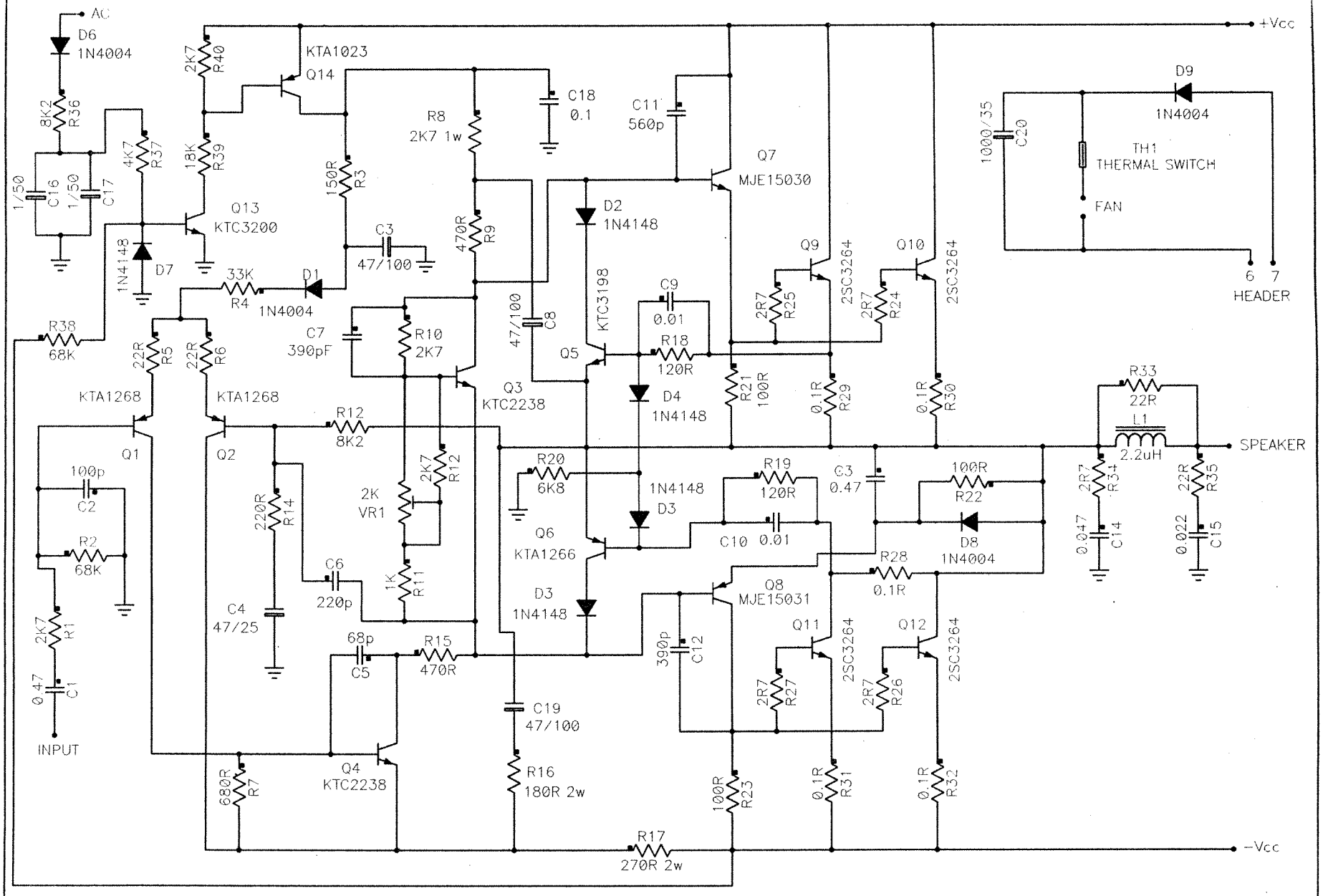


USED FOR PART # 700001-RH

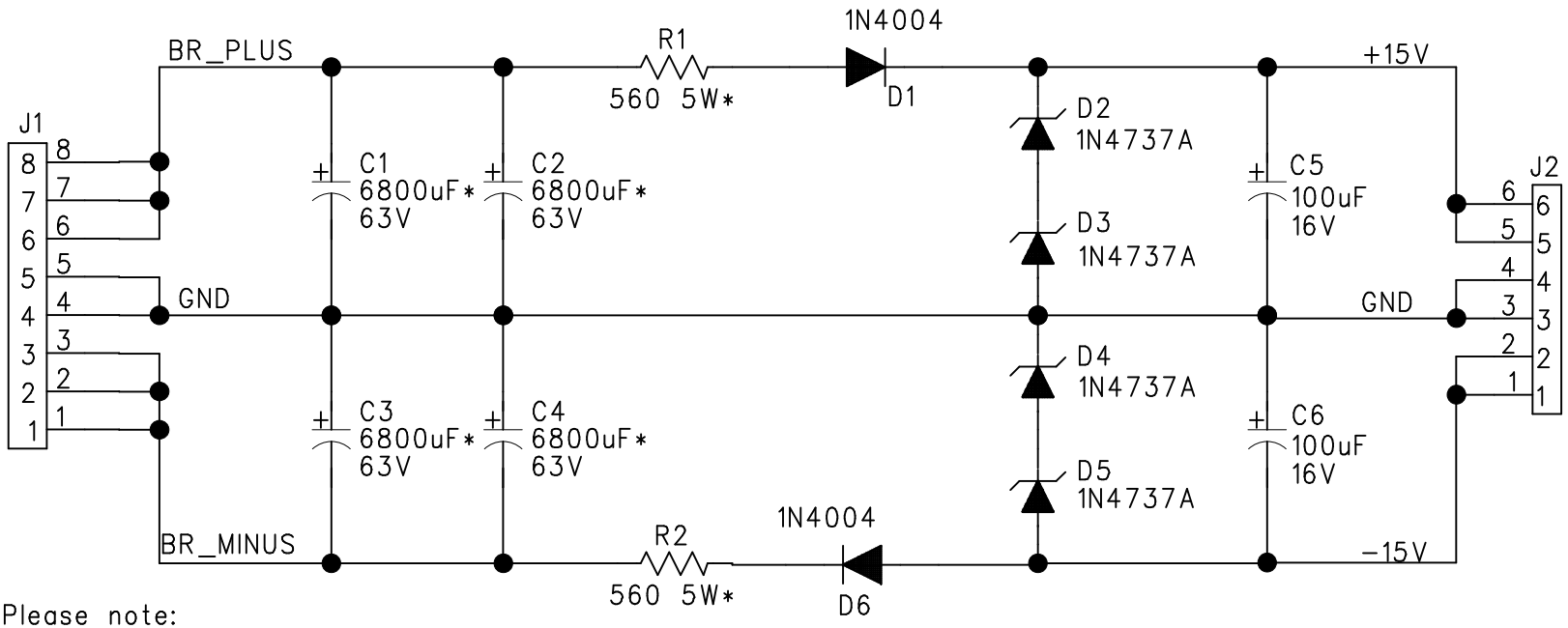
TITLE	FILENAME SWR1-3.S01
DRAWN BY S.MANTZ	DATE 9/16/99 → REV B/C

Power Amp Module

Bass 350, Silverado, Workingman's 4004, Super Redhead

Left side: SM-900, SM-500, ST-800

Blue Boards only!



Please note:

