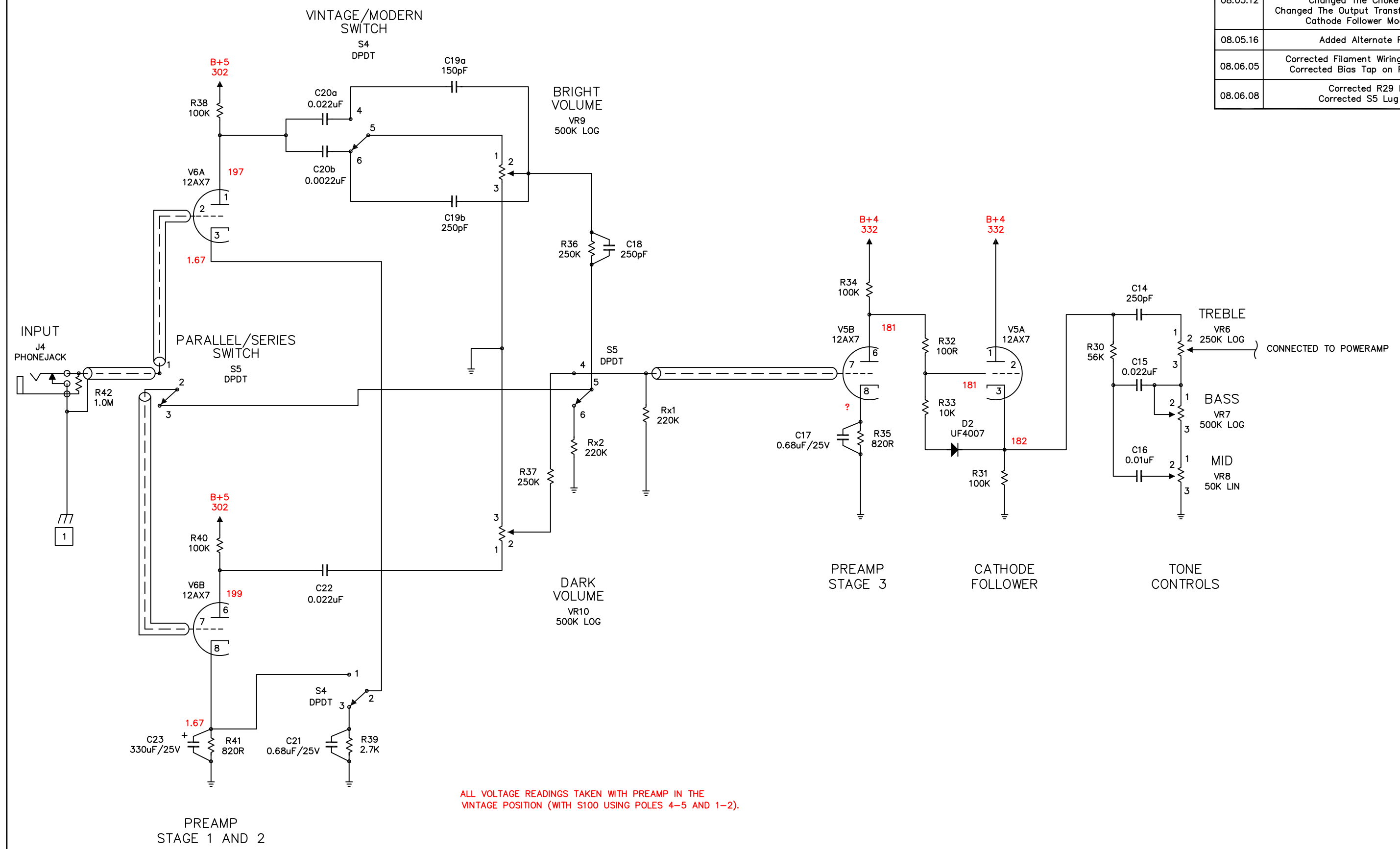
CONSTRUCTION NOTES:

