

SERVICE MANUAL



marantz

model 2235B

Stereophonic Receiver

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INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model 2235B Stereophonic Receiver.

Servicing information and voltage data included in this manual are intended for use by the knowledgeable and experienced technician only. All instruction should be read carefully. No attempt should be made to proceed without good understanding of the operation in the receiver.

The parts list furnish information by which replacement part may be ordered from the Marantz Company. A simple description is included for parts which can be usually be obtained through local suppliers.

1. P.W. BOARDS

As can be seen from the circuit diagram (Figure 36), the chassis of the Model 2235B mounts the following units. Each printed wiring (P.W.) board is described within the square enclosed by a bold dotted line on the circuit diagram.

- | | | |
|---|-------|-----------------------------|
| 1. FM Front End | ..... | mounted on P.W. Board, P100 |
| 2. AM Tuner | ..... | mounted on P.W. Board, P150 |
| 3. FM IF Amplifier | ..... | mounted on P.W. Board, P200 |
| 4. MPX Stereo Decoder | ..... | mounted on P.W. Board, P300 |
| 5. Dolby Level | ..... | mounted on P.W. Board, PC01 |
| 6. Antenna Muting | ..... | mounted on P.W. Board, PU01 |
| 7. Function Lamp | ..... | mounted on P.W. Board, PY01 |
| 8. Dial Lamp | ..... | mounted on P.W. Board, PZ01 |
| 9. Dolby FM, Monitor, Mono and Hi Filter Switch | ..... | mounted on P.W. Board PH01 |
| 10. Loudness, FM Muting, Main and Remote Speaker Switch | ..... | mounted on P.W. Board, PT01 |
| 11. Phono Amplifier | ..... | mounted on P.W. Board, P400 |
| 12. Pre and Tone Amplifier | ..... | mounted on P.W. Board, PE01 |
| 13. Main Amplifier | ..... | mounted on P.W. Board, P700 |
| 14. Power Supply | ..... | mounted on P.W. Board, P800 |

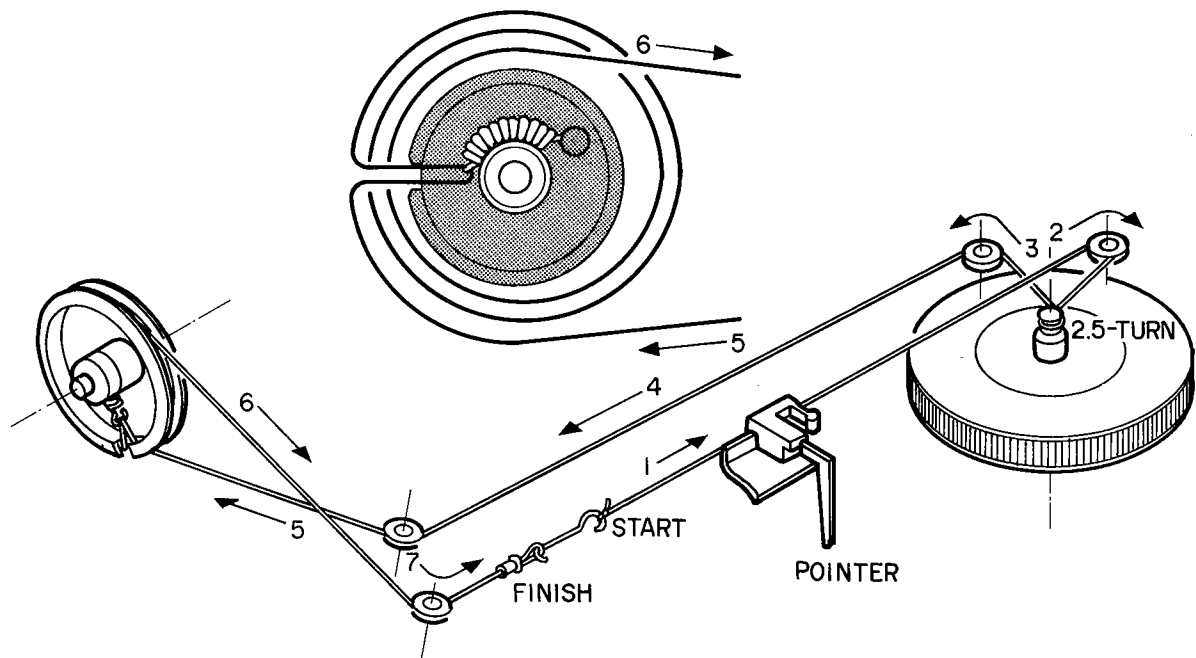


Figure 1. Dial Stringing

2. TEST EQUIPMENT REQUIRED FOR SERVICING

Table 1 lists the test equipment required for servicing the Model 2235B Receiver.

Item	Manufacturer and Model No.	Use
AM Signal Generator		Signal source for AM alignment.
Test Loop		Used with AM Signal generator.
FM Signal Generator	Less than 0.3% distortion	Signal source for FM alignment.
Stereo Modulator	Less than 0.3% distortion	Stereo separation alignment and trouble shooting.
Frequency Counter		MPX Oscillator adjustment (VCO).
Audio Oscillator	Weston Model CVO-100P, less than 0.02% residual distortion is required.	Sinewave and squarewave signal source.
Oscilloscope	High sensitivity with DC horizontal and vertical amplifiers.	Waveform analysis and trouble shooting and ASO alignment.
VTVM	With AC, DC, RF range	Voltage measurements.
Circuit Tester		Trouble shooting.
AC Wattmeter	Simpson, Model 380	Monitors primary power to Amplifier.
AC Ammeter	Commercial Grade (1-10A)	Monitors amplifier output under short circuit condition.
Line Voltmeter	Commercial Grade (0-150V AC)	Monitors potential of primary power to amplifier.
Variable Autotransformer (0-140V AC, 10 amps)	Powerstat, Model 116B	Adjusts level of primary power to amplifier.
Shorting Plug	Use phono plug with 600 ohm across center pin and shell.	Shorts amplifier input to eliminate noise pickup.
Output Load (8 ohms, $\pm 1\%$ 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination.
Output Load (4 ohms, $\pm 1\%$ 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination.

Table 1. Test Equipment Required for Servicing

3. AM ALIGNMENT PROCEDURE

3.1 AM IF Alignment

1. Connect a sweep generator to the J153 and an alignment scope to the test point R167 (out side).
2. Rotate each core of IF transformer L153 for maximum height and flat top symmetrical response.

3.2 AM Frequency Range and Tracking Alignment

1. Set AM signal generator to 515kHz. Turn the tuning capacitor fully closed (place the tuning pointer at the low end.) and adjust the oscillator coil L152 for maximum audiooutput.
2. Set the signal generator to 1650kHz. Place the tuning pointer in the high frequency end and adjust the oscillator trimmer on the oscillator tuning capacitor for maximum audio output.

3. Repeat the step 1 and 2 until no further adjustment is necessary.
4. Set the generator to 600kHz and tune the receiver to the same frequency and adjust a slug core of AM ferrite rod antenna and RF coil L151 for maximum output.
5. Set the generator to 1400kHz and tune the receiver to the same frequency and adjust both trimming capacitors of antenna and RF tuned circuit for maximum output.
6. Repeat the step 4 and 5 until no further adjustment is necessary.

Note: During tracking alignment reduce the signal generator output as necessary to avoid AGC action.

3.3 AM Signal Strength Meter Adjustment

Set the AM Signal generator to 1000kHz with $5\text{K}\mu\text{V}$, and adjust R178 so that the signal strength meter may read 80% of the full scale.

4. FM ALIGNMENT PROCEDURE

1. Connect an FM signal generator to the FM ANTENNA terminals and an oscilloscope and an audio distortion analyzer to the TAPE 1 MONITOR OUT jacks on the rear panel.
2. Set the FM SG to 87MHz and provide about 3 to $5\mu\text{V}$. Place the tuning pointer at the low frequency end by rotating the tuning knob and adjust the core of oscillator coil L104 to obtain maximum audio output.
3. Set the FM SG to 109MHz and provide about 3 to $5\mu\text{V}$ output. Rotate the tuning knob and place the tuning pointer at the high frequency end and adjust the trimming capacitor C106 for maximum output.
4. Repeat the step 2 and 3 until no further adjustment is necessary.
5. Set the FM SG to 90MHz and tune the receiver to the same frequency. Decrease signal generator output until the audio output level decreases with the decreasing generator output. Adjust the antenna coil L101, RF coil L102, L103 and IF transformer L106 for minimum audio distortion.
6. Set the FM SG to 106 MHz and tune the receiver to the same frequency. Adjust the trimming capacitor C102, C104 and C105 for minimum distortion.
7. Repeat the step 5 and 6 until no further adjustment is necessary.
8. Adjust the secondary core (upper) of discriminator transformer L201 so that the center tuning meter pointer indicates its center at no signal applied. Set the FM SG to 98MHz and increase its output level to $1\text{K}\mu\text{V}$ and tune the receiver to the same frequency so that the center tuning meter pointer indicates its center. Adjust the primary core (lower) of L201 for minimum distortion.
9. Set the FM SG to 98MHz with $100\text{K}\mu\text{V}$, and adjust R374 so that signal strength meter may read 90% of the full scale.

5. STEREO SEPARATION ALIGNMENT PROCEDURE

1. Set the FM SG to provide $1\text{K}\mu\text{V}$ at 98MHz. Tune the receiver to the same frequency so that the center tuning meter pointer indicates its center.
2. Turn the FM SG modulation off (with the pilot signal turned off), connect a frequency counter to the test point J310, and adjust R311 so that the frequency counter may precisely read 19kHz.
3. Modulate the FM SG with stereo composite signal consisting of only subchannel signal (of course a pilot signal must be included).
4. Adjust the trimming resistor R301 for maximum and same separation in both channels.

6. MUTING CIRCUIT ALIGNMENT PROCEDURE

1. Connect a VTVM to across the resistor R363 and adjust the resistor R363 until the meter reads 0.75V DC at no signal.

2. Set the FM SG to provide $1\text{K}\mu\text{V}$ at 98MHz and tune the receiver to the same frequency correctly.
3. Turn on MUTING pushswitch. Shift the FM signal generator frequency to plus and minus and note both plus and minus shifted frequencies at which undesirable audio side responses are muted out. Adjust the R363 so that the same shifted frequencies mute the undesirable side response.
4. Adjust R362 for proper frequency shift at which the muting circuit operates.

7. DOLBY FM TAPE OUTPUT SETTING

1. Set the modulation of FM SG to 400Hz, 50% ($\pm 37.5\text{kHz}$ Dev.).
2. Set the FM SG to provide $1\text{K}\mu\text{V}$ at 98MHz. Tune the receiver to the same frequency until the tuning meter pointer indicates its center.
3. Turn on DOLBY FM pushswitch. Set the semifixed resistors RC01 and RC02 until each output of the TAPE OUT jacks R and L becomes 580mV at VTVM.

8. AUDIO ADJUSTMENT

8.1 Main Amplifier DC Offset Alignment

Connect a DC voltmeter with 0.5 or 1V range between the SPEAKER terminals and adjust the trimming resistor R713 for "zero" DC output on the meter.

Repeat the same procedure for the other channel.

Note: During this alignment no load should be connected to the SPEAKER terminals.

8.2 Idle-Current Adjustment

Connect a VTVM between pins J713 and J717. Next, adjust the trimming resistor R766 for the VTVM reads 8mV DC.

Repeat the same procedure for the other channel.

Note: During this alignment no load should be connected to the speaker terminals.

8.3 Main Amplifier DC Offset Re-Alignment

Check the DC offset voltage aligned in the section 8.2 and if any DC output is observed on the DC voltmeter, adjust R713 again for "zero" output.

9. AUTOMATIC VOLTAGE REGULATOR ADJUSTMENT

Connect a VTVM to J804 (+) and J805 (-) and adjust R806 until the VTVM reads 35V under no signal condition.

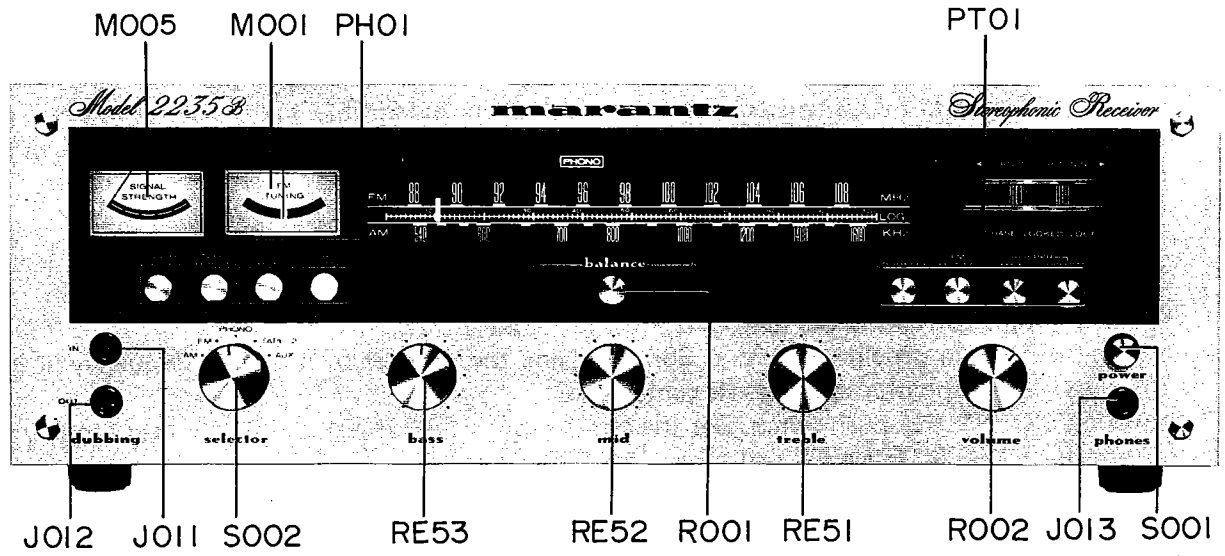


Figure 2. Front Panel Adjustment and Component Locations

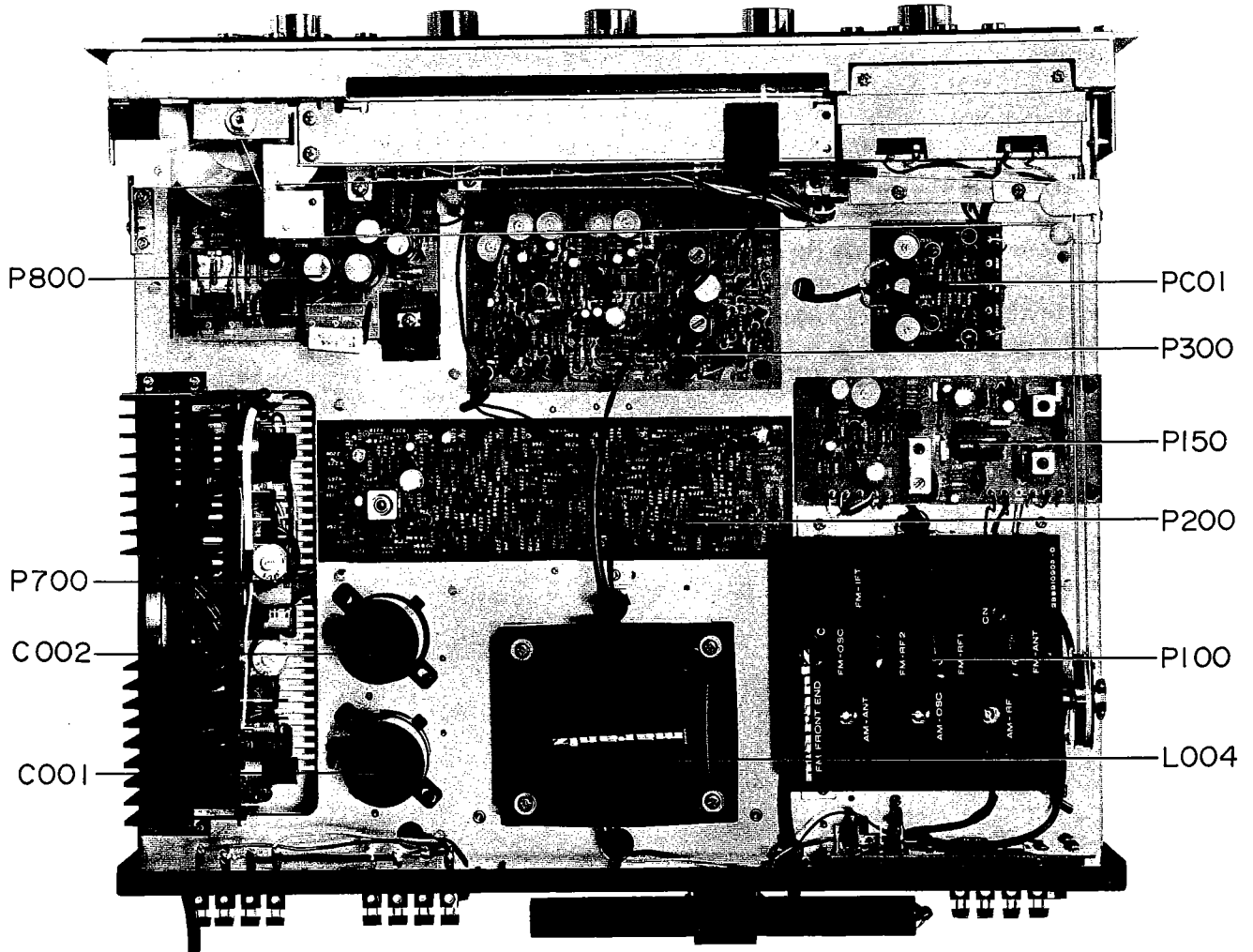


Figure 3. Main Chassis Component Locations (Top View)

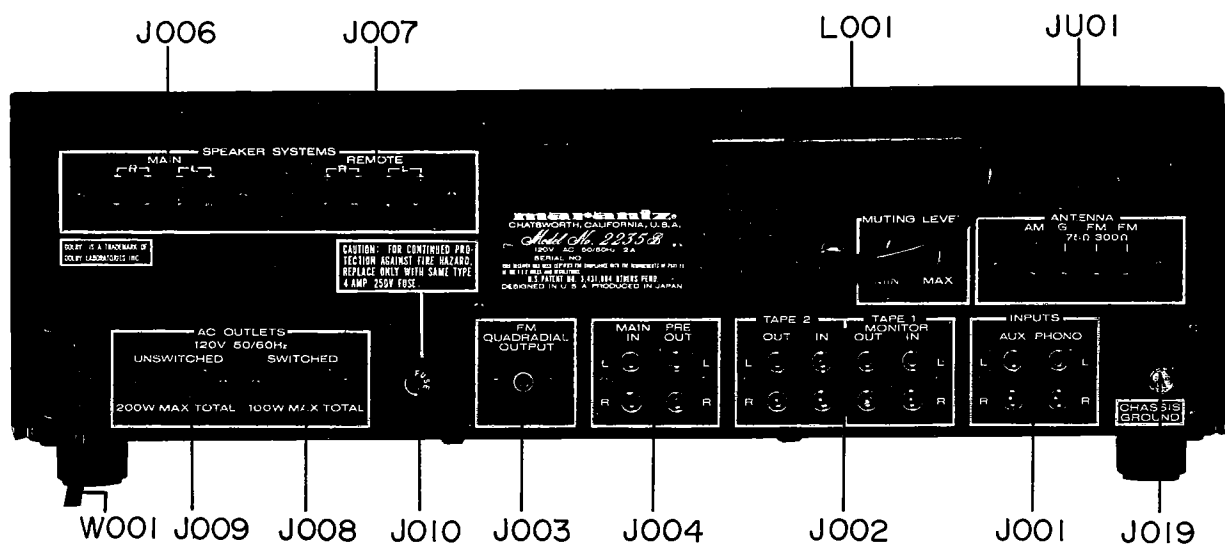


Figure 4. Rear Panel Jacks and Component Locations

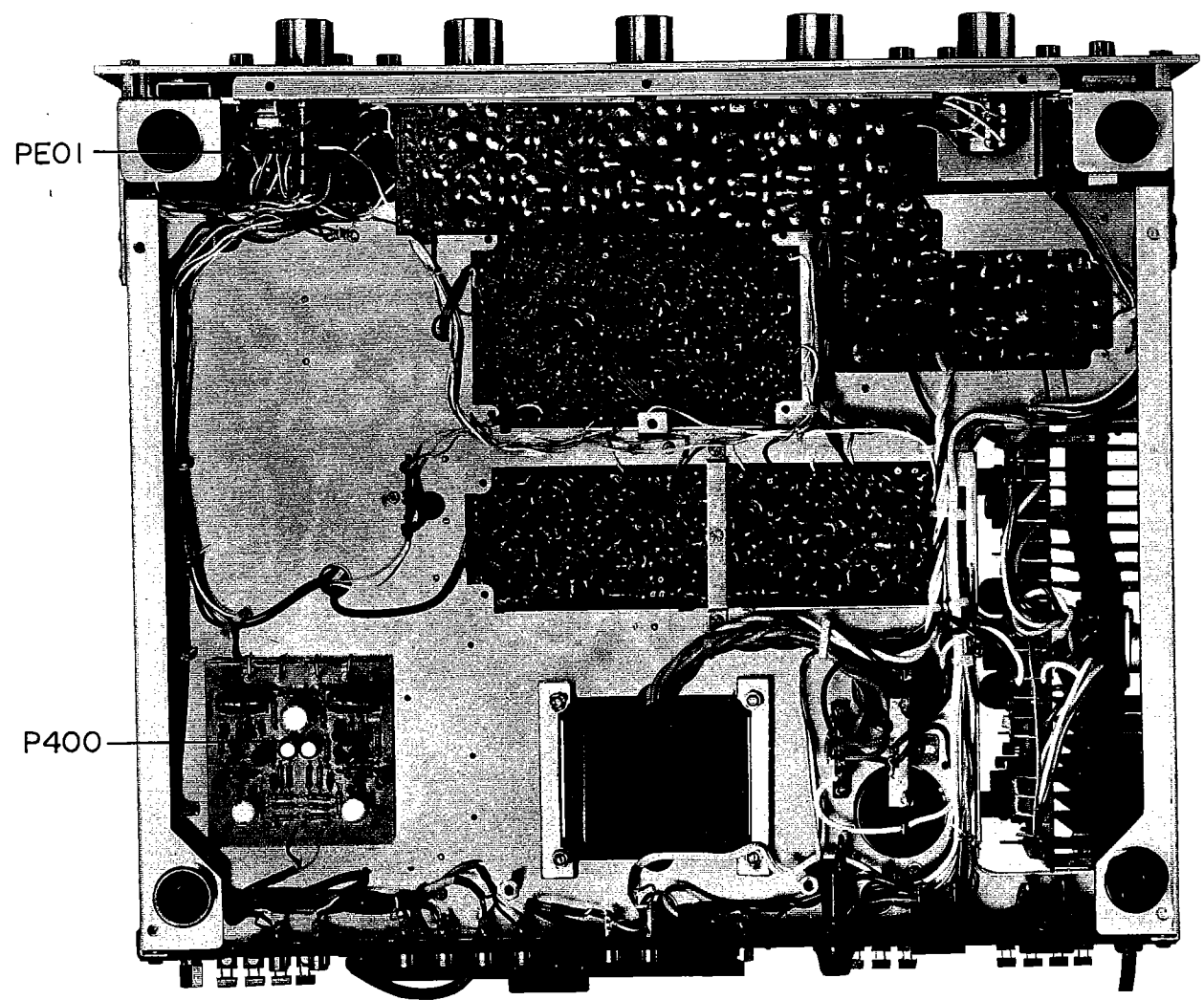


Figure 5. Main Chassis Component Locations (Bottom View)

