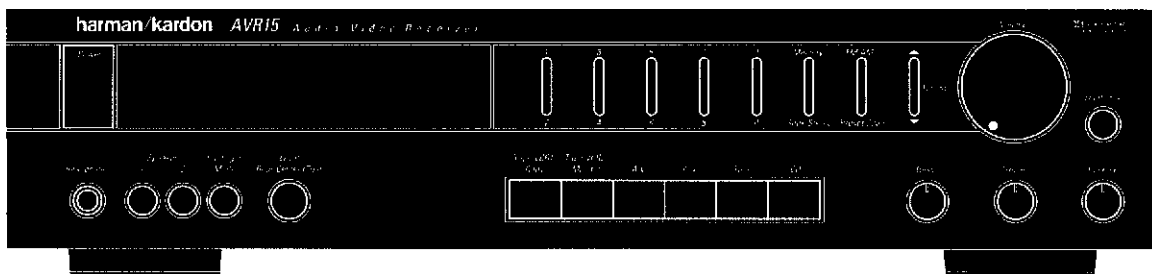


The Harman Kardon Model AVR15 AUDIO/VIDEO RECEIVER

Manual 195A

Technical Manual



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

- BK** : North America area model Black version
- IB** : International model Black version
- I** : International model

CONTENTS

SPECIFICATIONS	2	GENERAL UNIT PARTS LIST	10
LEAKAGE TEST	2	GENERAL UNIT EXPLODED VIEW	11
CONTROLS AND FUNCTIONS	3	P. C. BOARDS	12
DISASSEMBLY PROCEDURES	5	ELECTRICAL PARTS LIST	16
CIRCUIT DESCRIPTION	6	IC BLOCK DIAGRAM	24
BLOCK DIAGRAM	7	SCHEMATIC DIAGRAMS	27
TIMING CHART	8	WIRING DIAGRAM	34
ALIGNMENT PROCEDURES	8		

harman/kardon

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SPECIFICATIONS

●FM SECTION

	Nominal	Limit
Tuning Range	87.5 MHz - 108.0 MHz	
50dB Quieting Sensitivity		
Mono	14.0 dBf ≤ 19.0 dBf	ⓑⓀ Ⓛ
Stereo	24.5 dBf ≤ 27.0 dBf	ⓑⓀ Ⓛ
Usable Sensitivity		
Mono	38.0 dBf ≤ 41.0 dBf	ⓑⓀ Ⓛ
Stereo	47.0 dBf ≤ 50.0 dBf	ⓑⓀ Ⓛ
Image Ratio	14.0 dBf ≤ 15.0 dBf	ⓑⓀ Ⓛ
IF Rejection	14.0 dBf ≤ 17.0 dBf	ⓑⓀ Ⓛ
Spurious Response Rejection	85.0 dB ≥ 40.0 dB	
Capture Ratio (at 45dBf)	105.0 dB ≥ 80.0 dB	
Alternate Channel Selectivity (+400kHz, -400kHz 45dBf input)	110.0 dB	
AM Rejection (at 45 dBf)	1.5 dB ≤ 2.0 dB	
Signal to Noise Ratio (at 65dBf)	77.0 dB ≥ 60.0 dB	
Mono	60.0 dB ≥ 45.0 dB	
Stereo	80.0 dB ≥ 76.0 dB	ⓑⓀ Ⓛ
Stereo	73.5 dB ≥ 70.0 dB	ⓑⓀ Ⓛ
Stereo	71.5 dB ≥ 68.0 dB	ⓑⓀ Ⓛ
Stereo	64.5 dB ≥ 62.0 dB	ⓑⓀ Ⓛ
Total Harmonic Distortion (65dBf 1kHz input)		
Mono	0.05% ≤ 0.3%	
Stereo	0.1% ≤ 0.4%	
Stereo Separation (at 1kHz)	52.0 dB ≥ 42.0 dB	ⓑⓀ Ⓛ
Stereo	47.0 dB ≥ 35.0 dB	ⓑⓀ Ⓛ

●AM SECTION

Tuning Range	530 kHz - 1710 kHz	ⓑⓀ Ⓛ
20dB S/N Sensitivity	531 kHz - 1602 kHz	ⓑⓀ Ⓛ
Selectivity (+10kHz, -10kHz)	400μV/m ≤ 700μV/m	
Signal to Noise Ratio	35.0 dB ≥ 25.0 dB	
Image Rejection	52.0 dB ≥ 47.0 dB	
IF Rejection	39.0 dB ≥ 30.0 dB	
IF Rejection	63.0 dB ≥ 50.0 dB	

●AUDIO SECTION

Usable Sensitivity (at 30W output)	CD	133.0 mV 135 mV±25 mV / 26kΩ
Signal to Noise Ratio	CD	84.0 dB ≥ 75.0 dB

Channel Separation

CD	Nominal	Limit
IM Distortion Ratio (at 15W)	53.5 dB	≥ 45.0 dB
RMS Output Power	0.047 %	< 0.1 %
8Ω, 1kHz, THD 0.1%	38 W	≥ 30 W
(Front, Left Center Right)	38 W	≥ 30 W
8Ω, 1kHz, THD 0.3%	55 W	≥ 35 W
(Rear, Left Right)	55 W	≥ 30 W
8Ω, 1kHz, THD 0.3%	23 W	≥ 20 W
High-instantaneous Current Capability (HCC)	30.0 A	≥ 20.0 A
Damping Factor	44.0	≥ 30.0
Tone Control Characteristics		
Bass (at 50Hz)		
Boost	10 dB	± 2 dB
Cut	10 dB	± 2 dB
Treble (at 10kHz)		
Boost	10 dB	± 2 dB
Cut	10 dB	± 2 dB
Loudness Control (at 50Hz)	10 dB	± 2 dB
DC output Voltage		
L channel	34 mV	± 60 mV
R channel	24 mV	± 60 mV
Frequency Response (at -3dB Down)		
0.4 Hz - 175 kHz	< 1 Hz - ≥ 150 kHz	ⓑⓀ Ⓛ
0.4 Hz - 185 kHz	< 1 Hz - ≥ 150 kHz	ⓑⓀ Ⓛ
Rise Time	1.6 μsec.	≤ 3 μsec.
Subwoofer Output (at 6Ω)	2.0 V	/10kΩ
●DIMENSIONS	17 - 3/8" x 4 - 1/8" x 13 - 3/4"	
(W x H x D)	(443 x 105 x 349 mm)	
●WEIGHT	18.5 lbs	/ 8.4 kg
●POWER SUPPLY	AC 120V, 60Hz	ⓑⓀ Ⓛ
AC 230V/240V, 50Hz/60Hz	ⓑⓀ Ⓛ	Ⓛ
●POWER CONSUMPTION	240W (280VA)	ⓑⓀ Ⓛ
200W	ⓑⓀ Ⓛ	Ⓛ

These specifications are service target specs.

Specifications and components are subject to change without notice.

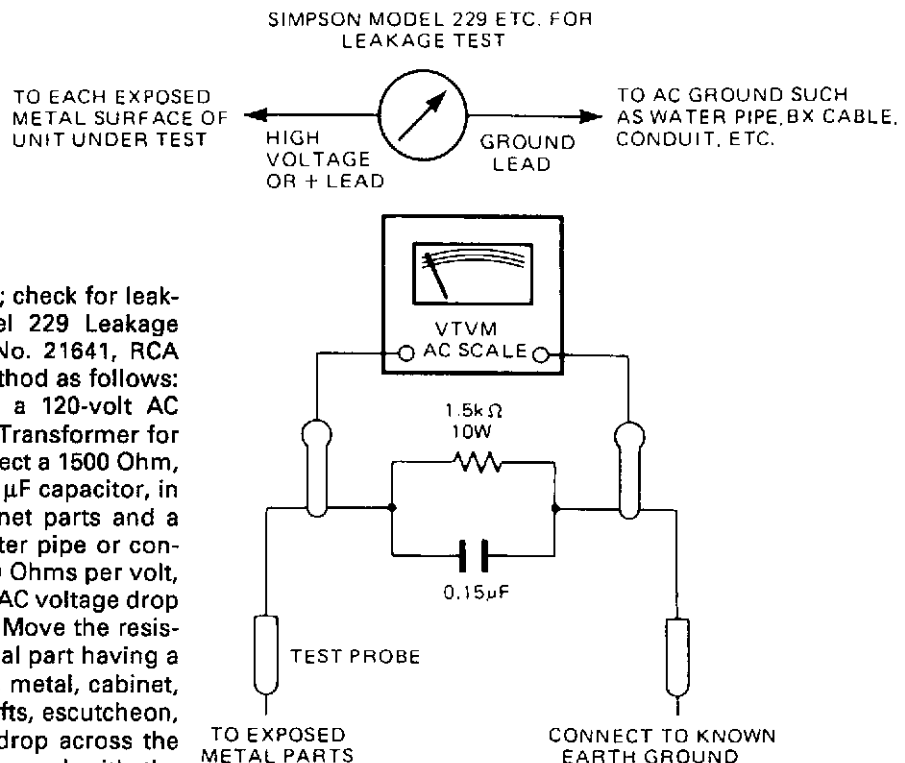
Overall performance will be maintained or improved.

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

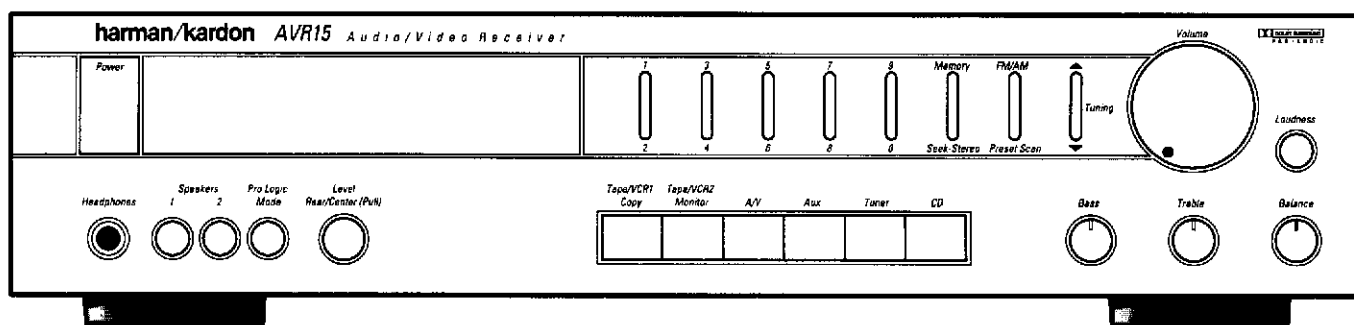
Before returning the unit to the user, perform the following safety checks:

1. 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.
2. 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.
3. 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 returning the unit to the owner.



CONTROLS AND FUNCTIONS



Power Switch

Press to turn the unit on and off.

Headphone Jack

Plug in headphones if desired. (With both Speakers 1 and 2 switches in Off position, output is supplied only to headphones.)

Speakers Switches

Push in to select either of two sets of speakers, or both, or neither (headphone output only).

Pro Logic Mode Button

Press to select the desired Pro Logic mode, or to return to Stereo (DIRECT) operation.

Rear/Center Level Control

Turn to set the level of the rear speakers. Then pull the knob outward and turn to set the level of the center speaker(s).

Function Selector Buttons

Select desired input source by pressing the corresponding button.

Preset Buttons (1 – 0)

Press to access 30 pre-selected stations.

Memory Switch

Press to set a new preset station in memory.

Seek-Stereo Switch

Press to select Seek tuning in stereo, or manual tuning in mono.

FM/AM Selector Buttons

Press to select FM or AM reception.

Preset Scan Button

Press to continuously scan each of the 30 preset stations for 10 seconds.

Tuning Button

Press ▲ to tune to stations with higher frequencies; press ▼ for lower frequencies.

Bass Control

Turn to increase or decrease the proportion of low frequency sound.

Treble Control

Turn to increase or decrease the proportion of high frequency sound.

Balance Control


Turn to adjust relative output level of left and right speakers.

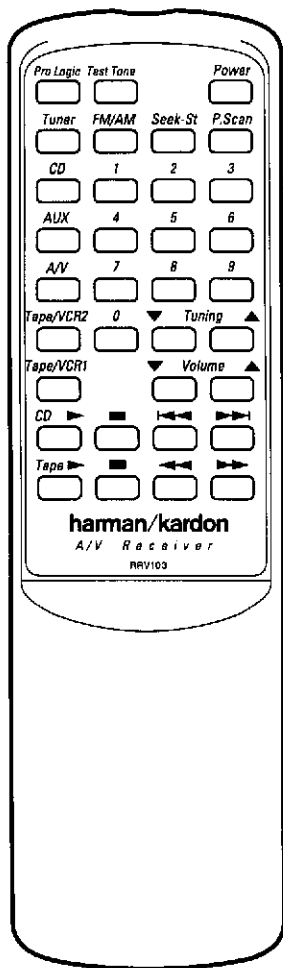
Volume Control

Turn to raise or lower output volume.

Loudness Switch

Press to improve sound quality when listening to your system at low volume.

* Manufactured under license from Dolby Laboratories Licensing Corporation.
 "Dolby", "Pro Logic" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.



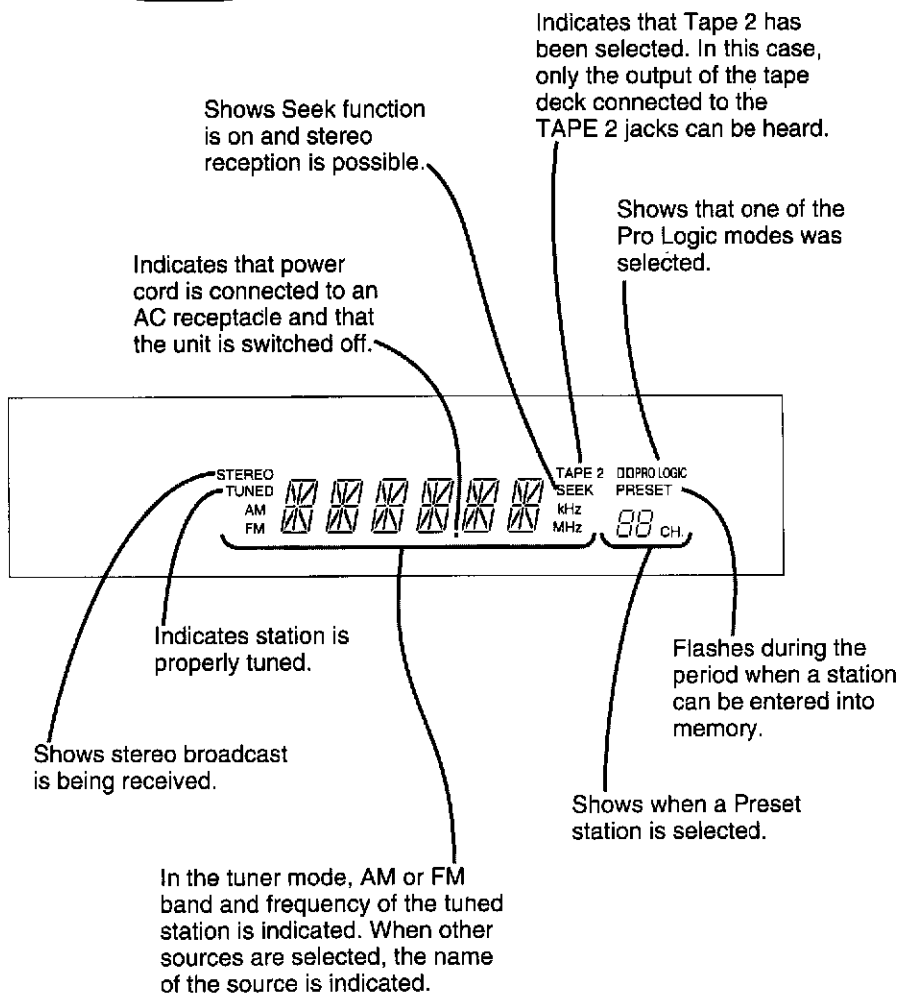
Independent Remote Control

The keys on the remote control unit function the same as the corresponding buttons on the receiver itself, except for the Test Tone button. For information on using the Test Tone button.

Operating Conditions

The control unit operates effectively within a distance of 7 meters (23 feet) and an angle of 30° from the receiver. Using the control near fluorescent lights may shorten this range, as will any dust or dirt that accumulates on the front of the remote control, or the remote sensor area of the receiver. Also avoid blocking the line of sight between receiver and remote.

The control unit is powered by two AA batteries, included with your receiver. When you replace weak batteries, replace both at the same time. When the remote is to be unused for an extended period, remove the batteries to prevent damage from corrosion.



DISASSEMBLY PROCEDURES (REFER TO PAGES 11,12 AND 34)

1 CABINET TOP (124) REMOVAL

Remove 6 screws (A) and then remove the Cabinet Top (124).

2 FRONT PANEL ASSEMBLY (AA) REMOVAL

1. Remove the Cabinet Top (124), referring to the previous step 1.
2. Disconnect the 1 connector (LCN16) from 1 connector (CN16) on the Tone P.C. Board (PCB-9).
3. Pull out the Volume Knob (131) with the Volume Indicator P.C. Board (PCB-19).
4. Disconnect the 1 jumper lead (JW701) from 1 connector (CN701B) on the Tuner P.C. Board (PCB-17).
5. If necessary, unsolder the lead wire.
6. Remove 6 screws (B) and then remove the Front Panel Assembly (AA) with Front P.C. Board (PCB-2).

3 FRONT P.C. BOARD (PCB-2) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Remove 12 screws (C) and then remove the Front P.C. Board (PCB-2).

4 VIDEO P.C. BOARD (PCB-13) REMOVAL

1. Remove the Cabinet Top (124), referring to the previous step 1.
2. Disconnect the 1 connector (LCN901) from 1 connector (CN901) on the Tuner P.C. Board (PCB-17).
3. Remove 7 screws (D) and then remove Video P.C. Board (PCB-13) with Shield Case (149).

5 TONE P.C. BOARD (PCB-9) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Disconnect the 5 connectors (LCN601, LCN1402, LCN1503, LCN406 and LCN1505) from 5 connectors (CN601, CN1402, CN1503, CN406 and CN1505) on the Tone P.C. Board (PCB-9).
3. Open the lid of 2 connectors (CN401 and CN503) on the Tone P.C. Board (PCB-9) and then disconnect the lead wire.
4. If necessary, unsolder the lead wires.
5. Remove 5 screws (E) and 1 nut (F) and then remove the Tone P.C. Board (PCB-9) with Loudness P.C. Board (PCB-10).

6 REAR AMP P.C. BOARD (PCB-12) REMOVAL

1. Remove the Cabinet Top (124), referring to the previous step 1.
2. Disconnect the 1 connector (LCN1408) from 1 connector (CN1408) on the Secondary 1 P.C. Board (PCB-18).
3. Remove 3 screws (G) and then remove the Rear Amp P.C. Board (PCB-12).
4. If necessary, unsolder the lead wires.

7 CENTER/REAR SPEAKER TERMINAL P.C. BOARD (PCB-7) REMOVAL

1. Remove the Cabinet Top (124), referring to the previous step 1.
2. Disconnect the 1 connector (LCN1403) on the Center/Rear Speaker Terminal P.C. Board (PCB-7).
3. Remove 2 screws (H) and then remove the Center/Rear Speaker Terminal P.C. Board (PCB-7).
4. If necessary, unsolder the lead wires.

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

1. Remove the Cabinet Top (124), referring to the previous step 1.
2. Remove 2 screws (J) and then remove the Front Speaker Terminal P.C. Board (PCB-6).
3. If necessary, unsolder the lead wires.

9 SPEAKER SWITCH P.C. BOARD (PCB-3) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the previous step 2.
2. Remove 3 screws (G) and then remove the Rear Amp P.C. Board (PCB-12).
3. Disconnect the 2 connectors (LCN4 and LCN802) from 2 connectors (CN4 and CN802) on the Tuner P.C. Board (PCB-17).
4. Disconnect the 1 connector (LCN1505) from 1 connector (CN1505) on the Tone P.C. Board (PCB-9).
5. Pull out the 3 Push Buttons (134).
6. Remove 3 screws (K) and 1 nut (L) and then remove Speaker Switch P.C. Board (PCB-3).
7. If necessary, unsolder the lead wires.

10 BASS, TREBLE, BALANCE P.C. BOARD (PCB-11) REMOVAL

1. Remove the Tone P.C. Board (PCB-9), referring to the previous step 5.
2. Open the lid of 1 connector (CN801) on the Tuner P.C. Board (PCB-17) and then disconnect the jumper lead (JW801).
3. Pull out the 3 Knobs (132).
4. Remove the 3 nuts (M) and then remove the Bass, Treble, Balance P.C. Board (PCB-11).

11 AMP P.C. BOARD (PCB-1) REMOVAL

1. Remove the Cabinet Top (124), referring to the previous step 1.
2. Disconnect the 1 connector (LCN406) from 1 connector (CN406) on the Tone P.C. Board (PCB-9).
3. Open the lid of 1 connector (CN401) on the Tone P.C. Board (PCB-9) and then disconnect the shield wire (W401).
4. Disconnect the 1 connector (LCN25) from 1 connector (CN25) on the Tuner P.C. Board (PCB-17).
5. Disconnect the 1 connector (LCN12) from 1 connector (CN12) on the Secondary 1 P.C. Board (PCB-16).
6. Remove 4 screws (N) and then remove the Amp P.C. Board (PCB-1) with 3 Metal Fittings (208, 209 and 210) and Heat Sink (206).
7. If necessary, unsolder the lead wires.

12 TUNER P.C. BOARD (PCB-17) REMOVAL

1. Remove the Tone P.C. Board (PCB-9), referring to the previous step 5.
2. Disconnect the 1 connector (LCN901) from 1 connector (CN901) on the Tuner P.C. Board (PCB-17).
3. Remove 7 screws (D) and then remove Video P.C. Board (PCB-13) with Shield Case (149).
4. Disconnect the 1 connector (LCN406) from 1 connector (CN406) on the Tone P.C. Board (PCB-9).
5. Open the lid of 1 connector (CN401) on the Tone P.C. Board (PCB-9) and then disconnect the shield wire (W401).
6. Disconnect the 1 connector (LCN25) from 1 connector (CN25) on the Tuner P.C. Board (PCB-17).
7. Disconnect the 1 connector (LCN12) from 1 connector (CN12) on the Secondary 1 P.C. Board (PCB-16).
8. Remove 4 screws (N) and then remove the Amp P.C. Board (PCB-1) with 3 Metal Fittings (208, 209 and 210) and Heat Sink (206).
9. If necessary, unsolder the lead wires.
10. Open the lid of 2 connectors (CN801 and CN6) on the Tuner P.C. Board (PCB-17) and then disconnect the 2 shield wires (JW801 and JL6).
11. Disconnect the 1 connector (LCN26) from 1 connector (CN26) on the Tuner P.C. Board (PCB-17). **(K)**
12. Disconnect the 2 connectors (LCN4 and LCN802) from 2 connectors (CN4 and CN802) on the Tuner P.C. Board (PCB-17). **(B) (I)**
13. Remove 13 screws (P) and then remove the Tuner P.C. Board (PCB-17).

CIRCUIT DESCRIPTION

■FM TUNER SECTION

The FM signal which has entered through the antenna is high-frequency amplified in the front end. Then it is mixed with the output of the local oscillators 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 pin 1 of IC201. In IC201, the signal is sent through the IF amplifier and after being detected in the quadrature, it is sent through the post amplifier to pin 12 and then input to pin 2 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 pin 4 for the left channel and from pin 7 for the right channel and transmitted to the input selector section.

■AM TUNER SECTION

The AM signal which has entered through the antenna passes through the tuning circuit consisting of T241 and is inputted to pin 21 of IC201. In IC201, it undergoes radio-frequency amplification and local oscillation and is output from pin 20, and passed through the transformer (T251) and ceramic filter (CF252) and enters pin 18 of IC201. It is then passed through the IF amplification and detection and is output from pin 15. This signal is fed to IC301.

■AUDIO AMPLIFIER SECTION

The signal which has entered from each input terminal is selected by the input 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 is amplified and transmitted to the speaker terminal.

The power amplifier has an over-output protective circuit. If current exceeding the specification flows to Q423, Q425 (L ch), Q424, Q426 (R ch), Q1423, Q1425 (Center), Q1424 and Q1426 (Rear), it is detected at Q51 (L ch), Q52 (R ch), Q56 (Center) and Q57 (Rear) and the protective circuit consisting of Q53 and Q12 draws in Q55 and Q54, and thus the input signal is cut to protect the circuit.

■MUTING CIRCUIT

If FM or AM is received out of tuning or in a very weak field intensity, pin 6 of IC701 becomes high level. This is fed to the base of Q757, whose collector then becomes low level and the collector of Q756 high level. As a result, Q301 (L ch) and Q302 (R ch) are conducted to mute the output.

■SYNTHESIZER SECTION

●FM

The local oscillation output at the front end is fed to pin 14 of the prescaler IC751 and after being frequency divided into 30 or 32, control output signal is fed from IC701, compared with the divided local oscillation output and output to pin 18. This voltage is level converted at Q751 and Q752, and fed to the front end.

●AM

The local oscillation output is fed from pin 24 of IC201 to pin 13 of IC751.

In IC751, control output signal is fed from IC701, compared with the local oscillation output and output to pin 18. This voltage is level converted at Q751 and Q752, and fed to the AM local oscillation section.

■INDICATOR SECTION

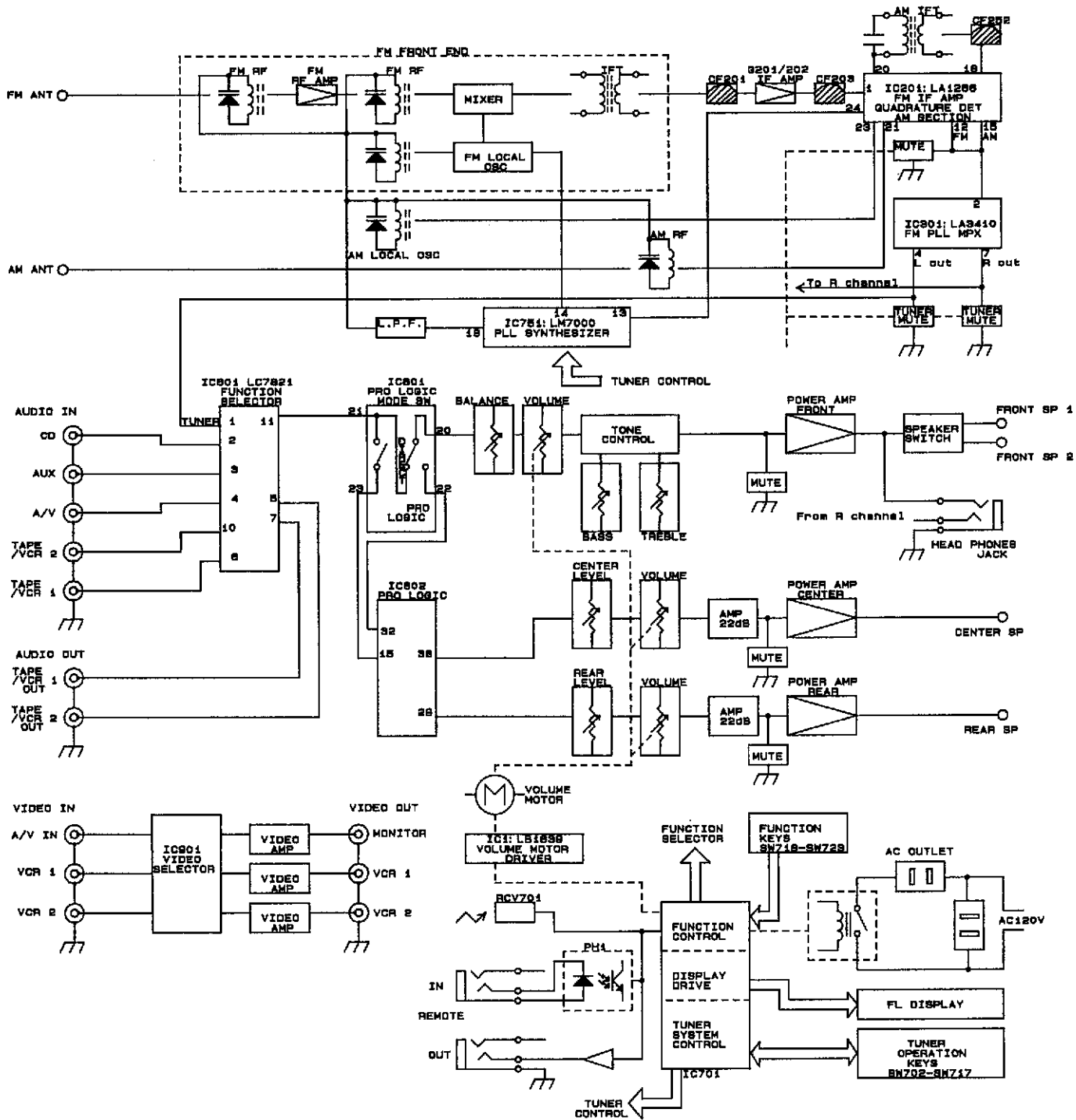
●Frequency display

The indicator tube is turned ON by the output decoded in IC701.

●Tuning

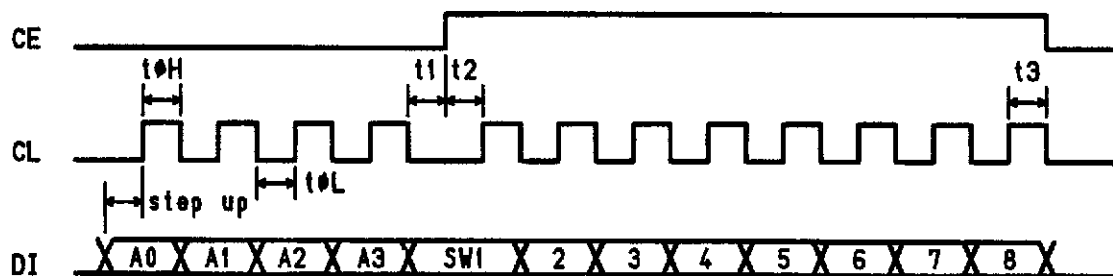
When broadcast is received, pin 2 of IC701 turns ON by the control signal in IC301 and "Tuned" of the indicator tube is turned ON. When FM or stereo broadcast is received, pin 9 of IC301 becomes low level, pin 5 of IC701 turns ON and "Stereo" of the indicator tube is turned ON.

BLOCK DIAGRAM

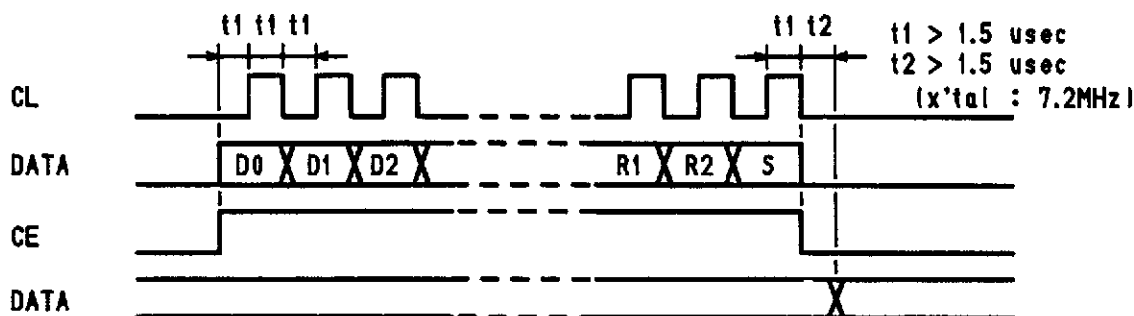


TIMING CHART

Serial Data input timing chart of IC601 (LC7821)



Serial Data input timing chart of IC751 (LM7000)



ALIGNMENT PROCEDURES (REFER TO PAGES 13, 14, 28 AND 33)

- Conditions:
- 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.
 - Set the Volume control to minimum.
 - Set the Speakers switch to 1 Position.