- 1 THIS IS A GROUND CONNECTION TO THE CHASSIS. THE MAINS SAFETY CONNECTION SHOULD BE MADE AS CLOSE AS POSSIBLE TO THE POINT WHERE AC ENTERS THE CHASSIS. THE CIRCUIT CONNECTION SHOULD BE MADE AS CLOSE AS POSSIBLE TO THE INPUT JACK. IDEALLY, THE JACK ITSELF SHOULD BE USED AS THE CONNECTION POINT BY NOT ISOLATING IT FROM THE CHASSIS.
- 2 THESE TWO 0.1R/5W RESISTORS ARE OPTIONAL, AND ARE NEEDED ONLY WHEN YOUR MAINS VOLTAGES ARE GREATER THAN THAT WHICH THE POWER TRANSFORMER WAS WOUND FOR. THE VALUES SHOWN SHOULD BE CORRECT FOR A 115V PT USED WITH 120V MAINS. THE PURPOSE OF THESE TWO RESISTORS IS TO INSURE THAT THE FILAMENT VOLTAGE STAYS WITHIN +/- 10% OF 6.3VAC.

VOLTAGE READING NOTES:

1. THE VOLTAGE READINGS ON THIS SCHEMATIC ARE SIMULATED BASED ON THE USE OF A HAMMOND 270FX WITH 120V MAINS.
2. DIFFERENT TUBES DRAW DIFFERENT AMOUNTS OF CURRENT, NO TWO ARE ALIKE UNLESS THEY ARE MATCHED. THE AMOUNT OF CURRENT DRAWN BY ALL THE TUBES IN THE AMP WILL AFFECT VOLTAGE READINGS THROUGHOUT THE AMP.

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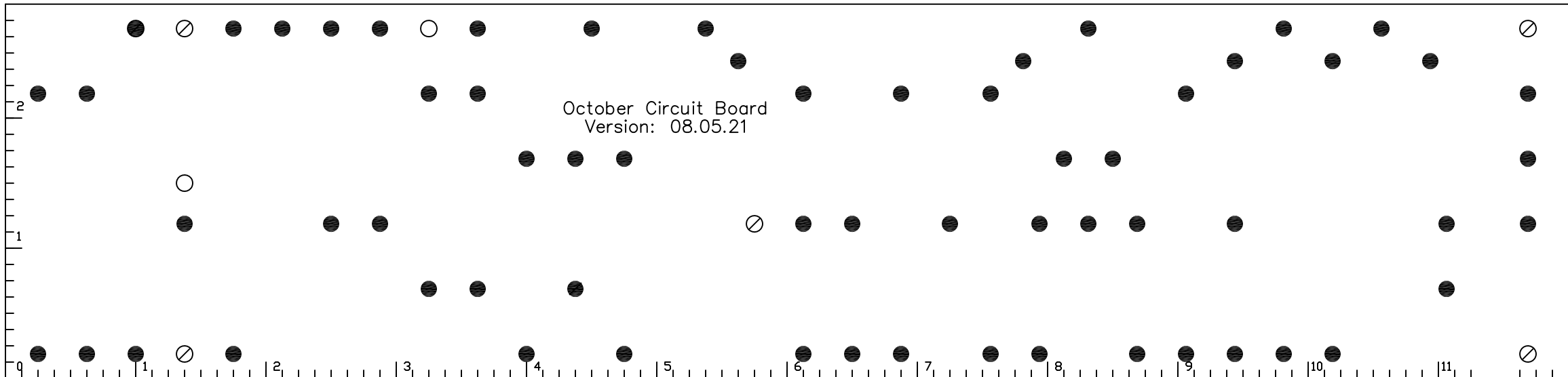
AX84 October Club Amplifier BOM

