ULTIMATE HIGH FIDELITY STEREO COMPONENTS

LUXMAN

R-1120

SERVICE MANUAL

R-1120 TUNER SECTION ALIGNMENT PROCEDURE

[CAUTION]

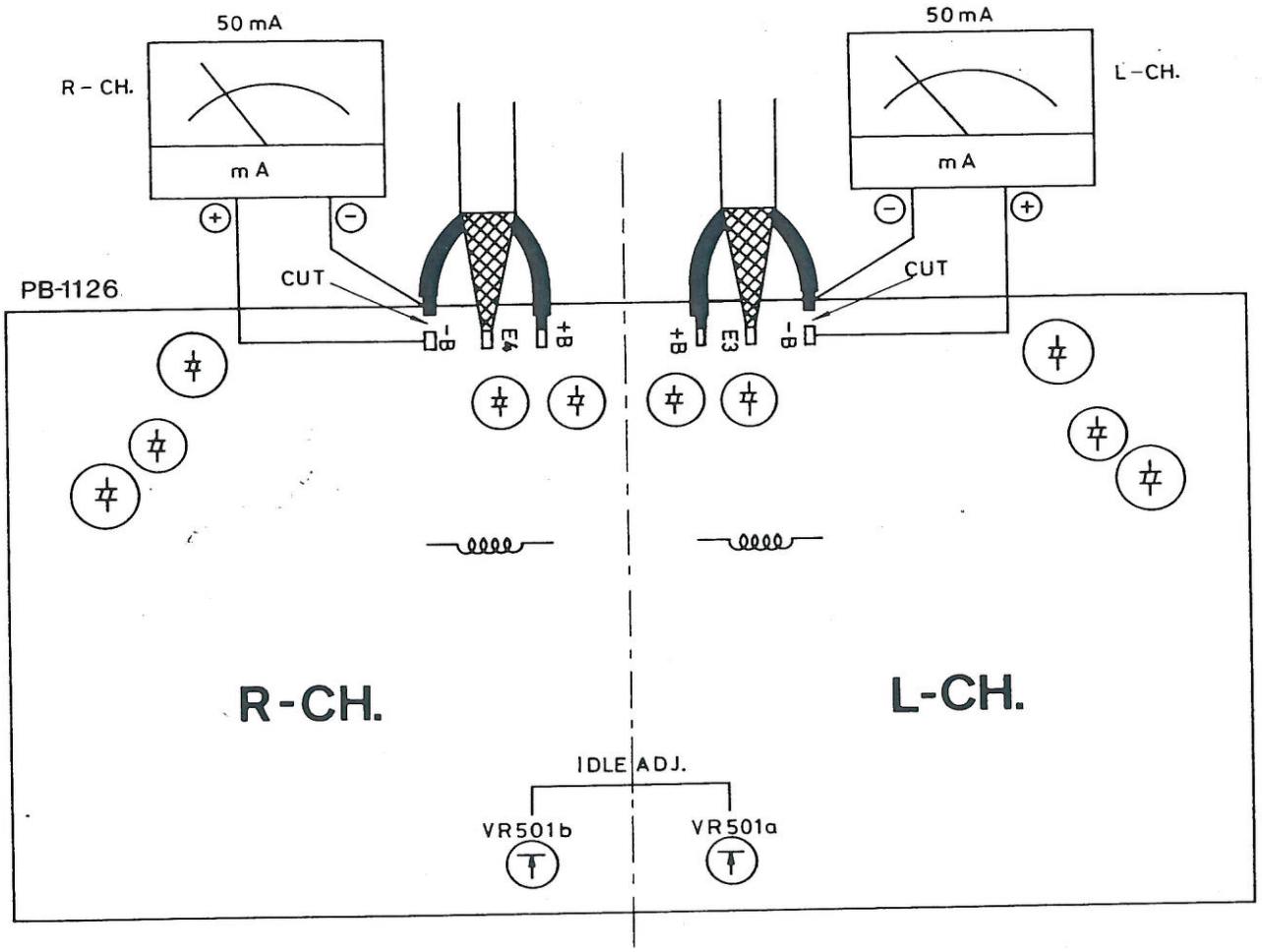
1. FM alignment should be done after 5 minutes of the power switch "ON".
2. Low distortion SG or stereo signal generator is indispensable for the FM-mono, stereo alignment procedure.

Preliminary Check	1.	Voltage selector must be at the appointed voltage.
	2.	Fuses on PB-1127 must be the appointed one.
	3.	Set the Input Selector Switch to the "AM" position.
	4.	Set the Dial Pointer to the maximum-right position.
	5.	Set all semifixed pots to their center position.
	6.	Select the De-emphasis switch to the appointed time-constant.
AM Section Alignment	7.	Push the Power Switch to "ON", and confirm if there is no trouble.
	8.	Measure the voltage at the (+) side of power rectifying diode D110, which must be 13V $\pm$1V.
	9.	Voltage at Pin No. 71 or No. 72 must be 13V $\pm$1V.
	10.	Set the output of 455kHz Sweep Generator for AM at 40dB, and connect it to Pin No. 64. At the same time connect the line input of the SG to the No. 66.
	11.	Adjust the Ceramic Filter T105, T106, and T107 to have symmetrical response.
	12.	Set the loop antenna connected to AM-SG at the measuring position.
	13.	Connect oscilloscope and milivoltmeter to the REC. OUT terminal.
	14.	Obtain 400Hz 30% modulation on AM SG, and set the output attenuator at 80dB.
	15.	Set both SG and the dial pointer at 600kHz.
	16.	Adjust T104, Ferrite-core antenna and RF coil T103 to obtain maximum response on the signal meter or 400Hz sine-wave.
	17.	Set SG and the Dial Pointer at 1400kHz.
	18.	Adjust 3 trimmers on top of the variable capacitor (viewing from front, the center one is for the OSC.) to obtain maximum response on the Signal Meter or 400Hz sine-wave. Repeat steps 15 - 18 for 2 or 3 times to obtain maximum sensitivity.
	19.	Set SG and the Dial Pointer at 1000kHz, and at maximum output level (126dB), adjust VR108 to have 4.5 reading on the Signal Meter calibration.
	20.	Check that all the specification items, sensitivity, output level, etc., are fulfilled.

Note the following adjustment must be done at least 5 minutes after the power "ON".		
FM Frontend & IF Section Alignment	21.	Set the Input Selector Switch to the "FM" position, and the Muting Switch to OFF.
	22.	Connect milivoltmeter, distortion meter and synchroscope to the REC. OUT terminal.
	23.	Connect FM SG of 400Hz 100% modulated to the 300-ohm ANT. terminal through 300-ohm balun. In this case the attenuator of the SG must be minimum.
	24.	Set SG and the Dial Pointer at 98MHz.
	25.	Adjust the detection transformer T101 to obtain center indication of the center meter.
	26.	Set the SG output at 1mV, and adjust VR104 to have 1.0V output level at REC.OUT. Adjust detection trans T102 (both L & R ch) to realize minimum distortion (no more than 0.1%).
	27.	Set the SG output at minimum, and turn the tuning knob to let the center meter stay at the center. Then set SG output at 1mV, and adjust detection trans T101 and T102 for 2 or 3 times to realize minimum distortion of the detection output.
	28.	Set SG and dial pointer at 108MHz, then obtain 1.5 - 1.8uV of SG output.
	29.	Adjust the "RF. ANT" trimmer on top of the Frontend (RF, ANT side) to obtain maximum indication of signal meter. (the right-end one is for the OSC.)
	30.	Set SG and dial pointer at 98MHz, then obtain maximum indication of milivoltmeter.
	31.	Adjust IF core on the Frontend to obtain maximum indication of milivoltmeter.
	32.	Set SG output to 3uV.
	33.	Set the muting switch to "ON", and adjust VR101 to set muting point. In this case set it so that 400Hz detection output waveform can be stable against the level fluctuation and that stable output is feasible. Then set the SG output to 1mV, and confirm if the tuning lock (AFC effect) operates normally when the tuning knob is turned.
	34.	Repeat step 27 and check distortion. Center; 0.1%.
	35.	Vary the SG outputs and confirm if the signal meter moves. Set SG output at 1mV, then adjust VR105 to have 4.5 reading on the signal meter calibration.
	36.	Check that all the specification items such as sensitivity, output level, etc., are fulfilled.
	37.	Set FM Stereo SG stereo-molulated at 1kHz, and further set FM SG 100% modulated, and connect to the 300-ohm ANT. terminal through 300-ohm balun.
	38.	Connect distortion meter, milivoltmeter, oscilloscope or synchroscope to the REC. OUT terminal.
	39.	Set SG and the dial pointer at 98MHz, and fix the SG output at 1mV.