AM ADJUSTMENT

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

Step	Alignment	Terminal to be connected	Measurement Frequency	Station Display	Adjustment	For
1	IF	• Connect the AM Test Loop Antenna cable into the output jack of AM Signal Generator. (80dBμV input signal)	1400kHz *1404kHz	1400kHz *1404kHz	T251	Maximum output level and symmetrical curve on scope.
2	Tracking	Place AM Test Loop Antenna close enough to couple signal into the AM Loop Antenna.	1400kHz *1404kHz	1400kHz *1404kHz	TR241	Maximum output
3			600kHz *603kHz	600kHz *603kHz	T241	Maximum output
4			Repeat step 2 and 3 for optimum sensitivity.			

* International model

FM ADJUSTMENT

- Conditions:
- Set the FM mode by pressing the "FM/AM" button.
 - Set the Seek-Stereo switch to on (seek indicator lights) position.

* International model

FM Signal Generator	1kHz, 75kHz modulation 1kHz, 40kHz 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	Terminal to be connected	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 FM Signal Generator to FM 75Ω UNBAL Antenna terminals through the 75Ω unbalanced dummy.) • In using the center meter, connect it to TP201 and TP202. (Make sure to remove the center meter before adjusting distortion factor.) 	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.
			97.9MHz	97.9MHz	T201(B)	Minimum distortion
			Repeat steps 1 and 2 for optimum sensitivity.			
4	Muting level	* Connect the Oscilloscope and Distortion meter to the out jacks of Tape/VCR1.	97.9MHz	97.9MHz	VR201	Adjust VR201 so that the waveform is muted at 35 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 terminals through the 300Ω balanced dummy. [1mV (65dBf) input signal] (*Connect the FM Signal Generator to FM 75Ω UNBAL Antenna terminals through the 75Ω unbalanced dummy.) • Connect the VTVM and Oscilloscope to the out jacks of Tape/VCR1. 	97.9MHz	97.9MHz	VR301	Adjust so that the left (or right) channel output becomes minimum when only the right (or left) channel of the Stereo Modulator is modulated.

ALIGNMENT PROCEDURES (POWER AMP SECTION)

- Conditions:
- Set the Source selector to the "CD" position.
 - Set the Volume control to minimum.
 - Set the Speakers selector to the "off" position.
 - Make the adjustment at a room temperature of 77°F (25°C).

DC BALANCE ADJUSTMENT

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP401 and center pin of TM404.	VR403	0 ± 10 mV
2	Connect the Digital Volt Meter to TP402 and center pin of TM404.	VR404	0 ± 10 mV
3	Connect the Digital Volt Meter to TP1401 and center pin of TM404.	VR1403	0 ± 10 mV
4	Connect the Digital Volt Meter to TP1402 and TP1407 (LCN1406).	VR1404	0 ± 10 mV

IDLING CURRENT ADJUSTMENT

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP403 and TP405.	VR401	33 mV ± 6 mV
2	Connect the Digital Volt Meter to TP404 and TP406.	VR402	33 mV ± 6 mV
3	Connect the Digital Volt Meter to TP1403 and TP1405.	VR1401	33 mV ± 6 mV
4	Connect the Digital Volt Meter to TP1404 and TP1406.	VR1402	33 mV ± 6 mV

- After the above adjustment, leave the unit with its power on for longer than 15 minutes and then repeat the same adjustment.

GENERAL UNIT PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
AA	A442-AVR15A	FRONT PANEL ASS'Y BK IB	145	2224-7141	INSULATOR
AA	A442-AVR15B	FRONT PANEL ASS'Y I	146	2240-R0101	HOLDER (x24)
AB	A319-AVR15A	LEG ASS'Y (x4)	147	2360-7017	BOSS,SPE
AC	A632-AVR15A	ROTARY KNOB ASS'Y BK IB	148	2360-7022	BOSS,SPE (x4) IB I
AC	A632-AVR15B	ROTARY KNOB ASS'Y I	148	2360-7022	BOSS,SPE (x3) BK
025	1756-CSA	LABEL BK	149	2217-7020	SHIELD CASE
026	1756-05910	LABEL, FUSE CAUTION BK	150	2651-110541	SPRING
027	2459-3004511	RIVET, PLASTIC BK	151	2327-R0130062	SCREW,BND+ (3x6 mm) (x4)
030	2224-7145	INSULATOR BK	152	2347-R0126082	SCREW,BND T+ (2.6x8 mm) (x13)
120	1117-78	SERIAL LABEL	153	2347-R0130082	SCREW,BND T+ (3x8 mm) (x18)
122	1319-04302	LEG (x4)	154	2347-R0130104	SCREW,BND T+ (3x10 mm) (x25) BK
123	1319-04601	LEG (x4)	154	2347-R0130104	SCREW,BND T+ (3x10 mm) (x23) IB I
124	1414-17002	CABINET TOP	155	2347-R0130202	SCREW,BND T+ (3x20 mm)
125	1424-37901	CABI BACK	156	2347-R0130062	SCREW,BND T+ (3x6 mm)
126	1424-38003	CABI BACK BK	157	2347-R0140062	SCREW,BND T+ (4x6 mm) (x4)
126	1424-38104	CABI BACK IB I	158	2347-R0140064	SCREW,BND T+ (4x6 mm) (x4)
127	1442-29702	PANEL BK IB	159	2651-110518	SPRING
127	1442-29701	PANEL I	160	2240-7411	HOLDER
128	1511-19811	PLATE	203	2240-7370	HOLDER (x2)
129	1532-17504	WINDOW	206	2222-7334	HEAT SINK
130	2111-1389	FELT (x4)	207	2224-7134	INSULATOR (x6)
131	1630-04602	ROTARY KNOB, VOLUME BK IB	208	2219-8408	METAL FITTG
131	1630-04601	ROTARY KNOB, VOLUME I	209	2219-8409	METAL FITTG
132	1632-20401	ROTARY KNOB (x3) BK IB	210	2219-8410	METAL FITTG
132	1632-20402	ROTARY KNOB (x3) I	211	2347-R0130082	SCREW,BND T+ (3x8 mm) (x12)
133	1662-52001	PUSH BUTTON, POWER BK IB	212	2557-301429	SCREW,B SPW+ (3x14 mm)(x7)
133	1662-52003	PUSH BUTTON, POWER I	233	2222-7338	HEAT SINK
134	1662-62902	PUSH BUTTON (x4) BK IB	234	2224-7134	INSULATOR (x2)
134	1662-62901	PUSH BUTTON (x4) I	235	2347-R0130082	SCREW,BND T+ (3x8 mm) (x2)
135	1662-70402	PUSH BUTTON BK IB	236	2557-301029	SCREW,B SPW+ (3x10 mm)(x2)
135	1662-70401	PUSH BUTTON I	253	2222-7319	HEAT SINK
136	1662-70502	PUSH BUTTON, PRESET (x8) BK IB	254	2327-R0130062	SCREW,BND+ (3x6 mm) (x2)
136	1662-70501	PUSH BUTTON, PRESET (x8) I	255	2224-135	INSULATOR (x2)
137	1632-22101	ROTARY KNOB, REAR/CENTER VR BK IB	257	2219-2411	METAL FITTG
137	1632-22102	ROTARY KNOB, REAR/CENTER VR I	258	2347-R0130062	SCREW,BND T+ (3x10 mm)
138	2224-7143	INSULATOR	261	1756-R01TL202	LABEL, FUSE (x2) IB I
139	2216-7209	SHIELD PLATE	330	2347-R0130102	SCREW,BND T+ (3x10 mm)(x14) BK
140	2224-7144	INSULATOR IB I	330	2347-R0130102	SCREW,BND T+ (3x10 mm)(x16) IB I
141	2211-7329	CHASSIS	331	2114-91143	BUSHING
142	2219-7945	METAL FITTG	332	2340-7009	SCREW,SPE T+ (x3)
143	2219-8412	METAL FITTG	333	2218-R0130	BRACKET, FIX (x2)
144	2219-8418	METAL FITTG	335	2111-11189	FELT (x3)

A

B

C

D

E

GENERAL UNIT (1/2)

EXPLODED VIEW CHASSIS

1

2

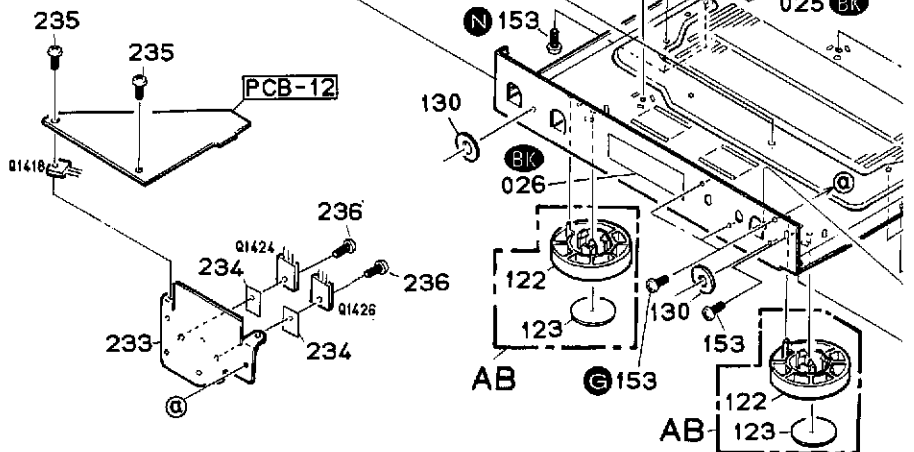
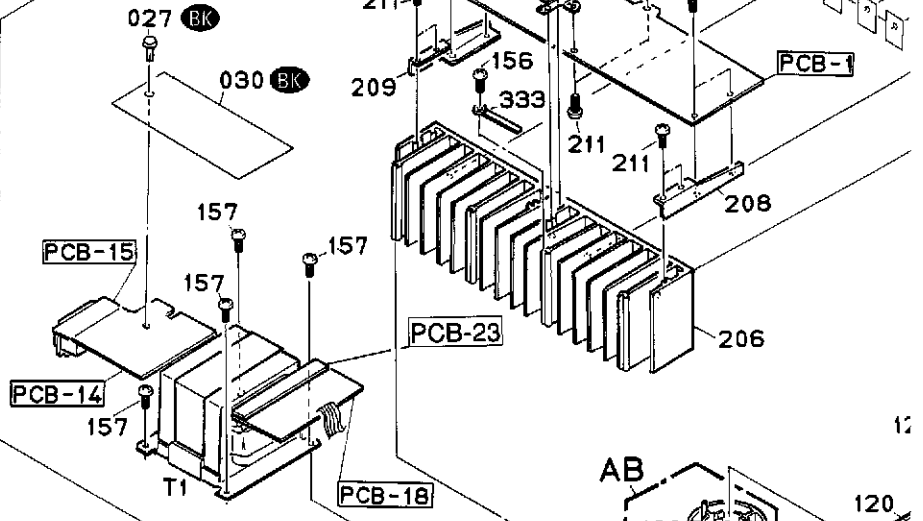
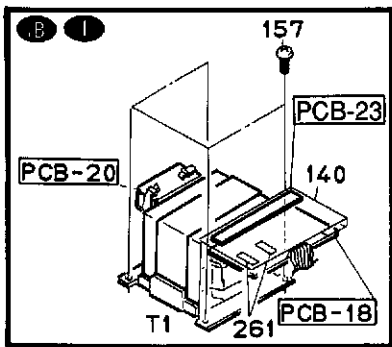
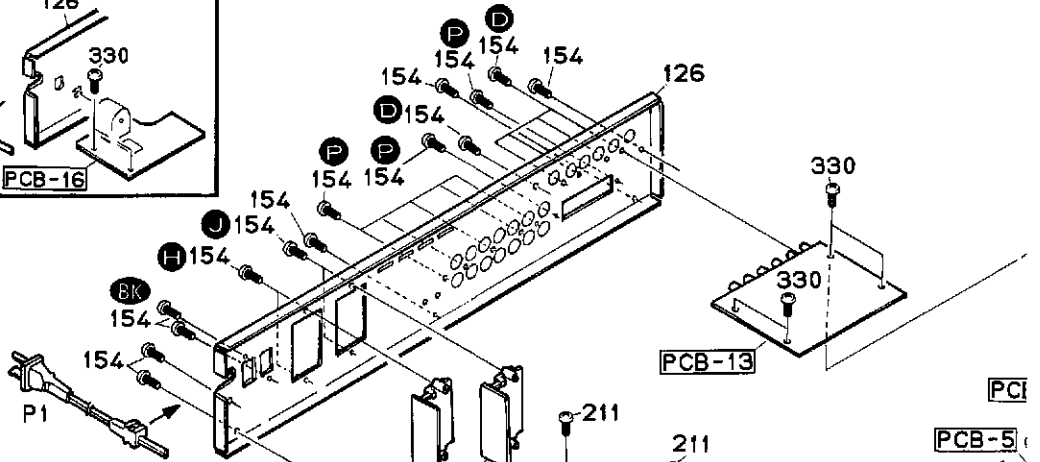
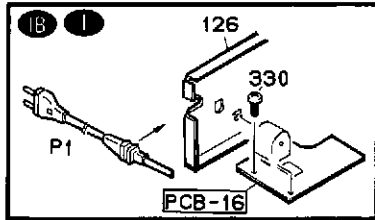
3

4

5

6

7



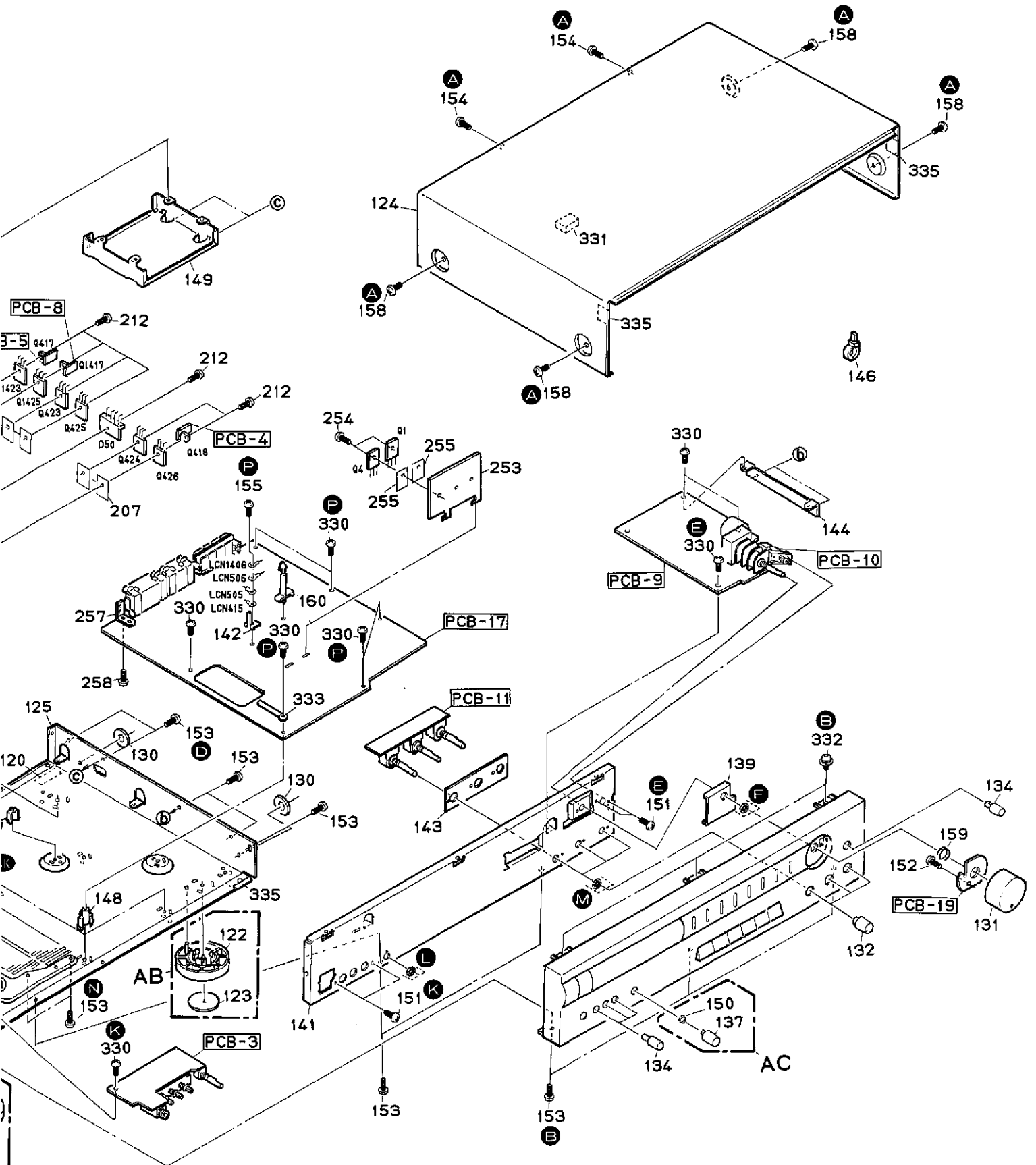
F

G

H

I

J



A B C D E

GENERAL UNIT (2/2)

EXPLODED VIEW
FRONT PANEL ASS'Y

1

2

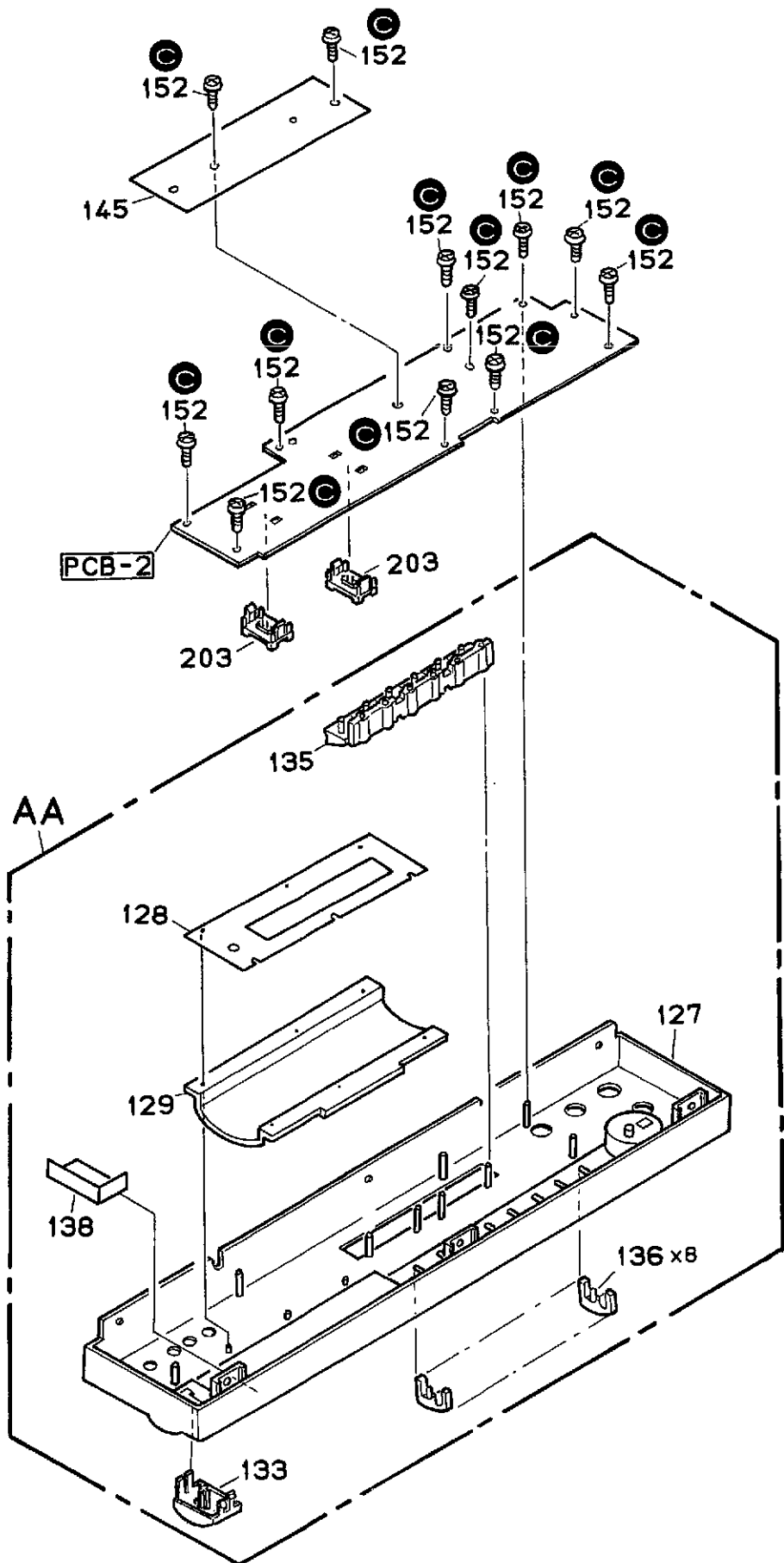
3

4

5

6

7



A

B

C

D

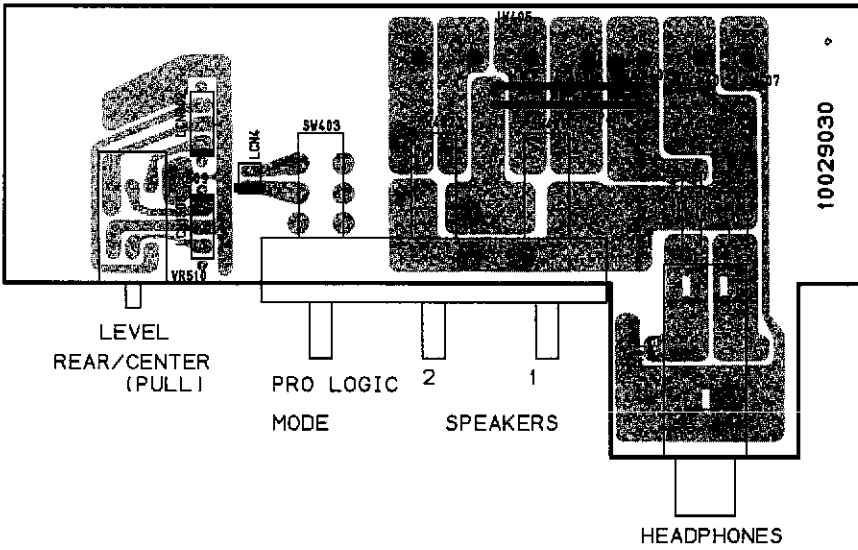
E

P. C. BOARDS (1)

1

PCB-3

Speaker Switch P. C. Board



PCB-4

Bias Rch
P. C. Board



PCB-5

Bias Lch
P. C. Board



2

PCB-8

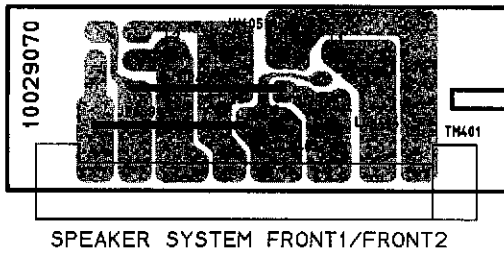
Bias Center
P. C. Board



3

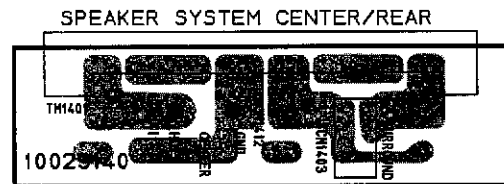
PCB-6

Front Speaker Terminal P. C. Board



PCB-7

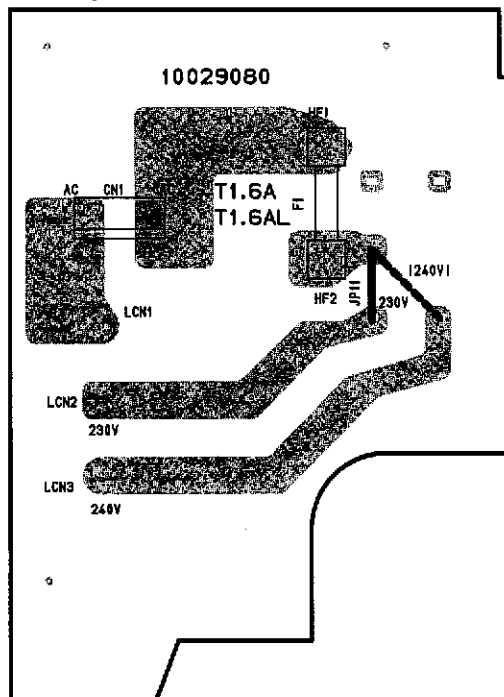
Center/Rear Speaker
Terminal P. C. Board



4

PCB-16

Primary 1 P. C. Board **IB I**

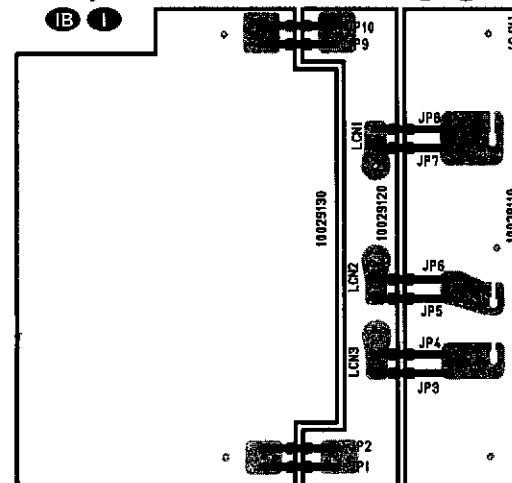


PCB-22

Primary 4
P. C. Board **IB I**

PCB-20

Primary 2 P. C. Board **IB I**



5

PCB-21

Primary 3 P. C. Board **IB I**

6

7

F

G

H

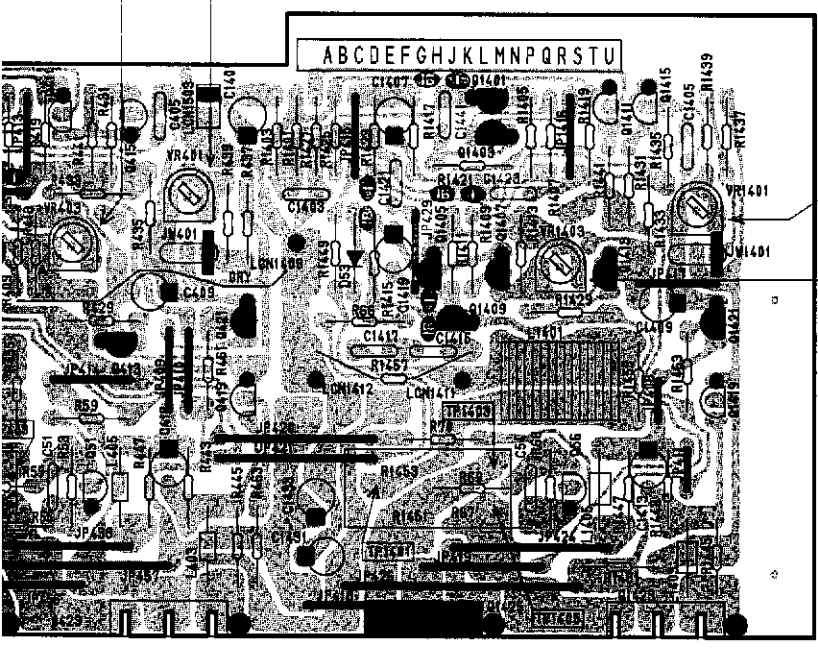
I

J

DC BALANCE ADJUSTMENT

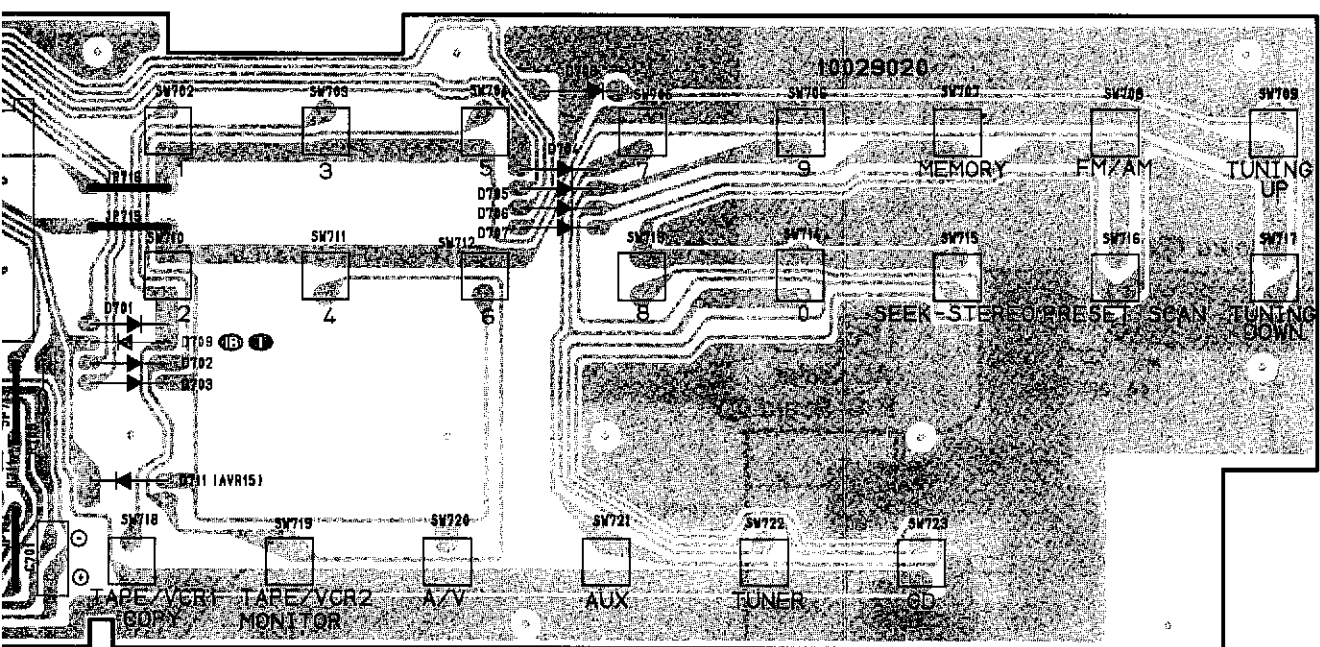
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ABCDEFGHIJKLMNPQRSTU



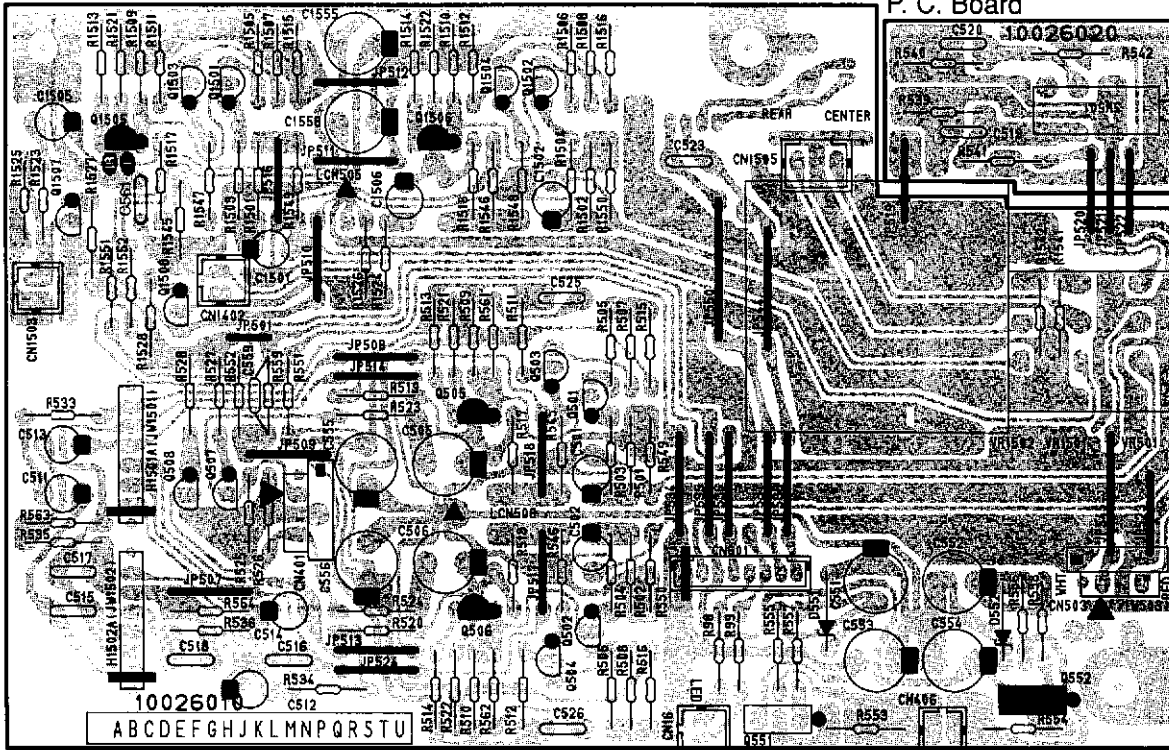
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DC BALANCE ADJUSTMENT