1. All resistors 5%

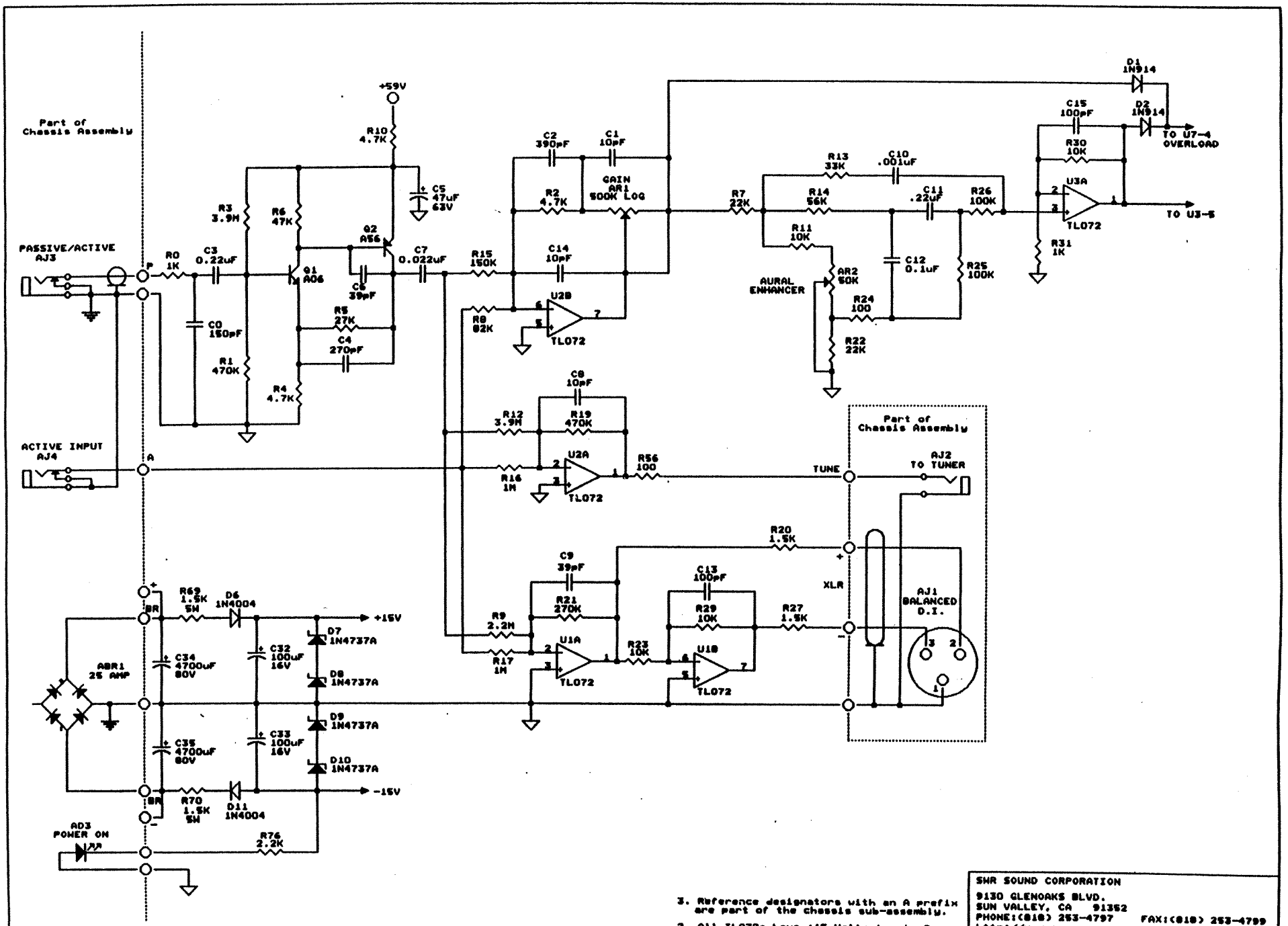
2. PCB assembly part number: (SM-500) 700006
   PCB assembly part number: (4004, 2x10c) 700026
   Bare PCB part number: 170006B

3. *See chart below:

Model	SM500	WM4004/210C
BR_PLUS	+59V	+77V
BR_MINUS	-59V	-77V
C1-C4	6800uF@63V	4700uF@80V
R1-R2	560@5W	1.5K@5W

SWR Sound Corporation

Title: SM500/4004/210C- Power Supply PCB		Rev: B
Date/Filename: 12 Aug 2002	WM4004ps_b.sch	
Last update: 19 Nov 02 GMx	Sheet: 1 of 1	