	40.	Connect Frequency Counter to Pin No. 30, and adjust VR106 to obtain 19kHz +0, -10Hz. Only in this case, the pilot signal of the SG should be "OFF".
	41.	Modulate the L-ch of the stereo signal generator, and make note of the output by the milivoltmeter.
	42.	Adjust VR105 to obtain minimum movement of the L-ch milivoltmeter.
	43.	Measure the distortion and separation on both channels, which must filfill the specification. Note that only in case the distortion is critical against the spec., adjust the IF core in the Frontend within 1/3 turn.
	44.	Switch on and off the pilot signal, and confirm if the stereo indicator LED lights up in accordance with the signal.
	45.	Confirm all specification items such as Signal-to-Noise Ratio etc., are fulfilled. And make note of them.
FM Dolby Section Alignment	46.	Set the input selector switch to the "FM" position, and the FM Dolby switch to the "DOLBY" position. At this time confirm if the Dolby indicator LED lights up.
	47.	Set SG and the dial pointer at 98MHz, and fix the SG output at 1mV.
	48.	Adjust VR801 on the Dolby printed circuit board PB-1055 to obtain 580mV output level at the L-ch REC. OUT terminal. At this step, stereo signal generator must be---modulation L+R 50% and pilot signal 10%.
	49.	Same as the above. Adjust VR802 on PB-1055 to have 580mV output level at the R-ch REC. OUT terminal.
	50.	Set stereo SG to the "mono" position. Set stereo signal generator to 100% modulation at 1kHz. Confirm the output level of L-ch and R-ch at REC. OUT terminal is 1.1V.

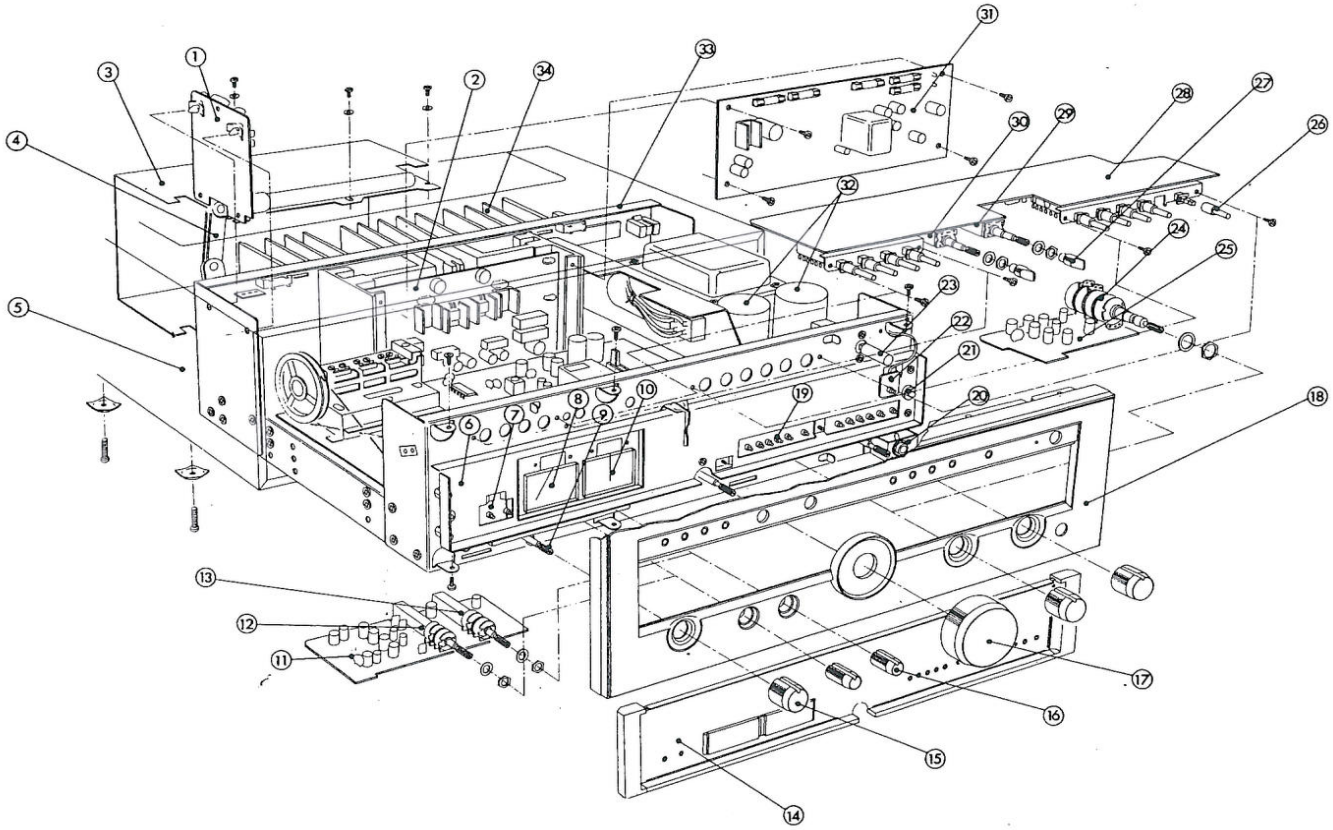
IDLE ADJUSTMENT

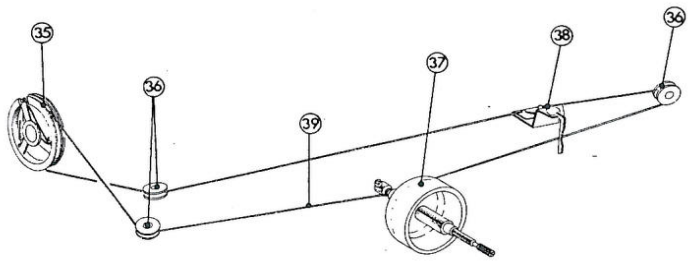


VR501a (L-ch) and VR501b (R-ch) on PB-1126 are semifixed potentiometers for quiescent current adjustment of the power transistors.

Solder off the wire-lead connected to the terminal "-B" on the PB-1126, and connect the (-) lead of the ammeter to the core-leads of the cable, while the (+) one to the "-B" terminal on the PC board. Likewise, disconnect the leads soldered to the R-CH "-B" terminal and insert the ammeter between the leads and the terminal.

After one minute of POWER-ON, adjust VR501a and VR501b respectively to have 50mA reading on the meter.





1.	#P1122	PB-1122 equalizer PCB
2.	#P1126	PB-1126 power PCB
3.	UJ1076	Heat-sink Cover
4.	LA1116	Ferrite Rod Ant.
5.	WB1046	Wooden Cover
6.	UR1141	Holder
7.	TD0088	L.E.D. SLP-119B
8.	AM0039	AM/FM tuning meter
9.	SR0085	Rotary Sw.(function)
10.	AM0040	FM fine tuning meter
11.	#P1125	PB-1125 T.C. PCB
12.	RV0161	VR 100k x 2 (bass)
13.	RV0163	VR 50k x 2 (treble)
14.	UQ1018	Dial Scale Ass'y
15.	WJ1033	Knob(function etc.)
16.	WJ1034	Knob(tone cont.)
17.	WJ1035	Knob(tuning)
18.	WA1087	Front Panel
19.	TD0088	L.E.D. SLP-119B
20.	AJ0015	Headphone Jack
21.	AL0039	Dial Lamp
22.	TD0088	L.E.D. SLP-119B
23.	WJ1066	Knob (power)
24.	RV0162	VR 200k x 2(main VR)
25.	#P1124	PB-1124 flat amp PCB
26.	WJ1069	knob
27.	WJ1067	knob (mode etc.)
28.	#P1122	PB-1123 Switch PCB
29.	SS0018	Rotary Sw. (mode)
30.	SS0018	Rotary Sw. (dubbing)
31.	#P1127	PB-1127 protector & muting PCB
32.	CE1410	Electrolytic 80V 15000uF x 2
33.	UC1065	Rear Panel for S, F
	UC1066	Rear Panel for E, U
34.	BE1042	Heat Sink
35.	BX0016	Dial Drum
36.	BX0022	Plastic Pulley
37.	UX0003	Flywheel
38.	UX1090	Dial Pointer
39.	------	Dial Cord
40.	PT2163	Power Transformer for U
	PT2164	Power Transformer for E, F
	PT2165	Power Transformer for S

