

4100
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marantz.

model 4100

Quadradiol 4 **console amplifier**

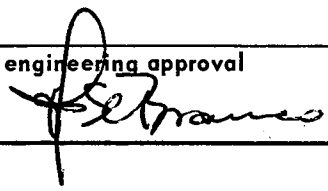
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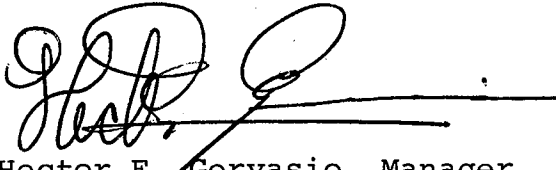
marantz® SERVICE BULLETIN	model number 4100	bulletin number
	for serial numbers ALL	M-4100-2
	subject SERVICE MANUAL CORRECTION	
	engineering approval 	date 7-24-73

This service bulletin is issued to correct misprints in the Model 4100 Service Manual.

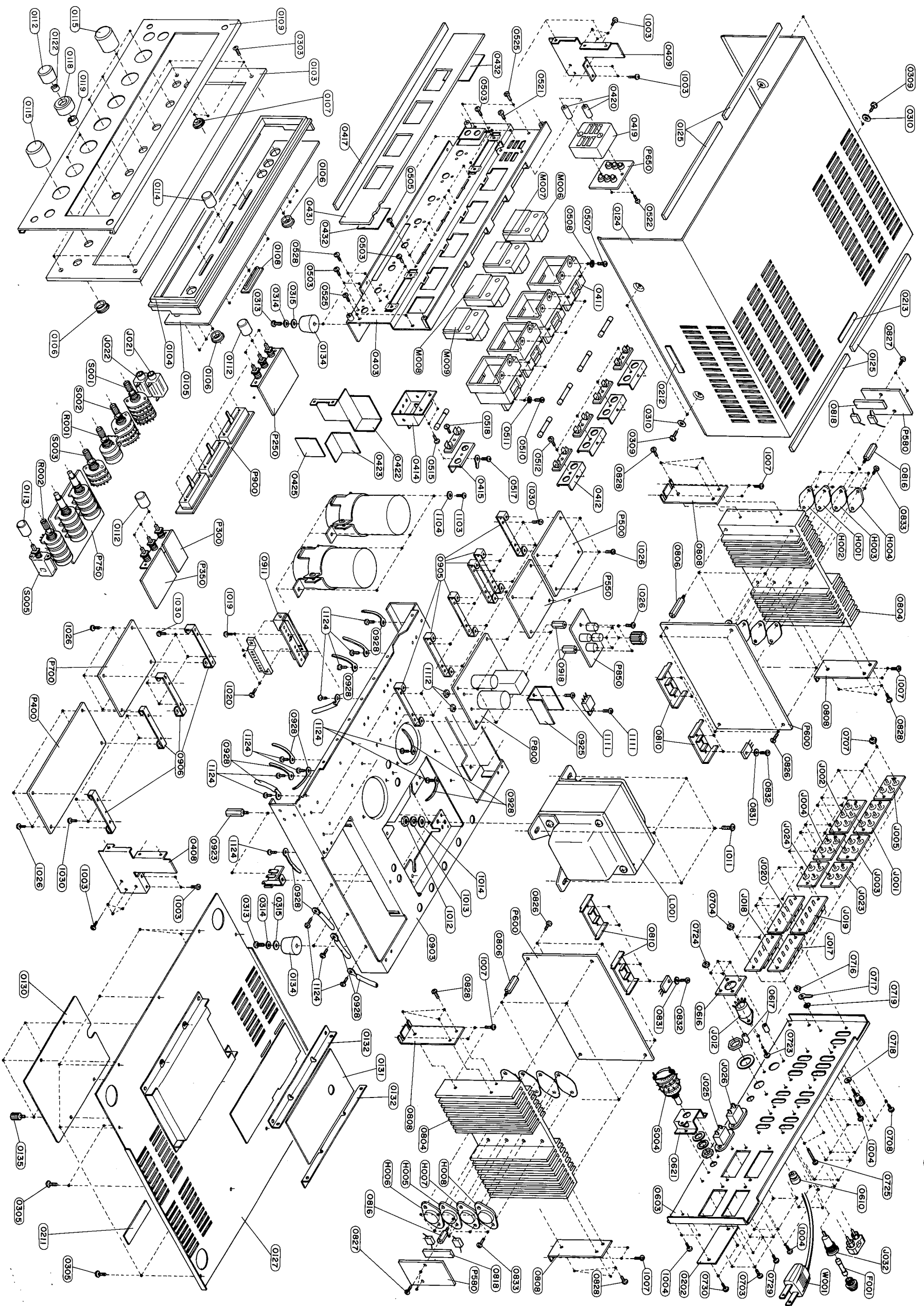
Incorporate this change into the service manual, as soon as possible, to ensure proper reference information.

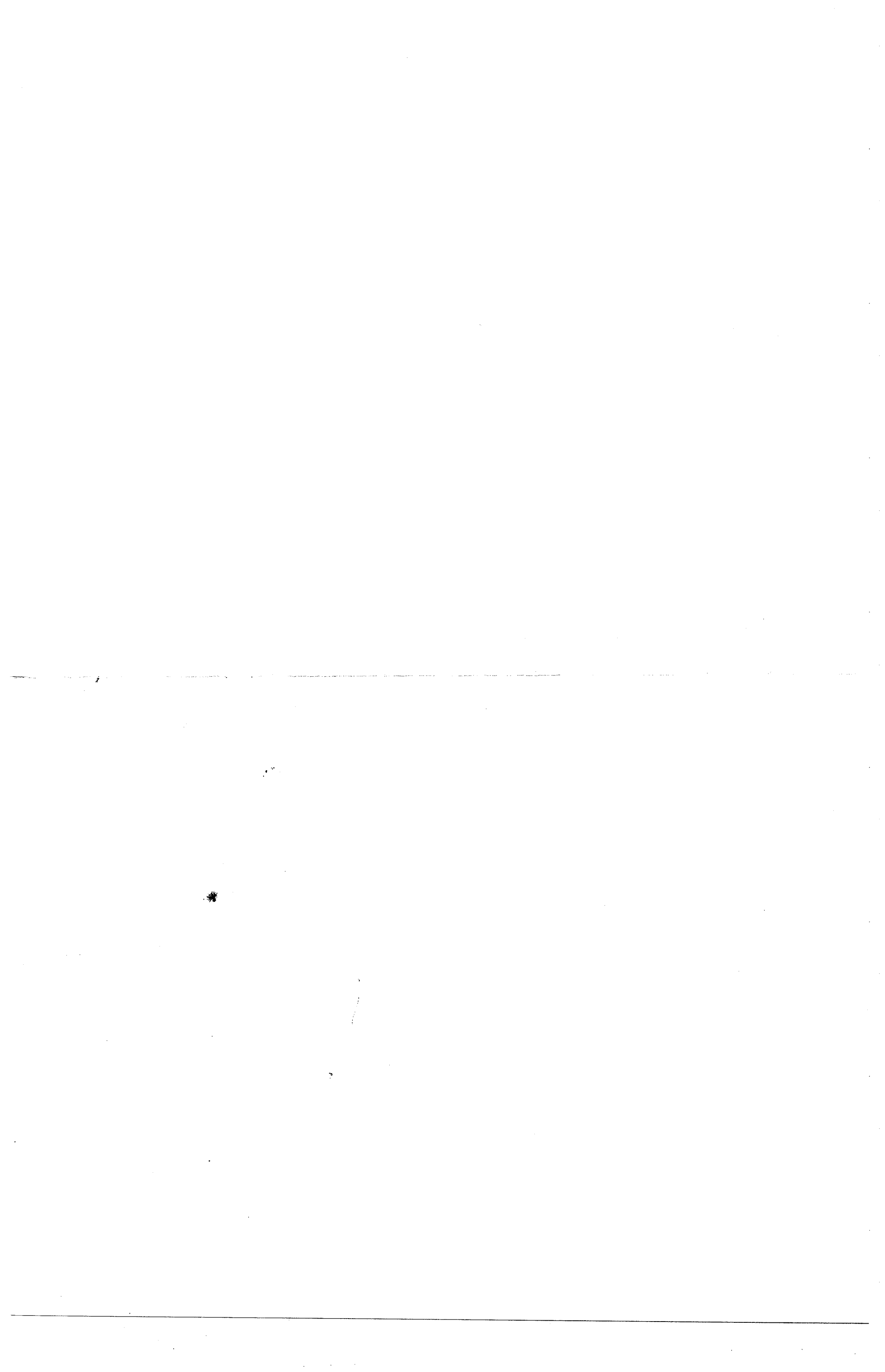
On page 21, Reference Designation Numbers H001 thru H008, Marantz Part Numbers HT310151D should be changed as follows:

<u>Ref. Desg.</u>	<u>Mz. Part No.</u>	<u>Description</u>
H001, H002	HT310511DO	Transistor 2SC1051 B or D, Pair
H003, H004	HT310511DO	Transistor 2SC1051 B or D, Pair
H005, H006	HT310511DO	Transistor 2SC1051 B or D, Pair
H007, H008	HT310511DO	Transistor 2SC1051 B or D, Pair


 Hector E. Gervasio, Manager
 Technical Services

EXPLODED MECHANICAL DIAGRAM FOR MODEL 4100





to limit current or to control the power transistors so that do not operate beyond the safety area.

In case either excessive current flows, or the load becomes almost entirely reactive, in the power stage, the transistors H607 and H609 and the diodes H622 and H624 are operated through the resistors R642 and R644, so that the power transistors are protected from damage.

7. BTL (Balanced Transformerless) CONNECTION

This power amplifier is designed to operate in either 2-channel or 4-channel modes, depending on the setting of the AMPLIFIER MODE switch that incorporates phase-conversion and power switch for BTL connection.

With this switch placed in the 25Wx4 position, this unit operates as a 25W 4 channel amplifier. With the switch placed in the 60Wx2 position, the unit operate as a 60W 2 channel amplifier, in which case, the power output is obtained only from REAR SPK terminals.

The transistor H626 convert the phase of 1 channel amplifier and 3 channel amplifier.

8. POWER SUPPLY UNIT

The power supply unit consisting of the transistors H801 and H802, operating as an automatic voltage regulator, provides +35V DC to all the amplifiers except the main amplifier.

The transistors H803, H804 and H805 operate the relay L801 that protects speakers from destruction, and has a time lag of from three to five seconds, for other transistors to work stably.

9. TROUBLE ANALYSIS

1. Excessive line consumption
 - a. Check for shorted H851 through H854, C003, C004.
 - b. Check for shorted transistor H001 through H008.
Check L001 for short.
2. No line consumption or zero bias
 - a. Check line cord, fuse, shorted H581, H582.
 - b. Check for open rectifiers H851 through H854, or open L001.
3. Excessive hum and noise
 - a. Check filter capacitors C003, C004, H801, H802.
4. Parasitic oscillation
 - a. Check for defective C607, C608, C619, C620, C621, C622.

10. POWER AMPLIFIER ADJUSTMENT

1. Connect a VTVM between J629 and J613 and adjust the trimming resistor R628 until the VTVM reads 10mV DC. For the other channel, connect the VTVM between J630 and J614 and adjust the R629 for the same reading.
2. Connect a VTVM between J623 and J629 and adjust the trimming resistor R613 until the VTVM reads 0V DC. For the other channel, connect the VTVM between J623 and J630 and adjust the trimming resistor R614 for the same reading.

11. POWER SUPPLY ADJUSTMENT

Connect a VTVM between J802(-) and J804(+) and adjust R806 until the VTVM reads 35.0V under no signal condition.

12. METER ADJUSTMENT

1. Connect the audio oscillator to the AUX input, set audio oscillator frequency to 1KHz. Set SELECTOR switch to AUX.
2. With the distortion analyzer connected across the output load (8-ohm), set the analyzer on the 30V AC scale.

3. Apply the audio oscillator output until the distortion analyzer indicates 15V and adjust the trimming resistor R551 until the meter indicator reads +2.

13. PHONO AMPLIFIER ADJUSTMENT

1. Connect the audio oscillator to the PHONO input, set audio oscillator frequency to 1KHz. Set SELECTOR switch to PHONO.
2. Connect the distortion analyzer to the TAPE OUT terminal that is terminated by the 47K ohm, set the analyzer on the 30V AC scale and connect the oscilloscope.
3. Increase the audio oscillator output gradually until a slight clipping on top of the sine-wave is observed on the oscilloscope. Adjust the trimming resistor R708 for equal clipping level. For the other channel adjust R709.

14. TEST EQUIPMENT REQUIRED FOR SERVICING

Table 1 lists the test equipment required for servicing the Model 4100 Solid-State Quadradial Console Amplifier.

Item	Manufacturer and Model No. (or equivalent)	Use
Distortion Analyzer	Hewlett Packard, Model 331A or 333A	Measures distortion and voltage of amplifier output.
Audio Oscillator	Weston Model CVO-100P (NOTE: Less than 0.02 percent residual distortion is required.)	Sinewave and squarewave signal source.
Oscilloscope	Tektronix, Model 503; Data, Model 555	Waveform analysis and trouble shooting.
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 150 vac)	Commercial Grade	Monitors potential of primary power to amplifier.
Variable Autotransformer (0 to 140 vac, 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 (8Ω ± 0.5%, 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination.
Output Load Resistor (4Ω ± 0.5%, 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination.

Table 1. Test Equipment Required for Servicing

15. PERFORMANCE VERIFICATION

Test Procedure

A. Test Equipment

Refer to Table 1 for required test equipment.

B. Preliminary Procedures

1. Make the test setup shown in Figure 1 with the instrument controls set in the following positions:

Line Switch	off
Variable-line Switch	variable
Watt Meter Switch	on
Variac	0 (fully CCW)
Load	8 ohms (0.5 mfd – off)
Audio Generator	Frequency 1 KHz
Output	5V range
Gain	minimum
AC Volt Meter	30V range

2. Make sure that connections between the resistive load and the system terminals of the Model 4100 have negligible resistance compared with the resistance of the load itself. Appreciable resistance in wiring adds to the total load, resulting in inaccurate measurements of output power.
3. Connect amplifier output to load and connect AC cord to line power. Connect a shorting plug to the PHONO input jack of the model 4100.
4. Remove the top cover.

C. Total Hum and Noise Test

1. With shorting plugs connected to the AUX input jacks and a 8-ohm resistive load connected across the speaker system output terminals, connect a distortion analyzer across the load.

NOTE: In this test and tests that follow, if distortion analyzer used does not contain a built-in voltmeter, a VTVM may be substituted.

2. Set the distortion analyzer controls for voltage measurements and apply power to the amplifier. Set the VOLUME control fully CCW. Set the SELECTOR switch to AUX and the MODE switch to DISCRETE.
3. If the distortion analyzer indicates more than 1.5mV, refer to the trouble analysis section of this manual.
4. Set the VOLUME control fully CW. If the distortion analyzer indicates more than 2mV, refer to the trouble analysis section of this manual.

D. Maximum Power Output

1. Connect the audio oscillator to the AUX input. Set audio oscillator frequency to 1KHz. Set SELECTOR switch to AUX.
2. With the distortion analyzer connected across the output load (8-ohm), set the analyzer on the 30V AC scale.
3. Turn the analyzer on and increase the audio oscillator output to 180mV, and verify the analyzer indicates more than 14.2V.

