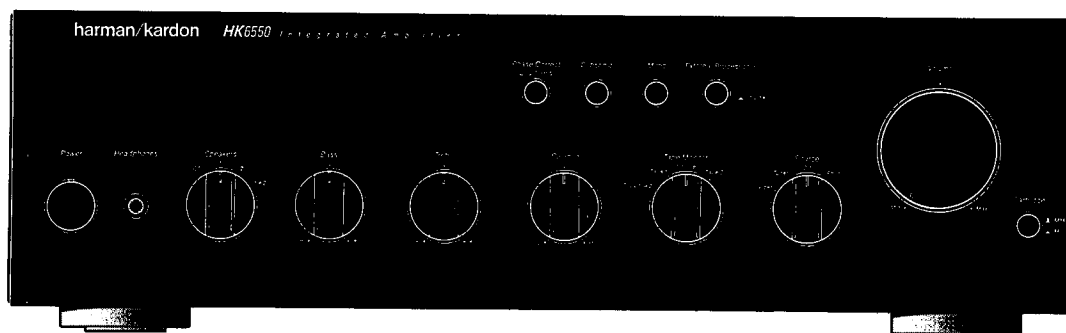


The Harman Kardon Model HK6550 INTEGRATED AMPLIFIER

Manual 185A

Technical Manual



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

- G**: German model
- GB**: German model Black version
- IB**: International model Black version

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harman/kardon

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1112-0230A152 P-089203 500 Printed in Japan

HK6550

SPECIFICATIONS

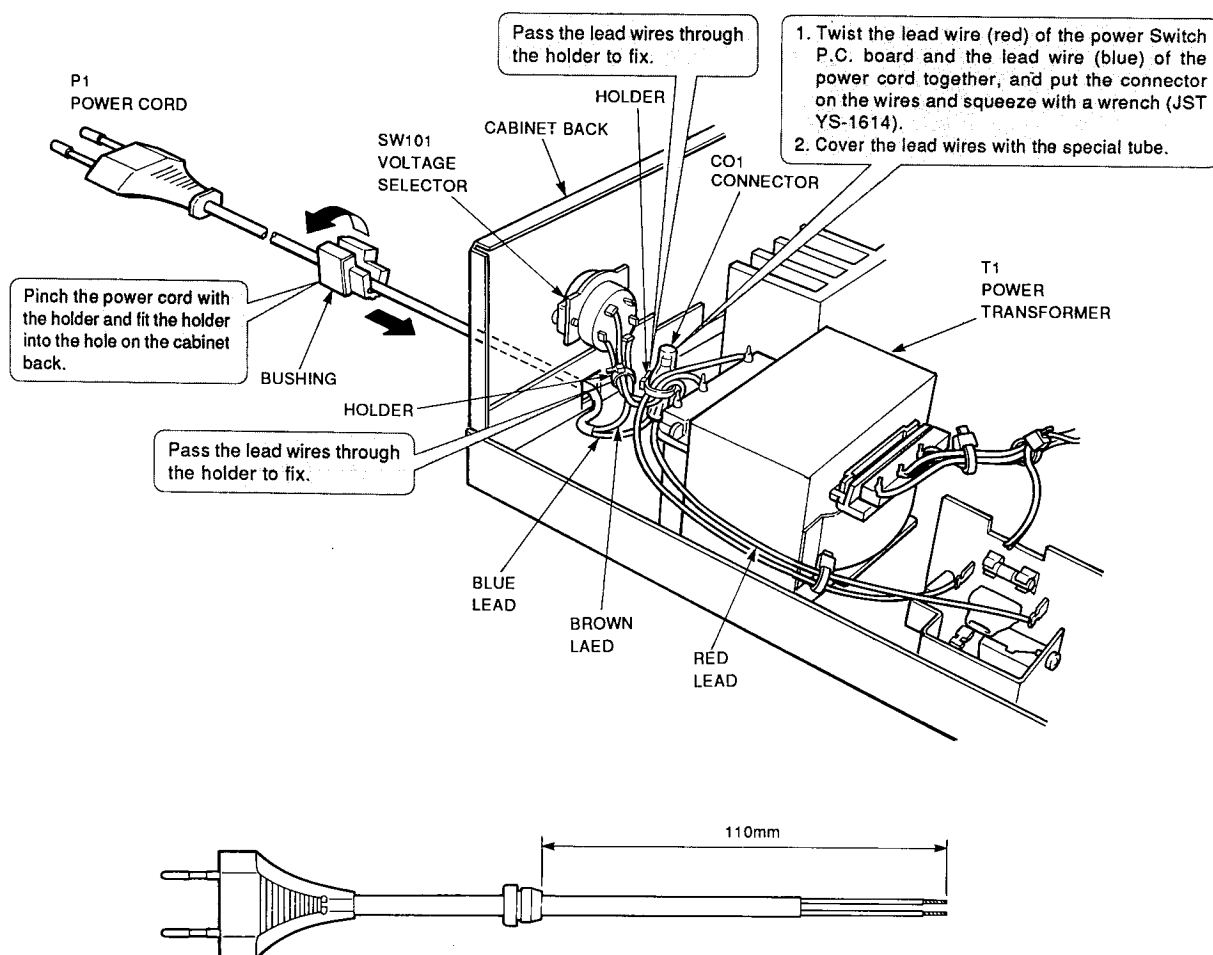
	Nominal	Limit		Nominal	Limit
RMS Output Power			Filters		
8Ω, 1kHz THD 0.1%	56.5W	≥50W	Subsonic at 15Hz	-3dB	±1.5dB
4Ω, 1kHz THD 0.3%	83W	≥70W	Phase Correct Loudness at 50Hz	6dB	±3dB
High-instantaneous Current Capability (HCC)	37A	≥32A	DC Output Voltage		
Half Power Bandwidth	<10Hz~100kHz	<10Hz~70kHz	L channel	0mV	±60mV
Frequency Response at -3dB	0.4Hz~190kHz	<1Hz~≥150kHz GB	R channel	0mV	±60mV
	0.4Hz~200kHz	<1Hz~≥150kHz IB	RIAA Equalization at Tape Out (20Hz/20kHz)	0.03dB	±0.5dB/-0.15dB±0.5dB
Input Sensitivity			Phono Overload THD 0.1%		
Tuner, CD, Video	135mV	±25mV	Phono (MM)	115mV	≥100mV
Phono (MM)	2.2mV	± 0.3 mV	Phono (MC)	6.1mV	≥5mV
Phono (MC)	120μV	±20μV	Dimensions (W x H x D)	17-1/2" x 5-1/4" x 14-3/16"	
Signal to Noise Ratio				(443 x 134 x 359mm)	
Tuner, CD, Video	81dB	≥74dB	Weight	20.3 lbs. (9.2 kg)	
Phono (MM)	80dB	≥73dB	Power Supply	AC 230/240V, 50/60Hz	
Phono (MC)	76dB	≥70dB	Power Consumption	220W	
Channel Separation at 10kHz					
CD	49dB	≥45dB			
Phono (MM)	52dB	≥45dB			
Phono (MC)	50dB	≥43dB			
IM Distortion Ratio	0.06%	≤0.1%			
Damping Factor at 1kHz	69	≥50			
Tone Control Characteristics					
Bass at 50Hz					
Boost	10dB	±2dB			
Cut	10dB	±2dB			
Treble at 10kHz					
Boost	10dB	±2dB			
Cut	10dB	±2dB			

• These specifications are service target specs.

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

POWER CORD REPLACEMENT

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



ALIGNMENT PROCEDURES (REFER TO PAGES 8, 9, 10, 11 AND 19)

- Conditions:**
- Set the Source selector to the "CD" position.
 - Set the Volume control to minimum.
 - Set the Speaker 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 TP1 and TP2.	VR401	0±10mV
2	Connect the Digital Volt Meter to TP3 and TP2.	VR402	0±10mV

■ IDLING CURRENT ADJUSTMENT

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP4 and TP5.	VR403	40mV
2	Connect the Digital Volt Meter to TP6 and TP7.	VR404	40mV

■ DC BALANCE CONFIRMATION

Step	Connection Equipments	For
1	Connect the Digital Volt Meter to TP1 and TP2.	0±60mV
2	Connect the Digital Volt Meter to TP3 and TP2.	0±60mV

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

DISASSEMBLY PROCEDURES (REFER TO PAGE 7 AND 20)

1 CABINET TOP (131) REMOVAL

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

2 FRONT PANEL ASS'Y (AA) REMOVAL

1. Remove the Cabinet Top (131), referring to the previous step 1.
2. Remove 5 screws (B) and then remove the Front Panel Ass'y (AA).

3 MAIN P. C. BOARD (PCB-1) REMOVAL

Remove 8 screws (C) and then remove the Main P.C. Board (PCB-1) with the Heat Sink (177). At this time unsolder the lead wires connected to the Main P.C.Board (PCB-1).

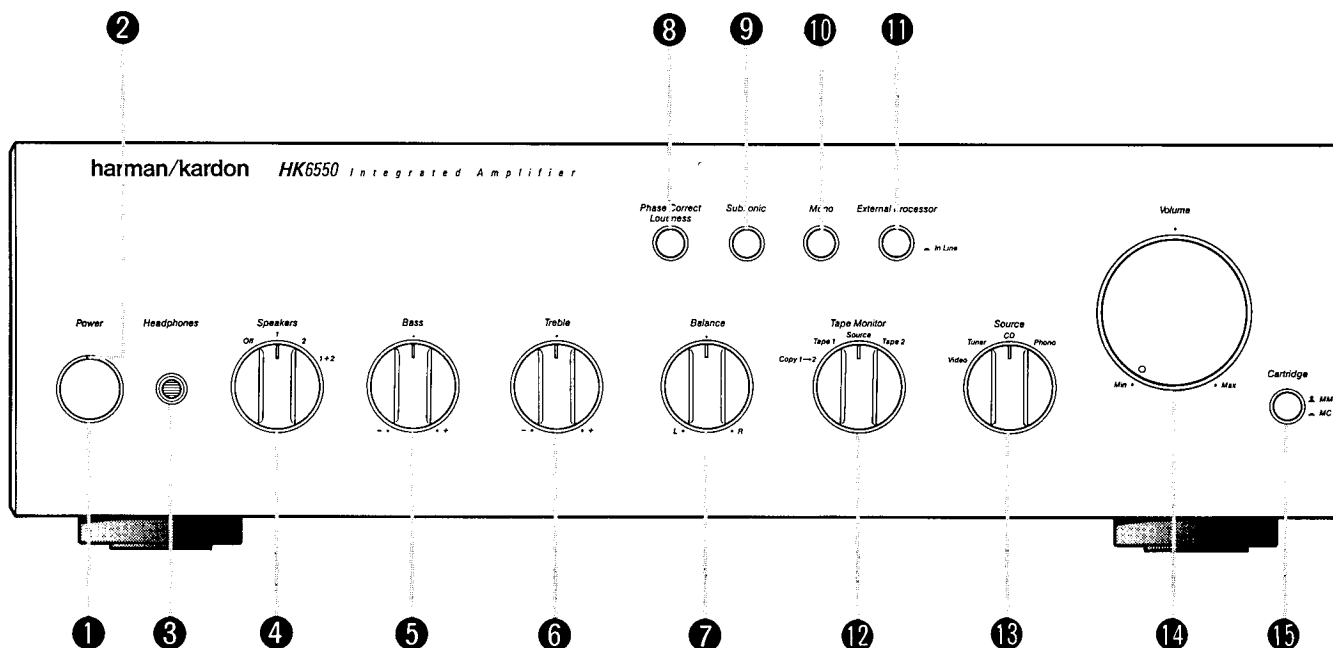
4 POWER SWITCH P.C. BOARD (PCB-8) REMOVAL

1. Remove the Front Panel Ass'y (AA), referring to the previous step 2.
2. Pull out the Push Button (146) and Lever (213).
3. Remove 1 screw (D), then remove the Power Switch P.C. Board (PCB-8) with Metal Fitting (172). If necessary unsolder the lead wires.

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

1. Remove the Front Panel Ass'y (AA), referring to the previous step 2.
2. Pull out the 3 Rotary knobs (152) and then remove 3 hexagon nuts (E), then remove the Tone Control P.C.Board (PCB-9). If necessary unsolder the lead wires.

CONTROLS AND FUNCTIONS



❶ POWER SWITCH (*POWER*)

Press this switch to turn the unit "On". Pressing it again will turn the unit off.

❷ POWER INDICATOR (*POWER*)

This indicator is illuminated in green when the power switch is "On" and is not illuminated when the power switch is "Off".

❸ HEADPHONES JACK (*HEADPHONES*)

Stereo headphones with a standard 1/4 inch plug can be connected to this jack. When the *SPEAKERS* selector is in the *Off* position, sound can still be obtained via the headphone jack.

❹ SPEAKER SELECTOR (*SPEAKERS*)

This selector is used to select the desired speaker system(s).
Off : Select this position to listen to sound via the headphone with no sound from the speaker system(s).

1 : Select this position to actuate the speaker system connected to the *SPEAKER SYSTEM 1* terminal.

2 : Select this position to actuate the speaker system connected to the *SPEAKER SYSTEM 2* terminal.

1 + 2 : Select this position to actuate simultaneously the two speaker systems connected to the *SPEAKER SYSTEM 1* and *2* terminals respectively.

❺ BASS CONTROL KNOB (*BASS*)

This knob controls the low frequency sound level. Turn it clockwise to boost or counterclockwise to reduce the low frequency sound level.

❻ TREBLE CONTROL KNOB (*TREBLE*)

This knob controls the high frequency sound level. Turn it clockwise to boost or counterclockwise to reduce the high frequency sound level.

❼ BALANCE CONTROL KNOB (*BALANCE*)

This knob is used to balance the left and the right channels. Usually, it is set at the center. Turn it to the left or right to balance the sound if it seems unbalanced from the speakers or the headphones.

❽ PHASE CORRECT LOUDNESS SWITCH (*Phase Correct Loudness*)

This switch activates a unique low frequency equalization circuit that provides full, natural sound from small speakers that are normally deficient in the bass region. It can also be used in place of conventional loudness compensation.

❾ SUBSONIC FILTER SWITCH (*Subsonic*)

When playing the turntable, this filter switch is used to reduce subsonic frequencies, which may excessively vibrate the speaker cones or turntable and cause feedback.

⑩ MONO SWITCH (*Mono*)

This switch is used to combine the left and right channels and create a mono signal.

⑪ EXTERNAL PROCESSOR (*External Processor*)

This switch activates a special "loop" which routes sound out of the amplifier, into a signal processor and back into the amplifier.

It can be used for equalizers, surround sound processors, dynamic noise reducers, or for special outboard processors required for certain speaker designs.

⑫ TAPE MONITOR SELECTOR (TAPE MONITOR)

This selector is used when playing a tape deck, or monitoring during recording.

Copy 1 → 2 : Select this position to duplicate the cassette tape in the deck connected to the TAPE 1 jacks onto the tape in the deck connected to the TAPE 2 jacks.

Tap 1 : Select this position to play a cassette tape, or to monitor during recording on the tape deck connected to the TAPE 1 jacks.

Source : Select this position to listen to a program source other than a cassette tape.

Tape 2 : Select this position to play a cassette tape, or to monitor during recording on the tape deck connected to the TAPE 2 jacks.

⑬ SOURCE SELECTOR (*SOURCE*)

This selector is used to select a program source other than a tape.

Video : Select this position to playback the audio signals from an audio/video component such as a camcorder, video player, or TV tuner connected to the VIDEO jack.

Tuner : Select this position to listen to an FM or AM broadcast from the stereo tuner connected to the TUNER jacks.

CD : Select this position to listen to the sound from a compact disc player connected to the CD jacks.

Phono: Select this position to listen to a disc played on the turntable connected to the PHONO MM or MC jacks.

