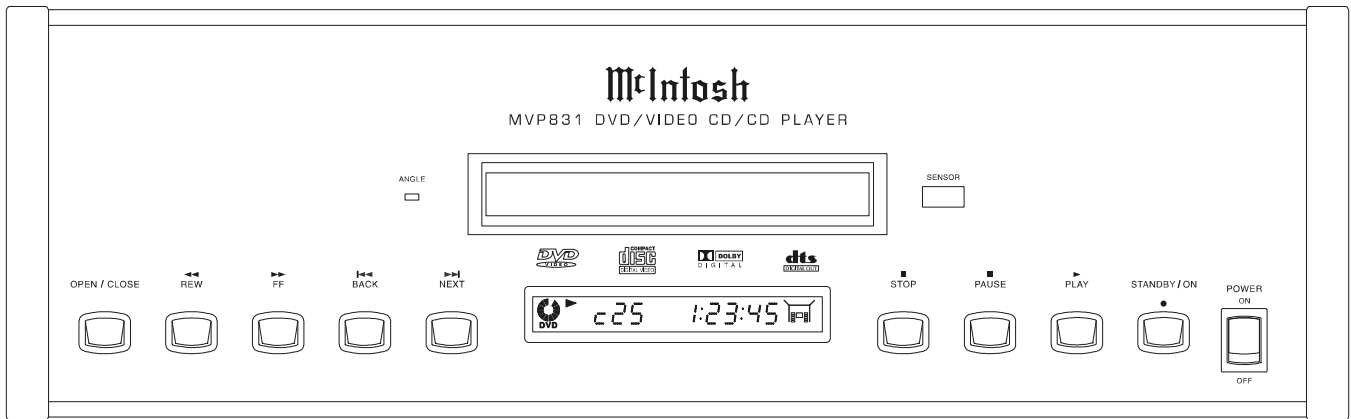


MVP831

COMPACT DISC TRANSPORT



CONTENTS

Performance Specifications	2	Main	7 - 8
Notes	2	A/V Power Supply Schematic and PCB	9 - 12
Safety Information	2	Display Schematic and PCB	13 - 16
Rear Panel	3	Parts List	15 - 16
Section Location	3	Exploded View and Parts List	17 - 18
Block Diagram	4	Repacking Instructions	19
Interconnection Diagram	5 - 6		

McIntosh

SERVICE MANUAL

Video Specifications

Signal System
NTSC

S-Video Y Output Level
1Vp-p (75 OHM)

S-Video C Output Level
0.286Vp-p (75 OHM) (NTSC)

Video Output Level
1Vp-p (75 OHM)

Audio Specifications

Number of Channels
2

Output level
2.2Vrms

DVD Frequency Response
4-22KHz (48KHz Sampling, Linear Audio)
4-44KHz (96KHz Sampling, Linear Audio)

CD Frequency Response
4-20KHz

CD Signal to Noise Ratio
Better than 110dB (A-weighted)

DVD Dynamic Range
Better than 100dB (Linear Audio)

CD Dynamic Range
Better than 98dB

Harmonic Distortion
0.003% (1KHz)

Channel Separation
Better than 110dB (1KHz)

General Specifications

Digital Output
Optical: -15dbm to -21dbm
Coaxial: 0.5V p-p/75 ohm

Digital Signal Format
Sampling Frequency: 44.1kHz & 48kHz

Transport
Laser Beam Wavelength: 655nm
Laser Power CLASS II

Power Requirements
100 Volts, 50/60Hz at 28 watts
110 Volts, 50/60Hz at 28 watts
120 Volts, 50/60Hz at 28 watts
220 Volts, 50/60Hz at 28 watts
230 Volts, 50/60Hz at 28 watts
240 Volts, 50/60Hz at 28 watts

Note: Refer to the rear panel of the MVP831 for the correct voltage.

Dimensions

Front Panel: 17-1/2 inches (44.5cm) wide, 5-3/8 inches (13.7cm) high, depth behind front mounting panel is 15 inches (38.1cm) including clearance for connectors. Panel clearance required in front of mounting panel is 3/4 inch (1.9cm).

Note: When the DVD/CD tray is opened, the panel clearance required in front of mounting panel is 6-3/4 inches (17.2cm).

Weight

20 pounds (9.0Kg) net, 34 pounds (15.4Kg) in shipping carton

PERFORMANCE SPECIFICATIONS

VIDEO SPECIFICATIONS

Signal System:	NTSC
S-Video Y Output Level:	1Vp-p (75 ohm)
S-Video C Output Level:	0.286Vp-p (75 ohm) (NTSC)
Video Output Level:	1Vp-p (75 ohm)

AUDIO SPECIFICATIONS

Number Of Channels:	2
Output Level:	2.2Vrms
DVD Frequency Response	4-22kHz (48kHz Sampling, Linear Audio)
	4-44kHz (96kHz Sampling, Linear Audio)
CD Frequency Response:	4-20kHz
CD Signal To Noise Ratio:	Better than 110dB (A-weighted)
DVD Dynamic Range:	Better than 100dB (Linear Audio)
CD Dynamic Range:	Better than 98dB
Harmonic Distortion:	0.003% (1kHz)
Channel Separation:	Better than 110dB (1kHz)

GENERAL SPECIFICATIONS

Digital Output

Optical:	-15dbm to -21dbm
Coaxial:	0.5V p-p/75 ohm

Transport

Laser Power:	CLASS II
Laser Beam Wavelength:	655nm

Digital Signal Format

Sampling Frequency:	44.1kHz and 48kHz
---------------------	-------------------

Power Requirements

100 Volts, 50/60Hz at 30 watts
110 Volts, 50/60Hz at 30 watts
120 Volts, 50/60Hz at 30 watts
220 Volts, 50/60Hz at 30 watts
230 Volts, 50/60Hz at 30 watts
240 Volts, 50/60Hz at 30 watts


Note: Refer to the rear panel of the MVP831 for the correct voltage.

Dimensions

Front Panel: 17-1/2 inches (44.5cm) wide, 5-3/8 inches (13.7cm) high, depth behind front mounting panel is 15 inches (38.1cm) including clearance for connectors. Panel clearance required in front of mounting panel is 3/4 inch (1.9cm).

Note: When the DVD/CD tray is opened, the panel clearance required in front of mounting panel is 6-3/4 inches (17.2cm).

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.

SAFETY INFORMATION

CAUTION: The use of optical instruments with this product will increase eye hazard.

This product utilizes a class 1 laser. Invisible laser radiation is emitted from the optical pickup lens when the unit is turned on.