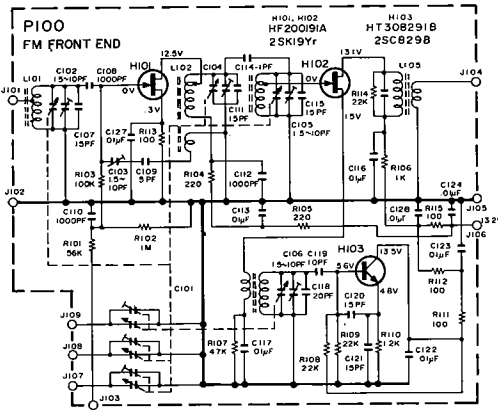


Figure 6. P100 Circuit Diagram

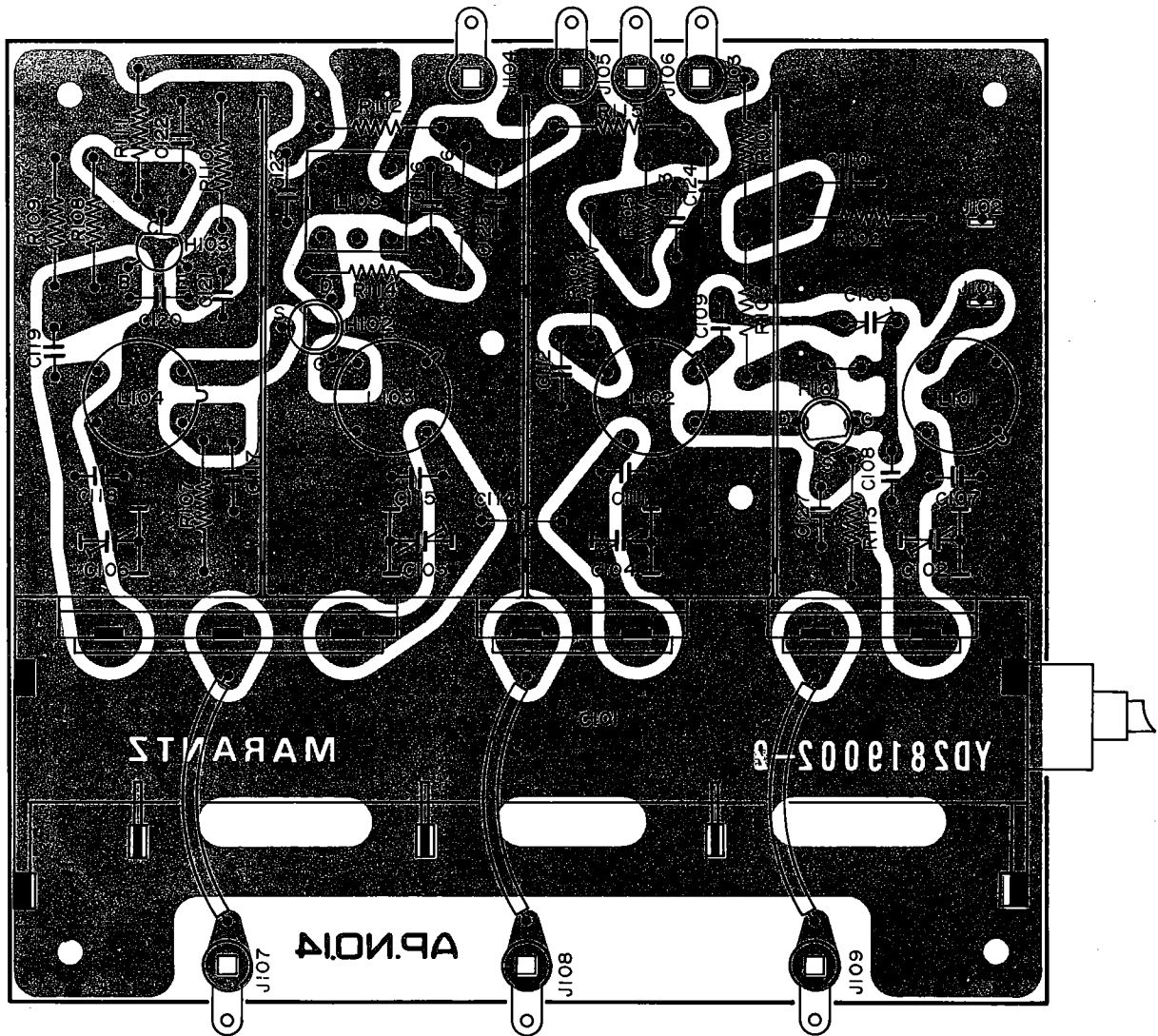


Figure 7. FM Front End Board – P100 Component Assembly Diagram

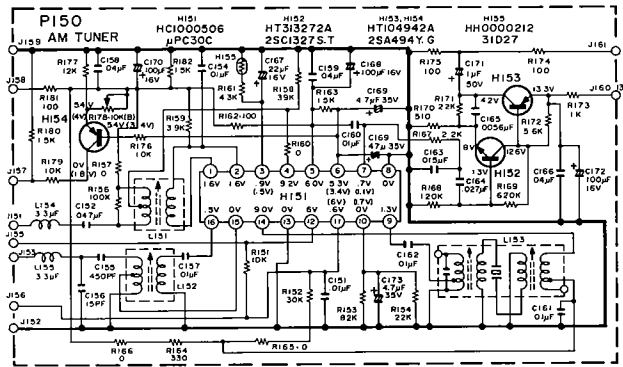


Figure 8. P150 Circuit Diagram

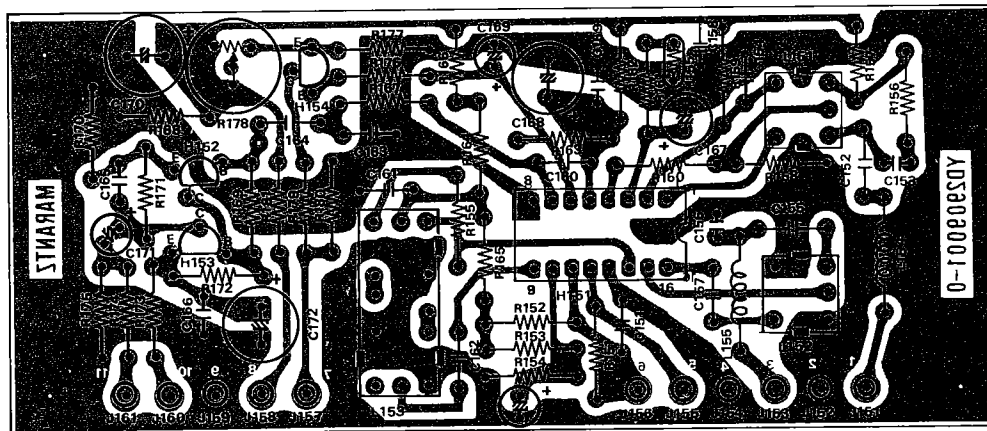


Figure 9. AM Tuner Board – P150 Component Assembly Diagram

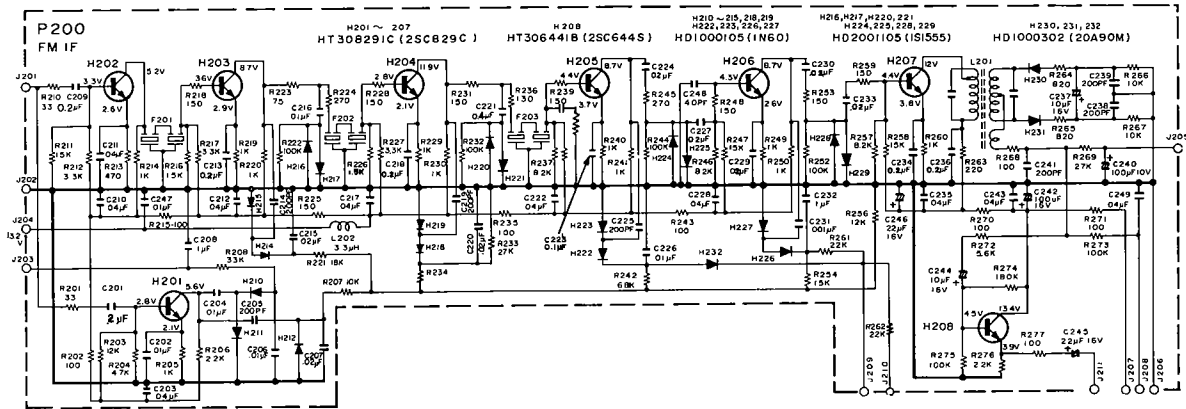


Figure 10. P200 Circuit Diagram

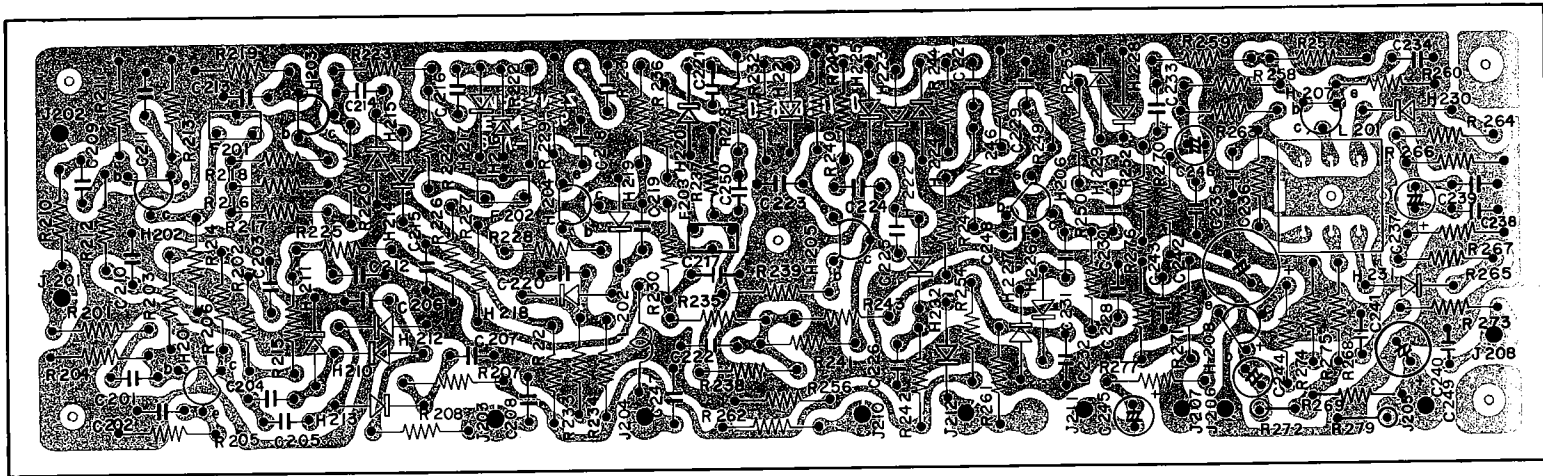


Figure 11. FM IF and Detector Board – P200 Component Assembly Diagram

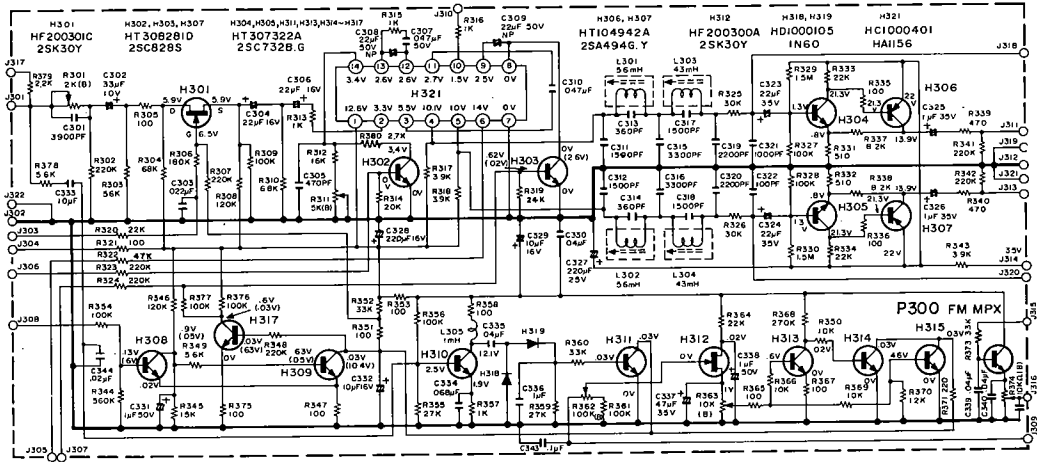


Figure 12. P300 Circuit Diagram

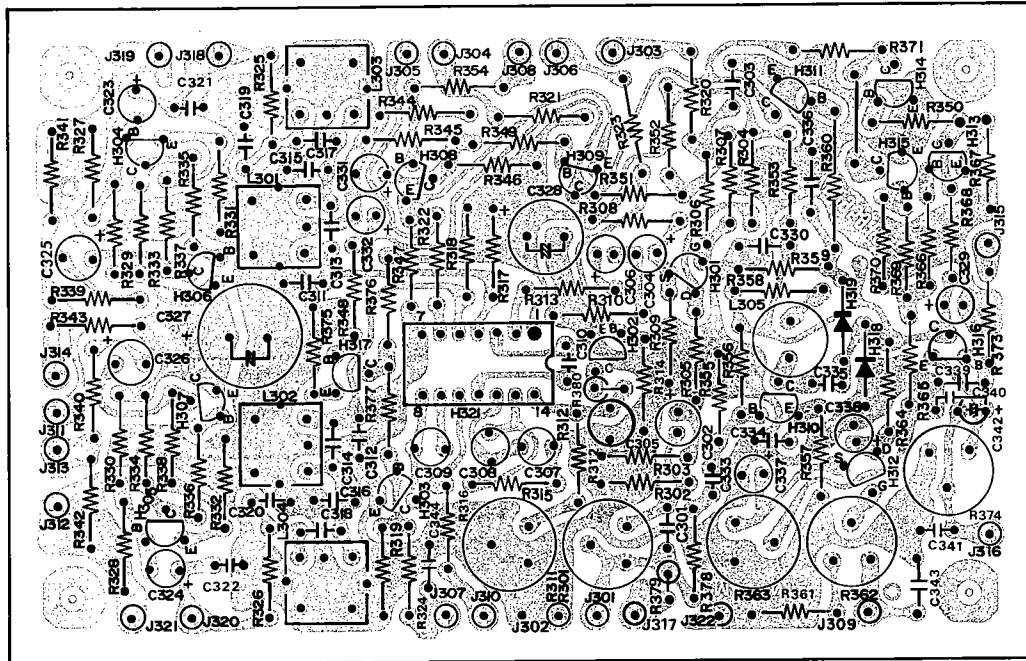


Figure 13. FM Multiplex and Muting Board – P300 Component Assembly Diagram

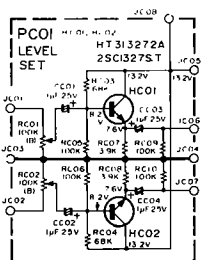


Figure 14. PC01 Circuit Diagram

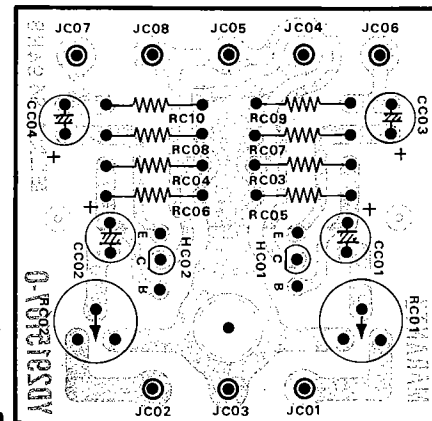


Figure 15. Dolby Level Board – PC01 Component Assembly Diagram

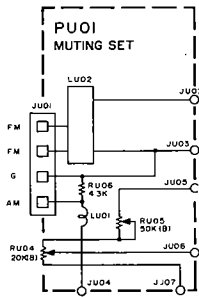


Figure 16. PU01 Circuit Diagram

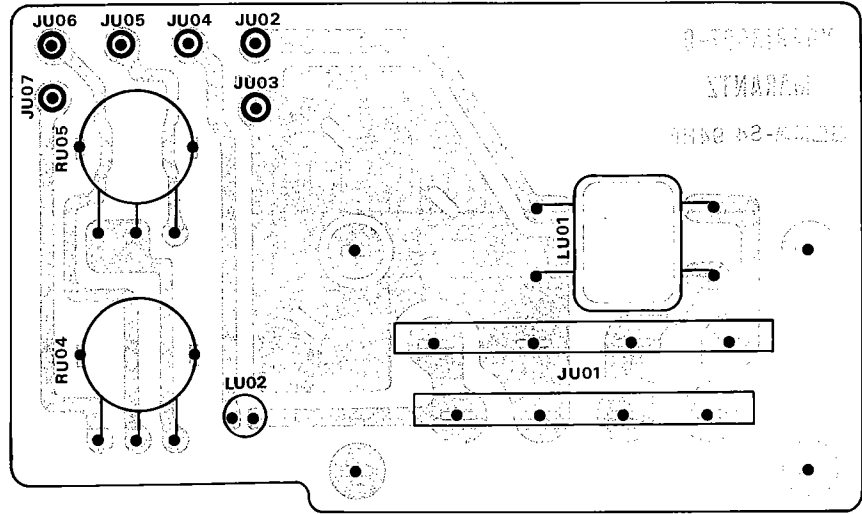


Figure 17. Antenna Muting Board - PU01 Component Assembly Diagram

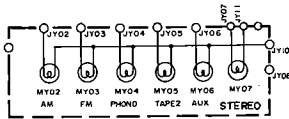


Figure 18. PY01 Circuit Diagram

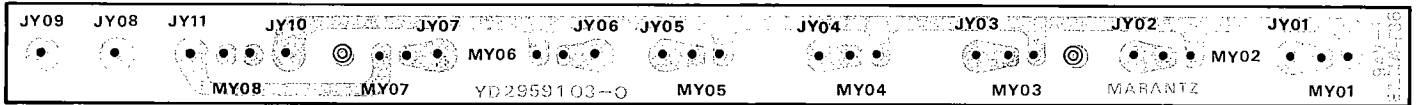


Figure 19. Function Lamp Board - PY01 Component Assembly Diagram

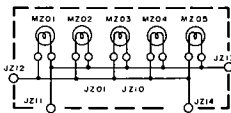


Figure 20. PZ01 Circuit Diagram

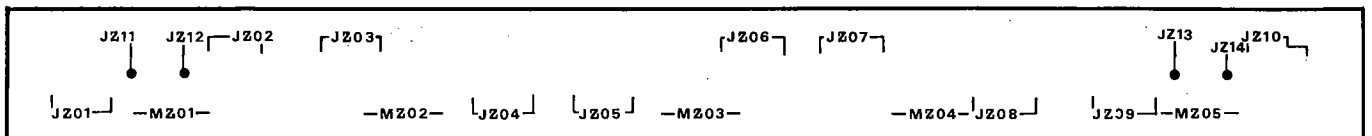


Figure 21. Dial Lamp Board - PZ01 Component Assembly Diagram

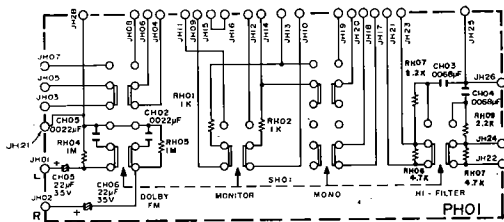


Figure 22. PH01 Circuit Diagram

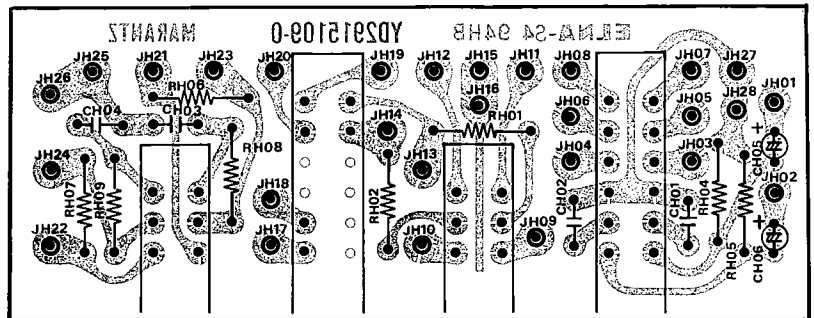


Figure 23. Dolby FM, Monitor, Mono and Hi Filter Switch Board – PH01 Component Assembly Diagram