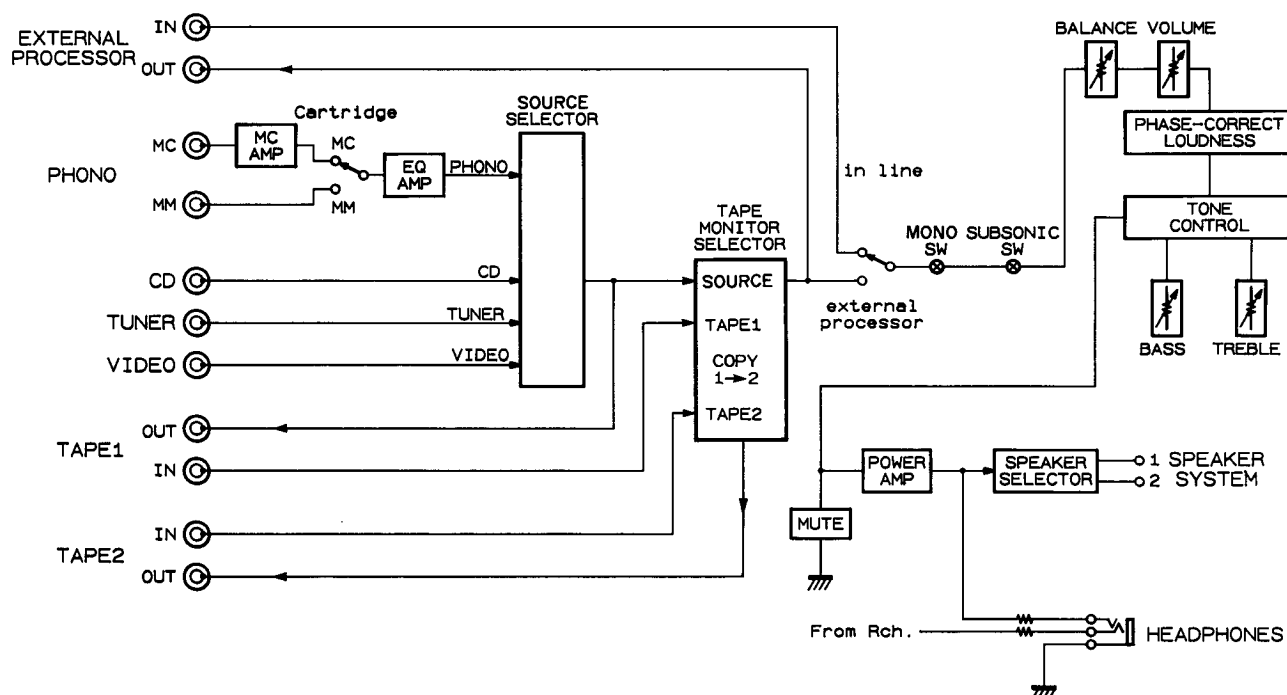
14 VOLUME CONTROL KNOB (VOLUME)

This knob controls the sound level. Turning clockwise increases the sound volume, and turning counterclockwise decreases it. Set this knob at a minimum level before turning the power on or changing the sound source to protect the speakers from being damaged by a sudden high level sound.

⑮ CARTRIDGE SELECTOR (*Cartridge*)

This switch selects the gain and input impedance of the phono input circuitry to match the type of phono cartridge used. Be sure to connect the turntable to the appropriate PHONO input jacks (MM for moving magnet type cartridges and MC for moving coil type cartridges), and to select that input with this selector switch.

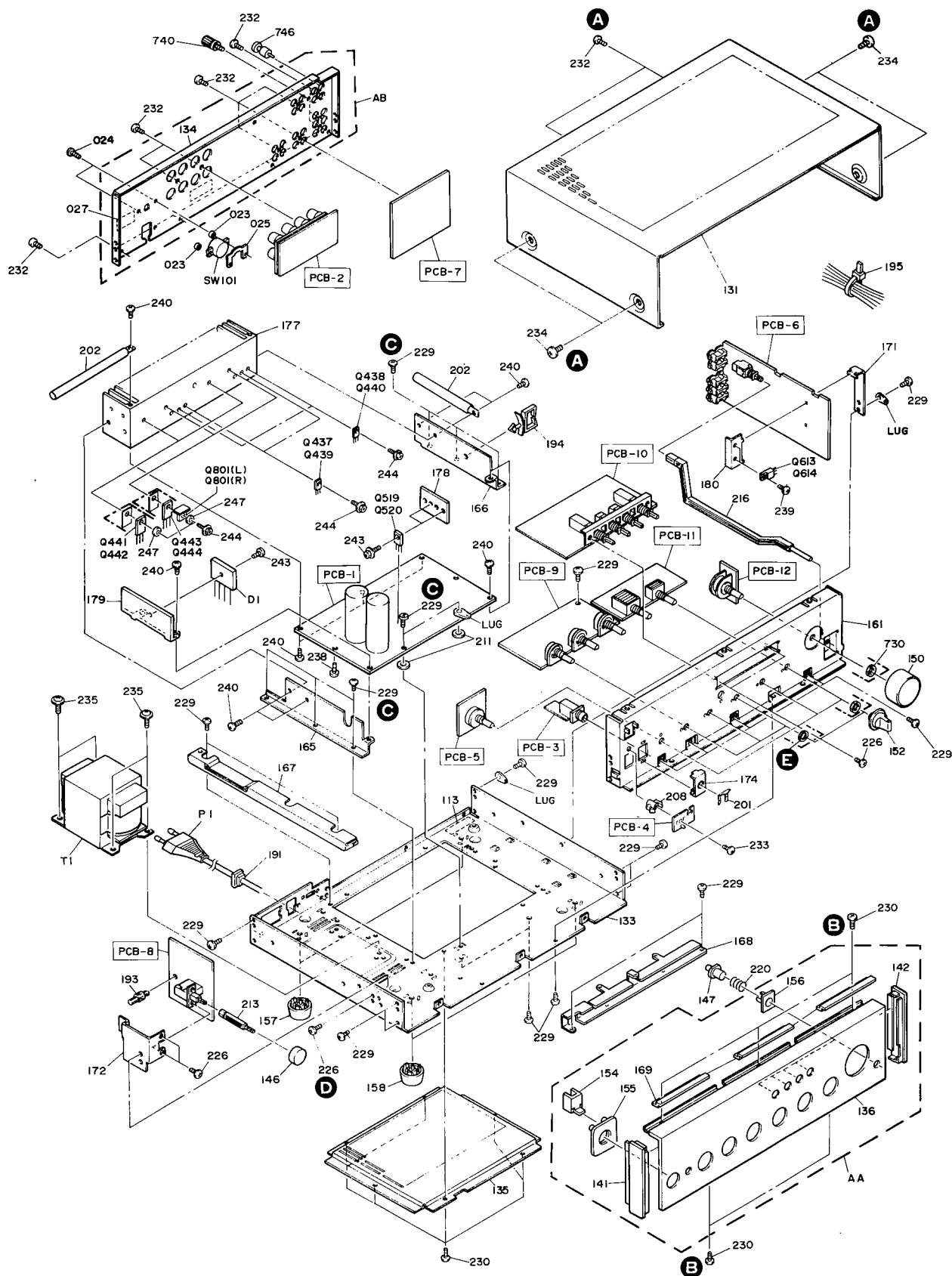
BLOCK DIAGRAM



GENERAL UNIT PARTS LIST

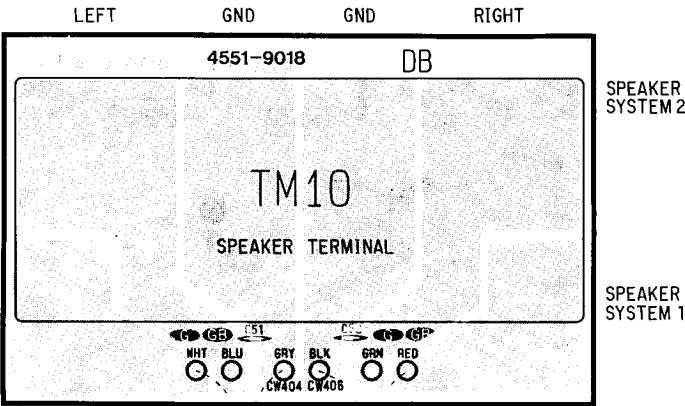
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
AA	A443-HK6550A	FRONT PANEL ASS'Y G	229	2347-R0130062	SCREW, BND T+ (3x6 mm)(X26)
AA	A443-HK6550B	FRONT PANEL ASS'Y GB IB	230	2347-R0130062	SCREW, BND T+ (3x6 mm)(X11)
AB	A424-HK6550D	CABINET BACK ASS'Y	232	2347-R0130084	SCREW, BND T+ (3x8 mm)(X15)
023	2132-7116	SPACER, VOLTAGE SELECTOR (X2)	233	2347-R0130102	SCREW, BND T+ (3x10 mm)
024	2327-R0130124	SCREW, BND+ (3x12 mm)(X2)	234	2347-R0140064	SCREW, BND T+ (4x6 mm)(X4)
025	2440-7017	NUT, SPE, VOLTAGE SELECTOR	235	2347-400827	SCREW, BND T+ (4x8 mm)(X4)
027	1756-21904	LABEL, DBP NO. G GB	238	2323-300829	SCREW, CSK+ (3x8 mm)
113	1117-78	SERIAL LABEL	239	2327-R0130082	SCREW, BND+ (3x8 mm)(X2)
131	1414-11601	CABINET TOP	240	2347-R0130082	SCREW, BND T+ (3x8 mm)(X10)
133	1424-25001	CABINET BACK, BOTTOM	243	2557-300829	SCREW, B SPW+ (3x8 mm)(X3)
134	1424-29204	CABINET BACK	244	2557-301429	SCREW, B SPW+ (3x14 mm)(X8)
135	1424-26101	CABINET BOTTOM COVER	247	2401-0373	WASHER, METAL (X4)
136	1443-14301	FRONT PANEL G	730	2440-62	NUT, SPE
136	1443-14302	FRONT PANEL GB IB	740	4214-168	TERMINAL, GND
141	1562-08601	FRAME, L-SIDE G	746	4442-14	PIN PLUG, MC SHORT (X2)
141	1562-08602	FRAME, L-SIDE GB IB			
142	1562-08701	FRAME, R-SIDE G			
142	1562-08702	FRAME, R-SIDE GB IB			
146	1662-66901	PUSH BUTTON, POWER G			
146	1662-66902	PUSH BUTTON, POWER GB IB			
147	1662-67001	PUSH BUTTON, PHASE CORRECT LOUDNESS, SUBSONIC, MONO, EXTERNAL PROCESSOR, CARTRIDGE G			
147	1662-67002	PUSH BUTTON, PHASE CORRECT LOUDNESS, SUBSONIC, MONO, EXTERNAL PROCESSOR, CARTRIDGE GB IB			
150	1630-04701	ROTARY KNOB, VOLUME G			
150	1630-04702	ROTARY KNOB, VOLUME GB IB			
152	1632-21501	ROTARY KNOB, SPEAKERS, BASS, TREBLE, BALANCE, TAPE MONITOR, SOURCE G			
152	1632-21502	ROTARY KNOB, SPEAKERS, BASS, TREBLE, BALANCE, TAPE MONITOR, SOURCE GB IB			
154	1732-08801	INDICATOR, PANEL			
155	1742-08301	ORNAMENT, POWER G			
155	1742-08302	ORNAMENT, POWER GB IB			
156	1742-08401	ORNAMENT, PHASE CORRECT LOUDNESS, SUBSONIC, MONO, EXTERNAL PROCESSOR, CARTRIDGE G			
156	1742-08402	ORNAMENT, PHASE CORRECT LOUDNESS, SUBSONIC, MONO, EXTERNAL PROCESSOR, CARTRIDGE GB IB			
157	1319-02201	LEG, BOTTOM REAR (X2)			
158	1319-03301	LEG, BOTTOM FRONT (X2)			
161	2211-7310	CHASSIS, FRONT			
165	2219-8210	METAL FITTG, L			
166	2219-8211	METAL FITTG, R			
167	2219-8212	METAL FITTG, BOTTOM			
168	2219-8353	METAL FITTG, MAIN P.C. BOARD			
169	2219-8363	METAL FITTG, PANEL (X3)			
171	2219-8237	METAL FITTG, EQ P.C. BOARD			
172	2219-8238	METAL FITTG, POWER SWITCH			
174	2219-8346	METAL FITTG, HEADPHONES JACK			
177	2222-7250	HEAT SINK, MAIN			
178	2222-7256	HEAT SINK, MAIN POWER			
179	2222-7243	HEAT SINK, BRIDGE			
180	2222-7240	HEAT SINK, EQ			
191	2240-364	HOLDER, AC CORD			
193	2240-7320	HOLDER, POWER SWITCH P.C. BOARD			
194	2240-7239	HOLDER, WIRING			
195	2240-R0101	HOLDER, WIRING (X22)			
201	2218-89	BRACKET, FIX, HEADPHONES JACK			
202	2218-7011	BRACKET, FIX, WIRING (X2)			
208	2360-7026	BOSS, SPE, POWER LED			
211	2402-0374	WASHER, PLASTIC (X2)			
213	2672-7018	LEVER, POWER SHAFT			
216	2601-7178	SHAFT, CARTRIDGE SWITCH			
220	2651-2101728	SPRING, PUSH BUTTON (X5)			
226	2327-R0130062	SCREW, BND+ (3x6 mm)(X5)			