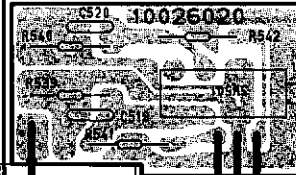
PCB-9

Tone P. C. Board



PCB-10

Loudness
P. C. Board

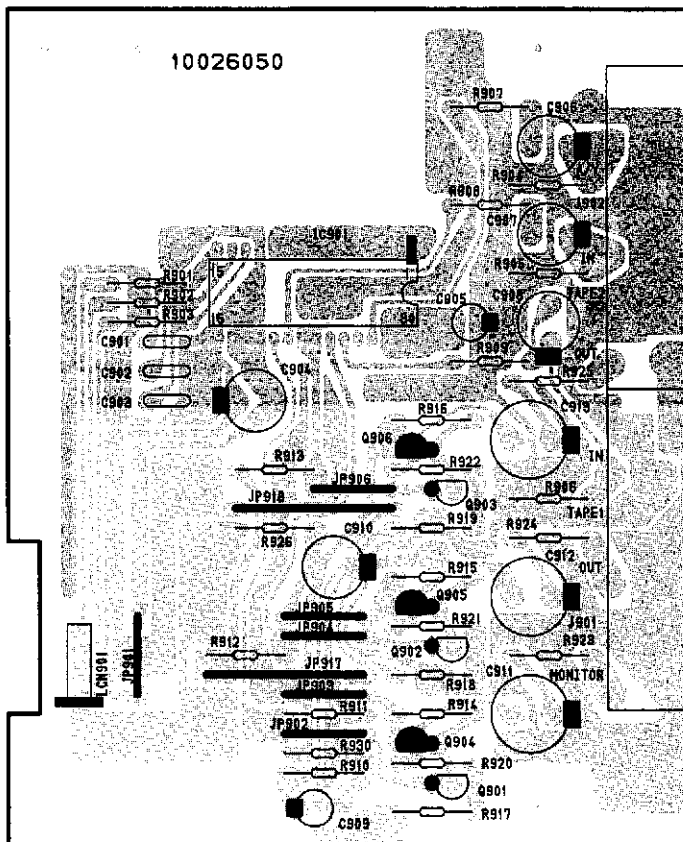
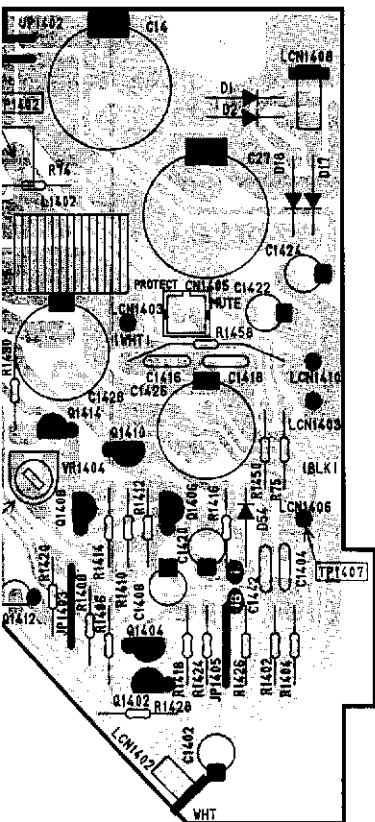


LOUDNESS

VOLUME

PCB-13

Video P. C. Board



A/V IN

IN

VCR2

OUT

IN

VCR1

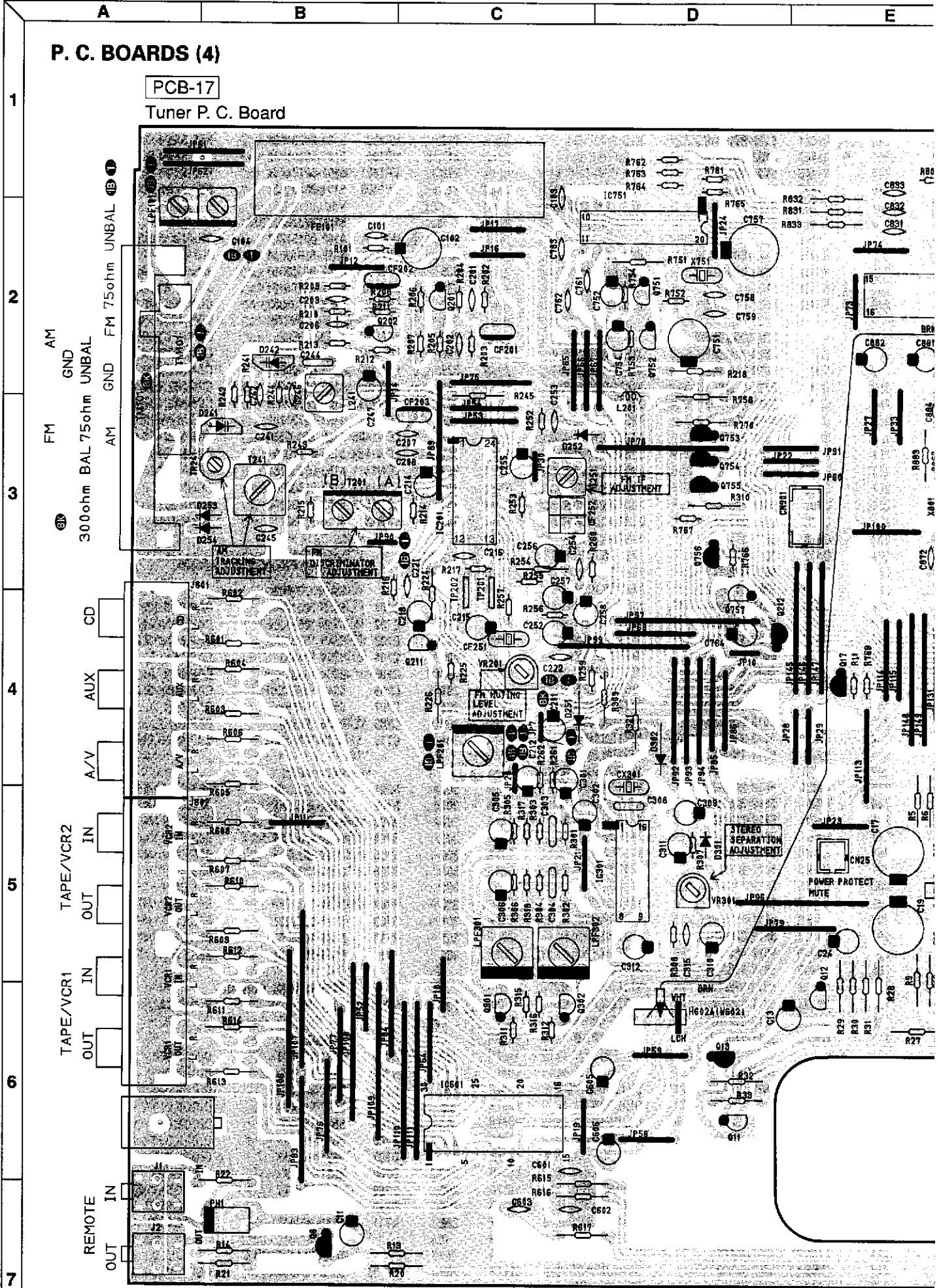
OUT

MONITOR OUT

P. C. BOARDS (4)

PCB-17

Tuner P. C. Board



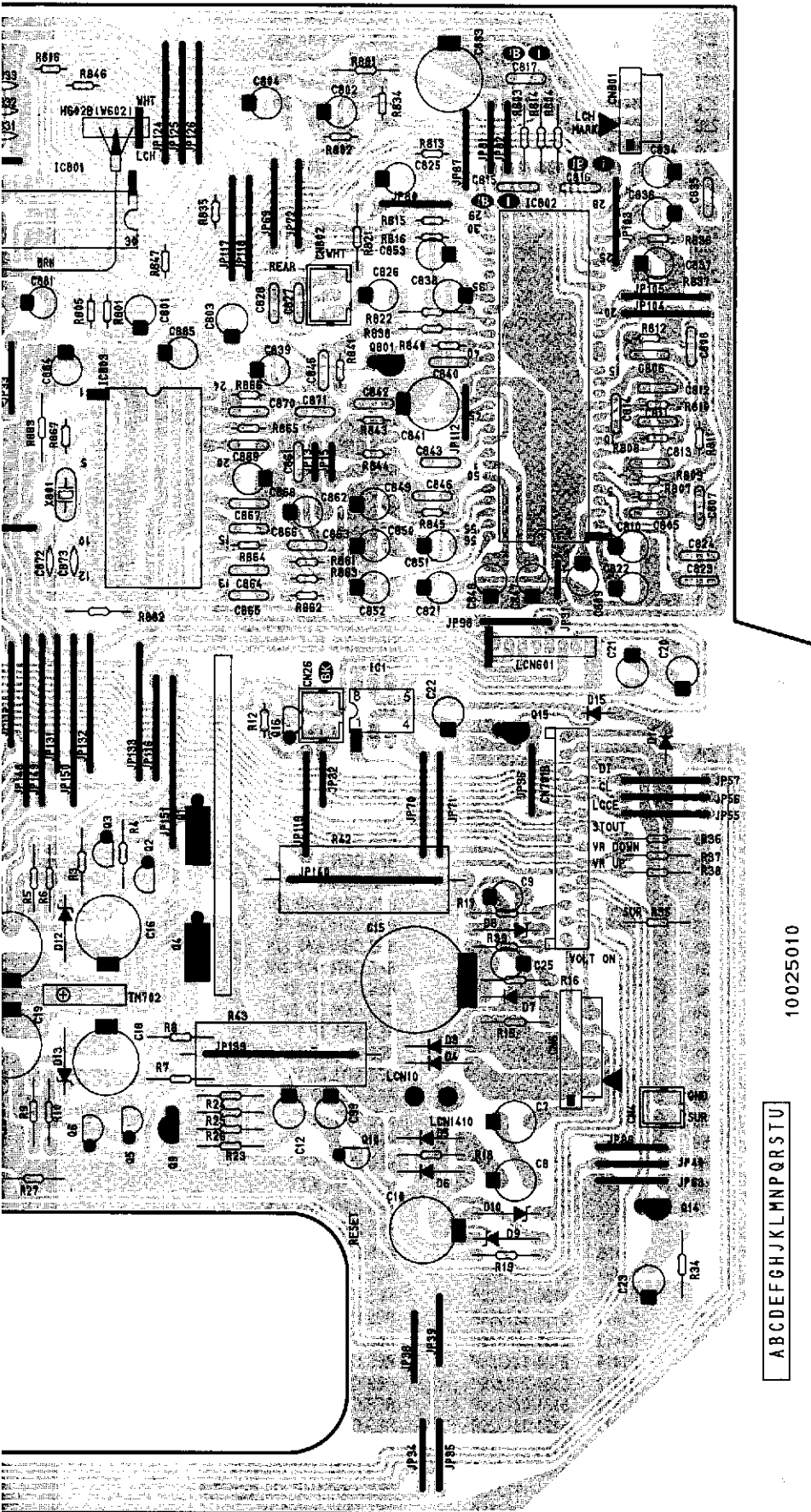
F

G

H

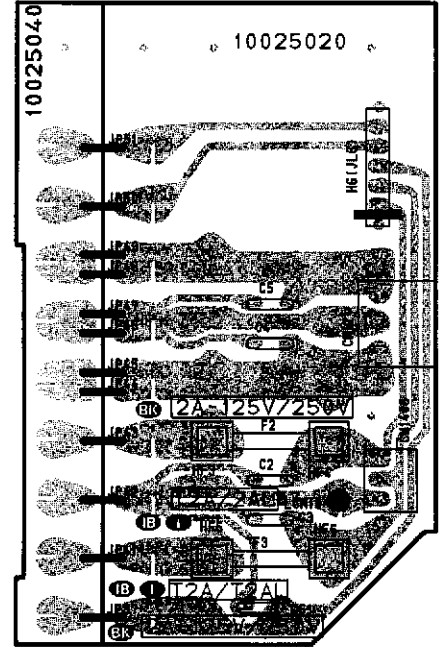
I

J



PCB-18

Secondary 1 P. C. Board

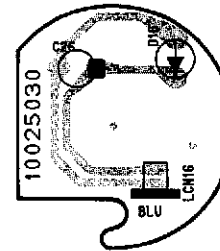


PCB-23

Secondary 2 P. C. Board

PCB-19

Volume Indicator P. C. Board



10025010
ABCDEF GHIJKLMNOPQRSTU

ELECTRICAL PARTS LIST

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
PCB-1 AMP P.C. BOARD							
CAPACITORS							
251	C31	5352-S181K104	CAP,MTL .1μ IB I	232	R403	5134-331J25P	RES,CBN 1/4P 330
251	C32	5352-S181K104	CAP,MTL .1μ IB I	232	R404	5134-331J25P	RES,CBN 1/4P 330
259	C51	5354-683593	CAP,MYL .068μ	233	R405	5134-151J25P	RES,CBN 1/4P 150
259	C52	5354-683593	CAP,MYL .068μ	233	R406	5134-151J25P	RES,CBN 1/4P 150
260	C53	5345-105F0962	CAP,MINI ELE 1μ/50V	233	R407	5134-151J25P	RES,CBN 1/4P 150
259	C54	5354-683593	CAP,MYL .068μ	233	R408	5134-151J25P	RES,CBN 1/4P 150
273	C55	5341-S38FM828	CAP,ELE 8200μ/50V	232	R409	5134-331J25P	RES,CBN 1/4P 330
273	C56	5341-S38FM828	CAP,ELE 8200μ/50V	232	R410	5134-331J25P	RES,CBN 1/4P 330
220	C401	5345-107B0962	CAP,MINI ELE 100μ/10V	232	R411	5134-331J25P	RES,CBN 1/4P 330
220	C402	5345-107B0962	CAP,MINI ELE 100μ/10V	232	R412	5134-331J25P	RES,CBN 1/4P 330
221	C403	5359-6805851	CAP,PPP 68P	236	R413	5134-222J25P	RES,CBN 1/4P 2.2K
221	C404	5359-6805851	CAP,PPP 68P	236	R414	5134-222J25P	RES,CBN 1/4P 2.2K
222B	C405	5353-030933	CAP,MCA 3P BK	237	R415	5134-123J25P	RES,CBN 1/4P 12K
222	C405	5353-050933	CAP,MCA 5P IB I	237	R416	5134-123J25P	RES,CBN 1/4P 12K
222B	C406	5353-030933	CAP,MCA 3P BK	231	R417	5134-273J25P	RES,CBN 1/4P 27K
222	C406	5353-050933	CAP,MCA 5P IB I	231	R418	5134-273J25P	RES,CBN 1/4P 27K
223	C407	5345-105F0962	CAP,MINI ELE 1μ/50V	238	R419	5134-272J25P	RES,CBN 1/4P 2.7K
223	C408	5345-105F0962	CAP,MINI ELE 1μ/50V	238	R420	5134-272J25P	RES,CBN 1/4P 2.7K
224	C409	5345-106F0962	CAP,MINI ELE 10μ/50V	232	R421	5134-331J25P	RES,CBN 1/4P 330
224	C410	5345-106F0962	CAP,MINI ELE 10μ/50V	232	R422	5134-331J25P	RES,CBN 1/4P 330
226	C413	5345-475F0962	CAP,MINI ELE 4.7μ/50V	239	R423	5134-102J25P	RES,CBN 1/4P 1K
226	C414	5345-475F0962	CAP,MINI ELE 4.7μ/50V	239	R424	5134-102J25P	RES,CBN 1/4P 1K
227	C415	5354-104593	CAP,MYL .1μ	230B	R425	5134-101J25P	RES,CBN 1/4P 100 BK
227	C416	5354-104593	CAP,MYL .1μ	230	R425	5134-121J25P	RES,CBN 1/4P 120 IB I
227	C417	5354-104593	CAP,MYL .1μ	230B	R426	5134-101J25P	RES,CBN 1/4P 100 BK
227	C418	5354-104593	CAP,MYL .1μ	230	R426	5134-121J25P	RES,CBN 1/4P 120 IB I
228	C419	5345-104F0962	CAP,MINI ELE .1μ/50V	234	R427	5134-332J25P	RES,CBN 1/4P 3.3K
228	C420	5345-104F0962	CAP,MINI ELE .1μ/50V	234	R428	5134-332J25P	RES,CBN 1/4P 3.3K
229	C421	5354-104593	CAP,MYL .1μ IB I	240	△ R429	5102-1015116	RES,FUSE 100
229	C422	5354-104593	CAP,MYL .1μ IB I	240	△ R430	5102-1015116	RES,FUSE 100
229	C423	5354-104593	CAP,MYL .1μ IB I	240	△ R431	5102-1015116	RES,FUSE 100
229	C424	5354-104593	CAP,MYL .1μ IB I	240	△ R432	5102-1015116	RES,FUSE 100
225	C441	5359-3905851	CAP,PPP 39P IB I	241	R433	5134-183J25P	RES,CBN 1/4P 18K
225	C442	5359-3905851	CAP,PPP 39P IB I	241	R434	5134-183J25P	RES,CBN 1/4P 18K
220	C1401	5345-107B0962	CAP,MINI ELE 100μ/10V	241	R435	5134-183J25P	RES,CBN 1/4P 18K
221	C1403	5359-6805851	CAP,PPP 68P	241	R436	5134-183J25P	RES,CBN 1/4P 18K
222B	C1405	5353-030933	CAP,MCA 3P BK	242	R437	5134-122J25P	RES,CBN 1/4P 1.2K
222	C1405	5353-050933	CAP,MCA 5P IB I	242	R438	5134-122J25P	RES,CBN 1/4P 1.2K
223	C1407	5345-105F0962	CAP,MINI ELE 1μ/50V	235	R439	5134-271J25P	RES,CBN 1/4P 270
224	C1409	5345-106F0962	CAP,MINI ELE 10μ/50V	235	R440	5134-271J25P	RES,CBN 1/4P 270
226	C1413	5345-475F0962	CAP,MINI ELE 4.7μ/50V	243	△ R441	5102-6815116	RES,FUSE 680
227	C1415	5354-104593	CAP,MYL .1μ	243	△ R442	5102-6815116	RES,FUSE 680
227	C1417	5354-104593	CAP,MYL .1μ	244	△ R443	5102-8205116	RES,FUSE 82
228	C1419	5345-104F0962	CAP,MINI ELE .1μ/50V	244	△ R444	5102-8205116	RES,FUSE 82
229	C1421	5354-104593	CAP,MYL .1μ IB I	245	R445	5134-100J25P	RES,CBN 1/4P 10
229	C1423	5354-104593	CAP,MYL .1μ IB I	245	R446	5134-100J25P	RES,CBN 1/4P 10
224	C1431	5345-106F0962	CAP,MINI ELE 10μ/50V	245	R447	5134-100J25P	RES,CBN 1/4P 10
224	C1433	5345-106F0962	CAP,MINI ELE 10μ/50V	245	R448	5134-100J25P	RES,CBN 1/4P 10
225	C1441	5359-3905851	CAP,PPP 39P IB I	231	R449	5134-273J25P	RES,CBN 1/4P 27K
RESISTORS							
262	R51	5134-123J25P	RES,CBN 1/4P 12K	231	R450	5134-273J25P	RES,CBN 1/4P 27K
262	R52	5134-123J25P	RES,CBN 1/4P 12K	246	R451/453	5273-R27672	RES,CEM 3P .27
263	R53	5134-331J25P	RES,CBN 1/4P 330	246	R452/454	5273-R27672	RES,CEM 3P .27
263	R54	5134-331J25P	RES,CBN 1/4P 330	247	R455	5171-S040J1R0	RES,MTL 1P 1
264	R55	5134-152J25P	RES,CBN 1/4P 1.5K	247	R456	5171-S040J1R0	RES,MTL 1P 1
264	R56	5134-152J25P	RES,CBN 1/4P 1.5K	248	R457	5173-S030J100	RES,MTL 2P 10
264	R57	5134-152J25P	RES,CBN 1/4P 1.5K	248	R458	5173-S030J100	RES,MTL 2P 10
264	R58	5134-152J25P	RES,CBN 1/4P 1.5K	250	△ R461	5102-4R75116	RES,FUSE 4.7
265	R59	5134-682J25P	RES,CBN 1/4P 6.8K	250	△ R462	5102-4R75116	RES,FUSE 4.7
265	R60	5134-682J25P	RES,CBN 1/4P 6.8K	250	△ R463	5102-4R75116	RES,FUSE 4.7
266	R61	5134-683J25P	RES,CBN 1/4P 68K	250	△ R464	5102-4R75116	RES,FUSE 4.7
267	R62	5134-472J25P	RES,CBN 1/4P 4.7K	231	R1401	5134-273J25P	RES,CBN 1/4P 27K
268	R63	5134-222J25P	RES,CBN 1/4P 2.2K	232	R1403	5134-331J25P	RES,CBN 1/4P 330
269	R64	5134-103J25P	RES,CBN 1/4P 10K	233	R1405	5134-151J25P	RES,CBN 1/4P 150
270	R65	5134-104J25P	RES,CBN 1/4P 100K	233	R1407	5134-151J25P	RES,CBN 1/4P 150
262	R66	5134-123J25P	RES,CBN 1/4P 12K	232	R1409	5134-331J25P	RES,CBN 1/4P 330
264	R67	5134-152J25P	RES,CBN 1/4P 1.5K	232	R1411	5134-331J25P	RES,CBN 1/4P 330
263	R68	5134-331J25P	RES,CBN 1/4P 330	236	R1413	5134-222J25P	RES,CBN 1/4P 2.2K
264	R69	5134-152J25P	RES,CBN 1/4P 1.5K	237	R1415	5134-123J25P	RES,CBN 1/4P 12K
265	R70	5134-682J25P	RES,CBN 1/4P 6.8K	231	R1417	5134-273J25P	RES,CBN 1/4P 27K
231	R401	5134-273J25P	RES,CBN 1/4P 27K	238	R1419	5134-272J25P	RES,CBN 1/4P 2.7K
231	R402	5134-273J25P	RES,CBN 1/4P 27K	232	R1421	5134-331J25P	RES,CBN 1/4P 330
				239	R1423	5134-102J25P	RES,CBN 1/4P 1K
				230B	R1425	5134-101J25P	RES,CBN 1/4P 100 BK
				230	R1425	5134-121J25P	RES,CBN 1/4P 120 IB I
				234	R1427	5134-332J25P	RES,CBN 1/4P 3.3K
				240	△ R1429	5102-1015116	RES,FUSE 100

Ser. No.	Ref. No.	Part No.	Description
240	△ R1431	5102-1015116	RES,FUSE 100
241	R1433	5134-183J25P	RES,CBN 1/4P 18K
241	R1435	5134-183J25P	RES,CBN 1/4P 18K
242	R1437	5134-122J25P	RES,CBN 1/4P 1.2K
235	R1439	5134-271J25P	RES,CBN 1/4P 270
243	△ R1441	5102-6815116	RES,FUSE 680
244	△ R1443	5102-8205116	RES,FUSE 82
245	R1445	5134-100J25P	RES,CBN 1/4P 10
245	R1447	5134-100J25P	RES,CBN 1/4P 10
231	R1449	5134-273J25P	RES,CBN 1/4P 27K
246	R1451/ 1453	5273-R27672	RES,CEM 3P .27
247	R1455	5171-S040J1R0	RES,MTL 1P 1
248	R1457	5173-S030J100	RES,MTL 2P 10
250	△ R1461	5102-4R75116	RES,FUSE 4.7
250	△ R1463	5102-4R75116	RES,FUSE 4.7

TRANSISTORS

252	Q51	5613-2240(GR)	XISTOR,NPN R
252	Q52	5613-2240(GR)	XISTOR,NPN R
253	Q53	5611-872(E)	XISTOR,PNP R
254	Q54	5611-970(BL)	XISTOR,PNP R
255	Q55	5613-2603(F)	XISTOR,NPN R
252	Q56	5613-2240(GR)	XISTOR,NPN R
201	Q401	5611-872(E)	XISTOR,PNP R
201	Q402	5611-872(E)	XISTOR,PNP R
201	Q403	5611-872(E)	XISTOR,PNP R
201	Q404	5611-872(E)	XISTOR,PNP R
202	Q405	5611-1115(F)	XISTOR,PNP R
202	Q406	5611-1115(F)	XISTOR,PNP R
201	Q407	5611-872(E)	XISTOR,PNP R
201	Q408	5611-872(E)	XISTOR,PNP R
202	Q409	5611-1115(F)	XISTOR,PNP R
202	Q410	5611-1115(F)	XISTOR,PNP R
203	Q411	5613-2240(BL)	XISTOR,NPN R
203	Q412	5613-2240(BL)	XISTOR,NPN R
204	Q413	5612-646A(C)	XISTOR,PNP A
204	Q414	5612-646A(C)	XISTOR,PNP A
205	Q415	5614-666A(C)	XISTOR,NPN A
205	Q416	5614-666A(C)	XISTOR,NPN A
208	Q419	5613-3298(Y)	XISTOR,NPN R
208	Q420	5613-3298(Y)	XISTOR,NPN R
209	Q421	5611-1306(Y)	XISTOR,PNP R
209	Q422	5611-1306(Y)	XISTOR,PNP R
210	Q423	5613-3181(O)	XISTOR,NPN R
210	Q424	5613-3181(O)	XISTOR,NPN R
211	Q425	5611-1264(O)	XISTOR,PNP R
211	Q426	5611-1264(O)	XISTOR,PNP R
201	Q1401	5611-872(E)	XISTOR,PNP R
201	Q1403	5611-872(E)	XISTOR,PNP R
202	Q1405	5611-1115(F)	XISTOR,PNP R
201	Q1407	5611-872(E)	XISTOR,PNP R
202	Q1409	5611-1115(F)	XISTOR,PNP R
203	Q1411	5613-2240(BL)	XISTOR,NPN R
204	Q1413	5612-646A(C)	XISTOR,PNP A
205	Q1415	5614-666A(C)	XISTOR,NPN A
208	Q1419	5613-3298(Y)	XISTOR,NPN R
209	Q1421	5611-1306(Y)	XISTOR,PNP R
210	Q1423	5613-3181(O)	XISTOR,NPN R
211	Q1425	5611-1264(O)	XISTOR,PNP R

DIODES

272	△ D50	5685-D5SB20	SILICON,BRIG
257	D51	5631-1S2473	DIODE,DET
257	D52	5631-1S2473	DIODE,DET
257	D53	5631-1S2473	DIODE,DET

COILS

213	L401	5991-7125	SPRING COIL
213	L402	5991-7125	SPRING COIL
214	L403	5597-45502	CORE,BEADS
214	L404	5597-45502	CORE,BEADS
214	L405	5597-45502	CORE,BEADS
214	L406	5597-45502	CORE,BEADS
213	L1401	5991-7125	SPRING COIL
214	L1403	5597-45502	CORE,BEADS

Ser. No.	Ref. No.	Part No.	Description
214	L1405	5597-45502	CORE,BEADS
CONTROLS			
216	VR401	5101-50101934	RES,SEMI FIX 500
216	VR402	5101-50101934	RES,SEMI FIX 500
217	VR403	5101-20201934	RES,SEMI FIX 2K
217	VR404	5101-20201934	RES,SEMI FIX 2K
216	VR1401	5101-50101934	RES,SEMI FIX 500
217	VR1403	5101-20201934	RES,SEMI FIX 2K

MISCELLANEOUS

360	△ W401	4142-00151201	SHIELD WIRE,2C
335	△ JW401	4242-R0103101	JUMPER LEAD
335	△ JW402	4242-R0103101	JUMPER LEAD
335	△ JW1401	4242-R0103101	JUMPER LEAD
324	△ LCN12	4163-10705003	CONNECTOR W/W
326	△ LCN25	4163-S5302201	CONNECTOR W/W
327	△ LCN401	4163-0135025	CONNECTOR W/W
328	△ LCN402	4163-0135024	CONNECTOR W/W
329	△ LCN403	4163-0150027	CONNECTOR W/W
330	△ LCN404	4163-0150026	CONNECTOR W/W
331	△ LCN406	4163-S5302401	CONNECTOR W/W
332	△ LCN415	4162-01201151	LUG W/WIRE
362	△ LCN1405	4163-S5302351	CONNECTOR W/W
351	△ LCN1409	4163-0112026	CONNECTOR W/W
353	△ LCN1411	4163-0125025	CONNECTOR W/W
352	△ LCN1412	4163-0130026	CONNECTOR W/W
350	△ LCN1503	4163-01334002	CONNECTOR W/W
309	TM404	4214-11032	TERMINAL

PCB-2 FRONT P.C. BOARD

CAPACITORS

295	C701	5350-S0512473	CAP,SPE .047F/5.5V
296	C702	5345-106F0962	CAP,MINI ELE 10μ/50V
297	C703	5345-107B0962	CAP,MINI ELE 100μ/10V
299	C704	5354-104593	CAP,MYL .1μ
298	C705	5354-103J1HM	CAP,MYL .01μ
297	C706	5345-107B0962	CAP,MINI ELE 100μ/10V
299	C707	5354-104593	CAP,MYL .1μ
299	C708	5354-104593	CAP,MYL .1μ
294	C712	5345-107D0962	CAP,MINI ELE 100μ/25V

RESISTORS

300	R701	5134-103J25P	RES,CBN 1/4P 10K
301	R702	5134-102J25P	RES,CBN 1/4P 1K
302	R703	5134-123J25P	RES,CBN 1/4P 12K
303	R704	5134-470J25P	RES,CBN 1/4P 47
300	R705	5134-103J25P	RES,CBN 1/4P 10K
300	R706	5134-103J25P	RES,CBN 1/4P 10K
300	R707	5134-103J25P	RES,CBN 1/4P 10K
300	R708	5134-103J25P	RES,CBN 1/4P 10K
304	R709	5134-105J25P	RES,CBN 1/4P 1M
305	R710	5134-100J25P	RES,CBN 1/4P 10
305	R711	5134-100J25P	RES,CBN 1/4P 10

INTEGRATED CIRCUIT

287	IC701	5654-37421-2F	IC,DIGITAL
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DIODES

288	D701	5631-1S2473	DIODE,DET
288	D702	5631-1S2473	DIODE,DET
288	D703	5631-1S2473	DIODE,DET
288	D704	5631-1S2473	DIODE,DET
288	D705	5631-1S2473	DIODE,DET
288	D706	5631-1S2473	DIODE,DET
288	D707	5631-1S2473	DIODE,DET
288	D708	5631-1S2473	DIODE,DET
288	D709	5631-1S2473	DIODE,DET
289	D710	5632-S5566B	DIODE,RECT
288	D711	5631-1S2473	DIODE,DET

