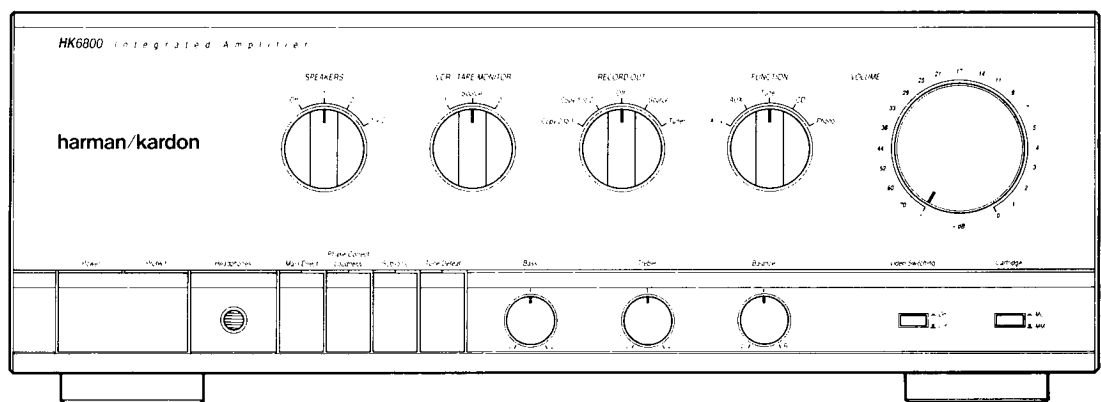


The Harman Kardon Model HK6800 INTEGRATED AMPLIFIER

Manual 149A

HK6800

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
- G : German model
- GB : German model Black version
- I : International model
- IB : International model Black version
- NB : Japan model Black version
- S : Switzerland model
- SB : Switzerland model Black version

harman/kardon

240 Crossways Park West, Woodbury, N.Y. 11797
1112-3152149A2 P-088906 1500 Printed in Japan

SPECIFICATIONS

	Nominal	Limit
Continuous Average Power (FTC) 20Hz–20kHz, both channels driven		
8Ω, 0.08% THD	132W	≥120W
4Ω, 1% THD	139W	≥120W
High Instantaneous Current Capability (HCC)	80A	≥70A
Negative Feedback (Overall)		12dB
Half Power Bandwidth	10Hz ~ 100kHz	
Frequency Response at –3dB	0.26Hz ~ 214kHz*	
Slew Rate	280V/μsec	
Square Wave Rise Time	2μsec	≤2.5μsec
Input Sensitivity		
Video/CD, Tuner	250mV	±25mV
Phono (MM)	2.5mV	±0.3mV*
Phono (MC)	128μV	±20μV*
Signal to Noise Ratio		
Video/CD, Tuner	83dB	≥75dB
Phono (MM)	82.5dB	≥76dB
Phono (MC)	76dB	≥72dB
Channel Separation at 10kHz		
Video/CD	53.5dB	≥43dB
Phono (MM), Tuner	53dB	≥40dB
Phono (MC)	51.5dB	≥40dB
IM Distortion Ratio	0.07%	≤0.1%
Damping Factor at 1kHz	100	≥70
Tone Control Characteristics		
Bass at 50Hz		
Boost	10dB	±2dB
Cut	10dB	±2dB
Treble at 10kHz		
Boost	10dB	±2dB
Cut	10dB	±2dB

	Nominal	Limit
Filters		
Subsonic	15Hz, 3.5dB	±1dB/Octave
Phase Correct Loudness at 50Hz		6dB ±2dB
DC Output Voltage		
L channel		0mV ±60mV
R channel		0mV ±60mV
RIAA Equalization at Tape Out (20Hz/20kHz) (22kΩ load)		±0.2dB ±0.5dB
Phono Over Load (No load)		
Phono (MM)	163mV	≥120mV
Phono (MC)	7.5mV	≥5mV
Dimensions (W × H × D)	17-1/2" × 6-5/16" × 15-15/16"	(443 × 160 × 405mm)
Weight	34lbs. 13oz.	(15.8kg)
Power Supplies		
North America area model	AC 120V, 60Hz	
International model	AC 220/240V, 50/60Hz	
Japan model	AC 100V, 50/60Hz	
Power Consumption		
North America area model	450W (540VA)	
International model	310W	
Japan model	230W	

* Input Sensitivity for International model are 2.7mV ±0.3mV (MM) and 140μV ±20μV (MC).

* Frequency Response International model 1Hz ~ 110kHz

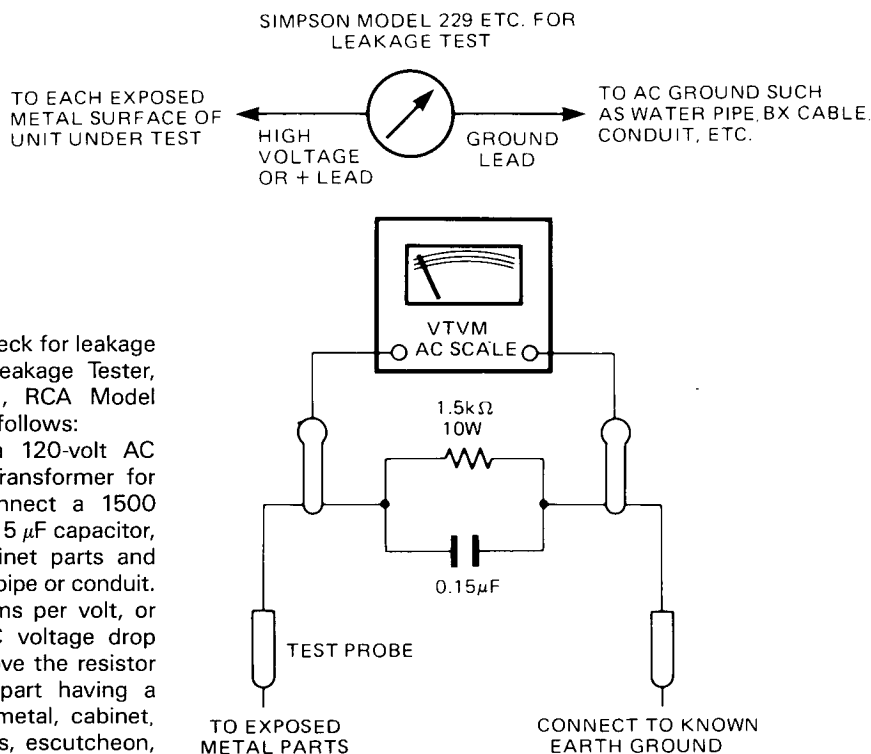
These specifications are service target specs.

