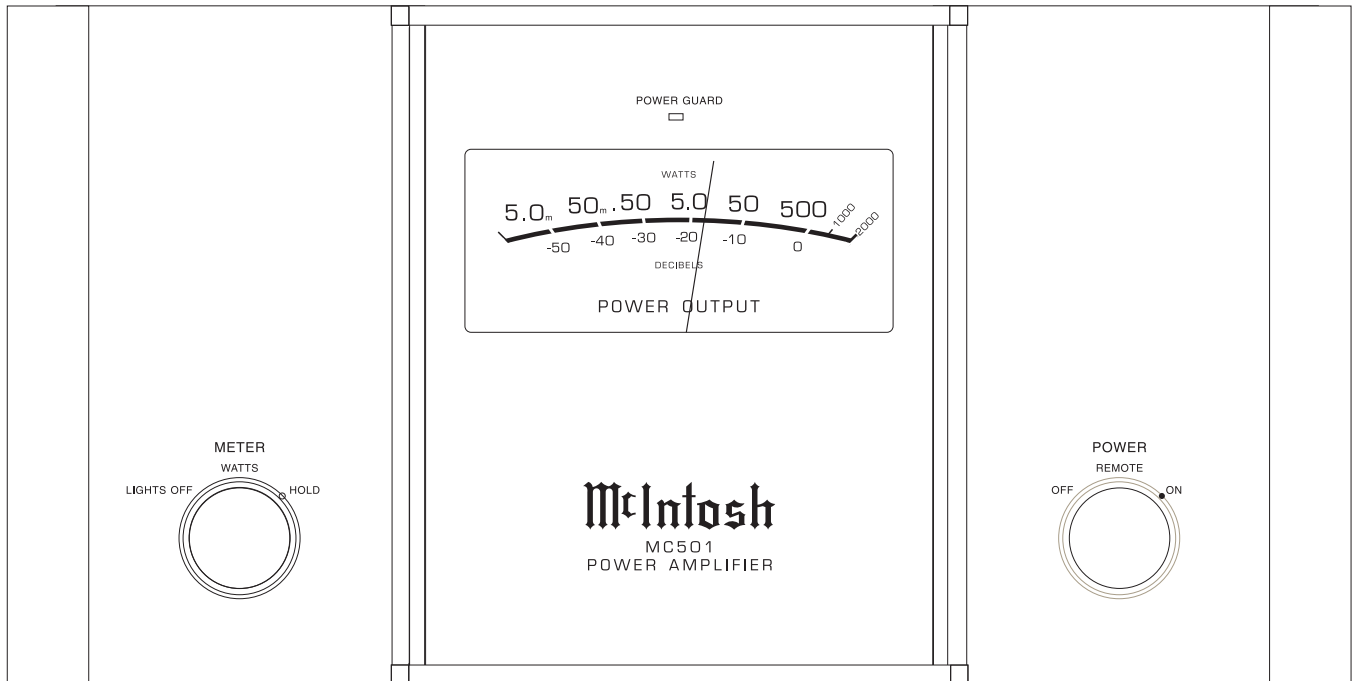




MC501

POWER AMPLIFIER

SERIAL NO. WU1001 And Above



CONTENTS

| | | | |
|---|--------|--|---------|
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SERVICE MANUAL

Serial Number WU1001 And Above

PERFORMANCE SPECIFICATIONS

Power Output

Minimum sine wave continuous average power output is:
500 watts into 2 ohm load
500 watts into 4 ohm load
500 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 load

Dynamic Headroom

1.8dB

Frequency Response

+0, -0.25dB from 20Hz to 20,000Hz
+0, -3dB from 10Hz to 100,000Hz

Sensitivity

2.1 Volts Unbalanced Input
4.2 Volts Balanced Input

A-Weighted Signal To Noise Ratio

97dB (124dB below rated output) Unbalanced and Balanced

Intermodulation Distortion

Maximum Intermodulation Distortion if instantaneous peak output does not exceed twice the rated output, for any combination of frequencies from 20Hz to 20,000Hz is: 0.005% for 2, 4 or 8 ohm load

Input Impedance

10,000 ohms Unbalanced Inputs
20,000 ohms Balanced Inputs

Wide Band Damping Factor

100 @ 8ohms

Power Requirements

100 Volts, 50/60Hz at 8.0 amps
110 Volts, 50/60Hz at 7.2 amps
120 Volts, 50/60Hz at 6.6 amps
220 Volts, 50/60Hz at 3.3 amps
230 Volts, 50/60Hz at 3.3 amps
240 Volts, 50/60Hz at 3.3 amps

Note: Refer to the rear panel of the MC501 for the correct voltage.


Overall Dimensions

Front Panel: 17-1/2 inches (44.45cm) wide, 8-13/16 inches (22.38cm) high. Depth is 14-13/16 inches (37.62cm) including the Front Panel and Knobs

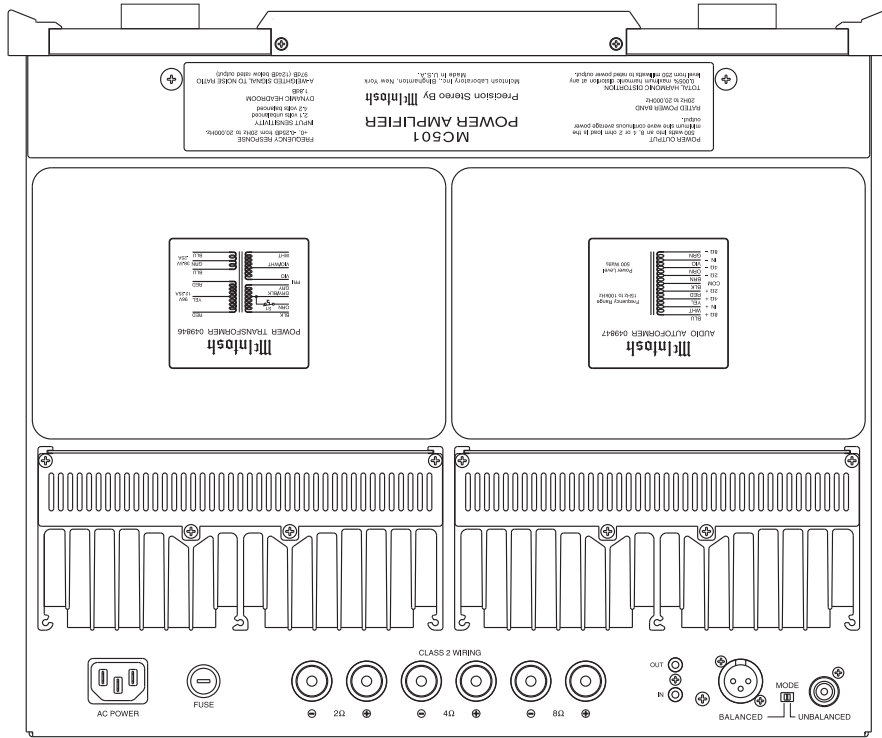
Weight

91.5 pounds (41.6 kg) net, 105.5 pounds (48 kg) in shipping carton

NOTES

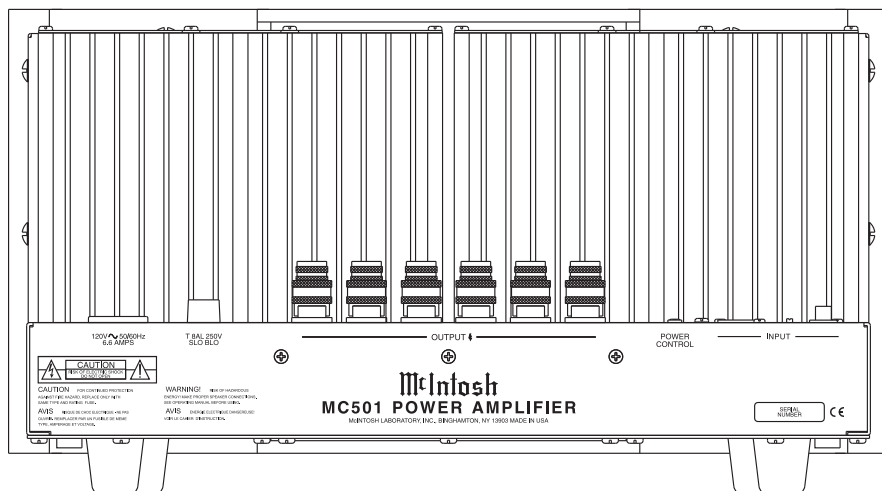
1. The heavy notes on the schematic denote the primary signal path.
2. Unless otherwise noted, all voltages indicated on the schematics are measured under the following conditions:
 - a. AC input at 120 volts, 50/60Hz.
 - b. All voltages are +/-10% with respect to ground. A high impedance (10 megaohm) 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.