R-1120 REPLACEMENT PARTS LIST

Resistors; 1/4W, ±5% unless otherwise noted.
L.....low noise type, F.P..... flame proof resistor,
C.S...cement shield resistor

Capacitors; P.....polyester film, S.....polystyrol, E.....electrolytic,
T.....tantalum, C.....ceramic, M.....mylar
LR.....low leakage type, LL...semi low leakage type

PB-1121

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R101	RD0028	15k	Z1	R155	RD0037	3.3k	Z3
102	0025	27k	Z1	156	0056	100	Z4
103	0022	47k	Z1	157	0041	1.5k	Z4
104	0034	5.6k	Z1	158	0037	3.3k	Z4
105	0022	47k	Z1	159	0037	3.3k	Y4
106	0043	1k	Z1	160	0024	33k	Y4
107	0020	68k	Z1	161	0024	33k	Y4
108	0029	12k	Z1	162	0026	22k	Z4
109	0022	47k	Z1	163	0026	22k	Z4
110	0050	330	Z1	164	0009	470k	Y4
111	0043	1k	Z1	165	0050	330	Y4
112	0056	100	Z1	166	0034	5.6k	Z4
113	0037	3.3k	Z1	167	0013	220k	Y4
114	0052	220	Z1	168	0024	33k	Z4
115	0052	220	Z1	169	0043	1k	Y4
116	0056	100	Z2	170	0029	12k	Z4
117	0061	47	Z1	171	0013	220k	Y4
118	0061	47	Z2				
119	0056	100	Z1	173	0024	33k	Z4
120	0037	3.3k	Z1	174	0050	330	Y4
121	0056	100	Z1	175	0034	5.6k	Z4
122	0043	1k	Z1	176	0009	470k	Y4
123	0056	100	Z1	177	0022	47k	Z4
124	0024	33k	Z1	178	0022	47k	Z4
125	0024	33k	Z1	179	0052	220	Z4
126	0047	560	Z1	193	0030	10k	Y1
127	0030	10k	Z1	194	0030	10k	Y1
128	0022	47k	Z2	195	0047	560	Y1
				196	0037	3.3k	Y1
130	0039	2.2k	Z3	197	0017	100k	Y1
131	0050	330	Z3	198	0030	10k	Y1
				199	0030	10k	Y1
133	0030	10k		200	0033	6.8k	Y1
134	0048	470	Z3	201	0033	6.8k	Y1
135	0030	10k	Z3	202	0022	47k	Y1
136	0030	10k	Z3	203	0034	5.6k	Y1
137	0065	22	Z3	204	0048	470	Y1
138	0491	2k	Z3	205	0022	47k	Y1
139	0024	33k	Z3	206	0030	10k	Y1
140	0056	100	Y3	207	0025	27k	Y2
141	0046	680	Z3	208	0041	1.5k	Y2
142	0022	47k	Z3	209	0034	5.6k	Y2
143	0022	47k	Z3	210	0054	150	Y2
			--	211	0054	150	Y2
145	0020	68k	Z3	212	0046	680	Y3
146	0034	5.6k	Z3	213	0043	1k	Y3
147	0043	1k	Z3	214	0030	10k	Y3
148	0026	22k	Z3	215	0030	10k	Y3
149	0022	47k	Z3	216	0053	180	Y3
150	0028	15k	Z3	217	0017	100k	Y3
151	0029	12k	Z3	221	0051	270	Y3
152	0048	470	Z3	222	0260	270 1/2W	Y3
153	0008	560k	Z3	223	0017	100k	Z2
			Z3	224	0056	100	

CAPACITORS

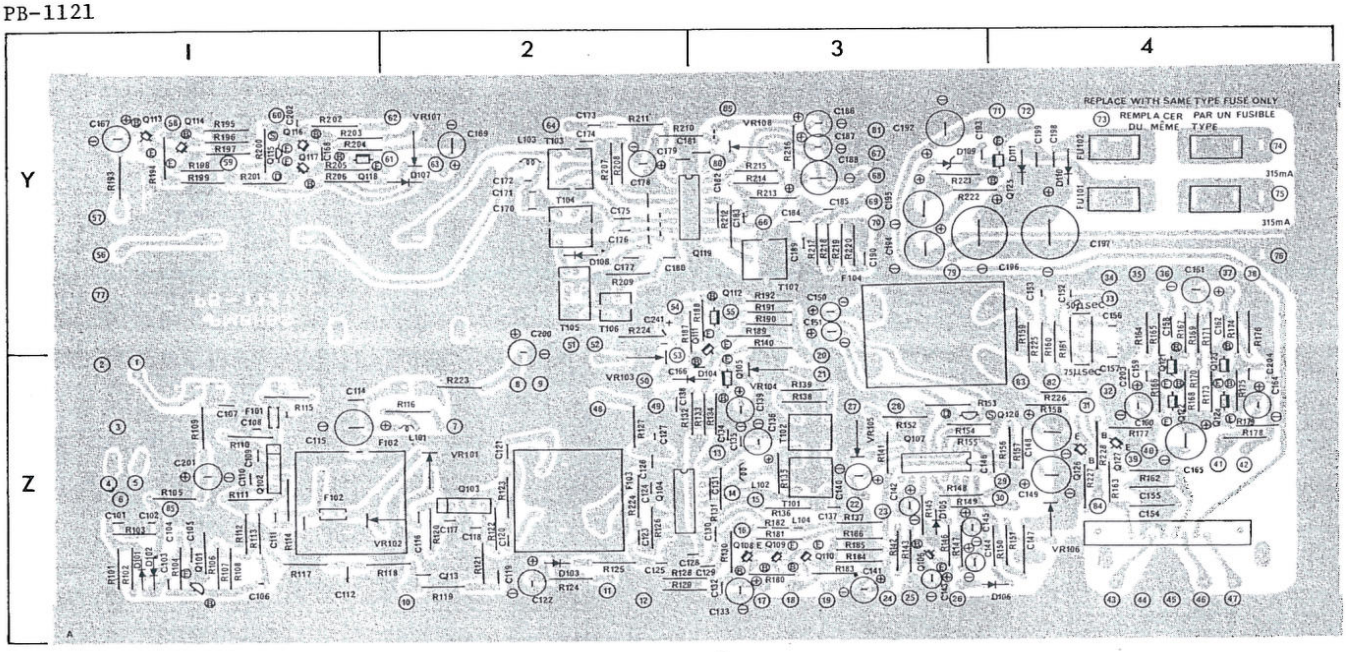
SYMBOL NO.	STOCK NO.	DESCRIPTION				LOCATION
C101	CK0011	0.01uF	+80%-20%	25V	C	Z1
102	"	0.01uF	"	"	C	Z1
103	"	0.01uF	"	"	C	Z1
104	CK0010	0.04uF	"	"	C	Z1
105	"	0.04uF	"	"	C	Z1
106	CK0019	470pF	+10%-10%	50V	C	Z1
107	CK0010	0.04uF	+80%-20%	25V	C	Z1
109	CK0011	0.01uF	"	"	C	Z1
110	"	0.01uF	"	"	C	Z1
111	"	0.01uF	"	"	C	Z1
112	CK0010	0.04uF	"	"	C	Z1
113	"	0.04uF	"	"	C	Z2
114	"	0.04uF	"	"	C	Z1
115	CE0079	220uF	+50%-10%	16V	E	Z1
116	CK0011	0.01uF	+80%-20%	25V	C	Z2
117	"	0.01uF	"	"	C	Z2
118	"	0.01uF	"	"	C	Z2
119	CK0010	0.04uF	"	"	C	Z2
121	CK0011	0.01uF	+80%-20%	25V	C	Z2
122	CE0099	2.2uF	+75%-10%	50V	E	Z2
123	CK0011	0.01uF	+80%-20%	25V	C	Z2
124	CK0010	0.04uF	"	"	C	Z2
125	"	0.04uF	"	"	C	Z2
127	CE0099	2.2uF	+75%-10%	50V	E	Z2
128	CK0010	0.04uF	+80%-20%	25V	C	Z2
129	"	0.04uF	"	"	C	Z3
130	"	0.04uF	"	"	C	Z3
131	"	0.04uF	"	"	C	Z3
133	CE0098	1uF	+75%-10%	50V	E	Z3
134	CK0018	330pF	+10%-10%	"	C	Z3
135	CK0010	0.04uF	+80%-20%	25V	C	Z3
136	CE0213	0.47uF	+75%-10%	50V	E	Z3
137	CK0010	0.04uF	+80%-20%	25V	C	Z3
139	CE0074	10uF	+50%-10%	16V	E	Z3
140	CE0076	33uF	"	16V	E	Z3
142	CS0028	0.33uF	+20%-20%	35V	T	Z3
143	CE0098	1uF	+75%-10%	50V	E	Z3
144	CE0213	0.47uF	+75%-10%	50V	E	Z3
145	CS0028	0.33uF	+20%-20%	"	T	Z3
146	CK0010	0.04uF	+80%-20%	25V	C	Z3
147	CQ0041	1000pF	+5%-5%	50V	S	Z4
148	CE0079	220uF	+50%-10%	16V	E	Z4
149	"	220uF	"	"	E	Z4
150	CE0099	2.2uF	+75%-10%	50V	E	Y3
151	"	2.2uF	"	"	E	Y3
152	CQ0202	1600pF	+5%-5%	50V	S	Y4
153	"	1600pF	"	"	S	Y4
154,155		1500pF	+5%-5%	50V	S	Z4,Z4
156	CQ0100	820pF	+5%-5%	50V	T	Y4
157	"	820pF	"	"	T	Y4
158	CQ0008	0.056uF	+10%-10%	50V	M	Y4
159	CK0019	470pF	"	"	C	Z4
160	CE0084	4.7uF	+75%-10%	25V	E	Z4
161	CE0076	33uF	+50%-10%	16V	E	Y4
162	CQ0008	0.056uF	+10%-10%	50V	M	Y4
163	CK0019	470pF	"	50V	C	Z4
164	CE0084	4.7uF	+75%-10%	25V	E	Z4
165	CE0079	220uF	+50%-10%	16V	E	Z4
167	CE0098	1uF	+75%-10%	50V	E	Y1
168	CK0064	1000pF	+20%-20%	25V	C	Y1
169	CE0078	100uF	+50%-10%	16V	E	Y2
170	CQ0172	330pF	+5%-5%	50V	S	Y2
171	CC0004	22pF	+10%-10%	50V	C	Y2
172	CC0080	15pF	"	"	C	Y2
173	CK0063	0.02uF	+80%-20%	25V	C	Y2
174	CK0010	0.04uF	+80%-20%	"	C	Y2
175	CK0011	0.01uF	"	"	C	Y2
176	CK0063	0.02uF	"	"	C	Y2