3. Reference designators with an A prefix are part of the chassis sub-assembly.

2. All TL072s have +15 Volts to pin 8, and -15 Volts to pin 4.

1. All resistors are Ohms, 1/4 Watt

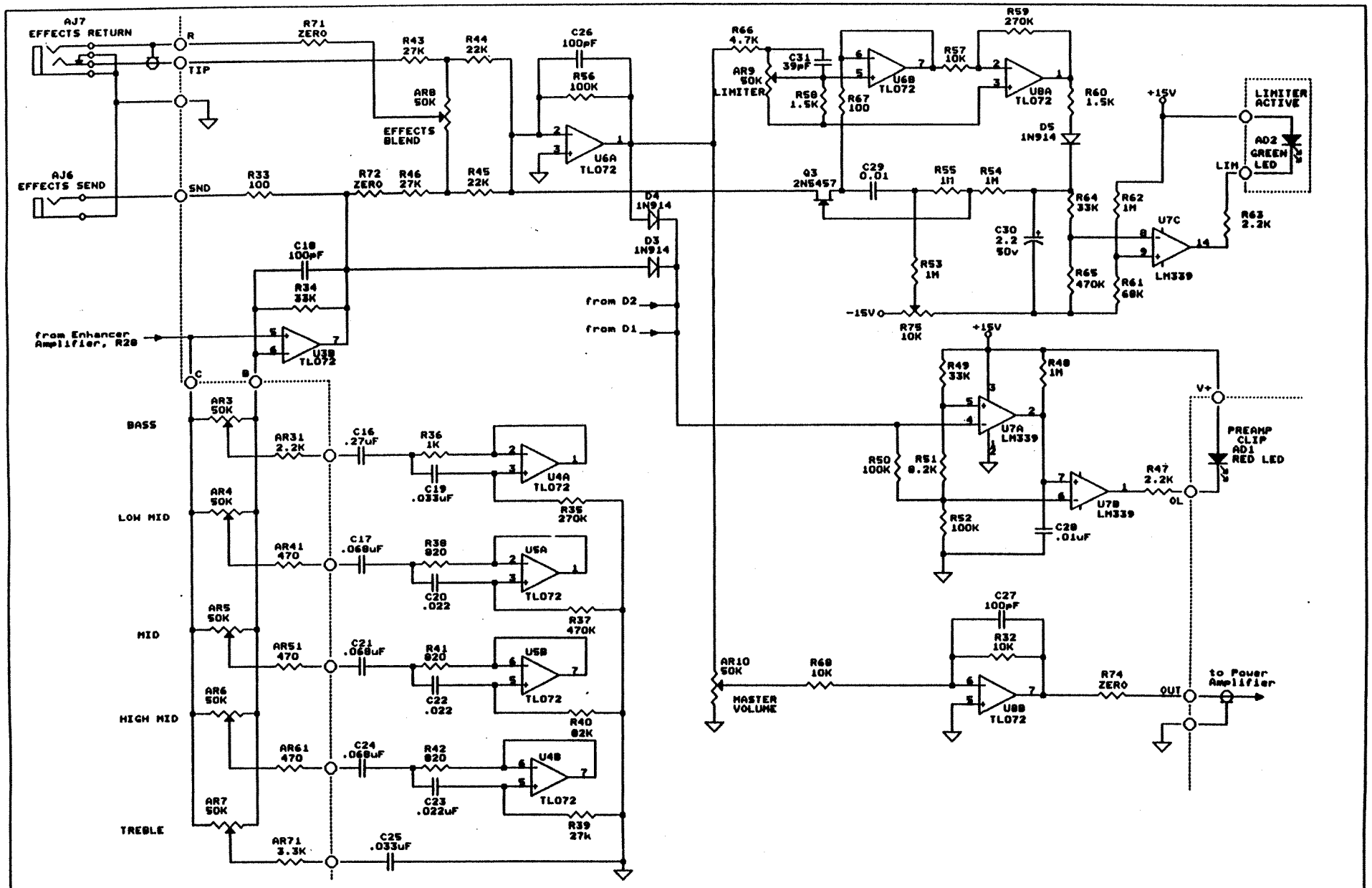
NOTES (Unless otherwise indicated):

