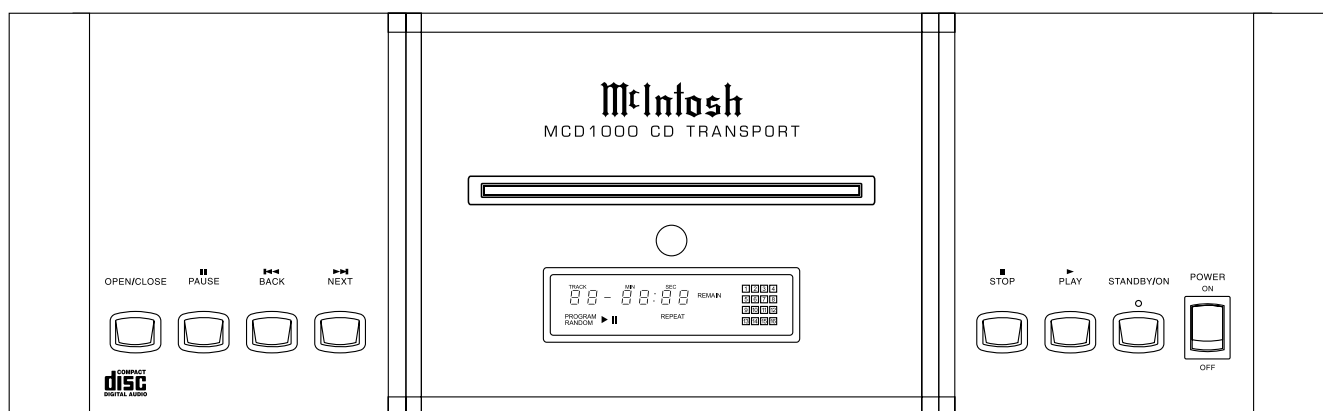




MCD1000

CD TRANSPORT



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McIntosh®

SERVICE MANUAL

PERFORMANCE SPECIFICATIONS

Digital Audio Format

IEC958, S/PDIF

Digital Outputs

Optical: -15 ~ -20dBm

Coaxial: 0.5V p-p @ 75ohms

XRL: 5V p-p @ 110ohms (AES/EBU)

Transport

Pickup: Optical 3-beam laser

Objective Lens Drive System: 2-Dimensional parallel

Laser Type: GaAIAs semiconductor

Laser Beam Wavelength: 780nm

Digital Signal Format

Sampling Frequency: 44.1kHz

Quantization Bit: 16-bit linear/channel

Modulation Code: Eight to Fourteen Modulation

Error Correction: Cross Interleave Reed Solomon

Power Requirements

100 Volts, 50/60Hz at 20 watts

110 Volts, 50/60Hz at 20 watts

120 Volts, 50/60Hz at 20 watts

220 Volts, 50/60Hz at 20 watts

230 Volts, 50/60Hz at 20 watts

240 Volts, 50/60Hz at 20 watts

Note: Refer to the rear panel of the MCD1000 for the correct voltage.


Dimensions

Front Panel: 17-1/2 inches (44.5cm) wide, 6 inches (15.24cm) high (including feet). Depth is 16-1/8 inches (40.96cm) including the Front Panel and knobs.

Weight

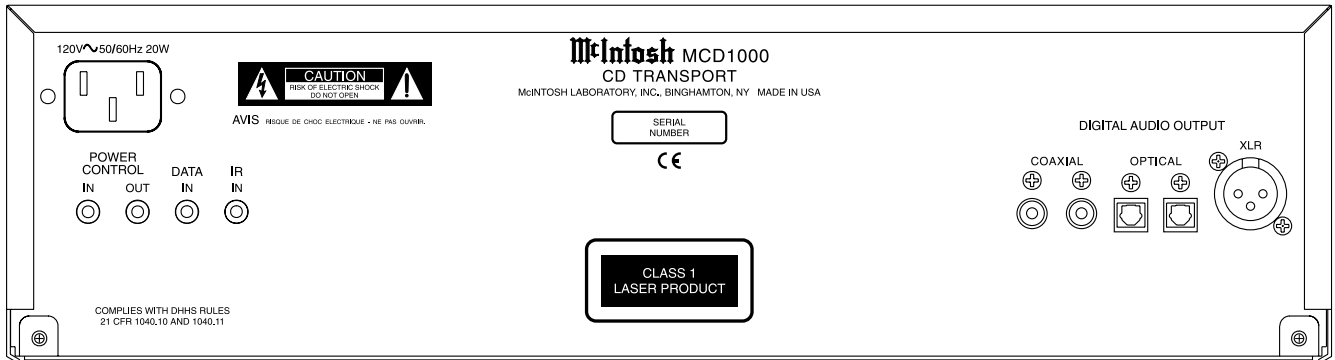
27.5 pounds (12.47g) net, 41.5 pounds (18.83kg) in shipping carton

