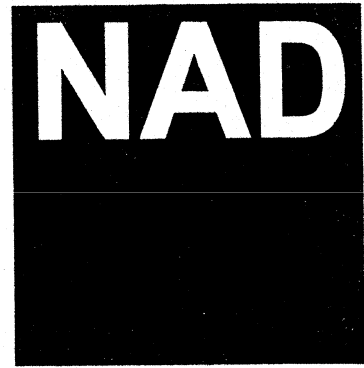


SERVICE MANUAL



S 200

**POWER
AMPLIFIER**

S 200

**POWER
AMPLIFIER**

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SERVICE SAFETY PRECAUTIONS

1. Replacing the Fuses

CAUTION: FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF FUSE.

REFERENCE NO.	PART NUMBER	DESCRIPTION
F501*AH	5120-0023-0	Fuse 15A 250V Slow Blow UL/CSA
F502-F505*AH	5120-0040-0	Fuse 6.3A 250V Slow Blow UL/CSA
F701-F702*AH	5120-0031-0	Fuse 500mA 250V Slow Blow High Surge UL/CSA
F501*C	5120-0025-0	Fuse 6.3A 250V Time Lag HBC VDE/SEMKO
F502-F505*C	5120-0038-0	Fuse 6.3A 250V Fast Acting HBC VDE/SEMKO
F701-F702*C	5120-0030-0	Fuse 500mA 250V Time Lag LBC High Surge VDE/SEMKO

NOTE:

*AH : North American model only

*C : European model only

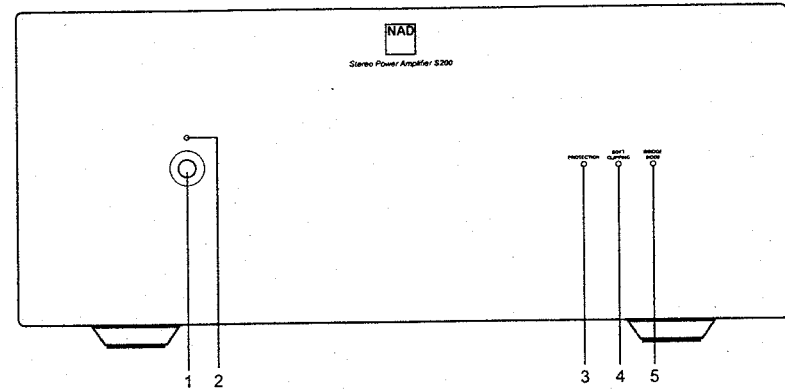
2. Safety-check out (North American model only)

Parts marked with the symbol \triangle are critical with regard to the risk of fire and electric shock. Replace only with parts recommended by the manufacturer.



Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit.

FRONT PANEL / REAR PANEL VIEW

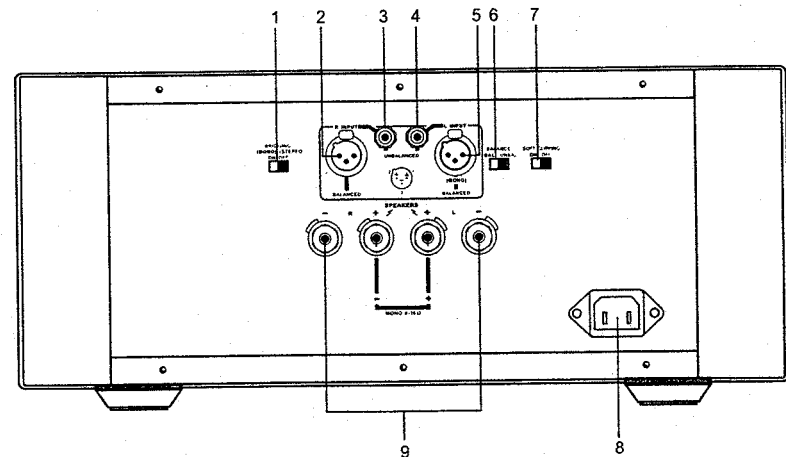
FRONT PANEL CONTROLS



- | | |
|-------------------------|----------------------------|
| 1. POWER SWITCH | 4. SOFT CLIPPING INDICATOR |
| 2. POWER INDICATOR | 5. BRIDGE MODE INDICATOR |
| 3. PROTECTION INDICATOR | |

	<p>The graphic symbol of a lightning flash with an arrow point within a triangle signifies that there is dangerous voltage within the unit and it poses a hazard to anyone removing the cover to gain access to the interior of the unit. Only qualified service personnel should make such attempt.</p>		<p>The graphic symbol of an exclamation point within an equilateral triangle warns a user of the device that it is necessary to refer to the instruction manual and its warnings for proper operation of the unit.</p>
---	---	---	--

REAR PANEL CONNECTIONS



- | | |
|---------------------------|-------------------------|
| 1. BRIDGING SWITCH | 6. BALANCE SWITCH |
| 2. RIGHT BALANCED INPUT | 7. SOFT CLIPPING SWITCH |
| 3. RIGHT UNBALANCED INPUT | 8. AC INLET |
| 4. LEFT UNBALANCED INPUT | 9. SPEAKER OUTPUTS |
| 5. LEFT BALANCED INPUT | |

SPECIFICATIONS

Measured in accordance with EIA Standard RS-490 (IHF-A-202) 1978.

	120V Version	230V Version
Unbridged (Stereo) Mode		
Continuous average power output (Minimum power per channel, 20Hz-20kHz, both channels driven, with no more than rated distortion)	8Ω	225W (23.5dBW)
	4Ω	350W (25.4dBW)
Rated distortion (THD 20Hz-20kHz)	0.03%	0.03%
Clipping power (Maximum continuous power per channel)	240W (23.8dBW)	210W (23.2dBW)
IHF dynamic headroom at 8Ω	1dB	1dB
IHF dynamic power (Maximum short term power per channel)	8Ω	280W (24.5dBW)
	4Ω	470W (26.7dBW)
	2Ω	700W (28.4dBW)
Signal-to-Noise ratio (A-weighted)	ref. 1W	95dB
	Ref. rated power	118.5dB
Frequency response	20Hz-20kHz	+/-0.3dB
	-3dB	2.5Hz / 80kHz
Slew Rate	>100V/μs	>100V/μs
Damping factor (ref. 8Ω, 50Hz)	>200	>200
Input impedance	47KΩ / 700pF	47KΩ / 700pF
Input sensitivity (for rated power into 8Ω)	1.4V	1.4V
Bridged Monophonic Mode		
Continuous average power output into 8Ω (Minimum power, 20Hz-20kHz, no more than rated THD)	780W (28.9dBW)	700W (28.5dBW)
IHF dynamic headroom at 8Ω	1dB	1dB
IHF dynamic power (Maximum short term power)	8Ω	940W (29.7dBW)
	4Ω	1.3kW (31.1dBW)
Physical specifications		
Dimensions (W x H x D)	450 x 180 x 406 mm	
Net weight	27 kg / 59.4 lbs	

ALIGNMENT PROCEDURE

IDLE CURRENT ALIGNMENT

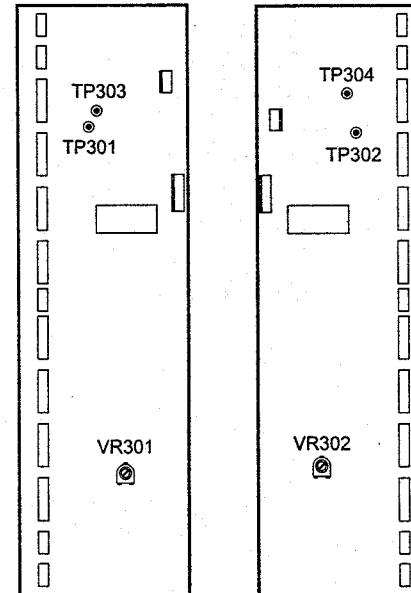
1. Ensure VR301 and VR302 are set to minimum (fully counter-clockwise) before switching on. No load should be connected and no input signal.
2. Connect a digital voltmeter switch to its 200mV range between TP301 and TP303.
3. Switch the amplifier on and, after one minute, adjust VR301 to obtain a reading of between 2mV and 2.5mV.
4. Transfer the DVM to TP302 and TP304 and adjust VR302 to obtain a reading of between 2mV and 2.5mV.
5. Leave power on for between 5 to 10 minutes to allow the idle currents to stabilize. Re-adjust VR301 and VR302 as necessary to obtain a reading of 8mV ±2mV on each channel.

COMMON MODE REJECTION ALIGNMENT

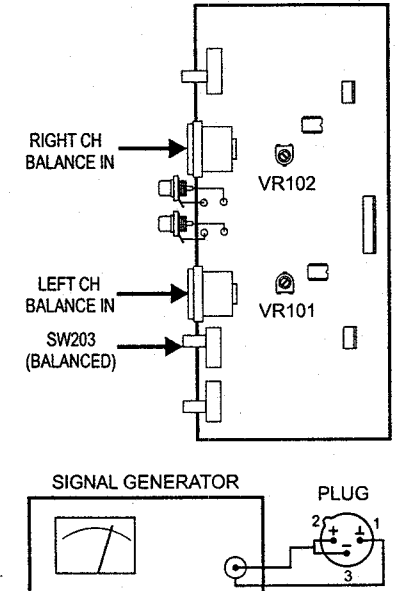
1. Switch SW203 to BALANCED mode.
2. Apply a signal of 1Vrms, 1kHz simultaneously to pins 2 and 3 of the left channel balanced input jack. Pins 2 and 3 must be shorted together at the plug and the signal referenced to the ground pin (1) for this test.
3. Monitor the output level at the left channel speaker terminals with an AC voltmeter (no load connected).
4. Adjust VR101 to produce the minimum reading on the AC voltmeter. This should be below 10mVrms.
5. Repeat the above procedure with the right channel to set VR102.