E. Harmonic Distortion Test

1. Set the frequency of the audio oscillator and the distortion analyzer to 20KHz.
2. Set the controls of the analyzer for voltage measurement on the 30-volt scale.
3. Adjust the audio oscillator output level until the analyzer meter indicates 10.9 volts.
4. Switch the distortion analyzer to Set Level – Manual mode, and adjust SENSITIVITY for full scale reading on 0-1 scale.

5. Measure the total harmonic distortion with the analyzer and verify it is less than 0.3%.
NOTE: Any parasitic oscillation in the amplifier will be displayed on the oscilloscope, when capacitance is switched into the load.
6. Switch the distortion analyzer back to SET LEVEL MANUAL.
(Do not adjust sensitivity of analyzer.)
7. Change the frequency of the audio oscillator and distortion analyzer to 1KHz. Adjust audio oscillator output as necessary to have a full scale reading on the 0-1 scale on the analyzer.
8. Measure the distortion, verifying it is no greater than 0.3%.
9. Repeat steps 7 and 8, changing frequency to 20Hz.
Distortion should be no more than 0.3%.
10. Check for parasitic oscillations; there should be none.

F. Channel Separation

1. Set audio oscillator to 20KHz. Connect oscillator to front left channel AUX input only, with shorting plug (10K ohm) in all other channels AUX input. Connect distortion analyzer to front left channel speaker output terminals.
2. Adjust oscillator output until distortion analyzer indicates 0 dB (2.8V).
3. Measure RF, LR, RR channel output. Distortion analyzer should indicate -30 dB or less.
4. Repeat step 1 and 2 with substituted channel driving.
5. If indication is not less than -30 dB, adjust input wires to preamp board until reading is -30 dB or less.

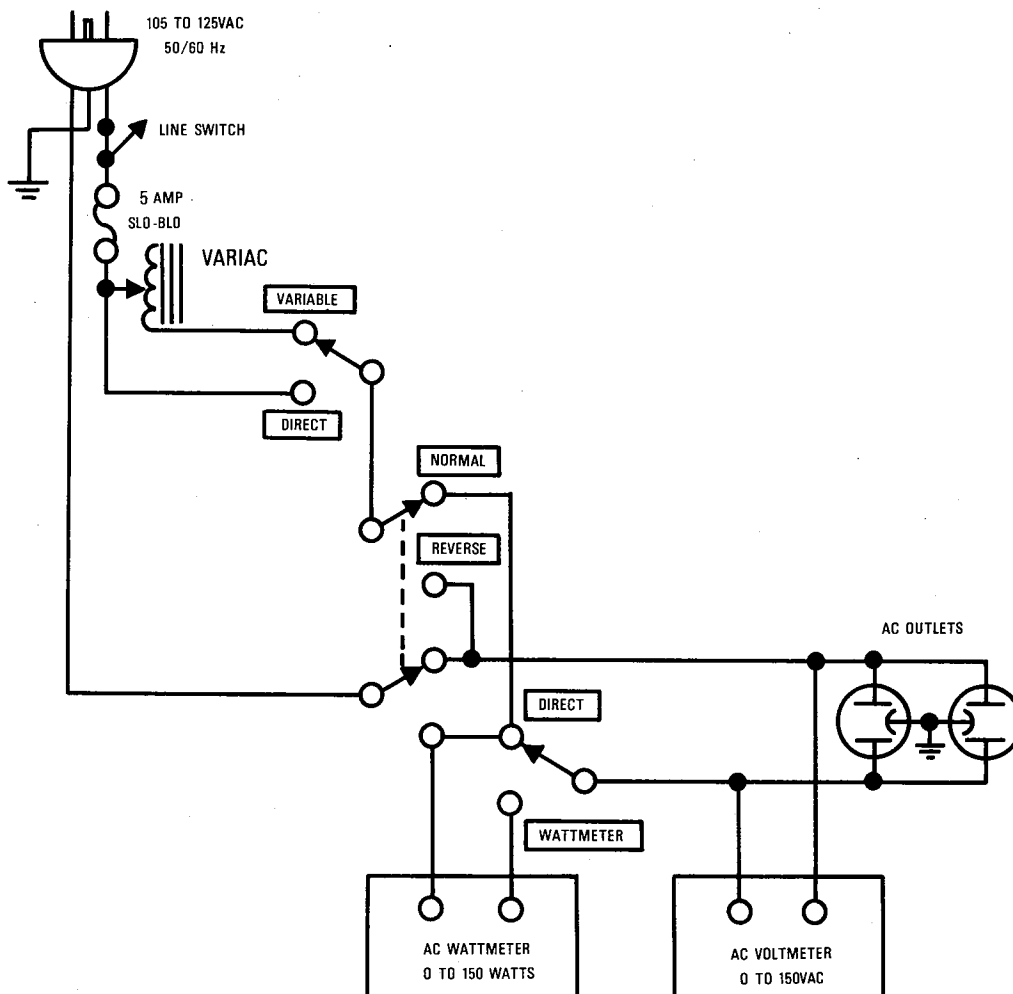


Figure 1. AC Power Control Box Simplified Schematic

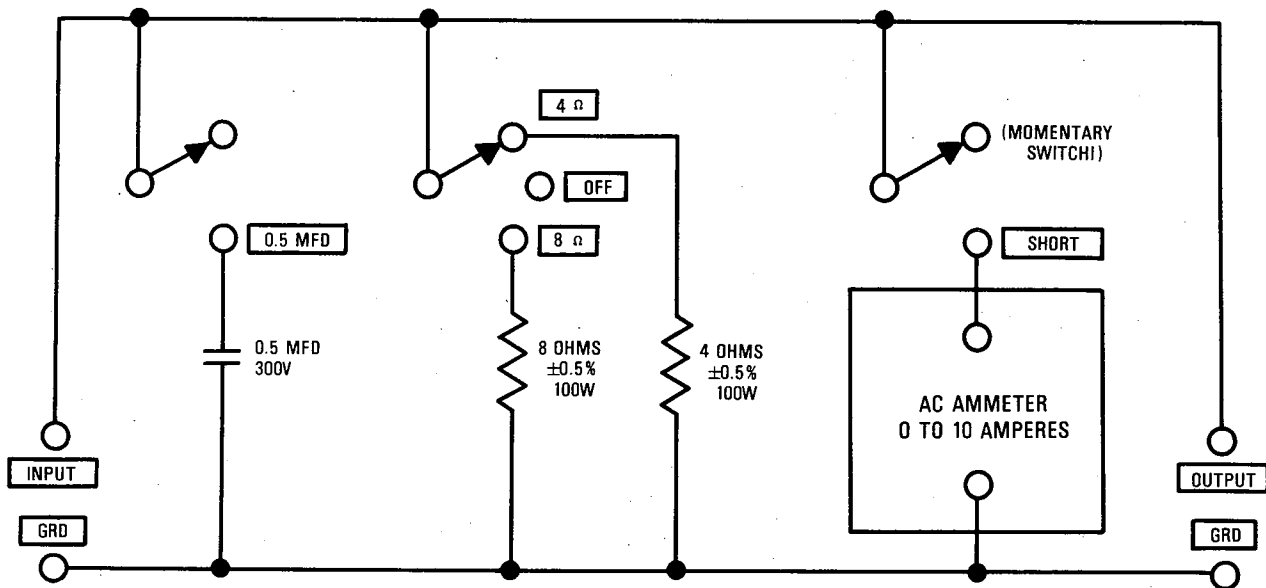


Figure 2. Amplifier Output Load Box Simplified Schematic

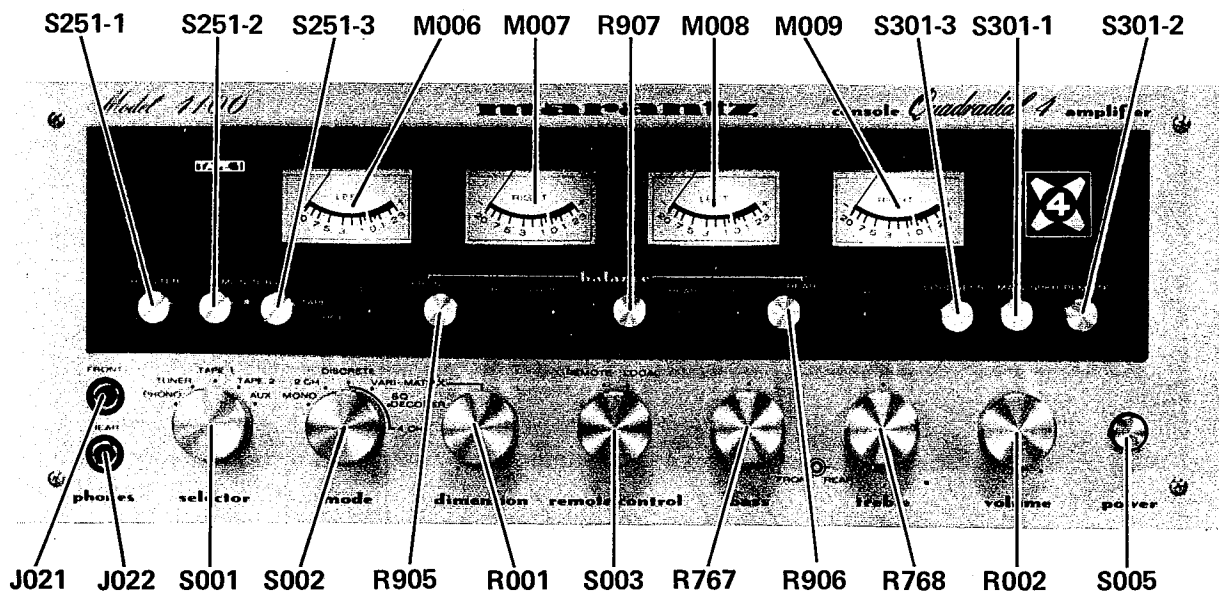


Figure 3. Front Panel Adjustment and Component Locations

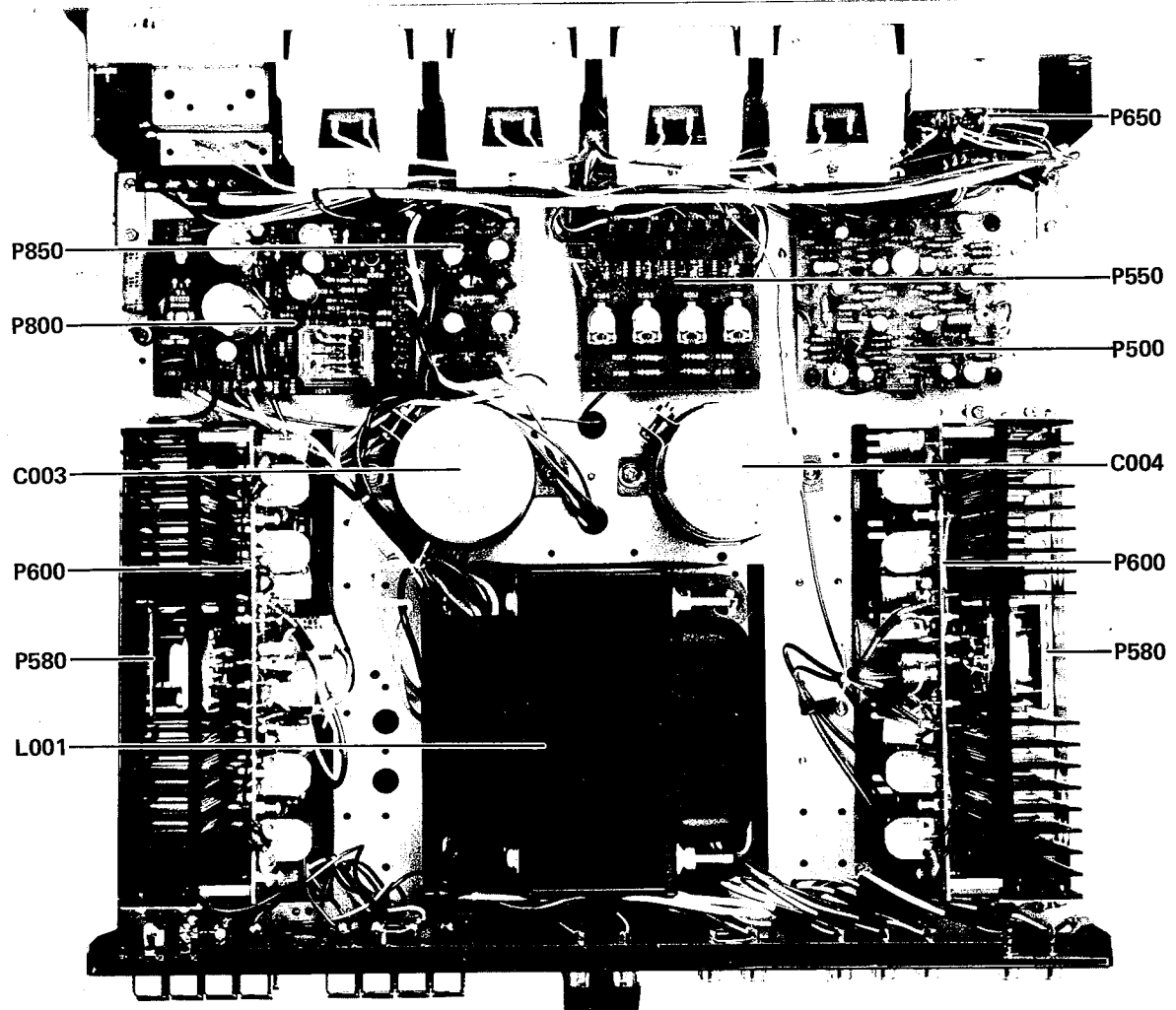


Figure 4. Main Chassis Component Locations (Top View)