SYMBOL NO.	STOCK NO.	DESCRIPTION				LOCATION
177	CK0010	0.04uF	+80%-20%	25V	C	Y2
178	CE0073	10uF	+50%-10%	16V	E	Y2
179	CK0064	1000pF	+20%-20%	25V	C	Y2
180	CK0063	0.02uF	+80%-20%	25V	C	Y2
181	CK0010	0.04uF	"	"	C	Y3
182	CK0024	0.002uF	+20%-20%	50V	C	Y3
183	CK0011	0.01uF	+80%-20%	"	C	Y3
184	CK0010	0.04uF	"	"	C	Y3
185	CK0010	0.04uF	"	"	C	Y3
186	CE0084	4.7uF	+75%-10%	25V	E	Y3
187	CE0168	3.3uF	"	"	E	Y3
188	CE0079	220uF	"	16V	E	Y3
192	CE0079	220uF	"	"	E	Y3
193	CK0011	0.01uF	+80%-20%	50V	C	Y3
194	CE0079	220uF	+50%-10%	16V	E	Y3
195	CE0079	220uF	"	"	E	Y3
196	CE0090	1000uF	+50%-10%	25V	E	Y3
197	CE0090	1000uF	+50%-10%	"	E	Y4
198	CK0010	0.04uF	+80%-20%	50V	C	Y4
200	CE0098	1uF	+75%-10%	50V	E	Y2
201	CE0213	0.47uF	+75%-10%	"	E	Z1
202	CE0213	0.47uF	+75%-10%	50V	E	Y1

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Q101	TR0014	2SC381	Z1	Q116	TR0025	2SC1345	Y1
102	TC0011	BA401	Z1	117	"	2SC1345	Y1
103	"	BA401	Z2	118	"	2SC1345	Y1
104	TC0080	HA11211	Z2	119	TC0021	HA1197	Y2
105	TR0025	2SC1345	Z3	120	TF0001	2SK30	Z3
106	"	2SC1345	Z3	121	TR0025	2SC1345	Z4
107	TC0012	LA3350	Z3	122	TR0125	2SA836	Z4
113	TR0025	2SC1345	Y1	123	TR0025	2SC1345	Z4
114	"	2SC1345	Y1	124	TR0125	2SA836	Z4
115	TF0001	2SK30	Y1	125	TR0047	2SD235	Y3

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
D101-D102	TD0018	1K188	Z1,Z1	D108	TD0018	1K188	Y2
103--106	TD0053	1S2473	Z2,Z3	109	TD0079	WZ140	Y3
107	TV0004	KB265	Y2	110	TD0002	1N4002	Y4

PB-1121



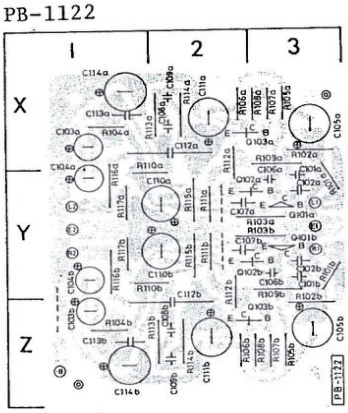
PB-1122

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R101ab	RB0224	56k 1/8W	Y3	R110ab	RB0170	330 1/8W	X2,Y2
102ab	RD0051	270k	X3,Z3	111ab	RB0202	6.8k "	Y2
103ab	RD0029	12k	Y3	112ab	RB0118	1.8k "	X2,Z2
104ab	RB0168	270 1/8W	X1,Z1	113ab	RD0015	150k	X2,Z2
105ab	RB0246	470k "	X3,Z3	114ab	RD0029	12k	X2,Z2
106ab	RB0218	33k "	X2,Z2	115ab	RD0120	2.7k 1/2W	Y2
107ab	RB0206	10k "	X3,Z3	116ab	RD0056	100	Y1
108ab	RB0212	18k "	X3,Z3	117ab	RB0244	390k 1/8W	Y1
109ab	RD0009	470k	X3,Y3				

SYMBOL NO.	STOCK NO.	DESCRIPTION			LOCATION
C101ab	CS0006	10uF	+20%-20%	16V T	Y3
102ab	CC0007	100pF	+10%-10%	10V C	Y3
103ab	CE0135	47uF	+50%-10%	10V E,LR	X1,Z1
104ab	CE0135	47uF	"	" E,LR	X1,Y1
105ab	CE0101	22uF	"	50V E	X3,Z3
106ab	CC0033	10pF	+1%-1%	" C	Y3
107ab	CC0007	100pF	+10%-10%	" C	Y2
108ab	CQ0124	0.022uF	+5%-5%	" M	X2,Z2
109ab	CQ0070	6200pF	+5%-5%	" S	X2,Z2
110ab	CE0078	100uF	+50%-10%	16V E	Y2
111ab	CE0118	47uF	+50%-10%	25V E	X2,Z2
112ab	CQ0138	1uF	+80%-20%	50V M	X2,Z2
113ab	CK0008	0.04uF	+80%-20%	50V C	X1,Z1
114ab	CE0101	22uF	+50%-10%	50V E	X1,Z1

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Q101ab	TR0125	2SA836	Y3
102ab	TR0125	2SA836	Y3
103ab	TR0162	2SA872	X3,Z3