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

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

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

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.



DISASSEMBLY PROCEDURES (REFER TO PAGES 7 AND 24)

1 CABINET TOP (131) REMOVAL

Remove 10 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 6 screws (B) and then remove the Front Panel Ass'y (AA).

3 MAIN and DRIVER P. C. BOARDS (PCB-4 to 6) REMOVAL

1. Remove the Cabinet Top (131), referring to the previous step 1.
2. Remove 10 screws (C, D, E and F) and then remove the Main and Driver P. C. Boards (PCB-4 to 6) with the Heat Sink (183 and 184).

At this time, unsolder the lead wires connected to the Main and Driver P. C. Boards.

4 PHONO P. C. BOARD (PCB-1) REMOVAL

1. Remove the Cabinet Top (131), referring to the previous step 1.
2. Pull out the Shaft (230).
3. Remove 5 screws (G, H and I), and then remove the Phono P. C. Board (PCB-1).

5 CONTROL P. C. BOARD (PCB-3) REMOVAL

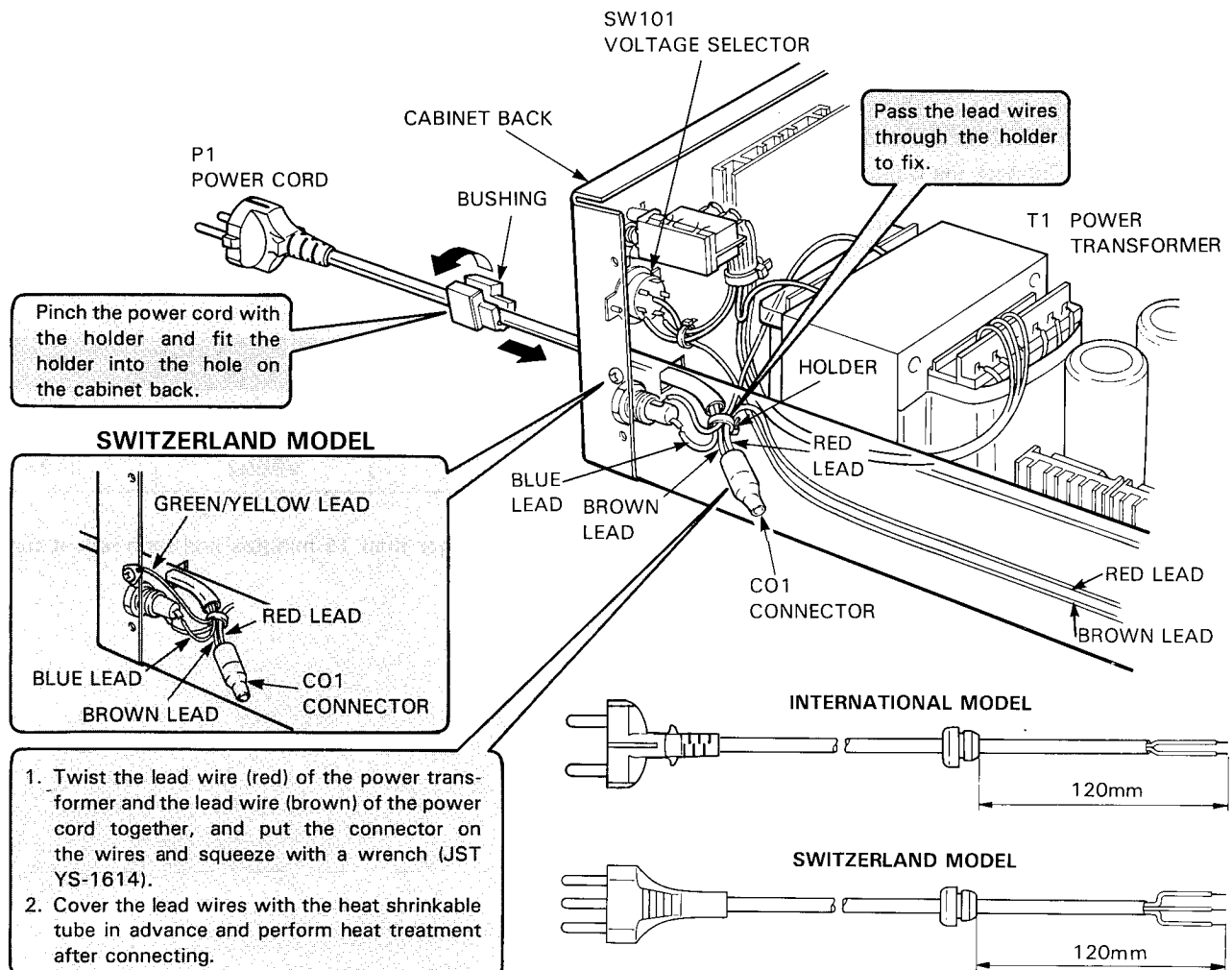
1. Remove the Main and Driver P. C. Boards (PCB-4 to 6), referring to the previous step 3.
2. Remove 6 screws (J) and then remove the Control P. C. Board (PCB-3).