TOP and REAR PANEL



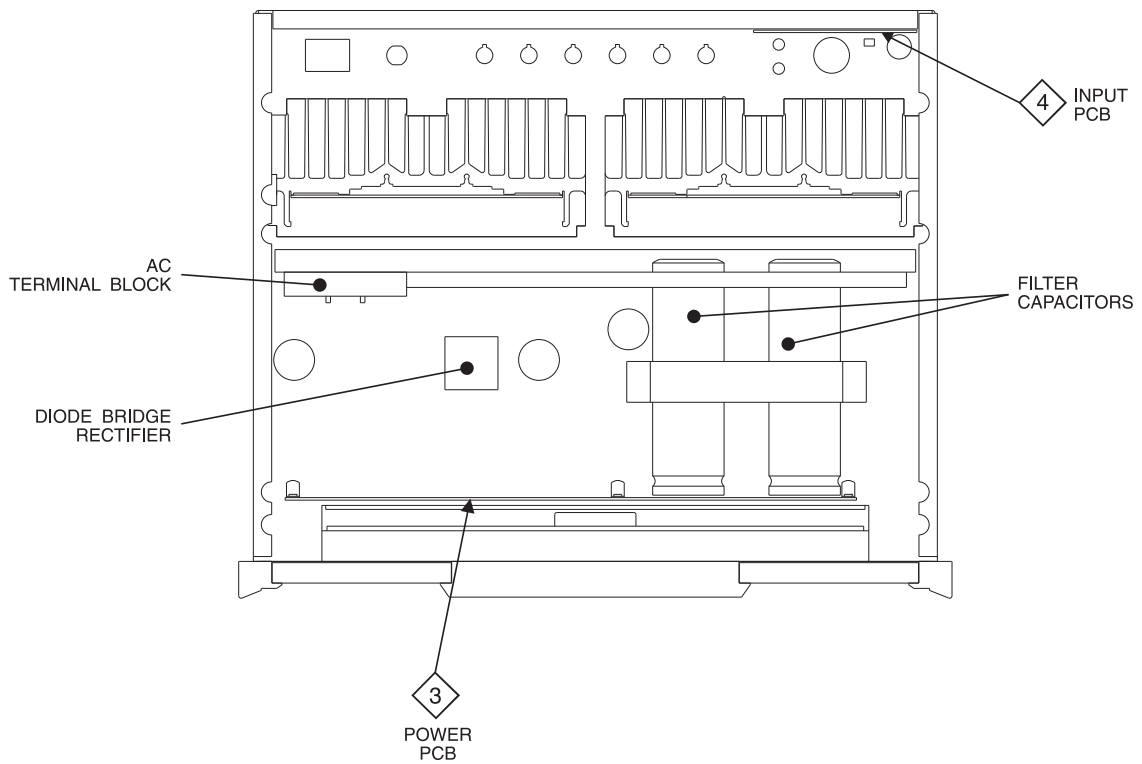
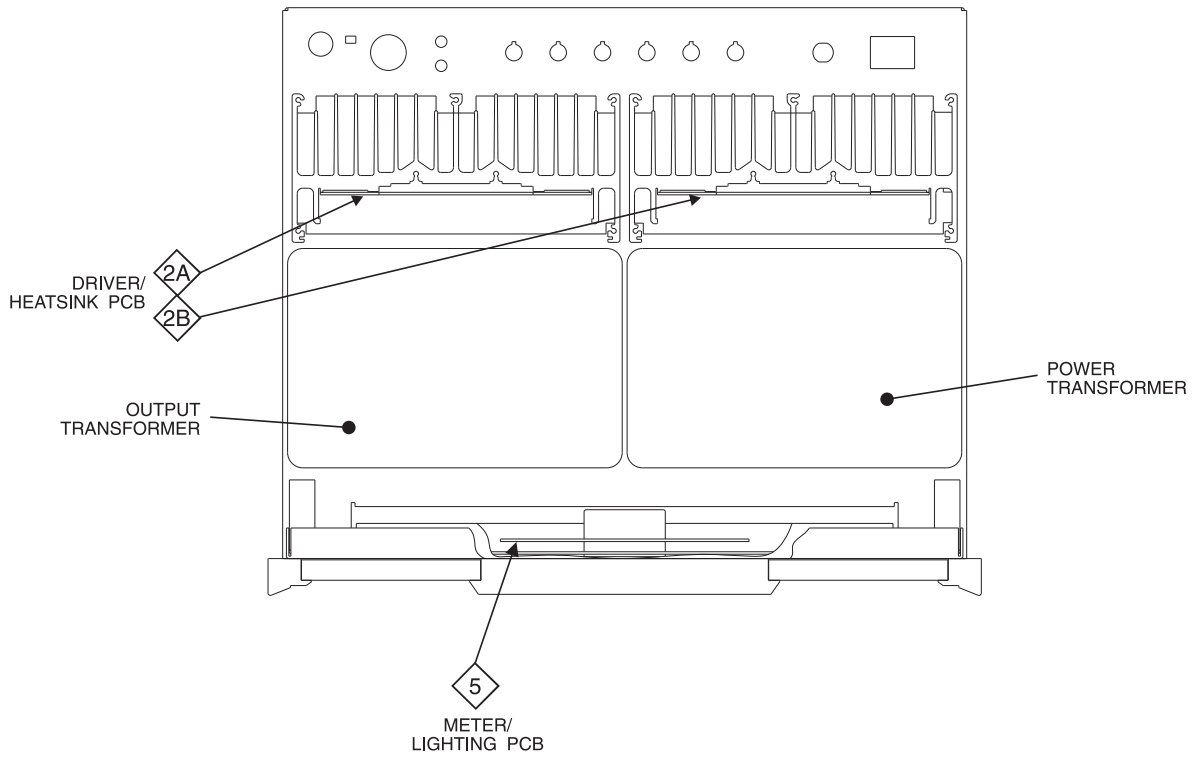
TOP VIEW