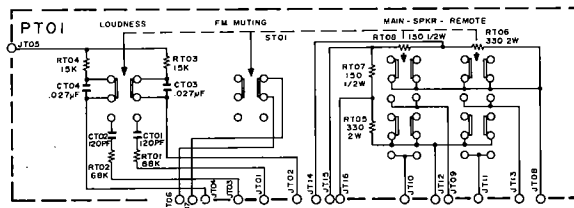


Figure 24. PT01 Circuit Diagram

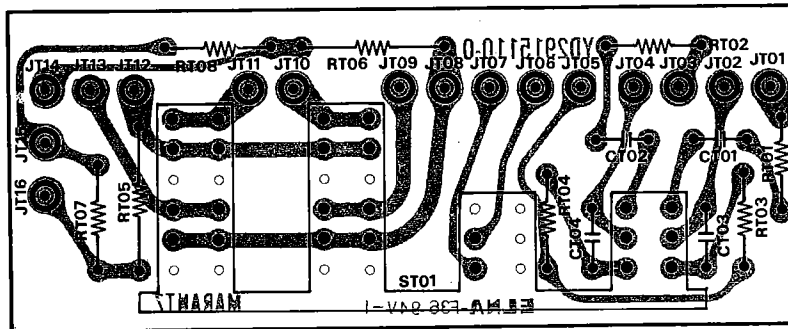


Figure 25. Loudness, FM Muting, Main and Remote Speaker Switch Board – PT01 Component Assembly Diagram

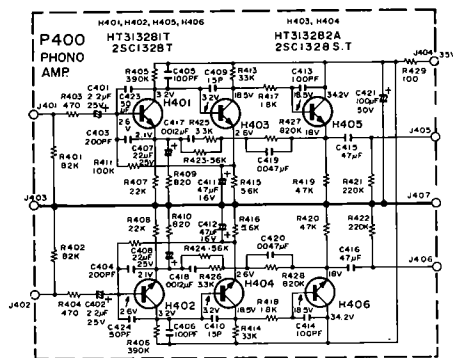


Figure 26. P400 Circuit Diagram

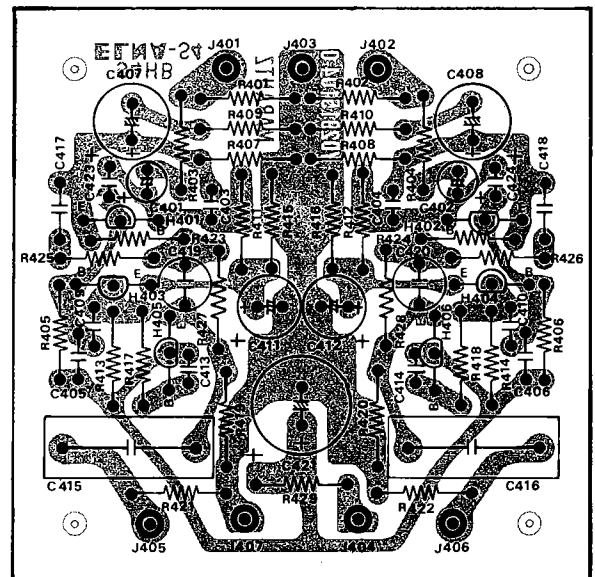


Figure 27. Phono Amplifier Board – P400 Component Assembly Diagram

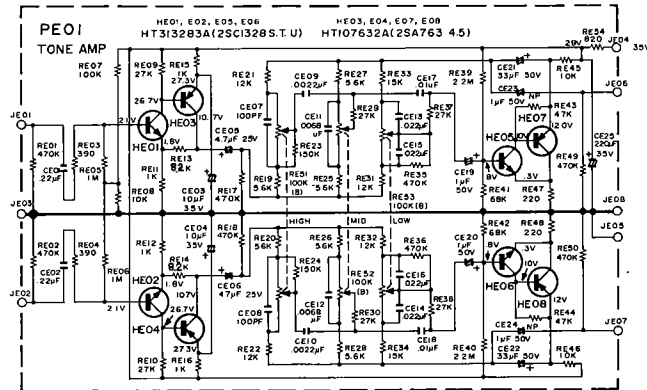


Figure 28. PE01 Circuit Diagram

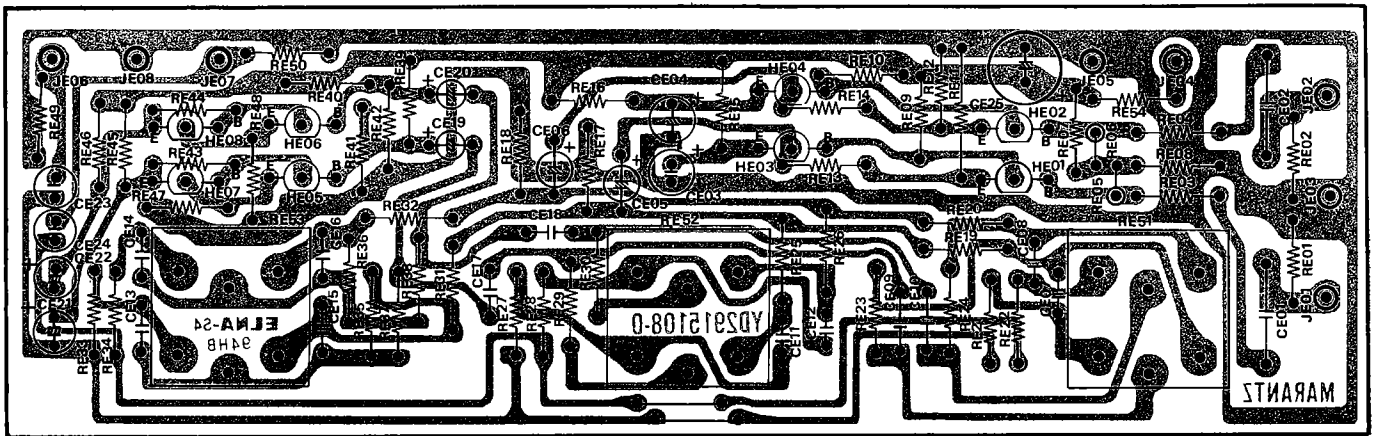


Figure 29. Pre and Tone Amplifier Board – PE01 Component Assembly Diagram

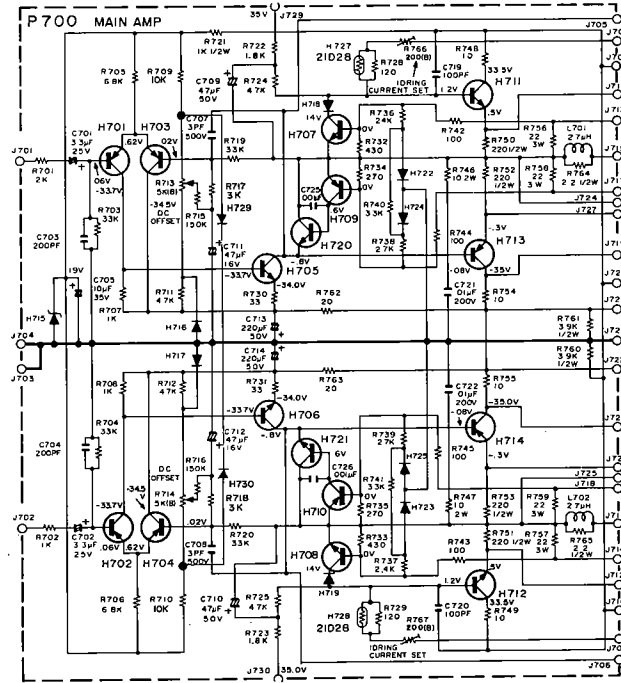


Figure 30. P700 Circuit Diagram

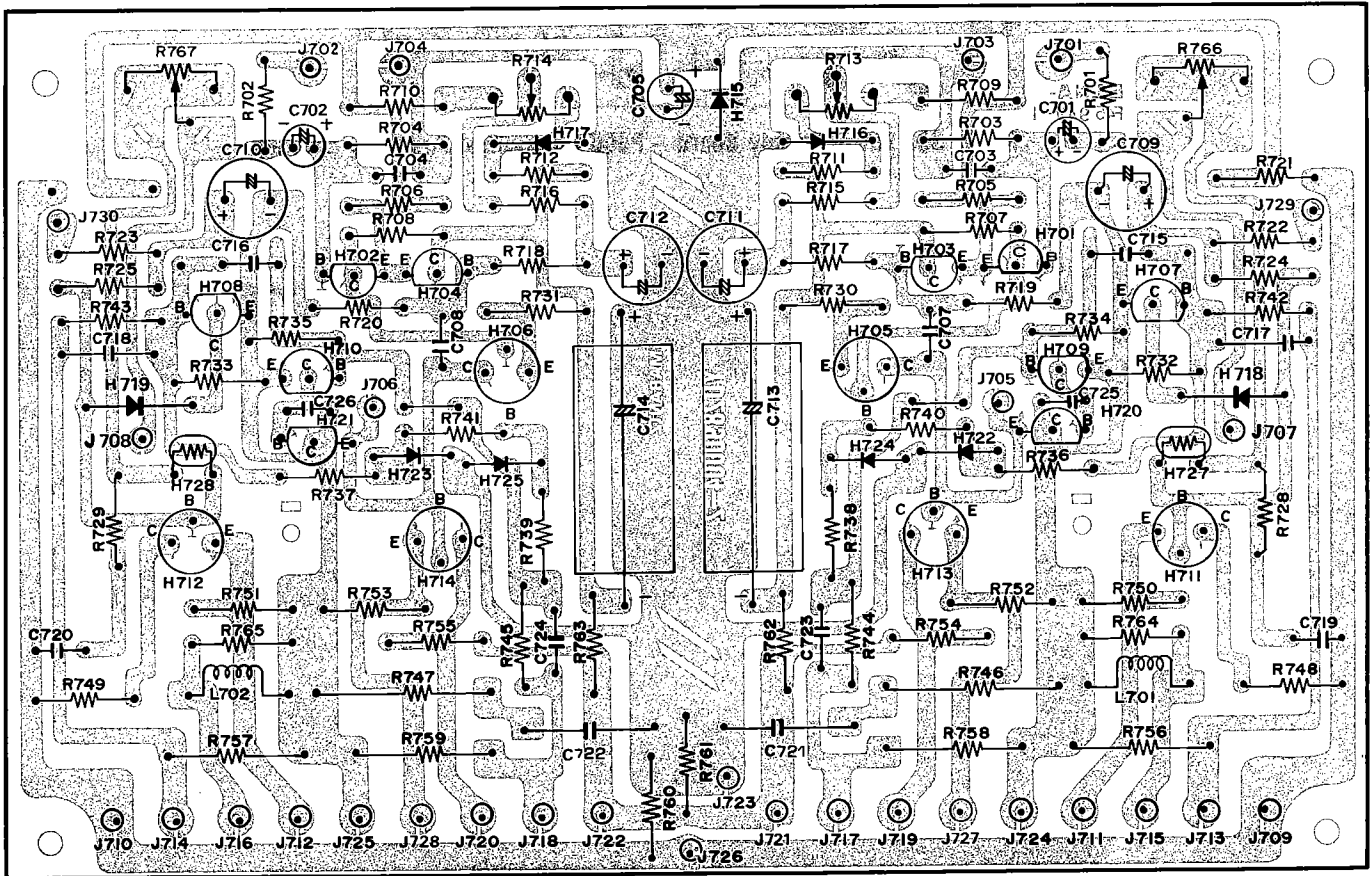


Figure 31. Main Amplifier Board - P700 Component Assembly Diagram

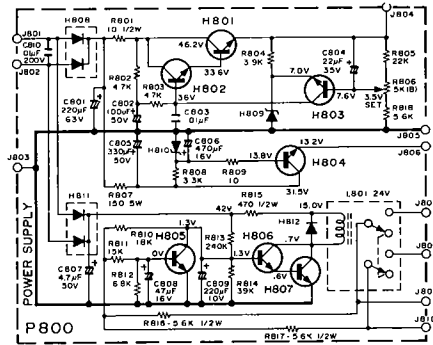


Figure 32. P800 Circuit Diagram

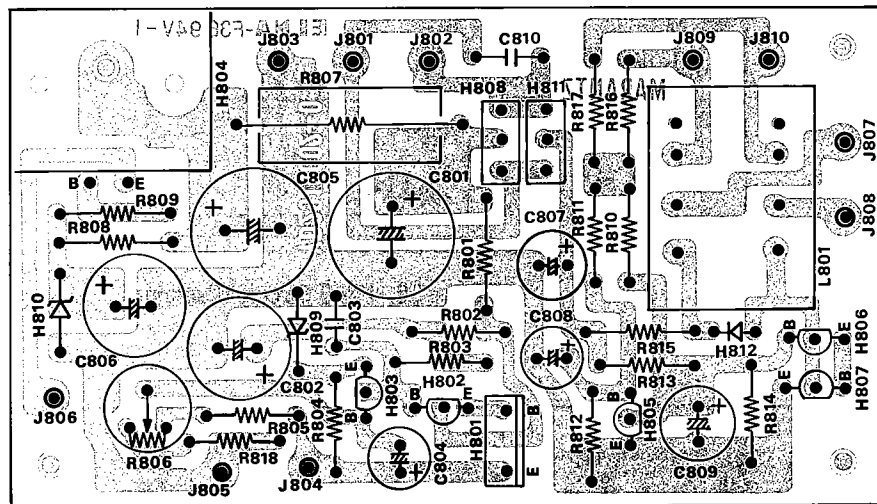


Figure 33. Power Supply Board - P800 Component Assembly Diagram

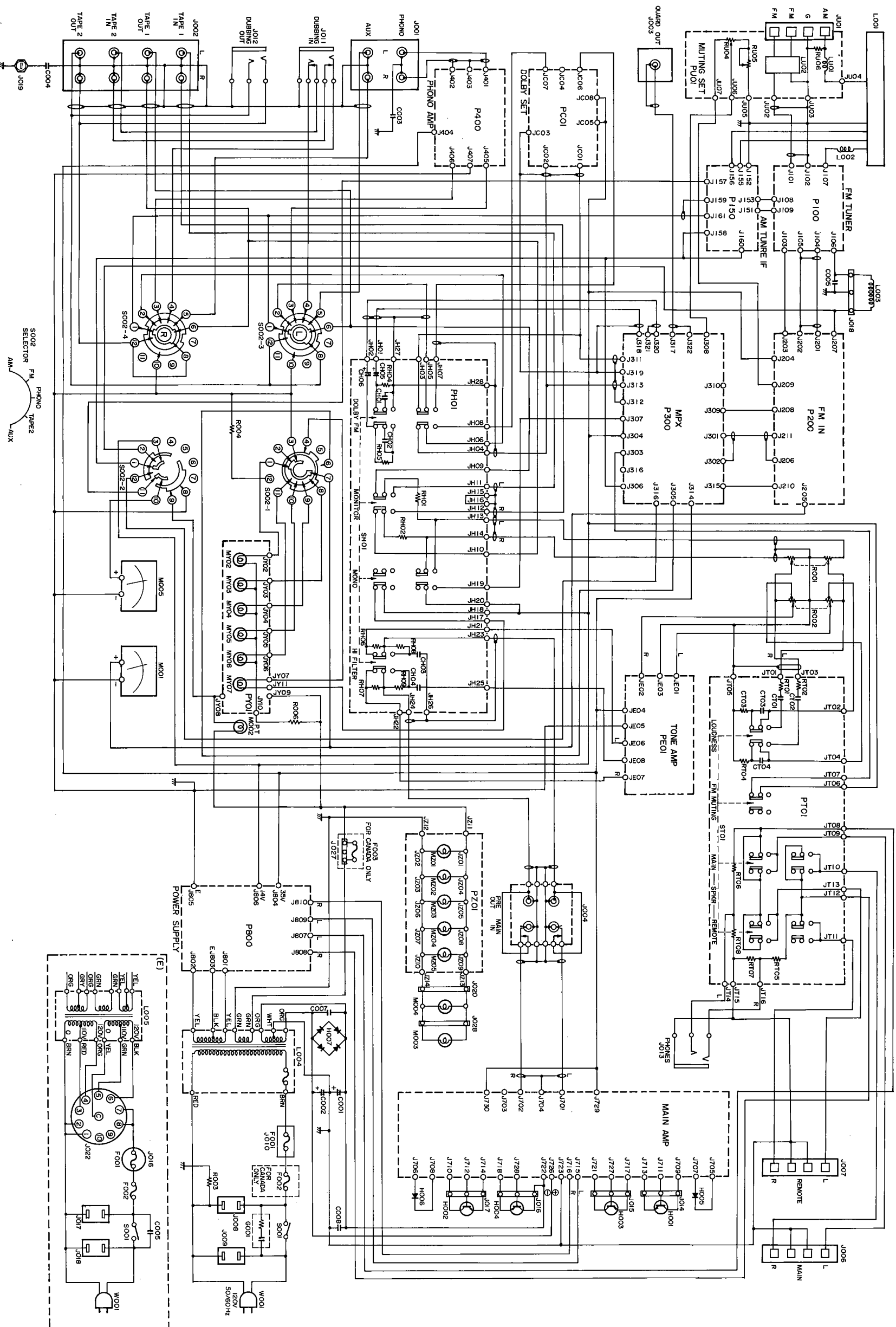
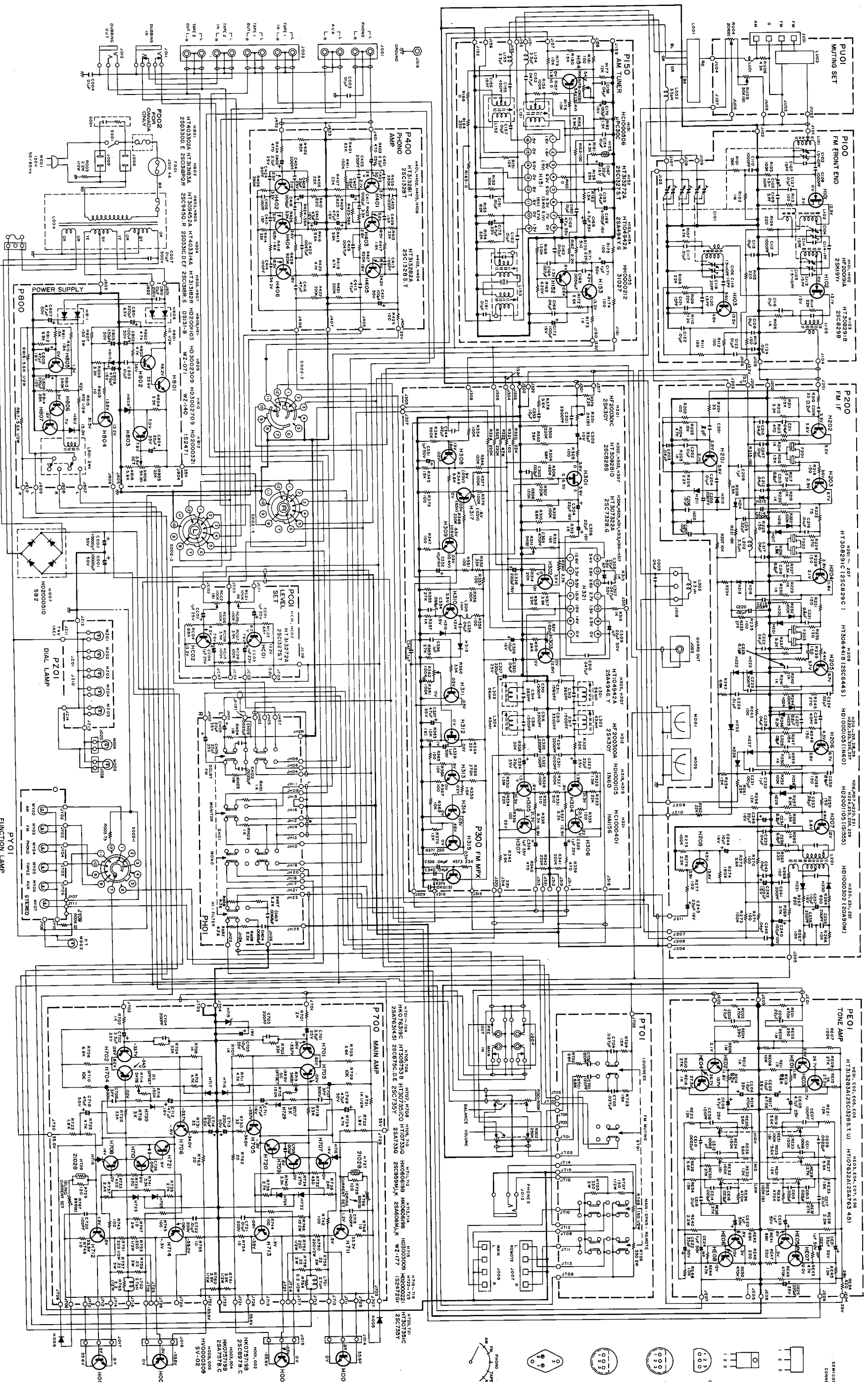


Figure 35. Schematic Diagram



MODEL 2235B

NOTE: This circuit diagram applied to units manufactured for the U.S.A. market.