MISCELLANEOUS

292	CF701	5693-FC4004A4	OSC,CER
322	CN701	4443-05401025	CONNECTOR
291	FL701	5722-064	TUBE DISPLAY

Ser. No.	Ref. No.	Part No.	Description
363	△ LCN702	4163-0135020	CONNECTOR W/W
316	SW701	4437-01201	SWITCH,PU-TC,POWER
317	SW702	4437-01202	SWITCH,PU-TC,1
317	SW703	4437-01202	SWITCH,PU-TC,3
317	SW704	4437-01202	SWITCH,PU-TC,5
317	SW705	4437-01202	SWITCH,PU-TC,7
317	SW706	4437-01202	SWITCH,PU-TC,9
317	SW707	4437-01202	SWITCH,PU-TC,MEMORY
317	SW708	4437-01202	SWITCH,PU-TC,FM/AM
317	SW709	4437-01202	SWITCH,PU-TC,TUNING(UP)
317	SW710	4437-01202	SWITCH,PU-TC,2
317	SW711	4437-01202	SWITCH,PU-TC,4
317	SW712	4437-01202	SWITCH,PU-TC,6
317	SW713	4437-01202	SWITCH,PU-TC,8
317	SW714	4437-01202	SWITCH,PU-TC,0
317	SW715	4437-01202	SWITCH,PU-TC,SEEK-STEREO
317	SW716	4437-01202	SWITCH,PU-TC,PRESET SCAN
317	SW717	4437-01202	SWITCH,PU-TC,TUNING(DOWN)
317	SW718	4437-01202	SWITCH,PU-TC,TAPE/VCR1 COPY
317	SW719	4437-01202	SWITCH,PU-TC,VCR2 MONITOR
317	SW720	4437-01202	SWITCH,PU-TC,A/V
317	SW721	4437-01202	SWITCH,PU-TC,AUX
317	SW722	4437-01202	SWITCH,PU-TC,TUNER
317	SW723	4437-01202	SWITCH,PU-TC,CD
293	RCV701	6143-00802	RECEIVER UNIT

PCB-3 SPEAKER SWITCH P.C. BOARD

RESISTORS

249	R491	5134-102J25P	RES,CBN 1/4P 1K
249	R492	5134-102J25P	RES,CBN 1/4P 1K
249	R493	5134-102J25P	RES,CBN 1/4P 1K
249	R494	5134-102J25P	RES,CBN 1/4P 1K

CONTROL

314	VR509/ 510	5110-S1301503	RES,V/CBN 9,50K,LEVEL REAR/ CENTER (PULL)
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MISCELLANEOUS

311	J401	4451-00158	JACK,1P,HEADPHONES
336	△ JW405	4163-S5404401	CONNECTOR W/W
355	△ LCN4	4163-S5302251	CONNECTOR W/W
333	△ LCN407	4163-0140039	CONNECTOR W/W
356	△ LCN802	4163-01332003	CONNECTOR W/W
358	△ LCN1505	4163-01333003	CONNECTOR W/W
315	SW401/ 402/403	4431-S0318306	SWITCH,PUSH,SPEAKERS 1, SPEAKERS 2,PRO LOGIC MODE

PCB-4 BIAS RCH P.C. BOARD

TRANSISTOR

207	Q418	5613-3423(Y)	XISTOR,NPN R
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PCB-5 BIAS LCH P.C. BOARD

TRANSISTOR

206	Q417	5613-3423(Y)	XISTOR,NPN R
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PCB-6 FRONT SPEAKER TERMINAL P.C. BOARD

MISCELLANEOUS

308	△ TM401	4214-254	TERMINAL, SPEAKER SYSTEM FRONT1/FRONT2
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PCB-7 CENTER/REAR SPEAKER TERMINAL P.C. BOARD

MISCELLANEOUS

321	CN1403	4443-09601002	CONNECTOR
307	△ TM1401	4214-254	TERMINAL, SPEAKER SYSTEM CENTER/REAR

PCB-8 BIAS CENTER P.C. BOARD

TRANSISTOR

212	Q1417	5613-3423(Y)	XISTOR,NPN R
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PCB-9 TONE P.C. BOARD

CAPACITORS

434	C501	5345-106F0962	CAP,MINI ELE 10μ/50V
434	C502	5345-106F0962	CAP,MINI ELE 10μ/50V
435	C505	5345-476C0962	CAP,MINI ELE 47μ/16V
435	C506	5345-476C0962	CAP,MINI ELE 47μ/16V
436	C511	5345-335F0962	CAP,MINI ELE 3.3μ/50V
436	C512	5345-335F0962	CAP,MINI ELE 3.3μ/50V
437	C513	5345-226D0962	CAP,MINI ELE 22μ/25V
437	C514	5345-226D0962	CAP,MINI ELE 22μ/25V
442	C515	5354-273J1HM	CAP,MYL .027μ
442	C516	5354-273J1HM	CAP,MYL .027μ
443	C517	5354-154593	CAP,MYL .15μ
443	C518	5354-154593	CAP,MYL .15μ
445	C523	5354-104593	CAP,MYL .1μ
447	C525	5359-4715851	CAP,PPP 470P
447	C526	5359-4715851	CAP,PPP 470P
438	C551	5345-107D0962	CAP,MINI ELE 100μ/25V
438	C552	5345-107D0962	CAP,MINI ELE 100μ/25V
439	C553	5345-227C0962	CAP,MINI ELE 220μ/16V
439	C554	5345-227C0962	CAP,MINI ELE 220μ/16V
439	C555	5345-227C0962	CAP,MINI ELE 220μ/16V
439	C556	5345-227C0962	CAP,MINI ELE 220μ/16V
446	C559	5354-104593	CAP,MYL .1μ
446	C561	5354-104593	CAP,MYL .1μ IB I
434	C1501	5345-106F0962	CAP,MINI ELE 10μ/50V
434	C1502	5345-106F0962	CAP,MINI ELE 10μ/50V
435	C1505	5345-476C0962	CAP,MINI ELE 47μ/16V
435	C1506	5345-476C0962	CAP,MINI ELE 47μ/16V
439	C1555	5345-227C0962	CAP,MINI ELE 220μ/16V
439	C1556	5345-227C0962	CAP,MINI ELE 220μ/16V

RESISTORS

453	R98	5134-331J25P	RES,CBN 1/4P 330
453	R99	5134-331J25P	RES,CBN 1/4P 330
452	R501	5134-274J25P	RES,CBN 1/4P 270K
452	R502	5134-274J25P	RES,CBN 1/4P 270K
453	R503	5134-331J25P	RES,CBN 1/4P 330
453	R504	5134-331J25P	RES,CBN 1/4P 330
454	R505	5134-101J25P	RES,CBN 1/4P 100
454	R506	5134-101J25P	RES,CBN 1/4P 100
454	R507	5134-101J25P	RES,CBN 1/4P 100
454	R508	5134-101J25P	RES,CBN 1/4P 100
455	R509	5134-272J25P	RES,CBN 1/4P 2.7K
455	R510	5134-272J25P	RES,CBN 1/4P 2.7K
455	R511	5134-272J25P	RES,CBN 1/4P 2.7K
455	R512	5134-272J25P	RES,CBN 1/4P 2.7K
454	R513	5134-101J25P	RES,CBN 1/4P 100
454	R514	5134-101J25P	RES,CBN 1/4P 100
456	R515	5134-123J25P	RES,CBN 1/4P 12K
456	R516	5134-123J25P	RES,CBN 1/4P 12K
452	R517	5134-274J25P	RES,CBN 1/4P 270K
452	R518	5134-274J25P	RES,CBN 1/4P 270K
457	R519	5134-271J25P	RES,CBN 1/4P 270
457	R520	5134-271J25P	RES,CBN 1/4P 270
458	R521	5134-182J25P	RES,CBN 1/4P 1.8K
458	R522	5134-182J25P	RES,CBN 1/4P 1.8K
453B	R523	5134-331J25P	RES,CBN 1/4P 330 BK
449	R523	5134-681J25P	RES,CBN 1/4P 680 IB I
453B	R524	5134-331J25P	RES,CBN 1/4P 330 BK
449	R524	5134-681J25P	RES,CBN 1/4P 680 IB I
459	R525	5134-473J25P	RES,CBN 1/4P 47K
459	R526	5134-473J25P	RES,CBN 1/4P 47K
460	R527	5134-103J25P	RES,CBN 1/4P 10K
460	R528	5134-103J25P	RES,CBN 1/4P 10K
463	R533	5134-153J25P	RES,CBN 1/4P 15K
463	R534	5134-153J25P	RES,CBN 1/4P 15K
455	R535	5134-272J25P	RES,CBN 1/4P 2.7K
455	R536	5134-272J25P	RES,CBN 1/4P 2.7K
478	R537	5134-154J25P	RES,CBN 1/4P 150K
478	R538	5134-154J25P	RES,CBN 1/4P 150K
467	R545	5134-331J25P	RES,CBN 1/4P 330
467	R546	5134-331J25P	RES,CBN 1/4P 330
468	R549	5134-105J25P	RES,CBN 1/4P 1M
468	R550	5134-105J25P	RES,CBN 1/4P 1M

Ser. No.	Ref. No.	Part No.	Description
489	R551	5134-220J25P	RES,CBN 1/4P 22
469	R552	5134-220J25P	RES,CBN 1/4P 22
451	⚠ R553	5102-1015116	RES,FUSE 100
451	⚠ R554	5102-1015116	RES,FUSE 100
470	R555	5134-332J25P	RES,CBN 1/4P 3.3K
470	R556	5134-332J25P	RES,CBN 1/4P 3.3K
454	R557	5134-101J25P	RES,CBN 1/4P 100
454	R558	5134-101J25P	RES,CBN 1/4P 100
471	R559	5232-104J16P	RES,CBN 1/6P 100K
472	R561	5134-221J25P	RES,CBN 1/4P 220
472	R562	5134-221J25P	RES,CBN 1/4P 220
473	R563	5134-393J25P	RES,CBN 1/4P 39K
473	R564	5134-393J25P	RES,CBN 1/4P 39K
452	R1501	5134-274J25P	RES,CBN 1/4P 270K
452	R1502	5134-274J25P	RES,CBN 1/4P 270K
453	R1503	5134-331J25P	RES,CBN 1/4P 330
453	R1504	5134-331J25P	RES,CBN 1/4P 330
474	R1505	5134-101J25P	RES,CBN 1/4P 100
474	R1506	5134-101J25P	RES,CBN 1/4P 100
474	R1507	5134-101J25P	RES,CBN 1/4P 100
474	R1508	5134-101J25P	RES,CBN 1/4P 100
455	R1509	5134-272J25P	RES,CBN 1/4P 2.7K
455	R1510	5134-272J25P	RES,CBN 1/4P 2.7K
455	R1511	5134-272J25P	RES,CBN 1/4P 2.7K
455	R1512	5134-272J25P	RES,CBN 1/4P 2.7K
474	R1513	5134-101J25P	RES,CBN 1/4P 100
474	R1514	5134-101J25P	RES,CBN 1/4P 100
456	R1515	5134-123J25P	RES,CBN 1/4P 12K
456	R1516	5134-123J25P	RES,CBN 1/4P 12K
456	R1517	5134-123J25P	RES,CBN 1/4P 12K
456	R1518	5134-123J25P	RES,CBN 1/4P 12K
458	R1521	5134-182J25P	RES,CBN 1/4P 1.8K
458	R1522	5134-182J25P	RES,CBN 1/4P 1.8K
453B	R1523	5134-331J25P	RES,CBN 1/4P 330
450	R1523	5134-122J25P	RES,CBN 1/4P 1.2K
453B	R1524	5134-331J25P	RES,CBN 1/4P 330
450	R1524	5134-122J25P	RES,CBN 1/4P 1.2K
459	R1525	5134-473J25P	RES,CBN 1/4P 47K
459	R1526	5134-473J25P	RES,CBN 1/4P 47K
460	R1527	5134-103J25P	RES,CBN 1/4P 10K
460	R1528	5134-103J25P	RES,CBN 1/4P 10K
475	R1541	5134-472J25P	RES,CBN 1/4P 4.7K
475	R1542	5134-472J25P	RES,CBN 1/4P 4.7K
476	R1545	5134-102J25P	RES,CBN 1/4P 1K
476	R1546	5134-102J25P	RES,CBN 1/4P 1K
467	R1547	5134-331J25P	RES,CBN 1/4P 330
467	R1548	5134-331J25P	RES,CBN 1/4P 330
468	R1549	5134-105J25P	RES,CBN 1/4P 1M
468	R1550	5134-105J25P	RES,CBN 1/4P 1M
469	R1551	5134-220J25P	RES,CBN 1/4P 22
469	R1552	5134-220J25P	RES,CBN 1/4P 22

TRANSISTORS

426	Q501	5613-2320L(F)	XISTOR,NPN R
426	Q502	5613-2320L(F)	XISTOR,NPN R
426	Q503	5613-2320L(F)	XISTOR,NPN R
426	Q504	5613-2320L(F)	XISTOR,NPN R
427	Q505	5611-1115(F)	XISTOR,PNP R
427	Q506	5611-1115(F)	XISTOR,PNP R
428	Q507	5614-1450(T)	XISTOR,NPN A
428	Q508	5614-1450(T)	XISTOR,NPN A
429	Q551	5614-2012	XISTOR,NPN A
430	Q552	5612-1375	XISTOR,PNP A
426	Q1501	5613-2320L(F)	XISTOR,NPN R
426	Q1502	5613-2320L(F)	XISTOR,NPN R
426	Q1503	5613-2320L(F)	XISTOR,NPN R
426	Q1504	5613-2320L(F)	XISTOR,NPN R
427	Q1505	5611-1115(F)	XISTOR,PNP R
427	Q1506	5611-1115(F)	XISTOR,PNP R
428	Q1507	5614-1450(T)	XISTOR,NPN A
428	Q1508	5614-1450(T)	XISTOR,NPN A

DIODES

431	D551	5635-HZ12C1	DIODE,ZENER
431	D552	5635-HZ12C1	DIODE,ZENER

Ser. No.	Ref. No.	Part No.	Description
CONTROL			
480	VR501/502	6161-00704 1501/1502	VR BLOCK,100K, VOLUME (W/MOTOR)
MISCELLANEOUS			
560	CN16	4443-0201140	CONNECTOR
562	CN401	4443-030185	CONNECTOR
560	CN406	4443-0201140	CONNECTOR
562	CN503	4443-030185	CONNECTOR
561	CN601	4443-0801140	CONNECTOR
563	CN1402	4443-03201002	CONNECTOR
563	CN1503	4443-03201002	CONNECTOR
559	CN1505	4443-03201003	CONNECTOR
587	⚠ LCN505	4162-01201201	LUG W/WIRE
586	⚠ LCN506	4162-01201151	LUG W/WIRE
568		2240-Z062	HOLDER, H1501A,1502A (X2)

PCB-10 LOUDNESS P.C. BOARD

Ser. No.	Ref. No.	Part No.	Description
CAPACITORS			
444	C519	5354-823593	CAP,MYL .082μ
444	C520	5354-823593	CAP,MYL .082μ
RESISTORS			
465	R539	5134-273J25P	RES,CBN 1/4P 27K
465	R540	5134-273J25P	RES,CBN 1/4P 27K
466	R541	5134-472J25P	RES,CBN 1/4P 4.7K
466	R542	5134-472J25P	RES,CBN 1/4P 4.7K
MISCELLANEOUS			
557	SW501	4431-A027610	SWITCH,PUSH, LOUDNESS

PCB-11 BASS,TREBLE,BALANCE P.C. BOARD

Ser. No.	Ref. No.	Part No.	Description
CAPACITORS			
440	C507	5354-682J1HM	CAP,MYL 6800P
440	C508	5354-682J1HM	CAP,MYL 6800P
441	C509	5354-393J1HM	CAP,MYL .039μ
441	C510	5354-393J1HM	CAP,MYL .039μ
448	C521	5359-1015851	CAP,PPP 100P
448	C522	5359-1015851	CAP,PPP 100P
RESISTORS			
461	R529	5134-122J25P	RES,CBN 1/4P 1.2K
461	R530	5134-122J25P	RES,CBN 1/4P 1.2K
462	R531	5134-121J25P	RES,CBN 1/4P 120
462	R532	5134-121J25P	RES,CBN 1/4P 120
477	R547	5134-271J25P	RES,CBN 1/4P 270
477	R548	5134-271J25P	RES,CBN 1/4P 270
CONTROLS			
482	VR503/504	5113-S2001503	RES,V CBN 16, 50K, BALANCE
484	VR505/506	5113-S2003104	RES,V CBN 16, 100K, BASS
486	VR507/508	5113-S2002503	RES,V CBN 16, 50K, TREBLE

MISCELLANEOUS

589	⚠ JW801	4242-R0503500	JUMPER LEAD
588	⚠ JW1501	4242-R0506251	JUMPER LEAD
588	⚠ JW1502	4242-R0506251	JUMPER LEAD
571	⚠ W503	4142-00151201	SHIELD WIRE,2C
564		2240-Z031	HOLDER, H503
565		2240-Z032	HOLDER, H801
566		2240-Z062	HOLDER, H501,1502 (X2)

PCB-12 REAR AMP P.C. BOARD

Ser. No.	Ref. No.	Part No.	Description
CAPACITORS			
509	C14	5345-228E0962	CAP,MINI ELE 2200μ/35V
509	C27	5345-228E0962	CAP,MINI ELE 2200μ/35V
508	C60	5354-683593	CAP,MYL .068μ
510	C1402	5345-107B0962	CAP,MINI ELE 100μ/10V
511	C1404	5359-6805851	CAP,PPP 68P
512B	C1406	5353-030933	CAP,MCA 3P
512	C1406	5353-050933	CAP,MCA 5P
513	C1408	5345-105F0962	CAP,MINI ELE 1μ/50V
514	C1410	5345-106F0962	CAP,MINI ELE 10μ/50V

Ser. No.	Ref. No.	Part No.	Description
516	C1414	5345-475F0962	CAP,MINI ELE 4.7μ/50V
517	C1416	5354-104593	CAP,MYL .1μ
517	C1418	5354-104593	CAP,MYL .1μ
516	C1420	5345-475F0962	CAP,MINI ELE 4.7μ/50V
514	C1422	5345-106F0962	CAP,MINI ELE 10μ/50V
514	C1424	5345-106F0962	CAP,MINI ELE 10μ/50V
515	C1426	5345-227E0962	CAP,MINI ELE 220μ/35V
515	C1428	5345-227E0962	CAP,MINI ELE 220μ/35V
518	C1442	5359-3905851	CAP,PPP 39P (IB)

RESISTORS

519	R71	5134-152J25P	RES,CBN 1/4P 1.5K
519	R72	5134-152J25P	RES,CBN 1/4P 1.5K
540	R73	5134-331J25P	RES,CBN 1/4P 330
520	R74	5134-682J25P	RES,CBN 1/4P 6.8K
526	R75	5134-123J25P	RES,CBN 1/4P 12K
522	R1402	5134-273J25P	RES,CBN 1/4P 27K
540	R1404	5134-331J25P	RES,CBN 1/4P 330
543	R1406	5134-151J25P	RES,CBN 1/4P 150
543	R1408	5134-151J25P	RES,CBN 1/4P 150
540	R1410	5134-331J25P	RES,CBN 1/4P 330
540	R1412	5134-331J25P	RES,CBN 1/4P 330
525	R1414	5134-222J25P	RES,CBN 1/4P 2.2K
526	R1416	5134-123J25P	RES,CBN 1/4P 12K
522	R1418	5134-273J25P	RES,CBN 1/4P 27K
542	R1420	5134-272J25P	RES,CBN 1/4P 2.7K
527	R1424	5134-102J25P	RES,CBN 1/4P 1K
541	R1426	5134-101J25P	RES,CBN 1/4P 100
523	R1428	5134-332J25P	RES,CBN 1/4P 3.3K
528	△ R1430	5102-1015116	RES,FUSE 100
528	△ R1432	5102-1015116	RES,FUSE 100
529	R1434	5134-183J25P	RES,CBN 1/4P 18K
529	R1436	5134-183J25P	RES,CBN 1/4P 18K
530	R1438	5134-122J25P	RES,CBN 1/4P 1.2K
524	R1440	5134-271J25P	RES,CBN 1/4P 270
531	△ R1442	5102-6815116	RES,FUSE 680
532	△ R1444	5102-8205116	RES,FUSE 82
533	R1446	5134-100J25P	RES,CBN 1/4P 10
533	R1448	5134-100J25P	RES,CBN 1/4P 10
522	R1450	5134-273J25P	RES,CBN 1/4P 27K
534	R1452/1454	5273-R27672	RES,CEM 3P .27
535	R1456	5171-S040J1R0	RES,MTL 1P 1
536	R1458	5173-S030J100	RES,MTL 2P 10
539	△ R1460	5102-2205116	RES,FUSE 22
539	△ R1462	5102-2205116	RES,FUSE 22
538	△ R1464	5102-4R75116	RES,FUSE 4.7
538	△ R1466	5102-4R75116	RES,FUSE 4.7

TRANSISTORS

490	Q57	5613-2240(GR)	XISTOR,NPN R
489	Q1402	5611-872(E)	XISTOR,PNP R
489	Q1404	5611-872(E)	XISTOR,PNP R
491	Q1406	5611-1115(F)	XISTOR,PNP R
489	Q1408	5611-872(E)	XISTOR,PNP R
491	Q1410	5611-1115(F)	XISTOR,PNP R
488	Q1412	5613-2240(BL)	XISTOR,NPN R
492	Q1414	5612-646A(C)	XISTOR,PNP A
493	Q1416	5614-666A(C)	XISTOR,NPN A
494	Q1418	5613-3423(Y)	XISTOR,NPN R
495	Q1420	5613-3298(Y)	XISTOR,NPN R
496	Q1422	5611-1306(Y)	XISTOR,PNP R
498	Q1424	5613-3180(O)	XISTOR,NPN R
499	Q1426	5611-1263(O)	XISTOR,PNP R

DIODES

500	D1	5632-S5566B	DIODE,RECT
500	D2	5632-S5566B	DIODE,RECT
500	D17	5632-S5566B	DIODE,RECT
500	D18	5632-S5566B	DIODE,RECT
501	D54	5631-1S2473	DIODE,DET

COILS

502	L1402	5991-7125	SPRING COIL
503	L1404	5597-45502	CORE,BEADS
503	L1406	5597-45502	CORE,BEADS

Ser. No.	Ref. No.	Part No.	Description
CONTROLS			
504	VR1402	5101-50101934	RES,SEMI FIX 500,IDLING CURRENT
505	VR1404	5101-20201934	RES,SEMI FIX 2K, DC BALANCE
MISCELLANEOUS			
558	△ CN1405	4443-0201140	CONNECTOR
570	△ LCN1402	4163-01335002	CONNECTOR W/W
580	△ LCN1403	4163-10704002	CONNECTOR W/W
577	△ LCN1406	4162-01201401	LUG W/WIRE
576	△ LCN1408	4163-01331003	CONNECTOR W/W

PCB-13 VIDEO P.C. BOARD

CAPACITORS

407	C901	5361-221KB	CAP,CER 220P
407	C902	5361-221KB	CAP,CER 220P
407	C903	5361-221KB	CAP,CER 220P
409	C904	5345-106F0962	CAP,MINI ELE 10μ/50V
409	C905	5345-106F0962	CAP,MINI ELE 10μ/50V
408	C906	5345-107C0962	CAP,MINI ELE 100μ/16V
408	C907	5345-107C0962	CAP,MINI ELE 100μ/16V
408	C908	5345-107C0962	CAP,MINI ELE 100μ/16V
408	C909	5345-107C0962	CAP,MINI ELE 100μ/16V
405	C910	5345-337C0962	CAP,MINI ELE 330μ/16V
406	C911	5345-477B0962	CAP,MINI ELE 470μ/10V
406	C912	5345-477B0962	CAP,MINI ELE 470μ/10V
406	C913	5345-477B0962	CAP,MINI ELE 470μ/10V

RESISTORS

413	R901	5134-102J25P	RES,CBN 1/4P 1K
413	R902	5134-102J25P	RES,CBN 1/4P 1K
413	R903	5134-102J25P	RES,CBN 1/4P 1K
419	R904	5134-750J25P	RES,CBN 1/4P 75
419	R905	5134-750J25P	RES,CBN 1/4P 75
419	R906	5134-750J25P	RES,CBN 1/4P 75
418	R907	5134-221J25P	RES,CBN 1/4P 220
418	R908	5134-221J25P	RES,CBN 1/4P 220
418	R909	5134-221J25P	RES,CBN 1/4P 220
420	R910	5134-182J25P	RES,CBN 1/4P 1.8K
414	R911	5134-103J25P	RES,CBN 1/4P 10K
414	R912	5134-103J25P	RES,CBN 1/4P 10K
414	R913	5134-103J25P	RES,CBN 1/4P 10K
416	R914	5134-271J25P	RES,CBN 1/4P 270
416	R915	5134-271J25P	RES,CBN 1/4P 270
416	R916	5134-271J25P	RES,CBN 1/4P 270
418	R917	5134-221J25P	RES,CBN 1/4P 220
418	R918	5134-221J25P	RES,CBN 1/4P 220
418	R919	5134-221J25P	RES,CBN 1/4P 220
418	R920	5134-221J25P	RES,CBN 1/4P 220
418	R921	5134-221J25P	RES,CBN 1/4P 220
418	R922	5134-221J25P	RES,CBN 1/4P 220
417	R923	5134-680J25P	RES,CBN 1/4P 68
417	R924	5134-680J25P	RES,CBN 1/4P 68
417	R925	5134-680J25P	RES,CBN 1/4P 68
412	R926	5134-220J25P	RES,CBN 1/4P 22
415	R930	5134-332J25P	RES,CBN 1/4P 3.3K

INTEGRATED CIRCUIT

401	IC901	5654-LC7821	IC,DIGITAL
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TRANSISTORS

403	Q901	5613-2603(F)	XISTOR,NPN R
403	Q902	5613-2603(F)	XISTOR,NPN R
403	Q903	5613-2603(F)	XISTOR,NPN R
402	Q904	5611-1115(F)	XISTOR,PNP R
402	Q905	5611-1115(F)	XISTOR,PNP R
402	Q906	5611-1115(F)	XISTOR,PNP R

MISCELLANEOUS

423	△ J901	4489-04004003	PIN JACK,MLT, VCR1 IN/ VCR1 OUT /MONITOR OUT
423	△ J902	4489-04004003	PIN JACK,MLT, A/V IN/ VCR2 IN/VCR2 OUT
585	△ LCN901	4163-S0205101	CONNECTOR W/W

Ser. No.	Ref. No.	Part No.	Description
PCB-14 PRIMARY P.C. BOARD			
CAPACITOR			
049B	△ C1	5352-S010M103	CAP,MTL .01μ BK
RESISTORS			
045B	△ R1	5135-335J50P	RES,CBN 1/2P 3.3M BK
042B	△ R2	5134-102J25P	RES,CBN 1/4P 1K BK
TRANSISTOR			
046B	Q7	5613-1740(R)	XISTOR,NPN R BK
DIODE			
041B	D11	5631-1S2473	DIODE,DET BK
MISCELLANEOUS			
043B	△ CN1	4443-09501002	CONNECTOR BK
059B	△ F1	5732-01301402	FUSE,4A 125/250V BK
058B	△ HF1	4472-04901	HOLDER,FUSE BK
058B	△ HF2	4472-04901	HOLDER,FUSE BK
044B	△ LCN26	4163-S5303551	CONNECTOR W/W BK
047B	△ RY1	4331-01702	RELAY,DC BK



















PCB-15 AC OUTLET P.C. BOARD			
MISCELLANEOUS			
048B	△ S1	4474-02901	AC SOCKET BK

PCB-16 PRIMARY 1 P.C. BOARD			
MISCELLANEOUS			
366	△ CN1	4443-09501002	CONNECTOR IB I
368	△ F1	5732-01601162	FUSE,T1.6A/1.6AL AC250V IB I
367	△ HF1	4472-04901	HOLDER,FUSE IB I
367	△ HF2	4472-04901	HOLDER,FUSE IB I
369	△ LCN1	4163-S5101120	CONNECTOR W/W IB I
370	△ LCN2	4163-S5201120	CONNECTOR W/W IB I
370	△ LCN3	4163-S5201120	CONNECTOR W/W IB I

PCB-17 TUNER P.C. BOARD			
CAPACITORS			
413	C7	5345-476F0962	CAP,MINI ELE 47μ/50V
413	C8	5345-476F0962	CAP,MINI ELE 47μ/50V
414	C9	5345-106F0962	CAP,MINI ELE 10μ/50V
415	C10	5345-337E0962	CAP,MINI ELE 330μ/35V
416	C11	5345-476D0962	CAP,MINI ELE 47μ/25V
417	C12	5345-107B0962	CAP,MINI ELE 100μ/10V
417	C13	5345-107B0962	CAP,MINI ELE 100μ/10V
418	C15	5345-228E0962	CAP,MINI ELE 2200μ/35V
419	C16	5345-227D0962	CAP,MINI ELE 220μ/25V
420	C17	5345-477C0962	CAP,MINI ELE 470μ/16V
421	C18	5345-227C0962	CAP,MINI ELE 220μ/16V
422	C19	5345-477B0962	CAP,MINI ELE 470μ/10V
423	C20	5345-475F0962	CAP,MINI ELE 4.7μ/50V
423	C21	5345-475F0962	CAP,MINI ELE 4.7μ/50V
417	C22	5345-107B0962	CAP,MINI ELE 100μ/10V
414	C23	5345-106F0962	CAP,MINI ELE 10μ/50V
424	C24	5345-105F0962	CAP,MINI ELE 1μ/50V
423	C25	5345-475F0962	CAP,MINI ELE 4.7μ/50V
424	C99	5345-105F0962	CAP,MINI ELE 1μ/50V
203	C101	5361-223ZF	CAP,CER .022μ
206	C102	5345-227C0962	CAP,MINI ELE 220μ/16V
204	C103	5361-150KSL	CAP,CER 15P
205	C104	5361-220KSL	CAP,CER 22P IB I
220	C201	5361-103ZF	CAP,CER .01μ
219	C202	5361-223ZF	CAP,CER .022μ
220	C203	5361-103ZF	CAP,CER .01μ
219	C206	5361-223ZF	CAP,CER .022μ
219	C207	5361-223ZF	CAP,CER .022μ
219	C208	5361-223ZF	CAP,CER .022μ
044B	C211	5345-226C0962	CAP,MINI ELE 22μ/16V BK
224	C212	5345-226C0962	CAP,MINI ELE 22μ/16V IB I
222	C214	5345-106F0962	CAP,MINI ELE 10μ/50V

