

273



SERVICE
MANUAL **1180 DC**



marantz

model 1180DC

Stereo Console Amplifier

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AMPLIFIER ADJUSTMENT

Offset Adjustment

VTVM to JN01 and JN05 (or ground) and adjust meter R739 until the meter indication reaches 0 mV. Similarly, connect VTVM to JN04 and JN06 (or ground) and adjust right channel R740 until the meter indication reaches 0 mV (± 5 mV).

2. TEST EQUIPMENT REQUIRED FOR SERVICING

Table 1 lists the test equipment required for servicing the Model 1180DC Stereo Console Amplifier. The wattmeter, AC voltmeter, and variable autotransformer may be assembled as a test fixture as shown schematically in Figure 1. The load resistors and AC ammeter may be assembled into a second test fixture as shown in Figure 2.

Item	Manufacturer and Model No. (or equivalent)	Use
Distortion Analyzer and Audio Oscillator	Sound Technology, Model 1700B (NOTE: Less than 0.002 percent residual distortion is required.)	Measures distortion, voltage of amplifier output and sine wave source
Oscilloscope	Tektronix, Model 503 Data, Model 555	Waveform analysis and troubleshooting.
VTVM	RCA Senior Volt-Ohmyst, Model WV-98C	Voltage and resistance measurements.
AC Wattmeter	Simpson, Model 390	Monitors primary power consumption of amplifier.
AC Ammeter (0 to 10 amps)	Commercial Grade	Monitors amplifier output under short circuit condition.
Line Voltmeter (0 to 150V AC)	Commercial Grade	Monitors potential of primary power to amplifier.
Variable Autotransformer (0 to 140 V AC, 10 amps)	Powerstat, Model 116B	Adjusts level of primary power to amplifier.
Shorting Plug	Use phono plug with 600 ohms across center pin and shell.	Shorts amplifier input to eliminate noise pickup.
Power Supply Bleeder Resistor (10 ohms at 1 W)	Commercial Grade	Discharges power supply filter capacitors prior to disassembly or resistance measurements.
Output Load Resistor (8 Ω $\pm 0.5\%$, 250W)	Commercial Grade	Provides 8-ohm load for amplifier output termination.
Output Load Resistor (4 Ω $\pm 0.5\%$, 250W)	Commercial Grade	Provides 4-ohm load for amplifier output termination.
Output Load Capacitor (0.5 mfd)	Mylar	Provides capacitive load for instability checks.
AC Power Control Box	Optional Item. Fabricate in accordance with Figure 1.	Monitors and controls primary power for amplifier.
Amplifier Output Load Box	Optional Item. Fabricate in accordance with Figure 2.	Provides various amplifier loads and can monitor shorted output.