Figure 36. Circuit Diagram

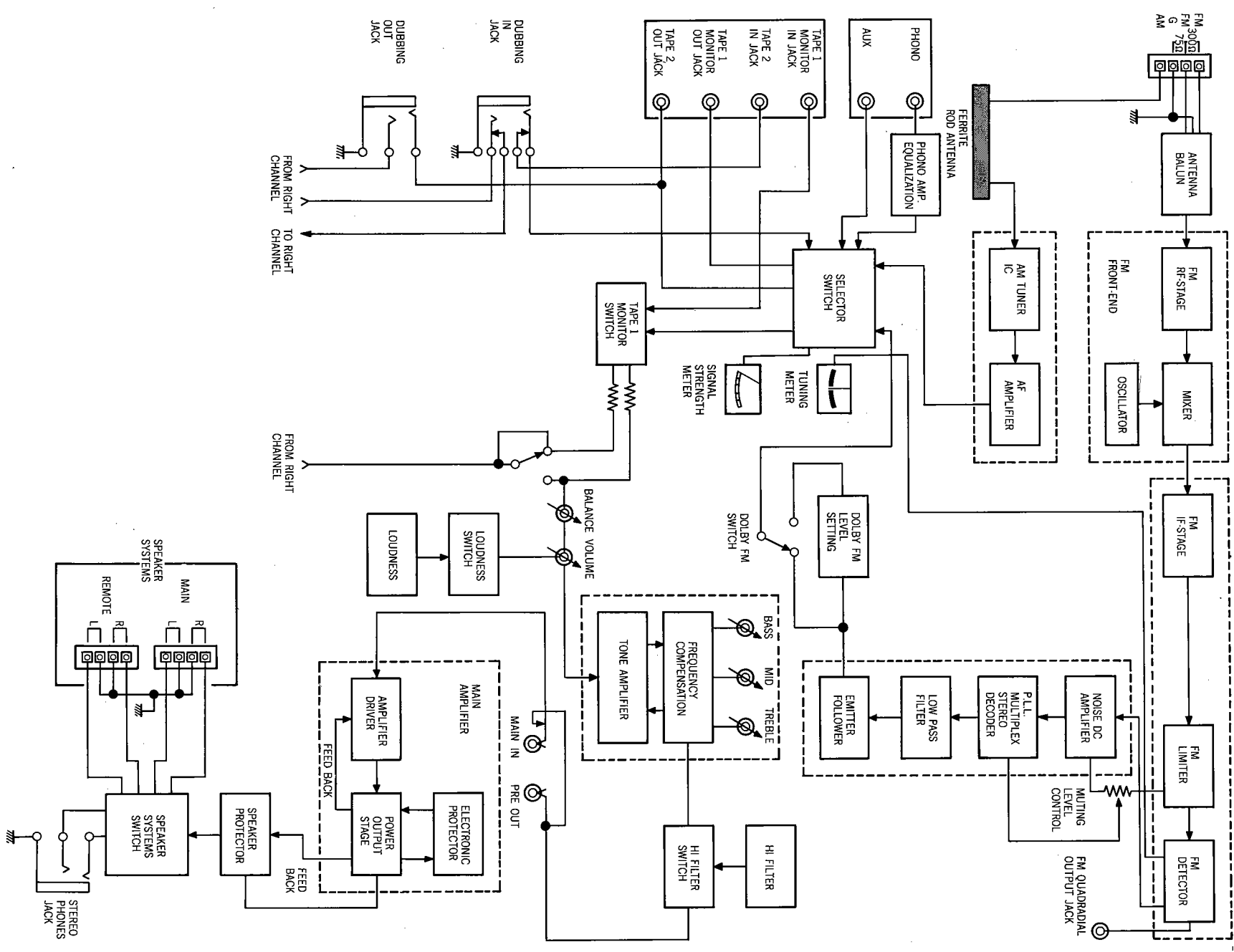


Figure 37. Block Diagram

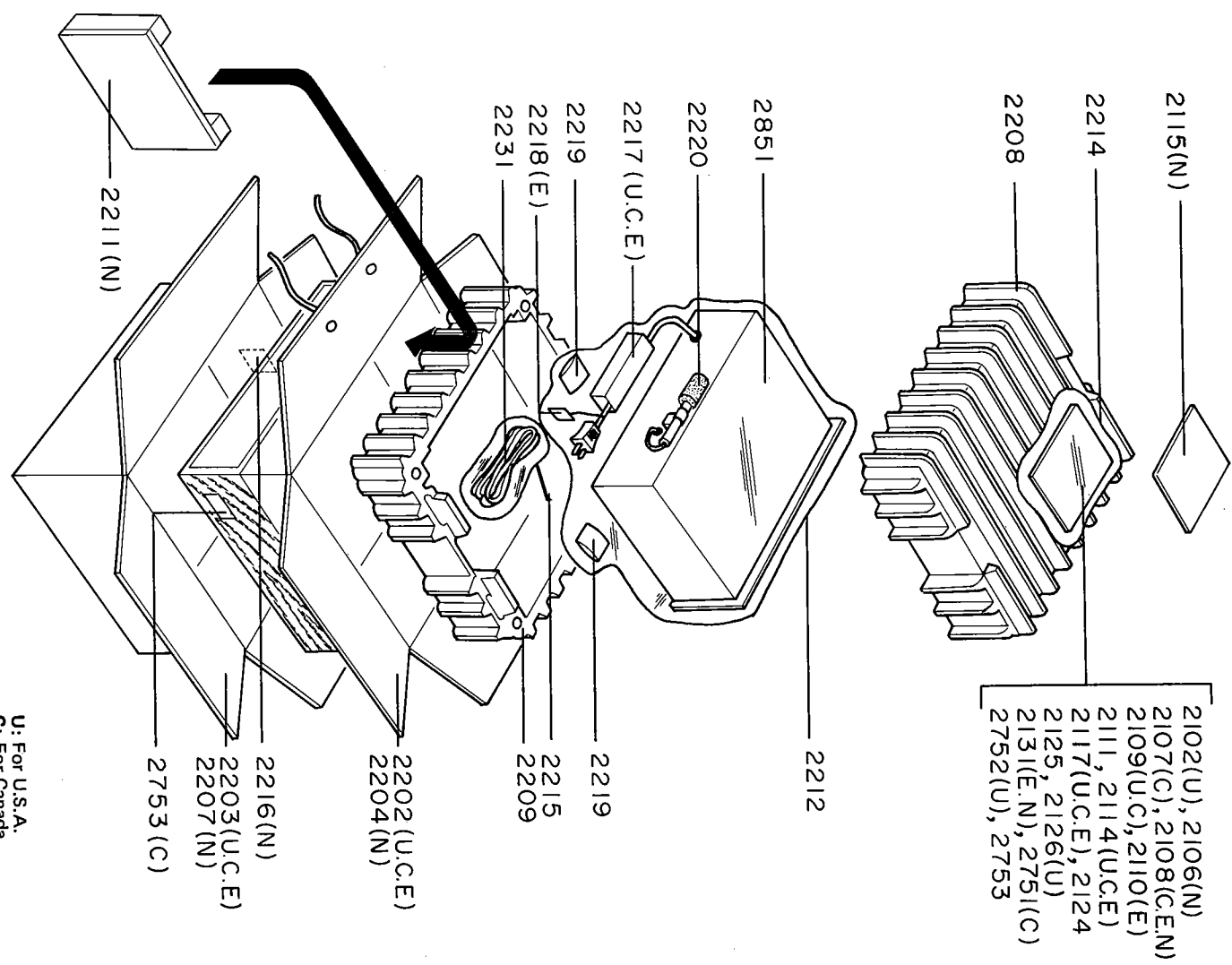


Figure 38. Packing

10. PARTS LIST

U: For U.S.A.
 C: For Canada
 E: For Europe
 N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
A	1	1	1	1	295906340	Front Panel Assembly
0104	1	1	1	1	295906301	Escutcheon
0105	1	1	1	1	285340101	Frame
0106	1	1	1	1	291515801	Window
0107	9	9	9	9	288625901	Bushing
0108	1	1	1	1	285425901	Bushing
0111	1	1	1	1	291510701	Sheet
0115	1	1	1	1	291605301	Cover
B	1	1	1	1	285327340	Flywheel Assembly
1204	2	2	2	2	257706302	Escutcheon
1205	1	1	1	1	257727301	Flywheel
1206	1	1	1	1	285311201	Shaft
1210	1	1	1	1	53110603E	Hexagon Nut
1212	1	1	1	1	54020601E	Flat Washer P
C	1	1	1	1	291510340	Pointer Assembly
1304	1	1	1	1	291510301	Pointer
1305	1	1	1	1	281810302	Pointer
1306	1	1	1	1	291510302	Pointer
0171	1	1	1	1	291526703	Heatsink
M002	1	1	1	1	IN1008030	Lamp
D	1	1	1	1	120200640	Hook Assembly
1404	1	1	1	1	120225801	Hook
1406	1	1	1	1	72080802A	String
E	1	1	1	1	281915943	Drum Assembly
1808	1	1	1	1	281915901	Drum
1810	1	1	1	1	71101689L	Spring
1813	2	2	2	2	51064019A	P.H.M. Screw
F	1	1	1	1	281825740	Lid Assembly, Upper
0219	4	4	4	4	257711807	Spacer
0220	1	1	1	1	281825701	Lid
2351	1	1	1	1	292705601	Buffer
G	1	1	1	1	281825741	Lid Assembly, Lower
0221	1	1	1	1	281825702	Lid
0222	1	1	1	1	291512001	Insulator
H		1			295916040	Rear Panel Assembly
0405		1			295916022	Rear Panel
0416		1			282125901	Bushing
0417		2			55060305S	T.R. Rivet
1725	5	5	5	5	51100306S	B.H.M. Screw, B3 x 6
0136	2	2	2	2	59030810P	Fiber Washer
						FM FRONT END CIRCUIT BOARD-P100
P100	1	1	1	1	YD2819002	P.W. Board, FM Front End(Print only)
	1	1	1	1	ZZ2927102	P.W. Board Assembly
						P100-RESISTORS
R101	1	1	1	1	RT0556314	Fixed, 56KΩ ±5% ¼W
R102	1	1	1	1	RT0510514	Fixed, 1MΩ ±5% ¼W

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
R103	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R104	1	1	1	1	RT0522114	Fixed, 220Ω ±5% ¼W
R105	1	1	1	1	RT0522114	Fixed, 220Ω ±5% ¼W
R106	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R107	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R108	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R109	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R110	1	1	1	1	RT0512214	Fixed, 1.2KΩ ±5% ¼W
R111	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R112	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R113	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R114	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R115	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
						P100-CAPACITORS
C101	1	1	1	1	CA4330001	Variable,
C102	1	1	1	1	CT1100001	Trimming, 1.5 ~ 10PF
C103	1	1	1	1	CT1100002	Trimming, 1.5 ~ 10PF
C104	1	1	1	1	CT1100001	Trimming, 1.5 ~ 10PF
C105	1	1	1	1	CT1100001	Trimming, 1.5 ~ 10PF
C106	1	1	1	1	CT1100001	Trimming, 1.5 ~ 10PF
C107	1	1	1	1	DD1615001	Ceramic, 15PF ±10%
C108	1	1	1	1	DK1710201	Ceramic, 1000PF ±20%
C109	1	1	1	1	DD1105001	Ceramic, 5PF ±0.5PF
C110	1	1	1	1	DK1710201	Ceramic, 1000PF ±20%
C111	1	1	1	1	DD1615001	Ceramic, 15PF ±10%
C112	1	1	1	1	DK1710201	Ceramic, 1000PF ±20%
C113	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C114	1	1	1	1	DD1001001	Ceramic, 1.0PF ±0.25
C115	1	1	1	1	DD1615001	Ceramic, 15PF ±10%
C116	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C117	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C118	1	1	1	1	DD1520002	Ceramic, 20PF ±5%
C119	1	1	1	1	DD1210006	Ceramic, 10PF ±1PF
C120	1	1	1	1	DD1615003	Ceramic, 15PF ±10%
C121	1	1	1	1	DD1615003	Ceramic, 15PF ±10%
C122	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C123	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C124	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C127	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C128	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C107	1	1	1	1	DD1625001	Ceramic, 25PF ±10%
C111	1	1	1	1	DD1625001	Ceramic, 25PF ±10%
C115	1	1	1	1	DD1625001	Ceramic, 25PF ±10%
C118	1	1	1	1	DD1615005	Ceramic, 15PF ±10%
						P100-COILS & TRANSF.
L101	1	1	1	1	LA1202603	Ant. Coil
L102	1	1	1	1	LA1202604	RF Coil
L103	1	1	1	1	LA1202605	RF Coil
L104	1	1	1	1	LO1202608	Osc. Coil
L105	1	1	1	1	LI1001601	IFT
						P100-SEMICONDUCTORS
H101	1	1	1	1	HF200191A	FET, 2SK19 (Y)
H102	1	1	1	1	HF200191A	FET, 2SK19 (Y)
H103	1	1	1	1	HT305351B	Transistor, 2SC535 (B)
						P100-MISCELLANEOUS
J101	1	1	1	1	YP1000094	Plug
J102	1	1	1	1	YP1000094	Plug
J103	?	?	?	?	?	?
J109	7	7	7	7	57271240W	Lug, Eyelet

U: For U.S.A.
 C: For Canada
 E: For Europe
 N: For Scandinavia

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
1720	3	3	3	3	273010903	Shield
0536	1	1	1	1	62031650W	Lug
1703	1	1	1	1	273010950	Shield K
1711	2	2	2	2	292716006	Bracket
1712	4	4	4	4	51100306B	B.H.M. Screw, B3 x 6
1716	1	1	1	1	291612003	Insulator
1722	1	1	1	1	341105605	Buffer
AM TUNER CIRCUIT BOARD-P150						
P150	1	1	1	1	YD2909001	P.W. Board, AM Tuner(Print only)
	1	1	1	1	ZZ2927101	P.W. Board Assembly
P158	2	2	2	2	293311802	Spacer, R181
P150-RESISTORS						
R151	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R152	1	1	1	1	RT0530314	Fixed, 30KΩ ±5% ¼W
R153	1	1	1	1	RT0582314	Fixed, 82KΩ ±5% ¼W
R154	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R156	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R157	1	1	1	1	RC0000012	Fixed, 0Ω, ½W
R158	1	1	1	1	RT0539314	Fixed, 39KΩ ±5% ¼W
R159	1	1	1	1	RT0539214	Fixed, 39KΩ ±5% ¼W
R160	1	1	1	1	RC0000012	Fixed, 0Ω, ¼W
R161	1	1	1	1	RT0543214	Fixed, 4.3KΩ ±5% ¼W
R162	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R163	1	1	1	1	RT0515214	Fixed, 1.5KΩ ±5% ¼W
R164	1	1	1	1	RT0533114	Fixed, 330Ω ±5% ¼W
R165	1	1	1	1	RC0000012	Fixed, 0Ω, ¼W
R166	1	1	1	1	RC0000012	Fixed, 0Ω, ½W
R167	1	1	1	1	RT0522214	Fixed, 2.2KΩ ±5% ¼W
R168	1	1	1	1	RT0582314	Fixed, 82KΩ ±5% ¼W
R169	1	1	1	1	RT0562414	Fixed, 620KΩ ±5% ¼W
R170	1	1	1	1	RT0551114	Fixed, 510Ω ±5% ¼W
R171	1	1	1	1	RT0522214	Fixed, 2.2KΩ ±5% ¼W
R172	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
R173	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R174	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R175	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R176	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R177	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
R178	1	1	1	1	RA0103025	Trimming, 10KΩ (B)
R179	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R180	1	1	1	1	RT0515214	Fixed, 1.5KΩ ±5% ¼W
R181	1	1	1	1	RT0510114	Fixed, 100Ω ±5%, ¼W
R182	1	1	1	1	RT0515214	Fixed, 1.5KΩ ±5%, ¼W
P150-CAPACITORS						
C151	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C152	1	1	1	1	DF1747305	Film, 0.047μF ±20%
C154	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C155	1	1	1	1	DF6545101	Film, 450PF ±5%
C156	1	1	1	1	DD1615001	Ceramic, 15PF ±10%
C157	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C158	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C159	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C160	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C161	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C162	1	1	1	1	DK1710301	Ceramic, 0.01μF ±20%
C163	1	1	1	1	DF1615305	Film, 0.015μF ±10%
C164	1	1	1	1	DF1627305	Film, 0.027μF ±10%
C165	1	1	1	1	DF1756205	Film, 5600PF ±20%

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
C166	1	1	1	1	DK1840302	Film, 0.04μF +80%, -20%
C167	1	1	1	1	EA2260169	Electrolytic, 22μF, 16V
C168	1	1	1	1	EA1070169	Electrolytic, 100μF, 16V
C169	1	1	1	1	EA4750359	Electrolytic, 4.7μF, 35V
C170	1	1	1	1	EA1070169	Electrolytic, 100μF, 16V
C171	1	1	1	1	EE1050505	Electrolytic, 1μF, 50V
C172	1	1	1	1	EA1070169	Electrolytic, 100μF, 16V
C173	1	1	1	1	EA4750359	Electrolytic, 4.7μF, 35V
P150-MISCELLANEOUS						
H151	1	1	1	1	HC1000506	IC, μPC30C
H152	1	1	1	1	HT313272A	Transistor, 2SC1327S, T
H153	1	1	1	1	HT108422A	Transistor, 2SA842 GR, BL
H154	1	1	1	1	HT104951C	Transistor, 2SA495 Y
H155	1	1	1	1	HH0000212	Thermistor, 31D27
L151	1	1	1	1	LA1001019	RF Coil, AM
L152	1	1	1	1	LO1001050	OSC Coil, AM
L153	1	1	1	1	LI1028003	I FT, AM Ceramic Filter
L154	1	1	1	1	LC1332002	Choke Coil, 3.3μH
L155	1	1	1	1	LC1332002	Choke Coil, 3.3μH
J151	?	3	3	3	YP1000113	Plug
J153	?	7	7	7	YP1000113	Plug
J155	?	7	7	7	YP1000113	Plug
J161	?	7	7	7	YP1000113	Plug
FM IF & DETECTOR CIRCUIT BOARD-P200						
P200	1	1	1	1	YD2959101	P.W. Board, FM IF & Detector (Print only)
	1	1	1	1	ZZ2959301	P.W. Board Assembly
P208	4	4	4	4	293311802	Spacer, R271, L201
P200-RESISTORS						
R201	1	1	1	1	RT0533014	Fixed, 33Ω ±5% ¼W
R202	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R203	1	1	1	1	RT0512314	Fixed, 12KΩ ±5% ¼W
R204	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R205	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R206	1	1	1	1	RT0522214	Fixed, 2.2KΩ ±5% ¼W
R207	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R208	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R210	1	1	1	1	RT0533014	Fixed, 33Ω ±5% ¼W
R211	1	1	1	1	RT0515214	Fixed, 1.5KΩ ±5% ¼W
R212	1	1	1	1	RT0533214	Fixed, 3.3KΩ ±5% ¼W
R213	1	1	1	1	RT0547114	Fixed, 470Ω ±5% ¼W
R214	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R215	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R216	1	1	1	1	RT0515214	Fixed, 1.5KΩ ±5% ¼W
R217	1	1	1	1	RT0533214	Fixed, 3.3KΩ ±5% ¼W
R218	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R219	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R220	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R221	1	1	1	1	RT0518314	Fixed, 18KΩ ±5% ¼W
R222	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R223	1	1	1	1	RT0575014	Fixed, 75Ω ±5% ¼W
R224	1	1	1	1	RT0527114	Fixed, 270Ω ±5% ¼W
R225	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R226	1	1	1	1	RT0515214	Fixed, 1.5KΩ ±5% ¼W
R227	1	1	1	1	RT0533214	Fixed, 3.3KΩ ±5% ¼W