1. Do not look directly into the pickup lens.
2. Do not use optical instruments to look at the pickup lens.
3. Do not adjust the preset variable resistor on the optical pickup.
4. Do not disassemble the optical pickup unit.
5. Use of controls or adjustment or performance of procedures other than those specified herein may result in hazardous radiation exposure.
6. Replace optical pickup only with manufacturers specified type.

Laser output:	0.65mW
Wavelength:	665nm

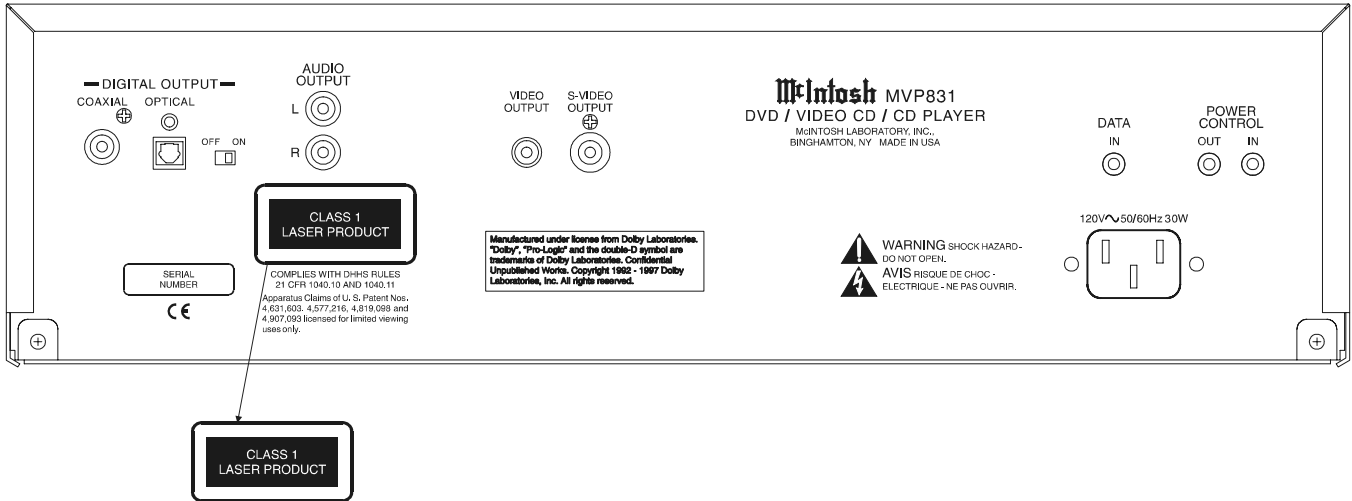
This product utilizes an embedded class 2 laser (IEC825).

LUOKAN 1 LASERLAITE KLASS 1 LASER APPARAT

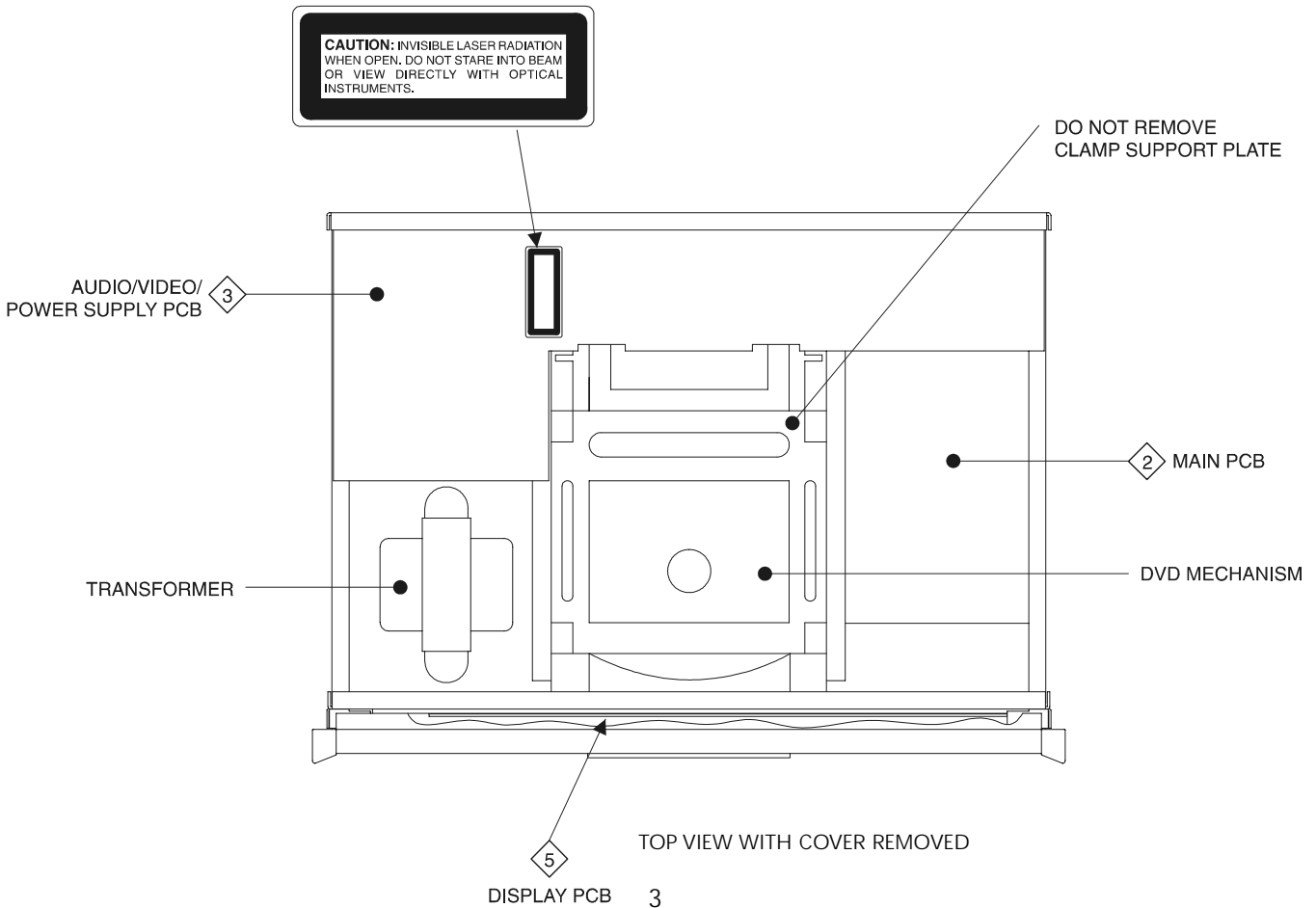
VAROITUS! Laitteen käyttäminen muulla kuin tassa kayttoohjeessa mainitulla tavalla saattaa altistaa kayttajan turvallisuusluokan 1 ylittavalle nakymattomalle lasersateiylle.

