

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!

USE AT YOUR OWN RISK: THE WEBMASTER, PROJECT COORDINATOR, PROJECT CONTRIBUTORS AND WEB SPACE PROVIDER EXPRESSLY DISCLAIM ALL LIABILITY FOR INJURY OR PROPERTY DAMAGE RESULTING FROM THIS INFORMATION! ALL INFORMATION IS PROVIDED 'AS-IS' AND WITHOUT WARRANTY OF ANY KIND.

GENERAL NOTES:

This project is in the **PRELIMINARY STAGES** and is not intended to be built except by **very experienced builders**. These documents have not been extensively debugged, and as such may contain serious errors. Once this project has been officially prototyped and debugged a general release of these documents will be made.

CORE CHASSIS DRILL PLAN:

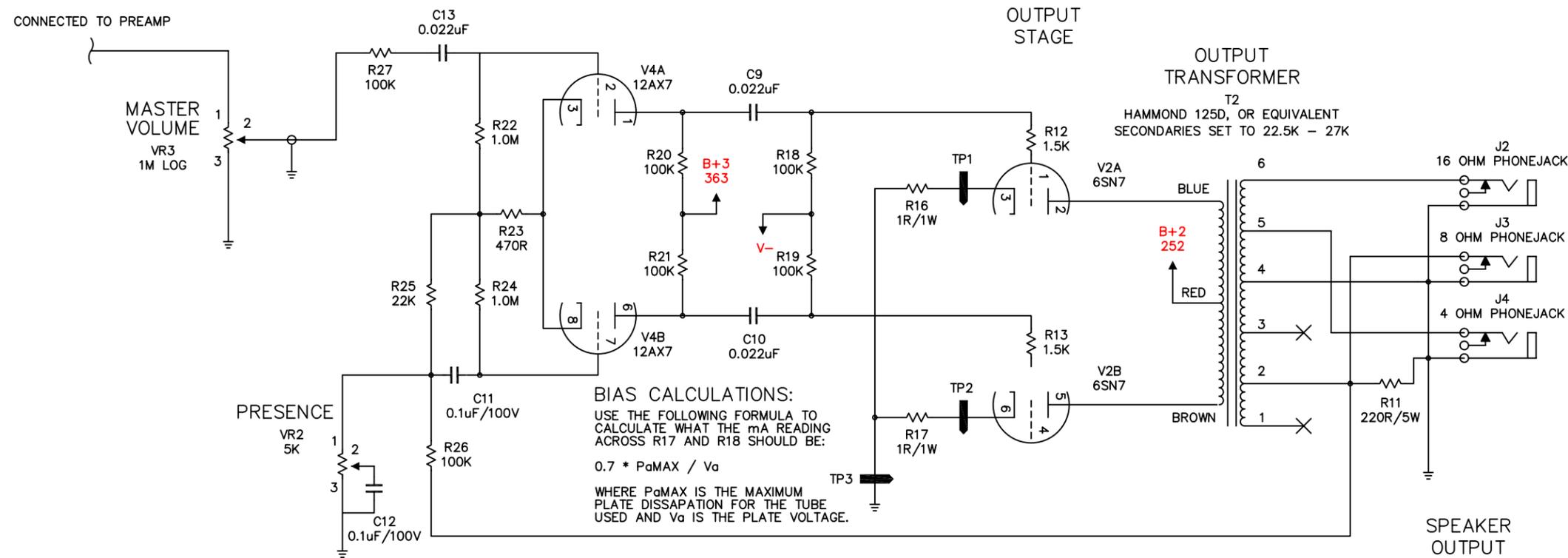
The chassis drill plan is common to all of the AX84 core series amps. Not all holes are used in all amps. You may want to drill all of them if you plan on upgrading, or modifying the amp in the future.

The chassis hole sizes and locations on these plans are correct for the components used in the construction of the prototype amp. At the current time, not all of the amps have been prototyped, so the size, number, and location are subject to change.