U: For U.S.A.
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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
R228	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R229	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R230	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R231	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R232	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R233	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
R234	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R235	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R236	1	1	1	1	RT0530114	Fixed, 300Ω ±5% ¼W
R237	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
R238	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
R239	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R240	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R241	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R242	1	1	1	1	RT0568314	Fixed, 68KΩ ±5% ¼W
R243	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R244	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R245	1	1	1	1	RT0527114	Fixed, 270Ω ±5% ¼W
R246	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
R247	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
R248	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R249	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R250	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R252	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R253	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R254	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
R256	1	1	1	1	RT0512314	Fixed, 12KΩ ±5% ¼W
R257	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
R258	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
R259	1	1	1	1	RT0515114	Fixed, 150Ω ±5% ¼W
R260	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R261	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R262	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R263	1	1	1	1	RT0522114	Fixed, 220Ω ±5% ¼W
R264	1	1	1	1	RT0582114	Fixed, 820Ω ±5% ¼W
R265	1	1	1	1	RT0582114	Fixed, 820Ω ±5% ¼W
R266	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R267	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R268	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R269	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
R270	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R271	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R272	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
R273	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R274	1	1	1	1	RT0518414	Fixed, 180KΩ ±5% ¼W
R275	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R276	1	1	1	1	RT0522214	Fixed, 22KΩ ±5% ¼W
R277	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R278	1	1	1	1	RT0543114	Fixed, 430Ω ±5% ¼W
P200-CAPACITORS						
C201	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C202	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C203	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C204	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C205	1	1	1	1	DD1620101	200PF ±10%
C206	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C207	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C208	1	1	1	1	DK1810402	Ceramic, 0.1μF +80%, -20%
C209	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C210	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C211	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
C212	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C213	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C214	1	1	1	1	DD1620101	Ceramic, 200PF ±10%
C215	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C216	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C217	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C218	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C219	1	1	1	1	DD1620101	Ceramic, 200PF ±10%
C220	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C221	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C222	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C223	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C224	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C225	1	1	1	1	DD1620101	Ceramic, 200PF ±10%
C226	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C227	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C228	1	1	1	1	DK1840301	Ceramic, 0.04μF +80%, -20%
C229	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C230	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C231	1	1	1	1	DK1710201	Ceramic, 0.001μF ±20%
C232	1	1	1	1	DK1810402	Ceramic, 0.1μF +80%, -20%
C233	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C234	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C235	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C236	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C237	1	1	1	1	EA1060169	Electrolytic, 10μF, 16V
C238	1	1	1	1	DD1620101	Ceramic, 200PF ±20%
C239	1	1	1	1	DD1620101	Ceramic, 200PF ±20%
C240	1	1	1	1	EA1070109	Electrolytic, 100μF, 10V
C241	1	1	1	1	DD1620101	Ceramic, 200PF ±20%
C242	1	1	1	1	EA1070169	Electrolytic, 100μF, 16V
C243	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C244	1	1	1	1	EA1060169	Electrolytic, 10μF, 16V
C245	1	1	1	1	EA2260169	Electrolytic, 22μF, 16V
C246	1	1	1	1	EA2260169	Electrolytic, 22μF, 16V
C247	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
C248	1	1	1	1	DD1540001	Ceramic, 40PF ±5%
C249	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C250	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
P200-FILTER & SEMICONDUCTORS						
F201	1	1	1	1	FP1107002	Ceramic Filter, SFE107MD-1
F202	1	1	1	1	FP1107002	Ceramic Filter, SFE107MD-1
F203	1	1	1	1	FP1107002	Ceramic Filter, SFE107MD-1
H201	1	1	1	1	HT308291C	Transistor, 2SC829C
H202	1	1	1	1	HT308291C	Transistor, 2SC829C
H203	1	1	1	1	HT308291C	Transistor, 2SC829C
H204	1	1	1	1	HT308291C	Transistor, 2SC829C
H205	1	1	1	1	HT308291C	Transistor, 2SC829C
H206	1	1	1	1	HT308291C	Transistor, 2SC829C
H207	1	1	1	1	HT308291C	Transistor, 2SC829C
H208	1	1	1	1	HT306441B	Transistor, 2SC644S
H210	1	1	1	1	HD1000105	Diode, 1N60
H211	1	1	1	1	HD1000105	Diode, 1N60
H212	1	1	1	1	HD1000105	Diode, 1N60
H213	1	1	1	1	HD1000105	Diode, 1N60
H214	1	1	1	1	HD1000105	Diode, 1N60
H215	1	1	1	1	HD1000105	Diode, 1N60
H216	1	1	1	1	HD2001105	Diode, 1S1555
H217	1	1	1	1	HD2001105	Diode, 1S1555
H218	1	1	1	1	HD1000105	Diode, 1N60
H219	1	1	1	1	HD1000105	Diode, 1N60

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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
H220	1	1	1	1	HD2001105	Diode, 1S1555
H221	1	1	1	1	HD2001105	Diode, 1S1555
H222	1	1	1	1	HD1000105	Diode, 1N60
H223	1	1	1	1	HD1000105	Diode, 1N60
H224	1	1	1	1	HD2001105	Diode, 1S1555
H225	1	1	1	1	HD2001105	Diode, 1S1555
H226	1	1	1	1	HD1000105	Diode, 1N60
H227	1	1	1	1	HD1000105	Diode, 1N60
H228	1	1	1	1	HD2001105	Diode, 1S1555
H229	1	1	1	1	HD2001105	Diode, 1S1555
H230	1	1	1	1	HD1000302	Diode, 20A90M
H231	1	1	1	1	HD1000302	Diode, 20A90M
H232	1	1	1	1	HD1000302	Diode, 20A90M
P200-MISCELLANEOUS						
L201	1	1	1	1	LI1401623	IFT, FM
L202	1	1	1	1	LC1332002	Choke Coil, 3.3μH
J201	?	8	8	8	YP1000113	Plug
J208						
J210	?	3	3	3	YP1000113	Plug
J212						
FM MPX & MUTING CIRCUIT BOARD-P300						
P300	1	1	1	1	YD2959102	P.W. Board, FM MPX & Muting (Print only)
	1	1	1	1	ZZ2959302	P.W. Board Assembly
P308	4	4	4	4	293311802	Spacer, R321, R343
P300-RESISTORS						
R301	1	1	1	1	RA0202011	Trimming, 2KΩ (B)
R302	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R303	1	1	1	1	RT0556314	Fixed, 56KΩ ±5% ¼W
R304	1	1	1	1	RT0568314	Fixed, 68KΩ ±5% ¼W
R305	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R306	1	1	1	1	RT0518414	Fixed, 180KΩ ±5% ¼W
R307	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R308	1	1	1	1	RT0512414	Fixed, 120KΩ ±5% ¼W
R309	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R310	1	1	1	1	RT0568214	Fixed, 6.8KΩ ±5% ¼W
R311	1	1	1	1	RA0502020	Trimming, 5KΩ (B)
R312	1	1	1	1	RT0516314	Fixed, 16KΩ ±5% ¼W
R313	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R314	1	1	1	1	RT0520314	Fixed, 20KΩ ±5% ¼W
R315	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R316	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R317	1	1	1	1	RT0539214	Fixed, 3.9KΩ ±5% ¼W
R318	1	1	1	1	RT0539214	Fixed, 3.9KΩ ±5% ¼W
R319	1	1	1	1	RT0524314	Fixed, 24KΩ ±5% ¼W
R320	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R321	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R322	1	1	1	1	RT0547014	Fixed, 47Ω ±5% ¼W
R323	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R324	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R325	1	1	1	1	RT0530314	Fixed, 30KΩ ±5% ¼W
R326	1	1	1	1	RT0530314	Fixed, 30KΩ ±5% ¼W
R327	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R328	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R329	1	1	1	1	RT0515514	Fixed, 1.5MΩ ±5% ¼W
R330	1	1	1	1	RT0515514	Fixed, 1.5MΩ ±5% ¼W

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
R331	1	1	1	1	RT0551114	Fixed, 510Ω ±5% ¼W
R332	1	1	1	1	RT0551114	Fixed, 510Ω ±5% ¼W
R333	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R334	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R335	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R336	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R337	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
R338	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
R339	1	1	1	1	RT0547114	Fixed, 470Ω ±5% ¼W
R340	1	1	1	1	RT0547114	Fixed, 470Ω ±5% ¼W
R341	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R342	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R343	1	1	1	1	RT0539214	Fixed, 3.9KΩ ±5% ¼W
R344	1	1	1	1	RT0556414	Fixed, 560KΩ ±5% ¼W
R345	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
R346	1	1	1	1	RT0512414	Fixed, 120KΩ ±5% ¼W
R347	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R348	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R349	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
R350	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R351	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R352	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R353	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R354	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R355	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
R356	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R357	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R358	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R359	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
R360	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R361	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R362	1	1	1	1	RA0104018	Trimming, 100KΩ (B)
R363	1	1	1	1	RA0103025	Trimming, 10KΩ (B)
R364	1	1	1	1	RT0522214	Fixed, 2.2KΩ ±5% ¼W
R365	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R366	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R367	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R368	1	1	1	1	RT0527414	Fixed, 270KΩ ±5% ¼W
R369	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
R370	1	1	1	1	RT0512314	Fixed, 12KΩ ±5% ¼W
R371	1	1	1	1	RT0522114	Fixed, 220Ω ±5% ¼W
R373	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R374	1	1	1	1	RA0103025	Trimming, 10KΩ (B)
R375	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
R376	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R377	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
R378	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
R379	1	1	1	1	RT0522214	Fixed, 2.2KΩ ±5% ¼W
R380	1	1	1	1	RT0527214	Fixed, 2.7KΩ ±5% ¼W
R381	1	1	1	1	RC0000012	Fixed, 0Ω ¼W
P300-CAPACITORS						
C301	1	1	1	1	DF1639205	Film, 3900PF ±10%
C302	1	1	1	1	EA3360109	Electrolytic, 33μF, 10V
C303	1	1	1	1	DF1722305	Film, 0.022μF, ±20%
C304	1	1	1	1	EA2260169	Electrolytic, 22μF, 16V
C305	1	1	1	1	DF5547101	Film, 470PF ±5%
C306	1	1	1	1	EA2260169	Electrolytic, 22μF, 16V
C307	1	1	1	1	EQ4740501	Electrolytic, 0.47μF ±20%, 50V
C308	1	1	1	1	EQ2240501	Electrolytic, 0.22μF ±20%, 50V
C309	1	1	1	1	EQ2240501	Electrolytic, 0.22μF ±20%, 50V
C310	1	1	1	1	DF1747301	Film, 0.047μF ±20%, 50V
C311	1	1	1	1	DF1515205	Film, 1500PF ±5%

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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
C312	1	1	1	1	DF1515205	Film, 1500PF ±5%
C313	1	1	1	1	DD1536101	Ceramic, 360PF ±5%
C314	1	1	1	1	DD1536101	Ceramic, 360PF ±5%
C315	1	1	1	1	DF1533205	Film, 3300PF ±5%
C316	1	1	1	1	DF1533205	Film, 3300PF ±5%
C317	1	1	1	1	DF1515205	Film, 1500PF ±5%
C318	1	1	1	1	DF1515205	Film, 1500PF ±5%
C319	1	1	1	1	DF1522205	Film, 2200PF ±5%
C320	1	1	1	1	DF1522205	Film, 2200PF ±5%
C321	1	1	1	1	DF1510205	Film, 1000PF ±5%
C322	1	1	1	1	DF1510205	Film, 1000PF ±5%
C323	1	1	1	1	EV2240351	Electrolytic, 0.22μF ±20%, 35V
C324	1	1	1	1	EV2240351	Electrolytic, 0.22μF ±20%, 35V
C325	1	1	1	1	EV1050352	Electrolytic, 1μF ±20%, 35V
C326	1	1	1	1	EV1050352	Electrolytic, 1μF ±20%, 35V
C327	1	1	1	1	EA2270259	Electrolytic, 220μF, 25V
C328	1	1	1	1	EA2270169	Electrolytic, 220μF, 16V
C329	1	1	1	1	EA1060169	Electrolytic, 10μF, 16V
C330	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C331	1	1	1	1	EA1050509	Electrolytic, 1μF, 50V
C332	1	1	1	1	EA1060169	Electrolytic, 10μF, 16V
C333	1	1	1	1	DD1210001	Ceramic, 10PF ±10%
C334	1	1	1	1	DF1668301	Film, 0.068μF ±10%
C335	1	1	1	1	DF1740301	Film, 0.04μF ±20%
C336	1	1	1	1	DK1810402	Ceramic, 0.1μF +80%, -20%
C337	1	1	1	1	EA4750359	Electrolytic, 4.7μF, 35V
C338	1	1	1	1	EA1050509	Electrolytic, 1μF, 50V
C339	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C340	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C341	1	1	1	1	DK1840302	Ceramic, 0.04μF +80%, -20%
C343	1	1	1	1	DF1710402	Film, 0.1μF ±20%
C344	1	1	1	1	DK1820302	Ceramic, 0.02μF +80%, -20%
P300-SEMICONDUCTORS						
H301	1	1	1	1	HF200301C	FET, 2SK30 (Y)
H302	1	1	1	1	HT308281D	Transistor, 2SC828S
H303	1	1	1	1	HT308281D	Transistor, 2SC828S
H304	1	1	1	1	HT307322A	Transistor, 2SC732 B or G
H305	1	1	1	1	HT307322A	Transistor, 2SC732 B or G
H306	1	1	1	1	HT108422A	Transistor, 2SA842 GR or BL
H307	1	1	1	1	HT108422A	Transistor, 2SA842 GR or BL
H308	1	1	1	1	HT308281D	Transistor, 2SC828S
H309	1	1	1	1	HT308281D	Transistor, 2SC828S
H310	1	1	1	1	HT308281D	Transistor, 2SC828S
H311	1	1	1	1	HT308281D	Transistor, 2SC828S
H312	1	1	1	1	HF200300A	FET, 2SK30
H313	1	1	1	1	HT308281D	Transistor, 2SC828S
H314	1	1	1	1	HT308281D	Transistor, 2SC828S
H315	1	1	1	1	HT308281D	Transistor, 2SC828S
H316	1	1	1	1	HT308281D	Transistor, 2SC828S
H317	1	1	1	1	HT308281D	Transistor, 2SC828S
H318	1	1	1	1	HD1000105	Diode, 1N60
H319	1	1	1	1	HD1000105	Diode, 1N60
H321	1	1	1	1	HC1000401	IC, HA1156
P300-MISCELLANEOUS						
L301	1	1	1	1	LS1029004	MPX Coil, 56mH
L302	1	1	1	1	LS1029004	MPX Coil, 56mH
L303	1	1	1	1	LS1029005	MPX Coil, 43mH
L304	1	1	1	1	LS1029005	MPX Coil, 43mH
L305	1	1	1	1	LS2105001	Choke Coil, 1mH

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
J301						
J322	22	22	22	22	YP1000113	Plug
EQUALIZER AMP. CIRCUIT BOARD-P400						
P400	1	1	1	1	YD2915104	P.W. Board, Equalizer Amp. (Print only)
	1	1	1	1	ZZ2915304	P.W. Board Assembly
P408	2	2	2	2	293351802	Spacer R429
P400-RESISTORS						
R401	1	1	1	1	RT0582314	Fixed, 82KΩ ±5% ¼W
R402	1	1	1	1	RT0582314	Fixed, 82KΩ ±5% ¼W
R403	1	1	1	1	RT0547114	Fixed, 470Ω ±5% ¼W
R404	1	1	1	1	RT0547114	Fixed, 470Ω ±5% ¼W
R405	1	1	1	1	RN0539414	Fixed, 390KΩ ±5% ¼W
R406	1	1	1	1	RN0539414	Fixed, 390KΩ ±5% ¼W
R407	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R408	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R409	1	1	1	1	RT0582114	Fixed, 820Ω ±5% ¼W
R410	1	1	1	1	RT0582114	Fixed, 820Ω ±5% ¼W
R411	1	1	1	1	RN0510414	Fixed, 100KΩ ±5% ¼W
R412	1	1	1	1	RN0510414	Fixed, 100KΩ ±5% ¼W
R413	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R414	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R415	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
R416	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
R417	1	1	1	1	RT0518214	Fixed, 1.8KΩ ±5% ¼W
R418	1	1	1	1	RT0518214	Fixed, 1.8KΩ ±5% ¼W
R419	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R420	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R421	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R422	1	1	1	1	RT0522414	Fixed, 220KΩ ±5% ¼W
R423	1	1	1	1	RT0556314	Fixed, 56KΩ ±5% ¼W
R424	1	1	1	1	RT0556314	Fixed, 56KΩ ±5% ¼W
R425	1	1	1	1	RT0533214	Fixed, 3.3KΩ ±5% ¼W
R426	1	1	1	1	RT0533214	Fixed, 3.3KΩ ±5% ¼W
R427	1	1	1	1	RN0582414	Fixed, 820KΩ ±5% ¼W
R428	1	1	1	1	RN0582414	Fixed, 820KΩ ±5% ¼W
R429	1	1	1	1	RT0510114	Fixed, 100Ω ±5% ¼W
P400-CAPACITORS						
C401	1	1	1	1	EV2250256	Electrolytic, 2.2μF ±20%, 25V
C402	1	1	1	1	EV2250256	Electrolytic, 2.2μF ±20%, 25V
C403	1	1	1	1	DD1520101	Ceramic, 200PF ±10%, 50V
C404	1	1	1	1	DD1520101	Ceramic, 200PF ±10%, 50V
C405	1	1	1	1	DD1610101	Ceramic, 100PF ±10%, 50V
C406	1	1	1	1	DD1610101	Ceramic, 100PF ±10%, 50V
C407	1	1	1	1	EE2260251	Electrolytic, 22μF ±20%, 25V
C408	1	1	1	1	EE2260251	Electrolytic, 22μF ±20%, 25V
C409	1	1	1	1	DD1630001	Ceramic, 30PF ±10%, 50V
C410	1	1	1	1	DD1630001	Ceramic, 30PF ±10%, 50V
C411	1	1	1	1	EA4760169	Electrolytic, 47μF, +100%, -10%, 16V
C412	1	1	1	1	EA4760169	Electrolytic, 47μF, +100%, -10%, 16V
C413	1	1	1	1	DD1610101	Ceramic, 100PF ±10%, 50V
C414	1	1	1	1	DD1610101	Ceramic, 100PF ±10%, 50V
C415	1	1	1	1	DF1747401	Film, 0.47μF ±20%, 50V
C416	1	1	1	1	DF1747401	Film, 0.47μF ±20%, 50V
C417	1	1	1	1	DF5412201	Film, 1200PF ±20%, 50V
C418	1	1	1	1	DF5412201	Film, 1200PF ±20%, 50V

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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
C419	1	1	1	1	DF5547201	Film, 4700PF ±20%, 50V
C420	1	1	1	1	DF5547201	Film, 4700PF ±5%, 50V
C421	1	1	1	1	EA1070509	Electrolytic, 100µF +100%,-10%, 50V
C423	1	1	1	1	DD1650001	Ceramic, 50PF ±10%, 50V
C424	1	1	1	1	DD1650001	Ceramic, 50PF ±10%, 50V
P400-TRANSISTORS						
H401	1	1	1	1	HT313281T	Transistor, 2SC1328T
H402	1	1	1	1	HT313281T	Transistor, 2SC1328T
H403	1	1	1	1	HT313282A	Transistor, 2SC1328S, T
H404	1	1	1	1	HT313282A	Transistor, 2SC1328S, T
H405	1	1	1	1	HT313281T	Transistor, 2SC1328T
H406	1	1	1	1	HT313281T	Transistor, 2SC1328T
P400-MISCELLANEOUS						
J401	7	7	7	7	YP1000113	Plug
J407						
1730	1	1	1	1	138200503	Clamper
2013	1	1	1	1	51100306S	B.H.M. Screw, B3 x 6
2014	1	1	1	1	51100204A	B.H.M. Screw, B2 x 4
MAIN AMP. CIRCUIT BOARD-P700						
P700	1	1	1	1	YD2890004	P.W. Board, Main Amp.(Print only)
	1	1	1	1	ZZ2927204	P.W. Board Assembly
P708	14	14	14	14	293311802	Spacer, R746,R747,R756,R757, R758,R759,R721
P700-RESISTORS						
R701	1	1	1	1	RT0520214	Fixed, 2KΩ ±5% ¼W
R702	1	1	1	1	RT0520214	Fixed, 2KΩ ±5% ¼W
R703	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R704	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R705	1	1	1	1	RT0568214	Fixed, 6.8KΩ ±5% ¼W
R706	1	1	1	1	RT0568214	Fixed, 6.8KΩ ±5% ¼W
R707	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R708	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
R709	1	1	1	1	RT05103140	Fixed, 10KΩ ±5% ¼W
R710	1	1	1	1	RT05103140	Fixed, 10KΩ ±5% ¼W
R711	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R712	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R713	1	1	1	1	RA0502017	Trimming, 5KΩ (B)
R714	1	1	1	1	RA0502017	Trimming, 5KΩ (B)
R715	1	1	1	1	RT0515414	Fixed, 150KΩ ±5% ¼W
R716	1	1	1	1	RT0515414	Fixed, 150KΩ ±5% ¼W
R717	1	1	1	1	RT0530214	Fixed, 3KΩ ±5% ¼W
R718	1	1	1	1	RT0530214	Fixed, 3KΩ ±5% ¼W
R719	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R720	1	1	1	1	RT0533314	Fixed, 33KΩ ±5% ¼W
R721	1	1	1	1	GF0510212	Fixed, 1KΩ ±5% ¼W
R722	1	1	1	1	RT0524214	Fixed, 2.4KΩ ±5% ¼W
R723	1	1	1	1	RT0524214	Fixed, 2.4KΩ ±5% ¼W
R724	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R725	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R728	1	1	1	1	RT0522114	Fixed, 220Ω ±5% ¼W
R729	1	1	1	1	RT0522114	Fixed, 220Ω ±5% ¼W
R730	1	1	1	1	GF0533014	Fixed, 33Ω ±5% ¼W
R731	1	1	1	1	GF0533014	Fixed, 33Ω ±5% ¼W
R732	1	1	1	1	GF0543114	Fixed, 430Ω ±5% ¼W
R733	1	1	1	1	GF0543114	Fixed, 430Ω ±5% ¼W