NOTES

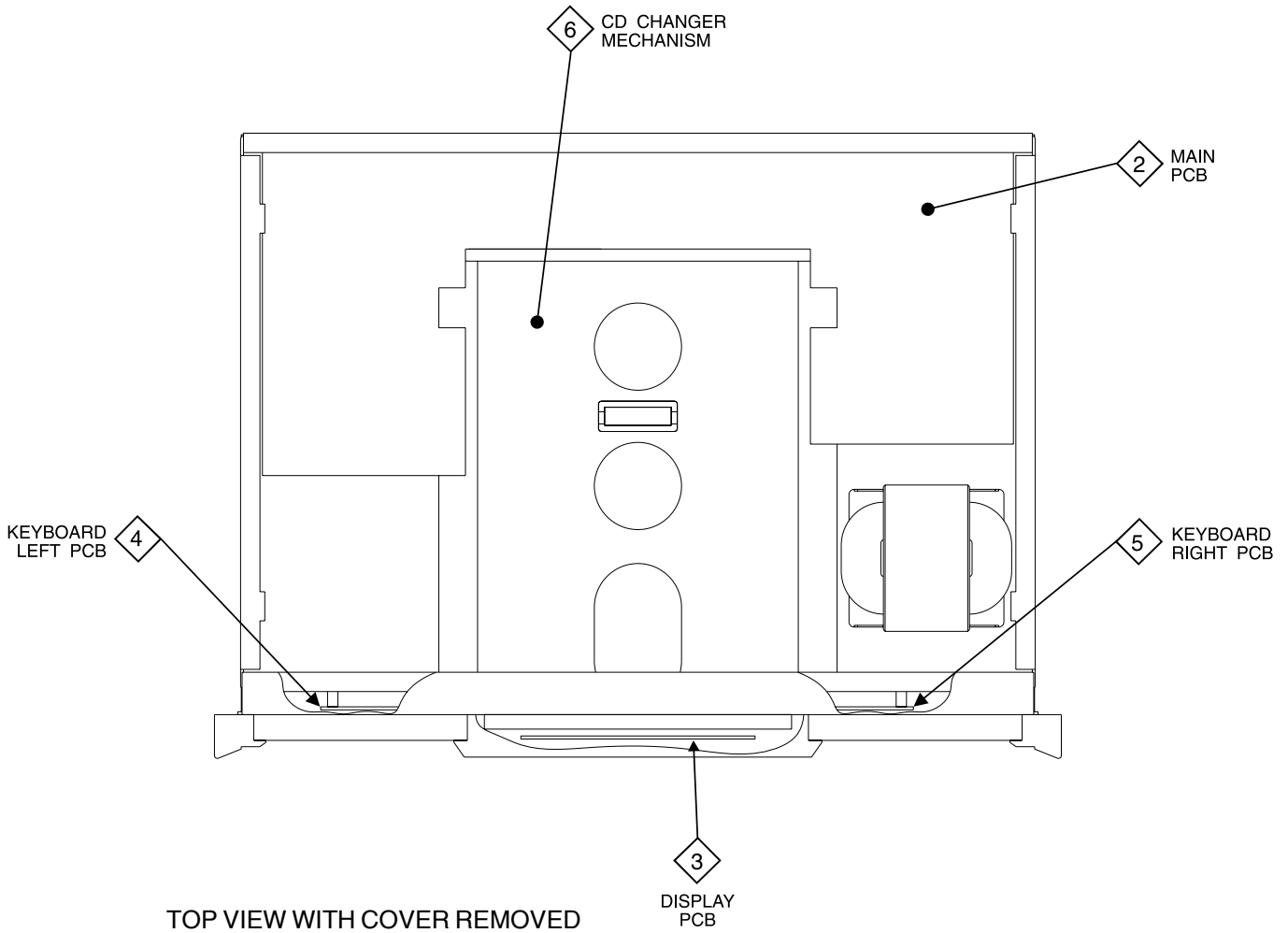
1. The heavy notes on the schematic denote the primary signal path.
2. Unless otherwise noted, all voltages indicated on the schematics are measured under the following conditions:
 - a. AC input at 120 volts, 50/60Hz.
 - b. All voltages are +/-10% with respect to ground. A high impedance (10 megaohm)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

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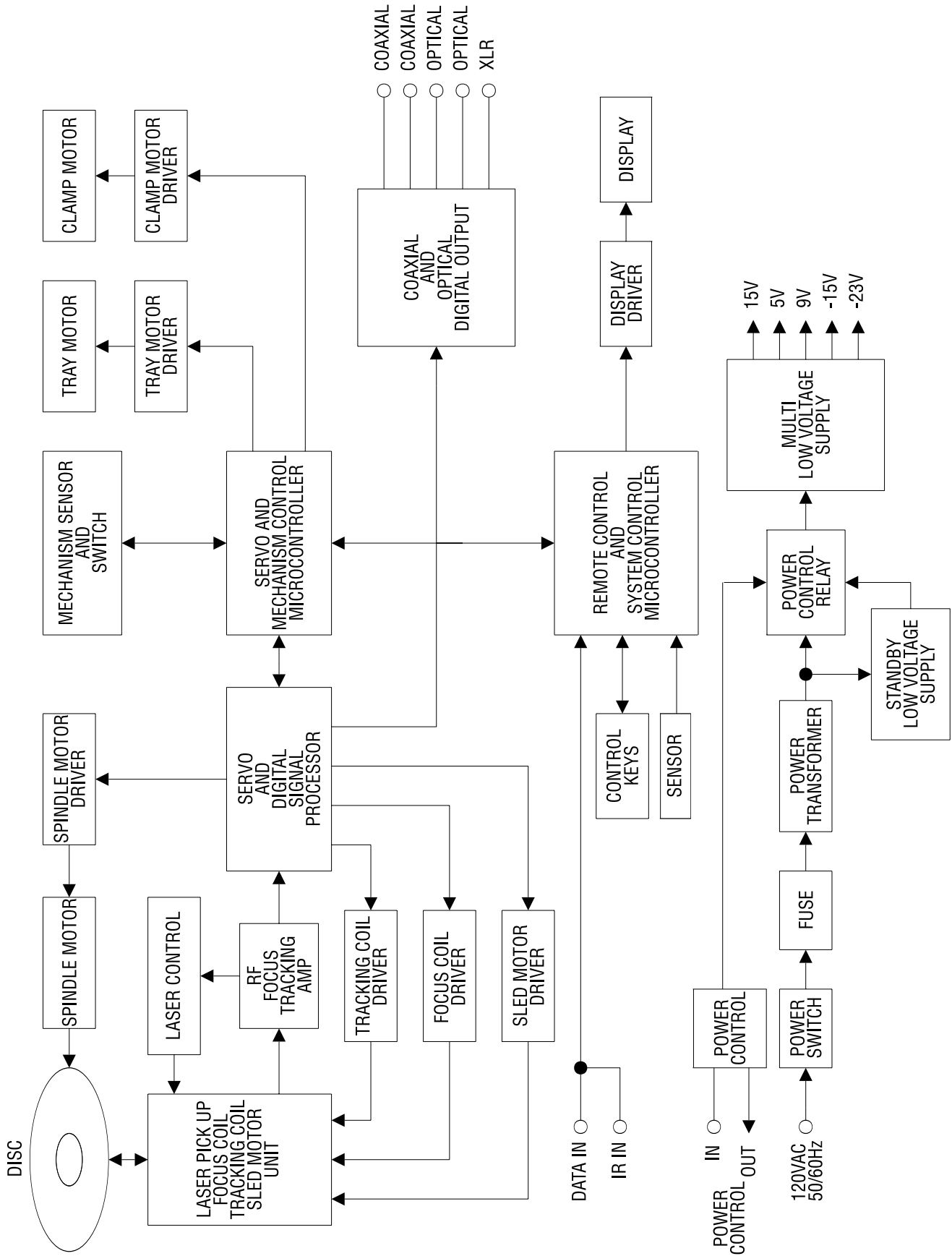
REAR VIEW