Ser. No.	Ref. No.	Part No.	Description
223	C215	5345-105F0962	CAP,MINI ELE 1μ/50V
221	C216	5361-101KB	CAP,CER 100P
224	C218	5345-226C0962	CAP,MINI ELE 22μ/16V
251	C221	5361-221KB	CAP,CER 220P IB I
251	C222	5361-221KB	CAP,CER 220P IB I
247	C241	5361-223ZF	CAP,CER .022μ
247	C242	5361-223ZF	CAP,CER .022μ
248	C244	5359-3915851	CAP,PPP 390P
247	C245	5361-223ZF	CAP,CER .022μ
249	C246	5361-150JCH	CAP,CER 15P
252	C247	5345-106F0962	CAP,MINI ELE 10μ/50V
255	C252	5345-224F0962	CAP,MINI ELE .22μ/50V
247	C253	5361-223ZF	CAP,CER .022μ
250	C254	5361-472KB	CAP,CER 4700P
253	C255	5345-475F0962	CAP,MINI ELE 4.7μ/50V
253	C256	5345-475F0962	CAP,MINI ELE 4.7μ/50V
254	C257	5345-105F0962	CAP,MINI ELE 1μ/50V
255	C258	5345-224F0962	CAP,MINI ELE .22μ/50V
280	C301	5345-226C0962	CAP,MINI ELE 22μ/16V
281	C302	5345-476C0962	CAP,MINI ELE 47μ/16V
277B	C303	5359-3915851	CAP,PPP 390P BK
277	C303	5359-1815851	CAP,PPP 180P IB I
277B	C304	5359-3915851	CAP,PPP 390P BK
277	C304	5359-1815851	CAP,PPP 180P IB I
282	C305	5345-225F0962	CAP,MINI ELE 2.2μ/50V
282	C306	5345-225F0962	CAP,MINI ELE 2.2μ/50V
279	C308	5354-473593	CAP,MYL .047μ
283	C309	5345-474F0962	CAP,MINI ELE .47μ/50V
284	C310	5345-106F0962	CAP,MINI ELE 10μ/50V
285	C311	5345-224F0962	CAP,MINI ELE .22μ/50V
286	C312	5345-225F0962	CAP,MINI ELE 2.2μ/50V
278	C315	5361-101KB	CAP,CER 100P
387	C601	5361-221KB	CAP,CER 220P
387	C602	5361-221KB	CAP,CER 220P
387	C603	5361-221KB	CAP,CER 220P
388	C605	5345-106F0962	CAP,MINI ELE 10μ/50V
388	C606	5345-106F0962	CAP,MINI ELE 10μ/50V
310	C751	5345-227C0962	CAP,MINI ELE 220μ/16V
308	C752	5345-224F0951	CAP,MINI ELE .22μ/50V
309	C754	5345-684F0951	CAP,MINI ELE .68μ/50V
311	C757	5345-337A0962	CAP,MINI ELE 330μ/6.3V
306	C758	5361-300JCH	CAP,CER 30P
306	C759	5361-300JCH	CAP,CER 30P
304	C761	5361-101KB	CAP,CER 100P
304	C762	5361-101KB	CAP,CER 100P
305	C763	5361-223ZF	CAP,CER .022μ
307	C764	5345-334F0962	CAP,MINI ELE .33μ/50V
334	C801	5345-106F0962	CAP,MINI ELE 10μ/50V
334	C802	5345-106F0962	CAP,MINI ELE 10μ/50V
334	C803	5345-106F0962	CAP,MINI ELE 10μ/50V
334	C804	5345-106F0962	CAP,MINI ELE 10μ/50V
345	C805	5354-104593	CAP,MYL .1μ
345	C806	5354-104593	CAP,MYL .1μ
345	C807	5354-104593	CAP,MYL .1μ
345	C808	5354-104593	CAP,MYL .1μ
335	C809	5345-104F0962	CAP,MINI ELE .1μ/50V
335	C810	5345-104F0962	CAP,MINI ELE .1μ/50V
348	C811	5354-473593	CAP,MYL .047μ
348	C812	5354-473593	CAP,MYL .047μ
349	C813	5354-S100J681	CAP,MYL 680P
349	C814	5354-S100J681	CAP,MYL 680P
347	C815	5354-S100J471	CAP,MYL 470P IB I
347	C816	5354-S100J471	CAP,MYL 470P IB I
344	C817	5354-104593	CAP,MYL .1μ IB I
335	C821	5345-104F0962	CAP,MINI ELE .1μ/50V
335	C822	5345-104F0962	CAP,MINI ELE .1μ/50V
350	C823	5354-223J1HM	CAP,MYL .022μ
350	C824	5354-223J1HM	CAP,MYL .022μ
334	C825	5345-106F0962	CAP,MINI ELE 10μ/50V
334	C826	5345-106F0962	CAP,MINI ELE 10μ/50V
351	C827	5354-102J1HM	CAP,MYL 1000P
351	C828	5354-102J1HM	CAP,MYL 1000P
358	C831	5361-221KB	CAP,CER 220P
358	C832	5361-221KB	CAP,CER 220P
358	C833	5361-221KB	CAP,CER 220P
336	C834	5345-226F0962	CAP,MINI ELE 22μ/50V

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
352	C835	5354-472J1HM	CAP,MYL 4700P	426	R43	5175-S020J101	RES,MTL 3P 100
334	C836	5345-106F0962	CAP,MINI ELE 10μ/50V	207	R101	5232-102J16P	RES,CBN 1/6P 1K
334	C837	5345-106F0962	CAP,MINI ELE 10μ/50V	227	R202	5232-391J16P	RES,CBN 1/6P 390
334	C838	5345-106F0962	CAP,MINI ELE 10μ/50V	225	R203	5232-102J16P	RES,CBN 1/6P 1K
334	C839	5345-106F0962	CAP,MINI ELE 10μ/50V	226	R204	5232-154J16P	RES,CBN 1/6P 150K
353	C840	5354-562J1HM	CAP,MYL 5600P	228	R205	5232-220J16P	RES,CBN 1/6P 22
337	C841	5345-477B0962	CAP,MINI ELE 470μ/10V	229	R206	5232-101J16P	RES,CBN 1/6P 100
348	C842	5354-473593	CAP,MYL .047μ	227	R207	5232-391J16P	RES,CBN 1/6P 390
354	C843	5354-S100J471	CAP,MYL 470P	227	R208	5232-391J16P	RES,CBN 1/6P 390
353	C845	5354-562J1HM	CAP,MYL 5600P	225	R209	5232-102J16P	RES,CBN 1/6P 1K
346	C846	5352-S110J684	CAP,MTL .68μ	226	R210	5232-154J16P	RES,CBN 1/6P 150K
338	C847	5345-224F0962	CAP,MINI ELE .22μ/50V	228	R211	5232-220J16P	RES,CBN 1/6P 22
338	C848	5345-224F0962	CAP,MINI ELE .22μ/50V	229	R212	5232-101J16P	RES,CBN 1/6P 100
338	C849	5345-224F0962	CAP,MINI ELE .22μ/50V	227	R213	5232-391J16P	RES,CBN 1/6P 390
339	C850	5345-475F0962	CAP,MINI ELE 4.7μ/50V	230	R214	5232-822J16P	RES,CBN 1/6P 8.2K
339	C851	5345-475F0962	CAP,MINI ELE 4.7μ/50V	231	R215	5232-332J16P	RES,CBN 1/6P 3.3K
338	C852	5345-224F0962	CAP,MINI ELE .22μ/50V	232	R216	5232-472J16P	RES,CBN 1/6P 4.7K
338	C853	5345-224F0962	CAP,MINI ELE .22μ/50V	233B	R217	5232-153J16P	RES,CBN 1/6P 15K BK
355	C861	5354-222J1HM	CAP,MYL 2200P	233	R217	5232-273J16P	RES,CBN 1/6P 27K IB I
340	C862	5345-105F0962	CAP,MINI ELE 1μ/50V	235	R218	5134-220J25P	RES,CBN 1/4P 22
356	C863	5354-332J1HM	CAP,MYL 3300P	234B	R224	5134-822J25P	RES,CBN 1/4P 8.2K BK
357	C864	5354-S100J561	CAP,MYL 560P	234	R224	5134-222J25P	RES,CBN 1/4P 2.2K IB I
345	C865	5354-104593	CAP,MYL .1μ	237	R225	5232-104J16P	RES,CBN 1/6P 100K
345	C866	5354-104593	CAP,MYL .1μ	236	R226	5134-103J25P	RES,CBN 1/4P 10K
345	C867	5354-104593	CAP,MYL .1μ	256	R241	5232-153J16P	RES,CBN 1/6P 15K
341	C868	5345-476D0962	CAP,MINI ELE 47μ/25V	256	R242	5232-153J16P	RES,CBN 1/6P 15K
345	C869	5354-104593	CAP,MYL .1μ	257	R243	5232-470J16P	RES,CBN 1/6P 47
354	C870	5354-S100J471	CAP,MYL 470P	258	R244	5232-104J16P	RES,CBN 1/6P 100K
353	C871	5354-562J1HM	CAP,MYL 5600P	259	R245	5134-180J25P	RES,CBN 1/4P 18
359	C872	5361-270JCH	CAP,CER 27P	260	R252	5232-563J16P	RES,CBN 1/6P 56K
359	C873	5361-270JCH	CAP,CER 27P	261	R253	5232-103J16P	RES,CBN 1/6P 10K
334	C881	5345-106F0962	CAP,MINI ELE 10μ/50V	264	R254	5134-102J25P	RES,CBN 1/4P 1K
334	C882	5345-106F0962	CAP,MINI ELE 10μ/50V	261	R255	5232-103J16P	RES,CBN 1/6P 10K
342	C883	5345-477C0962	CAP,MINI ELE 470μ/16V	262	R256	5232-223J16P	RES,CBN 1/6P 22K
343	C884	5345-107B0962	CAP,MINI ELE 100μ/10V	263	R257	5232-820J16P	RES,CBN 1/6P 82
343	C885	5345-107B0962	CAP,MINI ELE 100μ/10V	265	R259	5232-473J16P	RES,CBN 1/6P 47K
		RESISTORS		266B	R260	5232-183J16P	RES,CBN 1/6P 18K BK
433	R3	5134-822J25P	RES,CBN 1/4P 8.2K	266	R260	5232-223J16P	RES,CBN 1/6P 22K IB I
430	R4	5134-391J25P	RES,CBN 1/4P 390	258	R261	5232-104J16P	RES,CBN 1/6P 100K
431	R5	5134-101J25P	RES,CBN 1/4P 100	258	R262	5232-104J16P	RES,CBN 1/6P 100K
432	R6	5134-2R2J25P	RES,CBN 1/4P 2.2	287B	R301	5232-274J16P	RES,CBN 1/6P 270K
429	R7	5134-152J25P	RES,CBN 1/4P 1.5K	287	R301	5232-334J16P	RES,CBN 1/6P 330K IB I
430	R8	5134-391J25P	RES,CBN 1/4P 390	287B	R302	5232-274J16P	RES,CBN 1/6P 270K BK
431	R9	5134-101J25P	RES,CBN 1/4P 100	287	R302	5232-334J16P	RES,CBN 1/6P 330K IB I
432	R10	5134-2R2J25P	RES,CBN 1/4P 2.2	288B	R303	5232-184J16P	RES,CBN 1/6P 180K BK
448	R11	5232-103J16P	RES,CBN 1/6P 10K	288	R303	5232-274J16P	RES,CBN 1/6P 270K IB I
446	R12	5232-222J16P	RES,CBN 1/6P 2.2K	288B	R304	5232-184J16P	RES,CBN 1/6P 180K BK
435	R13	5134-470J25P	RES,CBN 1/4P 47	288	R304	5232-274J16P	RES,CBN 1/6P 270K IB I
436	R14	5134-473J25P	RES,CBN 1/4P 47K	292	R305	5232-272J16P	RES,CBN 1/6P 2.7K
428	R15	5134-102J25P	RES,CBN 1/4P 1K	292	R306	5232-272J16P	RES,CBN 1/6P 2.7K
445	R16	5134-272J25P	RES,CBN 1/4P 2.7K	289	R307	5232-102J16P	RES,CBN 1/6P 1K
434	R17	5134-103J25P	RES,CBN 1/4P 10K	290	R308	5232-103J16P	RES,CBN 1/6P 10K
431	R18	5134-101J25P	RES,CBN 1/4P 100	291	R309	5134-222J25P	RES,CBN 1/4P 2.2K
438	R19	5134-223J25P	RES,CBN 1/4P 22K	291	R310	5134-222J25P	RES,CBN 1/4P 2.2K
439	R20	5134-392J25P	RES,CBN 1/4P 3.9K	290	R311	5232-103J16P	RES,CBN 1/6P 10K
435	R21	5134-470J25P	RES,CBN 1/4P 47	290	R312	5232-103J16P	RES,CBN 1/6P 10K
440	R22	5134-271J25P	RES,CBN 1/4P 270	293	R315	5232-822J16P	RES,CBN 1/6P 8.2K
428	R23	5134-102J25P	RES,CBN 1/4P 1K	293	R316	5232-822J16P	RES,CBN 1/6P 8.2K
434	R24	5134-103J25P	RES,CBN 1/4P 10K	294B	R317	5232-123J16P	RES,CBN 1/6P 12K BK
434	R25	5134-103J25P	RES,CBN 1/4P 10K	294	R317	5232-682J16P	RES,CBN 1/6P 6.8K IB I
428	R26	5134-102J25P	RES,CBN 1/4P 1K	294B	R318	5232-123J16P	RES,CBN 1/6P 12K BK
441	R27	5134-104J25P	RES,CBN 1/4P 100K	294	R318	5232-682J16P	RES,CBN 1/6P 6.8K IB I
434	R28	5134-103J25P	RES,CBN 1/4P 10K	295	R321	5134-220J25P	RES,CBN 1/4P 22
442	R29	5134-393J25P	RES,CBN 1/4P 39K	389	R601	5134-102J25P	RES,CBN 1/4P 1K
443	R30	5134-683J25P	RES,CBN 1/4P 68K	389	R602	5134-102J25P	RES,CBN 1/4P 1K
437	R31	5134-472J25P	RES,CBN 1/4P 4.7K	389	R603	5134-102J25P	RES,CBN 1/4P 1K
437	R32	5134-472J25P	RES,CBN 1/4P 4.7K	389	R604	5134-102J25P	RES,CBN 1/4P 1K
441	R33	5134-104J25P	RES,CBN 1/4P 100K	389	R605	5134-102J25P	RES,CBN 1/4P 1K
439	R34	5134-392J25P	RES,CBN 1/4P 3.9K	389	R606	5134-102J25P	RES,CBN 1/4P 1K
436	R35	5134-473J25P	RES,CBN 1/4P 47K	389B	R607	5134-102J25P	RES,CBN 1/4P 1K BK
434	R36	5134-103J25P	RES,CBN 1/4P 10K	390	R607	5134-152J25P	RES,CBN 1/4P 1.5K IB I
434	R37	5134-103J25P	RES,CBN 1/4P 10K	389B	R608	5134-102J25P	RES,CBN 1/4P 1K BK
434	R38	5134-103J25P	RES,CBN 1/4P 10K	390	R608	5134-152J25P	RES,CBN 1/4P 1.5K IB I
444	R39	5134-332J25P	RES,CBN 1/4P 3.3K	389B	R609	5134-102J25P	RES,CBN 1/4P 1K BK
427	R42	5175-S020J390	RES,MTL 3P 39	390	R609	5134-152J25P	RES,CBN 1/4P 1.5K IB I
				389B	R610	5134-102J25P	RES,CBN 1/4P 1K BK

Ser. No.	Ref. No.	Part No.	Description	Ser. No.	Ref. No.	Part No.	Description
390	R610	5134-152J25P	RES,CBN 1/4P 1.5K  	326	IC801	5654-LC7821	IC,DIGITAL
389B	R611	5134-102J25P	RES,CBN 1/4P 1K 	328	IC802	5653-NJM2177L	IC,LINEAR
390	R611	5134-152J25P	RES,CBN 1/4P 1.5K  	327	IC803	5654-M50198	IC,DIGITAL
389B	R612	5134-102J25P	RES,CBN 1/4P 1K 	TRANSISTORS			
390	R612	5134-152J25P	RES,CBN 1/4P 1.5K  	394	Q1	5612-941(P)	XISTOR,PNP A
389B	R613	5134-102J25P	RES,CBN 1/4P 1K 	395	Q2	5613-1740(R)	XISTOR,NPN R
390	R613	5134-152J25P	RES,CBN 1/4P 1.5K  	395	Q3	5613-1740(R)	XISTOR,NPN R
389B	R614	5134-102J25P	RES,CBN 1/4P 1K 	394	Q4	5612-941(P)	XISTOR,PNP A
390	R614	5134-152J25P	RES,CBN 1/4P 1.5K  	395	Q5	5613-1740(R)	XISTOR,NPN R
389	R615	5134-102J25P	RES,CBN 1/4P 1K	395	Q6	5613-1740(R)	XISTOR,NPN R
389	R616	5134-102J25P	RES,CBN 1/4P 1K	396	Q8	5611-A143ES	XISTOR,PNP R DTA143ES or RN2201 or UN411L
389	R617	5134-102J25P	RES,CBN 1/4P 1K	397	Q9	5611-933(R)	XISTOR,PNP R
318	R751	5134-103J25P	RES,CBN 1/4P 10K	395	Q10	5613-1740(R)	XISTOR,NPN R
315	R752	5232-103J16P	RES,CBN 1/6P 10K	395	Q11	5613-1740(R)	XISTOR,NPN R
312	R753	5232-473J16P	RES,CBN 1/6P 47K	395	Q12	5613-1740(R)	XISTOR,NPN R
317	R754	5232-222J16P	RES,CBN 1/6P 2.2K	395	Q13	5613-1740(R)	XISTOR,NPN R
313	R758	5134-102J25P	RES,CBN 1/4P 1K	397	Q13	5611-933(R)	XISTOR,PNP R
314	R761	5232-102J16P	RES,CBN 1/6P 1K	398	Q14	5611-A114ES	XISTOR,PNP R DTA114ES or RN2202 or UN4111
314	R762	5232-102J16P	RES,CBN 1/6P 1K	398	Q15	5611-A114ES	XISTOR,PNP R DTA114ES or RN2202 or UN4111
314	R763	5232-102J16P	RES,CBN 1/6P 1K	399	Q16	5613-C114ES	XISTOR,NPN R DTC114ES or RN1202 or UN4211
314	R764	5232-102J16P	RES,CBN 1/6P 1K	400	Q17	5612-647(C)	XISTOR,PNP A
314	R765	5232-102J16P	RES,CBN 1/6P 1K	212	Q201	5613-1923(Y)	XISTOR,NPN R
316	R766	5232-472J16P	RES,CBN 1/6P 4.7K	212	Q202	5613-1923(Y)	XISTOR,NPN R
319	R767	5232-472J16P	RES,CBN 1/6P 4.7K	210	Q211	5614-1450(T)	XISTOR,NPN A
319	R768	5232-472J16P	RES,CBN 1/6P 4.7K	209	Q212	5611-A144ES	XISTOR,PNP R DTA144ES or RN2204 or UN4113
320	R770	5134-220J25P	RES,CBN 1/4P 22	271	Q301	5614-1450(T)	XISTOR,NPN A
361	R801	5232-104J16P	RES,CBN 1/6P 100K	271	Q302	5614-1450(T)	XISTOR,NPN A
361	R802	5232-104J16P	RES,CBN 1/6P 100K	299	Q751	5613-2240(BL)	XISTOR,NPN R
362	R803	5134-223J25P	RES,CBN 1/4P 22K	298	Q752	5613-1740(R)	XISTOR,NPN R
362	R804	5134-223J25P	RES,CBN 1/4P 22K	302	Q753	5611-A143ES	XISTOR,PNP R DTA143ES or RN2201 or UN411L
361	R805	5232-104J16P	RES,CBN 1/6P 100K	302	Q754	5611-A143ES	XISTOR,PNP R DTA143ES or RN2201 or UN411L
361	R806	5232-104J16P	RES,CBN 1/6P 100K	302	Q755	5611-A143ES	XISTOR,PNP R DTA143ES or RN2201 or UN411L
363	R807	5232-752J16P	RES,CBN 1/6P 7.5K	301	Q756	5611-A124ES	XISTOR,PNP R DTA124ES or RN2203 or UN4112
363	R808	5232-752J16P	RES,CBN 1/6P 7.5K	300	Q757	5613-C124ES	XISTOR,NPN R DTC124ES or RN1203 or UN4212
364	R809	5232-473J16P	RES,CBN 1/6P 47K	330	Q801	5611-A124ES	XISTOR,PNP R DTA124ES or RN2203 or UN4112
364	R810	5232-473J16P	RES,CBN 1/6P 47K	DIODES			
365	R811	5232-153J16P	RES,CBN 1/6P 15K	403	 D3	5632-S5566B	DIODE,RECT
365	R812	5232-153J16P	RES,CBN 1/6P 15K	403	 D4	5632-S5566B	DIODE,RECT
366	R813	5232-331J16P	RES,CBN 1/6P 330	403	 D5	5632-S5566B	DIODE,RECT
376	R814	5134-331J25P	RES,CBN 1/4P 330	403	 D6	5632-S5566B	DIODE,RECT
366	R815	5232-331J16P	RES,CBN 1/6P 330	401	D7	5631-1S2473	DIODE,DET
366	R816	5232-331J16P	RES,CBN 1/6P 330	404	D8	5635-HZ5C1	DIODE,ZENER
367	R821	5134-102J25P	RES,CBN 1/4P 1K	405	D9	5635-HZ24-1L	DIODE,ZENER
367	R822	5134-102J25P	RES,CBN 1/4P 1K	406	D10	5635-HZ6C1	DIODE,ZENER
367	R831	5134-102J25P	RES,CBN 1/4P 1K	407	D12	5635-HZ12C1	DIODE,ZENER
367	R832	5134-102J25P	RES,CBN 1/4P 1K	408	D13	5635-HZ7A1	DIODE,ZENER
367	R833	5134-102J25P	RES,CBN 1/4P 1K	402	D14	5631-1SS133	DIODE,DET
368	R834	5232-103J16P	RES,CBN 1/6P 10K	402	D15	5631-1SS133	DIODE,DET
361	R835	5232-104J16P	RES,CBN 1/6P 100K	238	D241	5633-321SP(B)	DIODE,CAP
361	R836	5232-104J16P	RES,CBN 1/6P 100K	238	D242	5633-321SP(B)	DIODE,CAP
369	R837	5232-106J16P	RES,CBN 1/6P 10M	239	D251	5631-1S2473	DIODE,DET
377	R838	5134-822J25P	RES,CBN 1/4P 8.2K	240	D252	5636-1SS133	DIODE,SWITCH
361	R840	5232-104J16P	RES,CBN 1/6P 100K	240	D253	5636-1SS133	DIODE,SWITCH
378	R841	5232-752J16P	RES,CBN 1/6P 7.5K	240	D254	5636-1SS133	DIODE,SWITCH
365	R843	5232-153J16P	RES,CBN 1/6P 15K	273	D301	5636-1SS133	DIODE,SWITCH
365	R844	5232-153J16P	RES,CBN 1/6P 15K	272	D302	5631-1S2473	DIODE,DET
371	R845	5232-334J16P	RES,CBN 1/6P 330K	COILS			
368	R846	5232-103J16P	RES,CBN 1/6P 10K	217	L201	5995-2R2J107	COIL W/CORE
368	R847	5232-103J16P	RES,CBN 1/6P 10K	244	L241	5922-10503	OSC COIL,7
365	R861	5232-153J16P	RES,CBN 1/6P 15K	TRANSFORMERS			
365	R862	5232-153J16P	RES,CBN 1/6P 15K	215	T201	5572-11101	DISCRI 7
372	R863	5232-183J16P	RES,CBN 1/6P 18K	243	T241	5933-S0901	COIL CASE,10
365	R864	5232-153J16P	RES,CBN 1/6P 15K	INTEGRATED CIRCUITS			
373	R865	5232-562J16P	RES,CBN 1/6P 5.6K	393	IC1	5653-LB1639	IC,LINEAR
372	R866	5232-183J16P	RES,CBN 1/6P 18K	211	IC201	5653-LA1266	IC,LINEAR
374	R867	5232-105J16P	RES,CBN 1/6P 1M	270	IC301	5653-LA3410	IC,LINEAR
375	R881	5134-220J25P	RES,CBN 1/4P 22	386	IC601	5654-LC7821	IC,DIGITAL
375	R882	5134-220J25P	RES,CBN 1/4P 22	297	IC751	5654-LM7000	IC,DIGITAL
375	R883	5134-220J25P	RES,CBN 1/4P 22				

Ser. No.	Ref. No.	Part No.	Description
245	T251	5552-10104	IFT,AM 7
CONTROLS			
218	VR201	5101-50301934	RES,SEMI FIX 50K
274	VR301	5101-10401934	RES,SEMI FIX 100K

MISCELLANEOUS			
042B	CF201	5671-0101A113	FILTER,CER S (BK)
214	CF201	5671-7141A	FILTER,CER S (IB) (I)
042B	CF202	5671-0101A113	FILTER,CER S (BK)
213	CF202	5671-7142A	FILTER,CER S (IB) (I)
043B	CF203	5671-012A	FILTER,CER S (BK)
213	CF203	5671-7142A	FILTER,CER S (IB) (I)
242	CF251	5671-7137C	FILTER,CER S
241	CF252	5671-0082A451	FILTER,CER S
467	CN4	4443-0201140	CONNECTOR
464	CN6	4443-050185	CONNECTOR
467	CN25	4443-0201140	CONNECTOR
041B	CN26	4443-0301140	CONNECTOR (BK)
471	CN801	4443-030185	CONNECTOR
473	CN802	4443-03201003	CONNECTOR
469	CN901	4443-0501140	CONNECTOR
472	CN701B	4443-05501025	CONNECTOR
275	CX301	5693-CSB456F1	DSC,CER
201B	FE101	6114-00801	FM TUNER (BK)
201	FE101	6114-00901	FM TUNER (IB) (I)
457	J1	4451-52701	JACK,1P,REMOTE IN
457	J2	4451-52701	JACK,1P,REMOTE OUT
459	(A) J601	4489-04302006	PIN JACK,MLT,CD/AUX/VIDEO
458	(A) J602	4489-04301008	PIN JACK,MLT,TAPE/VCR1/2 IN/OUT
476	(A) LCN10	4163-0130024	CONNECTOR W/W
475	(A) LCN601	4163-S5308101	CONNECTOR W/W
477	(A) LCN1410	4163-0135026	CONNECTOR W/W
202	LPF101	5214-14701	LC COMPOSITE (IB) (I)
216	LPF201	5214-12801	LC COMPOSITE (IB) (I)
276	LPF301	5214-12803	LC COMPOSITE
276	LPF302	5214-12803	LC COMPOSITE
410	PH1	5624-PC817	PHOTO COUPLR
322B	(A) TM101	4214-206	TERMINAL (BK)
322	(A) TM101	4214-253	TERMINAL (IB) (I)
451	TM702	4214-11023	TERMINAL
323	TP201	4214-245	TERMINAL
323	TP202	4214-245	TERMINAL
246	TR241	5371-93	TRIMMER,1P
479	(A) W602	4142-00151201	SHIELD WIRE,2C
303	X751	5691-00720027	XTAL,OSC
332	X801	5693-CSA327MG	DSC,CER
462		2240-Z031	HOLDER, H602A,B (X2)

PCB-18 SECONDARY 1 P.C. BOARD

CAPACITORS			
425	C2	5352-S181K104	CAP,MTL .1μ
425	C3	5352-S181K104	CAP,MTL .1μ
425	C4	5352-S181K104	CAP,MTL .1μ
425	C5	5352-S181K104	CAP,MTL .1μ
425	C6	5352-S181K104	CAP,MTL .1μ

MISCELLANEOUS			
468	CN12	4443-09601003	CONNECTOR
486	CN1408	4443-06101003	CONNECTOR
453B	(A) F2	5732-01501202	FUSE,2A 125/250V (BK)
453	(A) F2	5732-01601202	FUSE,T2A/T2AL 250V (IB) (I)
453B	(A) F3	5732-01501202	FUSE,2A 125/250V (BK)
453	(A) F3	5732-01601202	FUSE,T2A/T2AL 250V (IB) (I)
454	(A) HF3	4472-04901	HOLDER,FUSE, F2
454	(A) HF4	4472-04901	HOLDER,FUSE, F2
454	(A) HF5	4472-04901	HOLDER,FUSE, F3
454	(A) HF6	4472-04901	HOLDER,FUSE, F3
478	(A) JL6	4242-R0505301	JUMPER LEAD
461		2240-Z052	HOLDER, H6

PCB-19 VOLUME INDICATOR P.C. BOARD

CAPACITOR			
412	C26	5345-106F0962	CAP,MINI ELE 10μ/50V

Ser. No.	Ref. No.	Part No.	Description
DIODE			
409	D16	5637-S2410E1	LED,VOLUME INDICATOR
MISCELLANEOUS			
474	(A) LCN16	4163-01525002	CONNECTOR W/W

CHASSIS MISCELLANEOUS

328	JW701	4242-S0325301	JUMPER LEAD
327A	(A) P1	4161-09401202	CORD W/PLUG (BK)
327	(A) P1	4161-10201202	CORD W/PLUG (IB) (I)
347	PCB20	4551-10029130	P.C. BOARD, PRIMARY 2 (IB) (I)
346	PCB21	4551-10029120	P.C. BOARD, PRIMARY 3 (IB) (I)
345	PCB22	4551-10029110	P.C. BOARD, PRIMARY 4 (IB) (I)
484	PCB23	4551-10025040	P.C. BOARD, SECONDARY 2
321A	(A) T1	5584-T3801	XFORMER,POWER (BK)
321	(A) T1	5584-T3802	XFORMER,POWER (IB) (I)

PACKING PARTS LIST

021	1113-02501	OWNER CARD,REPLY CARD (BK)
022	1116-03802	GUARANTY CARD,WARRANTY CARD (BK)
023	1119-05301	ATTACH SHEET,IMPORTANT SAFEGUARDS (BK)
024	1119-04502	ATTACH SHEET,SERVICE GUIDE (BK)
026	1756-23601	LABEL, (CH) LABEL (I)
107	1221-34007	CARTON BOX
108	1222-7409	CUSHION, L
109	1222-7410	CUSHION, R
110	1756-03108	LABEL (X2) (IB) (I)
111	1223-R0420055	SOFT SHEET,PANEL
112	1241-R0123351	POLYETHY BAG,IB
113	1241-R0160601	POLYETHY BAG,SET
115	1111-1340M152	OWNER GUIDE (BK)
115	1111-1330M152	OWNER GUIDE (IB) (I)
322	6142-07804	CONT BLOCK,REMOTE CONTROL
323	1397-017	T FEEDER ANT (BK)
323	4163-F03186	FM ANT (IB) (I)
324	5911-278	AM LOOP ANT
325	1135-00301	ACCESSORY BAT
326	4161-08201102	CORD W/PLUG (X2),REMOTE CONTROL

ABBREVIATIONS IN PARTS LIST

CAPACITORS

CAP, MINI ELE	: Electrolytic
CAP, CER	: Ceramic
CAP, PPP	: Polypropylene
CAP, MYL	: Mylar
CAP, MCA	: Mica
470μ	: 470μF
6800P	: 6800pF
.047μ	: 0.047μF

RESISTORS

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

TRANSISTORS

XISTOR	: Transistor
FET	: Field Effect Transistor

CONTROLS

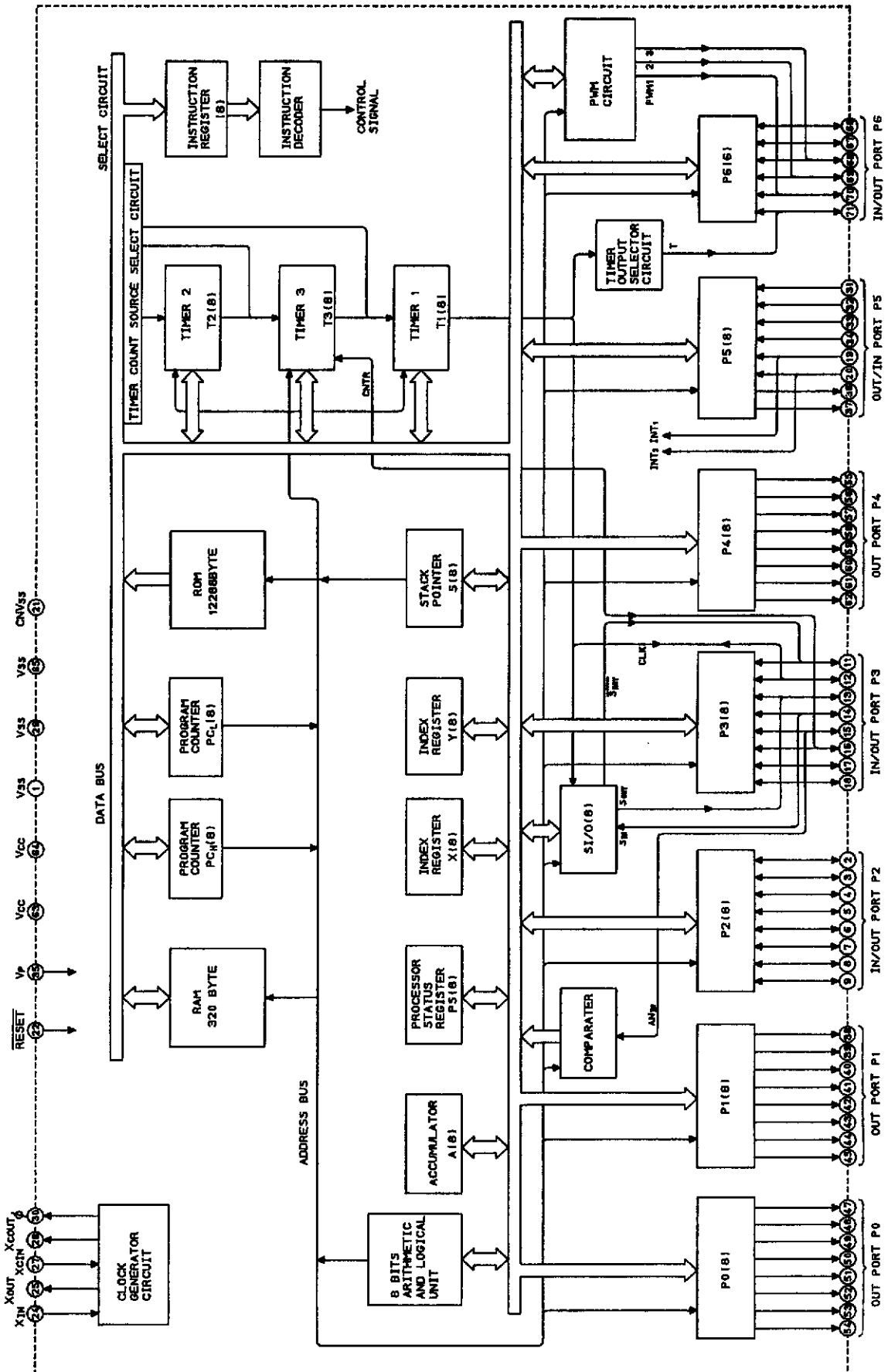
RES, V CBN	: Variable Carbon Resistor
RES, SEMI FIX	: Semi - fixed Resistors

NOTE:

(A) SAFETY RELATED COMPONENT. USE ONLY EXACT REPLACEMENT PART AS SPECIFIED.

