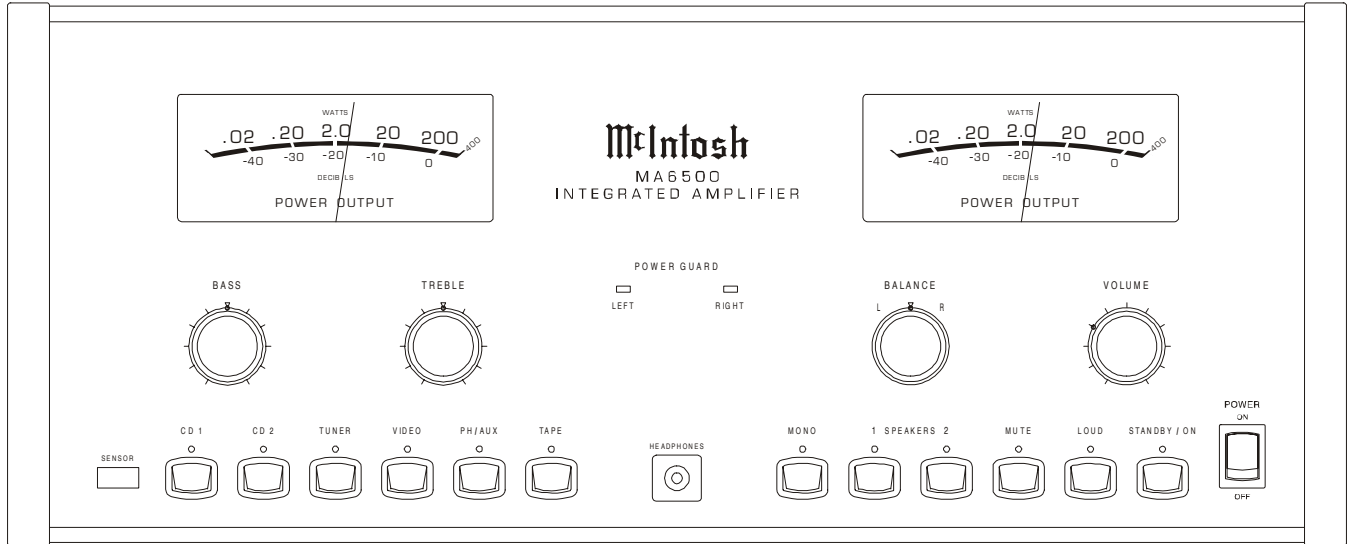


# MA6500

## INTEGRATED AMPLIFIER



### CONTENTS

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# McIntosh

## SERVICE MANUAL

# PREFORMANCE SPECIFICATIONS

## POWER OUTPUT, STEREO

250, 200, 120 watts minimum sine wave continuous average power output per channel, both channels operating, into a load impedance of 2, 4 and 8 ohms respectively.

## TOTAL HARMONIC DISTORTION

0.005% maximum at any power level from 250 milliwatts to rated power per channel from 20Hz to 20,000Hz, both channels operating.

## INTERMODULATION DISTORTION

0.005% maximum if instantaneous peak power output per channel does not exceed twice the rated output with both channels operating for any combination of frequencies from 20Hz to 20,000Hz.

## OUTPUT LOAD IMPEDANCE

2, 4 or 8 ohms

## RATED POWER BAND

20Hz to 20,000Hz

## DYNAMIC HEADROOM

2.4dB at 2, 4 or 8 ohms

## DAMPING FACTOR

60 at 2 ohms

120 at 4 ohms

230 at 8 ohms

## FREQUENCY RESPONSE

+0, -0.5dB from 20Hz to 20,000Hz

## SIGNAL TO NOISE RATIO, (A WEIGHTED)

Phono Input: 90dB (84dB IHF) below 10mV input

High Level: 100db (90dB IHF) below rated output

Power Amplifier: 110dB below rated output

## SENSITIVITY

Phono: 2.5mV for 2.5V rated output (0.5mV IHF)

High Level: 250mV for 2.5V rated output (50mV IHF)

Power Amplifier Input: 2.5V for rated output

## INPUT IMPEDANCE

Phono: 47k ohms, 65pF

High Level: 22k ohms

## MAXIMUM INPUT SIGNAL

Phono: 90mV

High Level: 8V

## POWER REQUIREMENT

120V, 50/60Hz, 5.0 Amps UL/CSA

230V, 50/60Hz, 2.5 Amps

## PREAMPLIFIER MAXIMUM VOLTAGE OUTPUT

Phono: 90mV at tape output

High Level: 8V at tape output

Main Out: 8V at preamp output

## VOLTAGE GAIN

High Level to Tape: 0dB

High Level to Main: 20dB

## TONE CONTROLS

Bass Control: +/-12dB at 20Hz

Treble Control: +/-12dB at 10kHz

## POWER REQUIREMENTS

100 Volts, 50/60Hz at 4.8 Amps

110 Volts, 50/60Hz at 4.4 Amps

120 Volts, 50/60Hz at 4.0 Amps

220 Volts, 50/60Hz at 2.0 Amps

230 Volts, 50/60Hz at 2.0 Amps

240 Volts, 50/60Hz at 2.0 Amps

*NOTE Refer to the rear panel of the MA6500 for the correct voltage.*

## DIMENSIONS

17-1/2 inches (44.5cm) wide by 7-1/16 inches (17.9cm) high. Depth behind front panel is 18-1/8 inches (46cm) including connectors. Knob clearance required in front of the mounting panel is 1-1/8 inches (2.9cm).

# NOTES

- 1. The heavy lines on the schematics denote the primary signal path.
- 2. Unless otherwise noted, all voltages indicated on the schematics are measured under the following conditions:
  - a. AC input at 120 volts, 50/60Hz
  - b. All voltages are +/-10% with respect to ground. A high impedance (10megaohm) voltmeter must be used.
- 3. Unless otherwise specified:
  - a. Resistors values are in ohms.
  - b. Capacitor values are in microfarads (uF).
  - c. Inductor values are in microhenries (uH).
- 4. On PC Board Drawings, Square Pad Indicates:
  - a. Polarized Capacitors - Positive
  - b. Diode - Cathode
  - c. Others - Pin 1
- 5. The voltages enclosed in a box are signal voltages that are measured with a 2.5mV, 1kHz signal connected to both channels at the TUNER input jacks.


Front panel controls are set at:

- BALANCE ..... CENTER DETENT
- TREBLE BASS ..... CENTER DETENT
- INPUT SELECTORS ..... TUNER
- LOUDNESS ..... OFF
- POWER ..... ON
- VOLUME ..... FULLY CLOCKWISE
- MONO ..... OFF
- SPEAKER SWITCHES 1 AND 2 ..... ON

Rear panel controls are set at:

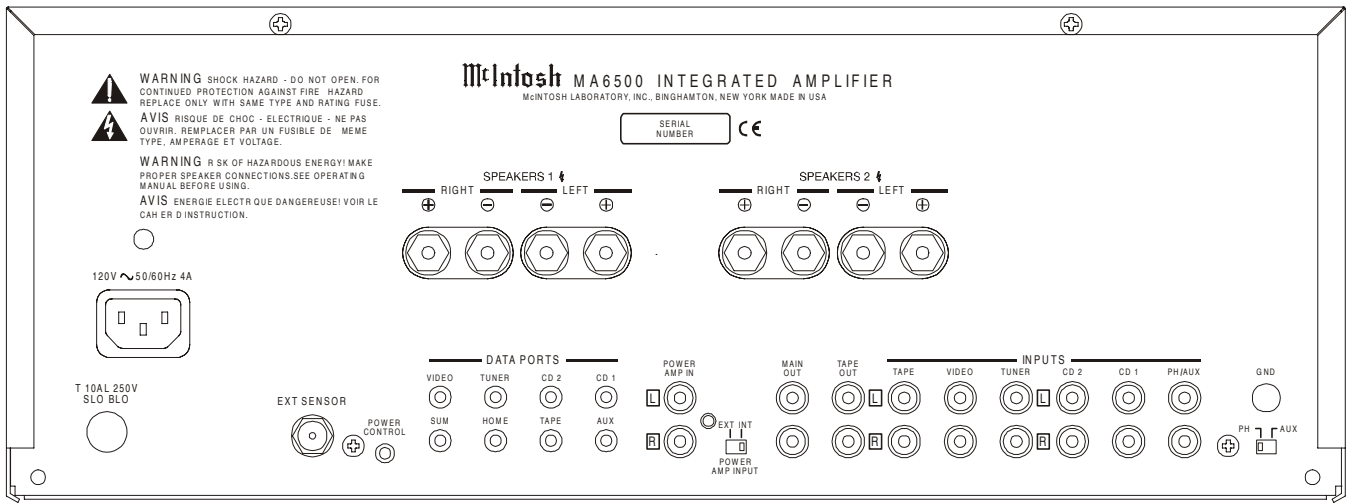
- PROCESSOR ..... OUT
- PWR AMP INPUT ..... INT
- SPEAKER TERMINALS ..... NO LOAD ON  
OUTPUTS

6. **WARNING:**

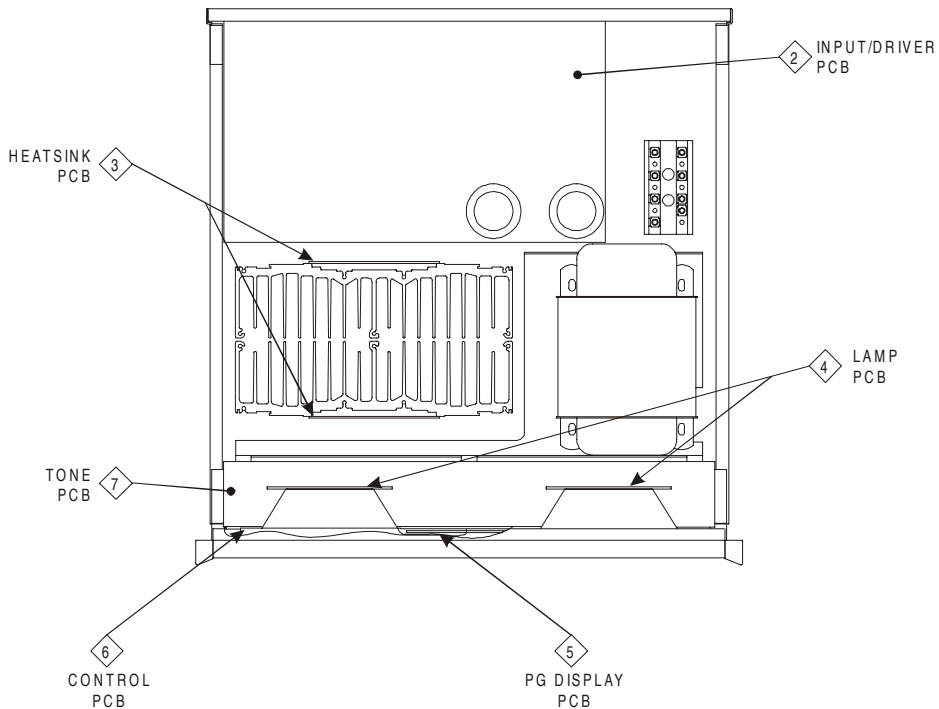
Parts marked with the symbol  have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.