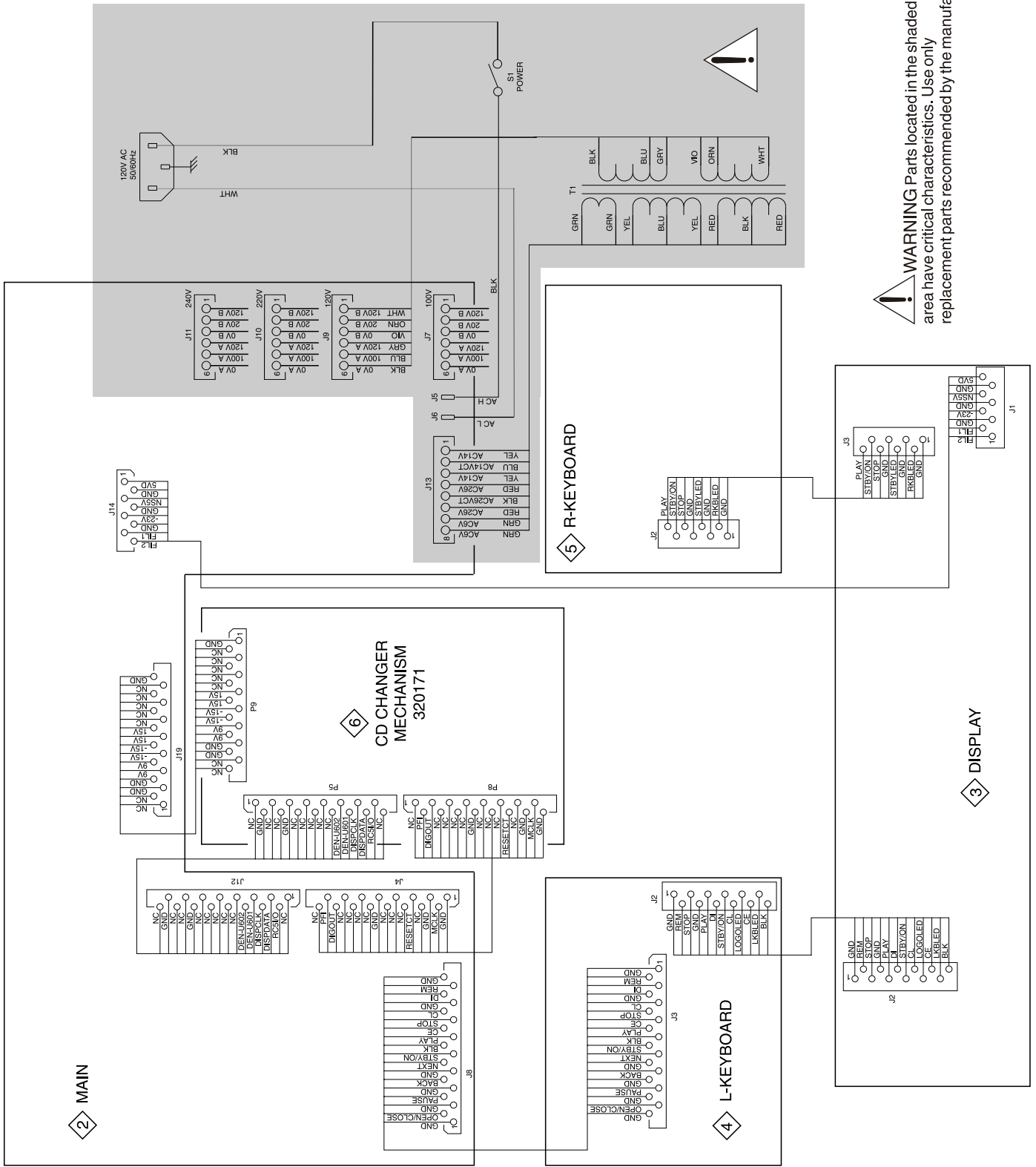
SECTION LOCATION



BLOCK DIAGRAM

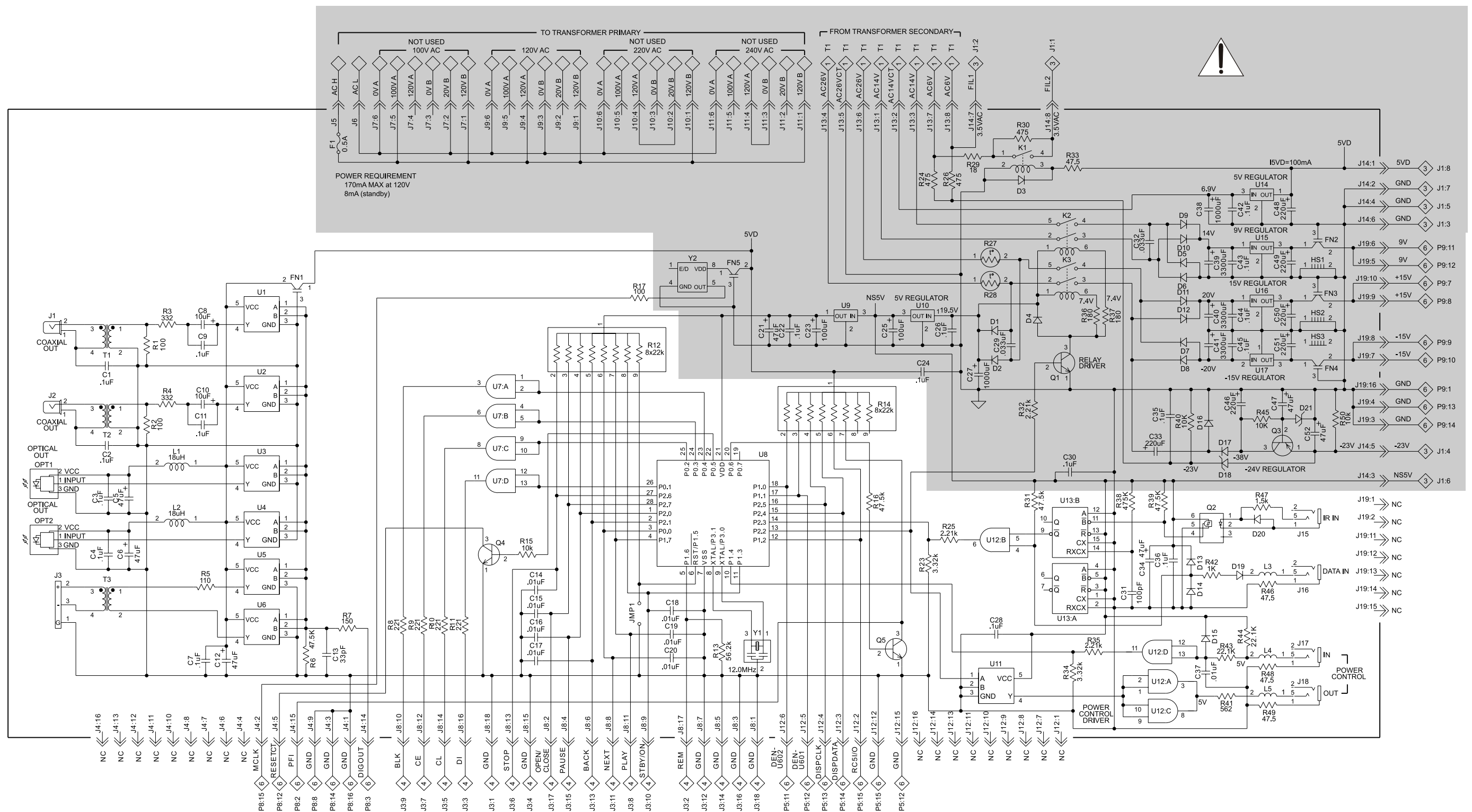


