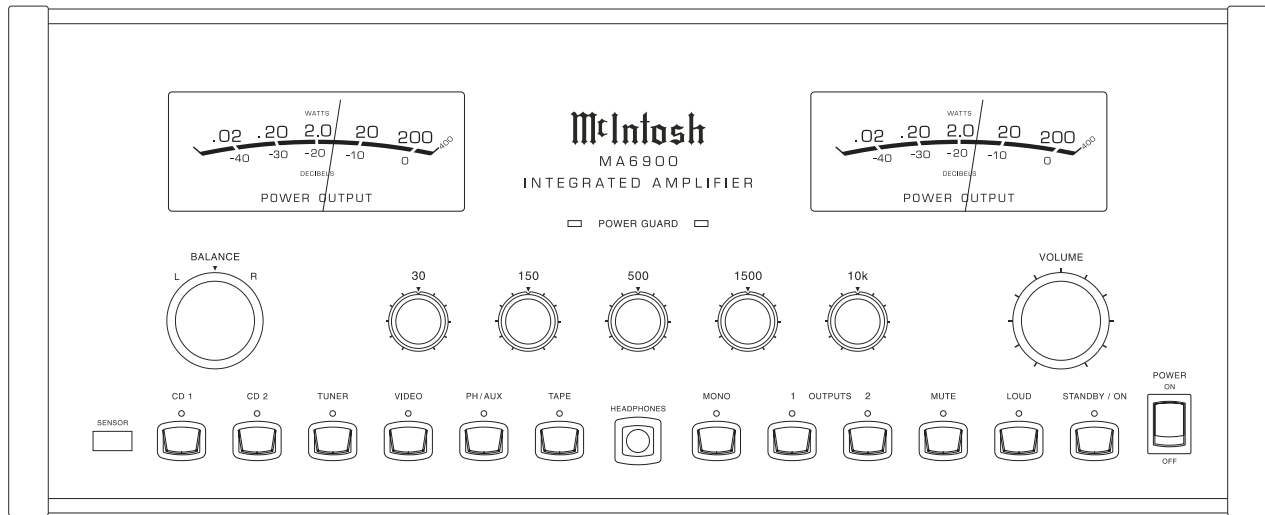


MA6900

INTEGRATED AMPLIFIER



CONTENTS

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McIntosh®

SERVICE MANUAL

PERFORMANCE SPECIFICATIONS

Power Output

Minimum sine wave continuous average power output per channel, all channels operating is:

200 watts into 2 ohm load

200 watts into 4 ohm load

200 watts into 8 ohm load

Rated Power Band

20Hz to 20,000Hz

Total Harmonic Distortion

Maximum Total Harmonic Distortion at any power level from 250 milliwatts to rated power output is:

0.005% for 2, 4 or 8 ohm loads

Dynamic Headroom

2.4dB

Frequency Response

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

+0, -3dB from 10Hz to 100,000Hz

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

Signal To Noise Ratio (A Weighted)

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

100dB (90dB IHF) below rated output, High Level

110dB below rated output, Power Amplifier

Intermodulation Distortion

Maximum Intermodulation Distortion if instantaneous peak output per channel does not exceed twice the rated output, for any combination of frequencies from 20Hz to 20,000Hz, with all channels operating is:

0.005% for 2, 4 or 8 ohm loads

Input Impedance

Phono, 47k ohms, 65pF

High Level, 22k ohms

Maximum Input Signal

Phono, 90mV

High Level, 8V

Preamplifier Maximum Voltage Output

Phono, 8V 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

Wide Band Damping Factor

Greater than 40

Power Requirements

100 Volts, ~ 50/60Hz at 4.8 amps

110 Volts, ~ 50/60Hz at 4.4 amps

120 Volts, ~ 50/60Hz at 4.2 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 MA6900 for the correct voltage.

Overall Dimensions

Front Panel: 17-1/2 inches (44.45cm) wide, 7-1/8 inches

(18.10cm) high. Depth behind front mounting panel is 16-1/2

inches (41.91cm). Clearance required in front of the Front Panel

is 1 inch (2.54cm) for knobs.

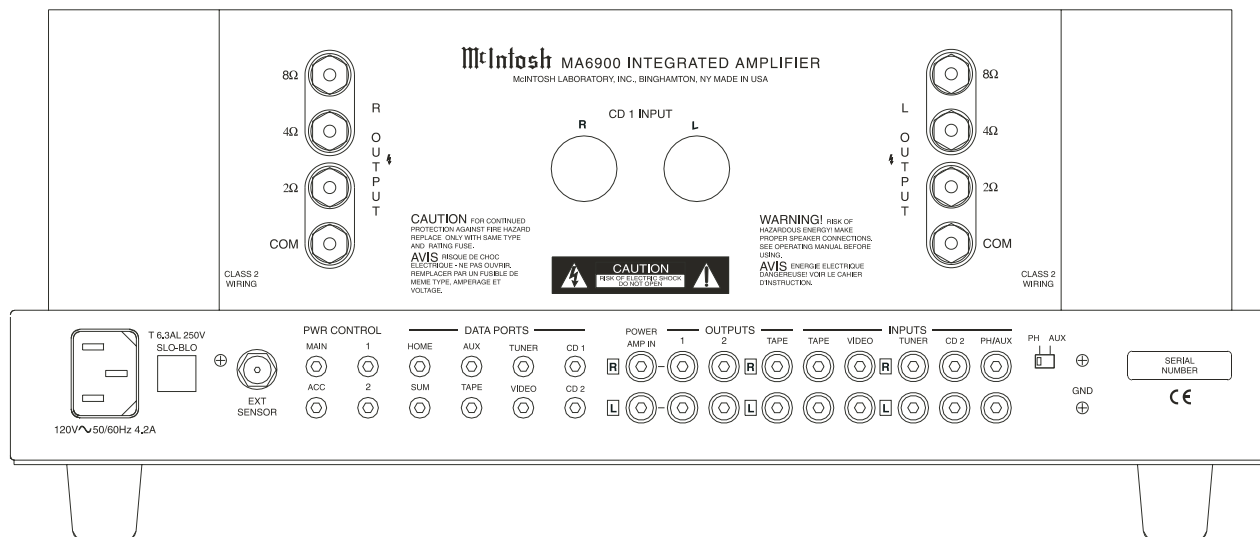
Weight

74.5 pounds (33.8 Kg) net, 92.5 pounds (41.7 Kg) in shipping carton

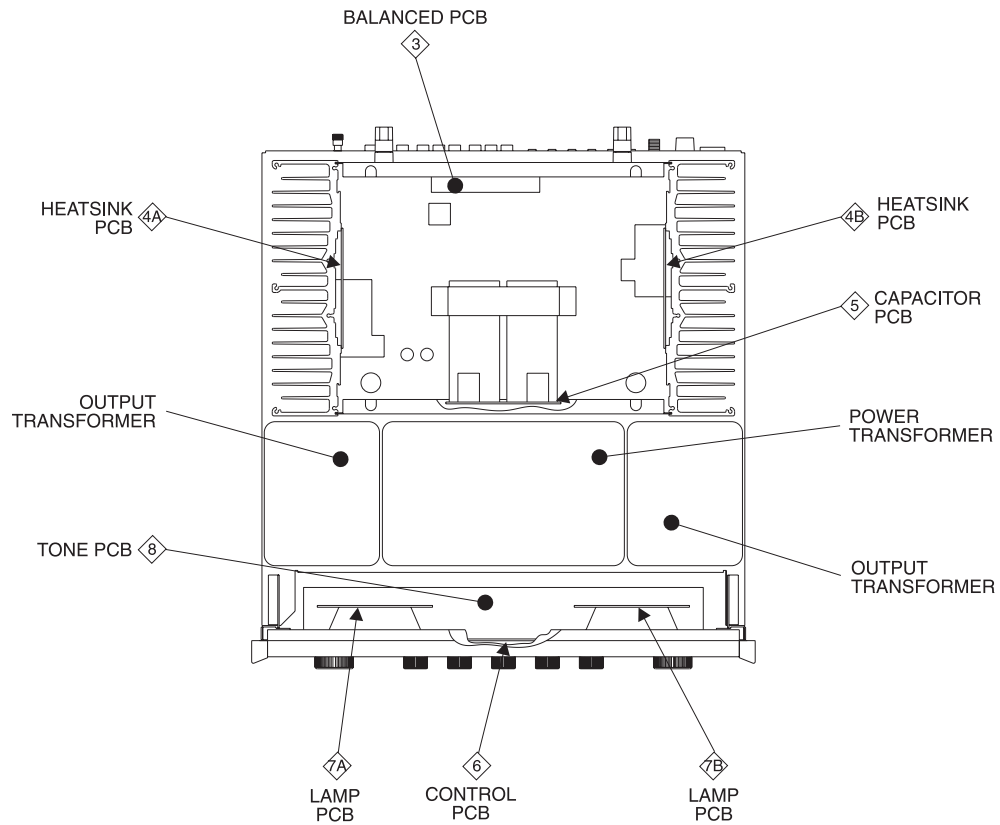
NOTES

1. The heavy lines on the schematic 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 (10 megaohm) voltmeter must be used.
3. Unless otherwise specified:
 - a. Resistor values are in ohms.
 - b. Capacitor values are microfarads (uF).
 - c. Inductor values are in microhenries (uH).
4. On PC board drawings, Square pad indicates:
 - a. Polarized Capacitors - Positive
 - b. Diodes - Cathode
 - c. Others - Pin 1
5. **WARNING**
Parts marked with the symbol  have critical characteristics. Use only replacement parts recommended by the manufacturer.

