

SERVICE MANUAL 2252B



marantz

model 2252B

Stereophonic Receiver

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1. INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for Marantz Model 2252B Stereophonic Receiver.

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

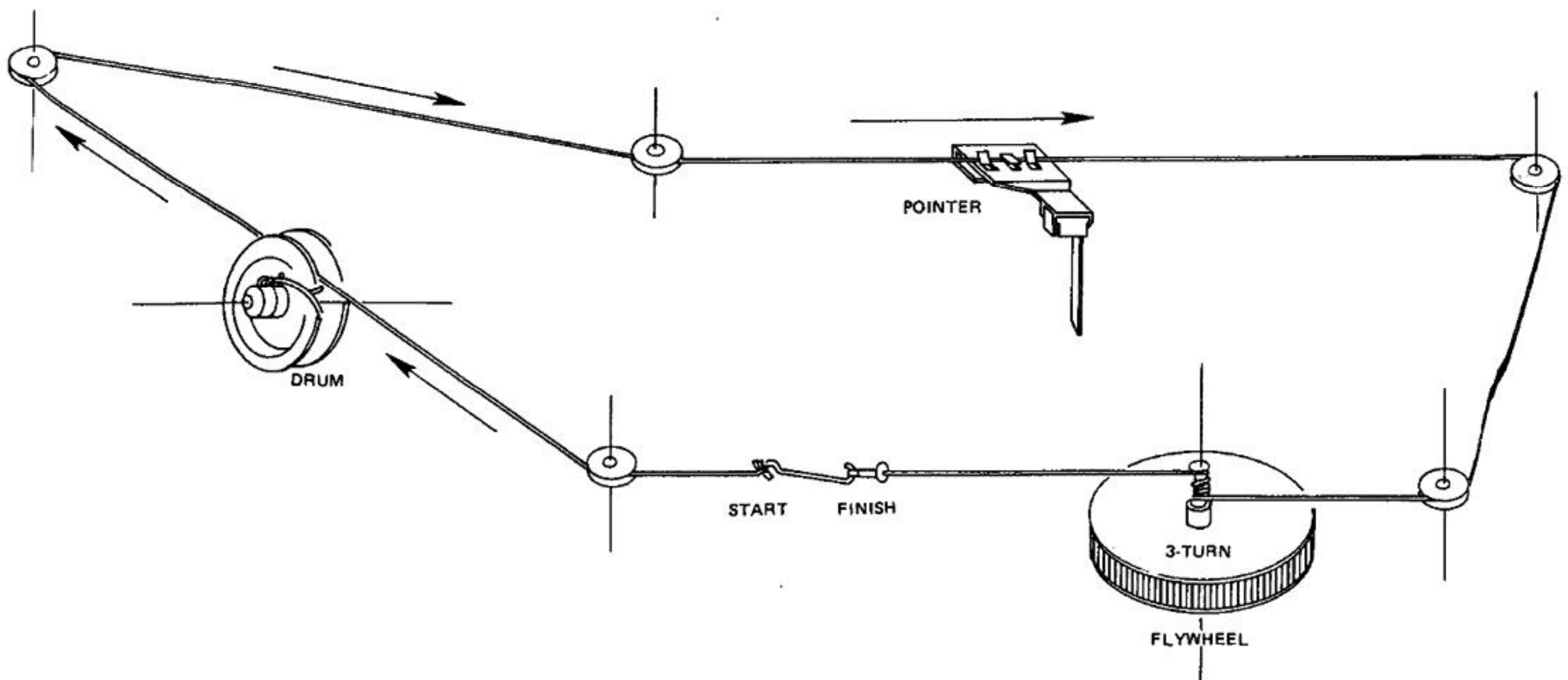
The parts list furnishes information by which replacement parts may be ordered from the Marantz Company. A simple description is included for parts which can usually be obtained through local suppliers.

2. SERVICE NOTES

As can be seen from the circuit diagram, the chassis of Model 2252B consists of the following units. Each unit mounted on a printed circuit board is described within the square enclosed by a bold dotted line on the circuit diagram.

1. FM Front End mounted on P.W.B. P 100
2. FM and AM Tuner mounted on P.W.B. P 200
3. EQ Amplifier mounted on P.W.B. P 400
4. Tone Amplifier mounted on P.W.B. PE01
5. Pushswitch Assy. mounted on P.W.B. PS 01
6. Power Amplifier
and Power Supply mounted on P.W.B. P 700
7. Dial Lamp Unit mounted on P.W.B. PZ01
8. Function Lamp mounted on P.W.B. PY01
9. DLB-1 Socket mounted on P.W.B. PK01

Figure 1. Dial Stringing



3. TEST EQUIPMENT REQUIRED FOR SERVICING

Table 1 lists the test equipment required for servicing the Model 2252B Receiver.

Item	Manufacturer and Model No.	Use
AM Signal Generator		Signal source for AM alignment
Test Loop		Use with AM Signal Generator
FM Signal Generator MPX Signal Generator	Sound Technology Model 1000A	Signal source for FM alignment Stereo separation alignment and trouble shooting
Distortion Analyzer		Distortion measurements
Audio Oscillator AC VTVM	Sound Technology Model 1700A	Sinewave and squarewave signal source voltage measurements (AC)
Oscilloscope	Tektronix Model T932 Philips Model 3232	Waveform analysis and trouble shooting and ASO alignment
Frequency Counter	Fluke Model 1900A	MPX Oscillator adjustment (VCO)
Circuit Tester		Trouble shooting
DC VTVM	Fluke Model 8000 "Digital" Simpson Model 313, Triplet Model 801	Voltage measurements (DC)
AC Wattmeter	Simpson Model 1379	Monitors primary power to amplifier
AC Ammeter	Commercial Grade (1~10A)	Monitors amplifier output under short circuit condition
Line Voltmeter	Simpson Model 1359	Monitors potential of primary power to amplifier
Variable Autotransformer	Superior Electronic Co., Powerstat Model 116B-10A	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, $\pm 0.5\%$, 100W)	Commercial Grade	Provides 8-ohm load for amplifier output termination
Output Load (4 ohms, $\pm 0.5\%$, 100W)	Commercial Grade	Provides 4-ohm load for amplifier output termination

4. AM ALIGNMENT PROCEDURE

4.1 AM IF ALIGNMENT

1. Connect a sweep generator to the L153 and an alignment scope to the J233.
2. Rotate each core of IF transformers L155 and L156 for the maximum height and flat top symmetrical response.

4.2 AM FREQUENCY RANGE AND TRACKING ALIGNMENT

1. Set AM signal generator to 515 kHz. Turn the tuning capacitor fully closed (place the tuning pointer at the low end) and adjust the oscillator coil L154 for maximum audio output.
2. Set the signal generator to 1650 kHz. 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 steps 1 and 2 until no further adjustment is necessary.
4. Set the generator to 600 kHz, tune the receiver to the same frequency and adjust a slug core of AM ferrite-rod antenna L001 for maximum output.
5. Set the generator to 1400 kHz and tune the receiver to the same frequency and adjust the trimming capacitor on the antenna tuning capacitor for maximum output.
6. Repeat procedures 4 and 5 until no further adjustment is necessary.

NOTE

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

5. FM ALIGNMENT PROCEDURE

5.1 FM FREQUENCY RANGE AND TRACKING ALIGNMENT

1. Connect an FM signal generator to the FM antenna terminals and oscilloscope and an audio distortion analyzer to the TAPE OUT jacks on the rear panel.
2. Set the generator to 87.4 MHz and provide about 3 to 5 μ V. Place the tuning pointer at the low frequency end by rotating the tuning knob and adjust the pitch of oscillator coil L107 to obtain maximum audio output.
3. Set the generator to 109 MHz and provide about 3 to 5 μ V. Rotate the tuning knob and place the tuning pointer at the high frequency end and adjust the trimming capacitor C121 for maximum output.
4. Repeat steps 2 and 3 until no further adjustment is necessary.
5. Set the generator to 90 MHz 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 pitch of antenna coil L102 and RF coil L104 for maximum output.
6. Set the generator to 106 MHz and tune the receiver to the same frequency. Decrease the signal generator output until the audio output level decreases with the decreasing generator output. Adjust the trimming capacitors of antenna and RF tuning circuits for maximum output.
7. Repeat steps 5 and 6 until no further adjustment is necessary.
8. Adjust the primary core (lower core) of discriminator transformer L202 so that the center tuning meter pointer indicates its center at no signal applied. Set the FM signal generator to 98 MHz and increase its output level 1 μ V and tune the receiver to the same frequency so that the center tuning meter pointer indicates its

center. Adjust the secondary core (upper core) of L202 for minimum distortion.

5.2 STEREO SEPARATION ALIGNMENT

1. Set the FM signal generator to provide 1 μ V at 98 MHz. Tune the receiver to the same frequency so that the center tuning meter pointer indicates its center. Then turn off the modulation of the generator, connect a frequency counter to test point J229 and adjust R301 so that the frequency counter may precisely read 76 kHz.
2. Modulate the generator with stereo composite signal consisting of only L or R channel (of course a pilot signal must be included).
3. Adjust the trimming resistor R317 for maximum and same separation in both channels.

5.3 MUTING THRESHOLD ADJUSTMENT

1. Set the FM signal generator output to provide 12.5 μ V (IHF) at 98 MHz and tune receiver to the same frequency. Adjust the trimming resistor R212 for the threshold level of 12.5 μ V. (During this adjustment turn the FM MUTING pushswitch "on".)

5.4 FM DOLBY LEVEL ADJUSTMENT

1. Set the FM signal generator to provide a 400 Hz, 50% modulated 98 MHz mono signal, at 1 μ V output. Precisely tune the receiver to 98 MHz.
2. Depress the FM 25 μ S pushswitch, and adjust R215 until the outputs of both channels are 580 mV.

6. POWER AMPLIFIER ADJUSTMENT

Connect a VTVM between R763(+) and R765(-) and adjust the trimming resistor R731 until the VTVM reads 24 mV DC. And next, connect a VTVM between J717 and J714(GROUND) and adjust the trimming resistor R711 until the VTVM reads 0 mV DC. Do over again. For the other channel, connect the VTVM between R764(+) and R766(-) and adjust the R732 for the same reading, and connect the VTVM between J718 and J714 and adjust the R712 for the same reading. Do over again. When adjusting a DC offset voltage, the switch of the SPEAKER SYSTEM-1 must be turned on.

7. POWER SUPPLY ADJUSTMENT

Connect a VTVM between J722(+) and J728(-) and adjust R787 until the VTVM reads 35.0 V under no signal condition.

● EUROPEAN MODEL ONLY

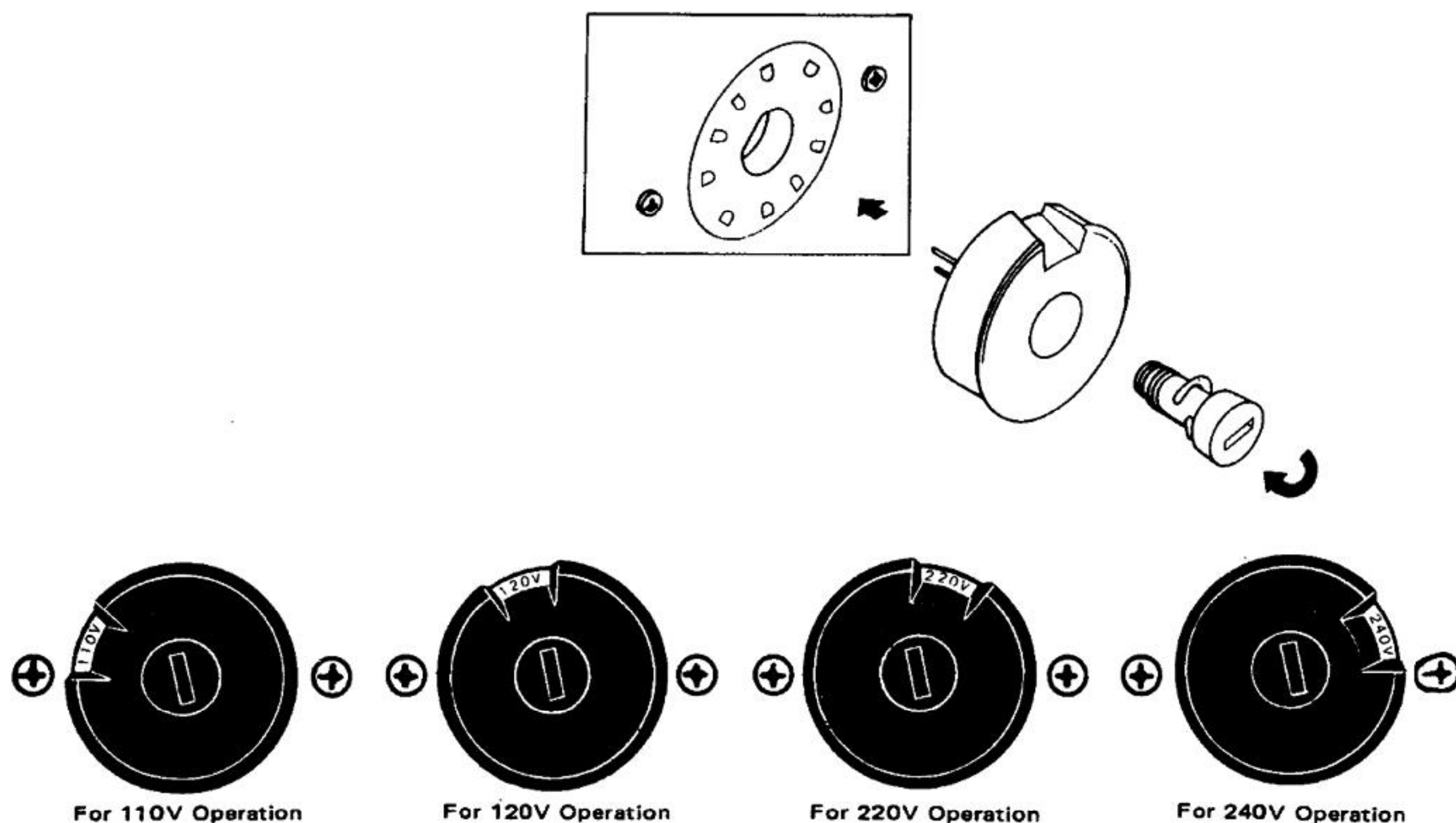
8. VOLTAGE CONVERSION

The European version of the Model 2252B is equipped with universal power transformer that may be adjusted to operate at 110 V, 120 V, 220 V or 240 V AC at 50 to 60 Hz. To convert the unit to a different power source voltage, reposition conversion plug as shown in Figure 2.

CAUTION

DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE.

Figure 2. Voltage Conversion Chart



9. FTZ REGULATION

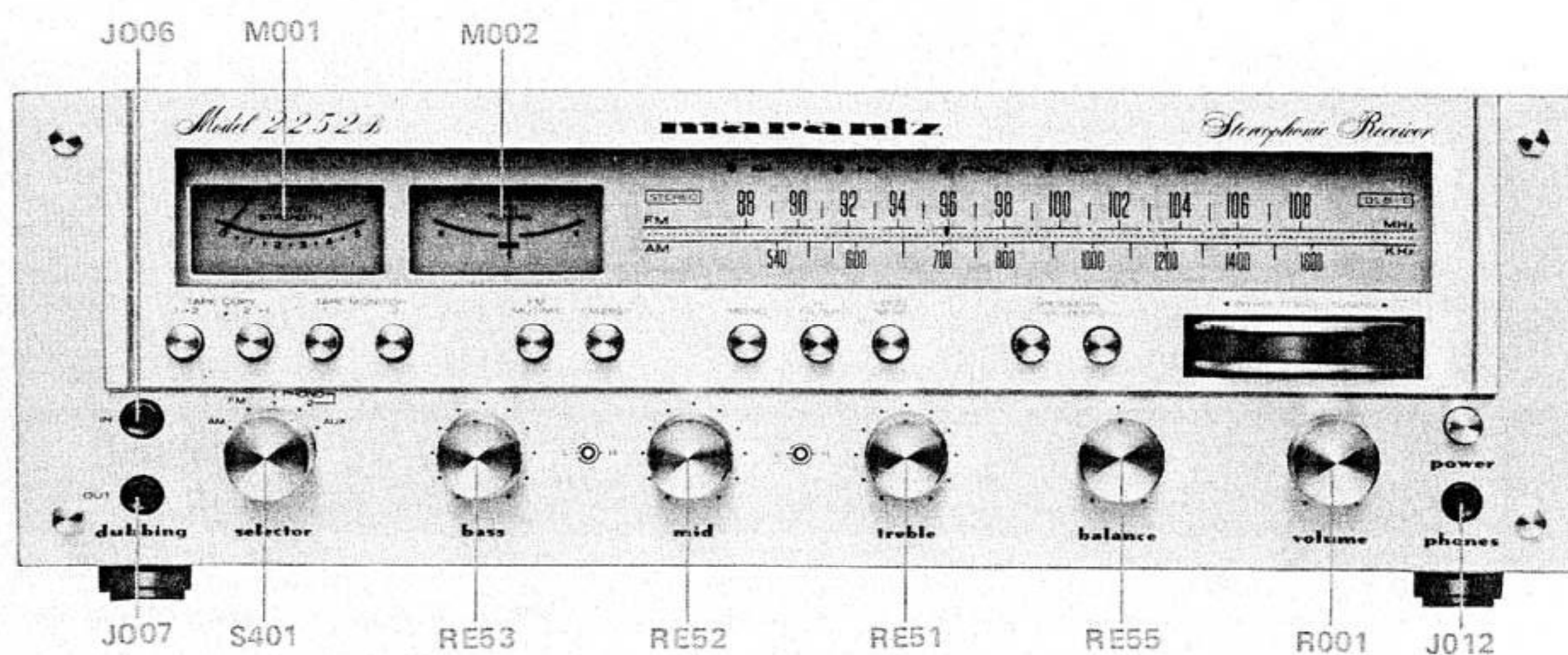
Instruction for the use
in the range other than specified in FTZ codes

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

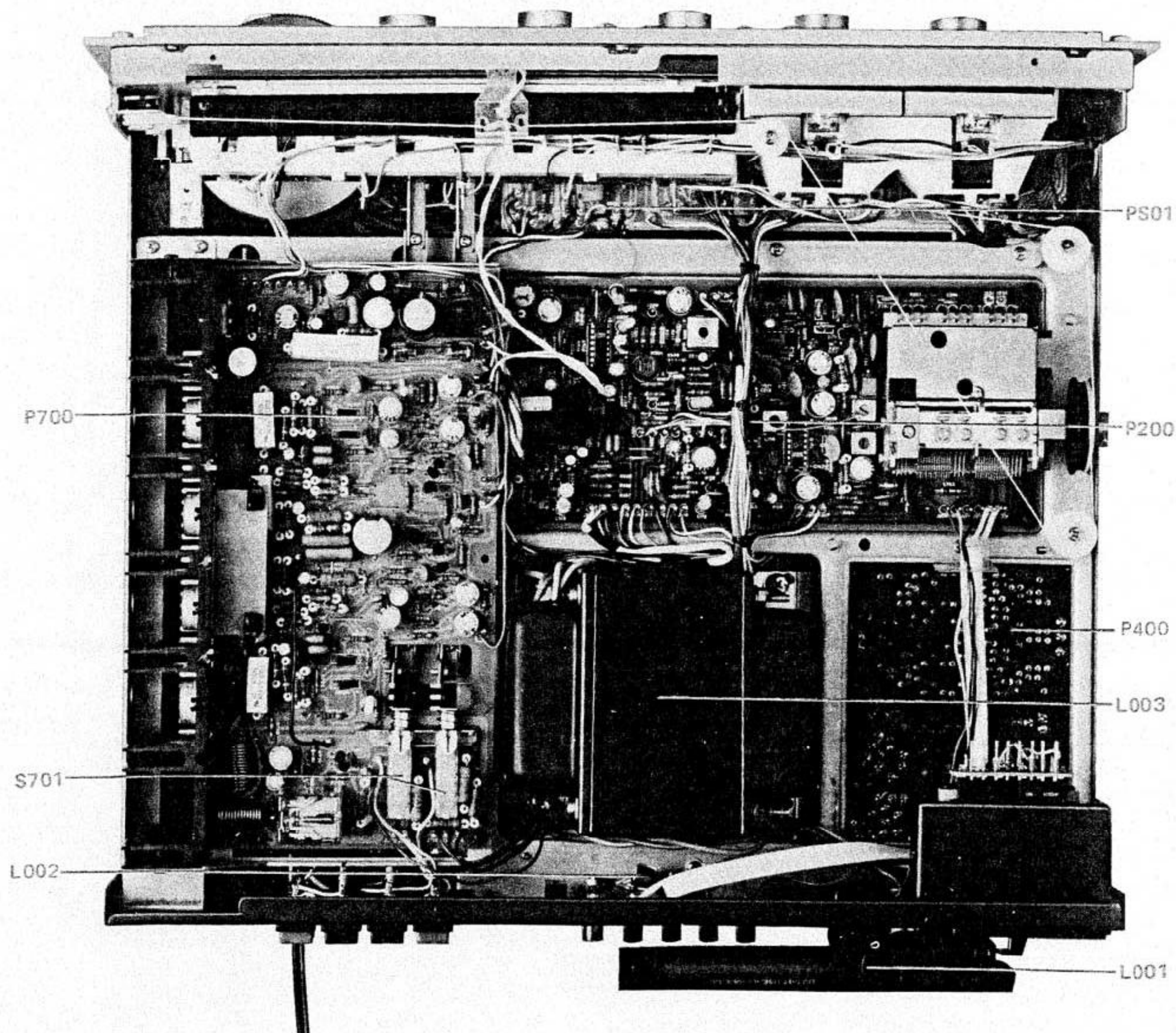
Sollte das Gerät auch für Frequenzen außerhalb des in den FTZ-Bestimmungen angegebenen Bereiches empfangsbereit sein, bitten wir, den Bereich durch Nachstellen des Kernes in der Oszillatorschleife (in der Abbildung mit „FTZ“ gekennzeichnet) so zu korrigieren, daß er den Bestimmungen entspricht.