1 INTERCONNECT

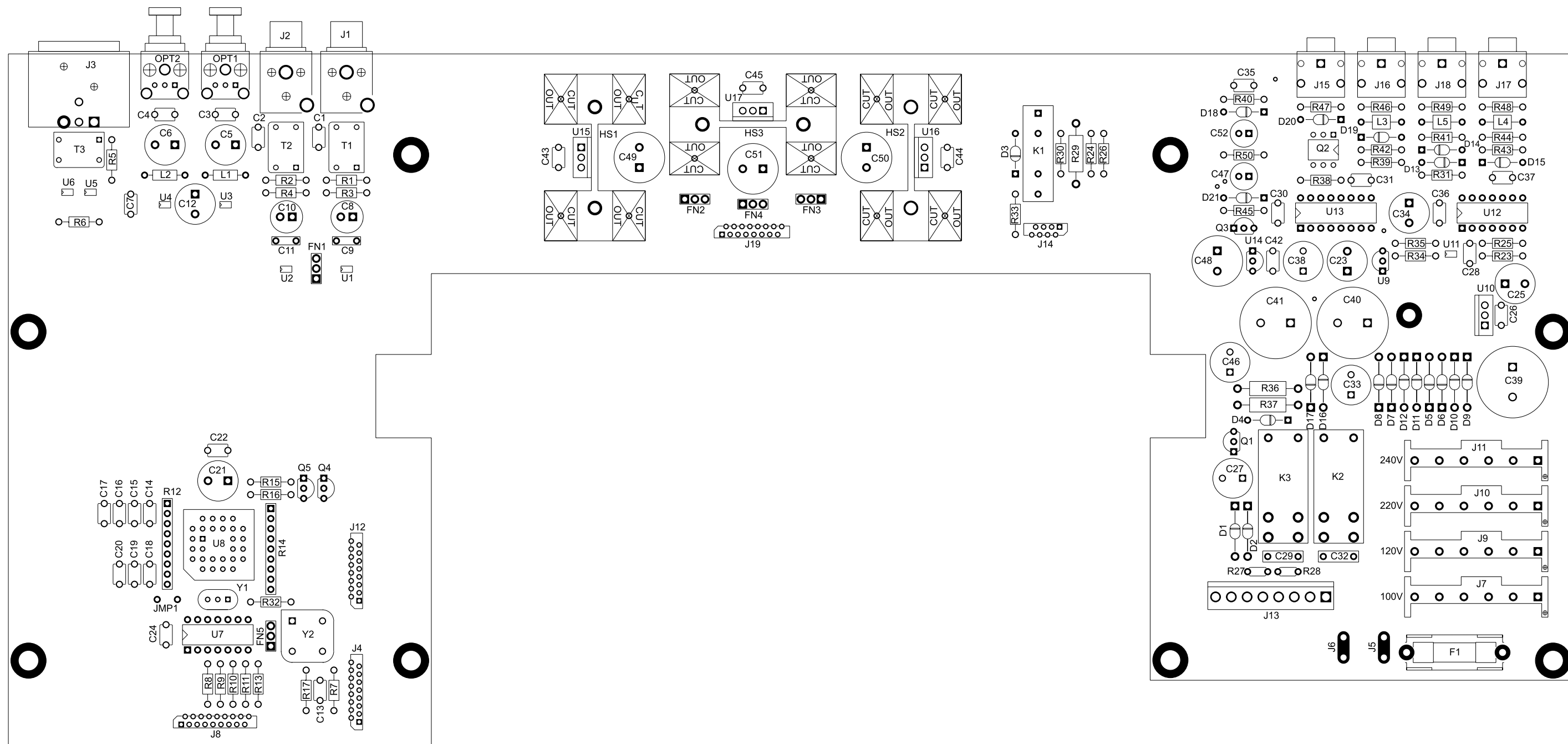


NOTES