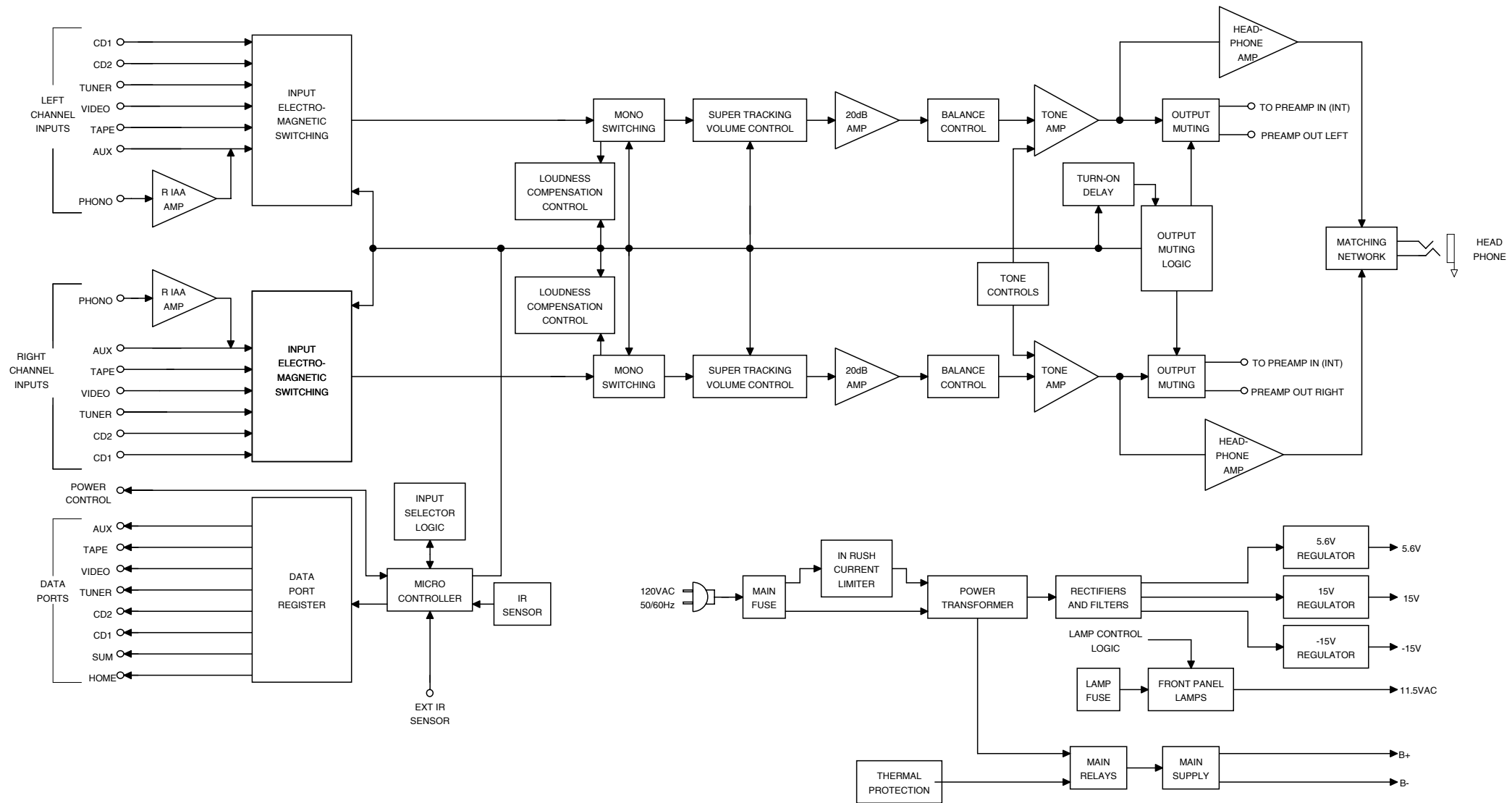
# REAR PANEL



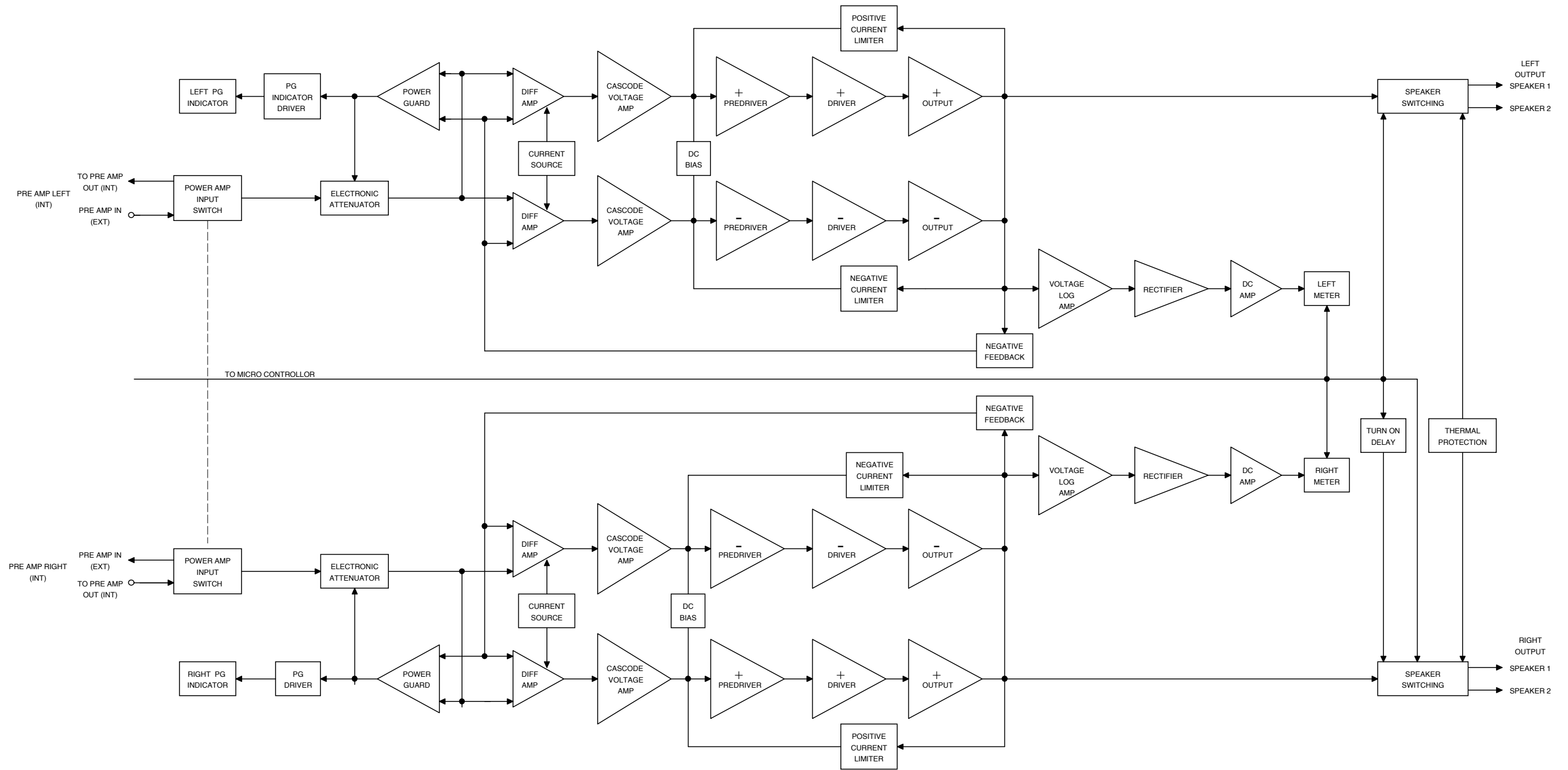
# SECTION LOCATIONS



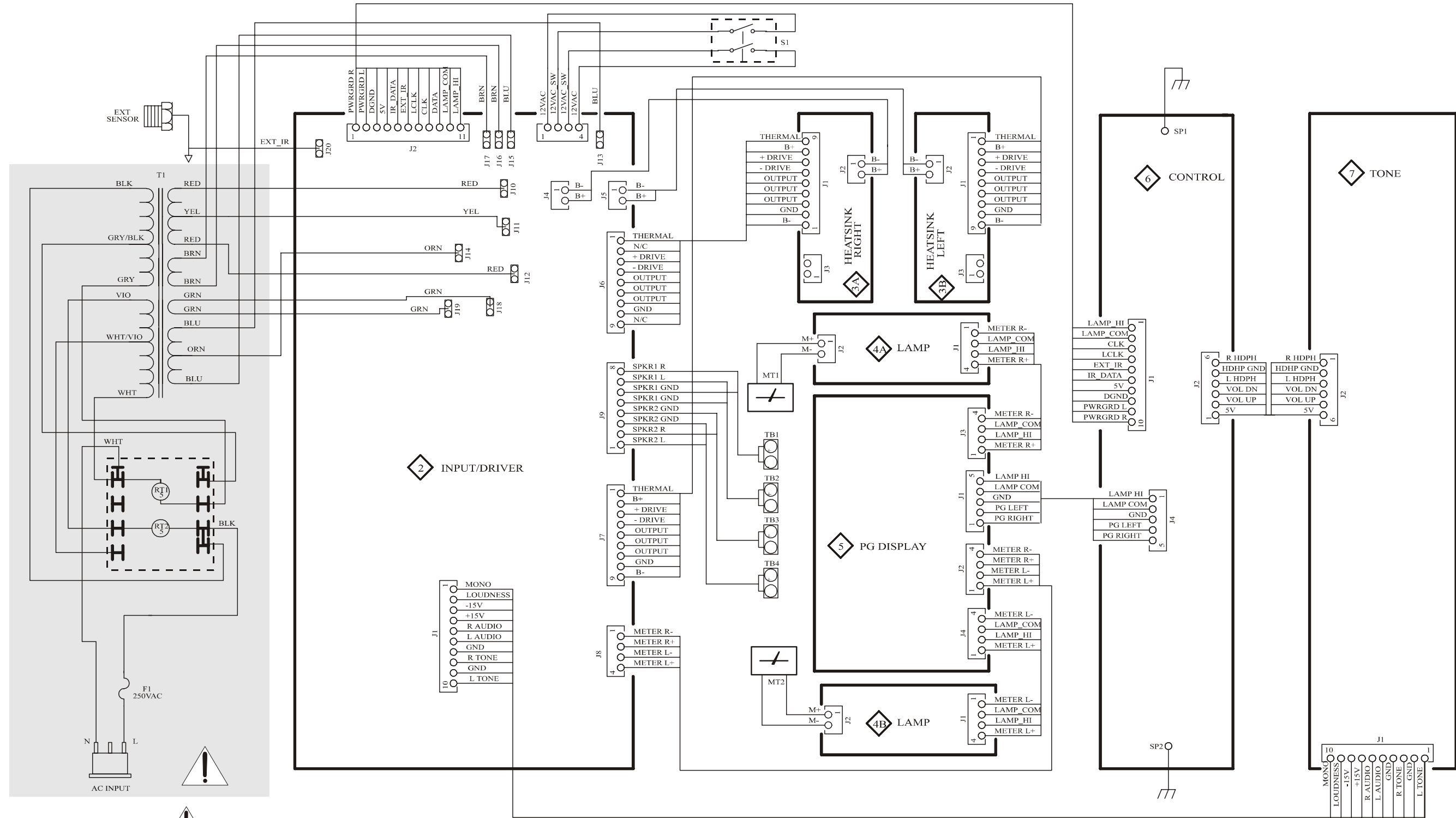
# BLOCK DIAGRAM



# BLOCK DIAGRAM