ADJUSTMENT POINTS

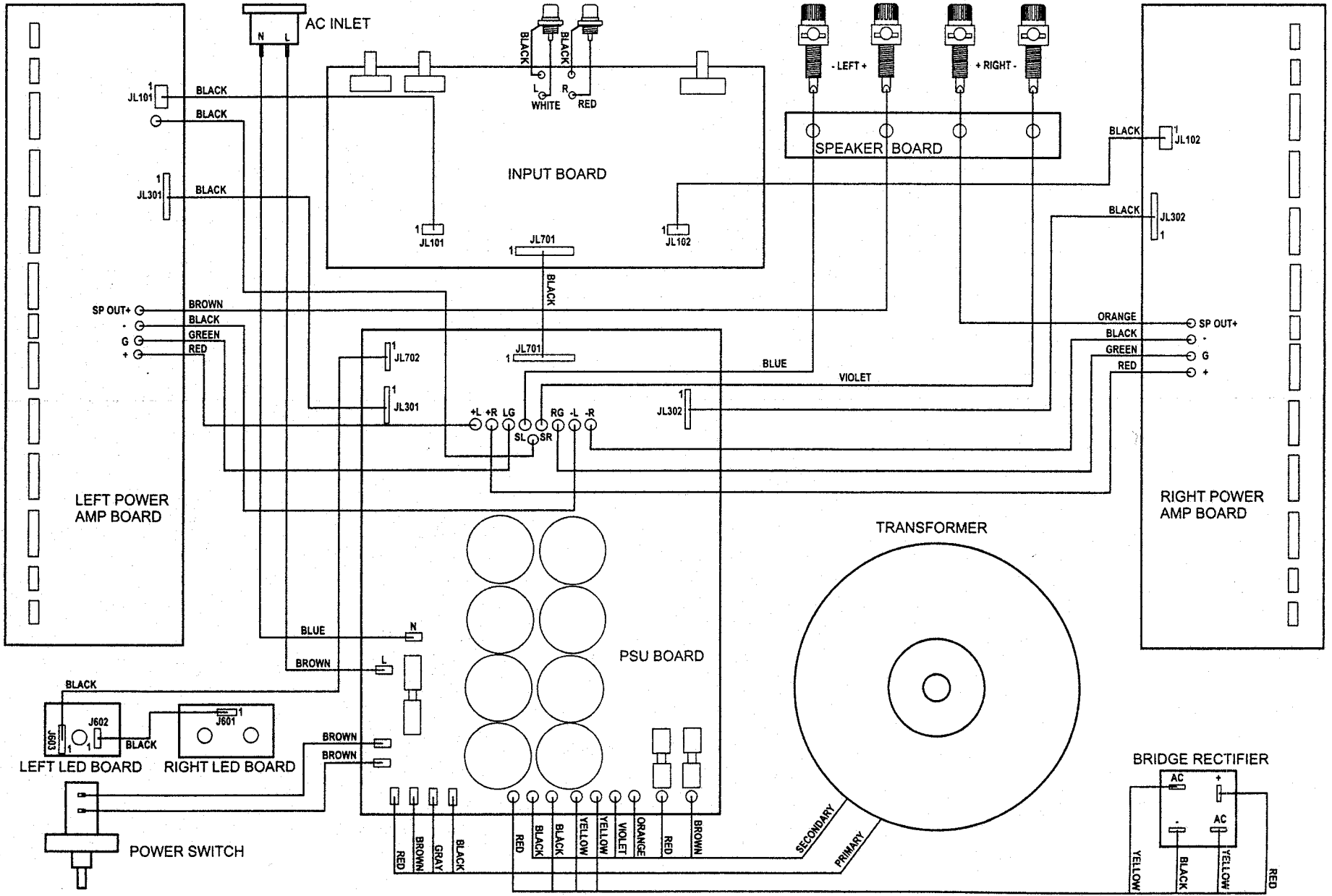
IDLE CURRENT ALIGNMENT



CMRR ALIGNMENT

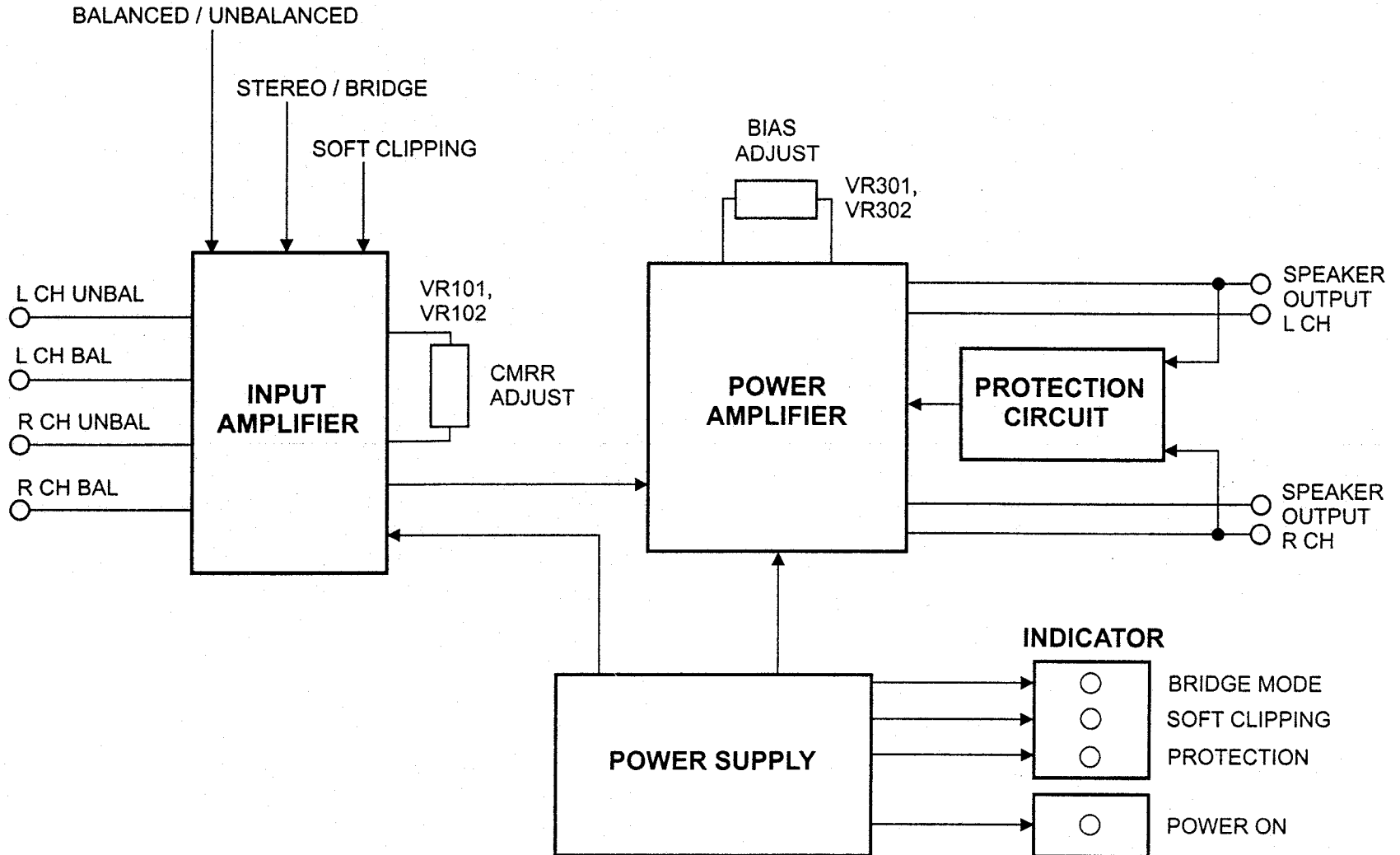


WIRING DIAGRAM

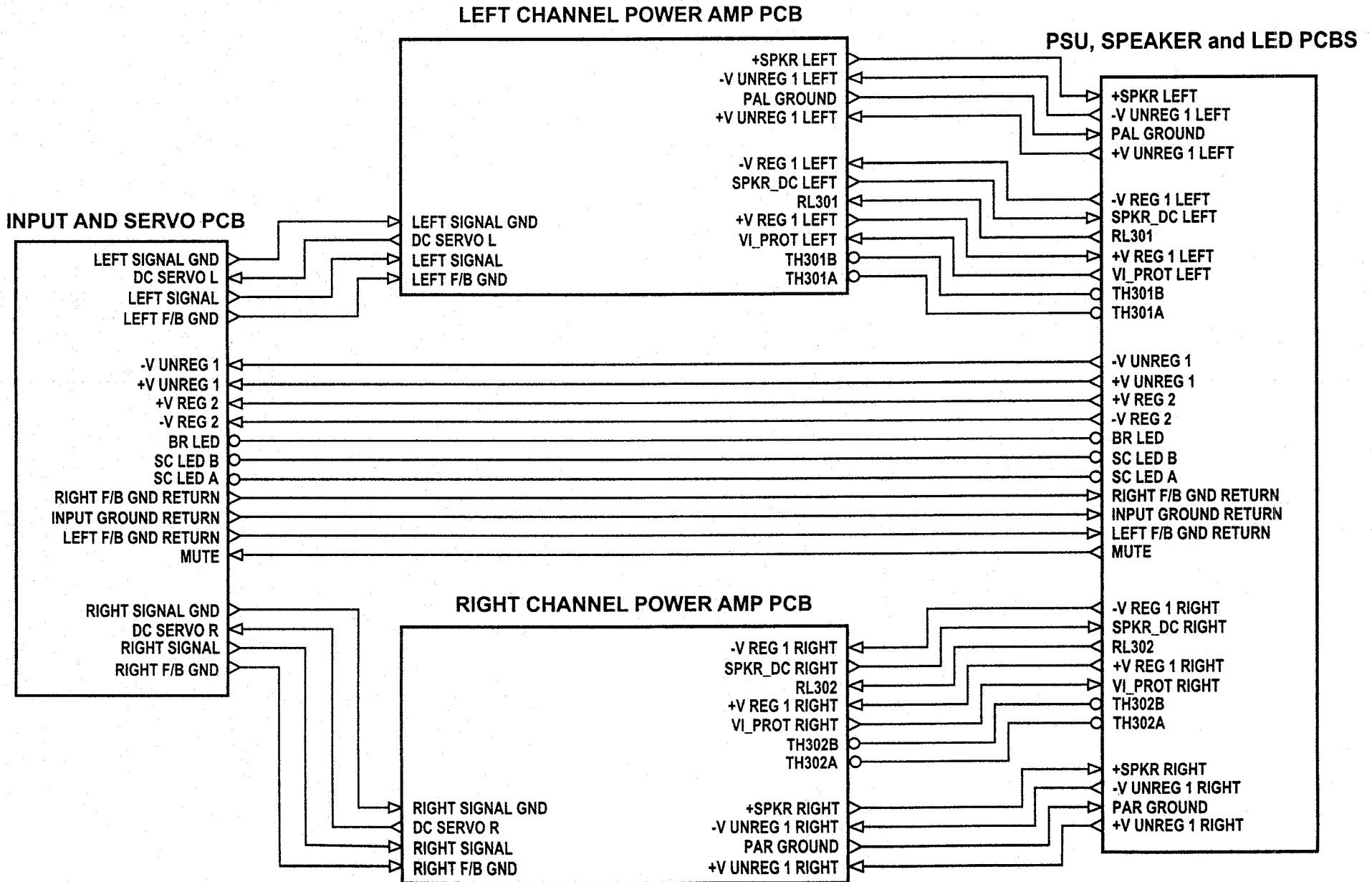


BLOCK DIAGRAM

MODE SELECT SWITCHES

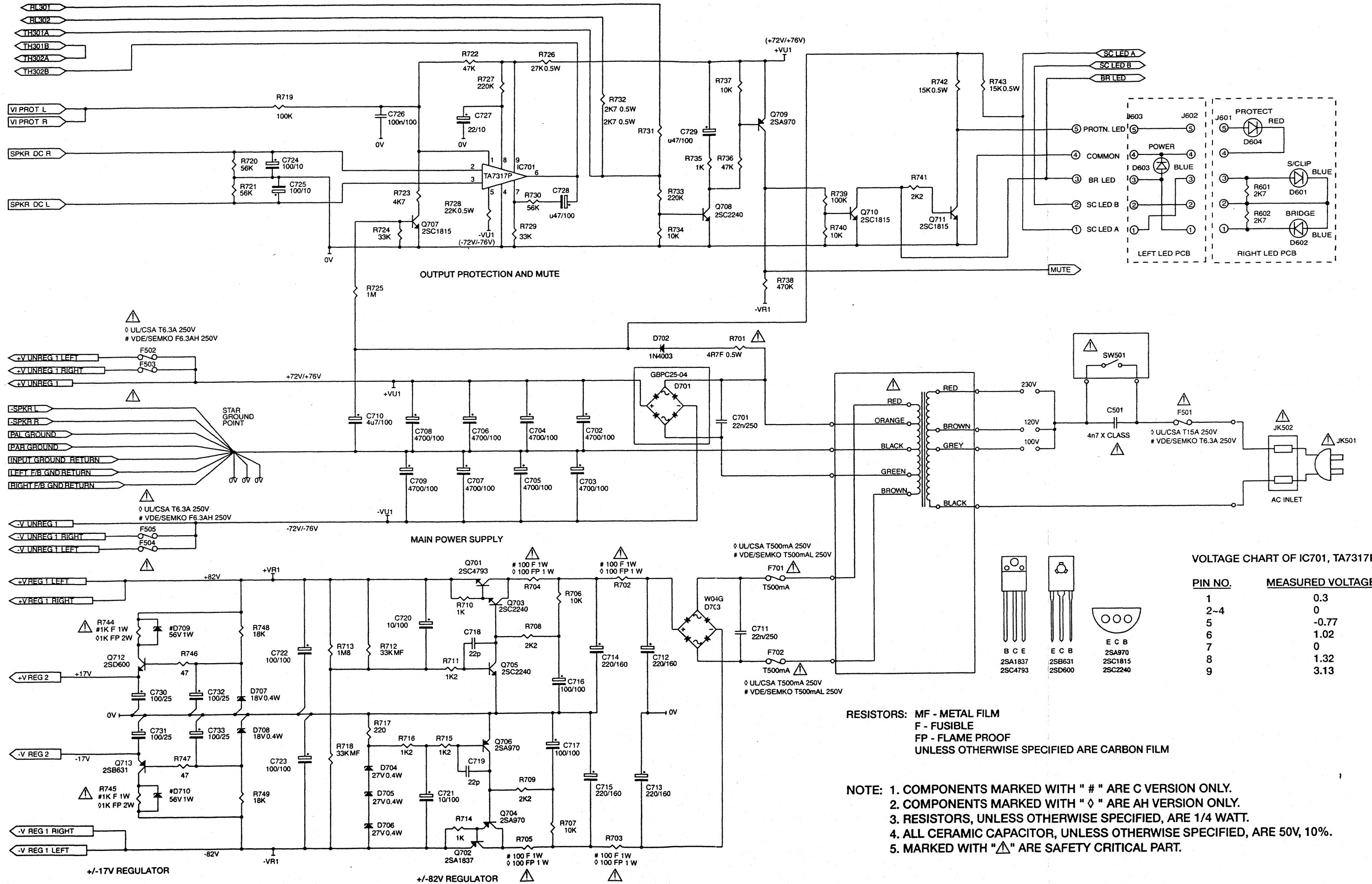


POWER AMPLIFIER SYSTEM



SCHEMATIC DIAGRAM

PSU



VOLTAGE CHART OF IC701, TA7317P

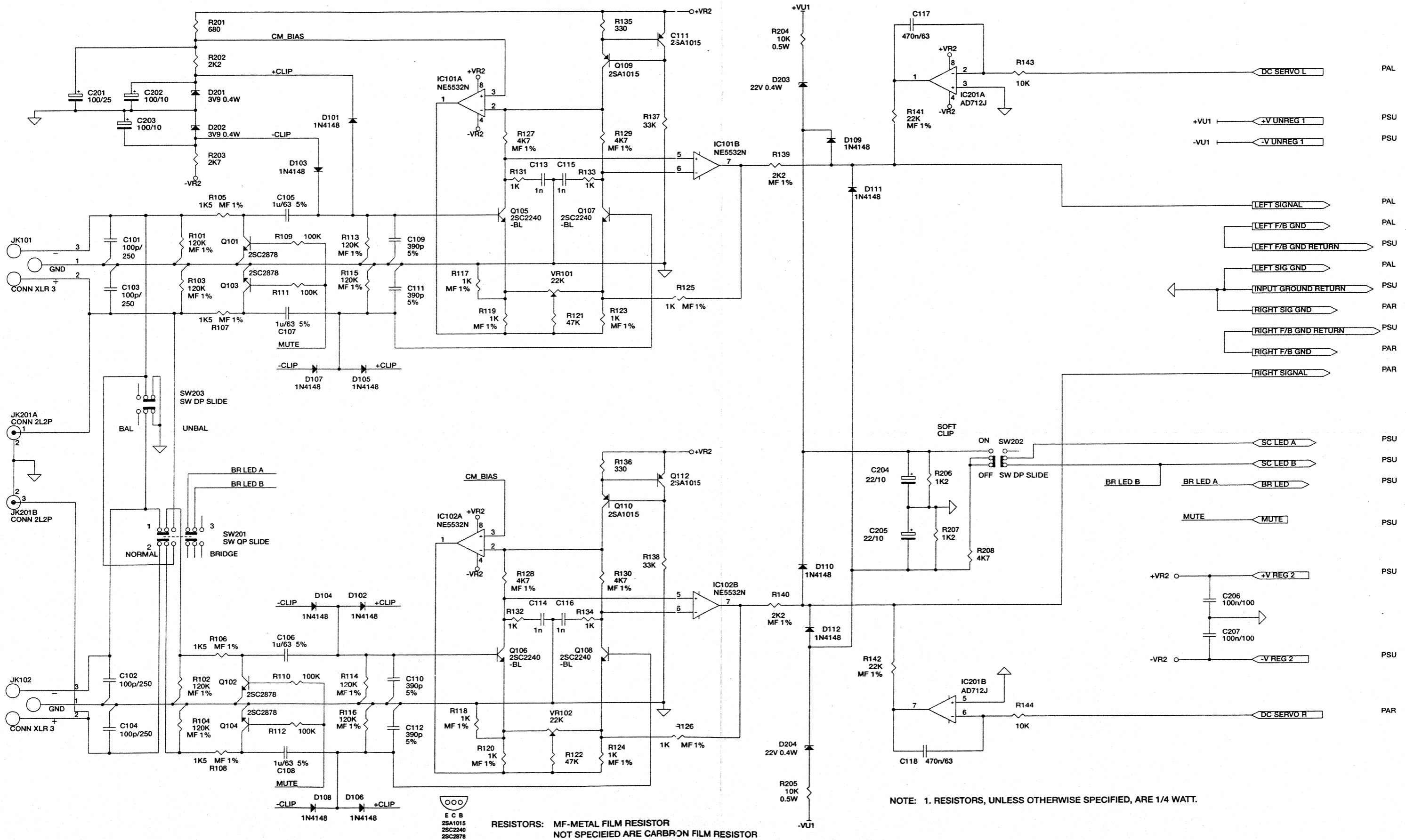
PIN NO.	MEASURED VOLTAGE
1	0.3
2-4	0
5	-0.77
6	1.02
7	0
8	1.32
9	3.13

RESISTORS: MF - METAL FILM
 F - FUSIBLE
 FP - FLAME PROOF
 UNLESS OTHERWISE SPECIFIED ARE CARBON FILM

NOTE: 1. COMPONENTS MARKED WITH " # " ARE C VERSION ONLY.
 2. COMPONENTS MARKED WITH " ◊ " ARE AH VERSION ONLY.
 3. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/4 WATT.
 4. ALL CERAMIC CAPACITOR, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
 5. MARKED WITH " ⚠ " ARE SAFETY CRITICAL PART.

