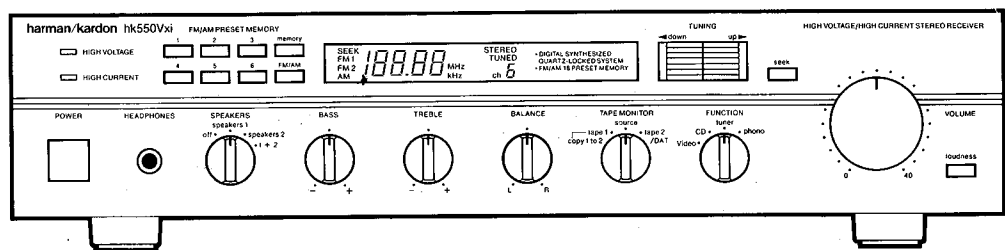


The Harman Kardon Model hk550 Vxi

Manual 123A

HIGH VOLTAGE/HIGH CURRENT STEREO RECEIVER

Technical Manual



The following marks found in the parts list of this manual identify the models as follows.

- **UA** : North America area model
- **BK** : North America area model Black version
- **GB** : General model

hk550 Vxi

harman/kardon

240 Crossways Park West, Woodbury, N. Y. 11797
1112-3152123A7 P-088801 1500 Printed in Japan

SPECIFICATIONS

	Nominal	Limit
• FM SECTION		
Tuning Range	87.5 ~ 108.0 MHz	
50dB Quieting Sensitivity		
Mono	15.7dBf	≧ 19dBf
Stereo	38dBf	≧ 41dBf
Usable Sensitivity	11.7dBf	≧ 15dBf
Image Ratio	45dB	≧ 40dB
IF Rejection	94dB	≧ 75dB
Spurious Response Rejection	96dB	≧ 60dB
Capture Ratio	1.25dB	≧ 2dB
Alternate Channel Selectivity	75dB	≧ 60dB
AM Rejection	57dB	≧ 45dB
Signal to Noise Ratio		
Mono	78dB	≧ 73dB
Stereo	72dB	≧ 67dB
Total Harmonic Distortion		
Mono	0.08%	≧ 0.3%
Stereo	0.08%	≧ 0.4%
Stereo Separation at 1kHz	53dB	≧ 45dB
• AM SECTION		
Tuning Range	520 ~ 1,710kHz	
Usable Sensitivity		
External Antenna	20μV	≧ 40μV
Loop Antenna	400μV/m	
Selectivity	26dB	≧ 20dB
Signal to Noise Ratio	52dB	≧ 47dB
Image Rejection	40dB	≧ 30dB
IF Rejection	62dB	≧ 50dB
• AUDIO SECTION		
Usable Sensitivity		
Video/CD	135mV ± 25mV	
Phono	2.2mV ± 0.2mV	
Signal to Noise Ratio		
Video/CD	82dB	≧ 77dB
Phono	81dB	≧ 73dB

	Nominal	Limit
Channel Separation at 10kHz		
Video/CD	60dB	≧ 45dB
Phono	57dB	≧ 45dB
IM Distortion Ratio	0.1%	≧ 0.2%
RMS Output Power	50W	≧ 45W
8Ω, 1kHz, THD 0.1%		
Damping Factor at 1kHz	63	≧ 50
Tone Control Characteristics		
Bass at 50Hz		
Boost	10dB ± 2dB	
Cut	-10dB ± 2dB	
Treble at 10kHz		
Boost	10dB ± 2dB	
Cut	-10dB ± 2dB	
Loudness Control		
at 10kHz	3dB ± 1dB	
at 50Hz	10dB ± 2dB	
DC Output Voltage		
L channel	0mV ± 60mV	
R channel	0mV ± 60mV	
RIAA Equalization at		
Tape Out		
(20Hz/20kHz)	± 0.5dB	
• DIMENSIONS		
(W × H × D)	17-3/8" × 4 × 14-1/2"	(443 × 103 × 368 mm)
• WEIGHT		
	15.4 lbs.	(7 kg)
• POWER SUPPLY		
North America area model	AC 120V, 60Hz	
General model	AC 220/240V, 50/60Hz	
• POWER CONSUMPTION		
North America area model	230W	
General model	170W	

These specifications are service target specs.

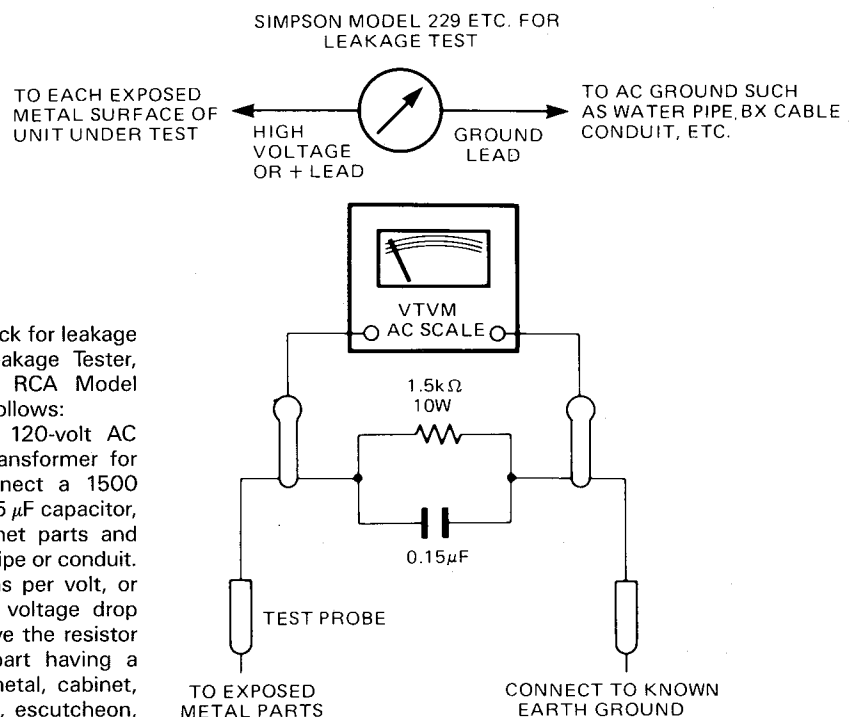
Specifications and components subject to change without notice. Overall performance will be maintained or improved.

LEAKAGE TEST (FOR SERVICE ENGINEERS IN THE U.S.A.)

Before returning the unit to the user, perform the following safety checks:

- Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the unit.
- Be sure that any protective devices such as nonmetallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc. which were removed for servicing are properly reinstalled.
- Be sure that no shock hazard exists; check for leakage current using Simpson Model 229 Leakage Tester, standard equipment item No. 21641, RCA Model WT540A or use alternate method as follows: Plug the power cord directly into a 120-volt AC receptacle (do not use an Isolation Transformer for this test). Using two clip leads, connect a 1500 Ohm, 10-watt resistor paralleled by a 0.15 μF capacitor, in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit. Use a VTVM or VOM with 1000 Ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (See Diagram.) Move the resistor connection to each exposed metal part having a return path to the chassis (antenna, metal, cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor. (This test should be performed with the power switch in both the On and Off positions.) A reading of 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before

2 returning the unit to the owner.



2 returning the unit to the owner.

DISASSEMBLY PROCEDURES (REFER TO PAGES 7 THROUGH 10 AND 18)

1. CABINET TOP REMOVAL

Remove 6 screws (A) and then remove the Cabinet Top (131).

2. FRONT PANEL ASS'Y REMOVAL

1. Remove the Cabinet Top (131), referring to the previous step 1.
2. Remove 6 screws (B) and then remove the Front Panel Ass'y (AA).

3. TUNER P. C. BOARD (PCB-13) REMOVAL

1. Remove the Front Panel Ass'y (AA), referring to the previous step 2.
2. Open the lid of connector (CN1) on the Power Switch P. C. Board (PCB-17) and then disconnect the lead wire (JL4).
3. Open the lid of connector (CN2) on the Tuner P. C. Board (PCB-13) and then disconnect the lead wire (JL14).
4. Remove 4 screws (C) and then remove the Tuner P. C. Board (PCB-13) with Lamp P. C. Board (PCB-18).
If necessary, unsolder the lead wires.

4. POWER AMP. P. C. BOARD (PCB-1) REMOVAL

1. Remove the Tuner P. C. Board (PCB-13), referring to the previous step 3.
2. Pull out the Power Push Button (146).
3. Remove 6 screws (D) and then remove the Front Chassis (161) with the Tone Control, Loudness Switch, Volume, Headphone Jack, Indicators, Speaker Switch, Function and Tape Mon. Switch, Preset Memory Switches and Tuning Switch P. C. Boards (PCB-2, PCB-4, PCB-5, PCB-6, PCB-7, PCB-8, PCB-12, PCB-14 and PCB-15).
4. Remove 6 screws (E) and then remove the Power Amp. P. C. Board (PCB-1) with Heat Sink (170) and Brackets (163, 164 and 165).
If necessary, unsolder the lead wires.
Removal of P. C. Boards attached to the Chassis (161)
5. Straighten the catches fixing the Preset Memory Switches P. C. Board (PCB-14) and then remove it.
6. Straighten the catches fixing the Tuning Switch P. C. Board (PCB-15) and then remove it.

7. Straighten the catches fixing the Indicators P. C. Board (PCB-7) and then remove it.
8. Remove the metal fixture (F) fixing the Headphone Jack P. C. Board (PCB-6) and then remove it.
9. Pull out the Speaker Knob (155).
10. Remove a hexagon-nut (G) and then remove the Speaker Switch P. C. Board (PCB-8).
11. Pull out the Knob (153).
12. Remove a hexagon-nut (H) and then remove the Volume P. C. Board (PCB-5).
13. Pull out the Loudness Push Button (151).
14. Remove 2 screws (I) and then remove the Loudness Switch P. C. Board (PCB-4).
15. Pull out the Function and Tape Mon. Switch Knobs (155).
16. Remove 2 hexagon-nuts (J) and then remove the Function and Tape Mon. Switch P. C. Board (PCB-12).
17. Pull out the Bass, Treble and Balance Knobs (155).
18. Remove 2 hexagon-nuts (K) and then remove the Tone Control P. C. Board (PCB-2).

5. PIN JACK P. C. BOARD (PCB-11) REMOVAL

1. Remove the Power Amp. P. C. Board (PCB-1), referring to the previous step 4.
2. Remove 5 screw (L) and then remove the Pin Jack P. C. Board (PCB-11).
If necessary, unsolder the lead wires.

6. SPEAKER TERMINAL P. C. BOARD (PCB-10) REMOVAL

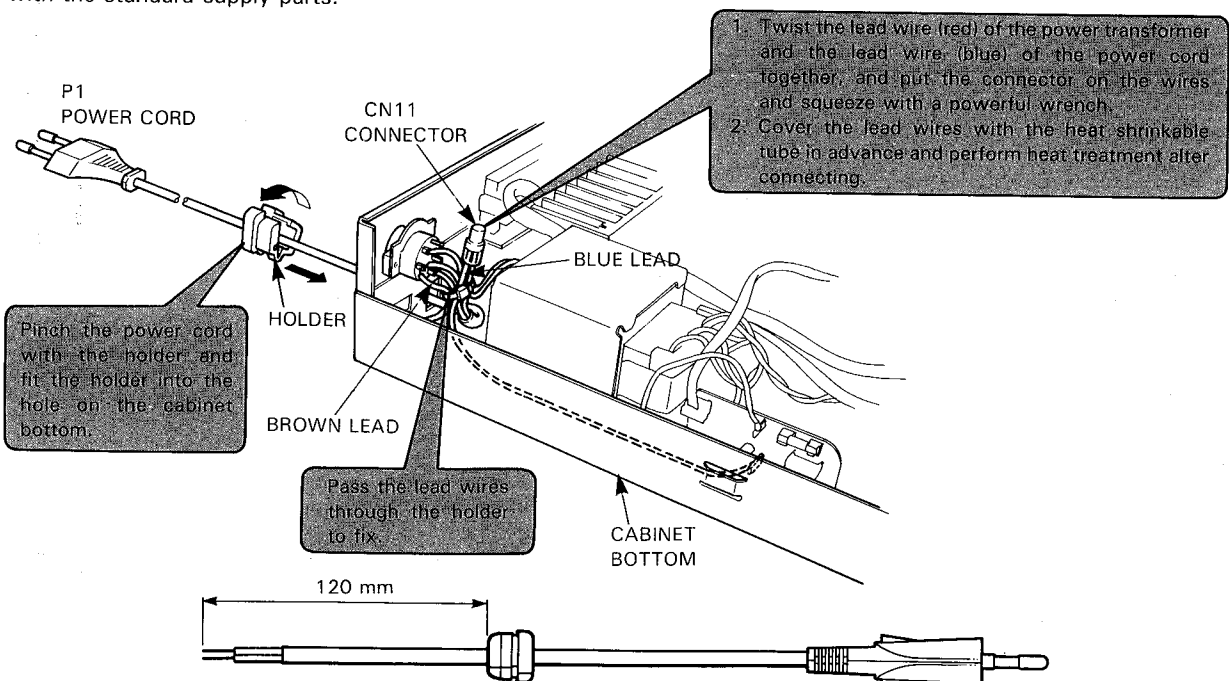
1. Remove the Cabinet Top (131), referring to the previous step 1.
2. Remove 2 screws (M) and then remove the Speaker Terminal P. C. Board (PCB-10).
If necessary, unsolder the lead wires.

7. ANTENNA TERMINAL P. C. BOARD (PCB-16) REMOVAL

1. Remove the Cabinet Top (131), referring to the previous step 1.
2. Remove 2 screws (N) and then remove the Antenna Terminal P. C. Board (PCB-16).
If necessary, unsolder the lead wires.

POWER CORD REPLACEMENT (FOR SERVICE ENGINEERS OTHER THAN NORTH AMERICA)

In order to prevent fire or shock hazard when replacing the power cord, follow the procedure below to replace the part with the standard supply parts.



CIRCUIT DESCRIPTION

■ FM TUNER SECTION

The FM signal which has entered through the antenna is high-frequency amplified in the front end unit FE101, mixed with the output of the local oscillator and converted into the 10.7MHz intermediate-frequency.

The 10.7MHz signal is amplified in the intermediate-frequency amplifying section which consists of CF201, Q201, CF202, Q202 and CF203 and fed to 1 pin of IC201. In IC201, the signal is transmitted through the IF amplifier in two steps, and after being detected in the quadrature, it is transmitted through the post amplifier to 12 pin and then input to 2 pin of IC301. In IC301, the pilot signal is detected out of the signal which has been fed and 38kHz signal is produced. Then by this signal, stereo signal is demodulated, output from 4 pin for the left channel and from 7 pin for the right channel be fed to the amplifier.

■ AM TUNER SECTION

The AM signal which has entered through the antenna is transmitted through the tuning circuit consisting of T251 and TC251 to IC201. In IC201 it undergoes high-frequency amplification, intermediate-frequency amplification local oscillation, intermediate-frequency amplification and detection, and then output from 15 pin. This signal is turned ON and OFF at Q703 and Q704 according to the signal from the input selector and fed to 2 pin of IC301.

■ MUTING CIRCUIT

If FM is received out of tuning or in a very weak field intensity, 41 pin of IC701 becomes high level. This is fed to the base of Q705, whose collector then becomes low level and the collector of Q709 high level. As a result, Q301 (L ch) and Q302 (R ch) are conducted to mute the output.

■ AUDIO AMPLIFIER SECTION

The signal which has entered from each input terminal is selected by the function selector, passes through the balance circuit, volume and loudness circuit and is fed into the pre-amplifier.

Then it is fed into the power amplifier through the tone control circuit, power amplified and transmitted to the speaker terminal.

The power amplifier has an over-output protective circuit. If current exceeding the specification flows to Q431, Q433 (L ch), Q432, Q434 (R ch), it is detected at Q3 (L ch) and Q4 (R ch) and the protective circuit consisting of Q1, Q2, Q5, Q6 and Q7 draws in the base of Q413 (L ch) and Q414 (R ch), and thus the input signal is cut to protect the circuit.

■ SYNTHESIZER SECTION

● FM

The local oscillation output at the front end is fed to 47 pin of IC701 and after being frequency divided into 30 or 32, the standard frequency is oscillated by the crystal oscillator, compared with the divided local oscillation output signal and output to 45 pin. This voltage is level converted at Q707 and Q708, and fed to the varicap diode at the front end.

● AM

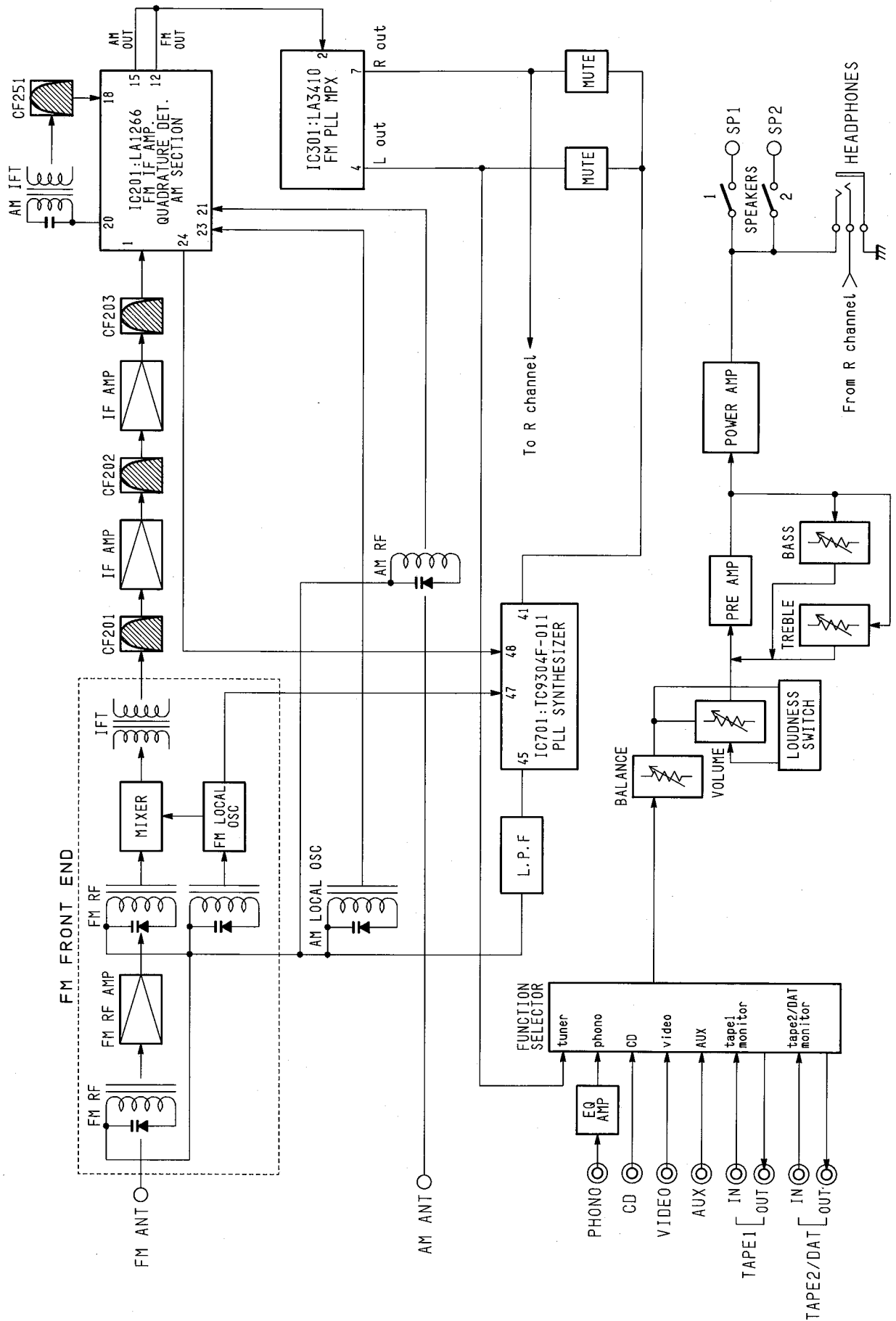
The local oscillation output is fed from 24 pin of IC201 to 48 pin of IC701. In IC701, the standard frequency is oscillated by the crystal oscillator, compared with the local oscillation output and output to 45 pin.

■ INDICATOR SECTION

● Frequency display

The serial data sent out of 1 to 22 and 56 to 60 pins of IC702, where the data is decoded to provide a signal which turns ON the indicator.

BLOCK DIAGRAM



ALIGNMENT PROCEDURES (REFER TO PAGES 14, 16, 25 AND 26)

- Conditions:**
- Set the Volume control to minimum.
 - Set the Speaker switches to on (button in) position.
 - Set the Speaker Operating Mode switch to "8Ω" position.
 - Set the Function switch to tuner position.
 - Make the adjustment at a room temperature of 77°F (25°C).
 - After the Power switch is pushed on, wait for 30 minutes before measuring to be sure of the most stable operation.

■ IDLING CURRENT ADJUSTMENT

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP1 and TP2.	VR401 (L ch)	40mV ± 2mV
2	Connect the Digital Volt Meter to TP3 and TP4.	VR402 (R ch)	40mV ± 2mV

■ AM ADJUSTMENT

- Conditions :**
- Set the AM mode by pressing the "FM/AM" button.
 - Standard modulation of the AM signal Generator is 400Hz at 30%.
 - Set the Seek switch to off (put out seek indicator) position.

Step	Alignment	Connection Equipments	Measurement Frequency	Station Display	Adjustment	For
1	IF Tracking	<ul style="list-style-type: none"> • Connect the AM Test Loop Antenna cable into the output jack of AM Signal Generator. Place AM Test Loop Antenna close enough to couple signal into the AM Loop Antenna. • Connect the VTVM and oscilloscope to the OUTPUT jacks. 	1400kHz	1400kHz	T252	Maximum output level and symmetrical curve on scope.
2			1400kHz	1400kHz	TC251	Maximum output.
3			600kHz	600kHz	T251	Maximum output.
4			Repeat steps 2 and 3 for optimum sensitivity.			