PB-1122



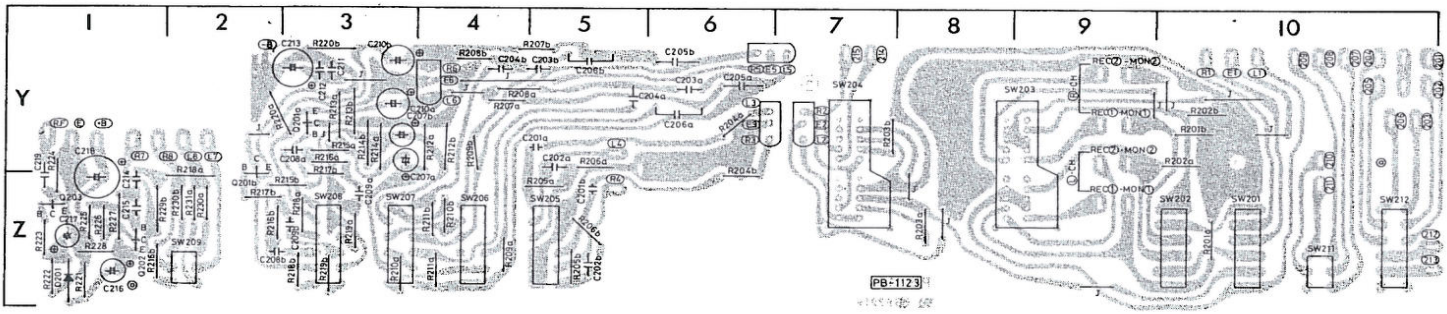
PB-1123

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R201ab	RB0254	1M 1/8W	Z10,Y10	R217ab	RB0190	2.2k 1/8W	Y3, Z2
202ab	RB0254	1M "	Y10	218ab	RB0254	1M "	Z2
203ab	RB0200	5.6k "	Z8, Y7	219ab	RB0254	1M "	Z3
204ab	RB0216	27k "	Y6	220ab	RD0206	10k	Y2, Y3
205ab	RB0262	2.2M "	Z5	221	RB0198	4.7k 1/8W	Z1
206ab	RB0208	12k "	Y5, Z5	222	RB0230	100k "	Z1
207ab	RB0218	33k "	Y4, Y5	223	RB0206	10k "	Z1
208ab	RB0222	47k "	Y4	224	RB0246	470k "	Y1
209ab	RB0262	2.2M "	Z4, Y4	225	RB0222	47k "	Z1
210ab	RB0262	2.2M "	Z3, Z4	226	RB0218	33k "	Z1
211ab	RB0262	2.2M "	Z4	227	RD0030	10k	Z1
212ab	RD0013	220k	Y4	228	RB	1k 1/8W	Z1
213ab	RD0009	470k	Y3	229ab	RD0025	27k	Z1
214ab	RD0014	180k	Y3	230ab	RB0230	100k 1/8W	Z2
215ab	RB0188	1.8K 1/8W	Y3, Z3	231ab	RB0244	390k "	Z2
216ab	RB0198	4.7k "	Y3, Z2				

SYMBOL NO.	STOCK NO.	DESCRIPTION				LOCATION
C201ab	CQ0170	470pF	+5%-5%	50V	S	Y5, Z5
202ab	CQ0031	0.033uF	+5%-5%	"	M	Y5, Z5
203ab	CQ0032	0.047uF	"	"	M	Y6, Y5
204ab	CQ0007	0.068uF	+10%-10%	"	M	Y5, Y4
205ab	CQ0003	0.22uF	"	"	M	Y6
206ab	CQ0029	0.33uF	"	"	M	Y6, Y5
207ab	CE0183	1uF	+75%-10%	"	E,LR	Y4
208ab	CQ0126	0.01uF	+5%-5%	"	M	Y3, Z2
209ab	CQ0030	4700pF	"	"	M	Z3
210ab	CE0129	10uF	+50%-10%	25V	E,LR	Y3
214	CK0064	1000pF	+20%-20%	50V	C	Z1
215	CK0064	1000pF	"	"	C	Z1
216	CE0099	2.2uF	+75%-10%	"	E	Z1
217	CE0074	10uF	+50%-10%	16V	E	Z1
218	CE0078	100uF	"	"	E	Y1
219	CE0183	0.1uF	+80%-20%	25V	E,LR	Y1

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
D201	TD0016	1S1555	Z1	Q202	TR0146	2SC1740	Z1
Q201ab	TR0206	2SC1775A	Y3, Y2	203	TR0146	2SC1740	Z1

PB-1123



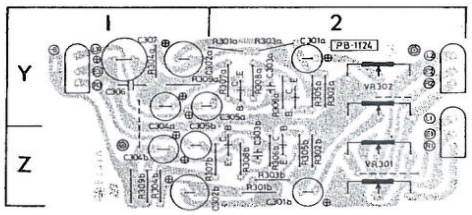
PB-1124

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R301ab	RB0206	10k 1/8W	Y2, Z2	R306ab	RB0174	470 1/8W	Y2, Z2
302ab	RB0246	470k "	Y2, Z2	307ab	RB0212	18k "	Y2, Z2
303ab	RB0254	1M "	Y2, Z2	308ab	RB0192	2.7k "	Y2, Z2
304ab	RB0222	47k "	Y1, Z1	309ab	RB0182	1k "	Y1, Z1
305ab	RB0192	2.7k "	Y2, Z2				

SYMBOL NO.	STOCK NO.	DESCRIPTION				LOCATION
C301ab	CE0173	3.3uF	+75%-10%	25V	E,LR	Y2, Z2
302ab	CE0077	47uF	+50%-10%	16V	E	Y1, Z1
303ab	CC0012	10pF	+1%-1%	50V	C	Y2, Z2
304ab	CE0068	47uF	+50%-10%	10V	E	Y1, Z1
305ab	CE0173	3.3uF	+75%-10%	25V	E,LR	Y1, Z1
306	CK0008	0.04uF	+80%-20%	50V	C	Y1
307	CE0101	22uF	+50%-10%	"	E	Y1

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Q301ab		2SA836	Y2, Z2
302ab		2SC1345	Y2, Z2

PB-1124



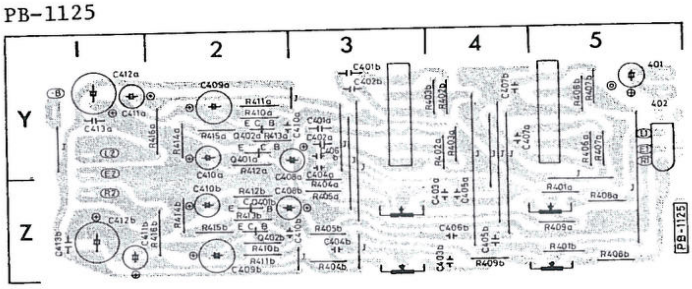
PB-1125

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R401ab	RB0212	18k 1/8W	Z5	R409ab	RB0186	1.5k	Z5, Z4
402ab	RB0262	2.2M "	Y4	410ab	RB0208	12k	Y2, Z2
403ab	RB0262	2.2M "	Y4	411ab	RB0206	10k	Y2, Z2
404ab	RB0212	18k "	Z3	412ab	RB0186	1.5k	Y2, Z2
405ab	RB0194	3.3k "	Z3	413ab	RB0234	150k	Y2, Z2
406ab	RB0262	2.2M "	Y5	414ab	RB0166	220	Y2, Z2
407ab	RB0262	2.2M "	Y5	415ab	RB0194	3.3k	
408ab	RB0186	1.5k "	Z5	416ab			

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
C401ab	CQ0008	0.056uF +10%-10% 50V M	Y3
402ab	CQ0124	0.022uF +5%-5% " M	Y3
403ab	CQ0130	1000pF " " M	Z4
404ab	CQ0130	1000pF " " M	Y3, Z3
405ab	CQ0128	2200pF " " M	Z4
406ab	CQ0128	2200pF " " M	Y3, Z4
407ab	CQ0127	3900pF " " M	Y4
408ab	CE0173	3.3uF +50%-10% 25V E,LR	Y3, Z3
409ab	CE0077	47uF " 16V E	Y2, Z2
410ab	CE0077	47uF " " E	Y3, Z3
411ab	CE0173	3.3uF " 25V E,LR	Y1, Z1
412ab	CE0101	22uF " 50V E	Y1, Z1
413ab	CK0059	0.047uF +80%-20% " C	Y1, Z1
414ab	CC0037	5pF " C	Y3, Z3
415	CE0077	47uF +50%-10% 16V E	Y5