10. MAJOR COMPONENT LOCATIONS

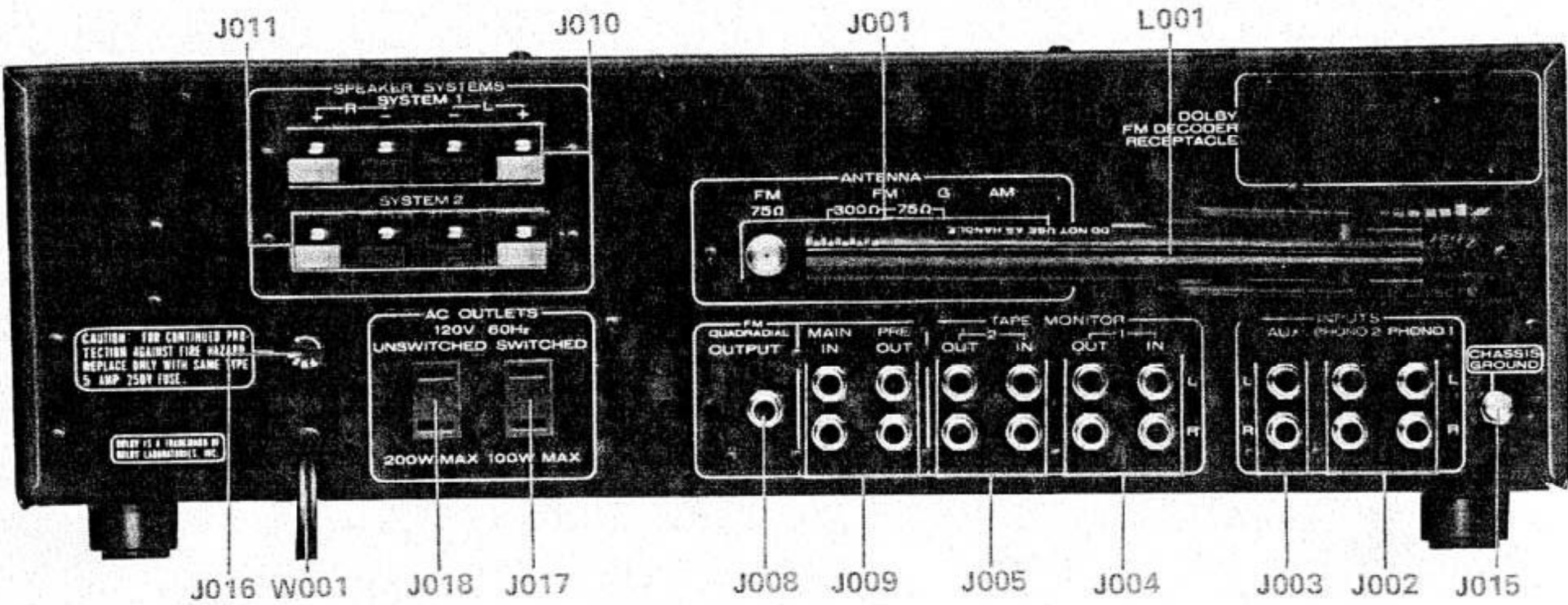
10.1 Front Panel Adjustment and Component Locations



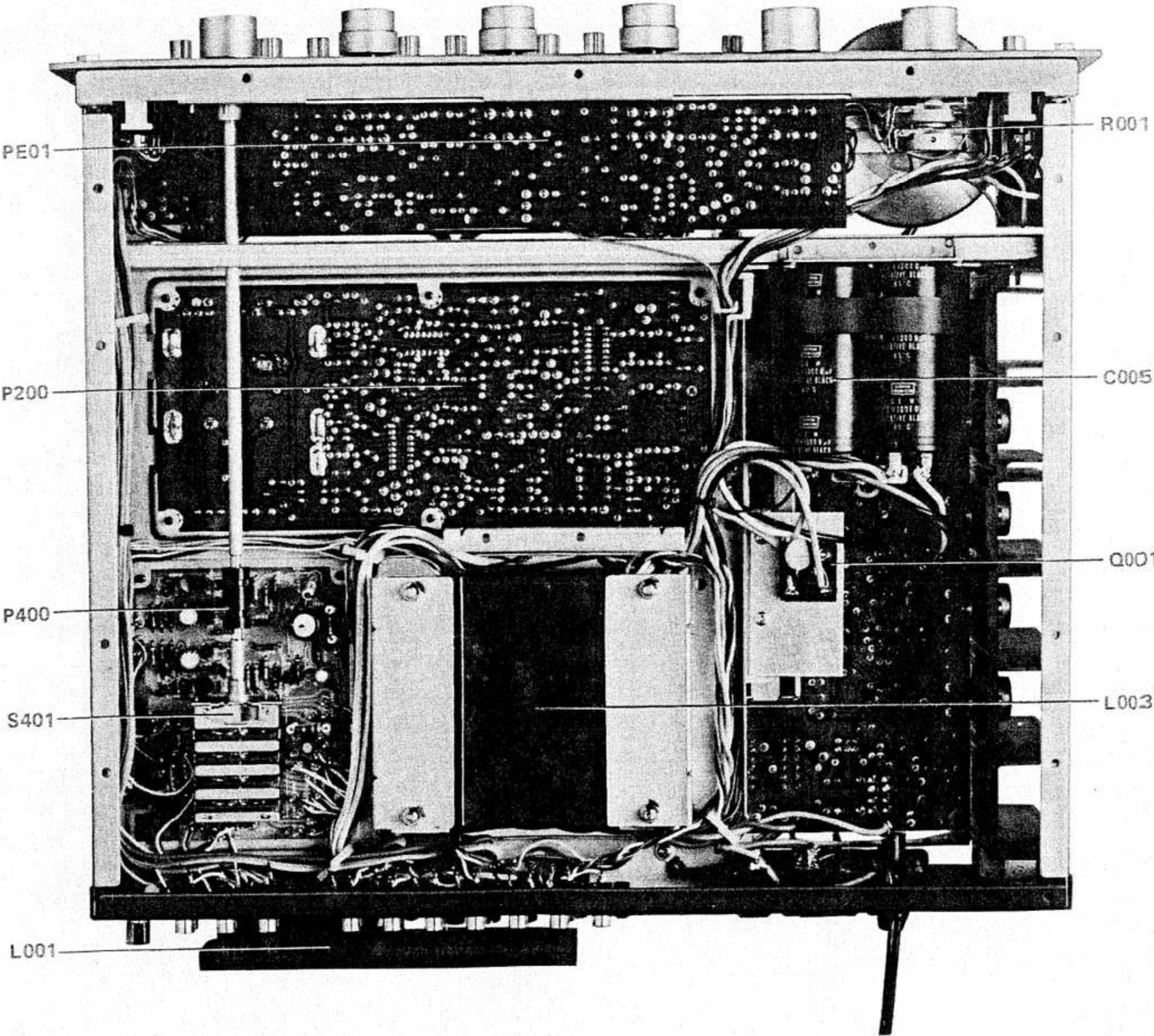
10.2 Main Chassis Component Locations (Top View)



10.3 Rear Panel Adjustment and Component Locations

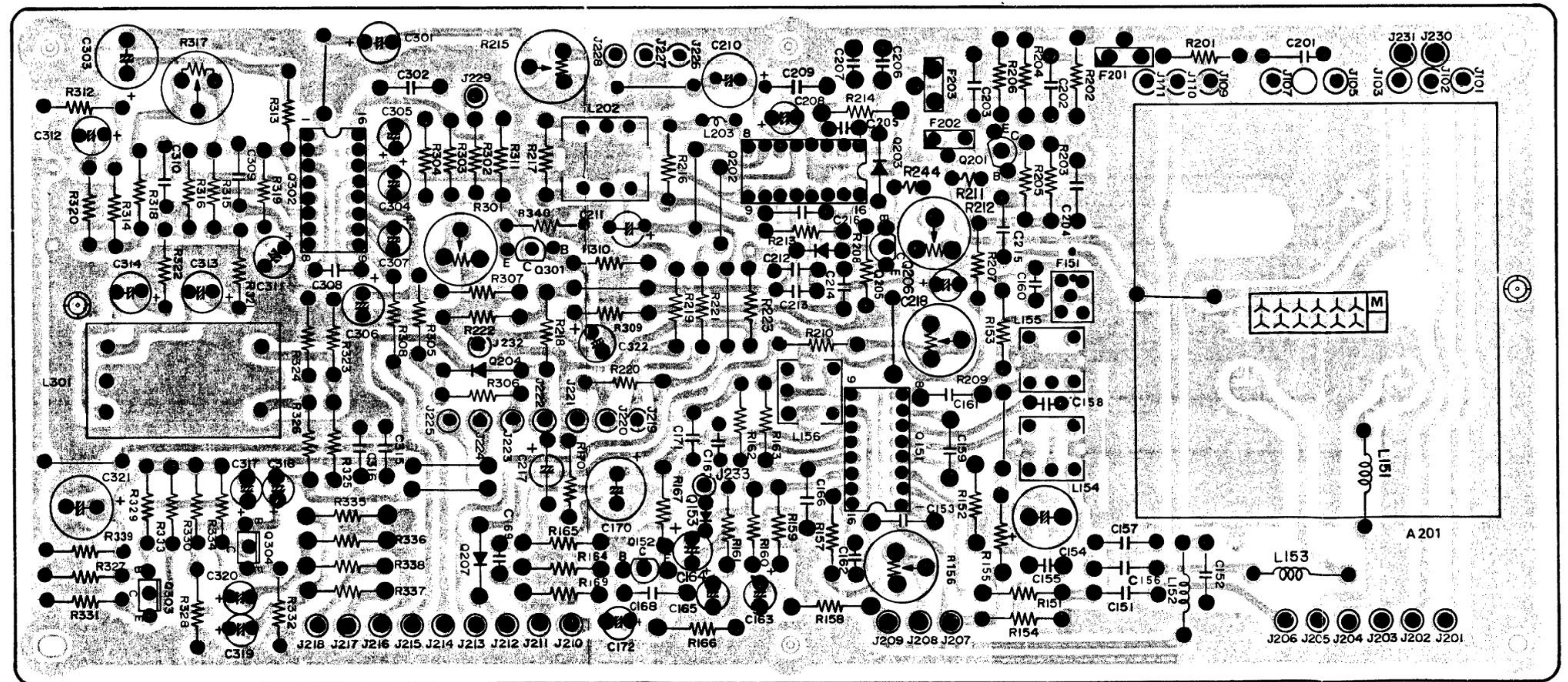
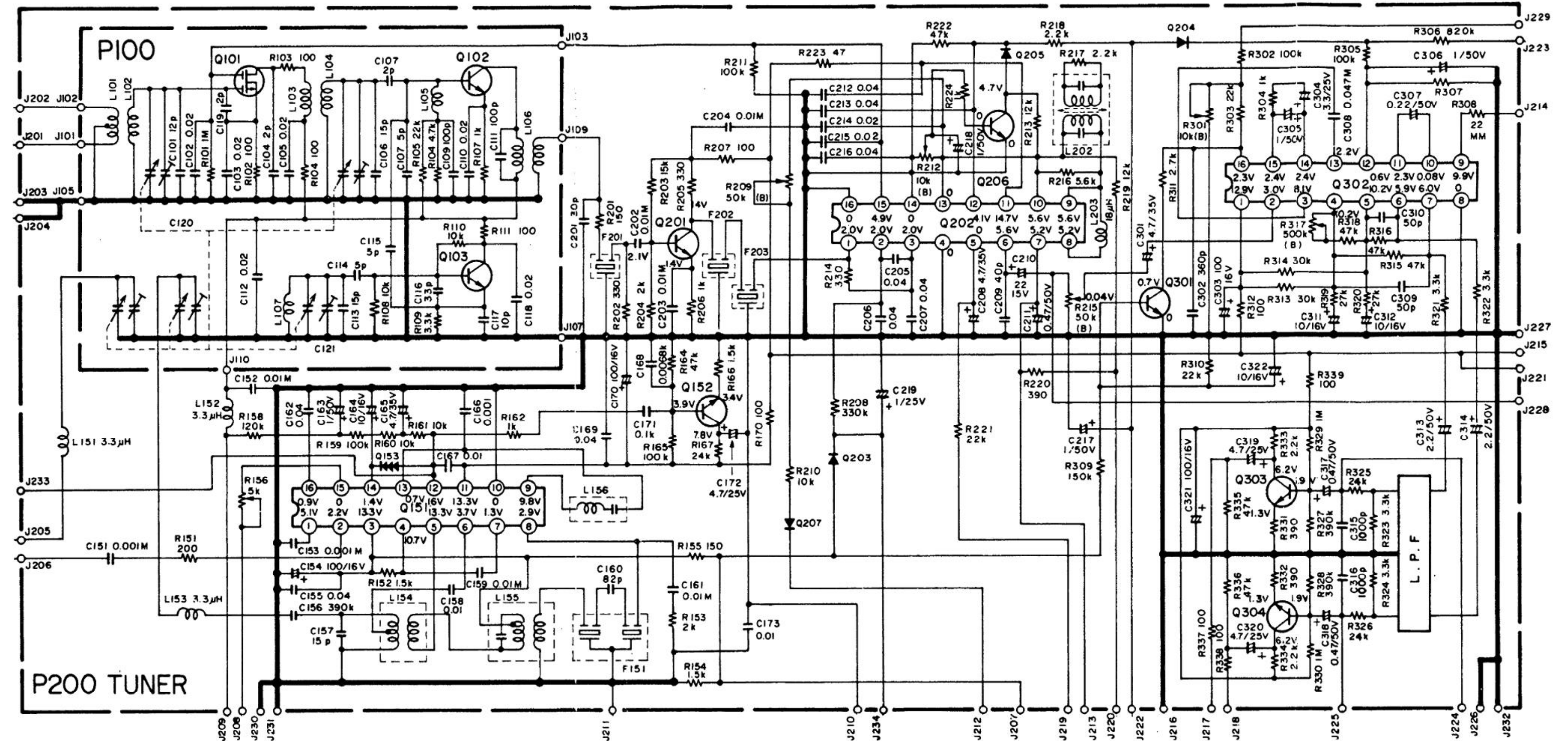


10.4 Main Chassis Component Locations (Bottom View)

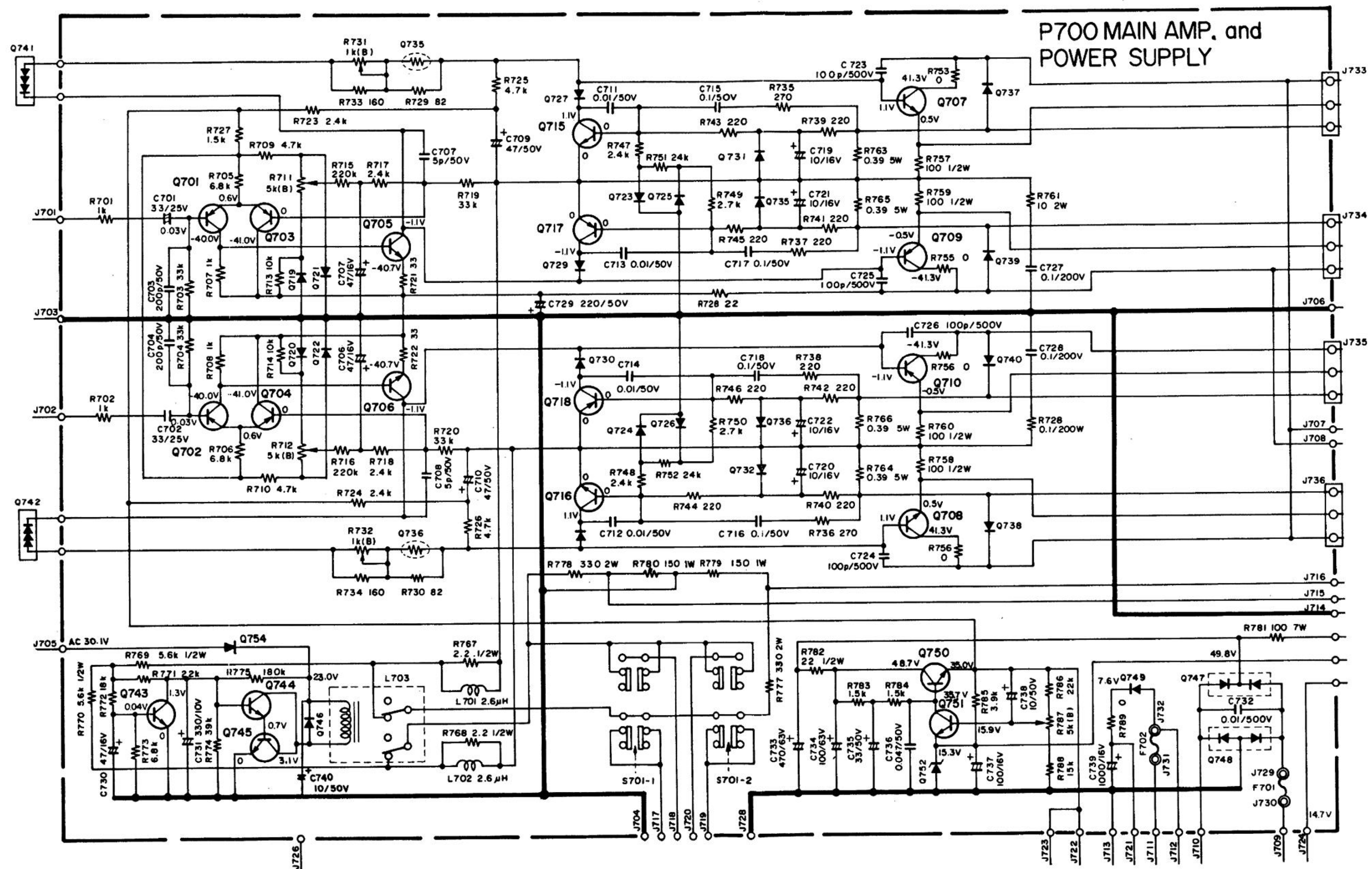


11. DIAGRAM AND COMPONENT LOCATIONS

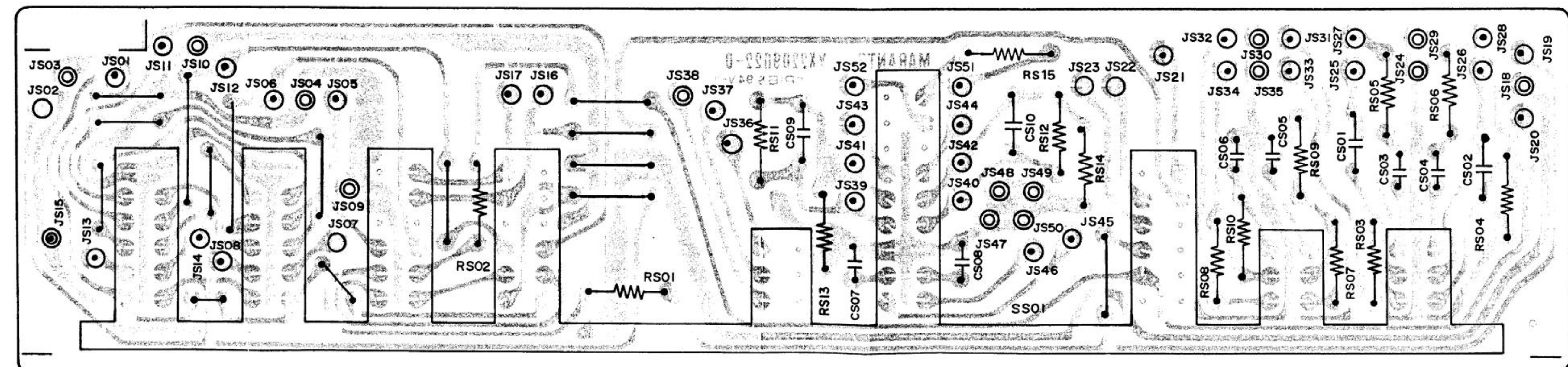
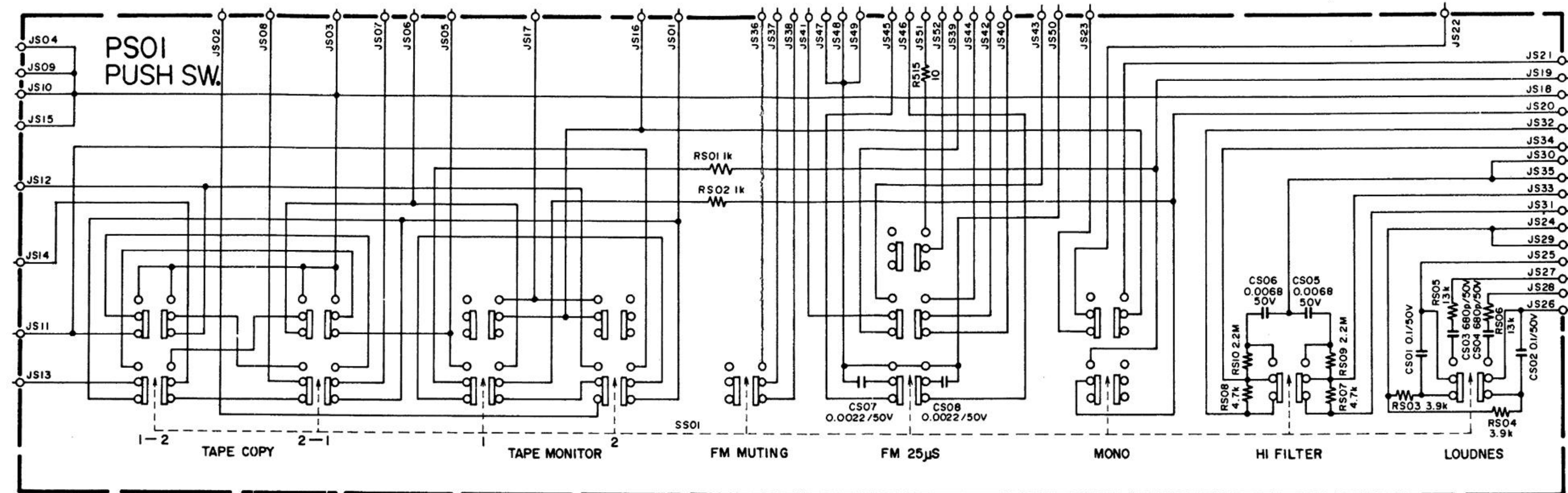
11.1 FM & AM Tuner Assembly (P200) Schematic Diagram and Component Locations



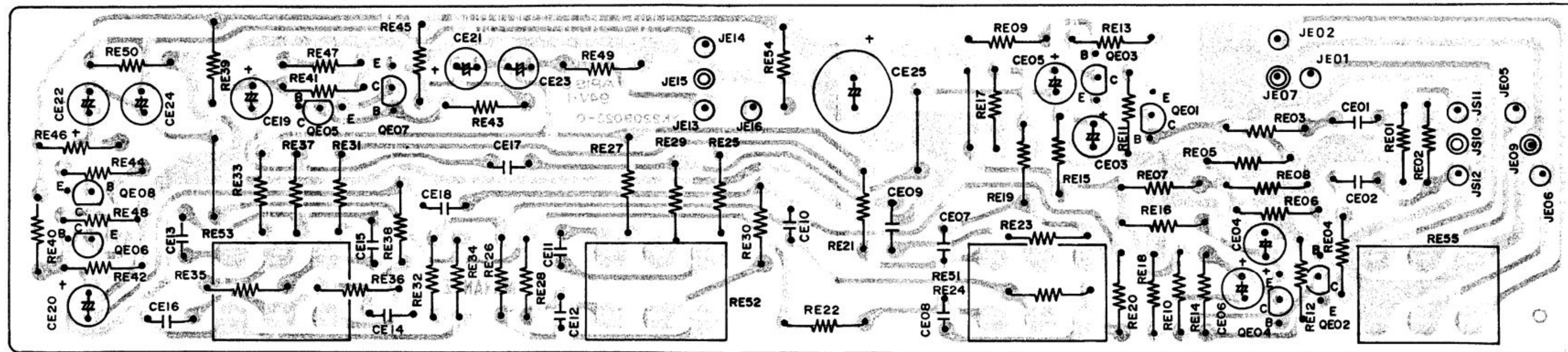
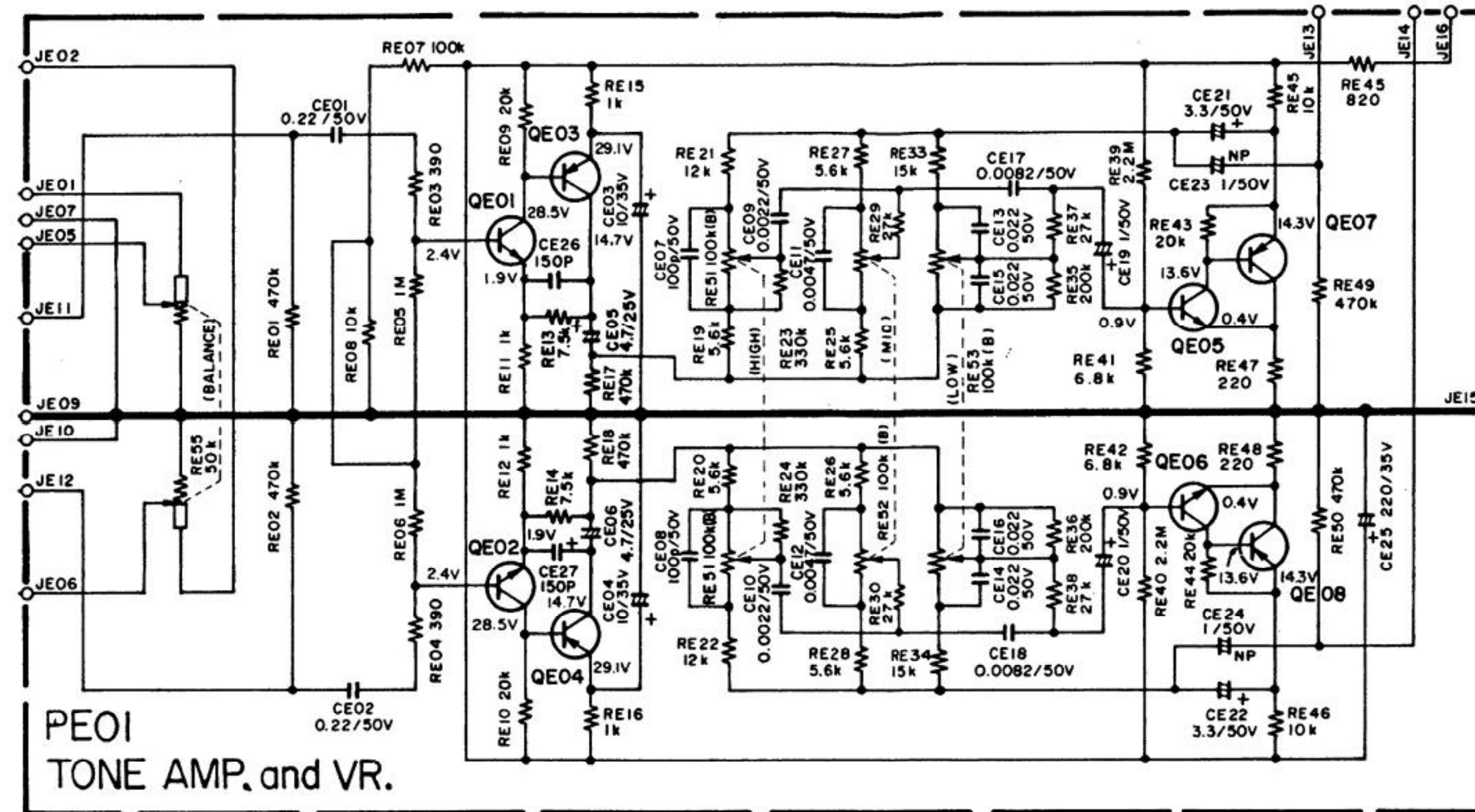
11.2 Main Amp. & Power Supply Assembly (P700) Schematic Diagram and Component Locations