SHR SOUND CORPORATION
9130 GLENOAKS BLVD.
SUN VALLEY, CA 91352
PHONE:(818) 253-4797 FAX:(818) 253-4799
http://www.swrsnd.com

Title: MM4004 PREAMP AND AURAL ENHANCER

Size: B | Document Number: 700049-1 | REV: A

Date: June 2, 1999 | Sheet 1 of 2



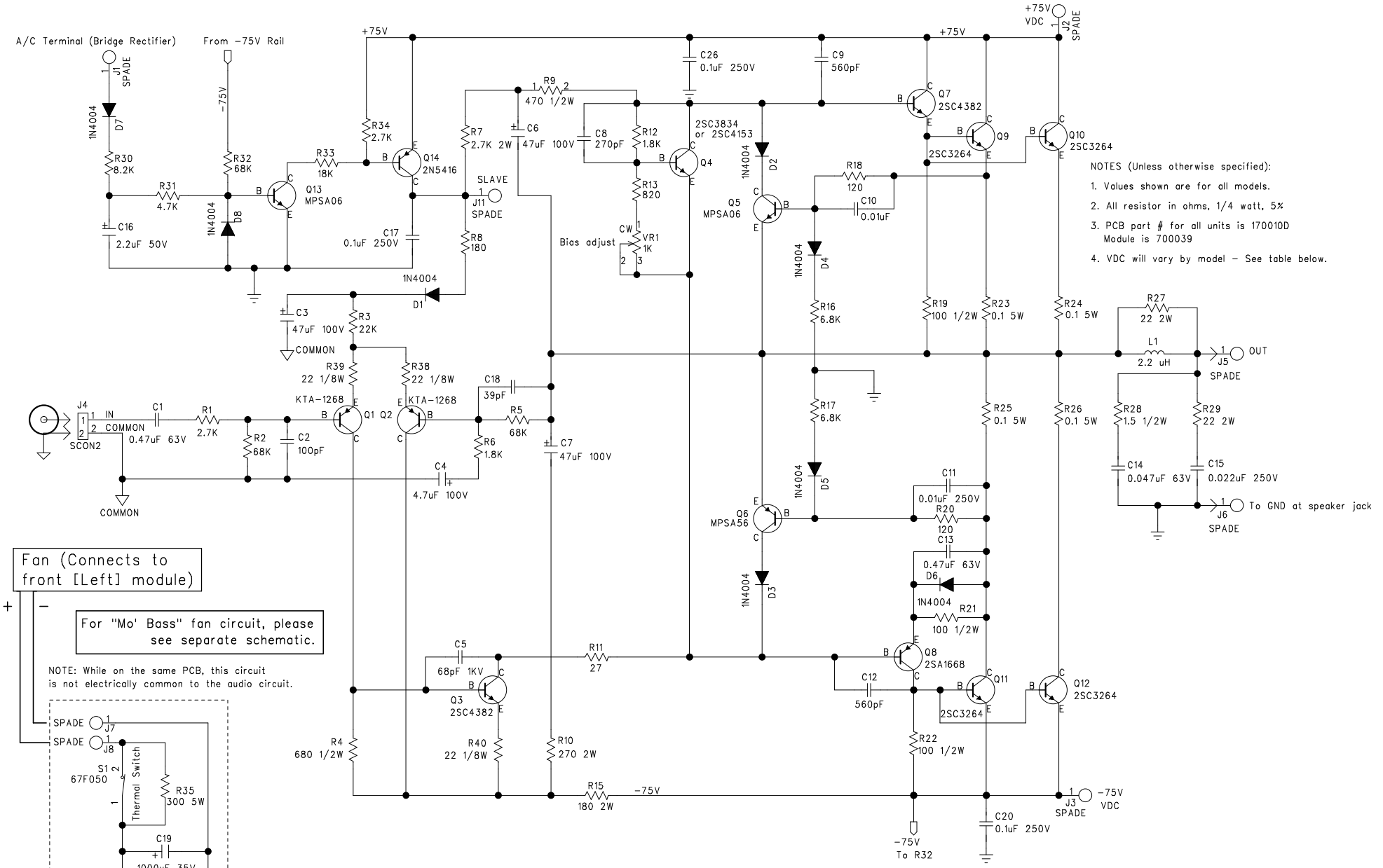
3. Reference designators with an A prefix are part of the chassis subassembly
2. All TL072s have +15 Volts to pin 8, and -15 Volts to pin 4.
1. All resistors are Ohms, 1/4 Watt, and capacitors are in microFarads.