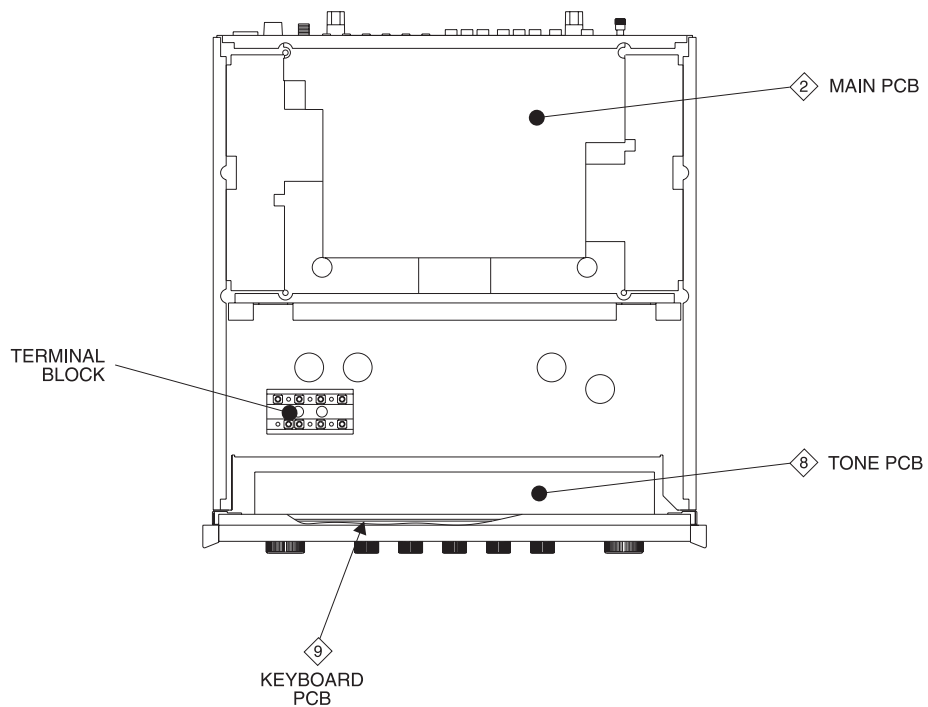
REAR PANEL



SECTION LOCATIONS

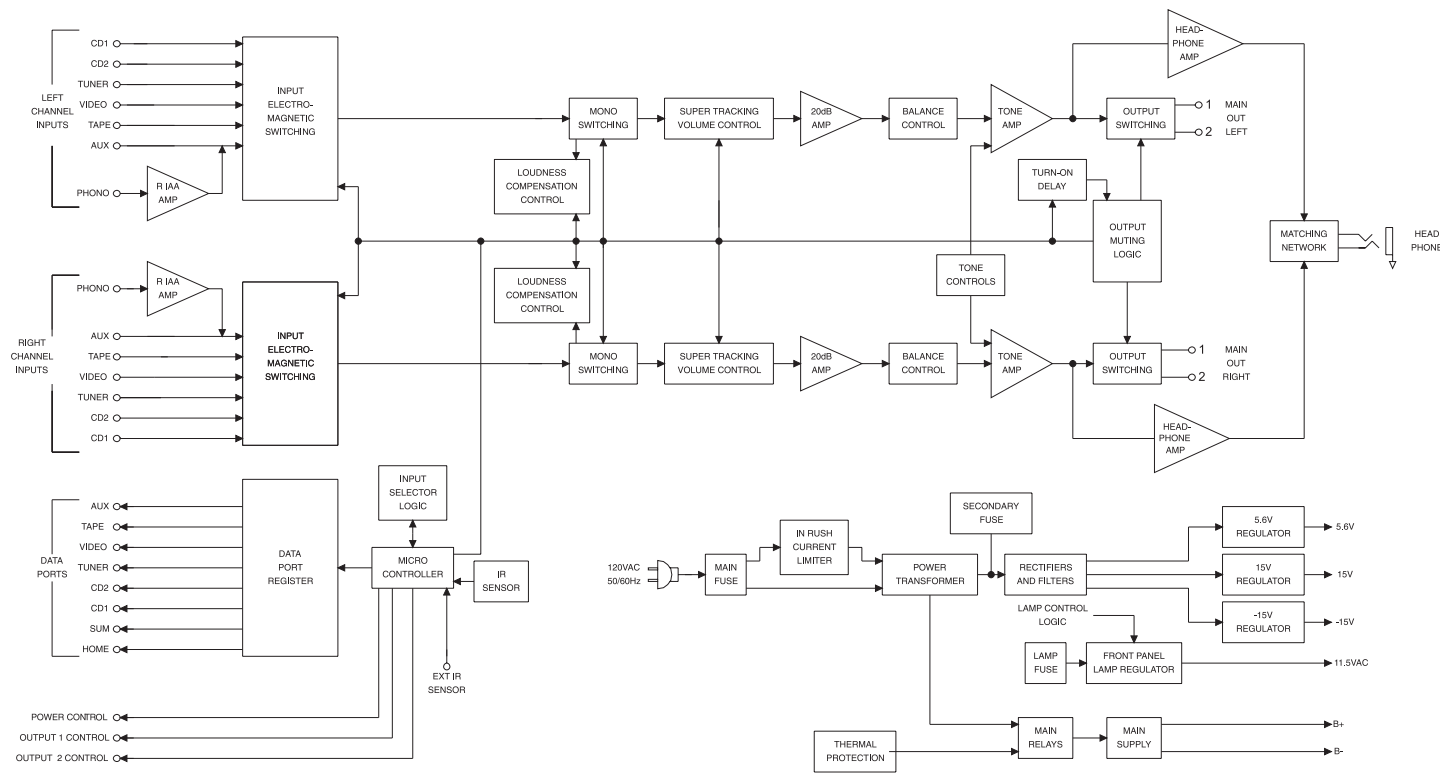
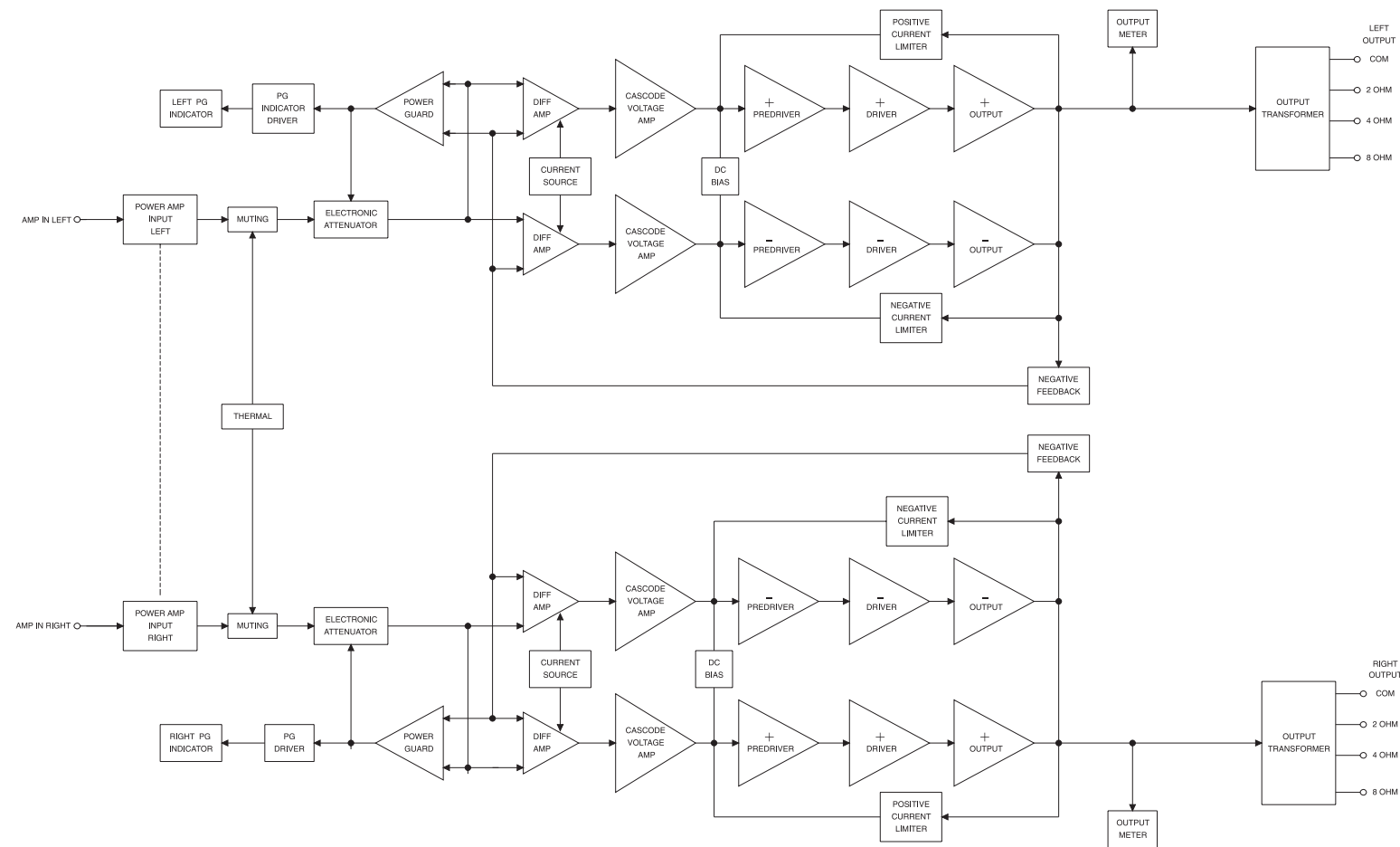