IC BLOCK DIAGRAM

IC701:M37421M6-351FP
Micro Computer

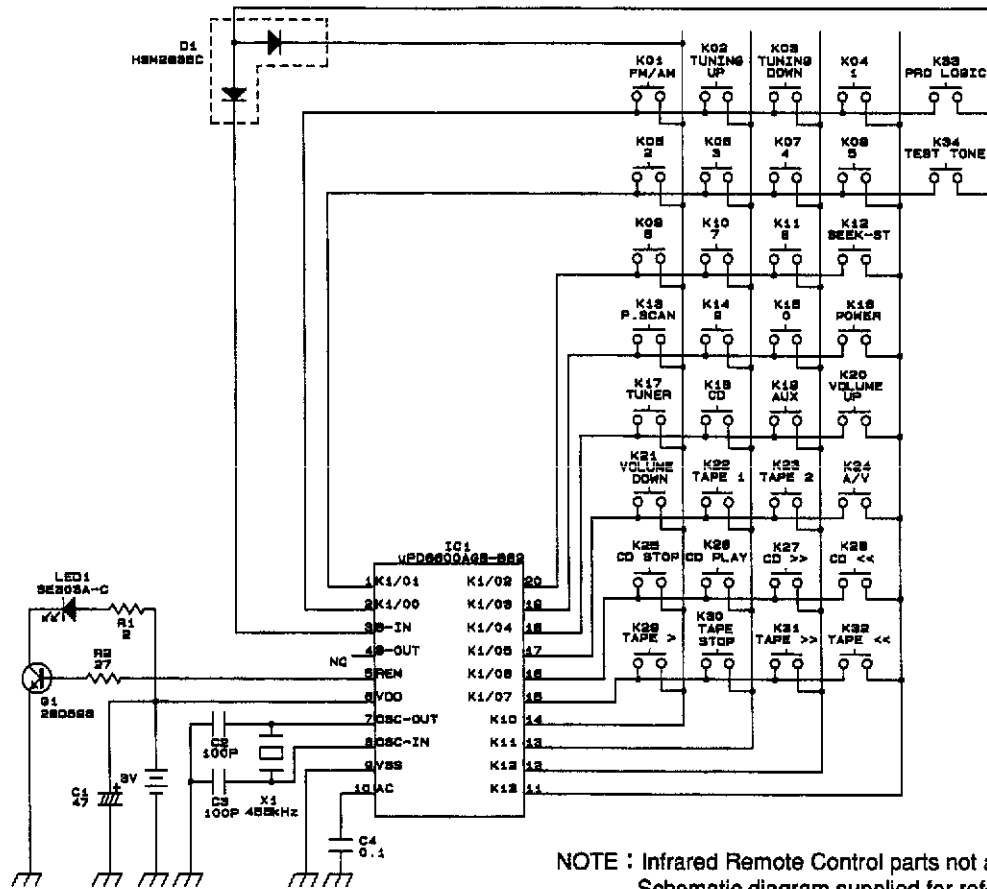


IC701 : IC TERMINAL FUNCTIONS

Pin No.	Pin Name	I/O	Function
1	Supply voltage		Power supply inputs 4.5–5.5V to Vcc, and 0V to Vss.
2	I/O port P27	I/O	Port P27 is an 8-bit I/O port.
3	I/O port P26	I/O	Port P26 is an 8-bit I/O port.
4	I/O port P25	I/O	Port P25 is an 8-bit I/O port.
5	I/O port P24	I/O	Port P24 is an 8-bit I/O port.
6	I/O port P23	I/O	Port P23 is an 8-bit I/O port.
7	I/O port P22	I/O	Port P22 is an 8-bit I/O port.
8	I/O port P21	I/O	Port P21 is an 8-bit I/O port.
9	I/O port P20	I/O	Port P20 is an 8-bit I/O port.
10	NC		
11	I/O port P37	I/O	Port P37 is an 8-bit output port and has basically the same functions as port P2.
12	I/O port P36	I/O	Port P36 is an 8-bit output port and has basically the same functions as port P2.
13	I/O port P35	I/O	Port P35 is an 8-bit output port and has basically the same functions as port P2.
14	I/O port P34	I/O	Port P34 is an 8-bit output port and has basically the same functions as port P2.
15	I/O port P33	I/O	Port P33 is an 8-bit output port and has basically the same functions as port P2.
16	I/O port P32	I/O	Port P32 is an 8-bit output port and has basically the same functions as port P2.
17	I/O port P31	I/O	Port P31 is an 8-bit output port and has basically the same functions as port P2.
18	I/O port P30	I/O	Port P30 is an 8-bit output port and has basically the same functions as port P2.
19	Input port P53	I	Port P53 is a 2-bit input port.
20	Input port P52	I	Port P52 is a 2-bit input port.
21	CNVss		This is usually connected to Vss.
22	Reset input	I	To enter the reset state, the reset input pin must be kept at a "L" for more than 2 μ s (under normal Vcc conditions).
23	NC		
24	Clock input	I	This chip has an internal clock generating circuit. To control generating frequency, a ceramic or crystal is connected between the Xin and Xout pins.
25	Clock output	O	This is output pin from internal clock generating circuit. The generating frequency can be controlled by connecting a ceramic or crystal between this pin and Xin pin.
26	NC		
27	Clock I/O for timer	I	These are I/O pins of the clock oscillating circuit for timer. To control generating frequency, an external ceramic or quartz crystal oscillator is connected between the Xcin pin and Xcout pin.
28	Clock I/O for timer	I	These are I/O pins of the clock oscillating circuit for timer. To control generating frequency, an external ceramic or quartz crystal oscillator is connected between the Xcin pin and Xcout pin.
29	Supply voltage		Power supply inputs 4.5–5.5V to Vcc, and 0V to Vss.
30	Timing output	O	This is the timing output pin.
31	Input port P57	I	Port P57 is a 7-bit input port.
32	Input port P56	I	Port P56 is a 7-bit input port.
33	Input port P55	I	Port P55 is a 7-bit input port.
34	Input port P54	I	Port P54 is a 7-bit input port.
35	Pull-down voltage	I	This is the input voltage pin for the pull-down transistor of ports P0, P1, P4, P5 and P51.
36	Output port P51	O	Port P51 is a 2-bit output port.
37	Output port P50	O	Port P50 is a 2-bit output port.
38	Output port P17	O	Port P17 is an 8-bit output port.
39	Output port P16	O	Port P16 is an 8-bit output port.
40	Output port P15	O	Port P15 is an 8-bit output port.
41	Output port P14	O	Port P14 is an 8-bit output port.
42	Output port P13	O	Port P13 is an 8-bit output port.
43	Output port P12	O	Port P12 is an 8-bit output port.
44	Output port P11	O	Port P11 is an 8-bit output port.
45	Output port P10	O	Port P10 is an 8-bit output port.
46	NC		

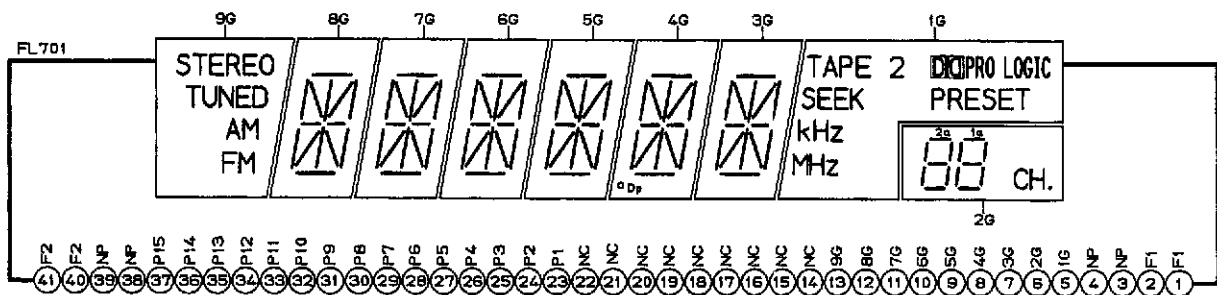
Pin No.	Pin Name	I/O	Function
47	Output port P07	O	Port P07 is an 8-bit output port. At reset, this port is set to "L" level.
48	Output port P06	O	Port P06 is an 8-bit output port. At reset, this port is set to "L" level.
49	Output port P05	O	Port P05 is an 8-bit output port. At reset, this port is set to "L" level.
50	Output port P04	O	Port P04 is an 8-bit output port. At reset, this port is set to "L" level.
51	Output port P03	O	Port P03 is an 8-bit output port. At reset, this port is set to "L" level.
52	Output port P02	O	Port P02 is an 8-bit output port. At reset, this port is set to "L" level.
53	Output port P01	O	Port P01 is an 8-bit output port. At reset, this port is set to "L" level.
54	Output port P00	O	Port P00 is an 8-bit output port. At reset, this port is set to "L" level.
55	Output port P47	O	Port P47 is an 8-bit output port and has basically the same functions as port P0.
56	Output port P46	O	Port P46 is an 8-bit output port and has basically the same functions as port P0.
57	Output port P45	O	Port P45 is an 8-bit output port and has basically the same functions as port P0.
58	Output port P44	O	Port P44 is an 8-bit output port and has basically the same functions as port P0.
59	Output port P43	O	Port P43 is an 8-bit output port and has basically the same functions as port P0.
60	Output port P42	O	Port P42 is an 8-bit output port and has basically the same functions as port P0.
61	Output port P41	O	Port P41 is an 8-bit output port and has basically the same functions as port P0.
62	Output port P40	O	Port P40 is an 8-bit output port and has basically the same functions as port P0.
63	Supply voltage		Power supply inputs 4.5–5.5V to Vcc, and 0V to Vss.
64	Supply voltage		Power supply inputs 4.5–5.5V to Vcc, and 0V to Vss.
65	Supply voltage		Power supply inputs 4.5–5.5V to Vcc, and 0V to Vss.
66	I/O port P65	I/O	Port P65 is an 6-bit I/O port.
67	I/O port P64	I/O	Port P64 is an 6-bit I/O port.
68	I/O port P63	I/O	Port P63 is an 6-bit I/O port.
69	I/O port P62	I/O	Port P62 is an 6-bit I/O port.
70	I/O port P61	I/O	Port P61 is an 6-bit I/O port.
71	I/O port P60	I/O	Port P60 is an 6-bit I/O port.
72	NC		

SCHEMATIC DIAGRAM (1) INFRARED REMOTE CONTROL



NOTE : Infrared Remote Control parts not available.
Schematic diagram supplied for reference only.

FL701 : Display Pin Connection

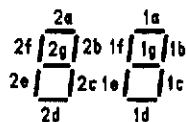


ANODE CONNECTION

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	STEREO	a	a	a	a	a	a	2a	TAPE2
P2	TUNED	h	h	h	h	h	h	1a	SEEK
P3	AM	b	b	b	b	b	b	2b	kHz
P4	FM	j	j	j	j	j	j	1b	MHz
P5	-	k	k	k	k	k	k	1c	PRO LOGIC
P6	-	f	f	f	f	f	f	2f	PRESET
P7	-	g	g	g	g	g	g	2g	-
P8	-	m	m	m	m	m	m	1d	-
P9	-	p	p	p	p	p	p	1f	-
P10	-	r	r	r	r	r	r	1g	-
P11	-	n	n	n	n	n	n	1e	-
P12	-	e	e	e	e	e	e	2e	-
P13	-	c	c	c	c	c	c	2c	-
P14	-	d	d	d	d	d	d	2d	-
P15	-	-	-	-	-	-	Dp	-	CH.



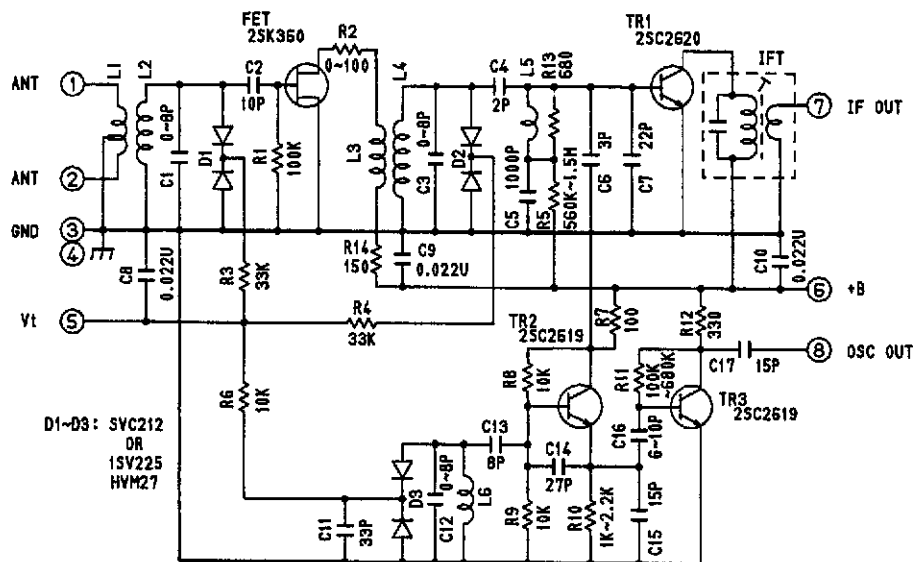
[8G~3G]



[2G]

SCHEMATIC DIAGRAM (2)
FM TUNER PACK SECTION

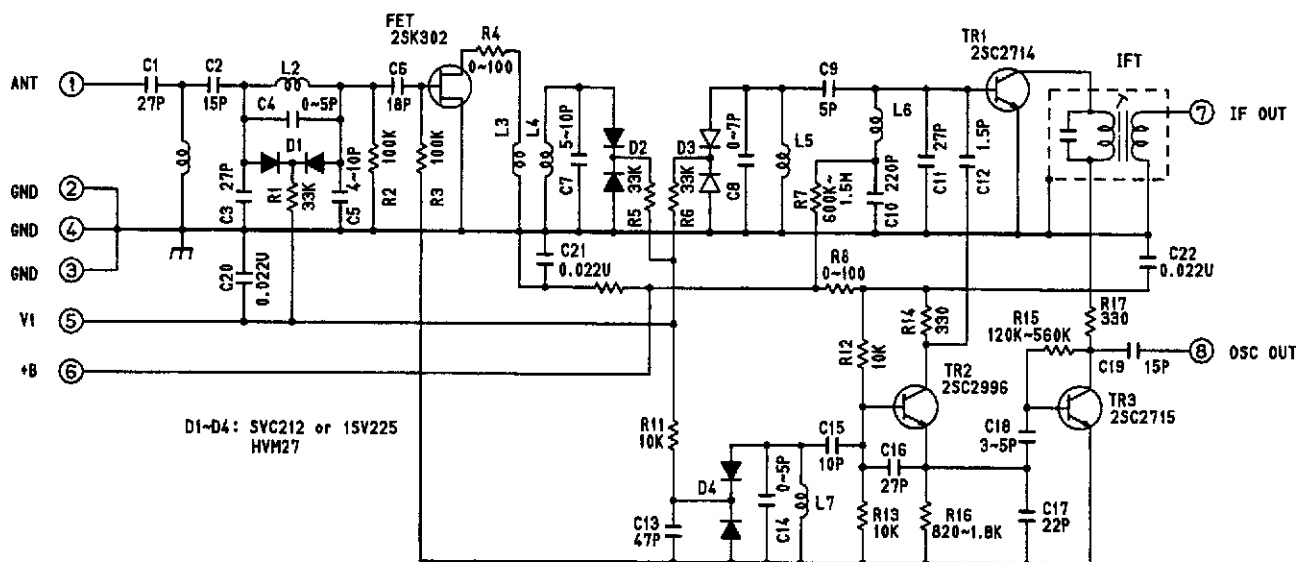
• For North America area model



NOTES:

1. TERMINAL NUMBER REFER TO OVERALL APPEARANCE.
2. RECEIVING FREQUENCY 87.5-108 MHz.
3. INPUT IMPEDANCE ① - GND 75 OHM. ①-② 300 OHM.
4. OUTPUT IMPEDANCE 300 OHM.
5. SUPPLY VOLTAGE +B 12V.
6. TUNING VOLTAGE Vt 1.3min-9.0max V.

• For International model



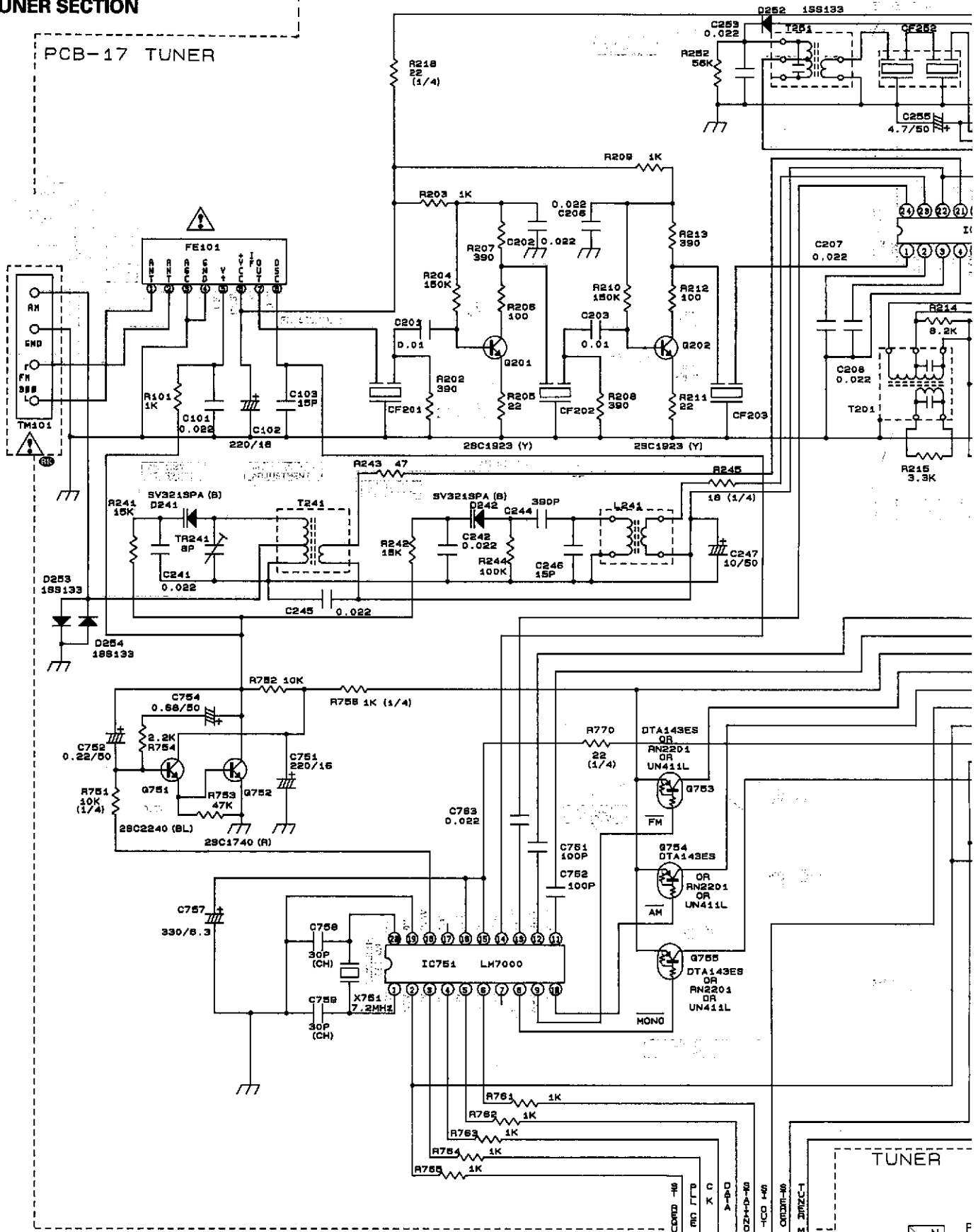
NOTES

1. TERMINAL NUMBER REFER TO OVERALL APPEARANCE.
2. RECEIVING FREQUENCY 87.5-108 MHz.
3. INPUT IMPEDANCE 75 OHM.
4. OUTPUT IMPEDANCE 300 OHM.
5. SUPPLY VOLTAGE +B 12V.
6. TUNING VOLTAGE Vt 1.2min-9.0max V.

NOTE : Front End parts not available.
Schematic diagram supplied for reference only.

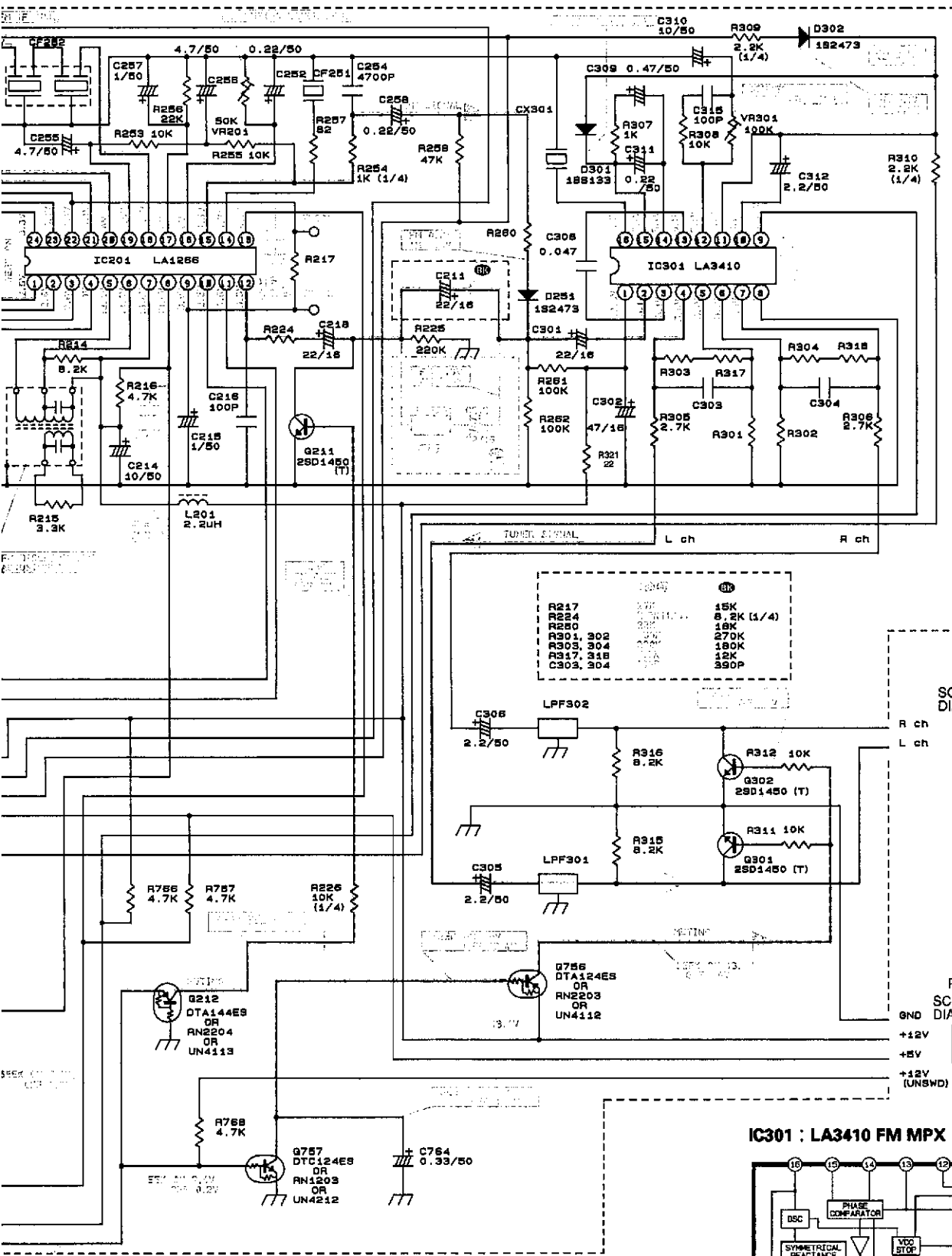
**SCHEMATIC DIAGRAM (3)
TUNER SECTION**

PCB-17 TUNER



NOTE:
 1. ALL RESISTANCES VALUES ARE IN (ohm),
 K=1000 (ohm), M=1000K (ohm)
 2. THE WATTAGE OF RESISTANCES IS 1/8W UNLESS OTHERWISE NOTED.
 3. ALL CAPACITANCES VALUES ARE IN uF UNLESS OTHERWISE NOTED.
 P=µUF
 4. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS.
 5. THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.

N SC DIA
 P SCI DIA



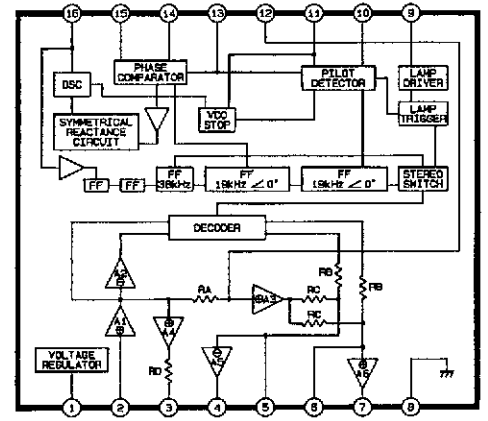
Page 32
SCHEMATIC
DIAGRAM(7)

Page 30
SCHEMATIC
DIAGRAM(5)

Page 32
SCHEMATIC
DIAGRAM(7)

GROUND
+12V
+5V
+12V (UNSWD)

IC301 : LA3410 FM MPX



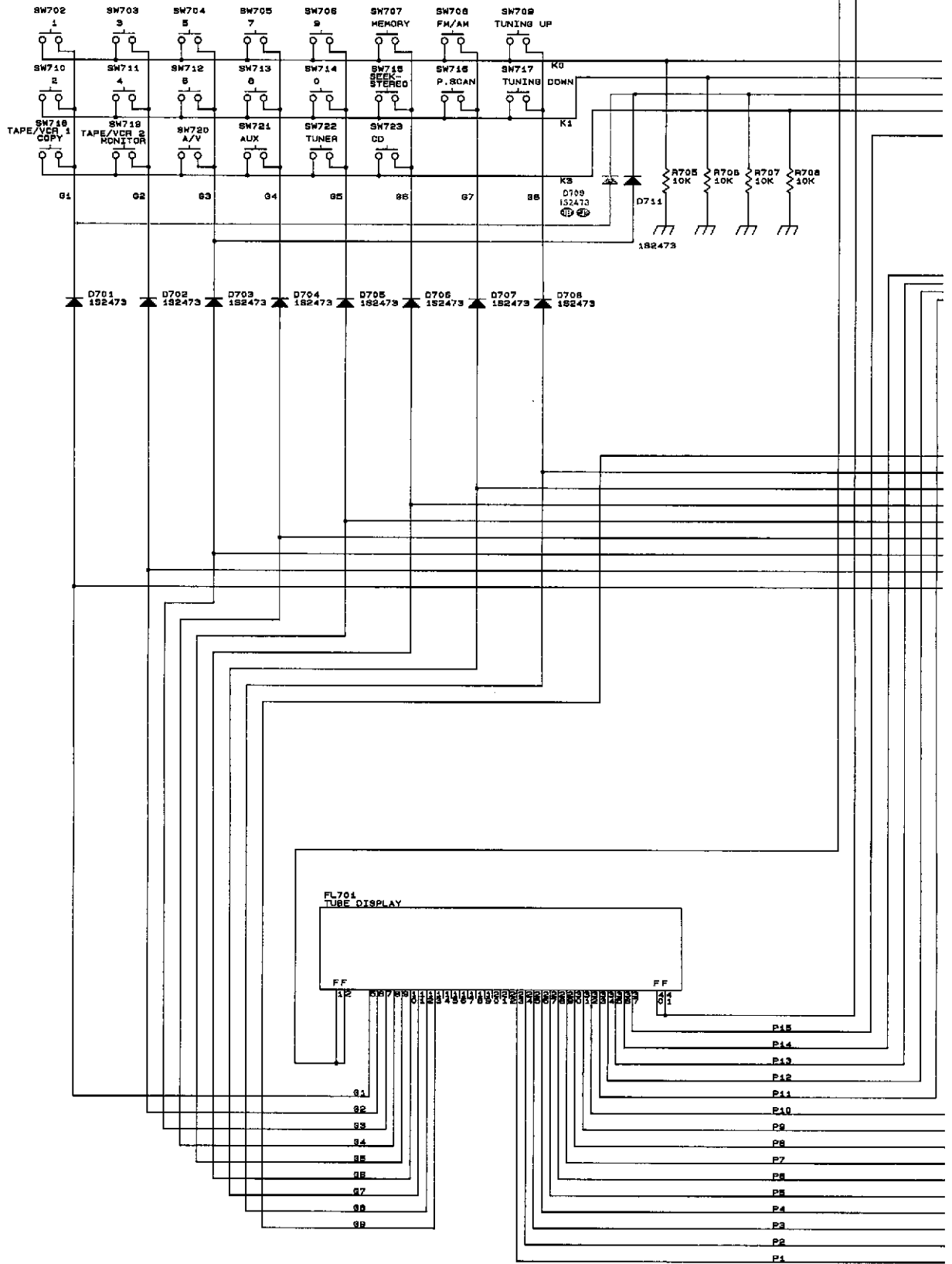
TUNER

Page 32
SCHEMATIC
DIAGRAM(7)

Page 30
SCHEMATIC
DIAGRAM(5)

SCHEMATIC DIAGRAM (4) FUNCTION SECTION

PCB-2 FRONT



NOTE:

1. ALL RESISTANCES VALUES ARE IN (ohm).
2. THE VOLTAGE OF RESISTANCES IS 1/4W UNLESS OTHERWISE SPECIFIED.
3. ALL CAPACITANCES VALUES ARE IN UF UNLESS OTHERWISE SPECIFIED.
4. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH IEC 60950-1.
5. THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL.