GENERAL UNIT EXPLODED VIEW

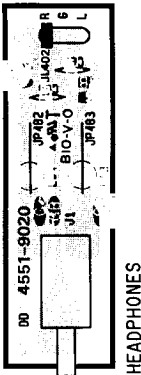


P. C. BOARDS (1)

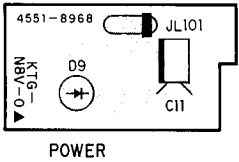
PCB-2 Speaker P. C. Board



PCB-3 Headphones P. C. Board

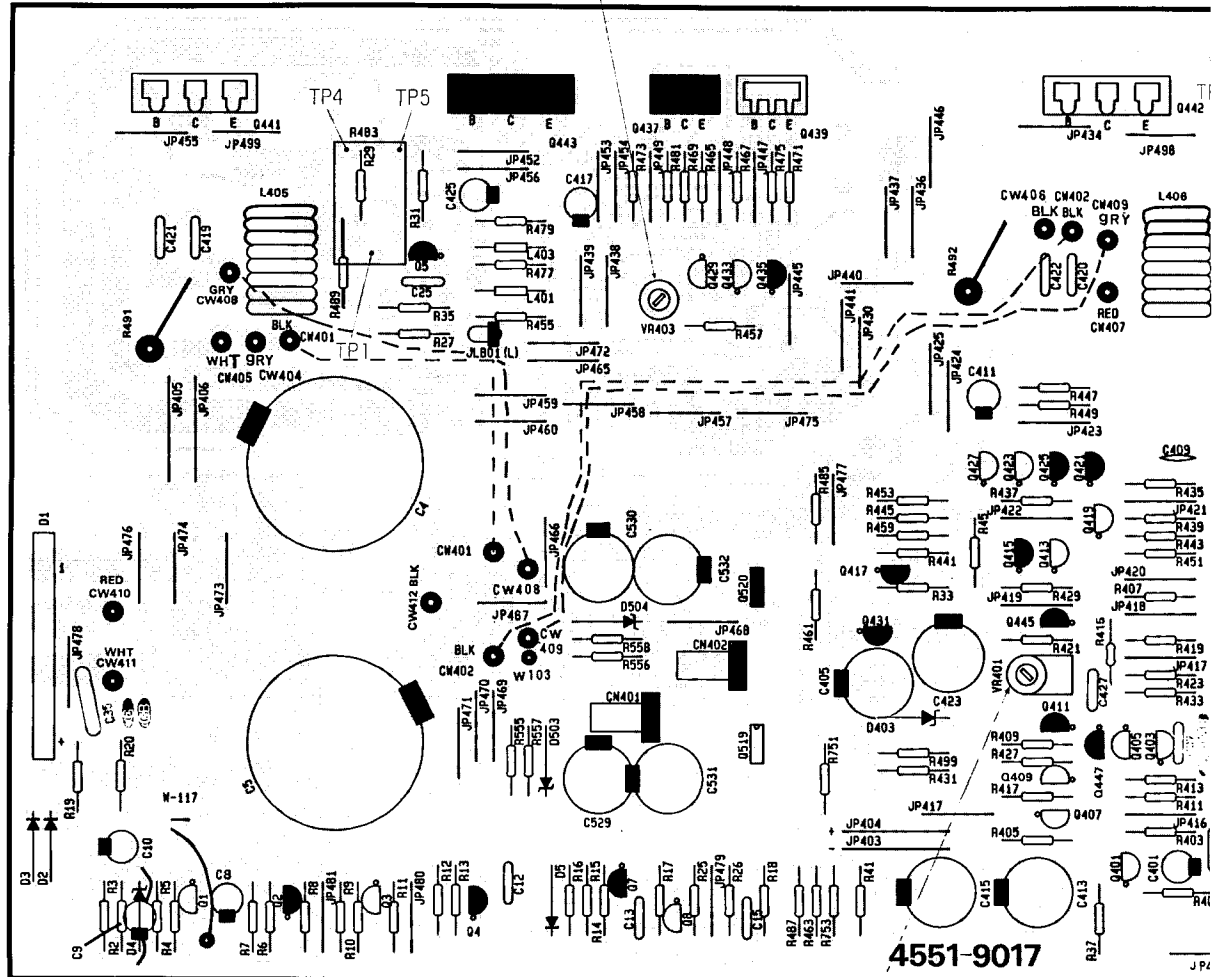


PCB-4 LED P. C. Board

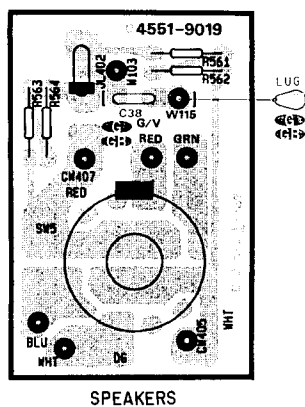


P. C. BOARDS (2)

PCB-1 Main P. C. Board



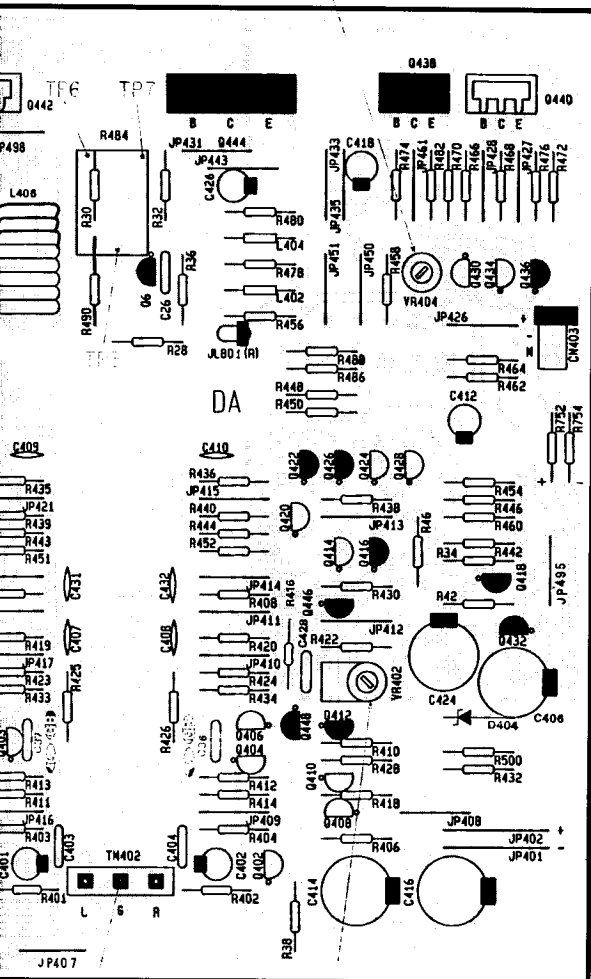
PCB-5 Speaker Switch P. C. Board



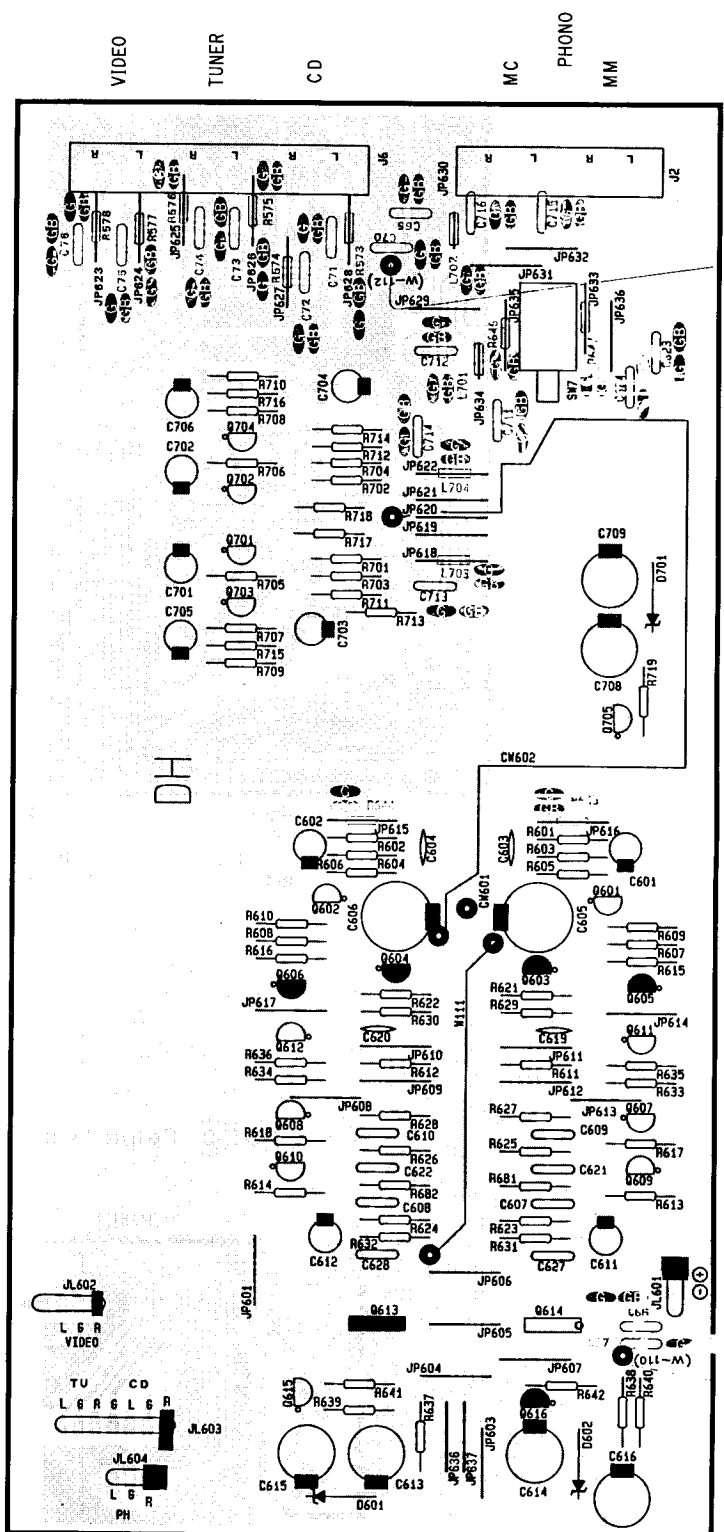
E F G H I J

PCB-6 Equalizer P. C. Board

IDLING CURRENT
ADJ. (R6R)



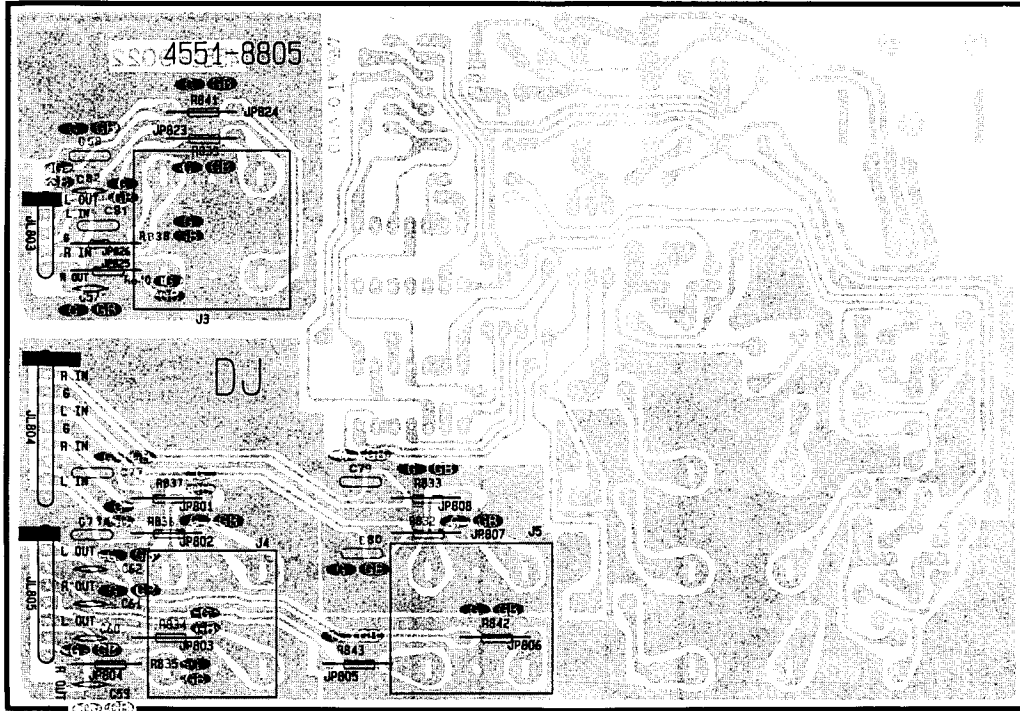
DC BALANCE
ADJ. (P6R)



P. C. BOARDS (3)

PCB-7 Pin Jack P. C. Board

EXTERNAL
PROCESSOR
IN IN
(R) (L)
OUT OUT

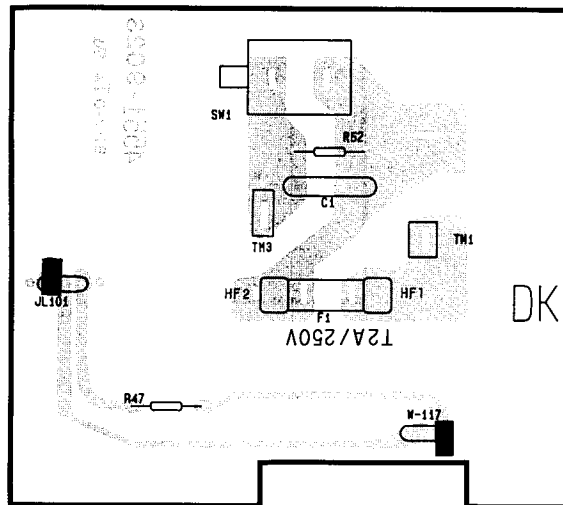


TAPE 1
IN IN
(R) (L)
OUT OUT

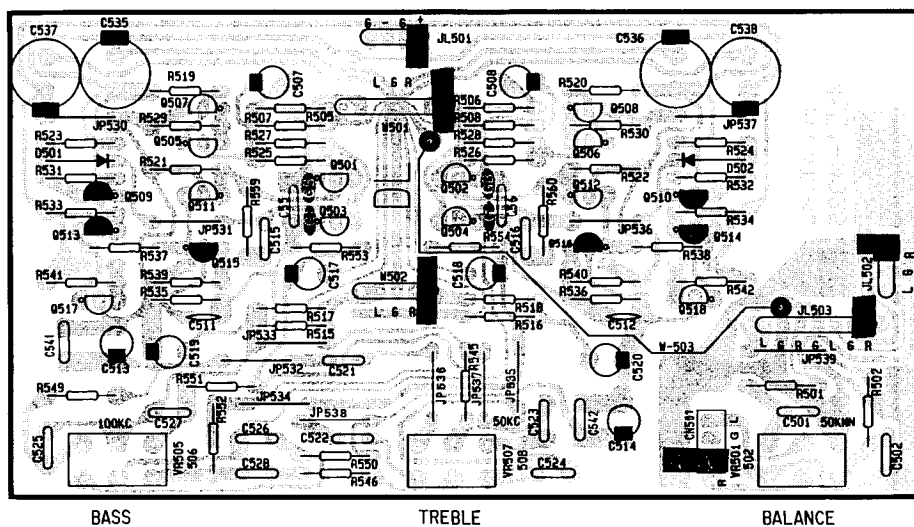
TAPE 2
IN IN
(R) (L)
OUT OUT

PCB-8 Power Switch P. C. Board

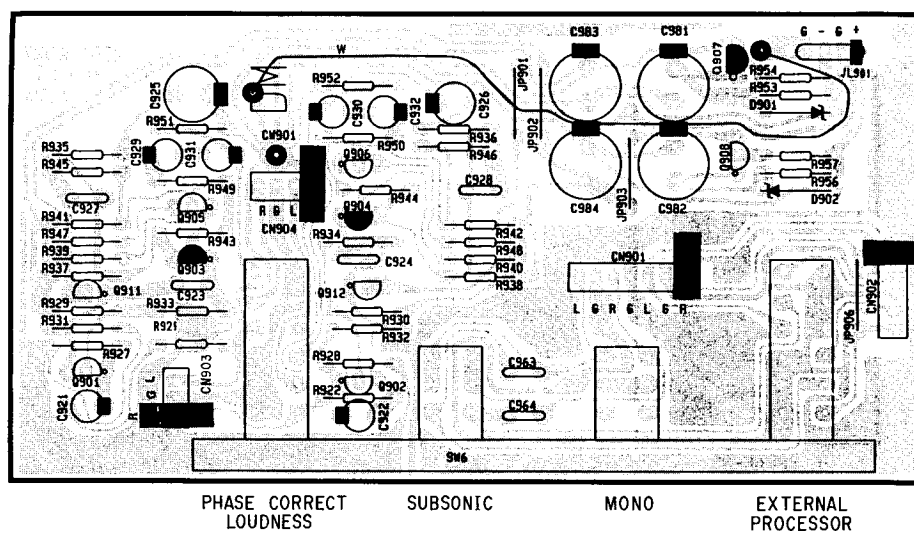
POWER



PCB-9 **Tone Control P. C. Board**

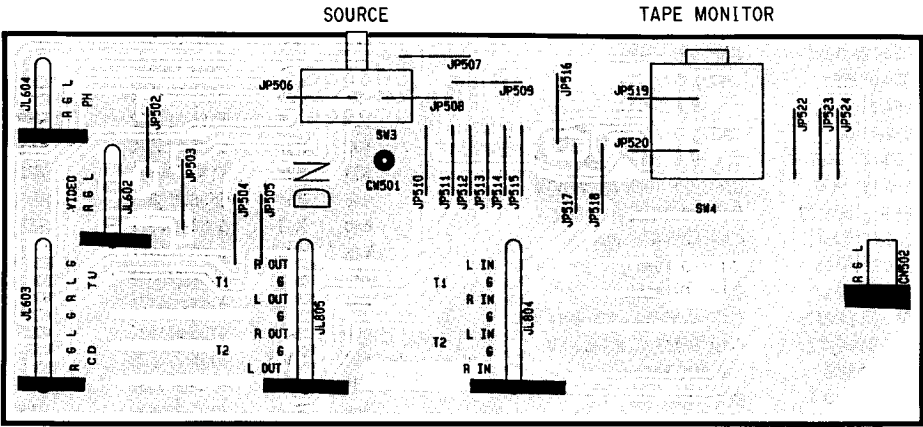


PCB-10 Basscon P. C. Board

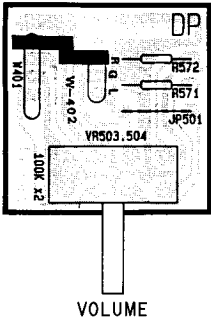


P. C. BOARDS (4)

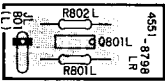
PCB-11 Function P. C. Board



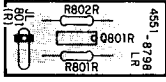
PCB-12 Main Volume P. C. Board



PCB-13 Bias P. C. Board (Lch)



PCB-14 Bias P. C. Board (Rch)



ELECTRICAL PARTS LIST

Ser.No Ref. No. Part No. Description

PCB-1 MAIN P.C. BOARD

CAPACITORS

687	△ C4	5341-S10GM139	CAP, ELE 13000μ/63V
687	△ C5	5341-S10GM139	CAP, ELE 13000μ/63V
632	C8	5345-S19CM336	CAP, MINI ELE 33μ/16V
630	C9	5345-S19CM106	CAP, MINI ELE 10μ/16V
631	C10	5345-S19FM475	CAP, MINI ELE 4.7μ/50V
633	C12	5354-334593	CAP, MYL .33μ
633	C13	5354-334593	CAP, MYL .33μ
636	C15	5354-223J1HM	CAP, MYL .022μ
635	C25	5354-683593	CAP, MYL .068μ
635	C26	5354-683593	CAP, MYL .068μ
057A	C35	5352-1041957	CAP, MTL .1μ G GB
077A	C36	5359-S010K101	CAP, PPP 100P G GB
077A	C37	5359-S010K101	CAP, PPP 100P G GB
561	C401	5345-S19BM107	CAP, MINI ELE 100μ/10V
561	C402	5345-S19BM107	CAP, MINI ELE 100μ/10V
566	C403	5359-6805851	CAP, PPP 68p
566	C404	5359-6805851	CAP, PPP 68p
563	C405	5345-S19AM227	CAP, MINI ELE 220μ/6.3V
563	C406	5345-S19AM227	CAP, MINI ELE 220μ/6.3V
066A	C407	5353-100933	CAP, MCA 10p
066A	C408	5353-100933	CAP, MCA 10p
571	C409	5353-680533	CAP, MCA 68p
571	C410	5353-680533	CAP, MCA 68p
562	C411	5345-S19FM106	CAP, MINI ELE 10μ/50V
562	C412	5345-S19FM106	CAP, MINI ELE 10μ/50V
564	△ C413	5345-337G0962	CAP, MINI ELE 330μ/63V
564	△ C414	5345-337G0962	CAP, MINI ELE 330μ/63V
564	△ C415	5345-337G0962	CAP, MINI ELE 330μ/63V
564	△ C416	5345-337G0962	CAP, MINI ELE 330μ/63V
562	C417	5345-S19FM106	CAP, MINI ELE 10μ/50V
562	C418	5345-S19FM106	CAP, MINI ELE 10μ/50V
568	C419	5354-104593	CAP, MYL .1μ
568	C420	5354-104593	CAP, MYL .1μ
568	C421	5354-104593	CAP, MYL .1μ
568	C422	5354-104593	CAP, MYL .1μ
563	C423	5345-S19AM227	CAP, MINI ELE 220μ/6.3V
563	C424	5345-S19AM227	CAP, MINI ELE 220μ/6.3V
562	C425	5345-S19FM106	CAP, MINI ELE 10μ/50V
562	C426	5345-S19FM106	CAP, MINI ELE 10μ/50V
573	C427	5359-4715851	CAP, PPP 470p IB
573A	C427	5359-3315851	CAP, PPP 330p G GB
573	C428	5359-4715851	CAP, PPP 470p IB
573A	C428	5359-3315851	CAP, PPP 330p G GB
066A	C431	5353-100933	CAP, MCA 10p
066A	C432	5353-100933	CAP, MCA 10p
659	C529	5345-337D041	CAP, MINI ELE 330μ/25V
659	C530	5345-337D041	CAP, MINI ELE 330μ/25V
659	C531	5345-337D041	CAP, MINI ELE 330μ/25V
659	C532	5345-337D041	CAP, MINI ELE 330μ/25V