TOP VIEW WITH COVER REMOVED

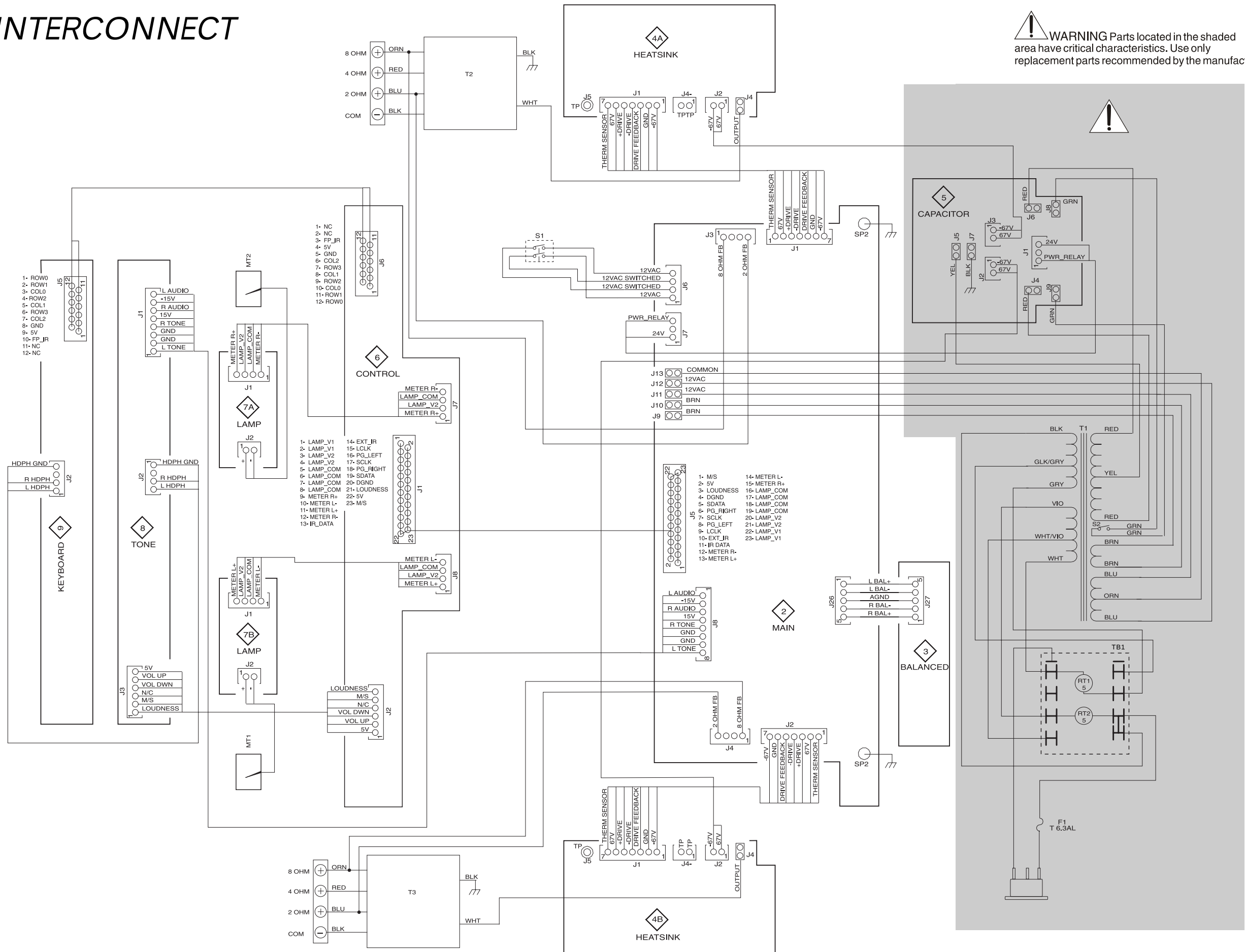


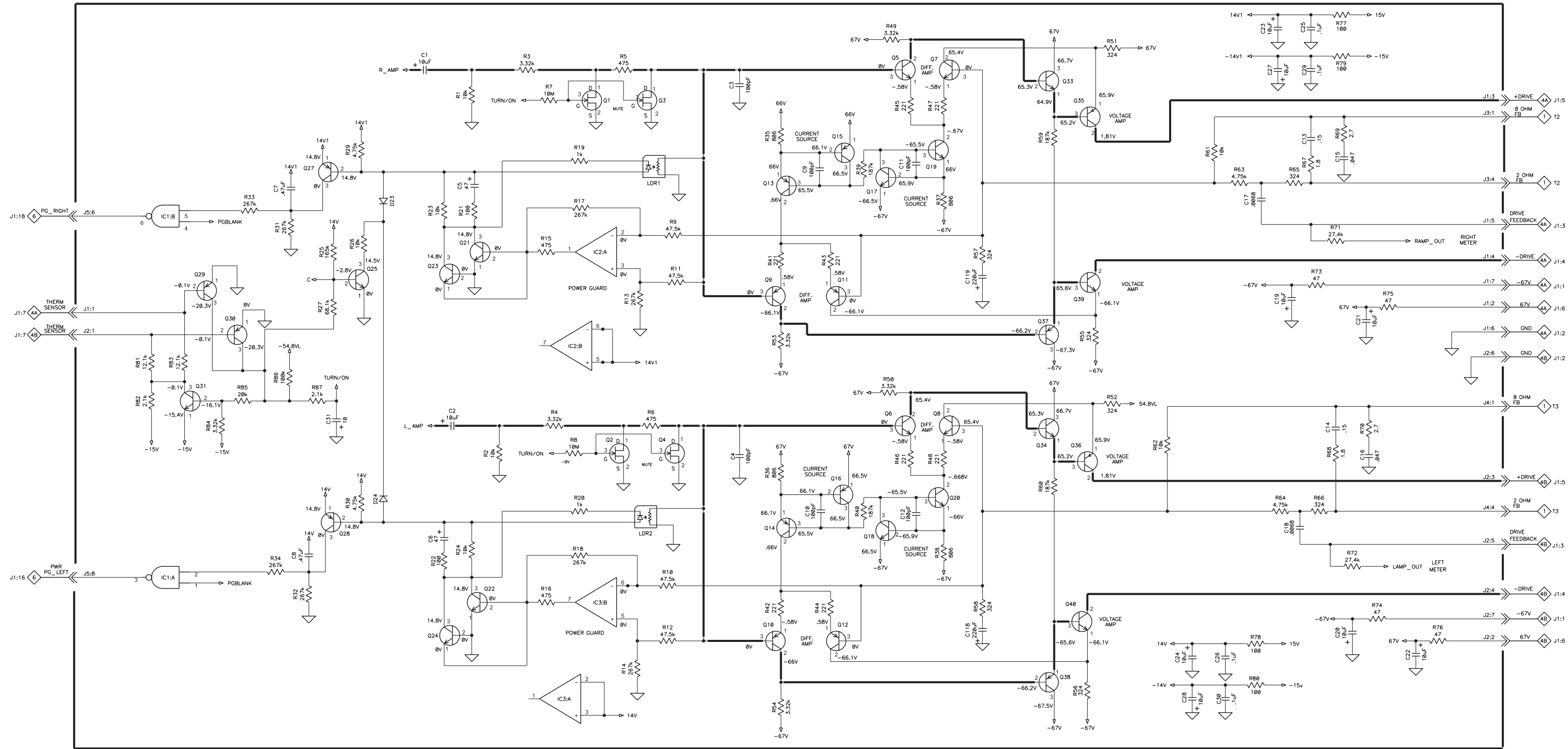
BOTTOM VIEW WITH COVER REMOVED

BLOCK DIAGRAM

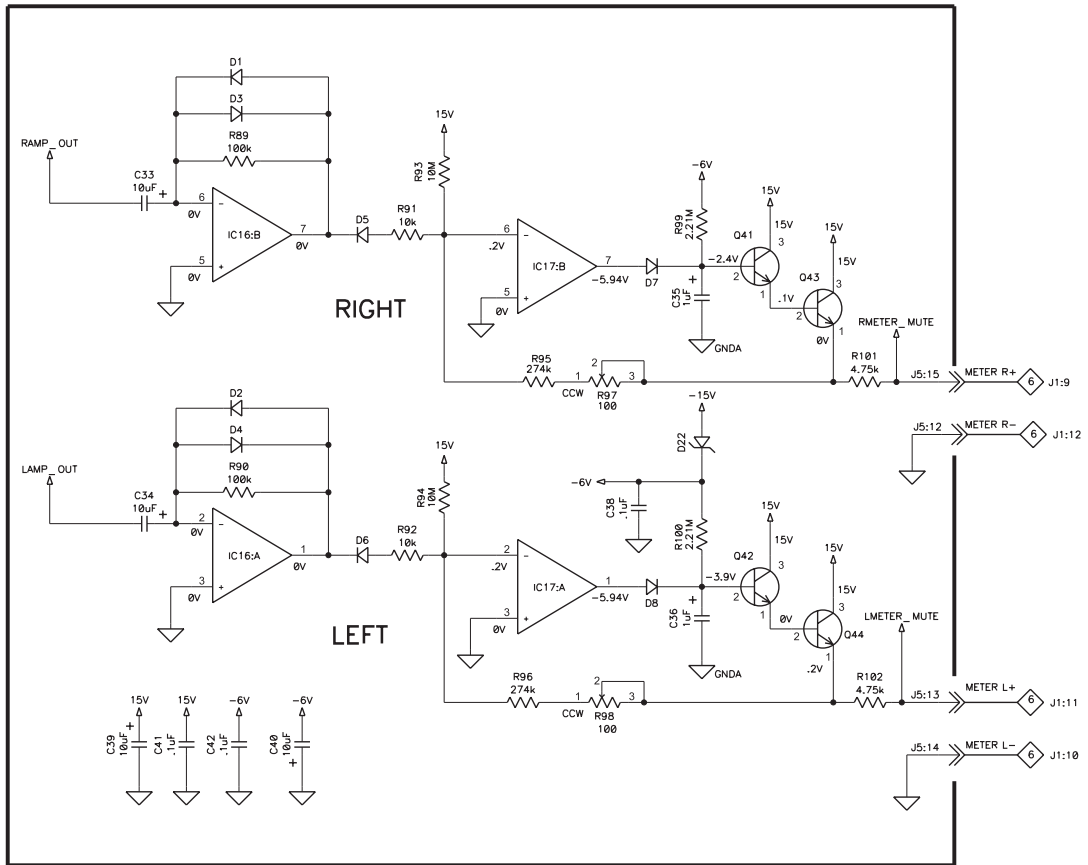


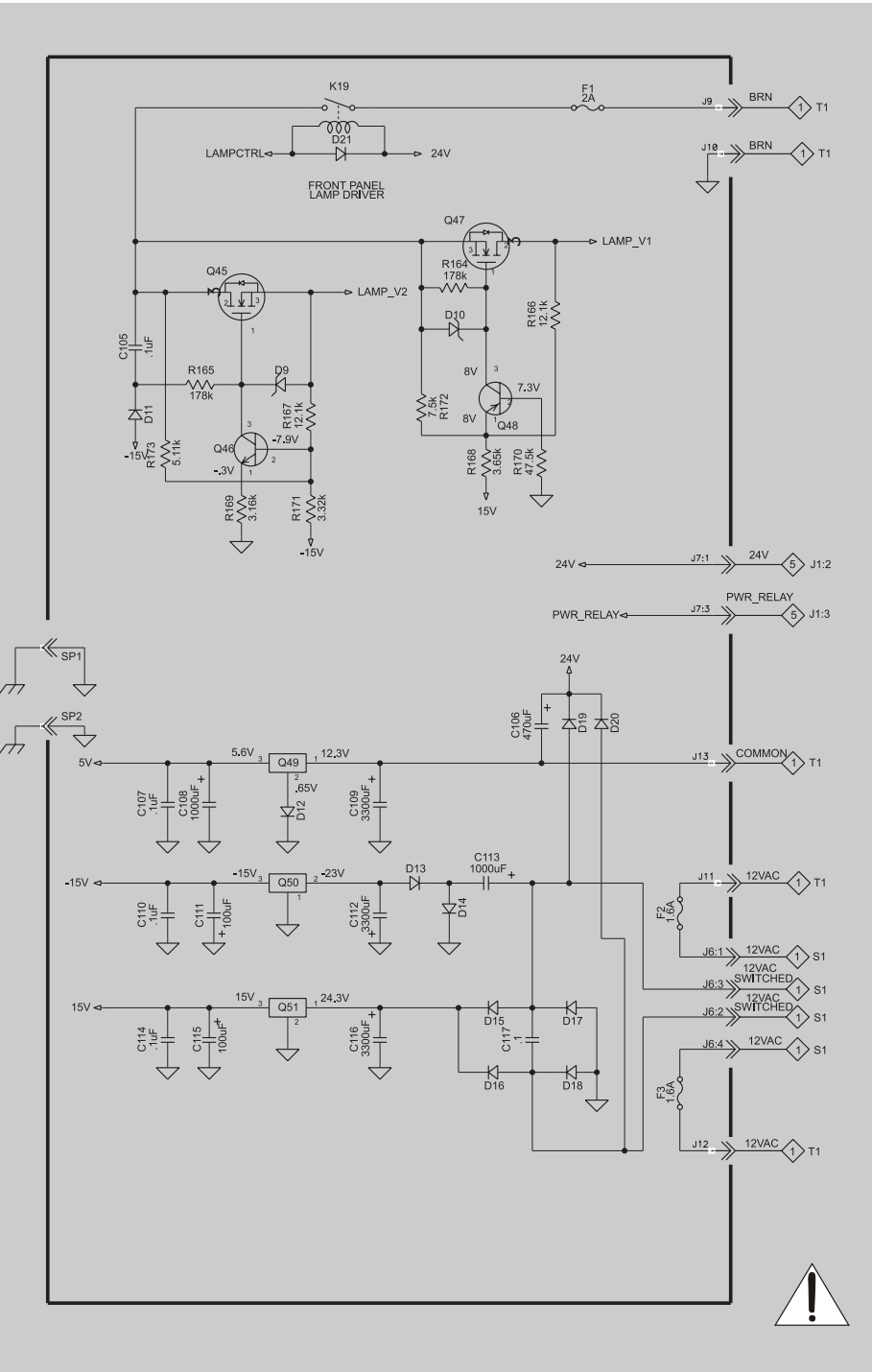
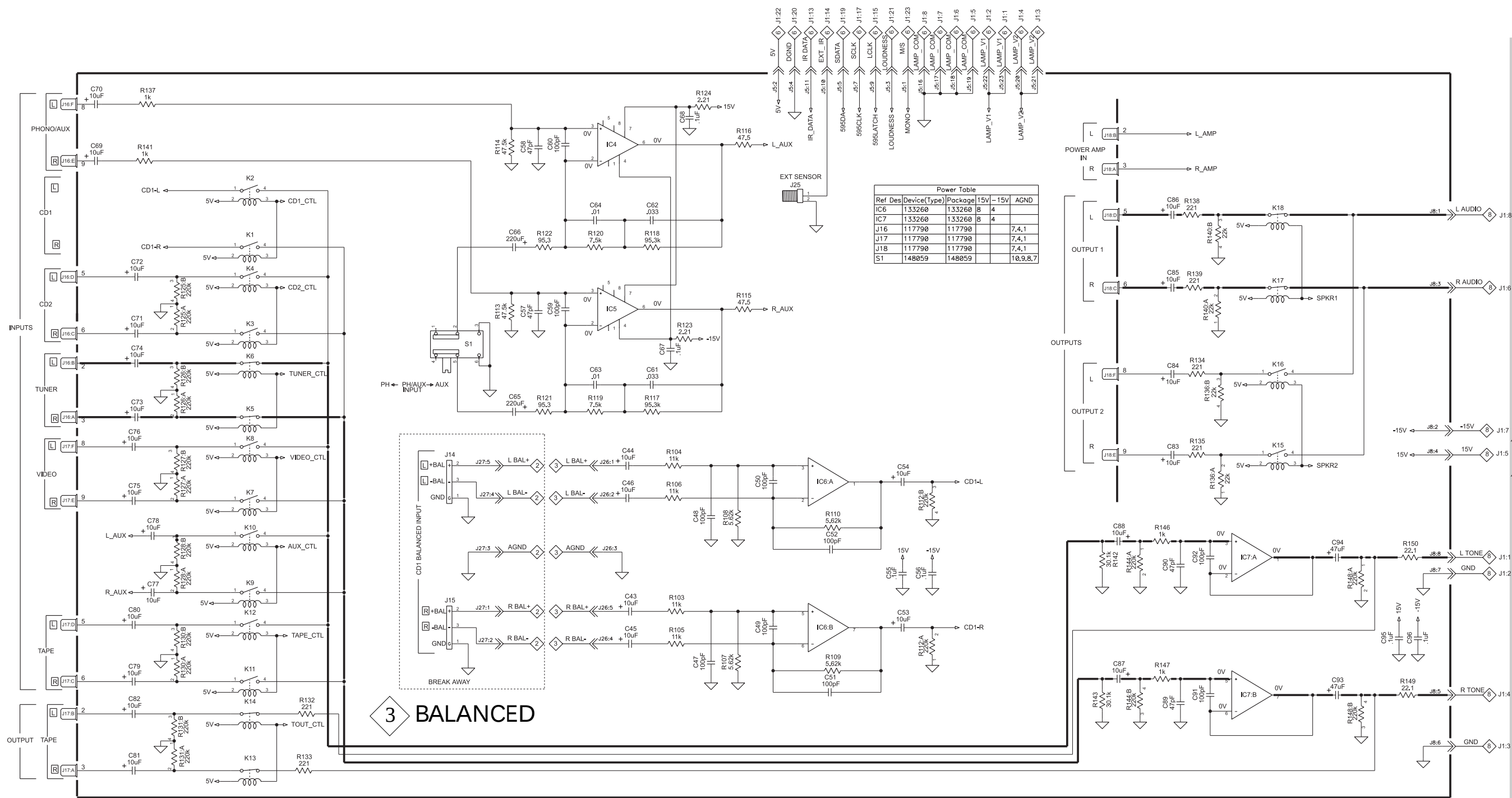
1 INTERCONNECT