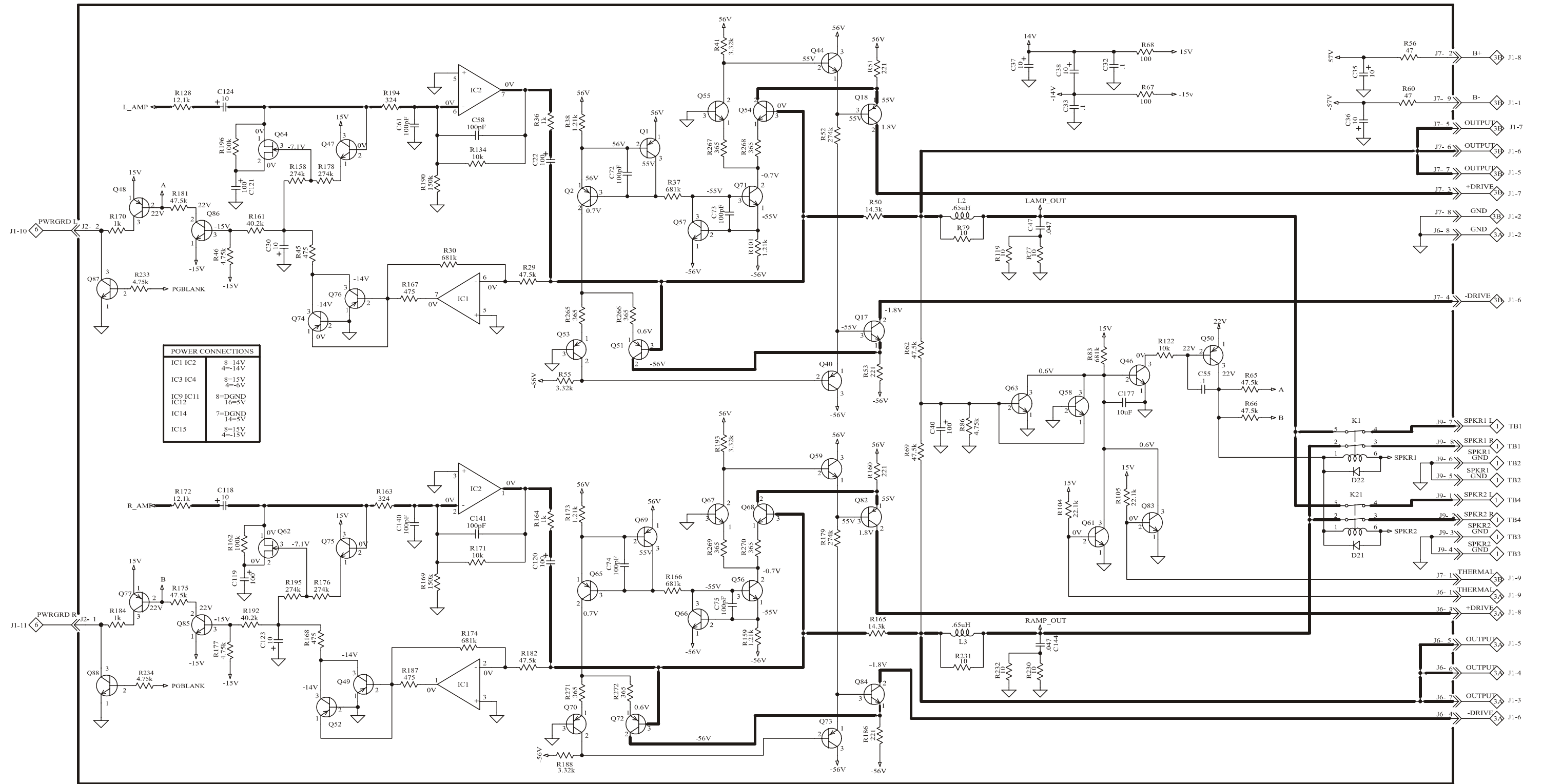


# INTERCONNECT



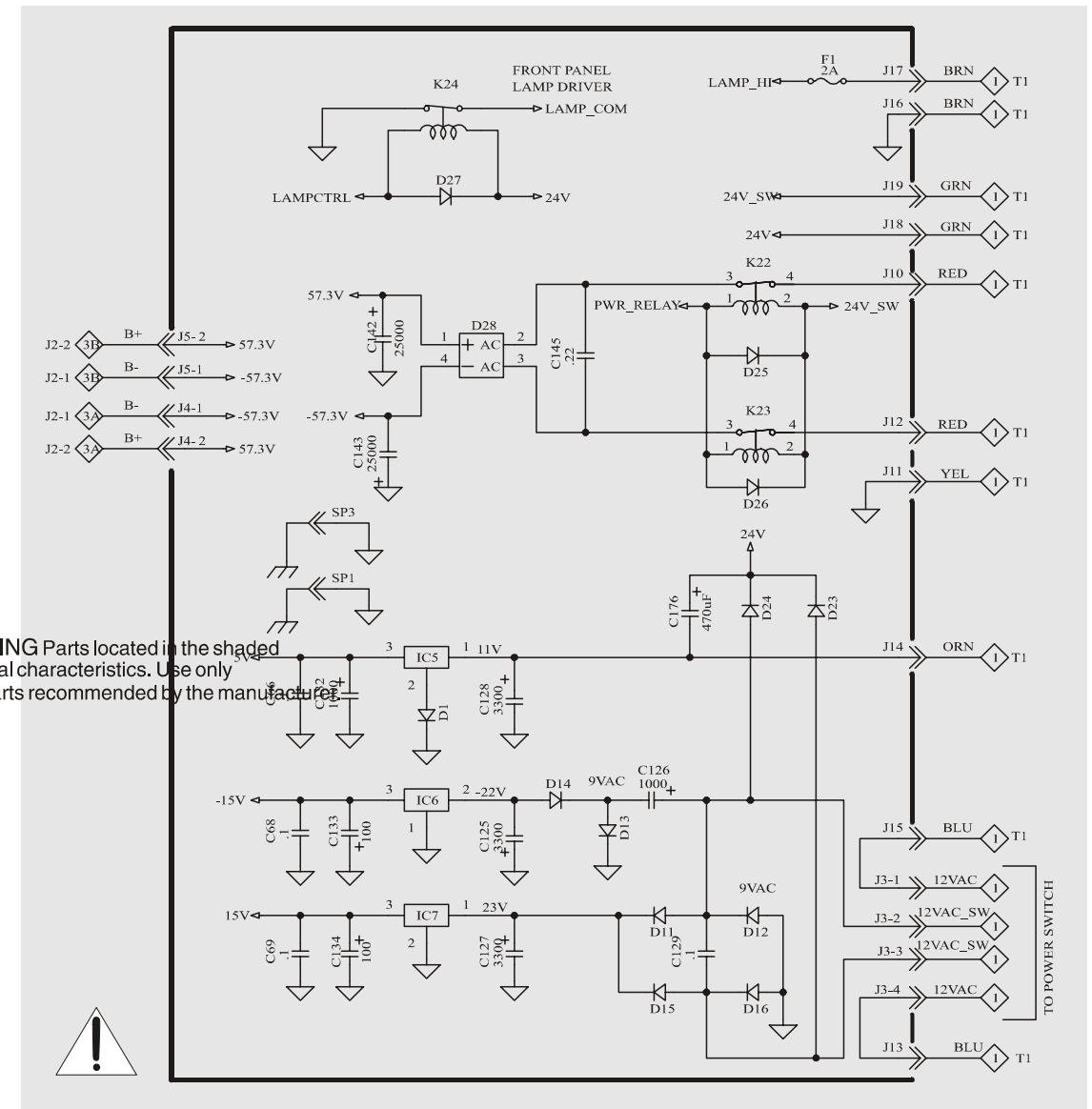
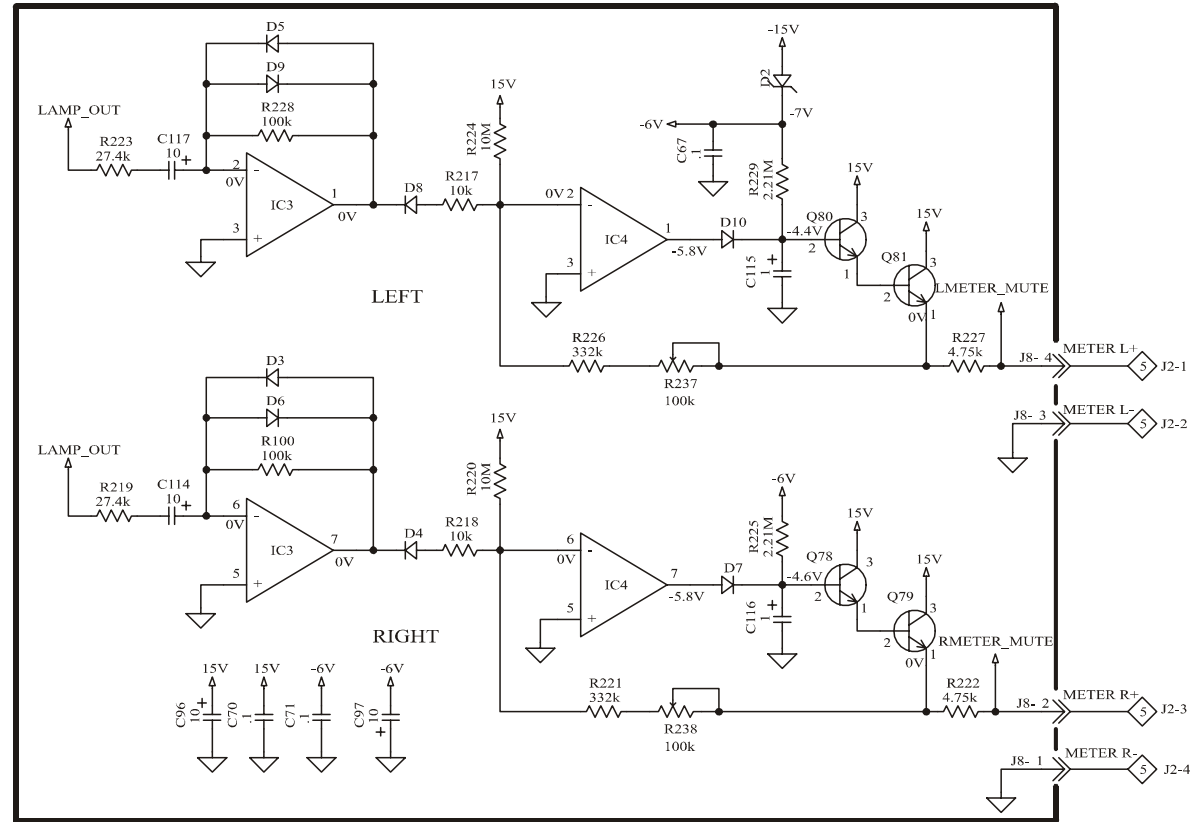
**WARNING** Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.