SCHEMATIC DIAGRAM

INPUT AMPLIFIER



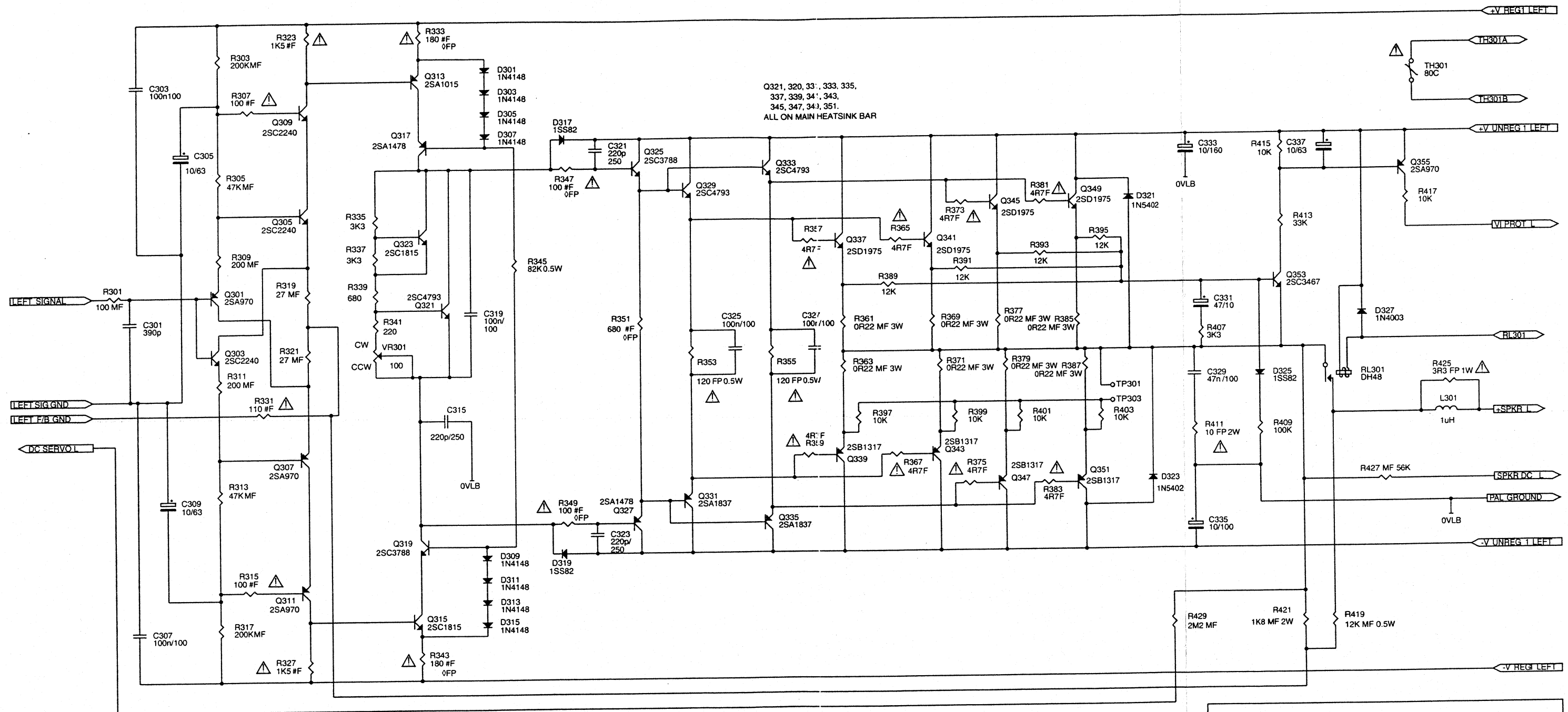
NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/4 WATT.


 E C B
 2SA1015
 2SC2240
 2SC2878

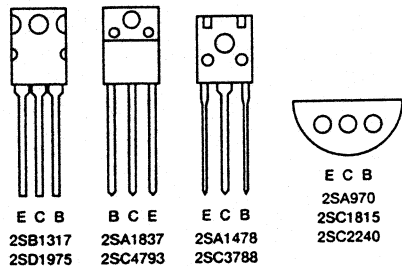
RESISTORS: MF-METAL FILM RESISTOR
 NOT SPECIFIED ARE CARBON FILM RESISTOR

SCHEMATIC DIAGRAM

STEREO POWER AMPLIFIER LEFT CHANNEL

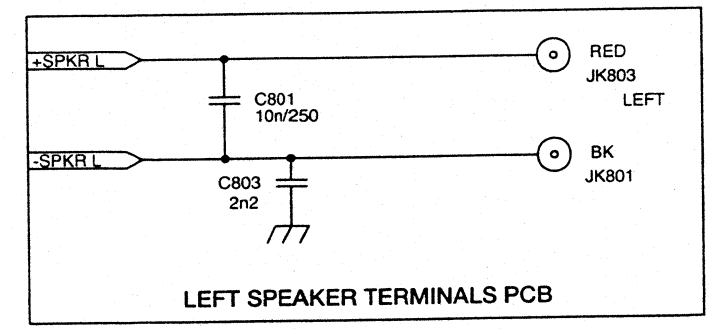


Q321, 320, 331, 333, 335,
337, 339, 341, 343,
345, 347, 349, 351.
ALL ON MAIN HEATSINK BAR



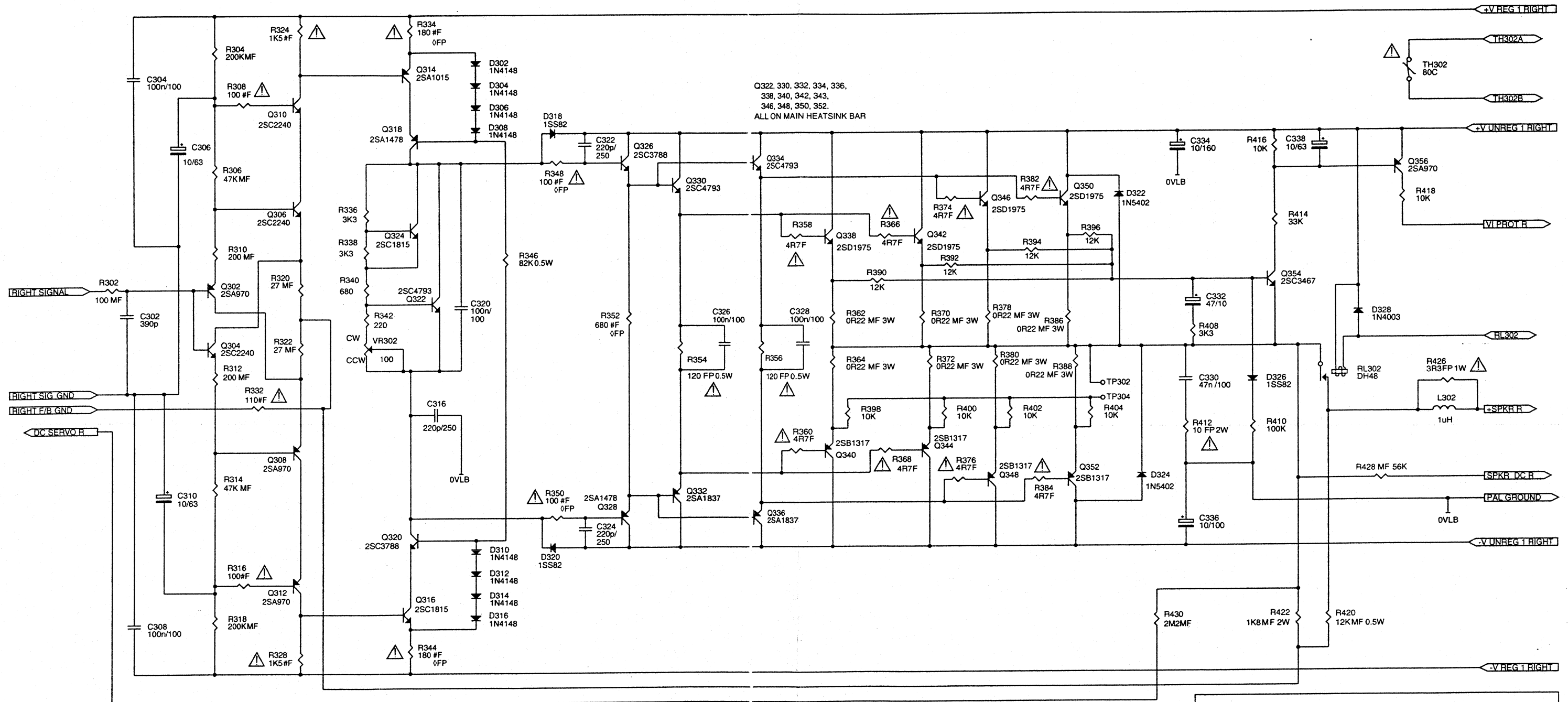
RESISTORS: MF - METAL FILM
F - FUSIBLE
FP - FLAME PROOF
NOT SPECIFIED ARE CARBON FILM

- NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/4 WATT.
 2. COMPONENTS MARKED WITH " # " ARE C VERSION ONLY.
 3. COMPONENTS MARKED WITH " ◊ " ARE AH VERSION ONLY.
 4. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
 5. MARKED WITH " ⚠ " ARE SAFETY CRITICAL PART.



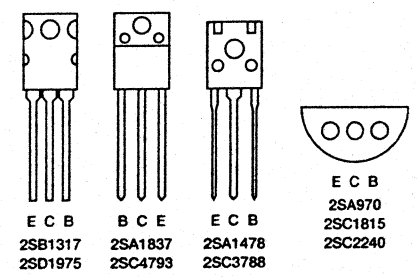
SCHEMATIC DIAGRAM

STEREO POWER AMPLIFIER RIGHT CHANNEL



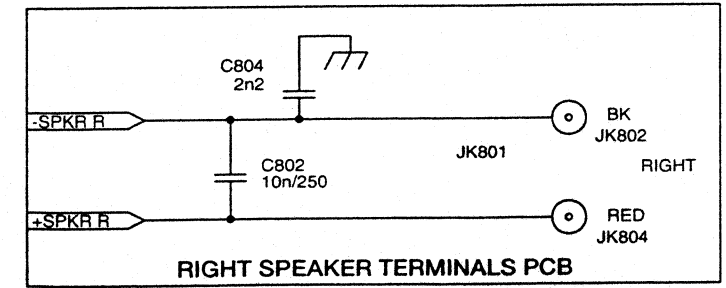
Q322, 330, 332, 334, 336,
338, 340, 342, 343,
346, 348, 350, 352.
ALL ON MAIN HEATSINK BAR