WARNING! Om apparaten anvands pa annat satt an i denna bruksanvisning specificerats, kan anvandaren utsattas for osynbg laserstraining, som overskrider gransen for laserklass 1.

REAR PANEL

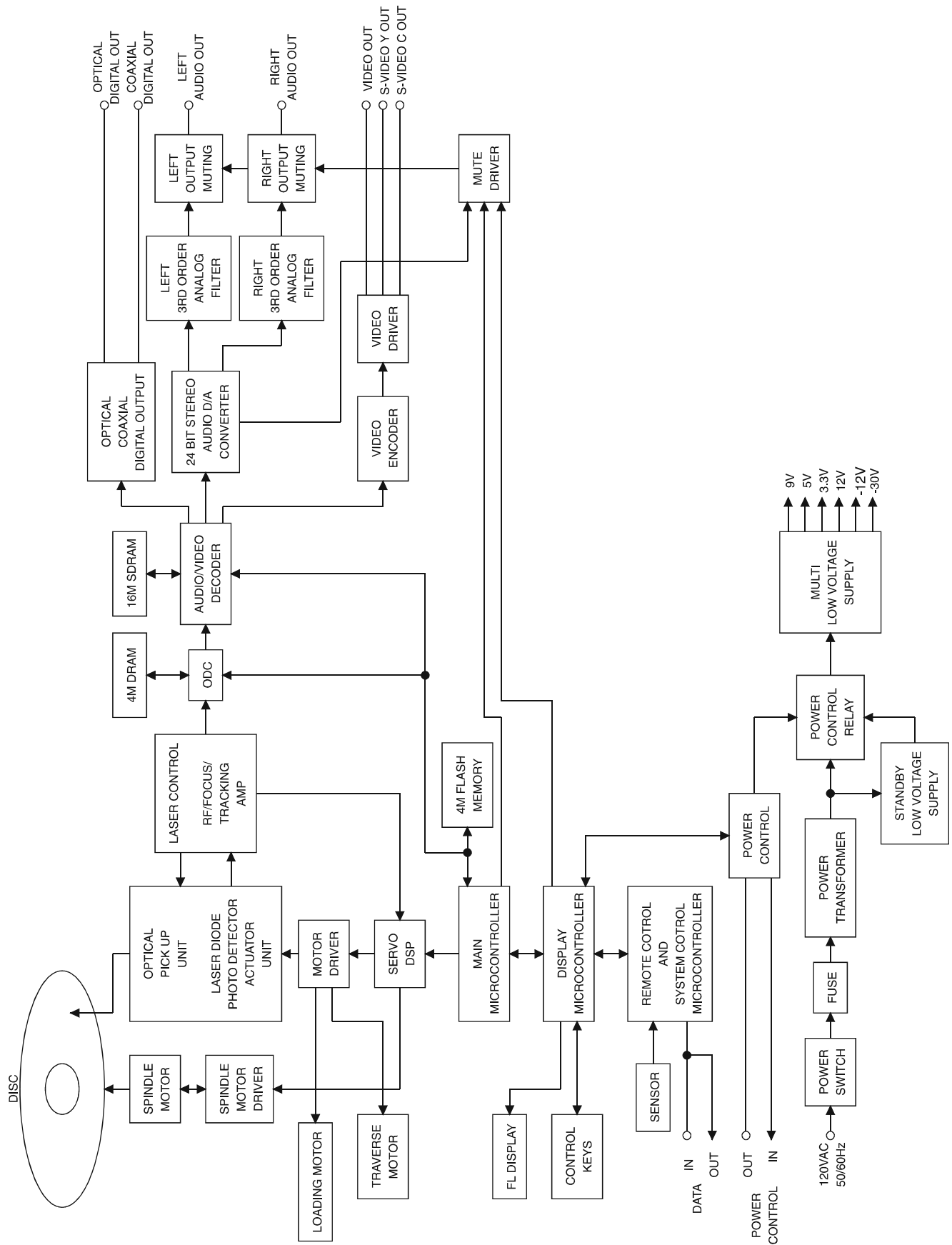