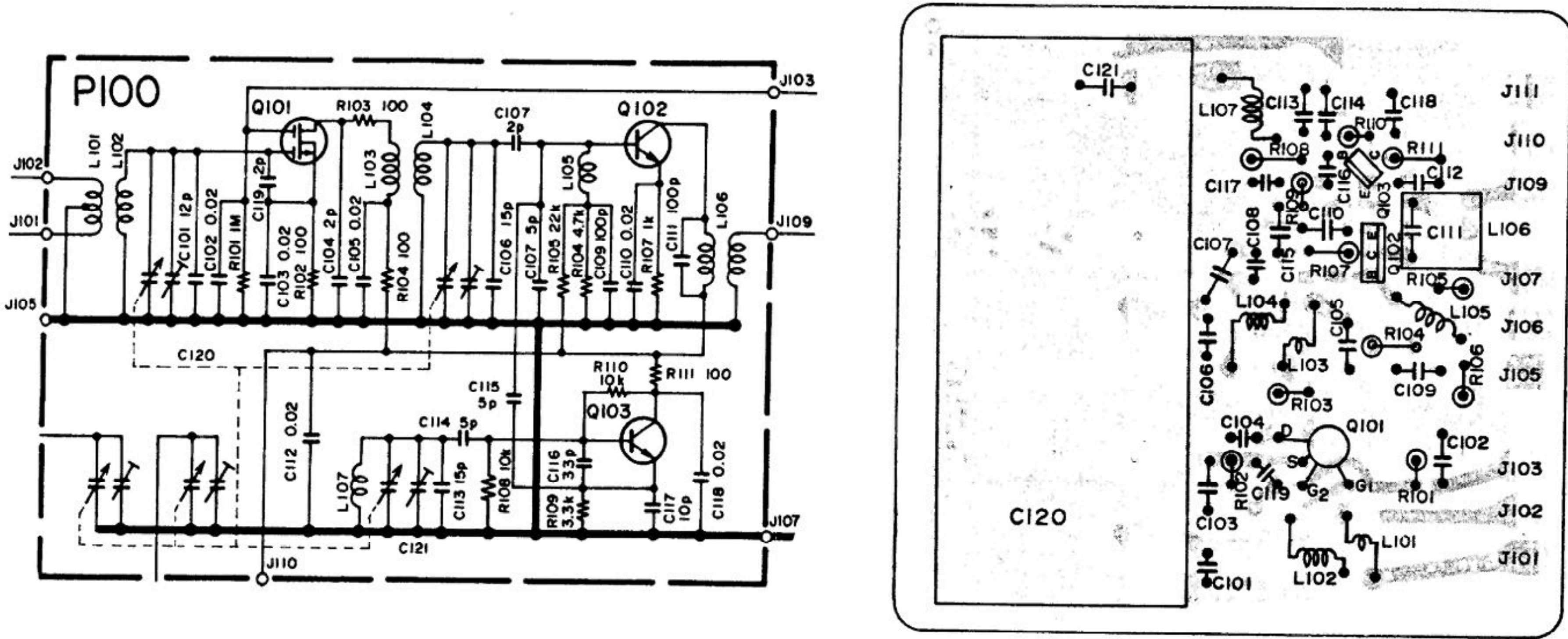
11.3 Pushswitch Assembly (PS01) Schematic Diagram and Component Locations



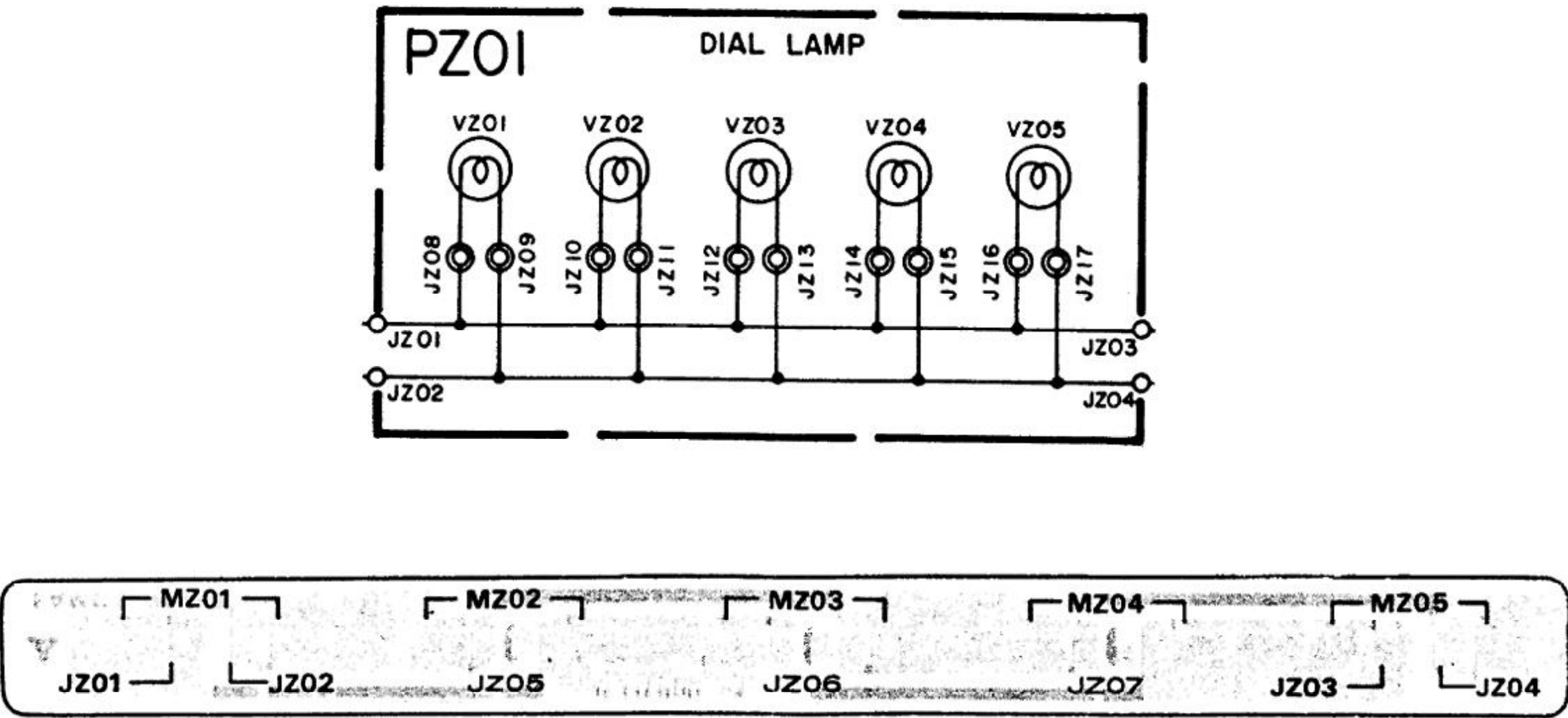
11.4 Tone Amp. Assembly (PE01) Schematic Diagram and Component Locations



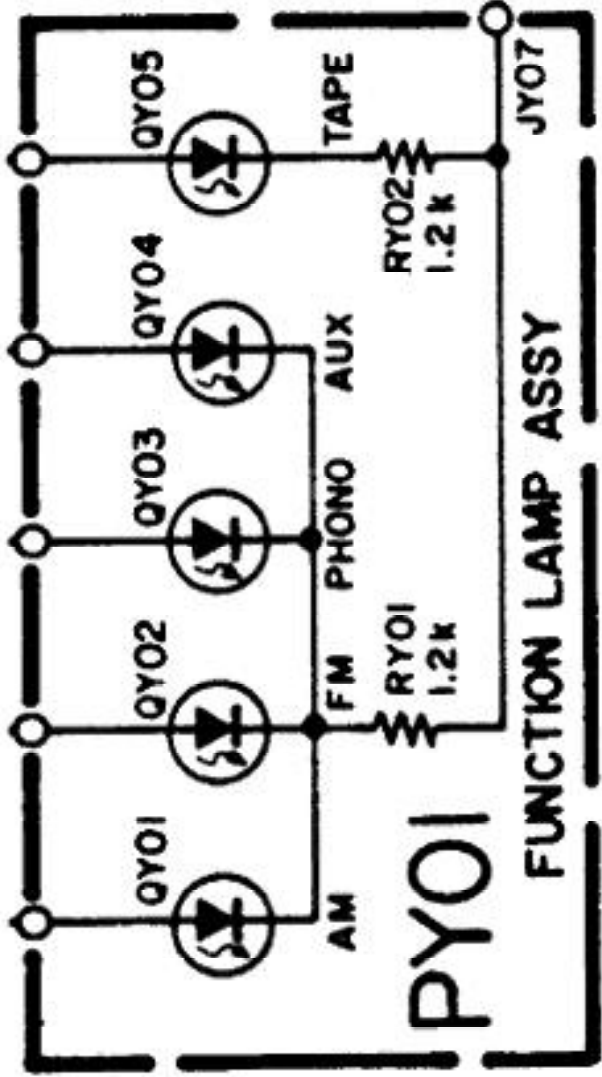
11.5 FM Front End Assembly (P100) Schematic Diagram and Component Locations



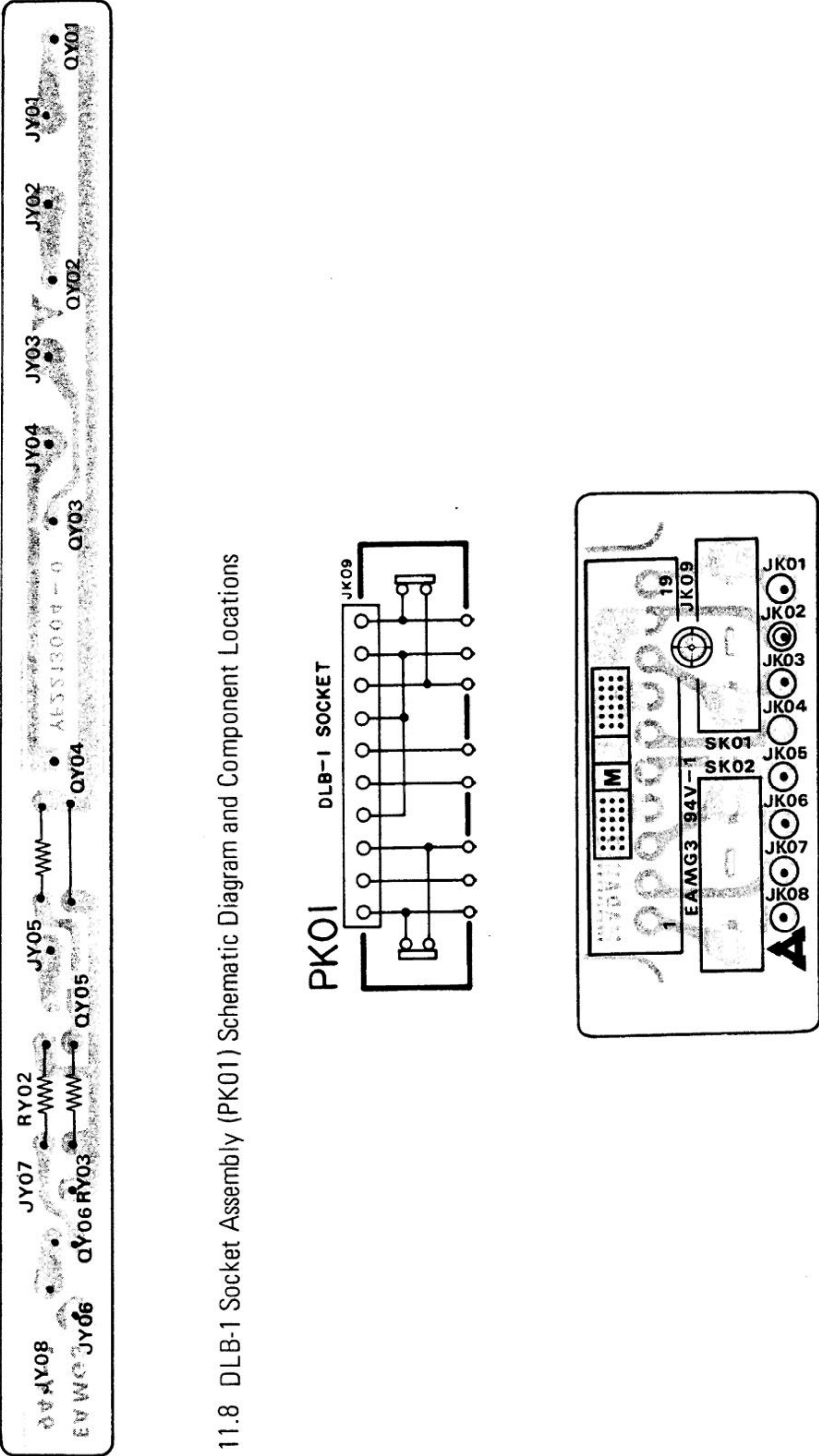
11.6 Dial Lamp Assembly (PZ01) Schematic Diagram and Component Locations



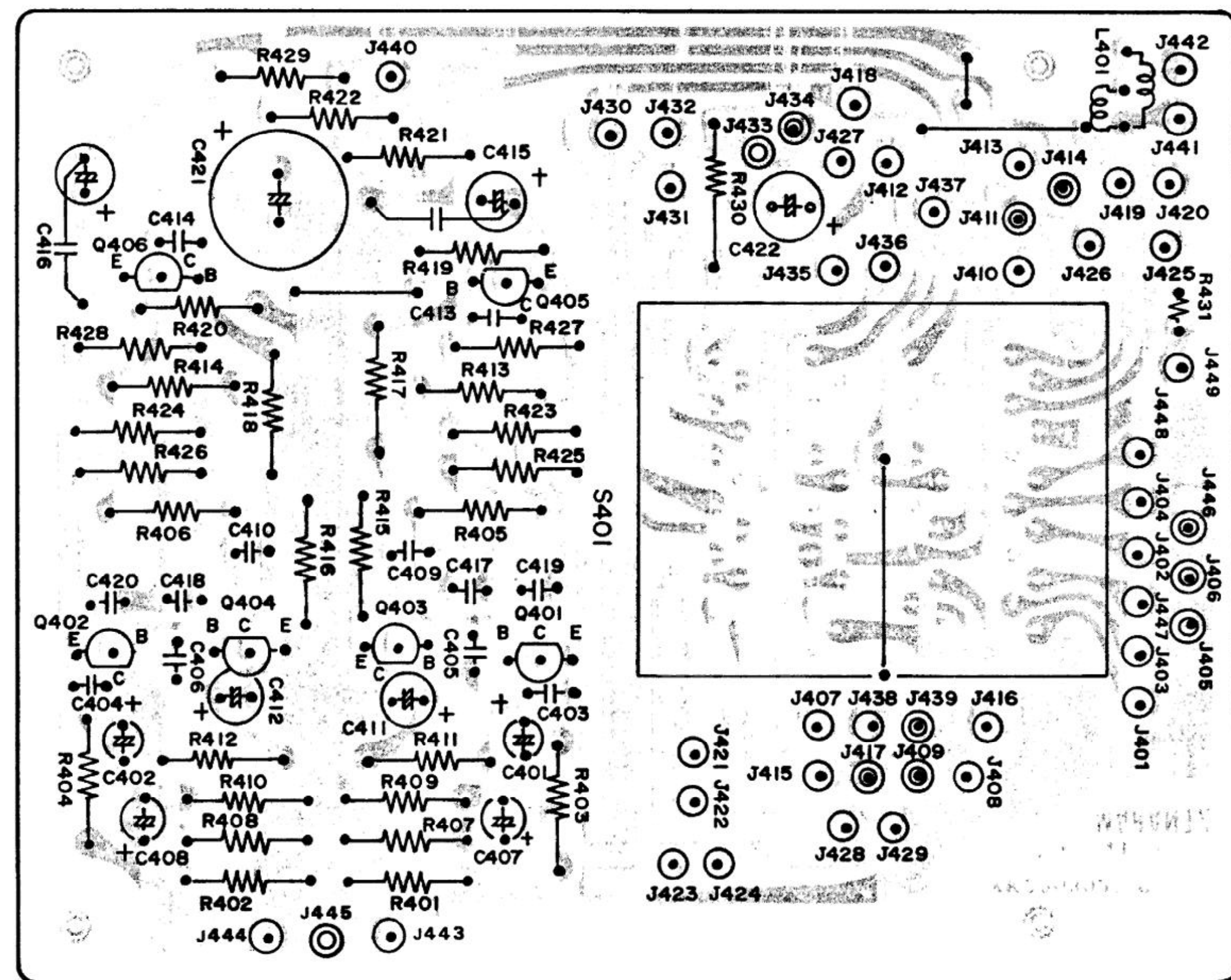
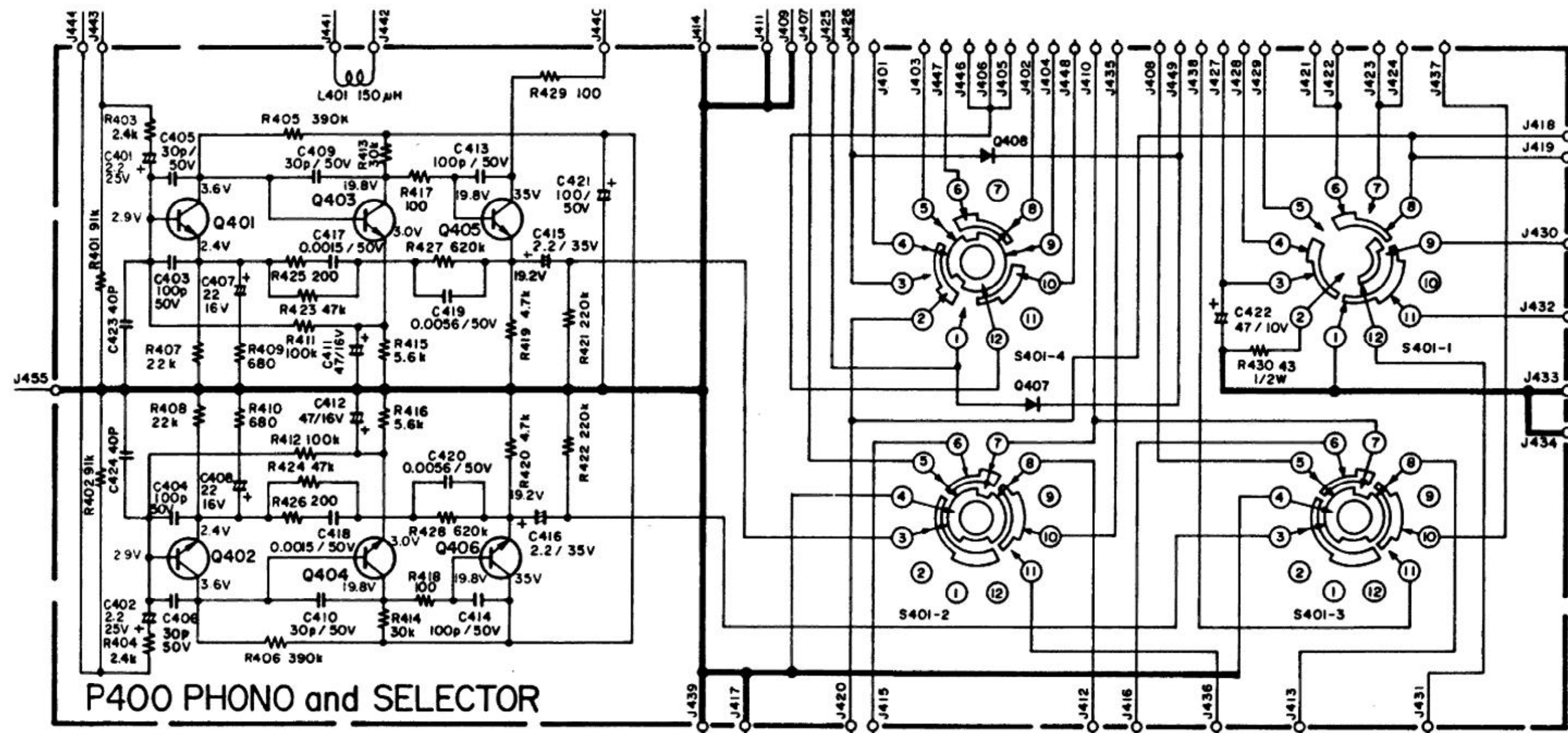
11.7 Function Lamp Assembly (PY01) Schematic Diagram and Component Locations



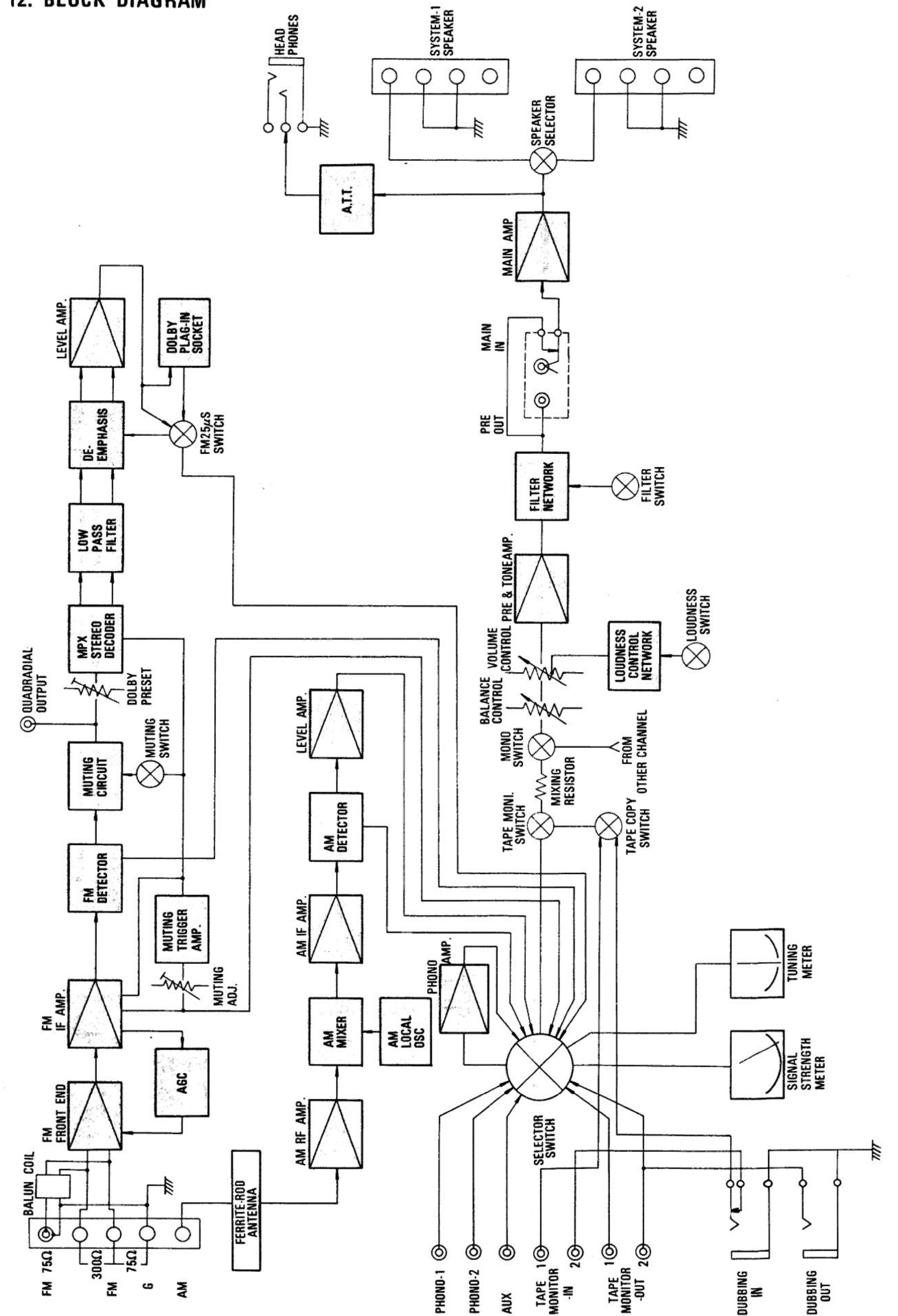
11.8 DLB-1 Socket Assembly (PK01) Schematic Diagram and Component Locations