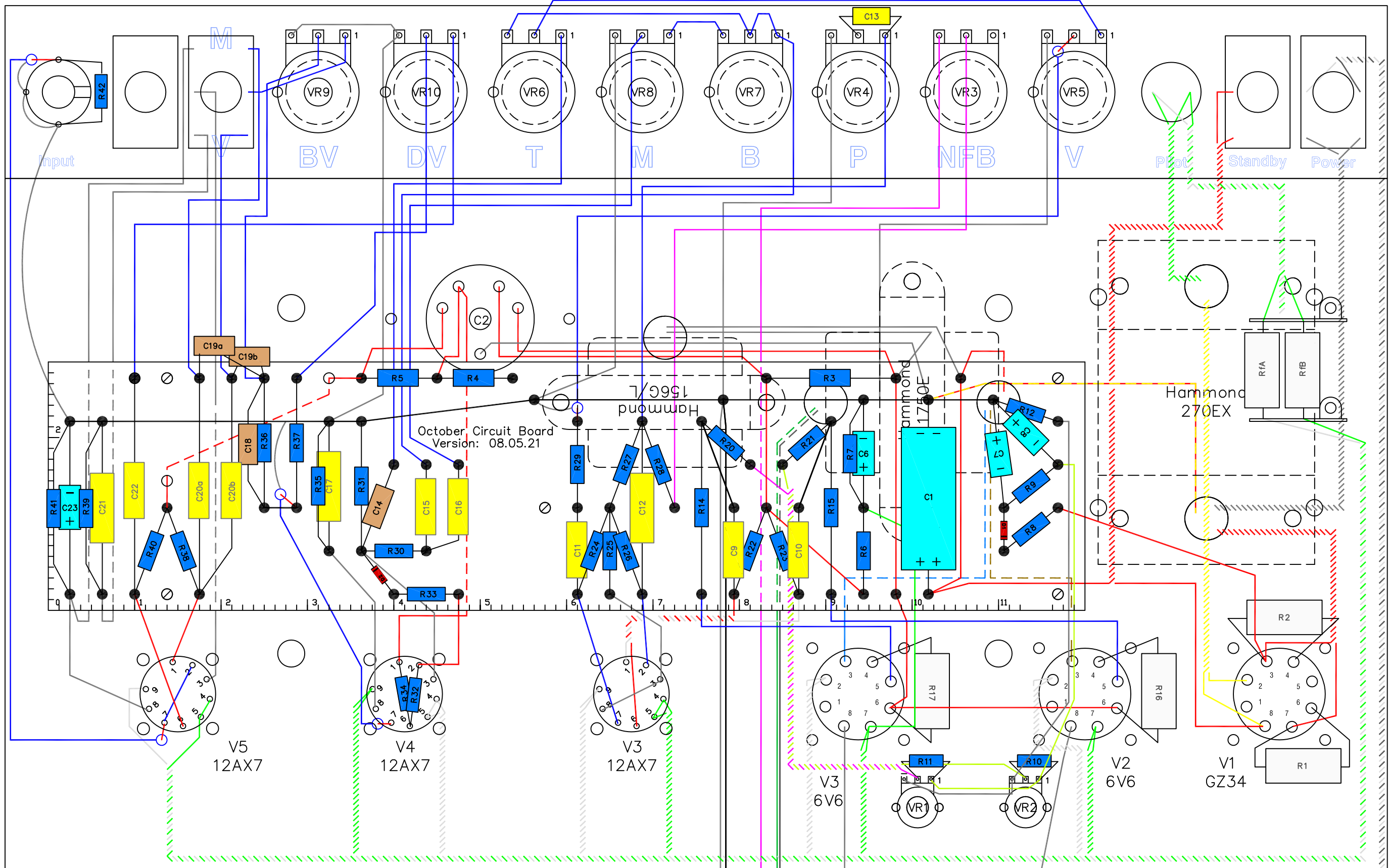
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NOTE: Parts for options are not included on this bill of materials.