RESISTORS

641	R2	5135-103522	RES, CBN 1/2P 10K
638	R3	5135-222522	RES, CBN 1/2P 2.2K
645	R4	5135-473522	RES, CBN 1/2P 47K
644	R5	5135-334522	RES, CBN 1/2P 330K
642	R6	5135-684522	RES, CBN 1/2P 680K
647	R7	5135-184522	RES, CBN 1/2P 180K
643	R8	5135-225522	RES, CBN 1/2P 2.2M
640	R9	5135-104522	RES, CBN 1/2P 100K
640	R10	5135-104522	RES, CBN 1/2P 100K
641	R11	5135-103522	RES, CBN 1/2P 10K
640	R12	5135-104522	RES, CBN 1/2P 100K
645	R13	5135-473522	RES, CBN 1/2P 47K
646	R14	5135-223522	RES, CBN 1/2P 22K
646	R15	5135-223522	RES, CBN 1/2P 22K
645	R16	5135-473522	RES, CBN 1/2P 47K
641	R17	5135-103522	RES, CBN 1/2P 10K
646	R18	5135-223522	RES, CBN 1/2P 22K

Ser.No	Ref. No.	Part No.	Description
649	R19	5135-102522	RES, CBN 1/2P 1K
649	R20	5135-102522	RES, CBN 1/2P 1K
650	R25	5135-152522	RES, CBN 1/2P 1.5K
645	R26	5135-473522	RES, CBN 1/2P 47K
648	R27	5135-472522	RES, CBN 1/2P 4.7K
648	R28	5135-472522	RES, CBN 1/2P 4.7K
648	R29	5135-472522	RES, CBN 1/2P 4.7K
648	R30	5135-472522	RES, CBN 1/2P 4.7K
648	R31	5135-472522	RES, CBN 1/2P 4.7K
648	R32	5135-472522	RES, CBN 1/2P 4.7K
646	R33	5135-223522	RES, CBN 1/2P 22K
646	R34	5135-223522	RES, CBN 1/2P 22K
637A	R35	5135-821522	RES, CBN 1/2P 820
637A	R36	5135-821522	RES, CBN 1/2P 820
639	R37	5135-105522	RES, CBN 1/2P 1M
639	R38	5135-105522	RES, CBN 1/2P 1M
646	R41	5135-223522	RES, CBN 1/2P 22K
646	R42	5135-223522	RES, CBN 1/2P 22K
646	R45	5135-223522	RES, CBN 1/2P 22K
646	R46	5135-223522	RES, CBN 1/2P 22K
604	R401	5135-331522	RES, CBN 1/2P 330
604	R402	5135-331522	RES, CBN 1/2P 330
599	R403	5135-223522	RES, CBN 1/2P 22K
599	R404	5135-223522	RES, CBN 1/2P 22K
600	R405	5135-333522	RES, CBN 1/2P 33K
600	R406	5135-333522	RES, CBN 1/2P 33K
589	R407	5135-122522	RES, CBN 1/2P 1.2K
589	R408	5135-122522	RES, CBN 1/2P 1.2K
589	R409	5135-122522	RES, CBN 1/2P 1.2K
589	R410	5135-122522	RES, CBN 1/2P 1.2K
602	R411	5135-221522	RES, CBN 1/2P 220
602	R412	5135-221522	RES, CBN 1/2P 220
602	R413	5135-221522	RES, CBN 1/2P 220
602	R414	5135-221522	RES, CBN 1/2P 220
598	R415	5135-331522	RES, CBN 1/2P 330 IB
598A	R415	5135-122522	RES, CBN 1/2P 1.2K G GB
598	R416	5135-331522	RES, CBN 1/2P 330 IB
598A	R416	5135-122522	RES, CBN 1/2P 1.2K G GB
604	R417	5135-331522	RES, CBN 1/2P 330
604	R418	5135-331522	RES, CBN 1/2P 330
605	R419	5135-333522	RES, CBN 1/2P 33K
605	R420	5135-333522	RES, CBN 1/2P 33K
606	R421	5135-182522	RES, CBN 1/2P 1.8K
606	R422	5135-182522	RES, CBN 1/2P 1.8K
592	R423	5135-751522	RES, CBN 1/2P 750
592	R424	5135-751522	RES, CBN 1/2P 750
591	R425	5135-220522	RES, CBN 1/2P 22
591	R426	5135-220522	RES, CBN 1/2P 22
587	△ R427	5102-1224713	RES, FUSE 1.2K
587	△ R428	5102-1224713	RES, FUSE 1.2K
587	△ R429	5102-1224713	RES, FUSE 1.2K
587	△ R430	5102-1224713	RES, FUSE 1.2K
603	R431	5135-562522	RES, CBN 1/2P 5.6K
603	R432	5135-562522	RES, CBN 1/2P 5.6K
593	R433	5174-243381	RES, MTL 1/4P 24K
593	R434	5174-243381	RES, MTL 1/4P 24K
613	R435	5135-153522	RES, CBN 1/2P 15K
613	R436	5135-153522	RES, CBN 1/2P 15K
608	R437	5135-123522	RES, CBN 1/2P 12K
608	R438	5135-123522	RES, CBN 1/2P 12K
595	R439	5174-222381	RES, MTL 1/4P 2.2K
595	R440	5174-222381	RES, MTL 1/4P 2.2K
595	R441	5174-222381	RES, MTL 1/4P 2.2K
595	R442	5174-222381	RES, MTL 1/4P 2.2K
585	△ R443	5102-1515116	RES, FUSE 150
585	△ R444	5102-1515116	RES, FUSE 150
585	△ R445	5102-1515116	RES, FUSE 150
585	△ R446	5102-1515116	RES, FUSE 150
594	R447	5135-123522	RES, CBN 1/2P 12K
594	R448	5135-123522	RES, CBN 1/2P 12K
594	R449	5135-123522	RES, CBN 1/2P 12K

Ser.No	Ref. No.	Part No.	Description
594	R450	5135-123522	RES, CBN 1/2P 12K
585	△ R451	5102-1515116	RES, FUSE 150
585	△ R452	5102-1515116	RES, FUSE 150
585	△ R453	5102-1515116	RES, FUSE 150
585	△ R454	5102-1515116	RES, FUSE 150
610	R455	5135-121522	RES, CBN 1/2P 120
610	R456	5135-121522	RES, CBN 1/2P 120
609	R457	5135-221522	RES, CBN 1/2P 220
609	R458	5135-221522	RES, CBN 1/2P 220
597	R459	5135-131522	RES, CBN 1/2P 130
597	R460	5135-131522	RES, CBN 1/2P 130
584	△ R461	5102-3R35116	RES, FUSE 3.3
584	△ R462	5102-3R35116	RES, FUSE 3.3
584	△ R463	5102-3R35116	RES, FUSE 3.3
584	△ R464	5102-3R35116	RES, FUSE 3.3
586	△ R465	5102-1015116	RES, FUSE 100
586	△ R466	5102-1015116	RES, FUSE 100
586	△ R467	5102-1015116	RES, FUSE 100
586	△ R468	5102-1015116	RES, FUSE 100
588	△ R469	5102-2R25116	RES, FUSE 2.2
588	△ R470	5102-2R25116	RES, FUSE 2.2
588	△ R471	5102-2R25116	RES, FUSE 2.2
588	△ R472	5102-2R25116	RES, FUSE 2.2
611	R473	5135-150522	RES, CBN 1/2P 15
611	R474	5135-150522	RES, CBN 1/2P 15
611	R475	5135-150522	RES, CBN 1/2P 15
611	R476	5135-150522	RES, CBN 1/2P 15
612	R477	5135-100522	RES, CBN 1/2P 10
612	R478	5135-100522	RES, CBN 1/2P 10
612	R479	5135-100522	RES, CBN 1/2P 10
612	R480	5135-100522	RES, CBN 1/2P 10
590	R481	5135-560522	RES, CBN 1/2P 56
590	R482	5135-560522	RES, CBN 1/2P 56
575	R483	5275-R27671	RES, CEM 5P .27
575	R484	5275-R27671	RES, CEM 5P .27
614	R485	5135-3R3522	RES, CBN 1/2P 3.3
614	R486	5135-3R3522	RES, CBN 1/2P 3.3
614	R487	5135-3R3522	RES, CBN 1/2P 3.3
614	R488	5135-3R3522	RES, CBN 1/2P 3.3
617	R489	5171-1R0581	RES, MTL 1P 1
617	R490	5171-1R0581	RES, MTL 1P 1
615	R491	5175-100581	RES, MTL 3P 10
615	R492	5175-100581	RES, MTL 3P 10
616	R499	5135-103522	RES, CBN 1/2P 10K
616	R500	5135-103522	RES, CBN 1/2P 10K
660	△ R555	5102-1005116	RES, FUSE 10
660	△ R556	5102-1005116	RES, FUSE 10
661	R557	5135-562522	RES, CBN 1/2P 5.6K
661	R558	5135-562522	RES, CBN 1/2P 5.6K
614	R751	5135-3R3522	RES, CBN 1/2P 3.3
614	R752	5135-3R3522	RES, CBN 1/2P 3.3
614	R753	5135-3R3522	RES, CBN 1/2P 3.3
614	R754	5135-3R3522	RES, CBN 1/2P 3.3

TRANSISTORS

621	Q1	5613-1740S(S)	XISTOR, NPN R
622	Q2	5611-933S(S)	XISTOR, PNP R
621	Q3	5613-1740S(S)	XISTOR, NPN R
622	Q4	5611-933S(S)	XISTOR, PNP R
624	Q5	5611-970(BL)	XISTOR, PNP R
624	Q6	5611-970(BL)	XISTOR, PNP R
622	Q7	5611-933S(S)	XISTOR, PNP R
623	Q8	5613-2240(BL)	XISTOR, NPN R
625	Q401	5616-2SK364(V)	FET, N-CH
625	Q402	5616-2SK364(V)	FET, N-CH
531	Q403	5613-1775(F)	XISTOR, NPN R
531	Q404	5613-1775(F)	XISTOR, NPN R
531	Q405	5613-1775(F)	XISTOR, NPN R
531	Q406	5613-1775(F)	XISTOR, NPN R
535	Q407	5613-2320L(F)	XISTOR, NPN R
535	Q408	5613-2320L(F)	XISTOR, NPN R

Ser.No	Ref. No.	Part No.	Description
535	Q409	5613-2320L(F)	XISTOR, NPN R
535	Q410	5613-2320L(F)	XISTOR, NPN R
538	Q411	5611-872(E)	XISTOR, PNP R
538	Q412	5611-872(E)	XISTOR, PNP R
534	Q413	5613-2320L(F)	XISTOR, NPN R
534	Q414	5613-2320L(F)	XISTOR, NPN R
532	Q415	5611-999L(F)	XISTOR, PNP R
532	Q416	5611-999L(F)	XISTOR, PNP R
533	Q417	5611-970(BL)	XISTOR, PNP R
533	Q418	5611-970(BL)	XISTOR, PNP R
536	Q419	5613-2632(S)	XISTOR, NPN R
536	Q420	5613-2632(S)	XISTOR, NPN R
537	Q421	5611-1124(S)	XISTOR, PNP R
537	Q422	5611-1124(S)	XISTOR, PNP R
536	Q423	5613-2632(S)	XISTOR, NPN R
536	Q424	5613-2632(S)	XISTOR, NPN R
537	Q425	5611-1124(S)	XISTOR, PNP R
537	Q426	5611-1124(S)	XISTOR, PNP R
536	Q427	5613-2632(S)	XISTOR, NPN R
536	Q428	5613-2632(S)	XISTOR, NPN R
540	Q429	5613-945(P)	XISTOR, NPN R
540	Q430	5613-945(P)	XISTOR, NPN R
542	Q431	5611-970(BL)	XISTOR, PNP R
542	Q432	5611-970(BL)	XISTOR, PNP R
546	Q433	5613-2632(S)	XISTOR, NPN R
546	Q434	5613-2632(S)	XISTOR, NPN R
545	Q435	5611-1124(S)	XISTOR, PNP R
545	Q436	5611-1124(S)	XISTOR, PNP R
544	Q437	5611-1306(Y)	XISTOR, PNP R
544	Q438	5611-1306(Y)	XISTOR, PNP R
541	Q439	5613-3298(Y)	XISTOR, NPN R
541	Q440	5613-3298(Y)	XISTOR, NPN R
547	△ Q441	5613-3281(O)	XISTOR, NPN R
547	△ Q442	5613-3281(O)	XISTOR, NPN R
549	△ Q443	5611-1302(O)	XISTOR, PNP R
549	△ Q444	5611-1302(O)	XISTOR, PNP R
538	Q445	5611-872(E)	XISTOR, PNP R
538	Q446	5611-872(E)	XISTOR, PNP R
538	Q447	5611-872(E)	XISTOR, PNP R
538	Q448	5611-872(E)	XISTOR, PNP R
655	Q519	5614-1266(P)	XISTOR, NPN A
656	Q520	5612-941(P)	XISTOR, PNP A

DIODES

681	△ D1	5685-D5SB20	SILICON, BRIG
628	△ D2	5636-1S2471	DIODE, SWITCH
628	△ D3	5636-1S2471	DIODE, SWITCH
627	D4	5635-HZ6A-2L	DIODE, ZENER
629	D5	5631-1S2473	DIODE, DET
553	D403	5635-HZ6A2L	DIODE, ZENER
553	D404	5635-HZ6A2L	DIODE, ZENER
657	D503	5635-HZ22-2L	DIODE, ZENER
657	D504	5635-HZ22-2L	DIODE, ZENER

COILS

557	L405	5991-7125	SPRING COIL
557	L406	5991-7125	SPRING COIL

CONTROLS

581	VR401	5101-50271920	RES, SEMI FIX 5K, DC BALANCE
581	VR402	5101-50271920	RES, SEMI FIX 5K, DC BALANCE
582	VR403	5101-50101930	RES, SEMI FIX 500, IDLING CURRENT
582	VR404	5101-50101930	RES, SEMI FIX 500, IDLING CURRENT

MISCELLANEOUS

693	CN401	4443-040185	CONNECTOR
693	CN402	4443-040185	CONNECTOR
694	CN403	4443-030185	CONNECTOR
747	CW401	4163-0110024	CONNECTOR W/W
748	CW402	4163-0114024	CONNECTOR W/W
749	CW404	4163-0134026	CONNECTOR W/W

Ser.No	Ref. No.	Part No.	Description
750	CW405	4163-0140027	CONNECTOR W/W
751	CW406	4163-0134024	CONNECTOR W/W
752	CW407	4163-0140025	CONNECTOR W/W
756	CW408	4163-0110026	CONNECTOR W/W
759	CW409	4163-0114026	CONNECTOR W/W
760	CW410	4163-0119021	CONNECTOR W/W
762	CW411	4163-0119023	CONNECTOR W/W
764	CW412	4163-0122020	CONNECTOR W/W
757	JL801L	4132-R0202101	CORD, 2C
757	JL801R	4132-R0202101	CORD, 2C
558	L401	5597-45502	CORE, BEADS
558	L402	5597-45502	CORE, BEADS
558	L403	5597-45502	CORE, BEADS
558	L404	5597-45502	CORE, BEADS
692	△ TM402	4214-11031	TERMINAL
758	W117	4132-R0202201	CORD, 2C

PCB-2 SPEAKER P.C. BOARD**CAPACITORS**

068A	C51	5359-1515851	CAP, PPP 150p G GB
068A	C52	5359-1515851	CAP, PPP 150p G GB
075A	C53	5359-1515851	CAP, PPP 150p G GB
075A	C54	5359-1515851	CAP, PPP 150p G GB

MISCELLANEOUS

763	JL401	4242-044305	JUMPER LEAD
743	△ TM10	4214-156	TERMINAL, SPEAKER

PCB-3 HEADPHONES P.C. BOARD**CAPACITORS**

070A	C63	5359-S010K101	CAP, PPP 100p G GB
070A	C64	5359-S010K101	CAP, PPP 100p G GB

COILS

071A	L63	5995-221J107	COIL W/CORE G GB
071A	L64	5995-221J107	COIL W/CORE G GB

MISCELLANEOUS

736	J1	4451-51501	JACK, 1P, HEADPHONES
797	JL402	4242-R0503101	JUMPER LEAD
852		2240-Z032	HOLDER, JL402

PCB-4 LED P.C. BOARD**CAPACITOR**

668	C11	5345-S19CM106	CAP, MINI ELE 10μ/16V
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DIODE

741	D9	5637-SLR33MC3	LED, POWER
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PCB-5 SPEAKER SWITCH P.C. BOARD**CAPACITOR**