Table 1. Test Equipment Required for Servicing

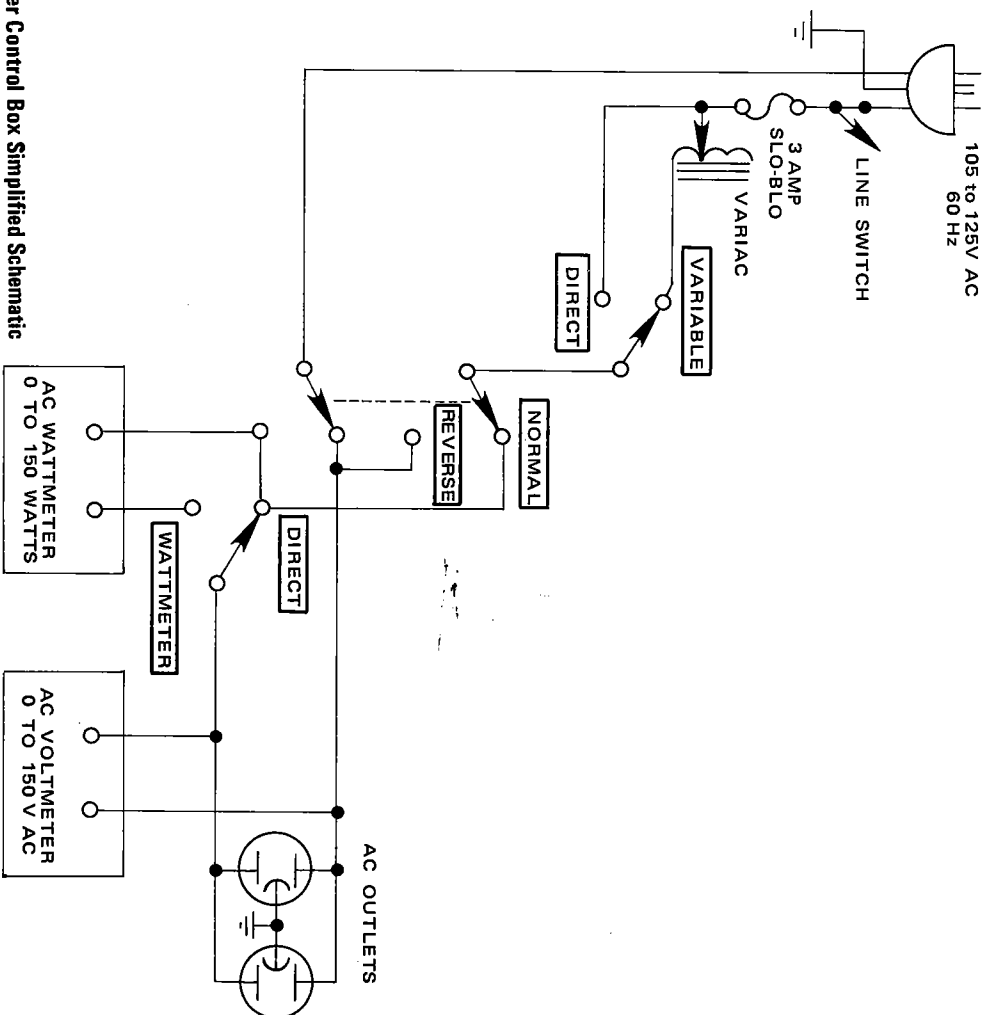


Figure 1. AC Power Control Box Simplified Schematic

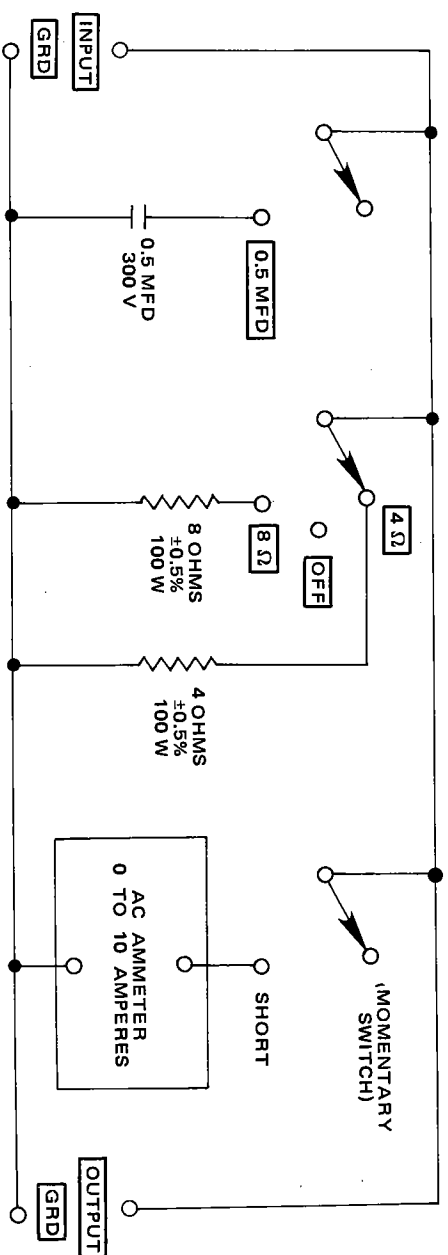


Figure 2. Amplifier Output Load Box Simplified Schematic

3. VOLTAGE CONVERSION

● EUROPEAN MODEL ONLY

This Model is equipped with a universal power transformer to permit operation at 110, 120, 220 and 240 V AC 50/60 Hz. To convert the unit to the required voltage, set the plug as illustrated so that you can adjust the voltage as required.

CAUTION
DISCONNECT POWER SUPPLY CORD FROM AC OUT-LET BEFORE CONVERTING VOLTAGE.