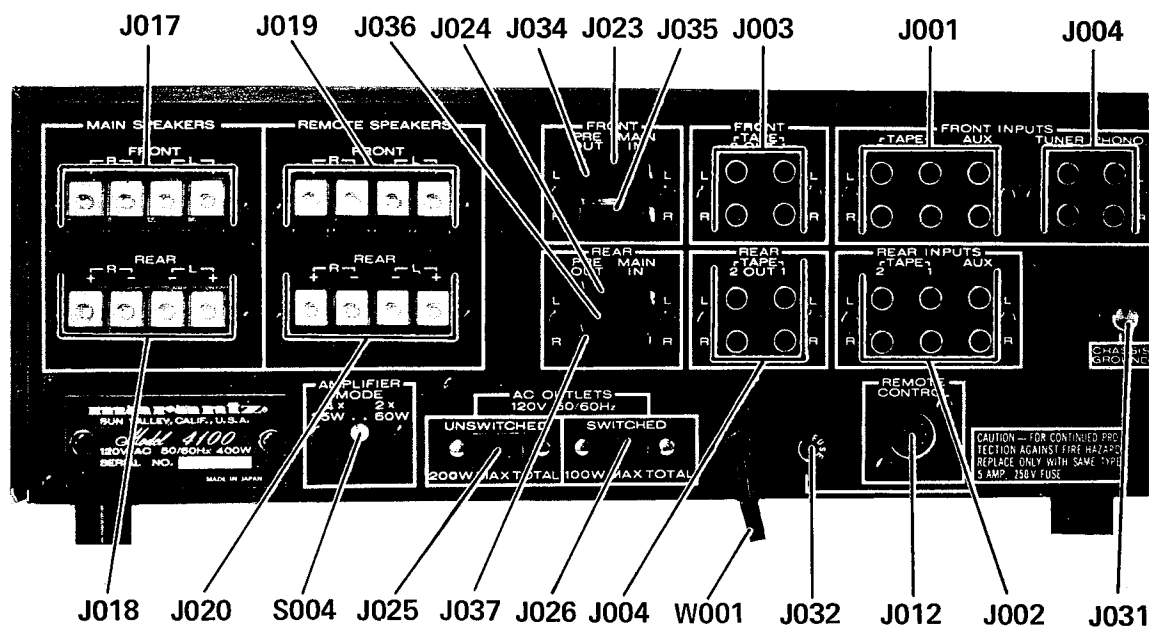


Figure 5. Rear Panel Adjustment and Component Locations

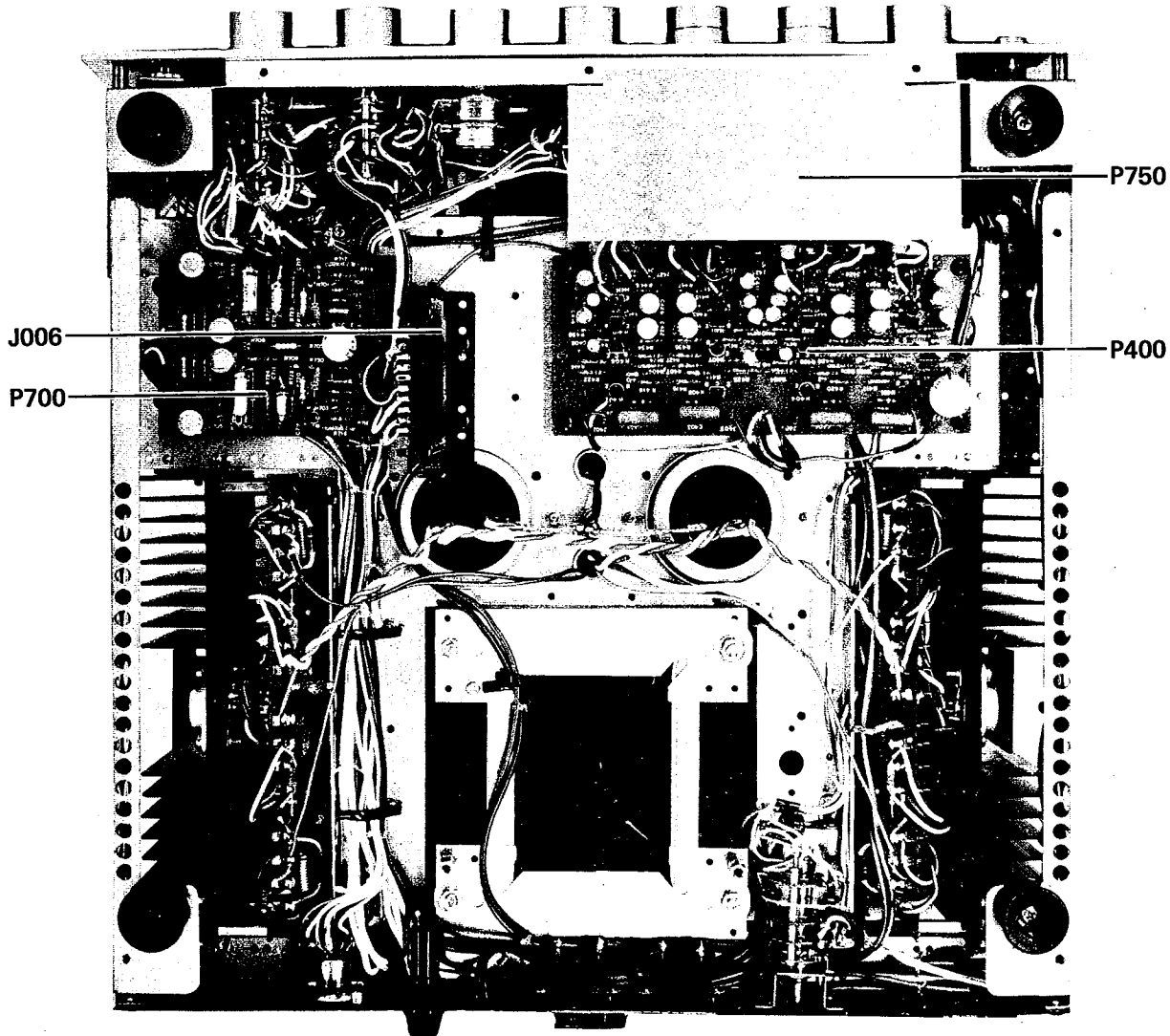


Figure 6. Main Chassis Component Locations (Bottom View)

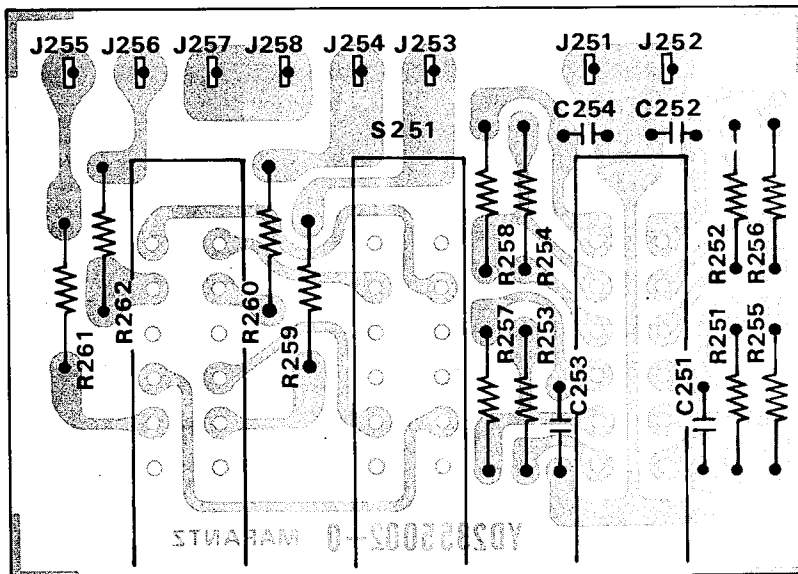


Figure 7. Tape Mon., Hi Filter Unit Assembly P250 Component Locations

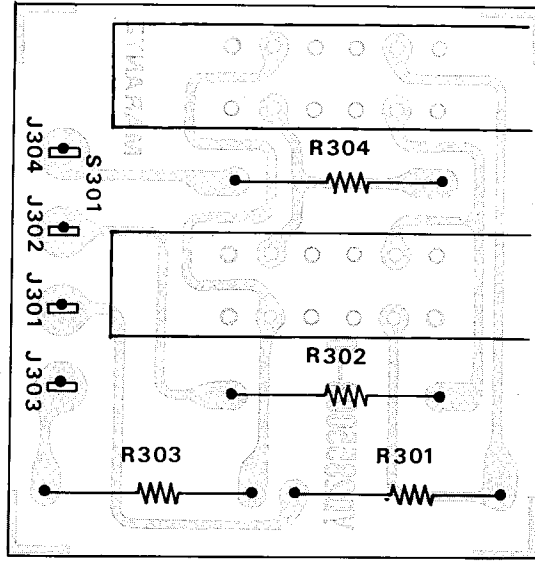


Figure 8. Main-Remote Speaker Switch Unit Assembly P300 Component Locations

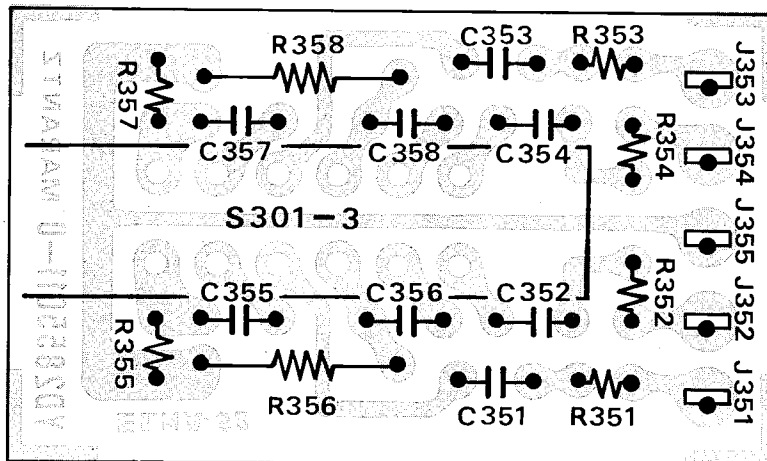


Figure 9. Loudness Unit Assembly P350 Component Locations

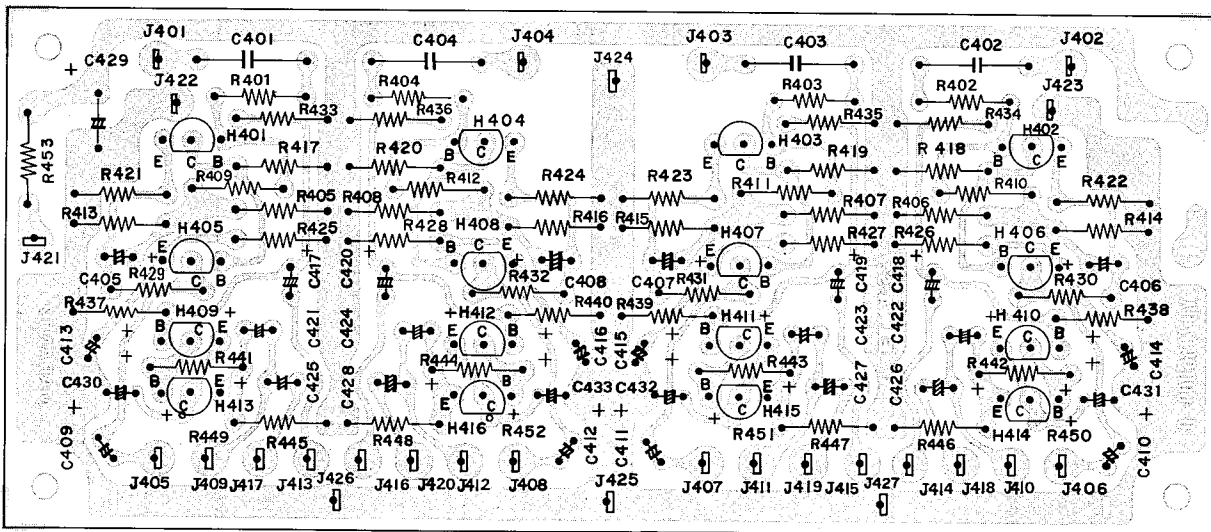


Figure 10. Tone Amplifier Assembly P400 Component Locations

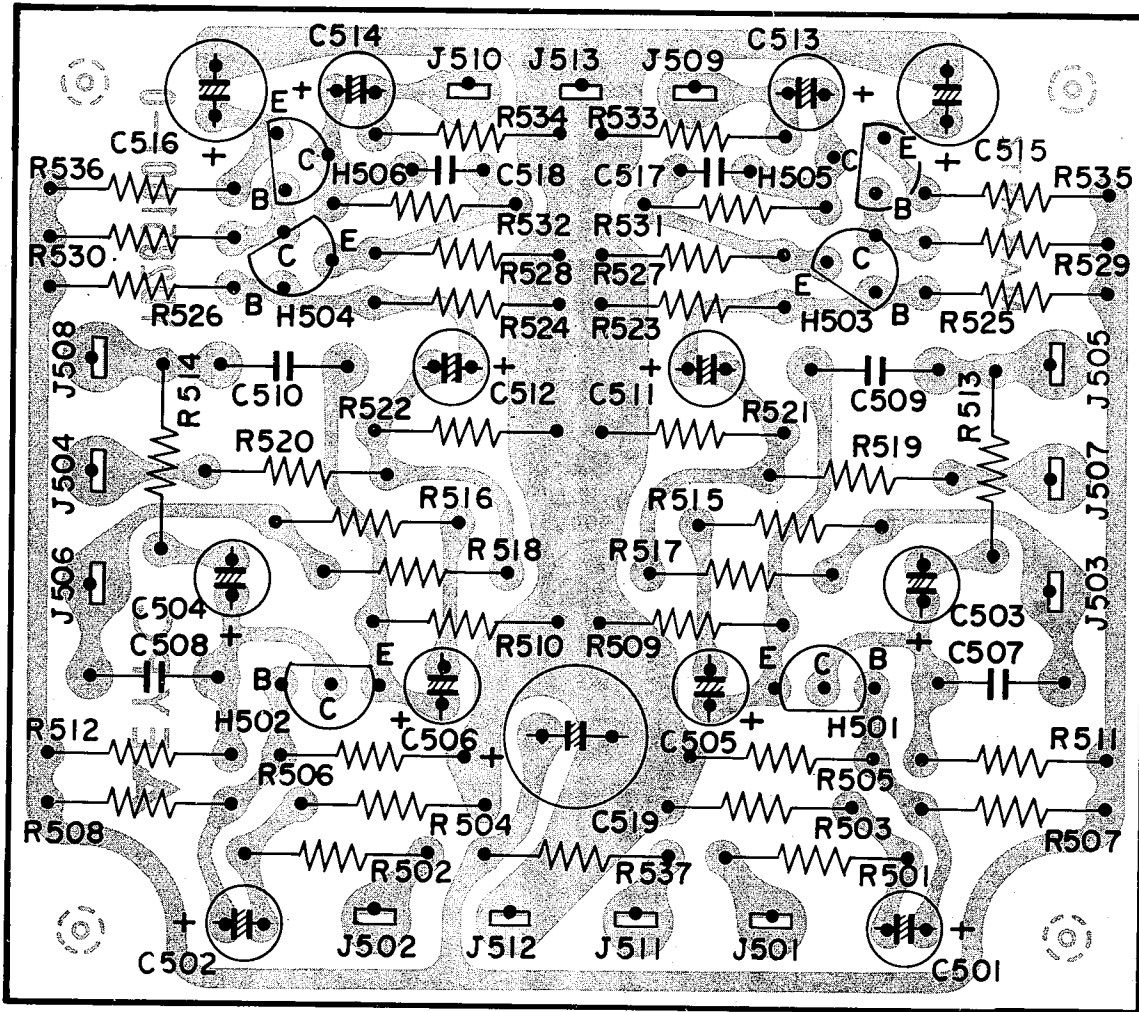


Figure 11. Vari-Matrix Unit Assembly P500 Component Locations

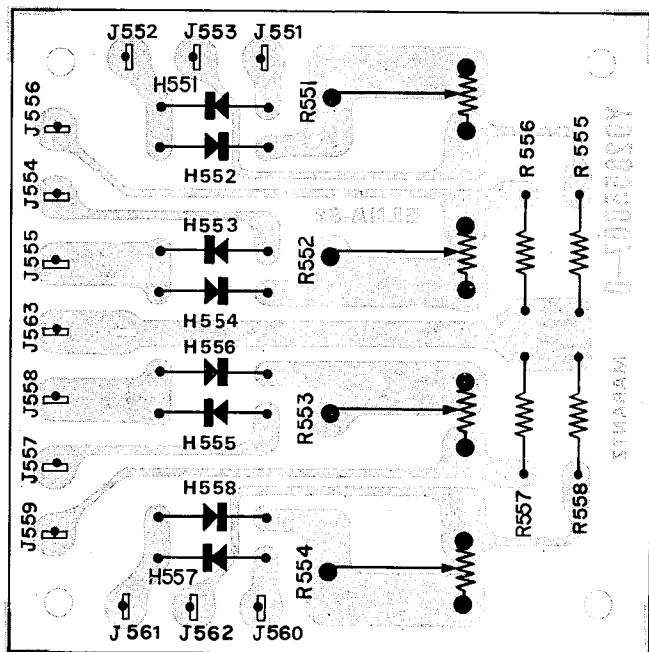
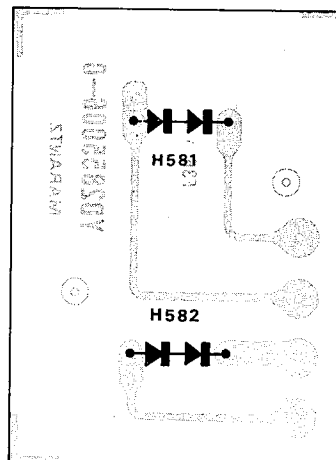