11.9 EQ Amp. Assembly (P400) Schematic Diagram and Component Locations

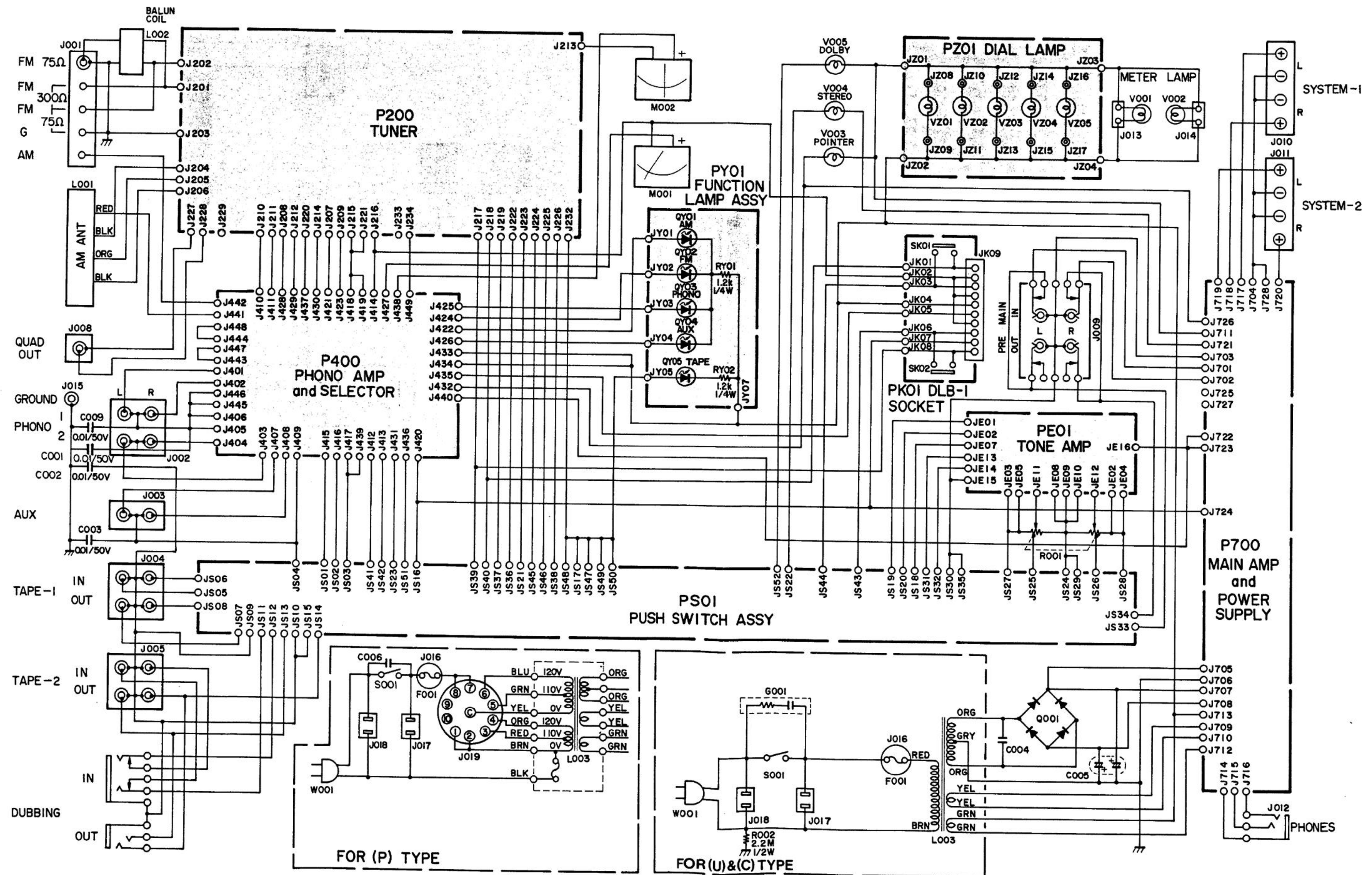


12. BLOCK DIAGRAM

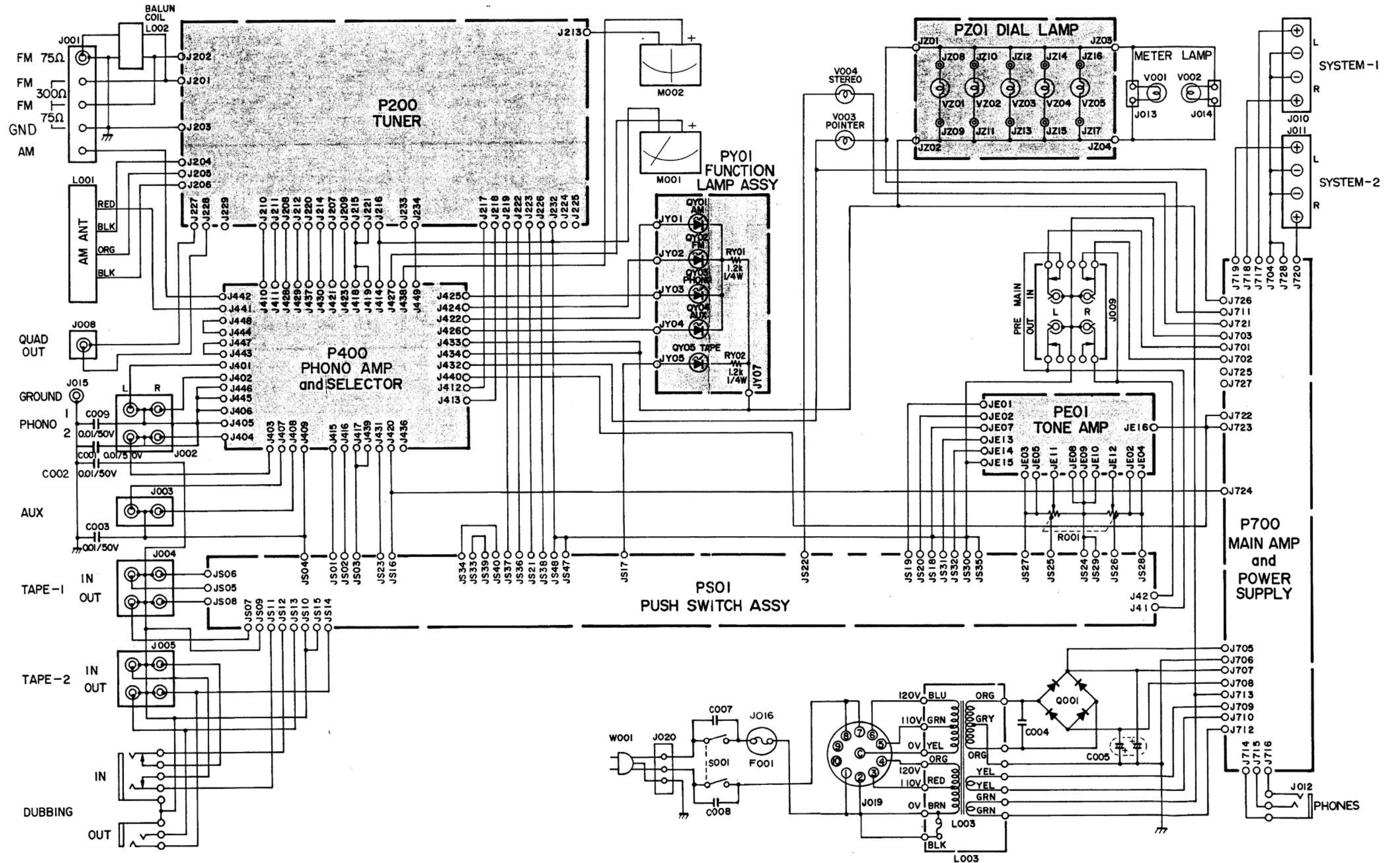


13. CONNECTION DIAGRAMS

13.1 For U.S.A. & Canadian Models



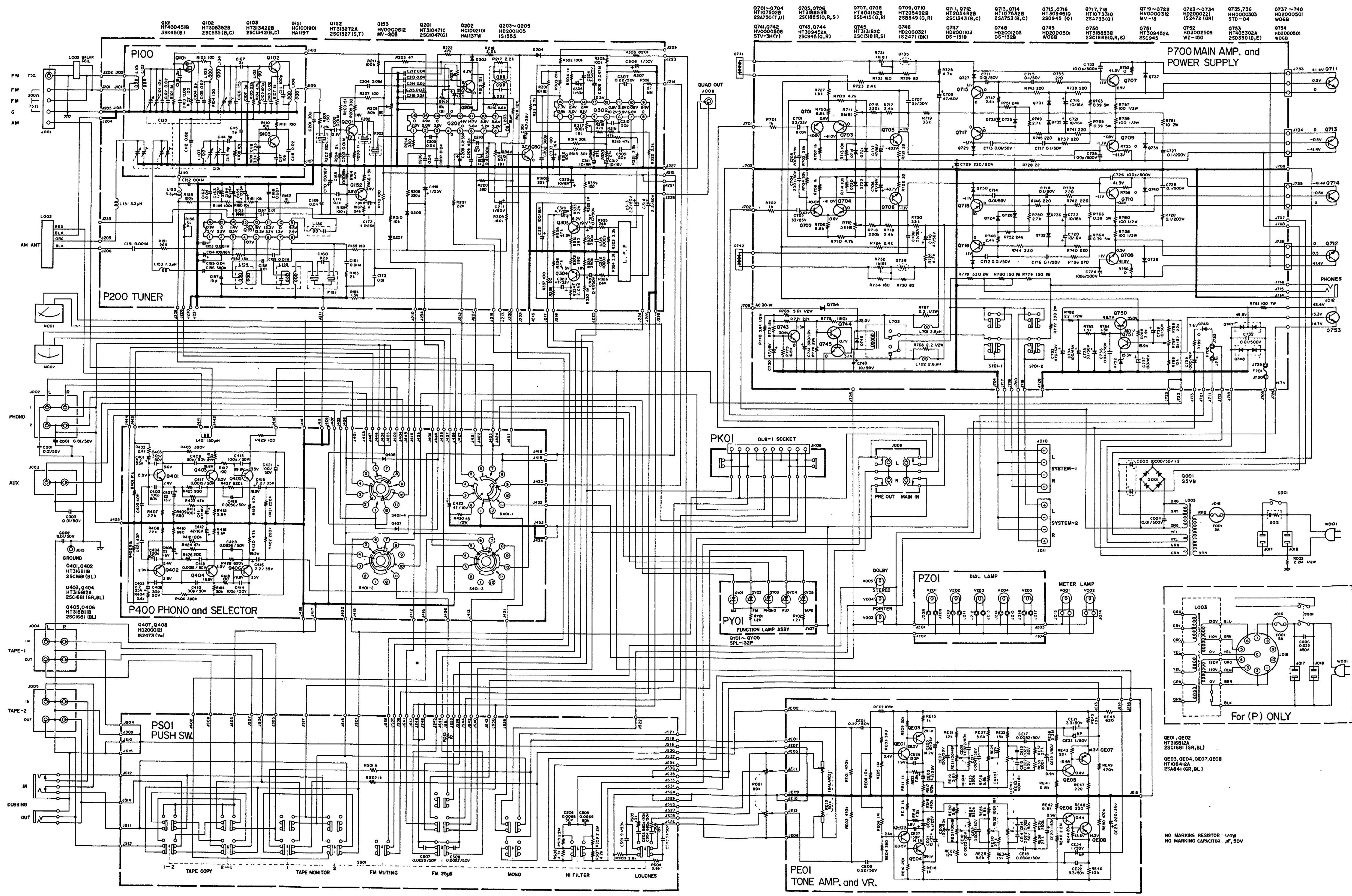
13.2 For European Model



14. SCHEMATIC DIAGRAMS

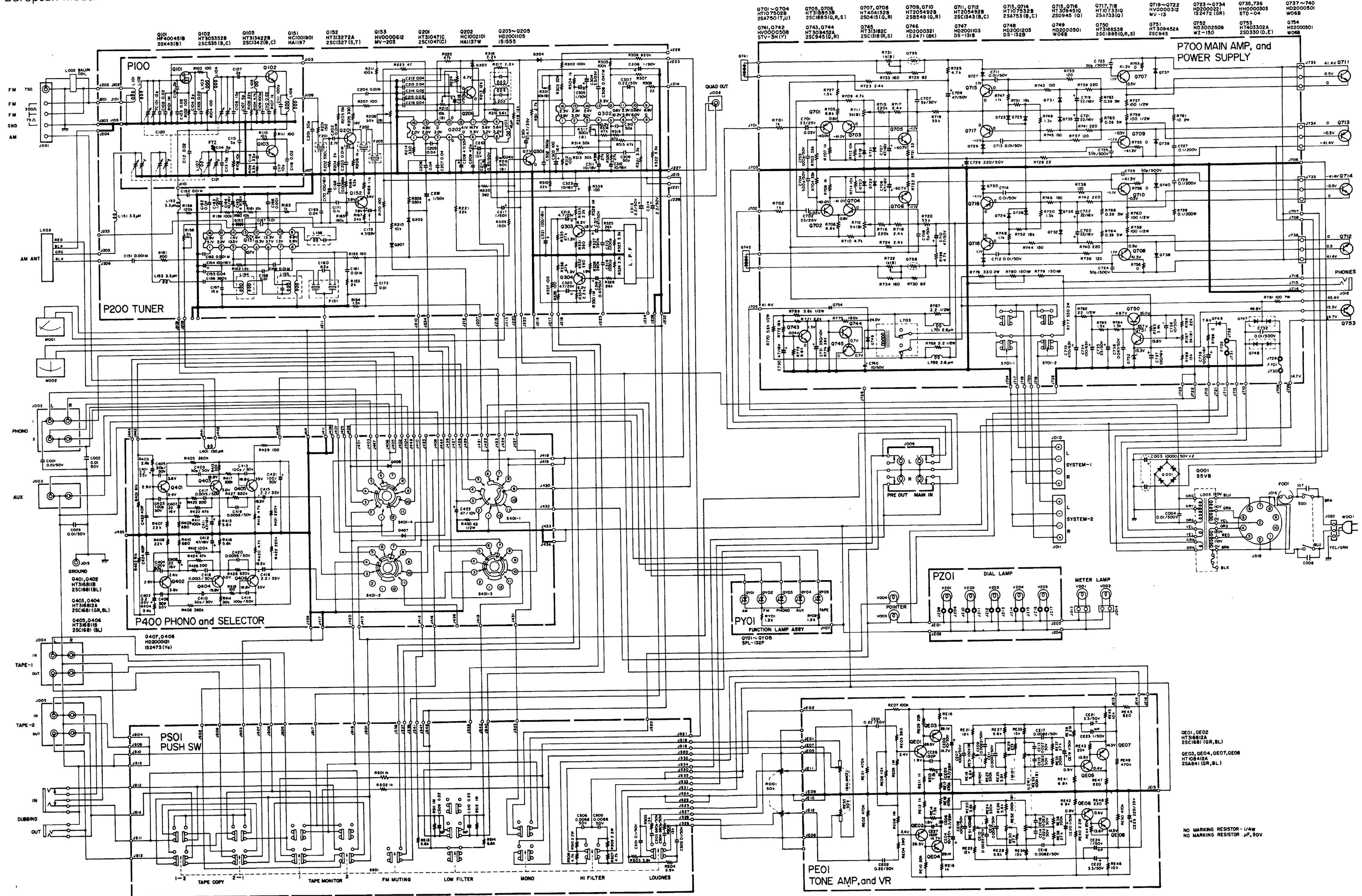
14.1 For U.S.A. & Canadian Models

Model 2252B

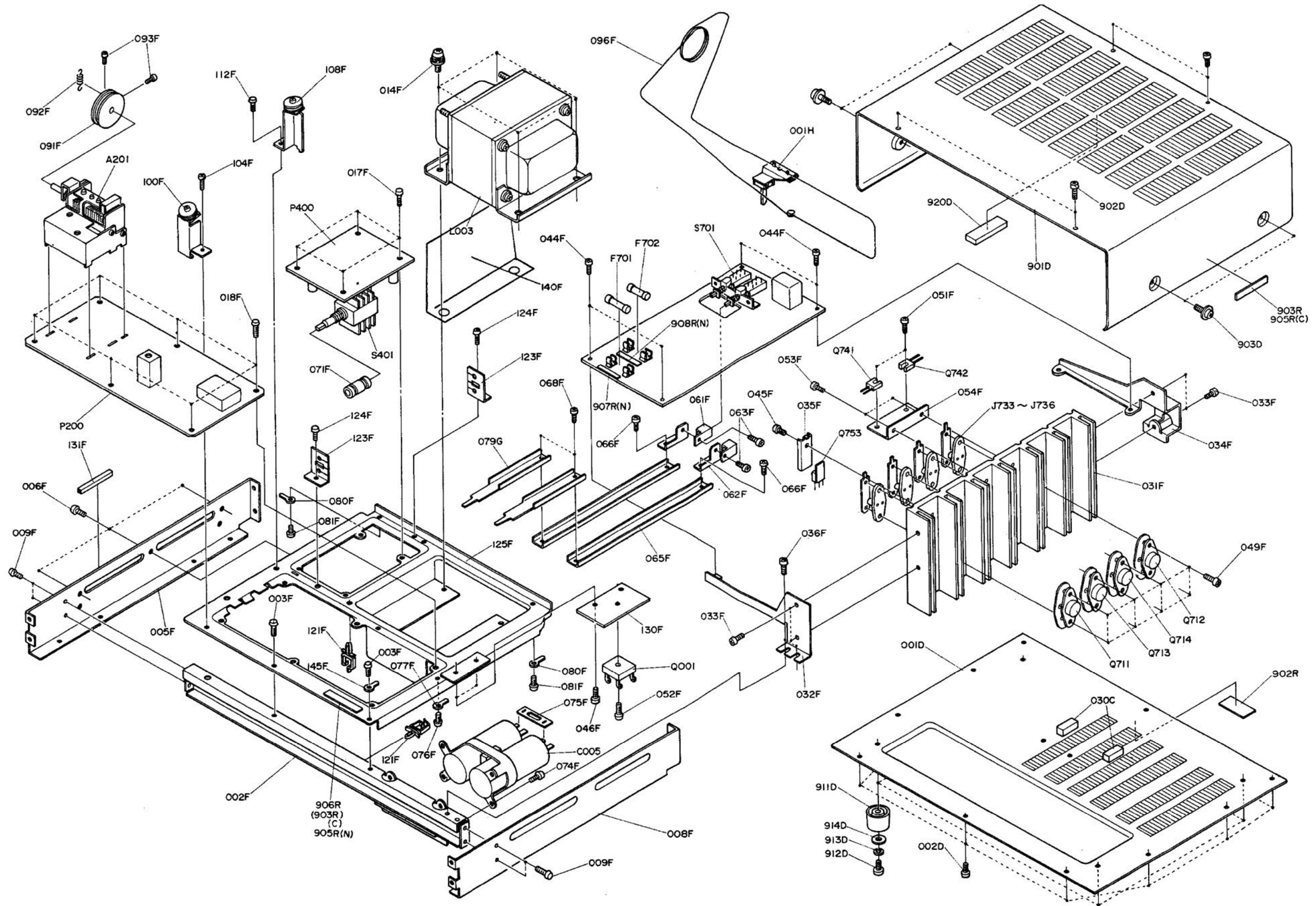


Model 2252B

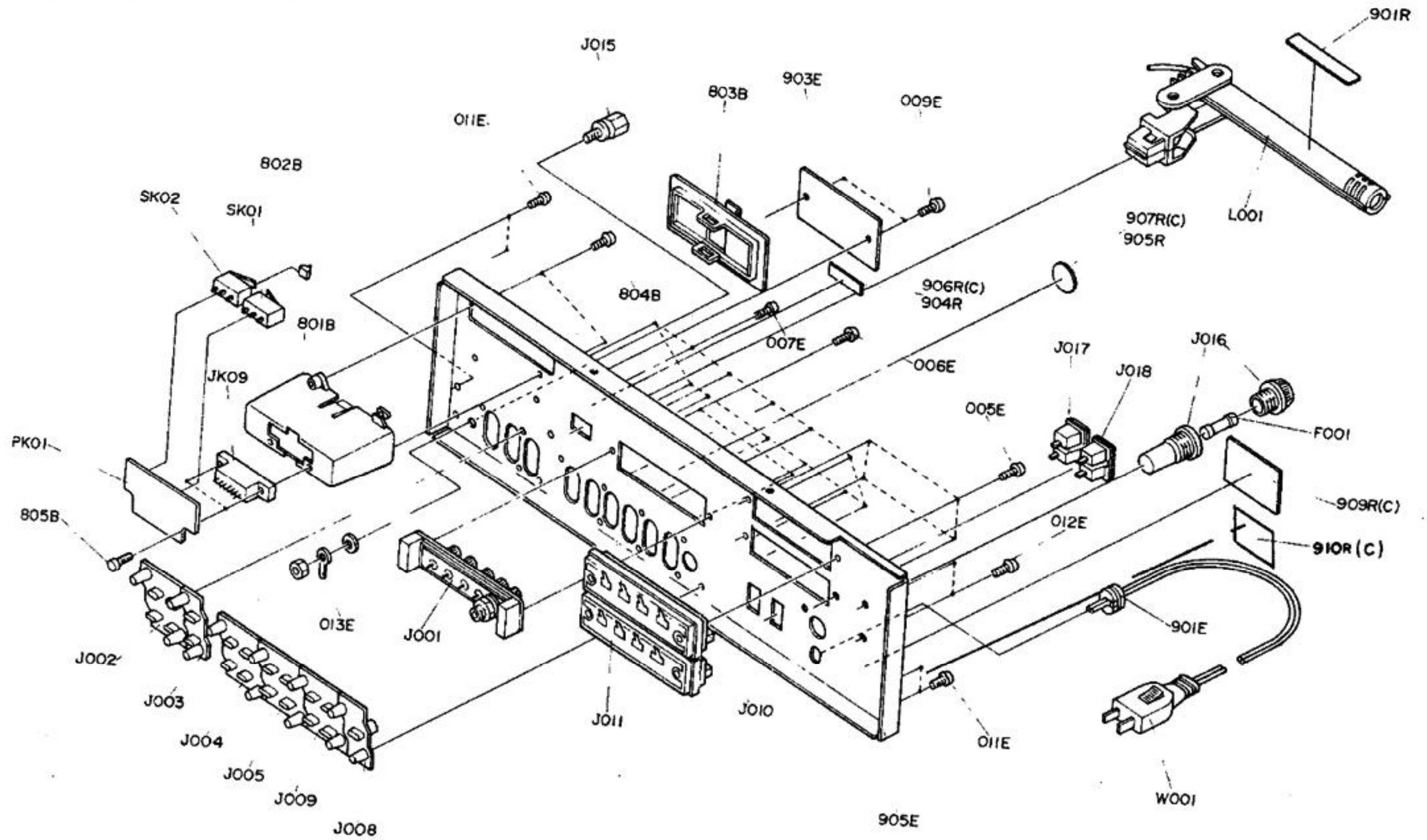
14.2 For European Model



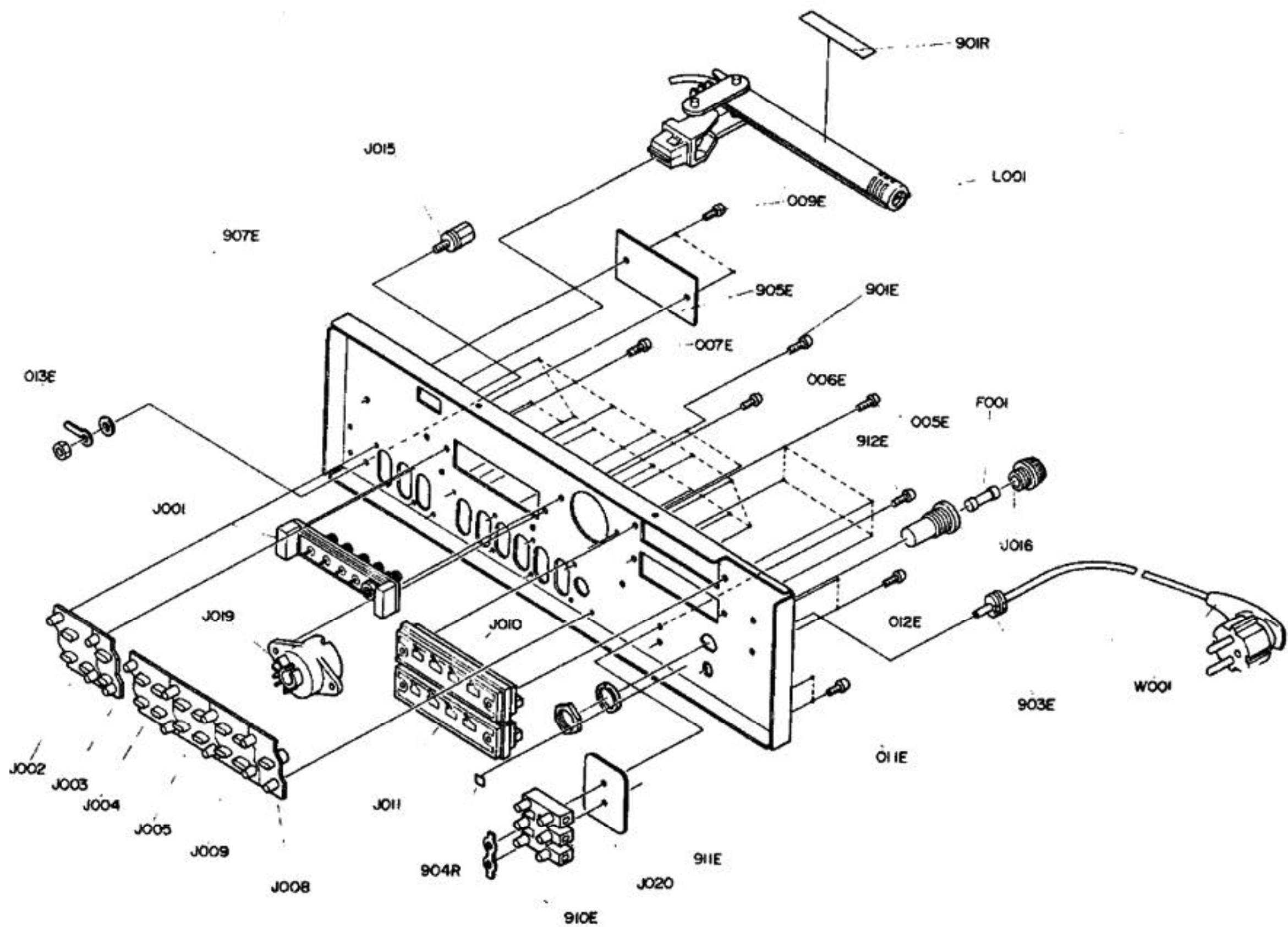
15.2 Chassis



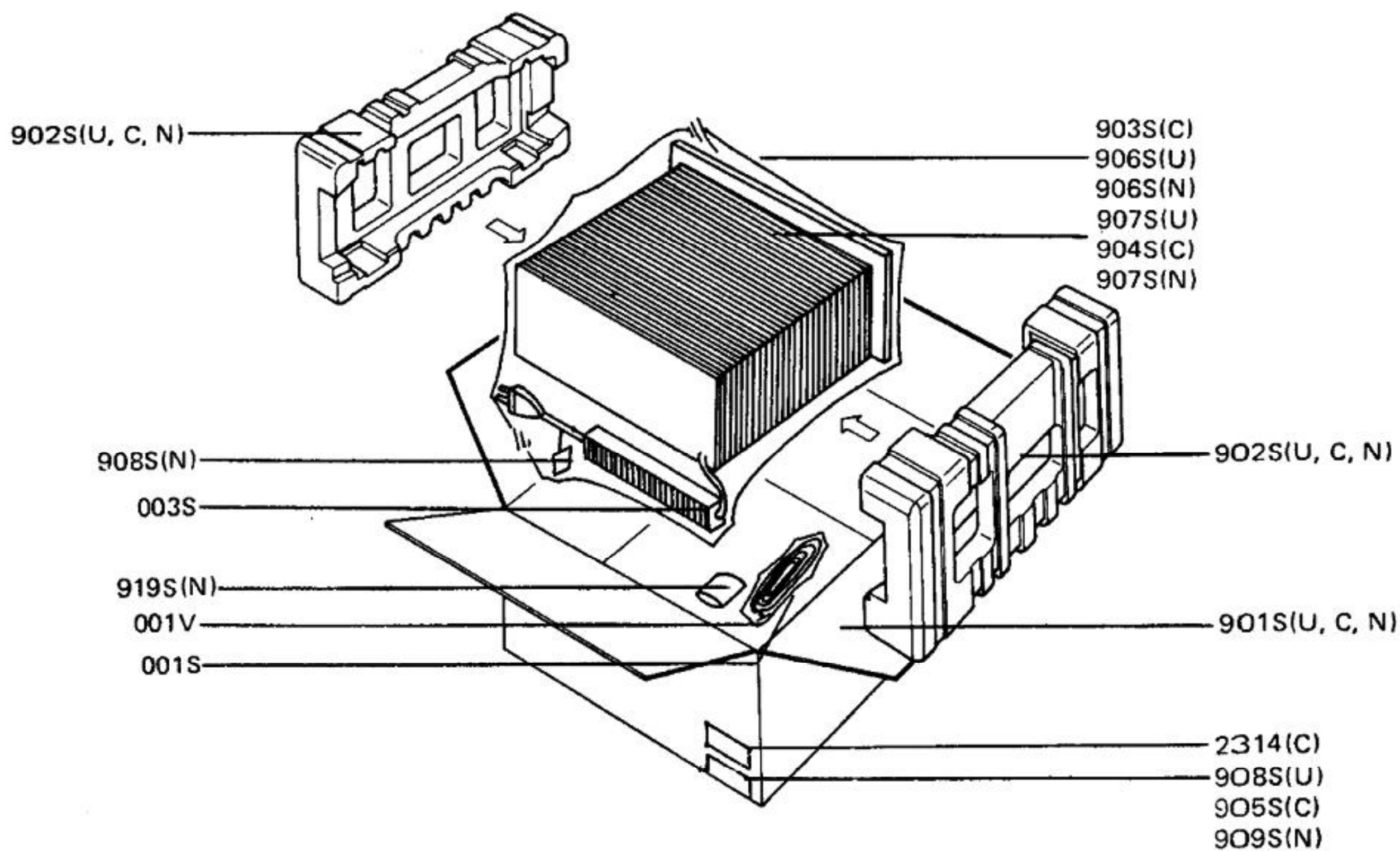
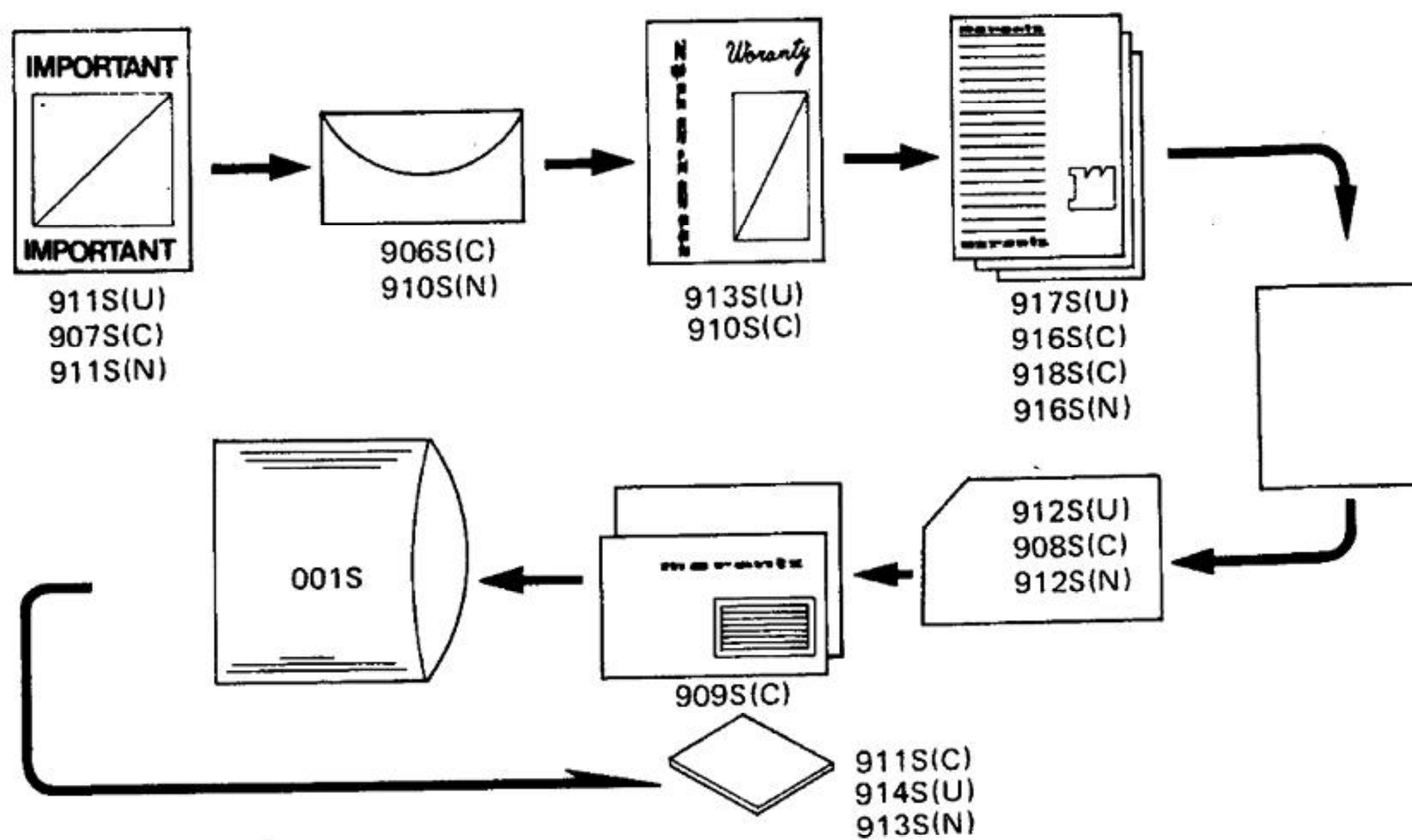
15.3 Rear Panel for U.S.A. & Canadian Models



15.4 Rear Panel for European Model



16. PACKING MATERIAL EXPLODED VIEW



- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

17. PARTS LIST

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	N		
A	1	1		2209063400	Front Panel Assembly
A1			1	2209063410	Front Panel Assembly
001C	1	1	1	2209063013	Escutcheon
003C	1	1	1	2211158110	Window
005C	3	3	3	51100305A9	B.H.M. Screw, B3 x 5
006C	2	2	2	51100306S9	B.H.M. Screw, B3 x 6
007C	1	1	1	2213160170	Bracket
015C	12	12	12	2978259012	Bushing
901C	1	1		2209063022	Escutcheon
901C			1	2209063120	Escutcheon
903C	1	1	1	2209053013	Cover
B	1	1	1	2219273410	Flywheel Assembly
001I	1	1	1	2219273010	Flywheel
007I	2	2	2	2219063030	Escutcheon
010I	1	1	1	2215353010	Ring
012I	2	2	2	51820206B0	P.H.M. Screw, P2 x 6
C	1	1	1	2205159400	Drum Assembly
091F	1	1	1	2204159010	Drum
092F	1	1	1	2205115020	Spring
093F	2	2	2	51064019A9	P.H.M. Screw
PE07	2	2	2	3444118050	Spacer
PE11	3	3	3	75061251P0	Jumper
PS11	1	1	1	75060501P0	Jumper
PS12	1	1	1	75060751P0	Jumper
PS13	11	11	11	75061001P0	Jumper
PS14	2	2	2	75062001P0	Jumper
P208	14	14	14	2933118020	Spacer
P211	12	12	12	75061251P0	Jumper
P212	1	1	1	75061001P0	Jumper
P408	4	4	4	2933118020	Spacer
P411	1	1	1	75060501P0	Jumper
P412	1	1	1	75060751P0	Jumper
P413	1	1	1	75061251P0	Jumper
P414	1	1	1	75061751P0	Jumper
P415	1	1	1	75062251P0	Jumper
P707	32	32	32	3444118050	Spacer
P708	34	34	34	2933118020	Spacer
P711	10	10	10	75061251P0	Jumper
P712	3	3	3	75060751P0	Jumper
R789	1	1	1	75061251P0	Jumper
001D	1	1	1	2205257022	Lid
001G	1	1	1	2211160044	Bracket
001H	1	1	1	2991103500	Pointer
001S	1	1	1	9013025010	Polyethylene Bag
001V	1	1	1	ZA02000070	Ext. Antenna FM Ant.
002D	12	12	12	51280406U0	B.H. Tapped Screw, B4 x 6
002F	1	1	1	2205126010	Stay
002I	1	1	1	2213104500	Retainer
003F	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6
003G	4	4	4	51280408B0	B.H. Tapped Screw, B4 x 8
003S	1	1	1	2864804010	Sleeve
005C	3	3	3	51100305A9	B.H.M. Screw, B3 x 5
005E	4	4	4	51280308U0	B.H. Tapped Screw, B3 x 8
005F	1	1	1	2205126023	Stay
006E	2	2	2	51280308U0	B.H. Tapped Screw, B3 x 8
006F	5	5	5	51280306B0	B.H. Tapped Screw, B3 x 6
006G	1	1	1	2211274102	Reflector
007E	12	12	12	51280308U0	B.H. Tapped Screw, B3 x 8
007G	1	1	1	2211274303	Reflector
008F	1	1	1	2205126033	Stay
008G	5	5	5	2211118010	Spacer
008I	1	1	1	2219112010	Shaft
009C	1	1	1	2213055010	Collar
009E	2	2	2	51760306B0	OS Tapped Screw, O3 x 6
009F	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6
010G	1	1	1	2205051014	Guide
011E	7	7	7	51280308U0	B.H. Tapped Screw, B3 x 8
011G	2	2	2	51042608A0	F.H.M. Screw, F2.6 x 8
012C	4	4	4	52017069J0	H. Head Bolt
012I	2	2	2	51820206B0	P.H.M. Screw, P2 x 6
013I	1	1	1	59031405G9	Washer
014F	4	4	4	51490514A9	L. Washer Screw, L5 x 14
014G	2	2	2	51100306A9	B.H.M. Screw, B3 x 6
017F	4	4	4	51280308U0	B.H. Tapped Screw, B3 x 8
017G	1	1	1	2211274203	Reflector
017I	4	4	4	51470306A9	L. Washer Screw, L3 x 6
018C	3	3	3	2210154212	Knob
018F	6	6	6	51280308U0	B.H. Tapped Screw, B3 x 8
018I	1	1	1	2205160123	Bracket
019C	3	3	3	2210154222	Knob
019G	2	2	2	2213053022	Cover
020C	3	3	3	2221154232	Knob
020G	2	2	2	2991107020	Sheet
020I	3	3	3	51280306B0	B.H. Tapped Screw, B3 x 6
022C	9	9	9	2205154030	Knob
023C	2	2	2	2963154022	Knob
030C	2	2	2	2208056010	Buffer
031F	1	1	1	2209267010	Heatsink
031G	1	1	1	2205269013	Protector
032F	1	1	1	2207104012	Retainer
032G	3	3	3	51280306B0	B.H. Tapped Screw, B3 x 6
033F	4	4	4	51280308B0	B.H. Tapped Screw, B3 x 8
034F	1	1	1	2207104022	Retainer
035F	1	1	1	2207267020	Heatsink
036F	2	2	2	51280308B0	B.H. Tapped Screw, B3 x 8
039G	1	1	1	2205262510	Pulley
044F	4	4	4	51280308U0	B.H. Tapped Screw, B3 x 8
044G	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6