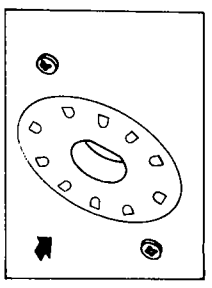
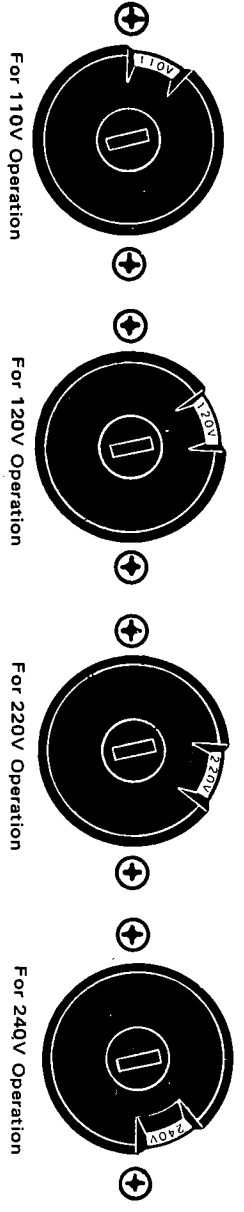
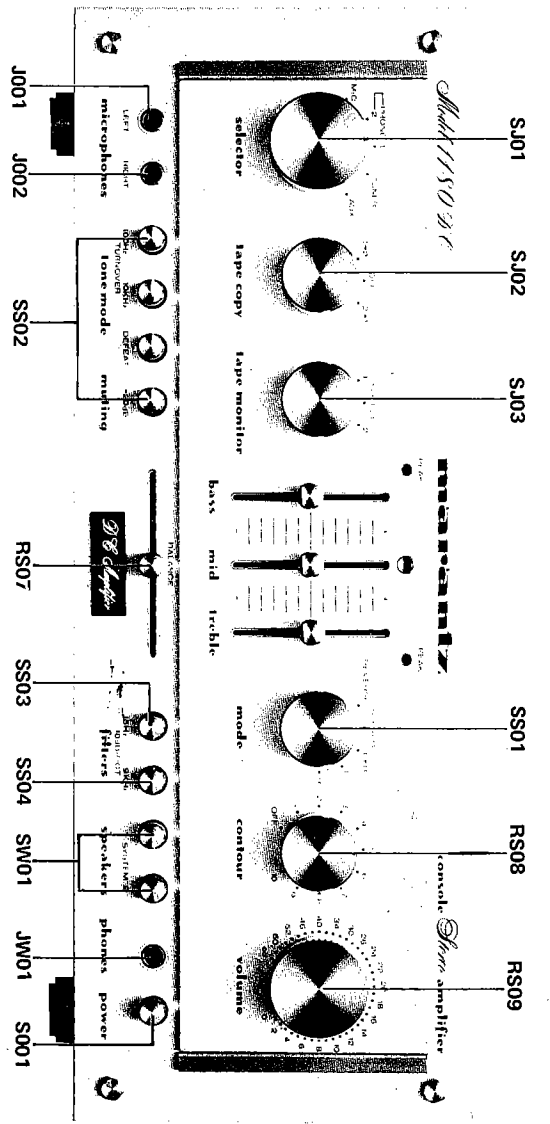