Figure 12. Meter Rectifier Unit Assembly P550 Component Locations

Figure 13. Temperature Compensation Unit Assembly P580 Component Locations



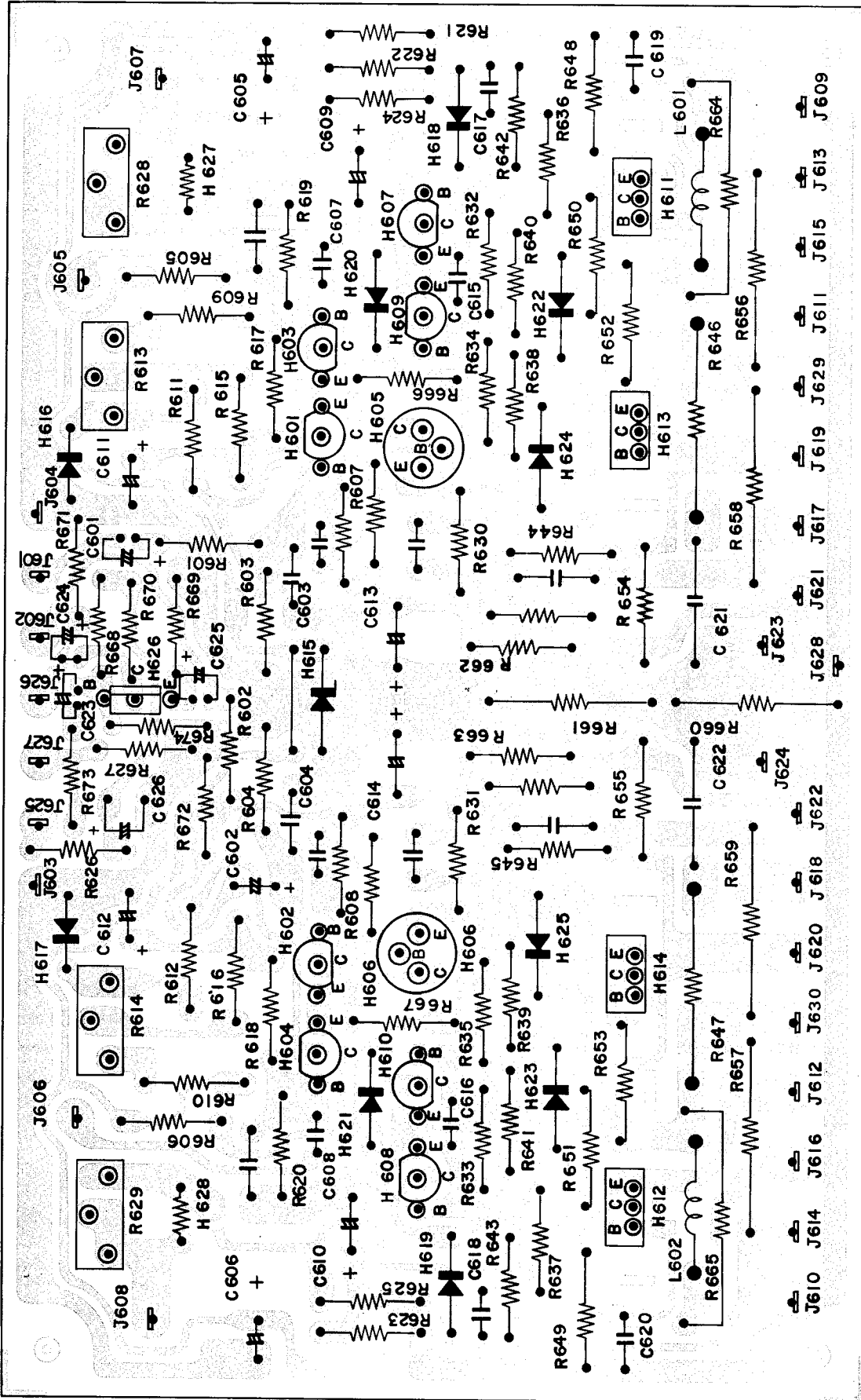


Figure 14. Power Amplifier Assembly P600 Component Locations

Figure 16. Tone Control Unit Assembly P750 Component Locations

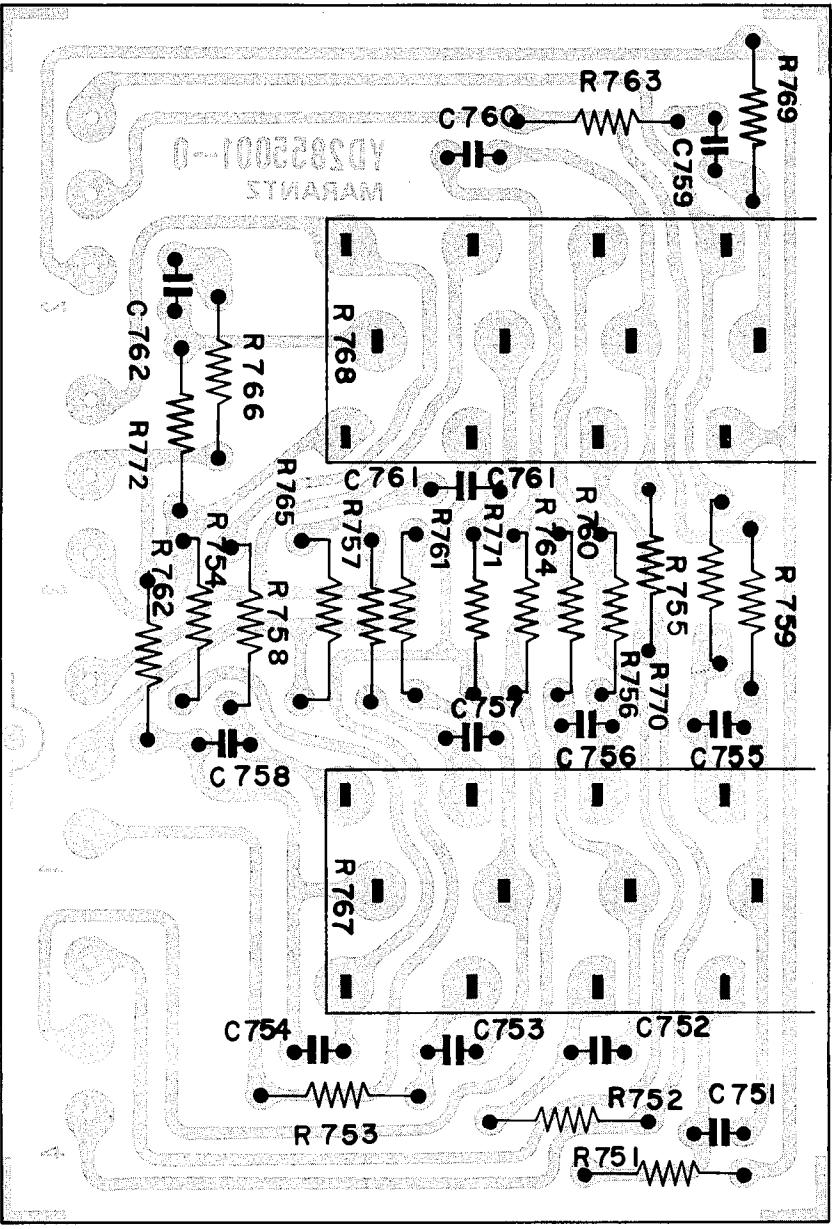


Figure 15. Phono Equalizer Amplifier Assembly P700 Component Locations

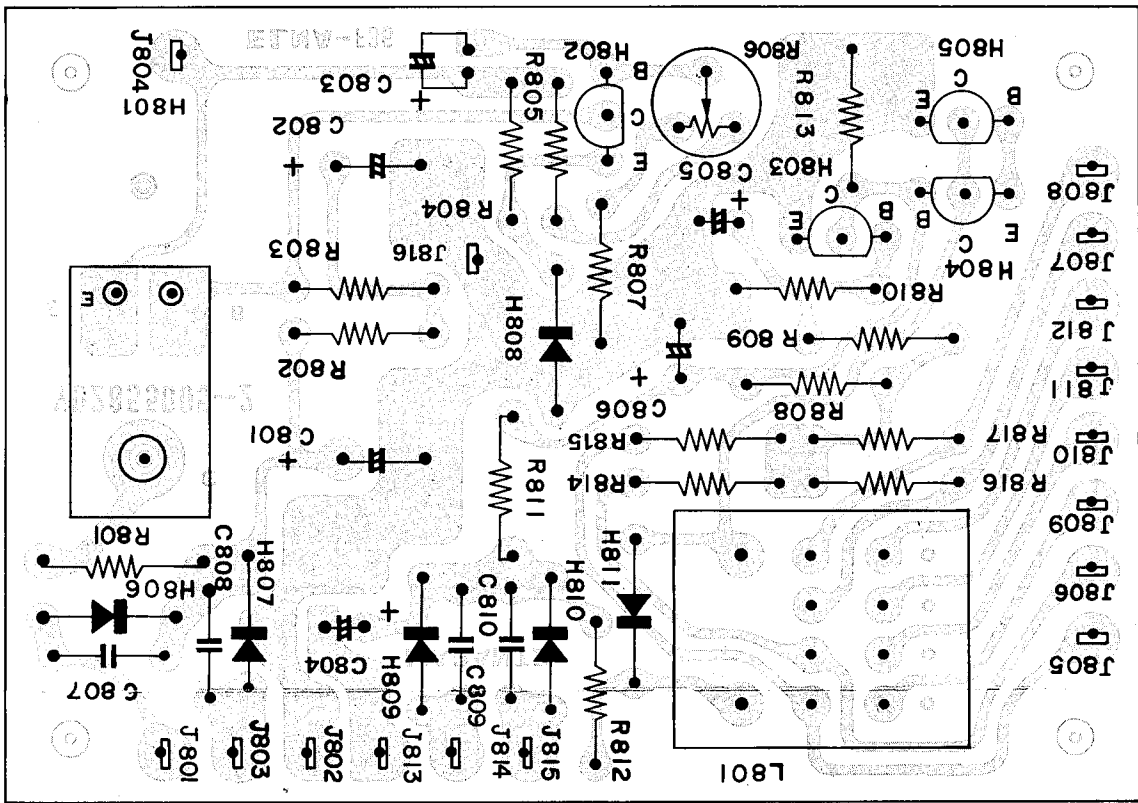
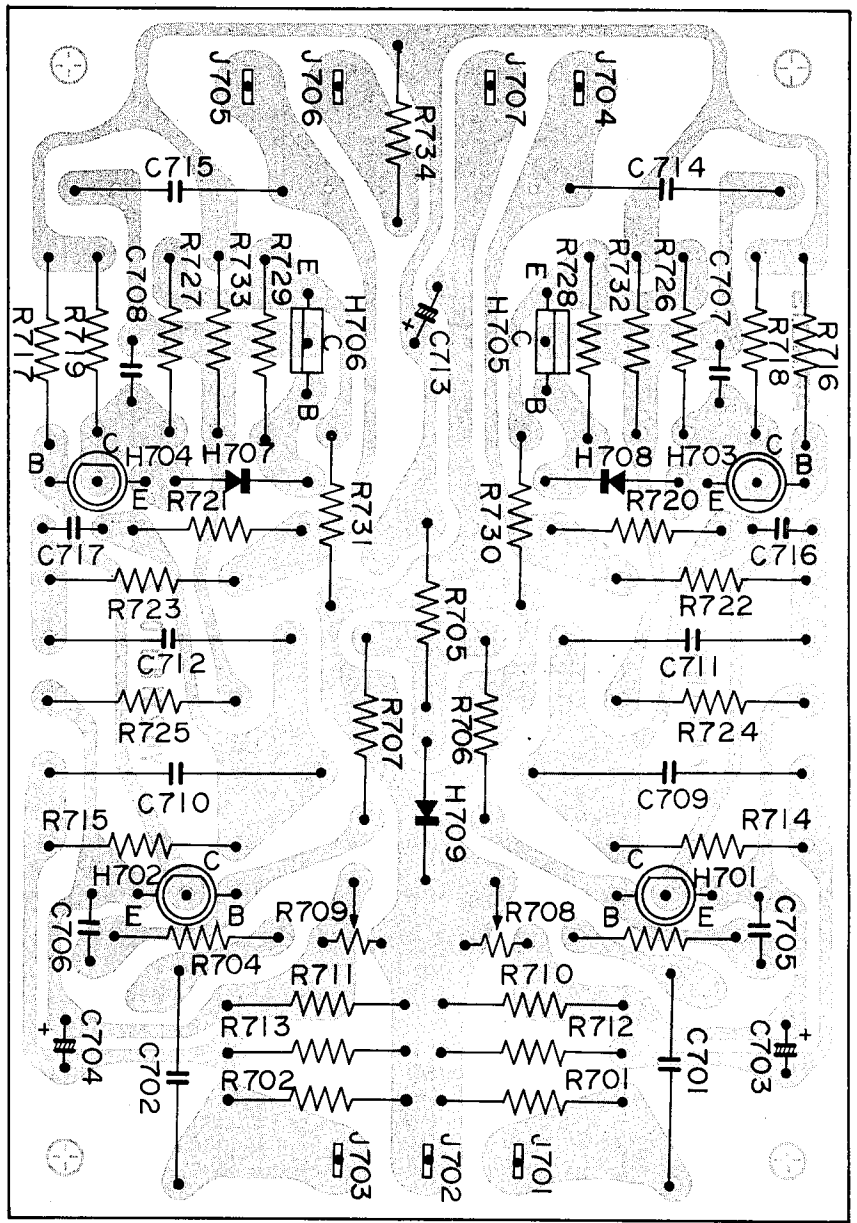