045F	1	1	1	51280310B0	B.H. Tapped Screw, B3 x 10
046F	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6
047G	1	1	1	2205262502	Pulley
049F	8	8	8	51100312A9	B.H.M. Screw, B3 x 12
051F	2	2	2	51280310U0	B.H. Tapped Screw, B3 x 10
052F	1	1	1	51280316U0	B.H. Tapped Screw, B3 x 16
053F	2	2	2	51280308B0	B.H. Tapped Screw, B3 x 8
053G	1	1	1	51280306B0	B.H. Tapped Screw, B3 x 6
054F	1	1	1	2207267040	Heatsink
061F	2	2	2	2891271013	Holder
061G	1	1	1	2213160020	Bracket
062F	2	2	2	2205002012	Arm
063F	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6
063G	2	2	2	51100306A9	B.H.M. Screw, B3 x 6

- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	N				U	C	N		
064G	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6	903S			1	2209801010	Packing Case
065F	2	2	2	2207160010	Bracket	903S		1		9014838380	Polyethylene Bag
066F	2	2	2	51300306B0	P.H. Tapped Screw, P3 x 6	904R			1	2882861020	Label
068F	2	2	2	51300306B0	P.H. Tapped Screw, P3 x 6	904R	1			9510911020	Label
068G	1	1	1	2213160030	Bracket	904S		1		2918107130	Sheet
070G	3	3	3	51280306B0	B.H. Tapped Screw, B3 x 6	905E	1	1		2209160213	Bracket
071F	1	1	1	2963125010	Joint	905E			1	2209265030	Indicator
074F	4	4	4	51280306B0	B.H. Tapped Screw, B3 x 6	905R			2	2205861010	Label
074G	1	1	1	2213106012	Sustainer	905R		1		2911861142	Label
075F	1	1	1	2207123010	Contacto	905R	1			9511101020	Label
075G	1	1	1	51280308B0	B.H. Tapped Screw, B3 x 8	905S		3		9523015120	Serial No. Card
076F	1	1	1	51280306B0	B.H. Tapped Screw, B3 x 6	906C	1	1		2209302010	Dial
077F	1	1	1	62030049W0	Lug	906C			1	2209302110	Dial
079G	2	2	2	2205160032	Bracket	906R	2			2205861010	Label
080F	2	2	2	62030049W0	Lug	906R		1		9510911010	Label
081F	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6	906S		1		2918813012	Envelope
091G	1	1	1	2205112502	Shaft	906S	1		1	9014838380	Polyethylene Bag
092G	1	1	1	2205112010	Shaft	907E			1	2209160312	Bracket
096F	2	2	2	72071605A0	String	907R			1	9512601030	Label
097G	2	2	2	51280308B0	B.H. Tapped Screw, B3 x 8	907S		1		2818851120	Instructions
100F	1	1	1	2205262520	Pulley	907S	1		1	2918107130	Sheet
104F	1	1	1	51280306B0	B.H. Tapped Screw, B3 x 6	908R			1	9512601060	Label
106G	1	1	1	2213107010	Sheet	908S	3			9522815010	Serial No. Card
108F	1	1	1	2205262530	Pulley	908S			1	9560000042	Hang Tag
112F	1	1	1	51280306B0	B.H. Tapped Screw, B3 x 6	908S		1		9630000180	Guarantee Card
115G	1	1	1	2219202050	Net	909R		1		2911861192	Label
121F	5	5	5	2886005020	Clamper	909S			3	9523015110	Serial No. Card
122F	2	2	2	2886005050	Clamper	909S		1		9650000050	S. Station Card
123F	2	2	2	2205120012	Insulator	910C			1	2205154030	Knob
124F	2	2	2	51280306B0	B.H. Tapped Screw, B3 x 6	910C	1	1		2209154010	Knob
125F	1	1	1	2209105502	Chassis	910E			1	2970005010	Clamper
130F	1	1	1	2207267030	Heatsink	910R		1		2911861240	Label
131F	1	1	1	2965259010	Bushing	910S			1	2818813010	Envelope
135F	1	1	1	2991109010	Shield	910S		1		2818854042	Guarantee Card
136F	1	1	1	2991053112	Cover	911D	4	4	4	2932057010	Leg
140F	1	1	1	2209109010	Shield	911S	1			2577851020	Instructions
801B	1	1		2218271050	Holder	911S			1	2818851120	Instructions
802B	1	1		2218258010	Hook	911S		1		2818854140	Guarantee Card
803B	1	1		2218257030	Lid	912C			2	2209101010	Support
804B	2	2		51280308U0	B.H. Tapped Screw, B3 x 8	912C	2	2		2213101010	Support
805B	2	2		51280308U0	B.H. Tapped Screw, B3 x 8	912D	4	4	4	5157041080	P. Tapped Screw, P4 x 1 0
901D	1	1	1	2213257010	Lid	912S	1			2577854012	Guarantee Card
901E	1	1		1455259030	Bushing	912S			1	9630000180	Guarantee Card
901E			2	51100308S9	B.H.M. Screw, B3 x 8	913C			2	2970120030	Insulator
901R	1		1	2506265060	Indicator	913D	4	4	4	54040402N0	Spring Washer
901R		1		2911861170	Label	913S			1	2818851140	Instructions
901S	1	1		2209801010	Packing Case	913S	1			2818854023	Guarantee Card
901S			1	2213801010	Packing Case	914D	4	4	4	54020401E0	Flat Washer, P
902D	4	4	4	51280306U0	B.H. Tapped Screw, B3 x 6	914S	1			2818851040	Instructions
902R	1		1	2578861010	Label	916S		1	1	2209851310	Instructions
902R		1		2911861112	Label	917S	1			2209851010	Instructions
902S	2	2	2	2204809012	Cushion	917S		1		2209851030	Instructions
903D	4	4	4	51480406S9	F. Washer Screw, F4 x 6	918S	1			2209851020	Instructions
903E			1	1455259040	Bushing	918S			1	2209851030	Instructions
903E	1			2209265010	Indicator	918S		1		2886851100	Instructions
903E		1		2209265020	Indicator	919S			1	2731821010	Silicagel
903R		3		2205861110	Label	920D	1	1	1	2208056010	Buffer
903R	1		1	2932861010	Label						