SECTION LOCATIONS

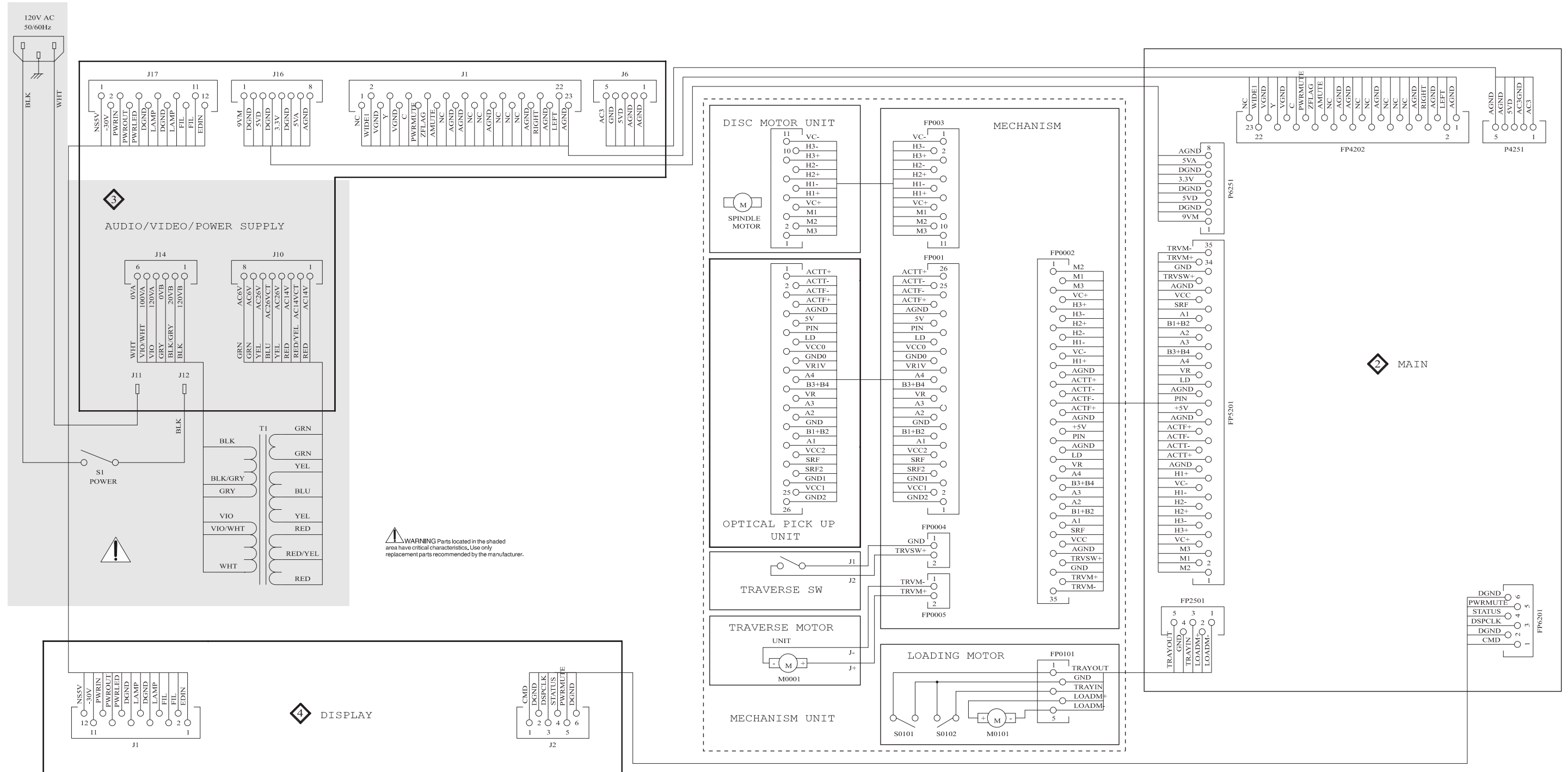


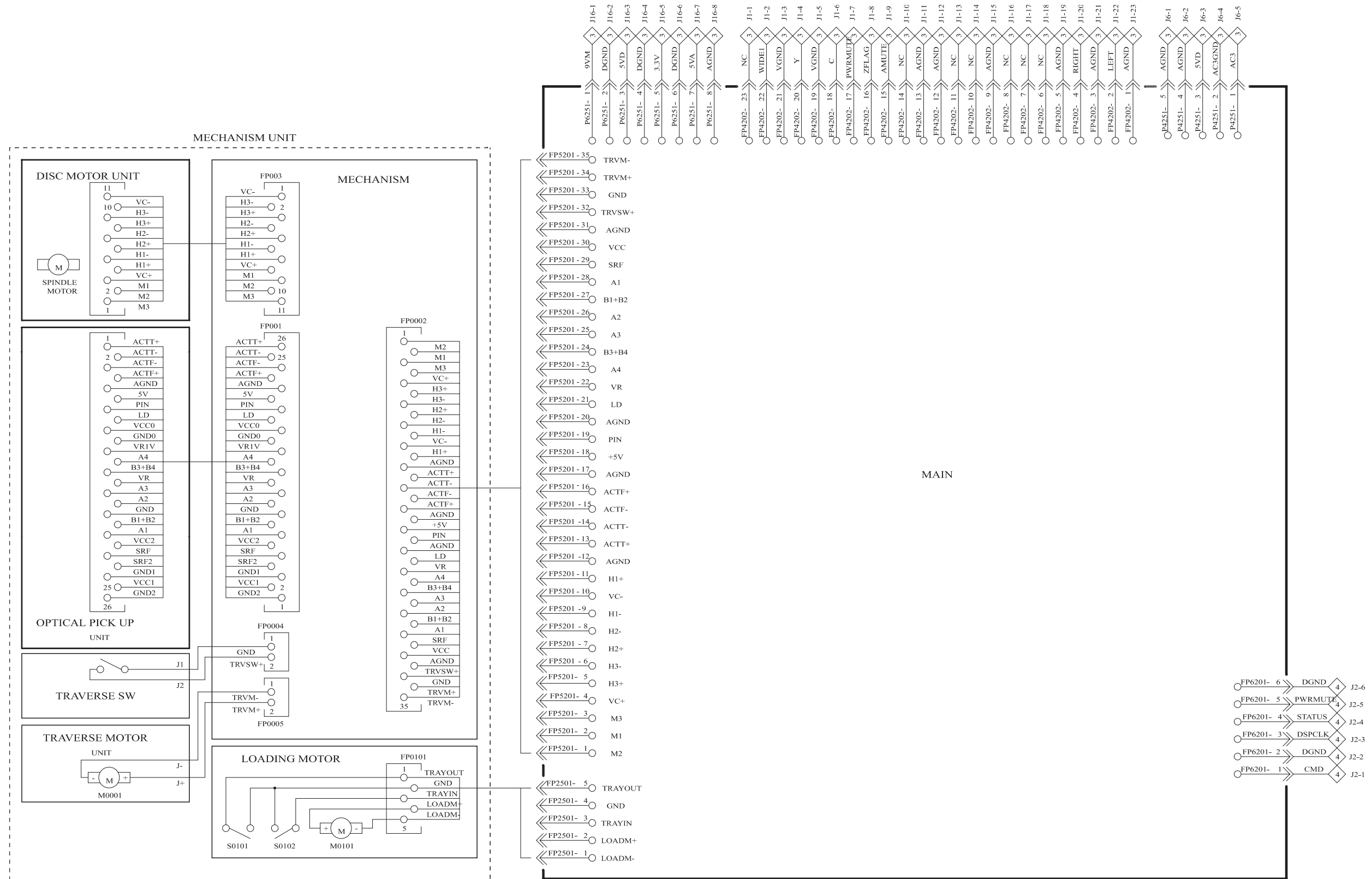
TOP VIEW WITH COVER REMOVED

BLOCK DIAGRAM

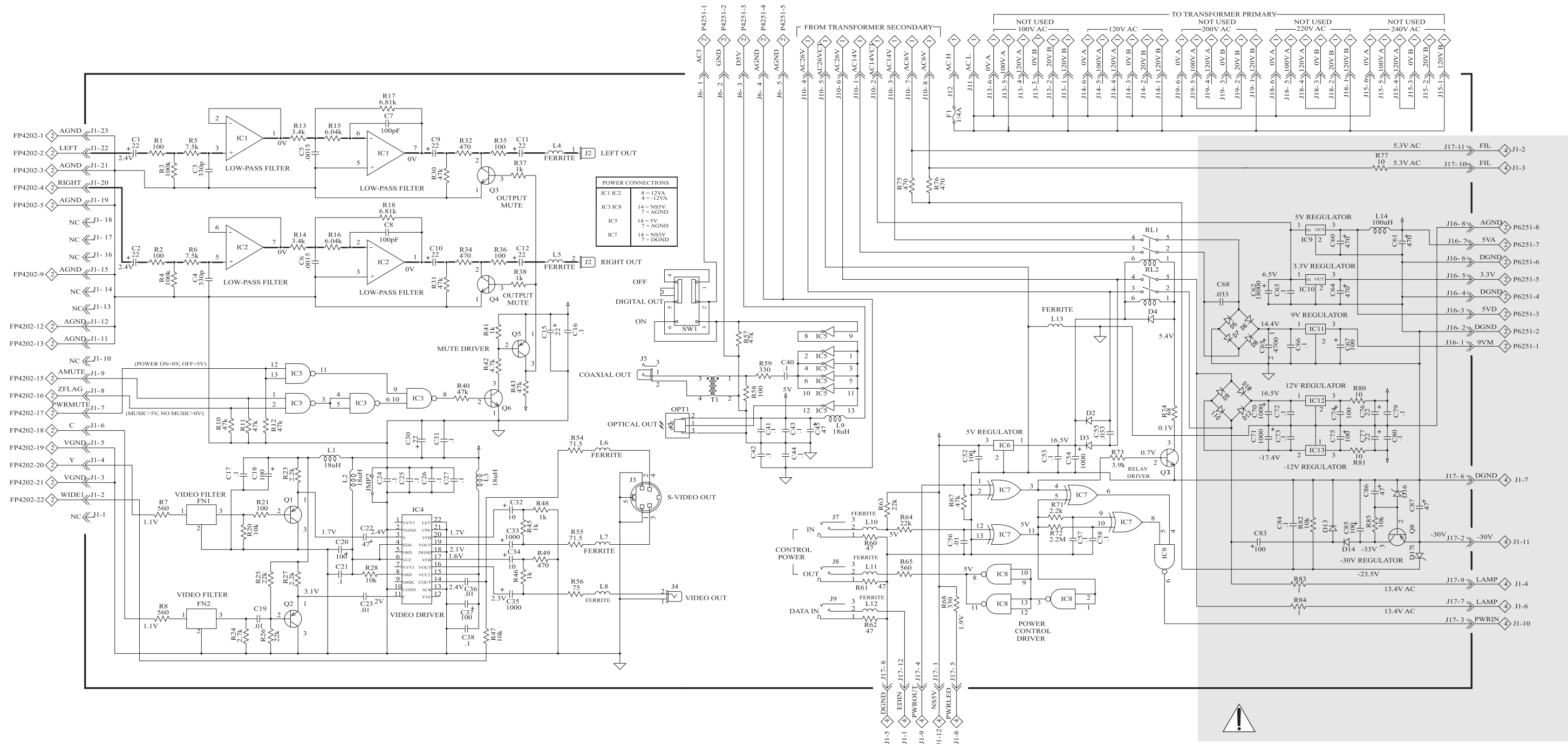


INTERCONNECT



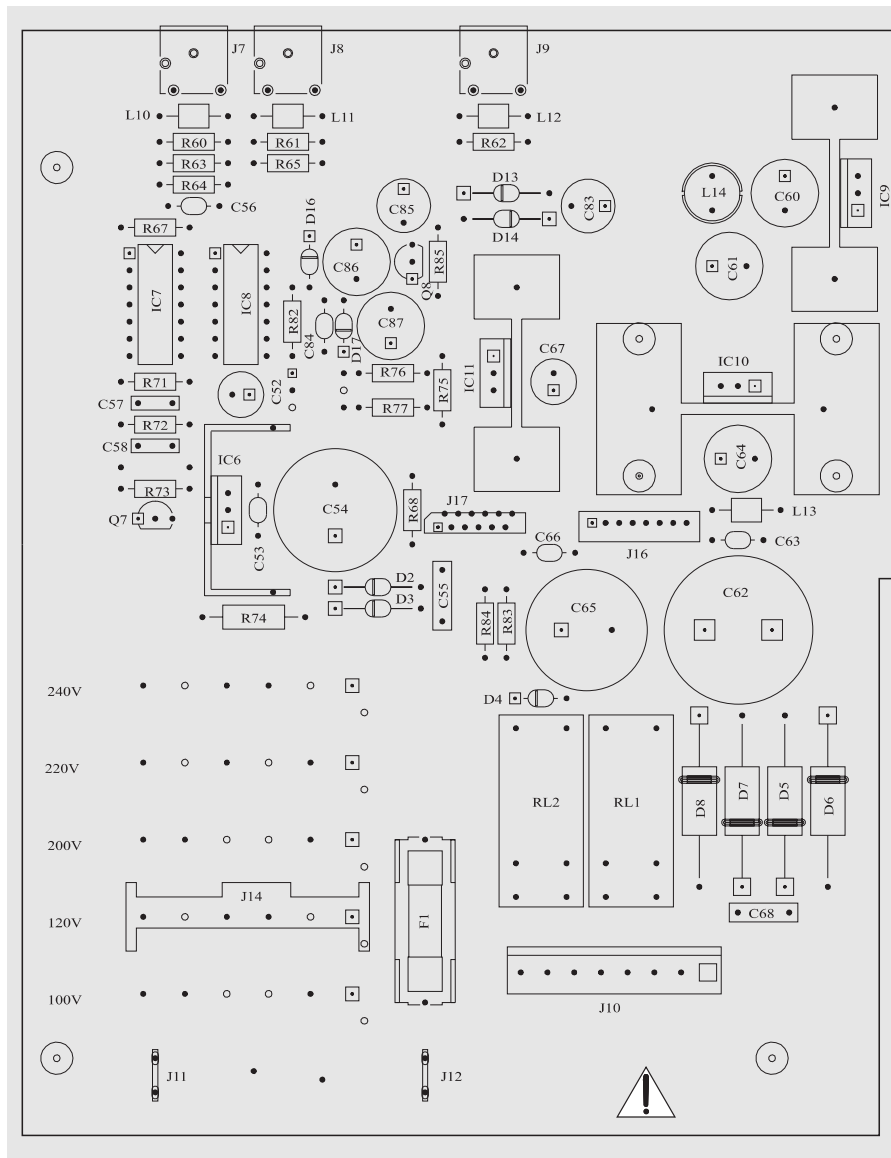


