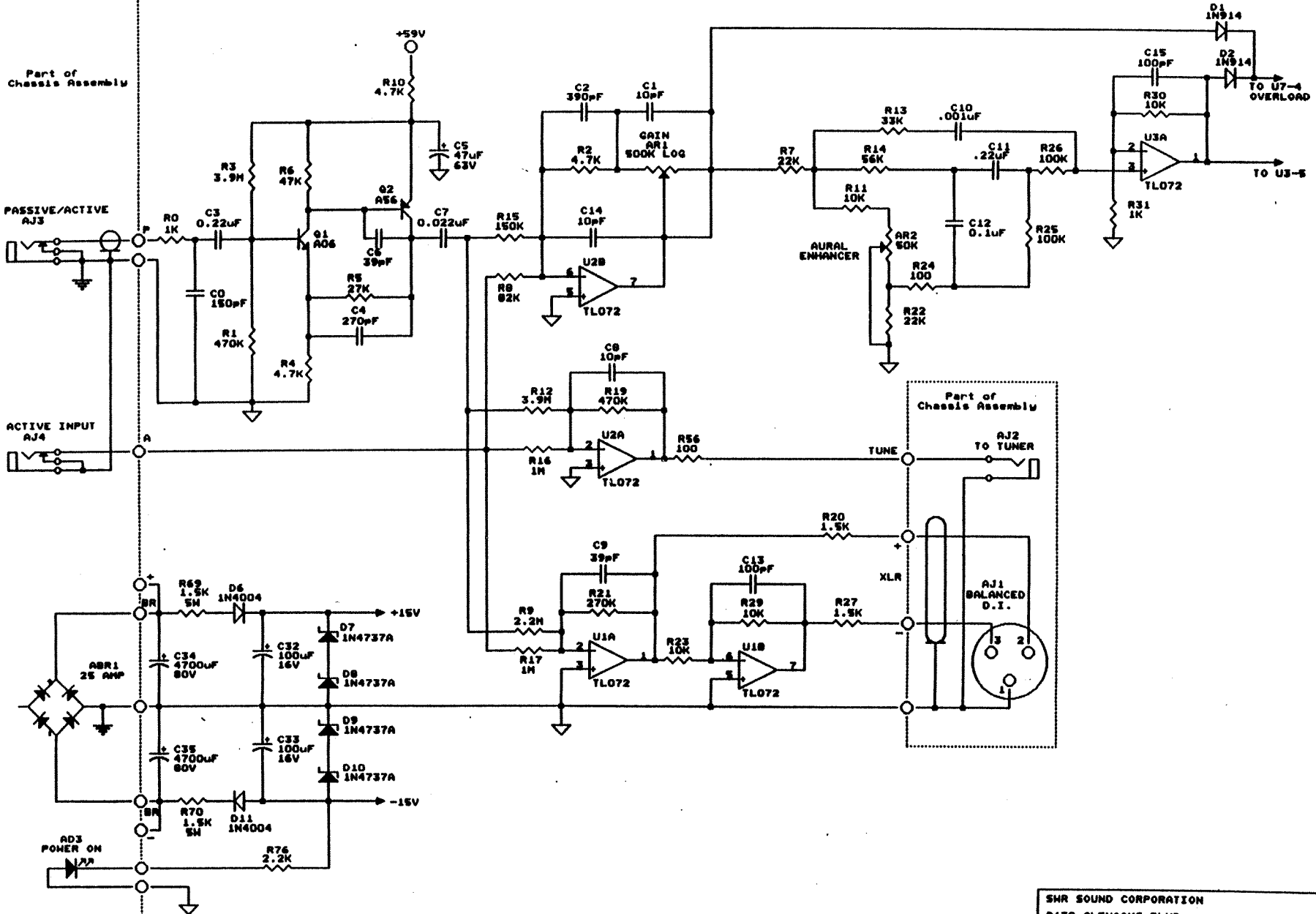


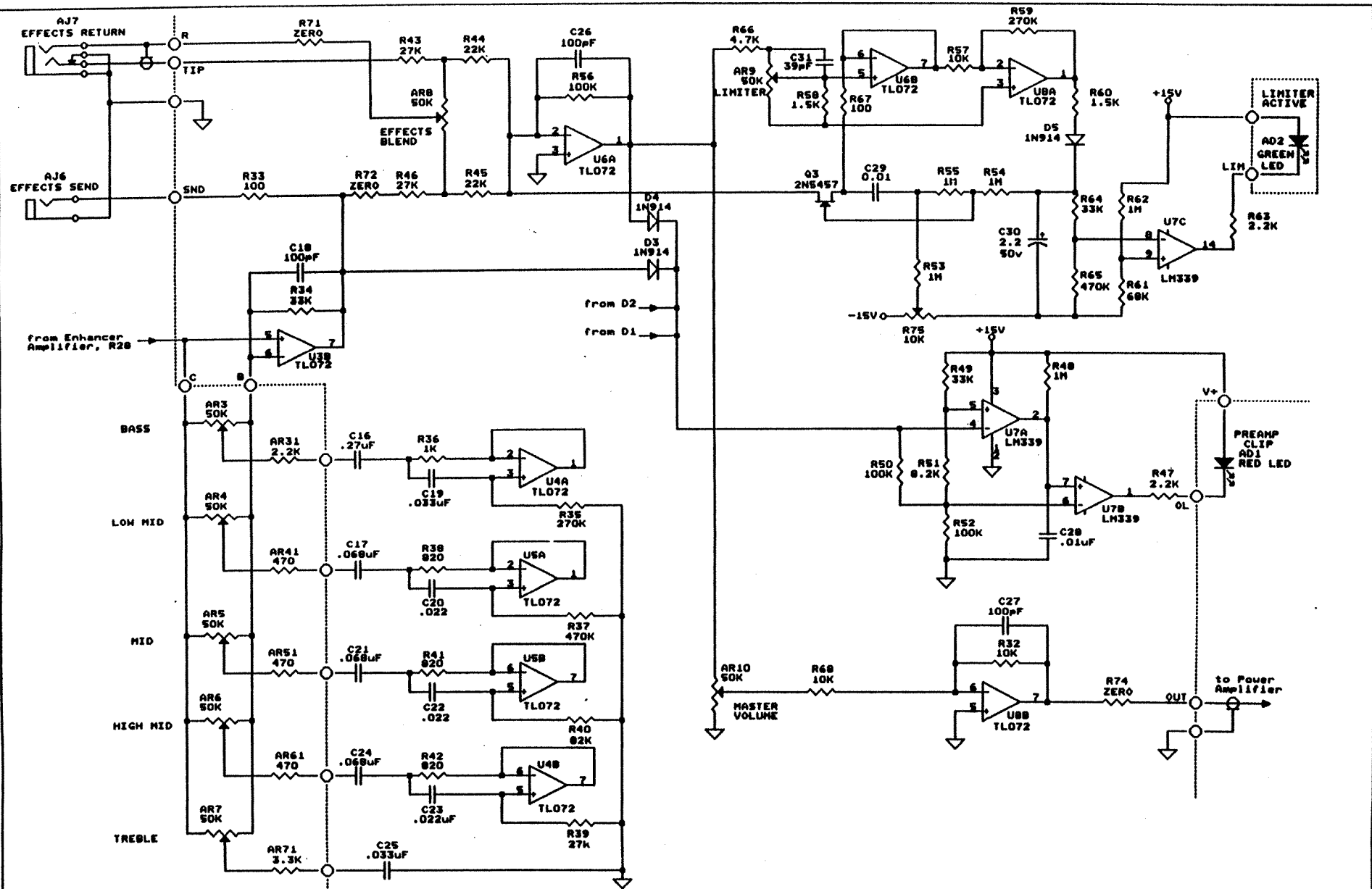
Part of Chassis Assembly



Part of Chassis Assembly

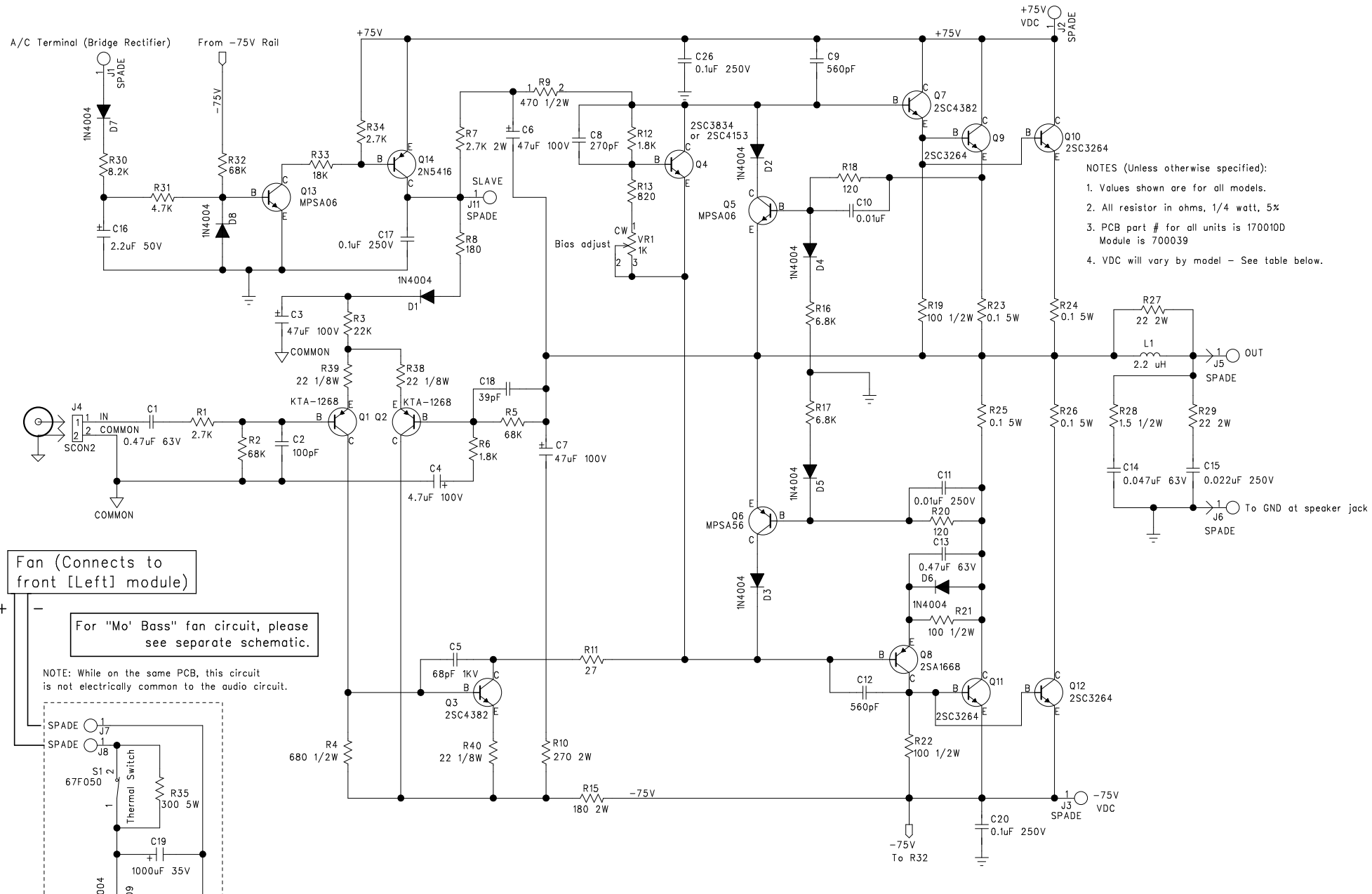
3. Reference designators with an A prefix are part of the chassis sub-assembly.
 2. All TL072s have +15 Volts to pin 8, and -15 Volts to pin 4.
 1. All resistors are Ohms, 1/4 Watt
- NOTES (Unless otherwise indicated):

SMR SOUND CORPORATION	
9130 GLENOAKS BLVD.	
SUN VALLEY, CA 91352	
PHONE: (818) 253-4797	FAX: (818) 253-4799
http://www.smrna.com	
Title	
MM4004 PRERAMP AND AURAL ENHANCER	
Size	Document Number
8	700049-1
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):