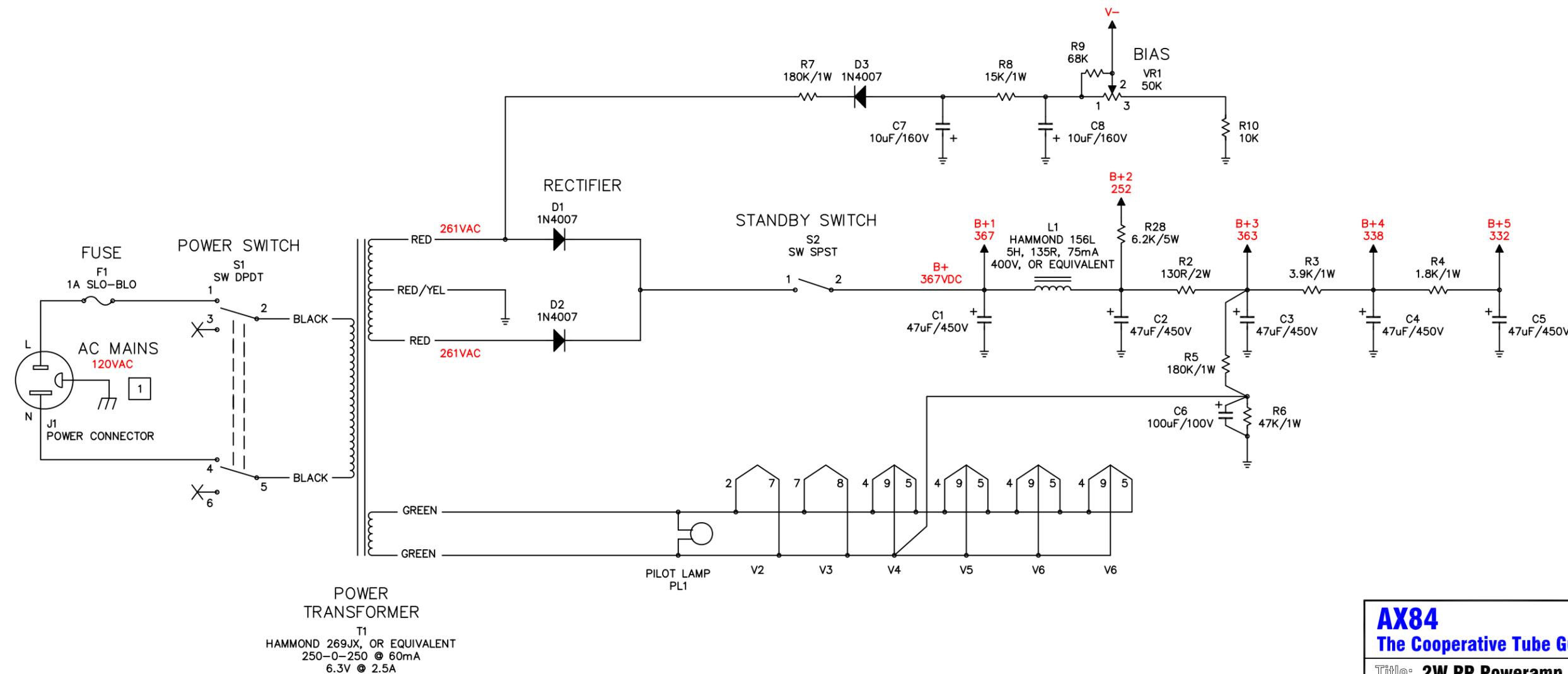
It is the builder's responsibility to insure that the hole sizes, numbers, and locations are correct for the parts used in their own build.

Do not assume that the parts you ordered individually, or bought as a kit, have the same dimensions as those used in the construction of the prototype amp.