REAR VIEW



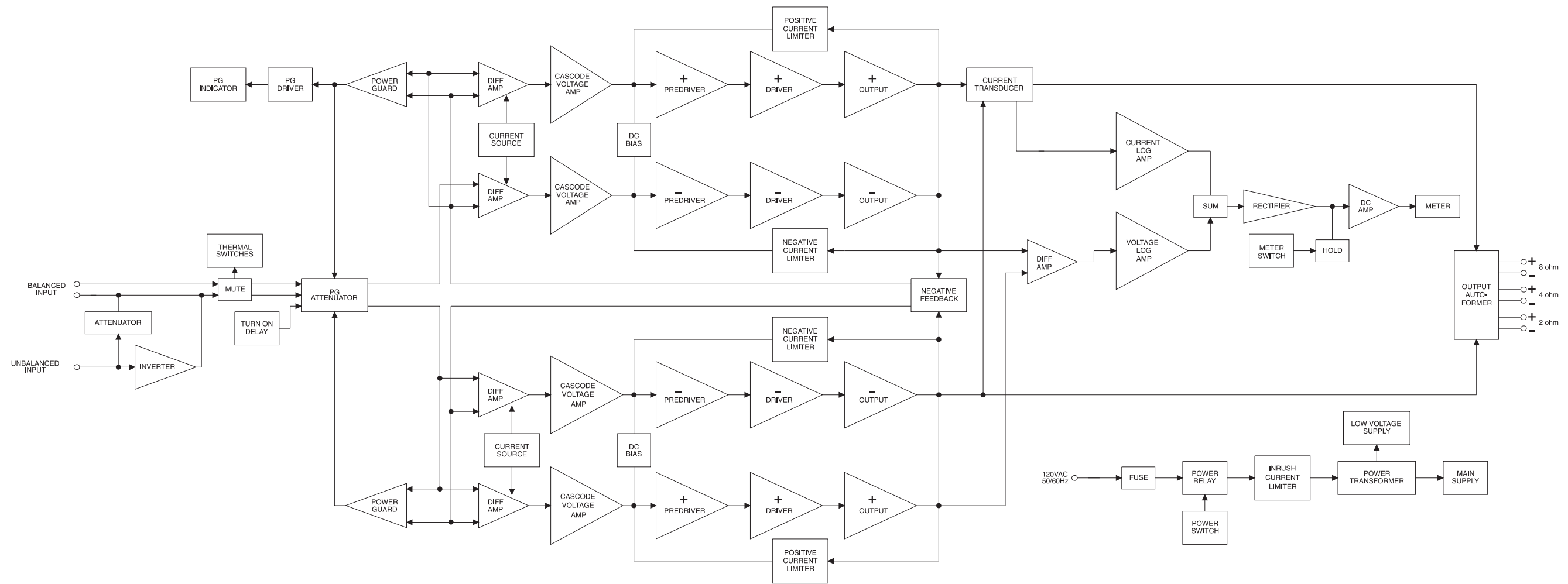
SECTION LOCATIONS

TOP VIEW WITH COVER REMOVED



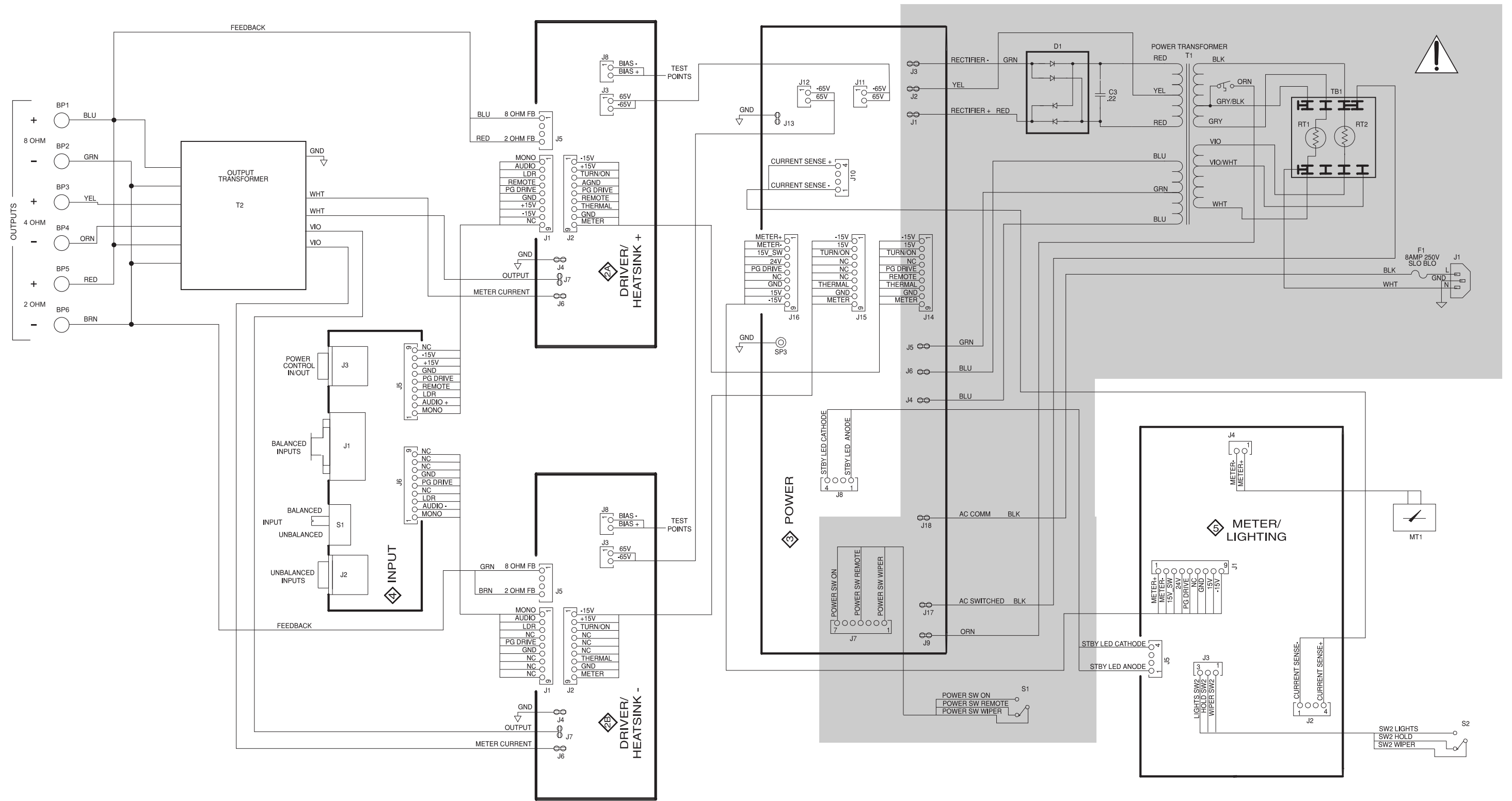
BOTTOM VIEW WITH COVER REMOVED

BLOCK DIAGRAM



1 INTERCONNECT

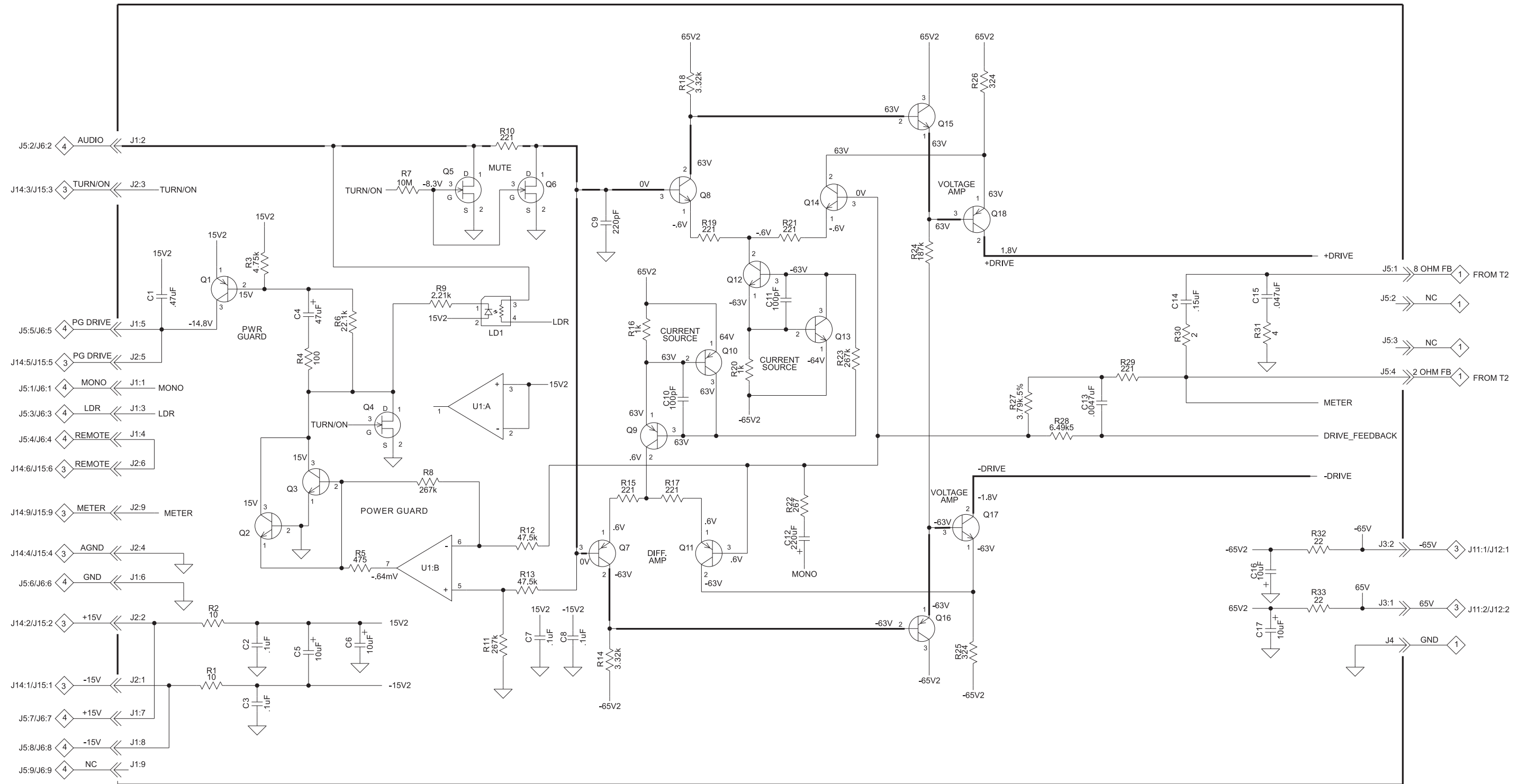
⚠ WARNING Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.