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
R734	1	1	1	1	GF0527114	Fixed, 270Ω ±5% ¼W
R735	1	1	1	1	GF0527114	Fixed, 270Ω ±5% ¼W
R736	1	1	1	1	GF0524214	Fixed, 2.4KΩ ±5% ¼W
R737	1	1	1	1	GF0524214	Fixed, 2.4KΩ ±5% ¼W
R738	1	1	1	1	GF0527214	Fixed, 2.7KΩ ±5% ¼W
R739	1	1	1	1	GF0527214	Fixed, 2.7KΩ ±5% ¼W
R740	1	1	1	1	GF0533214	Fixed, 3.3KΩ ±5% ¼W
R741	1	1	1	1	GF0533214	Fixed, 3.3KΩ ±5% ¼W
R742	1	1	1	1	GF0510114	Fixed, 100Ω ±5% ¼W
R743	1	1	1	1	GF0510114	Fixed, 100Ω ±5% ¼W
R744	1	1	1	1	GF0510114	Fixed, 100Ω ±5% ¼W
R745	1	1	1	1	GF0510114	Fixed, 100Ω ±5% ¼W
R746	1	1	1	1	GJ0510002	Fixed, 10Ω ±5% 2W
R747	1	1	1	1	GJ0510002	Fixed, 10Ω ±5% 2W
R748	1	1	1	1	GF0510014	Fixed, 10Ω ±5% ¼W
R749	1	1	1	1	GF0510014	Fixed, 10Ω ±5% ¼W
R750	1	1	1	1	GF0522112	Fixed, 220Ω ±5% ½W
R751	1	1	1	1	GF0522112	Fixed, 220Ω ±5% ½W
R752	1	1	1	1	GF0522112	Fixed, 220Ω ±5% ½W
R753	1	1	1	1	GF0522112	Fixed, 220Ω ±5% ½W
R754	1	1	1	1	GF0510014	Fixed, 10Ω ±5% ¼W
R755	1	1	1	1	GF0510014	Fixed, 10Ω ±5% ¼W
R756	1	1	1	1	GX1022203	Fixed, 0.22Ω ±10% 3W
R757	1	1	1	1	GX1022203	Fixed, 0.22Ω ±10% 3W
R758	1	1	1	1	GX1022203	Fixed, 0.22Ω ±10% 3W
R759	1	1	1	1	GX1022203	Fixed, 0.22Ω ±10% 3W
R760	1	1	1	1	RC1039212	Fixed, 3.9KΩ ±10% ½W
R761	1	1	1	1	RC1039212	Fixed, 3.9KΩ ±10% ½W
R762	1	1	1	1	GF0522014	Fixed, 22Ω ±5% ¼W
R763	1	1	1	1	GF0522014	Fixed, 22Ω ±5% ¼W
R764	1	1	1	1	RC1002212	Fixed, 2.2Ω ±10% ½W
R765	1	1	1	1	RC1002212	Fixed, 2.2Ω ±10% ½W
R766	1	1	1	1	RA0201005	Trimming, 200Ω (B)
R767	1	1	1	1	RA0201005	Trimming, 200Ω (B)
P700-CAPACITORS						
C701	1	1	1	1	EE3350251	Electrolytic, 3.3µF ±20% 25V
C702	1	1	1	1	EE3350251	Electrolytic, 3.3µF ±20% 25V
C703	1	1	1	1	DD1620101	Ceramic, 200PF ±10% 50V
C704	1	1	1	1	DD1620101	Ceramic, 200PF ±10% 50V
C705	1	1	1	1	EA1060359	Electrolytic, 10µF +100%,-10%, 35V
C707	1	1	1	1	DD1003050	Ceramic, 3PF, 500V
C708	1	1	1	1	DD1003050	Ceramic, 3PF, 500V
C709	1	1	1	1	EA4760509	Electrolytic, 47µF +100%,-10%, 50V
C710	1	1	1	1	EA4760509	Electrolytic, 47µF +100%,-10%, 50V
C711	1	1	1	1	EE4760162	Electrolytic, 47µF ±20%,16V
C712	1	1	1	1	EE4760162	Electrolytic, 4.7µF ±20% 16V
C713	1	1	1	1	ED2270509	Electrolytic, 220µF +50%,-10%, 50V
C714	1	1	1	1	ED2270509	Electrolytic, 220µF +50%,-10%, 50V
C719	1	1	1	1	DK1633150	Ceramic, 330PF ±10%, 500V
C720	1	1	1	1	DK1633150	Ceramic, 330PF ±10%, 500V
C721	1	1	1	1	DF1710452	Film, 0.1µF, 200V
C722	1	1	1	1	DF1710452	Film, 0.1µF, 200V
C725	1	1	1	1	DF1610205	Ceramic, 0.001µF ±10%, 50V
C726	1	1	1	1	DF1610205	Ceramic, 0.001µF ±10%, 50V
P700-SEMICONDUCTORS						
H701	1	1	1	1	HT107631B	Transistor, 2SA763 4,5
H702	1	1	1	1	HT107631B	Transistor, 2SA763 4,5

U: For U.S.A.
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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
H703	1	1	1	1	HT107631B	Transistor, 2SA763 4,5
H704	1	1	1	1	HT107631B	Transistor, 2SA763 4,5
H705	1	1	1	1	HT308753B	Transistor, 2SC875 C,D,E
H706	1	1	1	1	HT308753B	Transistor, 2SC875 C,D,E
H707	1	1	1	1	HT307351CO	Transistor, 2SC735 Y
H708	1	1	1	1	HT307351CO	Transistor, 2SC735 Y
H709	1	1	1	1	HT107331Q	Transistor, 2SA733 Q
H710	1	1	1	1	HT107331Q	Transistor, 2SA733 Q
H711	1	1	1	1	HT309591L	Transistor, 2SC959 M,L,K
H712	1	1	1	1	HT309591L	Transistor, 2SC959 M,L,K
H713	1	1	1	1	HT106061L	Transistor, 2SA606 M,L,K
H714	1	1	1	1	HT106061L	Transistor, 2SA606 M,L,K
H715	1	1	1	1	HD3003009	Diode, WZ-177
H716	1	1	1	1	HV0000312	Varistor, MV-13
H717	1	1	1	1	HV0000312	Varistor, MV-13
H718	1	1	1	1	HD2000221	Diode, IS2472 (Gr)
H719	1	1	1	1	HD2000221	Diode, IS2474 (Gr)
H720	1	1	1	1	HT307351C	Transistor, 2SC735 Y
H721	1	1	1	1	HT307351C	Transistor, 2SC735 Y
H722	1	1	1	1	HD2000221	Diode, IS2472 (Gr)
H723	1	1	1	1	HD2000221	Diode, IS2472 (Gr)
H724	1	1	1	1	HD2000221	Diode, IS2472 (Gr)
H725	1	1	1	1	HD2000221	Diode, IS2472 (Gr)
H727	1	1	1	1	HH0000812	Thermistor, 21D28
H728	1	1	1	1	HH0000812	Thermistor, 21D28
H729	1	1	1	1	HV0000312	Diode, MV-13
H730	1	1	1	1	HV0000312	Diode, MV-13
P700-MISCELLANEOUS						
L701	1	1	1	1	LC2272001	Coil, 2.7μH
L702	1	1	1	1	LC2272001	Coil, 2.7μH
J701						
J730	30	30	30	30	YP1000113	Plug
2011	4	4	4	4	289226703	Heatsink
2012	6	6	6	6	281811806	Spacer
2003	1	1	1	1	289026701	Heatsink
2005	2	2	2	2	289016003	Bracket
2006	4	4	4	4	281810104	Support
2007	4	4	4	4	51380305T	R.H. Tapped Screw, R3 x 5ST
2008	8	8	8	8	51100316E	B.H.M. Screw, B3 x 16
H001	1	1	1	1	HT308971B	Transistor, 2SC897 B,C
H002	1	1	1	1	HT308971B	Transistor, 2SC897 B,C
H003	1	1	1	1	HT107571B	Transistor, 2SA757 B,C
H004	1	1	1	1	HT107571B	Transistor, 2SA757 B,C
J014	1	1	1	1	YJ0500020	Socket, Transistor
J015	1	1	1	1	YJ0500020	Socket, Transistor
J016	1	1	1	1	YJ0500020	Socket, Transistor
J017	1	1	1	1	YJ0500020	Socket, Transistor
C008	1	1	1	1	DF1710405	Film Capacitor
H005	1	1	1	1	HV0000308	Varistor, SV-02
H006	1	1	1	1	HV0000308	Varistor, SV-02
2010	2	2	2	2	289026703	Heatsink
POWER SUPPLY CIRCUIT BOARD-P800						
P800	1	1	1	1	YD2916002	P.W. Board, Power Supply (Print only)
	1	1	1	1	ZZ2927202	P.W. Board Assembly
P808	12	12	12	12	293311802	Spacer, R801,R816,R817,H808 H811,R815

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
P800-RESISTORS						
R801	1	1	1	1	GF0510012	Fixed, 10Ω ±5% ¼W
R802	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R803	1	1	1	1	RT0547214	Fixed, 4.7KΩ ±5% ¼W
R804	1	1	1	1	RT0539214	Fixed, 3.9KΩ ±5% ¼W
R805	1	1	1	1	RT0522314	Fixed, 22KΩ ±5% ¼W
R806	1	1	1	1	RA0502013	Trimming, 5KΩ (B)
R807	1	1	1	1	GS1015105	Fixed, 150Ω ±10% 5W
R808	1	1	1	1	RT0533214	Fixed, 3.3KΩ ±5% ¼W
R809	1	1	1	1	RT0510014	Fixed, 10Ω ±5% ¼W
R810	1	1	1	1	RT0518314	Fixed, 18KΩ ±5% ¼W
R811	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
R812	1	1	1	1	RT0568214	Fixed, 6.8KΩ ±5% ¼W
R813	1	1	1	1	RT0524414	Fixed, 240KΩ ±5% ¼W
R814	1	1	1	1	RT0539314	Fixed, 39KΩ ±5% ¼W
R815	1	1	1	1	GU0547112	Fixed, 470Ω ±5% ½W
R816	1	1	1	1	GU0556212	Fixed, 5.6KΩ ±5% ½W
R817	1	1	1	1	GU0556212	Fixed, 5.6KΩ ±5% ½W
R818	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
P809	2	2	2	2	293311801	Spacer, R807
P800-CAPACITORS						
C801	1	1	1	1	EA2270631	Electrolytic, 220μF, 63V
C802	1	1	1	1	EA1070509	Electrolytic, 100μF, 50V
C803	1	1	1	1	DK1810351	Ceramic, 0.01μF, 200V
C804	1	1	1	1	EA2260359	Electrolytic, 22μF, 35V
C805	1	1	1	1	EA3370509	Electrolytic, 330μF, 50V
C806	1	1	1	1	EA4770169	Electrolytic, 470μF, 16V
C807	1	1	1	1	EA4750509	Electrolytic, 4.7μF, 50V
C808	1	1	1	1	EA4760169	Electrolytic, 47μF, 16V
C809	1	1	1	1	EA2270109	Electrolytic, 220μF, 10V
C810	1	1	1	1	DK1810351	Ceramic, 0.01μF, 200V
P800-SEMICONDUCTORS						
H801	1	1	1	1	HT403302A	Transistor, 2SD330 D,E
H802	1	1	1	1	HT313183A	Transistor, 2SC1318 P,Q,R
H803	1	1	1	1	HT309452A	Transistor, 2SC945 Q,R
H804	1	1	1	1	HT403314A	Transistor, 2SD331 C,D,E,F
H805	1	1	1	1	HT309452A	Transistor, 2SC945 Q,R
H806	1	1	1	1	HT313182R	Transistor, 2SC1318 R,S
H807	1	1	1	1	HT313182R	Transistor, 2SC1318 R,S
H808	1	1	1	1	HD2001103	Diode, DS131-B
H809	1	1	1	1	HD3002309	Diode, WZ-071
H810	1	1	1	1	HD3002709	Diode, WZ-140
H811	1	1	1	1	HD2001103	Diode, DS131-B
H812	1	1	1	1	HD2000321	Diode, 1S2471
P800-MISCELLANEOUS						
L801	1	1	1	1	LY2024009	Relay, MY2Z, 24V
J801						
J810	10	10	10	10	YP1000113	Plug
1602	1	1	1	1	291626702	Heatsink
1603	2	2	2	2	51102606S	B.H.M. Screw, B2.6 x 6
1604	1	1	1	1	51100312E	B.H.M. Screw, B3 x 12
1605	1	1	1	1	53110301E	Hexagon Nut
1607	1	1	1	1	54050300R	T.L. Washer OR
4536	1	1	1	1	54040302N	Spring Washer
4537	1	1	1	1	54020301E	Flat Washer
DOLBY LEVEL CIRCUIT BOARD-PC01						
PC01	1	1	1	1	YD2915107	P.W. Board, Dolby Level (Print only)

U: For U.S.A.
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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
	1	1	1	1	ZZ2928307	P.W. Board Assembly
						PC01-RESISTORS
RC01	1	1	1	1	RA0104015	Trimming, 100KΩ (B)
RC02	1	1	1	1	RA0104015	Trimming, 100KΩ (B)
RC03	1	1	1	1	RT0568314	Fixed, 68KΩ ±5% ¼W
RC04	1	1	1	1	RT0568314	Fixed, 68KΩ ±5% ¼W
RC05	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
RC06	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
RC07	1	1	1	1	RT0539214	Fixed, 3.9KΩ ±5% ¼W
RC08	1	1	1	1	RT0539214	Fixed, 3.9KΩ ±5% ¼W
RC09	1	1	1	1	RT0510214	Fixed, 100KΩ ±5% ¼W
RC10	1	1	1	1	RT0510414	Fixed, 100KΩ ±5% ¼W
						PC01-CAPACITORS
CC01	1	1	1	1	EV1050256	Electrolytic, 1μF, 25V
CC02	1	1	1	1	EV1050256	Electrolytic, 1μF, 25V
CC03	1	1	1	1	EV1050256	Electrolytic, 1μF, 25V
CC04	1	1	1	1	EV1050256	Electrolytic, 1μF, 25V
						PC01-MISCELLANEOUS
JC01 ? JC08	8	8	8	8	YP1000113	Plug
HC01	1	1	1	1	HT313272A	Transistor, 2SC1327 S,T
HC02	1	1	1	1	HT313272A	Transistor, 2SC1327 S,T
0603	1	1	1	1	291516050	Bracket K
0610	2	2	2	2	51100306A	B.H.M. Screw, B3 x 6
0613	2	2	2	2	51100306A	B.H.M. Screw, B3 x 6
0616	1	1	1	1	281816003	Bracket
0617	1	1	1	1	281816004	Bracket
0618	4	4	4	4	51100406A	B.H.M. Screw, B4 x 6
0621	4	4	4	4	51100306A	B.H.M. Screw, B3 x 6
0622	2	2	2	2	51100306A	B.H.M. Screw, B3 x 6
0623	1	1	1	1	291512002	Insulator
0624	1	1	1	1	257710602	Bearing
0625	1	1	1	1	141511801	Spacer
0626	2	2	2	2	51040306A	F.H.M. Screw, F3 x 6
0627	2	2	2	2	51490306A	B.H.M. Screw, FS
0631	2	2	2	2	51100305A	B.H.M. Screw, B3 x 5
0702	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6 ST
0703	2	2	2	2	54050300R	T.L. Washer OR
0706	2	2	2	2	51042608A	F.H.M. Screw, F2.6 x 8
0714	1	1	1	1	291626251	Pulley K
0719	2	2	2	2	51100306A	B.H.M. Screw, B3 x 6
0721	1	1	1	1	292726251	Pulley K
0728	2	2	2	2	51100306A	B.H.M. Screw, B3 x 6
0733	4	4	4	4	288612002	Insulator
4936	3	3	3	3	292705502	Collar
1908	1	1	1	1	285326901	Protector
1909	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6 ST
1915	2	2	2	2	287105302	Cover
1922	1	1	1	1	288612201	Sticker
R004	1	1	1	1	GF0575014	Resistor, Fixed, 75Ω ±5% ¼W
						PRE & TONE AMP. CIRCUIT BOARD-PE01
PE01	1	1	1	1	YD2915108	P.W. Board, Pre & Tone Amp. (Print only)
	1	1	1	1	ZZ2959408	P.W. Board Assembly
PE08	2	2	2	2	293311802	Spacer, RE54

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
						PE01-RESISTORS
RE01	1	1	1	1	RT0547414	Fixed, 470KΩ ±5% ¼W
RE02	1	1	1	1	RT0547414	Fixed, 470KΩ ±5% ¼W
RE03	1	1	1	1	RT0539114	Fixed, 390Ω ±5% ¼W
RE04	1	1	1	1	RT0539114	Fixed, 390Ω ±5% ¼W
RE05	1	1	1	1	RN0510514	Fixed, 1MΩ ±5% ¼W
RE06	1	1	1	1	RN0510514	Fixed, 1MΩ ±5% ¼W
RE07	1	1	1	1	RN0510414	Fixed, 100KΩ ±5% ¼W
RE08	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
RE09	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
RE10	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
RE11	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
RE12	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
RE13	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
RE14	1	1	1	1	RT0582214	Fixed, 8.2KΩ ±5% ¼W
RE15	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
RE16	1	1	1	1	RT0510214	Fixed, 1KΩ ±5% ¼W
RE17	1	1	1	1	RT0547414	Fixed, 470KΩ ±5% ¼W
RE18	1	1	1	1	RT0547414	Fixed, 470KΩ ±5% ¼W
RE19	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
RE20	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
RE21	1	1	1	1	RT0512314	Fixed, 12KΩ ±5% ¼W
RE22	1	1	1	1	RT0512314	Fixed, 12KΩ ±5% ¼W
RE23	1	1	1	1	RT0515414	Fixed, 150KΩ ±5% ¼W
RE24	1	1	1	1	RT0515414	Fixed, 150KΩ ±5% ¼W
RE25	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
RE26	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
RE27	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
RE28	1	1	1	1	RT0556214	Fixed, 5.6KΩ ±5% ¼W
RE29	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
RE30	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
RE31	1	1	1	1	RT0512314	Fixed, 12KΩ ±5% ¼W
RE32	1	1	1	1	RT0512314	Fixed, 12KΩ ±5% ¼W
RE33	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
RE34	1	1	1	1	RT0515314	Fixed, 15KΩ ±5% ¼W
RE35	1	1	1	1	RT0547414	Fixed, 470KΩ ±5% ¼W
RE36	1	1	1	1	RT0547414	Fixed, 470KΩ ±5% ¼W
RE37	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
RE38	1	1	1	1	RT0527314	Fixed, 27KΩ ±5% ¼W
RE39	1	1	1	1	RT0522514	Fixed, 2.2MΩ ±5% ¼W
RE40	1	1	1	1	RT0522514	Fixed, 2.2MΩ ±5% ¼W
RE41	1	1	1	1	RT0568314	Fixed, 68KΩ ±5% ¼W
RE42	1	1	1	1	RT0568314	Fixed, 68KΩ ±5% ¼W
RE43	1	1	1	1	RT0547314	Fixed, 47KΩ ±5% ¼W
RE44	1	1	1	1	RT0547314	Fixed, 47KΩ ±5% ¼W
RE45	1	1	1	1	RT0510314	Fixed, 10KΩ ±5% ¼W
RE46	1	1	1	1	RT0510314	Fixed, 10KΩ 5% ¼W
RE47	1	1	1	1	RT0522114	Fixed, 220Ω 5% ¼W
RE48	1	1	1	1	RT0522114	Fixed, 220Ω 5% ¼W
RE49	1	1	1	1	RT0547414	Fixed, 470KΩ 5% ¼W
RE50	1	1	1	1	RT0547414	Fixed, 470KΩ 5% ¼W
RE51	1	1	1	1	RM0104005	Variable, 100KΩ (B) High
RE52	1	1	1	1	RM0104005	Variable, 100KΩ (B) Mid
RE53	1	1	1	1	RM0104005	Variable, 100KΩ (B) Low
RE54	1	1	1	1	RT0582114	Fixed, 820Ω ±5% ¼W
RE55	1	1	1	1	RC0000012	Fixed, 0Ω, ¼W
						PE01-CAPACITORS
CE01	1	1	1	1	DF1722405	Film, 0.22μF ±20% 50V
CE02	1	1	1	1	DF1722405	Film, 0.22μF ±20% 50V
CE03	1	1	1	1	EA1060359	Electrolytic, 10μF +100%,-10%, 35V
CE04	1	1	1	1	EA1060359	Electrolytic, 10μF +100%,-10%, 35V