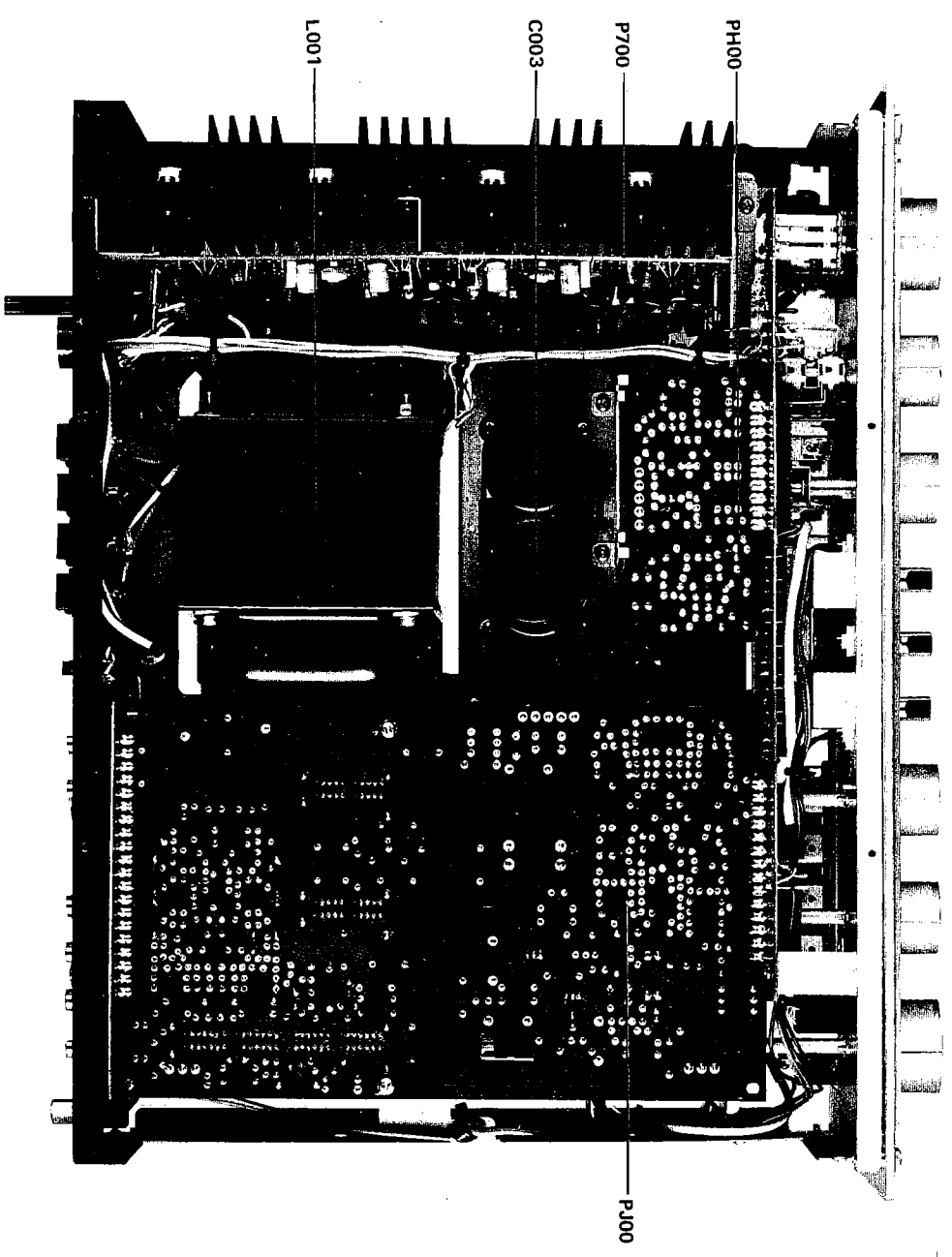
Figure 3. Voltage Conversion Chart



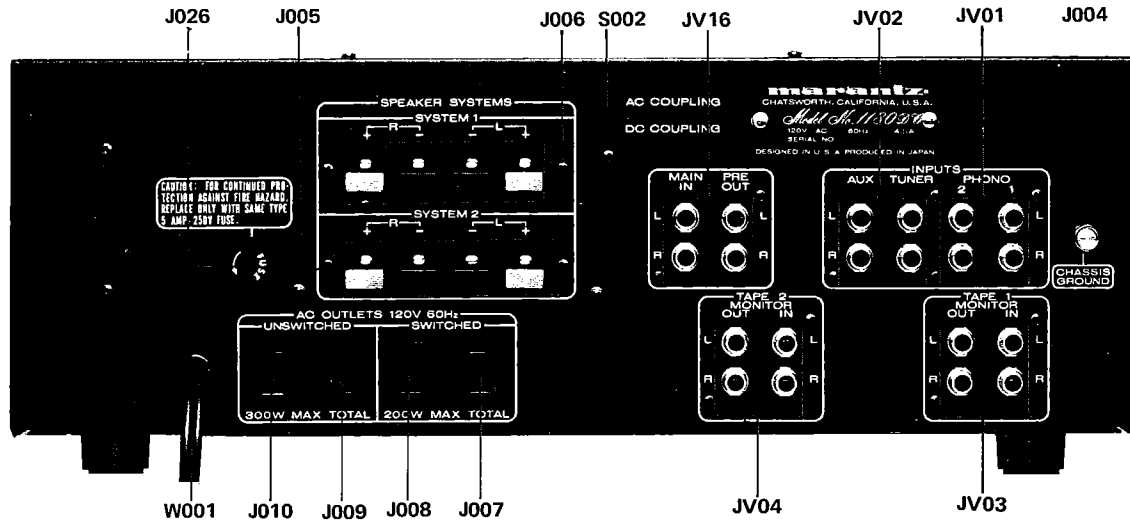
4. MAJOR COMPONENT LOCATIONS
4.1 Front Panel Adjustment and Component Locations