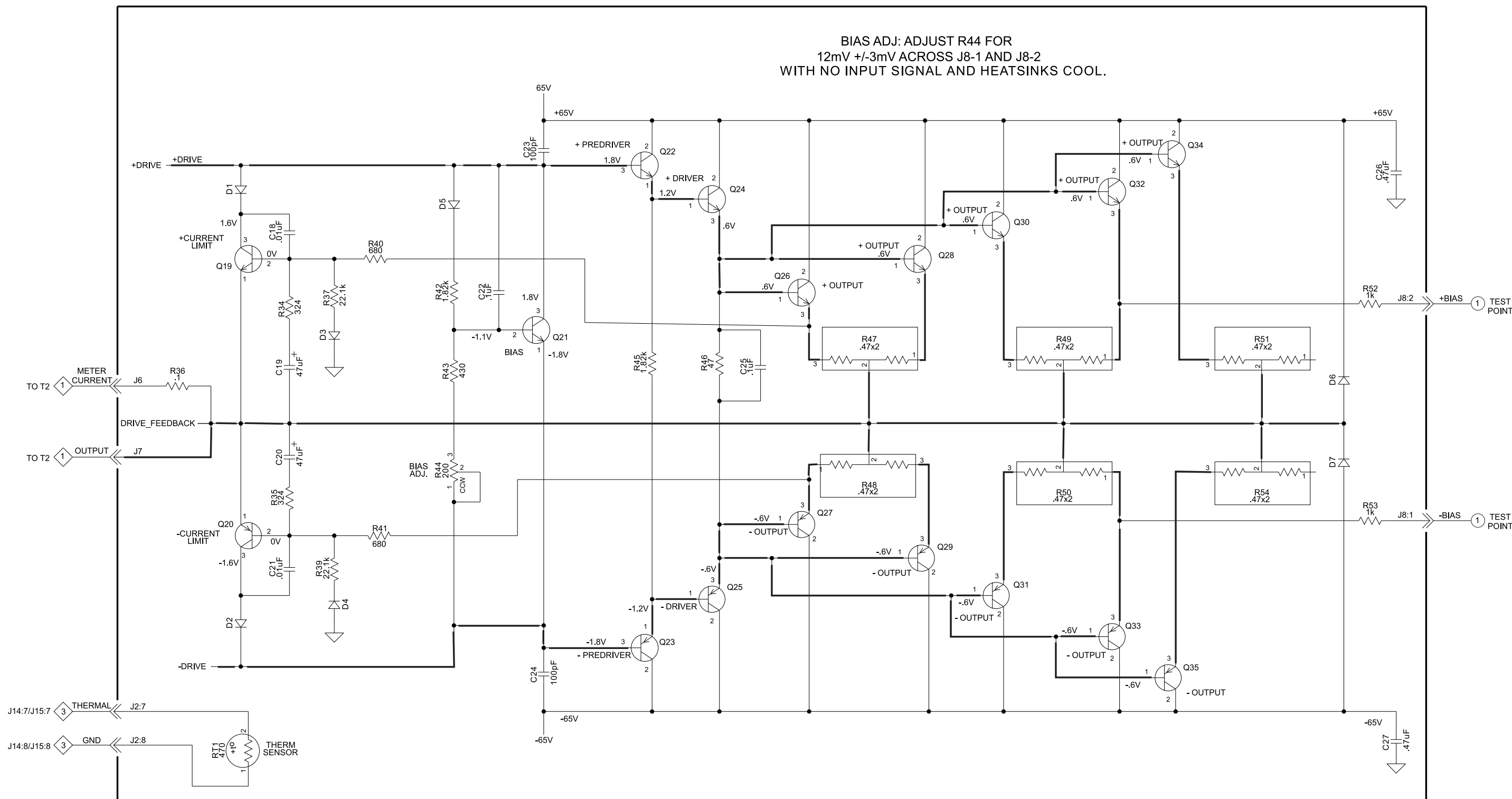


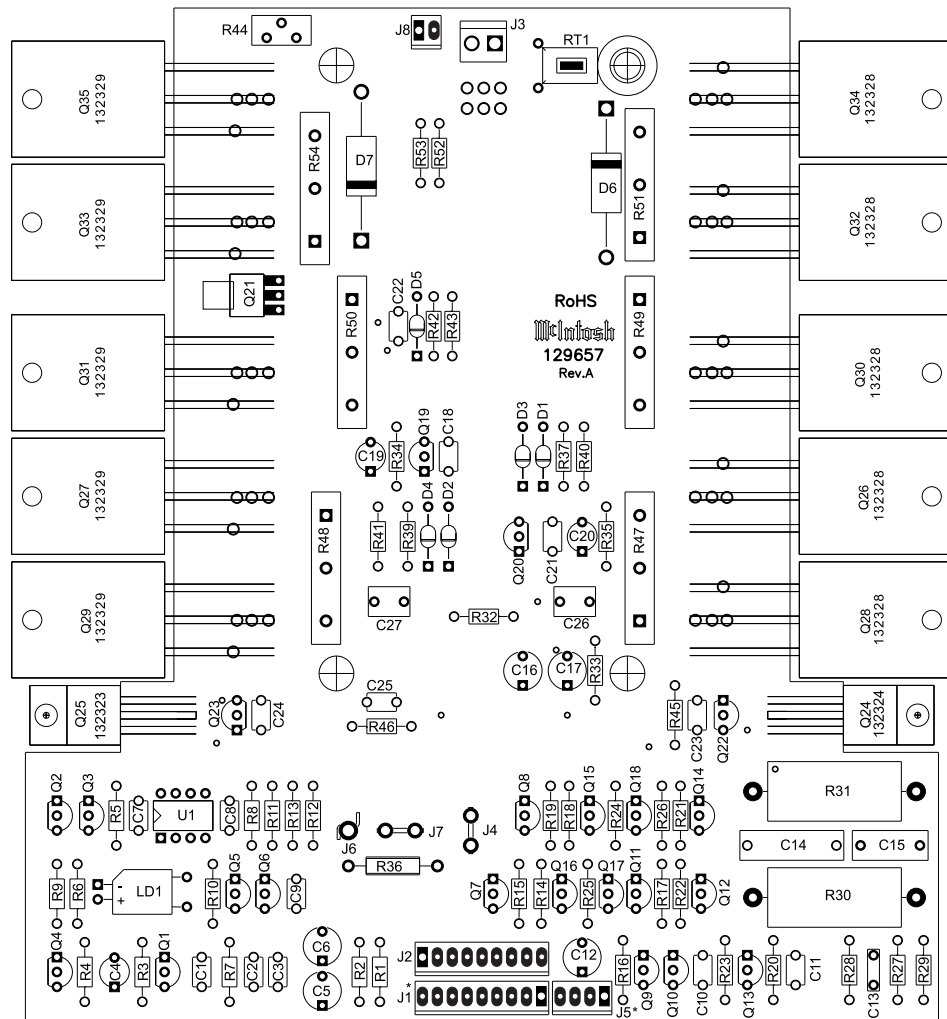


DRIVER/HEATSINK 749828 SCH 1 OF 2

DRIVER SECTION



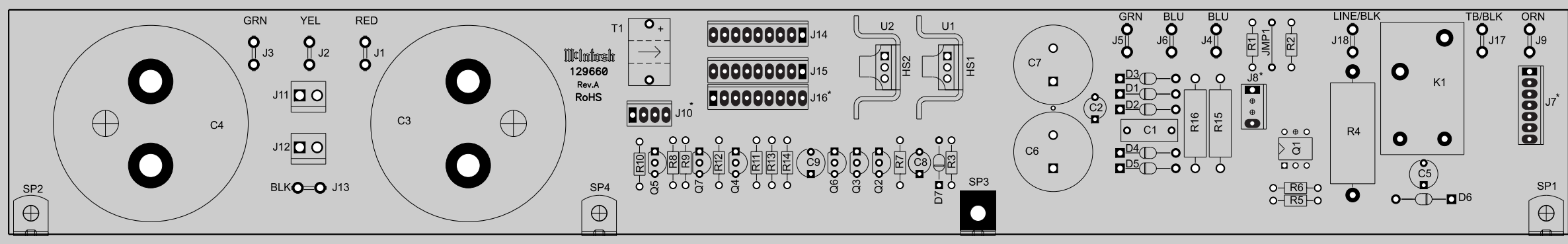
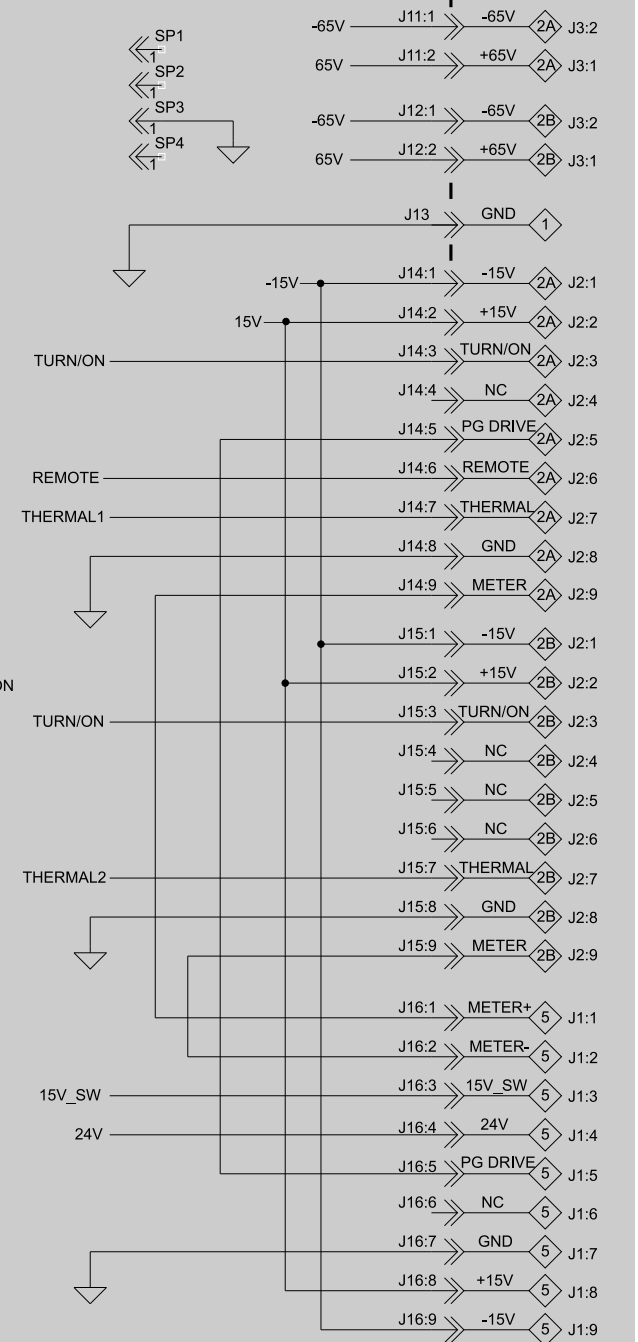
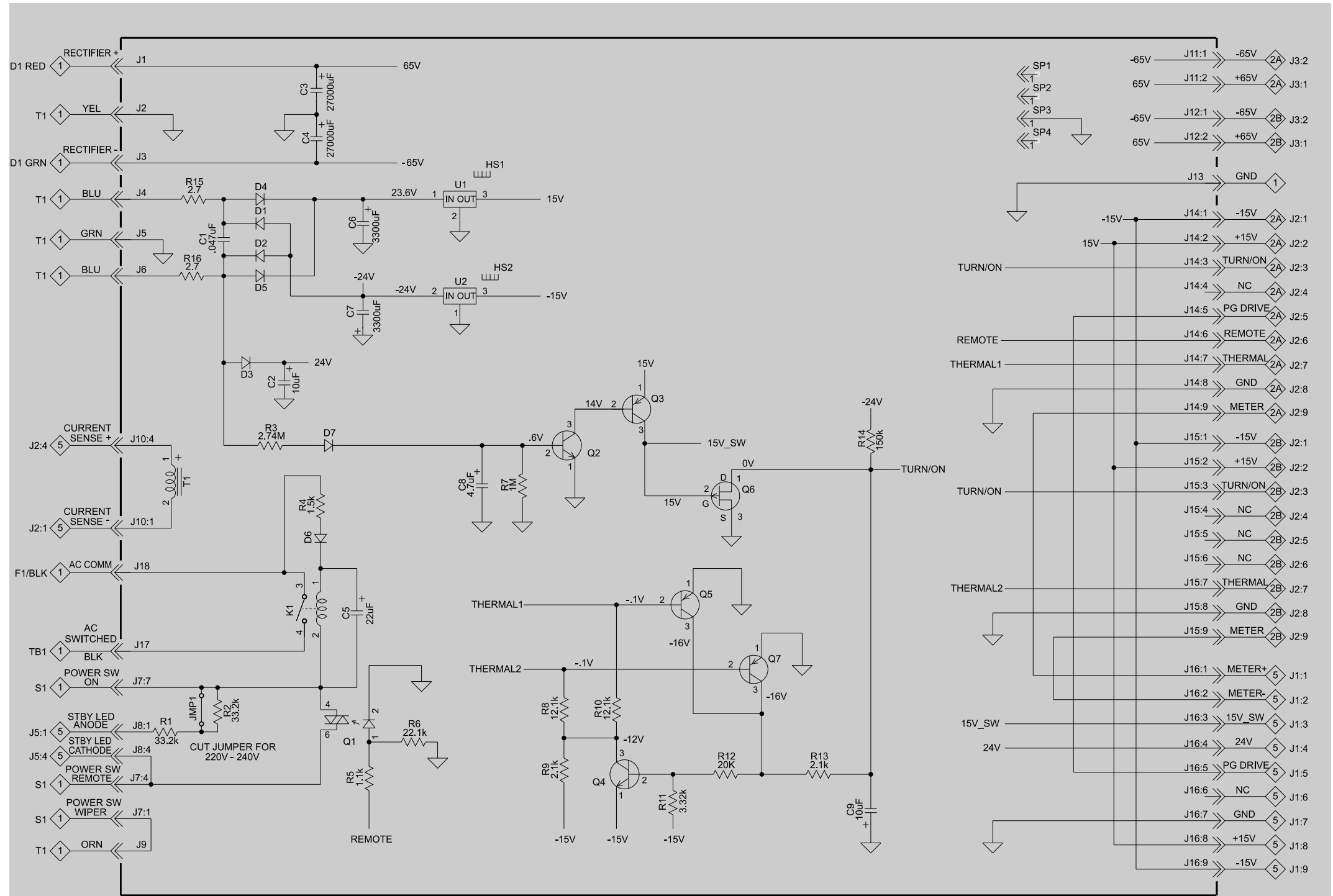




* DENOTES COMPONENTS ON BACKSIDE OR FARSIDE OF PC BOARD.