Item	Quantity	Reference	Value
1	1	C1	47uF/450V
2	1	C2	40/20/20/20 Multi-section Capacitor
3	3	C6, C7, C8	10uF/160V
4	6	C9, C10, C11, C15, C20a, C22	0.022uF/400V
5	2	C12, C13	0.1uF/100V
6	3	C14, C18, C19b	250pF/500V
7	1	C16	0.01uF/400V
8	2	C17, C21	0.68uF/25V
9	1	C19a	150pF/500V
10	1	C20b	0.0022uF/400V
11	1	C23	330uF/25V
12	2	R1, R2	50R/5W
13	2	Rfa, Rfb	0.1R/5W
14	3	R3, R4, R5	1K/1W
15	2	R6, R8	180K/1W
16	1	R7	47K/1W
17	1	R9	15K/1W
18	2	R10, R11	68K
19	2	R12, R33	10K
20	1	R13	220R/5W
21	2	R14, R15	5k6
22	2	R16, R17	1K/5W
23	2	R18, R19	1R/1W
24	8	R20, R21, R23, R29, R31, R34, R38, R40	100K
25	1	R22	82K
26	2	R24, R26	1.0M
27	1	R25	470R
28	2	R27, R28	22K
29	1	R30	56K
30	1	R32	100R
31	1	R35, R41	820R
32	2	R36, R37	250K
33	1	R39	2k7
34	1	F1	1A SLO-BLO
35	1	FH1	Fuse Holder
36	1	J1	Power Connector
37	3	J2, J3, J4	Phonejack
38	4	JW1, JW2, JW3, JW4	Phonejack Isolation Washer (if needed)
39	2	S1, S4	SW DPDT
40	1	S2	SW SPST
41	2	D1, D2	UF4007
42	1	PL1	Pilot Lamp Assembly And Bulb
43	1	T1	Hammond 270EX

44	1	T2	Hammond 1750E
45	1	L1	Hammond 156G
46	3	SK4, SK5, SK6	9 Pin Tube Sockets
47	3	SK1, SK2, SK3	8 Pin Octal Socket
48	1	V1	GZ34/5AR4
49	2	V2, V3	6V6GT
50	3	V3, V4, V5	12AX7
52	2	VR1, VR2	25K/2W LIN LOCKING
53	1	VR3	100K LIN
54	1	VR4	5K LIN
55	1	VR5	1MEG LOG
56	1	VR6	250K LOG
57	3	VR7, VR9, VR10	500K LOG
58	1	VR8	50K LIN
59	1	CCImp	Clamp For Multi-section Cap C2
60	8	K1, K2, K3, K4, K5, K6, K7, K8	Knobs
61	1	CH1	Chassis
62	2	TP1, TP2	Red Tip Jack
63	1	TP3	Black Tip Jack