6 TONE P. C. BOARD (PCB-2) REMOVAL

1. Remove the Front Panel Ass'y (AA), referring to the previous step 2.
2. Pull out the 6 Rotary knobs (143 and 144).
3. Remove 6 hexagon nuts (K) and remove 4 screws (L).
4. Remove 14 screws (C, G and M) and the Chassis Ass'y (BA), then the Tone P. C. Board (PCB-2) can be removed. Unsolder the lead wires if necessary when removing each P. C. Board.

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

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, 10, 11, 20 AND 23)

- Conditions:
- Set the Function 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).

■ **MAIN DRIVER ADJUSTMENT**

- Set the Speaker Operating Mode switch to the "8Ω" position.

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP401.	VR401	1.0V
2	Connect the Digital Volt Meter to TP402.	VR402	1.0V

■ **IDLING CURRENT ADJUSTMENT**

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP403.	VR405	39mV
2	Connect the Digital Volt Meter to TP404.	VR406	39mV

■ **MAIN OFFSET ADJUSTMENT**

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TM11 and TM13.	VR403	0V
2	Connect the Digital Volt Meter to TM12 and TM14.	VR404	0V

■ **MAIN OFFSET DC BALANCE CONFIRMATION**

- Set the Speaker Operating Mode switch to the "4Ω" position.

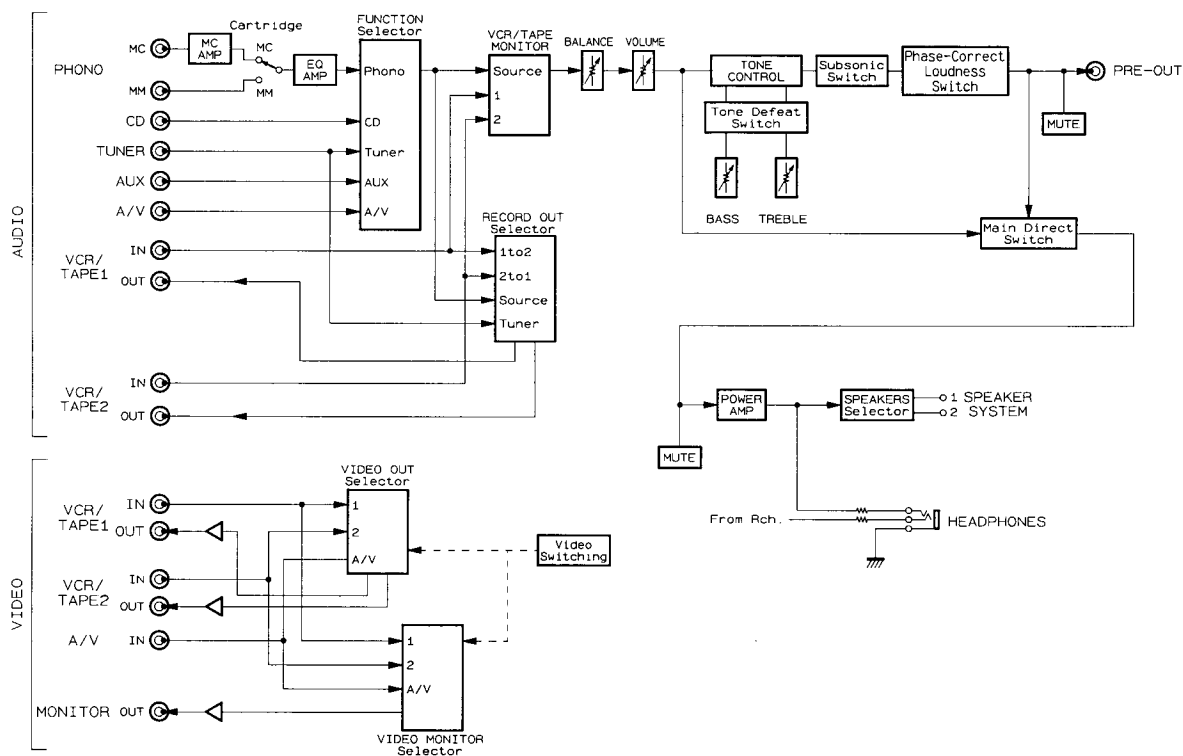
Step	Connection Equipments	For
1	Connect the Digital Volt Meter to TM11 and TM13.	0 ± 60mV
2	Connect the Digital Volt Meter to TM12 and TM14.	0 ± 60mV

■ **PHONO DRIVER ADJUSTMENT**

Step	Connection Equipments	Adjustment	For
1	Connect the Digital Volt Meter to TP701.	VR601	2.2V
2	Connect the Digital Volt Meter to TP702.	VR602	2.2V