Figure 17. Power Supply Unit Assembly P800 Component Locations

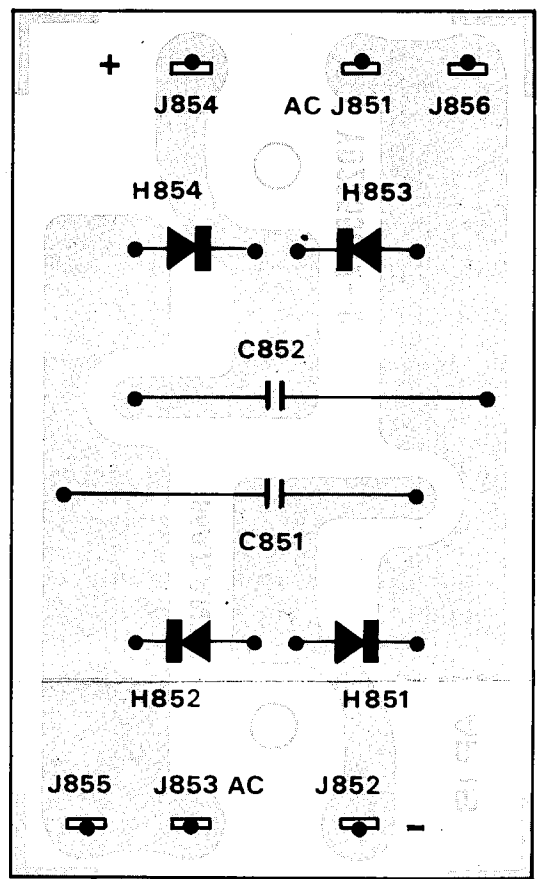


Figure 18. AC Rectifier Assembly P850 Component Locations

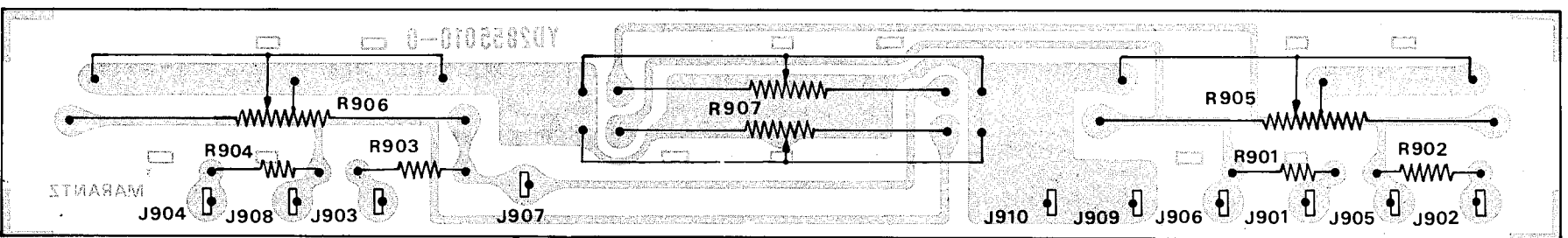


Figure 19. Balance Variable Resistor Unit Assembly P900 Component Locations

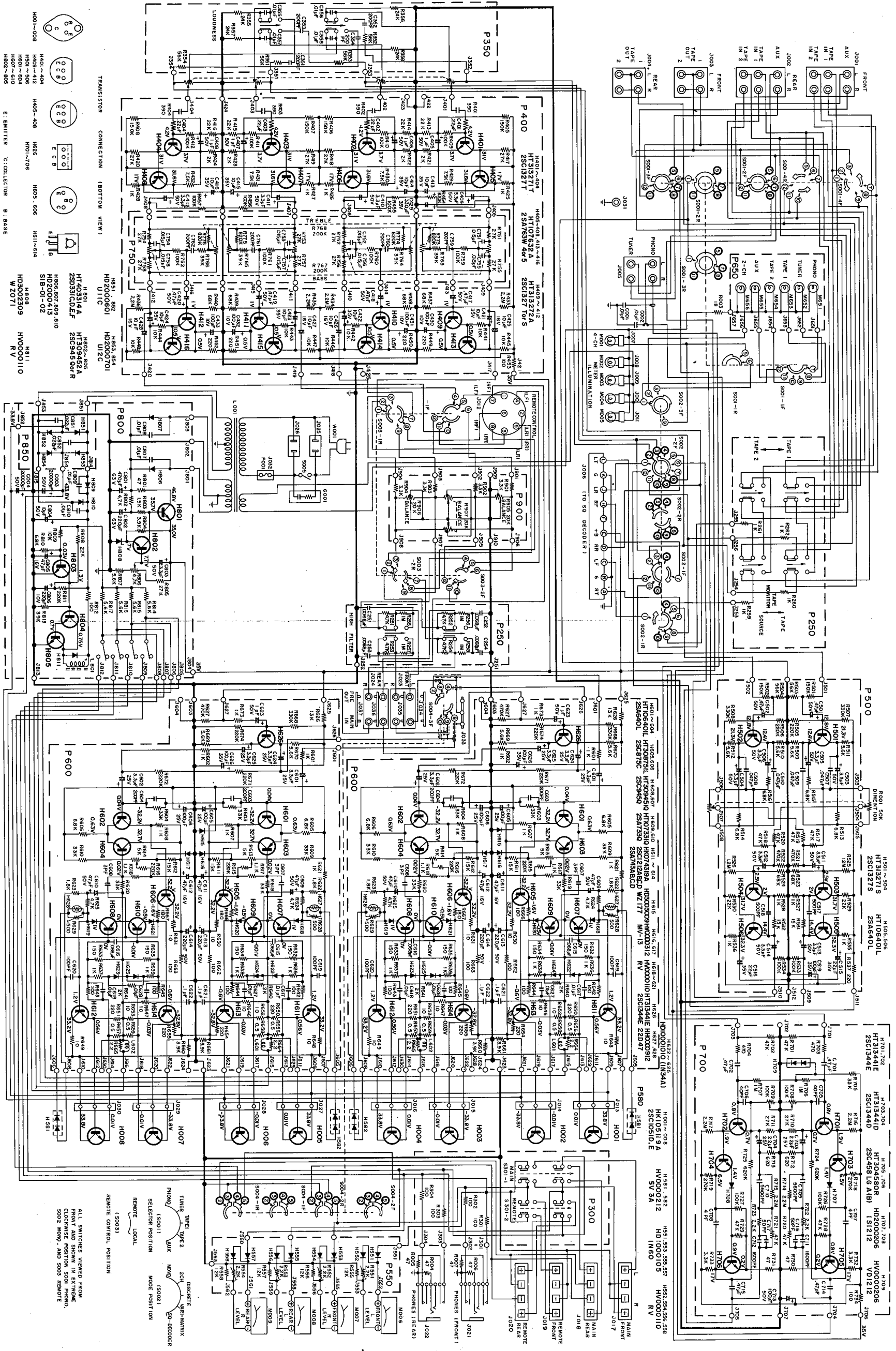


Figure 20. Schematic Diagram

PARTS LIST

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION	REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
P700	YD2818010 ZZ2855110	P. W. B. Phono Amp. P. W. B. Ass'y	J704	YP1000099	Plug
		RESISTORS (All resistors are ± 5% and ¼W, unless otherwise indicated.)	J705	YP1000099	Plug
R701	RT0547314	47KΩ	J706	YP1000099	Plug
R702	RT0547314	47KΩ	J707	YP1000099	Plug
R703	RT0547114	470Ω			SEMICONDUCTORS
R704	RT0547114	470Ω	H701	HT313441E	Transistor 2SC1344E
R705	RT0533314	33KΩ	H702	HT313441E	Transistor 2SC1344E
R706	RN1010514	1MΩ ±10% ¼W	H703	HT313441D	Transistor 2SC1344D
R707	RN1010514	1MΩ ±10% ¼W	H704	HT313441D	Transistor 2SC1344D
R708	RA0104012	Trimming 100KΩ(B)	H705	HT304580R	Transistor 2SC458LG A(B)
R709	RA0104012	Trimming 100KΩ(B)	H706	HT304580R	Transistor 2SC458LG A(B)
R710	RT0527314	27KΩ	H707	HD2000206	Diode 1S1212
			H708	HD2000206	Diode 1S1212
R711	RT0527314	27KΩ	H709	HV0000206	Varistor VD1212
R712	RT0562114	620Ω			
R713	RT0562114	620Ω	P500	YD2851001 ZZ2855101	P. W. B. Vari-Matrix P. W. B. Ass'y
R714	RT0522514	2.2MΩ			RESISTORS (All resistors are ±5% and ¼W.)
R715	RT0522514	2.2MΩ	R501	RT0515414	150KΩ
R716	RN1022514	2.2MΩ ±10% ¼W	R502	RT0515414	150KΩ
R717	RN1022514	2.2MΩ ±10% ¼W	R503	RT0556314	56KΩ
R718	RT0527414	270KΩ	R504	RT0556314	56KΩ
R719	RT0527414	270KΩ	R505	RT0522414	220KΩ
R720	RT0547314	47KΩ	R506	RT0522414	220KΩ
			R507	RT0533414	330KΩ
R721	RT0547314	47KΩ	R508	RT0533414	330KΩ
R722	RT0522214	2.2KΩ	R509	RT0556214	5.6KΩ
R723	RT0522214	2.2KΩ	R510	RT0556214	5.6KΩ
R724	RN0562414	620KΩ			
R725	RN0562414	620KΩ	R511	RT0556214	5.6KΩ
R726	RT0510414	100KΩ	R512	RT0556214	5.6KΩ
R727	RT0510414	100KΩ	R513	RT0568214	6.8KΩ
R728	RT0547314	47KΩ	R514	RT0568214	6.8KΩ
R729	RT0547314	47KΩ	R515	RT0568214	6.8KΩ
R780	RT0547014	47Ω	R516	RT0568214	6.8KΩ
			R517	RT0547314	47KΩ
R731	RT0547014	47Ω	R518	RT0547314	47KΩ
R732	RT0533214	3.3KΩ	R519	RT0547314	47KΩ
R733	RT0533214	3.3KΩ	R520	RT0547314	47KΩ
R734	RT0510114	100Ω			
		CAPACITORS	R521	RT0547414	470KΩ
C701	DF1747401	Film 0.47μF ±20% 50V	R522	RT0547414	470KΩ
C702	DF1747401	Film 0.47μF ±20% 50V	R523	RT0568314	68KΩ
C703	EE2260251	Electroly 22μF ±20% 25V	R524	RT0568314	68KΩ
C704	EE2260251	Electroly 22μF ±20% 25V	R525	RT0512514	1.2 MΩ
C705	DD1540004	Ceramic 40PF ±5% 50V	R526	RT0512514	1.2 MΩ
C706	DD1540004	Ceramic 40PF ±5% 50V	R527	RT0510214	1KΩ
C707	DD1104001	Ceramic 4PF ±0.5PF 50V	R528	RT0510214	1KΩ
C708	DD1104001	Ceramic 4PF ±0.5PF 50V	R529	RT0522314	22KΩ
C709	DF6556201	Film 5600PF ±5% 50V	R530	RT0522314	22KΩ
C710	DF6556201	Film 5600PF ±5% 50V			
			R531	RT0515314	15KΩ
C711	DF6516201	Film 1600PF ±5% 50V	R532	RT0515314	15KΩ
C712	DF6516201	Film 1600PF ±5% 50V	R533	RT0510414	100KΩ
C713	EA1070509	Electroly 100μF 50V	R534	RT0510414	100KΩ
C714	DF1747401	Film 0.47μF ±20% 50V	R535	RT0510214	1KΩ
C715	DF1747401	Film 0.47μF ±20% 50V	R536	RT0510214	1KΩ
C716	DD1650001	Ceramic 50PF ±10% 50V	R537	RT0522114	220Ω
C717	DD1650001	Ceramic 50PF ±10% 50V			MISCELLANEOUS
		MISCELLANEOUS	J501	YP1000094	Plug
J701	YP1000099	Plug	J502	YP1000094	Plug
J702	YP1000099	Plug	J503	YP1000094	Plug
J703	YP1000099	Plug	J504	YP1000094	Plug

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
J505	YP1000094	Plug
J506	YP1000094	Plug
J507	YP1000094	Plug
J508	YP1000094	Plug
J509	YP1000094	Plug
J510	YP1000094	Plug
J511	YP1000094	Plug
J512	YP1000094	Plug
CAPACITORS		
C501	EE4740501	Electroly 0.47 μ F \pm 20% 50V
C502	EE4740501	Electroly 0.47 μ F \pm 20% 50V
C503	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C504	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C505	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C506	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C507	DF1747305	Film 0.047 μ F \pm 20% 50V
C508	DF1747305	Film 0.047 μ F \pm 20% 50V
C509	DF1747305	Film 0.047 μ F \pm 20% 50V
C510	DF1747305	Film 0.047 μ F \pm 20% 50V
C511	EE3350501	Electrol 3.3 μ F \pm 20% 50V
C512	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C513	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C514	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C515	EA2260359	Electroly 22 μ F +100% -10% 35V
C516	EA2260359	Electroly 22 μ F +100% -10% 35V
C517	DD1650101	Ceramic 500PF \pm 10% 50V
C518	DD1650101	Ceramic 500PF \pm 10% 50V
C519	EA1070359	Electroly 100 μ F +100% -10% 35V
SEMICONDUCTORS		
H501	HT313271S	Transistor 2SC1327S
H502	HT313271S	Transistor 2SC1327S
H503	HT313271S	Transistor 2SC1327S
H504	HT313271S	Transistor 2SC1327S
H505	HT106401L	Transistor 2SA640L
H506	HT106401L	Transistor 2SA640L
P400	YD2855009 ZZ2855009	P. W. B. Pre Tone Amp. P. W. B. Ass'y
RESISTORS (All resistors are \pm5% and $\frac{1}{4}$W, unless otherwise indicated.)		
R401	RT0539114	390 Ω
R402	RT0539114	390 Ω
R403	RT0539114	390 Ω
R404	RT0539114	390 Ω
R405	RT0515414	150K Ω
R406	RT0515414	150K Ω
R407	RT0515414	150K Ω
R408	RT0515414	150K Ω
R409	RT0510414	100K Ω
R410	RT0510414	100K Ω
R411	RT0510414	100K Ω
R412	RT0510414	100K Ω
R413	RT0522314	22K Ω
R414	RT0522314	22K Ω
R415	RT0522314	22K Ω
R416	RT0522314	22K Ω
R417	RT0527314	27K Ω
R418	RT0527314	27K Ω
R419	RT0527314	27K Ω
R420	RT0527314	27K Ω