RIGHT SIGNAL
RIGHT SIG GND
RIGHT F/B GND
DC SERVOR



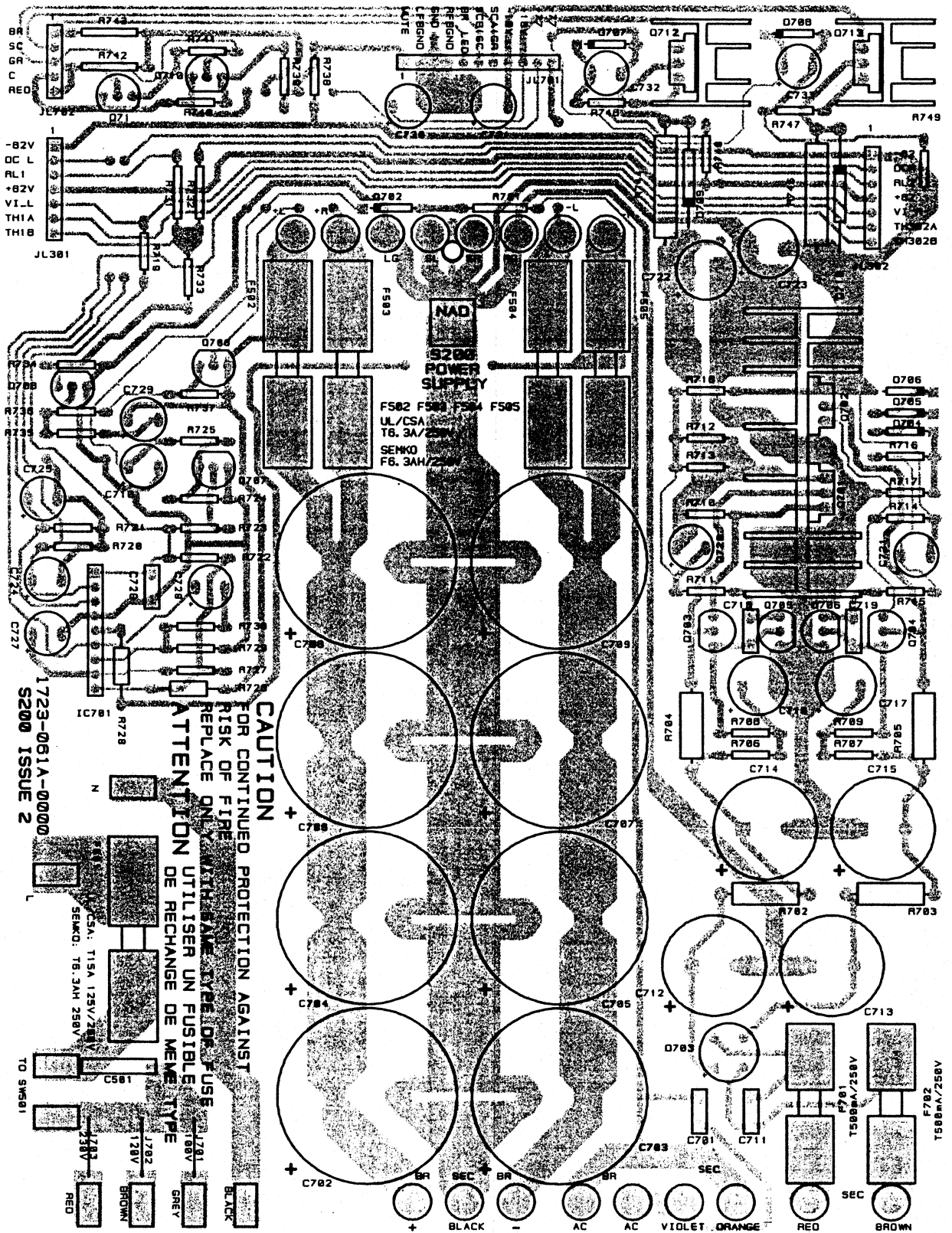
RESISTORS: MF - METAL FILM
F - FUSIBLE
FP - FLAME PROOF
NOT SPECIFIED ARE CARBON FILM

- NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/4 WATT.
 2. COMPONENTS MARKED WITH " # " ARE C VERSION ONLY.
 3. COMPONENTS MARKED WITH " ◊ " ARE AH VERSION ONLY.
 4. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
 5. MARKED WITH " ⚠ " ARE SAFETY CRITICAL PART.



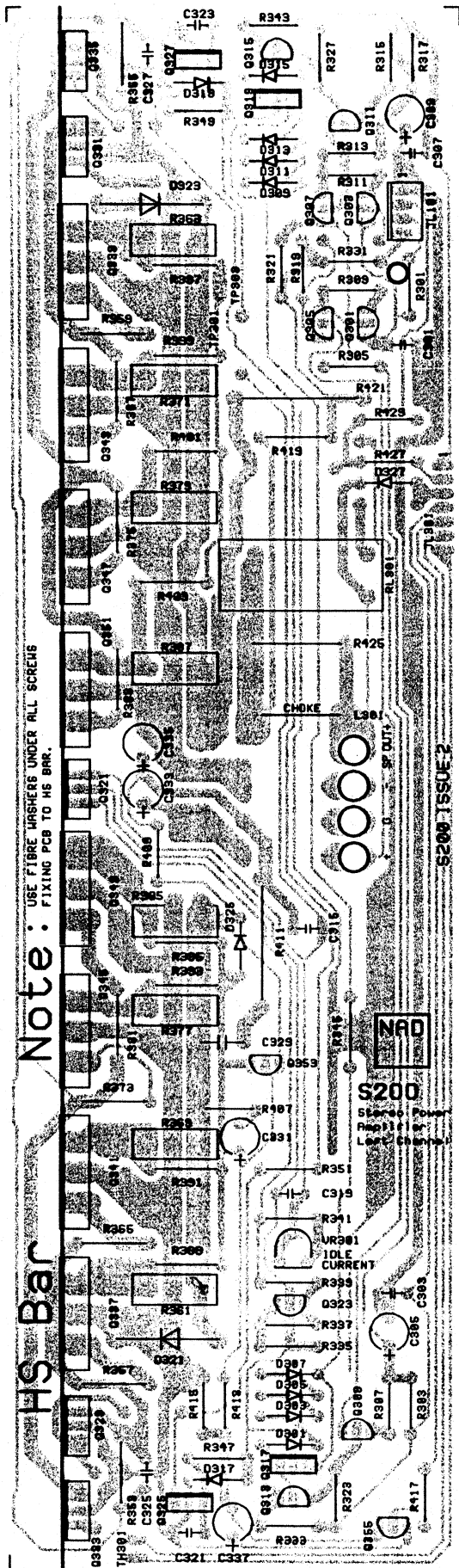
PCB LAYOUT

PSU - SOLDER SIDE

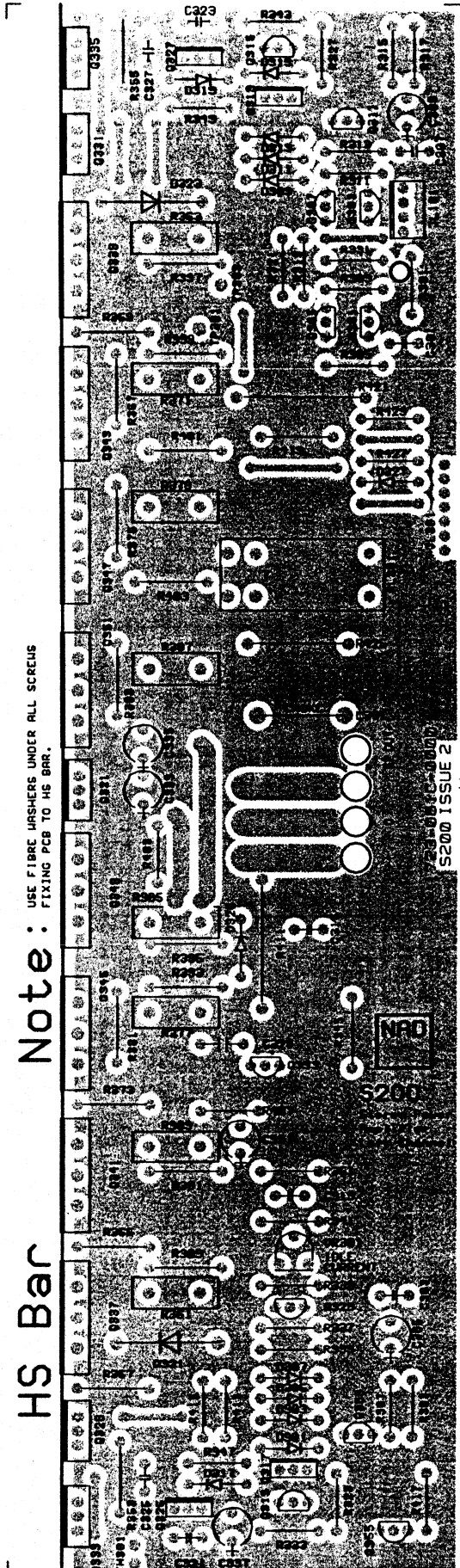


PCB LAYOUT

STEREO POWER AMP LEFT CHANNEL
- SOLDER SIDE

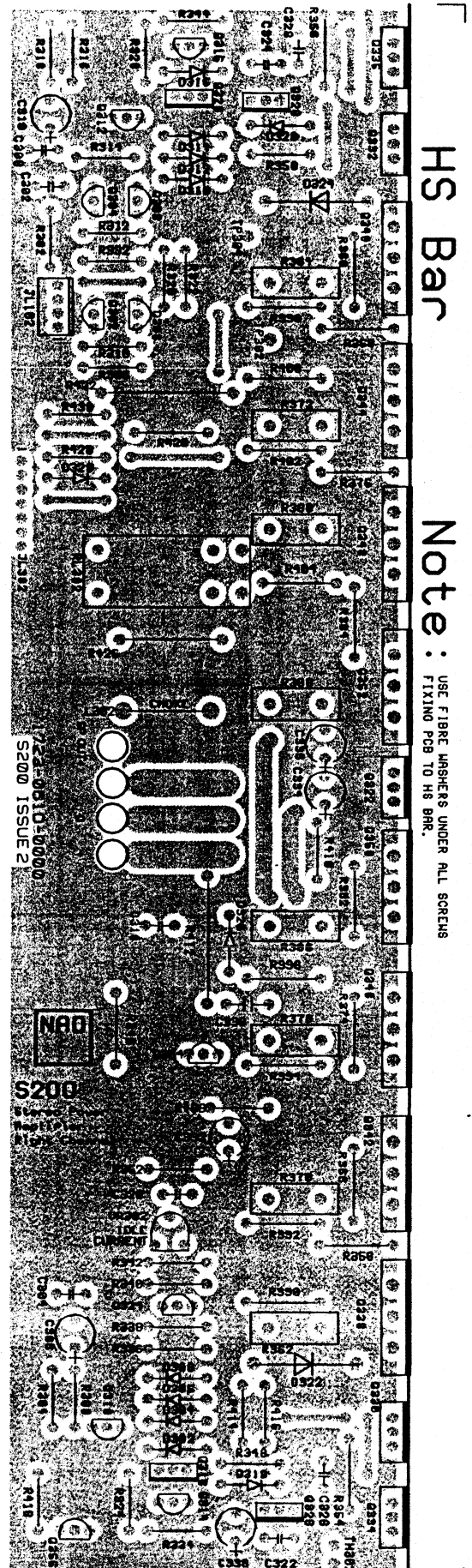
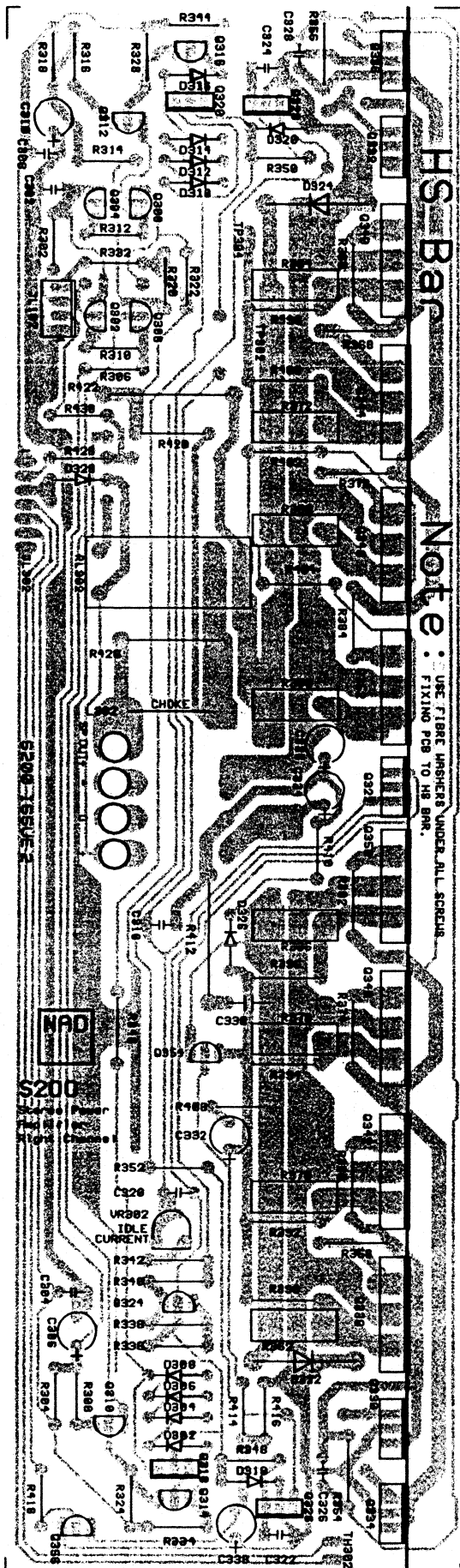