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

BLOCK DIAGRAM

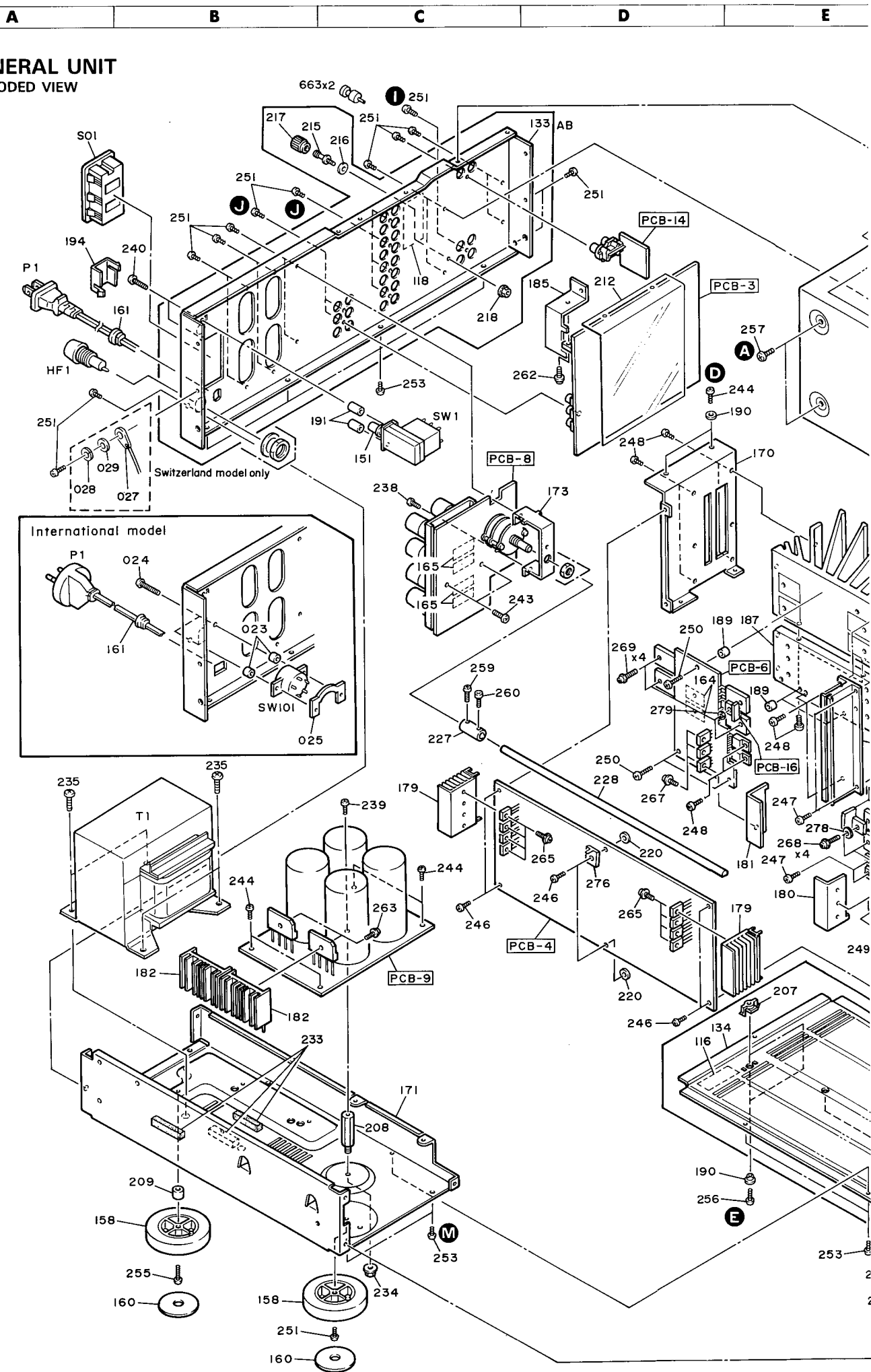


PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
AA	A443-HK6800A	FRONT PANEL ASS'Y G I S	119	1756-11301	LABEL, FUSE CAUTION
AA	A443-HK6800B	FRONT PANEL ASS'Y BK	131	1414-14901	CABINET TOP
AA	A443-HK6800C	FRONT PANEL ASS'Y GB	133	1424-29701	CABI BACK, REAR BK
AA	A443-HK6800D	FRONT PANEL ASS'Y IB	133	1424-29801	CABI BACK, REAR G GB I IB
AA	A443-HK6800E	FRONT PANEL ASS'Y NB	133	1424-29702	CABI BACK, REAR NB
AA	A443-HK6800F	FRONT PANEL ASS'Y SB	133	1424-29803	CABI BACK, REAR S SB
AB	A424-HK6800A	CABI BACK ASS'Y BK	134	1424-29901	CABI BACK, BOTTOM
AB	A424-HK6800C	CABI BACK ASS'Y G	136	1443-13501	PANEL, FRONT G I S
AB	A424-HK6800E	CABI BACK ASS'Y GB	136	1443-13502	PANEL,FRONT BK GB IB NB SB
AB	A424-HK6800G	CABI BACK ASS'Y I	138	1562-07701	FRAME, R G I S
AB	A424-HK6800J	CABI BACK ASS'Y IB	138	1562-07702	FRAME, R BK GB IB NB SB
AB	A424-HK6800L	CABI BACK ASS'Y BK	139	1562-07801	FRAME, L G I S
AB	A424-HK6800N	CABI BACK ASS'Y S	139	1562-07802	FRAME, L BK GB IB NB SB
AB	A424-HK6800Q	CABI BACK ASS'Y SB	142	1630-03901	ROTARY KNOB, VOLUME G I S
AC	A424-HK6800B	CABI BOTTOM ASS'Y BK	142	1630-03902	ROTARY KNOB, VOLUME BK GB IB NB SB
AC	A424-HK6800D	CABI BOTTOM ASS'Y G	143	1630-04001	ROTARY KNOB, FUNCTION G I S
AC	A424-HK6800F	CABI BOTTOM ASS'Y GB	143	1630-04002	ROTARY KNOB, FUNCTION BK GB IB NB SB
AC	A424-HK6800H	CABI BOTTOM ASS'Y I	144	1630-04101	ROTARY KNOB, BASS/TRE/BAL G I S
AC	A424-HK6800K	CABI BOTTOM ASS'Y IB	144	1630-04102	ROTARY KNOB, BASS/TREBAL BK GB IB NB SB
AC	A424-HK6800M	CABI BOTTOM ASS'Y NB	145	1634-05901	ROTARY KNOB, SPEAKER G I S
AC	A424-HK6800P	CABI BOTTOM ASS'Y S	145	1634-05902	ROTARY KNOB, SPEAKER BK GB IB NB SB
AC	A424-HK6800R	CABI BOTTOM ASS'Y SB	147	1660-01401	PUSH BUTTON, POWER G I S
BA	B216-HK6800A	SHIELD PLATE ASS'Y	147	1660-01402	PUSH BUTTON, POWER BK GB IB NB SB
023	2132-7116	SPACER G GB I IB S SB	148	1660-01501	PUSH BUTTON, TONE G I S
024	2327-R0130124	SCREW, BND+ (3X12mm) G GB I IB S SB	148	1660-01502	PUSH BUTTON, TONE BK GB IB NB SB
025	2440-7017	NUT, SPE G GB I IB S SB	150	1662-52501VN	PUSH BUTTON, MC/VIDEO G I S
026	1756-01402	LABEL,FUSE G GB I IB S SB	150	1662-52502	PUSH BUTTON, MC/VIDEO BK GB IB NB SB