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
R421	RT0520214	2K Ω
R422	RT0520214	2K Ω
R423	RT0520214	2K Ω
R424	RT0520214	2K Ω
R425	RT0510214	1K Ω
R426	RT0510214	1K Ω
R427	RT0510214	1K Ω
R428	RT0510214	1K Ω
R429	RT0575214	7.5K Ω
R430	RT0575214	7.5K Ω
R431	RT0575214	7.5K Ω
R432	RT0575214	7.5K Ω
R433	RN1022514	2.2M Ω \pm 10% $\frac{1}{4}$ W
R434	RN1022514	2.2M Ω \pm 10% $\frac{1}{4}$ W
R435	RN1022514	2.2M Ω \pm 10% $\frac{1}{4}$ W
R436	RN1022514	2.2M Ω \pm 10% $\frac{1}{4}$ W
R437	RT0568314	68K Ω
R438	RT0568314	68K Ω
R439	RT0568314	68K Ω
R440	RT0568314	68K Ω
R441	RT0510314	10K Ω
R442	RT0510314	10K Ω
R443	RT0510314	10K Ω
R444	RT0510314	10K Ω
R445	RT0510314	10K Ω
R446	RT0510314	10K Ω
R447	RT0510314	10K Ω
R448	RT0510314	10K Ω
R449	RT0522114	220 Ω
R450	RT0522114	220 Ω
R451	RT0522114	220 Ω
R452	RT0522114	220 Ω
R453	RT0510114	100 Ω
R454	RT0510414	100K Ω
R455	RT0510414	100K Ω
R456	RT0510414	100K Ω
R457	RT0510414	100K Ω
CAPACITORS		
C401	DF1622405	Film 0.22 μ F \pm 10% 50V
C402	DF1622405	Film 0.22 μ F \pm 10% 50V
C403	DF1622405	Film 0.22 μ F \pm 10% 50V
C404	DF1622405	Film 0.22 μ F \pm 10% 50V
C405	EE1050501	Electroly 1 μ F \pm 20% 50V
C406	EE1050501	Electroly 1 μ F \pm 20% 50V
C407	EE1050501	Electroly 1 μ F \pm 20% 50V
C408	EE1050501	Electroly 1 μ F \pm 20% 50V
C409	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C410	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C411	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C412	EE3350501	Electroly 3.3 μ F \pm 20% 50V
C413	EA1060359	Electroly 10 μ F 35V
C414	EA1060359	Electroly 10 μ F 35V
C415	EA1060359	Electroly 10 μ F 35V
C416	EA1060359	Electroly 10 μ F 35V
C417	EE4740501	Electroly 0.47 μ F \pm 20% 50V
C418	EE4740501	Electroly 0.47 μ F \pm 20% 50V
C419	EE4740501	Electroly 0.47 μ F \pm 20% 50V
C420	EE4740501	Electroly 0.47 μ F \pm 20% 50V
C421	EE1060351	Electroly 10 μ F \pm 20% 35V
C422	EE1060351	Electroly 10 μ F \pm 20% 35V
C423	EE1060351	Electroly 10 μ F \pm 20% 35V

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
C424	EE1060351	Electroly 10 μ F \pm 20% 35V
C425	EQ1060161	Electroly 10 μ F \pm 30% 16V
C426	EQ1060161	Electroly 10 μ F \pm 30% 16V
C427	EQ1060161	Electroly 10 μ F \pm 30% 16V
C428	EQ1060161	Electroly 10 μ F \pm 30% 16V
C429	EA3370359	Electroly 330 μ F +50% -10% 35V
C430	EA1070109	Electroly 100 μ F 10V
C431	EA1070109	Electroly 100 μ F 10V
C432	EA1070109	Electroly 100 μ F 10V
C433	EA1070109	Electroly 100 μ F 10V
SEMICONDUCTORS		
H401	HT313271T	Transistor 2SC1327 (T)
H402	HT313271T	Transistor 2SC1327 (T)
H403	HT313271T	Transistor 2SC1327 (T)
H404	HT313271T	Transistor 2SC1327 (T)
H405	HT107632A	Transistor 2SA763W 4 or 5
H406	HT107632A	Transistor 2SA763W 4 or 5
H407	HT107632A	Transistor 2SA763W 4 or 5
H408	HT107632A	Transistor 2SA763W 4 or 5
H409	HT313272A	Transistor 2SC1327 (T or S)
H410	HT313272A	Transistor 2SC1327 (T or S)
H411	HT313272A	Transistor 2SC1327 (T or S)
H412	HT313272A	Transistor 2SC1327 (T or S)
H413	HT107632A	Transistor 2SA763W 4 or 5
H414	HT107632A	Transistor 2SA763W 4 or 5
H415	HT107632A	Transistor 2SA763W 4 or 5
H416	HT107632A	Transistor 2SA763W 4 or 5
MISCELLANEOUS		
J401	YP1000094	Plug
J402	YP1000094	Plug
J403	YP1000094	Plug
J404	YP1000094	Plug
J405	YP1000094	Plug
J406	YP1000094	Plug
J407	YP1000094	Plug
J408	YP1000094	Plug
J409	YP1000094	Plug
J410	YP1000094	Plug
J411	YP1000094	Plug
J412	YP1000094	Plug
J413	YP1000094	Plug
J414	YP1000094	Plug
J415	YP1000094	Plug
J416	YP1000094	Plug
J417	YP1000094	Plug
J418	YP1000094	Plug
J419	YP1000094	Plug
J420	YP1000094	Plug
J421	YP1000094	Plug
J422	YP1000094	Plug
J423	YP1000094	Plug
J424	YP1000094	Plug
J425	YP1000094	Plug
P550	YD2855007 ZZ2855007	P. W. B. Meter P. W. B. Ass'y
RESISTORS		
R551	RA0202010	Trimming 2.2K Ω \pm 30%
R552	RA0202010	Trimming 2.2K Ω \pm 30%
R553	RA0202010	Trimming 2.2K Ω \pm 30%

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
R554	RA0202010	Trimming 2.2K Ω \pm 30%
R555	RT0512314	12K Ω
R556	RT0512314	12K Ω
R557	RT0512314	12K Ω
R558	RT0512314	12K Ω
SEMICONDUCTORS		
H551	HD1000105	Diode 1N60
H552	HV0000110	Varistor RV
H553	HD1000105	Diode 1N60
H554	HV0000110	Varistor RV
H555	HD1000105	Diode 1N60
H556	HV0000110	Varistor RV
H557	HD1000105	Diode 1N60
H558	HV0000110	Varistor RV
MISCELLANEOUS		
J551	YP1000099	Plug
J552	YP1000099	Plug
J553	YP1000099	Plug
J554	YP1000099	Plug
J555	YP1000099	Plug
J556	YP1000099	Plug
J557	YP1000099	Plug
J558	YP1000099	Plug
J559	YP1000099	Plug
J560	YP1000099	Plug
J561	YP1000099	Plug
J562	YP1000099	Plug
J563	YP1000099	Plug
0814	281910101	Support x2
0826	51100306S	B. H. M. Screw x10
0827	51100306S	B. H. M. Screw x 4
P600	YD2855004 ZZ2855004	P. W. B. Main Amp. x2 P. W. B. Ass'y
RESISTORS (All resistors are \pm5% and $\frac{1}{4}$W, unless otherwise indicated.)		
R601	RT0510214	1K Ω x 2
R602	RT0510214	1K Ω x 2
R603	RT0533314	33K Ω x 2
R604	RT0533314	33K Ω x 2
R605	RT0568214	6.8K Ω x 2
R606	RT0568214	6.8K Ω x 2
R607	RT0510214	1K Ω x 2
R608	RT0510214	1K Ω x 2
R609	RT0533314	33K Ω x 2
R610	RT0533314	33K Ω x 2
R611	RT0515314	15K Ω x 2
R612	RT0515314	15K Ω x 2
R613	RA0502017	Trimming 5K Ω \pm 10% x 2
R614	RA0502017	Trimming 5K Ω \pm 10% x 2
R615	RT0522414	220K Ω x 2
R616	RT0522414	220K Ω x 2
R617	RT0511214	1K Ω x 2
R618	RT0511214	1K Ω x 2
R619	RT0533314	33K Ω x 2
R620	RT0533314	33K Ω x 2
R621	RC1010212	1K Ω \pm 10% $\frac{1}{4}$ W x2
R622	RC1018212	1.8K Ω \pm 10% $\frac{1}{4}$ W x2
R623	RC1018212	1.8K Ω \pm 10% $\frac{1}{4}$ W x2

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION			REF. DESIG.	MARANTZ PART NO.	DESCRIPTION		
R624	RC1047212	4.7K Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	C610	EA4760509	Electroly	47 μF	50V x 2
R625	RC1047212	4.7K Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	C611	EE4760162	Electroly	47 μF	16V x 2
R626	RT0513314	13K $\Omega \times 2$			C612	EE4760162	Electroly	47 μF	16V x 2
R627	RT0547414	470K $\Omega \times 2$			C613	EA2270509	Electroly	220 μF	50V x 2
R628	RA0501010	Trimming	500 $\Omega \pm 10\%$	x 2	C614	EA2270509	Electroly	220 μF	50V x 2
R629	RA0501010	Trimming	500 $\Omega \pm 10\%$	x 2	C615	DF1768301	Film	0.068 $\mu F \pm 20\%$	x 2
R630	RC1010012	10 $\Omega \pm 10\%$		$\frac{1}{2}W \times 2$	C616	DF1768301	Film	0.068 $\mu F \pm 20\%$	x 2
R631	RC1010012	10 $\Omega \pm 10\%$		$\frac{1}{2}W \times 2$	C617	DF1710301	Film	0.01 $\mu F \pm 20\%$	x 2
R632	GF0515114	150 $\Omega \times 2$			C618	DF1710301	Film	0.01 $\mu F \pm 20\%$	x 2
R633	GF0515114	150 $\Omega \times 2$			C619	DK1610150	Ceramic	100PF $\pm 10\%$	x 2
R634	GF0515114	150 $\Omega \times 2$			C620	DK1610150	Ceramic	100PF $\pm 10\%$	x 2
R635	GF0515114	150 $\Omega \times 2$			C621	DF1710452	Film	0.1 μF	200V x 2
R636	GF0510214	1K $\Omega \times 2$			C622	DF1710452	Film	0.1 μF	200V x 2
R637	GF0510214	1K $\Omega \times 2$			C623	EE1050501	Electroly	1 $\mu F \pm 20\%$	50V x 2
R638	GF0510214	1K $\Omega \times 2$			C624	EE3350251	Electroly	3.3 $\mu F \pm 20\%$	25V x 2
R639	GF0510214	1K $\Omega \times 2$			C625	EE3350251	Electroly	3.3 $\mu F \pm 20\%$	25V x 2
R640	RT0520214	2K $\Omega \times 2$			C626	EA1070359	Electroly	100 μF	35V x 2
R641	RT0520214	2K $\Omega \times 2$			C627	DF1710301	Film	0.01 $\mu F \pm 20\%$	x 2
R642	GF0510114	100 $\Omega \times 2$			C628	DF1710301	Film	0.01 $\mu F \pm 20\%$	x 2
R643	GF0510114	100 $\Omega \times 2$							
R644	GF0510114	100 $\Omega \times 2$							
R645	GF0510114	100 $\Omega \times 2$							
R646	GT0510002	10 Ω	$\pm 5\%$	2W x 2	L601	LL2380612	Choke	x 2	
R647	GT0510002	10 Ω	$\pm 5\%$	2W x 2	L602	LL2380612	Choke	x 2	
R648	GF0510012	10 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$					
R649	GF0510012	10 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$					
R650	GF0522112	220 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$					
R651	GF0522112	220 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$	H601	HT106401L	Transistor	2SA640	L x 2
R652	GF0510012	10 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$	H602	HT106401L	Transistor	2SA640	L x 2
R653	GF0510012	10 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$	H603	HT106401L	Transistor	2SA640	L x 2
R654	GF0522112	220 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$	H604	HT106401L	Transistor	2SA640	L x 2
R655	GF0522112	220 Ω	$\pm 5\%$	$\frac{1}{2}W \times 2$	H605	HT308751L	Transistor	2SC875	C x 2
R656	RW1000503	0.5 Ω	$\pm 10\%$	3W x 2	H606	HT308751L	Transistor	2SC875	C x 2
R657	RW1000503	0.5 Ω	$\pm 10\%$	3W x 2	H607	HT309451Q	Transistor	2SC945	Q x 2
R658	RW1000503	0.5 Ω	$\pm 10\%$	3W x 2	H608	HT309451Q	Transistor	2SC945	Q x 2
R659	RW1000503	0.5 Ω	$\pm 10\%$	3W x 2	H609	HT107331Q	Transistor	2SA733	Q x 2
R660	RC1039212	3.9K Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	H610	HT107331Q	Transistor	2SA733	Q x 2
R661	RC1039212	3.9K Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	H611	HT107431C	Transistor	2SA743C	x 2
R662	RC1010112	100 Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	H612	HT107431C	Transistor	2SA743C	x 2
R663	RC1010112	100 Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	H613	HT312121C	Transistor	2SC1212C	x 2
R664	RC1002212	2.2 Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	H614	HT312121C	Transistor	2SC1212C	x 2
R665	RC1002212	2.2 Ω	$\pm 10\%$	$\frac{1}{2}W \times 2$	H615	HD3003009	Diode	Zenner WZ-177	x 2
R666	RT0518114	180 $\Omega \times 2$			H616	HV0000312	Varistor	MV-13	x 2
R667	RT0518114	180 $\Omega \times 2$			H617	HV0000312	Varistor	MV-13	x 2
R668	RT0533414	330K $\Omega \times 2$			H618	HV0000110	Varistor	RV	x 2
R669	RT0556214	5.6K $\Omega \times 2$			H619	HV0000110	Varistor	RV	x 2
R670	RT0556214	5.6K $\Omega \times 2$			H620	HV0000110	Varistor	RV	x 2
R671	RT0522414	220K $\Omega \times 2$			H621	HV0000110	Varistor	RV	x 2
R672	RT0522414	220K $\Omega \times 2$			H622	HD1000101	Diode	1N34A	x 2
R673	RT0510214	1K $\Omega \times 2$			H623	HD1000101	Diode	1N34A	x 2
R674	RT0522414	220K $\Omega \times 2$			H624	HD1000101	Diode	1N34A	x 2
C601	EE3350251	Electroly	3.3 $\mu F \pm 20\%$	25V x 2	H625	HD1000101	Diode	1N34A	x 2
C602	EE3350251	Electroly	3.3 $\mu F \pm 20\%$	25V x 2	H626	HT313441E	Transistor	2SC1344E	x 2
C603	DD1620101	Ceramic	200PF $\pm 10\%$	x 2	H627	HH0000912	Thermistor	22D47(200 Ω)	x 2
C604	DD1620101	Ceramic	200PF $\pm 10\%$	x 2	H628	HH0000912	Thermistor	22D47(200 Ω)	x 2
C605	EA1070259	Electroly	100 μF	25V x 2					
C606	EA1070259	Electroly	100 μF	25V x 2					
C607	DD1003050	Ceramic	3PF $\pm 0.25PF$	500V x 2	J601	YP1000099	Plug	x 2	
C608	DD1003050	Ceramic	3PF $\pm 0.25PF$	500V x 2	J603	YP1000099	Plug	x 2	
C609	EA4760509	Electroly	47 μF	50V x 2	J604	YP1000099	Plug	x 2	
					J605	YP1000099	Plug	x 2	
					J606	YP1000099	Plug	x 2	
					J607	YP1000099	Plug	x 2	
					J608	YP1000099	Plug	x 2	
					J609	YP1000099	Plug	x 2	
					J610	YP1000099	Plug	x 2	