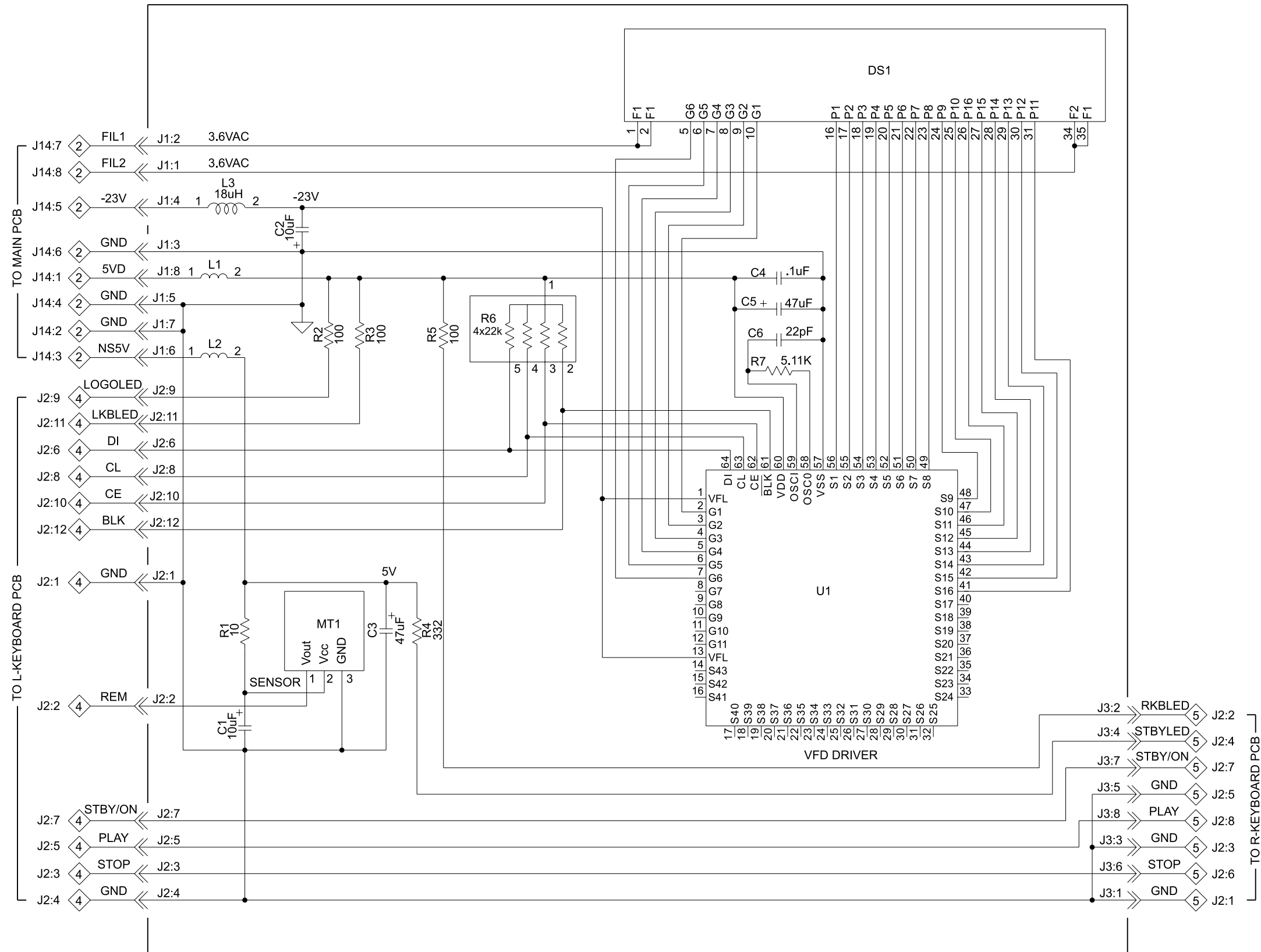
WARNING Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.