SMR SOUND CORPORATION	
9130 GLENOAKS BLVD.	
PHONE: (818) 253-4797 FAX: (818) 253-4799	
http://www.smrsm.com	
Title	
MM4004 TONES, LIMITER, AND EFFECTS	
Size	Document Number
B	700049-2
Date	June 14, 1999
Sheet	2 of 2

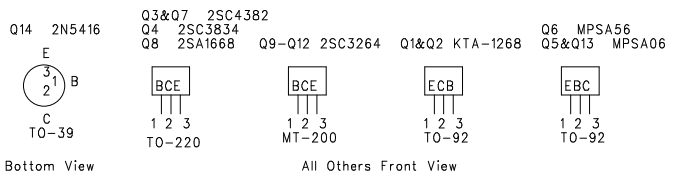
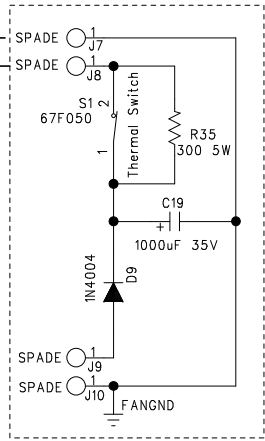


- NOTES (Unless otherwise specified):
1. Values shown are for all models.
 2. All resistor in ohms, 1/4 watt, 5%
 3. PCB part # for all units is 170010D
Module is 700039
 4. VDC will vary by model - See table below.

Fan (Connects to front [Left] module)

For "Mo' Bass" fan circuit, please see separate schematic.

NOTE: While on the same PCB, this circuit is not electrically common to the audio circuit.