# 2 INPUT DRIVER 049193 SH 1 OF 3



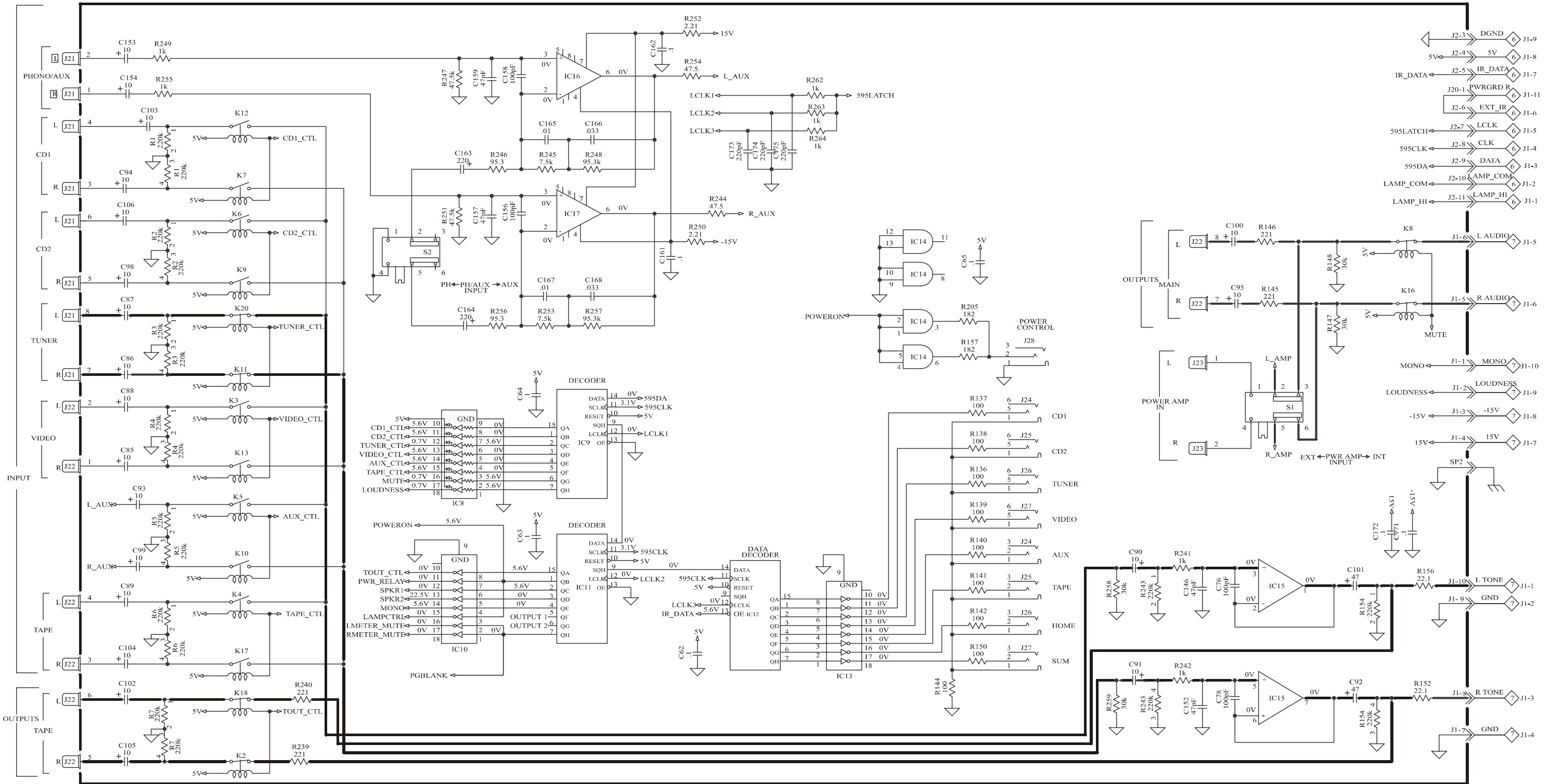


**2** INPUT DRIVER 049193 SH 2 OF 3

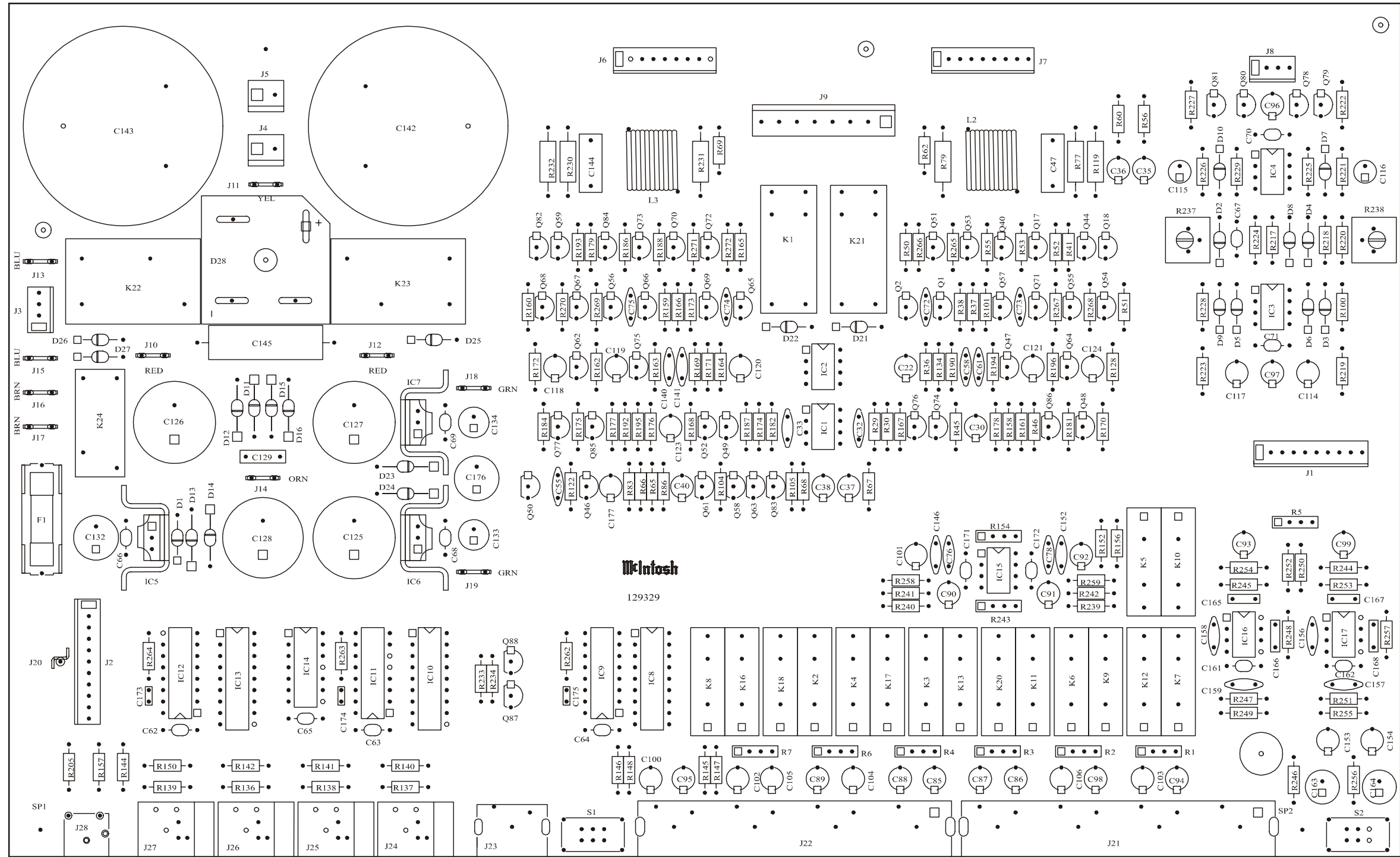


**WARNING** Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.

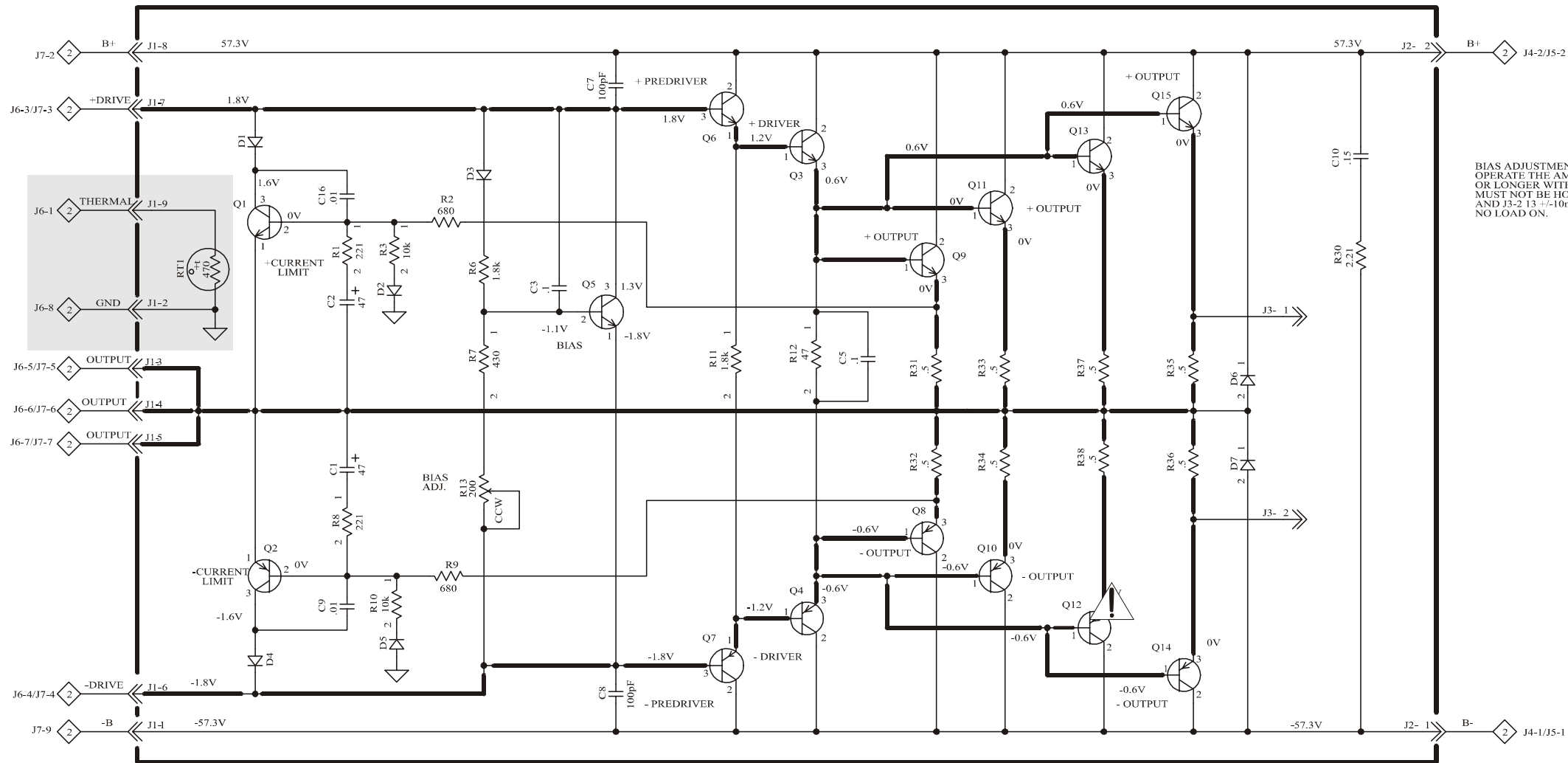
# 2 INPUT DRIVER 049193 SH 3 OF 3



# 2 INPUT DRIVER

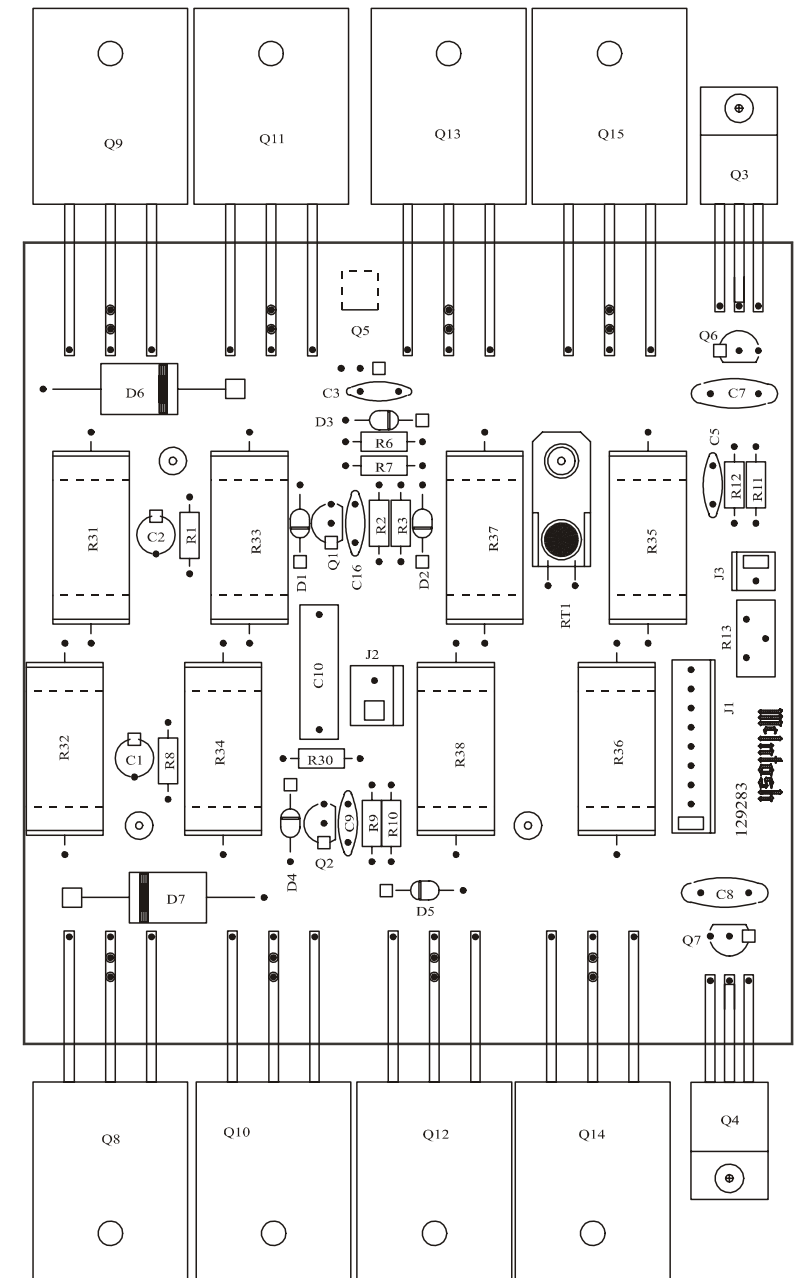


# 3A 3B HEATSINK 049194

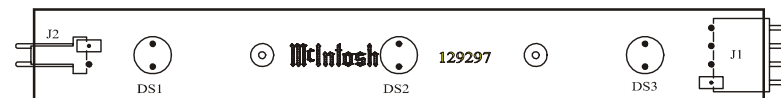