027	4211-5005	LUG, GND S SB	151	1662-52601	PUSH BUTTON, 4/8 SW
028	2412-3022	WASHER, SPRING S SB	153	1714-02502	NAME PLATE G I S
029	2401-0373	WASHER, METAL S SB			
030	2112-11771	SPONGE G GB I IB S SB			
116	1117-78	SERIAL LABEL			
117	1751-01018	LABEL, UL BK			
118	1756-CSA	LABEL, CSA BK			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
153	1714-02501	NAME PLATE BK GB IB NB SB	228	2601-7188	SHAFT, SPEAKER SW
155	1732-06801	INDICATOR, POWER	229	2601-7189	SHAFT, SPEAKER KNOB
156	1732-06901	INDICATOR, TONE	230	2601-7190	SHAFT, CARTRIDGE
158	1319-02301	LEG	231	2112-11773	SPONGE
160	2111-244	FELT, LEG	232	2112-11800	SPONGE, HOLDER
161	2114-71246	BUSHING	233	2112-11771	SPONGE
162	2211-7308	CHASSIS	234	2440-7016	NUT, SPE
163	2218-7038	BRACKET, FIX	235	2347-400827	SCREW, BND T+ (4X8mm)
164	2218-7038	BRACKET, FIX	238	2327-R0130062	SCREW, BND+ (3X6mm)
165	2218-7038	BRACKET, FIX	239	2327-R0130062	SCREW, BND+ (3X6mm)
166	2218-89	BRACKET, FIX	240	2327-R0130164	SCREW, BND+ (3X16mm)
167	2219-8273	METAL FITTING, H/P	243	2343-300826	SCREW, CSK T+ (3X8mm)
168	2219-8267	METAL FITTING, EQ BOTTOM	244	2347-R0130062	SCREW, BND T+ (3X6mm)
169	2219-8268	METAL FITTING, HEAT SINK (L)	245	2347-R0130082	SCREW, BND T+ (3X8mm)
170	2219-8269	METAL FITTING, HEAT SINK (R)	246	2347-R0130082	SCREW, BND T+ (3X8mm)
171	2219-8266	METAL FITTING, TRANS	247	2347-R0130082	SCREW, BND T+ (3X8mm)
172	2219-8271	METAL FITTING, EQ TOP	248	2347-R0130082	SCREW, BND T+ (3X8mm)
173	2219-8272	METAL FITTING, SPEAKER SW	249	2347-R0130122	SCREW, BND T+ (3X12mm)
176	2222-7179	HEAT SINK, TONE	250	2347-R0130122	SCREW, BND T+ (3X12mm)
177	2222-7194	HEAT SINK, EQ	251	2347-R0130084	SCREW, BND T+ (3X8mm)
178	2222-7266	HEAT SINK, JOINT	252	2347-R0130062	SCREW, BND T+ (3X6mm)
179	2222-7267	HEAT SINK, DRIVER	253	2347-R0130064	SCREW, BND T+ (3X6mm)
180	2222-7268	HEAT SINK, MAIN PCB (L)	255	2347-R0130124	SCREW, BND T+ (3X12mm)
181	2222-7268	HEAT SINK, MAIN PCB (R)	256	2347-R0130164	SCREW, BND T+ (3X16mm)
182	2222-7269	HEAT SINK, SCR	257	2347-R0140064	SCREW, BND T+ (4X8mm)
183	2222-7271	HEAT SINK, MAIN (L) BK NB	259	2396-300549	SCREW, SK HEX
183	2222-7278	HEAT SINK, MAIN (L) G GB I	260	2396-300549	SCREW, SK HEX
		IB S SB	261	2557-300829	SCREW, B SPW+ (3X8mm)
184	2222-7274	HEAT SINK, MAIN (R) BK NB	262	2557-300829	SCREW, B SPW+ (3X8mm)