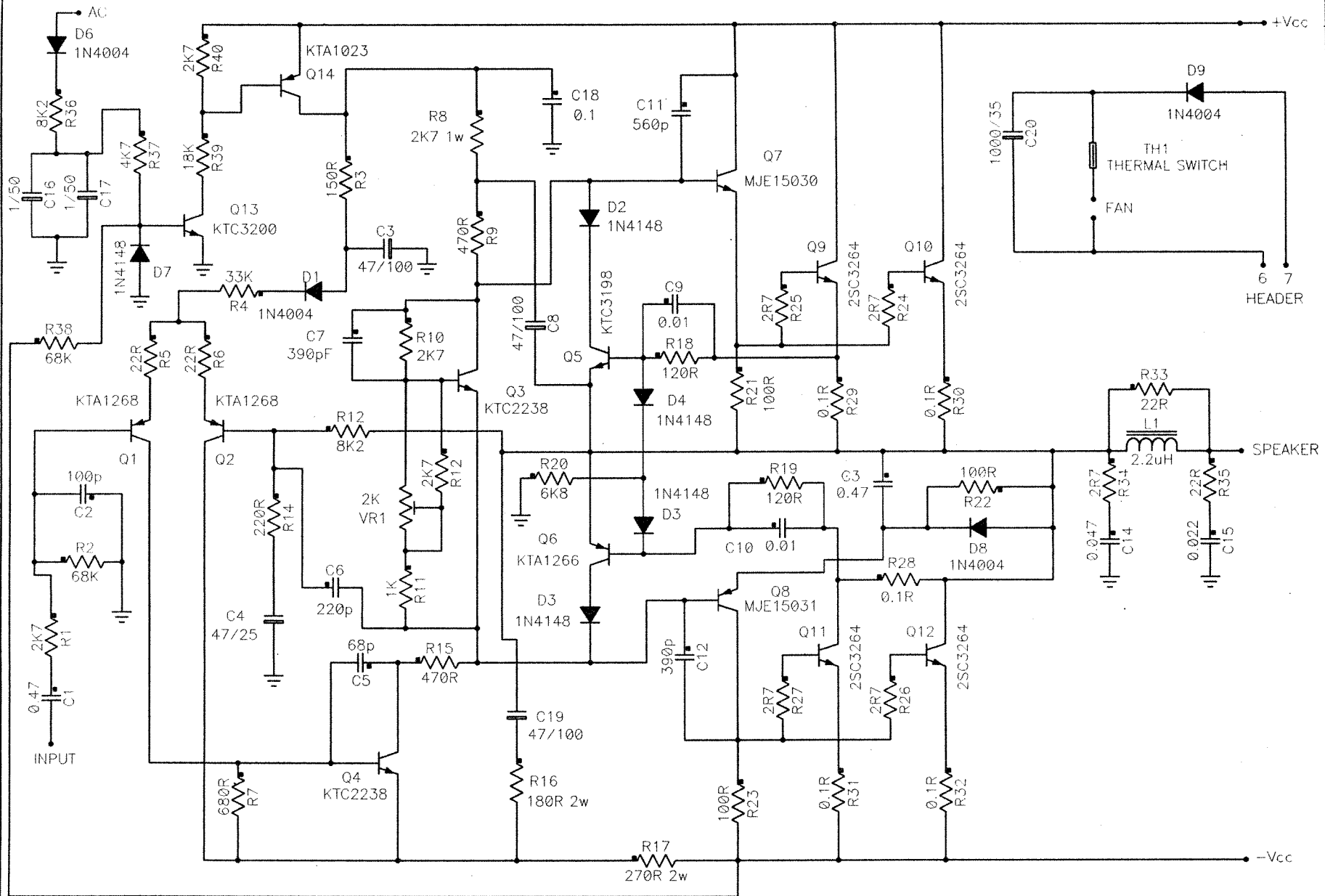
VDC Table

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

SWR Sound Corp.

SWR2000 - Power Amp Module

May 2000 Revision D Page 1 of 1



USED FOR PART # 700001-RH

Power Amp Module

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

Bass 350, Silverado, Workingman's 4004, Super Redhead
 Left side: SM-900, SM-500, ST-800

Blue Boards only!

Quan	Type	Value	Ref Designators
1	EC	47/25	C4
1	FUSE	THERMAL	TH1
4	NPN	2SC3264	Q10,Q11,Q12,Q9
1	NPN	KTC3200	Q13
2	NPN	KTC2238	Q3,Q4
1	NPN	KTC3198	Q5
1	NPN	MJE15030	Q7
2	PNP	KTA1268	Q1,Q2
1	PNP	KTA1023	Q14
1	PNP	KTA1266	Q6
1	PNP	MJE15031	Q8
4	R	2K7	R1,R10,R40,R8
1	R	1K	R11
1	R	2K7	R12
1	R	220R	R14
2	R	470R	R15,R9
1	R	180R	R16

Quan	Type	Value	Ref Designators
1	R	270R	R17
2	R	120R	R18,R19
2	R	68K	R2,R38
1	R	6K8	R20
3	R	100R	R21,R22,R23
5	R	2R7	R24,R25,R26,R27,R34
5	R	0.1R	R28,R29,R30,R31,R32
1	R	150R	R3
4	R	22R	R33,R35,R5,R6
1	R	8K2	R36
1	R	4K7	R37
1	R	18K	R39
1	R	33K	R4
1	R	680R	R7
1	TRIM	2K	VR1