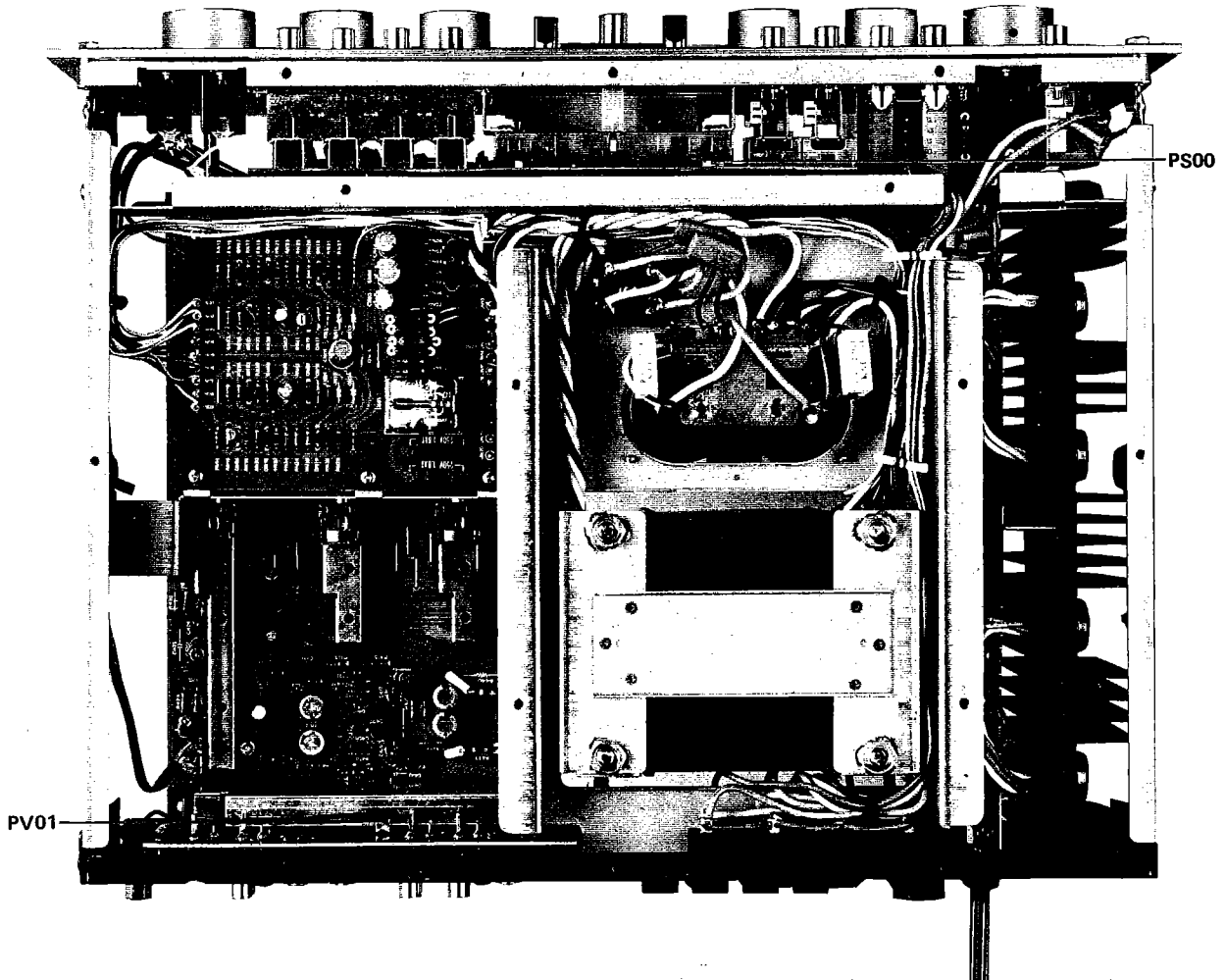
4.2 Main Chassis Component Locations (Top View)