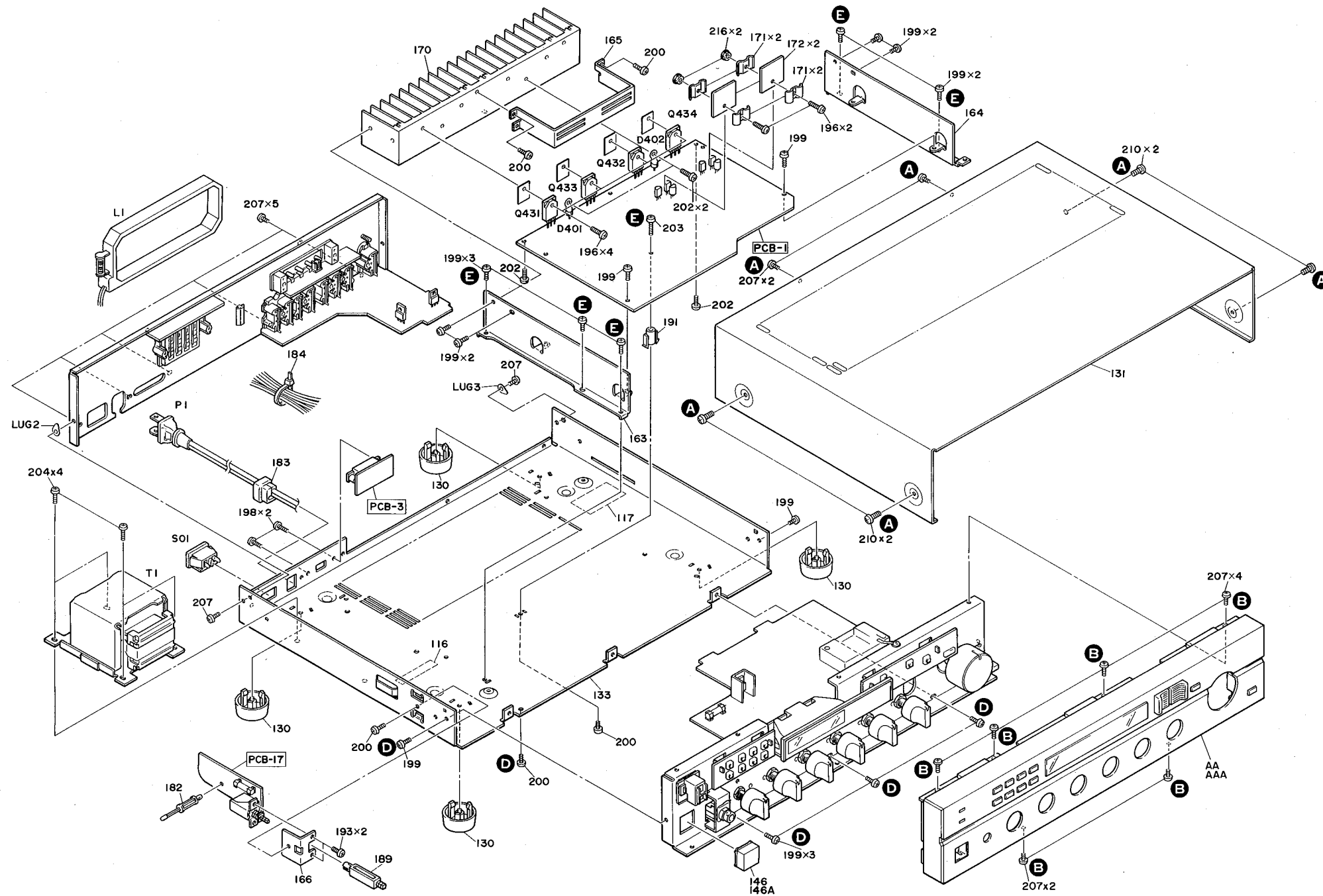
■ FM ADJUSTMENT

- Conditions :**
- Set the FM mode by pressing the "FM/AM" button.
 - Set the Seek switch to off (put out seek indicator) position.

	U.S.A. model	General model
FM Signal Generator	1kHz, 100% modulation	1kHz, 45% modulation
Stereo Modulator	L + R = 45.5%, L - R = 45.5%, 19kHz = 9%	L + R = 22.5%, L - R = 22.5%, 19kHz = 8%

Step	Alignment	Connection Equipments	Measurement Frequency	Station Display	Adjustment	For
1	Discriminator	<ul style="list-style-type: none"> • Connect the FM Signal Generator to FM 300Ω BAL Antenna terminals through the 300Ω balanced dummy. (1mV(65dBf) input signal) • Connect the Oscilloscope and Distortion meter to the TAPE 1 OUT jacks. • Set the Seek switch to on (seek indicator lights) position. 	97.9MHz	97.9MHz	T201(A)	Adjust so that the TUNED indicator lights in the same range on both plus (+) and minus (-) sides of 97.9MHz.
2			97.9MHz	97.9MHz	T201(B)	Minimum distortion.
3			Repeat steps 1 and 2 for optimum sensitivity.			
4	Muting level		97.9MHz	97.9MHz	VR251	Adjust VR251 so that the waveform is disappear at 30 dBf input.
5	Separation	<ul style="list-style-type: none"> • Connect the Stereo Modulator to FM Signal Generator. Connect the FM Signal Generator to FM 300Ω BAL Antenna terminal through the 300Ω balanced dummy. (65 dBf input) • Connect the VTVM and Oscilloscope to the TAPE 1 OUT jacks. 			VR301	Adjust so that the left channel output becomes minimum when only the right channel of the Stereo Modulator is ulated.
			97.9MHz	97.9MHz	VR301	Adjust so that the right channel output becomes minimum when only the left channel of the Stereo Modulator is modulated.

GENERAL UNIT
EXPLODED VIEW



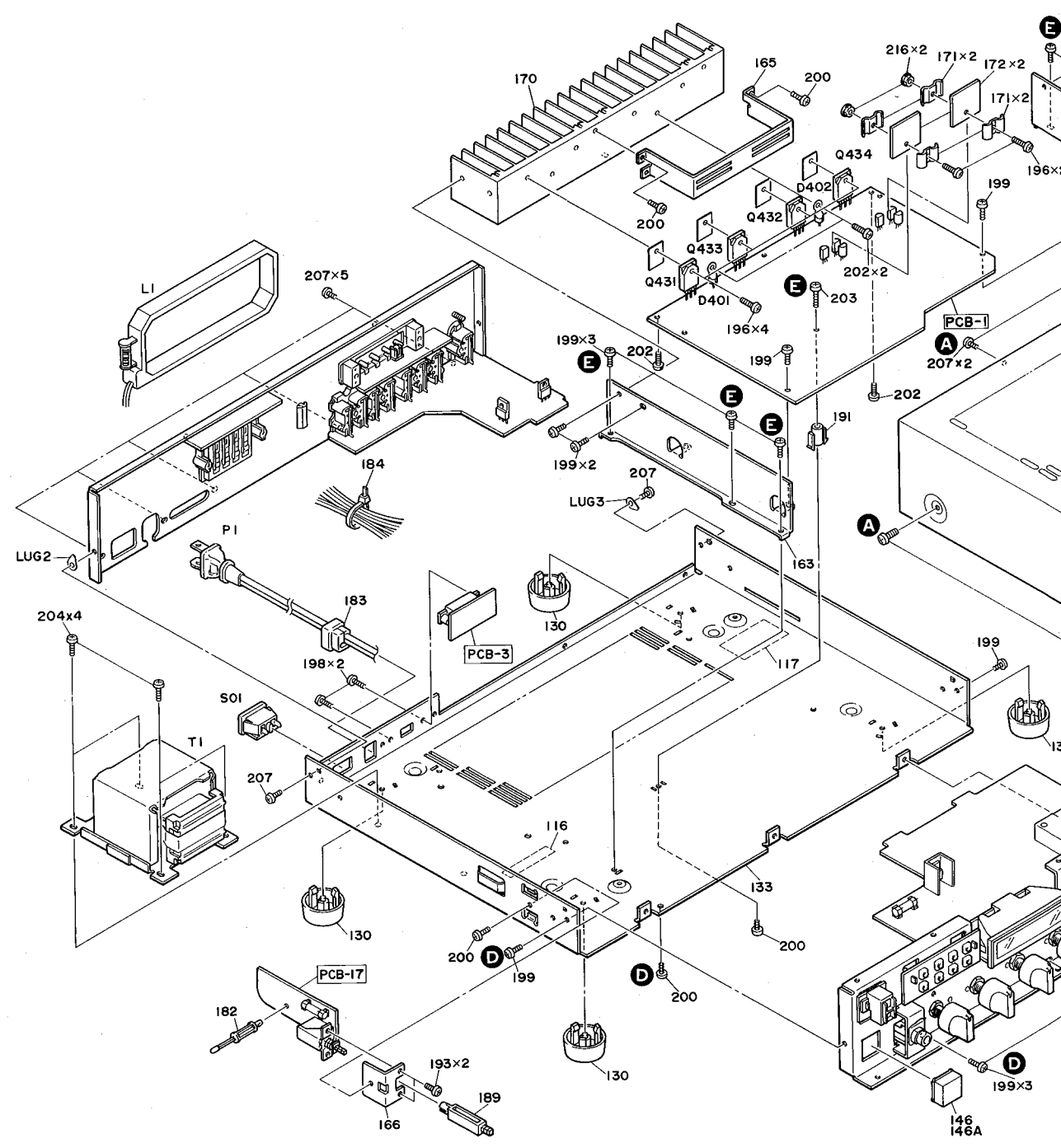
PARTS LIST

Ref. No.	Part No.	Description
AA	A443-HK550A	FRONT PANEL ASS'Y (UA)
AAA	A443-HK550B	FRONT PANEL ASS'Y (BK GB)
I16	1756-05910	LABEL (UA)
I17	1756-CSA	LABEL, CSA (UA)
I30	I319-0139	LEG
I31	I414-11501	CABINET
I33	I424-24001	CABINET BOTTOM
I46	I660-00401	PUSH BUTTON, POWER (UA)
I46A	I660-00403	PUSH BUTTON, POWER (BK GB)
I63	2219-8194	METAL FITTG, L
I64	2219-8195	METAL FITTG, R
I65	2219-8214	METAL FITTG, TUNER PCB
I66	2219-8197	METAL FITTG, POWER SW
I70	2222-7234	HEAT SINK, MAIN
I71	2222-7106	HEAT SINK, DRIVER
I72	2222-7231	HEAT SINK, DRIVER
I82	2240-7326	HOLDER, POWER SW PCB
I83	2240-364	HOLDER, POWER CORD
I84	2240-7120	HOLDER
I89	2672-7018	LEVER, POWER SW
I91	2360-7015	SPECIAL BOSS, POWER AMP PCB
I93	2327-R0130062	SCREW
I96	2557-301029	SCREW
I98	2347-R0126104	SCREW
I99	2347-R0130062	SCREW
200	2347-R0130062	SCREW
202	2347-R0130062	SCREW
203	2347-R0130102	SCREW
204	2592-400826	SCREW
207	2347-R0130064	SCREW
210	2347-R0140064	SCREW
216	2440-7016	SPECIAL NUT
ΔP1	4161-71151	POWER CORD (UA)
ΔP1	4161-7256	POWER CORD (GB)
ΔP1	4161-04100	POWER CORD (Australia model)
ΔSO1	4474-164	SOCKET (UA)
ΔT1	5584-S1404	XFORMER, POWER (UA)
ΔT1	5584-S1405	XFORMER, POWER (GB)
LUG2	4211-4	LUG (UA)
LUG3	4211-4	LUG
Q431	5613-3181(O)	XISTOR, NPN R
Q432	5613-3181(O)	XISTOR, NPN R
Q433	5611-1264(O)	XISTOR, PNP R
Q434	5611-1264(O)	XISTOR, PNP R
D401	5641-MV12YM	VARISTOR
D402	5641-MV12YM	VARISTOR
LI	5911-235	AM LOOP ANTENNA

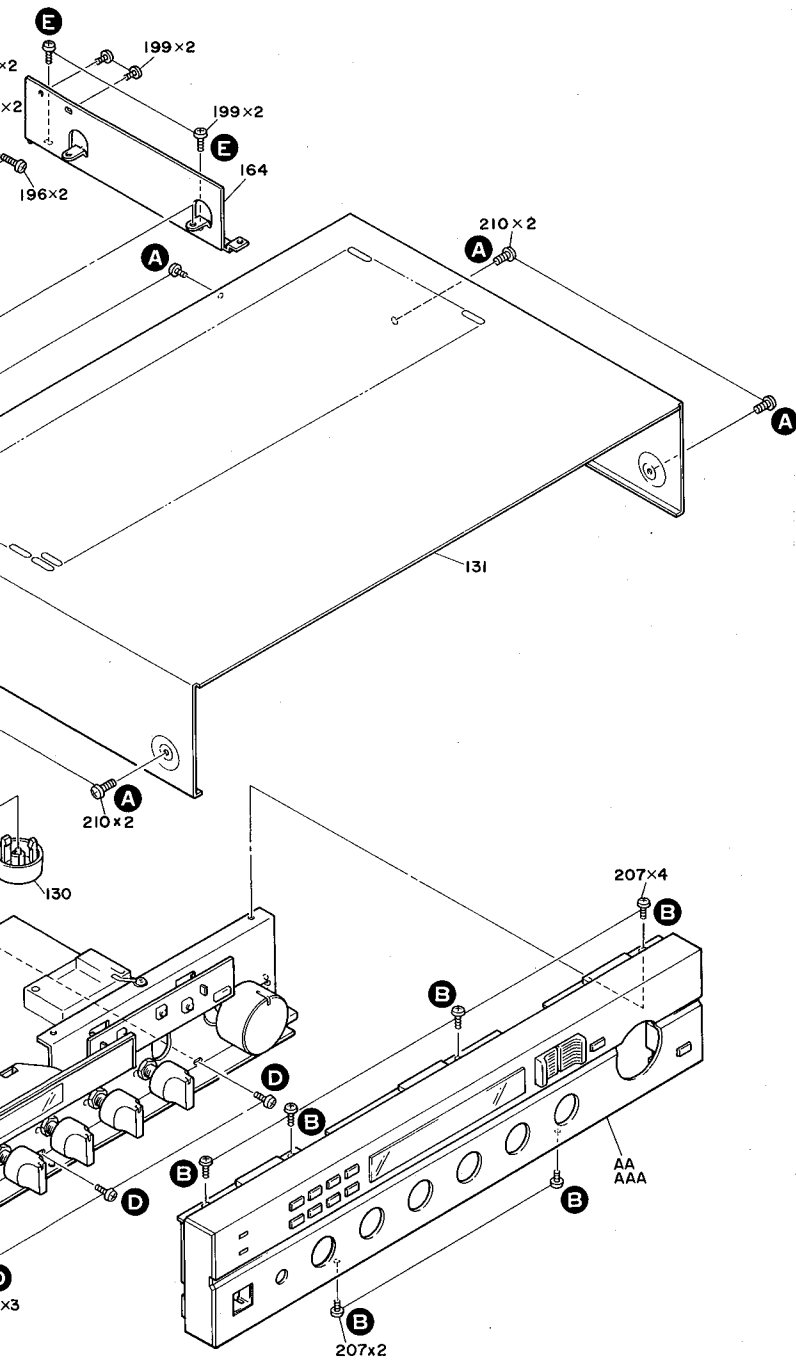
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GENERAL UNIT
EXPLODED VIEW

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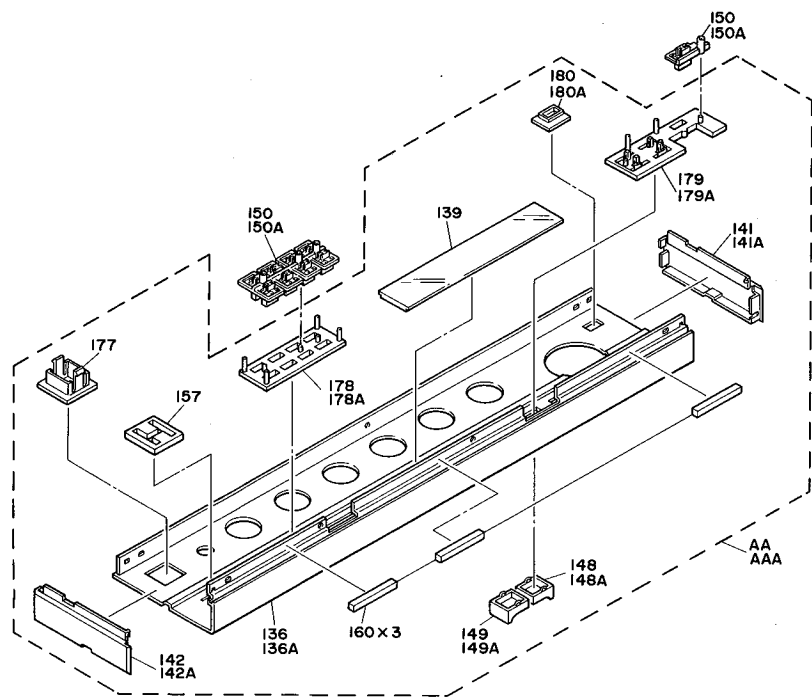


PARTS LIST

Ref. No.	Part No.	Description
AA	A443-HK550A	FRONT PANEL ASS'Y (UA)
AAA	A443-HK550B	FRONT PANEL ASS'Y (BK GB)
116	1756-05910	LABEL (UA)
117	1756-CSA	LABEL, CSA (UA)
130	1319-0139	LEG
131	1414-11501	CABINET
133	1424-24001	CABINET BOTTOM
146	1660-00401	PUSH BUTTON, POWER (UA)
146A	1660-00403	PUSH BUTTON, POWER (BK GB)
163	2219-8194	METAL FITTG, L
164	2219-8195	METAL FITTG, R
165	2219-8214	METAL FITTG, TUNER PCB
166	2219-8197	METAL FITTG, POWER SW
170	2222-7234	HEAT SINK, MAIN
171	2222-7106	HEAT SINK, DRIVER
172	2222-7231	HEAT SINK, DRIVER
182	2240-7326	HOLDER, POWER SW PCB
183	2240-364	HOLDER, POWER CORD
184	2240-7120	HOLDER
189	2672-7018	LEVER, POWER SW
191	2360-7015	SPECIAL BOSS, POWER AMP PCB
193	2327-R0130062	SCREW
196	2557-301029	SCREW
198	2347-R0126104	SCREW
199	2347-R0130062	SCREW
200	2347-R0130062	SCREW
202	2347-R0130062	SCREW
203	2347-R0130102	SCREW
204	2592-400826	SCREW
207	2347-R0130064	SCREW
210	2347-R0140064	SCREW
216	2440-7016	SPECIAL NUT
ΔP1	4161-71151	POWER CORD (UA)
ΔP1	4161-7256	POWER CORD (GB)
ΔP1	4161-04100	POWER CORD (Australia model)
ΔSO1	4474-164	SOCKET (UA)
ΔT1	5584-S1404	XFORMER, POWER (UA)
ΔT1	5584-S1405	XFORMER, POWER (GB)
LUG2	4211-4	LUG (UA)
LUG3	4211-4	LUG
Q431	5613-3181(O)	XISTOR, NPN R
Q432	5613-3181(O)	XISTOR, NPN R
Q433	5611-1264(O)	XISTOR, PNP R
Q434	5611-1264(O)	XISTOR, PNP R
D401	5641-MV12YM	VARISTOR
D402	5641-MV12YM	VARISTOR
LI	5911-235	AM LOOP ANTENNA

GENERAL UNIT

EXPLODED VIEW (FRONT PANEL ASS'Y)

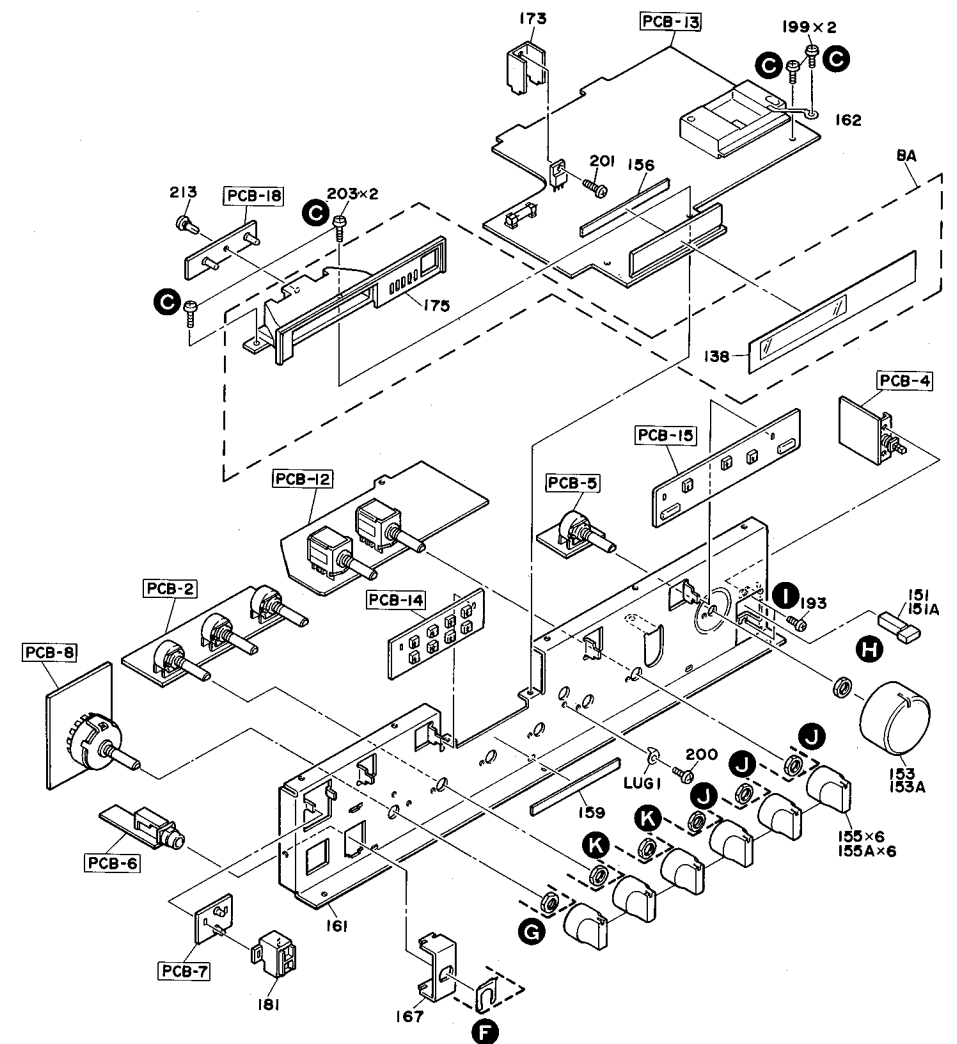


PARTS LIST

Ref. No.	Part No.	Description
AA	A443-HK550A	FRONT PANEL ASS'Y UA
AAA	A443-HK550B	FRONT PANEL ASS'Y BK GB
136	1443-11701	FRONT PANEL UA
136A	1443-11702	FRONT PANEL BK GB
139	1531-12001	FRONT WINDOW
141	1562-06201	FRAME, R UA
141A	1562-06202	FRAME, R BK GB
142	1562-06301	FRAME, L UA
142A	1562-06302	FRAME, L BK GB
148	1662-35701VN	PUSH BUTTON, TUNING UP UA
148A	1662-35702	PUSH BUTTON, TUNING UP BK GB
149	1662-35801VN	PUSH BUTTON, TUNING DOWN UA
149A	1662-35802	PUSH BUTTON, TUNING DOWN BK GB
150	1662-37201VN	PUSH BUTTON, PRESET MEMORY UA
150A	1662-37202	PUSH BUTTON, PRESET MEMORY, SEEK BK GB
157	1732-04201	INDICATOR
160	2112-11762	SPONGE, PANEL TOP
177	2240-7209	HOLDER, POWER
178	2240-7322	HOLDER, PRESET UA
178A	2240-7333	HOLDER, PRESET BK GB
179	2240-7323	HOLDER UA
179A	2240-7332	HOLDER BK GB
180	2240-7324	HOLDER UA
180A	2240-7337	HOLDER BK GB

GENERAL UNIT

EXPLODED VIEW (FRONT CHASSIS)