3 AUDIO/VIDEO POWER SUPPLY₀₄₉₂₇₇

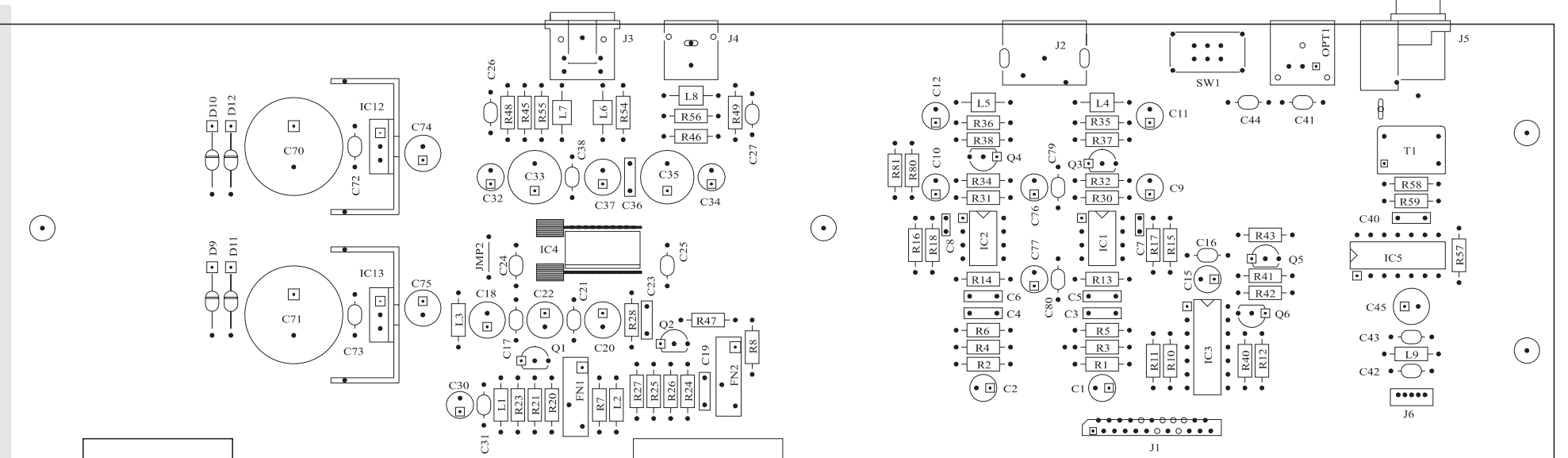


! WARNING Parts located in the shaded area have critical characteristics. Use only replacement parts recommended by the manufacturer.