STEREO POWER AMP LEFT CHANNEL
- COMPONENT SIDE



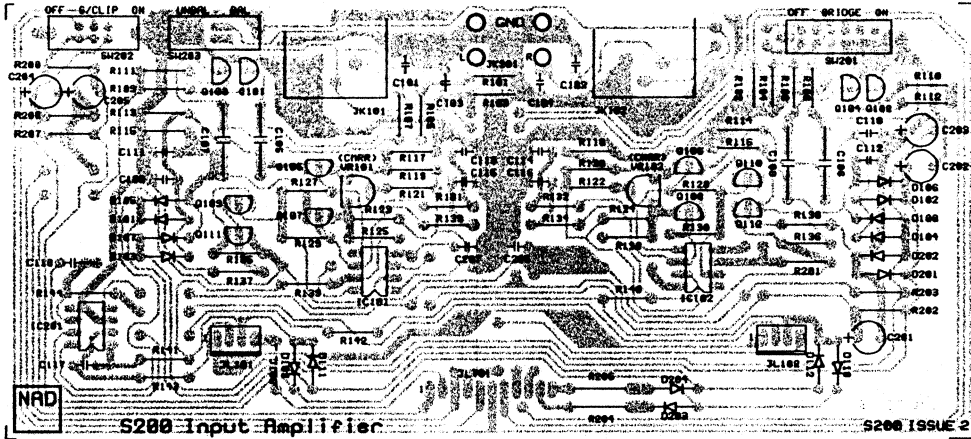
**STEREO POWER AMP
RIGHT CHANNEL - SOLDER SIDE**