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Q401ab	TR0125	2SA836	Y2, Z2
402ab	TR0125	2SA836	Y2, Z2

PB-1125



PB-1126

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R501ab	RB0182	1k 1/8W	Z1, Z6	R515ab	RD0110	39k 1/2W	X2, X5
502ab	RB0170	330 "	Z1, Z6	516ab	RS0073	68 " FP	Z2, Z5
503ab	RB0206	10k "	Z1, Z6	517ab	RS0075	150 " FP	Y2, Y4
504ab	RD0047	560	Y1, X6	518ab	RS0075	150 " FP	Y2, Y5
505ab	RD0026	22k	X1, X6	519ab	RB0176	560 1/8W	Y2, Y5
506ab	RD0033	6.8k	Y1, Y6	520ab	RB0176	560 "	X2, X5
507ab	RD0370	5.6k 1/2W	Y1, Y6	521ab	RB0196	3.9k "	Y2, Y6
508ab	RD0030	10k	Y1, Y6	522ab	RB0196	3.9k "	Z2, Y5
509ab	RB0182	1k 1/8W	X1, X6	523ab	RG0064	0.47 +-10%5WCS	Z2, Z5
510ab	RD0054	150	X2, X5	524ab	RG0064	0.47 " " "	Y2, Y5
511ab	RS0043	10 FP	X2, X5	525ab	RD0142	10 1/2W	Y3, Y4
512ab	RB0186	1.5k 1/8W	X3, X4	526ab	RG0054	4.7 +-10%2WCS	Z3, Z4
513ab	RB0176	560 "	X3, X4	527ab	RB0188	1.8k 1/8W	Y1, Y6
514ab	RS0043	10 FP	X3, X4	528	RB0176	560 "	Y1, Y6

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
C501ab	CE0173	3.3uF +75%-10% 25V E,LR	Z1, Z6
502ab	CE0217	22uF +50%-10% 35V E	Z1, Z6
503ab	CC0034	47pF +10%-10% 50V C	Z1, Z6
504ab	CE0069	100uF +50%-10% 10V E	Z1, Z6
505ab	CC0124	33pF +10%-10% 50V C	X1, X6
506ab	CK0033	0.1uF +80%-20% 12V C	X3, X4
507ab	CC0036	100!F +10%-10% 500V C	Y3, Y4

PB-1126

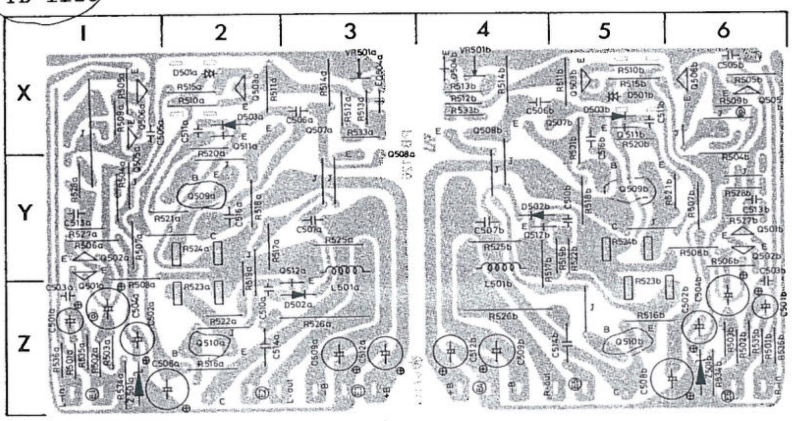
SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
C508ab	CE0107	47uF +50%-10% 63V E	Z1, Z6
509ab	CE0107	47uF " " E	Z3, Z4
510ab	CC0012	10pF +1%-1% 50V C	Z2, Y5
511ab	CC0012	10pF +1%-1% " C	X2, X5
512ab	CE0107	47uF +50%-10% 63V E	Z3, Z4
513ab	CC0035	270pF +10%-10% 50V C	Y1, Y6
514ab	CQ0424	0.1uF " " M	Z2, Z5

called Alpine
ordered parts
5-26-81

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Q501ab	TR0201	2SA872DA	Y1, Y6	Q507ab	TR0209	2SC2238	X3, X5
502ab	TR0201	2SA872DA	Y1, Y6	508ab	TR0210	2SA968	X3, X4
503ab	TR0208	2SB648A	X2, X5	509ab	TR0111	2SD424	Y2, Y5
504ab	TR0140	2SC1740	X3, X4	510ab	TR0110	2SB554	Z2, Z5
505ab	TR0165	2SC1775A	X1, X6	511ab	TR0146	2SC1740	X2, X5
506ab	TR0207	2SD668A	X1, X6	512ab	TR0148	2SA826	Z2, Y4

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Z501ab	TD0029	WZ-290 29V 500mW zener diode	Z1, Z6
D501ab	TV0004	KB-265	X2, X5
502ab	TD0015	1S1554V silicon diode	Z3, Y4
503ab	TD0015	1S1554V " "	X2, X5

PB-1126



1-RY801 Relay
1-R519 - RB0176 - 560 1/8W
1-R522 - RB0196 3.9k 1/8W
1-Q512 - TR0148 - 2SA826
1-Q504b - 2SC1740 = TR0140
1-VR501b - 330 Ω variable
2-R514 RS0043 - 10 FP
1-Q503b - TR0208 - 2SB648A
1-Q506b - TR0207 - 2SD668A
1-Q508b - TR0210 - 2SA968
1-Q507b - TR0209 - 2SC2238
1-Q509 - TR0111 - 2SD424
1-Q510 - TR0110 - 2SB554
1-D502 - TD0015 - 1S1554V S. Diode
1-R516 - RS0073 - 68 FP Resistor

PB-1127

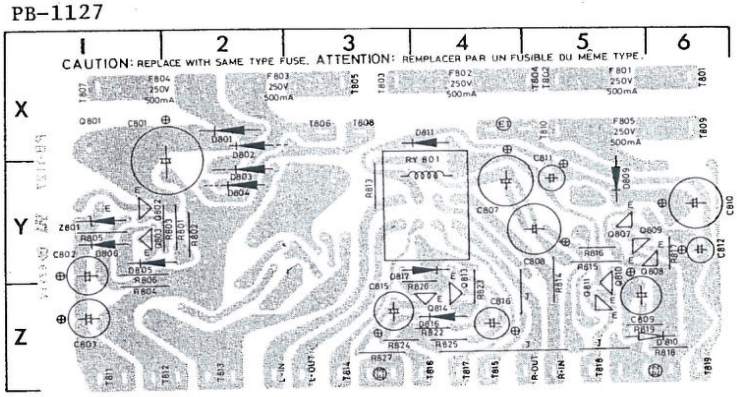
SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R801	RD0022	47k	Y2	R815	RD0046	680	Y5
802	RD0037	3.3k	Y2	822	RB0182	1k 1/8W	Z4
803	RD0033	6.8k	Y2	823	RB0254	1M "	Z4
804	RD0039	2.2k	Z1	824	RB0226	68k "	Z4
805	RD0024	33k	Y1	825	RB0220	39 "	Z4
806	RD0027	18k	Y1	826	RB0254	1M "	Z4
813	RD0027	18k	Y3	816	RB0192	2.7k "	Y5
814	RD0027	18k	Z5	817	RD0047	560	Y6
818	RB0160	120 1/8W	Z6	827	RD0043	1k	Z3

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
C801	CE0111	100uF +50%-10% 100V E	X2
802	CE0100	10uF " 50V E	Y1
803	CE0100	10uF " " E	Z1
807	CE0070	220uF " 10V E	Y4
808	CE0070	220uF " " E	Y5
809	CE0069	100uF " " E	Z5
810	CE0079	220uF " 16V E	Y6
811	CE0086	10uF " 25V E	Y5
815	CE0075	22uF " 16V E	Z3
816	CE0075	22uF " " E	Z4

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Q801	TR0177	2SD525	X1	Q809	TR0148	2SA826	Y5
802	TR0162	2SA872	Y1	810	TR0146	2SC1740	Z5
803	TR0165	2SC1775A	Y2	811	TR0147	2SC1741	Z5
807	TR0146	2SC1740	Y5	813	TR0213	2SA854	Z4
808	TR0146	2SC1740	Y6	814	TR0213	2SA854	Z4