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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
CE05	1	1	1	1	EE4750251	Electrolytic, 4.7 μ F \pm 20% 25V
CE06	1	1	1	1	EE4750251	Electrolytic, 4.7 μ F \pm 20% 25V
CE07	1	1	1	1	DD1610101	Ceramic, 100PF \pm 10% 50V
CE08	1	1	1	1	DD1610101	Ceramic, 100PF \pm 10% 50V
CE09	1	1	1	1	DF1622205	Film, 2200PF \pm 10% 50V
CE10	1	1	1	1	DF1622205	Film, 2200PF \pm 10% 50V
CE11	1	1	1	1	DF1668205	Film, 6800PF \pm 10% 50V
CE12	1	1	1	1	DF1668205	Film, 6800PF \pm 10% 50V
CE13	1	1	1	1	DF1622305	Film, 0.022 μ F \pm 10% 50V
CE14	1	1	1	1	DF1622305	Film, 0.022 μ F \pm 10% 50V
CE15	1	1	1	1	DF1622305	Film, 0.022 μ F \pm 10% 50V
CE16	1	1	1	1	DF1622305	Film, 0.022 μ F \pm 10% 50V
CE17	1	1	1	1	DF1610305	Film, 0.01 μ F \pm 10% 50V
CE18	1	1	1	1	DF1610305	Film, 0.01 μ F \pm 10% 50V
CE19	1	1	1	1	EE1050501	Electrolytic, 1 μ F \pm 20% 50V
CE20	1	1	1	1	EE1050501	Electrolytic, 1 μ F \pm 20% 50V
CE21	1	1	1	1	EE3350501	Electrolytic, 3.3 μ F 20% 50V
CE22	1	1	1	1	EE3350501	Electrolytic, 3.3 μ F 20% 50V
CE23	1	1	1	1	EQ1050501	Electrolytic, 1 μ F 30% 50V
CE24	1	1	1	1	EQ1050501	Electrolytic, 1 μ F 30% 50V
CE25	1	1	1	1	EA2270359	Electrolytic, 220 μ F +100%, -10% 35V
PE01-SEMICONDUCTORS & PLUGS						
HE01	1	1	1	1	HT313283A	Transistor, 2SC1328 S,T,U
HE02	1	1	1	1	HT313283A	Transistor, 2SC1328 S,T,U
HE03	1	1	1	1	HT107632A	Transistor, 2SA763, 4,5
HE04	1	1	1	1	HT107632A	Transistor, 2SA763, 4,5
HE05	1	1	1	1	HT313283A	Transistor, 2SC1328 S,T,U
HE06	1	1	1	1	HT313283A	Transistor, 2SC1328 S,T,U
HE07	1	1	1	1	HT107632A	Transistor, 2SA763, 4,5
HE08	1	1	1	1	HT107632A	Transistor, 2SA763, 4,5
JE01						
?	8	8	8	8	YP1000113	Plug
JE08						
FILTER & DOLBY CIRCUIT BOARD-PH01						
PH01	1	1	1	1	YD2915109	P.W. Board, Filter & Dolby (Print only)
	1	1			ZZ2927409	P.W. Board Assembly
			1	1	ZZ2927909	P.W. Board Assembly
PH01-RESISTORS						
PH01	1	1	1	1	RT0510214	Fixed, 1K Ω 5% $\frac{1}{4}$ W
PH02	1	1	1	1	RT0510214	Fixed, 1K Ω 5% $\frac{1}{4}$ W
PH04	1	1	1	1	RT0510514	Fixed, 1M Ω 5% $\frac{1}{4}$ W
PH05	1	1	1	1	RT0510514	Fixed, 1M Ω 5% $\frac{1}{4}$ W
RH06	1	1	1	1	RT0547214	Fixed, 4.7K Ω \pm 5% $\frac{1}{4}$ W
RH07	1	1	1	1	RT0547214	Fixed, 4.7K Ω \pm 5% $\frac{1}{4}$ W
RE08	1	1	1	1	RT0522514	Fixed, 2.2M Ω \pm 5% $\frac{1}{4}$ W
RE09	1	1	1	1	RT0522514	Fixed, 2.2M Ω \pm 5% $\frac{1}{4}$ W
PH01-CAPACITORS, SWITCH & PLUGS						
CH01	1	1			DF1522205	Film, 0.0022 μ F \pm 10% 50V
CH02	1	1			DF1522205	Film, 0.0022 μ F \pm 10% 50V
CH03	1	1	1	1	DF1668205	Film, 0.0068 μ F \pm 10% 50V
CH04	1	1	1	1	DF1668205	Film, 0.0068 μ F \pm 10% 50V
CH01			1	1	DF1510205	Film, 0.001 μ F \pm 5% 50V
CH02			1	1	DF1510205	Film, 0.001 μ F \pm 5% 50V
CH05	1	1	1	1	EV2240351	Electrolytic, 0.22 μ F \pm 20% 35V
CH06	1	1	1	1	EV2240351	Electrolytic, 0.22 μ F \pm 20% 35V

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
SH01	1	1	1	1	SP0404014	Pushswitch
JH01						
?	28	28	28	28	YP1000120	Plug
JH28						
MAIN & REMOTE SWITCH CIRCUIT BOARD-PT01						
PT01	1	1	1	1	YD2915110	P.W. Board, Main & Remote
	1	1	1	1	ZZ2959410	P.W. Board Assembly Switch
PT07	4	4	4	4	344411805	Spacer, RT05, RT07
PT01-RESISTORS						
RT01	1	1	1	1	RT0568314	Fixed, 68K Ω \pm 5% $\frac{1}{4}$ W
RT02	1	1	1	1	RT0568314	Fixed, 68K Ω \pm 5% $\frac{1}{4}$ W
RT03	1	1	1	1	RT0515314	Fixed, 15K Ω \pm 5% $\frac{1}{4}$ W
RT04	1	1	1	1	RT0515314	Fixed, 15K Ω \pm 5% $\frac{1}{4}$ W
RT05	1	1	1	1	GJ0533102	Fixed, 330 Ω \pm 5% 2W
RT06	1	1	1	1	GJ0533102	Fixed, 330 Ω \pm 5% 2W
RT07	1	1	1	1	GU0515112	Fixed, 150 Ω \pm 5% $\frac{1}{2}$ W
RT08	1	1	1	1	GU0515112	Fixed, 150 Ω \pm 5% $\frac{1}{2}$ W
PT01-CAPACITORS						
CT01	1	1	1	1	DD1612101	Ceramic, 120PF \pm 10% 50V
CT02	1	1	1	1	DD1612101	Ceramic, 120PF \pm 10% 50V
CT03	1	1	1	1	DF1627305	Film, 0.027 μ F \pm 10% 50V
CT04	1	1	1	1	DF1627305	Film, 0.027 μ F \pm 10% 50V
PT01-MISCELLANEOUS						
ST01	1	1	1	1	SP0404011	Pushswitch
JT01						
?	16	16	16	16	YP1000120	Plug
JT16						
S002	1	1	1	1	SR0905010	Rotary SW, SELECTOR
J011	1	1	1	1	YJ0100081	Socket, DUBBING-IN
J012	1	1	1	1	YJ0100098	Socket, DUBBING-OUT
0609	1	1	1	1	291616002	Bracket
S001	1	1	1		SP0201015	Power Switch
S001				1	SP0201017	Power Switch
J013	1	1	1	1	YJ0100098	Socket, Headphone
G001	1	1			BF1040004	Printed Comp.
C006			1		DF1722380	Film Capacitor, .022 μ F \pm 20%, 1000V
0611	1	1	1	1	291616003	Bracket
0612	2	2	2	2	51060306A	P.H.M. Screw, P3 x 6
0629	1	1	1	1	291510903	Shield, Variable Resistor
0630	2	2	2	2	291512003	Insulator, Variable Resistor
0709	1	1	1	1	288610701	Sheet
0729	1	1	1	1	287105102	Guide, Dial Pointer
1731	1	1	1	1	291726250	Pulley K
1735	2	2	2	2	51100306A	B.H.M. Screw, B3 x 6
0802	1	1	1	1	288627401	Reflector
0803	1	1	1	1	288627102	Holder
0805	2	2	2	2	51480306A	B.H.M. Screw,
0806	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6 ST
M003	1	1	1	1	IN1008007	Lamp, Meter
M004	1	1	1	1	IN1008007	Lamp, Meter

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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
J020	1	1	1	1	YJ0800019	Socket, Lamp
J028	1	1	1	1	YJ0800019	Socket, Lamp
0902	1	1	1	1	287127401	Reflector
0903	2	2	2	2	51480306A	B.H.M. Screw, F, B3 x 6
1007	2	2	2	2	51100306A	B.H.M. Screw, B3 x 6
1011	1	1	1	1	288627101	Holder
1012	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6 ST
DIAL LAMP CIRCUIT BOARD-PZ01						
PZ01	1	1	1	1	YD2886016	P.W. Board, Dial Lamp(Print only)
	1	1	1	1	ZZ2889116	P.W. Board Assembly
PZ01-MISCELLANEOUS						
MZ01	5	5	5	5	IN1008007	Lamp
MZ05						
JZ01	10	10	10	10	YJ0800017	Socket
JZ10						
JZ11	4	4	4	4	YP1000113	Plug
JZ14						
1002	1	1	1	1	287127101	Holder
1003	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6ST
FUNCTION LAMP CIRCUIT BOARD-PY01						
PY01	1	1	1	1	YD2959103	P.W. Board, Function Lamp (Print only)
	1	1	1	1	ZZ2959303	P.W. Board Assembly
PY01-MISCELLANEOUS						
MY02	1	1	1	1	IN1006301	Lamp, AM, 7V, 40mA
MY03	1	1	1	1	IN1006301	Lamp, FM, 7V, 40mA
MY04	1	1	1	1	IN1006301	Lamp, PHONO, 7V, 40mA
MY05	1	1	1	1	IN1006301	Lamp, TAPE 1, 7V, 40mA
MY06	1	1	1	1	IN1006301	Lamp, AUX, 7V, 40mA
MY07	1	1	1	1	IN1012091	Lamp, STEREO, 12V, 40mA
JY02	10	10	10	10	YP1000113	Plug
JY11						
R006	1	1	1	1	GF0522014	Resistor, Fixed, 22Ω ±5% ¼W
1103	1	1	1	1	285310650	Bearing K
1108	1	1	1	1	51640410D	Set Screw C.P
1109	1	1	1	1	54040402N	Spring Washer
1110	1	1	1	1	53110403E	Hexagon Nut
R001	1	1	1	1	RS0504002	Variable Resistor, BALANCE
R002	1	1	1	1	RM0254022	Variable Resistor, VOLUME
0808	1	1	1	1	288610701	Sheet
M001	1	1	1	1	IM1104202	Meter, FM TUNING
M005	1	1	1	1	IM1104203	Meter, SIGNAL
0403	1	1			292716009	Bracket
8536			1		295916025	Bracket
0413	1	1			145525903	Bushing
0418			2		54050300R	T.L. Washer OR
0419			2		51060316A	P.H.M. Screw, P3 x 16
0420			2		53110303A	Hexagon Nut

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
0423	4	4			51060308S	P.H.M. Screw, P3 x 8
0424	4	4			53110303A	Hexagon Nut
0425	4	4	4	4	54050300R	T.L. Washer OR
0430	1	1	1	1	54050400R	T.L. Washer OR
0433	4	4	4	4	51060308S	P.H.M. Screw, P3 x 8
0434	4	4	4	4	53110303A	Hexagon Nut
8537			2		51100308S	B.H.M. Screw, B3 x 8
8538			2		53110303A	Hexagon Nut
8539			2		54050300R	T.L. Washer OR
0527	3	3	3	3	51100306S	B.H.M. Screw, B3 x 6
0529	1	1	1	1	145525903	Bushing
0532	2	2	2	2	51060306S	P.H.M. Screw, P3 x 6
8540			1		288286102	Label
0534	8	8	8	8	51060308S	P.H.M. Screw, P3 x 8
0535	8	8	8	8	53110303A	Hexagon Nut
1634	1	1	1	1	138200503	Clamper
W001	1	1			YC0240022	Power Cord
J001	1	1	1	1	YT0204008	Terminal, 4-Pin Jack
J002	1	1	1	1	YT0208006	Terminal, 8-Pin Jack
J003	1	1	1	1	YT0201009	Terminal, 1-Pin Jack
J006	1	1	1	1	YT0304006	Terminal, Speaker
J007	1	1	1	1	YT0304006	Terminal, Speaker
J008	1	1			YJ0400048	Jack, AC Outlet
J009	1	1			YJ0400048	Jack, AC Outlet
J008			1	1	YJ0400056	Jack, AC Outlet
J009			1	1	YJ0400056	Jack, AC Outlet
J010	1	1			YJ0800012	Socket, Fuse Holder
J019	1	1	1	1	YT0101005	Terminal, Chassis Ground
J024			1		YP0400056	Socket, Inlet
J010			1	1	YJ0800022	Socket, Fuse Holder
J026			1		YT0101005	Terminal, Ground
F001			1		FS1040006	Fuse, 4A
F001	1	1			FS1040005	Fuse, 4A
F001			1		FS1040080	Fuse, 4A
F002			1		FS2050090	Fuse, 5A
L001	1	1	1	1	LF1120038	Ant Coil, AM
L002	1	1	1	1	LC1332002	Choke Coil, 3.3μH
0505	1	1	1	1	281927103	Holder
0506	1	1	1	1	257816052	Bracket K
0511	2	2	2	2	51060310S	P.H.M. Screw, P3 x 10
0512	2	2	2	2	54050300R	T.L. Washer OR
0513	2	2	2	2	53110303E	Hexagon Nut
0516	2	2	2	2	51060310S	P.H.M. Screw, P3 x 10
0518	2	2	2	2	53110303E	Hexagon Nut
ANTENNA MUTING CIRCUIT BOARD-PU01						
PU01	1	1	1	1	YD2916007	P.W. Board, Antenna Muting (Print only)
	1	1	1	1	ZZ2916007	P.W. Board Assembly
PU01-MISCELLANEOUS						
RU04	1	1	1	1	RK0203032	Variable Resistor, 20K (B)
RU05	1	1	1	1	RK0503010	Variable Resistor, 50K (B)
RU06	1	1	1	1	RT0543214	Resistor, Fixed, 4.3KΩ ±5%, ¼W
LU01	1	1	1	1	LB3007526	Balun Coil
LU02	1	1	1	1	LC1154002	Choke Coil
JU01	1	1	1	1	YT0304009	Terminal, Antenna

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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
JU02 ? JU07	6	6	6	6	YP1000113	Plug
0531	1	1	1	1	291616005	Bracket
R003	1	1			RC1022512	Resistor, Fixed, 22MΩ ±10%, ½W
9136	1	1	1	1	62030039W	Lug
C004	1	1	1	1	DK1710301	Ceramic Capacitor, 0.01μF ±20%, 50V
9236	1	1	1	1	62030039W	Lug
C003	1	1	1	1	DK1710301	Ceramic Capacitor, 0.01μF ±20%, 50V
0431	1	1	1	1	62041760W	Lug, Chassis Ground
J004	1	1	1	1	YT0204011	Terminal, 4-Pin Jack
1530	1	1	1	1	282100501	Clamper
1532	1	1	1	1	138200503	Clamper
1728	1	1	1	1	138200503	Clamper
1903	1	1	1	1	295930201	Dial
1906	1	1	1	1	285610701	Sheet
J018	1	1	1	1	YL0103018	Terminal, 3-Pin Jack
L003	1	1	1	1	LC1332002	Choke Coil, 3.3μH
C005	1	1	1	1	DK1840301	Ceramic Capacitor, 0.04μF, 50V
C007	1	1	1	1	DK1810351	Ceramic Capacitor, 0.01μF, 500V
H007	1	1	1	1	HD2000510	Diode, 5B-2
1251				1	62041760W	Lug, Power Cord Grounding
J023				1	BY0311001	Terminal, Voltage Selector
PR01				1	YD2960103	FUSE CIRCUIT BOARD-PR01 P.W. Board, Fuse (Print only)
				1	ZZ2960303	P.W. Board Assembly
JR01				1	YJ0800020	PR01-JACKS & PLUGS Jack
JR02				1	YJ0800020	Jack
JR03				1	YJ0800020	Jack
JR04				1	YJ0800020	Jack
JR05				1	YJ0800020	Jack
JR06				1	YJ0800020	Jack
JR07				1	YP1000113	Plug
JR08				1	YP1000113	Plug
JR09				1	YP1000113	Plug
JR10				1	YP1000113	Plug
JR11				1	YP1000113	Plug
JR12				1	YP1000113	Plug
JR07				1	YP1000113	PR01-PLUGS & SOCKET Plug
JR08				1	YP1000113	Plug
JR09				1	YP1000113	Plug
JR10				1	YP1000113	Plug
JR11				1	YP1000113	Plug
JR12				1	YP1000113	Plug
JR01				1	YJ0800020	Socket
JR02				1	YJ0800020	Socket

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
JR03				1	YJ0800020	Socket
JR04				1	YJ0800020	Socket
JR05				1	YJ0800020	Socket
JR06				1	YJ0800020	Socket
PR01				1	YD2975001	FUSE CIRCUIT BOARD-PR01 P.W. Board, Fuse (Print only)
				1	ZZ2975001	P.W. Board Assembly
2022				1	292710901	PR01-MISCELLANEOUS Shield
2023				1	285612001	Insulator
F003				1	FS2030090	Fuse, 3A
J027				1	YL0103018	Terminal, 3-Pin Jack
0234	4	4	4	4	293205701	Leg
0235	4	4	4	4	51440410S	B.H.M. Screw S, B3 x 6
0323				1	951022101	Label
1951				1	951061105	Label
0410	6	6	6	6	51100306S	P.H.M. Screw, P3 x 6
1952				1	54050400R	T.L. Washer OR
0619	1	1	1	1	51570306B	P.H. Tapped Screw, P3 x 6ST
1953				2	51100306S	B.H.M. Screw, B3 x 6
1502	1	1	1	1	292710550	Chassis K
1509	4	4	4	4	51100306S	B.H.M. Screw, B3 x 6
1510	2	2	2	2	51100306S	B.H.M. Screw, B3 x 6
1511	4	4	4	4	51570306S	P.H. Tapped Screw, P3 x 6ST
1512	4	4	4	4	51570306S	P.H. Tapped Screw, P3 x 6ST
1513	1	1	1	1	51100306S	B.H.M. Screw, B3 x 6
1514	4	4	4	4	389610101	Support
1516	1	1	1	1	292710450	Retainer K
1519	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6ST
1954				1	291612004	Insulator
1522	2	2	2	2	288600503	Clamper
1523	5	5	5	5	288600502	Clamper
1524	4	4	4	4	288600505	Clamper
1528	1	1	1	1	292716003	Bracket
1529	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6 ST
1606	1	1	1	1	51570308S	P.H. Tapped Screw, P3 x 6ST
1608	3	3	3	3	51100306S	B.H.M. Screw, B3 x 6
1612	2	2	2	2	292700501	Clamper
1613	4	4	4	4	54040402A	Spring Washer
1614	4	4	4	4	53110401A	Hexagon Nut
1615	4	4	4	4	54020401A	Flat Washer P
1619	1	1	1	1	292716004	Bracket
1620	4	4	4	4	51570306S	P.H. Tapped Screw, P3 x 6ST
1621	1	1	1	1	51570306B	P.H. Tapped Screw, P3 x 6ST
1622	1	1	1	1	54050300R	T.L. Washer OR
1623	2	2	2	2	51570310B	P.H. Tapped Screw, P3 x 6ST
2051	1	1	1	1	62030039W	Lug
1632	1	1	1	1	62030039W	Lug
1633	4	4	4	4	51570306B	P.H. Tapped Screw, P3 x 6ST
1713	4	4	4	4	51570306B	P.H. Tapped Screw, P3 x 6ST
2015	4	4	4	4	51570306B	P.H. Tapped Screw, P3 x 6ST
2019	1	1	1	1	288816005	Bracket
2020	2	2	2	2	51570306B	P.H. Tapped Screw, P3 x 6ST
2021				2	51100306S	B.H.M. Screw, B3 x 6
2024				2	51570305B	P.H. Tapped Screw, P3 x 5ST
2028				4	51570312B	P.H. Tapped Screw, P3 x 6ST
1531	1	1	1	1	51570306B	P.H. Tapped Screw, P3 x 6ST
1533	1	1	1	1	287100501	Clamper
1534	1	1	1	1	51570306B	P.H. Tapped Screw, P3 x 6ST

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REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
1535	2	2	2	2	54050300R	T.L. Washer OR
2151	1				951022101	Label, Fuse Caution
2152	1				951061103	Label, 3A Fuse
2153	1				53110303E	Hexagon Nut
2154	1				54050300R	T.L. Washer OR
C001	1	1	1	1	EC1090502	Electrolytic Capacitor, 10,000 μ F, 50V
C002	1	1	1	1	EC1090502	Electrolytic Capacitor, 10,000 μ F, 50V
L004	1	1			TS1960213	Power Transformer
L004	1	1			TS1960214	Power Transformer
W001	1				YC0190003	Power Cord
FR01			1		FS1035080	Fuse, 3.5A, SEMKO
FR02			1		FS1010080	Fuse, 1A, SEMKO
FR03			1		FS1010080	Fuse, 1A, SEMKO
FR01	1	1	1		FS1040090	Fuse, 4A, SGA
FR02	1	1	1		FS1010090	Fuse, 1A, SGA
FR03	1	1	1		FS1010090	Fuse, 1A, SGA
0113	4	4	4	4	52017039J	H Head Bolt
0120	3	3	3	3	289610701	Sheet
0125	1	1	1	1	292705501	Collar
0202	8	8	8	8	288615403	Knob, Pushswitch
0204	1	1	1	1	290415404	Knob, Power Switch
0205	1	1	1	1	285015401	Knob, VOLUME
0206	5	5	5	5	281815403	Knob, Single, Large
0208	1				295926501	Indicator, Model Name Plate
0209	1				295926502	Indicator, Model Name Plate
0210			1		295926503	Indicator, Model Name Plate
2353			1		295926508	Indicator, Model Name Plate
0217	2	2	2	2	51060306S	P.H.M. Screw, P3 x 6
2352			1		291612004	Insulator
0223	4	4	4	4	51480406S	B.H.M. Screw F, B4 x 6
0224	10	10	10	10	51100406S	B.H.M. Screw, B4 x 6
0306	1	1	1	1	250626506	Indicator, "Do not use as ..."
2451	1	1	1	1	293286101	Label, "Caution"
0303	1	1	1	1	257886101	Label, "UL Caution"
2452	1				281886101	Label, FTC
0311			1		951091101	Label, LL No.
0312			1		282186102	Label, Fuse Caution
0313	1				951091102	Label, UL Factory Code
0316	1				951110102	Label, UL
0321	1	1	1	1	288686101	Label, On-Transformer
0634	1	1	1	1	285011202	Shaft, Flywheel
0635	1	1	1	1	54040402N	Spring Washer
1410	1	1	1	1	56382540G	Eyelet, Dial String
1627	1	1	1	1	292716005	Bracket
1628	1	1	1	1	51570306B	P.H. Tapped Screw, P3 x 6ST
1629	1	1	1	1	290825901	Bushing
1707	1	1	1	1	288910903	Shield
1708	2	2	2	2	51100306S	B.H.M. Screw, B3 x 6
2551	2	2	2	2	288912006	Insulator
2552	6	6	6	6	291612002	Insulator
1912					291526901	Protector
1913	2	2	2	2	51570305B	P.H. Tapped Screw, P3 x 5ST
1924	1	1	1	1	281912005	Insulator
2102	1				295985101	Instructions, Set
2106			1		295985129	Instructions, Set
2107	1				288685110	Instructions, Set
2108		1	1	1	295985131	Instructions, Set
2109	1				295985601	Schematic Diagram
2110			1		295985602	Schematic Diagram
2111	1				295985603	Schematic Diagram