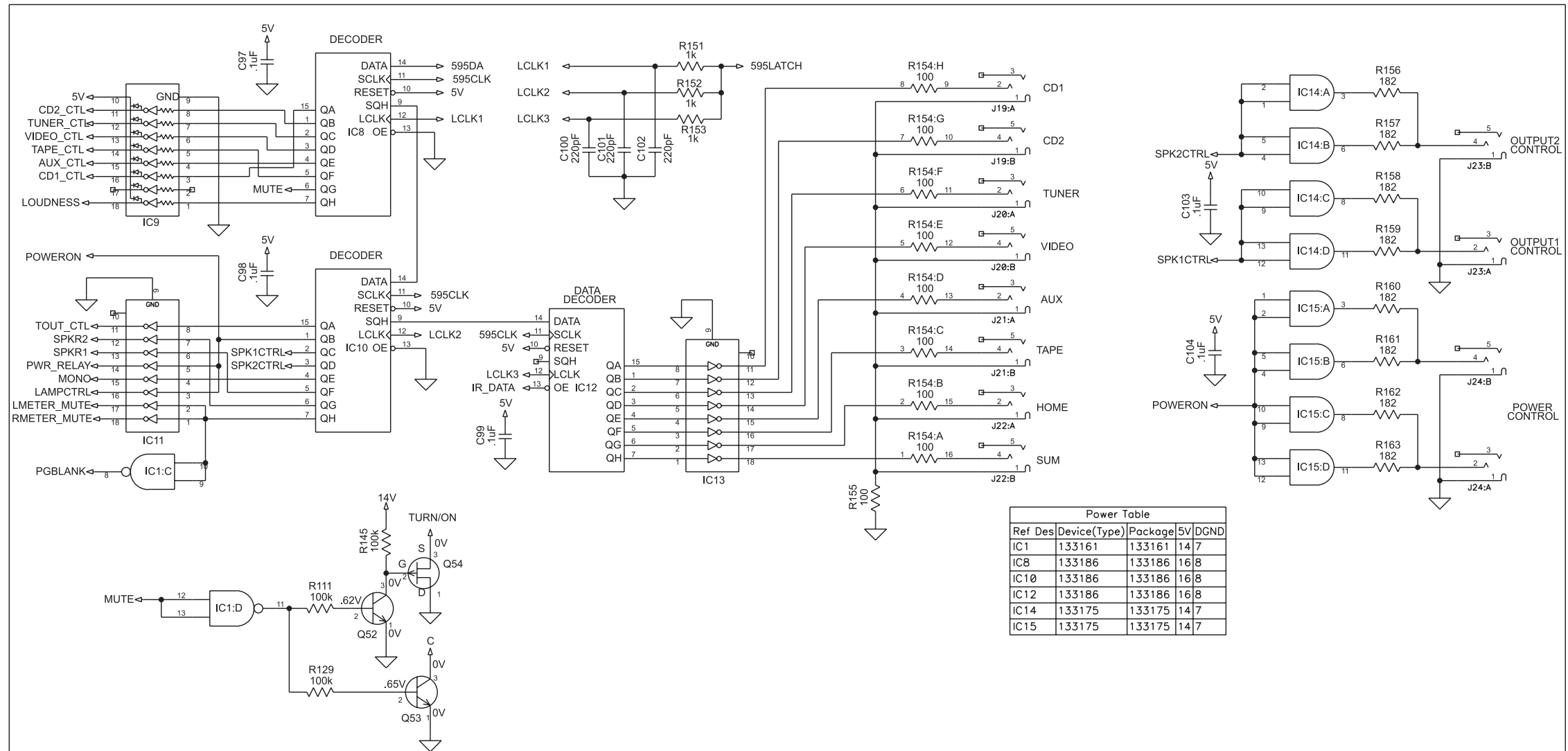


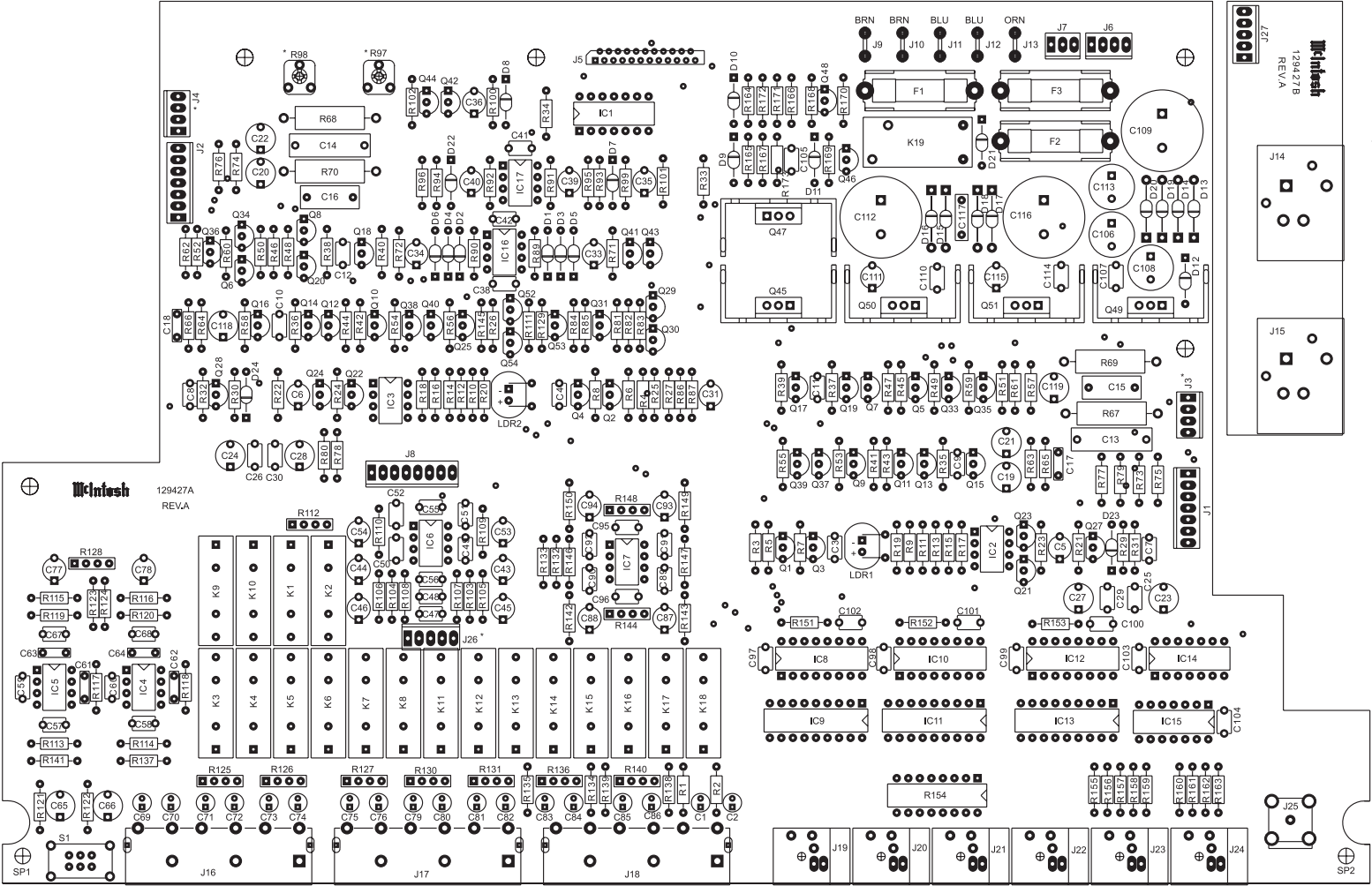
Power Table						
Ref Des	Device(Type)	Package	14V1	-14V1	-6V	15V
IC1	133161	133161				
IC2	133028	133028	8	4		
IC3	133028	133028			4	8
IC16	133028	133028			4	8
IC17	133260	133260			4	8



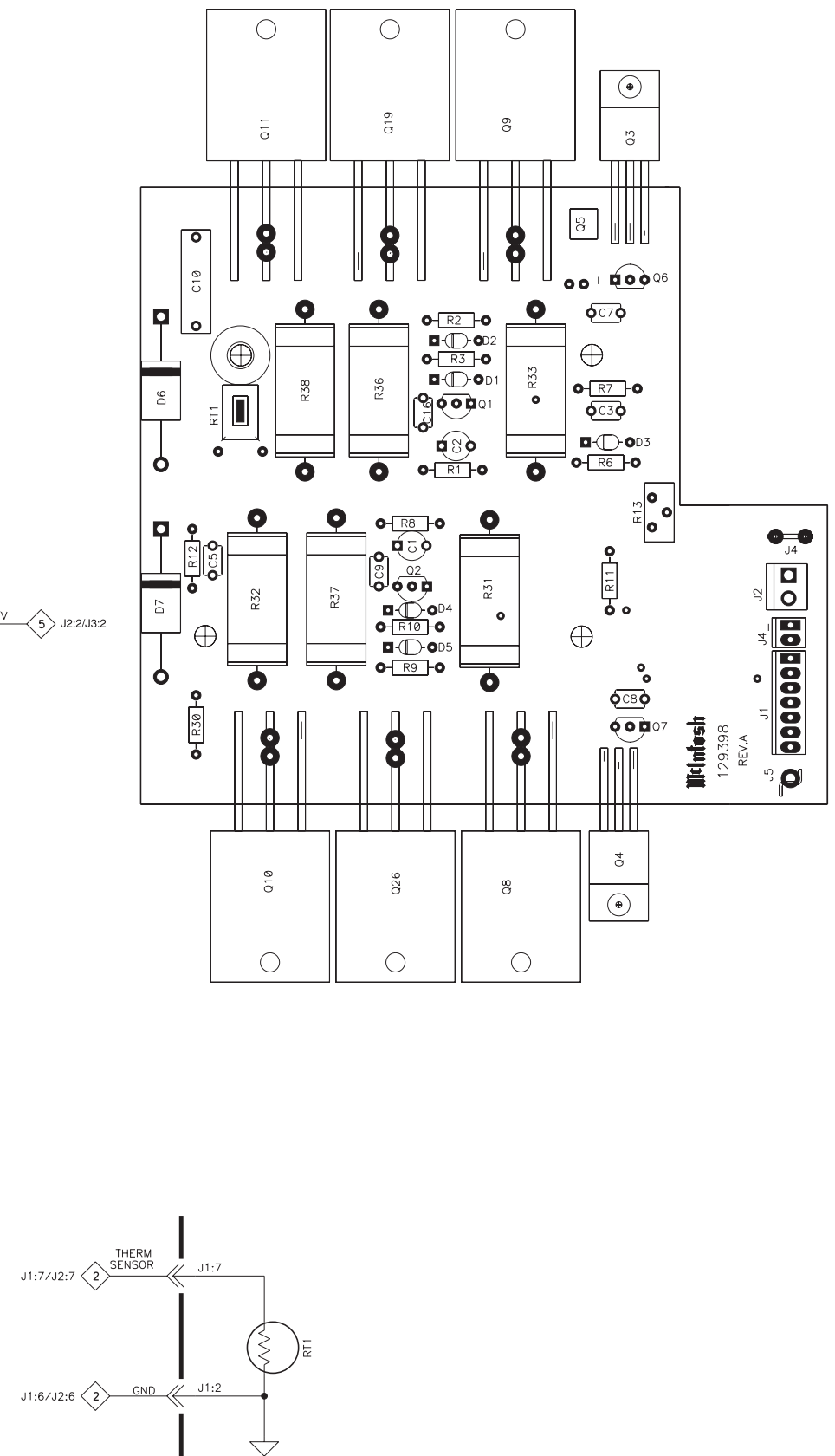
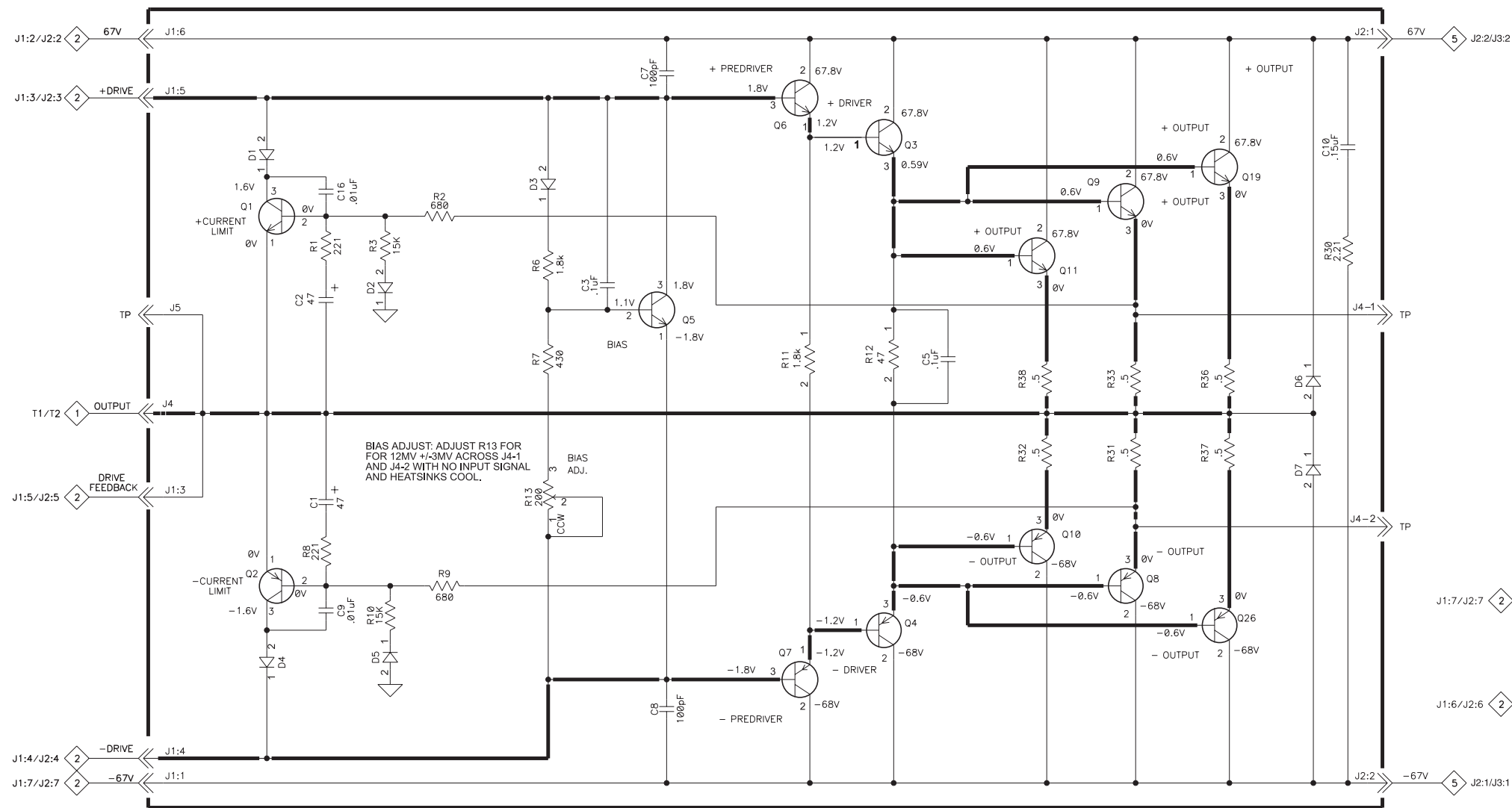


WARNING Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.