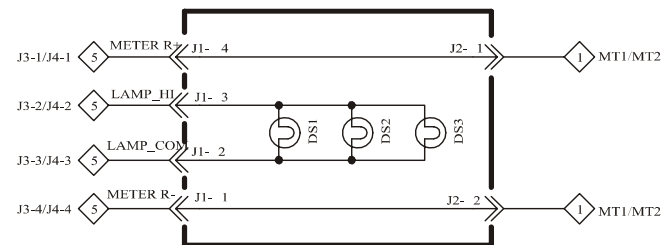


**WARNING** Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.

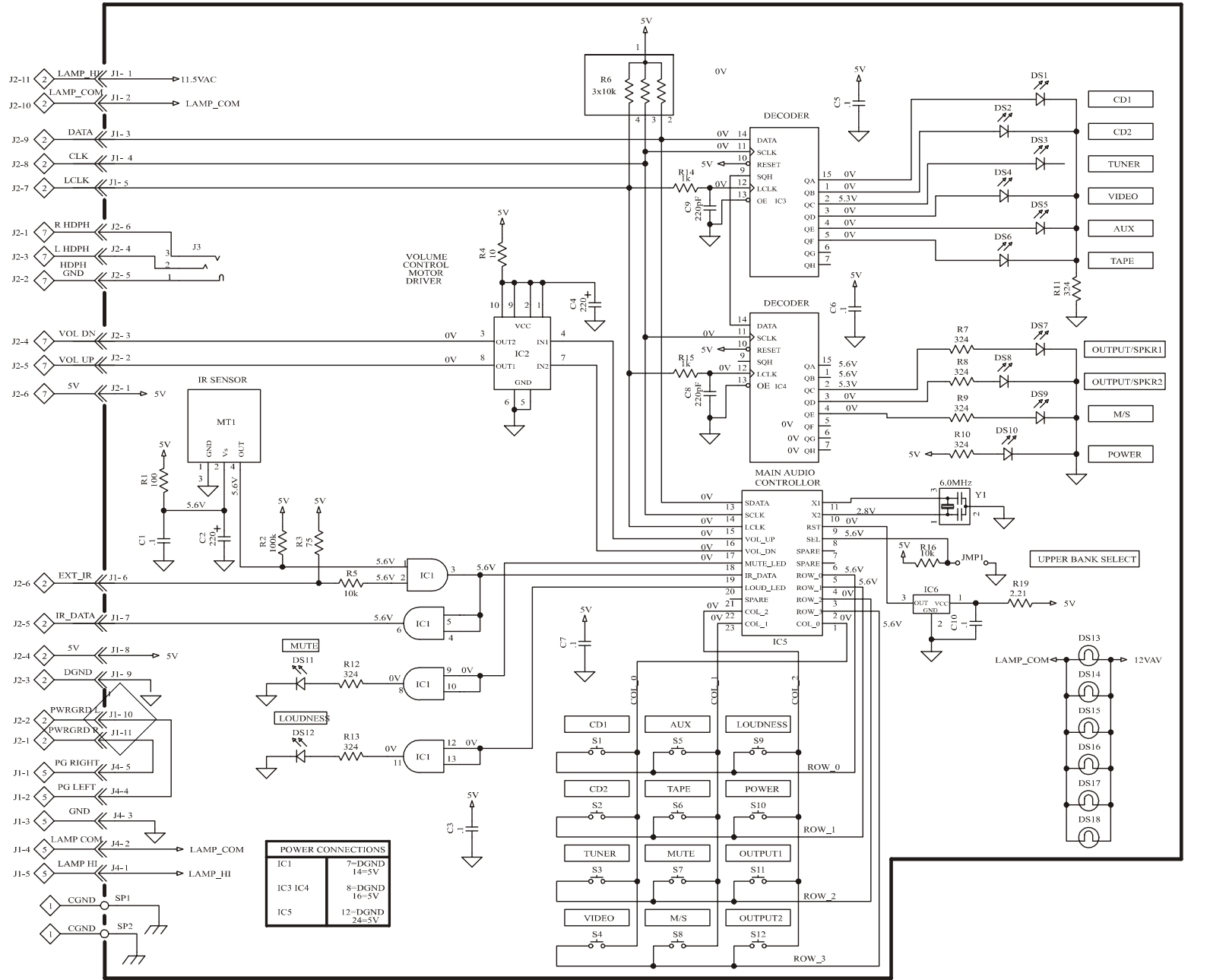
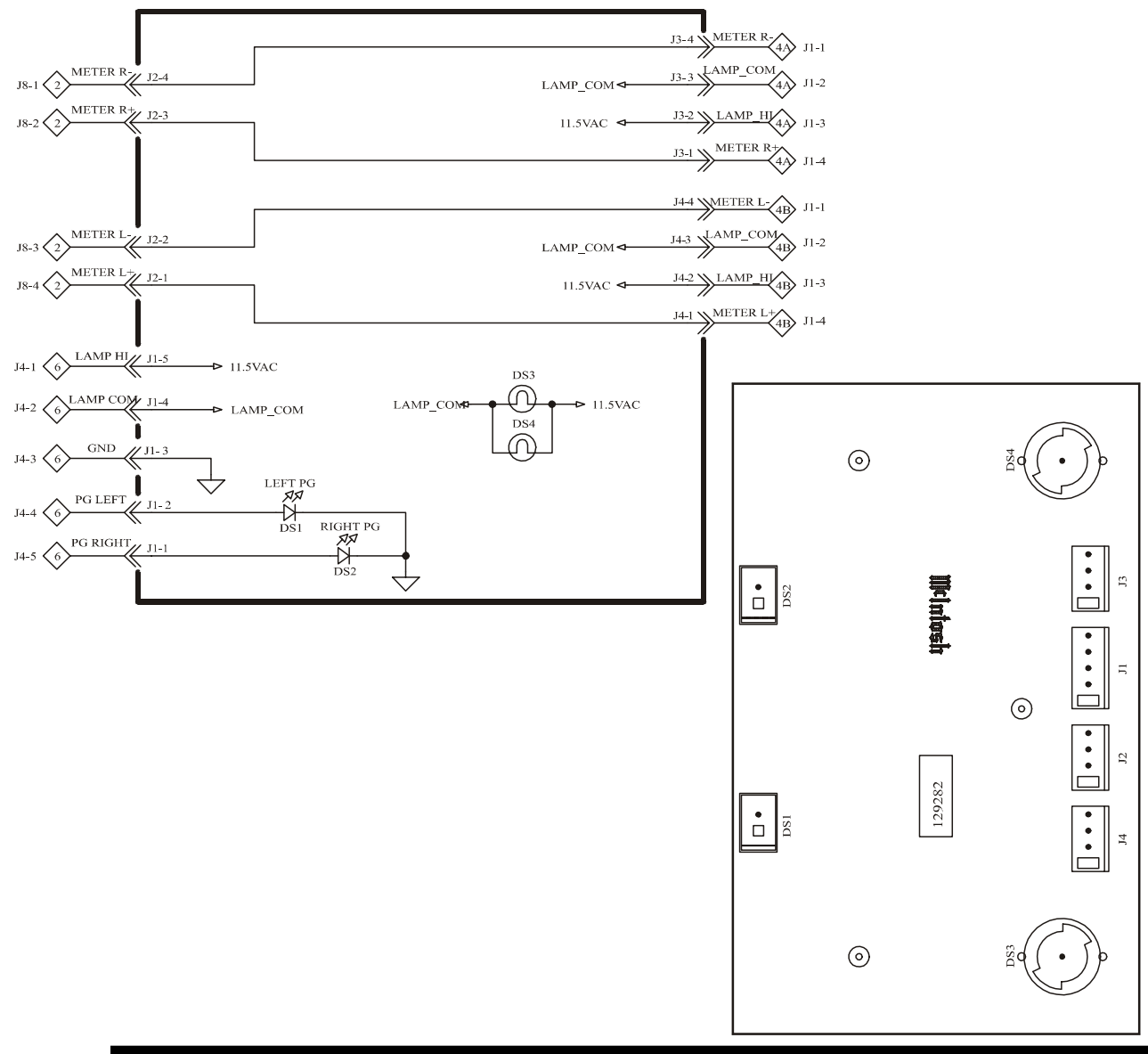
**BIAS ADJUSTMENT:**  
OPERATE THE AMPLIFIER FOR 2 MINUTES OR LONGER WITH NO OUTPUT. HEATSINKS MUST NOT BE HOT. MEASURE ACROSS J3-1 AND J3-2 13  $\pm$  10mV TO  $\pm$  15mV WITH NO LOAD ON.