**STEREO POWER AMP
RIGHT CHANNEL - COMPONENT SIDE**

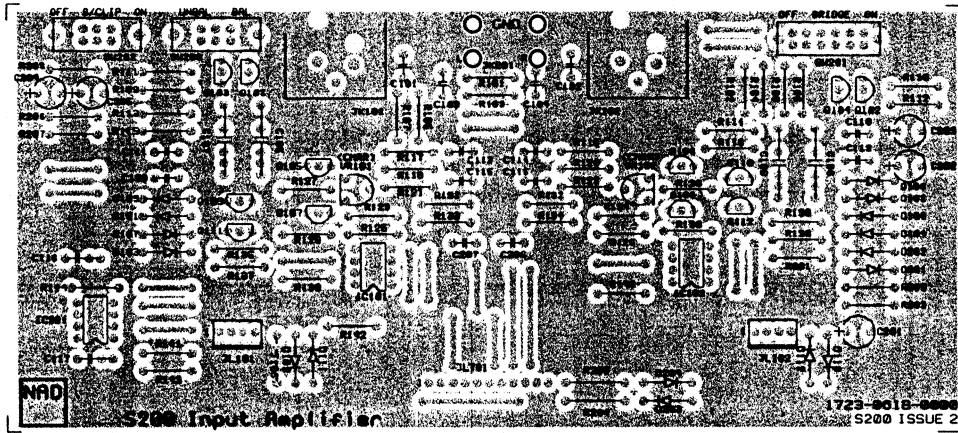


PCB LAYOUT

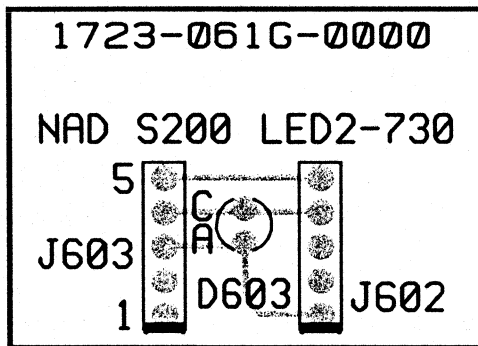
INPUT AMPLIFIER - SOLDER SIDE



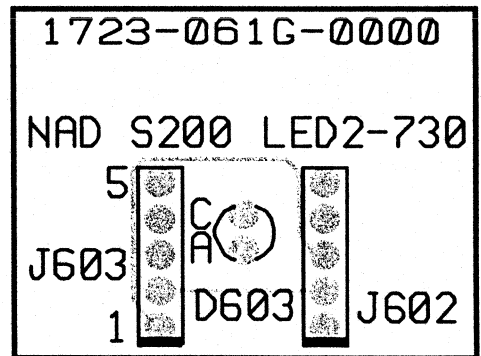
INPUT AMPLIFIER - COMPONENT SIDE



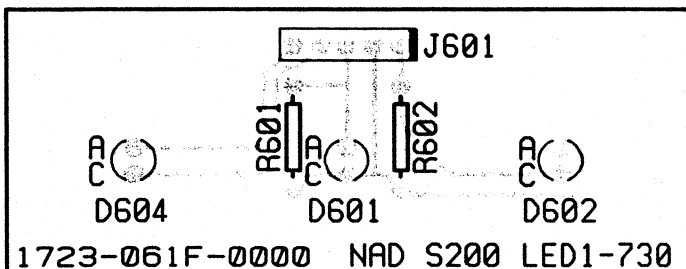
LEFT LED - SOLDER SIDE



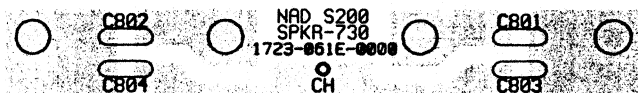
LEFT LED - COMPONENT SIDE



RIGHT LED



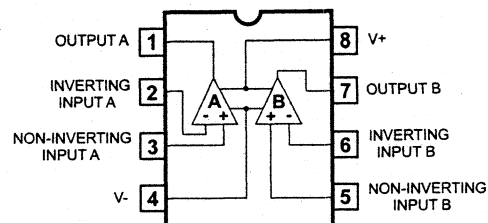
SPEAKER TERMINAL



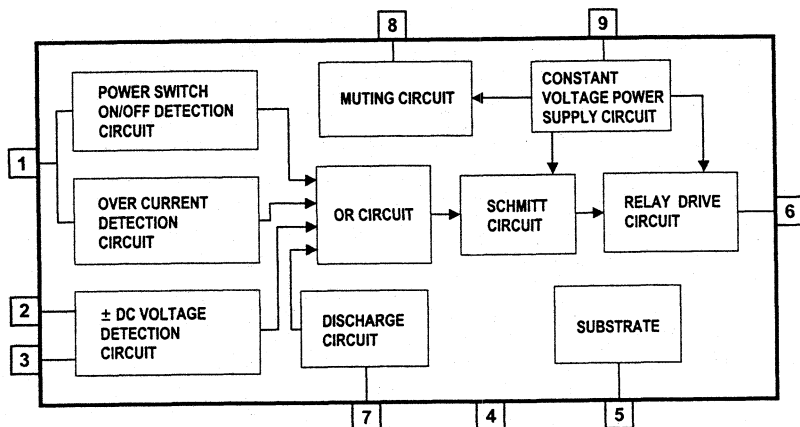
IC BLOCK DIAGRAM

IC101-IC102: OP-249
HIGH PERFORMANCE DUAL OP-AMP

IC201: AD712JN
HIGH PERFORMANCE DUAL OP-AMP



IC701: TA7317P
POWER AMP AND SPEAKER PROTECTION



ELECTRICAL PARTS LIST

Reference No	Part Number	Description
PCB BOARD		
MAIN BOARD ASSEMBLY		
*AH	PCB-N0830C-MAIN	MAIN BOARD ASSEMBLY
*C	PCB-N0831C-MAIN	MAIN BOARD ASSEMBLY
CAPACITORS		
C101-C104	158R-101J-5-IQ	CP 250V 100pF 5%
C105-C108	153I-105J-9-NSU	CM 63V 1uF 5%
C109-C112	15CG-391J-7-IJ	CC 50V 390pF 5% NPO
C113-C116	15CG-102J-7-IJ	CC 50V 1000pF 5% NPO
C117-C118	153I-474K-9-NSU	CM 63V 0.47uF 10%
C201	157E-107M-5-LUC	CE 25V 100uF 20%
C202-C203	157C-107M-5-IUC	CE 10V 100uF 20%
C204-C205	157C-226M-5-IUC	CE 10V 22uF 20%
C206-C207	153H-104M-9-NNU	CM 100V 0.1uF 20%
C301-C302	15CG-391J-7-IJ	CC 50V 390pF 5% NPO
C303-C304	153H-104M-9-NNU	CM 100V 0.1uF 20%
C305-C306	157I-106M-5-IUC	CE 63V 10uF 20%
C307-C308	153H-104M-9-NNU	CM 100V 0.1uF 20%
C309-C310	157H-106M-5-LUC	CE 100V 10uF 20%
C315-C316	158R-221J-5-IQ	CP 250V 220pF 5%
C319-C320	153H-104M-9-NNU	CM 100V 0.1uF 20%
C321-C324	158R-221J-5-IQ	CP 250V 220pF 5%
C325-C328	153H-104M-9-NNU	CM 100V 0.1uF 20%
C329-C330	153H-473K-9-NLU	CM 250V 0.047uF 10%
C331-C332	157C-476M-5-IUC	CE 10V 47uF 20%
C333-C336	157S-106M-5-SXC	CE 160V 10uF 20%
C337-C338	157I-106M-5-IUC	CE 63V 10uF 20%
C501	8910-0049-0	CAP400V 4700P DE7150F472MVA1K
C701	153R-223M-9-NNU	CM 250V 0.022uF 20%
C702-C709	8910-0095-0	CE 100V 4700uF 20%
C710	157H-475M-5-IUC	CE 100V 4.7uF 20%
C711	153R-223M-9-NNU	CM 250V 0.022uF 20%
C712-C715	8910-0056-0	CE 160V 220uF 20%
C716-C717	157H-107M-5-X9C	CE 100V 100uF 20%
C718-C719	15CG-220J-7-IJ	CTC 0/30 22pF 5%
C720-C721	157H-106M-5-LUC	CE 100V 10uF 20%
C722-C723	157H-107M-5-X9C	CE 100V 100uF 20%
C724-C724	157C-107M-5-IUC	CE 10V 100uF 20%
C726	153H-104M-9-NNU	CM 100V 0.1uF 20%
C727	157C-226M-5-IUC	CE 10V 22uF 20%
C728-C729	157H-474M-5-IUC	CE 100V 0.47uF 20%
C730-C733	157E-107M-5-LUC	CE 25V 100uF 20%
C801-C802	153R-103M-9-NLU	CM 250V 0.01uF 20%
C803-C804	15CG-222J-7-IJ	CC 50V 2200pF 5% NPO
DIODES		
D101-D112	4804-1480-C	DIODE 1N4148
D201-D202	4837-3B20-2	DZ 1/2W 3.8-4.0V
D203-D204	4840-0850-0	ZD 1/2W 21.52-22.63V
D301-D316	4804-1480-C	DIODE 1N4148
D317-D320	4840-0590-0	DIODE ISS143
D321-D324	4805-4020-L	DIODE IN5402
D325-D326	4840-0590-0	DIODE ISS143

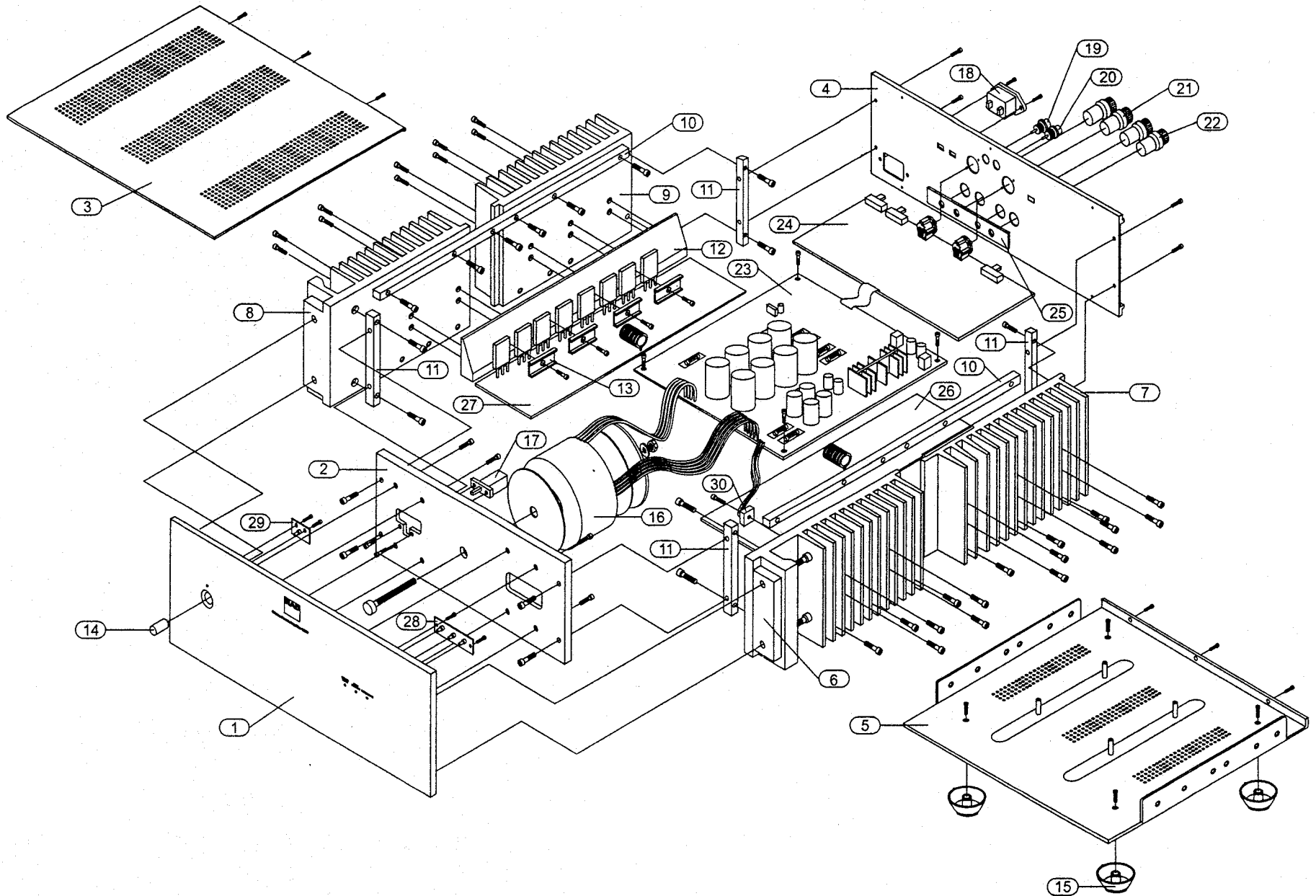
Reference No	Part Number	Description
D327-D328	4804-0030-2	DIODE IN4003
D701	4840-0970-0	BRIDGE DIODE 25A400V KBPC 2504
D702	4804-0030-2	DIODE IN4003
D703	4840-0810-0	BRIDGE DIODE 1.5A 400V
D704-D706	4837-27V0-2	DZ 1/2W 27V(26.2-27.6)
D707-D708	4840-0800-0	DZ 1/2W MTZ-J 18C
D709-D710°C	4840-1160-0	ZENER DOIDE 1W 56V 5%
LEDS		
D601-D603	3700-3538-B	BLUE LED 3MM FLAT
D604	3700-3607-R	RED LED 3MM RT3-2134HTS-B
FUSE AND FUSE HOLDER		
F501*AH △	5120-0023-0	FUSE 15A 250V SLOW BLOW LBC UL/CSA
F501°C △	5120-0025-0	FUSE 6.3A 250V TIME LAG HBC VDE/SEMKO
F502-F505*AH △	5120-0040-0	FUSE 6.3A 250V SLOW BLOW LBC UL/CSA
F502-F505°C △	5120-0038-0	FUSE 6.3A 250V FAST ACTING HBC VDE/SEMKO
F701-F702*AH △	5120-0031-0	FUSE 500mA 250V SLOW BLOW LBC HIGH SURGE UL/CSA
F701-F702°C △	5120-0030-0	FUSE 500mA 250V TIME LAG LBC HIGH SURGE VDE/SEMKO
FH501*AH	4132-1821-0	FUSE HOLDER
FH501C	4131-9131-0	FUSE HOLDER 6.5MM PITCH RECT
FH502-FH505	4131-9131-0	FUSE HOLDER 6.5MM PITCH RECT
FH701-FH702	4131-9131-0	FUSE HOLDER 6.5MM PITCH RECT
ICs		
IC101-IC102	3130-7350-0	IC OP-249 DUAL JFET OP AMP
IC201	3130-3830-0	IC AD712 ANALOG DEVICES
IC701	3130-3550-0	IC TA7317P
JACKS		
JK101-JK201	2113-1152-0	3-PIN FEMALE JACK
JK103	2113-1206-0	1P RCA JACK RED AU CHASSIS MOUNT
JK104	2113-1306-0	1P RCA JACK WHITE AU CHASSIS MOUNT
AC INLET		
JK502 △	2113-1661-0	AC INLET 15A 250V
COILS		
L301-L302	1804-0550-0	AIR COIL 1uH D15.5XL15
TRANSISTORS		
Q101-Q104	4860-0770-5	TR 2SC2878 (A,B)
Q105-Q108	4852-40GR-5	TR 2SC2240GR
Q109-Q112	4851-015Y-5	TR 2SA1015-Y HFE120-240
Q301-Q302	4860-0650-5	TR 2SA970GR
Q303-Q306	4852-40GR-5	TR 2SC2240GR
Q307-Q308	4860-0650-5	TR 2SA970GR
Q309-Q310	4852-40GR-5	TR 2SC2240GR
Q311-Q312	4860-0650-5	TR 2SA970GR
Q313-Q314	4851-015Y-5	TR 2SA1015-Y HFE120-240
Q315-Q316	4860-0700-5	TR 2SC1815GR
Q317-Q318	4860-0810-5	TR 2SA1478E