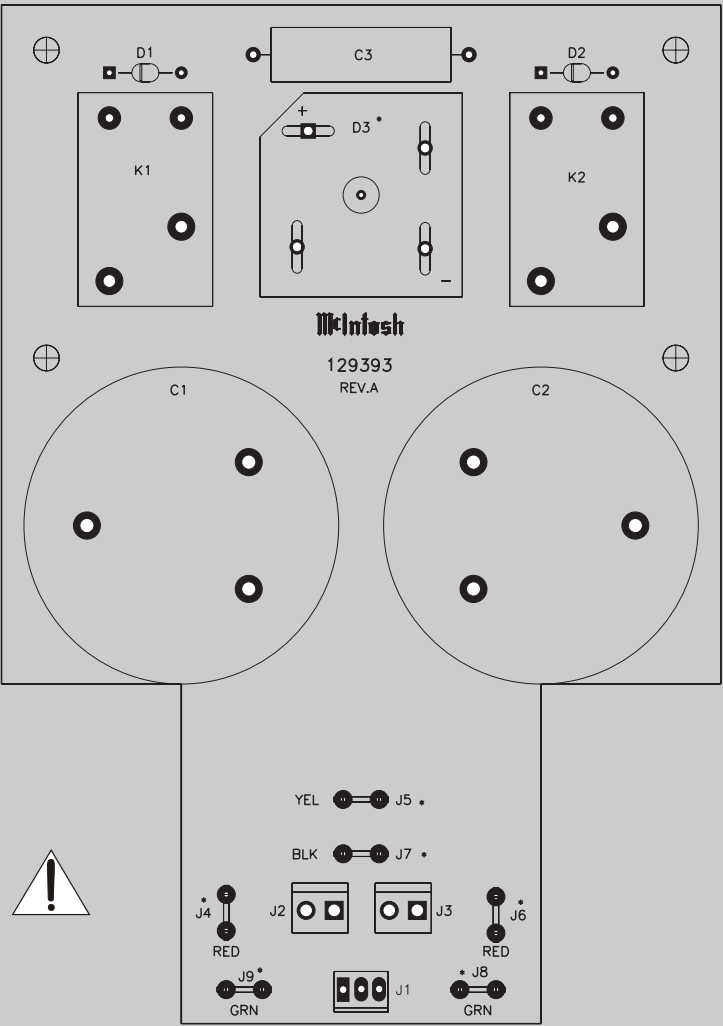
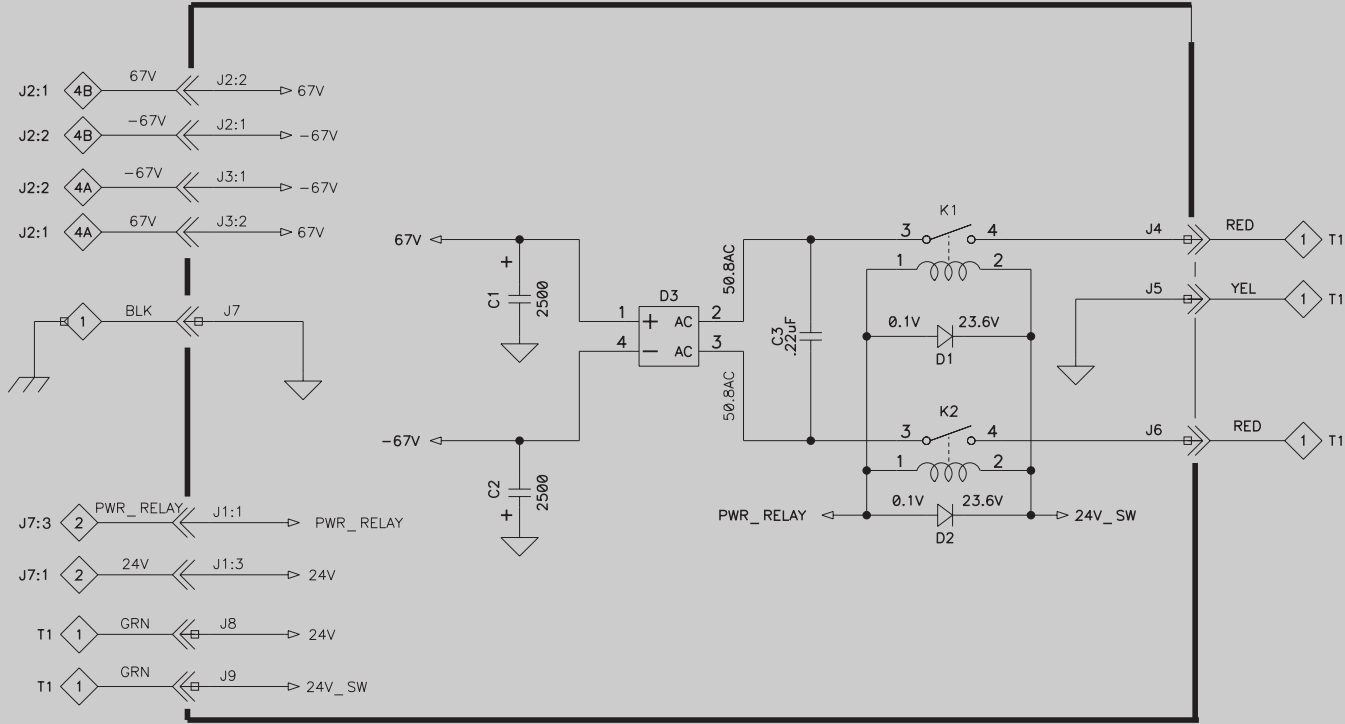


*DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PC BD

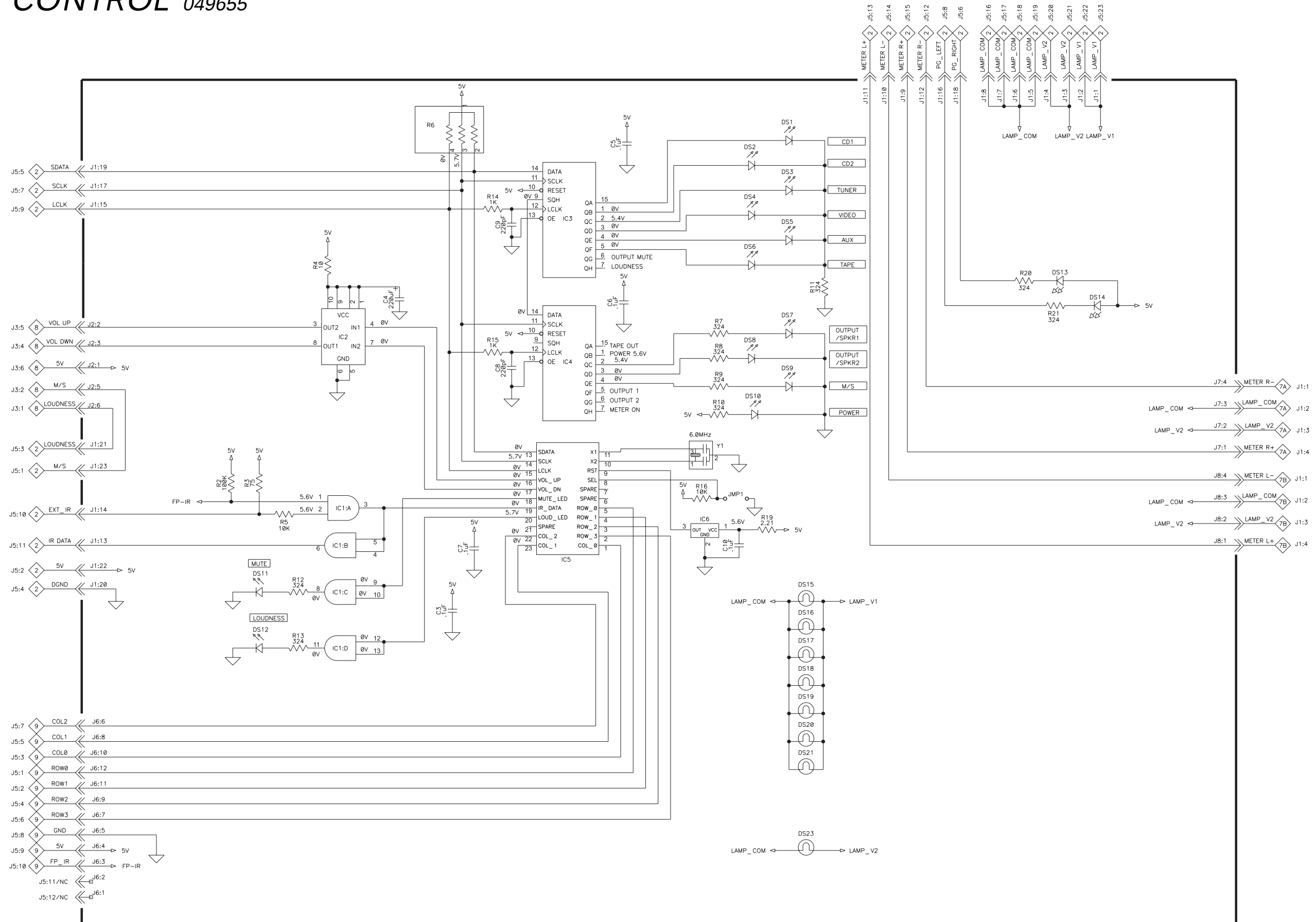


CAPACITOR 049653

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

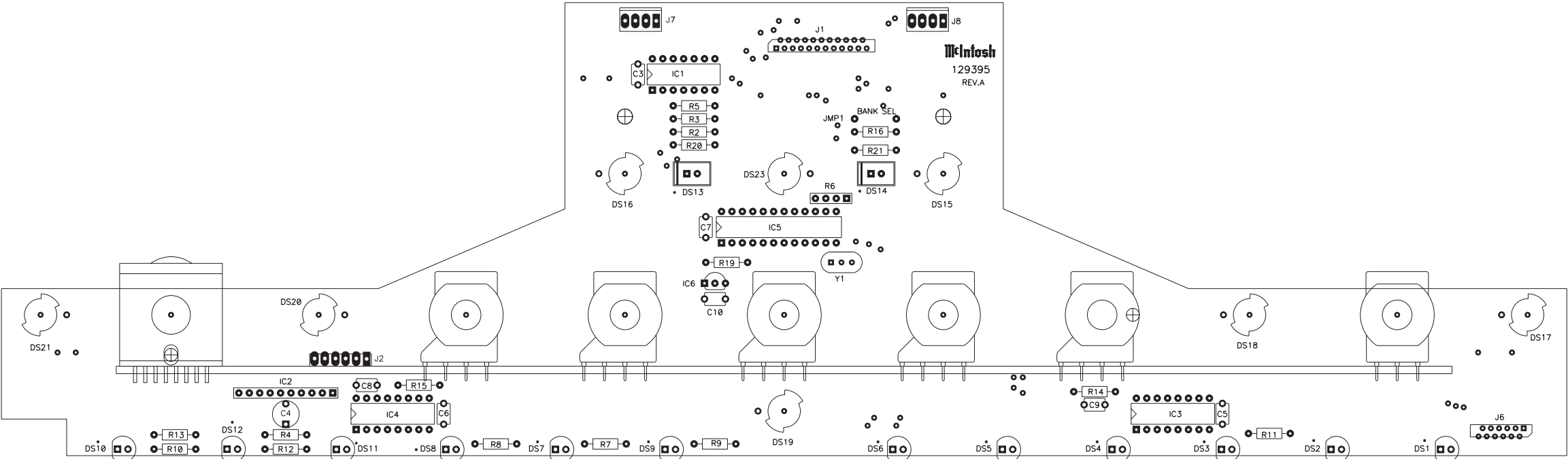


*DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PC BD



6

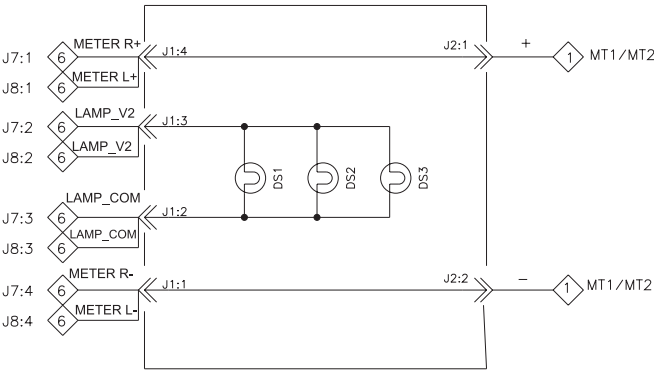
CONTROL PCB 049655



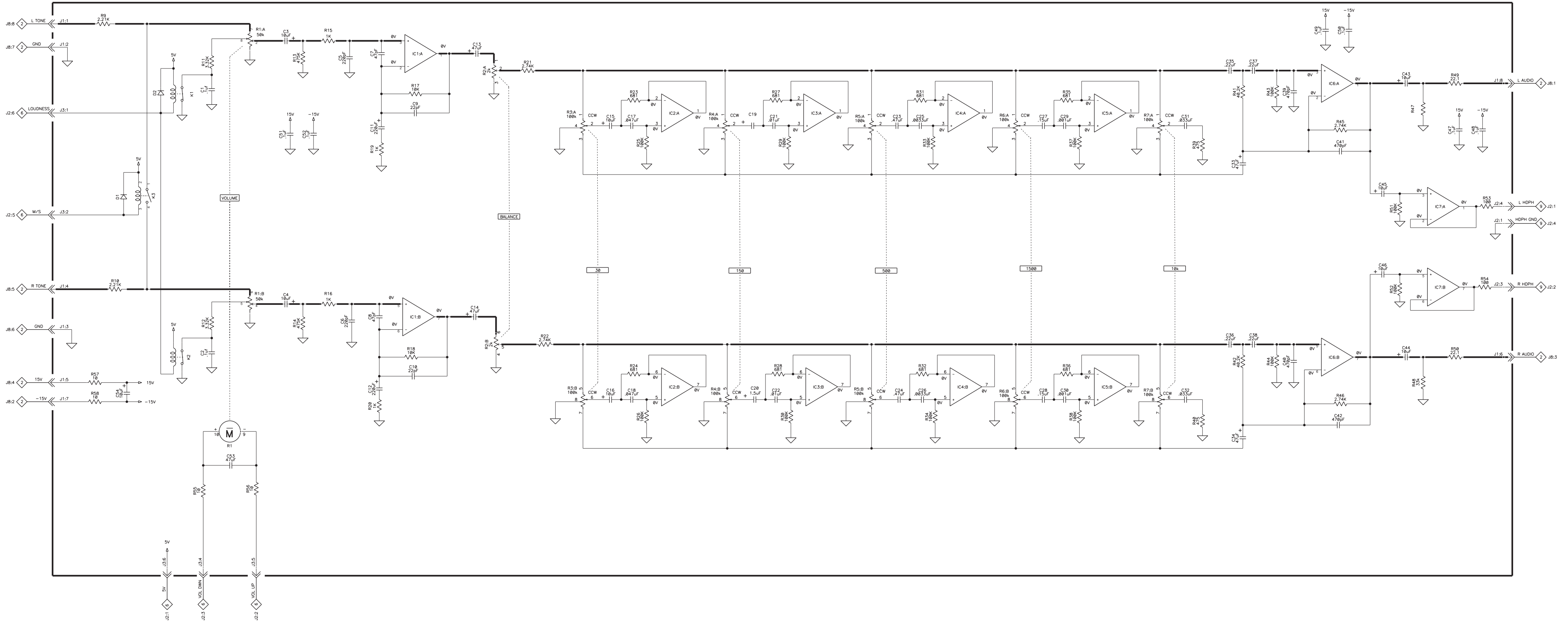
*DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PC BD