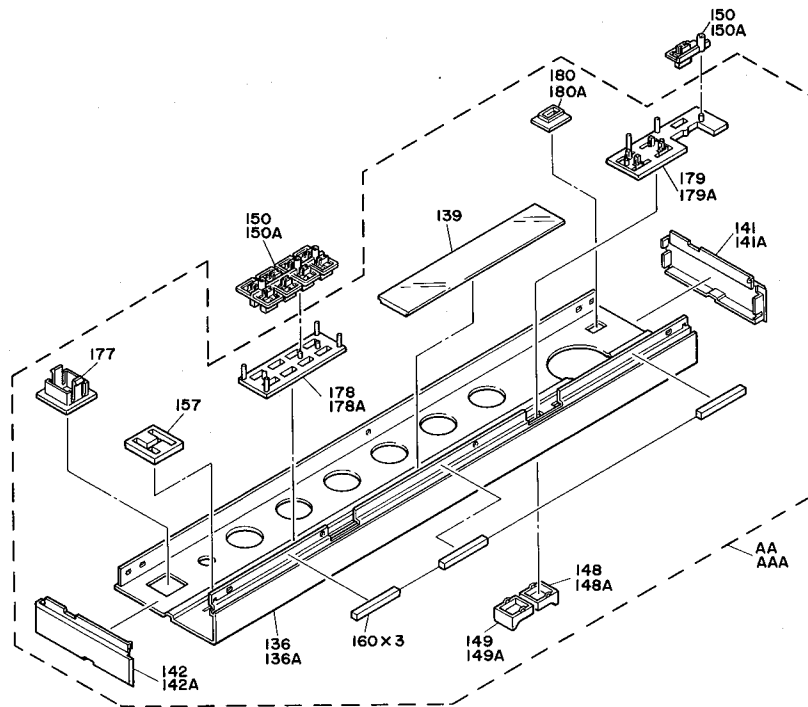


PARTS LIST

Ref. No.	Part No.	Description
BA	B223-HK550A	REFLECTOR ASS'Y
138	1511-14301	PLATE, REFLECTOR
151	1662-36001VN	PUSH BUTTON, LOUDNESS UA
151A	1662-36002	PUSH BUTTON, LOUDNESS BK GB
153	1630-02601	ROTARY KNOB, VOLUME UA
153A	1630-02603	ROTARY KNOB, VOLUME BK GB
155	1632-16502	ROTARY KNOB UA
155A	1632-17101	ROTARY KNOB BK GB
156	1731-00601	INDICATOR, LCD REAR
159	2111-11768	FELT, LCD UNDER
161	2211-7296	CHASSIS, FRONT
162	2218-7001	BRACKET FIX
167	2219-8206	METAL FITTG, HEADPHONES
173	2222-7239	HEAT SINK, TUNER PCB
175	2223-7058	REFLECTOR
181	2240-7325	HOLDER
193	2327-R0130062	SCREW
199	2347-R0130062	SCREW
200	2347-R0130062	SCREW
201	2347-R0130102	SCREW
203	2347-R0130102	SCREW
213	2459-3006511	PLASTIC RIVET, LAMP PCB
LUG1	4211-4	LUG

GENERAL UNIT

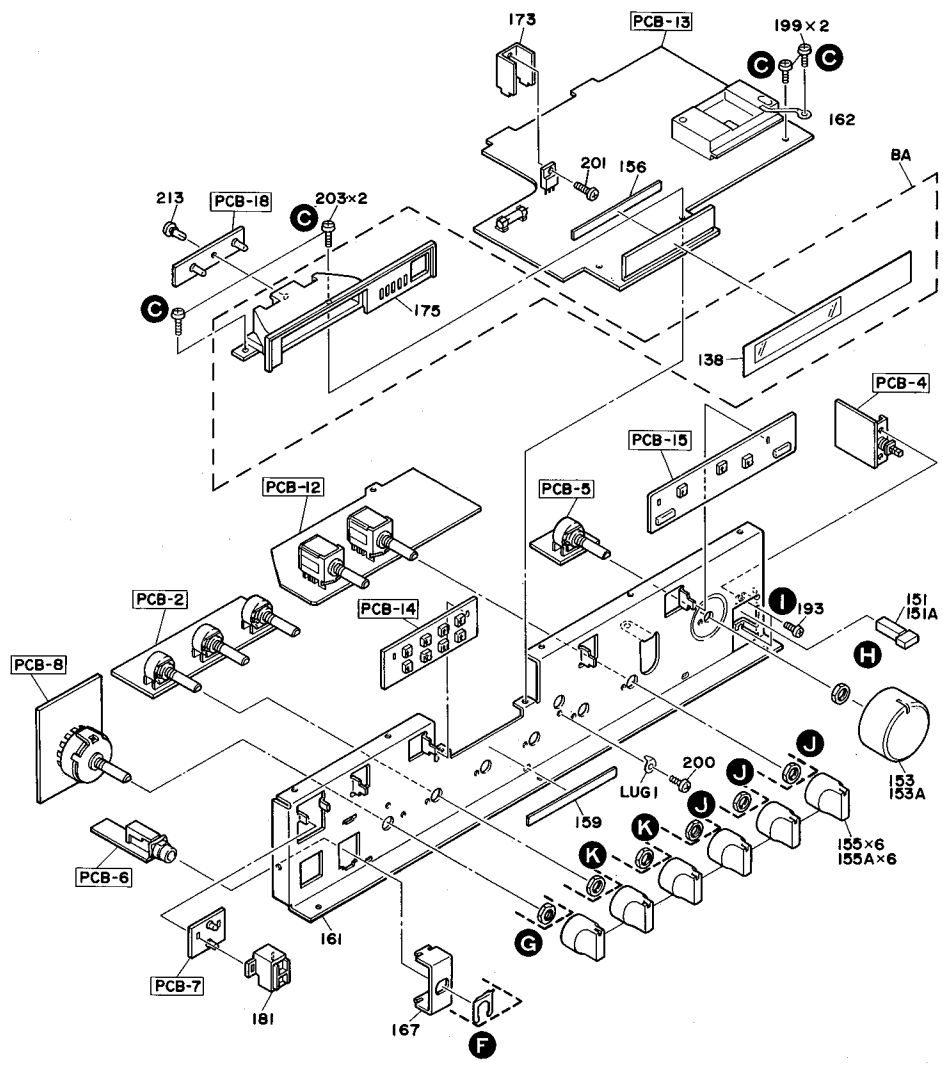
EXPLODED VIEW (FRONT PANEL ASS'Y)



PARTS LIST

Ref. No.	Part No.	Description
AA	A443-HK550A	FRONT PANEL ASS'Y UA
AAA	A443-HK550B	FRONT PANEL ASS'Y BK GB
136	1443-11701	FRONT PANEL UA
136A	1443-11702	FRONT PANEL BK GB
139	1531-12001	FRONT WINDOW
141	1562-06201	FRAME, R UA
141A	1562-06202	FRAME, R BK GB
142	1562-06301	FRAME, L UA
142A	1562-06302	FRAME, L BK GB
148	1662-35701VN	PUSH BUTTON, TUNING UP UA
148A	1662-35702	PUSH BUTTON, TUNING UP BK GB
149	1662-35801VN	PUSH BUTTON, TUNING DOWN UA
149A	1662-35802	PUSH BUTTON, TUNING DOWN BK GB
150	1662-37201VN	PUSH BUTTON, PRESET MEMORY UA
150A	1662-37202	PUSH BUTTON, PRESET MEMORY, SEEK BK GB
157	1732-04201	INDICATOR
160	2112-11762	SPONGE, PANEL TOP
177	2240-7209	HOLDER, POWER
178	2240-7322	HOLDER, PRESET UA
178A	2240-7333	HOLDER, PRESET BK GB
179	2240-7323	HOLDER UA
179A	2240-7332	HOLDER BK GB
180	2240-7324	HOLDER UA
180A	2240-7337	HOLDER BK GB

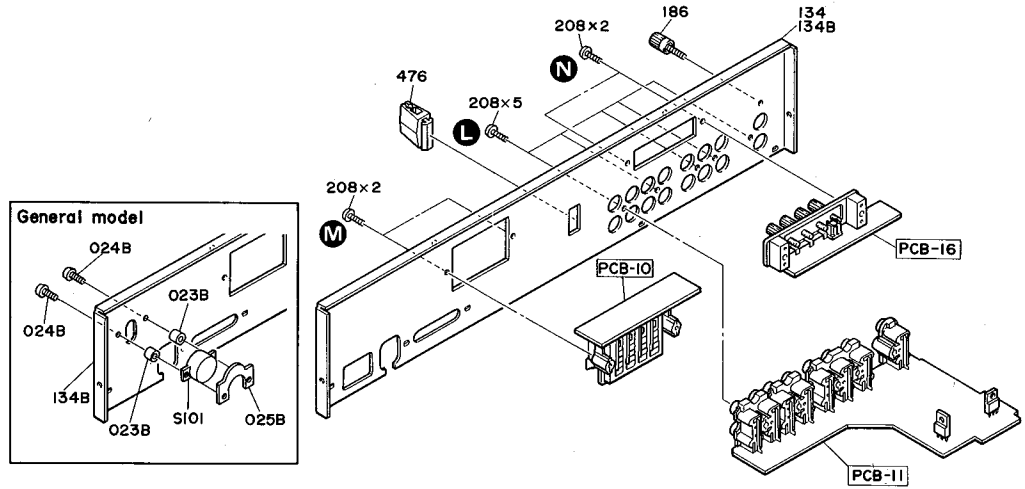
GENERAL UNIT
EXPLODED VIEW (FRONT CHASSIS)



PARTS LIST

Ref. No.	Part No.	Description
BA	B223-HK550A	REFLECTOR ASS'Y
138	1511-14301	PLATE, REFLECTOR
151	1662-36001VN	PUSH BUTTON, LOUDNESS UA
151A	1662-36002	PUSH BUTTON, LOUDNESS BK GB
153	1630-02601	ROTARY KNOB, VOLUME UA
153A	1630-02603	ROTARY KNOB, VOLUME BK GB
155	1632-16502	ROTARY KNOB UA
155A	1632-17101	ROTARY KNOB BK GB
156	1731-00601	INDICATOR, LCD REAR
159	2111-11768	FELT, LCD UNDER
161	2211-7296	CHASSIS, FRONT
162	2218-7001	BRACKET FIX
167	2219-8206	METAL FITTG, HEADPHONES
173	2222-7239	HEAT SINK, TUNER PCB
175	2223-7058	REFLECTOR
181	2240-7325	HOLDER
193	2327-R0130062	SCREW
199	2347-R0130062	SCREW
200	2347-R0130062	SCREW
201	2347-R0130102	SCREW
203	2347-R0130102	SCREW
213	2459-3006511	PLASTIC RIVET, LAMP PCB
LUG1	4211-4	LUG

GENERAL UNIT
EXPLODED VIEW (CABINET BACK)

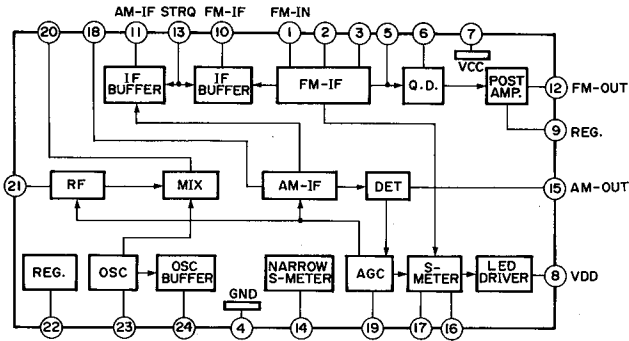


PARTS LIST

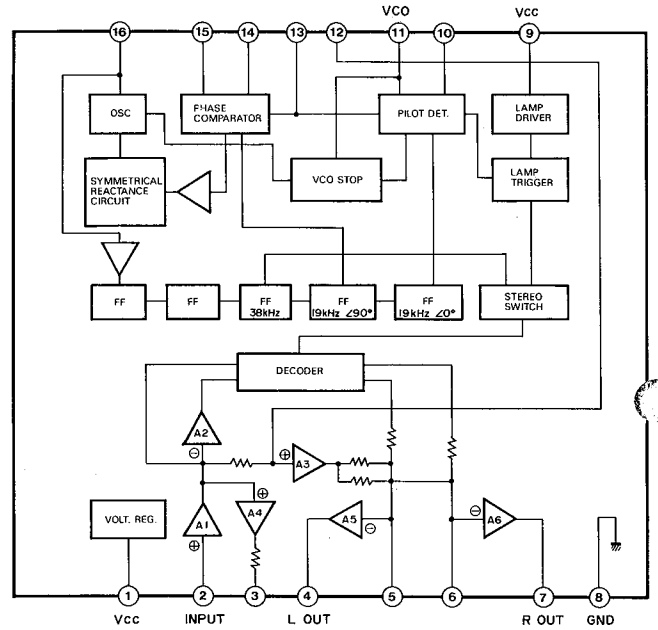
Ref. No.	Part No.	Description
023B	2132-7116	SPACER (GB)
024B	2327-R0130124	SCREW (GB)
025B	2440-7017	SPECIAL NUT (GB)
134	1424-24101	CABINET BACK (UA)
134B	1424-24201	CABINET BACK (GB)
186	4214-168	TERMINAL
208	2347-R0130104	SCREW
476	2240-7208	HOLDER
△S101	4411-102729	ROTARY SWITCH (GB)