Reference No	Part Number	Description
Q319-Q320	4860-0820-5	TR 2SC3788E
Q321-Q322	4860-1060-5	TR 2SC4793 100-320
Q323-Q324	4860-0700-5	TR 2SC1815GR
Q325-Q326	4860-0820-5	TR 2SC3788E
Q327-Q328	4860-0810-5	TR 2SA1478E
Q329-Q330	4860-1060-5	TR 2SC4793 100-320
Q331-Q332	4860-1050-5	TR 2SA1837 100-320
Q333-Q334	4860-1060-5	TR 2SC4793 100-320
Q335-Q336	4860-1050-5	TR 2SA1837 100-320
Q337-Q338	4860-0880-5	TR 2SD1975 S.P
Q339-Q340	4860-0890-5	TR 2SB1317 S.P
Q341-Q342	4860-0880-5	TR 2SD1975 S.P
Q343-Q344	4860-0890-5	TR 2SB1317 S.P
Q345-Q346	4860-0880-5	TR 2SD1975 S.P
Q347-Q348	4860-0890-5	TR 2SB1317 S.P
Q349-Q350	4860-0880-5	TR 2SD1975 S.P
Q351-Q352	4860-0890-5	TR 2SB1317 S.P
Q353-Q354	4860-0720-5	TR 2SC3467 E
Q355-Q356	4860-0650-5	TR 2SA970GR
Q701	4860-1060-5	TR 2SC4793 100-320
Q702	4860-1050-5	TR 2SA1837 100-320
Q703,Q705	4852-40GR-5	TR 2SC2240GR
Q704,Q706	4860-0650-5	TR 2SA970GR
Q707	4860-0700-5	TR 2SC1815GR
Q708	4852-40GR-5	TR 2SC2240GR
Q709	4860-0650-5	TR 2SA970GR
Q710-Q711	4860-0700-5	TR 2SC1815GR
Q712	4860-0740-5	TR 2SD600K (E,F)
Q713	4860-0870-5	TR 2SB631K (E,F)
RESISTORS		
R101-R104	4715-124A-2-K	RMF 1/4W 120K 1%
R105-R108	4715-152A-2-K	RMF 1/4W 1.5K 1%
R113-R116	4715-124A-2-K	RMF 1/4W 120K 1%
R117-R120	4715-102A-2-K	RMF 1/4W 1K 1%
R123-R126	4715-102A-2-K	RMF 1/4W 1K 1%
R127-R130	4715-472A-2-K	RMF 1/4W 4.7K 1%
R139-R140	4715-222A-2-K	RMF 1/4W 2.2K 1%
R141-R142	4715-223A-2-K	RMF 1/4W 22K 1%
R301-R302	4715-101A-2-K	RMF 1/4W 100R 1%
R303-R304	4715-204A-2-K	RMF 1/4W 200K 1%
R305-R306	4715-473A-2-K	RMF 1/4W 47K 1%
R307-R308*AH	4705-101J-2-K	RCF 1/4W 100R 5%
R307-R308°C △	4715-101J-2-F	RFU 1/4W 100R 5%
R309-R312	4715-201A-2-K	RMF 1/4W 200R 1%
R313-R314	4715-473A-2-K	RMF 1/4W 47K 1%
R315-R316*AH	4705-101J-2-K	RCF 1/4W 100R 5%
R315-R316°C △	4715-101J-2-F	RFU 1/4W 100R 5%
R317-R318	4715-204A-2-K	RMF 1/4W 200K 1%
R319-R322	4715-270A-2-K	RMF 1/4W 27R 1%
R323-R324*AH	4705-152J-2-K	RCF 1/4W 1.5K 5%
R323-R324°C △	4715-152J-2-F	RFU 1/4W 1.5K 5%
R327-R328*AH	4705-152J-2-K	RCF 1/4W 1.5K 5%
R327-R328°C △	4715-152J-2-F	RFU 1/4W 1.5K 5%
R331-R332*AH	4715-111A-2-K	RMF 1/4W 110R 1%
R331-R332°C △	4715-111J-2-F	RFU 1/4W 110R 5%

<u>Reference No</u>		<u>Part Number</u>	<u>Description</u>
R333-R334*AH	△	4715-181J-2-P	RFP 1/4W 180R 5%
R333-R334°C	△	4715-181J-2-F	RFU 1/4W 180R 5%
R343-R344*AH	△	4715-181J-2-P	RFP 1/4W 180R 5%
R343-R344°C	△	4715-181J-2-F	RFU 1/4W 180R 5%
R347-R350*AH	△	4715-121J-2-P	RFP 1/4W 120R 5%
R347-R350°C	△	4715-101J-2-F	RFU 1/4W 100R 5%
R351-R352*AH	△	4715-681J-2-P	RFP 1/4W 680R 5%
R351-R352°C	△	4715-681J-2-F	RFU 1/4W 680R 5%
R353-R356	△	4717-121J-2-P	RFP 1/2W 120R 5%
R357-R360	△	4717-4R7J-2-KF	RFU 1/2W 4.7R 5%
R361-R364		471A-022K-5-N	RMF 3W 0.22R 10%
R365-R368	△	4717-4R7J-2-KF	RFU 1/2W 4.7R 5%
R369-R372		471A-022K-5-N	RMF 3W 0.22R 10%
R373-R376	△	4717-4R7J-2-KF	RFU 1/2W 4.7R 5%
R377-R380		471A-022K-5-N	RMF 3W 0.22R 10%
R381-R384	△	4717-4R7J-2-KF	RFU 1/2W 4.7R 5%
R385-R388		471A-022K-5-N	RMF 3W 0.22R 10%
R411-R412	△	4719-100J-1-P	RFP 2W 10R 5%
R419-R420		4717-123A-2-K	RMF 1/2W 12K 1%
R421-R422		4719-182A-1	RMF 2W 1.8K 1%
R425-R426	△	4718-3R3J-1-P	RFP 1W 3.3R 5%
R701	△	4717-4R7J-2-KF	RFU 1/2W 4.7R 5%
R702-R703	△	4718-101J-1-P	RFP 1W 100R 5%
R704-R705*AH	△	4718-101J-1-P	RFP 1W 100R 5%
R704-R705°C	△	4718-101J-1-F	RFU 1W 100R 5%
R712		4715-333A-2-K	RMF 1/4W 33K 1%
R718		4715-333A-2-K	RMF 1/4W 33K 1%
R744-R745*AH		4719-102J-1-X	RMF 2W 1K 5%
R744-R745°C	△	4718-102J-2-F	RFU 1W 1K 5%
RELAYS			
RL301-RL302		4500-0150-0	RELAY 48V 16A SPST
SWITCHES			
SW201		5200-3161-0-01	4PDT SLIDE SW.SK-42F28-G6TS
SW202-SW203		5200-3171-0-01	DPDT SLIDE SW.SK-22F28-G9TS
SW501*AH	△	5200-3441-0	POWER SW DPST UL/CSA
SW501°C	△	5200-3461-0	POWER SW DPST VDE/SEMKO
THERMAL SWITCHES			
TH301-TH302	△	8910-0090-0	THERMAL SWITCH 80C
JUMPER			
J702*AH		635N-0001-0	WJ ROLLER FORM D=0.6MM
J703°C		635N-0001-0	WJ ROLLER FORM D=0.6MM
VARIABLE RESISTORS			
VR101-VR102		4756-2236-3-06	SVR 22K H3
VR301-VR302		4756-1016-3-06	SVR 100R H6

- Note:**
- The components identified by △ mark are critical for risk of the fire and electrical shock. Replace only with part number specified.
 - <*AH > : USA, Canadian model only.
 - <*C > : European model only.
 - Capacitors : CC - Ceramic, CE - Electrolytic, CM - Mylar, CP - Polystyrene.
 - Resistors : RMF - Metal Film, RFU - Fusible.

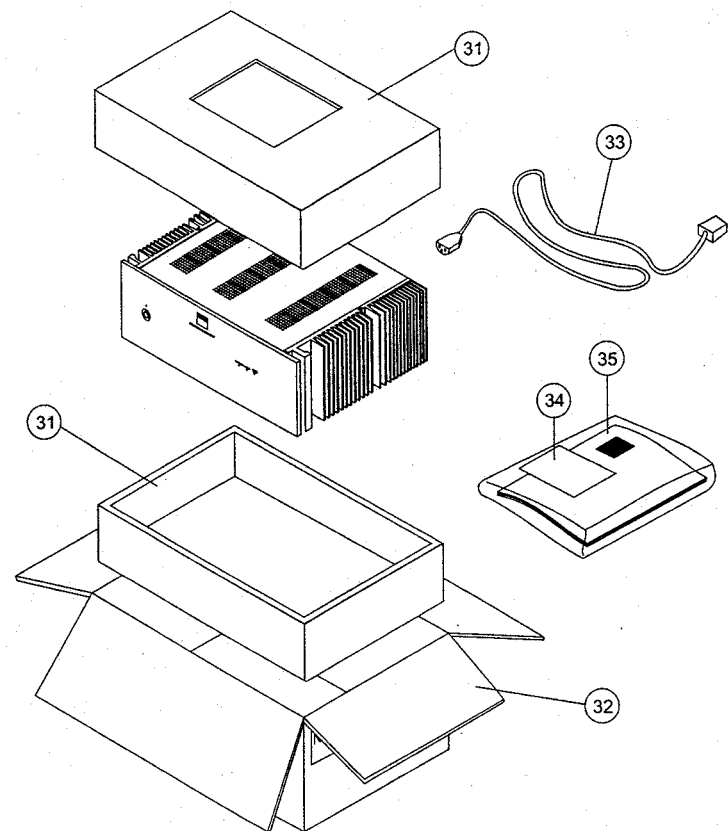
EXPLODED VIEW



EXPLODED VIEW PARTS LIST

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	S200-2001-3	FASCIA	1
2	S200-2002-2	SUBFASCIA	1
3	S200-2005-2	TOP COVER	1
4*AH	S200-2004AH-2	REAR PANEL 120V	1
4*C	S200-2004C-2	REAR PANEL 230V	1
5	S200-2003-3	BASE PLATE	1
6	S200-2014-2	RIGHT FRONT HEATSINK	1
7	S200-2034-1	RIGHT REAR HEATSINK	1
8	S200-2024-2	LEFT FRONT HEATSINK	1
9	S200-2044-1	LEFT REAR HEATSINK	1
10	S200-2008-2	TOP COVER MOUNTING BAR	2
11	S200-2009-2	SUBFASCIA/REAR PANEL BAR	4
12	S200-2007-3	HEATSINK BAR	2
13	N41321671-0	TRANSISTOR CLAMP	8
14	S100-2011-3	10MM POWER BUTTON	1
15	S100-2013-2	FOOT W/ RUBBER CUSHION	4
16	TI-652252	TRANSFORMER	1
17	S200-0205	POWER SWITCH	1
18	PX0690/28	AC INLET	1
19	S300-0202	RCA JACK WHITE	1
20	S300-0201	RCA JACK RED	1
21	WBT-745 RED	SPEAKER TERMINAL RED	2
22	WBT-745 BLACK	SPEAKER TERMINAL BLACK	2
23	S200-0100	PSU PCB	1
24	S200-0110	INPUT STAGE PCB	1
25	S200-0120	SPEAKER PCB	1
26	S200-0130	RIGHT POWER STAGE PCB	1
27	S200-0140	LEFT POWER STAGE PCB	1
28	S200-0150	RIGHT LED PCB	1
29	S200-0160	LEFT LED PCB	1
30	S200-0200	BRIDGE RECTIFIER	1

PACKING DIAGRAM



ITEM	PART NUMBER	DESCRIPTION	QTY.
31	311232	POLYFOAM	1 SET
32	S200-2010-A	CARTON BOX	1
33*AH	POW4	POWER CORD NEMA 1-15 POLARIZED	1
33*C	POW2	POWER CORD CEE (7) XVII	1
34	WARR	WARRANTY CARD	1
35	S200-IM	INSTRUCTION MANUAL	1

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