CAPACITORS

COILS

SEMICONDUCTORS

MISCELLANEOUS

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
J611	YP1000099	Plug x2
J612	YP1000099	Plug x2
J613	YP1000099	Plug x2
J614	YP1000099	Plug x2
J615	YP1000099	Plug x2
J616	YP1000099	Plug x2
J617	YP1000099	Plug x2
J618	YP1000099	Plug x2
J619	YP1000099	Plug x2
J620	YP1000099	Plug x2
J621	YP1000099	Plug x2
J622	YP1000099	Plug x2
J623	YP1000099	Plug x2
J624	YP1000099	Plug x2
J625	YP1000099	Plug x2
J626	YP1000099	Plug x2
J627	YP1000099	Plug x2
J628	YP1000099	Plug x2
J629	YP1000099	Plug x2
J630	YP1000099	Plug x2
0810	285526702	Heat-Sink x4
0812	281811806	Spacer x4
0831	54022601E	Flat Washer x8
0832	51102606E	B. H. M. Screw x8
P580	YD2855006 ZZ2855006	P. W. B. Temp. Comp. x2 P. W. B. Ass'y
MISCELLANEOUS		
H581	HV0000212	Varistor SV-3A x2
H582	HV0000212	Varistor SV-3A x2
0818	285505601	Buffer x2
0804	285526701	Heat-Sink x2
0806	281810104	Support x8
0808	281816007	Bracket x4
0816	285510101	Support x4
0833	51100314E	B. H. M. Screw x12
0828	51570306B	P. H. Tapt Screw x12
H001	HT310151D	Transistor 2SC1051 D
H002	HT310151D	Transistor 2SC1051 D
H003	HT310151D	Transistor 2SC1051 D
H004	HT310151D	Transistor 2SC1051 D
H005	HT310151D	Transistor 2SC1051 D
H006	HT310151D	Transistor 2SC1051 D
H007	HT310151D	Transistor 2SC1051 D
H008	HT310151D	Transistor 2SC1051 D
J013	YJ0500019	Socket
J014	YJ0500019	Socket
J015	YJ0500019	Socket
J016	YJ0500019	Socket
J027	YJ0500019	Socket
J028	YJ0500019	Socket
J029	YJ0500019	Socket
J030	YJ0500019	Socket
P850	YD2855012 ZZ2855012	P. W. B. Rectifier P. W. B. Ass'y
MISCELLANEOUS		
C851	DF2722350	Capacitor Film 0.022 μ F \pm 20% 400V
C852	DF2722350	Capacitor Film 0.022 μ F \pm 20% 400V

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
H851	HD2000601	Diode U11C
H852	HD2000601	Diode U11C
H853	HD2000701	Diode U12C
H854	HD2000701	Diode U12C
J851	YP1000099	Plug
J852	YP1000099	Plug
J853	YP1000099	Plug
J854	YP1000099	Plug
J855	YP1000099	Plug
J856	YP1000099	Plug
P800	YD2855005 ZZ2855005	P. W. B. Power Supply P. W. B. Ass'y
RESISTORS		
R801	GF0547012	47 Ω \pm 5% $\frac{1}{2}$ W
R802	RT0547214	4.7K Ω \pm 5% $\frac{1}{4}$ W
R803	RT0515214	1.5K Ω \pm 5% $\frac{1}{4}$ W
R804	RC1039212	3.9K Ω \pm 10% $\frac{1}{2}$ W
R805	RT0527314	27K Ω \pm 5% $\frac{1}{4}$ W
R806	RA0502013	Trimming 4.7K Ω B
R807	RT0556214	5.6K Ω \pm 5% $\frac{1}{4}$ W
R808	RT0522314	22K Ω \pm 5% $\frac{1}{4}$ W
R809	RT0510314	10K Ω \pm 5% $\frac{1}{4}$ W
R810	RT0568214	6.8K Ω \pm 5% $\frac{1}{4}$ W
R811	RT0522414	220K Ω \pm 5% $\frac{1}{4}$ W
R812	RC1010112	100 Ω \pm 10% $\frac{1}{2}$ W
R813	RT0539314	39K Ω \pm 10% $\frac{1}{4}$ W
R814	RC1056212	5.6K Ω \pm 10% $\frac{1}{2}$ W
R815	RC1056212	5.6K Ω \pm 10% $\frac{1}{2}$ W
R816	RC1056212	5.6K Ω \pm 10% $\frac{1}{2}$ W
R817	RC1056212	5.6K Ω \pm 10% $\frac{1}{2}$ W
CAPACITORS AND RELAY		
C801	EA4770631	Electroly 470 μ F 63V
C802	EA2270631	Electroly 220 μ F 63V
C803	EA3350509	Electroly 3.3 μ F 50V
C804	EA1060509	Electroly 10 μ F 50V
C805	EA4760169	Electroly 47 μ F 16V
C806	EA2270109	Electroly 220 μ F 10V
C807	DK1810351	Ceramic 0.01 μ F +100% -0% 500V
C808	DK1810351	Ceramic 0.01 μ F +100% -0% 500V
C809	DK1810351	Ceramic 0.01 μ F +100% -0% 500V
C810	DK1810351	Ceramic 0.01 μ F +100% -0% 500V
L801	LY4024003	Relay
SEMICONDUCTORS		
H801	HT403314A	Transistor 2SD331C. D. E. F
H802	HT309452A	Transistor 2SC945Q or R
H803	HT309452A	Transistor 2SC945Q or R
H804	HT309452A	Transistor 2SC945Q or R
H805	HT309452A	Transistor 2SC945Q or R
H806	HD2000413	Diode SIB-01-02
H807	HD2000413	Diode SIB-01-02
H808	HD3002309	Diode WZ-071
H809	HD2000413	Diode SIB-01-02
H810	HD2000413	Diode SIB-01-02
H811	HV0000110	Varistor RV
MISCELLANEOUS		
J801	YP1000099	Plug
J802	YP1000099	Plug
J803	YP1000099	Plug

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION	REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
J804	YP1000099	Plug			MISCELLANEOUS
J805	YP1000099	Plug	J351	YP1000099	Plug
J806	YP1000099	Plug	J352	YP1000099	Plug
J807	YP1000099	Plug	J353	YP1000099	Plug
J808	YP1000099	Plug	J354	YP1000099	Plug
J809	YP1000099	Plug	J355	YP1000099	Plug
J810	YP1000099	Plug			
J811	YP1000099	Plug	P300	YD2855003 ZZ2855003	P. W. B. SP, Mode P. W. B. Ass'y
J812	YP1000099	Plug			RESISTORS
J813	YP1000099	Plug	R301	RJ1010102	100Ω ± 10% 2W
J814	YP1000099	Plug	R302	RJ1010102	100Ω ± 10% 2W
J815	YP1000099	Plug	R303	RJ1010102	100Ω ± 10% 2W
			R304	RJ1010102	100Ω ± 10% 2W
0925	273026702	Heat-Sink			MISCELLANEOUS
1111	51060308E	P. H. M. Screw x2	S301	SP0403006	Push Switch
1112	53110303E	Hexagon Nut			
1113	54040302N	Spring Washer	J301	YP1000099	Plug
2837	62031650W	Lug	J302	YP1000099	Plug
2836	62031650W	Lug	J303	YP1000099	Plug
C007	EA1070509	Capacitor Electroly 100μF 50V	J304	YP1000099	Plug
0403	285516050	Bracket K	P650	YD2855008 ZZ2855008	P. W. B. Function Indicator P. W. B. Ass'y
0408	281816003	Bracket			MISCELLANEOUS
0409	281816004	Bracket	M651	IN1006301	Lamp 6.3V 40mA
0419	285527401	Reflector	M652	IN1006301	Lamp 6.3V 40mA
0420	285510102	Support x 2	M653	IN1006301	Lamp 6.3V 40mA
0503	51100306A	B. H. M. Screw x 6	M654	IN1006301	Lamp 6.3V 40mA
0505	51102605A	B. H. M. Screw x 6	M655	IN1006301	Lamp 6.3V 40mA
0507	51570306B	P. H. Tapt Screw x 8	M656	IN1006301	Lamp 6.3V 40mA
0508	54050300R	T. L. Washer OR x 8	J651	YP1000094	Plug
0515	51570306B	P. H. Tapt Screw x 2	J652	YP1000094	Plug
0521	51042605A	F. H. M. Screw x 2	J653	YP1000094	Plug
0522	51102605A	B. H. M. Screw x 2	J654	YP1000094	Plug
0523	54042602N	Spring Washer x 2	J655	YP1000094	Plug
0525	51100406A	B. H. M. Screw x 4	J656	YP1000094	Plug
0528	51100306A	B. H. M. Screw x 2	J657	YP1000094	Plug
0432	288310701	Sheet x 2	R003	RC1018012	Resistor 18Ω ± 10% ¼W
0426	287105302	Sheet x 4	P750	YD2855001 ZZ2855001	P. W. B. Tone Control P. W. B. Ass'y
P350	YD2855011 ZZ2855011	P. W. B. Loudness P. W. B. Ass'y			RESISTORS
R351	RT0556314	56KΩ ± 5% ¼W	R751	RT0527314	27KΩ ± 5% ¼W
R352	RT0556314	56KΩ ± 5% ¼W	R752	RT0527314	27KΩ ± 5% ¼W
R353	RT0556314	56KΩ ± 5% ¼W	R753	RT0527314	27KΩ ± 5% ¼W
R354	RT0556314	56KΩ ± 5% ¼W	R754	RT0527314	27KΩ ± 5% ¼W
R355	RT0524314	24KΩ ± 5% ¼W	R755	RT0527314	27KΩ ± 5% ¼W
R356	RT0524314	24KΩ ± 5% ¼W	R756	RT0527314	27KΩ ± 5% ¼W
R357	RT0524314	24KΩ ± 5% ¼W	R757	RT0527314	27KΩ ± 5% ¼W
R358	RT0524314	24KΩ ± 5% ¼W	R758	RT0527314	27KΩ ± 5% ¼W
		CAPACITORS	R759	RT0510414	100KΩ ± 5% ¼W
C351	DD1620101	Ceramic 200PF ± 10%	R760	RT0510414	100KΩ ± 5% ¼W
C352	DD1620101	Ceramic 200PF ± 10%	R761	RT0510414	100KΩ ± 5% ¼W
C353	DD1620101	Ceramic 200PF ± 10%	R762	RT0510414	100KΩ ± 5% ¼W
C354	DD1620101	Ceramic 200PF ± 10%	R763	RT0539314	39KΩ ± 5% ¼W
C355	DF1610301	Film 0.01μF ± 10%	R764	RT0539314	39KΩ ± 5% ¼W
C356	DF1610301	Film 0.01μF ± 10%	R765	RT0539314	39KΩ ± 5% ¼W
C357	DF1610301	Film 0.01μF ± 10%	R766	RT0539314	39KΩ ± 5% ¼W
C358	DF1610301	Film 0.01μF ± 10%	R767	RU0204001	Variable 200KΩ (B)

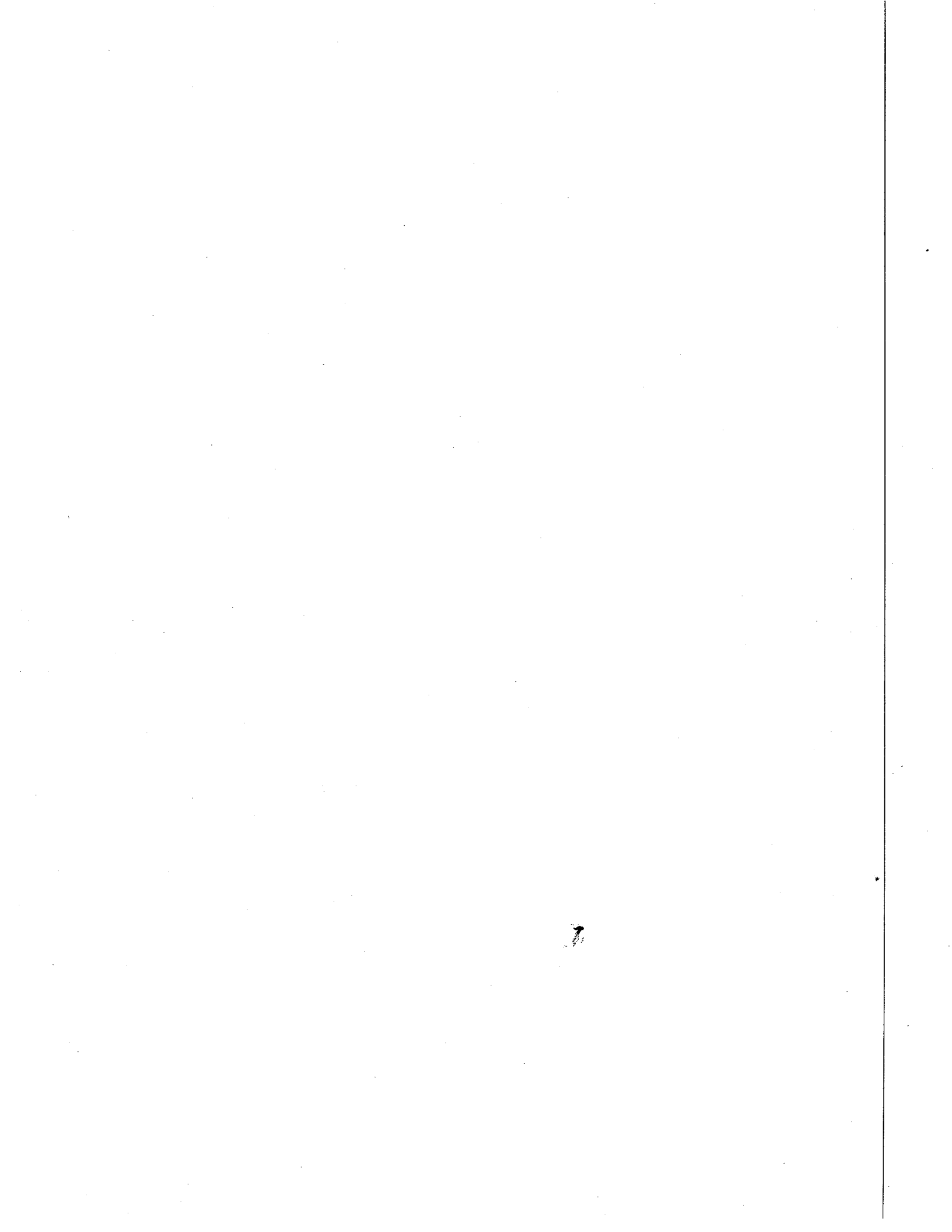
REF. DEISG.	MARANTZ PART NO.	DESCRIPTION	REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
R768	RU0204001	Variable 200K Ω (B)	C254	DF1668201	Film 0.0068 μ F \pm 10%
R773	GC1082418	820K Ω \pm 10% 1/8W	J251	YP1000099	MISCELLANEOUS Plug Plug Plug Plug Plug
R774	GC1082418	820K Ω \pm 10% 1/8W	J252	YP1000099	
R775	GC1082418	820K Ω \pm 10% 1/8W	J253	YP1000099	
R776	GC1082418	820K Ω \pm 10% 1/8W	J254	YP1000099	
C751	DF1615301	Film 0.015 μ F \pm 10% 50V	J255	YP1000099	
C752	DF1615301	Film 0.015 μ F \pm 10% 50V	J256	YP1000099	
C753	DF1615301	Film 0.015 μ F \pm 10% 50V	S251	SP0403006	Push Switch
C754	DF1615301	Film 0.015 μ F \pm 10% 50V	S005	SP0201010	Push Switch Power
C755	DF1615301	Film 0.015 μ F \pm 10% 50V	G001	BF1040001	Printed Compo. 120 Ω +0.1 μ F
C756	DF1615301	Film 0.015 μ F \pm 10% 50V	R002	RG0204001	Resistor Variable 200K Ω B Volume
C757	DF1615301	Film 0.015 μ F \pm 10% 50V	R001	RM0503050	Resistor Variable 50K Ω B Dimension
C758	DF1615301	Film 0.015 μ F \pm 10% 50V	S003	SR0802002	Rotary Switch Remocon
C759	DD1520101	Ceramic 200PF \pm 5% 50V	S002	SR0905002	Rotary Switch Mode
C760	DD1520101	Ceramic 200PF \pm 5% 50V	4536	138200503	Clamper
C761	DD1520101	Ceramic 200PF \pm 5% 50V	S001	SR1205001	Rotary Switch Selector
C762	DD1520101	Ceramic 200PF \pm 5% 50V	4736	138200503	Clamper x2
P900	YD2855010 ZZ2855010	P. W. B. Balance Control P. W. B. Ass'y	J021	YJ0100055	Jack Headphone (Front)
R901	RT0533214	3.3K Ω \pm 5% 1/4W	R006	RJ1047001	Resistor 47 Ω \pm 10% 1W
R902	RT0533214	3.3K Ω \pm 5% 1/4W	R007	RJ1047001	Resistor 47 Ω \pm 10% 1W
R903	RT0533214	3.3K Ω \pm 5% 1/4W	J022	YJ0100055	Jack Headphone (Rear)
R904	RT0533214	3.3K Ω \pm 5% 1/4W	R004	RJ1047001	Resistor 47 Ω \pm 10% 1W
R905	RX0203012	Variable 20K Ω G	R005	RJ1047001	Resistor 47 Ω \pm 10% 1W
R906	RX0203012	Variable 20K Ω G	J008	YJ0800019	Jack Lamp Socket
R907	RS0203004	Variable 20K Ω G	J009	YJ0800019	Jack Lamp Socket
J901	YP1000099	MISCELLANEOUS Plug Plug Plug Plug Plug Plug Plug Plug Plug Plug	J010	YJ0800019	Jack Lamp Socket
J902	YP1000099		J011	YJ0800019	Jack Lamp Socket
J903	YP1000099		0411	285427401	Reflector x4
J904	YP1000099		0412	285427101	Holder x4
J905	YP1000099		0510	51100306A	B. H. M Screw x4
J906	YP1000099		0511	54050300R	T. L. Washer OR x4
J907	YP1000099		0512	51570306B	P. H. Tapt Screw x4
J908	YP1000099		M002	IN1008007	Lamp Meter
J909	YP1000099		M003	IN1008007	Lamp Meter
J910	YP1000099		M004	IN1008007	Lamp Meter
P250	YD2855002 ZZ2855002	P. W. B. Hi Filter, Tape Monitor P. W. B. Ass'y	M005	IN1008007	Lamp Meter
R251	RT0547214	4.7K Ω \pm 5% 1/4W	J007	YJ0800019	Jack Quad Indicator
R252	RT0547214	4.7K Ω \pm 5% 1/4W	0414	285327402	Reflector
R253	RT0547214	4.7K Ω \pm 5% 1/4W	0415	285327102	Holder
R254	RT0547214	4.7K Ω \pm 5% 1/4W	0517	51100306A	B. H. M. Screw
R255	RT0510514	1M Ω \pm 5% 1/4W	0518	51570306B	P. H. Tapt Screw
R256	RT0510514	1M Ω \pm 5% 1/4W	1126	62031650W	Lug Earth
R257	RT0510514	1M Ω \pm 5% 1/4W	M001	IN1008007	Lamp Quad Indicator
R258	RT0510514	1M Ω \pm 5% 1/4W	0422	285510901	Shield
R259	RT0510214	1K Ω \pm 5% 1/4W	0423	285512002	Insulator
R260	RT0510214	1K Ω \pm 5% 1/4W	0425	280312001	Insulator
R261	RT0510214	1K Ω \pm 5% 1/4W	C251	DF1668201	Film 0.0068 μ F \pm 10%
R262	RT0510214	1K Ω \pm 5% 1/4W	C252	DF1668201	Film 0.0068 μ F \pm 10%
C251	DF1668201	Film 0.0068 μ F \pm 10%	C253	DF1668201	Film 0.0068 μ F \pm 10%