IC BLOCK DIAGRAM

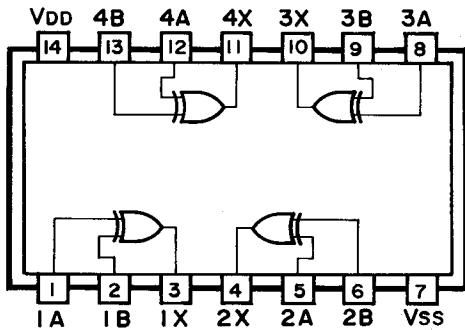
LA1266 : IC201 FM/AM IF



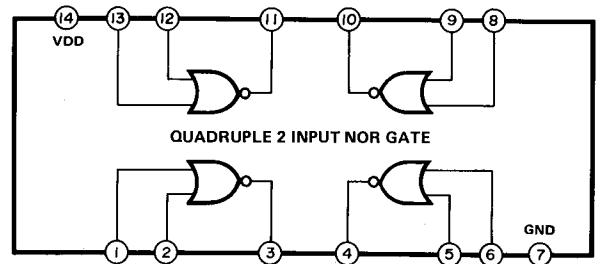
LA3410 : IC301 PLL MPX



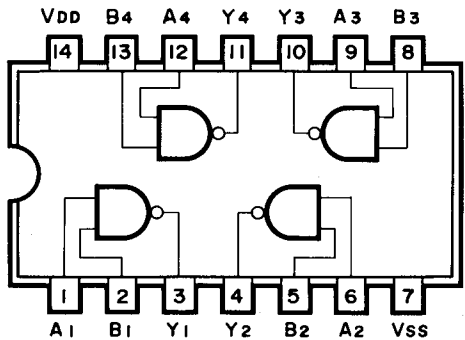
TC4030BP : IC702 QUAD EXCLUSIVE-OR GATE



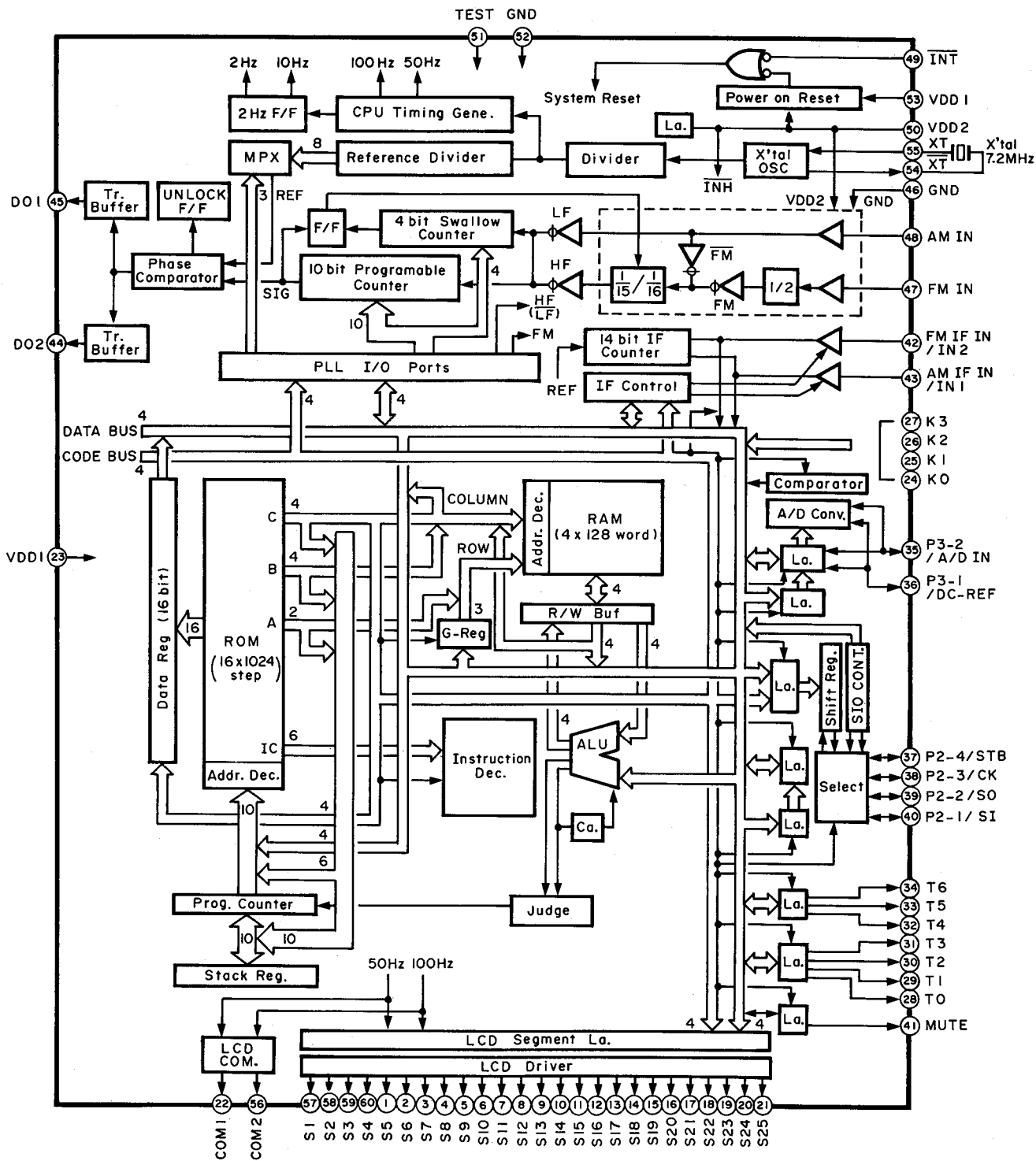
TC4001BP : IC752 QUAD 2 INPUT NOR GATE



TC4011BP : IC751 QUAD 2 INPUT NAND GATE

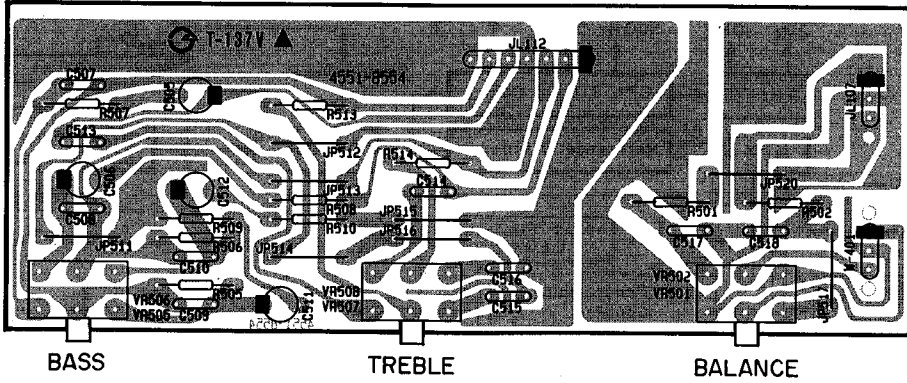


TC9304F-011 : IC701 LSI MICRO PROCESSOR

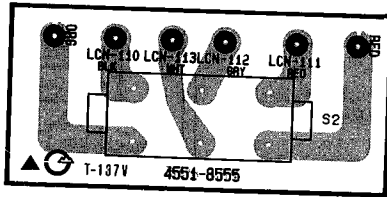


P. C. BOARDS

PCB-2 Tone Control P. C. Board

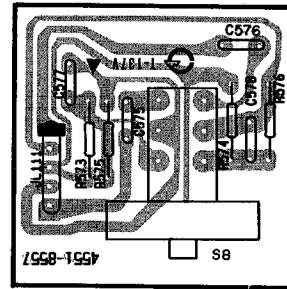


PCB-3 Speaker Mode Selector P. C. Board



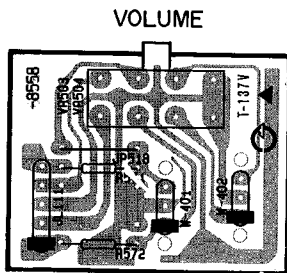
▲ △
4Ω 8Ω
SPEAKER
OPERATING
MODE

PCB-4 Loudness Switch P. C. Board



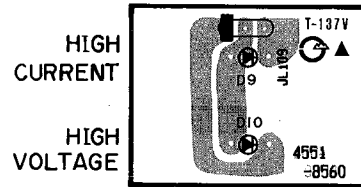
Loudness

PCB-5 Volume P. C. Board



VOLUME

PCB-7 Indicators P. C. Board

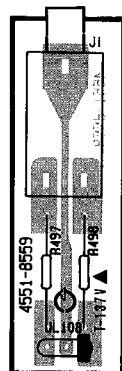


HIGH
CURRENT

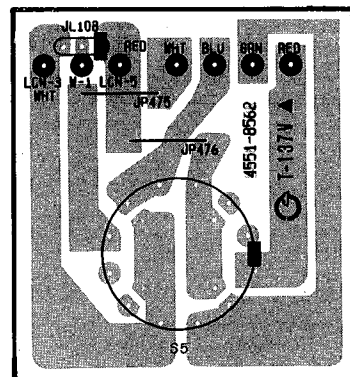
HIGH
VOLTAGE

PCB-6 Headphone Jack P. C. Board

HEADPHONES



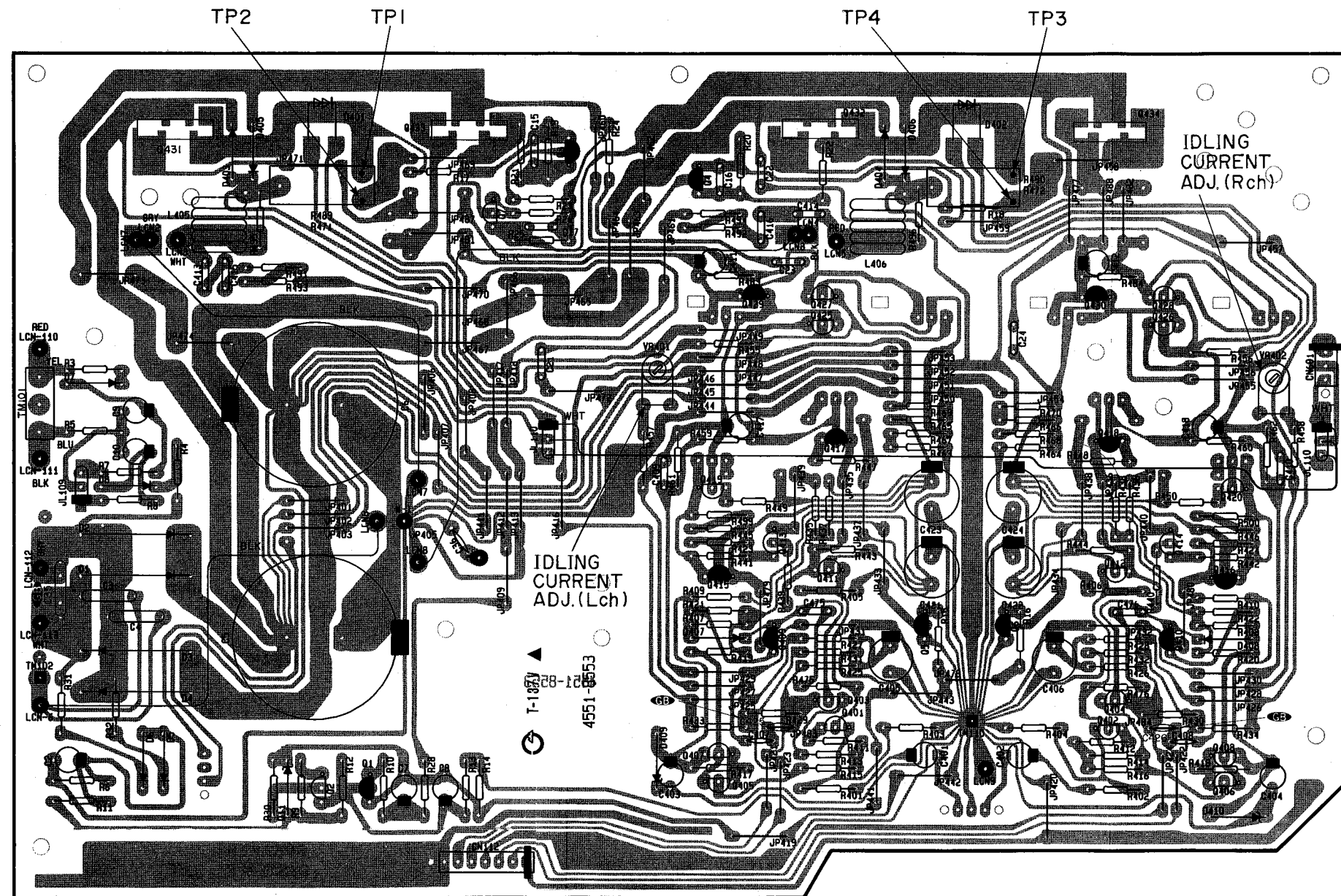
PCB-8 Speaker Switch P. C. Board



SPEAKERS
off speakers1 speakers2 1+2

P. C. BOARDS

PCB-1 Power Amp. P. C. Board



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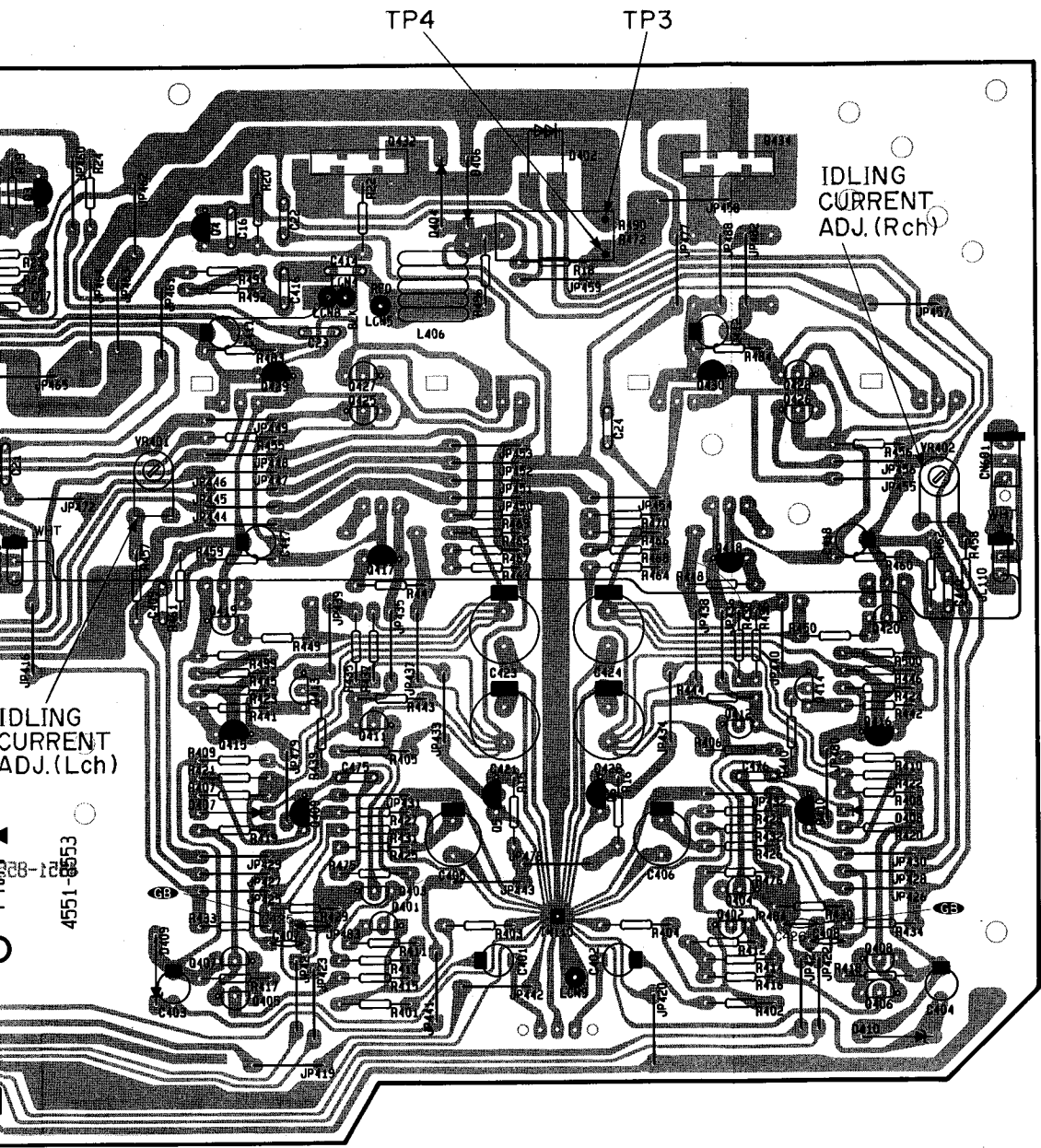
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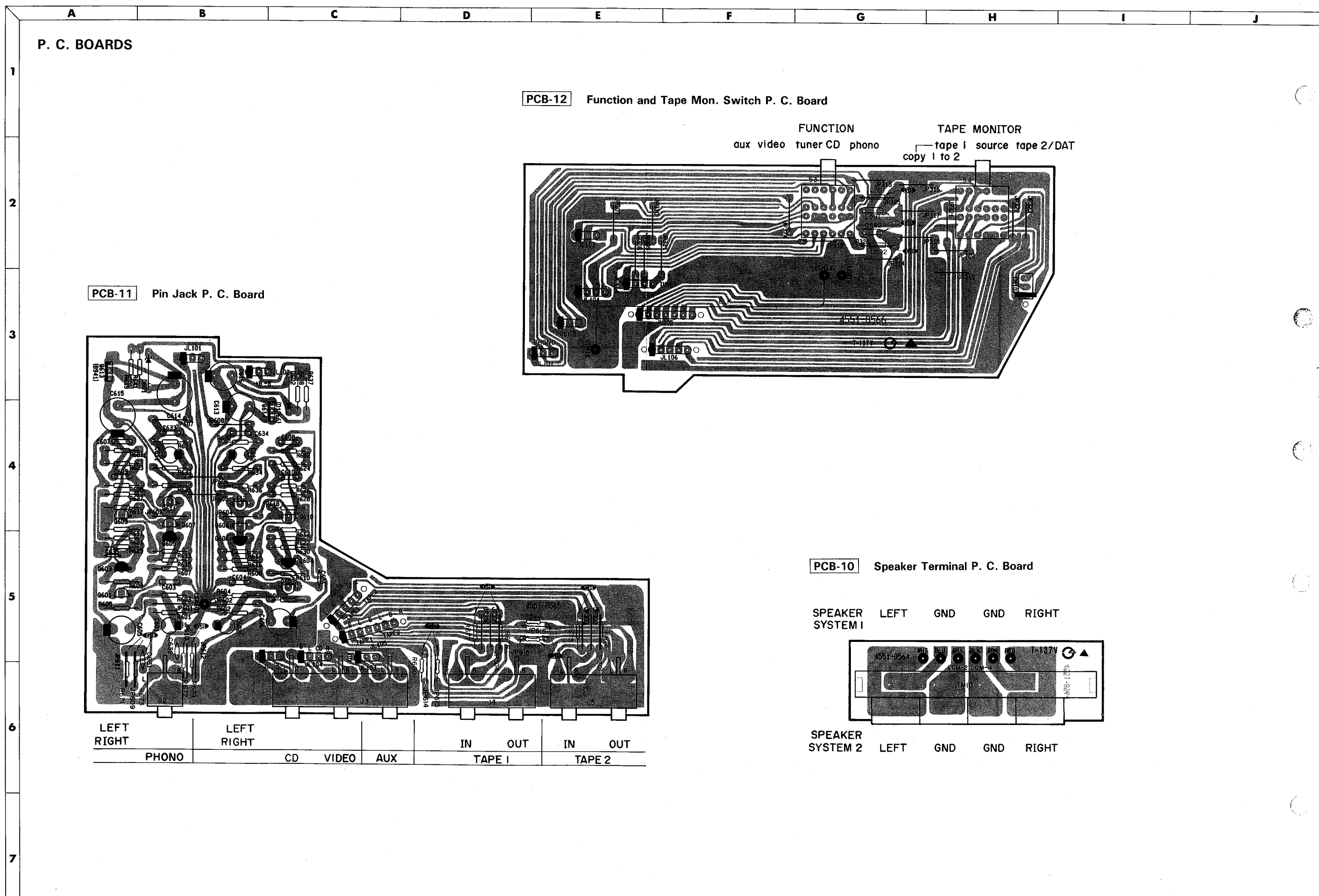
TP4

TP3

IDLING
CURRENT
ADJ. (Rch)

IDLING
CURRENT
ADJ. (Lch)

4551-0553

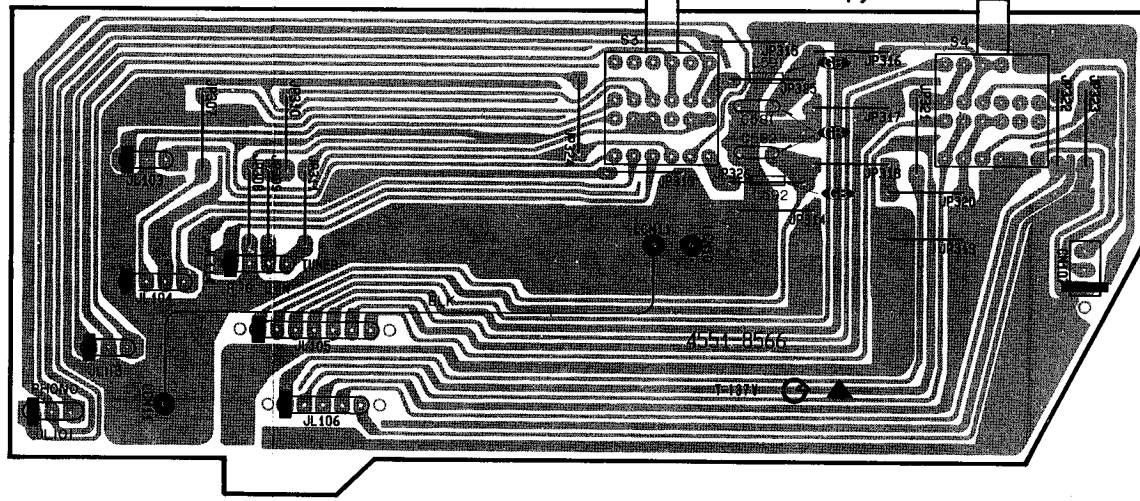


P. C. BOARDS

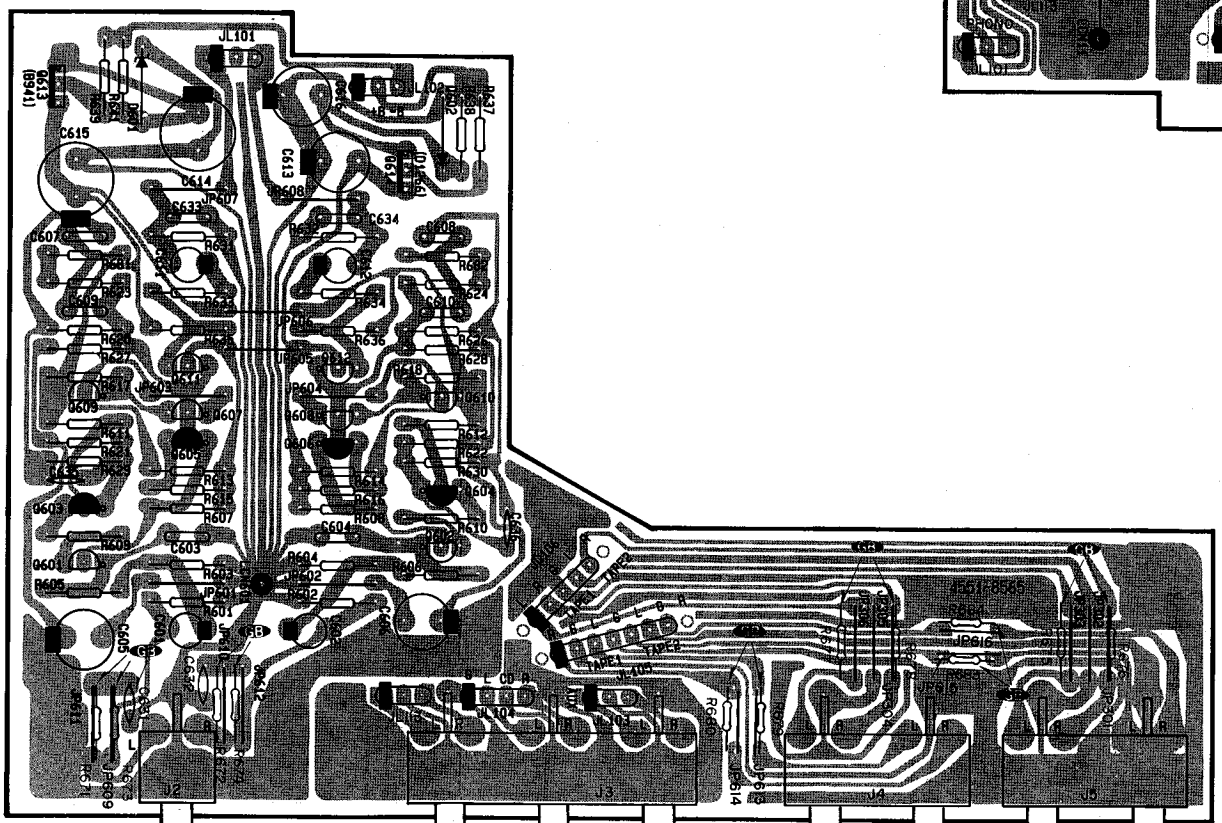
PCB-12 Function and Tape Mon. Switch P. C. Board

FUNCTION
aux video tuner CD phono

TAPE MONITOR
tape 1 source tape 2/DAT
copy 1 to 2



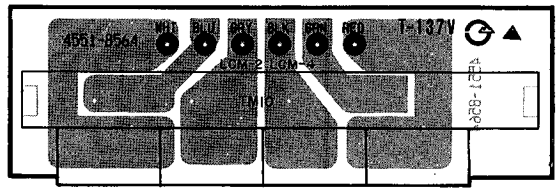
PCB-11 Pin Jack P. C. Board



LEFT RIGHT	LEFT RIGHT			IN OUT	IN OUT
PHONO	CD VIDEO	AUX	TAPE 1	TAPE 2	

PCB-10 Speaker Terminal P. C. Board

SPEAKER SYSTEM 1 LEFT GND GND RIGHT



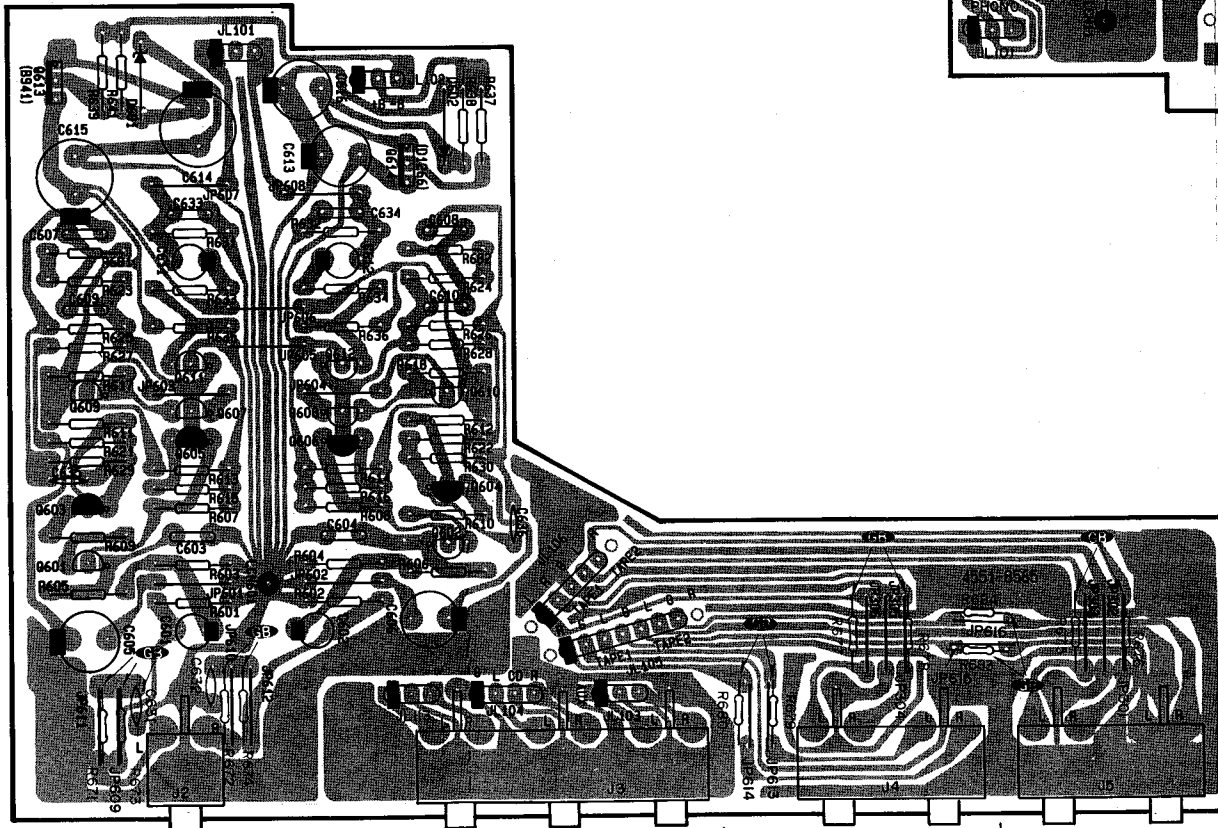
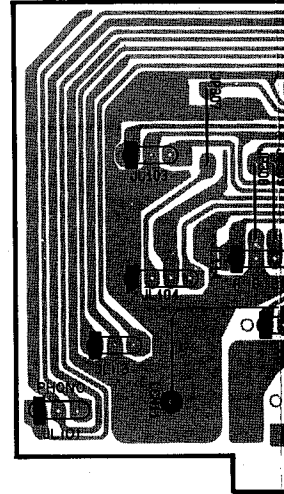
SPEAKER SYSTEM 2 LEFT GND GND RIGHT

A B C D E

P. C. BOARDS

PCB-12 Function and

PCB-11 Pin Jack P. C. Board



LEFT RIGHT	LEFT RIGHT			IN OUT	IN OUT
PHONO	CD VIDEO	AUX	TAPE 1	TAPE 2	

1

2

3

4

5

6

7

F

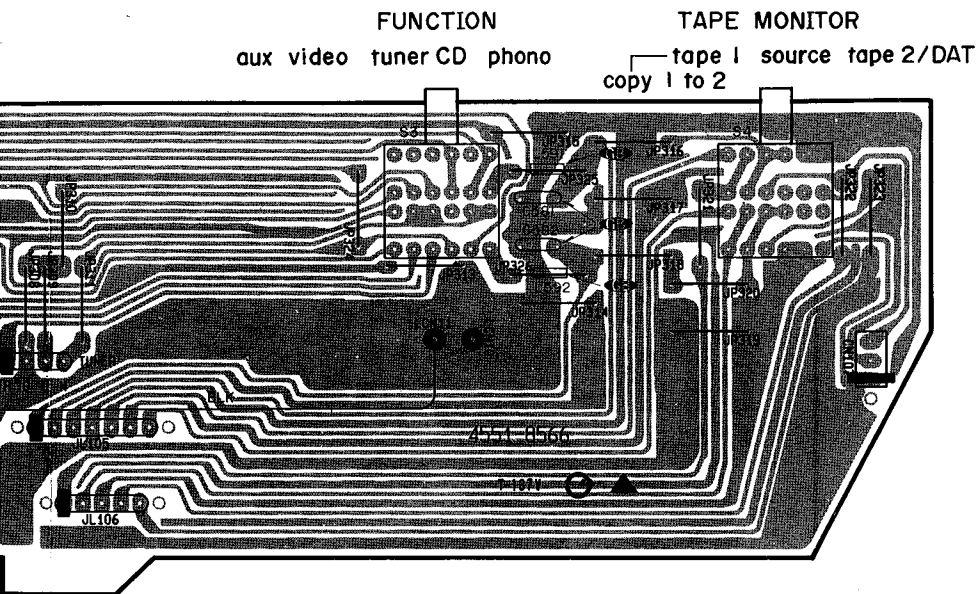
G

H

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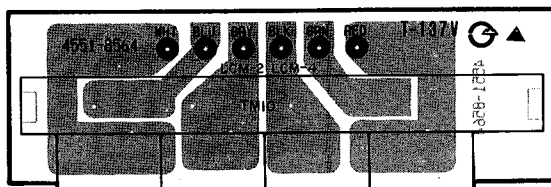
J