- (U) for U.S.A.
- (C) for Canada
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REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	N		
921D	2	2	2	2965118010	Spacer
923S			1	9510901140	Label
923S		1		9510901150	Label
924S			1	9510901140	Label
924S		1		9510901150	Label
CE01	1	1	1	DF17224010	Film Cap., 0.22 μ F $\pm$ 20% 50V
CE02	1	1	1	DF17224010	Film Cap., 0.22 μ F $\pm$ 20% 50V
CE03	1	1	1	EA10603590	Electrolytic Cap., 10 μ F $\pm$ 50% 35V
CE04	1	1	1	EA10603590	Electrolytic Cap., 10 μ F $\pm$ 50% 35V
CE05	1	1	1	EE47502540	Electrolytic Cap., 4.7 μ F $\pm$ 20% 25V
CE06	1	1	1	EE47502540	Electrolytic Cap., 4.7 μ F $\pm$ 20% 25V
CE07	1	1	1	DD16101010	Ceramic Cap., 100pF $\pm$ 10% 50V
CE08	1	1	1	DD16101010	Ceramic Cap., 100pF $\pm$ 10% 50V
CE09	1	1	1	DF16222050	Film Cap., 0.0022 μ F $\pm$ 10% 50V
CE10	1	1	1	DF16222050	Film Cap., 0.0022 μ F $\pm$ 10% 50V
CE11	1	1	1	DF16472050	Film Cap., 0.0047 μ F $\pm$ 10% 50V
CE12	1	1	1	DF16472050	Film Cap., 0.0047 μ F $\pm$ 10% 50V
CE13	1	1	1	DF16223010	Film Cap., 0.022 μ F $\pm$ 10% 50V
CE14	1	1	1	DF16223010	Film Cap., 0.022 μ F $\pm$ 10% 50V
CE15	1	1	1	DF16223010	Film Cap., 0.022 μ F $\pm$ 10% 50V
CE16	1	1	1	DF16223010	Film Cap., 0.022 μ F $\pm$ 10% 50V
CE17	1	1	1	DF16822050	Film Cap., 0.0082 μ F $\pm$ 10% 50V
CE18	1	1	1	DF16822050	Film Cap., 0.0082 μ F $\pm$ 10% 50V
CE19	1	1	1	EE10505010	Electrolytic Cap., 1 μ F $\pm$ 20% 50V
CE20	1	1	1	EE10505010	Electrolytic Cap., 1 μ F $\pm$ 20% 50V
CE21	1	1	1	EE33505010	Electrolytic Cap., 3.3 μ F $\pm$ 20% 50V
CE22	1	1	1	EE33505010	Electrolytic Cap., 3.3 μ F $\pm$ 20% 50V
CE23	1	1	1	EQ10505010	Electrolytic Cap., 1 μ F $\pm$ 30% 50V
CE24	1	1	1	EQ10505010	Electrolytic Cap., 1 μ F $\pm$ 20% 50V
CE25	1	1	1	EA22703590	Electrolytic Cap., 220 μ F $\pm$ 50% 35V
JE01	1	1	1	YP10001130	Plug
JE02	1	1	1	YP10001130	Plug
JE05	1	1	1	YP10001130	Plug
JE06	1	1	1	YP10001130	Plug
JE07	1	1	1	YP10001130	Plug
JE09					
JE16	8	8	8	YP10001130	Plug
PE01 TONE BOARD					
PE01	1	1	1	YK22090230	P.W. Board
	1	1	1	ZZ22090230	P.W. Board Assembly
QE01	1	1	1	HT316812A0	Transistor, 2SC1681 (GR, BL)
QE02	1	1	1	HT316812A0	Transistor, 2SC1681 (GR, BL)
QE03	1	1	1	HT108412A0	Transistor, 2SA 841 (GR, BL)
QE04	1	1	1	HT108412A0	Transistor, 2SA 841 (GR, BL)
QE05	1	1	1	HT316812A0	Transistor, 2SC1681 (GR, BL)
QE06	1	1	1	HT316812A0	Transistor, 2SC1681 (GR, BL)
QE07	1	1	1	HT108412A0	Transistor, 2SA 841 (GR, BL)
QE08	1	1	1	HT108412A0	Transistor, 2SA 841 (GR, BL)
RE01	1	1	1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W
RE02	1	1	1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W
RE03	1	1	1	RT05391140	Resistor, 390 Ω $\pm$ 5% $\frac{1}{4}$ W
RE04	1	1	1	RT05391140	Resistor, 390 Ω $\pm$ 5% $\frac{1}{4}$ W
RE05	1	1	1	RT05105140	Resistor, 1M Ω $\pm$ 5% $\frac{1}{4}$ W
RE06	1	1	1	RT05105140	Resistor, 1M Ω $\pm$ 5% $\frac{1}{4}$ W
RE07	1	1	1	RT05104140	Resistor, 100k Ω $\pm$ 5% $\frac{1}{4}$ W
RE08	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W
RE09	1	1	1	RT05203140	Resistor, 20k Ω $\pm$ 5% $\frac{1}{4}$ W
RE10	1	1	1	RT05203140	Resistor, 20k Ω $\pm$ 5% $\frac{1}{4}$ W
RE11	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
RE12	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
RE13	1	1	1	RT05752140	Resistor, 7.5k Ω $\pm$ 5% $\frac{1}{4}$ W
RE14	1	1	1	RT05752140	Resistor, 7.5k Ω $\pm$ 5% $\frac{1}{4}$ W
RE15	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
RE16	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
RE17	1	1	1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W
RE18	1	1	1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W
RE19	1	1	1	RT05562140	Resistor, 5.6k Ω $\pm$ 5% $\frac{1}{4}$ W
RE20	1	1	1	RT05562140	Resistor, 5.6k Ω $\pm$ 5% $\frac{1}{4}$ W
RE21	1	1	1	RT05123140	Resistor, 12k Ω $\pm$ 5% $\frac{1}{4}$ W
RE22	1	1	1	RT05123140	Resistor, 12k Ω $\pm$ 5% $\frac{1}{4}$ W
RE23	1	1	1	RT05334140	Resistor, 330k Ω $\pm$ 5% $\frac{1}{4}$ W
RE24	1	1	1	RT05334140	Resistor, 330k Ω $\pm$ 5% $\frac{1}{4}$ W
RE25	1	1	1	RT05562140	Resistor, 5.6k Ω $\pm$ 5% $\frac{1}{4}$ W
RE26	1	1	1	RT05562140	Resistor, 5.6k Ω $\pm$ 5% $\frac{1}{4}$ W
RE27	1	1	1	RT05562140	Resistor, 5.6k Ω $\pm$ 5% $\frac{1}{4}$ W
RE28	1	1	1	RT05562140	Resistor, 5.6k Ω $\pm$ 5% $\frac{1}{4}$ W
RE29	1	1	1	RT05273140	Resistor, 27k Ω $\pm$ 5% $\frac{1}{4}$ W
RE30	1	1	1	RT05273140	Resistor, 27k Ω $\pm$ 5% $\frac{1}{4}$ W
RE31	1	1	1	RT05123140	Resistor, 12k Ω $\pm$ 5% $\frac{1}{4}$ W
RE32	1	1	1	RT05123140	Resistor, 12k Ω $\pm$ 5% $\frac{1}{4}$ W
RE33	1	1	1	RT05153140	Resistor, 15k Ω $\pm$ 5% $\frac{1}{4}$ W
RE34	1	1	1	RT05153140	Resistor, 15k Ω $\pm$ 5% $\frac{1}{4}$ W
RE35	1	1	1	RT05204140	Resistor, 200k Ω $\pm$ 5% $\frac{1}{4}$ W
RE36	1	1	1	RT05204140	Resistor, 200k Ω $\pm$ 5% $\frac{1}{4}$ W
RE37	1	1	1	RT05273140	Resistor, 27k Ω $\pm$ 5% $\frac{1}{4}$ W
RE38	1	1	1	RT05273140	Resistor, 27k Ω $\pm$ 5% $\frac{1}{4}$ W
RE39	1	1	1	RT05225140	Resistor, 2.2M Ω $\pm$ 5% $\frac{1}{4}$ W
RE40	1	1	1	RT05225140	Resistor, 2.2M Ω $\pm$ 5% $\frac{1}{4}$ W
RE41	1	1	1	RT05683140	Resistor, 68k Ω $\pm$ 5% $\frac{1}{4}$ W
RE42	1	1	1	RT05683140	Resistor, 68k Ω $\pm$ 5% $\frac{1}{4}$ W
RE43	1	1	1	RT05203140	Resistor, 20k Ω $\pm$ 5% $\frac{1}{4}$ W
RE44	1	1	1	RT05203140	Resistor, 20k Ω $\pm$ 5% $\frac{1}{4}$ W
RE45	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W
RE46	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W
RE47	1	1	1	RT05221140	Resistor, 220 Ω $\pm$ 5% $\frac{1}{4}$ W
RE48	1	1	1	RT05221140	Resistor, 220 Ω $\pm$ 5% $\frac{1}{4}$ W
RE49	1	1	1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W
RE50	1	1	1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W
RE51	1	1	1	RD01040080	Variable Resistor, 100k Ω (B) Treble
RE52	1	1	1	RD01040080	Variable Resistor, 100k Ω (B) Mid
RE53	1	1	1	RD01040080	Variable Resistor, 100k Ω (B) Bass
RE54	1	1	1	RT05821140	Resistor, 820 Ω $\pm$ 5% $\frac{1}{4}$ W
RE55	1	1	1	RM05030710	Variable Resistor, 50k Ω Balance
JK01					
JK08	8	8		YP10001130	Plug
JK09	1	1		YJ07000120	Jack, 10P, PC Connector
PK01 DOLBY SOCKET BOARD					
PK01	1	1		YA22180310	P.W. Board
	1	1		ZZ22180310	P.W. Board Assembly

- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	N				U	C	N		
SK01	1	1		SC01020240	Micro Switch	RY01	1	1	1	RT05122140	Resistor, 1.2k Ω $\pm$ 5% $\frac{1}{4}$ W
SK02	1	1		SC01020240	Micro Switch	RY02	1	1	1	RT05122140	Resistor, 1.2k Ω $\pm$ 5% $\frac{1}{4}$ W
CS01	1	1	1	DF16104050	Film Cap., 0.1 μ F $\pm$ 10% 50V	JZ01					
CS02	1	1	1	DF16104050	Film Cap., 0.1 μ F $\pm$ 10% 50V		7	7	7	YP10001130	Plug
CS03	1	1	1	DK16681010	Ceramic Cap., 680pF $\pm$ 10% 50V	JZ07					
CS04	1	1	1	DK16681010	Ceramic Cap., 680pF $\pm$ 10% 50V	JZ08					
CS05	1	1	1	DF16682050	Film Cap., 0.0068 μ F $\pm$ 10% 50V		10	10	10	YJ08000170	Jack
CS06	1	1	1	DF16682050	Film Cap., 0.0068 μ F $\pm$ 10% 50V	JZ17					
CS07	1	1		DF15222050	Film Cap., 0.0022 μ F $\pm$ 5% 50V						
CS08	1	1		DF15222050	Film Cap., 0.0022 μ F $\pm$ 5% 50V						
						PZ01	1	1	1	YF22130050	PZ01 DIAL LAMP BOARD
CS09			1	DF15393010	Film Cap., 0.039 μ F $\pm$ 5% 50V		1	1	1	ZZ22130050	P.W. Board
CS10			1	DF15393010	Film Cap., 0.039 μ F $\pm$ 5% 50V						P.W. Board Assembly
JS01											
	42	42	42	YP10001130	Plug	VZ01	1	1	1	IN10080070	Lamp, 8V 200mA
JS42						VZ02	1	1	1	IN10080070	Lamp, 8V 200mA
JS43						VZ03	1	1	1	IN10080070	Lamp, 8V 200mA
	4	4		YP10001130	Plug	VZ04	1	1	1	IN10080070	Lamp, 8V 200mA
JS46						VZ05	1	1	1	IN10080070	Lamp, 8V 200mA
JS47	1	1	1	YP10001130	Plug	C001	1	1	1	DK18103010	Ceramic Cap., 0.01 μ F $\pm$ 20% 50V
JS48	1	1	1	YP10001130	Plug	C003	1	1	1	DK18103010	Ceramic Cap., 0.01 μ F $\pm$ 20% 50V
						C004	1	1	1	DK18103510	Ceramic Cap., 0.01 μ F $\pm$ 20% 500V
JS49						C005	1	1	1	EI10905010	Electrolytic Cap., 10000 μ F $\pm$ 50% 50V
	4	4		YP10001130	Plug	C007			1	DO07223510	Oilpaper Cap., 0.022 μ F $\pm$ 20% 450V
JS52											
						C008		1		DF17223800	Film Cap., 0.022 μ F $\pm$ 20%
						F001		1		FS10400800	Fuse, 4AT 20mm (SEMKO)
PS01	1	1	1	YK22090220	PS01 PUSH SWITCH BOARD	F001	1	1		FS10500040	Fuse, 5A MGC 30mm
	1	1		ZZ22090220	P.W. Board Assembly	F002		1		FS20500910	Fuse, 5A MGP 30mm
			1	ZZ22098220	P.W. Board Assembly	G001	1			BF10400030	Cap. Comp., Printed Comp.
						G001		1		BF10400050	Cap. Comp., Printed Comp.
RS01	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W	J001	1	1		BY04050010	Terminal, 75 Ω Coaxial Ant.
RS02	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W	J002	1	1	1	YT02040190	Terminal, Phono 1, 2
RS03	1	1	1	RT05392140	Resistor, 3.9k Ω $\pm$ 5% $\frac{1}{4}$ W	J003	1	1	1	YT02020140	Terminal, Aux
RS04	1	1	1	RT05392140	Resistor, 3.9k Ω $\pm$ 5% $\frac{1}{4}$ W	J004	1	1	1	YT02040140	Terminal, Tape 1
RS05	1	1	1	RT05133140	Resistor, 13k Ω $\pm$ 5% $\frac{1}{4}$ W						
RS06	1	1	1	RT05133140	Resistor, 13k Ω $\pm$ 5% $\frac{1}{4}$ W	J005	1	1	1	YT02040140	Terminal, Tape 2
RS07	1	1	1	RT05472140	Resistor, 4.7k Ω $\pm$ 5% $\frac{1}{4}$ W	J006	1	1	1	YJ01001070	Jack, Dubbing In
RS08	1	1	1	RT05472140	Resistor, 4.7k Ω $\pm$ 5% $\frac{1}{4}$ W	J007	1	1	1	YJ01001080	Jack, Dubbing Out
RS09	1	1	1	RT05225140	Resistor, 2.2M Ω $\pm$ 5% $\frac{1}{4}$ W	J008	1	1	1	YT02010130	Terminal, Quad. Out
RS10	1	1	1	RT05225140	Resistor, 2.2M Ω $\pm$ 5% $\frac{1}{4}$ W	J009	1	1	1	YT02040170	Terminal, Pre Out, Main In
						J010	1	1	1	YT03040160	Terminal, Spkr System 1
RS11			1	RT05105140	Resistor, 1M Ω $\pm$ 5% $\frac{1}{4}$ W	J011	1	1	1	YT03040160	Terminal, Spkr System 2
RS12			1	RT05105140	Resistor, 1M Ω $\pm$ 5% $\frac{1}{4}$ W	J012	1	1	1	YJ01001080	Jack, Headphones
RS13			1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W	J013	1	1	1	YJ08000250	Jack, Lamp Holder
RS14			1	RT05474140	Resistor, 470k Ω $\pm$ 5% $\frac{1}{4}$ W	J014	1	1	1	YJ08000250	Jack, Lamp Holder
RS15	1	1		GF05100140	Resistor, 10 Ω $\pm$ 5% $\frac{1}{4}$ W						
SS01	1	1	1	SP06090010	Pushswitch	J015	1	1	1	YT01010050	Terminal, GND Terminal
JY01						J016	1	1		YJ08000120	Jack, Fuse Holder
	5	5	5	YP10001130	Plug	J016			1	YJ08000220	Jack, Fuse Holder
JY05						J017	1	1		YJ04000560	Jack, AC Outlet
JY07	1	1	1	YP10001130	Plug	J018	1	1		YJ04000560	Jack, AC Outlet
						J019			1	BY03110010	Plug, Voltage Selector
						J020			1	YL09030010	Terminal, 3P
PY01	1	1	1	YF22130040	PY01 FUNCTION LAMP BOARD	L001	1	1	1	LF11200520	Ant. Coil, AM
	1	1	1	ZZ22091040	P.W. Board Assembly	L002	1	1	1	LB30075260	Balun Coil
						L003	1	1		TS60505010	Power Transformer
QY01	1	1	1	HI10004030	L.E.D., Diode SPL-132P				1	TS60505020	Power Transformer
QY02	1	1	1	HI10004030	L.E.D., Diode SPL-132P	M001	1	1	1	IM11055080	D.C.Meter, Signal Strength
QY03	1	1	1	HI10004030	L.E.D., Diode SPL-132P	M002	1	1	1	IM11055050	D.C.Meter, Center Tuning
QY04	1	1	1	HI10004030	L.E.D., Diode SPL-132P	Q001	1	1	1	HD20004290	Diode, 55VB
QY05	1	1	1	HI10004030	L.E.D., Diode SPL-132P	R001	1	1	1	RM05030730	Variable Resistor, Vol. 50k Ω

- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	
	U	C	N			
R002	1	1		RC10225120	Resistor, 2.2M Ω $\pm$ 10% $\frac{1}{2}$ W	
S001	1	1		SP02010280	Pushswitch, Power	
S001			1	SP04010250	Pushswitch, Power	
V001	1	1	1	IN10080430	Lamp, 8V 300mA	
V002	1	1	1	IN10080430	Lamp, 8V 300mA	
V004	1	1	1	IN10080340	Lamp, Stereo	
V005	1	1	1	IN10080340	Lamp, Dolby	
W001			1	YCO1900030	A.C. Power Cord	
W001	1	1		YCO2400220	A.C. Power Cord	
C101	1	1	1	DD16120020	Ceramic Cap., 12pF $\pm$ 10%	
C102	1	1	1	DK18203030	Ceramic Cap., 0.02 μ F	
C103	1	1	1	DK18203030	Ceramic Cap., 0.02 μ F	
C104	1	1	1	DD11020010	Ceramic Cap., 2pF	
C105	1	1	1	DK18203030	Ceramic Cap., 0.02 μ F	
C106	1	1	1	DD16150040	Ceramic Cap., 15pF $\pm$ 10%	
C107	1	1	1	DD11020010	Ceramic Cap., 2pF	
C108	1	1	1	DD12050010	Ceramic Cap., 5pF	
C109	1	1	1	DD16101010	Ceramic Cap., 100pF $\pm$ 10%	
C110	1	1	1	DK18203030	Ceramic Cap., 0.02 μ F	
C111	1	1	1	DD16101010	Ceramic Cap., 100pF $\pm$ 10%	
C112	1	1	1	DK18203030	Ceramic Cap., 0.02 μ F	
C113	1	1	1	DD15150020	Ceramic Cap., 15pF $\pm$ 5%	
C114	1	1	1	DD10050030	Ceramic Cap., 5pF	
C115	1	1	1	DD12050010	Ceramic Cap., 5pF	
C116	1	1	1	DD16330020	Ceramic Cap., 33pF $\pm$ 10%	
C117	1	1	1	DD12100060	Ceramic Cap., 10pF	
C118	1	1	1	DK18203030	Ceramic Cap., 0.02 μ F	
C119	1	1	1	DD11020010	Ceramic Cap., 2pF	
C120	1	1	1	CA32400080	Variable Cap.,	
C121	1	1	1	CT14200010	Trimming Cap.,	
C151	1	1	1	DK17103010	Ceramic Cap., 0.01 μ F $\pm$ 20%	
C152	1	1	1	DK17103010	Ceramic Cap., 0.01 μ F $\pm$ 20%	
C153	1	1	1	DK17102010	Ceramic Cap., 0.001 μ F $\pm$ 20%	
C154	1	1	1	EA10701690	Electrolytic Cap., 100 μ F 16V	
C155	1	1	1	DK18403020	Ceramic Cap., 0.04 μ F	
C156	1	1	1	DF65391010	Film Cap., 390pF	
C157	1	1	1	DD16150010	Ceramic Cap., 15pF $\pm$ 10%	
C158	1	1	1	DK18103010	Ceramic Cap., 0.01 μ F	
C159	1	1	1	DK17103010	Ceramic Cap., 0.01 μ F $\pm$ 20%	
C160	1	1	1	DD16820010	Ceramic Cap., 82pF $\pm$ 10%	
C161	1	1	1	DK17103010	Ceramic Cap., 0.01 μ F $\pm$ 20%	
C162	1	1	1	DK18403020	Ceramic Cap., 0.04 μ F	
C163	1	1	1	EA10505090	Electrolytic Cap., 1 μ F 50V	
C164	1	1	1	EA10601690	Electrolytic Cap., 10 μ F 16V	
C165	1	1	1	EA47503590	Electrolytic Cap., 4.7 μ F 35V	
C166	1	1	1	DK17102010	Ceramic Cap., 0.001 μ F $\pm$ 20%	
C167	1	1	1	DK18103010	Ceramic Cap., 0.01 μ F	
C168	1	1	1	DK16682010	Ceramic Cap., 0.0068 μ F $\pm$ 10%	
C169	1	1	1	DK18403020	Ceramic Cap., 0.04 μ F	
C170	1	1	1	EA10701690	Electrolytic Cap., 100 μ F 16V	
C171	1	1	1	DF16104010	Film Cap., 0.1 μ F $\pm$ 10%	
C172	1	1	1	EE47502510	Electrolytic Cap., 4.7 μ F 25V	
C173	1	1	1	DK17103040	Ceramic Cap., 0.01 μ F $\pm$ 20%	
F151	1	1	1	FF10045160	Ceramic Filter, AM 455kHz	
J101	1	1	1	YP10001510	Plug	
J102	1	1	1	YP10001510	Plug	
J103	1	1	1	YP10001510	Plug	
J105	1	1	1	YP10001510	Plug	
J107	1	1	1	YP10001510	Plug	
J109	1	1	1	YP10001510	Plug	
J110	1	1	1	YP10001510	Plug	
J111	1	1	1	YP10001510	Plug	
L105	1	1	1	LC12220010	Choke Coil	
L106	1	1	1	LI10239010	I.F.T.	
L151	1	1	1	LC13320020	Choke Coil, 3.3 μ H	
L152	1	1	1	LC13320020	Choke Coil, 3.3 μ H	
L153	1	1	1	LC13320020	Choke Coil, 3.3 μ H	
L154	1	1	1	LO10010480	Osc. Coil, AM	
L155	1	1	1	LI10015010	I.F.T., AM	
L156	1	1	1	LI10015060	I.F.T., AM	
						P100 FM FRONT END BOARD
P100	1	1	1	YD29910010	P.W. Board	
A201	1	1	1	AV01202060	FM Front End Assembly	
Q101	1	1	1	HF400451B0	F.E.T., 3SK45 B	
Q102	1	1	1	HT305352B0	Transistor, 2SC535 (B, C)	
Q103	1	1	1	HT313422B0	Transistor, 2SC1342 (B, C)	
Q151	1	1	1	HC10019010	IC, HA1197	
Q152	1	1	1	HT313272A0	Transistor, 2SC1327 (S, T)	
Q153	1	1	1	HV00006120	Varistor, MV-203	
R101	1	1	1	GD05105140	Resistor, 1M Ω $\pm$ 5% $\frac{1}{4}$ W	
R102	1	1	1	GD05101140	Resistor, 100 Ω $\pm$ 5% $\frac{1}{4}$ W	
R103	1	1	1	GD05101140	Resistor, 100 Ω $\pm$ 5% $\frac{1}{4}$ W	
R104	1	1	1	GD05101140	Resistor, 100 Ω $\pm$ 5% $\frac{1}{4}$ W	
R105	1	1	1	GD05223140	Resistor, 22k Ω $\pm$ 5% $\frac{1}{4}$ W	
R106	1	1	1	GD05472140	Resistor, 4.7k Ω $\pm$ 5% $\frac{1}{4}$ W	
R107	1	1	1	GD05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W	
R108	1	1	1	GD05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W	
R109	1	1	1	GD05332140	Resistor, 3.3k Ω $\pm$ 5% $\frac{1}{4}$ W	
R110	1	1	1	GD05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W	
R111	1	1	1	GD05101140	Resistor, 100 Ω $\pm$ 5% $\frac{1}{4}$ W	
R151	1	1	1	RT05201140	Resistor, 200 Ω $\pm$ 5% $\frac{1}{4}$ W	
R152	1	1	1	RT05152140	Resistor, 1.5k Ω $\pm$ 5% $\frac{1}{4}$ W	
R153	1	1	1	RT05202140	Resistor, 2k Ω $\pm$ 5% $\frac{1}{4}$ W	
R154	1	1	1	RT05152140	Resistor, 1.5k Ω $\pm$ 5% $\frac{1}{4}$ W	
R155	1	1	1	RT05151140	Resistor, 150 Ω $\pm$ 5% $\frac{1}{4}$ W	
R156	1	1	1	RA05020200	Trimming Resistor, 5k Ω	
R157	1	1	1	RT05391140	Resistor, 390 Ω $\pm$ 5% $\frac{1}{4}$ W	
R158	1	1	1	RT05124140	Resistor, 120k Ω $\pm$ 5% $\frac{1}{4}$ W	
R159	1	1	1	RT05104140	Resistor, 100k Ω $\pm$ 5% $\frac{1}{4}$ W	
R160	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W	
R161	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W	
R162	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W	
R163	1	1	1	RT05301140	Resistor, 300 Ω $\pm$ 5% $\frac{1}{4}$ W	
R164	1	1	1	RT05473140	Resistor, 47k Ω $\pm$ 5% $\frac{1}{4}$ W	
R165	1	1	1	RT05104140	Resistor, 100k Ω $\pm$ 5% $\frac{1}{4}$ W	
R166	1	1	1	RT05152140	Resistor, 1.5k Ω $\pm$ 5% $\frac{1}{4}$ W	
R167	1	1	1	RT05242140	Resistor, 2.4k Ω $\pm$ 5% $\frac{1}{4}$ W	
R169	1	1	1	RT05473140	Resistor, 47k Ω $\pm$ 5% $\frac{1}{4}$ W	
R170	1	1	1	RT05101140	Resistor, 100 Ω $\pm$ 5% $\frac{1}{4}$ W	
A201	1	1	1	AV01202060	V.H.F. Tuner, FM Front End	
C201	1	1	1	DD15300010	Ceramic Cap., 30pF $\pm$ 5%	
C202	1	1	1	DK17103010	Ceramic Cap., 0.01 μ F $\pm$ 20%	
C203	1	1	1	DK17103010	Ceramic Cap., 0.01 μ F $\pm$ 20%	