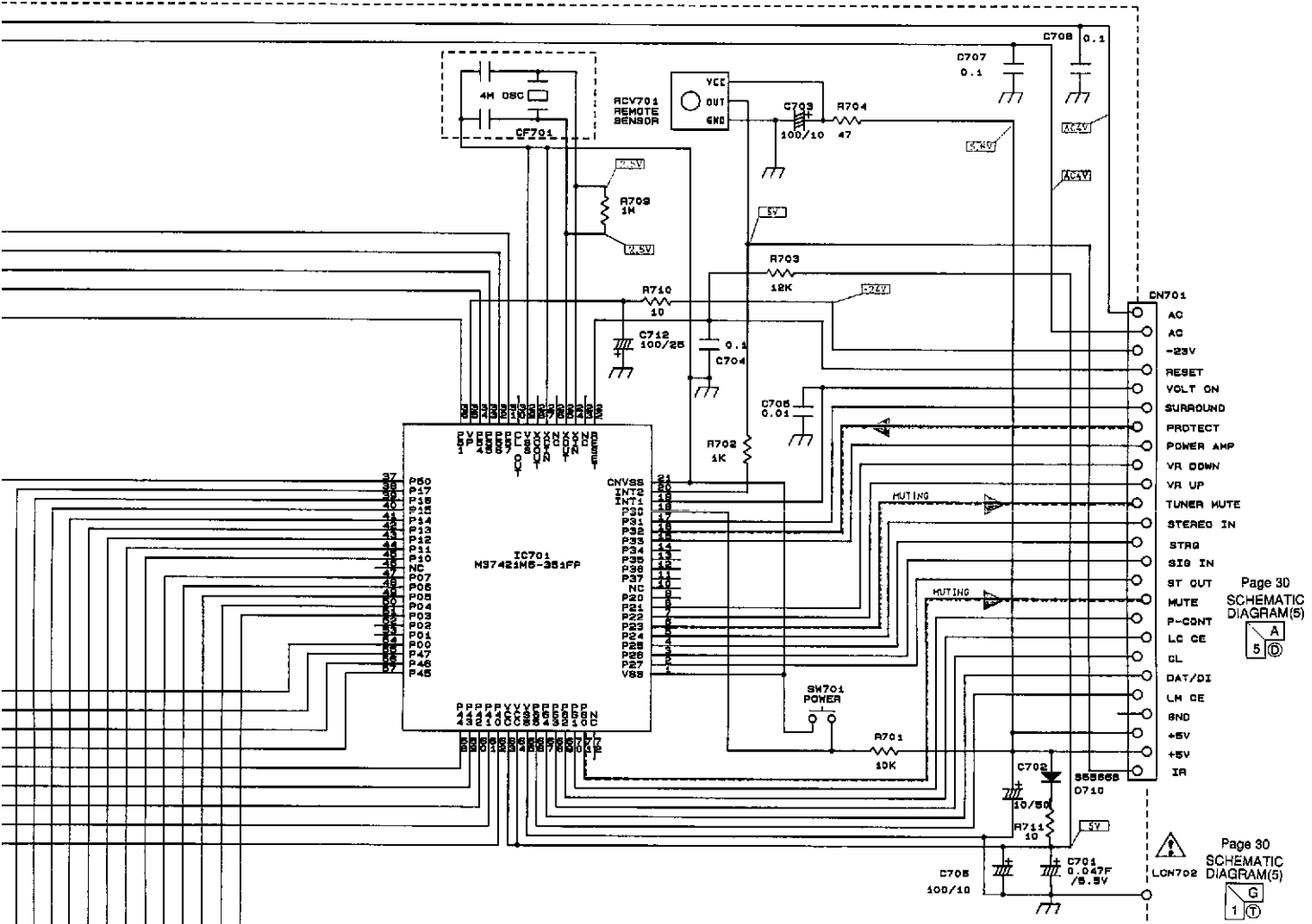
F

G

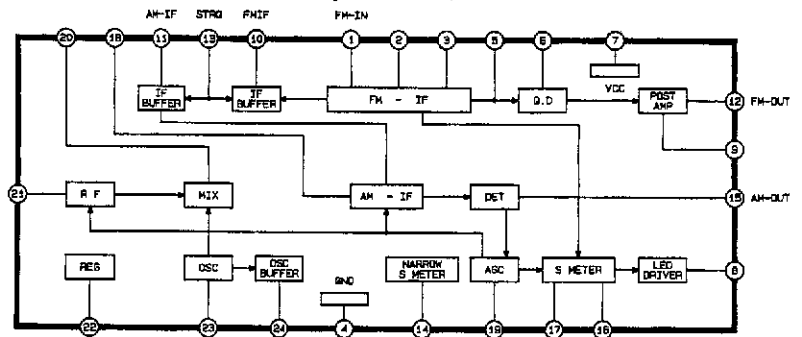
H

I

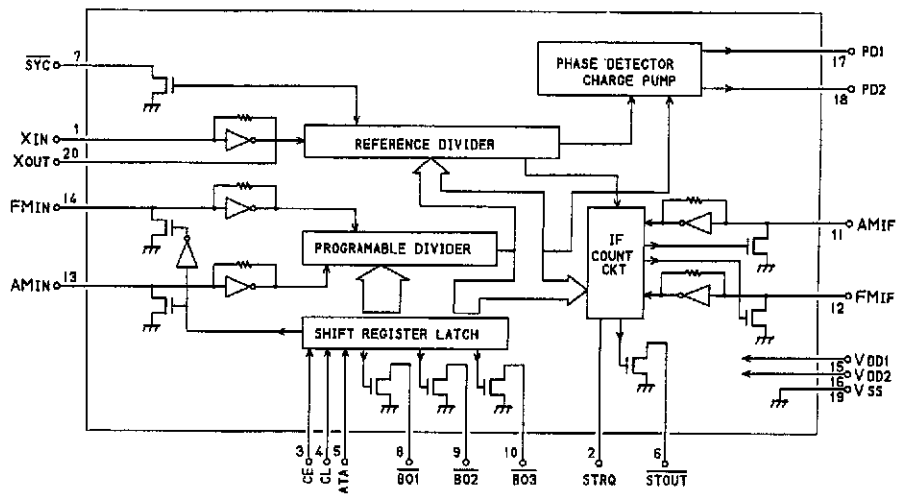
J



IC201 : LA1266 FM/AM IF Amp. and Det., AM Mixer and OSC.



IC751 : LM7000 PLL Synthesizer



OTHERWISE NOTED.
 OTHERWISE NOTED.
 ICE WITH PRESENT SAFETY REGULATIONS.
 ORIGINAL PARTS.

**SCHEMATIC DIAGRAM (5)
POWER SUPPLY SECTION**

PCB-17 TUNER

Page 28
SCHEMATIC
DIAGRAM(3)
I
5(B)

Page 32
SCHEMATIC
DIAGRAM(7)
N
2(B)

Page 28
SCHEMATIC
DIAGRAM(3)
E
7(C)

Page 32
SCHEMATIC
DIAGRAM(7)
N
2(C)

Page 32
SCHEMATIC
DIAGRAM(7)
N
8(S)

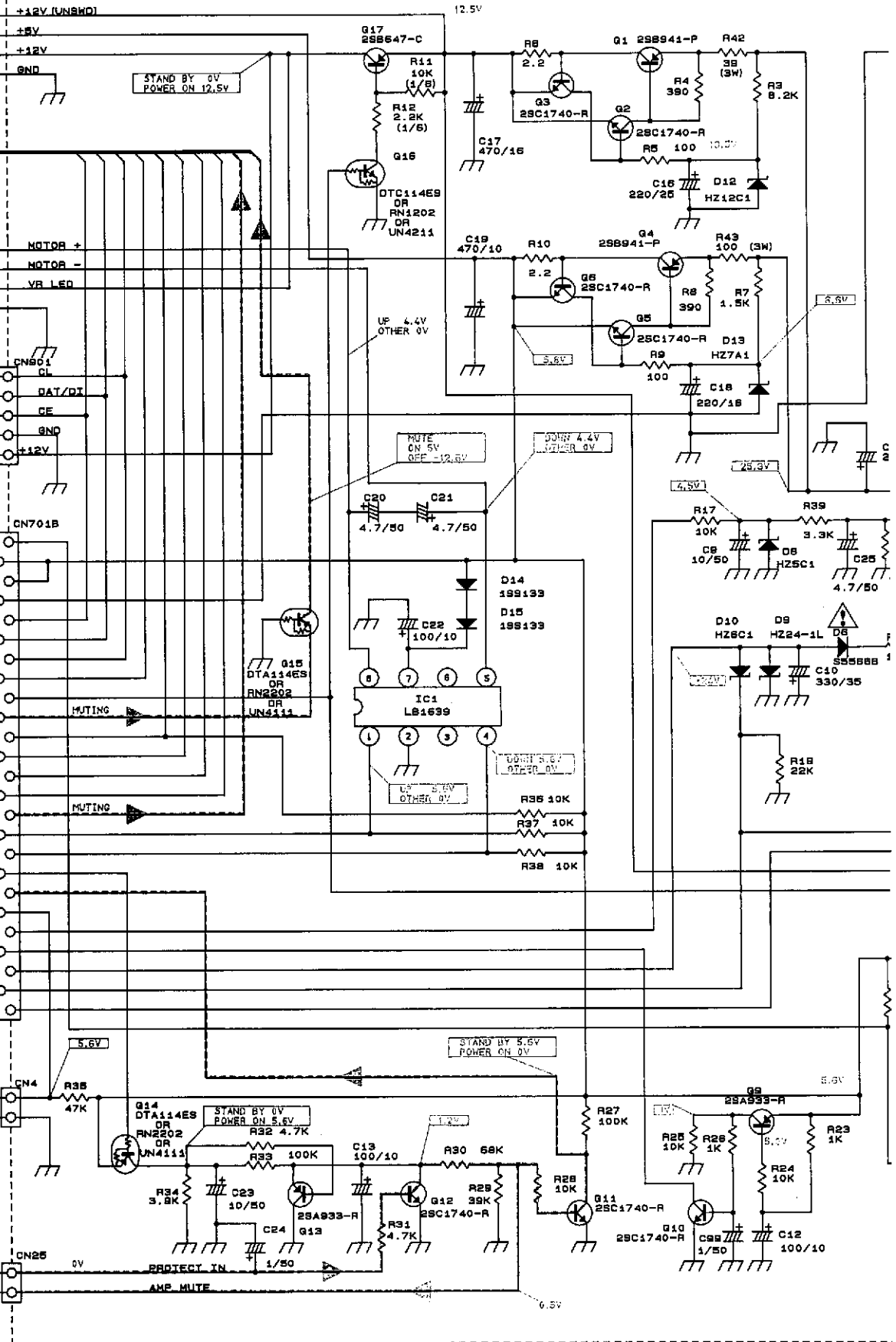
Page 33
SCHEMATIC
DIAGRAM(8)
N
5(E)

Page 29
SCHEMATIC
DIAGRAM(4)
J
3(D)

Page 33
SCHEMATIC
DIAGRAM(8)
H
2(G)

Page 33
SCHEMATIC
DIAGRAM(8)
G
5(P)

- IR
- +5
- +5
- GND
- LM CE
- DAT/DI
- CL
- LC CE
- P-CONT
- MUTE
- ST OUT
- SIG IN
- STRQ
- STEREO IN
- TUNER MUTE
- VR UP
- VR DOWN
- POWER AMP
- PROTECT
- SURROUND
- VOLT ON
- RESET
- 23V
- AC
- AC



POWER SUPPLY

NOTE:

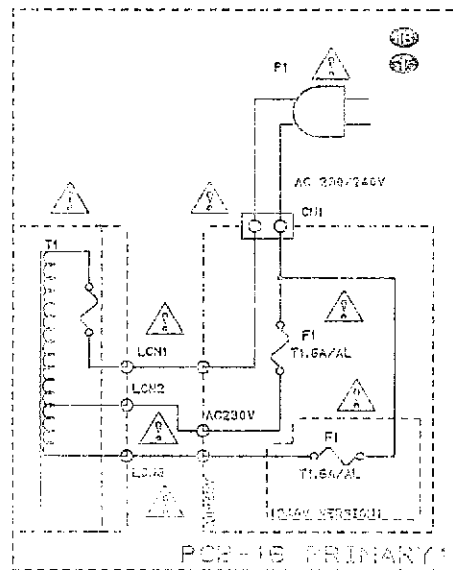
1. ALL RESISTANCES VALUES ARE IN (ohm).
K=1000 (ohm), M=1000K (ohm)
2. THE WATTAGE OF RESISTANCES IS 1/4W UNLESS OTHERWISE NOTED.
3. ALL CAPACITANCES VALUES ARE IN uF UNLESS OTHERWISE NOTED.
P=uF
4. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS.
5. THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.

Page 29
SCHEMATIC
DIAGRAM(4)

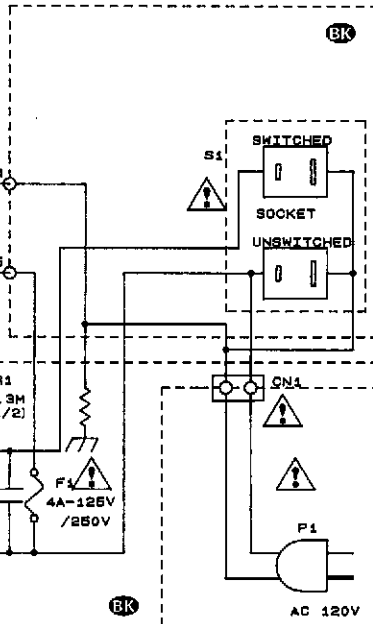
PCB-18
SECONDARY 1

Page 31
SCHEMATIC
DIAGRAM(6)

Page 33
SCHEMATIC
DIAGRAM(8)

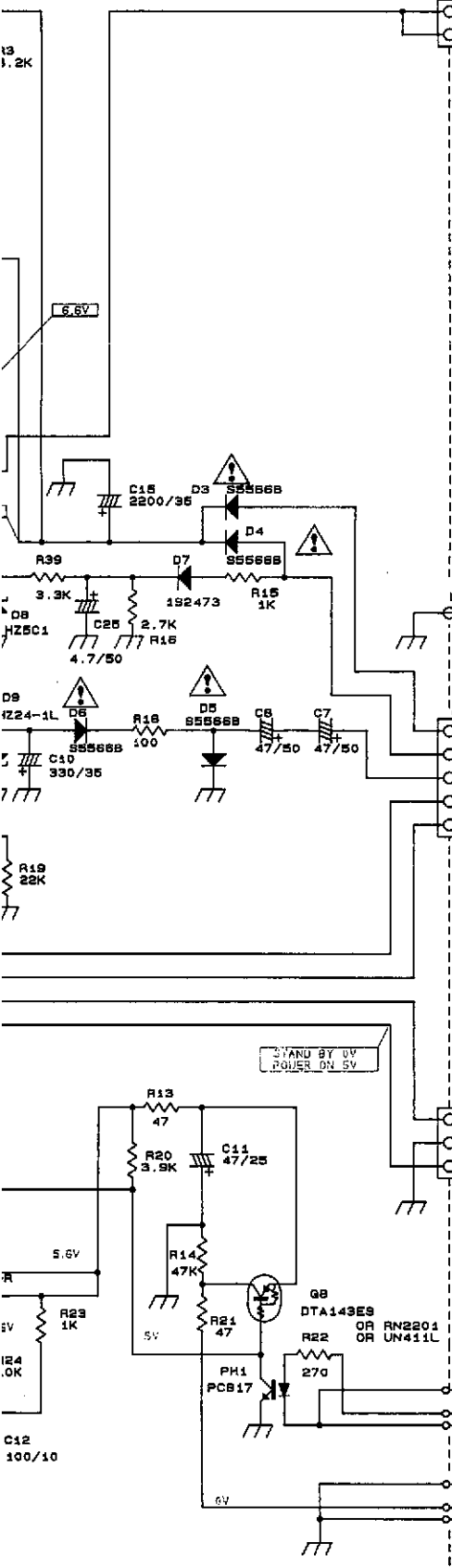
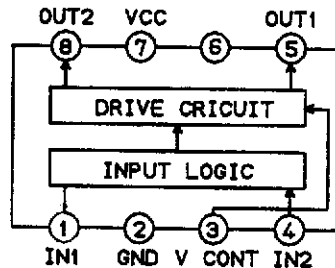


PCB-15 AC OUTLET



PCB-14 PRIMARY

IC1 : LB1639
Volume Motor Driver



STAND BY DV
POWER ON 5V

REMOTE

A

B

C

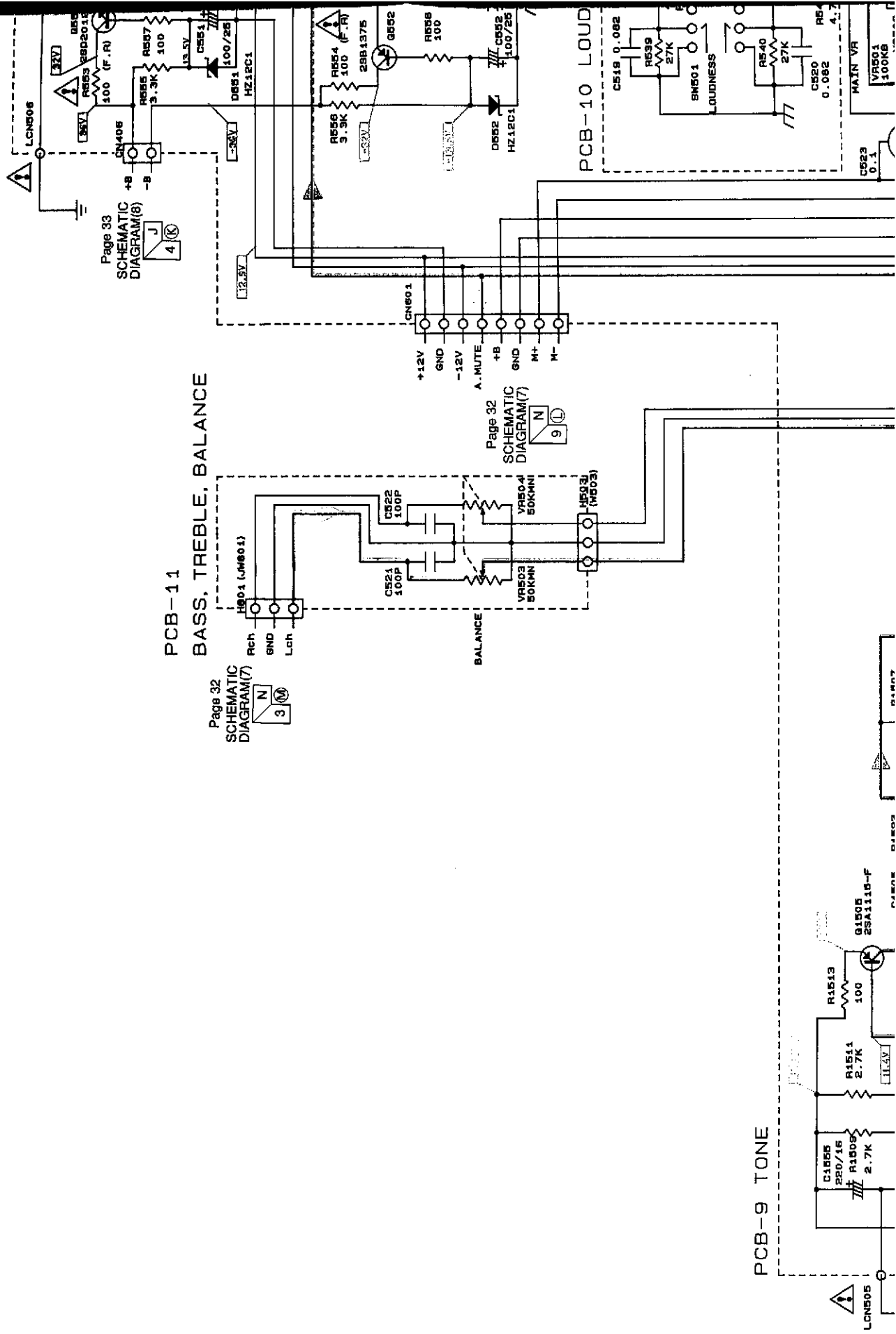
D

E

F

G

SCHEMATIC DIAGRAM (6) TONE/REAR AMP SECTION



PCB-9 TONE

PCB-11
BASS, TREBLE, BALANCE

PCB-10 LOUD

Page 33
SCHEMATIC
DIAGRAM(8)

Page 32
SCHEMATIC
DIAGRAM(7)

Page 32
SCHEMATIC
DIAGRAM(7)



LCN505

G1505
2SA1118-F

H503
H503

VR501
100K

EM501

RE
0.082

VR501
100K

MAIN VR

RE
0.082

RE
0.082

RE
0.082

RE
0.082

RE
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RE
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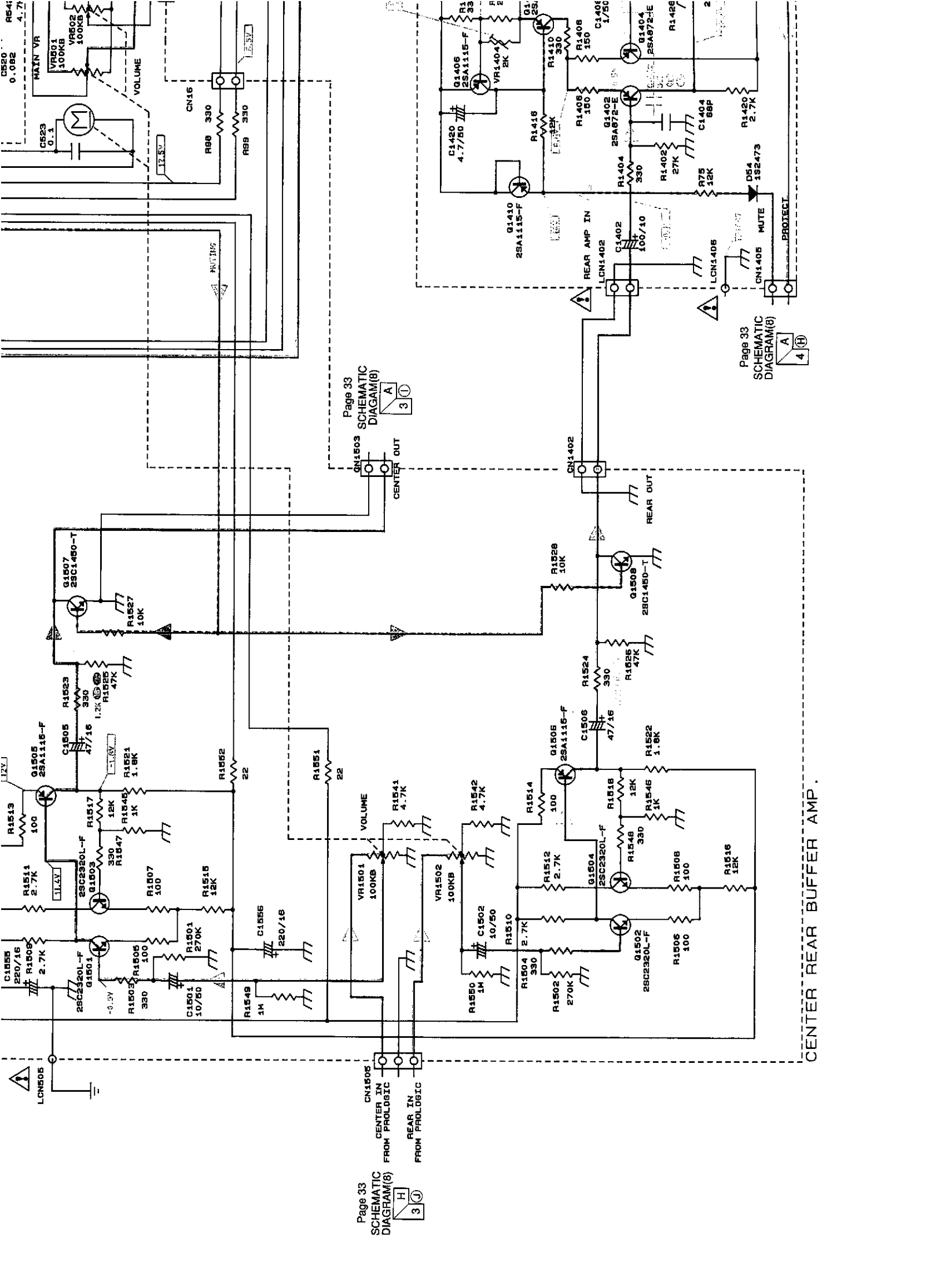
RE
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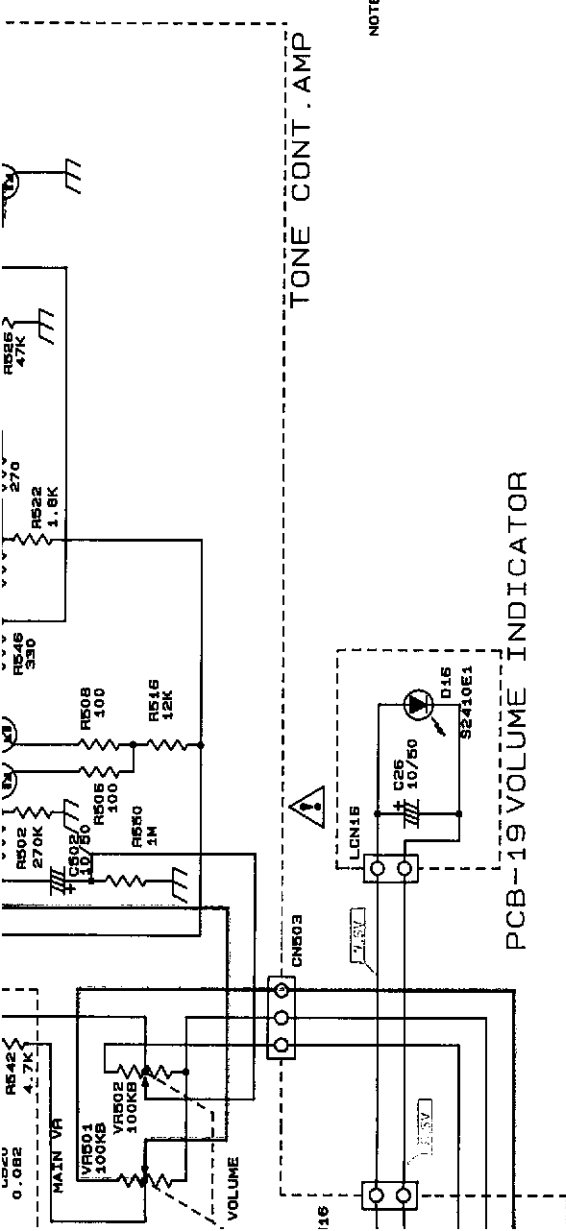


Page 33
SCHEMATIC
DIAGRAM(8)

Page 33
SCHEMATIC
DIAGRAM(8)

Page 33
SCHEMATIC
DIAGRAM(8)

CENTER REAR BUFFER AMP.

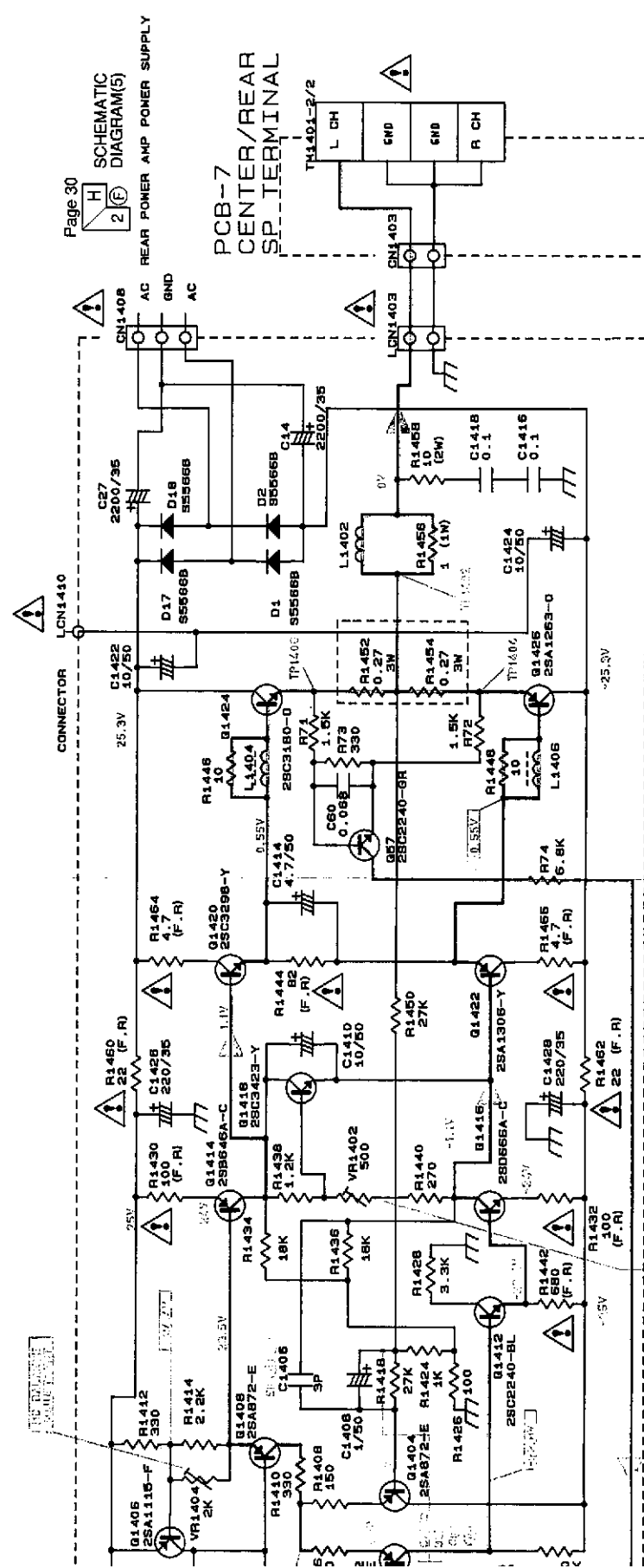


TONE CONT. AMP

PCB-19 VOLUME INDICATOR

PCB-12 REAR AMP

NOTE: 1. ALL RESISTANCE VALUES ARE IN (ohm) .
 K=1000 (ohm) M=1000K (ohm)
 2. THE VOLTAGE OF RESISTANCES IS 1/4W UNLESS OTHERWISE NOTED.
 3. ALL CAPACITANCE VALUES ARE IN UF UNLESS OTHERWISE NOTED.
 4. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS.
 5. THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.