4.3 Rear Panel Adjustment and Component Locations

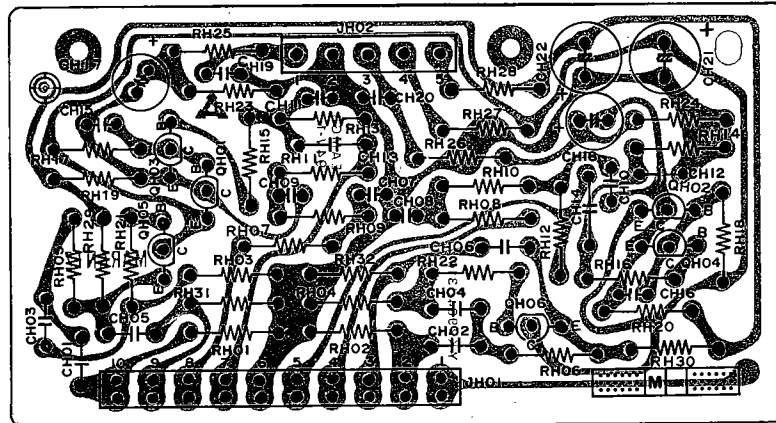
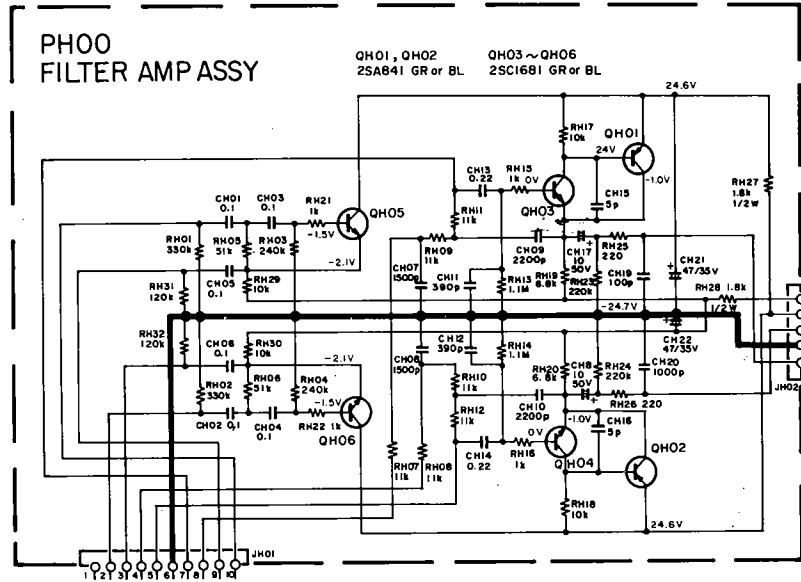


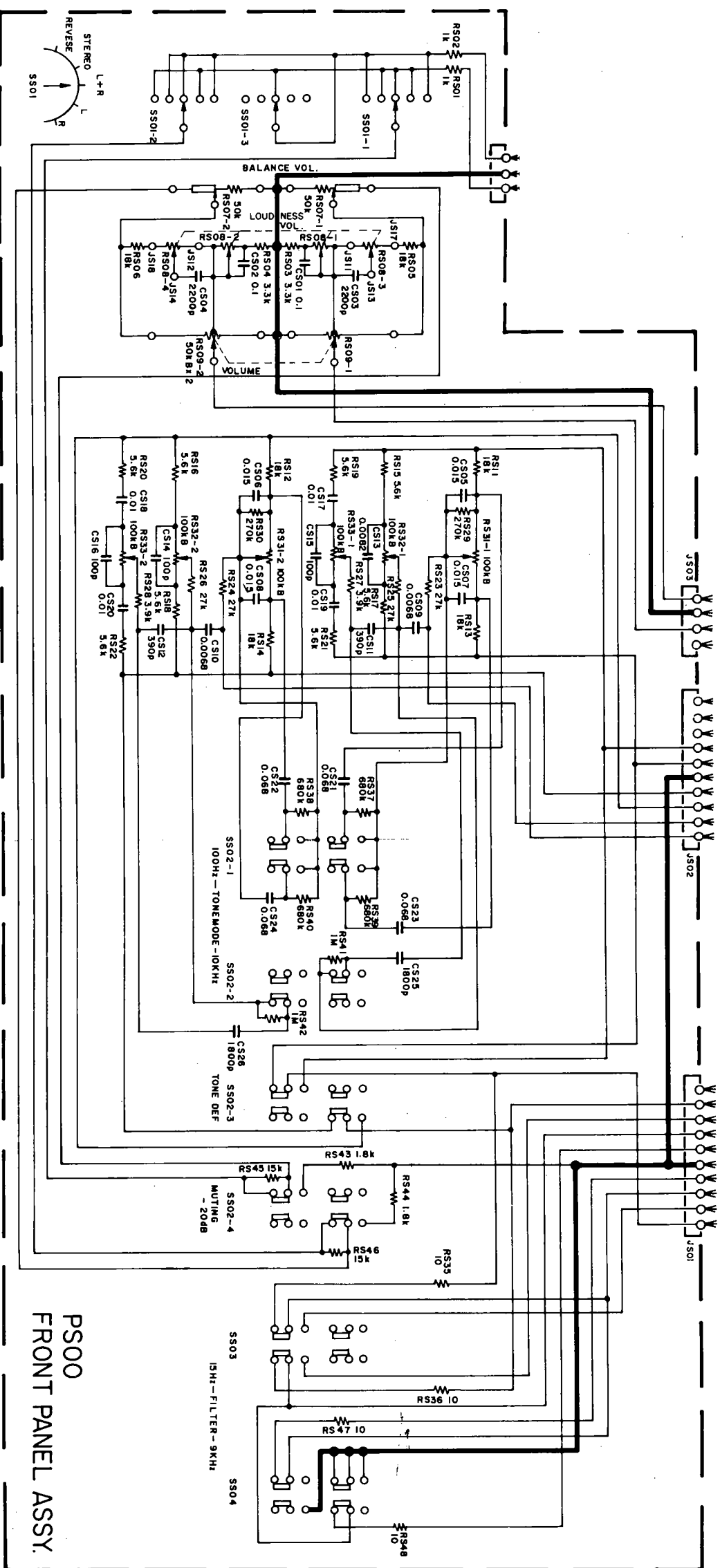
4.4 Main Chassis Component Locations (Bottom View)