Function and Tape Mon. Switch P. C. Board



PCB-10 Speaker Terminal P. C. Board

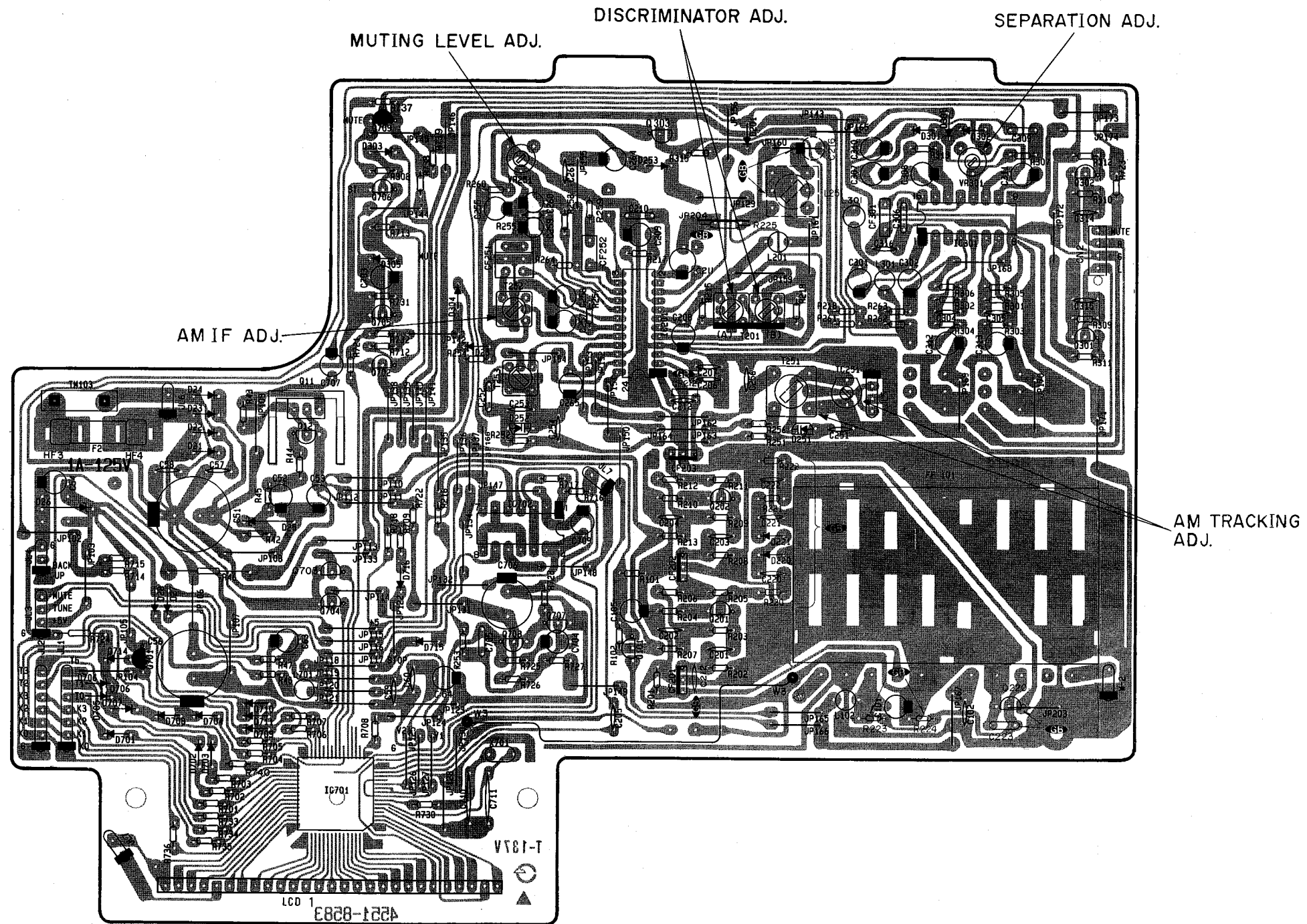
SPEAKER SYSTEM 1 LEFT GND GND RIGHT



SPEAKER SYSTEM 2 LEFT GND GND RIGHT

P. C. BOARDS

PCB-13 Tuner P. C. Board

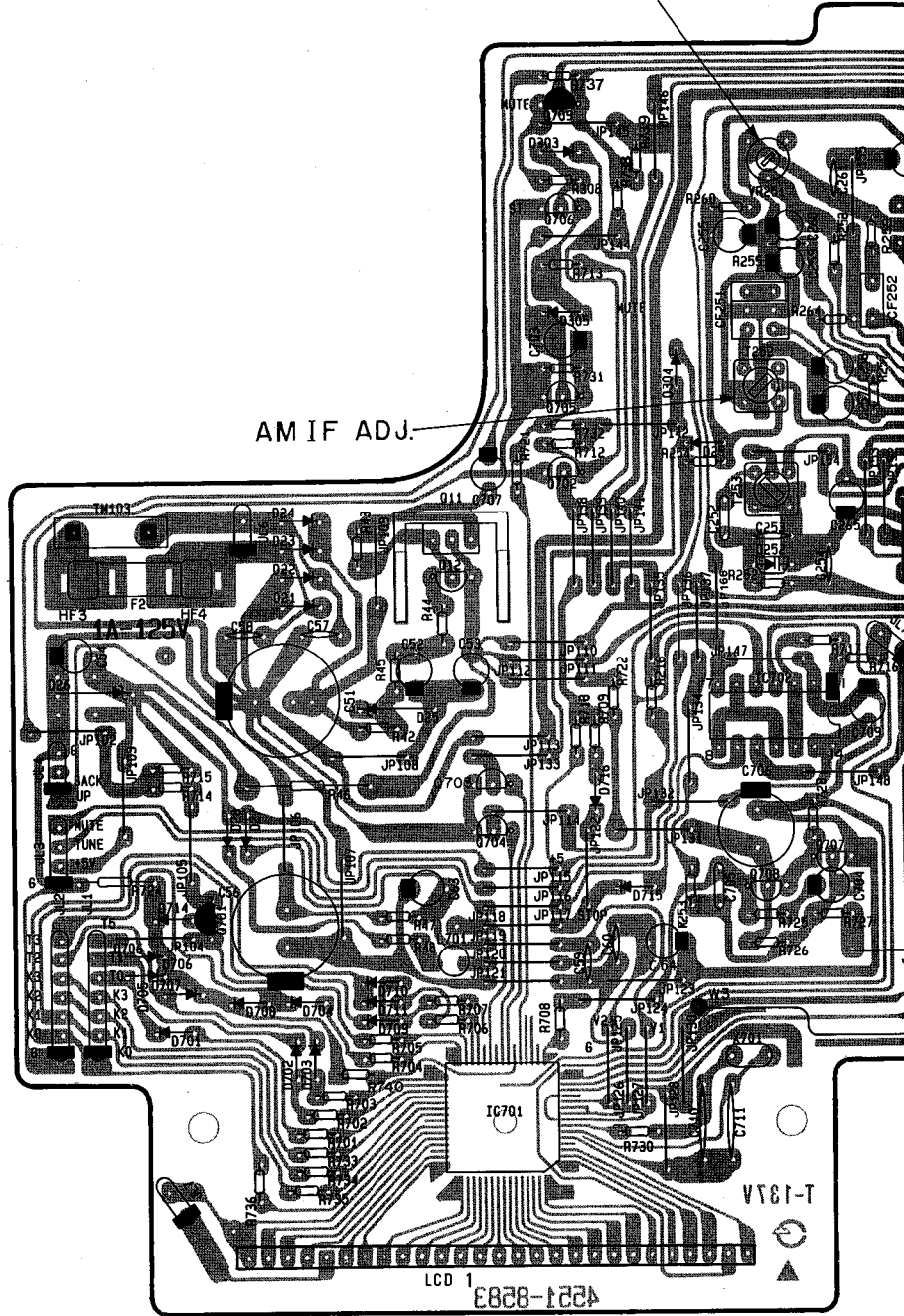


P. C. BOARDS

PCB-13 Tuner P. C. Board

MUTING LEVEL ADJ.

AM IF ADJ.



4221-8283
LCD 1
VT81-T

F

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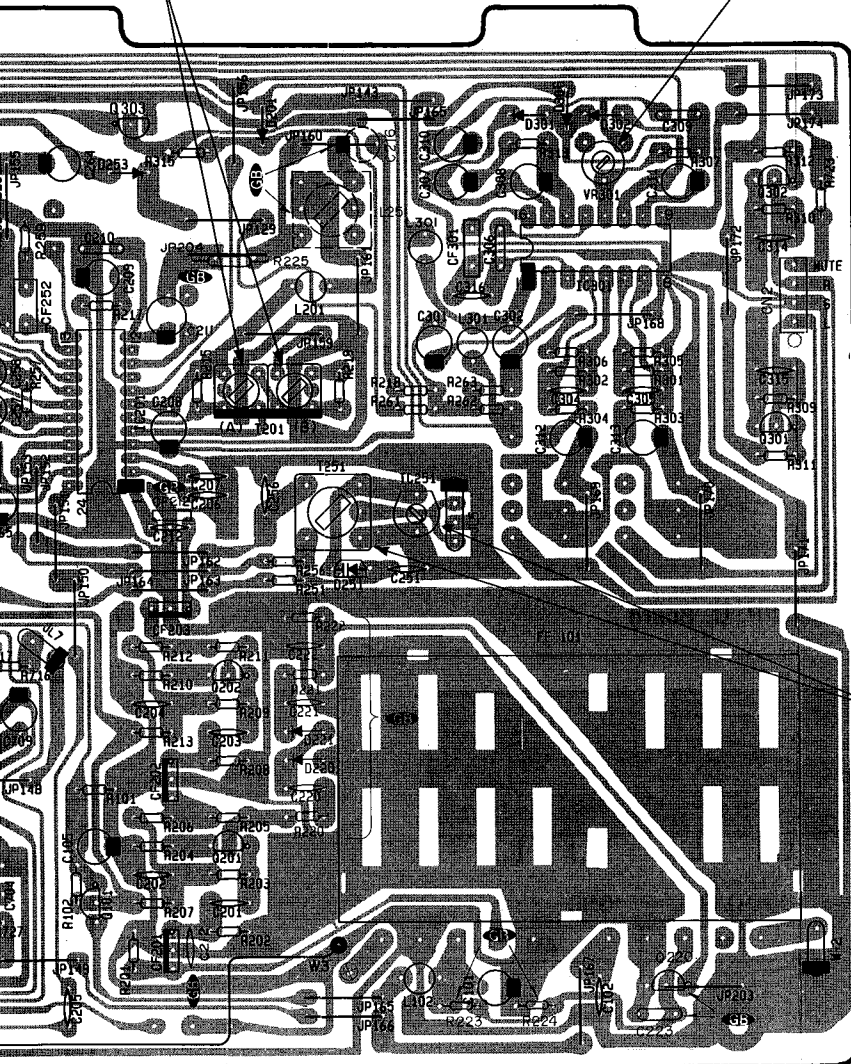
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DISCRIMINATOR ADJ.

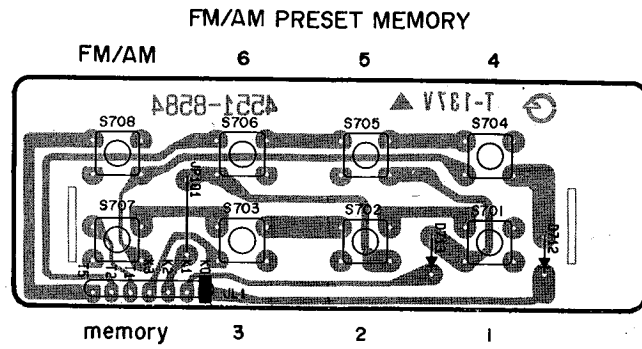
SEPARATION ADJ.



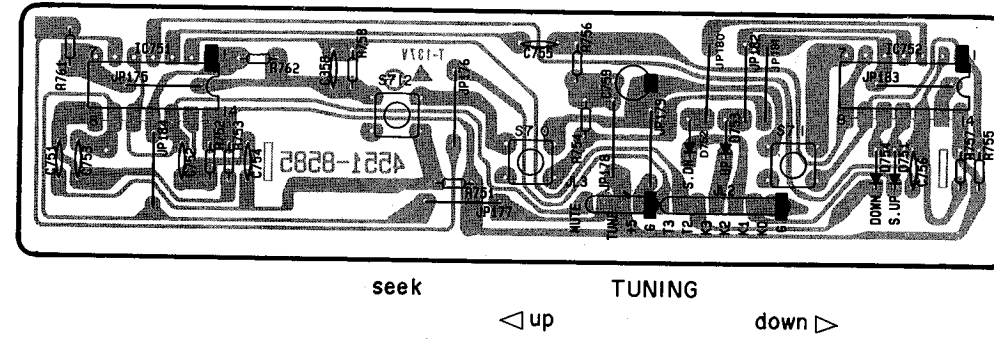
AM TRACKING
ADJ.

P. C. BOARDS

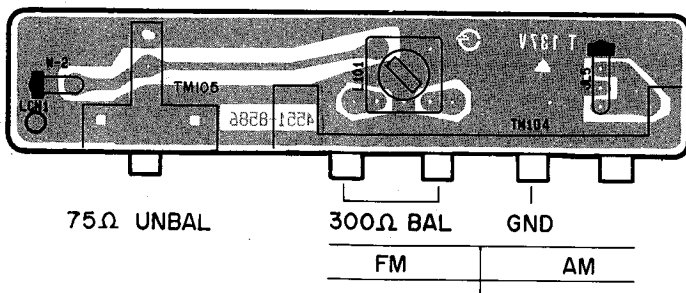
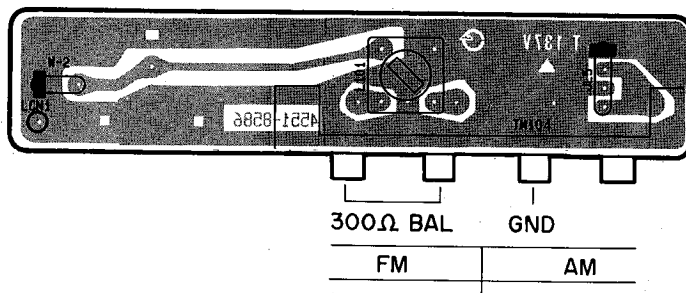
PCB-14 Preset Memory Switches P. C. Board



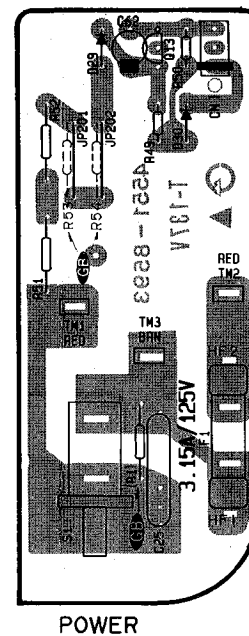
PCB-15 Tuning Switch P. C. Board



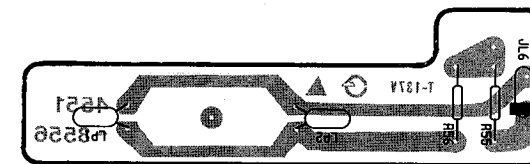
PCB-16 Antenna Terminal P. C. Board



PCB-17 Power Switch P. C. Board

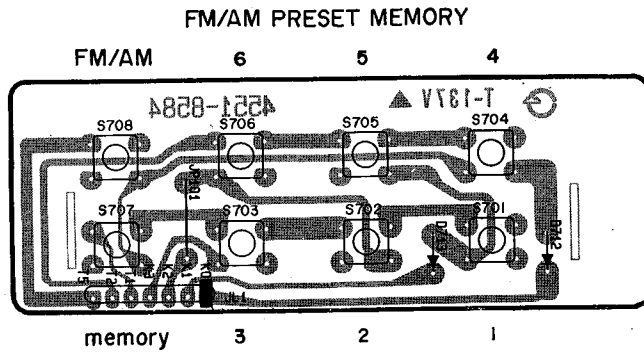


PCB-18 Lamp P. C. Board



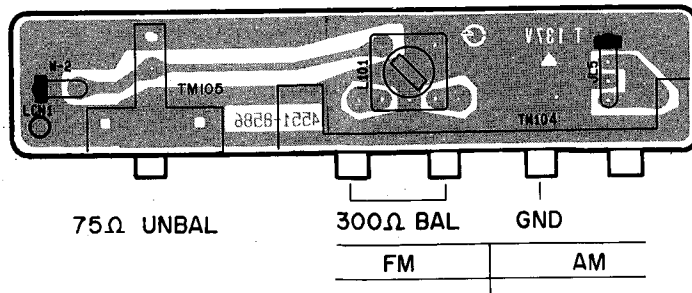
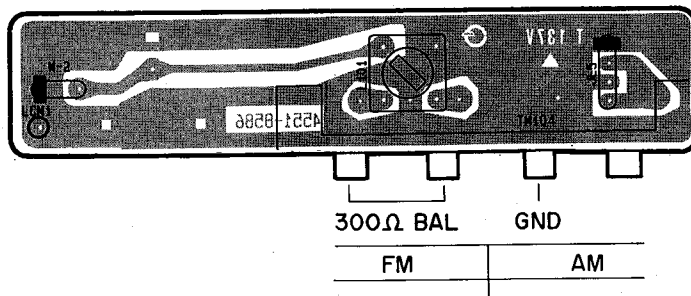
P. C. BOARDS

PCB-14 Preset Memory Switches P. C. Board

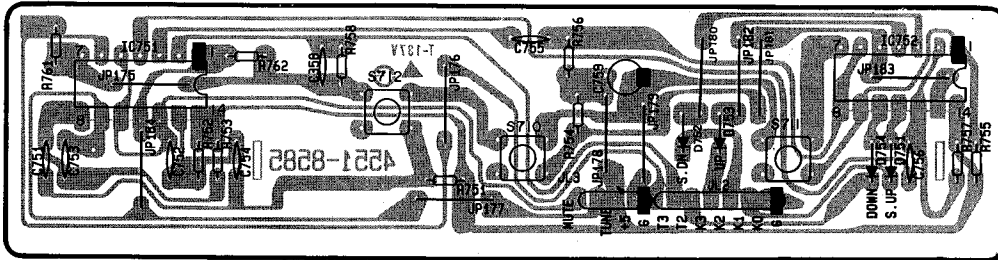


PCB-16 Antenna Terminal P. C. Board

PCB-17



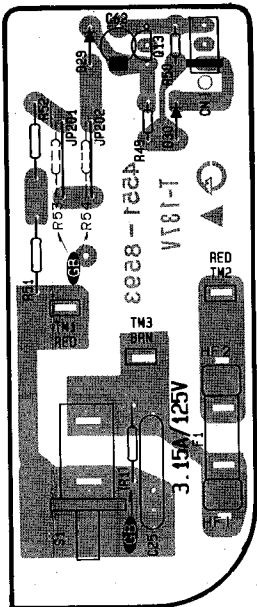
PCB-15 Tuning Switch P. C. Board



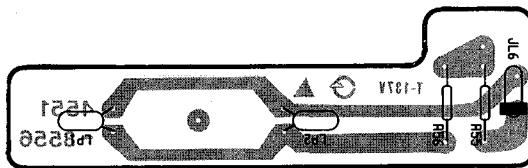
seek TUNING down
◁ up ▷

Power Switch P. C. Board

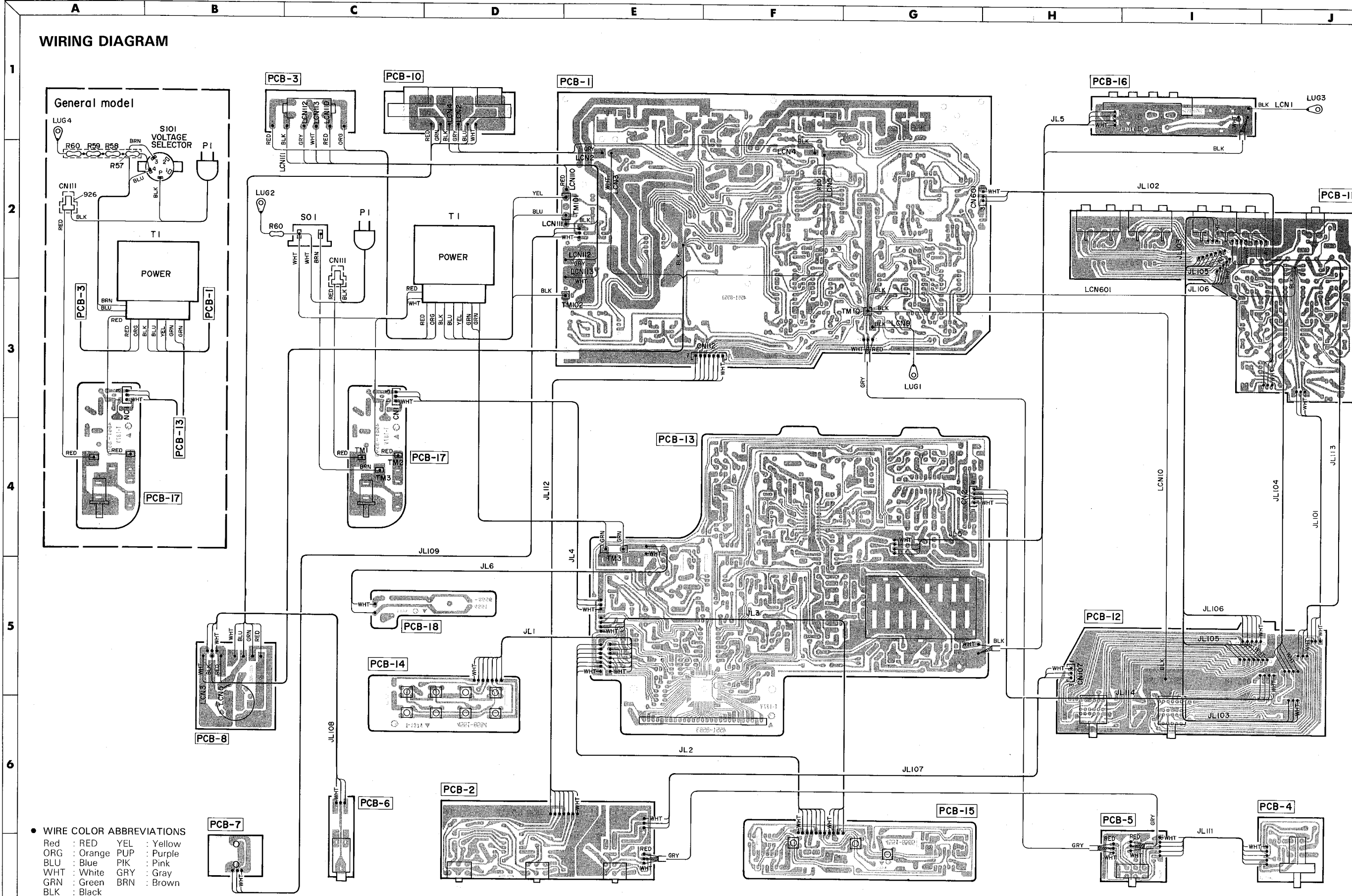
PCB-18 Lamp P. C. Board



POWER



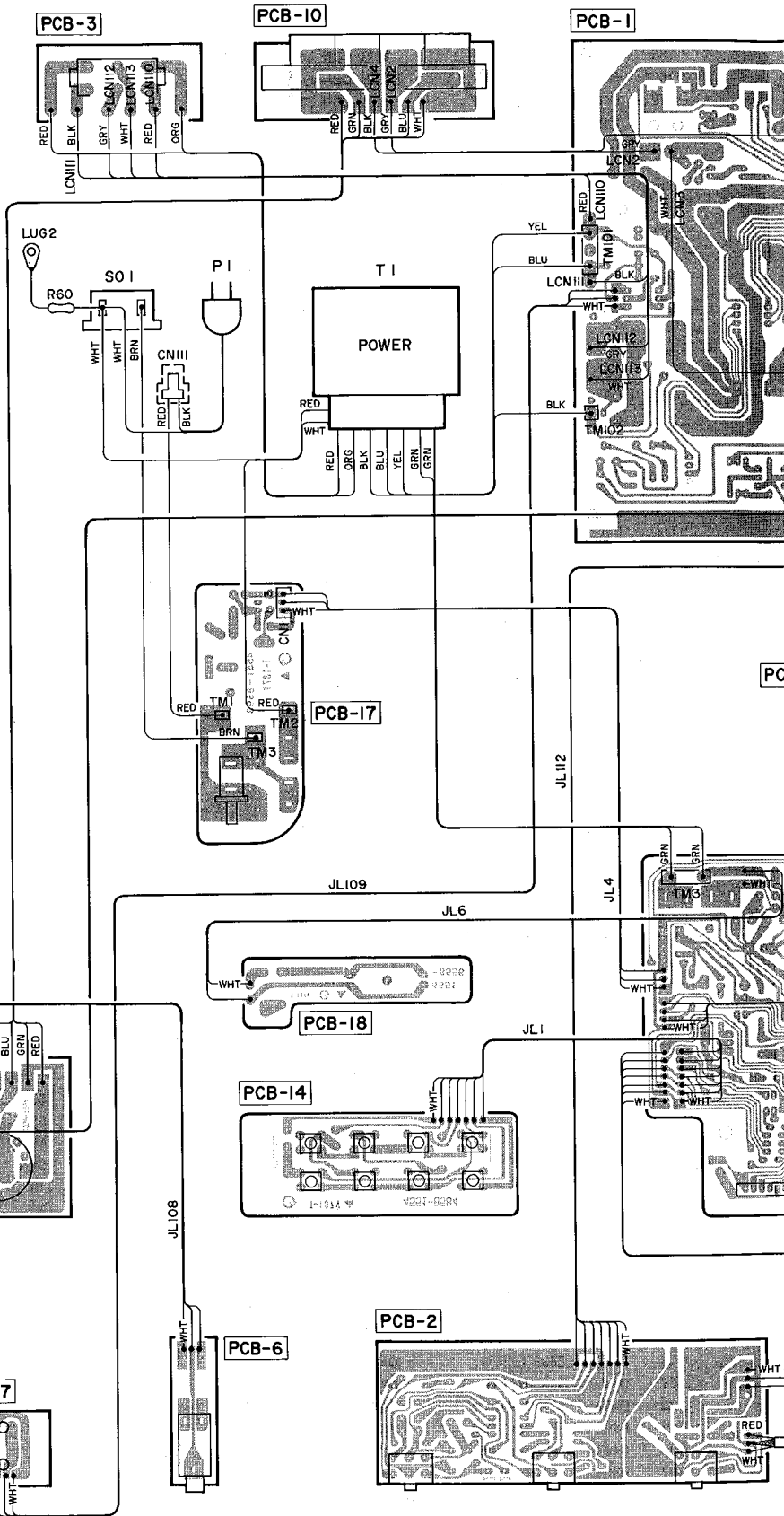
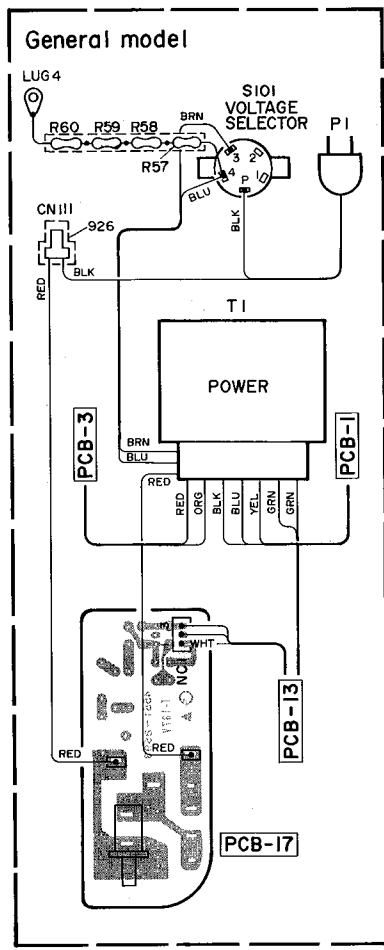
WIRING DIAGRAM