184	2222-7279	HEAT SINK, MAIN (R) G GB I	263	2557-300829	SCREW, B SPW+ (3X8mm)
		IB S SB	264	2557-300829	SCREW, B SPW+ (3X8mm)
185	2222-7273	HEAT SINK, VIDEO	265	2557-300829	SCREW, B SPW+ (3X8mm)
186	2222-7275	HEAT SINK	266	2557-300829	SCREW, B SPW+ (3X8mm)
187	2222-7275	HEAT SINK	267	2557-300829	SCREW, B SPW+ (3X8mm)
188	2132-7120	SPACER, MAIN PCB (L)	268	2557-301429	SCREW, B SPW+ (3X14mm)
189	2132-7120	SPACER, MAIN PCB (R)	269	2557-301429	SCREW, B SPW+ (3X14mm)
190	2132-7136	SPACER	271	2218-R0130	BRACKET, FIX
191	2132-01003	SPACER, 4/8 SW	273	2651-2101729	SPRING
192	2240-7367	HOLDER, POWER BUTTON G I S	274	2651-2101731	SPRING
192	2240-7357	HOLDER, POWER BUTTON BK GB IB	276	2219-7945	METAL FITTG
		NB SB	278	2401-0373	WASHER, METAL
193	2240-7368	HOLDER, MC/VIDEO BUTTON G I S	279	2401-0373	WASHER, METAL
193	2240-7358	HOLDER, MC/VIDEO BUTTON BK GB IB	663	4442-14	PIN PLUG
		NB SB	4161-04801252	CORD W/PLUG BK	
194	2240-7359	HOLDER, 4/8 SW	4161-71150	CORD W/PLUG G GB I IB	
195	2240-7360	HOLDER, SP SW SHAFT	4161-04901252	CORD W/PLUG NB	
196	2240-7361	HOLDER, SP KNOB SHAFT	4161-71159	CORD W/PLUG S SB	
197	2240-7362	HOLDER, LINK	5584-S2513	XFORMER, POWER BK	
198	2240-7363	HOLDER, SHAFT HOLD (FRONT)	5584-S2514	XFORMER, POWER G GB I IB	
199	2240-7364	HOLDER, SHAFT HOLD (REAR)		S SB	
200	2240-7365	HOLDER, POWER LED	5584-S2515	XFORMER, POWER NB	
201	2240-7366	HOLDER, TONE LED	4474-156	SOCKET BK NB	
202	2240-7369	HOLDER, SUB PCB	4433-01002	SWITCH, PU-PW BK NB	
203	2240-7120	HOLDER, WIRING	4433-01001	SWITCH, PU-PW G GB I IB	
206	2360-7019	BOSS, SPE		S SB	
207	2360-7020	BOSS, SPE	4411-102729	SWITCH, ROTARY G GB I IB	
208	2362-961410	BOSS, THREAD		S SB	
209	2363-501724	BOSS, PIPE	5732-632029	FUSE BK	
212	2224-7132	INSULATOR	5732-312030	FUSE G GB I IB S SB	
213	2216-7184	SHIELD PLATE	5732-632056	FUSE NB	
214	2459-3005511	RIVET, PLASTIC	4472-014	HOLDER, FUSE BK NB	
215	2310-7036	SCREW, SPE	4472-7118	HOLDER, FUSE G GB I IB	
216	2410-7018	WASHER, SPE		S SB	
217	2440-7027	NUT, SPE	LUG	LUG G GB	
218	2440-7016	NUT, SPE	PT1	POSISTOR	
220	2402-0374	WASHER, PLASTIC			
222	2433-0151	FASTENER, PSH			
223	2459-3008011	RIVET, PLASTIC			
224	2446-30229	NUT, HEX			
225	2111-1387	FELT			
226	2403-301	WASHER, POLY			
227	2601-7069	SHAFT, SPEAKER JOINT			