NOTES (Unless otherwise specified):

SHR SOUND CORPORATION
9130 GLENOAKS BLVD.
PHONE: (818) 253-4797 FAX: (818)253-4799
http://www.shrsnd.com

Title: HM4004 TONES, LIMITER, AND EFFECTS

Size	Document Number	REV
B	700049-2	A
Date: June 14, 1999	Sheet 2 of 2	



Q14 2N5416

TO-39

Bottom View

Q3&Q7 2SC4382
Q4 2SC3834
Q8 2SA1668

TO-220

Q9−Q12 2SC3264

MT-200

Q1&Q2 KTA−1268

TO-92

Q6 MPSA56
Q5&Q13 MPSA06

TO-92

All Others Front View

VDC Table

Model	+ VDC	− VDC
SM−900 Mo' Bass	78	78
SM−500	59	59
Bass 350/350x Super Redhead Silverado Black Beauty	77	77
WM4004	79	79

SWR Sound Corp.		
SWR2000 − Power Amp Module		
May 2000	Revision D	Page 1 of 1

Last updated: 22 Nov. 2002

pwr2000_d2g.sch-1 - Fri Nov 22 17:30:54 2002

BIAS PROCEDURE SM-400/SM-900/ST-800

Equipment required:
Sinewave generator
2 ohm, 250 watt load
AC millivolt meter
Oscilloscope

1. Lower signal generator output to minimum, set frequency to 1KHz and insert into "mono" effects return jack (unbalanced line in for Stereo 800).

2. Set Power Amp Assign Switch on back panel to "Stereo" position (up). Plug 2 ohm dummy load in channel to be tested.

3. Raise Master Volumes on SM-900 and ST-800 to full clockwise. Set Effects Blend control on SM-900 to "wet" (full clockwise). Set Balance control on SM-400 to mid-position.

4. Adjust bias trim pots to full counter-clockwise position.

5. Turn on/off switch to "on" position. Connect unit to autotransformer (variac) and raise AC line level to 115 volts.

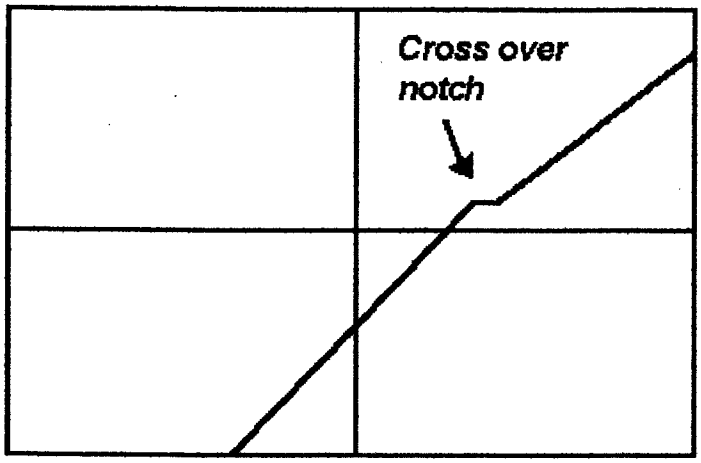
6. Position ground reference on oscilloscope just above center line of screen.

7. Raise signal generator level so that 2 volts RMS appears at the speaker output.

8. Monitor signal on scope with the following settings:
Load: 2 ohms
Scope: Sweep Time: 50us Volts/Div: 0.2V
Signal Generator: Freq. 1KHz

9. The signal should have a prominent crossover notch at about zero crossing. Refer to diagram below.

Figure 1.



10. Adjust bias trimpot of amp being tested just past the point the crossover notch disappears. <u>DO NOT OVER ADJUST</u> as this will set the idle current too high and the power amp will overheat

11. Repeat procedure for other side.