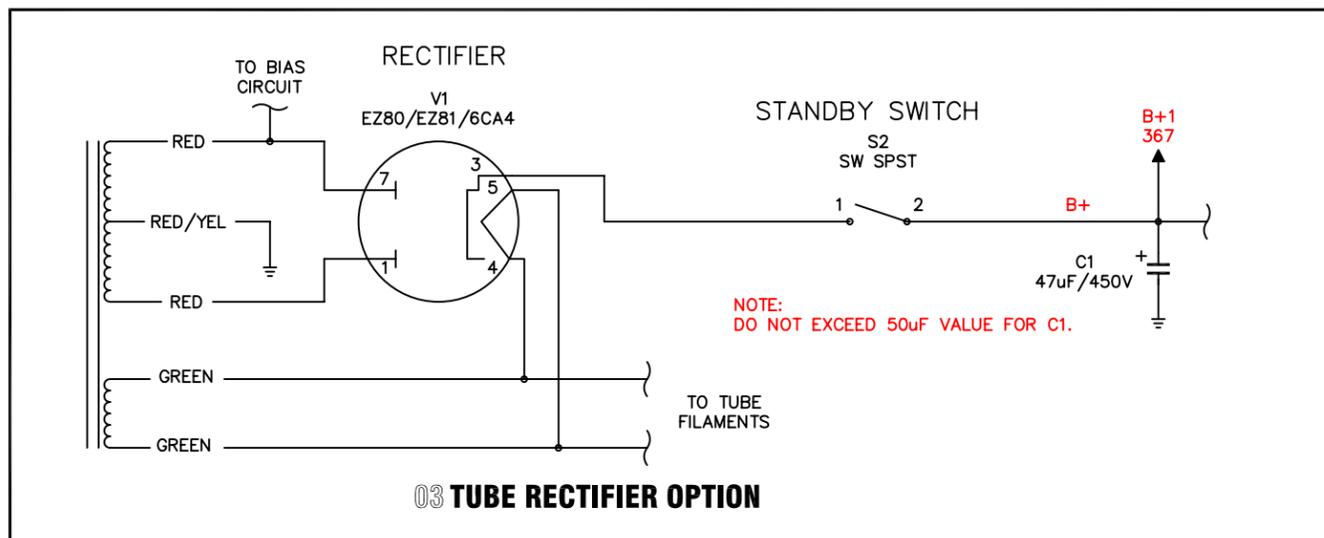
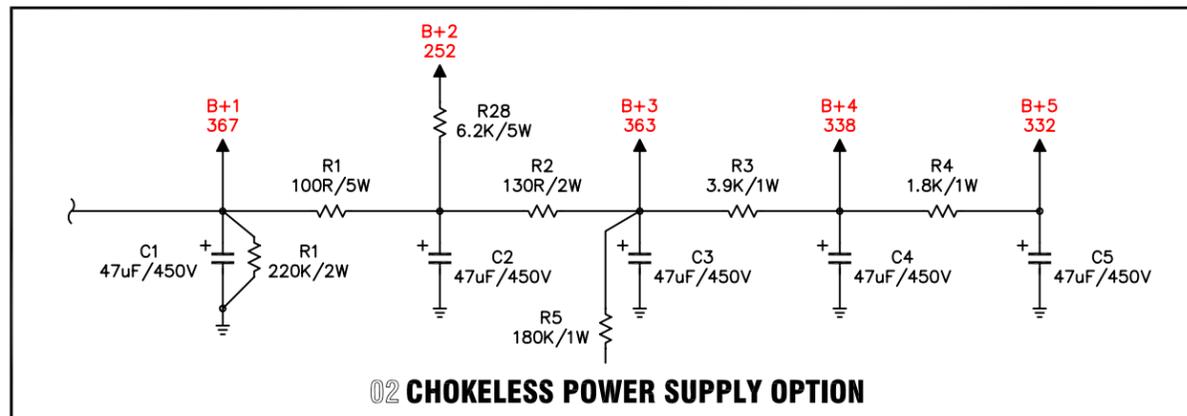
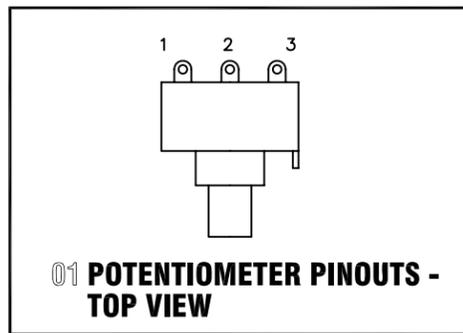
Revision	Description
07.05.08	Changed V4 From 12AT7 To 12AX7 Changed R26 From 22K To 56K Changed R25 From 18K To 22K Changed R20 From 47K To 82K Changed R21 From 47K To 100K
07.05.14	Changed R20 From 82K To 100K
07.07.09	Corrected MV Tag On Chassis Drawing
07.10.02	Changed C1 In Details 02 And 03 To 47uF Added R11



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



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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 A 12BH7A. 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.

VOLTAGE READING NOTES:

1. THE VOLTAGE READINGS ON THIS SCHEMATIC ARE SIMULATED BASED ON THE USE OF A HAMMOND 369JX WITH 120V MAINS.
2. DIFFERENT TUBES DRAW DIFFERENT AMOUNTS OF CURRENT. 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.