GENERAL UNIT EXPLODED VIEW



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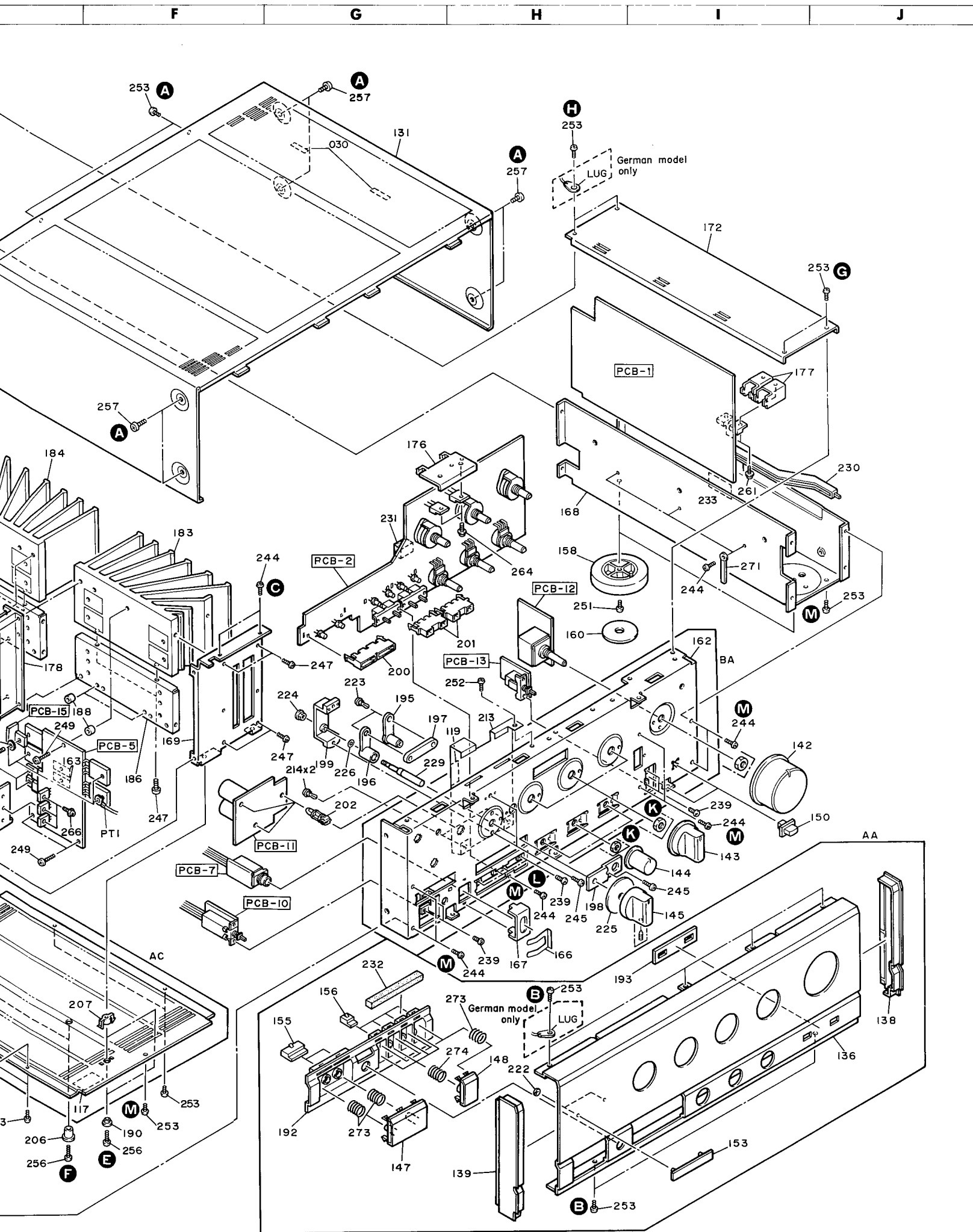
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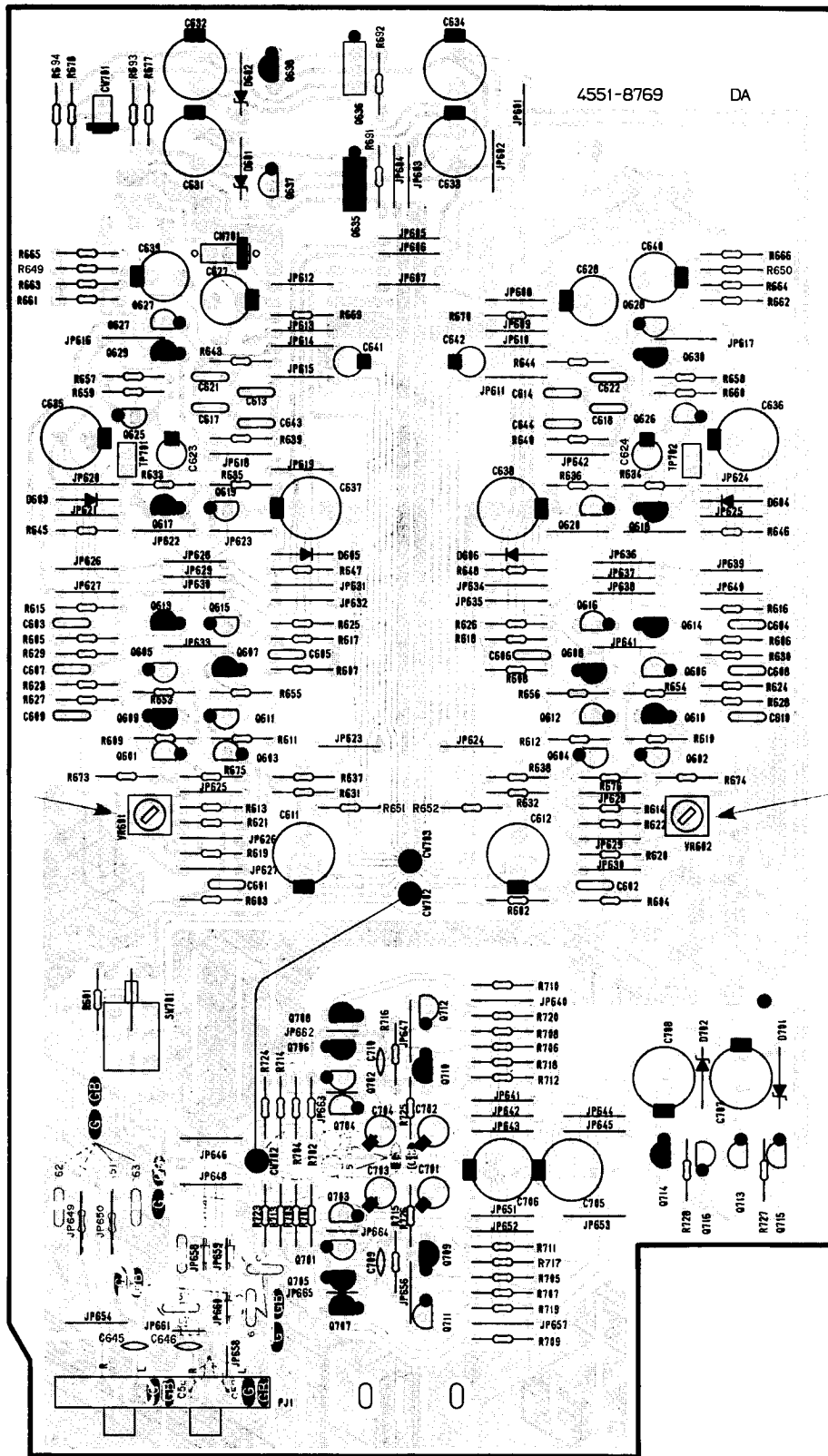
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P. C. BOARDS

PCB-1 Phono P. C. Board



4551-8769 DA

DRIVER ADJ. (Left)

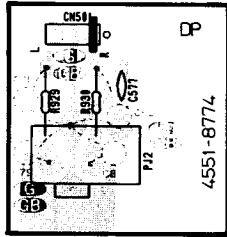
PHONO DRIVER ADJ. (Right)

Cartridge

MM
PHONO
MC

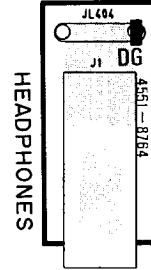
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PCB-14 Pre Out P. C. Board