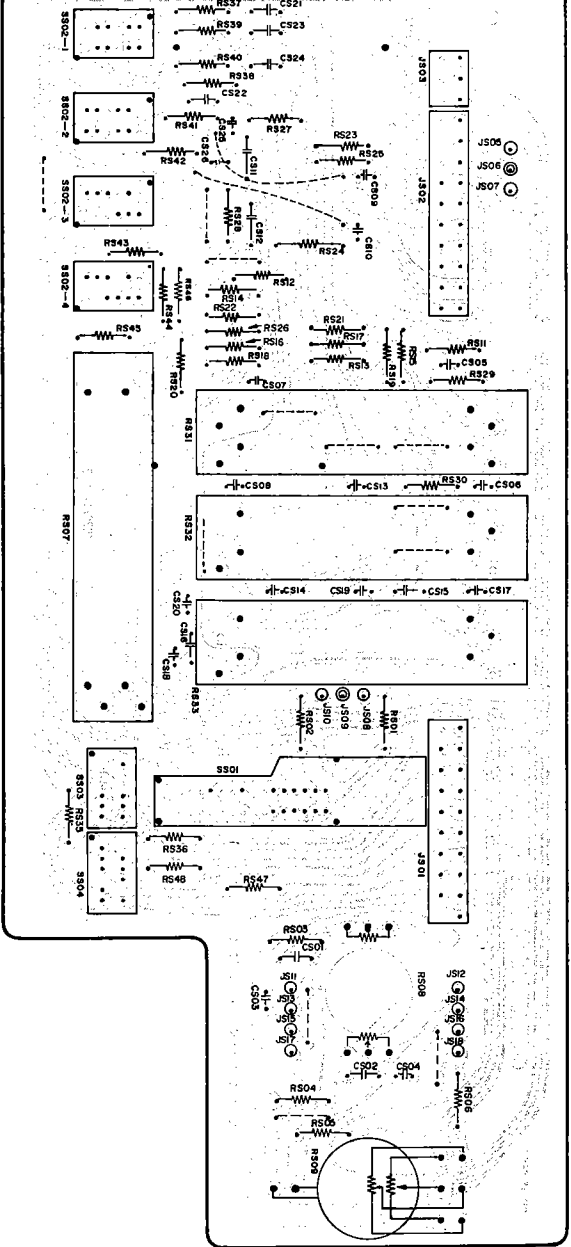
5. DIAGRAM AND COMPONENT LOCATIONS

5.1 Filter Amp. Assy (PH00) Schematic Diagram and Component Locations





PS00
FRONT PANEL ASSY.



5.3 Speaker Switch Assembly (PW00) Schematic Diagram and Component Locations