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
D801	TD0003	1N4003	X2	D809	TD0002	1N4002	Y5
802	TD0003	1N4003	X2	810	TD0018	1K188FM-1	Z6
803	TD0003	1N4003	Y2	811	TD0002	1N4002	X4
804	TD0003	1N4003	Y2	816	TD0015	1S1554V	Z4
805	TD0015	1S1554V	Y2	817	TD0015	1S1554V	Y4
806	TD0015	1S1554V	Y1	Z801	TD0029	WZ-290	Y1

PB-1127



PB-1063

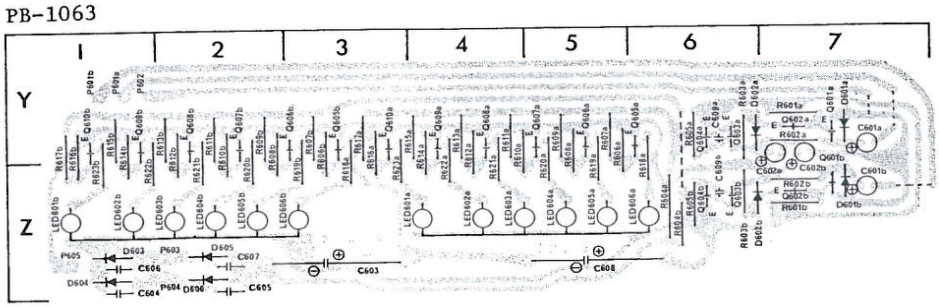
SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
R601ab	RD0026	22k	Y7, Z7	R613ab	RD0037	3.3k	Y4, Y2
602ab	RD0019	82k	Y7, Z7	614ab	RD0046	680	Y4, Y1
603ab	RD0030	10k	Y6, Z6	615ab	RD0035	4.7k	Y4, Y1
604ab	RD0033	6.8k	Z6	616ab	RD0046	680	Y3, Y1
605ab	RD0027	18k	Y6, Z6	617ab	RD0030	10k	Y3, Y1
606ab	RD0045	820	Y5, Y3	618ab	RD0040	1.8k	Y5, Y3
607ab	RD0041	1.5k	Y5, Y3	619ab	RD0040	1.8k	Y5, Y3
608ab	RD0046	680	Y5, Y2	620ab	RD0040	1.8k	Y5, Y2
609ab	RD0040	1.8k	Y5, Y2	621ab	RD0040	1.8k	Y4, Y2
610ab	RD0046	680	Y4, Y2	622ab	RD0040	1.8k	Y4, Y1
611ab	RD0039	2.2k	Y4, Y2	623ab	RD0040	1.8k	Y3, Y1
612ab	RD0046	680	Y4, Y2				

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
C601ab	CE0084	4.7uF +75%-10% 25V E	Y7, Z7
602ab	CE0099	2.2uF " 50V E	Y7
603	CE0250	100uF +50%-10% 35V E	Z3
604	CK0008	0.04uF +80%-20% 50V C	Z1
605	CK0008	0.04uF +80%-20% " C	Z2
606	CK0008	0.04uF " " C	Z1
607	CK0008	0.04uF " " C	Z2
608	CE0250	100uF +50%-10% 35V E	Z5
609ab	CC0006	47pF +10%-10% 50V C	Y6, Z6

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
Q601ab	TR0127	2SC733	Y7, Z7	Q606ab	TR0127	2SC733	Y5, Y3
602ab	TR0127	2SC733	Y7, Z7	607ab	TR0127	2SC733	Y5, Y2
603ab	TR0001	2SC734	Y6, Z6	608ab	TR0127	2SC733	Y4, Y2
604ab	TR0007	2SA561	Y6, Z6	609ab	TR0127	2SC733	Y4, Y1
605ab	TR0127	2SC733	Y5, Y3	610ab	TR0127	2SC733	Y3, Y1

SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION	SYMBOL NO.	STOCK NO.	DESCRIPTION	LOCATION
D601ab	TD0016	1S1555	Y7, Z7	LED601ab	TD0088	SLP-119B	
602ab	TD0016	1S1555	Y6, Z6	LED606ab	TD0088	SLP-119B	
603	TD0002	1N4002	Z1				
604	TD0002	1N4002	Z1				
605	TD0002	1N4002	Z2				
606	TD0002	1N4002	Z2				

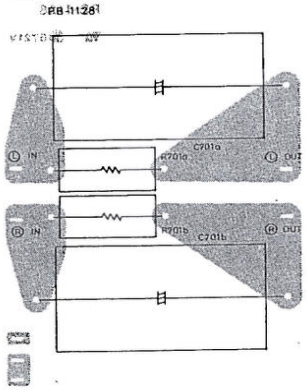
PB-1063



PB-1128

SYMBOL NO.	STOCK NO.	DESCRIPTION
R701ab	RG0049	8.2 $^{+}_{-}$10% 5W cement sealed
C701ab	CE1409	100uF $^{+}_{-}$20% 25V E bipolar