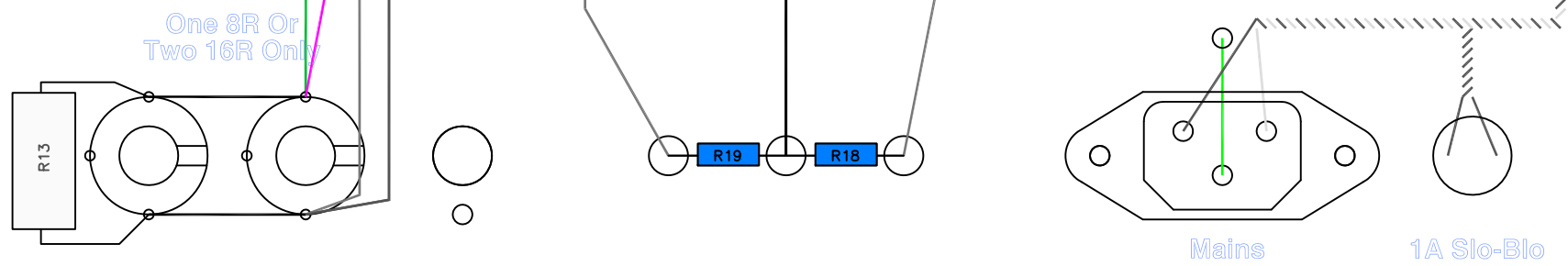


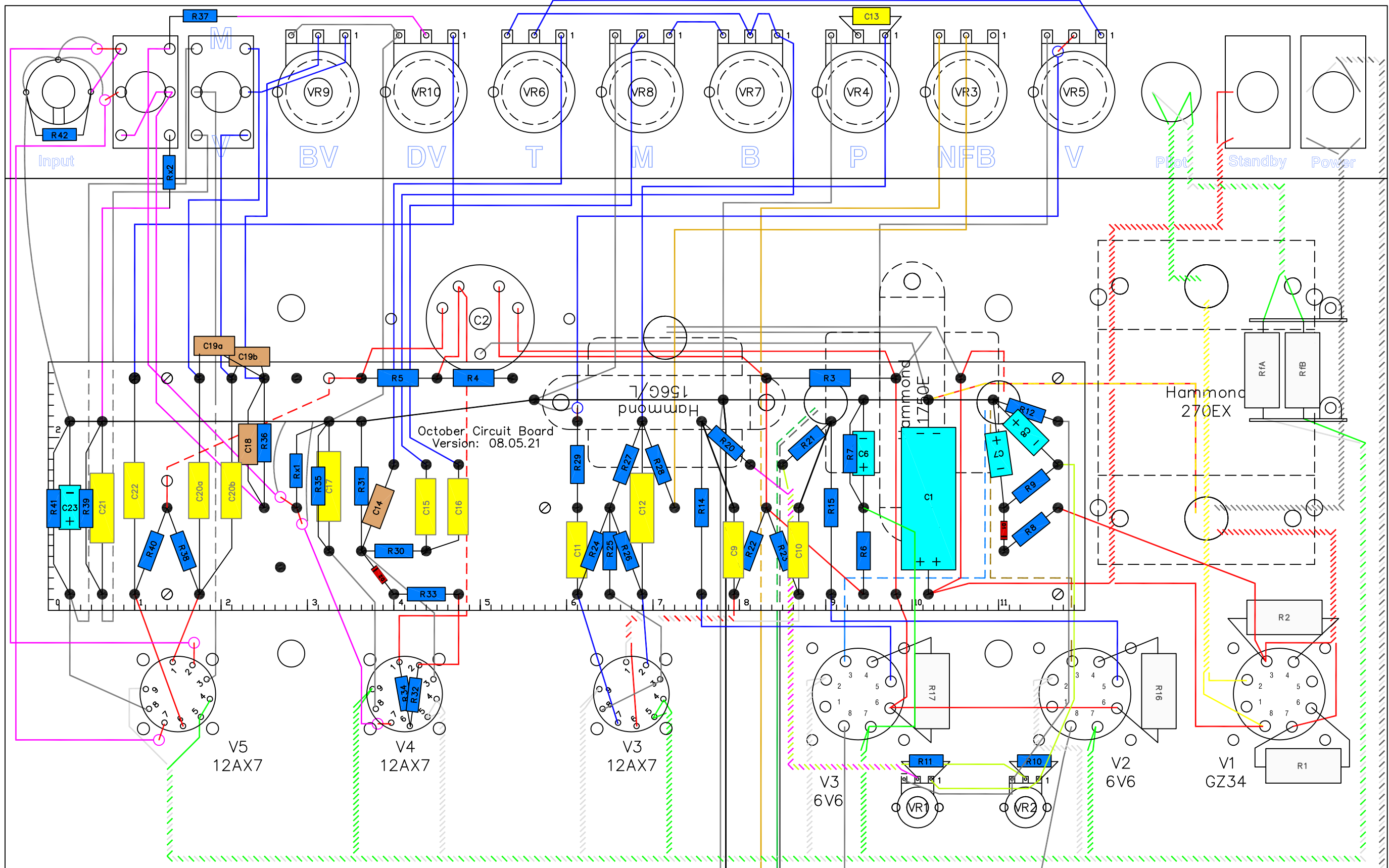
AX84 October ~ Club Chassis Layout

Version: 08.06.08

AX84 Kit Chassis 2

Version: 08.05.12





AX84 October ~ Club Chassis Alt Layout

Version: 08.06.08

AX84 Kit Chassis 2

Version: 08.05.12