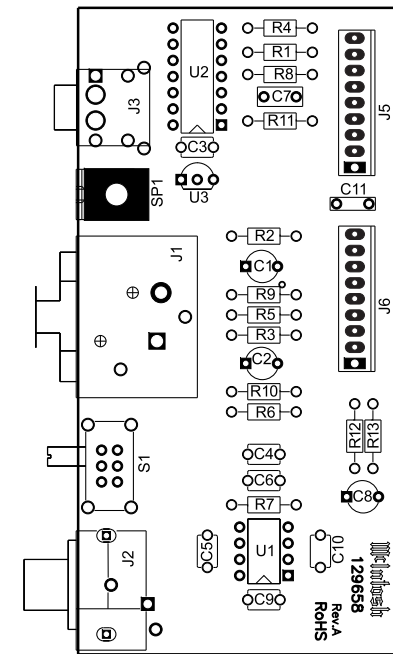
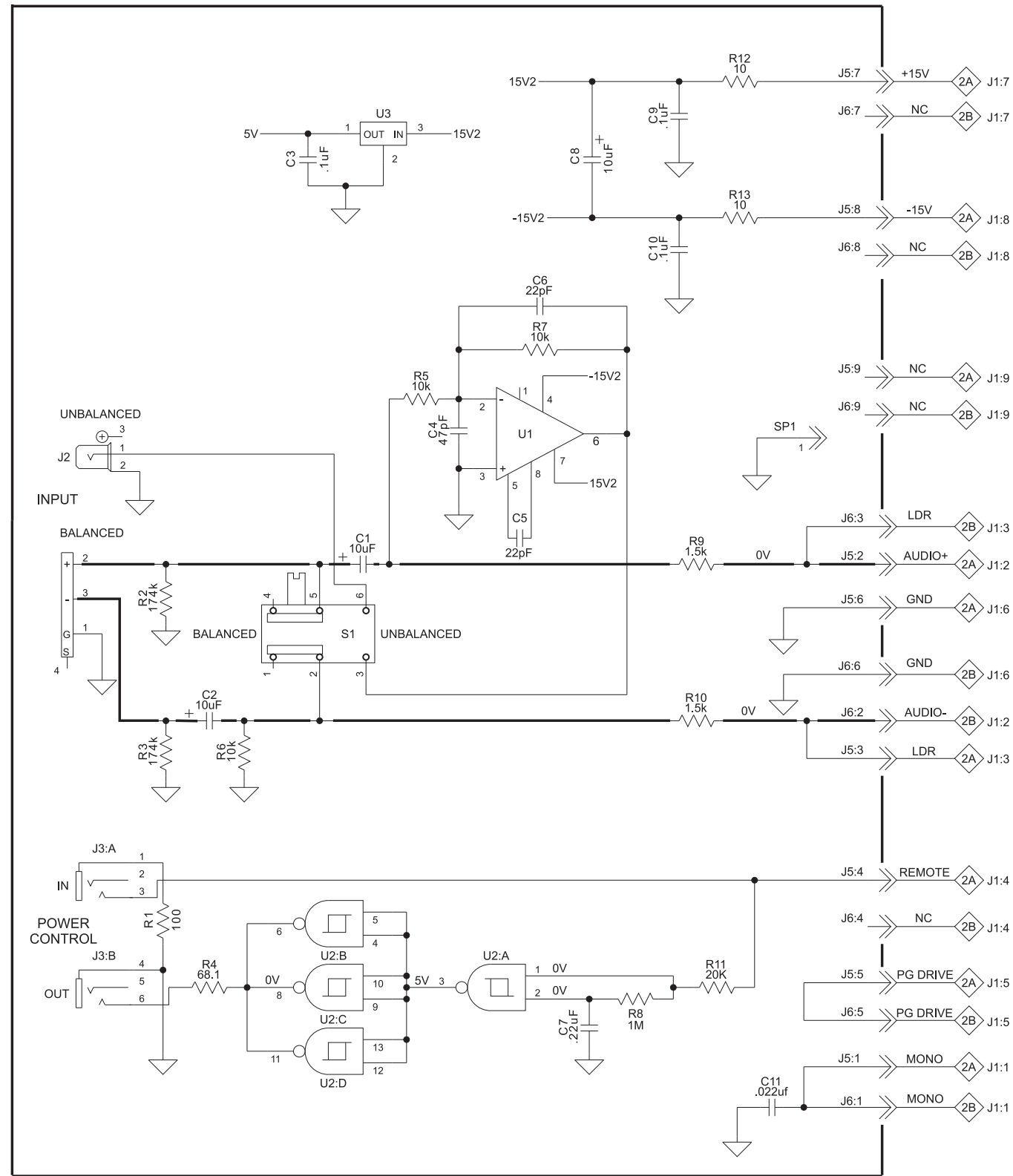
3 POWER 749831 SCH AND PCB

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



* DENOTES COMPONENTS ON BACKSIDE OF PCB

4 INPUT 749829 SCH AND PCB



PARTS LIST

1 INTERCONNECT

| Ref. No. | Description | Part No. |
|----------|-------------------------|----------|
| BP1 | BINDING POST, RED | 117937 |
| BP2 | BINDING POST, BLK | 117938 |
| BP3 | BINDING POST, RED | 117937 |
| BP4 | BINDING POST, BLK | 117938 |
| BP5 | BINDING POST, RED | 117937 |
| BP6 | BINDING POST, BLK | 117938 |
| DI | DIODE, BRIDGE RECTIFIER | 070181 |
| F1 | FUSE | 089134 |
| J1 | RECEPTACLE, AC LINE | 117487 |
| MT1 | METER | 124093 |
| RT1 | THERMISTER ASSY | 052008 |
| RT2 | THERMISTER ASSY | 052008 |
| S1 | SWITCH | 146243 |
| S2 | SWITCH | 146243 |
| T1 | TRANSFORMER, POWER | 749846 |
| T2 | TRANSFORMER, OUTPUT | 749847 |
| TB1 | TERMINAL BLOCK AC | 074091 |

2A DRIVER/HEATSINK PCB 749828

| | | |
|-----|--------------------------------|--------|
| C1 | CAP DISC MONO .47UF 50V | 061320 |
| C2 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C3 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C4 | CAP ELECT 47UF 35V | 066446 |
| C5 | CAP ELECT 10UF 100VDC | 066462 |
| C6 | CAP ELECT 10UF 100VDC | 066462 |
| C7 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C8 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C9 | CAP MONO 220PF 200V 10% NPO | 061342 |
| C10 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C11 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C13 | CAP MPF 0.0047UF 5% 63VDC | 064308 |
| C14 | CAP POLYPROP 0.15UF 10% 250VDC | 064363 |
| C15 | CAP POLYPROP .047UF 10% 250VDC | 064364 |
| C16 | CAP ELECT 10UF 100VDC | 066462 |
| C17 | CAP ELECT 10UF 100VDC | 066462 |
| C18 | CAP MONO .01UF 50V 20% X7R | 061345 |
| C19 | CAP ELECT 47UF 35V | 066446 |
| C20 | CAP ELECT 47UF 35V | 066446 |
| C21 | CAP MONO .01UF 50V 20% X7R | 061345 |
| C22 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C23 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C24 | CAP MONO 100PF 100V 10% NPO | 061341 |
| C25 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C26 | CAP MPF 0.47UF 5% 100VDC | 064442 |
| C27 | CAP MPF 0.47UF 5% 100VDC | 064442 |
| C12 | CAP ELECT 220UF 25V | 066507 |
| D1 | DIODE SILICON | 070174 |
| D2 | DIODE SILICON | 070174 |
| D3 | DIODE SILICON | 070174 |
| D4 | DIODE SILICON | 070174 |
| D5 | DIODE SILICON | 070174 |
| D6 | DIODE 200V 3A | 070126 |
| D7 | DIODE 200V 3A | 070126 |
| J1 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| J2 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| J3 | CONN HEADER 2 PIN 0.156 | 117404 |
| J4 | BLADE FASTON W/FEET | 117708 |

| Ref. No. | Description | Part No. |
|----------|------------------------|----------|
| J5 | CONN 4 PIN | 117215 |
| J6 | BLADE FASTON .110 | 117712 |
| J7 | BLADE FASTON W/FEET | 117708 |
| J8 | CONN 2 PIN MALE | 117213 |
| LD1 | LDR NETWORK | 144179 |
| | PC BD DRIVER/HEATSINK | 129657 |
| Q1 | TRANSISTOR PNP SILICON | 132304 |
| Q2 | TRANSISTOR NPN SILICON | 132317 |
| Q3 | TRANSISTOR NPN SILICON | 132317 |
| Q4 | TRANSISTOR N JFET | 132319 |
| Q5 | TRANSISTOR N JFET | 132319 |
| Q6 | TRANSISTOR N JFET | 132319 |
| Q7 | TRANSISTOR PNP 120V | 132255 |
| Q8 | TRANSISTOR PNP | 132254 |
| Q9 | TRANSISTOR PNP 120V | 132255 |
| Q10 | TRANSISTOR PNP SILICON | 132304 |
| Q11 | TRANSISTOR PNP 120V | 132255 |
| Q12 | TRANSISTOR PNP | 132254 |
| Q13 | TRANSISTOR NPN SILICON | 132317 |
| Q14 | TRANSISTOR PNP | 132254 |
| Q15 | TRANSISTOR NPN SILICON | 132317 |
| Q16 | TRANSISTOR PNP SILICON | 132304 |
| Q17 | TRANSISTOR NPN | 132325 |
| Q18 | TRANSISTOR PNP | 132326 |
| Q19 | TRANSISTOR NPN SILICON | 132317 |
| Q20 | TRANSISTOR PNP SILICON | 132304 |
| Q21 | TRANSISTOR NPN SILICON | 132317 |
| Q22 | TRANSISTOR NPN | 132325 |
| Q23 | TRANSISTOR PNP | 132326 |
| Q24 | TRANSISTOR NPN | 132324 |
| Q25 | TRANSISTOR PNP | 132323 |
| Q26 | TRANSISTOR NPN POWER | 132328 |
| Q27 | TRANSISTOR PNP POWER | 132329 |
| Q28 | TRANSISTOR NPN POWER | 132328 |
| Q29 | TRANSISTOR PNP POWER | 132329 |
| Q30 | TRANSISTOR NPN POWER | 132328 |
| Q31 | TRANSISTOR PNP POWER | 132329 |
| Q32 | TRANSISTOR NPN POWER | 132328 |
| Q33 | TRANSISTOR PNP POWER | 132329 |
| Q34 | TRANSISTOR NPN POWER | 132328 |
| Q35 | TRANSISTOR PNP POWER | 132329 |
| U1 | IC DUAL AMP | 133259 |
| R1 | RES MF 10 OHM 1% 1/4W | 144553 |
| R2 | RES MF 10 OHM 1% 1/4W | 144553 |
| R3 | RES MF 4.75K 1% 1/4W | 144520 |
| R4 | RES MF 100 OHM 1% 1/4W | 144568 |
| R5 | RES MF 475 OHM 1% 1/4W | 144509 |
| R6 | RES MF 22.1K 1% 1/4W | 144564 |
| R7 | RES MF 10M 1% 1/4W | 144575 |
| R8 | RES MF 267K 1% 1/4W | 144532 |
| R9 | RES MF 2.21K 1% 1/4W | 144584 |
| R10 | RES MF 221 OHM 1% 1/4W | 144559 |
| R11 | RES MF 267K 1% 1/4W | 144532 |
| R12 | RES MF 47.5K 1% 1/4W | 144526 |
| R13 | RES MF 47.5K 1% 1/4W | 144526 |
| R14 | RES MF 3.32K 1% 1/4W | 144518 |
| R15 | RES MF 221 OHM 1% 1/4W | 144559 |
| R16 | RES MF 1K 1% 1/4W | 144513 |
| R17 | RES MF 221 OHM 1% 1/4W | 144559 |