078A	C38	5359-S010J102	CAP, PPP 1000p G GB
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RESISTORS

619	R561	5135-221522	RES, CBN 1/2P 220
619	R562	5135-221522	RES, CBN 1/2P 220
619	R563	5135-221522	RES, CBN 1/2P 220
619	R564	5135-221522	RES, CBN 1/2P 220

MISCELLANEOUS

729	SW5	4411-00306403	SWITCH, ROTARY, SPEAKERS
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Ser.No	Ref. No.	Part No.	Description
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PCB-6 EQUALIZER P.C. BOARD**CAPACITORS**

079A	C65	5361-103ZF	CAP, CER .01μ G GB
060A	C66	5359-S010J103	CAP, PPP .01μ G GB
060A	C67	5359-S010J103	CAP, PPP .01μ G GB
079A	C70	5361-103ZF	CAP, CER .01μ G GB
076A	C71	5359-1015851	CAP, PPP 100p G GB
076A	C72	5359-1015851	CAP, PPP 100p G GB
076A	C73	5359-1015851	CAP, PPP 100p G GB
076A	C74	5359-1015851	CAP, PPP 100p G GB
076A	C75	5359-1015851	CAP, PPP 100p G GB
076A	C76	5359-1015851	CAP, PPP 100p G GB
419	C601	5345-S19DM475	CAP, MINI ELE 4.7μ/25V
419	C602	5345-S19DM475	CAP, MINI ELE 4.7μ/25V
423	C603	5359-1215851	CAP, PPP 120p
423	C604	5359-1215851	CAP, PPP 120p
420	C605	5345-S19AM227	CAP, MINI ELE 220μ/6.3V
420	C606	5345-S19AM227	CAP, MINI ELE 220μ/6.3V
424	C607	5359-5625851	CAP, PPP 5600p
424	C608	5359-5625851	CAP, PPP 5600p
423	C609	5359-1215851	CAP, PPP 120p
423	C610	5359-1215851	CAP, PPP 120p
421	C611	5345-S19CM106	CAP, MINI ELE 10μ/16V
421	C612	5345-S19CM106	CAP, MINI ELE 10μ/16V
456	C613	5345-227D041	CAP, MINI ELE 220μ/25V
456	C614	5345-227D041	CAP, MINI ELE 220μ/25V
456	C615	5345-227D041	CAP, MINI ELE 220μ/25V
456	C616	5345-227D041	CAP, MINI ELE 220μ/25V
427	C619	5353-040933	CAP, MCA 4p
427	C620	5353-040933	CAP, MCA 4p
422	C621	5359-S010J182	CAP, PPP 1800p
422	C622	5359-S010J182	CAP, PPP 1800p
056A	C623	5353-820534	CAP, MCA 82p G GB
056A	C624	5353-820534	CAP, MCA 82p G GB
425	C627	5359-6825851	CAP, PPP 6800p
425	C628	5359-6825851	CAP, PPP 6800p
837	C701	5345-S19BM107	CAP, MINI ELE 100μ/10V
837	C702	5345-S19BM107	CAP, MINI ELE 100μ/10V
839	C703	5345-477C041	CAP, MINI ELE 470μ/16V
839	C704	5345-477C041	CAP, MINI ELE 470μ/16V
836	C705	5345-S19CM106	CAP, MINI ELE 10μ/16V
836	C706	5345-S19CM106	CAP, MINI ELE 10μ/16V
838	C708	5345-337D041	CAP, MINI ELE 330μ/25V
838	C709	5345-337D041	CAP, MINI ELE 330μ/25V
064A	C711	5359-S010J103	CAP, PPP .01μ G GB
064A	C712	5359-S010J103	CAP, PPP .01μ G GB
064A	C713	5359-S010J103	CAP, PPP .01μ G GB
064A	C714	5359-S010J103	CAP, PPP .01μ G GB
061A	C715	5359-1815851	CAP, PPP 180p G GB
061A	C716	5359-1815851	CAP, PPP 180p G GB

RESISTORS

055A	R573	5135-102522	RES, CBN 1/2P 1K G GB
055A	R574	5135-102522	RES, CBN 1/2P 1K G GB
055A	R575	5135-102522	RES, CBN 1/2P 1K G GB
055A	R576	5135-102522	RES, CBN 1/2P 1K G GB
055A	R577	5135-102522	RES, CBN 1/2P 1K G GB
055A	R578	5135-102522	RES, CBN 1/2P 1K G GB
429	R601	5135-823522	RES, CBN 1/2P 82K
429	R602	5135-823522	RES, CBN 1/2P 82K
430	R603	5135-124522	RES, CBN 1/2P 120K
430	R604	5135-124522	RES, CBN 1/2P 120K
431	R605	5135-221522	RES, CBN 1/2P 220
431	R606	5135-221522	RES, CBN 1/2P 220
432	R607	5135-122522	RES, CBN 1/2P 1.2K
432	R608	5135-122522	RES, CBN 1/2P 1.2K
433	R609	5135-220522	RES, CBN 1/2P 22
433	R610	5135-220522	RES, CBN 1/2P 22
432	R611	5135-122522	RES, CBN 1/2P 1.2K

Se.No.	Ref. No.	Part No.	Description
432	R612	5135-122522	RES, CBN 1/2P 1.2K
434	R613	5135-223522	RES, CBN 1/2P 22K
434	R614	5135-223522	RES, CBN 1/2P 22K
435	R615	5135-820522	RES, CBN 1/2P 82
435	R616	5135-820522	RES, CBN 1/2P 82
436	R617	5135-121522	RES, CBN 1/2P 120
436	R618	5135-121522	RES, CBN 1/2P 120
428	R621	5135-821522	RES, CBN 1/2P 820
428	R622	5135-821522	RES, CBN 1/2P 820
438	R623	5135-393522	RES, CBN 1/2P 39K
438	R624	5135-393522	RES, CBN 1/2P 39K
439	R625	5135-564522	RES, CBN 1/2P 560K
439	R626	5135-564522	RES, CBN 1/2P 560K
440	R627	5135-334522	RES, CBN 1/2P 330K
440	R628	5135-334522	RES, CBN 1/2P 330K
441	R629	5135-102522	RES, CBN 1/2P 1K
441	R630	5135-102522	RES, CBN 1/2P 1K
443	R631	5135-104522	RES, CBN 1/2P 100K
443	R632	5135-104522	RES, CBN 1/2P 100K
444	R633	5135-331522	RES, CBN 1/2P 330
444	R634	5135-331522	RES, CBN 1/2P 330
442	R635	5135-222522	RES, CBN 1/2P 2.2K
442	R636	5135-222522	RES, CBN 1/2P 2.2K
452	△ R637	5102-4705116	RES, FUSE 47
452	△ R638	5102-4705116	RES, FUSE 47
454	R639	5135-103522	RES, CBN 1/2P 10K
454	R640	5135-103522	RES, CBN 1/2P 10K
453	R641	5135-331522	RES, CBN 1/2P 330
453	R642	5135-331522	RES, CBN 1/2P 330
055A	R644	5135-102522	RES, CBN 1/2P 1K G GB
055A	R645	5135-102522	RES, CBN 1/2P 1K G GB
055A	R646	5135-102522	RES, CBN 1/2P 1K G GB
055A	R647	5135-102522	RES, CBN 1/2P 1K G GB
442	R681	5135-222522	RES, CBN 1/2P 2.2K
442	R682	5135-222522	RES, CBN 1/2P 2.2K
841	R701	5135-1R0522	RES, CBN 1/2P 1 1B
841A	R701	5135-100522	RES, CBN 1/2P 10 G GB
841	R702	5135-1R0522	RES, CBN 1/2P 1 1B
841A	R702	5135-100522	RES, CBN 1/2P 10 G GB
844	R703	5135-560522	RES, CBN 1/2P 56 1B
844A	R703	5135-470522	RES, CBN 1/2P 47 G GB
844	R704	5135-560522	RES, CBN 1/2P 56 1B
844A	R704	5135-470522	RES, CBN 1/2P 47 G GB
847	R705	5135-562522	RES, CBN 1/2P 5.6K
847	R706	5135-562522	RES, CBN 1/2P 5.6K
846	R707	5174-681381	RES, MTL 1/4P 680
846	R708	5174-681381	RES, MTL 1/4P 680
845	R709	5135-272522	RES, CBN 1/2P 2.7K
845	R710	5135-272522	RES, CBN 1/2P 2.7K
843	R711	5174-220381	RES, MTL 1/4P 22
843	R712	5174-220381	RES, MTL 1/4P 22
842	R713	5135-121522	RES, CBN 1/2P 120
842	R714	5135-121522	RES, CBN 1/2P 120
842	R715	5135-121522	RES, CBN 1/2P 120
842	R716	5135-121522	RES, CBN 1/2P 120
840	R717	5135-822522	RES, CBN 1/2P 8.2K
840	R718	5135-822522	RES, CBN 1/2P 8.2K
849	R719	5135-152522	RES, CBN 1/2P 1.5K

TRANSISTORS

411	Q601	5613-2320L(F)	XISTOR, NPN R
411	Q602	5613-2320L(F)	XISTOR, NPN R
414	Q603	5611-999L(F)	XISTOR, PNP R
414	Q604	5611-999L(F)	XISTOR, PNP R
414	Q605	5611-999L(F)	XISTOR, PNP R
414	Q606	5611-999L(F)	XISTOR, PNP R
411	Q607	5613-2320L(F)	XISTOR, NPN R
411	Q608	5613-2320L(F)	XISTOR, NPN R
411	Q609	5613-2320L(F)	XISTOR, NPN R
411	Q610	5613-2320L(F)	XISTOR, NPN R
411	Q611	5613-2320L(F)	XISTOR, NPN R

<u>Ser.No</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
411	Q612	5613-2320L(F)	XISTOR, NPN R
448	Q613	5612-941(P)	XISTOR, PNP A
447	Q614	5614-1266(P)	XISTOR, NPN A
449	Q615	5613-1740S(S)	XISTOR, NPN R
450	Q616	5611-933S(S)	XISTOR, PNP R
832	Q701	5613-2855(E)	XISTOR, NPN R
832	Q702	5613-2855(E)	XISTOR, NPN R
832	Q703	5613-2855(E)	XISTOR, NPN R
832	Q704	5613-2855(E)	XISTOR, NPN R
833	Q705	5613-2320L(F)	XISTOR, NPN R

DIODES

451	D601	5635-HZ18-2L	DIODE, ZENER
451	D602	5635-HZ18-2L	DIODE, ZENER
834	D701	5635-HZ15-2L	DIODE, ZENER

MISCELLANEOUS

753	CW601	4163-0140039	CONNECTOR W/W
761	CW602	4163-0118024	CONNECTOR W/W
737	△ J2	4484-46	PIN JACK, 4P, PHONO MM/MC
739	△ J6	4486-15	PIN JACK, 6P, CD/TUNER/VIDEO
768	JL601	4242-R0503151	JUMPER LEAD
769	JL602	4242-R0504181	JUMPER LEAD
770	JL603	4242-R0507181	JUMPER LEAD
791	JL604	4242-R0503181	JUMPER LEAD
065A	L701	5597-45502	CORE, BEADS  
065A	L702	5597-45502	CORE, BEADS  
065A	L703	5597-45502	CORE, BEADS  
065A	L704	5597-45502	CORE, BEADS  
074A	LCN601	4132-R0102800	CORD, 2C  
733	SW7	4431-S0315102	SWITCH, PUSH, CARTRIDGE
773		2240-Z072	HOLDER, JL603
855		2240-Z042	HOLDER, JL602
857		2240-Z032	HOLDER, JL601, 604

PCB-7 PIN JACK P.C. BOARD

CAPACITORS

069A	C57	5359-1015851	CAP, PPP 100p		
069A	C58	5359-1015851	CAP, PPP 100p		
069A	C59	5359-1015851	CAP, PPP 100p		
069A	C60	5359-1015851	CAP, PPP 100p		
069A	C61	5359-1015851	CAP, PPP 100p		
069A	C62	5359-1015851	CAP, PPP 100p		
069A	C77	5359-1015851	CAP, PPP 100p		
069A	C78	5359-1015851	CAP, PPP 100p		
069A	C79	5359-1015851	CAP, PPP 100p		
069A	C80	5359-1015851	CAP, PPP 100p		
069A	C81	5359-1015851	CAP, PPP 100p		
069A	C82	5359-1015851	CAP, PPP 100p		

RESISTORS

058A	R832	5135-102522	RES, CBN 1/2P 1K		
058A	R833	5135-102522	RES, CBN 1/2P 1K		
058A	R834	5135-102522	RES, CBN 1/2P 1K		
058A	R835	5135-102522	RES, CBN 1/2P 1K		
058A	R836	5135-102522	RES, CBN 1/2P 1K		
058A	R837	5135-102522	RES, CBN 1/2P 1K		
058A	R838	5135-102522	RES, CBN 1/2P 1K		
058A	R839	5135-102522	RES, CBN 1/2P 1K		
058A	R840	5135-102522	RES, CBN 1/2P 1K		
058A	R841	5135-102522	RES, CBN 1/2P 1K		
058A	R842	5135-102522	RES, CBN 1/2P 1K		
058A	R843	5135-102522	RES, CBN 1/2P 1K		

MISCELLANEOUS

738	△J3	4489-01001004	PIN JACK, MLT, EXTERNAL PROCESSOR IN/OUT
738	△J4	4489-01001004	PIN JACK, MLT, TAPE 1 IN/OUT

Ser.No	Ref. No.	Part No.	Description
738	△ J5	4489-01001004	PIN JACK, MLT, TAPE 2 IN/OUT
766	JL803	4242-R0505351	JUMPER LEAD
767	JL804	4242-R0507351	JUMPER LEAD
767	JL805	4242-R0507351	JUMPER LEAD
772		2240-Z072	HOLDER, JL804, 805
853		2240-Z052	HOLDER, JL803

PCB-8 POWER SWITCH P.C. BOARD

CAPACITOR			
667A	△ C1	5352-1030958	CAP, MTL .01μ
RESISTORS			
662	R47	5135-471522	RES, CBN 1/2P 470
054A	△ R52	5135-335522	RES, CBN 1/2P 3.3M

MISCELLANEOUS			
685A	△ F1	5732-202030	FUSE, 250V/T2A
684	△ HF1	4472-04501	HOLDER, FUSE, F1
684	△ HF2	4472-04501	HOLDER, FUSE, F1
796	JL101	4242-R0203141	JUMPER LEAD
732	△ SW1	4433-00401	SWITCH, PU-PW, POWER
675	△ TM1	4214-122	TERMINAL
675	△ TM3	4214-122	TERMINAL
851		2240-Z032	HOLDER, JL101

PCB-9 TONE CONTROL P.C. BOARD

CAPACITORS			
073A	C55	5359-1015851	CAP, PPP 100p 
073A	C56	5359-1015851	CAP, PPP 100p 
484	C501	5359-1015851	CAP, PPP 100p
484	C502	5359-1015851	CAP, PPP 100p
480	C507	5345-S19DM475	CAP, MINI ELE 4.7μ/25V
480	C508	5345-S19DM475	CAP, MINI ELE 4.7μ/25V
487	C511	5353-010933	CAP, MCA 1p
487	C512	5353-010933	CAP, MCA 1p
481	C513	5345-155F0951	CAP, MINI ELE 1.5μ/50V
481	C514	5345-155F0951	CAP, MINI ELE 1.5μ/50V
488	C515	5359-4715851	CAP, PPP 470p
488	C516	5359-4715851	CAP, PPP 470p
478	C517	5345-S19CM106	CAP, MINI ELE 10μ/16V
478	C518	5345-S19CM106	CAP, MINI ELE 10μ/16V
482	C519	5345-S19CM476	CAP, MINI ELE 47μ/16V
482	C520	5345-S19CM476	CAP, MINI ELE 47μ/16V
497	C521	5354-822J1HM	CAP, MYL 8200p
497	C522	5354-822J1HM	CAP, MYL 8200p
498	C523	5354-563J1HM	CAP, MYL .056μ
498	C524	5354-563J1HM	CAP, MYL .056μ
499	C525	5354-823J1HM	CAP, MYL .082μ
499	C526	5354-823J1HM	CAP, MYL .082μ
491	C527	5354-334593	CAP, MYL .33μ
491	C528	5354-334593	CAP, MYL .33μ
479	C535	5345-227D041	CAP, MINI ELE 220μ/25V
479	C536	5345-227D041	CAP, MINI ELE 220μ/25V
479	C537	5345-227D041	CAP, MINI ELE 220μ/25V
479	C538	5345-227D041	CAP, MINI ELE 220μ/25V
492	C541	5354-394593	CAP, MYL .39μ
492	C542	5354-394593	CAP, MYL .39μ