7A 7B

LAMP 049235

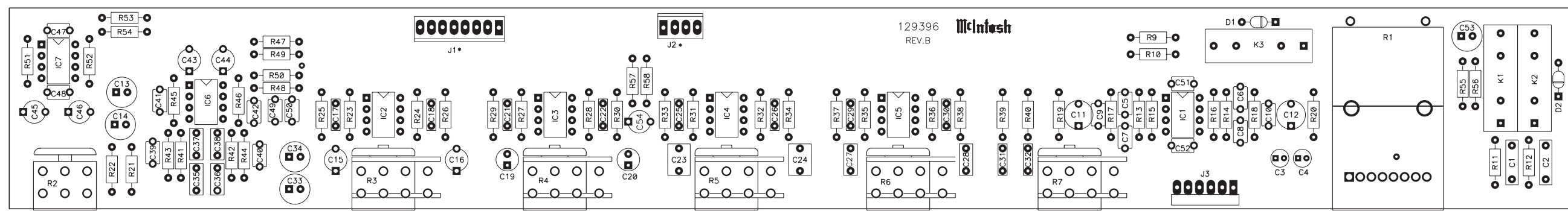


*DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PC BD



8

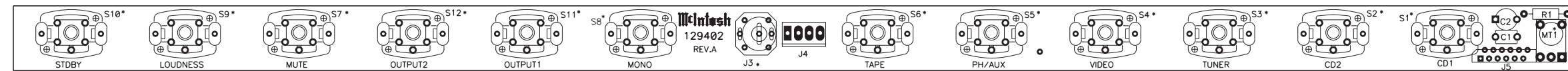
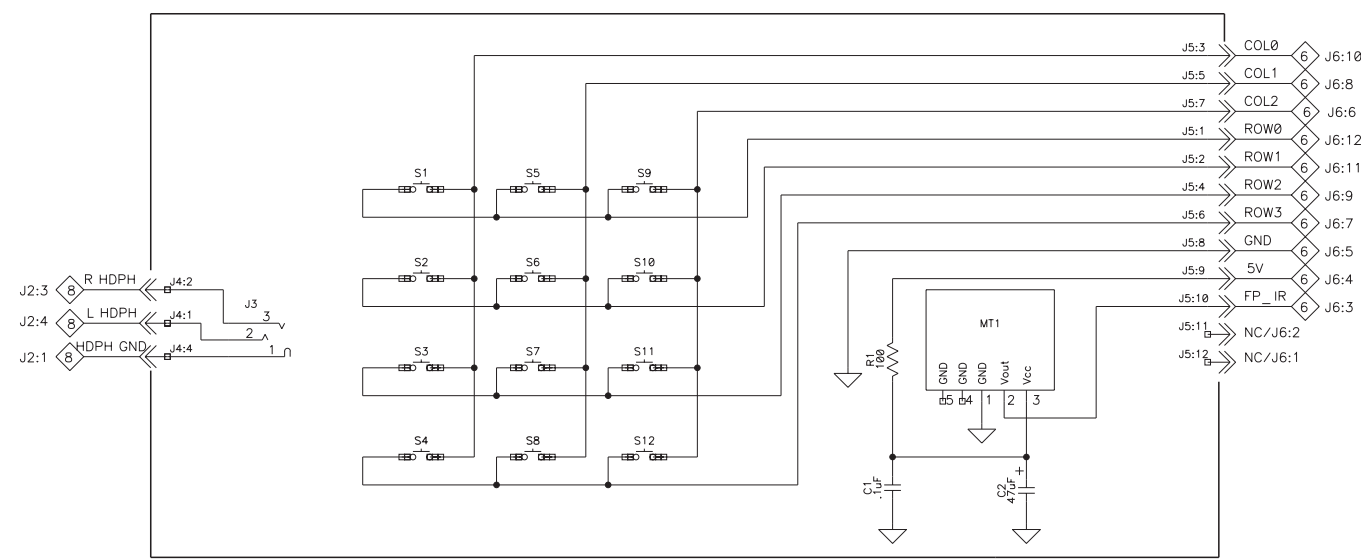
TONE 049656



*DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PC BD

9

KEYBOARD 049696



*DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PC BD

PARTS LIST

Reference No.	Description	Part No.
Interconnect		
F1	FUSE	08910400
MT1 MT2	METER	12707700
RT1 RT2	THERMISTOR	05200800
S1	SWITCH	14807300
T1	POWER TRANSFORMER	04967600
T2 T3	OUTPUT TRANSFORMER	04967500
TB1	TERMINAL BLOCK	07409100
049654 MAIN PCB		
C1 C2 C69 C70 C71 C72 C73 C74 C75 C76	CAP ELECT 10UF 16V	06638200
C3 C4 C9 C10 C11 C12 C47 C48 C49	CAP MONO 100PF 100V 10%	06130000
C5 C6 C93 C94	CAP ELECT 47UF 35V	06644600
C7 C8	CAP DISC .47UF 50V MONO	06124900
C13 C14	CAP POLY .15UF 10% 250V	06436300
C15 C16	CAP POLY .047UF 10% 250V	06436400
C17 C18	CAP MPOLY .0068UF 5% 63VDC	06431000
C19 C20 C21 C22 C23 C24 C27 C28 C31	CAP ELECT 10UF 100VDC	06646200
C25 C26 C29 C30 C38 C41 C42 C55 C56	CAP MONO .1UF 50V 20% Z5U	06130500
C33 C34 C39 C40 C43 C44 C45 C46 C53	CAP ELECT 10UF 50V	06644500
C35 C36	CAP ELECT 1UF 50V	06651000
C50 C51 C52 C59 C60 C91 C92	CAP MONO 100PF 100V 10%	06130000
C54 C77 C78 C87 C88	CAP ELECT 10UF 50V	06644500
C57 C58 C89 C90	CAP MONO 47PF 200V 10%	06129900
C61 C62	CAP M POLY .033UF 5% 63VDC	06431800
C63 C64	CAP M POLY .01UF 5% 63VDC	06431200
C65 C66 C118 C119	CAP ELECT 220UF 25V	06650700
C67 C68 C95 C96 C97 C98 C99 C103	CAP MONO .1UF 50V 20%	06130500
C79 C80 C81 C82 C83 C84 C85 C86	CAP ELECT 10UF 16V	06638200
C100 C101 C102	CAP MONO 220PF 100V 10%	06130100
C104 C105 C107 C110 C114	CAP MONO .1UF 50V 20% Z5U	06130500
C106	CAP ELECT 470UF 50V	06646900
C108 C113	CAP ELECT 1000UF 25V	06651300
C109 C112 C116	CAP ELECT 3300UF 35V	06650900
C111 C115	CAP ELECT 100UF 25V	06644700
C117	CAP M POLY .1UF 10% 100VDC	06425400
D1 D2 D3 D4 D5 D6 D7 D8 D11 D12	DIODE SILICON	07004700
D9 D10	DIODE ZENER 16V 5% 500MW	07011400
D13 D14 D15 D16 D17 D18 D19 D20	DIODE RECTIFIER	07013100
D21 D23 D24	DIODE SILICON	07004700
D22	DIODE ZENER 8.2V 1/2W	07013000
F1	FUSE 2A SLO-BLO 5X20	08908900
F1 F2 F3	HLDR FUSE 5X20MM PCB MNT	17815900
F2 F3	FUSE 5X20 1.6A IEC SLO-BLO	08909600
IC1	IC NAND 2 INPUT X 4	13316100
IC2 IC3 IC16	IC OPERATIONAL AMPLIFIER	13302800
IC4 IC5	IC OPR TINL AMP LOW NOISE	13306700
IC6 IC7 IC17	IC DUAL OPERATIONAL AMP	13326000
IC8 IC10 IC12	IC SHFT REG SER-PAR	13318600
IC9	IC OCTAL DAR TRNS ARRY	13336000
IC11 IC13	IC 8 LN DRIVER ARRAY	13318000
IC14 IC15	IC AND 2 INPUT X 4	13317500
J1 J2	CONN MALE 7 PIN	11721700
J3 J4 J6	CONN 4 PIN	11721500
J5	CONN 23PIN FFC	11771500
J7	CONN MALE 3 POS MTS100 NRML	11721400
J8	CONN 8 POS MALE FRCTION LK	11727500
J9 J10 J11 J12 J13	BLADE FASTON W/FEET	11770800
J14 J15	RECEPTACLE XLR FEMALE	11768500
J16 J17 J18	RCA JACK 3X2 WHT/RED 14MM	11779000
J19 J20 J21 J22 J23 J24	JACK HDPHNE DUAL BLACK 1/8	11754900
J25	CONN GOLD F RIGHT ANGLE	11766100
J26 J27	CONN MALE 5 PIN 0.1 POST	11721600

K1 K2 K3 K4 K5 K6 K7 K8 K9 K10 K11
K12 K13 K14 K15 K16 K17 K18
K19
LDR1 LDR2
Q1 Q2 Q3 Q4
Q5 Q6 Q7 Q8 Q19 Q20
Q9 Q10 Q11 Q12 Q13 Q14
Q15 Q16 Q27 Q28 Q29 Q30 Q37 Q38 Q48
Q17 Q18 Q21 Q22 Q23 Q24 Q25 Q31 Q33
Q34 Q41 Q42 Q43 Q44 Q46 Q52 Q53
Q35 Q36
Q39 Q40
Q45 Q47
Q49
Q50
Q51
Q54
R1 R2 R23 R24 R26 R61 R62 R91 R92
R3 R4 R49 R50 R53 R54 R84 R171
R5 R6 R15 R16
R7 R8 R93 R94
R9 R10 R11 R12 R113 R114 R170
R19 R20 R137 R141 R146 R147 R151
R21 R22 R77 R78 R79 R80 R155
R25
R27
R29 R30 R63 64 R101 R102
R35 R36 R37 R38
R39 R40 R59 R60
R41 R42 R43 R44 R45 R46 R47 R48 R132
R51 R52 R55 R56 R57 R58 R65 R66
R67 R68
R69 R70
R71 R72
R73 R74 R75 R76
R81 R83 R166 R167
R82 R87
R85
R86 R89 R90 R111 R129 R145
R95 R96
R97 R98
R99 R100
R103 R104 R105 R106
R107 R108 R109 R110
R112 R125 R126 R127 R128 R130 R131
R115 R116
R117 R118
R119 R120 R172
R121 R122
R123 R124
R13 R14 R17 R18 R31 R32 R33 R34
R133 R134 R135 R138 R139
R136 R140
R142 R143
R144 R148
R149 R150
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R163
R164 R165
R168
R169
R173
S1
SP1 SP2