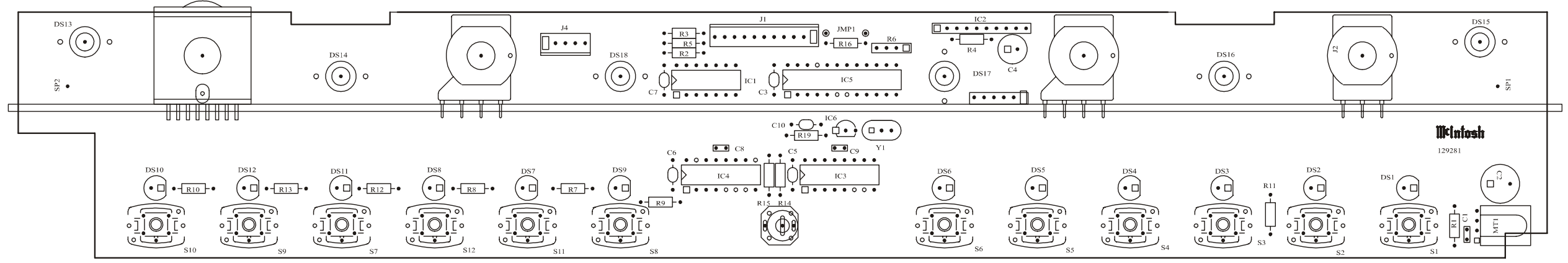
# 4A 4B LAMP 049235



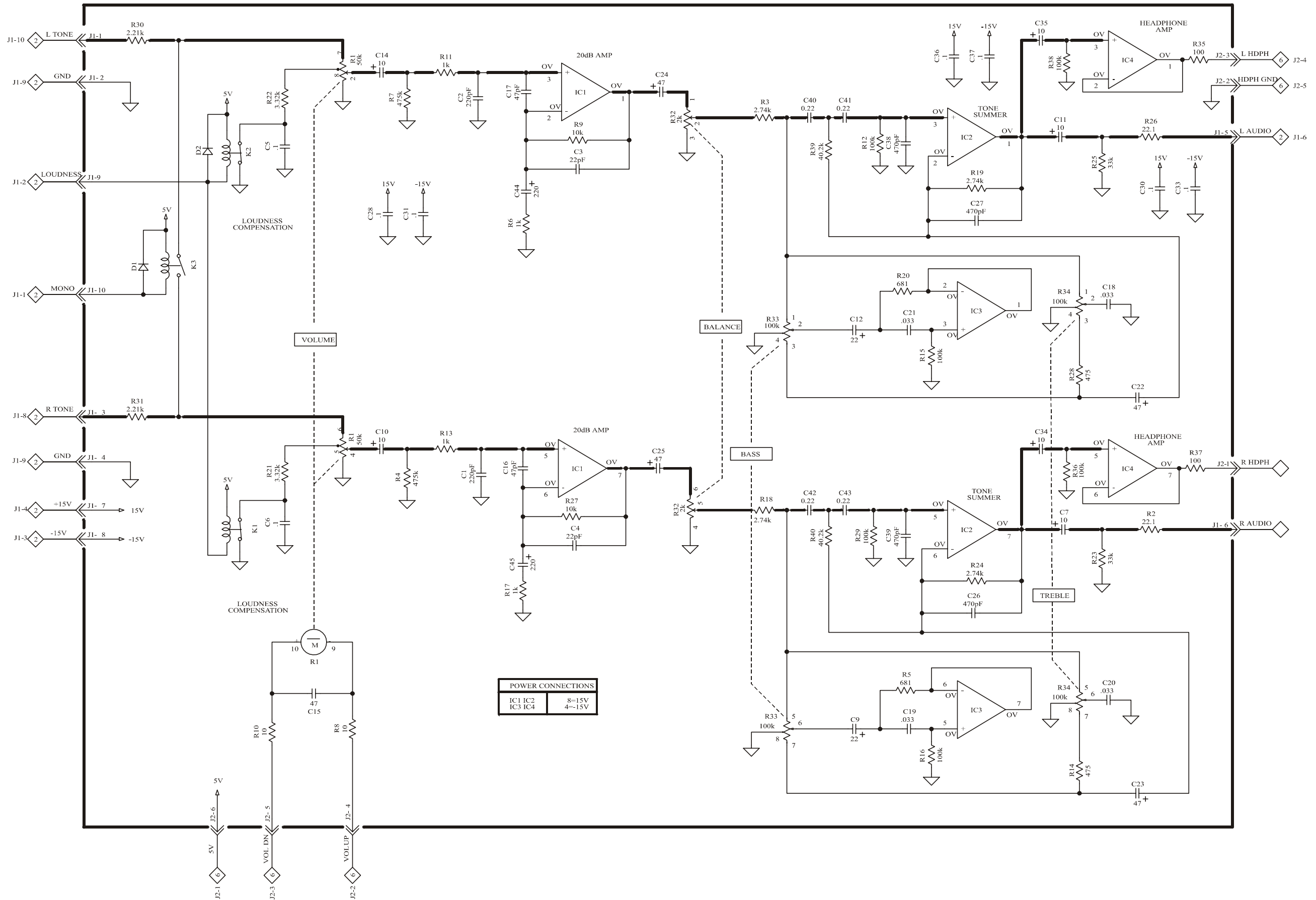
**5** PG DISPLAY 049236

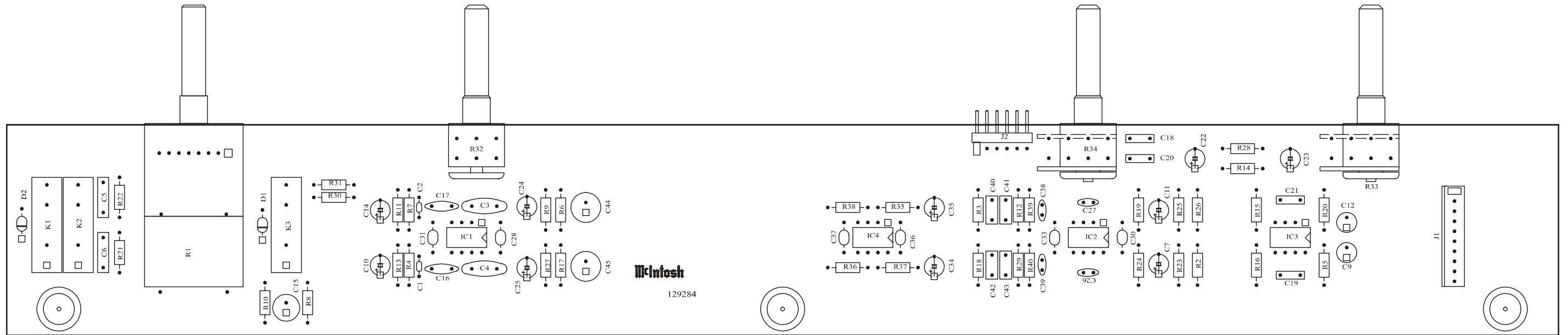


**6** CONTROL 049195



# 7 TONE 049268





## PARTS LIST

PART NO	DESCRIPTION	REFERENCE NO					
<b>049193 INPUT DRIVER</b>							
003611	CARD MOUNTING BRACKET	SP1 SP2					
061196	DISC CAP 47PF,20%,N470 50V	C146 C152 C157 C159	066462	ELECT CAP 10 UF 100VDC AMMO	C35 C36 C37 C38	132223	TRANSISTOR NPN MPS4124 2K/REEL
061199	DISC CAP 100PF 10% N1500 50V	C58 C61 C72 C73 C74	066469	ELECT CAPACITOR 470MF 50V T&R	C176		Q44 Q46 Q47Q57 Q58
		C75 C76 C78 C140 C141	066504	CAPACITOR ELECT 25000UF 75V	C142 C143		Q59 Q61Q63 Q66 Q75
		C156 C158	070047	SILICON DIODE 1N4148 T&R	D1 D3 D4 D5 D6 D7 D8		Q78 Q79 Q80 Q81 Q83
061248	DISC CAP .1MF,25V,Y5T	C32 C33 C55	070130	ZENER DIODE 8.2V,1/2W	D9 D10 D21 D22 D25	132224	TRANSISTOR PNP
061268	MONO CAP .1UF,50V,Z5U	C62 C63 C64 C65 C66	070131	DIODE RECTIFIER	D26 D27		Q1 Q40 Q48 Q49 Q52
		C67 C68 C69 C70 C71			D2	132254	TRANSISTOR NPN
		C161 C162 C171 C172	070139	RECTIFIER BRIDGE MC1000	D11 D12 D13 D14 D15		Q54 Q55 Q56 Q67 Q68
		C173 C174 C175	087050	REED RELAY FORM 1A,5V,500 OHMS	D16 D23 D24	132255	TRANSISTOR PNP
061273	220PF 5% 100V NPO	C129			D28		Q2 Q51 Q53 Q65 Q70
064254	M POLY FILM CAP .1MF,10%,100V	C145	087057	RELAY	K2 K3 K4 K5 K6 K7 K8	132261	TRANSISTOR PNP
064267	M. POLYESTER CAP .22MF,400V	C165 C167	087069	POWER RELAY TV5 24V	K9 K10 K11 K12 K13	132262	TRANSISTOR NPN
064312	CAP M POLY .01UF 5% 63VDC	C166 C168	087072	RELAY 24V TV8/VDE CERTIFIED	K16 K17 K18 K20	133028	IC OPERATIONAL AMPLIFIER
064318	CAP M POLY .033UF 5% 63/100VDC	C47 C144	089089	FUSE 2A SLO-BLO 5X20	K1 K21	133067	NE5534AN OP AMP LOW NOISE
064364	CAP POLYPROP .047MF 10% 250V	C115 C116	117215	4-PIN CONNECTOR	K22 K23	133108	IC +5V REGULATOR
066269	CAP ELECT 1UF 10% 50V	C132	117219	MALE CONN 10 POS	F1	133153	IC REGULATOR -15V
066309	CAP ELECT 1000UF 10V	C163 C164	117244	FRICTION LK CONN 9POS MALE	J3 J8	133154	IC REGULATOR 15V
066330	CAP ELECT 220UF 16V SHORT CAN	C133 C134	117279	11-POS. MALE CONN.	J1	133175	IC AND 2 INPUT X 4
066344	CAP ELECT 100UF 25V	C125 C127 C128	117404	HEADER 2-PIN 0.156	J6 J7	133180	LB1720 8 LN DRIVER ARRAY
066360	CAP ELECT 3300UF 35V	C126	117436	PJ261G PHON JACK, GOLD	J2	133186	IC SHFT REG SER-PAR
066361	CAP ELECT 1000UF 20% 35V	C30 C85 C86 C87 C88	117455	PHONO JACK 8P, GOLD PLATED	J4 J5	133260	DUAL OPERATIONAL AMPLIFIER
066445	ELECT CAP 10MF, 50V AMMO PACK	C89 C90 C91 C93 C94	117549	HEADPHONE JACK DUAL BLACK 1/8	J23	133360	OCTAL DAR TRANS ARRAY W/DIODE
		C95 C96 C97 C98 C99	117708	FASTON BLADE W/FEET	J21 J22	134389	TRIM POT 100K,10%,3/8SQ.
		C100 C102 C103 C104			J28	137042	FLAMEPROOF RES 47 OHM 5% 1/4W
		C105 C106 C115 C117	117712	FASTON BLADE .110	J24 J25 J26 J27	141165	RES CF 10 5% 1/2W
		C118 C123 C124 C153	117717	MTA-156 HEADER 8PIN	J10 J11 J12 J13 J14 J15		
		C154 C177	122297	CHOKE OUTPUT .65UH	J16 J17 J18 J19 J2	144053	RES MF 10K 1% 1/4W
066446	ELECT CAP 47MF, 35V AMMO PACK	C92 C101	132172	TRANSISTOR SI PNP MPSA55	J20		
066447	ELECT CAP 100MF 16V AMMO PACK	C22 C40 C119 C120	132193	TRANSISTOR J.F.E.T. 2N4392	J9	144071	METAL FILM RES 365 OHM 1% 1/4W
		C121			L2 L3		R265 R266 R267 R268
					Q50	144086	METAL FILM RES 475 OHM 1% 1/4W
					Q62 Q64	144090	METAL FILM RES 1K 1% 1/4W
							R241 R242 R249 R255
							R262 R263 R264
							R41 R55 R188 R193