Total Parts: 84

700001 - RH

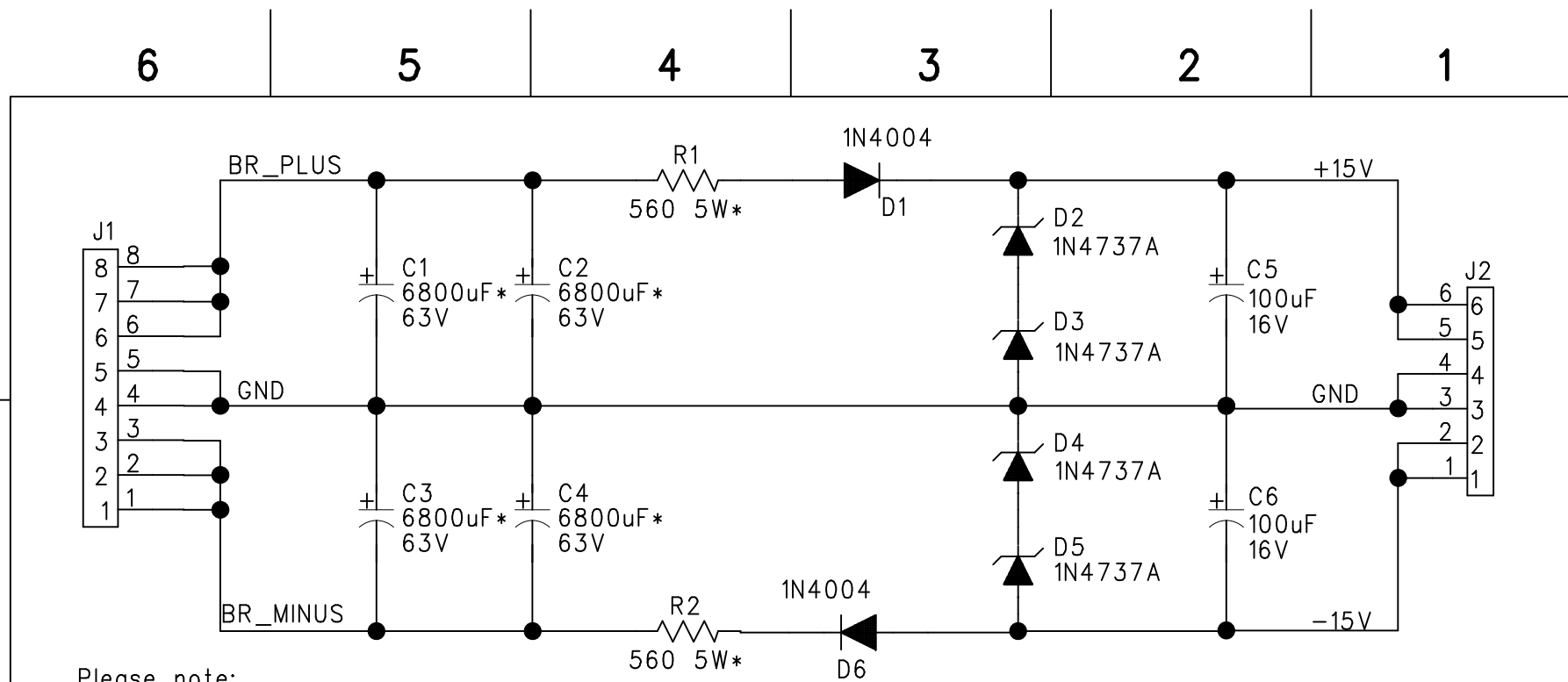
Quan	Type	Value	Ref Designators
2	C	0.47	C1,C3
2	C	0.01	C10,C9
1	C	560p	C11
1	C	390p	C12
1	C	0.047	C14

1	C	0.022	C15
1	C	0.1	C18
1	C	100p	C2
1	C	68p	C5
1	C	220p	C6
1	C	390pF	C7
1	COIL	2.2uH	L1
4	D	1N4004	D1,D6,D8,D9
4	D	1N4148	D2,D3,D4,D7
2	EC	1/50	C16,C17
3	EC	47/100	C19,C3,C8
1	EC	1000/35	C20

03-Nov-99 15:57

Page 1

700001- RH



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

D

C

B

A

D

C

B

A

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

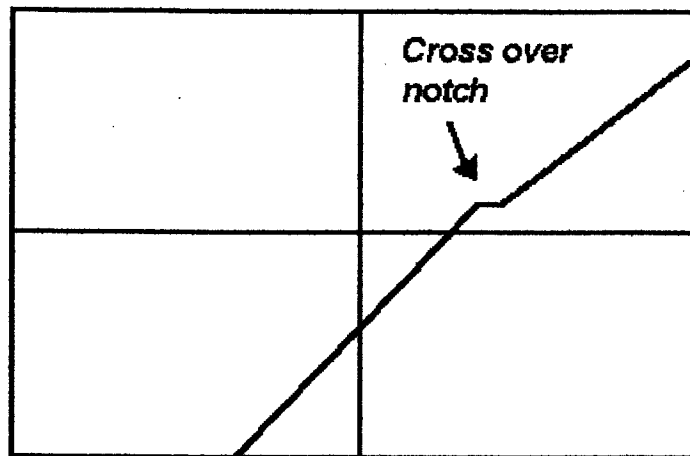
Equipment required:

**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. DO NOT OVER ADJUST as this will set the idle current too high and the power amp will overheat

11. Repeat procedure for other side.