RESISTORS			
507	R501	5135-331522	RES, CBN 1/2P 330
507	R502	5135-331522	RES, CBN 1/2P 330
503	R505	5135-224522	RES, CBN 1/2P 220K
503	R506	5135-224522	RES, CBN 1/2P 220K
502	R507	5135-394522	RES, CBN 1/2P 390K
502	R508	5135-394522	RES, CBN 1/2P 390K
514	R515	5135-183522	RES, CBN 1/2P 18K

Ser.No	Ref. No.	Part No.	Description
514	R516	5135-183522	RES, CBN 1/2P 18K
507	R517	5135-331522	RES, CBN 1/2P 330
507	R518	5135-331522	RES, CBN 1/2P 330
504	R519	5135-473522	RES, CBN 1/2P 47K
504	R520	5135-473522	RES, CBN 1/2P 47K
505	R521	5135-332522	RES, CBN 1/2P 3.3K
505	R522	5135-332522	RES, CBN 1/2P 3.3K
505	R523	5135-332522	RES, CBN 1/2P 3.3K
505	R524	5135-332522	RES, CBN 1/2P 3.3K
506	R525	5135-471522	RES, CBN 1/2P 470
506	R526	5135-471522	RES, CBN 1/2P 470
506	R527	5135-471522	RES, CBN 1/2P 470
506	R528	5135-471522	RES, CBN 1/2P 470
507	R529	5135-331522	RES, CBN 1/2P 330
507	R530	5135-331522	RES, CBN 1/2P 330
508	R531	5135-222522	RES, CBN 1/2P 2.2K
508	R532	5135-222522	RES, CBN 1/2P 2.2K
508	R533	5135-222522	RES, CBN 1/2P 2.2K
508	R534	5135-222522	RES, CBN 1/2P 2.2K
509	R535	5135-274522	RES, CBN 1/2P 270K
509	R536	5135-274522	RES, CBN 1/2P 270K
510	R537	5135-153522	RES, CBN 1/2P 15K
510	R538	5135-153522	RES, CBN 1/2P 15K
507	R539	5135-331522	RES, CBN 1/2P 330
507	R540	5135-331522	RES, CBN 1/2P 330
507	R541	5135-331522	RES, CBN 1/2P 330
507	R542	5135-331522	RES, CBN 1/2P 330
515	R545	5135-271522	RES, CBN 1/2P 270
515	R546	5135-271522	RES, CBN 1/2P 270
513	R549	5135-822522	RES, CBN 1/2P 8.2K
513	R550	5135-822522	RES, CBN 1/2P 8.2K
512	R551	5135-152522	RES, CBN 1/2P 1.5K
512	R552	5135-152522	RES, CBN 1/2P 1.5K
516	R553	5135-563522	RES, CBN 1/2P 56K
516	R554	5135-563522	RES, CBN 1/2P 56K
501	R559	5135-331522	RES, CBN 1/2P 330
501	R560	5135-331522	RES, CBN 1/2P 330

TRANSISTORS			
471	Q501	5613-2320L(F)	XISTOR, NPN R
471	Q502	5613-2320L(F)	XISTOR, NPN R
471	Q503	5613-2320L(F)	XISTOR, NPN R
471	Q504	5613-2320L(F)	XISTOR, NPN R
471	Q505	5613-2320L(F)	XISTOR, NPN R
471	Q506	5613-2320L(F)	XISTOR, NPN R
471	Q507	5613-2320L(F)	XISTOR, NPN R
471	Q508	5613-2320L(F)	XISTOR, NPN R
473	Q509	5611-999L(F)	XISTOR, PNP R
473	Q510	5611-999L(F)	XISTOR, PNP R
476	Q511	5613-2320L(F)	XISTOR, NPN R
476	Q512	5613-2320L(F)	XISTOR, NPN R
473	Q513	5611-999L(F)	XISTOR, PNP R
473	Q514	5611-999L(F)	XISTOR, PNP R
475	Q515	5612-646A(C)	XISTOR, PNP A
475	Q516	5612-646A(C)	XISTOR, PNP A
474	Q517	5614-666A(C)	XISTOR, NPN A
474	Q518	5614-666A(C)	XISTOR, NPN A

DIODES			
477	D501	5631-1S2473	DIODE, DET
477	D502	5631-1S2473	DIODE, DET

CONTROLS			
720	VR501/502	5113-S1501503	RES, V CBN 16 50K, BALANCE
714	VR505/506	5113-10420122	RES, V CBN 16 100K, BASS
717	VR507/508	5113-50321122	RES, V CBN 16 50K, TREBLE

Ser.No	Ref. No.	Part No.	Description
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MISCELLANEOUS

703	CN501	4443-030185	CONNECTOR
793	JL501	4242-R0504121	JUMPER LEAD
794	JL502	4242-R0203500	JUMPER LEAD
795	JL503	4242-R0507181	JUMPER LEAD
850		2240-Z072	HOLDER, JL503
854		2240-Z042	HOLDER, JL501
859		2240-Z031	HOLDER, W502
860		2240-Z051	HOLDER, W501

PCB-10 BASSCON P.C. BOARD

CAPACITORS

806	C921	5345-S19FM104	CAP, MINI ELE .1μ/50V
806	C922	5345-S19FM104	CAP, MINI ELE .1μ/50V
810	C923	5354-154593	CAP, MYL .15μ
810	C924	5354-154593	CAP, MYL .15μ
808	C925	5345-107D041	CAP, MINI ELE 100μ/25V
808	C926	5345-107D041	CAP, MINI ELE 100μ/25V
811	C927	5354-334593	CAP, MYL .33μ
811	C928	5354-334593	CAP, MYL .33μ
807	C929	5345-S19FM474	CAP, MINI ELE .47μ/50V
807	C930	5345-S19FM474	CAP, MINI ELE .47μ/50V
807	C931	5345-S19FM474	CAP, MINI ELE .47μ/50V
807	C932	5345-S19FM474	CAP, MINI ELE .47μ/50V
812	C963	5354-474593	CAP, MYL .47μ
812	C964	5354-474593	CAP, MYL .47μ
809	C981	5345-227D041	CAP, MINI ELE 220μ/25V
809	C982	5345-227D041	CAP, MINI ELE 220μ/25V
809	C983	5345-227D041	CAP, MINI ELE 220μ/25V
809	C984	5345-227D041	CAP, MINI ELE 220μ/25V

RESISTORS

814	R921	5135-471522	RES, CBN 1/2P 470
814	R922	5135-471522	RES, CBN 1/2P 470
816	R927	5135-104522	RES, CBN 1/2P 100K
816	R928	5135-104522	RES, CBN 1/2P 100K
817	R929	5135-332522	RES, CBN 1/2P 3.3K
817	R930	5135-332522	RES, CBN 1/2P 3.3K
817	R931	5135-332522	RES, CBN 1/2P 3.3K
817	R932	5135-332522	RES, CBN 1/2P 3.3K
818	R933	5135-183522	RES, CBN 1/2P 18K
818	R934	5135-183522	RES, CBN 1/2P 18K
819	R935	5135-472522	RES, CBN 1/2P 4.7K
819	R936	5135-472522	RES, CBN 1/2P 4.7K
820	R937	5135-562522	RES, CBN 1/2P 5.6K
820	R938	5135-562522	RES, CBN 1/2P 5.6K
817	R939	5135-332522	RES, CBN 1/2P 3.3K
817	R940	5135-332522	RES, CBN 1/2P 3.3K
817	R941	5135-332522	RES, CBN 1/2P 3.3K
817	R942	5135-332522	RES, CBN 1/2P 3.3K
825	R943	5135-472522	RES, CBN 1/2P 4.7K
825	R944	5135-472522	RES, CBN 1/2P 4.7K
821	R945	5135-331522	RES, CBN 1/2P 330
821	R946	5135-331522	RES, CBN 1/2P 330
823	R947	5135-221522	RES, CBN 1/2P 220
823	R948	5135-221522	RES, CBN 1/2P 220
821	R949	5135-331522	RES, CBN 1/2P 330
821	R950	5135-331522	RES, CBN 1/2P 330
822	R951	5135-104522	RES, CBN 1/2P 100K
822	R952	5135-104522	RES, CBN 1/2P 100K
824	R953	5135-682522	RES, CBN 1/2P 6.8K
830	△ R954	5102-4705116	RES, FUSE 47
824	R956	5135-682522	RES, CBN 1/2P 6.8K
830	△ R957	5102-4705116	RES, FUSE 47

TRANSISTORS

801	Q901	5613-2240(BL)	XISTOR, NPN R
813	Q902	5613-2240(BL)	XISTOR, NPN R
802	Q903	5611-970(BL)	XISTOR, PNP R

Ser.No	Ref. No.	Part No.	Description
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802	Q904	5611-970(BL)	XISTOR, PNP R
801	Q905	5613-2240(BL)	XISTOR, NPN R
801	Q906	5613-2240(BL)	XISTOR, NPN R
804	Q907	5612-647(C)	XISTOR, PNP A
803	Q908	5614-667(C)	XISTOR, NPN A
828	Q911	5616-2SK246(Y)	FET, N-CH
828	Q912	5616-2SK246(Y)	FET, N-CH

DIODES

805	D901	5635-HZ12B2L	DIODE, ZENER
805	D902	5635-HZ12B2L	DIODE, ZENER

MISCELLANEOUS

699	CN901	4443-070185	CONNECTOR
700	CN902	4443-050185	CONNECTOR
701	CN903	4443-030185	CONNECTOR
701	CN904	4443-030185	CONNECTOR
755	CW901	4163-0125039	CONNECTOR W/W
792	JL901	4242-R0504251	JUMPER LEAD
731	SW6	4431-04127170	SWITCH, PUSH, PHASE CORRECT LOUDNESS/SUBSONIC/MONO EXTERNAL PROCESSOR
856		2240-Z042	HOLDER, JL901

PCB-11 FUNCTION P.C. BOARD

MISCELLANEOUS

702	CN502	4443-030185	CONNECTOR
754	CW501	4163-0113039	CONNECTOR W/W
723	SW3	4411-00214204	SWITCH, ROTARY, SOURCE
726	SW4	4411-00213404	SWITCH, ROTARY, TAPE MONITOR

PCB-12 MAIN VOLUME P.C. BOARD

RESISTORS

523	R571	5135-472522	RES, CBN 1/2P 4.7K
523	R572	5135-472522	RES, CBN 1/2P 4.7K

CONTROLS

711	VR503/ 504	5113-10419122	RES, V CBN 16 100K, VOLUME
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MISCELLANEOUS

858		2240-Z031	HOLDER, W-401, 402
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PCB-13 BIAS (LCH) P.C. BOARD

RESISTORS

607	R801L	5135-222522	RES, CBN 1/2P 2.2K
601	R802L	5135-122522	RES, CBN 1/2P 1.2K

TRANSISTOR

551	Q801L	5613-2682(Q)	XISTOR, NPN R
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PCB-14 BIAS (RCH) P.C. BOARD

RESISTORS

607	R801R	5135-222522	RES, CBN 1/2P 2.2K
601	R802R	5135-122522	RES, CBN 1/2P 1.2K

TRANSISTOR

551	Q801R	5613-2682(Q)	XISTOR, NPN R
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Ser.No **Ref. No.** **Part No.**

Description

CHASSIS MISCELLANEOUS

CAPACITORS

689A	C2	5352-S060K104	CAP, MTL .1U
689A	C3	5352-S060K104	CAP, MTL .1U

MISCELLANEOUS

052A	△ CO1	4443-712	CONNECTOR
062A	LUG	4211-4	LUG (X3) G GB
560	LUG	4211-4	LUG, CHASSIS EARTH
745A	△ P1	4161-7256	CORD W/PLUG
051A	△ SW101	4467-012	SWITCH, VOLTAGE SELECTOR
683A	△ T1	5584-T0705	XFORMER, POWER
053A	△	4150-8	TUBING, SPE

PACKING PARTS LIST

021	1756-06304	LABEL, 230V/50Hz
022	1756-03124	LABEL (G), (X2) G GB
022	1756-03108	LABEL (I), (X2) IB
107	1111-0280J152	OWNER GUIDE
121	1241-R0123351	POLYETHY BAG, OG
122	1241-R0160601	POLYETHY BAG, SET
124	1221-837167	CARTON BOX G
124	1221-847167	CARTON BOX GB IB
125	1222-7331	CUSHION, L
126	1222-7332	CUSHION, R
127	1223-11729	SOFT SHEET

ABBREVIATIONS IN PARTS LIST

CAPACITORS

CAP, MINI ELE	: Electrolytic
CAP, CER	: Ceramic
CAP, PPP	: Polypropylene
CAP, MYL	: Mylar
CAP, MCA	: Mica
CAP, MINI BP	: Bipolar
CAP, ELE BP	: Electrolytic Bipolar
CAP, STY	: Polystyrene Film
CAP, SPE	: Special
CAP, TAN	: Tantalum

470μ	: 470μF
6800p	: 6800pF
.047μ	: 0.047μF

RESISTORS

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

TRANSISTORS

XISTOR	: Transistor
FET	: Field Effect Transistor

CONTROLS

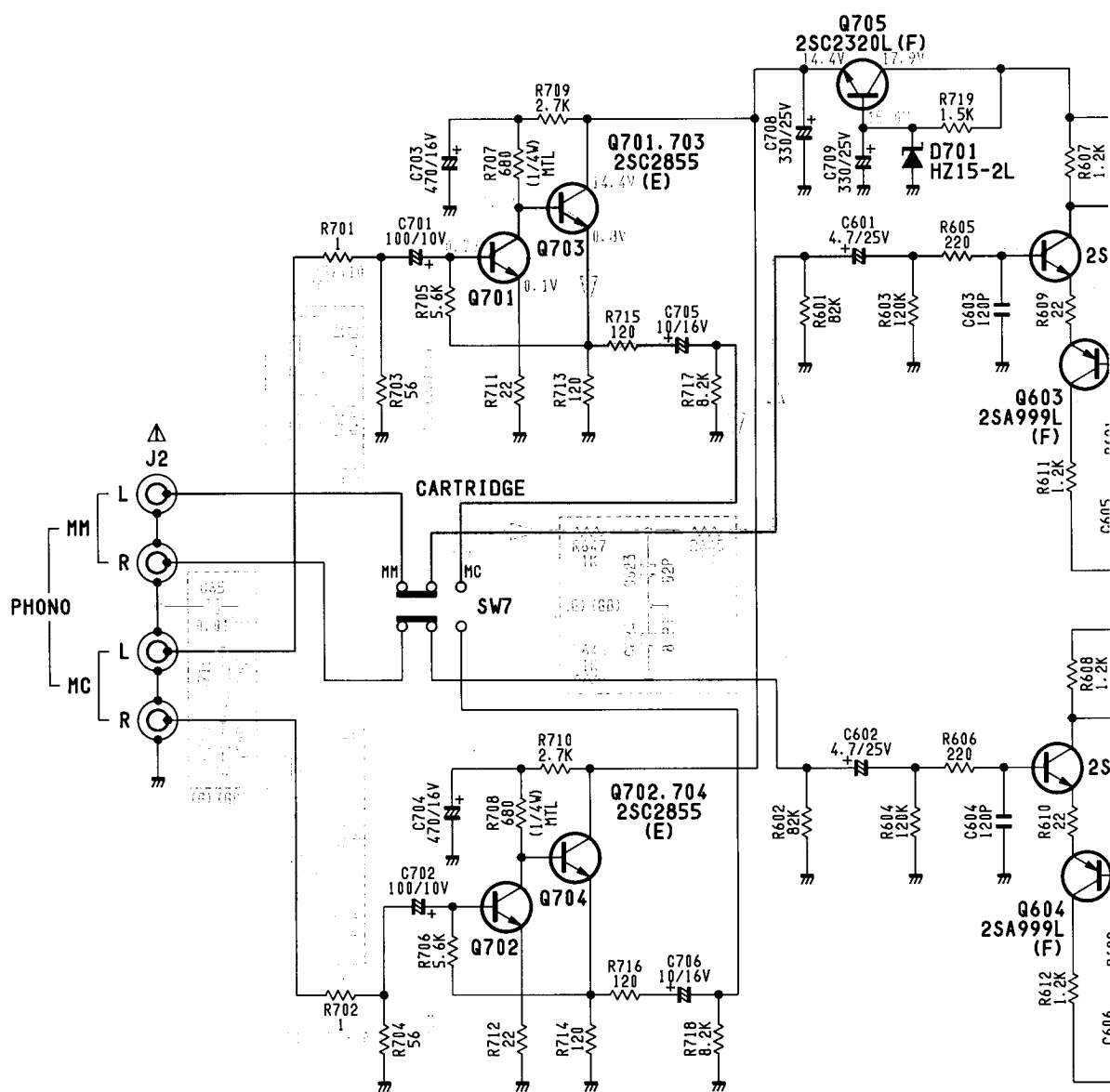
RES, V CBN	: Variable Carbon Resistor
RES, SEMI FIX	: Semi-fixed Resistor