- WIRE COLOR ABBREVIATIONS
- | | | | |
|-----|----------|-----|----------|
| Red | : RED | YEL | : Yellow |
| ORG | : Orange | PUP | : Purple |
| BLU | : Blue | PIK | : Pink |
| WHT | : White | GRY | : Gray |
| GRN | : Green | BRN | : Brown |
| BLK | : Black | | |

WIRING DIAGRAM

1
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• WIRE COLOR ABBREVIATIONS

Red	: RED	YEL	: Yellow
ORG	: Orange	PUR	: Purple
BLU	: Blue	PIK	: Pink
WHT	: White	GRY	: Gray
GRN	: Green	BRN	: Brown
BLK	: Black		

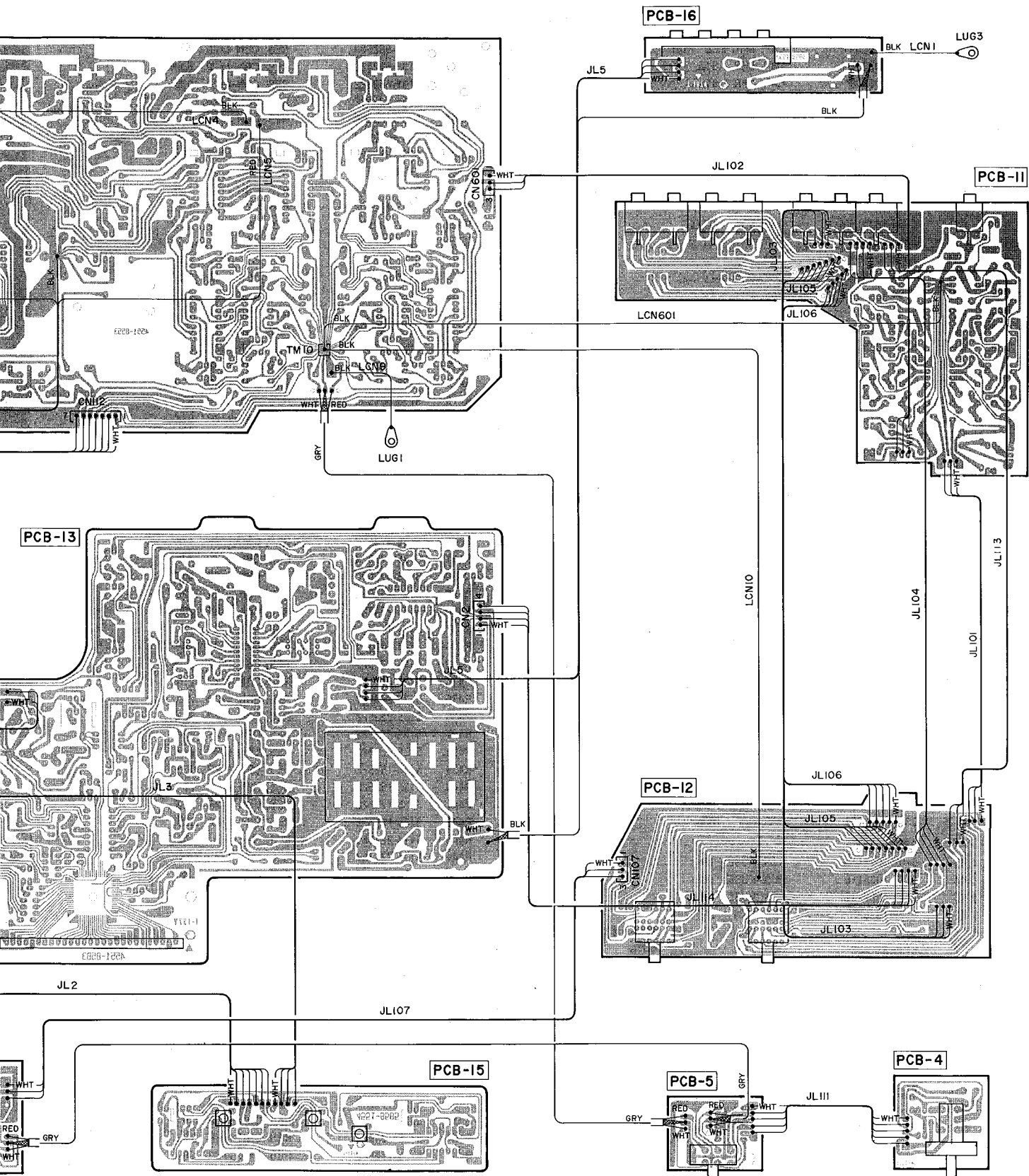
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ELECTRICAL PARTS LIST

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
PCB-1 POWER AMP. P. C. BOARD															
CAPACITORS															
812	C2	5345-106F041	CAP, MINI ELE 10μ/50V	820	R24	5135-472522	RES, CBN 1/2P 4.7K	789	R471	5273-R27672	RES, CEM 3P .27	726	D410	5635-HZ12B2L	DIODE, ZENER
839	C3	5362-103048	CAP, CER .01μ	821	R25	5135-473522	RES, CBN 1/2P 47K	789	R472	5273-R27672	RES, CEM 3P .27				
839	C4	5362-103048	CAP, CER .01μ	822	R26	5135-223522	RES, CBN 1/2P 22K	755	R475	5135-122522	RES, CBN 1/2P 1.2K	794	L405	5991-7165	SPRING COIL
837	C5	5341-S07FM822	CAP, ELE 8200p/50V	821	R28	5135-473522	RES, CBN 1/2P 47K	755	R476	5135-122522	RES, CBN 1/2P 1.2K	794	L406	5991-7165	SPRING COIL
837	C6	5341-S07FM822	CAP, ELE 8200p/50V	816	R30	5135-562522	RES, CBN 1/2P 5.6K	766	R483	5135-820522	RES, CBN 1/2P 82				
810	C7	5345-105F041	CAP, MINI ELE 1μ/50V	828	R31	5135-682522	RES, CBN 1/2P 6.8K	766	R484	5135-820522	RES, CBN 1/2P 82				
811	C8	5345-107B041	CAP, MINI ELE 100μ/10V	828	R32	5135-682522	RES, CBN 1/2P 6.8K	789	R489	5273-R27672	RES, CEM 3P .27	791	VR401	5101-50171920	RES, SEMI FIX 500
811	C9	5345-107B041	CAP, MINI ELE 100μ/10V	753	R401	5135-102522	RES, CBN 1/2P 1K	789	R490	5273-R27672	RES, CEM 3P .27	791	VR402	5101-50171920	RES, SEMI FIX 500
811	C10	5345-107B041	CAP, MINI ELE 100μ/10V	753	R402	5135-102522	RES, CBN 1/2P 1K	776	R491	5135-4R7522	RES, CBN 1/2P 4.7				
813	C15	5354-683J1HM	CAP, MYL .068μ	754	R403	5135-683522	RES, CBN 1/2P 68K	776	R492	5135-4R7522	RES, CBN 1/2P 4.7	799	CN112	4443-070185	CONNECTOR
813	C16	5354-683J1HM	CAP, MYL .068μ	754	R404	5135-683522	RES, CBN 1/2P 68K	776	R493	5135-4R7522	RES, CBN 1/2P 4.7	849	CN601	4443-030185	CONNECTOR
814	C17	5354-473J1HM	CAP, MYL .047μ	755	R405	5135-122522	RES, CBN 1/2P 1.2K	776	R494	5135-4R7522	RES, CBN 1/2P 4.7	913	JL109	4242-R0103251	JUMPER LEAD
815	C21	5354-104593	CAP, MYL .1μ	755	R406	5135-122522	RES, CBN 1/2P 1.2K	767	R495	5135-100522	RES, CBN 1/2P 10	912	JL110	4242-R0103181	JUMPER LEAD
815	C22	5354-104593	CAP, MYL .1μ	755	R407	5135-122522	RES, CBN 1/2P 1.2K	767	R496	5135-100522	RES, CBN 1/2P 10	844	TM101	4214-11023	TERMINAL
815	C23	5354-104593	CAP, MYL .1μ	755	R408	5135-122522	RES, CBN 1/2P 1.2K	757	R499	5135-680522	RES, CBN 1/2P 68	843	TM102	4214-11013	TERMINAL
815	C24	5354-104593	CAP, MYL .1μ	756	R409	5135-682522	RES, CBN 1/2P 6.8K	757	R500	5135-680522	RES, CBN 1/2P 68	796	TM110	4214-11013	TERMINAL
058B	C35	5352-1041957	CAP, MTL .1μ GB	756	R410	5135-682522	RES, CBN 1/2P 6.8K								
731	C401	5345-107B0951	CAP, MINI ELE 100μ/10V	757	R411	5135-680522	RES, CBN 1/2P 68								
731	C402	5345-107B0951	CAP, MINI ELE 100μ/10V	757	R412	5135-680522	RES, CBN 1/2P 68	802	Q1	5611-1115(F)or(E)	XISTOR, PNP R	897	LCN2	4163-0140026	CONNECTOR W/W
733	C403	5345-106C041	CAP, MINI ELE 10μ/16V	773	R413	5135-680522	RES, CBN 1/2P 68	801	Q2	5613-2603(F)or(E)	XISTOR, PNP R	898	LCN3	4163-0140027	CONNECTOR W/W
733	C404	5345-106C041	CAP, MINI ELE 10μ/16V	773	R414	5135-680522	RES, CBN 1/2P 68	803	Q3	5611-970(BL)	XISTOR, NPN R	899	LCN4	4163-0140024	CONNECTOR W/W
732	C405	5345-227A0951	CAP, MINI ELE 220μ/6.3V	773	R415	5135-222522	RES, CBN 1/2P 2.2K	803	Q4	5611-970(BL)	XISTOR, PNP R	900	LCN5	4163-0140025	CONNECTOR W/W
732	C406	5345-227A0951	CAP, MINI ELE 220μ/6.3V	773	R416	5135-222522	RES, CBN 1/2P 2.2K	803	Q5	5611-970(BL)	XISTOR, PNP R	901	LCN6	4163-0110024	CONNECTOR W/W
742	C407	5353-020934	CAP, MCA 2p UA BK	759	R417	5135-561522	RES, CBN 1/2P 560	803	Q6	5611-970(BL)	XISTOR, PNP R	901	LCN7	4163-0110024	CONNECTOR W/W
742B	C407	5353-040934	CAP, MCA 4p GB	759	R418	5135-561522	RES, CBN 1/2P 560	804	Q7	5613-2240(BL)	XISTOR, NPN R	909	LCN8	4163-0112024	CONNECTOR W/W
742	C408	5353-020934	CAP, MCA 2p UA BK	754	R419	5135-683522	RES, CBN 1/2P 68K	711	Q401	5613-2240(BL)	XISTOR, NPN R	903	LCN9	4163-0115020	CONNECTOR W/W
742B	C408	5353-040934	CAP, MCA 4p GB	754	R420	5135-683522	RES, CBN 1/2P 68K	711	Q402	5613-2240(BL)	XISTOR, NPN R	905	LCN10	4163-0130025	CONNECTOR W/W
740	C409	5359-1015851	CAP, PPP 100p	788	ΔR421	5102-3315116	RES, FUSE 330	711	Q403	5613-2240(BL)	XISTOR, NPN R	906	LCN11	4163-0130024	CONNECTOR W/W
740	C410	5359-1015851	CAP, PPP 100p	788	ΔR422	5102-3315116	RES, FUSE 330	711	Q404	5613-2240(BL)	XISTOR, NPN R	907	LCN12	4163-0130026	CONNECTOR W/W
733	C411	5345-106C041	CAP, MINI ELE 10μ/16V	788	ΔR423	5102-3315116	RES, FUSE 330	712	Q405	5613-2603(F)or(E)	XISTOR, NPN R	908	LCN13	4163-0130027	CONNECTOR W/W
733	C412	5345-106C041	CAP, MINI ELE 10μ/16V	760	R425	5135-473522	RES, CBN 1/2P 47K	712	Q406	5613-2603(F)or(E)	XISTOR, NPN R				
745	C413	5354-683J1HM	CAP, MYL .068μ	760	R426	5135-473522	RES, CBN 1/2P 47K	712	Q407	5613-2603(F)or(E)	XISTOR, NPN R				
745	C414	5354-683J1HM	CAP, MYL .068μ	760	R427	5135-473522	RES, CBN 1/2P 47K	713	Q408	5613-2603(F)or(E)	XISTOR, NPN R				
745	C415	5354-683J1HM	CAP, MYL .068μ	760	R428	5135-473522	RES, CBN 1/2P 47K	713	Q409	5611-970(BL)	XISTOR, PNP R	735	C505	5345-225F0951	CAP, MINI ELE 2.2μ/50V
745	C416	5354-683J1HM	CAP, MYL .068μ	761	R429	5135-224522	RES, CBN 1/2P 220K	723	Q411	5613-2240(BL)	XISTOR, NPN R	735	C506	5345-225F0951	CAP, MINI ELE 2.2μ/50V
733	C417	5345-106C041	CAP, MYL .068μ	761	R430	5135-224522	RES, CBN 1/2P 220K	723	Q412	5613-2240(BL)	XISTOR, NPN R	746	C507	5354-273J1HM	CAP, MYL .027μ
733	C418	5345-106C041	CAP, MYL .068μ	782	R431	5174-111381	RES, MTL 1/4 110	723	Q413	5613-2240(BL)	XISTOR, NPN R	746	C508	5354-273J1HM	CAP, MYL .027μ
734	C421	5345-337F041	CAP, MINI ELE 330μ/50V	782	R432	5174-111381	RES, MTL 1/4 110	723	Q414	5613-2240(BL)	XISTOR, NPN R	749	C509	5354-154593	CAP, MYL .15μ
734	C422	5345-337F041	CAP, MINI ELE 330μ/50V	762	R433	5135-272522	RES, CBN 1/2P 2.7K	713	Q415	5611-970(BL)	XISTOR, PNP R	749	C510	5354-154593	CAP, MYL .15μ
734	C423	5345-337F041	CAP, MINI ELE 330μ/50V	762	R434	5135-272522	RES, CBN 1/2P 2.7K	713	Q416	5611-970(BL)	XISTOR, PNP R	736	C511	5345-106C0951	CAP, MINI ELE 10μ/16V
734	C424	5345-337F041	CAP, MINI ELE 330μ/50V	763	R435	5135-223522	RES, CBN 1/2P 22K	714	Q417	5612-646A(C)	XISTOR, PNP A	736	C512	5345-106C0951	CAP, MINI ELE 10μ/16V
059B	C425	5353-040934	CAP, MCA 4p GB	763	R436	5135-223522	RES, CBN 1/2P 22K	714	Q418	5612-646A(C)	XISTOR, PNP A	747	C513	5354-682J1HM	CAP, MYL 6800p
059B	C426	5353-040934	CAP, MCA 4p GB	763	R437	5135-223522	RES, CBN 1/2P 22K	715	Q419	5614-666A(C)	XISTOR, NPN A	747	C514	5354-682J1HM	CAP, MYL 6800p
740	C475	5359-1015851	CAP, PPP 100p	763	R438	5135-223522	RES, CBN 1/2P 22K	715	Q420	5614-666A(C)	XISTOR, NPN A	748	C515	5354-393J1HM	CAP, MYL .039μ
740	C476	5359-1015851	CAP, PPP 100p	774	R439	5135-153522	RES, CBN 1/2P 15K	716	Q425	5613-945(K)or(P)	XISTOR, NPN R	748	C516	5354-393J1HM	CAP, MYL .039μ
				774	R440	5135-153522	RES, CBN 1/2P 15K	716	Q426	5613-945(K)or(P)	XISTOR, NPN R	741	C517	5359-3915851	CAP, PPP 390p
				764	R441	5135-123522	RES, CBN 1/2P 12K	717	Q427	5614-667A(C)	XISTOR, NPN A	741	C518	5359-3915851	CAP, PPP 390p
				764	R442	5135-123522	RES, CBN 1/2P 12K	717	Q428	5614-667A(C)	XISTOR, NPN A				
				783	R443	5174-222381	RES, MTL 1/4 2.2K	718	Q429	5612-647A(C)	XISTOR, PNP A				
				783	R444	5174-222381	RES, MTL 1/4 2.2K	718	Q430	5612-647A(C)	XISTOR, PNP A	771	R501	5135-102522	RES, CBN 1/2P 1K
				783	R445	5174-222381	RES, MTL 1/4 2.2K	719	Q431	5613-3181(O)	XISTOR, NPN R	771	R502	5135-102522	RES, CBN 1/2P 1K
				783	R446	5174-222381	RES, MTL 1/4 2.2K	719	Q432	5613-3181(O)	XISTOR, NPN R	769	R505	5135-683522	RES, CBN 1/2P 68K
				786	ΔR447	5102-4705116	RES, FUSE 47	721	Q433	5611-1264(O)	XISTOR, PNP R	769	R506	5135-683522	RES, CBN 1/2P 68K
				786	ΔR448	5102-4705116	RES, FUSE 47	721	Q434	5611-1264(O)	XISTOR, PNP R	768	R507	5135-153522	RES, CBN 1/2P 15K
				786	ΔR449	5102-4705116	RES, FUSE 47					768	R508	5135-153522	RES, CBN 1/2P 15K
				786	ΔR450	5102-4705116	RES, FUSE 47					770	R509	5135-272522	RES, CBN 1/2P 2.7K
				765	R455	5135-821522	RES, CBN 1/2P 820					770	R510	5135-272522	RES, CBN 1/2P 2.7K
				765	R456	5135-821522	RES, CBN 1/2P 820	831	ΔD1	5632-ERC402FL	DIODE, RECT	772	R513	5135-681522	RES, CBN 1/2P 680
				765	R457	5135-821522	RES, CBN 1/2P 820	831	ΔD2	5632-ERC402FL	DIODE, RECT	772	R514	5135-681522	RES, CBN 1/2P 680
				765	R458	5135-821522	RES, CBN 1/2P 820	831	ΔD3	5632-ERC402FL	DIODE, RECT				
				775	R459	5135-183522	RES, CBN 1/2P 18K	806	D5	5636-1S2471	DIODE, SWITCH				
				775	R460	5135-183522	RES, CBN 1/2P 18K	806	D6	5636-1S2471	DIODE, SWITCH	870	VR501	5113-50346122	RES, V CBN 16 50K
				775	R461	5135-183522									