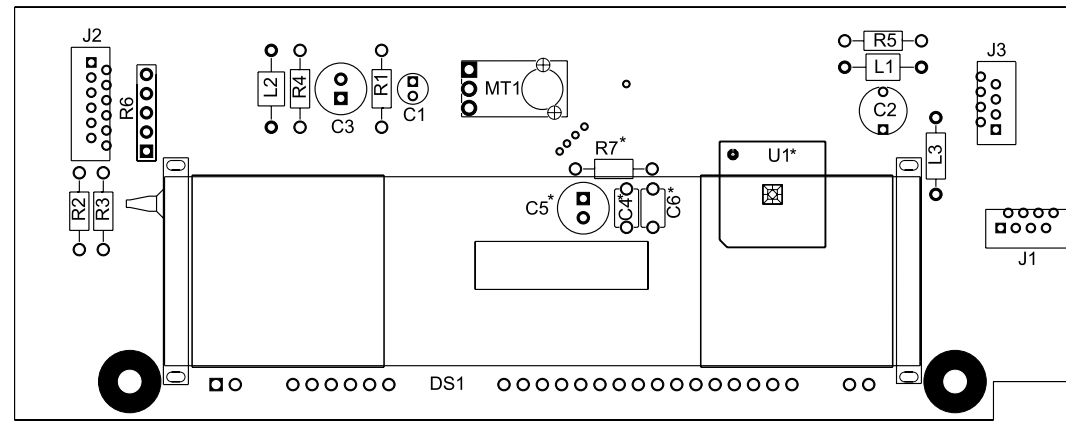
2 MAIN 050017



3 DISPLAY 050018

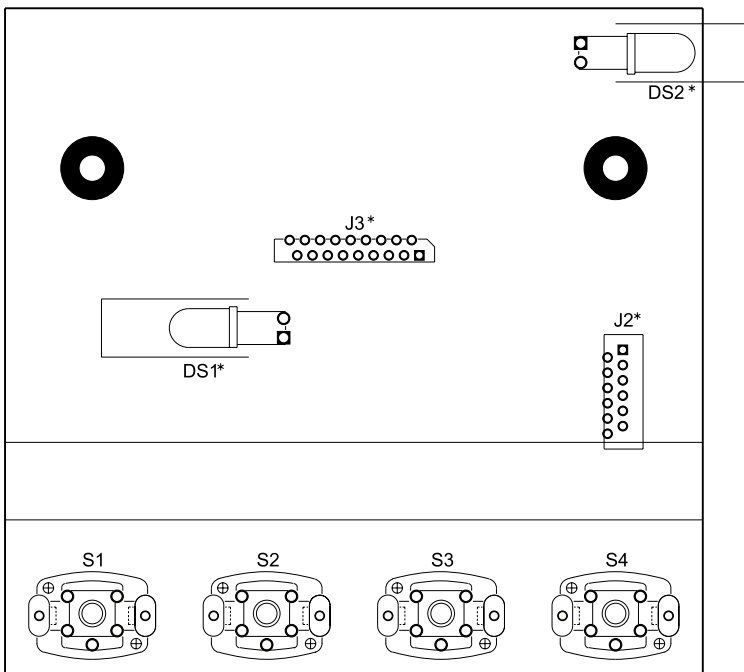
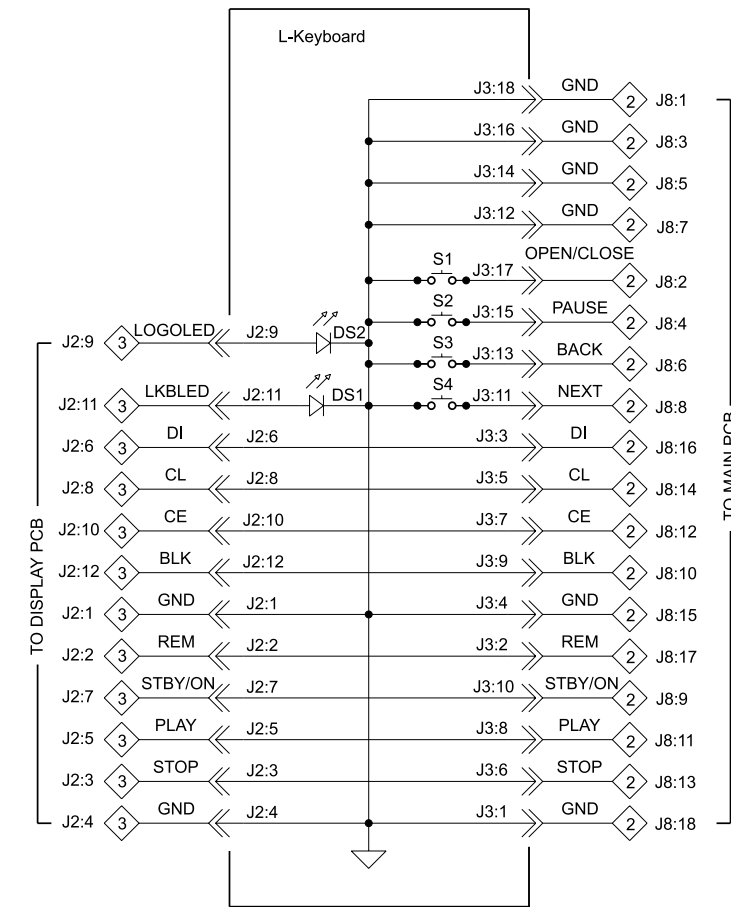


3 DISPLAY 050018



* DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PCB

4 L-KEYBOARD 050019

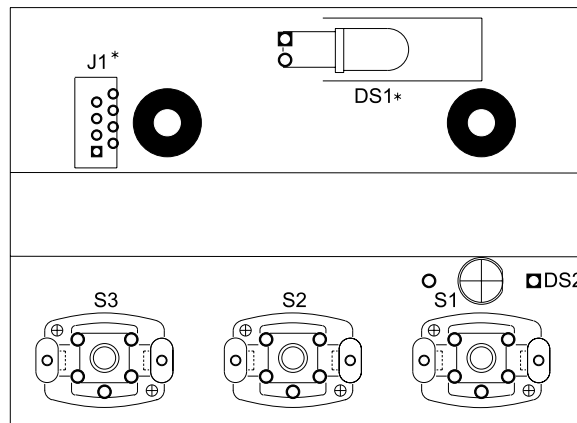
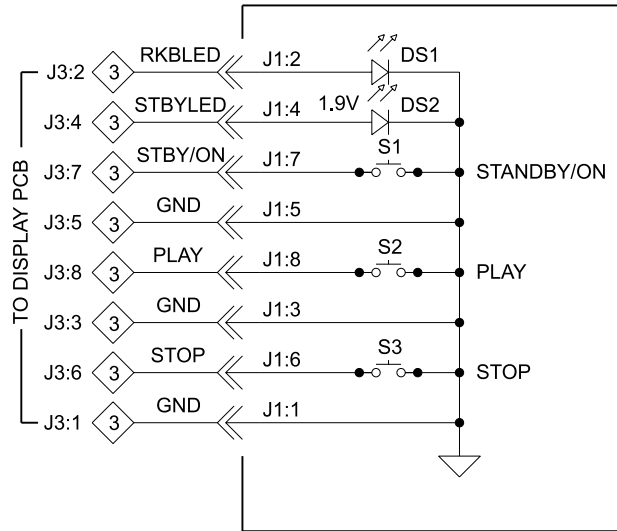