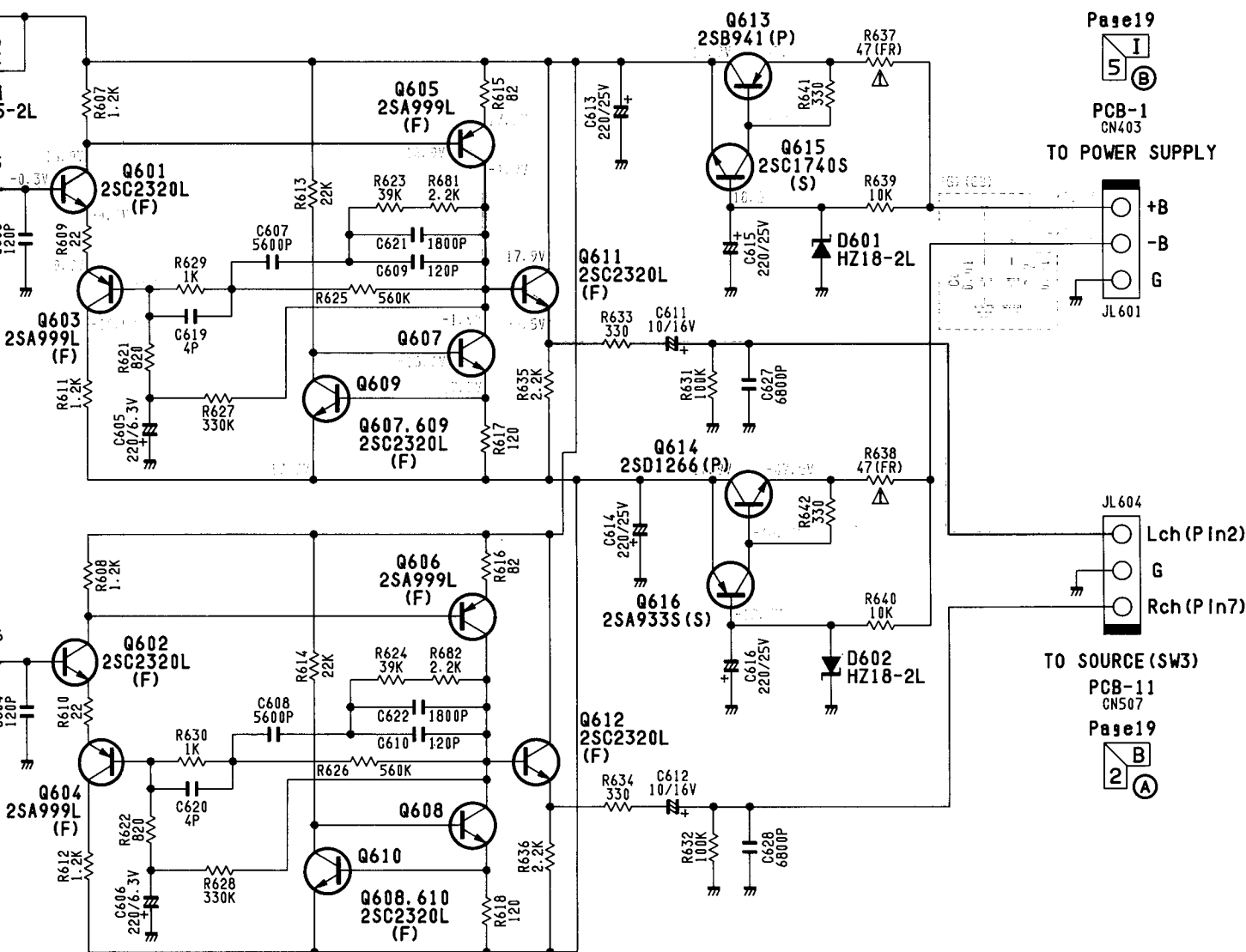
NOTE



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

EQUALIZER P.C. BOARD



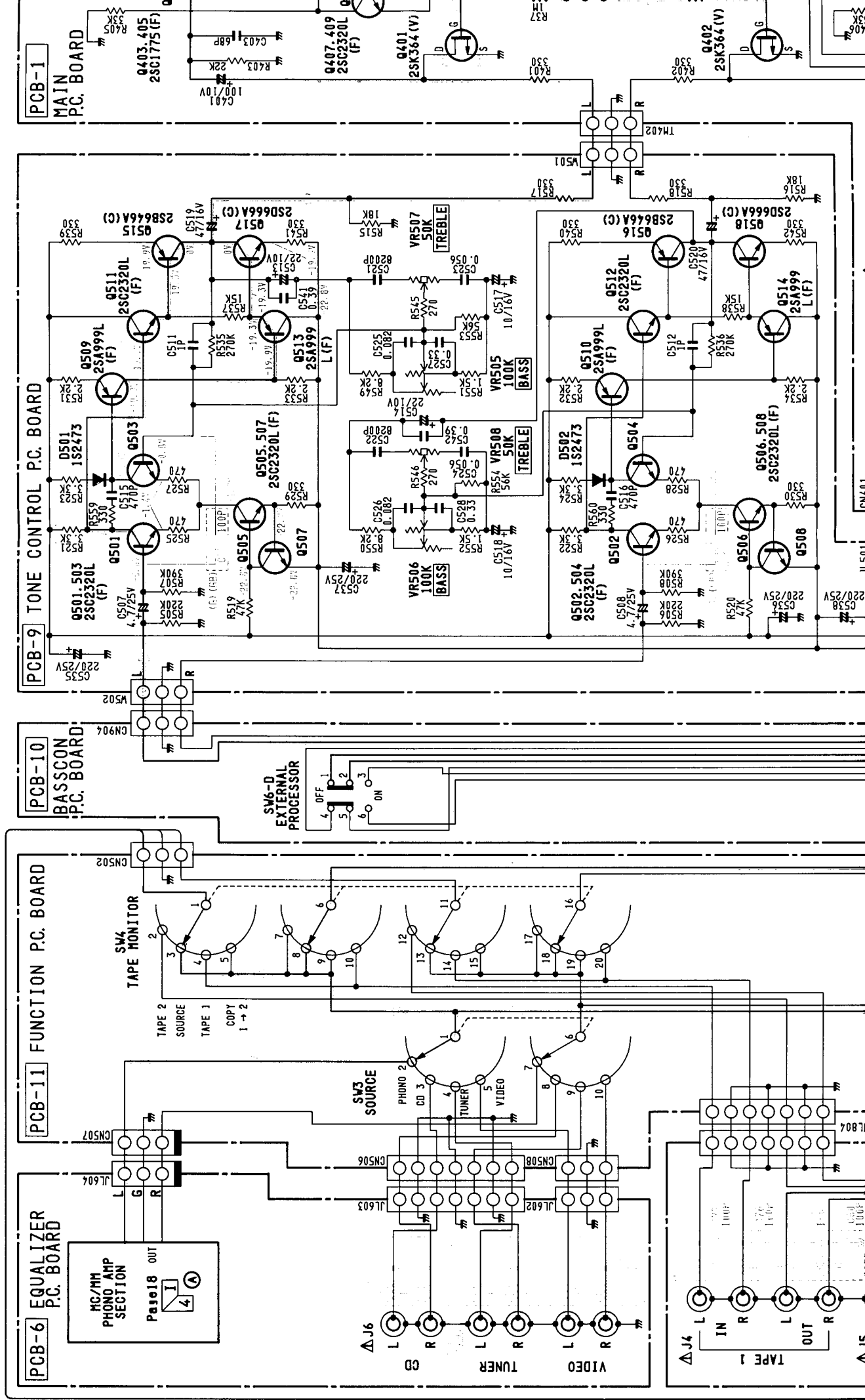


NOTE:

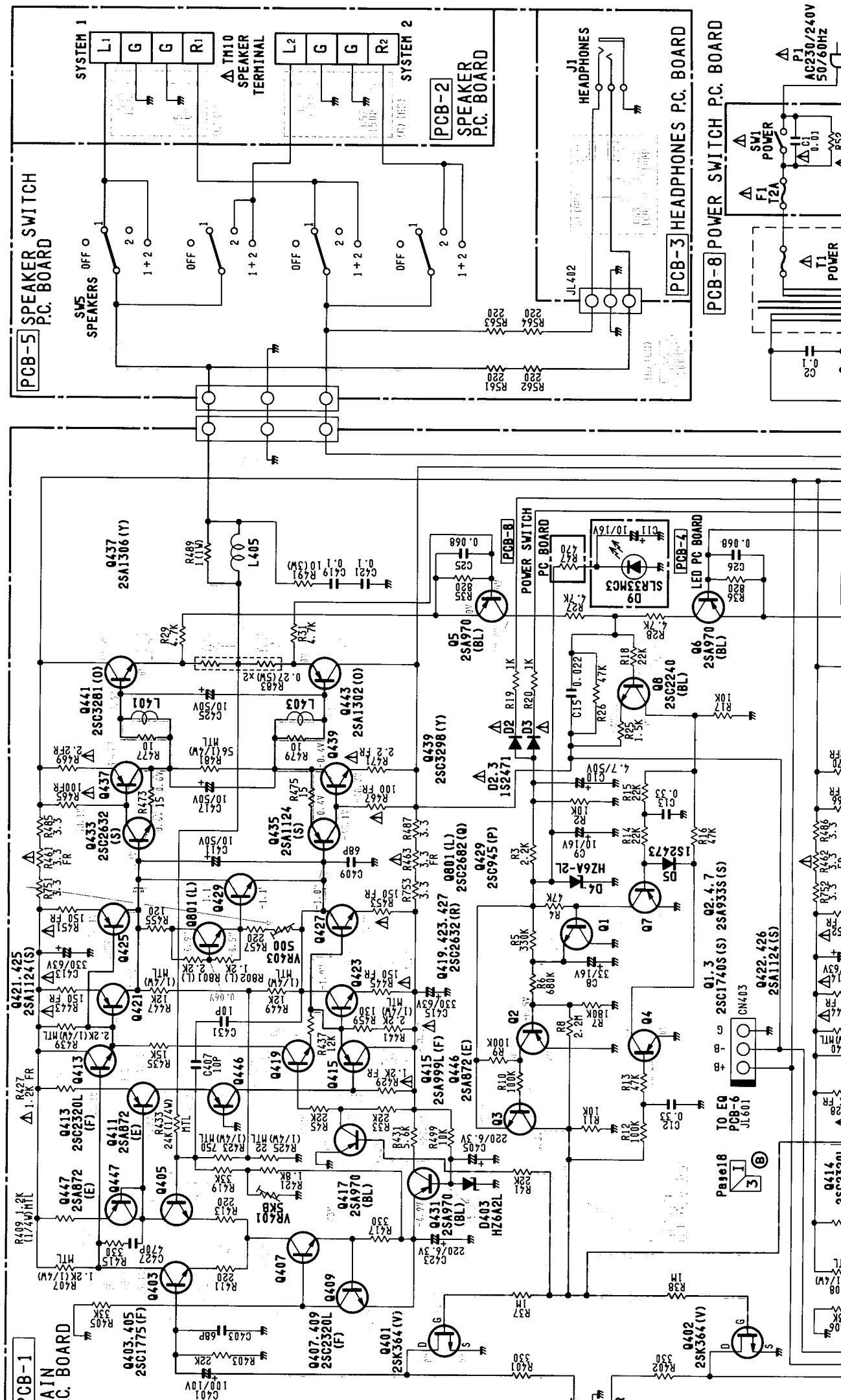
1. ALL RESISTANCES VALUES ARE IN Ω .
 $K\Omega=1000\Omega$, $M\Omega=1000K\Omega$.
2. THE WATTAGE OF RESISTORS IS 1/2W UNLESS OTHERWISE NOTED.
3. ALL CAPACITANCES VALUES ARE IN μF UNLESS OTHERWISE NOTED. $P=\mu F$.
4. ...V:DC VOLTAGE AT NO SIGNAL UNLESS OTHERWISE NOTED.
5. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS. THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.