- (U) for U.S.A.
- (C) for Canada
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REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	N		
C204	1	1	1	DK17103010	Ceramic Cap., 0.01 μ F $\pm$ 20%
C205	1	1	1	DK18403020	Ceramic Cap., 0.04 μ F
C206	1	1	1	DK18403020	Ceramic Cap., 0.04 μ F
C207	1	1	1	DK18403020	Ceramic Cap., 0.04 μ F
C208	1	1	1	EA47503590	Electrolytic Cap., 4.7 μ F 35V
C209	1	1	1	DD15400040	Ceramic Cap., 40pF $\pm$ 5%
C210	1	1	1	EA22601690	Electrolytic Cap., 22 μ F 16V
C211	1	1	1	EA47405010	Electrolytic Cap., 0.47 μ F 50V
C212	1	1	1	DK18403010	Ceramic Cap., 0.04 μ F
C213	1	1	1	DK18403010	Ceramic Cap., 0.04 μ F
C214	1	1	1	DK18403010	Ceramic Cap., 0.04 μ F
C215	1	1	1	DK18403010	Ceramic Cap., 0.04 μ F
C216	1	1	1	DK18403010	Ceramic Cap., 0.04 μ F
C217	1	1	1	EA10505090	Electrolytic Cap., 1 μ F 50V
C218	1	1	1	EA10505090	Electrolytic Cap., 1 μ F 50V
C219	1	1	1	EE10505010	Electrolytic Cap., 1 μ F $\pm$ 20% 50V
F201	1	1	1	FF11070050	Ceramic Filter, FM 10.7MHz
F202	1	1	1	FF11070050	Ceramic Filter, FM 10.7MHz
F203	1	1	1	FF11070050	Ceramic Filter, FM 10.7MHz
J201	28	28	28	YP10001130	Plug
J228					
J229	1	1	1	YP10001130	Plug, Test Point (76kHz)
J231	1	1	1	YP10001130	Plug
J232	1	1	1	YP10001130	Plug
J233	1	1	1	YP10001130	Plug, AM Test Point
J234	1	1	1	YP10001130	Plug
L202	1	1	1	LI14019010	I.F.T., FM
L203	1	1	1	LC11830010	Choke Coil, 18 μ H
P200 TUNER BOARD					
P200	1	1	1	YD22042013	P.W. Board
	1	1		ZZ22052012	P.W. Board Assembly
			1	ZZ22058012	P.W. Board Assembly
Q201	1	1	1	HT310471C0	Transistor, 2SC1047 C
Q202	1	1	1	HC10021010	IC, HA1137W
Q203	1	1	1	HD20001210	Diode, 1S2473
Q204	1	1	1	HD20001210	Diode, 1S2473
Q205	1	1	1	HD20001210	Diode, 1S2473
Q206	1	1	1	HT308281D0	Transistor, 2SC828 S
Q207	1	1	1	HD20001210	Diode, 1S2473
R201	1	1	1	RT05151140	Resistor, 150 Ω $\pm$ 5% $\frac{1}{4}$ W
R202	1	1	1	RT05331140	Resistor, 330 Ω $\pm$ 5% $\frac{1}{4}$ W
R203	1	1	1	RT05153140	Resistor, 15k Ω $\pm$ 5% $\frac{1}{4}$ W
R204	1	1	1	RT05272140	Resistor, 2.7k Ω $\pm$ 5% $\frac{1}{4}$ W
R205	1	1	1	RT05331140	Resistor, 330 Ω $\pm$ 5% $\frac{1}{4}$ W
R206	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
R207	1	1	1	RT05101140	Resistor, 100 Ω $\pm$ 5% $\frac{1}{4}$ W
R208	1	1	1	RT05334140	Resistor, 330k Ω $\pm$ 5% $\frac{1}{4}$ W
R209	1	1	1	RA05030120	Trimming Resistor, 50k Ω B
R210	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W
R211	1	1	1	RT05104140	Resistor, 100k Ω $\pm$ 5% $\frac{1}{4}$ W
R212	1	1	1	RA01030250	Trimming Resistor, 10k Ω B
R213	1	1	1	RT05123140	Resistor, 12k Ω $\pm$ 5% $\frac{1}{4}$ W
R214	1	1	1	RT05331140	Resistor, 330 Ω $\pm$ 5% $\frac{1}{4}$ W
R215	1	1	1	RA05030120	Trimming Resistor, 50k Ω B
R216	1	1	1	RT05562140	Resistor, 5.6k Ω $\pm$ 5% $\frac{1}{4}$ W
R217	1	1	1	RT05222140	Resistor, 2.2k Ω $\pm$ 5% $\frac{1}{4}$ W
R218	1	1	1	RT05222140	Resistor, 2.2k Ω $\pm$ 5% $\frac{1}{4}$ W
R219	1	1	1	RT05123140	Resistor, 12k Ω $\pm$ 5% $\frac{1}{4}$ W
R220	1	1	1	RT05391140	Resistor, 390 Ω $\pm$ 5% $\frac{1}{4}$ W
R221	1	1	1	RT05223140	Resistor, 22k Ω $\pm$ 5% $\frac{1}{4}$ W
R222	1	1	1	RT05473140	Resistor, 47k Ω $\pm$ 5% $\frac{1}{4}$ W
R223	1	1	1	RT05470140	Resistor, 47 Ω $\pm$ 5% $\frac{1}{4}$ W
R224	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
C301	1	1	1	EA47503590	Electrolytic Cap., 4.7 μ F 35V
C302	1	1	1	DF65361500	Film Cap., 360pF $\pm$ 5%
C303	1	1	1	EA10701690	Electrolytic Cap., 100 μ F 16V
C304	1	1	1	EE33502510	Electrolytic Cap., 3.3 μ F 25V
C305	1	1	1	EE10505010	Electrolytic Cap., 1 μ F 50V
C306	1	1	1	EA10505090	Electrolytic Cap., 1 μ F 50V
C307	1	1	1	EQ22405010	Electrolytic Cap., 0.22 μ F 50V
C308	1	1	1	DF17473010	Film Cap., 0.047 μ F $\pm$ 20%
C309	1	1	1	DD15500050	Ceramic Cap., 50pF $\pm$ 5%
C310	1	1	1	DD15500050	Ceramic Cap., 50pF $\pm$ 5%
C311	1	1	1	EA10601690	Electrolytic Cap., 10 μ F 16V
C312	1	1	1	EA10601690	Electrolytic Cap., 10 μ F 16V
C313	1	1	1	EA22505090	Electrolytic Cap., 2.2 μ F 50V
C314	1	1	1	EA22505090	Electrolytic Cap., 2.2 μ F 50V
C315	1	1		DF15102050	Film Cap., 1000pF $\pm$ 5%
C315			1	DF15222050	Film Cap., 2200pF $\pm$ 5%
C316	1	1		DF15102050	Film Cap., 1000pF $\pm$ 5%
C316			1	DF15222050	Film Cap., 2200pF $\pm$ 5%
C317	1	1	1	EA47405010	Electrolytic Cap., 0.47 μ F 50V
C318	1	1	1	EA47405010	Electrolytic Cap., 0.47 μ F 50V
C319	1	1	1	EE47502510	Electrolytic Cap., 4.7 μ F 25V
C320	1	1	1	EE47502510	Electrolytic Cap., 4.7 μ F 25V
C321	1	1	1	EA10701690	Electrolytic Cap., 100 μ F 16V
C322	1	1	1	EE10601640	Electrolytic Cap., 10 μ F 16V
L301	1	1	1	LS35025010	M.P.X. Coil, LPF.
Q301	1	1	1	HT308281D0	Transistor, 2SC828 S
Q302	1	1	1	HC10020010	IC, HA1196
Q303	1	1	1	HT313441E0	Transistor, 2SC1344E
Q304	1	1	1	HT313441E0	Transistor, 2SC1344E
R301	1	1	1	RA01030310	Trimming Resistor, 10k Ω B
R302	1	1	1	RT05104140	Resistor, 100k Ω $\pm$ 5% $\frac{1}{4}$ W
R303	1	1	1	RT05223140	Resistor, 22k Ω $\pm$ 5% $\frac{1}{4}$ W
R304	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
R305	1	1	1	RT05104140	Resistor, 100k Ω $\pm$ 5% $\frac{1}{4}$ W
R306	1	1	1	RT05824140	Resistor, 820k Ω $\pm$ 5% $\frac{1}{4}$ W
R307	1	1	1	RT05473140	Resistor, 47k Ω $\pm$ 5% $\frac{1}{4}$ W
R308	1	1	1	GF05220140	Resistor, 22 Ω $\pm$ 5% $\frac{1}{4}$ W
R309	1	1	1	RT05154140	Resistor, 150k Ω $\pm$ 5% $\frac{1}{4}$ W
R310	1	1	1	RT05223140	Resistor, 22k Ω $\pm$ 5% $\frac{1}{4}$ W
R311	1	1	1	RT05272140	Resistor, 2.7k Ω $\pm$ 5% $\frac{1}{4}$ W
R312	1	1	1	RT05101140	Resistor, 100 Ω $\pm$ 5% $\frac{1}{4}$ W
R313	1	1	1	RT05303140	Resistor, 30k Ω $\pm$ 5% $\frac{1}{4}$ W
R314	1	1	1	RT05303140	Resistor, 30k Ω $\pm$ 5% $\frac{1}{4}$ W
R315	1	1	1	RT05473140	Resistor, 47k Ω $\pm$ 5% $\frac{1}{4}$ W
R316	1	1	1	RT05473140	Resistor, 47k Ω $\pm$ 5% $\frac{1}{4}$ W
R317	1	1	1	RA05040080	Trimming Resistor, 50k Ω B
R318	1	1	1	RT05473140	Resistor, 47k Ω $\pm$ 5% $\frac{1}{4}$ W
R319	1	1	1	RT05273140	Resistor, 27k Ω $\pm$ 5% $\frac{1}{4}$ W
R320	1	1	1	RT05273140	Resistor, 27k Ω $\pm$ 5% $\frac{1}{4}$ W

- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION				REF. DESIG.	Q'TY			PART NO.	DESCRIPTION			
	U	C	N							U	C	N					
R321	1	1	1	RT05332140	Resistor,	3.3k Ω	$\pm 5\%$	$\frac{1}{4}W$	R401	1	1	1	RT05913140	Resistor,	91k Ω	$\pm 5\%$	$\frac{1}{4}W$
R322	1	1	1	RT05332140	Resistor,	3.3k Ω	$\pm 5\%$	$\frac{1}{4}W$	R402	1	1	1	RT05913140	Resistor,	91k Ω	$\pm 5\%$	$\frac{1}{4}W$
R323	1	1	1	RT05332140	Resistor,	3.3k Ω	$\pm 5\%$	$\frac{1}{4}W$	R403	1	1	1	RT05471140	Resistor,	470 Ω	$\pm 5\%$	$\frac{1}{4}W$
R324	1	1	1	RT05332140	Resistor,	3.3k Ω	$\pm 5\%$	$\frac{1}{4}W$	R404	1	1	1	RT05471140	Resistor,	470 Ω	$\pm 5\%$	$\frac{1}{4}W$
R325	1	1	1	RT05243140	Resistor,	24k Ω	$\pm 5\%$	$\frac{1}{4}W$	R405	1	1	1	RT05394140	Resistor,	390k Ω	$\pm 5\%$	$\frac{1}{4}W$
R326	1	1	1	RT05243140	Resistor,	24k Ω	$\pm 5\%$	$\frac{1}{4}W$	R406	1	1	1	RT05394140	Resistor,	390k Ω	$\pm 5\%$	$\frac{1}{4}W$
R327	1	1	1	RT05394140	Resistor,	390k Ω	$\pm 5\%$	$\frac{1}{4}W$	R407	1	1	1	RT05223140	Resistor,	22k Ω	$\pm 5\%$	$\frac{1}{4}W$
R328	1	1	1	RT05394140	Resistor,	390k Ω	$\pm 5\%$	$\frac{1}{4}W$	R408	1	1	1	RT05223140	Resistor,	22k Ω	$\pm 5\%$	$\frac{1}{4}W$
R329	1	1	1	RT05105140	Resistor,	1M Ω	$\pm 5\%$	$\frac{1}{4}W$	R409	1	1	1	RT05681140	Resistor,	680 Ω	$\pm 5\%$	$\frac{1}{4}W$
R330	1	1	1	RT05105140	Resistor,	1M Ω	$\pm 5\%$	$\frac{1}{4}W$	R410	1	1	1	RT05681140	Resistor,	680 Ω	$\pm 5\%$	$\frac{1}{4}W$
R331	1	1	1	RT05391140	Resistor,	390 Ω	$\pm 5\%$	$\frac{1}{4}W$	R411	1	1	1	RT05104140	Resistor,	100k Ω	$\pm 5\%$	$\frac{1}{4}W$
R332	1	1	1	RT05391140	Resistor,	390 Ω	$\pm 5\%$	$\frac{1}{4}W$	R412	1	1	1	RT05104140	Resistor,	100k Ω	$\pm 5\%$	$\frac{1}{4}W$
R333	1	1	1	RT05222140	Resistor,	2.2k Ω	$\pm 5\%$	$\frac{1}{4}W$	R413	1	1	1	RT05303140	Resistor,	30k Ω	$\pm 5\%$	$\frac{1}{4}W$
R334	1	1	1	RT05222140	Resistor,	2.2k Ω	$\pm 5\%$	$\frac{1}{4}W$	R414	1	1	1	RT05303140	Resistor,	30k Ω	$\pm 5\%$	$\frac{1}{4}W$
R335	1	1	1	RT05473140	Resistor,	47k Ω	$\pm 5\%$	$\frac{1}{4}W$	R415	1	1	1	RT05562140	Resistor,	5.6k Ω	$\pm 5\%$	$\frac{1}{4}W$
R336	1	1	1	RT05473140	Resistor,	47k Ω	$\pm 5\%$	$\frac{1}{4}W$	R416	1	1	1	RT05562140	Resistor,	5.6k Ω	$\pm 5\%$	$\frac{1}{4}W$
R337	1	1	1	RT05101140	Resistor,	100 Ω	$\pm 5\%$	$\frac{1}{4}W$	R417	1	1	1	RT05182140	Resistor,	1.8k Ω	$\pm 5\%$	$\frac{1}{4}W$
R338	1	1	1	RT05101140	Resistor,	100 Ω	$\pm 5\%$	$\frac{1}{4}W$	R418	1	1	1	RT05182140	Resistor,	1.8k Ω	$\pm 5\%$	$\frac{1}{4}W$
R339	1	1	1	RT05101140	Resistor,	100 Ω	$\pm 5\%$	$\frac{1}{4}W$	R419	1	1	1	RT05472140	Resistor,	4.7k Ω	$\pm 5\%$	$\frac{1}{4}W$
R340	1	1	1	RT05201140	Resistor,	200 Ω	$\pm 5\%$	$\frac{1}{4}W$	R420	1	1	1	RT05472140	Resistor,	4.7k Ω	$\pm 5\%$	$\frac{1}{4}W$
C401	1	1	1	EV22502560	Electrolytic Cap.,	2.2 μF	$\pm 20\%$	25V	R421	1	1	1	RT05224140	Resistor,	220k Ω	$\pm 5\%$	$\frac{1}{4}W$
C402	1	1	1	EV22502560	Electrolytic Cap.,	2.2 μF	$\pm 20\%$	25V	R422	1	1	1	RT05224140	Resistor,	220k Ω	$\pm 5\%$	$\frac{1}{4}W$
C403	1	1	1	DD16201010	Ceramic Cap.,	200pF	$\pm 10\%$	50V	R423	1	1	1	RT05473140	Resistor,	47k Ω	$\pm 5\%$	$\frac{1}{4}W$
C404	1	1	1	DD16201010	Ceramic Cap.,	200pF	$\pm 10\%$	50V	R424	1	1	1	RT05473140	Resistor,	47k Ω	$\pm 5\%$	$\frac{1}{4}W$
C405	1	1	1	DD16151010	Ceramic Cap.,	150pF	$\pm 10\%$	50V	R425	1	1	1	RT05152140	Resistor,	1.5k Ω	$\pm 5\%$	$\frac{1}{4}W$
C406	1	1	1	DD16151010	Ceramic Cap.,	150pF	$\pm 10\%$	50V	R426	1	1	1	RT05152140	Resistor,	1.5k Ω	$\pm 5\%$	$\frac{1}{4}W$
C407	1	1	1	EV22600660	Electrolytic Cap.,	22 μF	$\pm 20\%$	6.3V	R427	1	1	1	RT05564140	Resistor,	560k Ω	$\pm 5\%$	$\frac{1}{4}W$
C408	1	1	1	EV22600660	Electrolytic Cap.,	22 μF	$\pm 20\%$	6.3V	R428	1	1	1	RT05564140	Resistor,	560k Ω	$\pm 5\%$	$\frac{1}{4}W$
C409	1	1	1	DD16300010	Ceramic Cap.,	30pF	$\pm 10\%$	50V	R429	1	1	1	RT05101140	Resistor,	100 Ω	$\pm 5\%$	$\frac{1}{4}W$
C410	1	1	1	DD16300010	Ceramic Cap.,	30pF	$\pm 10\%$	50V	R430	1	1	1	GF05430120	Resistor,	43 Ω	$\pm 5\%$	$\frac{1}{2}W$
C411	1	1	1	EA47601690	Electrolytic Cap.,	47 μF	$\pm 50\%$	16V	S401	1	1	1	SR16050020	Rotary Switch, Selector			
C412	1	1	1	EA47601690	Electrolytic Cap.,	47 μF	$\pm 50\%$	16V	C701	1	1	1	EE33502540	Electrolytic Cap.,	3.3 μF	$\pm 20\%$	25V
C413	1	1	1	DD16101010	Ceramic Cap.,	100pF	$\pm 10\%$	50V	C702	1	1	1	EE33502540	Electrolytic Cap.,	3.3 μF	$\pm 20\%$	25V
C414	1	1	1	DD16101010	Ceramic Cap.,	100pF	$\pm 10\%$	50V	C703	1	1	1	DD16201010	Ceramic Cap.,	200pF	$\pm 10\%$	50V
C415	1	1	1	EE22503510	Electrolytic Cap.,	2.2 μF	$\pm 20\%$	35V	C704	1	1	1	DD16201010	Ceramic Cap.,	200pF	$\pm 10\%$	50V
C416	1	1	1	EE22503510	Electrolytic Cap.,	2.2 μF	$\pm 20\%$	35V	C705	1	1	1	EE47601640	Electrolytic Cap.,	47 μF	$\pm 20\%$	16V
C417	1	1	1	DF15152010	Film Cap.,	0.0015 μF	$\pm 5\%$	50V	C706	1	1	1	EE47601640	Electrolytic Cap.,	47 μF	$\pm 20\%$	16V
C418	1	1	1	DF15152010	Film Cap.,	0.0015 μF	$\pm 5\%$	50V	C707	1	1	1	DD11050500	Ceramic Cap.,	5pF	$\pm 0.25pF$	500V
C419	1	1	1	DF15562010	Film Cap.,	0.0056 μF	$\pm 5\%$	50V	C708	1	1	1	DD11050500	Ceramic Cap.,	5pF	$\pm 0.25pF$	500V
C420	1	1	1	DF15562010	Film Cap.,	0.0056 μF	$\pm 5\%$	50V	C709	1	1	1	EA47605090	Electrolytic Cap.,	47 μF	$\pm 50\%$	50V
C421	1	1	1	EA10705090	Electrolytic Cap.,	100 μF	$\pm 50\%$	50V	C710	1	1	1	EA47605090	Electrolytic Cap.,	47 μF	$\pm 50\%$	50V
C422	1	1	1	EA47601090	Electrolytic Cap.,	47 μF	$\pm 50\%$	10V	C711	1	1	1	DF16103050	Film Cap.,	0.01 μF	$\pm 10\%$	50V
J401	49	49	49	YP10001130	Plug				C712	1	1	1	DF16103050	Film Cap.,	0.01 μF	$\pm 10\%$	50V
J449									C713	1	1	1	DF16103050	Film Cap.,	0.01 μF	$\pm 10\%$	50V
L401	1	1	1	LC11540020	Choke Coil,	150 μH			C714	1	1	1	DF16103050	Film Cap.,	0.01 μF	$\pm 10\%$	50V
P400	1	1	1	YK22090210	P.W. Board				C715	1	1	1	DF17104010	Film Cap.,	0.1 μF	$\pm 20\%$	50V
	1	1	1	ZZ22090210	P.W. Board Assembly				C716	1	1	1	DF17104010	Film Cap.,	0.1 μF	$\pm 20\%$	50V
Q401	1	1	1	HT316811B0	Transistor,	2SC1681 (BL)			C717	1	1	1	DF17104010	Film Cap.,	0.1 μF	$\pm 20\%$	50V
Q402	1	1	1	HT316811B0	Transistor,	2SC1681 (BL)			C718	1	1	1	DF17104010	Film Cap.,	0.1 μF	$\pm 20\%$	50V
Q403	1	1	1	HT316812A0	Transistor,	2SC1681 (GR, BL)			C719	1	1	1	EE10601640	Electrolytic Cap.,	10 μF	$\pm 20\%$	16V
Q404	1	1	1	HT316812A0	Transistor,	2SC1681 (GR, BL)			C720	1	1	1	EE10601640	Electrolytic Cap.,	10 μF	$\pm 20\%$	16V
Q405	1	1	1	HT316811B0	Transistor,	2SC1681 (BL)			C721	1	1	1	EE10601640	Electrolytic Cap.,	10 μF	$\pm 20\%$	16V
Q406	1	1	1	HT316811B0	Transistor,	2SC1681 (BL)			C722	1	1	1	EE10601640	Electrolytic Cap.,	10 μF	$\pm 20\%$	16V
Q407	1	1	1	HD20001210	Diode,	1S2472			C723	1	1	1	DK16101500	Ceramic Cap.,	100pF	$\pm 10\%$	500V
									C724	1	1	1	DK16101500	Ceramic Cap.,	100pF	$\pm 10\%$	500V
									C725	1	1	1	DK16101500	Ceramic Cap.,	100pF	$\pm 10\%$	500V
									C726	1	1	1	DK16101500	Ceramic Cap.,	100pF	$\pm 10\%$	500V

- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	N				U	C	N		
C727	1	1	1	DF17104520	Film Cap., 0.1 μ F $\pm$ 20% 200V	Q725	1	1	1	HD20002210	Diode, 1S2472 (GR)
C728	1	1	1	DF17104520	Film Cap., 0.1 μ F $\pm$ 20% 200V	Q726	1	1	1	HD20002210	Diode, 1S2472 (GR)
C729	1	1	1	EA22705090	Electrolytic Cap., 220 μ F $\pm$ 50% 50V	Q727	1	1	1	HD20002210	Diode, 1S2472 (GR)
C730	1	1	1	EA47601690	Electrolytic Cap., 47 μ F $\pm$ 50% 16V	Q728	1	1	1	HD20002210	Diode, 1S2472 (GR)
C731	1	1	1	EA33701090	Electrolytic Cap., 330 μ F $\pm$ 50% 10V	Q729	1	1	1	HD20002210	Diode, 1S2472 (GR)
C732	1	1	1	DK18103510	Ceramic Cap., 0.01 μ F $\pm$ 20% 500V	Q730	1	1	1	HD20002210	Diode, 1S2472 (GR)
C733	1	1	1	EA47706310	Electrolytic Cap., 470 μ F $\pm$ 50% 63V	Q731	1	1	1	HD20002210	Diode, 1S2472 (GR)
C734	1	1	1	EA10706310	Electrolytic Cap., 100 μ F $\pm$ 50% 63V	Q732	1	1	1	HD20002210	Diode, 1S2472 (GR)
C735	1	1	1	EA33605090	Electrolytic Cap., 33 μ F $\pm$ 50% 50V	Q733	1	1	1	HD20002210	Diode, 1S2472 (GR)
C736	1	1	1	DF17473050	Film Cap., 0.047 μ F $\pm$ 20% 50V	Q734	1	1	1	HD20002210	Diode, 1S2472 (GR)
C737	1	1	1	EA10701690	Electrolytic Cap., 100 μ F $\pm$ 50% 16V	Q735	1	1	1	HH00003030	Thermistor, STD-04
C738	1	1	1	EA10605090	Electrolytic Cap., 10 μ F $\pm$ 50% 50V	Q736	1	1	1	HH00003030	Thermistor, STD-04
C739	1	1	1	EA10801690	Electrolytic Cap., 1000 μ F $\pm$ 50% 16V	Q737	1	1	1	HD20005010	Diode, W06B
F701	1	1	1	FS10100080	Fuse, MGC 1A 30mm	Q738	1	1	1	HD20005010	Diode, W06B
F701	1	1	1	FS10100800	Fuse, 1AT 20mm SEMKO	Q739	1	1	1	HD20005010	Diode, W06B
F702	1	1	1	FS10200060	Fuse, MGC 2A 30mm	Q740	1	1	1	HD20005010	Diode, W06B
F702	1	1	1	FS10200800	Fuse, 2AT 20mm SEMKO	Q741	1	1	1	HV00005080	Varistor, STV-3H (Y)
J701	28	28	28	YP10001130	Plug	Q742	1	1	1	HV00005080	Varistor, STV-3H (Y)
J728						Q743	1	1	1	HT309452A0	Transistor, 2SC945 (Q, R)
J729	4	4	4	YJ08000210	Jack, Fuse Holder	Q744	1	1	1	HT309452A0	Transistor, 2SC945 (R, Q)
J732						Q745	1	1	1	HT313182C0	Transistor, 2SC1318 (R, S)
J733	4	4	4	YJ05000260	Jack, TR Socket	Q746	1	1	1	HD20003210	Diode, 1S2471 (BK)
J736						Q747	1	1	1	HD20011030	Diode, DS-131B
L701	1	1	1	LC22620010	Choke Coil, 2.6 μ H	Q748	1	1	1	HD20012030	Diode, DS-132B
L702	1	1	1	LC22620010	Choke Coil, 2.6 μ H	Q749	1	1	1	HD20005010	Diode, W06B
L703	1	1	1	LY40240050	Relay	Q750	1	1	1	HT318853B0	Transistor, 2SC1885 (Q, R, S)
P700	1	1	1	YG22070010	P.W. Board	Q751	1	1	1	HT309452A0	Transistor, 2SC945 (P, Q)
	1	1	1	ZZ22091010	P.W. Board Assembly	Q752	1	1	1	HD30025090	Zener, WZ-150
Q701	1	1	1	HT107502B0	Transistor, 2SA750 (T, U)	Q753	1	1	1	HT403302A0	Transistor, 2SD330 (D, E)
Q702	1	1	1	HT107502B0	Transistor, 2SA750 (T, U)	R701	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
Q703	1	1	1	HT107502B0	Transistor, 2SA750 (T, U)	R702	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
Q704	1	1	1	HT107502B0	Transistor, 2SA750 (T, U)	R703	1	1	1	RT05333140	Resistor, 33k Ω $\pm$ 5% $\frac{1}{4}$ W
Q705	1	1	1	HT318853B0	Transistor, 2SC1885 (Q, R, S)	R704	1	1	1	RT05333140	Resistor, 33k Ω $\pm$ 5% $\frac{1}{4}$ W
Q706	1	1	1	HT318853B0	Transistor, 2SC1885 (Q, R, S)	R705	1	1	1	RT05682140	Resistor, 6.8k Ω $\pm$ 5% $\frac{1}{4}$ W
Q707	1	1	1	HT404152B0	Transistor, 2SD415 (Q, R)	R706	1	1	1	RT05682140	Resistor, 6.8k Ω $\pm$ 5% $\frac{1}{4}$ W
Q708	1	1	1	HT404152B0	Transistor, 2SD415 (Q, R)	R707	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
Q709	1	1	1	HT205492B0	Transistor, 2SB549 (Q, R)	R708	1	1	1	RT05102140	Resistor, 1k Ω $\pm$ 5% $\frac{1}{4}$ W
Q710	1	1	1	HT205492B0	Transistor, 2SB549 (Q, R)	R709	1	1	1	RT05472140	Resistor, 4.7k Ω $\pm$ 5% $\frac{1}{4}$ W
Q711	1	1	1	HT313432B0	Transistor, 2SC1343 (B, C)	R710	1	1	1	RT05472140	Resistor, 4.7k Ω $\pm$ 5% $\frac{1}{4}$ W
Q712	1	1	1	HT313432B0	Transistor, 2SC1343 (B, C)	R711	1	1	1	RA05020200	Trimming Resistor, 5k Ω (B)
Q713	1	1	1	HT107532B0	Transistor, 2SA753 (B, C)	R712	1	1	1	RA05020200	Trimming Resistor, 5k Ω (B)
Q714	1	1	1	HT107532B0	Transistor, 2SA753 (B, C)	R713	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W
Q715	1	1	1	HT309451Q0	Transistor, 2SC945 (Q)	R714	1	1	1	RT05103140	Resistor, 10k Ω $\pm$ 5% $\frac{1}{4}$ W
Q716	1	1	1	HT309451Q0	Transistor, 2SC945 (Q)	R715	1	1	1	RT05224140	Resistor, 220k Ω $\pm$ 5% $\frac{1}{4}$ W
Q717	1	1	1	HT107331Q0	Transistor, 2SA733 (Q)	R716	1	1	1	RT05224140	Resistor, 220k Ω $\pm$ 5% $\frac{1}{4}$ W
Q718	1	1	1	HT107331Q0	Transistor, 2SA733 (Q)	R717	1	1	1	RT05242140	Resistor, 2.4k Ω $\pm$ 5% $\frac{1}{4}$ W
Q719	1	1	1	HV00003120	Varistor, MV-13	R718	1	1	1	RT05242140	Resistor, 2.4k Ω $\pm$ 5% $\frac{1}{4}$ W
Q720	1	1	1	HV00003120	Varistor, MV-13	R719	1	1	1	RT05333140	Resistor, 33k Ω $\pm$ 5% $\frac{1}{4}$ W
Q721	1	1	1	HV00003120	Varistor, MV-13	R720	1	1	1	RT05333140	Resistor, 33k Ω $\pm$ 5% $\frac{1}{4}$ W
Q722	1	1	1	HV00003120	Varistor, MV-13	R721	1	1	1	GF05330140	Resistor, 33 Ω $\pm$ 5% $\frac{1}{4}$ W
Q723	1	1	1	HD20002210	Diode, 1S2472 (GR)	R722	1	1	1	GF05330140	Resistor, 33 Ω $\pm$ 5% $\frac{1}{4}$ W
Q724	1	1	1	HD20002210	Diode, 1S2472 (GR)	R723	1	1	1	RT05242140	Resistor, 2.4k Ω $\pm$ 5% $\frac{1}{4}$ W
						R724	1	1	1	RT05242140	Resistor, 2.4k Ω $\pm$ 5% $\frac{1}{4}$ W
						R725	1	1	1	RT05472140	Resistor, 4.7k Ω $\pm$ 5% $\frac{1}{4}$ W
						R726	1	1	1	RT05472140	Resistor, 4.7k Ω $\pm$ 5% $\frac{1}{4}$ W
						R727	1	1	1	RT05152140	Resistor, 1.5k Ω $\pm$ 5% $\frac{1}{4}$ W
						R728	1	1	1	GF05220120	Resistor, 22 Ω $\pm$ 5% $\frac{1}{4}$ W

- (U) for U.S.A.
- (C) for Canada
- (N) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	N		
R729	1	1	1	RT05820140	Resistor, 82Ω ±5% ¼W
R730	1	1	1	RT05820140	Resistor, 82Ω ±5% ¼W
R731	1	1	1	RA01020210	Trimming Resistor, 1kΩ (B)
R732	1	1	1	RA01020210	Trimming Resistor, 1kΩ (B)
R733	1	1	1	RT05161140	Resistor, 160Ω ±5% ¼W
R734	1	1	1	RT05161140	Resistor, 160Ω ±5% ¼W
R735	1	1	1	GF05271140	Resistor, 270Ω ±5% ¼W
R736	1	1	1	GF05271140	Resistor, 270Ω ±5% ¼W
R737	1	1	1	GF05271140	Resistor, 270Ω ±5% ¼W
R738	1	1	1	GF05271140	Resistor, 270Ω ±5% ¼W
R739	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R740	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R741	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R742	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R743	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R744	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R745	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R746	1	1	1	GF05221140	Resistor, 220Ω ±5% ¼W
R747	1	1	1	GF05242140	Resistor, 2.4kΩ ±5% ¼W
R748	1	1	1	GF05242140	Resistor, 2.4kΩ ±5% ¼W
R749	1	1	1	GF05272140	Resistor, 2.7kΩ ±5% ¼W
R750	1	1	1	GF05272140	Resistor, 2.7kΩ ±5% ¼W
R751	1	1	1	GF05243140	Resistor, 24kΩ ±5% ¼W
R752	1	1	1	GF05243140	Resistor, 24kΩ ±5% ¼W
R753	1	1	1	GF05100140	Resistor, 10Ω ±5% ¼W
R754	1	1	1	GF05100140	Resistor, 10Ω ±5% ¼W
R755	1	1	1	GF05100140	Resistor, 10Ω ±5% ¼W
R756	1	1	1	GF05100140	Resistor, 10Ω ±5% ¼W
R757	1	1	1	GF05101120	Resistor, 100Ω ±5% ½W
R758	1	1	1	GF05101120	Resistor, 100Ω ±5% ½W
R759	1	1	1	GF05101120	Resistor, 100Ω ±5% ½W
R760	1	1	1	GF05101120	Resistor, 100Ω ±5% ½W
R761	1	1	1	GJ05100020	Resistor, 10Ω ±5% 2W
R762	1	1	1	GJ05100020	Resistor, 10Ω ±5% 2W
R763	1	1	1	GW10392050	Resistor, 0.39Ω ±10% 5W
R764	1	1	1	GW10392050	Resistor, 0.39Ω ±10% 5W
R765	1	1	1	GW10392050	Resistor, 0.39Ω ±10% 5W
R766	1	1	1	GW10392050	Resistor, 0.39Ω ±10% 5W
R767	1	1	1	RC10022120	Resistor, 2.2Ω ±10% ½W
R768	1	1	1	RC10022120	Resistor, 2.2Ω ±10% ½W
R769	1	1	1	RC10562120	Resistor, 5.6kΩ ±10% ½W
R770	1	1	1	RC10562120	Resistor, 5.6kΩ ±10% ½W
R771	1	1	1	RT05223140	Resistor, 22kΩ ±5% ¼W
R772	1	1	1	RT05183140	Resistor, 18kΩ ±5% ¼W
R773	1	1	1	RT05682140	Resistor, 6.8kΩ ±5% ¼W
R774	1	1	1	RT05393140	Resistor, 39kΩ ±5% ¼W
R775	1	1	1	RT05184140	Resistor, 180kΩ ±5% ¼W
R776	1	1	1	GJ05471010	Resistor, 470Ω ±5% 1W
R777	1	1	1	GJ05331020	Resistor, 330Ω ±5% 2W
R778	1	1	1	GJ05331020	Resistor, 330Ω ±5% 2W
R779	1	1	1	GJ05151010	Resistor, 150Ω ±5% 1W
R780	1	1	1	GJ05151010	Resistor, 150Ω ±5% 1W
R781	1	1	1	GS10101070	Resistor, 100Ω ±10% 7W
R782	1	1	1	GF05220120	Resistor, 22Ω ±5% ½W
R783	1	1	1	RT05152140	Resistor, 1.5kΩ ±5% ¼W
R784	1	1	1	RT05152140	Resistor, 1.5kΩ ±5% ¼W
R785	1	1	1	RT05392140	Resistor, 3.9kΩ ±5% ¼W
R786	1	1	1	RT05223140	Resistor, 22kΩ ±5% ¼W
R787	1	1	1	RA05020200	Trimming Resistor, 5kΩ (B)
R788	1	1	1	RT05153140	Resistor, 15kΩ ±5% ¼W
S701	1	1	1	SP04020200	Pushswitch, Spkr System 1-2

18. TECHNICAL SPECIFICATIONS

FOR U.S.A. MODEL ONLY

AMPLIFIER SECTION:

RATED POWER OUTPUT, MINIMUM CONTINUOUS AVERAGE POWER PER CHANNEL, BOTH CHANNELS DRIVEN.	52W
POWER BAND	20 Hz to 20 kHz
TOTAL HARMONIC DISTORTION	0.05%
LOAD IMPEDANCE	8 OHMS
RATED POWER OUTPUT, MINIMUM CONTINUOUS AVERAGE POWER PER CHANNEL, BOTH CHANNELS DRIVEN.	65W
POWER BAND	20 Hz to 20 kHz
TOTAL HARMONIC DISTORTION	0.1%
LOAD IMPEDANCE	4 OHMS

I.M. Distortion

(I.H.F. method, 60 Hz and 7 kHz mixed 4:1 at rated power output)	
at 8 ohm load impedance	0.05%
at 4 ohm load impedance	0.1%
Damping Factor (at 20 Hz)	45
Sensitivity (at MAIN IN)	1.5V
Impedance (at MAIN IN)	33k ohms
Frequency Response for Power Amp Only (at 1 Watt output, 20 Hz to 20 kHz)	±0.2 dB

PREAMPLIFIER SECTION:

Phono	
Input Overload at 1 kHz	100 mV
Equivalent Input Noise	1.5μV
Dynamic Range (Dynamic Range is the ratio of input overload to equivalent input noise)	96 dB
Input Sensitivity	1.8 mV
Input Impedance	47k ohms
Input Capacitance	100 pF
Frequency Response, RIAA 20 Hz to 20 kHz	±0.75 dB
Signal-to-Noise Ratio (at rated output and 7.75 mV input)	76 dB
High Level (Aux and Tape)	
Input Sensitivity	180 mV
Input Impedance	20k ohms
Frequency Response (includes power amp)	10 Hz to 60 kHz ± 1.25 dB
Signal-to-Noise Ratio (ref. to rated output and 775 mV input)	90 dB
Output Levels	
Tape Out (ref. 7.75 mV at Phono inputs)	775 mV
Pre-Out (ref. 180 mV at Aux inputs)	1.5V
(ref. 500 mV at Aux inputs, main amp disconnected)	4.2V
Output Impedance	
Tape Out	600 ohms
Pre-Out	900 ohms

FM TUNER SECTION:

Sensitivity	
IHF Usable	10.8 dBf (1.9μV)
IHF 50 dB Quieting (Mono)	16.1 dBf (3.2μV)
(Stereo)	37.3 dBf (40μV)
Quieting Slope (Mono)	
RF Input for 30 dB Quieting	9.3 dBf (1.6μV)
Quieting at:	
20 dBf (5.5μV)	55 dB
25 dBf (10μV)	60 dB
40 dBf (55μV)	70 dB
65 dBf (1000μV)	75 dB
Quieting Slope (Stereo)	
Quieting at:	

30 dBf (17μV)	42 dB
40 dBf (55μV)	53 dB
50 dBf (173μV)	58 dB
65 dBf (1000μV)	65 dB
Distortion (Mono) at 65 dBf (1000μV)	
100 Hz	0.25%
1000 Hz	0.15%
6000 Hz	0.35%
Distortion (Stereo) at 65 dBf (1000μV)	
100 Hz	0.35%
1000 Hz	0.3%
6000 Hz	0.55%
Distortion (Mono and Stereo) at 50 dB Quieting, 1000 Hz	0.6%
Hum and Noise at 65 dBf (1000μV)	
Mono	73 dB
Frequency Response	
30 Hz to 15 kHz	
Mono	+0.2 dB, -1.5 dB
Stereo	±1.5 dB
Capture Ratio at 65 dBf (1000μV)	1.0 dB
Alternate Channel Selectivity	70 dB
Spurious Response Rejection	90 dB
Image Response Rejection	70 dB
I.F. Rejection (Balanced)	95 dB
A.M. Suppression	50 dB
Stereo Separation	
100 Hz	40 dB
1000 Hz	45 dB
10 kHz	40 dB
Subcarrier Rejection	60 dB

AM TUNER SECTION:

IHF Usable Sensitivity	15μV
Distortion (THD), 30% Modulation	0.5%
Signal-to-Noise Ratio	50 dB
Alternate Channel Selectivity	46 dB
Image Rejection	45 dB
Spurious Response Rejection	60 dB
I.F. Rejection	40 dB

GENERAL:

Power Requirements	120V AC, 60 Hz
Power Consumption at rated output, both channels operating	220W
Idling Power (Volume Control at zero)	35W
Dimensions:	
Panel Width	440 mm (17-5/16 inches)
Panel Height	137 mm (5-3/8 inches)
Depth	362 mm (14-1/2 inches)
Weight:	
Unit alone	14.2 kg (31.2 lbs)
Packed for Shipment	16.7 kg (36.7 lbs)

FOR EUROPEAN MODEL ONLY

AUDIO SECTION

POWER OUTPUT AT 1% DISTORTION	105W
RATED POWER OUTPUT, 1 kHz	72W
TOTAL HARMONIC DISTORTION AT RATED POWER OUTPUT, 1 kHz	0.1%
I.M. DISTORTION AT RATED POWER OUTPUT (I.H.F. METHOD, 300 Hz AND 10 kHz MIXED 4:1 AT RATED POWER OUTPUT)	0.1%
POWER BANDWIDTH, 1/2 RATED POWER OUTPUT	8 Hz ~ 30 kHz
LOAD IMPEDANCE	4 OHMS
POWER OUTPUT AT 1% DISTORTION	70W
RATED POWER OUTPUT, 1 kHz	57W
TOTAL HARMONIC DISTORTION AT RATED POWER OUTPUT, 1 kHz	0.05%
I.M. DISTORTION AT RATED POWER OUTPUT (I.H.F. METHOD, 300 Hz AND 10 kHz MIXED 4:1 AT RATED POWER OUTPUT)	0.1%
POWER BANDWIDTH, 1/2 RATED POWER OUTPUT	8 Hz ~ 30 kHz
LOAD IMPEDANCE	8 OHMS

Damping Factor, SP Output	
40 Hz	60
1 kHz	60
12.5 kHz	40
Frequency Response	
Phono ± 2 dB	18 Hz ~ 30 kHz
Aux ± 1.5 dB	10 Hz ~ 40 kHz
Main In ± 1.5 dB	10 Hz ~ 40 kHz
Signal-to-Noise Ratio, 1 kHz	
Phono	50 dB
Aux	50 dB
Main In	55 dB
Input Sensitivity, 1 kHz (Rated Input Voltage)	
Phono	1.8 mV
Aux	180 mV
Main In	1.5V
Input Impedance, 1 kHz	
Phono	47k ohms
Aux	20k ohms
Main In	33k ohms
Phono Equivalent Input Noise	1.8µV
Phono Dynamic Range	92 dB
Phono Input Capacitance	100 pF
Channel Balance	
Phono 0 ~ -40 dB	2.5 dB
Aux 40 ~ 16 kHz	2.0 dB
Main In	1.0 dB
Interchannel Crosstalk	
Phono 1 kHz	38 dB
250 Hz ~ 10 kHz	33 dB
Aux 1 kHz	45 dB
250 Hz ~ 10 kHz	30 dB
Tape 1 kHz	45 dB
250 Hz ~ 10 kHz	30 dB
Main In 1 kHz	55 dB
250 Hz ~ 10 kHz	50 dB
Intersource Crosstalk, Worst Point	
1 kHz	45 dB
250 Hz ~ 10 kHz	30 dB
Output Voltage, 1 kHz	
Tape Out	0.18V
Pre Out	1.5V
Output Impedance, 1 kHz	
Tape Out	50 ohms
Pre Out	600 ohms
Overload Margin, 1 kHz	
Phono	33 dB
Aux	50 dB
Power Consumption	
Idling	40W
Rated Power, 1 kHz	230W

FM TUNER SECTION:

Frequency Range	87.5 ~ 108 MHz
Usable Sensitivity 40 kHz Deviation, 98 MHz	
Mono S/N 26 dB	1.5µV
Stereo S/N 46 dB	45µV
Alternate Channel Selectivity 98 MHz, ±300 kHz	50 dB
Image Response Rejection, 98 MHz	60 dB

IF Rejection, 98 MHz	80 dB
Spurious Response Rejection, 98 MHz	80 dB
AM Suppression, 98 MHz	50 dB
Signal-to-Noise Ratio at 98 MHz	
Un-weighted Mono	65 dB
Stereo	58 dB
Weighted Mono	68 dB
Stereo	62 dB
Pilot Signal & Subcarrier Rejection	
19 kHz	60 dB
38 kHz	65 dB
Total Harmonic Distortion at 98 MHz	
Mono	0.2%
Stereo	0.4%
Frequency Response	
30 Hz ~ 15 kHz	+0.2 dB, -2.0 dB
Separation	
250 ~ 6.3 kHz	40 dB
6.3 kHz ~ 12.5 kHz	35 dB
Channel Balance	0.5 dB
Output Voltage, 1 kHz	565 mV
Output Impedance, 1 kHz	2.3k ohms
Acceptable Load Impedance, 1 kHz	47k ohms
Antenna Terminals	
Balanced	300 ohms
Unbalanced	75 ohms

AM TUNER SECTION:

Frequency Range	515 ~ 1650 kHz
Usable Sensitivity 26 dB S/N 30% Mod., 1 MHz	25µV
Selectivity 1 MHz, ±9 kHz	20 dB
Image Rejection, 1 MHz	18 dB
IF Rejection, 1 MHz	3 dB
Spurious Response Rejection, 1 MHz	60 dB
Signal-to-Noise Ratio, 1 MHz	52 dB
Frequency Response 1 MHz, ±3 dB	40 Hz ~ 2.3 kHz
Total Harmonic Distortion, 1 MHz	0.5%

GENERAL:

Power Requirements	220V ~, 50 Hz
(E and N versions are featuring an external voltage selector for use on 110/120/240V. Other versions can be converted by a qualified technician to operate on 110/120/240V.)	
Power Consumption at rated output, both channels operating	220W ± 15W
Idling Power	37W ± 7W
Semiconductor Complement	
Integrated Circuits	3
Transistors	46
Diodes	39
Field Effect Transistors	1
Dimensions	
Panel Width	440 mm (17-5/16 inches)
Panel Height	137 mm (5-25/64 inches)
Depth	365 mm (14-3/8 inches)
Weight	
Unit Alone	14.2 kg (31.3 lbs)
Packed for Shipment	16.7 kg (36.8 lbs)



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