# PARTS LIST *con't*

144097	METAL FILM RES 4.75K 1% 1/4W	R46 R86 R177 R222 R227 R233 R234
144107	METAL FILM RES 40.2K 1% 1/4W	R161 R192
144108	RES MF 47.5K 1% 1/4W	R29 R62 R65 R66 R69 R175 R181 R182 R247 R251
144113	RES MF 100K 1% 1/4W	R100 R162 R196 R228
144119	METAL FILM RES 332K 1% 1/4W	R221 R226
144125	METAL FILM RES 150K 2% 1/4W	R169 R190
144127	METAL FILM RES 95.3K 1% 1/4W	R248 R257
144141	METAL FILM RES 27.4K 1% 1/4W	R219 R223
144154	RES MF 12.1K 1% 1/4W	R128 R172
144160	METAL FILM RES 22.1OHM 1% 1/4W	R152 R156
144172	RES MF 221 OHMS 1% 1/4W	R51 R53 R145 R146 R160 R186 R239 R240 R104 R105
144187	METAL FILM RES 22.1K 1% 1/4W	R38 R101 R159 R173
144191	RESISTOR MF 1.21K 1% 1/4W	R67 R68 R136 R137
144196	METAL FILM RES 100 OHM 1% 1/4W	R138 R139 R140 R141 R142 R144 R150
144210	RES MF 7.5K 1% 1/4W CRB1/4FX	R245 R253
144220	95.3 OHMS 1% 1/4W MF	R246 R256
144225	MF RES, 30K OHM 1% 1/4W	R147 R148 R258 R259
144262	RES NETWORK, 2X220K, ISO	R1 R2 R3 R4 R5 R6 R7 R154 R243
144264	METAL FILM RES 10M 1% 1/4W	R220 R224
144265	METAL FILM RES 2.21M 1/4W	R225 R229
144273	RESISTOR MF 182 OHM 1/4W 1%	R157 R205
144338	RES MF 324 OHM 1% 1/4W	R163 R194
144378	RES MF 2.21 OHM 1/4W 1%	R250 R252
144440	MF RES 14.3K 1% 1/4W	R50 R165
144441	METAL FILM RES 274K 1% 1/4W	R52 R158 R176 R178 R179 R195 R244 R254
144442	METAL FILM RES 47.5 1% 1/4W	R30 R37 R83 R166 R174
144443	METAL FILM RES 681K 1% 1/4W	S1 S2
148059	SLIDE SWITCH	F1
178159	FUSE HOLDER 5X20MM PCB MOUNT	
<b>049194 HEATSINK</b>		
061023	DISC CAP 100PF 10% N1500	C7 C8
061159	CERAMIC CAP .01MF +80-20% 50V	C9 C16
061248	DISC CAP .1MF,25V,Y5T	C3 C5
064363	CAP POLYPROP 0.15MF 10% 250VDC	C10
066446	ELECT CAP 47MF, 35V AMMO PACK	C1 C2
070047	SILICON DIODE 1N4148 T&R	D1 D2 D3 D4 D5 D6 D7
070133	DIODE 200V,6A	
117213	2-PIN MALE CONNECTOR	J3
117244	FRICTION LK CONN 9POS MALE	J1
117404	HEADER 2-PIN 0.156	J2
132223	TRANSISTOR NPN MPS4124 2K/REEL	Q1
132224	TRANSISTOR PNP	Q2
132261	TRANSISTOR PNP	Q7
132262	TRANSISTOR NPN	Q6
134390	TRIM POT 200 OHM 20% HORIZ AD	R13
137093	MET OX 680 5% .5W	R2 R9
137094	MET OX 1.8K 5% .5W	R6 R11
137095	MET OX 430 5% .5W	R7
137096	MET OX 47 5% .5W	R12
139177	WIREWOUND RES 0.5 OHM 5W 5%	R31 R32 R33 R34 R35 R36 R37 R38
144053	RES MF 10K 1% 1/4W	R3 R10
144172	RES MF 221 OHMS 1% 1/4W	R1 R8
144279	THERMISTOR 100 OHM	RT1
144378	RES MF 2.21 OHM 1/4W 1%	R30

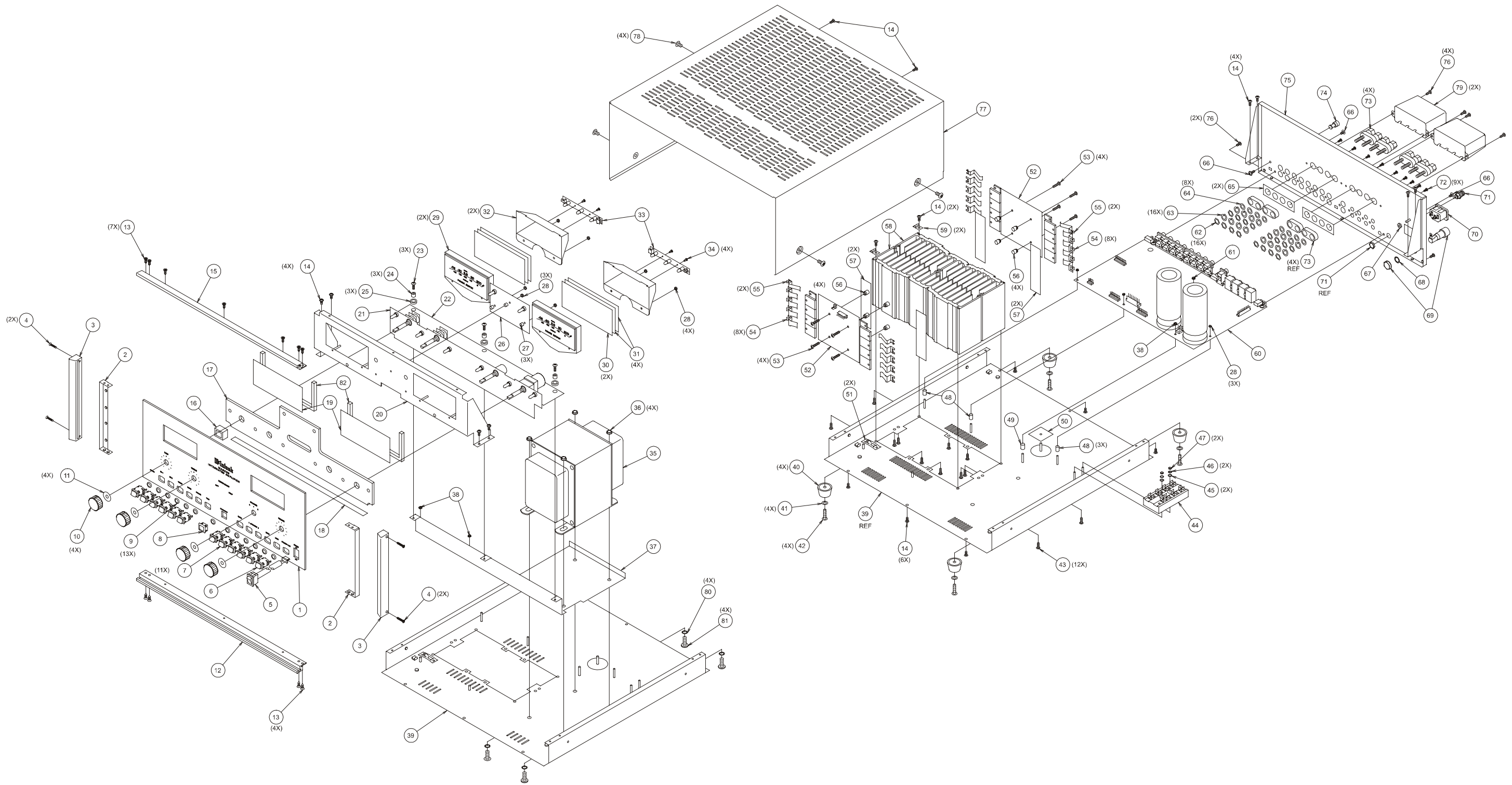
## 049195 CONTROL

058153	INCANDESCENT LAMP 14V 100MA	DS13 DS14 DS15 DS16 DS17 DS18 C3 C5 C6 C7 C10 C8 C9
061268	MONO CAP .1UF,50V,Z5U	C1
061273	220PF 5% 100V NPO	C2
061277	MONO CAP 0.1MF 20% 50V	C4
066254	CAP ELECT 220UF 50V 20%	DS1 DS2 DS3 DS4 DS5 DS6 DS7 DS8 DS9 DS10 DS11 DS12
066330	CAP ELECT 220UF 16V SHORT CAN	J4
070093	LED LAMP RED	J1
117216	MALE CONN 5-PIN 0.1 POST ASSY	J3
117279	11-POS. MALE CONN.	MT1
117462	PHON JACK 1 1/8" STEREO VER	IC1
121031	IR SENSOR 38KHZ	IC3 IC4
133175	IC AND 2 INPUT X 4	IC2
133186	IC SHFT REG SER-PAR	IC6
133191	IC DC MOTOR DRIVER	
133241	IC MICROPRCSSR RESET POS	R5 R16 R14 R15
133394	PROGRAMMED DEVICE	R2
144053	RES MF 10K 1% 1/4W	R4
144090	METAL FILM RES 1K 1% 1/4W	R1
144113	RES MF 100K 1% 1/4W	R6
144157	METAL FILM RES:10 OHMS 1% 1/4W	R7 R8 R9 R10 R11 R12 R13
144196	METAL FILM RES 100 OHM 1% 1/4W	R19
144290	RES NETWORK 3 X 10K BUSSED	R3
144338	RES MF 324 OHM 1% 1/4W	S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11S12
144378	RES MF 2.21 OHM 1/4W 1%	IC5
144444	METAL FILM RES 75 1% 1/4W	Y1
150058	TACT SWITCH	
178139	IC SOCKET 24-PIN	
180039	CERAM RESON 6.0MHZ W/CAP	
<b>049235 LAMP</b>		
058120	LAMP 14V #7373	DS1 DS2 DS3
117240	4 PIN RT. ANGLE	J1
117274	CONN. 2 POS. R-ANGLE	J2
<b>049236 POWER GUARD</b>		
058133	AMBER LED	DS1 DS2
058153	INCANDESCENT LAMP 14V 100MA	DS3 DS4
117215	4-PIN CONNECTOR	J2 J3 J4
117216	MALE CONN 5-PIN 0.1 POST ASSY	J1
<b>049268 TONE</b>		
061191	DISC CAP 22PF,10%,NPO 50V	C3 C4
061196	DISC CAP 47PF,20%,N470 50V	C16 C17
061256	M.CAP 470PF,5%,100V	C26 C27 C38 C39
061260	MONOLYTHIC, 220PF	C1 C2
061268	MONO CAP .1UF,50V,Z5U	C28 C30 C31 C33 C36 C37
064254	M POLY FILM CAP .1MF,10%,100V	C5 C6
064318	CAP M POLY .033UF 5% 63/100VDC	C18 C19 C20 C21
064329	CAP M POLY .22UF 5% 63VDC	C40 C41 C42 C43
066330	CAP ELECT 220UF 16V SHORT CAN	C44 C45
066345	CAP ELECT 22UF 50V	C9 C12
066378	CAP ELECT 47UF 16V BP	C15
066445	ELECT CAP 10MF, 50V AMMO PACK	C7 C10 C11 C14 C34 C35
066446	ELECT CAP 47MF, 35V AMMO PACK	C22 C2324 C25
070047	SILICON DIODE 1N4148 T&R	D1 D2
087050	REED RELAY FORM 1A,5V,500 OHMS	K1 K2 K3
117219	MALE CONN 10 POS	J1
117707	CONNECTOR MALE 6 POS RT ANGLE	J2