| Ref. No. | Description | Part No. |
|----------|-------------------------------|----------|
| R18 | RES MF 3.32K 1% 1/4W | 144518 |
| R19 | RES MF 221 OHM 1% 1/4W | 144559 |
| R20 | RES MF 1K 1% 1/4W | 144513 |
| R21 | RES MF 221 OHM 1% 1/4W | 144559 |
| R22 | RES MF 267 OHM 1% 1/4W | 144560 |
| R23 | RES MF 267K 1% 1/4W | 144532 |
| R24 | RES MF 187K 1% 1/4W | 144621 |
| R25 | RES MF 324 OHM 1% 1/4W | 144597 |
| R26 | RES MF 324 OHM 1% 1/4W | 144597 |
| R27 | RES MF 3.79K .5% 1/4W | 144711 |
| R28 | RES MF 6.49K .5% 1/4W | 144617 |
| R29 | RES MF 221 OHM 1% 1/4W | 144559 |
| R30 | RES WW 2 OHM 10% 5W | 139253 |
| R31 | RES WW 4 OHM 5% 5W | 139248 |
| R32 | RES FP 22 OHM 5% 1/4W | 137111 |
| R33 | RES FP 22 OHM 5% 1/4W | 137111 |
| R34 | RES MF 324 OHM 1% 1/4W | 144597 |
| R35 | RES MF 324 OHM 1% 1/4W | 144597 |
| R36 | RES WW 0.1 OHM 5% 1W | 144697 |
| R37 | RES MF 22.1K 1% 1/4W | 144564 |
| R39 | RES MF 22.1K 1% 1/4W | 144564 |
| R40 | RES MET OX 680 OHM 5% 1/2W | 137099 |
| R41 | RES MET OX 680 OHM 5% 1/2W | 137099 |
| R42 | RES MF 1.82K 1% 1/4W | 144582 |
| R43 | RES MET OX 430 OHM 5% 1/2W | 137101 |
| R44 | POT TRIM 200 OHM 20% HORIZ AD | 134506 |
| R45 | RES MF 1.82K 1% 1/4W | 144582 |
| R46 | RES MET OX 47 OHM 5% 1/2W | 137102 |
| R47 | RES WW DUAL .47 OHM 5% 5W | 139252 |
| R48 | RES WW DUAL .47 OHM 5% 5W | 139252 |
| R49 | RES WW DUAL .47 OHM 5% 5W | 139252 |
| R50 | RES WW DUAL .47 OHM 5% 5W | 139252 |
| R51 | RES WW DUAL .47 OHM 5% 5W | 139252 |
| R52 | RES MF 1K 1% 1/4W | 144513 |
| R53 | RES MF 1K 1% 1/4W | 144513 |
| R54 | RES WW DUAL .47 OHM 5% 5W | 139252 |
| RT1 | SENSOR THERMAL | 144249 |

3 POWER PCB 749831

| | | |
|-----|--------------------------------|--------|
| C1 | CAP POLYPROP .047UF 10% 250VDC | 064364 |
| C2 | CAP ELECT 10UF 50V | 066445 |
| C5 | CAP ELECT 22UF 100V | 066574 |
| C6 | CAP ELECT 3300UF 35V | 066509 |
| C7 | CAP ELECT 3300UF 35V | 066509 |
| C8 | CAP ELECT 4.7UF 50V | 066512 |
| C9 | CAP ELECT 10UF 100VDC | 066462 |
| D1 | DIODE RECTIFIER | 070175 |
| D2 | DIODE RECTIFIER | 070175 |
| D3 | DIODE RECTIFIER | 070175 |
| D4 | DIODE RECTIFIER | 070175 |
| D5 | DIODE RECTIFIER | 070175 |
| D6 | DIODE RECTIFIER | 070175 |
| D7 | DIODE SILICON | 070174 |
| HS1 | HEATSINK T0220 | 080014 |
| HS2 | HEATSINK T0220 | 080014 |
| J1 | BLADE FASTON W/FEET | 117708 |
| J2 | BLADE FASTON W/FEET | 117708 |

PARTS LIST cont'd

POWER PCB 749831 (Cont'd.)

| Ref. No. | Description | Part No. |
|----------|--------------------------------|----------|
| J3 | BLADE FASTON W/FEET | 117708 |
| J4 | BLADE FASTON W/FEET | 117708 |
| J5 | BLADE FASTON W/FEET | 117708 |
| J6 | BLADE FASTON W/FEET | 117708 |
| J9 | BLADE FASTON W/FEET | 117708 |
| J7 | CONN MALE 7 PIN | 117217 |
| J8 | CONN 4 PIN | 117215 |
| J10 | CONN 4 PIN | 117215 |
| J13 | BLADE FASTON W/FEET | 117708 |
| J11 | CONN HEADER 2 PIN 0.156 | 117404 |
| J12 | CONN HEADER 2 PIN 0.156 | 117404 |
| J14 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| J15 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| J16 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| J17 | BLADE FASTON W/FEET | 117708 |
| J18 | BLADE FASTON W/FEET | 117708 |
| K1 | RELAY 48VDC TV-F | 087080 |
| PCB1 | PC BD POWER SUPPLY | 129660 |
| Q1 | TRIAC OPTOCOUPLER | 131024 |
| Q2 | TRANSISTOR NPN SILICON | 132317 |
| Q3 | TRANSISTOR PNP SILICON | 132304 |
| Q4 | TRANSISTOR NPN SILICON | 132317 |
| Q5 | TRANSISTOR PNP SILICON | 132304 |
| Q6 | TRANSISTOR P CHAN JUNCTION FET | 132320 |
| Q7 | TRANSISTOR PNP SILICON | 132304 |
| U2 | IC REGULATOR -15V | 133588 |
| U1 | IC REGULATOR 15V | 133589 |
| R1 | RES MF 33.2K 1% 1/4W | 144694 |
| R2 | RES MF 33.2K 1% 1/4W | 144694 |
| R3 | RES MF 2.74M 1% 1/4W | 144578 |
| R4 | RES WW 1.5K 5% 5W | 139247 |
| R5 | RES MF 1.1K 1% 1/4W | 144514 |
| R6 | RES MF 22.1K 1% 1/4W | 144564 |
| R7 | RES MF 1M 1% 1/4W | 144577 |
| R8 | RES MF 12.1K 1% 1/4W | 144550 |
| R9 | RES MF 2.1K 1% 1/4W | 144585 |
| R10 | RES MF 12.1K 1% 1/4W | 144550 |
| R11 | RES MF 3.32K 1% 1/4W | 144518 |
| R12 | RES MF 20K 1% 1/4W | 144524 |
| R13 | RES MF 2.1K 1% 1/4W | 144585 |
| R14 | RES MF 150K 1% 1/4W | 144627 |
| R15 | RES WW 2.7 OHM 10% 2W FP | 139259 |
| R16 | RES WW 2.7 OHM 10% 2W FP | 139259 |
| SP1 | BRACKET PCB CARD MOUNTING | 003611 |
| SP2 | BRACKET PCB CARD MOUNTING | 003611 |
| SP4 | BRACKET PCB CARD MOUNTING | 003611 |
| SP32 | BRACKET PCB CARD MOUNTING | 003611 |
| T1 | TRANSFORMER CURRENT | 159353 |
| | SCR MS 6-32 X 3/16 SEMS PH PN | 400348 |

INPUT PCB 749829

| | | |
|----|----------------------------|--------|
| C1 | CAP ELECT 10UF 50V | 066445 |
| C2 | CAP ELECT 10UF 50V | 066445 |
| C3 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C4 | CAP MONO 47PF 200V 10% NPO | 061340 |
| C5 | CAP MONO 22PF 200V 10% NPO | 061339 |
| C6 | CAP MONO 22PF 200V 10% NPO | 061339 |

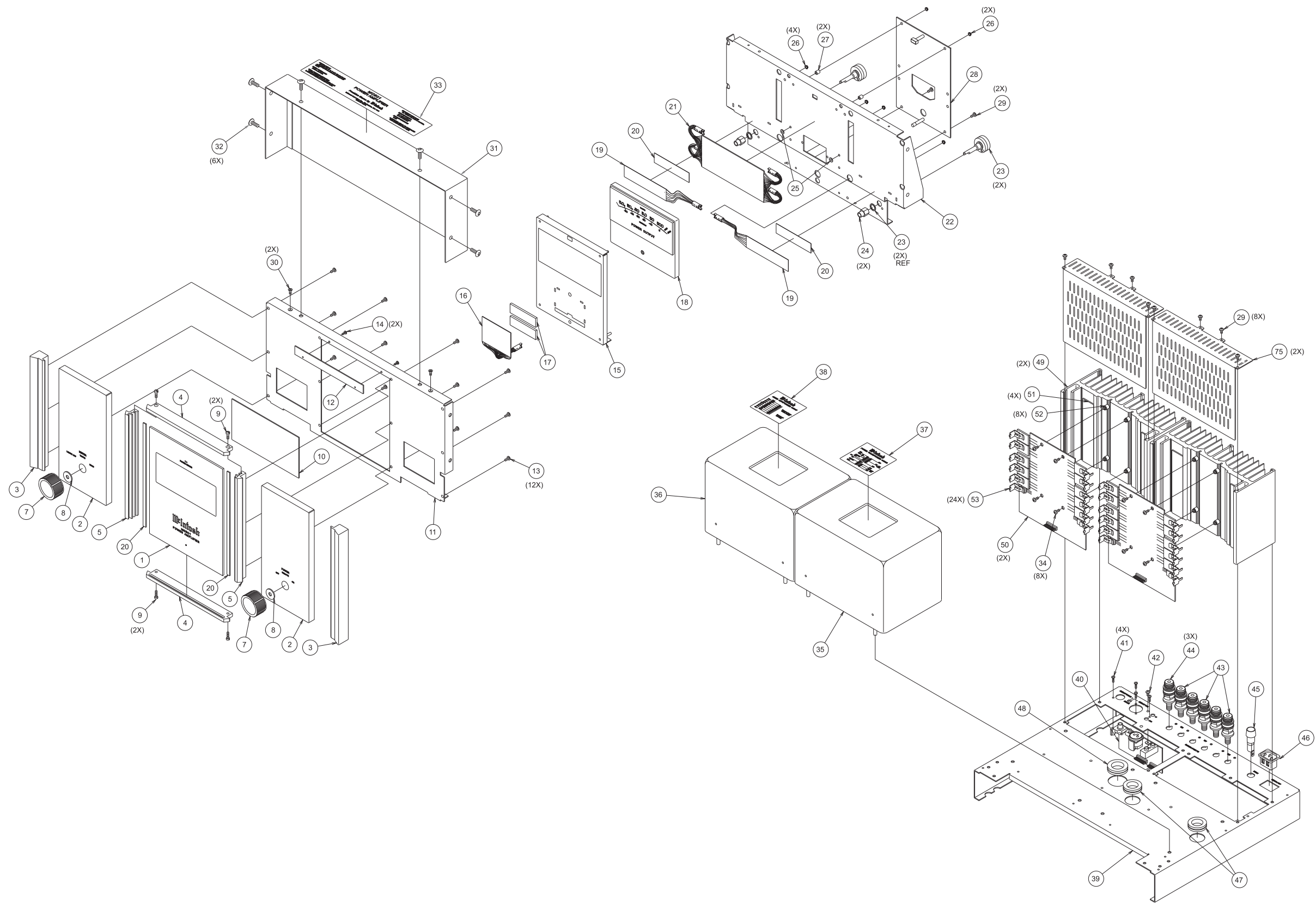
| Ref. No. | Description | Part No. |
|----------|--------------------------------|----------|
| C7 | CAP MPF 0.22UF 5% 63VDC | 064329 |
| C8 | CAP ELECT 10UF 50V | 066445 |
| C9 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C10 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C11 | CAP MPF 0.022UF 5% 63VDC | 064316 |
| J1 | CONN XLR FEM HORIZ PCB LATCH | 117814 |
| J2 | JACK RCA 1P RED | 117706 |
| J3 | JACK HEADPHONE DUAL BLACK 1/8" | 117825 |
| J5 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| J6 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| PCB1 | PC BD INPUT | 129658 |
| R1 | RES MF 100 OHM 1% 1/4W | 144568 |
| R2 | RES MF 174K 1% 1/4W | 144601 |
| R3 | RES MF 174K 1% 1/4W | 144601 |
| R4 | RES MF 68.1 OHM 1% 1/4W | 144507 |
| R5 | RES MF 10K 1% 1/4W | 144504 |
| R6 | RES MF 10K 1% 1/4W | 144504 |
| R7 | RES MF 10K 1% 1/4W | 144504 |
| R8 | RES MF 1M 1% 1/4W | 144577 |
| R9 | RES MF 1.5K 1% 1/4W | 144539 |
| R10 | RES MF 1.5K 1% 1/4W | 144539 |
| R11 | RES MF 20K 1% 1/4W | 144524 |
| R12 | RES MF 10 OHM 1% 1/4W | 144553 |
| R13 | RES MF 10 OHM 1% 1/4W | 144553 |
| S1 | SWITCH SLIDE DPDT | 148076 |
| SP1 | BRACKET PCB CARD MOUNTING | 003611 |
| U1 | IC OPERATIONAL AMP LOW NOISE | 133565 |
| U3 | IC REGULATOR +5V | 133568 |
| U2 | IC NAND SCHMIT 2-IN X 4 | 133595 |
| | SCR MS 6-32X1/4 SEMS PH PN CLR | 400250 |
| | NUT KEP 6-32 SPECIAL | 402045 |