* DENOTES COMPONENTS ON REVERSE OR BACKSIDE OF PCB

5

R-KEYBOARD 050020

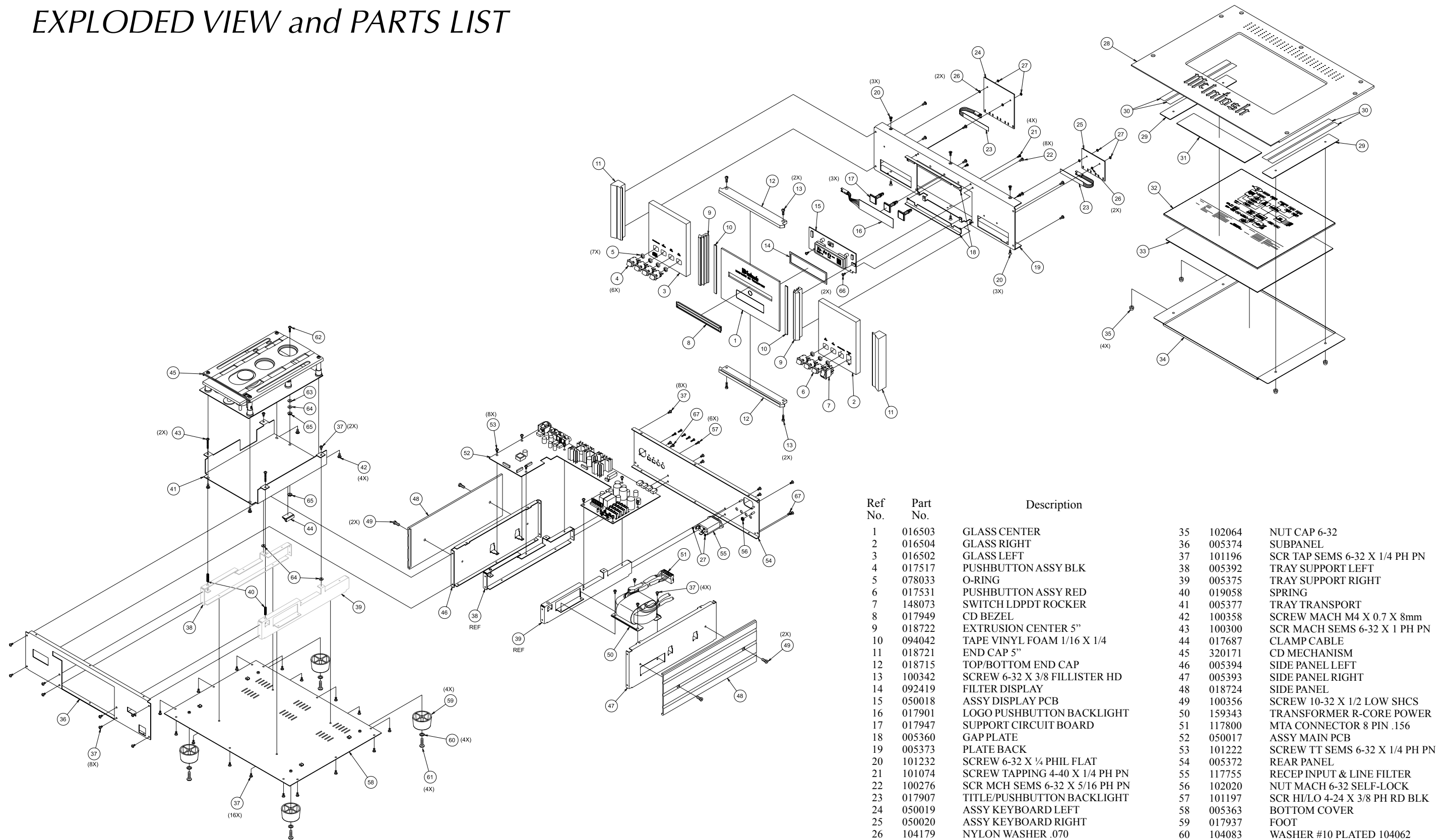
R-Keyboard



* DENOTES COMPONENTS ON BACK OR FARSIDE OF PCB

NOTES

EXPLODED VIEW and PARTS LIST



| Ref No. | Part No. | Description |
|---------|----------|--------------------------------|
| 1 | 016503 | GLASS CENTER |
| 2 | 016504 | GLASS RIGHT |
| 3 | 016502 | GLASS LEFT |
| 4 | 017517 | PUSHBUTTON ASSY BLK |
| 5 | 078033 | O-RING |
| 6 | 017531 | PUSHBUTTON ASSY RED |
| 7 | 148073 | SWITCH LDPDT ROCKER |
| 8 | 017949 | CD BEZEL |
| 9 | 018722 | EXTRUSION CENTER 5" |
| 10 | 094042 | TAPE VINYL FOAM 1/16 X 1/4 |
| 11 | 018721 | END CAP 5" |
| 12 | 018715 | TOP/BOTTOM END CAP |
| 13 | 100342 | SCREW 6-32 X 3/8 FILLISTER HD |
| 14 | 092419 | FILTER DISPLAY |
| 15 | 050018 | ASSY DISPLAY PCB |
| 16 | 017901 | LOGO PUSHBUTTON BACKLIGHT |
| 17 | 017947 | SUPPORT CIRCUIT BOARD |
| 18 | 005360 | GAP PLATE |
| 19 | 005373 | PLATE BACK |
| 20 | 101232 | SCREW 6-32 X 1/4 PHIL FLAT |
| 21 | 101074 | SCREW TAPPING 4-40 X 1/4 PH PN |
| 22 | 100276 | SCR MCH SEMS 6-32 X 5/16 PH PN |
| 23 | 017907 | TITLE/PUSHBUTTON BACKLIGHT |
| 24 | 050019 | ASSY KEYBOARD LEFT |
| 25 | 050020 | ASSY KEYBOARD RIGHT |
| 26 | 104179 | NYLON WASHER .070 |
| 27 | 102001 | NUT KEP 4-40 CADMIUM PLATE |
| 28 | 018723 | TOP PANEL |
| 29 | 005364 | TOP STRIP |
| 30 | 094192 | TAPE DOUBLE SIDED 1/2" |
| 31 | 005396 | GOLD STRIP |
| 32 | 016505 | GLASS TOP COVER |
| 33 | 094442 | FOAM PAD |
| 34 | 005365 | TRAY |
| 35 | 102064 | NUT CAP 6-32 |
| 36 | 005374 | SUBPANEL |
| 37 | 101196 | SCR TAP SEMS 6-32 X 1/4 PH PN |
| 38 | 005392 | TRAY SUPPORT LEFT |
| 39 | 005375 | TRAY SUPPORT RIGHT |
| 40 | 019058 | SPRING |
| 41 | 005377 | TRAY TRANSPORT |
| 42 | 100358 | SCREW MACH M4 X 0.7 X 8mm |