Page 30
 H SCHEMATIC
 2 (E) DIAGRAM(S)

PCB-7
 CENTER/REAR
 SP. TERMINAL

A B C D E F G

SCHEMATIC DIAGRAM (7)
DSP SECTION

FUNCTION

DSP

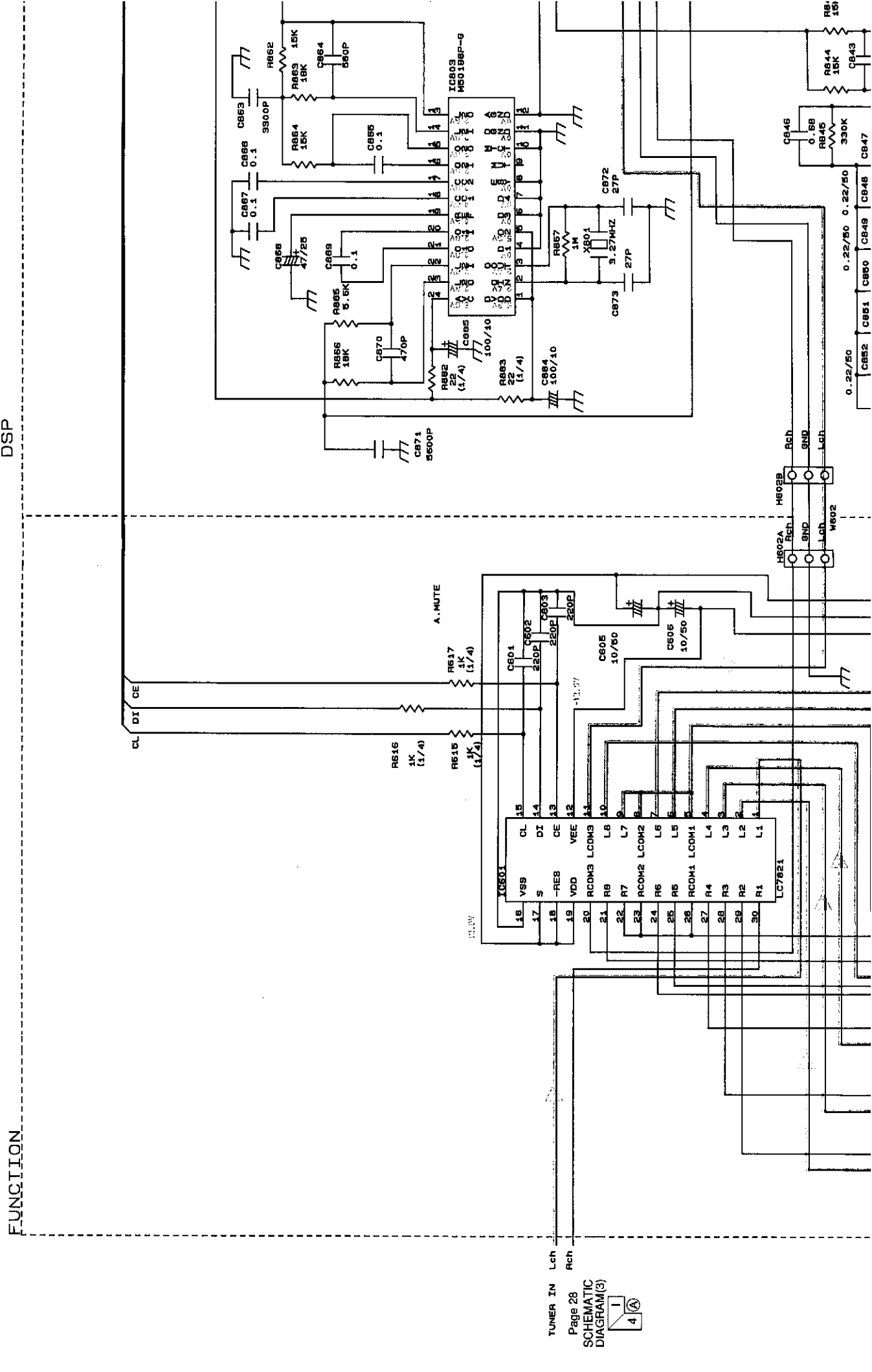
1

2

3

4

5



TUNER IN Lch Rch
Page 28
SCHEMATIC DIAGRAM(3)



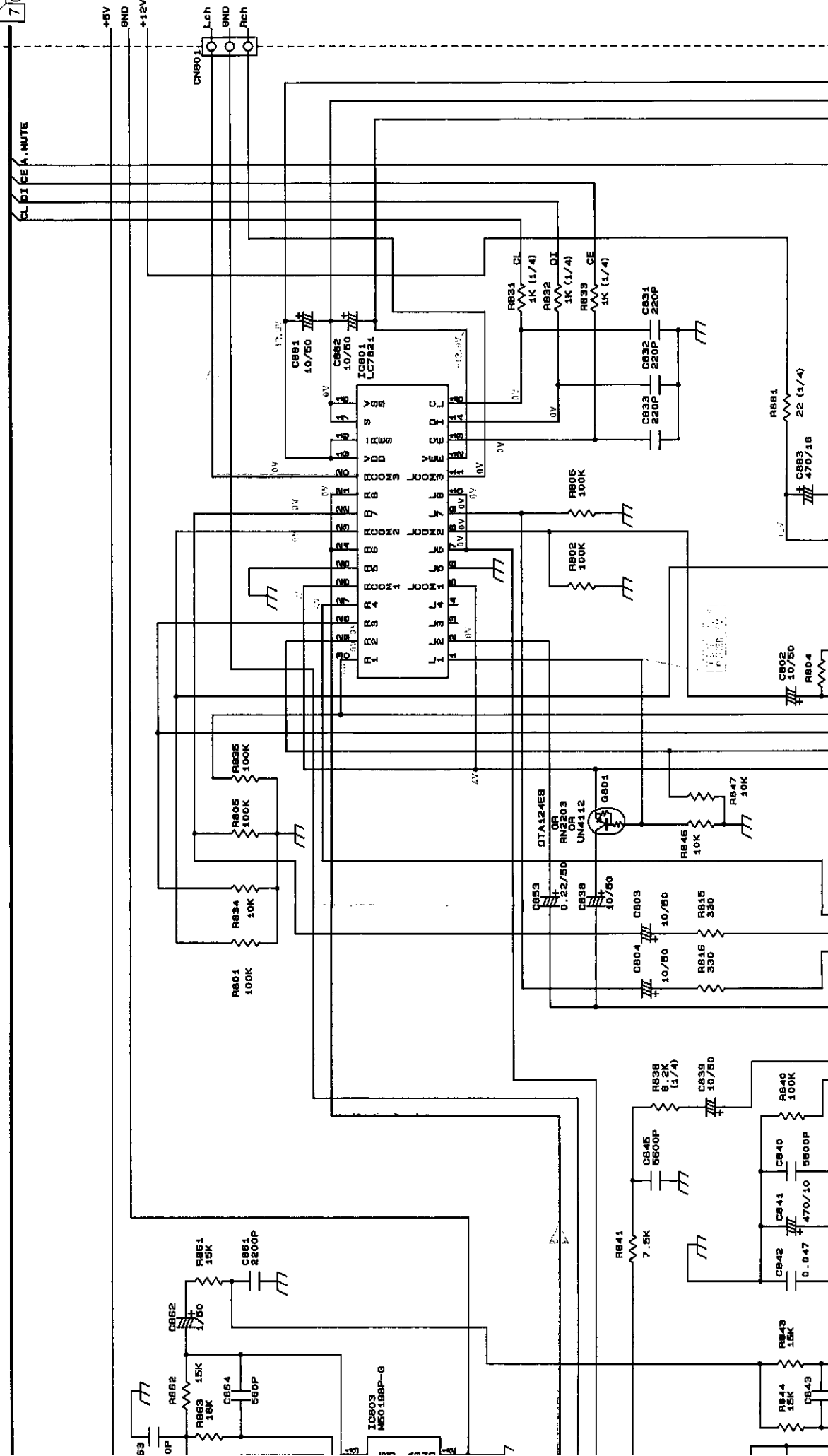
PCB-17 TUNER

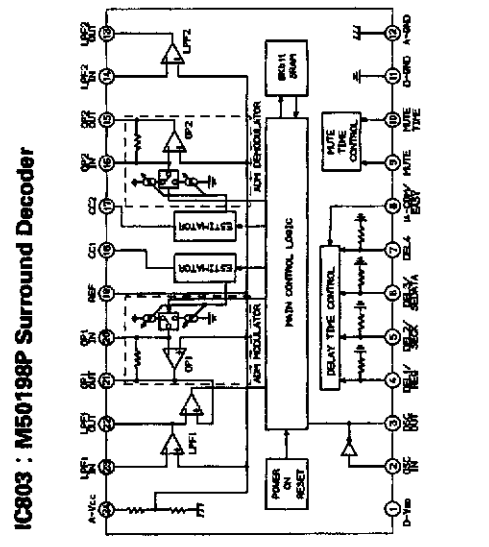
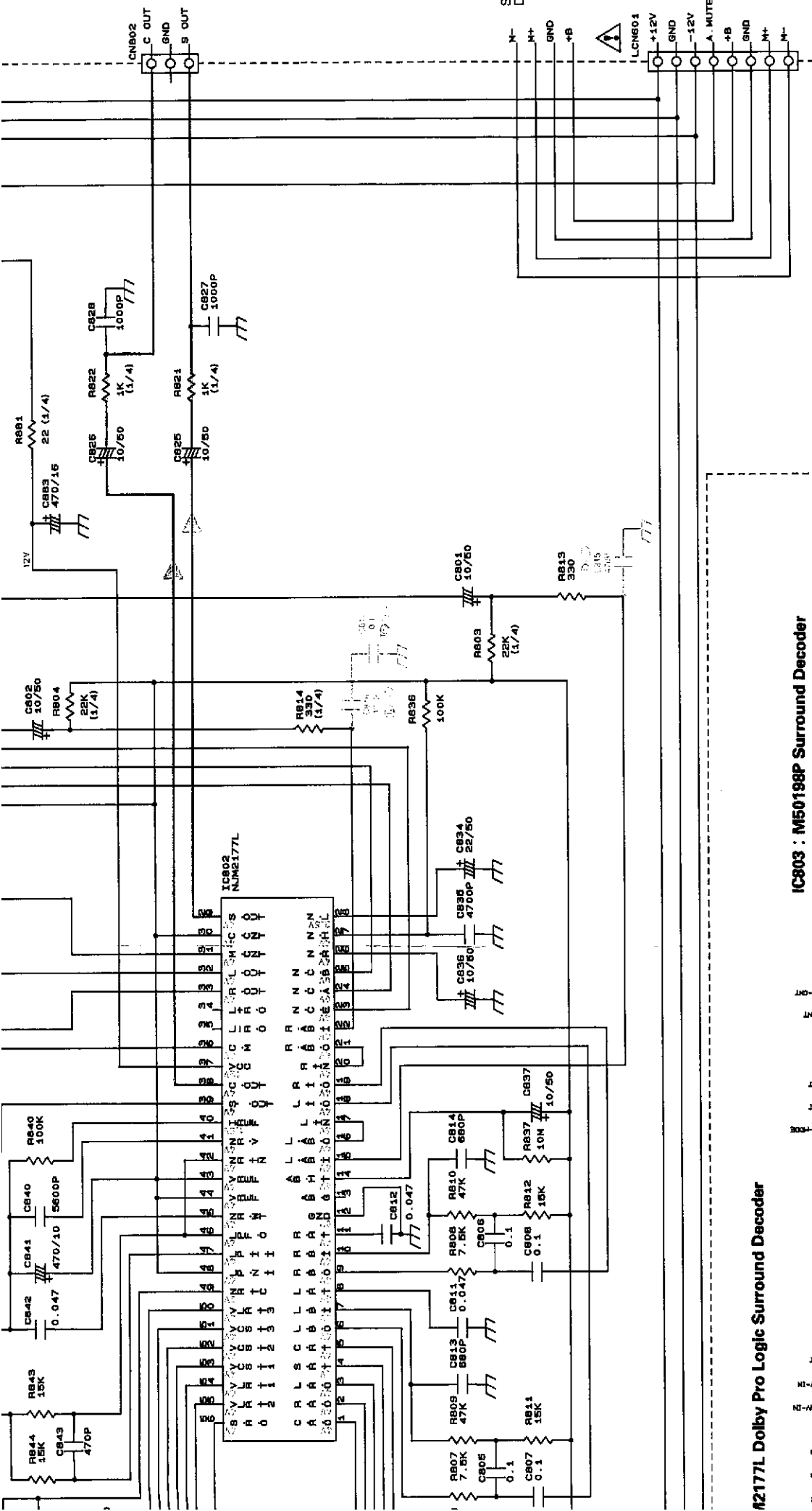
Page 28 SCHEMATIC DIAGRAM(3) 7(C) A 2(C)

Page 28 SCHEMATIC DIAGRAM(3) 1 5(B)

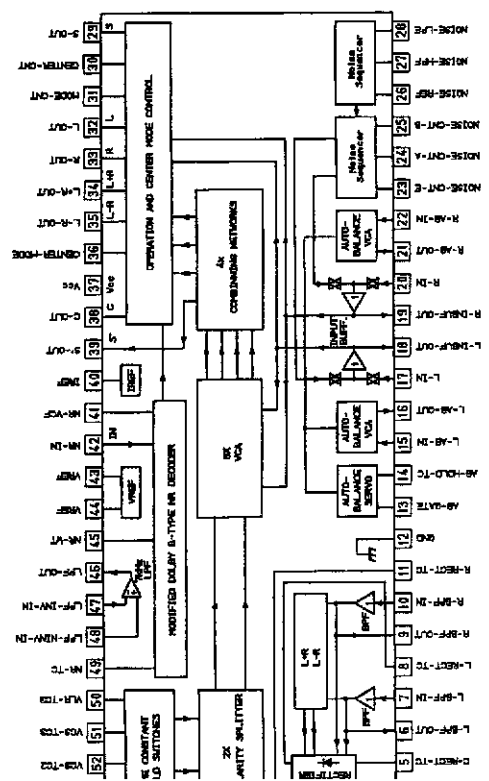
Page 30 SCHEMATIC DIAGRAM(5) 1(B) A

Page 31 SCHEMATIC DIAGRAM(6) 3(M) E



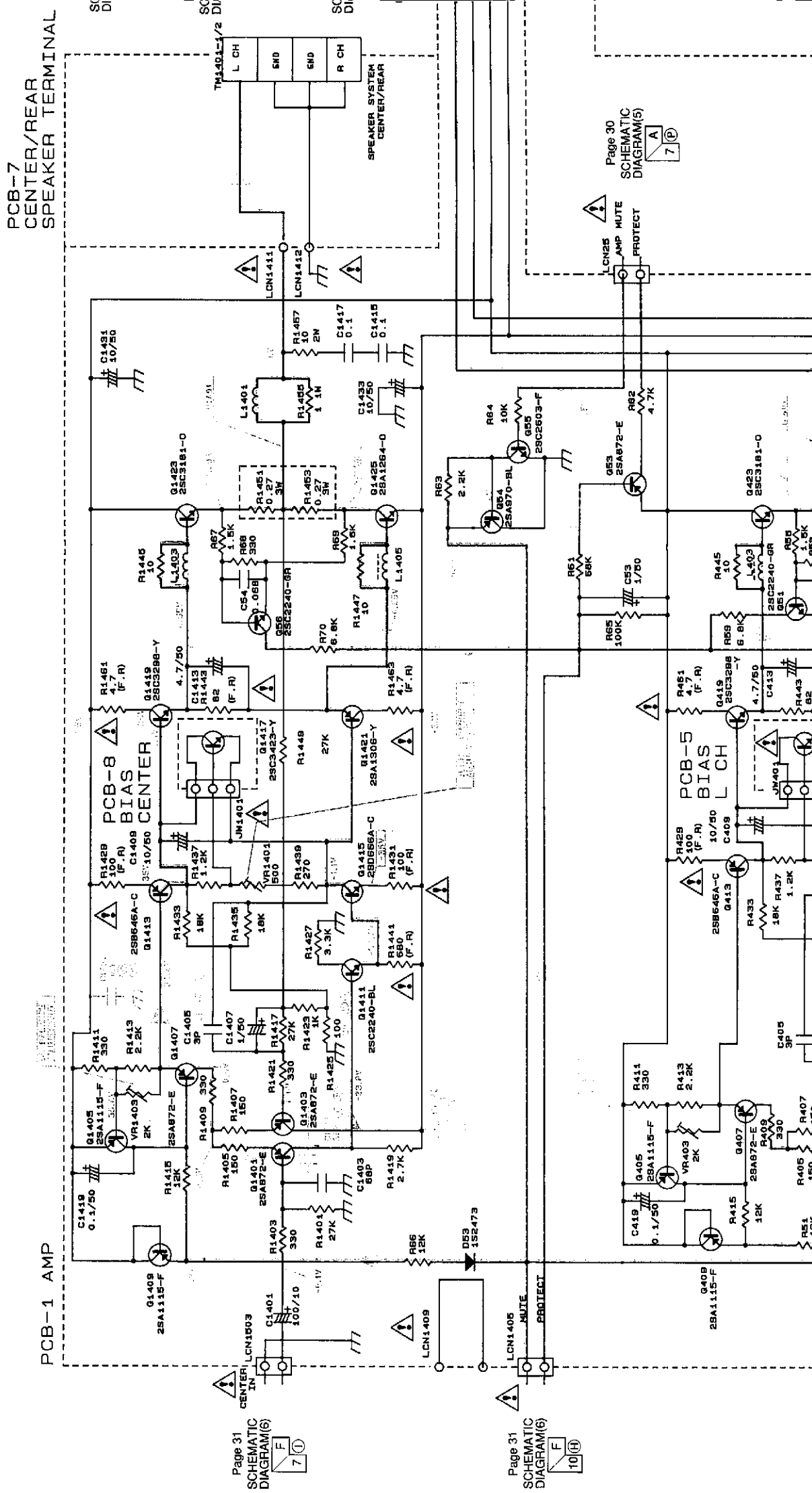


M2177L Dolby Pro Logic Surround Decoder



A B C D E F G

SCHEMATIC DIAGRAM (8) POWER AMP SECTION

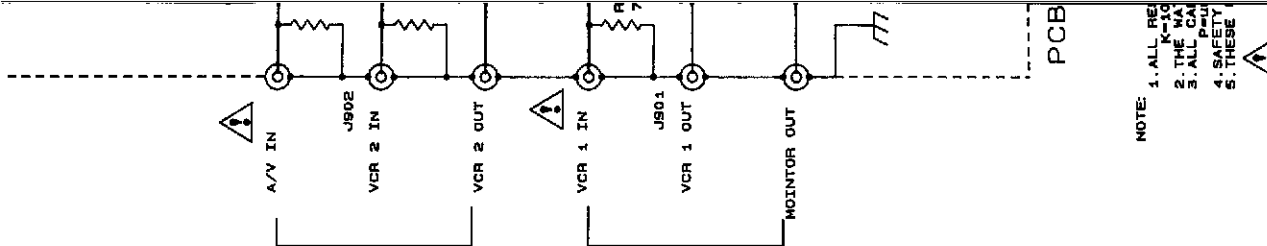


PCB-7
CENTER/REAR
SPEAKER TERMINAL

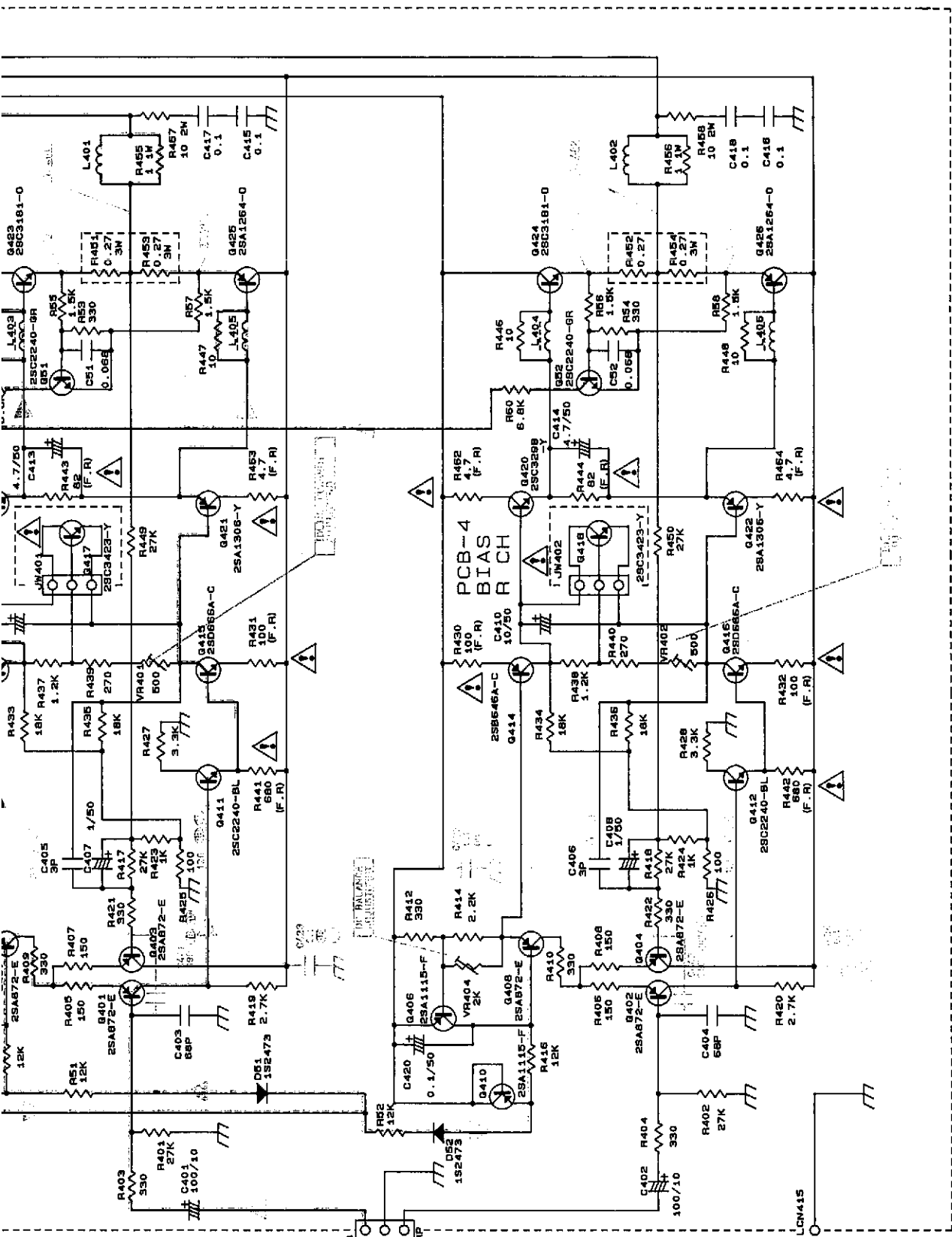
SPEAKER SYSTEM
CENTER/REAR

AMP MUTE
PROTECT

AMP MUTE
PROTECT



NOTE: 1. ALL REPAIRS TO BE MADE BY QUALIFIED PERSONNEL ONLY.
 2. THE CAPACITORS SHOWN ARE POLYMER FILM TYPE UNLESS OTHERWISE NOTED.
 3. ALL CAPACITORS ARE TO BE 5% TOLERANCE UNLESS OTHERWISE NOTED.
 4. SAFETY PRECAUTIONS SHOULD BE OBSERVED AT ALL TIMES.
 5. THESE PRECAUTIONS ARE INDICATED BY THE WARNING SYMBOL.



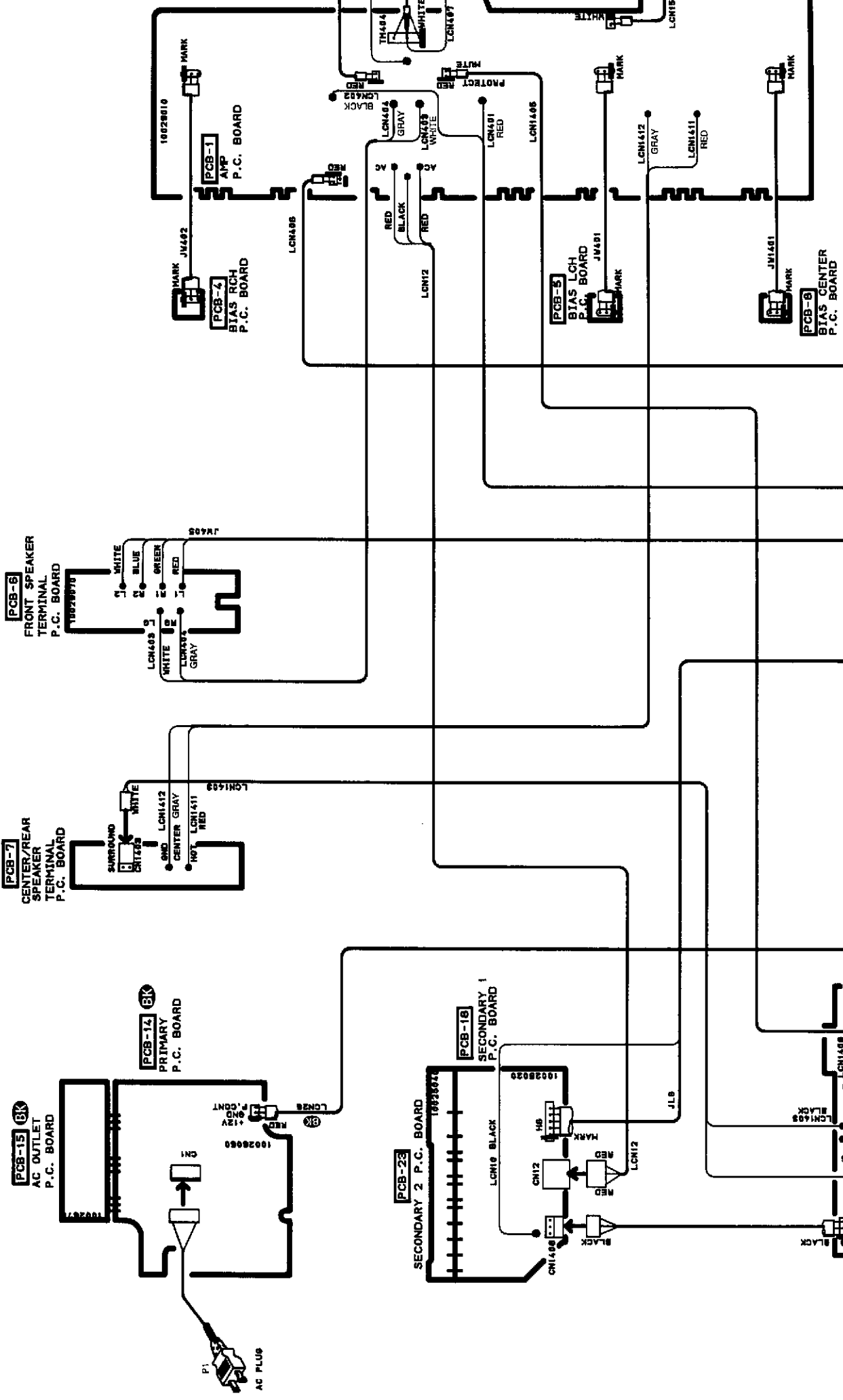
Page 31
 SCHEMATIC L CH
 DIAGRAM(6)

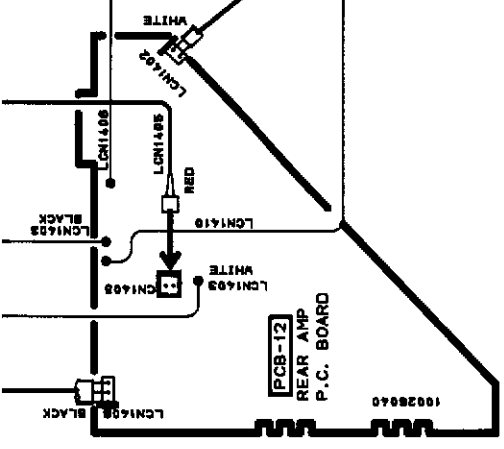
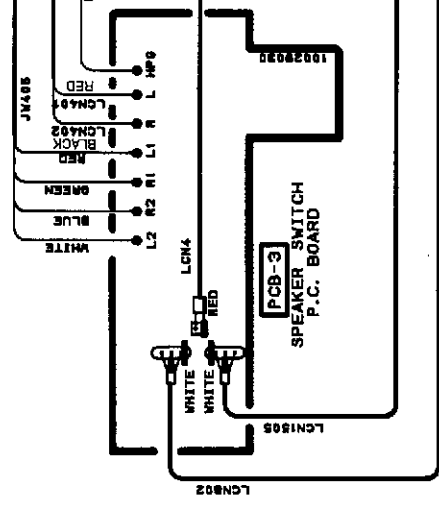
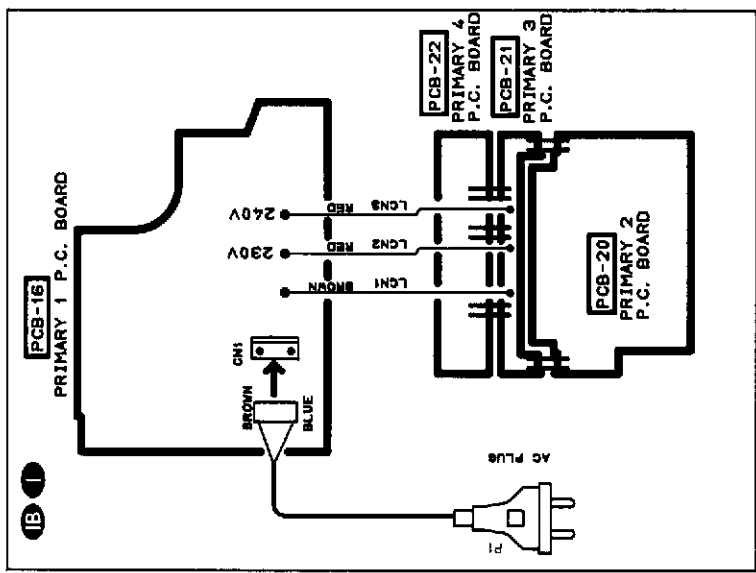
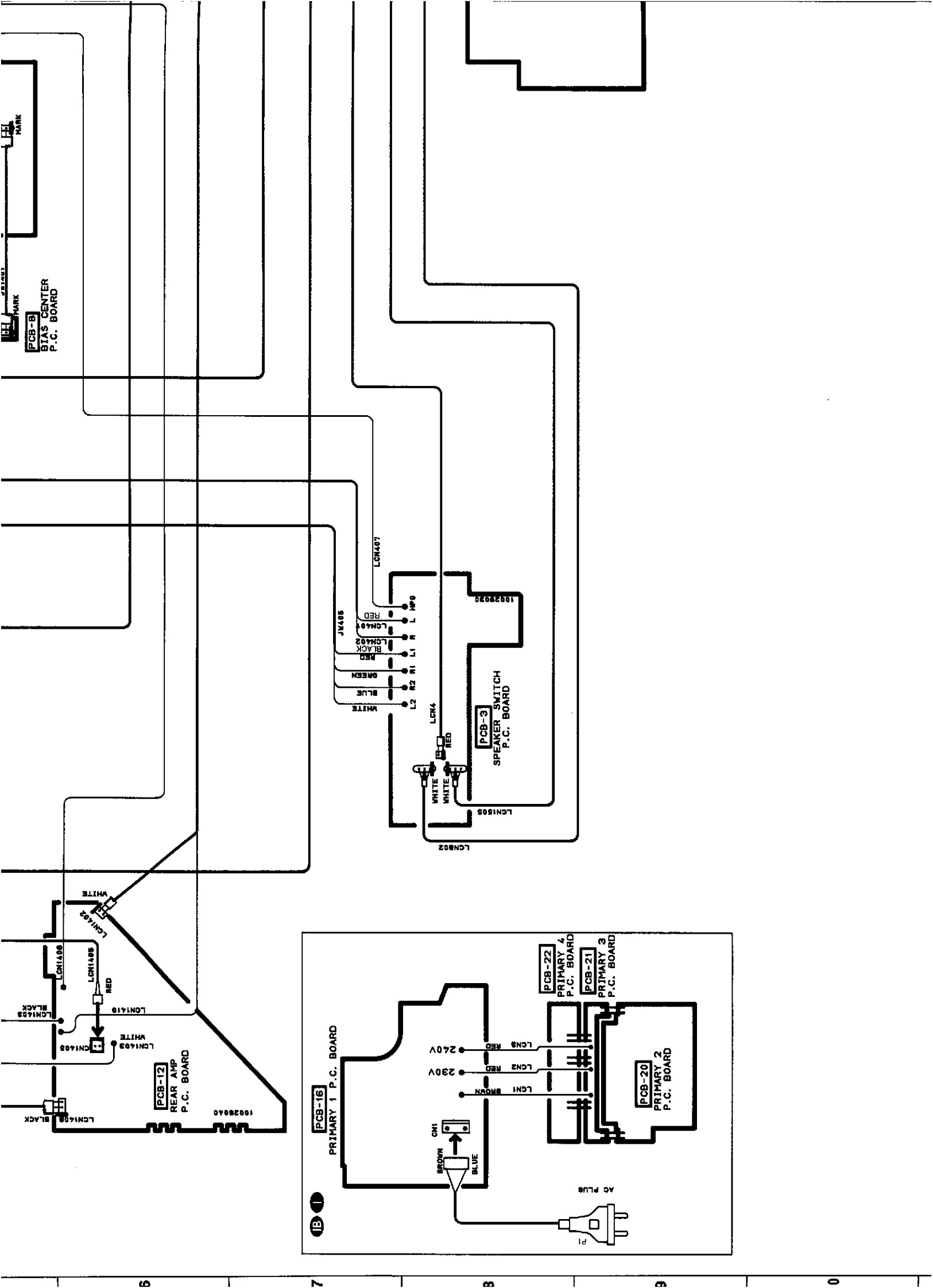


A B C D E F G

WIRING DIAGRAM

1 2 3 4 5





PCB-8
 BIAS CENTER
 P.C. BOARD

MARK

MARK

MARK

MARK

MARK

MARK

MARK

MARK

MARK

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