METER/LIGHTS PCB 749830

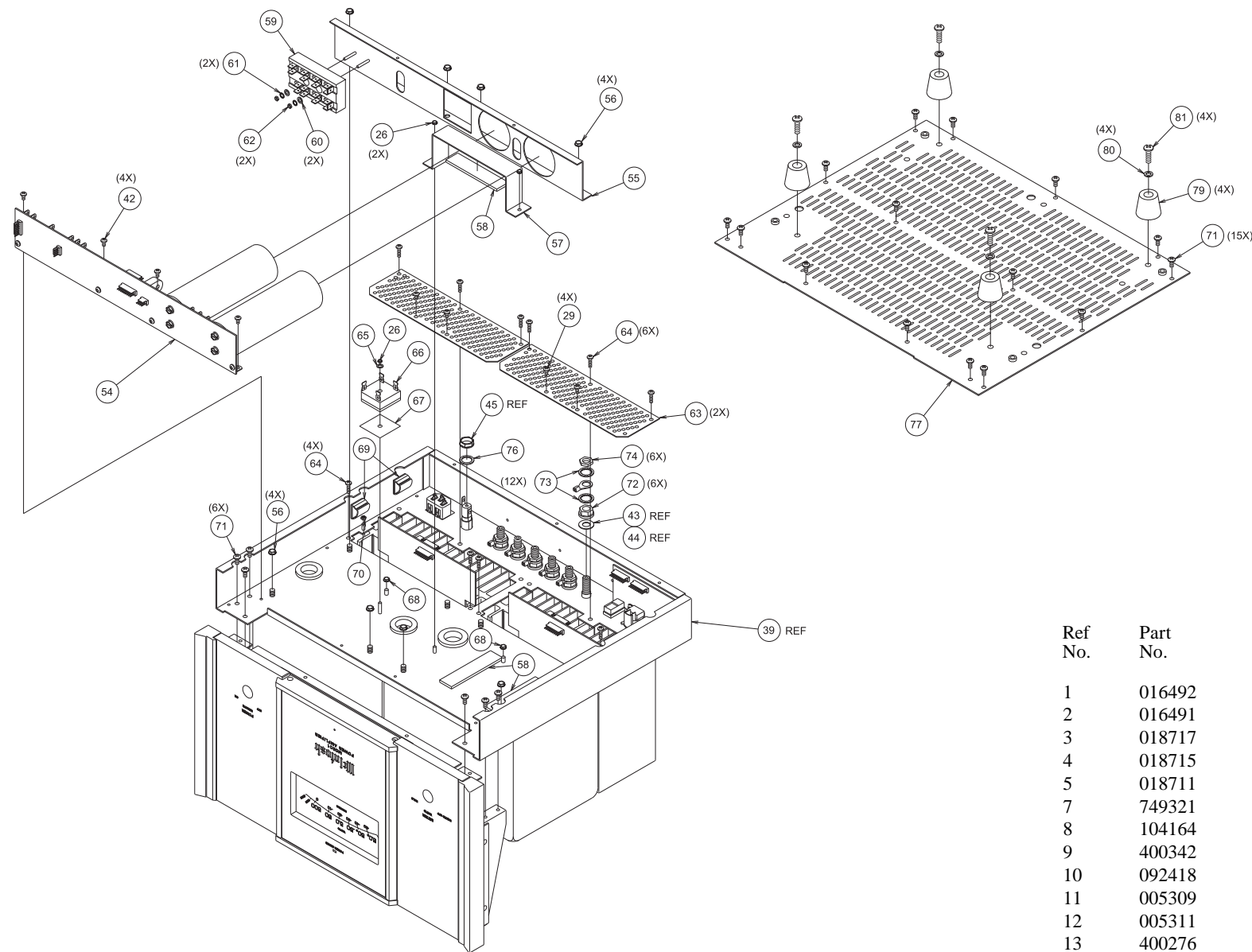
| | | |
|-------|---------------------------|--------|
| | SPACER LED 3/4" LONG | 017927 |
| C1 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C2 | CAP ELECT 1000UF 25V | 066513 |
| C3 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C4 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C5 | CAP MONO .1UF 50V 20% Z5U | 061346 |
| C6 | CAP MPF 1UF 5% 63VDC | 064337 |
| C7 | CAP MPF 0.22UF 5% 63VDC | 064329 |
| D1 | DIODE ZENER 8.2V 1/2W | 070130 |
| D2 | DIODE SILICON | 070174 |
| D3 | DIODE SILICON | 070174 |
| D4 | DIODE SILICON | 070174 |
| D5 | DIODE SILICON | 070174 |
| D6 | DIODE SILICON | 070174 |
| D7 | DIODE SILICON | 070174 |
| D8 | DIODE SILICON | 070174 |
| D9 | LED AMBER | 058133 |
| DS1 | LED BLU 5MM HI-INTENSITY | 058166 |
| (DS1) | SPACER LED | 112108 |
| DS2 | LED GRN 5MM HI-INTENSITY | 058165 |
| (DS2) | SPACER LED | 112108 |
| DS3 | LED BLU 5MM HI-INTENSITY | 058166 |
| (DS3) | SPACER LED | 112108 |
| DS4 | LED GRN 5MM HI-INTENSITY | 058165 |

| Ref. No. | Description | Part No. |
|----------|-------------------------------|----------|
| (DS4) | SPACER LED | 112108 |
| DS5 | LED GRN 5MM HI-INTENSITY | 058165 |
| (DS5) | SPACER LED | 112108 |
| DS6 | LED GRN 5MM HI-INTENSITY | 058165 |
| (DS6) | SPACER LED | 112108 |
| DS7 | LED GRN 5MM HI-INTENSITY | 058165 |
| (DS7) | SPACER LED | 112108 |
| DS8 | LED RED HIGH EFFICIENCY | 058148 |
| D10 | DIODE SILICON | 070174 |
| D11 | DIODE SILICON | 070174 |
| D12 | DIODE SILICON | 070174 |
| J1 | CONN MALE 9 POS FRICTION LOCK | 117244 |
| J2 | CONN 4 PIN | 117215 |
| J3 | CONN 3 POS MALE MTS100 NORMAL | 117214 |
| J4 | HEADER 2 PIN LATCHING | 117766 |
| J5 | CONN 4 PIN | 117215 |
| Q1 | TRANSISTOR NPN SILICON | 132317 |
| Q2 | TRANSISTOR NPN SILICON | 132317 |
| Q3 | TRANSISTOR NPN SILICON | 132317 |
| Q4 | TRANSISTOR NPN SILICON | 132317 |
| Q5 | TRANSISTOR NPN SILICON | 132317 |
| Q6 | TRANSISTOR PNP | 132254 |
| Q7 | TRANSISTOR PNP | 132254 |
| U1 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| U2 | IC DUAL OPERATIONAL AMPLIFIER | 133578 |
| R1 | RES MF 47.5K 1% 1/4W | 144526 |
| R2 | RES MF 47.5K 1% 1/4W | 144526 |
| R3 | RES MF 10K 1% 1/4W | 144504 |
| R4 | RES MF 10K 1% 1/4W | 144504 |
| R5 | RES MF 8.25 OHM 1% 1/4W | 144558 |
| R6 | RES MF 93.1K 1% 1/4W | 144625 |
| R7 | RES MF 7.5K 1% 1/4W | 144571 |
| R8 | RES MF 12.1K 1% 1/4W | 144550 |
| R9 | RES MF 221K 1% 1/4W | 144629 |
| R10 | RES MF 150K 1% 1/4W | 144627 |
| R11 | RES MF 4.75K 1% 1/4W | 144520 |
| R12 | RES MF 200K 1% 1/4W | 144531 |
| R13 | RES MF 681 OHM 1% 1/4W | 144567 |
| R14 | RES MF 18.2K 1% 1/4W | 144563 |
| R15 | RES MF 22.1K 1% 1/4W | 144564 |
| R16 | RES MF 10M 1% 1/4W | 144575 |
| R17 | RES MF 150K 1% 1/4W | 144627 |
| R18 | RES MF 12.1K 1% 1/4W | 144550 |
| R19 | RES MF 4.75K 1% 1/4W | 144520 |
| R20 | POT TRIM 2K OHM 20% | 134507 |
| R21 | POT TRIM 2K OHM 20% | 134507 |
| R22 | POT TRIM 100K OHM 20% | 134504 |
| R23 | RES MF 365 OHM 1% 1/4W | 144505 |
| R24 | RES MF 365 OHM 1% 1/4W | 144505 |
| R26 | RES MF 12.1K 1% 1/4W | 144550 |
| R29 | RES MF 806 OHM 1% 1/4W | 144512 |
| R30 | RES MF 200K 1% 1/4W | 144531 |
| R31 | RES MF 4.75K 1% 1/4W | 144520 |
| R25 | RES MF 100 OHM 1% 1/4W | 144568 |
| R27 | RES MF 2.74M 1% 1/4W | 144578 |
| R28 | RES MF 562 OHM 1% 1/4W | 144622 |
| | PC BD METER | 129659 |