REF. DESIG.	Q'TY				PART NO.	DESCRIPTION
	U	C	E	N		
2751				1	295985605	Schematic Diagram
2114	1	1	1	1	281885108	Instructions, Accessories
2115				1	291585102	Instructions, Accessories
2752	1				281885402	Instructions, Leaflet
2117	1	1	1	1	281885104	Instructions, Packing
2753			2		951090102	Label
2124	1	1	1	1	257785401	Guarantee Card
2125	1	1	1	1	257785102	Instructions
2126	1				257781301	Envelope
2751			1		291881301	Envelope
2131			1	1	281881301	Envelope
2202	1	1	1	1	295980101	Packing Case, Inner
2203	1	1	1	1	295980111	Packing Case, Outer
2204				1	295980103	Packing Case, Inner
2207				1	295980113	Packing Case, Outer
2208	1	1	1	1	281880304	Cushion, Upper
2209	1	1	1	1	281880305	Cushion, Lower
2211				1	291580701	Reinforcing
2212	1	1	1	1	901483838	Polyethylene Bag
2214	1	1	1	1	901302501	Polyethylene Bag
2215	1	1	1	1	901302501	Polyethylene Bag
2217	1	1	1	1	102980401	Sleeve, Power Cord
2218				1	956000004	Hang Tag, Power Voltage
2219	1	1	1	1	273182101	Silica Gel
2220	1	1	1	1	281905601	Buffer
2222	4				952281501	Serial No. Card
2223			4		952301512	Serial No. Card
2224			4		952301511	Serial No. Card
2225			4		952301513	Serial No. Card
2216			1		288286101	Label
2851	1	1	1	1	291810713	Sheet
2231	1	1	1	1	ZA0200007	Ext Antenna, FM

11. TECHNICAL SPECIFICATIONS

AMPLIFIER SECTION

Rated Power Output	... 35 Watts per channel, continuous average power, both channels driven.
Power Band	.....20 Hz to 20 kHz
Total Harmonic Distortion	.....0.25%
Load Impedance	.....8 ohms
Intermodulation Distortion at rated power	.....0.5%
Damping Factor	.....45
Frequency Response	.....20 Hz to 20 kHz \pm 1.0 dB

PREAMPLIFIER SECTION

Phono:

Dynamic Range	.....96 dB
Note: Dynamic Range is the ratio in dB of the phono input overload to equivalent input noise.	
Equivalent Input Noise	.....1.5 μ V
Input Overload	.....100 mV
Sensitivities (for rated power output)	
Phono	.....1.8 mV
Tape	.....180 mV
Main In	.....1.0 V
Frequency Response (phono)	.....30 Hz to 15 kHz \pm 1.0 dB
Input Impedances	
Phono	.....47 K ohms
Aux or Tape	.....100 K ohms
Main In	.....30 K ohms
Tape Output Level	.....775 mV
Ref.: 7.75 mV at phono input	
Signal to Noise Ratio	
Aux Input	.....80 dB
Phono Input	.....65 dB
Tone Controls	
Bass: 50 Hz	.....\pm10 dB
Mid: 700 Hz	.....\pm6 dB
Treble: 15 kHz	.....\pm10 dB
Sensitivity (DIN)	.....2.1 μ V

FM TUNER SECTION

Selectivity (alternate carrier)	.....65 dB
Quieting Slope	
RF Input for 30 dB Quieting	.....1.9 μ V
Quieting at 5 μ V RF Input	.....52 dB
Quieting at 10 μ V RF Input	.....58 dB
Quieting at 50 μ V RF Input	.....68 dB
Total Harmonic Distortion	
Mono:	.....0.3%
Stereo:	.....0.5%
Capture Ratio	.....1.5 dB
Stereo Separation at 1 kHz	.....40 dB
Spurious Rejection	.....95 dB
Image Rejection	.....70 dB
IF Rejection90 dB
AM Suppression50 dB

AM TUNER SECTION

Sensitivity20 μ V
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GENERAL

Power Requirements	120 V AC, 50/60 Hz
Power Consumption at rated output, both channels operating	180 Watts
Idling Power (Volume Control at zero)	30 Watts
Dimensions:	
Panel Width	17-3/8 inches
Panel Height	5-3/8 inches
Depth	14 inches
Weight:	
Unit alone	26.4 lbs.
Packed for shipment	36.4 lbs.

NOTES

SERVICE INFORMATION FOR EUROPEAN MODEL

The information contained herein included the fuse assembly PR01, rear panel and main chassis component locations, voltage conversion, FTZ regulation, and circuit diagram.

For the alignment method and repairing hints, refer to the original service manual.

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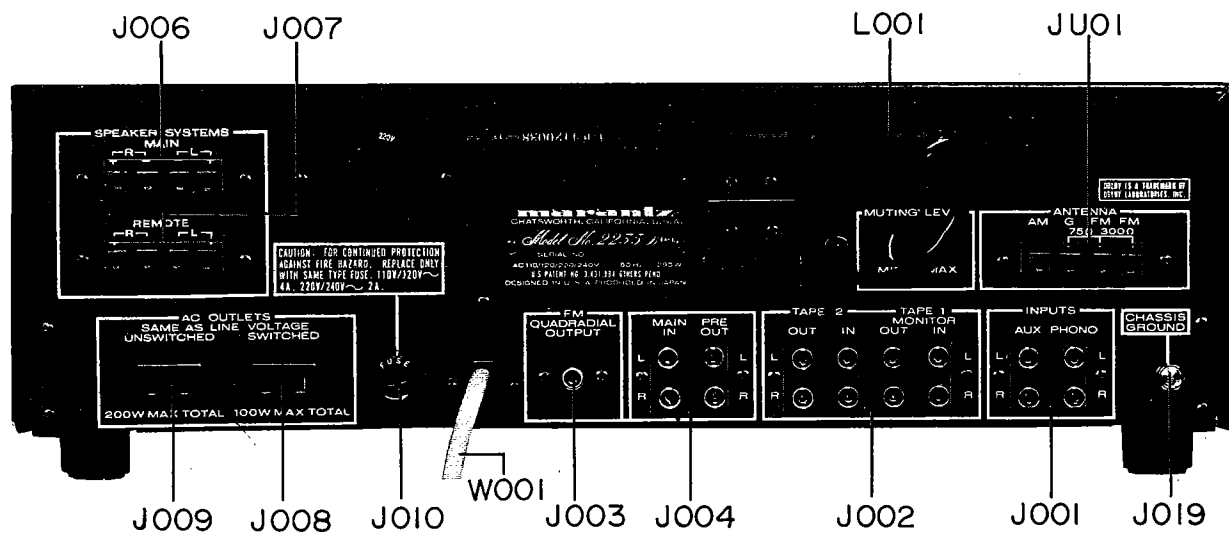


Figure 39. Rear Panel Adjustment and Component Locations

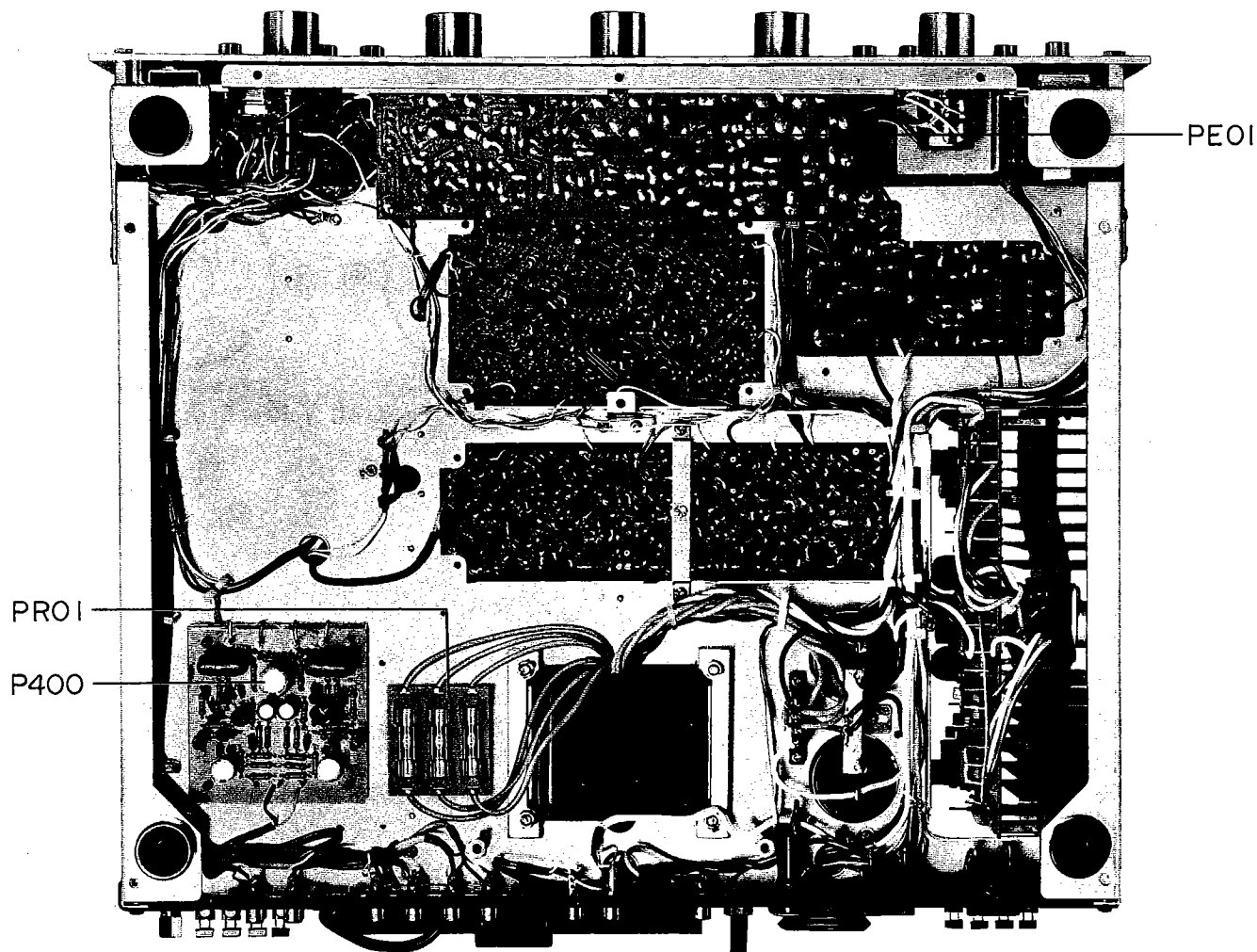


Figure 40. Main Chassis Component Locations (Bottom View)

VOLTAGE CONVERSION FOR EUROPEAN MODEL

The European version of the Model 2235B is equipped with a universal power transformer that may be adjusted to operate at 110V, 120V, 220V, or 240V AC at 50 to 60 Hz.

To convert the unit to a different power source voltage, reposition conversion plug as shown in the illustration below.

CAUTION: DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE

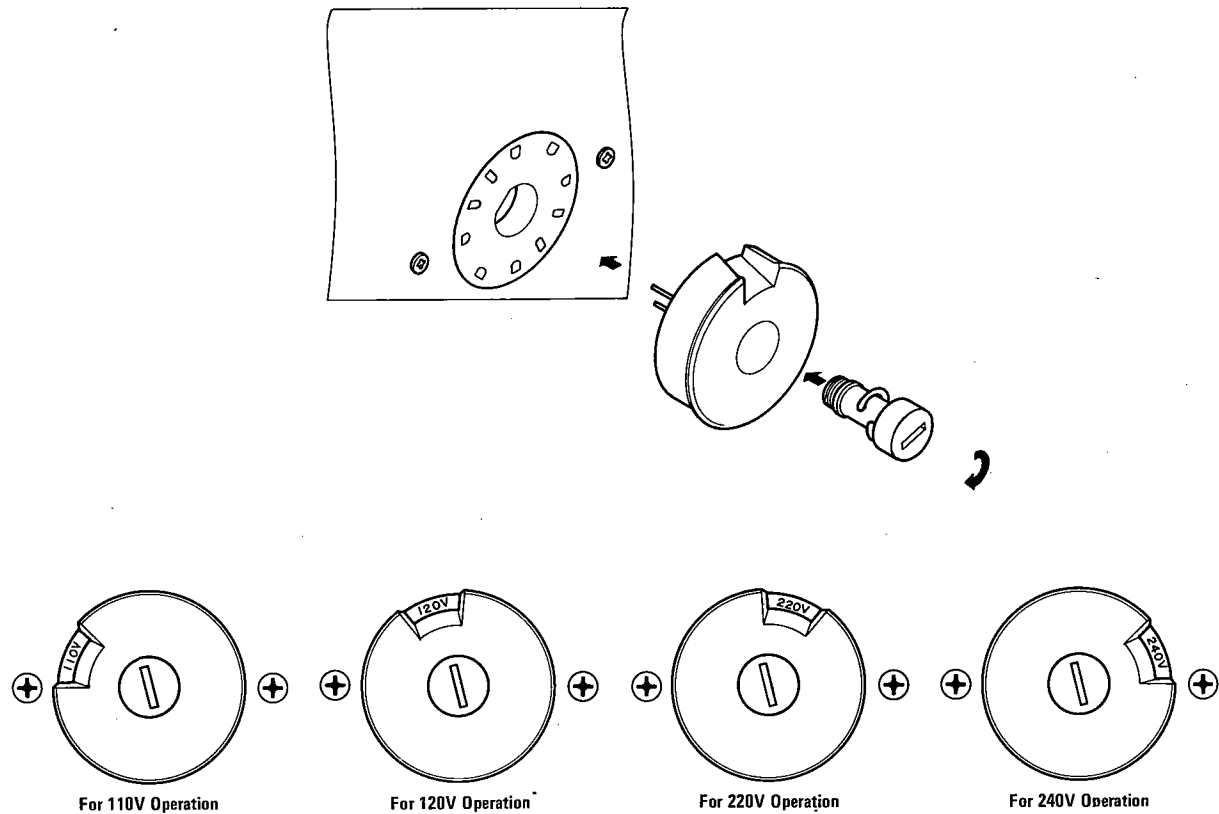


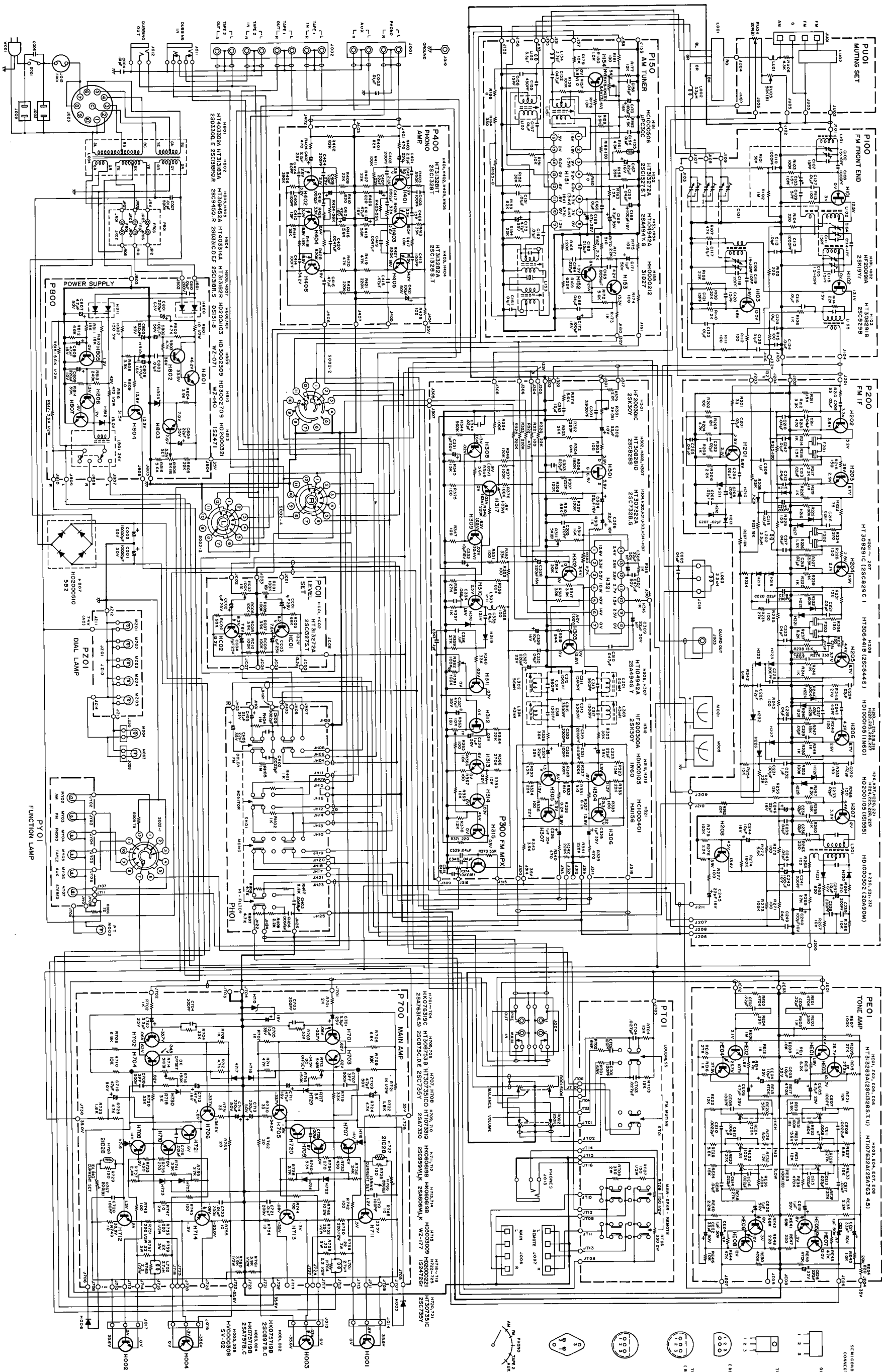
Figure 41. Voltage Conversion Chart

FTZ REGULATION

Instruction for the use in the range other than specified in FTZ codes

Achtung für die Leute, die in dem Gebiet wohnen, wo die FTZ-Bestimmungen vorherrschend sind.

Sollte das Gerät auch für Frequenzen ausserhalb des in den FTZ-Bestimmungen angegebenen Bereiches empfangsbereit sein, bitten wir, den Bereich durch Nachstellen des Kernes in der Oszillatorschule (in der Abbildung mit "FTZ" gekennzeichnet) so zu korrigieren, dass er den Bestimmungen entspricht.



MODEL 2235B NOTE: This circuit diagram applied to units manufactured for the European Market.

Figure 42. Circuit Diagram

TECHNICAL SPECIFICATIONS

AMPLIFIER SECTION

Rated Power Output	35 Watts per channel, continuous average power, both channels driven.
Power Band	20 Hz to 20 kHz
Total Harmonic Distortion	0.25%
Load Impedance	8 ohms
Intermodulation Distortion at rated power	0.5%
Damping Factor	45
Frequency Response	20 Hz to 20 kHz ± 1.0 dB

PREAMPLIFIER SECTION

Phono:	96 dB
Dynamic Range	96 dB

Note: Dynamic Range is the ratio in dB of the phono input overload to equivalent input noise.

Equivalent Input Noise	1.5 μ V
Input Overload	100 mV
Sensitivities (for rated power output)	
Phono	1.8 mV
Tape	180 mV
Main In	1.0 V
Frequency Response (phono)	30 Hz to 15 kHz ± 1.0 dB
Input Impedances	
Phono	47 k ohms
Aux or Tape	100 k ohms
Main In	30 ohms
Tape Output Level	775 mV
Ref.: 7.75 mV at phono input	
Signal to Noise Ratio	
Aux Input	80 dB
Phono Input	65 dB
Tone Controls	
Bass: 50 Hz	± 10 dB
Mid: 700 Hz	± 6 dB
Treble: 15 kHz	± 10 dB
Sensitivity (DIN)	2.1 μ V

FM TUNER SECTION

Selectivity (alternate carrier)	65 dB
Quieting Slope	
RF Input for 30 dB Quieting	1.9 μ V
Quieting at 5 μ V RF Input	52 dB
Quieting at 10 μ V RF Input	58 dB
Quieting at 50 μ V RF Input	68 dB
Total Harmonic Distortion	
Mono:	0.3%
Stereo:	0.5%
Capture Ratio	1.5 dB
Stereo Separation at 1 kHz	40 dB
Spurious Rejection	95 dB
Image Rejection	70 dB
IF Rejection	90 dB
AM Suppression	50 dB

AM TUNER SECTION

Sensitivity	20 μ V
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GENERAL

Power Requirements	220 V \sim , 50/60 Hz
Power Consumption at rated output, both channels operation	180 Watts
Idling Power (Volume Control at zero)	30 Watts
Dimensions:	
Panel Width	440 mm
Panel Height	137 mm
Depth	356 mm
Weight:	
Unit alone	10.5 kg
Packed for shipment	13.5 kg





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