133260	DUAL OPERATIONAL AMPLIFIER	IC1 IC2 IC3 IC4
134457	POT, EQUAL	R33 R34
134464	POTENTIOMETER BALANCE 2KOHM	R32
134490	POTENTIOMETER 50KAX2	R1
144015	METAL FILM RES 33.2K 1% 1/4W	R23 R25
144053	RES MF 10K 1% 1/4W	R9 R27
144086	METAL FILM RES 475 OHM 1% 1/4W	R14 R28
144090	METAL FILM RES 1K 1% 1/4W	R6 R11 R13 R17
144095	RES MF 3.32K 1% 1/4W	R21 R22
144107	METAL FILM RES 40.2K 1% 1/4W	R39 R40
144113	RES MF 100K 1% 1/4W	R12 R15 R16 R29 R36 R38
144157	METAL FILM RES 10 OHMS 1% 1/4W	R8 R10
144160	METAL FILM RES 22.1OH 1% 1/4W	R2 R26
144195	MF RES, 681 OHM 1% 1/4W	R5 R20
144196	METAL FILM RES 100 OHM 1% 1/4W	R35 R37
144298	MF 2.21K 1% 1/4W	R30 R31
144304	MF 2.74K 1% 1/4W	R3 R18 R19 R24
144364	RES MF 475K 1% 1/4W	R4 R7



# EXPLODED VIEW



# EXPLODED VIEW PARTS LIST

# NOTES

Ref. No.	Part No.	Description
1	016404	FRONT PANEL GLASS
2	004899	EXTRUSION BRACKET
3	018612	END CAP
4	101042	TS 4-40 X 1/2 SLOT FILLISTER
5	171260	C/A INPUT/POWER SWITCH
6	017531	PUSHBUTTON ASSY RED
7	017517	PUSHBUTTON ASSY
8	017736	HEADPHONE BEZEL
9	078033	O-RING
10	090258	KNOB 25mm INDEX
11	104073	FELT W MPI-4 1/4 X 5/8
12	018605	BOTTOM EXTRUSION
13	101172	TCS 6-32 X 1/4 PHIL FLAT U/C
14	101054	TS 6-32 X 1/4 PHIL PAN TAPTITE
15	018587	TOP EXTRUSION
16	094350	SENSOR GASKET
17	017764	DISPLAY PLEXIGLAS
18	022314	FISHPAPER SHEILD
19	017363	PLEXIGLAS FILTER LIGHT BLUE
20	004966	SUBPANEL
21	049195	CONTROL PCB ASSY
22	129284	tone PCB ASSY
23	100275	MS 6-32 X 1/2 PHIL BLK TRUSS HD
24	021030	SPACER 6 X 1/4
25	078031	GROMMET
26	049236	POWER GUARD DISPLAY ASSY
27	021094	SPACER 4 X 1/4
28	102001	KEP NUT 4-40 CADMIUM PLATE
29	124074	MC202 METER
30	092341	FILTER AZURE BLUE
31	092342	FILTER PALE BLUE
32	017447	PLASTIC LIGHT BOX
33	049235	LAMP PCB ASSY
34	114072	PLASTIC RIVET
35	159310	POWER TRANSFORMER
36	102007	MACH NUT 1/4-20 W/LOCK
37	004964	TRAY
38	102003	MACH NUT 6-32 W/LOCK
39	004965	CHASSIS
40	017218	PLASTIC FEET - BLACK
41	104080	FLAT WASHER #10 CLEAR ZINC
42	100159	MS 10-32 X 3/4 PHIL PAN ZINC
43	101176	TCS 6-32 X 1/2 PH PAN BLK TYPE F
44	074091	AC TERMINAL BLOCK
45	104001	FLAT STEEL WASHER #4 X 9/32 X .025
46	104004	LK WASHER 5 X .255 INT STAR
47	102022	MN 4-40 3/16 X 1/16
48	112038	STL SPACER 4 X 3/8 L NICKEL PLT
49	021038	SPACER #6 X 3/8
50	084135	THERMAL PAD MC7150
51	106007	SPRING CLIP LATCH TYPE
52	049194	HEATSINK PCB ASSY
53	101059	SM 6 X 5/8 PHIL PAN TYPE A
54	114119	TRANSISTOR CLIP 214
55	114118	TRANSISTOR CLIP 218
56	112087	PCB SPACER 1/4"
57	084194	ISOSTRATE
58	018616	AMPLIFIER HEATSINK 4 INCH
59	017160	MOUNTING TAB W/.140 DIA MTG
60	049193	INPUT/DRIVER PCB ASSY
61	102014	MACH NUT 6-32 W/LOCK
62	110009	NUT M5 X 0.8 BRASS W/GOLD PLATE
63	104130	LW #10 SPLIT PHOS/BRONZE
64	104148	FLAT WASHER BRASS
65	004800	OUTPUT PLATE
66	100250	SEMS 6-32 X 1/4 PHIL PAN
67	102020	MACH NUT 6-32 SELF-LOCK
68	104016	LK WASHER 1/2 X .630 X .022 INT STAR
69	178122	SOCKET FUSEHOLDER UL/CSA
70	117487	MC1000 AC LINE RECEPTACLE
71	117369	COAX RECEPTACLE GOLD TYPE F
72	101197	HI/LO 4-32 X 3/8 PH ROUND BLACK
73	084124	DUAL BINDING POST
74	084112	GROUND POST (GOLD) 4300
75	004962	REAR PANEL
76	101109	TS 6-32 X 5/16 PHIL PAN
77	004798	TOP COVER
78	101078	TS 8-32 X 5/16 PHIL PAN
79	017706	TERMINAL COVER
80	100072	LOCK WASHER 1/4 X .396 INT STAR
81	100126	MS 1/4-20 X 5/8 PHIL PAN BLACK
82	094017	FOAM TAPE 1/4 X 1/4

# REPACKING INSTRUCTIONS

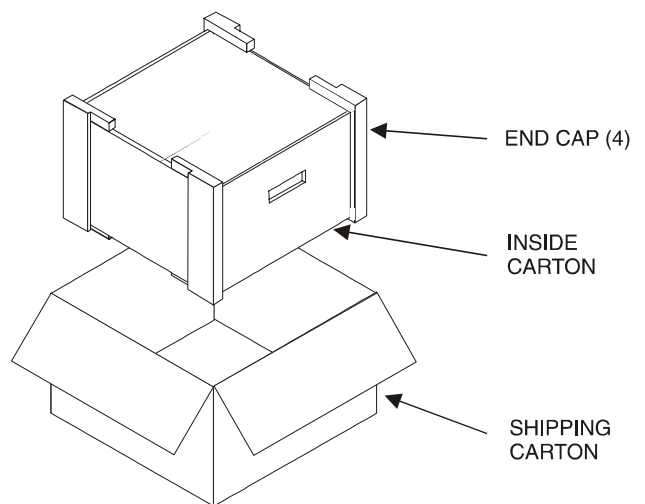
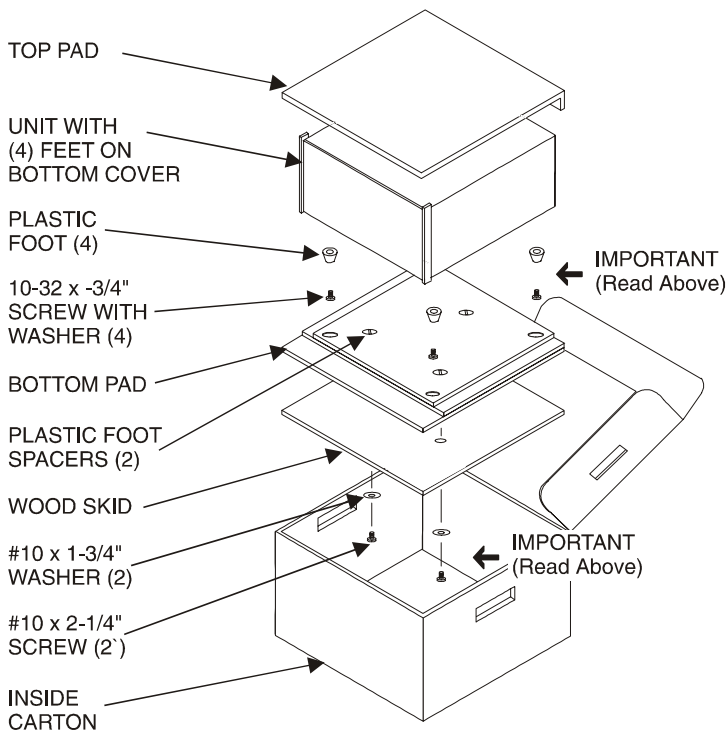
In the event it is necessary to repack the unit for shipment, the unit must be packed exactly as shown below.

*IMPORTANT - The four plastic feet must be attached to the bottom of the unit so they will locate in the four holes of the bottom pad. Three #10 x 2-1/4" screws and washers must be used to fasten the unit securely to the bottom pad and wood skid. Failure to do this will result in shipping damage.*

If a shipping carton or any of the interior parts is needed, please call or write the Customer Service Department of McIntosh Laboratory. Order parts from the accompanying list by part number.

Use the original shipping carton and interior parts only if they are in good serviceable condition.

Qty.	Part No.	Description
1	033888	Shipping carton only
4	033887	End cap (Foam pad)
1	033697	Inside carton only
1	033725	Top pad
1	034008	Bottom pad
2	017218	Plastic foot (spacer)
1	033699	Wood skid
2	101169	#10 x 2-1/4" Wood screw
2	104033	#10 x 1-3/4" Flat washer
4	017218	Plastic foot
4	100159	#10-32 x 3/4" Machine screw
4	104083	#10 x 7/16" Flat washer



# MA6500

## INTEGRATED AMPLIFIER

# SERVICE MANUAL

The continuous improvement of its products is the policy of McIntosh Laboratory Incorporated, who reserve the right to improve design with out notice. Because of the constant upgrading of McIntosh products' circuitry and components, the Company cannot insure, and does not warrant, the accuracy of the within schematic material, which is intended for information only.