EXPLODED VIEW



EXPLODED VIEW con't and PARTS LIST



| Ref No. | Part No. | Description |
|---------|----------|------------------------------------|
| 1 | 016492 | CENTER GLASS PLATE |
| 2 | 016491 | GLASS PANEL W/HOLE |
| 3 | 018717 | END CAP |
| 4 | 018715 | TOP/BOTTOM END CAP |
| 5 | 018711 | CENTER EXTRUSION |
| 7 | 749321 | ASSY KNOB |
| 8 | 104164 | WASHER FELT BLK 1 X 1/4 X 1/16 |
| 9 | 400342 | SCREW 6-32 X 3/8 FILLISTER HD |
| 10 | 092418 | FILTER BLUE DISPLAY |
| 11 | 005309 | GLASS PANEL PLATE |
| 12 | 005311 | GAP PLATE |
| 13 | 400276 | SCREW MACH SEM 6-32 X 5/16 PH PN |
| 14 | 401074 | SCREW TAPPING 4-40 X 1/4 PH PN |
| 15 | 005788 | METER CLAMP |
| 16 | 017913 | LOGO BACKLIGHT |
| 17 | 094430 | FOAM TAPE 1/8" THK |
| 18 | 124093 | METER |
| 19 | 163026 | LOGO PUSHBUTTON BACKLIGHT |
| 20 | 094274 | TAPE ADHESIVE |
| 21 | 163037 | BACKLIGHT METER 2.8 X 6.1 |
| 22 | 005306 | SUBPANEL |
| 23 | 146243 | SWITCH POWER |
| 24 | 021159 | BUSHING SWITCH |
| 25 | 104138 | WASHER FIBER .150ID X .312OD |
| 26 | 402045 | KEP NUT 6-32 SPECIAL |
| 27 | 021030 | SPACER 6 X 1/4 |
| 28 | 749830 | ASSY METER PCB |
| 29 | 401054 | SCREW TAPTITE 6-32 X 1/4 PH PN BLK |
| 30 | 401172 | SCREW TC 6-32 X 1/4 PH FL U/C |
| 31 | 005291 | DUST COVER |
| 32 | 400200 | SCREW MACH 10-32 X 1/2 TRUSS HD |
| 33 | 126937 | DECAL TOP COVER |
| 34 | 401059 | SCREW SM 6-18 X 5/8 PH PN TYPE A |
| 35 | 749846 | POTTED TRANSFORMER POWER |
| 36 | 749847 | POTTED TRANSFORMER OUTPUT |
| 37 | 166131 | DECAL POWER TRANSFORMER |
| 38 | 166130 | DECAL OUTPUT TRANSFORMER |
| 39 | 005305 | CHASSIS |
| 40 | 749829 | ASSY INPUT PCB |
| 41 | 101197 | SCREW HI/LO 4-24 X 3/8 PH HD BLK |
| 42 | 400250 | SCREW MACH SEMS 6-32 X 1/4 PH PN |
| 43 | 117938 | POST BINDING BLACK |
| 44 | 117937 | POST BINDING RED |
| 45 | 178161 | HOLDER FUSE |
| 46 | 117487 | RECEPTACLE AC LINE |
| 47 | 078024 | GROMMET RUBBER 1" ID |
| 48 | 078025 | GROMMET RUBBER 3/4" ID |
| 49 | 018690 | HEATSINK |
| 50 | 749828 | ASSY DRIVER/HEATSINK PCB |
| 51 | 084206 | ISOSTRATE |
| 52 | 112087 | SPACER PCB 1/4 |
| 53 | 414141 | CLIP RIGHT ANGLE |
| 54 | 749831 | ASSY POWER SUPPLY PCB |
| 55 | 005307 | SUPPORT BRACKET |
| 56 | 102006 | NUT MACH 10-32 W/LOCK |
| 57 | 005308 | CAPACITOR STRAP |
| 58 | 094391 | TAPE FOAM 1/8 X 3/4 |
| 59 | 074091 | TERMINAL BLOCK AC |
| 60 | 404001 | WASHER FLAT |
| 61 | 404004 | WASHER LOCK 2.5mm INT STAR |
| 62 | 402022 | NUT MACH 4-40 X 3/16 X 1/16 |
| 63 | 005240 | HEATSINK VENT |
| 64 | 401176 | SCREW TC 6-32 X 1/2 PH PN BLK |
| 65 | 404005 | WASHER FLAT STEEL |
| 66 | 070181 | DIODE BRIDGE RECTIFIER |
| 67 | 084135 | PAD THERMAL |
| 68 | 402005 | NUT MACH 8-32 W/LOCK |
| 69 | 017452 | KLIP WIRE |
| 70 | 402003 | NUT 6-32 SELF LOCK |
| 71 | 401078 | SCREW TAP 8-32 X 5/16 PH PN BLK |
| 72 | 102052 | NUT GOLD SUPPLIED W/117758 |
| 73 | 104162 | WASHER LOCK INTERNAL TOOTH |
| 74 | 102051 | NUT HEX M9 X .75 GOLD PLATED |
| 75 | 005235 | HEATSINK COVER |
| 76 | 404016 | WASHER INT STAR .5 X .630 X .022 |
| 77 | 005635 | BOTTOM COVER |
| 79 | 017218 | FOOT PLASTIC BLACK |
| 80 | 404033 | WASHER FLAT #10 CLEAR |
| 81 | 400159 | SCREW MACH 10-32 X 3/4 PH PN BLK |

REPACKING INSTRUCTIONS

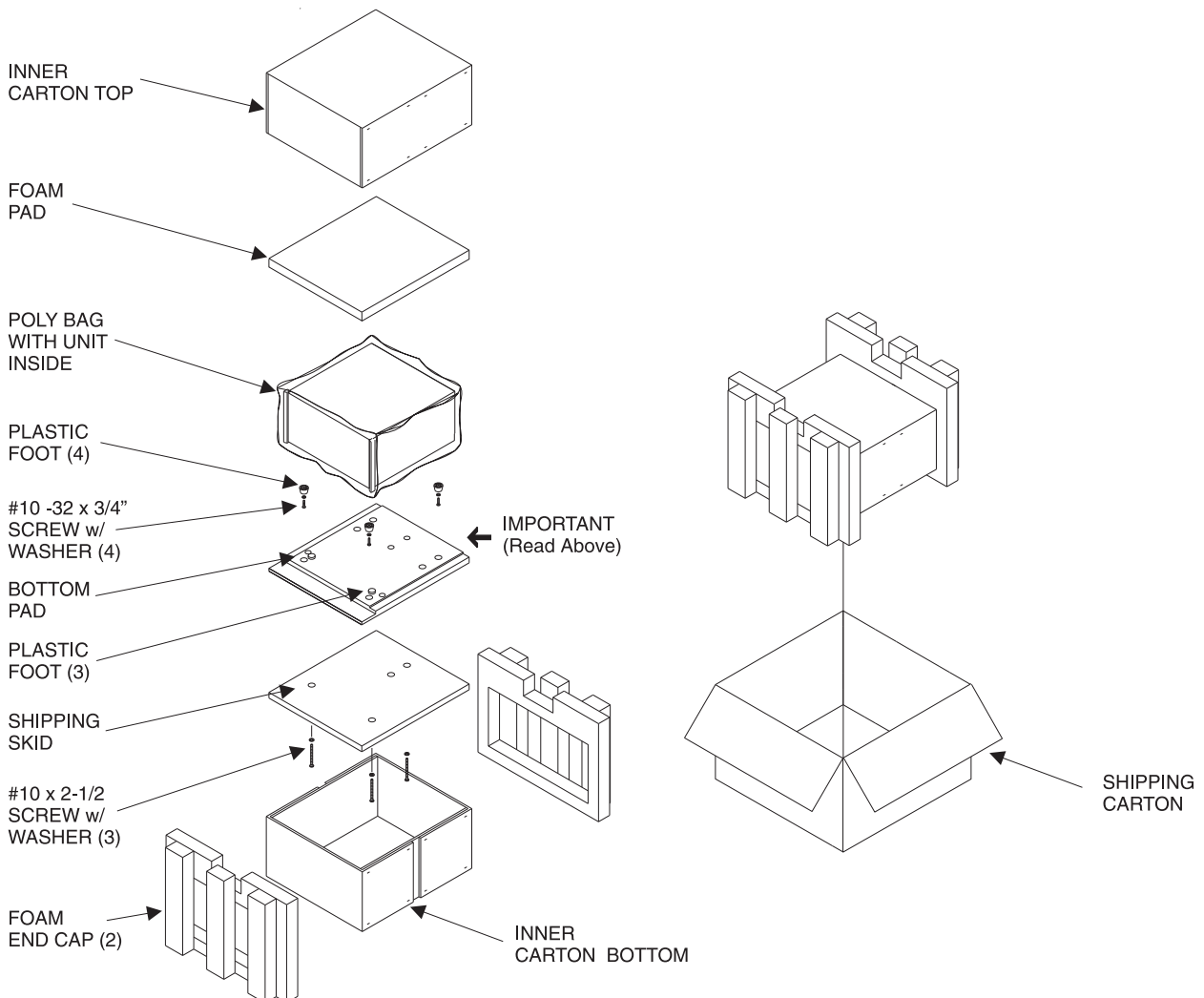
In the event it is necessary to repack the unit for shipment, the unit must be packed exactly as shown below.

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 | 034198 | Inner carton top |
| 1 | 034188 | Inner carton foam pad |
| 4 | 017218 | Plastic foot (unit) |
| 1 | 033739 | Poly bag |
| 4 | 400159 | #10-32 x 3/4" Machine screw |
| 4 | 404080 | #10 x 7/16" Flat washer |
| 1 | 034194 | Bottom pad |
| 3 | 017218 | Plastic foot (spacer) |
| 1 | 033699 | Shipping skid |
| 3 | 401204 | #10 x 2-1/2" Wood screw |
| 3 | 404033 | #10 x 1-3/4" Flat washer |
| 2 | 034250 | Foam end caps |
| 1 | 034256 | Shipping carton |
| 1 | 034199 | Inner carton bottom |



MC501

POWER AMPLIFIER

SERVICE MANUAL

SERIAL NO. WU1001 And Above



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.