| 43 | 100300 | SCR MACH SEMS 6-32 X 1 PH PN |
| 44 | 017687 | CLAMP CABLE |
| 45 | 320171 | CD MECHANISM |
| 46 | 005394 | SIDE PANEL LEFT |
| 47 | 005393 | SIDE PANEL RIGHT |
| 48 | 018724 | SIDE PANEL |
| 49 | 100356 | SCREW 10-32 X 1/2 LOW SHCS |
| 50 | 159343 | TRANSFORMER R-CORE POWER |
| 51 | 117800 | MTA CONNECTOR 8 PIN .156 |
| 52 | 050017 | ASSY MAIN PCB |
| 53 | 101222 | SCREW TT SEMS 6-32 X 1/4 PH PN |
| 54 | 005372 | REAR PANEL |
| 55 | 117755 | RECEP INPUT & LINE FILTER |
| 56 | 102020 | NUT MACH 6-32 SELF-LOCK |
| 57 | 101197 | SCR HI/LO 4-24 X 3/8 PH RD BLK |
| 58 | 005363 | BOTTOM COVER |
| 59 | 017937 | FOOT |
| 60 | 104083 | WASHER #10 PLATED 104062 |
| 61 | 100159 | SCR MCH 10-32 X 3/4 PH PN BLK |
| 62 | 100304 | SCR MCH SEMS 6-32 X 1/2 PH PN |
| 63 | 104009 | WASH FIBRE FLAT 6 X 3/8 X 3/64 |
| 64 | 104005 | WASH FLAT STEEL 6 X 3/8 X .032 |
| 65 | 102003 | NUT MACH 6-32 W/LOCK |
| 66 | 101057 | SCREW 4-40 X 1/4 PH PN |
| 67 | 101109 | SCREW 6-32 X 5/16 PH PN |

REPACKING INSTRUCTION

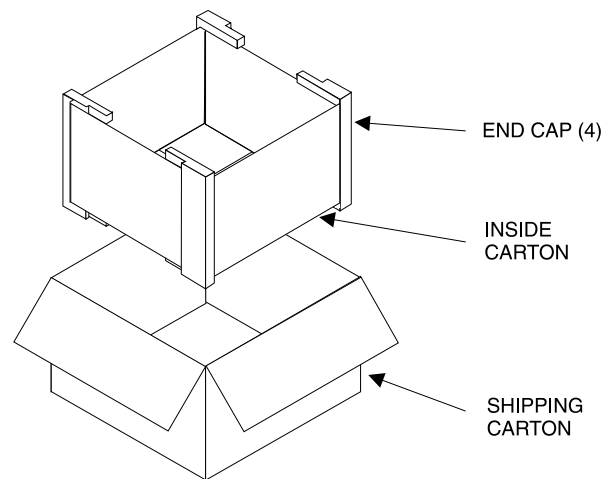
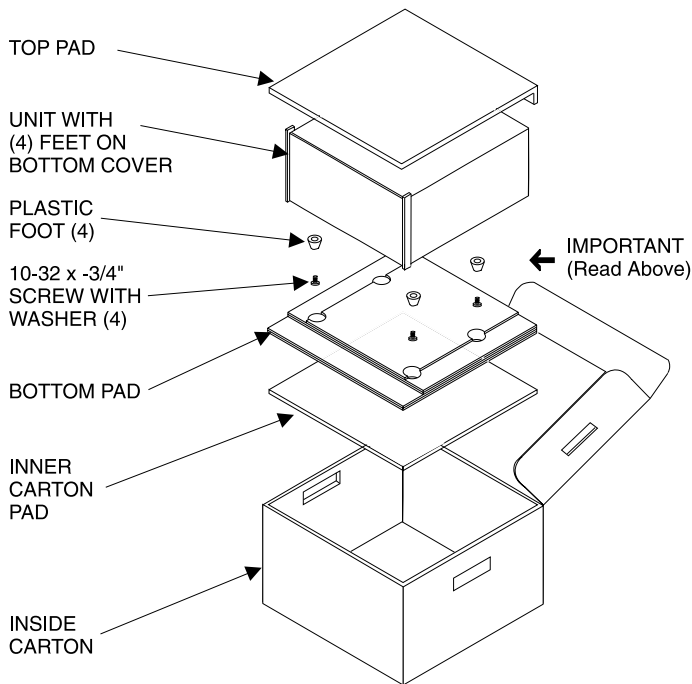
In the event it is necessary to repack the unit for shipment, the unit must be packed exactly as shown below.

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. 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 | 034075 | Shipping carton only |
| 4 | 033837 | Foam end cap |
| 1 | 034076 | Inside carton only |
| 1 | 033726 | Top pad |
| 1 | 034255 | Bottom pad |
| 1 | 034077 | Inner carton pad |
| 4 | 017937 | Plastic foot |
| 4 | 100159 | #10-32 x 3/4" Machine screw |
| 4 | 104083 | #10 x 7/16" Flat washer |
| 1 | 049270 | Shipping carton complete with all the above parts. |



MCD1000

CD TRANSPORT 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.