ELECTRICAL PARTS LIST

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
PCB-1 POWER AMP. P. C. BOARD							
CAPACITORS							
812	C2	5345-106F041	CAP, MINI ELE 10 μ /50V	820	R24	5135-472522	RES, CBN 1/2P 4.7K
839	C3	5362-103048	CAP, CER .01 μ	821	R25	5135-473522	RES, CBN 1/2P 47K
839	C4	5362-103048	CAP, CER .01 μ	822	R26	5135-223522	RES, CBN 1/2P 22K
837	C5	5341-S07FM822	CAP, ELE 8200p/50V	821	R28	5135-473522	RES, CBN 1/2P 47K
837	C6	5341-S07FM822	CAP, ELE 8200p/50V	816	R30	5135-562522	RES, CBN 1/2P 5.6K
810	C7	5345-105F041	CAP, MINI ELE 1 μ /50V	828	R31	5135-682522	RES, CBN 1/2P 6.8K
811	C8	5345-107B041	CAP, MINI ELE 100 μ /10V	828	R32	5135-682522	RES, CBN 1/2P 6.8K
811	C9	5345-107B041	CAP, MINI ELE 100 μ /10V	753	R401	5135-102522	RES, CBN 1/2P 1K
811	C10	5345-107B041	CAP, MINI ELE 100 μ /10V	753	R402	5135-102522	RES, CBN 1/2P 1K
813	C15	5354-683J1HM	CAP, MYL .068 μ	754	R403	5135-683522	RES, CBN 1/2P 68K
813	C16	5354-683J1HM	CAP, MYL .068 μ	754	R404	5135-683522	RES, CBN 1/2P 68K
814	C17	5354-473J1HM	CAP, MYL .047 μ	755	R405	5135-122522	RES, CBN 1/2P 1.2K
815	C21	5354-104593	CAP, MYL .1 μ	755	R406	5135-122522	RES, CBN 1/2P 1.2K
815	C22	5354-104593	CAP, MYL .1 μ	755	R407	5135-122522	RES, CBN 1/2P 1.2K
815	C23	5354-104593	CAP, MYL .1 μ	755	R408	5135-122522	RES, CBN 1/2P 1.2K
815	C24	5354-104593	CAP, MYL .1 μ	756	R409	5135-682522	RES, CBN 1/2P 6.8K
058B	C35	5352-1041957	CAP, MTL .1 μ GB	756	R410	5135-682522	RES, CBN 1/2P 6.8K
731	C401	5345-107B0951	CAP, MINI ELE 100 μ /10V	757	R411	5135-680522	RES, CBN 1/2P 68
731	C402	5345-107B0951	CAP, MINI ELE 100 μ /10V	757	R412	5135-680522	RES, CBN 1/2P 68
733	C403	5345-106C041	CAP, MINI ELE 10 μ /16V	757	R413	5135-680522	RES, CBN 1/2P 68
733	C404	5345-106C041	CAP, MINI ELE 10 μ /16V	757	R414	5135-680522	RES, CBN 1/2P 68
732	C405	5345-227A0951	CAP, MINI ELE 220 μ /6.3V	773	R415	5135-222522	RES, CBN 1/2P 2.2K
732	C406	5345-227A0951	CAP, MINI ELE 220 μ /6.3V	773	R416	5135-222522	RES, CBN 1/2P 2.2K
742	C407	5353-020934	CAP, MCA 2p UA BK	759	R417	5135-561522	RES, CBN 1/2P 560
742B	C407	5353-040934	CAP, MCA 4p GB	759	R418	5135-561522	RES, CBN 1/2P 560
742	C408	5353-020934	CAP, MCA 2p UA BK	754	R419	5135-683522	RES, CBN 1/2P 68K
742B	C408	5353-040934	CAP, MCA 4p GB	754	R420	5135-683522	RES, CBN 1/2P 68K
740	C409	5359-1015851	CAP, PPP 100p	788	Δ R421	5102-3315116	RES, FUSE 330
740	C410	5359-1015851	CAP, PPP 100p	788	Δ R422	5102-3315116	RES, FUSE 330
733	C411	5345-106C041	CAP, MINI ELE 10 μ /16V	788	Δ R423	5102-3315116	RES, FUSE 330
733	C412	5345-106C041	CAP, MINI ELE 10 μ /16V	788	Δ R424	5102-3315116	RES, FUSE 330
745	C413	5354-683J1HM	CAP, MYL .068 μ	760	R425	5135-473522	RES, CBN 1/2P 47K
745	C414	5354-683J1HM	CAP, MYL .068 μ	760	R426	5135-473522	RES, CBN 1/2P 47K
745	C415	5354-683J1HM	CAP, MYL .068 μ	760	R427	5135-473522	RES, CBN 1/2P 47K
745	C416	5354-683J1HM	CAP, MYL .068 μ	760	R428	5135-473522	RES, CBN 1/2P 47K
733	C417	5345-106C041	CAP, MINI ELE 10 μ /16V	761	R429	5135-224522	RES, CBN 1/2P 220K
733	C418	5345-106C041	CAP, MINI ELE 10 μ /16V	761	R430	5135-224522	RES, CBN 1/2P 220K
734	C421	5345-337F041	CAP, MINI ELE 330 μ /50V	782	R431	5174-111381	RES, MTL 1/4 110
734	C422	5345-337F041	CAP, MINI ELE 330 μ /50V	782	R432	5174-111381	RES, MTL 1/4 110
734	C423	5345-337F041	CAP, MINI ELE 330 μ /50V	762	R433	5135-272522	RES, CBN 1/2P 2.7K
734	C424	5345-337F041	CAP, MINI ELE 330 μ /50V	762	R434	5135-272522	RES, CBN 1/2P 2.7K
059B	C425	5353-040934	CAP, MCA 4p GB	763	R435	5135-223522	RES, CBN 1/2P 22K
059B	C426	5353-040934	CAP, MCA 4p GB	763	R436	5135-223522	RES, CBN 1/2P 22K
740	C475	5359-1015851	CAP, PPP 100p	763	R437	5135-223522	RES, CBN 1/2P 22K
740	C476	5359-1015851	CAP, PPP 100p	763	R438	5135-223522	RES, CBN 1/2P 22K
RESISTORS							
830	Δ R3	5102-1005116	RES, FUSE 10	774	R439	5135-153522	RES, CBN 1/2P 15K
830	Δ R4	5102-1005116	RES, FUSE 10	774	R440	5135-153522	RES, CBN 1/2P 15K
829	Δ R5	5102-5R65116	RES, FUSE 5.6	764	R441	5135-123522	RES, CBN 1/2P 12K
818	R6	5135-103522	RES, CBN 1/2P 10K	764	R442	5135-123522	RES, CBN 1/2P 12K
827	R7	5135-121522	RES, CBN 1/2P 120 UA BK	783	R443	5174-222381	RES, MTL 1/4 2.2K
827B	R7	5135-221522	RES, CBN 1/2P 220 GB	783	R444	5174-222381	RES, MTL 1/4 2.2K
827	R8	5135-121522	RES, CBN 1/2P 120 UA BK	783	R445	5174-222381	RES, MTL 1/4 2.2K
827B	R8	5135-221522	RES, CBN 1/2P 220 GB	783	R446	5174-222381	RES, MTL 1/4 2.2K
820	R9	5135-472522	RES, CBN 1/2P 4.7K	786	Δ R447	5102-4705116	RES, FUSE 47
820	R10	5135-472522	RES, CBN 1/2P 4.7K	786	Δ R448	5102-4705116	RES, FUSE 47
817	R11	5135-682522	RES, CBN 1/2P 6.8K	786	Δ R449	5102-4705116	RES, FUSE 47
819	R12	5135-104522	RES, CBN 1/2P 100K	786	Δ R450	5102-4705116	RES, FUSE 47
825	R13	5135-683522	RES, CBN 1/2P 68K	765	R455	5135-821522	RES, CBN 1/2P 820
826	R14	5135-333522	RES, CBN 1/2P 33K	765	R456	5135-821522	RES, CBN 1/2P 820
822	R15	5135-223522	RES, CBN 1/2P 22K	765	R457	5135-821522	RES, CBN 1/2P 820
822	R16	5135-223522	RES, CBN 1/2P 22K	765	R458	5135-821522	RES, CBN 1/2P 820
824	R17	5135-332522	RES, CBN 1/2P 3.3K	775	R459	5135-183522	RES, CBN 1/2P 18K
824	R18	5135-332522	RES, CBN 1/2P 3.3K	775	R460	5135-183522	RES, CBN 1/2P 18K
823	R19	5135-102522	RES, CBN 1/2P 1K	775	R461	5135-183522	RES, CBN 1/2P 18K
823	R20	5135-102522	RES, CBN 1/2P 1K	775	R462	5135-183522	RES, CBN 1/2P 18K
824	R21	5135-332522	RES, CBN 1/2P 3.3K	767	R463	5135-100522	RES, CBN 1/2P 10
824	R22	5135-332522	RES, CBN 1/2P 3.3K	767	R464	5135-100522	RES, CBN 1/2P 10
820	R23	5135-472522	RES, CBN 1/2P 4.7K	767	R465	5135-100522	RES, CBN 1/2P 10
				767	R466	5135-100522	RES, CBN 1/2P 10
				787	Δ R467	5102-1005116	RES, FUSE 10
				787	Δ R468	5102-1005116	RES, FUSE 10
				787	Δ R469	5102-1005116	RES, FUSE 10
				787	Δ R470	5102-1005116	RES, FUSE 10

Ser. No.	Ref. No.	Part No.	Description
789	R471	5273-R27672	RES, CEM 3P .27
789	R472	5273-R27672	RES, CEM 3P .27
755	R475	5135-122522	RES, CBN 1/2P 1.2K
755	R476	5135-122522	RES, CBN 1/2P 1.2K
766	R483	5135-820522	RES, CBN 1/2P 82
766	R484	5135-820522	RES, CBN 1/2P 82
789	R489	5273-R27672	RES, CEM 3P .27
789	R490	5273-R27672	RES, CEM 3P .27
776	R491	5135-4R7522	RES, CBN 1/2P 4.7
776	R492	5135-4R7522	RES, CBN 1/2P 4.7
776	R493	5135-4R7522	RES, CBN 1/2P 4.7
776	R494	5135-4R7522	RES, CBN 1/2P 4.7
767	R495	5135-100522	RES, CBN 1/2P 10
767	R496	5135-100522	RES, CBN 1/2P 10
757	R499	5135-680522	RES, CBN 1/2P 68
757	R500	5135-680522	RES, CBN 1/2P 68

TRANSISTORS

802	Q1	5611-1115(F)or(E)	XISTOR, PNP R
801	Q2	5613-2603(F)or(E)	XISTOR, NPN R
803	Q3	5611-970(BL)	XISTOR, PNP R
803	Q4	5611-970(BL)	XISTOR, PNP R
803	Q5	5611-970(BL)	XISTOR, PNP R
803	Q6	5611-970(BL)	XISTOR, PNP R
804	Q7	5613-2240(BL)	XISTOR, NPN R
711	Q401	5613-2240(BL)	XISTOR, NPN R
711	Q402	5613-2240(BL)	XISTOR, NPN R
711	Q403	5613-2240(BL)	XISTOR, NPN R
711	Q404	5613-2240(BL)	XISTOR, NPN R
712	Q405	5613-2603(F)or(E)	XISTOR, NPN R
712	Q406	5613-2603(F)or(E)	XISTOR, NPN R
712	Q407	5613-2603(F)or(E)	XISTOR, NPN R
712	Q408	5613-2603(F)or(E)	XISTOR, NPN R
713	Q409	5611-970(BL)	XISTOR, PNP R
713	Q410	5611-970(BL)	XISTOR, PNP R
723	Q411	5613-2240(BL)	XISTOR, NPN R
723	Q412	5613-2240(BL)	XISTOR, NPN R
723	Q413	5613-2240(BL)	XISTOR, NPN R
723	Q414	5613-2240(BL)	XISTOR, NPN R
713	Q415	5611-970(BL)	XISTOR, PNP R
713	Q416	5611-970(BL)	XISTOR, PNP R
714	Q417	5612-646A(C)	XISTOR, PNP A
714	Q418	5612-646A(C)	XISTOR, PNP A
715	Q419	5614-666A(C)	XISTOR, NPN A
715	Q420	5614-666A(C)	XISTOR, NPN A
716	Q425	5613-945(K)or(P)	XISTOR, NPN R
716	Q426	5613-945(K)or(P)	XISTOR, NPN R
717	Q427	5614-667A(C)	XISTOR, NPN A
717	Q428	5614-667A(C)	XISTOR, NPN A
718	Q429	5612-647A(C)	XISTOR, PNP A
718	Q430	5612-647A(C)	XISTOR, PNP A
719	Q431	5613-3181(O)	XISTOR, NPN R
719	Q432	5613-3181(O)	XISTOR, NPN R
721	Q433	5611-1264(O)	XISTOR, PNP R
721	Q434	5611-1264(O)	XISTOR, PNP R

DIODES

831	ΔD1	5632-ERC402FL	DIODE, RECT
831	ΔD2	5632-ERC402FL	DIODE, RECT
831	ΔD3	5632-ERC402FL	DIODE, RECT
831	ΔD4	5632-ERC402FL	DIODE, RECT
806	D5	5636-1S2471	DIODE, SWITCH
806	D6	5636-1S2471	DIODE, SWITCH
806	D7	5636-1S2471	DIODE, SWITCH
806	D8	5636-1S2471	DIODE, SWITCH
807	D11	5635-HZ6B1L	DIODE, ZENER
729	D401	5641-MV12YM	VARISTOR
729	D402	5641-MV12YM	VARISTOR
727	D403	5632-S5566B	DIODE, RECT
727	D404	5632-S5566B	DIODE, RECT
727	D405	5632-S5566B	DIODE, RECT
727	D406	5632-S5566B	DIODE, RECT
725	D407	5636-1S2471	DIODE, DET
725	D408	5636-1S2471	DIODE, DET
726	D409	5635-HZ12B2L	DIODE, ZENER

Ser. No.	Ref. No.	Part No.	Description
726	D410	5635-HZ12B2L	DIODE, ZENER
COILS			
794	L405	5991-7165	SPRING COIL
794	L406	5991-7165	SPRING COIL
CONTROLS			
791	VR401	5101-50171920	RES, SEMI FIX 500
791	VR402	5101-50171920	RES, SEMI FIX 500
MISCELLANEOUS			
799	CN112	4443-070185	CONNECTOR
849	CN601	4443-030185	CONNECTOR
913	JL109	4242-R0103251	JUMPER LEAD
912	JL110	4242-R0103181	JUMPER LEAD
844	TM101	4214-11023	TERMINAL
843	TM102	4214-11013	TERMINAL
796	TM110	4214-11013	TERMINAL
897	LCN2	4163-0140026	CONNECTOR W/W
898	LCN3	4163-0140027	CONNECTOR W/W
899	LCN4	4163-0140024	CONNECTOR W/W
900	LCN5	4163-0140025	CONNECTOR W/W
901	LCN6	4163-0110024	CONNECTOR W/W
901	LCN7	4163-0110024	CONNECTOR W/W
909	LCN8	4163-0112024	CONNECTOR W/W
903	LCN9	4163-0115020	CONNECTOR W/W
905	LCN110	4163-0130025	CONNECTOR W/W
906	LCN111	4163-0130024	CONNECTOR W/W
907	LCN112	4163-0130026	CONNECTOR W/W
908	LCN113	4163-0130027	CONNECTOR W/W

PCB-2 TONE CONTROL P. C. BOARD

CAPACITORS

735	C505	5345-225F0951	CAP, MINI ELE 2.2μ/50V
735	C506	5345-225F0951	CAP, MINI ELE 2.2μ/50V
746	C507	5354-273J1HM	CAP, MYL .027μ
746	C508	5354-273J1HM	CAP, MYL .027μ
749	C509	5354-154593	CAP, MYL .15μ
749	C510	5354-154593	CAP, MYL .15μ
736	C511	5345-106C0951	CAP, MINI ELE 10μ/16V
736	C512	5345-106C0951	CAP, MINI ELE 10μ/16V
747	C513	5354-682J1HM	CAP, MYL 6800p
747	C514	5354-682J1HM	CAP, MYL 6800p
748	C515	5354-393J1HM	CAP, MYL .039μ
748	C516	5354-393J1HM	CAP, MYL .039μ
741	C517	5359-3915851	CAP, PPP 390p
741	C518	5359-3915851	CAP, PPP 390p

RESISTORS

771	R501	5135-102522	RES, CBN 1/2P 1K
771	R502	5135-102522	RES, CBN 1/2P 1K
769	R505	5135-683522	RES, CBN 1/2P 68K
769	R506	5135-683522	RES, CBN 1/2P 68K
768	R507	5135-153522	RES, CBN 1/2P 15K
768	R508	5135-153522	RES, CBN 1/2P 15K
770	R509	5135-272522	RES, CBN 1/2P 2.7K
770	R510	5135-272522	RES, CBN 1/2P 2.7K
772	R513	5135-681522	RES, CBN 1/2P 680
772	R514	5135-681522	RES, CBN 1/2P 680

CONTROLS

870	VR501	5113-50346122	RES, V CBN 16 50K
870	VR502	5113-50346122	RES, V CBN 16 50K
864	VR505	5113-10447122	RES, V CBN 16 100K
864	VR506	5113-10447122	RES, V CBN 16 100K
867	VR507	5113-50348122	RES, V CBN 16 50K
867	VR508	5113-50348122	RES, V CBN 16 50K

MISCELLANEOUS

910	JL112	4242-R0207600	JUMPER LEAD
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PCB-3 SPEAKER MODE SELECTOR P. C. BOARD

884	S2	4421-0227143	SWITCH, SLIDE
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Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
PCB-4 LOUDNESS SWITCH P. C. BOARD							
CAPACITORS							
739	C575	5359-1815851	CAP, PPP 180p	673	C633	5359-1825851	CAP, PPP 1800p
739	C576	5359-1815851	CAP, PPP 180p	673	C634	5359-1825851	CAP, PPP 1800p
744	C577	5354-823J1HM	CAP, MYL .082 μ	676	C635	5353-030934	CAP, MCA 3p
744	C578	5354-823J1HM	CAP, MYL .082 μ	676	C636	5353-030934	CAP, MCA 3p
RESISTORS							
779	R573	5135-472522	RES, CBN 1/2P 4.7K	681	R601	5135-823522	RES, CBN 1/2P 82K
779	R574	5135-472522	RES, CBN 1/2P 4.7K	681	R602	5135-823522	RES, CBN 1/2P 82K
780	R575	5135-273522	RES, CBN 1/2P 27K	682	R603	5135-124522	RES, CBN 1/2P 120K
780	R576	5135-273522	RES, CBN 1/2P 27K	682	R604	5135-124522	RES, CBN 1/2P 120K
MISCELLANEOUS							
883	S8	4431-A027610	SWITCH, PUSH	683	R605	5135-221522	RES, CBN 1/2P 220
PCB-5 VOLUME P. C. BOARD							
RESISTORS							
781	R571	5135-273522	RES, CBN 1/2P 27K	683	R606	5135-221522	RES, CBN 1/2P 220
781	R572	5135-273522	RES, CBN 1/2P 27K	684	R607	5135-122522	RES, CBN 1/2P 1.2K
CONTROLS							
861	VR503	5113-10419122	RES, V CBN 16 100K	684	R608	5135-122522	RES, CBN 1/2P 1.2K
861	VR504	5113-10419122	RES, V CBN 16 100K	685	R609	5135-220522	RES, CBN 1/2P 22
PCB-6 HEADPHONE JACK P. C. BOARD							
RESISTORS							
784	R497	5171-471571	RES, MTL 1 470	685	R610	5135-220522	RES, CBN 1/2P 22
784	R498	5171-471571	RES, MTL 1 470	684	R611	5135-122522	RES, CBN 1/2P 1.2K
MISCELLANEOUS							
886	J1	4451-00159	JACK, IP	684	R612	5135-122522	RES, CBN 1/2P 1.2K
915	JL108	4242-R0103121	JUMPER LEAD	686	R613	5135-223522	RES, CBN 1/2P 22K
916	JL111	4242-R0105121	JUMPER LEAD	686	R614	5135-223522	RES, CBN 1/2P 22K
PCB-7 INDICATORS P. C. BOARD							
891	D9	5637-GL5HD41	LED	687	R615	5135-820522	RES, CBN 1/2P 82
891	D10	5637-GL5HD41	LED	687	R616	5135-820522	RES, CBN 1/2P 82
PCB-8 SPEAKER SWITCH P. C. BOARD							
879	S5	4411-00302103	SWITCH, ROTARY	688	R617	5135-121522	RES, CBN 1/2P 120
PCB-10 SPEAKER TERMINAL P. C. BOARD							
911	JL120	4242-043805	JUMPER LEAD	688	R618	5135-121522	RES, CBN 1/2P 120
893	TM10	4214-165	TERMINAL	689	R621	5135-751522	RES, CBN 1/2P 750
PCB-11 PIN JACK P. C. BOARD							
CAPACITORS							
665	C601	5345-106C0951	CAP, MINI ELE 10 μ /16V	689	R622	5135-751522	RES, CBN 1/2P 750
665	C602	5345-106C0951	CAP, MINI ELE 10 μ /16V	690	R623	5135-393522	RES, CBN 1/2P 39K
670	C603	5359-1215851	CAP, PPP 120p	690	R624	5135-393522	RES, CBN 1/2P 39K
670	C604	5359-1215851	CAP, PPP 120p	691	R625	5135-564522	RES, CBN 1/2P 560K
664	C605	5345-227A0951	CAP, MINI ELE 220 μ /6.3V	691	R626	5135-564522	RES, CBN 1/2P 560K
664	C606	5345-227A0951	CAP, MINI ELE 220 μ /6.3V	692	R627	5135-334522	RES, CBN 1/2P 330K
671	C607	5359-5625851	CAP, PPP 5600p	692	R628	5135-334522	RES, CBN 1/2P 330K
671	C608	5359-5625851	CAP, PPP 5600p	693	R629	5135-102522	RES, CBN 1/2P 1K
672	C609	5359-2025851	CAP, PPP 2000p	693	R630	5135-102522	RES, CBN 1/2P 1K
672	C610	5359-2025851	CAP, PPP 2000p	694	R631	5135-104522	RES, CBN 1/2P 100K
665	C611	5345-106C0951	CAP, MINI ELE 10 μ /16V	694	R632	5135-104522	RES, CBN 1/2P 100K
665	C612	5345-106C0951	CAP, MINI ELE 10 μ /16V	693	R633	5135-102522	RES, CBN 1/2P 1K
667	C613	5345-107D041	CAP, MINI ELE 100 μ /25V	693	R634	5135-102522	RES, CBN 1/2P 1K
666	C614	5345-227D041	CAP, MINI ELE 220 μ /25V	695	R635	5135-222522	RES, CBN 1/2P 2.2K
666	C615	5345-227D041	CAP, MINI ELE 220 μ /25V	695	R636	5135-222522	RES, CBN 1/2P 2.2K
667	C616	5345-107D041	CAP, MINI ELE 100 μ /25V	701	Δ R637	5102-1815116	RES, FUSE 180
TRANSISTORS							
651	Q601	5613-2320L(F)	XISTOR, NPN R	696	R638	5135-822522	RES, CBN 1/2P 8.2K
651	Q602	5613-2320L(F)	XISTOR, NPN R	701	Δ R639	5102-1815116	RES, FUSE 180
653	Q603	5611-999L(F)	XISTOR, PNP R	696	R641	5135-822522	RES, CBN 1/2P 8.2K
653	Q604	5611-999L(F)	XISTOR, PNP R	065B	R671	5135-102522	RES, CBN 1/2P 1K (GB)
654	Q605	5611-1115(F)or(E)	XISTOR, PNP R	065B	R672	5135-102522	RES, CBN 1/2P 1K (GB)
654	Q606	5611-1115(F)or(E)	XISTOR, PNP R	065B	R673	5135-102522	RES, CBN 1/2P 1K (GB)
652	Q607	5613-2603(F)or(E)	XISTOR, NPN R	065B	R674	5135-102522	RES, CBN 1/2P 1K (GB)
652	Q608	5613-2603(F)or(E)	XISTOR, NPN R	065B	R675	5135-102522	RES, CBN 1/2P 1K (GB)
652	Q609	5613-2603(F)or(E)	XISTOR, NPN R	065B	R676	5135-102522	RES, CBN 1/2P 1K (GB)
652	Q610	5613-2603(F)or(E)	XISTOR, NPN R	065B	R677	5135-102522	RES, CBN 1/2P 1K (GB)
652	Q611	5613-2603(F)or(E)	XISTOR, NPN R	065B	R678	5135-102522	RES, CBN 1/2P 1K (GB)
652	Q612	5613-2603(F)or(E)	XISTOR, NPN R	065B	R679	5135-102522	RES, CBN 1/2P 1K (GB)
655	Q613	5612-941(Q)or(P)	XISTOR, PNP A	065B	R680	5135-102522	RES, CBN 1/2P 1K (GB)

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
656	Q614	5614-1266(Q)or(P)	XISTOR, NPN A	046B	C222	5345-106C04I	CAP, MINI ELE 10 μ /16V GB
DIODES				045B	C223	5361-473ZF	CAP, CER .047 μ GB
659	D601	5635-HZ18-2L	DIODE, ZENER	481	C251	5361-473ZF	CAP, CER .047 μ
659	D602	5635-HZ18-2L	DIODE, ZENER	482	C252	5359-431585I	CAP, PPP 430p
MISCELLANEOUS				483	C253	5361-220JPH	CAP, CER 22p
887	J2	4482-0133	PIN JACK, 2P	481	C254	5361-473ZF	CAP, CER .047 μ
888	J3	4484-46	PIN JACK, 4P	487	C255	5345-106C04I	CAP, MINI ELE 10 μ /16V
888	J4	4484-46	PIN JACK, 4P	481	C256	5361-473ZF	CAP, CER .047 μ
889	J5	4486-15	PIN JACK, 6P	489	C257	5345-475D04I	CAP, MINI ELE 4.7 μ /25V
902	LCN601	4163-0135020	CONNECTOR W/W	489	C258	5345-475D04I	CAP, MINI ELE 4.7 μ /25V