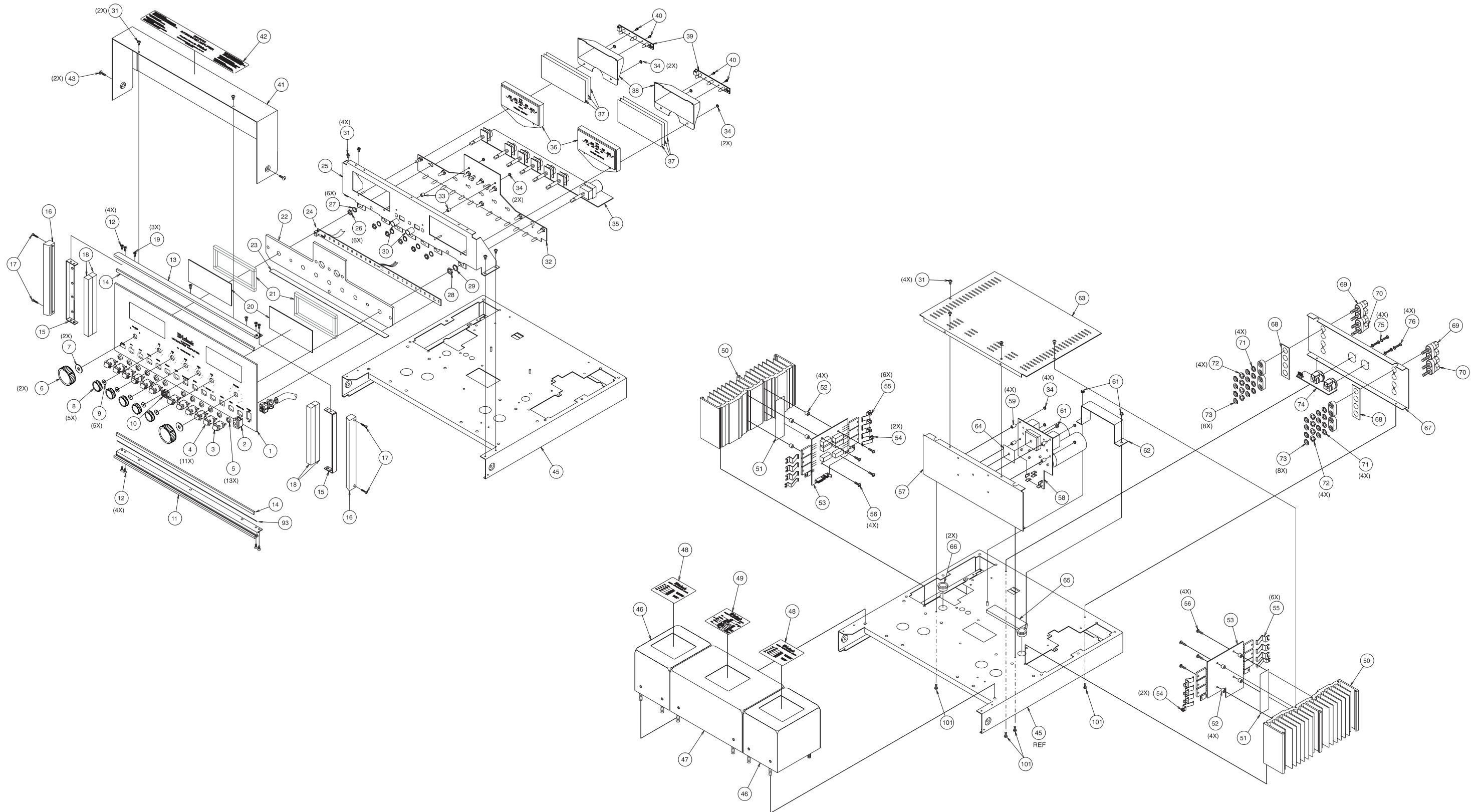
RLY REED FORM 1A 5V 500OHMS 08705000
RLY REED FORM 1A 5V 500OHMS 08705000
RELAY POWER TV5 24V 08706900
LDR NETWORK VTL5C9 14417900
TRANSISTOR N JFET 13222200
TRANSISTOR NPN 13225400
TRANSISTOR PNP 120V 13225500
TRANSISTOR PNP 13222400
TRANSISTOR NPN 2K/REEL 13222300
TRANSISTOR NPN 2K/REEL 13222300
TRANSISTOR PNP 2SA32IC 13228600
TRANSISTOR NPN 25C3334C 13228500
TRANS POWER N-CHN ENHANCE 13224200
IC REGULATOR +5V 13310800
IC REGULATOR -15V 13315300
IC REGULATOR 15V 13315400
TRANS P CHAN JUNCTION FET 13222600
RES MF 10K 1% 1/4W 14405300
RES MF 3.32K 1% 1/4W 14409500
RES MF 475 1% 1/4W 14408600
RES MF 10M 1% 1/4W 14426400
RES MF 47.5K 1% 1/4W 14410800
RES MF 1K 1% 1/4W 14409000
RES MF 100 1% 1/4W 14419600
RES MF 165K 1% 1/4W 14411600
RES MF 68.1K 1% 1/4W 14408100
RES MF 4.75K 1% 1/4W 14409700
RES MF 806 1% 1/4W 14408900
RES MF 187K 1% 1/4W 14440600
RES MF 221 1% 1/4W 14417200
RES MF 324 OHM 1% 1/4W 14433800
RES 1.8 OHM 2W 5% WW FP 13923000
RES WW 2.7 OHM 2W 5% FP 13921800
RES MF 27.4K 1% 1/4W 14414100
RES FP 47 OHM 5% 1/4W 13704200
RES MF 12.1K 1% 1/4W 14415400
RES MF 2.1K 1% 1/4W 14429900
RES MF 20K 1% 1/4W 14410400
RES MF 100K 1% 1/4W 14411300
RES MF 274K 1% 1/4W 14444100
POT TRIM 100K OHM 13450200
RES MF 2.21M 1/4W 14426500
RES MF 11K 1% 1/4W 14410100
RES MF 5.62K OHM 1% 1/4W 14444700
RES NETWORK 2X220K ISO 14426200
RES MF 47.5 1% 1/4W 14444200
RES MF 95.3K 1% 1/4W 14412700
RES MF 7.5K 1% 1/4W 14421000
RES MF 95.3 1% 1/4W 14422000
RES MF 2.21 OHM 1/4W 1% 14437800
RES MF 267K 1% 1/4W 14411800
RES MF 221 1% 1/4W 14417200
RES NET 2 X 22K ISOLATED 14436600
RES MF 30.1K 1% 1/4W 14422500
RES NETWORK 2X220K ISO 14426200
RES MF 22.1 1% 1/4W 14416000
RES MF 1K 1% 1/4W 14409000
RES NETWORK 8X100 ISO 14427500
RES MF 182 1/4W 1% 14427300
RES MF 182 1/4W 1% 14427300
RES MF 178K 1% 1/4W 14442000
RES MF 3.65K 1% 1/4W 14418900
RES MF 3.16K 1% 1/4W 14419900
RES MF 5.11K 1% 1/4W 14408300
SWITCH SLIDE 14805900
BRACKET PCB CARD MOUNTING 00361100

PARTS LIST con't

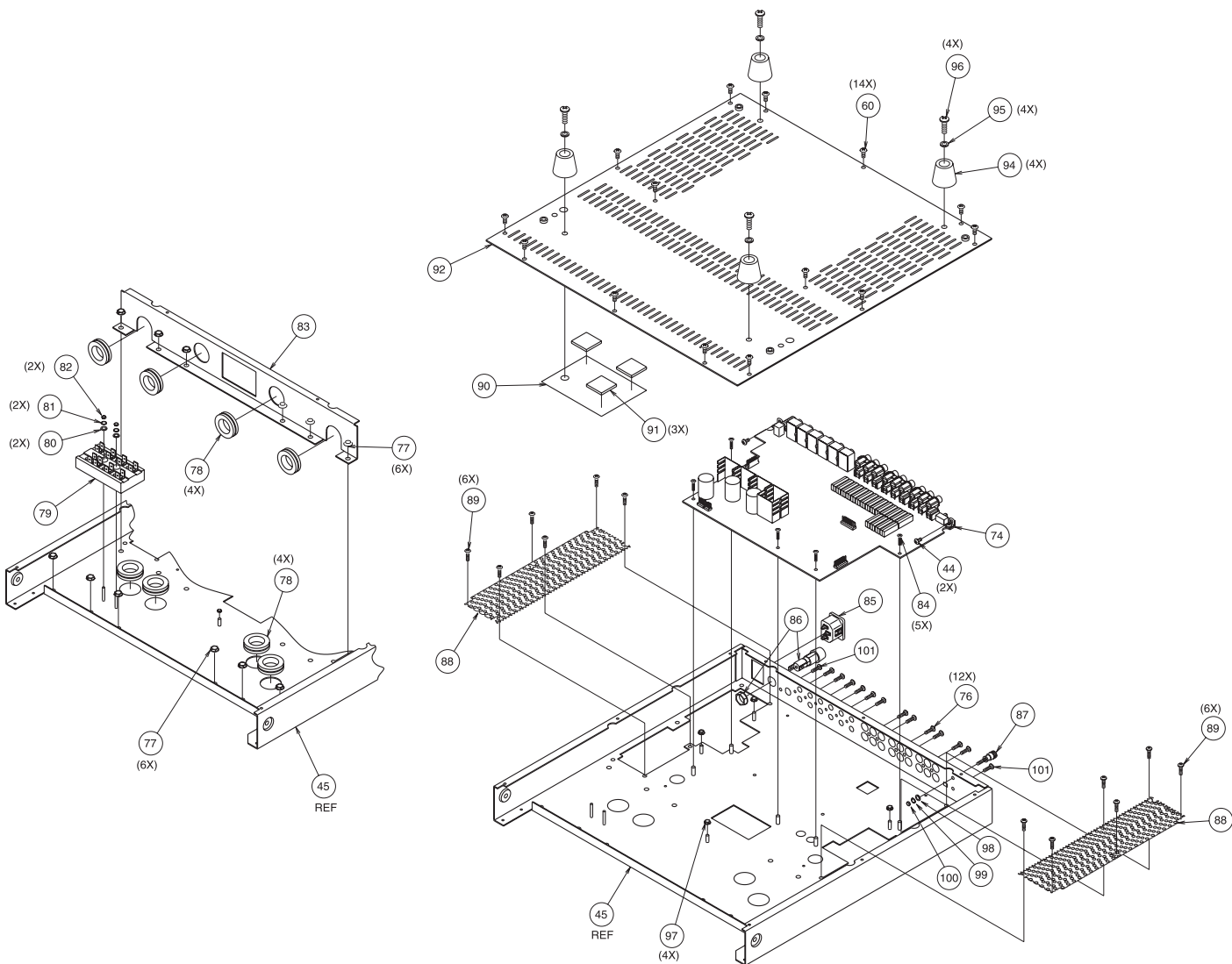
Reference No.	Description	Part No.
049665 HEATSINK PCB		
C1 C2	CAP ELECT 47UF 35V	06644600
C3 C5	CAP MONO .1UF 50V 20% Z5U	06130500
C7 C8	CAP MONO 100PF 100V 10% NPO	06130000
C9 C16	CAP MONO .01UF 50V 20% X7R	06130400
C10	CAP POLYPROP 0.15UF 10% 250VDC	06436300
D1 D2 D3 D4 D5	DIODE SILICON	07004700
D6 D7	DIODE 200V 6A	07013300
J1-	CONN MALE 7 PIN	11721700
J2-	CONN HEADER 2 PIN 0.156	11740400
J4	BLADE FASTON W/FEET	11770800
J4-	CONN MALE 2 PIN	11721300
Q1	TRANSISTOR NPN SILICON	13217100
Q2	TRANSISTOR PNP SILICON	13217200
Q6	TRANSISTOR NPN	13226200
Q7	TRANSISTOR PNP	13226100
R1 R8	RES MF 221 1% 1/4W	14417200
R2 R9	RES MET OX 680 5% .5W	13709300
R3 R10	RES MF 15K 1% 1/4W	14441200
R6 R11	RES MET OX 1.8K 5% .5W	13709400
R7	RES MET OX 430 5% .5W	13709500
R12	RES MET OX 47 5% .5W	13709600
R13	POT TRIM 200 OHM 20% HORIZ AD	13439000
R30	RES MF 2.21 OHM 1/4W 1%	14437800
R31 R32 R33 R36 R37 R38	RES WW .5 OHM 5W 5%	13917700
RT1	SENSOR THERMAL	14424900
049653 CAPACITOR PCB		
C1 C2	CAP ELECT 25000UF 75V	06650400
C3	CAP M POLY .22UF 20% 400VDC	06426700
D1 D2	DIODE SILICON	07004700
D3	DIODE BRIDGE RECTIFIER	07013900
J1	CONN MALE 3 POS MTS100 NORMAL	11721400
J2 J3	CONN HEADER 2 PIN 0.156	11740400
J4 J5 J6 J7 J8 J9	BLADE FASTON W/FEET	11770800
K1 K2	RELAY 24V TV8/VDE CERTIFIED	08707200
049655 CONTROL PCB		
C3 C5 C6 C7 C10	CAP MONO .1UF 50V 20% Z5U	06130500
C4	CAP ELECT 220UF 25V	06650700
C8 C9	CAP MONO 220PF 100V 10% NPO	06130100
DS1 DS2 DS3 DS4 DS5 DS6 DS7 DS8 DS9	LED LAMP RED	07009300
DS10 DS11 DS12	LED LAMP RED	07009300
DS13 DS14	LED AMBER	05813300
DS15 DS16 DS17 DS18 DS19 DS20	LAMP INCANDESCENT 14V 100MA	05815300
DS21 DS23	LAMP INCANDESCENT 14V 100MA	05815300
IC1	IC AND 2 INPUT X 4	13317500
IC2	IC DC MOTOR DRIVER	13319100
IC3 IC4	IC SHFT REG SER-PAR	13318600
IC5	IC PROGRAMMED	13343800
IC5	SOCKET IC 24-PIN	17813900
IC6	IC MICRO RESET POS	13324100
J1	CONN 23PIN FFC	11771500
J6	CONN 12 PIN FFC	11772000
J7 J8	CONN 4 PIN	11721500
R2	RES MF 100K 1% 1/4W	14411300
R3	RES MF 75 OHM 1% 1/4W	14444400
R4	RES MF 10 1% 1/4W	14415700
R5 R16	RES MF 10K 1% 1/4W	14405300
R6	RES NETWORK 3X10K BUSSED	14429000
R7 R8 R9 R10 R11 R12 R13 R20 R21	RES MF 324 OHM 1% 1/4W	14433800