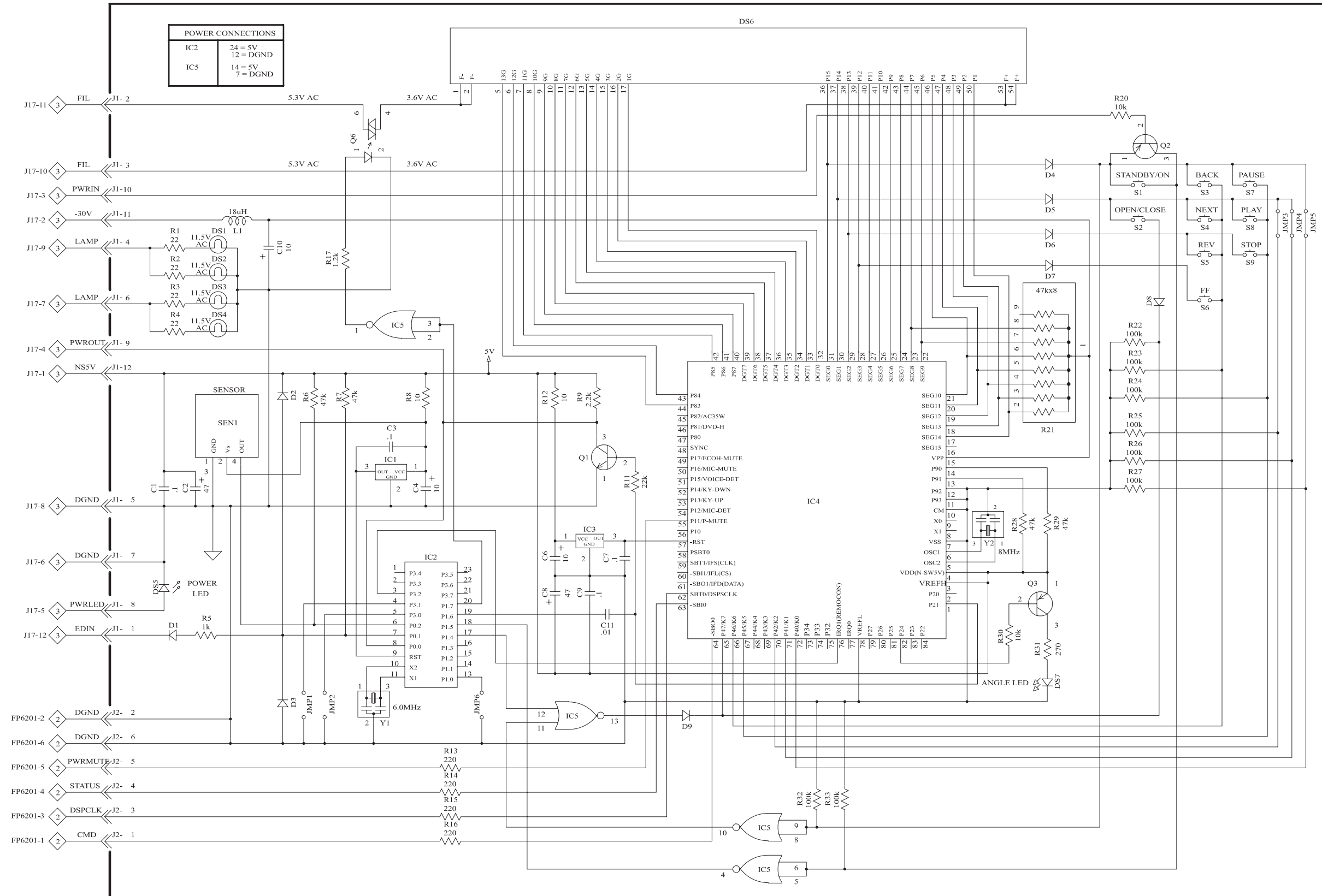
3 AUDIO/VIDEO POWER SUPPLY 049277



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

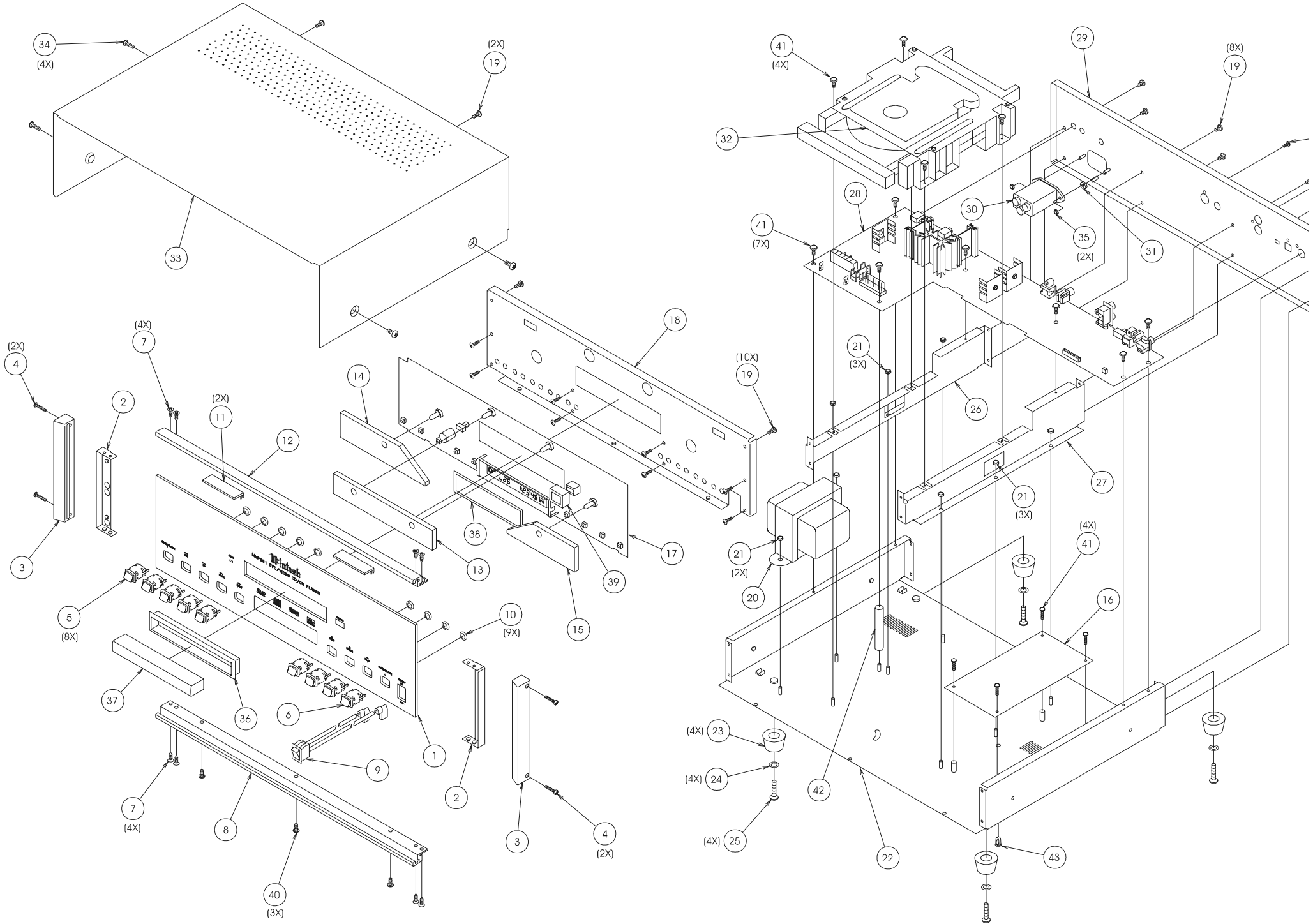


4 DISPLAY 049278



EXPLODED VIEW AND PARTS LIST

Ref. No.	Part No.	Description
1	016408	GLASS
2	004983	EXTRUSION BRACKETS
3	018611	END CAP
4	101042	TS 4-40x1/2 SLOT FILL
5	017517	PUSHBUTTON ASSY
6	017531	PUSHBUTTON ASSY RED
7	101172	TS 6-32x1/4 PHIL FLAT U/C
8	018588	BOTTOM EXTRUSION
9	171264	C/A POWER SWITCH
10	078033	O-RING
11	017779	PRINTED CIRCUIT GUIDES
12	018585	TOP EXTRUSION
13	017755	LOGO PLEXIGLAS
14	017782	PLEXIGLAS LEFT
15	017783	PLEXIGLAS RIGHT
16	320092	MVP831 DVD PLAYER PCB
17	049278	DISPLAY PCB
18	004989	SUBPANEL
19	101196	SEMS TS 6-32x1/4 PHIL PAN BLK
20	159286	TRANSFORMER
21	102003	NUT 6-32 W/LOCK
22	004990	CHASSIS
23	017218	PLASTIC FEET
24	104083	#10 WASHER
25	100159	MS 10-32x3/4
26	004987	LEFT ZEE BRACKET
27	004988	RIGHT ZEE BRACKET
28	049277	A/V PCB
29	004986	REAR PANEL
30	117711	AC RECEPTACLE
31	102020	NUT 6-32 SELF-LOCK
32	320091	DVD MECHANISM
33	004984	TOP COVER
34	101078	TS 8-32x5/16 PHIL PAN BLK
35	102001	KEP NUT 4-40 CADMIUM PLATE
36	017781	FRONT BEZEL
37	017784	DOOR MOLDING
38	092419	DISPLAY FILTER
39	094350	SENSOR GASKET
40	101197	HI/LO 4-24x3/8 PHIL ROUND
41	101213	SEMS MS 4-40x3/8 PHIL PAN
42	112095	HEX SPACER 6-32x2-1/4
43	112097	CIRCUIT BOARD SUPPORT