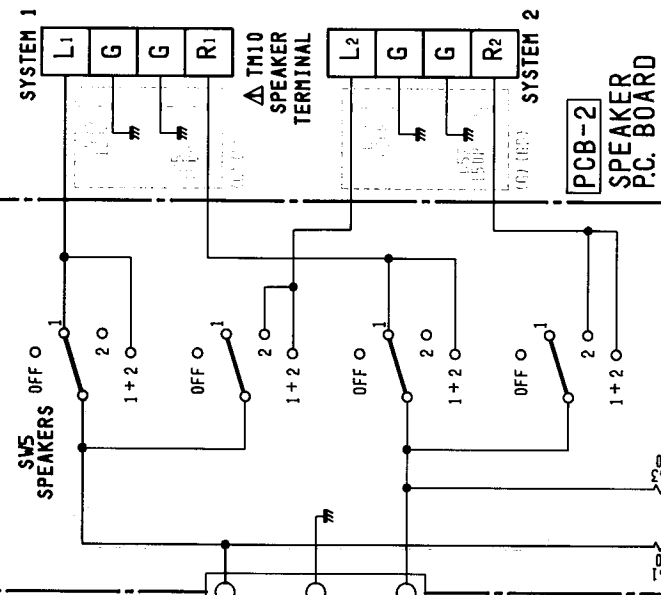
SCHEMATIC DIAGRAM



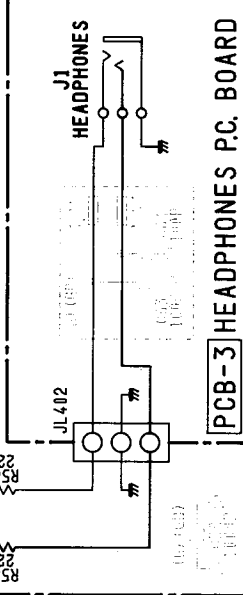
PCB-13 BIAS (Lch) P.C. BOARD



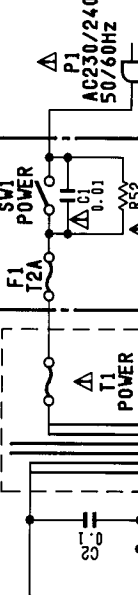
PCB-5 SPEAKER SWITCH P.C. BOARD

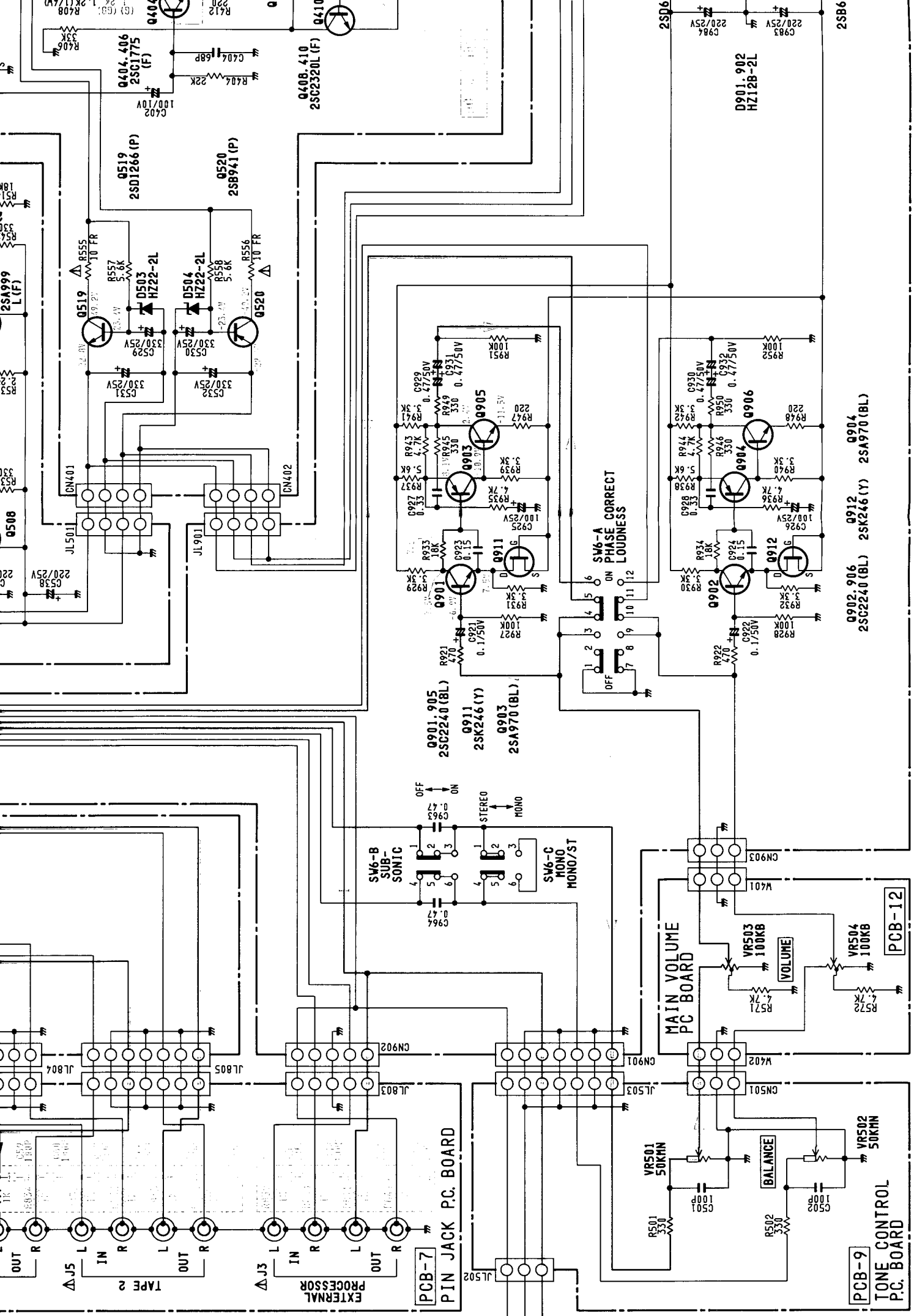


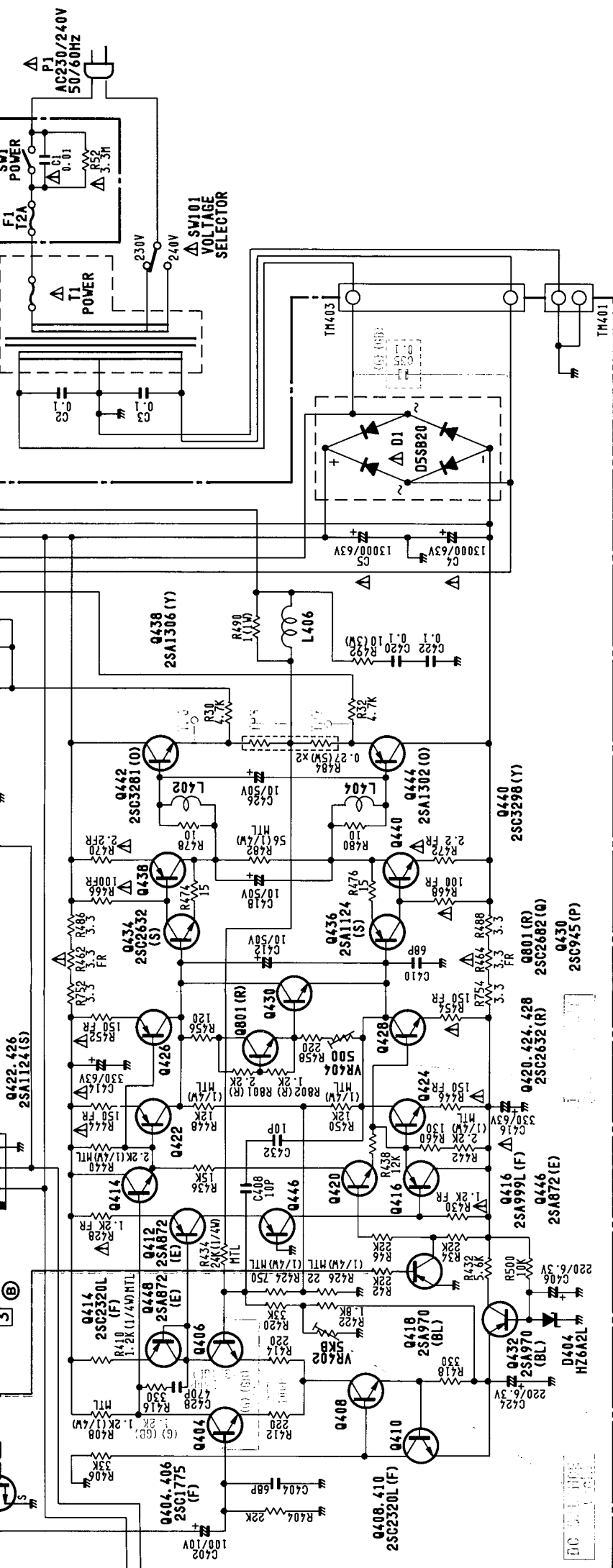
PCB-2 SPEAKER P.C. BOARD



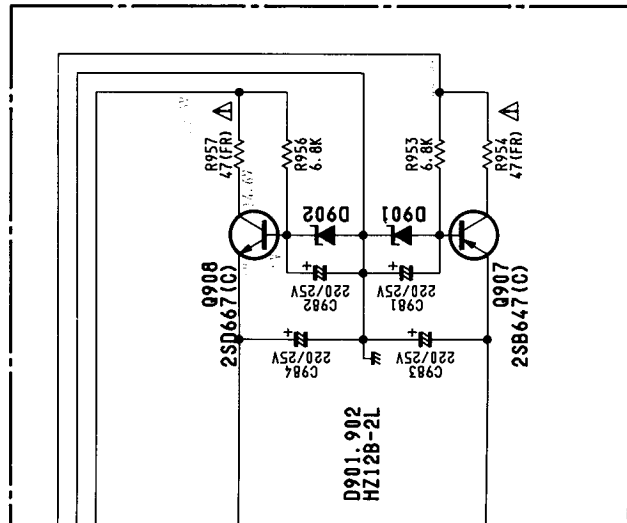
PCB-8 POWER SWITCH P.C. BOARD





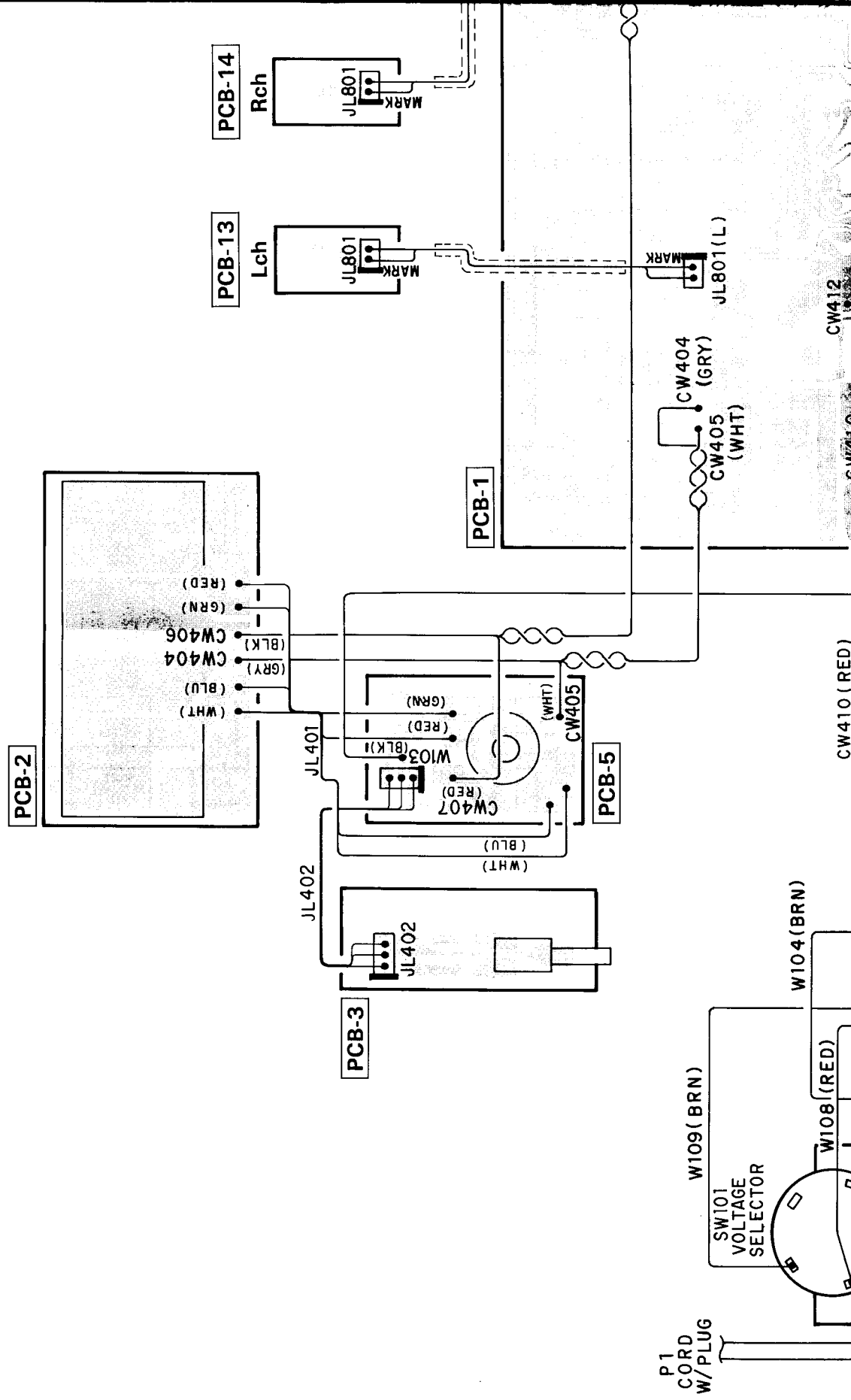


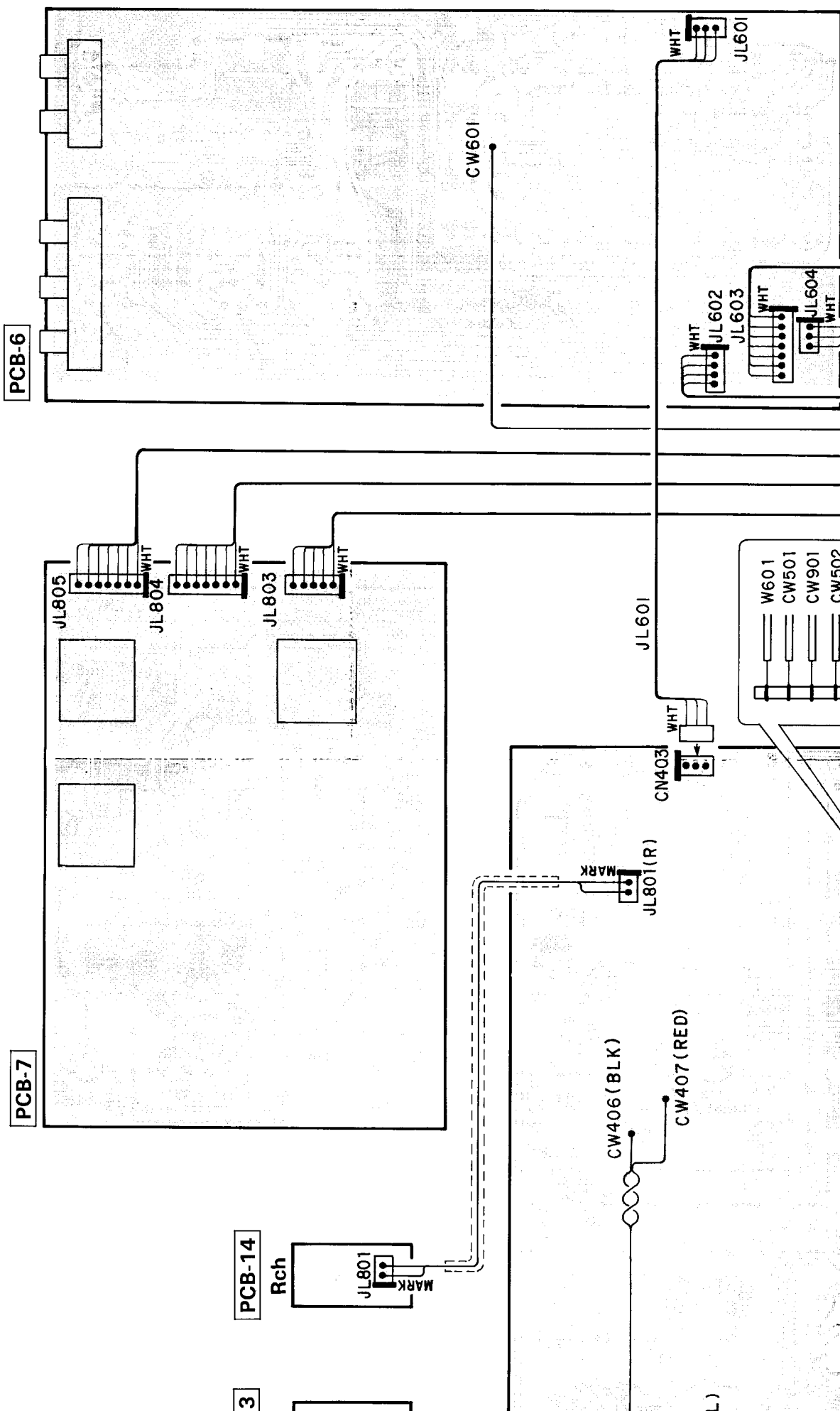
PCB-14 BIAS(Rch) P.C. BOARD

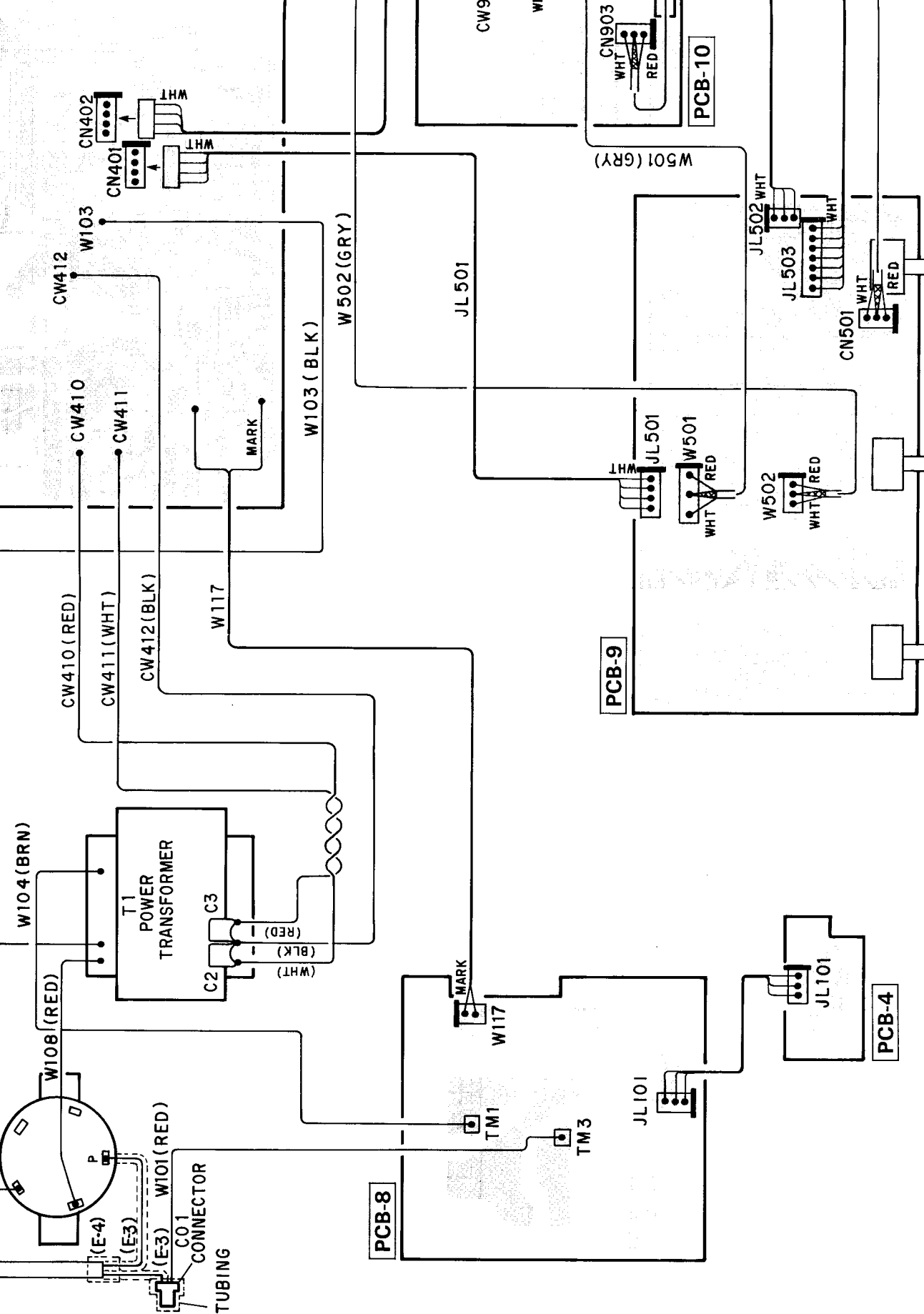


- NOTE:
1. ALL RESISTANCE VALUES ARE IN Ω .
K Ω =1000 Ω , M Ω =1000K Ω .
 2. THE WATTAGE OF RESISTORS IS 1/2W UNLESS OTHERWISE NOTED.
 3. ALL CAPACITANCE VALUES ARE IN μ F UNLESS OTHERWISE NOTED. P= μ F.
 4. ... V-DC VOLTAGE AT NO SIGNAL UNLESS OTHERWISE NOTED.
 5. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS, THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.

LD







WIRE COLOR ABBREVIATIONS

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