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION			
M006	IM1104205	DC Meter	LF		
M007	IM1104206	DC Meter	RF		
M008	IM1104205	DC Meter	LR		
M009	IM1104206	DC Meter	RR		
0603	285516001	Bracket			
0610	145525903	Bush			
0703	51100308S	B. H. M. Screw	x8		
0704	53110303E	Hexagon Nut	x8		
J017	YT0304003	Terminal	Spk		
J018	YT0304003	Terminal	Spk		
J019	YT0304003	Terminal	Spk		
J020	YT0304003	Terminal	Spk		
0707	51100308S	B. H. M. Screw	x14		
0708	53110303E	Hexagon Nut	x14		
J001	YT0206003	Terminal	Aux	Tape 1,2	
J002	YT0206003	Terminal	Aux	Tape 1,2	
J003	YT0204003	Terminal	Aux	Tape 1,2	
J004	YT0204003	Terminal	Tape	Out 1,2	
J005	YT0204003	Terminal	Phono	Tuner	
J023	YT0204003	Terminal	Pre Out	Main In	
J024	YT0204003	Terminal	Pre Out	Main In	
0711	55060307F	T. R. Rivet	x4		
0712	54050300R	T. L. Washer	OR x4		
J025	YJ0400018	Jack	AC Outlet		
J026	YJ0400018	Jack	AC Outlet		
0716	53110403E	Hexagon Nut			
0717	62041760W	Lug			
0718	54020401E	Flat Washer P			
0719	54050400R	T. L. Washer	OR		
J031	YL0301021	Socket	Ground		
0617	281805501	Collar	x2		
0725	51100312S	B. H. M. Screw	x2		
0726	53110303E	Hexagon Nut	x2		
J032	YJ0800012	Socket	Fuse Holder		
F001	FS1050003	Fuse	5 (A) UL 3AG		
J034	YP1000097	Plug	Pre Out/Main In		
J035	YP1000097	Plug	Pre Out/Main In		
J036	YP1000097	Plug	Pre Out/Main In		
J037	YP1000097	Plug	Pre Out/Main In		
C001	DK1710301	Capacitor	Ceramic 0.01μF	50V	
C002	DK1710301	Capacitor	Ceramic 0.01μF	50V	
W001	YC0240010	AC Cord			
0723	51100306S	B. H. M. Screw	x2		
0724	53110303E	Hexagon Nut	x2		
J012	YJ1100012	Jack			
0616	285116007	Bracket			
0621	285516003	Bracket			

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION	
S004	SR0602009	Rotary Switch	Spk. 4CH/2CH
J006	YJ0700006	Jack	SQ Decoder
0911	285110450	Retainer K	
1020	51100312S	B. H. M. Screw	x2
A	285506340	Escutcheon Ass'y	
0103	285506301	Escutcheon	
0104	285540101	Frame	
0105	285515801	Window	
0106	281825905	Bush	
0107	273125901	Bush	x2
0109	285505301	Cover	
B	281815440	Knob Ass'y	
0118	281815404	Knob	x2
0119	71400149Q	Spring	x2
C	281815441	Knob Ass'y	
0121	281815405	Knob	x2
0122	71400159Q	Spring	x2
0927	282100501	Clamper	
0928	138200503	Clamper	x11
W002	YW2855001	Wire Material	
W003	YX2855001	Wire Material	
0134	275905701	Leg	x4
0313	51100410A	B. H. M. Screw	x4
0314	54020401A	Flat Washer P	x4
0315	54040402A	Spring Washer	x4
0729	51100306S	B. H. M. Screw	x2
0903	285510550	Chassis K	
0923	285510103	Support	x2
0918	285110101	Support	x2
6336	138200503	Clamper	x3
1003	51570306B	P. H. Tapt Screw	x10
1004	51100306S	B. H. M. Screw	x6
1007	51570306B	P. H. Tapt Screw	x8
1011	51100512A	B. H. M. Screw	x4
1012	53110501A	Hexagon Nut	x4
1013	54040502A	Spring Washer	x4
1014	54020501A	Flat Washer P	x4
1016	53110303E	Hexagon Nut	x2
1017	54040302N	Spring Washer	x2
1019	51100306S	B. H. M. Screw	x2
1022	54040402N	Spring Washer	x2
1026	51100306S	B. H. M. Screw	x4
1027	51100306S	B. H. M. Screw	x4
1028	51100306S	B. H. M. Screw	x4

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
1029	51100306S	B. H. M. Screw x4
1030	51100306S	B. H. M. Screw x4
1031	51100306S	B. H. M. Screw x2
1103	51570408B	P. H. Tapt Screw x4
1104	54020401E	Flat Washer P x4
1123	51570306B	P. H. Tapt Screw x7
1124	51570306B	P. H. Tapt Screw x10
1125	54050300R	T. L. Washer OR x10
C003	EC2090501	Capacitor Electroly 20000 μ F 50V
C004	EC2090501	Capacitor Electroly 20000 μ F 50V
L001	TS6140302	Power Transf.
J033	YL0103002	Terminal 3P
1108	51570306B	P. H. Tapt Screw x2
1109	51570306B	P. H. Tapt Screw
6436	62031650W	Lug x3
0112	281815401	Knob x6
0113	281815402	Knob
0114	285015401	Knob x3
0115	281815403	Knob x5
0124	285525701	Lid
0125	257711803	Spacer x4
0127	285525750	Lid K
0130	285125703	Lid
0131	285712001	Insulator
0132	285512001	Insulator x2
0133	288312001	Insulator
0135	51216059E	Screw x4
0202	285526501	Indicator
0211	257886101	Label UL CAUTION
0212	257886102	Label Do not Remove Cover
0213	257886103	Label See Marking on Bottom
0220	282186102	Label Fuse Caution
0303	51122608E	T. H. M. Screw x4
0305	51100406S	B. H. M. Screw x9
0309	51100406S	B. H. M. Screw x4
0310	54020401S	Flat Washer P x4
0730	51100306S	B. H. M. Screw x2
0417	285500701	Strip
0431	285530201	Dial
0221	285386101	Label
1202	285585101	Instructions
1209	285585601	Schematic Diagram
1217	281885104	Instructions
1219	282885108	Instructions
1223	257785450	Guarantee Card K
1302	285580101	Packing Case
1303	285580111	Packing Case
1308	285580301	Partitioner
1309	285580302	Partitioner

REF. DESIG.	MARANTZ PART NO.	DESCRIPTION
1312	901403540	Polyethylen Bag
1314	901302501	Polyethylen Bag x2
1317	102980401	Sleeve
1319	273182101	Silicagel x2
1322	952281501	Serial NO Card x4



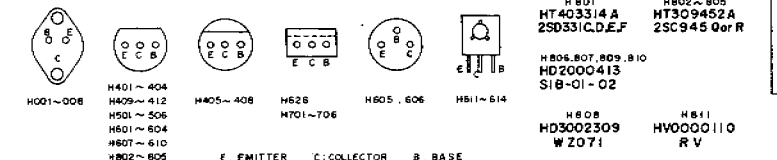
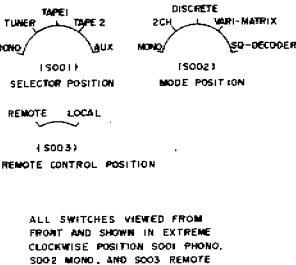
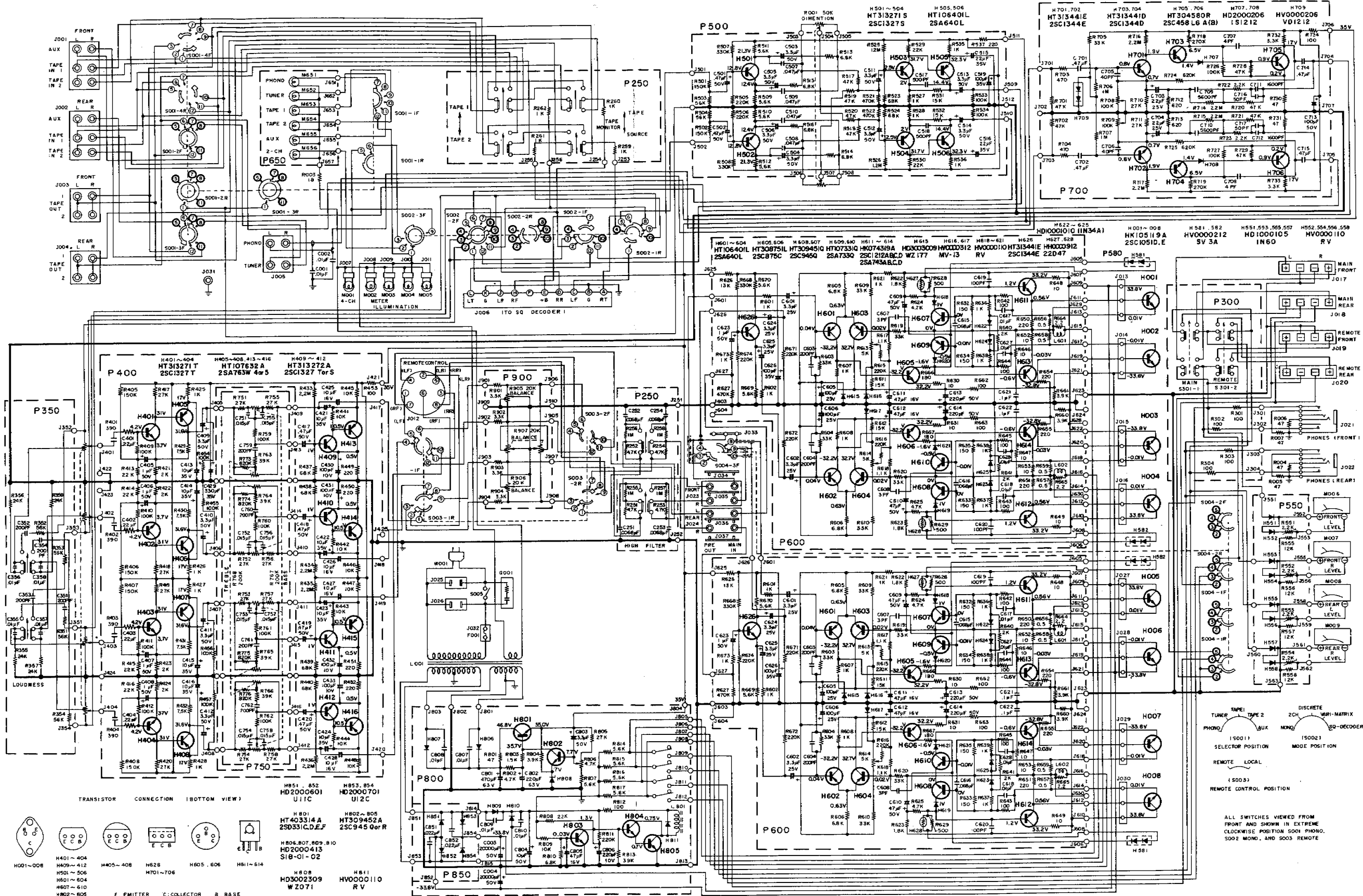


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