PB-1128



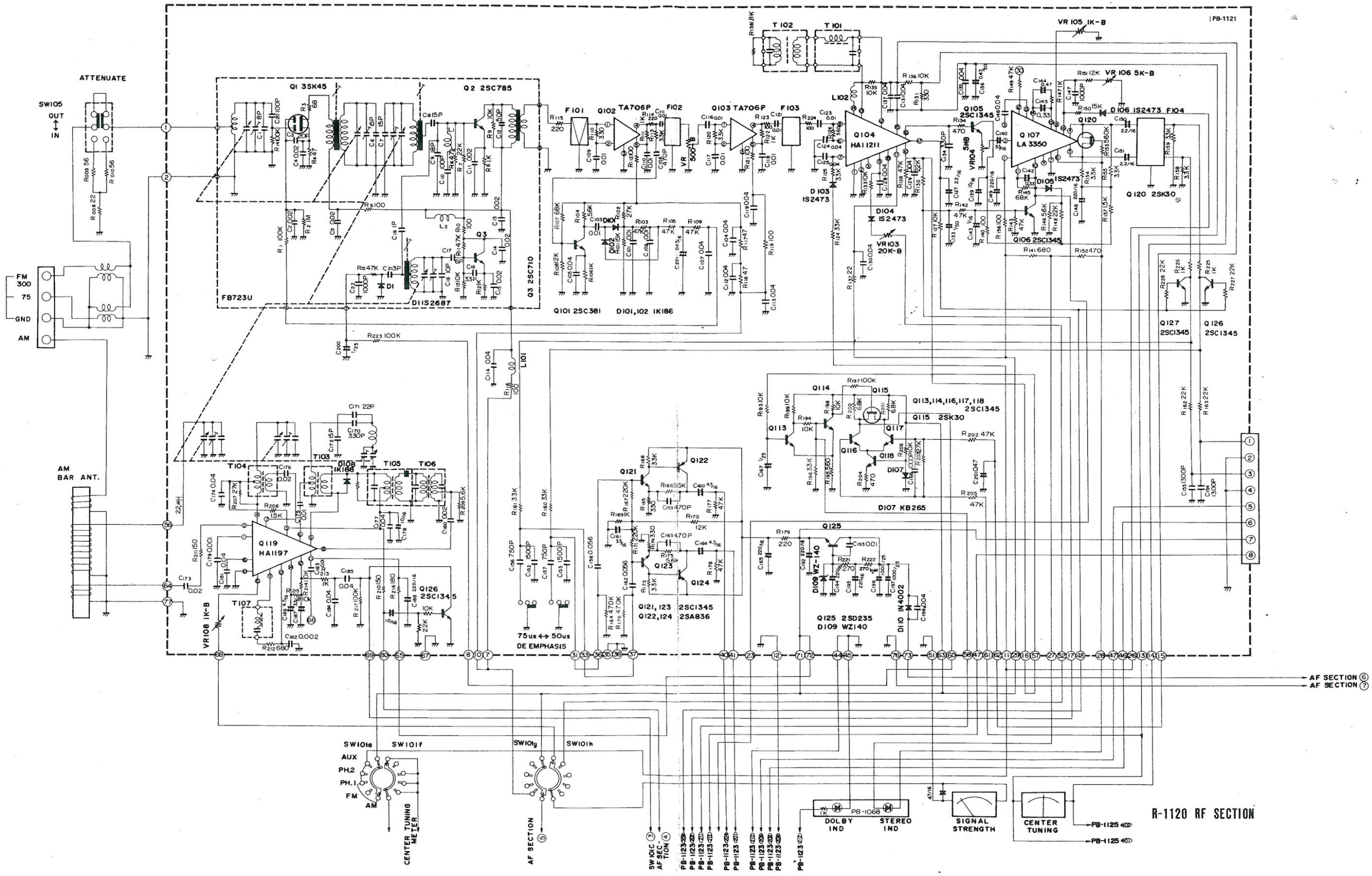
CHASSIS PART

SYMBOL NO.	STOCK NO.	DESCRIPTION	SYMBOL NO.	STOCK NO.	DESCRIPTION
C001	CU0015	2200pF +20%-20% 250V C	C007	CE1410	15000uF +10%-10% 80V E
002	CU0015	2200pF " " C	008	CE1410	15000uF " " E
003	CU0004	0.01uF " 125V M	009	CK0009	0.1uF +80%-20% 25V C
004	CU0004	0.01uF " " M	010	CK0009	0.1uF " " C
005	CU0004	0.01uF " " M	011	CK0009	0.1uF " " C
006	CU0004	0.01uF " " M			

CHASSIS PART

SYMBOL NO.	STOCK NO.	DESCRIPTION	NOTES
R001	RD0100	2.2M 1/2W	U model only
002	RD0401	5.6k 1W	
003	RD0401	5.6k 1W	
004	RD0015	150k 1/4W	
005	RD0015	150k "	
006	RD0015	150k "	
007	RD0015	150k "	
008	RD0065	22 "	
009	RD0060	56 "	
010	RD0060	56 "	
011	RS2746	560 1W	flame proof
012	RS2746	560 1W	flame proof

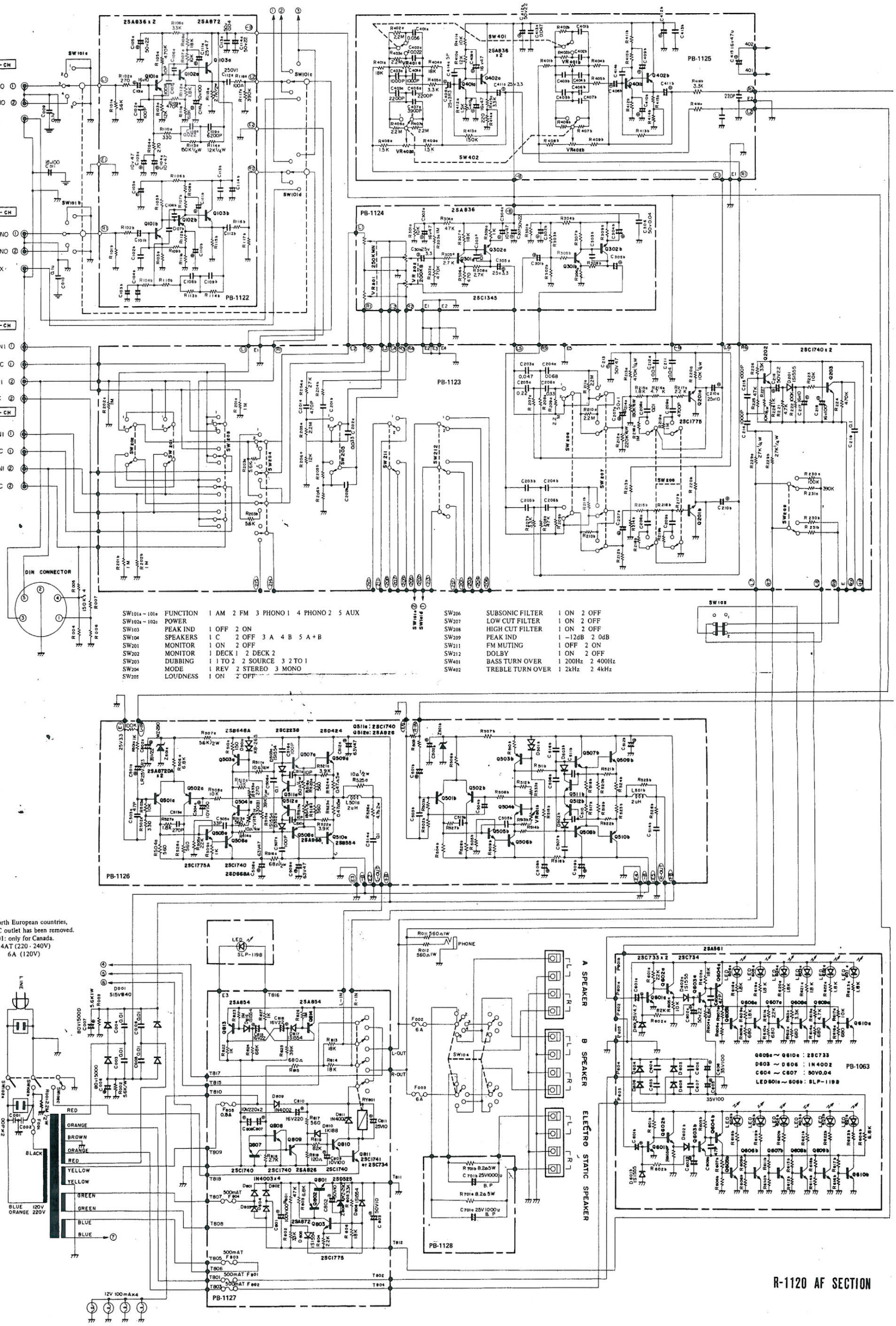
SYMBOL NO.	STOCK NO.	DESCRIPTION	NOTES
D001	TD0122	S15VB40 rectifier	
SW102	SP0080	power switch	U model only
102	SP0075	power switch	S, D model only
101	SR0085	function switch	
104	SR0086	speaker switch	
103	SS0014	peak indicator	
105	SS0014	FM attenuator	
201	SP0077	tape monitor	
202	SP0077	tape monitor	
211	SP0077	FM muting	
212	SP0077	Dolby	
203	SR0088	tape dubbing	
204	SR0087	mode switch	
205	SP0076	loudness switch	
206	SP0076	subsonic filter	
207	SP0076	low cut filter	
208	SP0076	high cut filter	
209	SP0076	peak indicator	
VR301	RV0162	250k $^{+}_{-}$20% 0.25W	balance
302	RV0162	200k " 0.5W	volume control
SW401	RV0163	pull sw. 2-2	bass turnover
SW402	RV0161	pull sw. 2-2	treble turnover
VR401	RV0163	100k +20%-20% 0.1W	bass control
402	RV0161	50k +20%-20% 0.1W	treble control



R-1120 RF SECTION

LUX CORPORATION, JAPAN

1-1, 1-CHOME, SHINSENRI-NISHIMACHI, TOYONAKASHI, OSAKA
PHONES:06-834-2222 CABLE:LUXELECT OSAKA TELEX:J63694



SW101a ~ 101e	FUNCTION	1 AM 2 FM 3 PHONO 1 4 PHONO 2 5 AUX
SW102a ~ 102c	POWER	
SW103	PEAK IND	1 OFF 2 ON
SW104	SPEAKERS	1 C 2 OFF 3 A 4 B 5 A+B
SW201	MONITOR	1 ON 2 OFF
SW202	MONITOR	1 DECK 1 2 DECK 2
SW203	DUBBING	1 1 TO 2 2 SOURCE 3 2 TO 1
SW204	MODE	1 REV 2 STEREO 3 MONO
SW205	LOUDNESS	1 ON 2 OFF
SW206	SUBSONIC FILTER	1 ON 2 OFF
SW207	LOW CUT FILTER	1 ON 2 OFF
SW208	HIGH CUT FILTER	1 ON 2 OFF
SW209	PEAK IND	1 –12dB 2 0dB
SW211	FM MUTING	1 OFF 2 ON
SW212	DOLBY	1 ON 2 OFF
SW401	BASS TURN OVER	1 200Hz 2 400Hz
SW402	TREBLE TURN OVER	1 2kHz 2 4kHz

For north European countries,
the AC outlet has been removed.
■ R001: only for Canada.
F001: 4AT (220 · 240V)
6A (120V)

R-1120 AF SECTION