PCB-12 FUNCTION AND TAPE MON. SWITCH P. C. BOARD

MISCELLANEOUS			
873	S3	4411-00207205	SWITCH, ROTARY
876	S4	4411-00208203	SWITCH, ROTARY
850	CN107	4443-030185	CONNECTOR
918	JL101	4242-R010316I	JUMPER LEAD
917	JL102	4242-R020314I	JUMPER LEAD
919	JL103	4242-R010340I	JUMPER LEAD
922	JL104	4242-R010435I	JUMPER LEAD
921	JL105	4242-R030730I	JUMPER LEAD
920	JL106	4242-R030525I	JUMPER LEAD
914	JL107	4242-R0203600	JUMPER LEAD
923	JL113	4242-R010335I	JUMPER LEAD
924	JL114	4242-R020420I	JUMPER LEAD
904	LCN10	4163-0118020	CONNECTOR W/W
896	LCN11	4163-0108024	CONNECTOR W/W
CAPACITORS			
061B	C581	5359-101585I	CAP, PPP 100p GB
061B	C582	5359-101585I	CAP, PPP 100p GB
COILS			
062B	L591	5597-45502	CORE, BEADS GB
062B	L592	5597-45502	CORE, BEADS GB

PCB-13 TUNER P. C. BOARD

CAPACITORS				RESISTORS			
607	C25	5352-S010M103	CAP, MTL .01 μ	611	R42	5232-222J16P	RES, CBN 1/6P 2.2K
601	C51	5345-228D045	CAP, MINI ELE 2200 μ /25V	612	R43	5232-331J16P	RES, CBN 1/6P 330
602	C52	5345-476D041	CAP, MINI ELE 47 μ /25V	613	R44	5232-101J16P	RES, CBN 1/6P 100
602	C53	5345-476D041	CAP, MINI ELE 47 μ /25V	613	R45	5232-101J16P	RES, CBN 1/6P 100
603	C54	5345-107B041	CAP, MINI ELE 100 μ /10V	609	R46	5171-221593	RES, MTL 1 220
604	C56	5345-228A041	CAP, MINI ELE 2200 μ /6.3V	614	R47	5232-471J16P	RES, CBN 1/6P 470
608	C57	5361-473ZF	CAP, CER .047 μ	615	R48	5232-100J16P	RES, CBN 1/6P 10
608	C58	5361-473ZF	CAP, CER .047 μ	616	R49	5232-334J16P	RES, CBN 1/6P 330K
606	C59	5361-223ZF	CAP, CER .022 μ	617	R50	5232-105J16P	RES, CBN 1/6P 1M
606	C60	5361-223ZF	CAP, CER .022 μ	618	R51	5135-155522	RES, CBN 1/2P 1.5M
600	C62	5345-105F041	CAP, MINI ELE 1 μ /50V	618	R52	5135-155522	RES, CBN 1/2P 1.5M
599	C63	5345-227A041	CAP, MINI ELE 220 μ /6.3V	427	R101	5232-183J16P	RES, CBN 1/6P 18K
598	C64	5345-107A041	CAP, MINI ELE 100 μ /6.3V	428	R102	5232-272J16P	RES, CBN 1/6P 2.7K
415	C101	5345-476C041	CAP, MINI ELE 47 μ /16V	459	R201	5232-391J16P	RES, CBN 1/6P 390 UA
417	C102	5361-223ZF	CAP, CER .022 μ	460	R202	5232-331J16P	RES, CBN 1/6P 330
416	C105	5345-226C041	CAP, MINI ELE 22 μ /16V	461	R203	5232-154J16P	RES, CBN 1/6P 150K
452	C201	5361-223ZF	CAP, CER .022 μ	466	R204	5232-330J16P	RES, CBN 1/6P 33
452	C202	5361-223ZF	CAP, CER .022 μ	462	R205	5232-101J16P	RES, CBN 1/6P 100
452	C203	5361-223ZF	CAP, CER .022 μ	459	R206	5232-391J16P	RES, CBN 1/6P 390
452	C204	5361-223ZF	CAP, CER .022 μ	463	R207	5232-102J16P	RES, CBN 1/6P 1K
451	C205	5361-103ZF	CAP, CER .01 μ	460	R208	5232-331J16P	RES, CBN 1/6P 330
452	C206	5361-223ZF	CAP, CER .022 μ	461	R209	5232-154J16P	RES, CBN 1/6P 150K
452	C207	5361-223ZF	CAP, CER .022 μ	466	R210	5232-330J16P	RES, CBN 1/6P 33
453	C208	5345-106C041	CAP, MINI ELE 10 μ /16V	462	R211	5232-101J16P	RES, CBN 1/6P 100
454	C209	5345-105F041	CAP, MINI ELE 1 μ /50V	459	R212	5232-391J16P	RES, CBN 1/6P 390
456	C210	5359-101585I	CAP, PPP 100p UA	463	R213	5232-102J16P	RES, CBN 1/6P 1K
456B	C210	5359-331585I	CAP, PPP 330p GB	465	R215	5232-103J16P	RES, CBN 1/6P 10K
455	C211	5345-226C0952	CAP, MINI ELE 22 μ /16V	463	R216	5232-102J16P	RES, CBN 1/6P 1K
452	C212	5361-223ZF	CAP, CER .022 μ	467	R217	5232-123J16P	RES, CBN 1/6P 12K UA
053B	C216	5345-226C095I	CAP, MINI ELE 22 μ /16V GB	467B	R217	5232-223J16P	RES, CBN 1/6P 22K GB
043B	C220	5361-050DSL	CAP, CER 5P GB	468	R218	5232-472J16P	RES, CBN 1/6P 4.7K UA
044B	C221	5361-223ZF	CAP, CER .022 μ GB	468B	R218	5232-222J16P	RES, CBN 1/6P 2.2K GB

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
469	R219	5232-332J16P	RES, CBN 1/6P 3.3K	549	R739	5232-473J16P	RES, CBN 1/6P 47K
047B	R220	5232-331J16P	RES, CBN 1/6P 330	547	R740	5232-103J16P	RES, CBN 1/6P 10K
048B	R221	5232-332J16P	RES, CBN 1/6P 3.3K	INTEGRATED CIRCUITS			
049B	R222	5232-473J16P	RES, CBN 1/6P 47K	441	IC201	5653-LA1266	IC, FM/AM IF
050B	R223	5232-104J16P	RES, CBN 1/6P 100K	501	IC301	5653-LA3410	IC, PLL MPX
049B	R224	5232-473J16P	RES, CBN 1/6P 47K	531	IC701	5654-T9304F11	IC, DIGITAL TUNING SYSTEM LSI
064B	R225	5232-222J16P	RES, CBN 1/6P 2.2K	538	IC702	5654-TC4030BP	IC, QUAD EXCLUSIVE-OR GATE
493	R251	5232-104J16P	RES, CBN 1/6P 100K	TRANSISTORS			
493	R252	5232-104J16P	RES, CBN 1/6P 100K	591	Q11	5612-1375	XISTOR, PNP A
494	R253	5232-102J16P	RES, CBN 1/6P 1K	592	Q12	5613-2603(E)or(F)	XISTOR, NPN R
495	R254	5232-272J16P	RES, CBN 1/6P 2.7K	592	Q13	5613-2603(E)or(F)	XISTOR, NPN R
500	R255	5232-223J16P	RES, CBN 1/6P 22K	424	Q101	5613-2603(F)or(E)	XISTOR, NPN R
497	R256	5232-471J16P	RES, CBN 1/6P 470	442	Q201	5613-2058(N)or(P)	XISTOR, NPN R
496	R257	5232-103J16P	RES, CBN 1/6P 10K	442	Q202	5613-2058(N)or(P)	XISTOR, NPN R
496	R258	5232-103J16P	RES, CBN 1/6P 10K	041B	Q220	5613-2603(E)or(F)	XISTOR, NPN R
498	R259	5232-820J16P	RES, CBN 1/6P 82	502	Q301	5613-2878(B)	XISTOR, NPN R
499	R260	5232-473J16P	RES, CBN 1/6P 47K	502	Q302	5613-2878(B)	XISTOR, NPN R
492	R261	5232-153J16P	RES, CBN 1/6P 15K	507	Q303	5613-RN1203	XISTOR, NPN R
492B	R261	5232-183J16P	RES, CBN 1/6P 18K	532	Q701	5611-1115(E)or(F)	XISTOR, PNP R
493	R262	5232-104J16P	RES, CBN 1/6P 100K	533	Q702	5613-RN1203	XISTOR, NPN R
493	R263	5232-104J16P	RES, CBN 1/6P 100K	533	Q703	5613-RN1203	XISTOR, NPN R
496	R264	5232-103J16P	RES, CBN 1/6P 10K	533	Q704	5613-RN1203	XISTOR, NPN R
521	R301	5232-154J16P	RES, CBN 1/6P 150K	535	Q705	5613-2603(E)or(F)	XISTOR, NPN R
521B	R301	5232-184J16P	RES, CBN 1/6P 180K	533	Q706	5613-RN1203	XISTOR, NPN R
521	R302	5232-154J16P	RES, CBN 1/6P 150K	535	Q707	5613-2603(E)or(F)	XISTOR, NPN R
521B	R302	5232-184J16P	RES, CBN 1/6P 180K	534	Q708	5613-2240(BL)	XISTOR, NPN R
522	R303	5232-332J16P	RES, CBN 1/6P 3.3K	532	Q709	5611-1115(E)or(F)	XISTOR, PNP R
522	R304	5232-332J16P	RES, CBN 1/6P 3.3K	DIODES			
523	R305	5232-124J16P	RES, CBN 1/6P 120K	594	ΔD21	5632-S5566B	DIODE, RECT
523B	R305	5232-154J16P	RES, CBN 1/6P 150K	594	ΔD22	5632-S5566B	DIODE, RECT
523	R306	5232-124J16P	RES, CBN 1/6P 120K	594	ΔD23	5632-S5566B	DIODE, RECT
523B	R306	5232-154J16P	RES, CBN 1/6P 150K	594	ΔD24	5632-S5566B	DIODE, RECT
524	R307	5232-103J16P	RES, CBN 1/6P 10K	596	D25	5635-HZ12C2L	DIODE, ZENER
526	R308	5232-473J16P	RES, CBN 1/6P 47K	597	D26	5635-HZ6B1L	DIODE, ZENER
524	R309	5232-103J16P	RES, CBN 1/6P 10K	595	D27	5631-ISS133	DIODE, DET
524	R310	5232-103J16P	RES, CBN 1/6P 10K	595	D28	5631-ISS133	DIODE, DET
524	R312	5232-103J16P	RES, CBN 1/6P 10K	595	D29	5631-ISS133	DIODE, DET
525	R313	5232-472J16P	RES, CBN 1/6P 4.7K	595	D30	5631-ISS133	DIODE, DET
525	R315	5232-472J16P	RES, CBN 1/6P 4.7K	448	D201	5631-ISS133	DIODE, DET
547	R701	5232-103J16P	RES, CBN 1/6P 10K	042B	D220	5631-ISS133	DIODE, DET
547	R702	5232-103J16P	RES, CBN 1/6P 10K	042B	D221	5631-ISS133	DIODE, DET
547	R703	5232-103J16P	RES, CBN 1/6P 10K	471	D251	5633-ISV149	DIODE, CAP
547	R704	5232-103J16P	RES, CBN 1/6P 10K	471	D252	5633-ISV149	DIODE, CAP
547	R705	5232-103J16P	RES, CBN 1/6P 10K	472	D253	5631-ISS133	DIODE, DET
547	R706	5232-103J16P	RES, CBN 1/6P 10K	472	D254	5631-ISS133	DIODE, DET
547	R707	5232-103J16P	RES, CBN 1/6P 10K	503	D301	5631-ISS133	DIODE, DET
547	R708	5232-103J16P	RES, CBN 1/6P 10K	503	D302	5631-ISS133	DIODE, DET
548	R709	5232-100J16P	RES, CBN 1/6P 10	503	D303	5631-ISS133	DIODE, DET
550	R712	5232-223J16P	RES, CBN 1/6P 22K	503	D334	5631-ISS133	DIODE, DET
550	R713	5232-223J16P	RES, CBN 1/6P 22K	503	D305	5631-ISS133	DIODE, DET
550	R714	5232-223J16P	RES, CBN 1/6P 22K	503	D306	5631-ISS133	DIODE, DET
550	R715	5232-223J16P	RES, CBN 1/6P 22K	539	D701	5631-ISS133	DIODE, DET
555	R716	5232-105J16P	RES, CBN 1/6P 1M	539	D702	5631-ISS133	DIODE, DET
556	R717	5232-335J16P	RES, CBN 1/6P 3.3M	539	D703	5631-ISS133	DIODE, DET
550	R718	5232-223J16P	RES, CBN 1/6P 22K	539	D704	5631-ISS133	DIODE, DET
547	R721	5232-103J16P	RES, CBN 1/6P 10K	539	D705	5631-ISS133	DIODE, DET
552	R722	5232-102J16P	RES, CBN 1/6P 1K	539	D706	5631-ISS133	DIODE, DET
550	R723	5232-223J16P	RES, CBN 1/6P 22K	539	D707	5631-ISS133	DIODE, DET
554	R724	5135-155522	RES, CBN 1/2P 1.5M	539	D708	5631-ISS133	DIODE, DET
557	R725	5232-222J16P	RES, CBN 1/6P 2.2K	539	D709	5631-ISS133	DIODE, DET
547	R726	5232-103J16P	RES, CBN 1/6P 10K	539	D710	5631-ISS133	DIODE, DET
552	R727	5232-102J16P	RES, CBN 1/6P 1K	539	D711	5631-ISS133	DIODE, DET
549	R728	5232-473J16P	RES, CBN 1/6P 47K	539	D714	5631-ISS133	DIODE, DET
553	R730	5232-562J16P	RES, CBN 1/6P 5.6K	539	D715	5631-ISS133	DIODE, DET
550	R731	5232-223J16P	RES, CBN 1/6P 22K	539	D716	5631-ISS133	DIODE, DET
550	R732	5232-223J16P	RES, CBN 1/6P 22K	COILS			
547	R733	5232-103J16P	RES, CBN 1/6P 10K	413	L102	5995-2R2J107	COIL W/CORE
547	R734	5232-103J16P	RES, CBN 1/6P 10K	447	L201	5995-2R2J107	COIL W/CORE
547	R735	5232-103J16P	RES, CBN 1/6P 10K	054B	L251	5214-86	LC COMPOSITE
547	R736	5232-103J16P	RES, CBN 1/6P 10K	506	L301	5995-2R2J107	COIL W/CORE
558	R737	5232-104J16P	RES, CBN 1/6P 100K	537	L701	5995-2R2J107	COIL W/CORE
550	R738	5232-223J16P	RES, CBN 1/6P 22K				

Ser. No.	Ref. No.	Part No.	Description
TRANSFORMERS			
446	T201	5572-10201	DISCRI 7
480	T251	5933-00101	COIL CASE, 10
475	T252	5552-70114	IFT, AM 7
474	T253	5922-00112	OSC COIL, 7
CONTROLS			
444	VR251	5101-5030193750K	RES, SEMI FIX
505	VR301	5101-10401937100K	RES, SEMI FIX
MISCELLANEOUS			
634	△F2	5732-102031	FUSE UA BK
634B	△F2	5732-102030	FUSE GB
536	X701	5691-00720027	XTAL, OSC
445	CF201	5671-7120A	FILTER, CER S UA
445B	CF201	5671-7142A	FILTER, CER S GB
445	CF202	5671-7120A	FILTER, CER S UA
445B	CF202	5671-7142A	FILTER, CER S GB
449	CF203	5671-012A	FILTER, CER S UA
445B	CF203	5671-7142A	FILTER, CER S GB
478	CF251	5671-7137C	FILTER, CER S
477	CF252	5671-0159	FILTER, CER S
504	CF301	5693-CSB456F1	OSC, CER
626	CN2	4443-040185	CONNECTOR
411	FE101	6114-00101	FM TUNER UA BK
411B	FE101	6114-00201	FM TUNER GB
632	△HF3	4472-0131	HOLDER, FUSE
632	△HF4	4472-0131	HOLDER, FUSE
641	JL1	4242-R0107161	JUMPER LEAD
643	JL2	4242-10301351	JUMPER LEAD
644	JL3	4242-R0104351	JUMPER LEAD
642	JL4	4242-R0203201	JUMPER LEAD
645	JL5	4242-R0104451	JUMPER LEAD
647	JL6	4132-R0100201	CORD, 2C
648	JL7	4132-R0100141	CORD, 2C
479	TC251	5371-93	TRIMMER, IP
637	TM103	4214-11023	TERMINAL
621	LCD1	5791-BP8A9041	LCD

PCB-14 PRESET MEMORY SWITCHES P. C. BOARD

Ser. No.	Ref. No.	Part No.	Description
DIODES			
540	D712	5631-ISS133	DIODE, DET
540	D713	5631-ISS133	DIODE, DET
SWITCHES			
629	S701	4431-A017169	SWITCH, PUSH
629	S702	4431-A017169	SWITCH, PUSH
629	S703	4431-A017169	SWITCH, PUSH
629	S704	4431-A017169	SWITCH, PUSH
629	S705	4431-A017169	SWITCH, PUSH
629	S706	4431-A017169	SWITCH, PUSH
629	S707	4431-A017169	SWITCH, PUSH
629	S708	4431-A017169	SWITCH, PUSH

PCB-15 TUNING SWITCH P. C. BOARD

Ser. No.	Ref. No.	Part No.	Description
CAPACITORS			
566	C751	5361-1032F	CAP, CER .01μ
566	C752	5361-1032F	CAP, CER .01μ
567	C753	5361-472KB	CAP, CER 4700p
567	C754	5361-472KB	CAP, CER 4700p
567	C755	5361-472KB	CAP, CER 4700p
567	C756	5361-472KB	CAP, CER 4700p
565	C758	5361-220KSL	CAP, CER 22p
568	C759	5345-106C041	CAP, MINI ELE 10μ/16V
RESISTORS			
569	R751	5232-105J16P	RES, CBN 1/6P 1M
569	R752	5232-105J16P	RES, CBN 1/6P 1M
569	R753	5232-105J16P	RES, CBN 1/6P 1M
570	R754	5232-104J16P	RES, CBN 1/6P 100K
570	R755	5232-104J16P	RES, CBN 1/6P 100K

Ser. No.	Ref. No.	Part No.	Description
570	R756	5232-104J16P	RES, CBN 1/6P 100K
570	R757	5232-104J16P	RES, CBN 1/6P 100K
569	R758	5232-105J16P	RES, CBN 1/6P 1M
570	R761	5232-104J16P	RES, CBN 1/6P 100K
570	R762	5232-104J16P	RES, CBN 1/6P 100K
INTEGRATED CIRCUITS			
561	IC751	5654-TC4011BP	IC, QUAD 2 INPUT NAND GATE
562	IC752	5654-TC4001BP	IC, QUAD 2 INPUT NOR GATE
DIODES			
563	D751	5631-ISS133	DIODE, DET
563	D752	5631-ISS133	DIODE, DET
563	D753	5631-ISS133	DIODE, DET
563	D754	5631-ISS133	DIODE, DET
SWITCHES			
630	S710	4431-A017169	SWITCH, PUSH
630	S711	4431-A017169	SWITCH, PUSH
630	S712	4431-A017169	SWITCH, PUSH

PCB-16 ANTENNA TERMINAL P. C. BOARD

Ser. No.	Ref. No.	Part No.	Description
421	L101	5943-00136	COIL BBN, 10
636	TM104	4214-164	TERMINAL
052B	TM105	4214-167	TERMINAL GB
649	LCN1	4163-0110020	CONNECTR W/W UA

PCB-17 POWER SWITCH P. C. BOARD

Ser. No.	Ref. No.	Part No.	Description
057B	R1	5135-335522	RES, CBN 1/2P 3.3M GB
618B	R53	5135-155522	RES, CBN 1/2P 1.5M GB
618B	R54	5135-155522	RES, CBN 1/2P 1.5M GB
633	△F1	5732-312031	FUSE UA
633B	△F1	5732-162030	FUSE GB
628	△S1	4433-00103	SWITCH, POWER
625	CN1	4443-030185	CONNECTOR
631	△HF1	4472-0131	HOLDER, FUSE
631	△HF2	4472-0131	HOLDER, FUSE
635	TM1	4214-122	TERMINAL
635	TM2	4214-122	TERMINAL
635	TM3	4214-122	TERMINAL

PCB-18 LAMP P. C. BOARD

Ser. No.	Ref. No.	Part No.	Description
RESISTORS			
619	R55	5135-100522	RES, CBN 1/2P 10
620	△R56	5102-6R85116	RES, FUSE 6.8
LAMPS			
622	LP1	5731-00101140	LAMP
622	LP2	5731-00101140	LAMP

CHASSIS MISCELLANEOUS

Ser. No.	Ref. No.	Part No.	Description
895	△P1	4161-71151	POWER CORD UA
895B	△P1	4161-7256	POWER CORD GB
895C	△P1	4161-04100	POWER CORD (Australia model)
833	△T1	5584-S1404	XFORMER, POWER UA
833B	△T1	5584-S1405	XFORMER, POWER GB
894	△S01	4474-164	SOCKET UA
055B	△R57	5135-155522	RES, CBN 1/2P 1.5M GB
055B	△R58	5135-155522	RES, CBN 1/2P 1.5M GB
055B	△R59	5135-155522	RES, CBN 1/2P 1.5M GB
055B	△R60	5135-155522	RES, CBN 1/2P 1.5M GB
639	△R60	5135-335J50P	RES, CBN 1/2P 3.3M UA
063B	△S101	4411-102729	ROTARY SWITCH GB
624	L1	5911-235	AM LOOP ANTENNA
925	△CN111	4443-712	CONNECTOR
800	LUG1	4211-4	LUG
650	LUG2	4211-4	LUG UA
650	LUG3	4211-4	LUG

Ser. No.	Ref. No.	Part No.	Description
056B	LUG4	4211-4	LUG GB
623		1397-6	T FEEDER ANT
926		4150-8	Special Tubing

PACKAGE PARTS LIST

106	1111-J90195	OWNER GUIDE UA
107	1111-J30281	OWNER GUIDE UA
107B	1111-J30282	OWNER GUIDE GB
108	1113-717004	OWNER CARD UA
109	1119-047	ATTACH SHEET UA
110	1119-0137	ATTACH SHEET UA
121	1241-C12732	POLYETHYLENE BAG, OWNER GUIDE
122	1241-C1491	POLYETHYLENE BAG, SET
124	1221-21301	CARTON BOX UA
124A	1221-21302	CARTON BOX BK GB
125	1222-7327	CUSHION
127	1223-11729	SOFT SHEET

ABBREVIATIONS IN PARTS LIST**CAPACITORS**

CAP, MINI ELE : Electrolytic
 CAP, CER : Ceramic
 CAP, PPP : Polypropylene
 CAP, MYL : Mylar
 CAP, MCA : Mica
 CAP, MINI BP : Bipolar
 CAP, ELE BP : Electrolytic Bipolar
 CAP, STY : Polystyrene Film
 CAP, SPE : Special
 CAP, TAN : Tantalum
 470 μ : 470 μ F
 6800p : 6800pF
 .047 μ : 0.047 μ F

RESISTORS

RES, CBN 1/6P : Carbon 1/6W
 RES, FUSE : Fuse
 RES, CEM 5P : Cement 5W
 RES, MTL 1P : Metal 1W
 2.2K : 2.2k Ω
 220 : 220 Ω

TRANSISTORS

XISTOR : Transistor
 FET : Field Effect Transistor

CONTROLS

RES, V CBN : Variable Carbon Resistor
 RES, SEMI FIX : Semi-fixed Resistor

NOTE

SAFETY RELATED COMPONENT. USE ONLY EXACT REPLACEMENT PART AS SPECIFIED.

SCHEMATIC DIAGRAM (1) (FM TUNER)

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