REPACKING INSTRUCTIONS

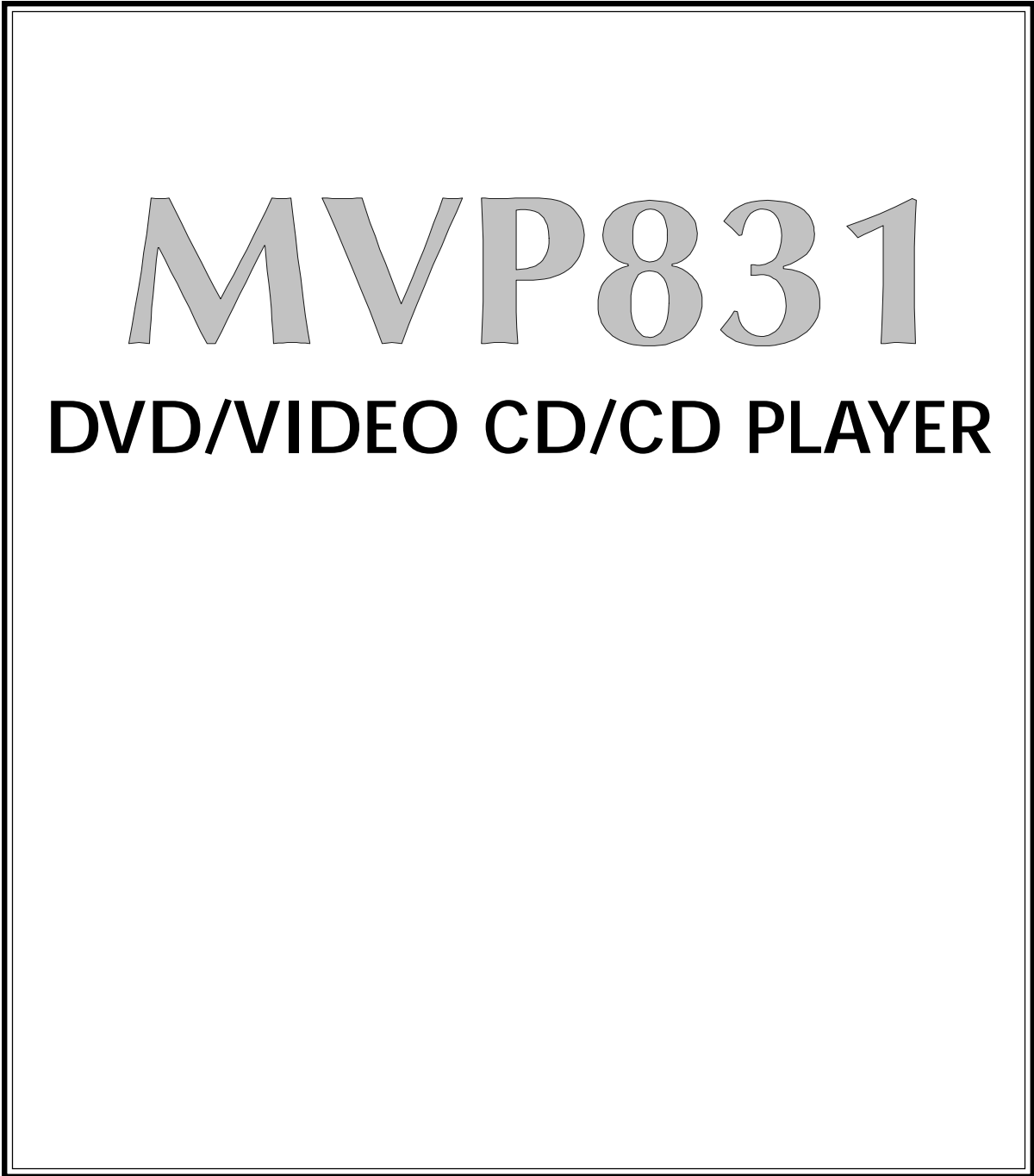
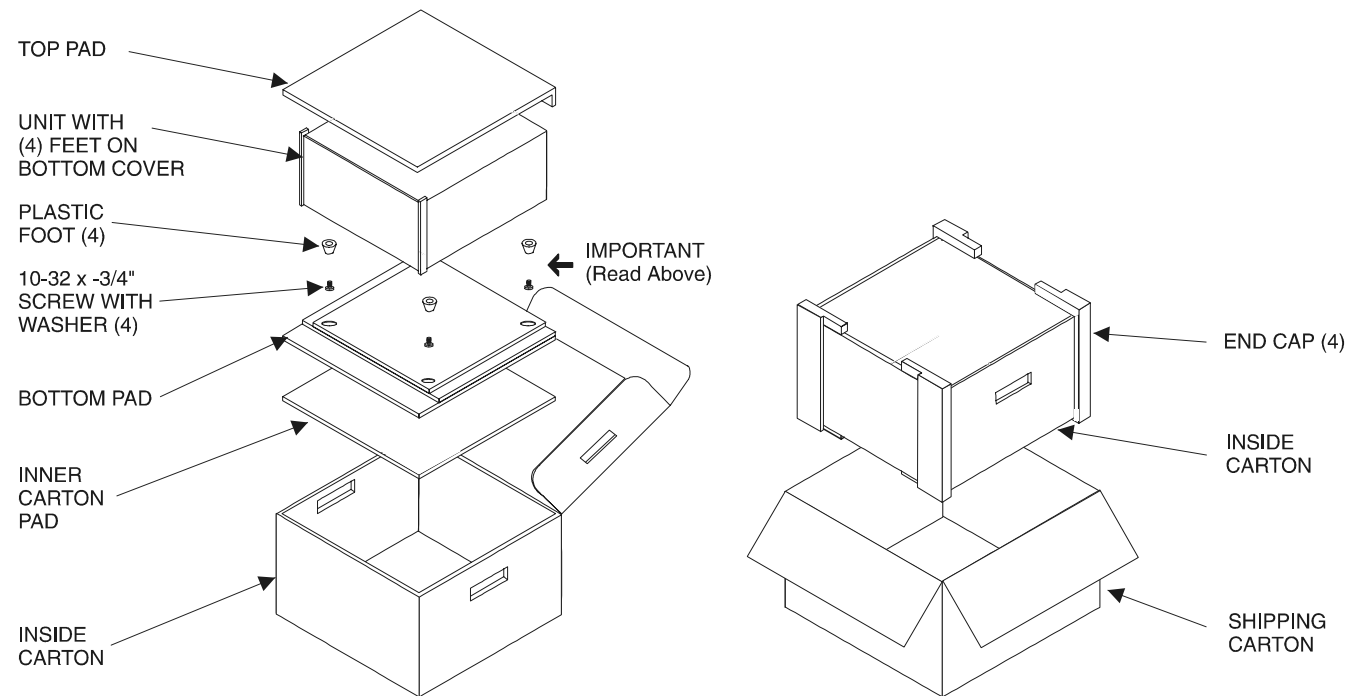
In the event it is necessary to repack the unit for shipment, the unit must be packed exactly as shown below.

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. Failure to do this will result in shipping damage.

If a shipping carton or any of the interior parts 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	034036	Bottom pad
1	034077	Inner carton pad
4	017218	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



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.