R14 R15	RES MF 1K 1% 1/4W	14409000
R19	RES MF 2.21 OHM 1/4W 1%	14437800
Y1	RESONATOR CERAMIC 6.0MHZ W/CAP	18003900
049235 LAMP PCB		
DS1 DS2 DS3	LAMP 14V #7373	05812000
J1	4 PIN RT. ANGLE	11724000
J2	CONN. 2 POS. R-ANGLE	11727400
049656 TONE PCB		
C1 C2	CAP M POLY .1UF 10% 100VDC	06425400
C3 C4	CAP ELECT 10UF 16V (4X5 CASE)	06638200
C5 C6	CAP MONO 220PF 100V 10% NPO	06130100
C7 C8	CAP MONO 47PF 200V 10% NPO	06129900
C9 C10	CAP MONO 22PF 200V 10% NPO	06129800
C11 C12	CAP ELECT 220UF 25V	06650700
C13 C14 C33 C34	CAP ELECT 47UF 50V	06621500
C15 C16 C43 C44 C45 C46 C54	CAP ELECT 10UF 50V	06644500
C17 C18	CAP M POLY .047UF 5% 63VDC	06432000
C19 C20	CAP ELECT 1.5UF 10% 50V	06627100
C21 C22	CAP M POLY .01UF 5% 63VDC	06431200
C23 C24	CAP M POLY .47UF 5% 50/63VDC	06433300
C25 C26	CAP MPOLY .0033UF 5% 63VDC	06430600
C27 C28	CAP M POLY .15UF 5% 63VDC	06432700
C29 C30	CAP POLY 0.001MF 5% 63VDC	06430000
C31 C32	CAP M POLY .033UF 5% 63VDC	06431800
C35 C36 C37 C38	CAP M POLY .22UF 5% 63VDC	06432900
C39 C40 C41 C42	CAP MONO 470PF 100V 10% NPO	06130200
C47 C48 C49 C50 C51 C52	CAP MONO .1UF 50V 20% Z5U	06130500
C53	CAP ELECT 47UF 10V BP	06637800
D1 D2	DIODE SILICON	07004700
IC1 IC6 IC7	IC DUAL OPERATIONAL AMPLIFIER	13326000
IC2 IC3 IC4 IC5	IC OPERATIONAL AMPLIFIER	13302800
J1	CONN 8 POS MALE FRICTION LOCK	11727500
J2	CONN 4 PIN	11721500
J3	CONN MALE 6 POS RT ANGLE	11770700
K1 K2 K3	RELAY REED FORM 1A 5V 500 OHMS	08705000
R1	POT 50KAX2	13449000
R2	POT BALANCE 2KOHM	13446400
R3 R4 R5 R6 R7	POT EQUAL	13445700
R9 R10	RES MF 2.21K 1% 1/4W	14429800
R11 R12	RES MF 3.32K 1% 1/4W	14409500
R13 R14	RES MF 475K 1% 1/4W	14436400
R15 R16 R19 R20	RES MF 1K 1% 1/4W	14409000
R17 R18	RES MF 10K 1% 1/4W	14405300
R21 R22 R45 R46	RES MF 2.74K 1% 1/4W	14430400
R23 R24 R27 R28 R31 R32 R35 R36	RES MF 681 1% 1/4W	14419500
R25 R26R29 R30 R33 R34 R37 R38 R43	RES MF 100K 1% 1/4W	14411300
R39 R40	RES MF 475 1% 1/4W	14408600
R41 R42	RES MF 40.2K 1% 1/4W	14410700
R44 R51 R52	RES MF 100K 1% 1/4W	14411300
R47 R48	RES MF 33.2K 1% 1/4W	14401500
R49 R50	RES MF 22.1 1% 1/4W	14416000
R53 R54	RES MF 100 1% 1/4W	14419600
R55 R56 R57 R58	RES MF 10 1% 1/4W	14415700
049696 KEYBOARD PCB		
C1	CAP MONO .1UF 50V 20% Z5U	06130500
C2	CAP ELECT 47UF 35V	06644600
J3	JACK PHONO 1/8 STEREO VER	11746200
J4	CONN 4 PIN	11721500
J5	CONN 12 PIN FFC	11772000
MT1	GASKET SENSOR	09437700
MT1	RECEIVER IR	12104100
R1	RES MF 100 1% 1/4W	14419600
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12	SWITCH TACT	15005800

EXPLODED VIEW



EXPLODED VIEW



EXPLODED PARTS LIST

Item No.	Part No.	Description			
1	016456	GLASS	50	018691	HEATSINK
2	148073	INPUT POWER SWITCH	51	084194	ISOSTRATE
3	017531	PUSHBUTTON ASSY RED	52	112087	SPACER PCB 1/4
4	017517	PUSHBUTTON ASSY BLK	53	749665	HEATSINK PCB ASSY
5	078033	O-RING	54	414118	CLIP TRANSISTOR 218
6	749695	KNOB ASSY	55	414119	CLIP TRANSISTOR 214
7	104017	WASHER FELT BLK 3/4 X 1/4 X 1/16	56	401059	SCREW SM 6 X 5/8 PH PAN TYPE A
8	749694	KNOB ASSY	57	005188	SUBREAR PANEL
9	104073	WASHER FELT 1/4 X 5/8 MPI-4	58	749653	CAPACITOR PCB ASSY
10	017854	BEZEL HEADPHONE	59	412060	SPACER #4 X 5/16 STEEL
11	018707	BOTTOM EXTRUSION	60	401078	SCREW TAP 8-32 X 5/16 PH PAN
12	400149	SCREW MACH 6-32 X 1/4 FL U/H ST	61	402003	NUT MACH 6-32 W/LOCK
13	018738	TOP EXTRUSION	62	005202	STRAP
14	094016	TAPE FOAM 1/4 X 1/8	63	005185	TOP COVER
15	004899	BRACKET EXTRUSION	64	084135	THERMAL PAD
16	018612	ENDCAP 7"	65	094401	TAPE FOAM 1/4 X 1 3M #4504
17	401042	SCREW TS 4-40 X 1/2 SLOT FILLISTER	66	078034	GROMMET
18	094360	TAPE FOAM 1/2 X 1/2	67	005453	REAR PANEL
19	401172	SCREW TC 6-32 X 1/4 PH FL U/C	68	004800	PLATE OUTPUT
20	017363	PLEXIGLAS FILTER LT BLUE	69	084189	BINDING POST DUAL RED-RED
21	094017	TAPE FOAM 1/4 X 1/4	70	084124	BINDING POST DUAL
22	017864	PLEXI MA6900	71	104148	WASHER FLAT BRASS
23	022314	FISHPAPER SHIELD	72	104130	WASHER LOCK #10 SLIT PHOS/BRNZ
24	749696	KEYBOARD PCB ASSY	73	110009	NUT M5 X 0.8 BRASS W/GOLD PLATE
25	005475	SUBPANEL	74	750156	MAIN PCB ASSY
26	410004	NUT CONTROL M7 X 0.75 HEX	75	404142	WASHER LOCK 2.5mm INT STAR ZINC
27	404013	WASHER LOCK 5/16 X .435 X .002	76	101197	SCREW HI/LO 4-24 X 3/8 PH RD BLK
28	410002	NUT 5 CONTROL M9 X 0.75	77	102006	NUT MACH 10-32 W/LOCK
29	404014	WASHER LOCK 3/8 X .507 X .002 INT STAR	78	078025	GROMMET RUBBER 3/4
30	077032	SLEEVING FIBERGLASS 7/16	79	074091	TERMINAL BLOCK AC
31	401054	SCREW TAPTITE 6-32 X 1/4 PH PAN BLK	80	404001	WASHER FLAT STEEL 4 X 9/32 X .025
32	750510	CONTROL PCB ASSY	81	404004	WASHER LOCK 5 X .255 INT STAR
33	021165	SPACER 4 X 1/4	82	402022	NUT MACH 4-40 X 3/16 X 1/16
34	402001	KEP NUT 4-40 CADMIUM PLATE	83	005194	BRACKET CHASSIS SUPPORT
35	749656	TONE PCB ASSY	84	400256	SEMS MS 4-40 X 3/8 CCA PAN
36	124092	METER	85	117487	RECEPTACLE AC LINE
37	092342	FILTER PALE BLUE	86	178161	HOLDER FUSE 5 X 20mm IEC
38	017447	LIGHT BOX PLASTIC	87	084217	GROUND POST GOLD
39	749235	LAMP PCB ASSY	88	005401	HEATSINK VENT
40	114072	RIVET NYLON POP-IN	89	401250	SCREW TT 6-32 X 1/2 PH PAN
41	005714	DUST COVER	90	017869	SHIELD
42	126819	TOP COVER DECAL	91	094332	TAPE MTG DBL COATED 1/8 THK
43	400287	SCREW MACH 8-32 X 3/8 PH TRUSS HD	92	005634	BOTTOM COVER
44	400250	SCREW MACH SEMS 6-32 X 1/4 PH PAN	93	404072	CORD DIAL .027
45	005702	CHASSIS	94	017218	FOOT BLACK PLASTIC
46	749675	OUTPUT TRANSFORMER	95	404080	WASHER FLAT #10 CLEAR ZINC
47	749676	POWER TRANSFORMER	96	400159	SCREW MACH 10-32 X 3/4 PH PAN
48	166128	DECAL OUTPUT TRANSFORMER	97	402020	NUT MACH 6-32 SELF LOCK
49	166129	DECAL POWER TRANSFORMER	98	104072	WASHER 1/4 IDX .408 X .18
			99	104078	WASHER LOCK #8 STAR
			100	410014	NUT 4 X .7
			101	101222	SCREW TT SEMS 6-32 X 1/4

REPACKING INSTRUCTIONS

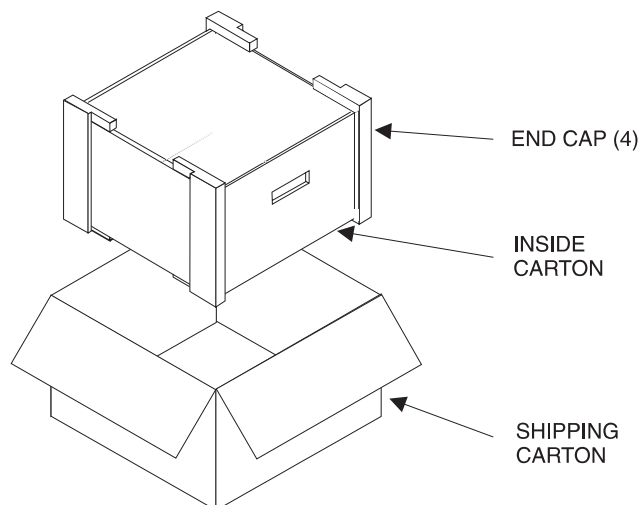
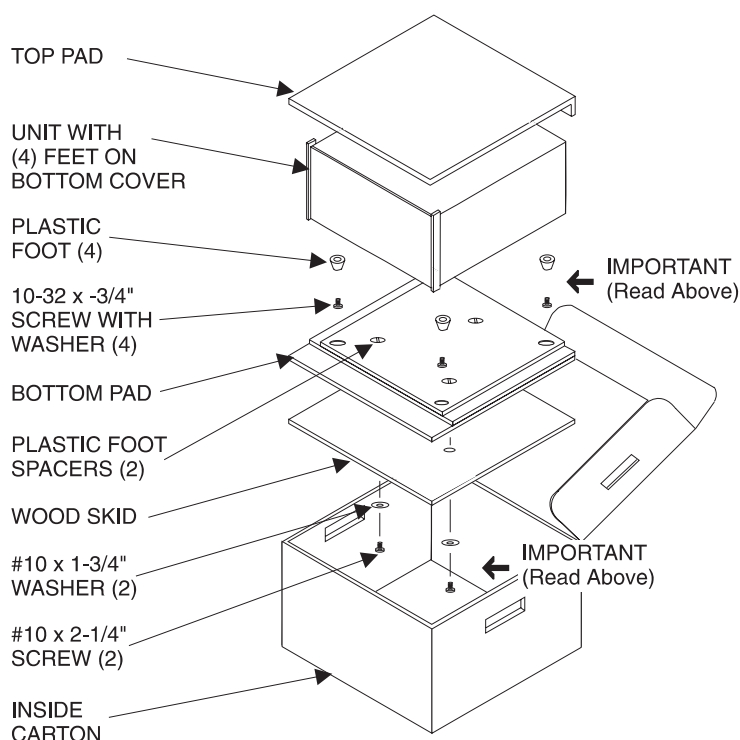
In the event it is necessary to repack the unit for shipment, the unit must be packed exactly as shown below.

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. Two #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	034194	Bottom pad
2	017218	Plastic foot (spacer)
1	033699	Wood skid
2	101204	#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	104080	#10 x 7/16" Flat washer



MA6900

INTEGRATED AMPLIFIER

SERVICE MANUAL

The continuous improvement of its products is the policy of McIntosh Laboratory Incorporated, who reserve the right to improve design without 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.

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