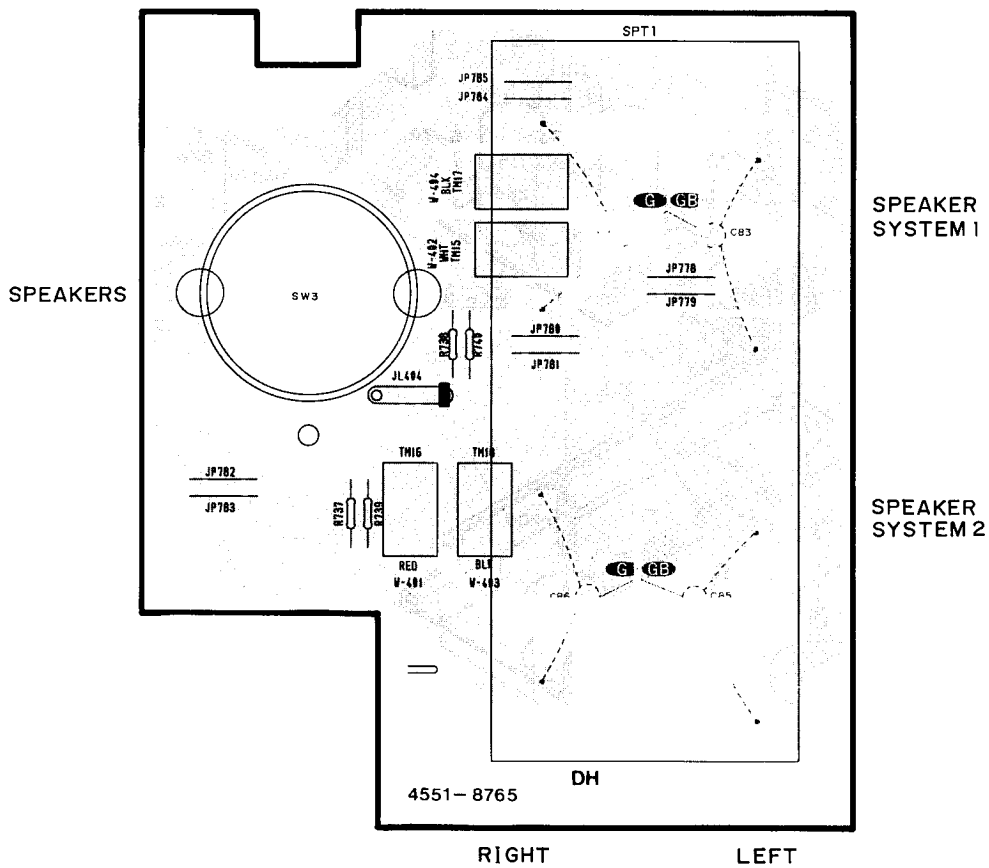


PRE-OUT

PCB-7 Headphone P. C. Board



PCB-8 Speaker P. C. Board



P. C. BOARDS

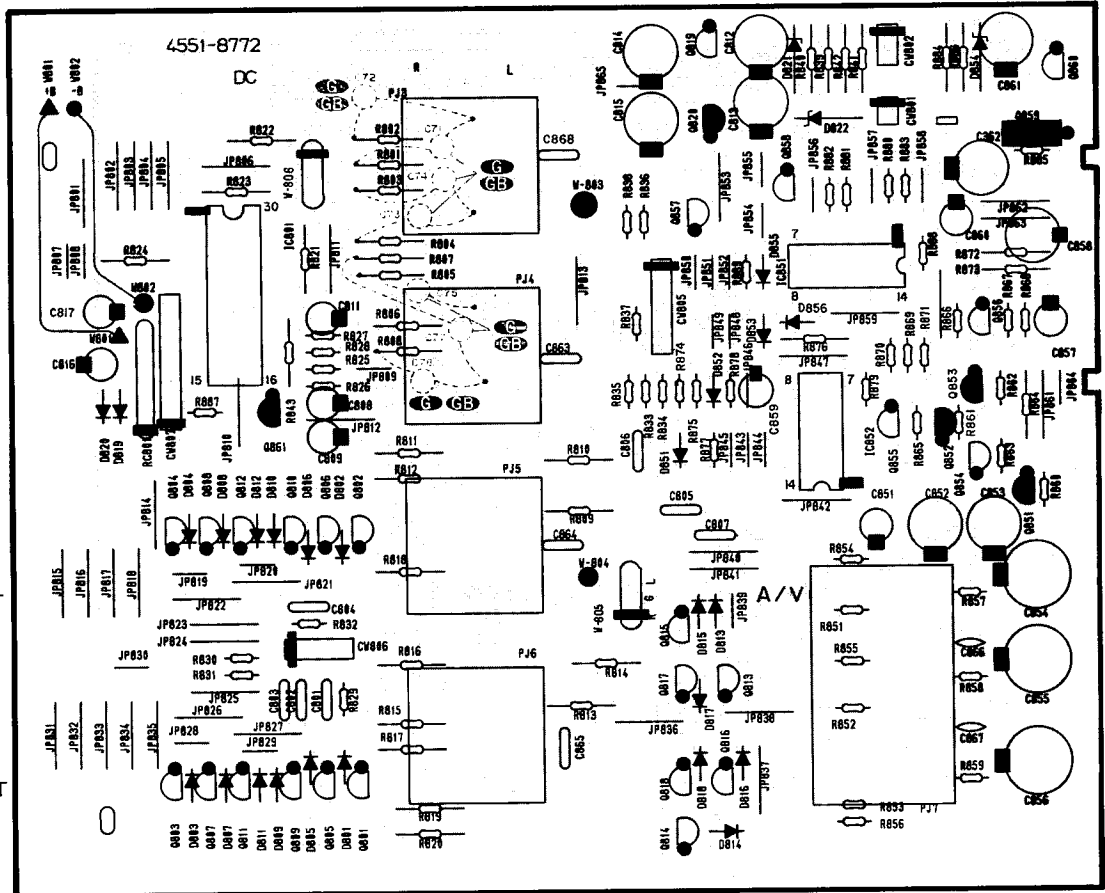
PCB-3 Control P. C. Board

RIGHT LEFT

CD
TUNER
AUX
A/V
IN
VCR/
TAPE 1
OUT
IN
VCR/
TAPE 2
OUT

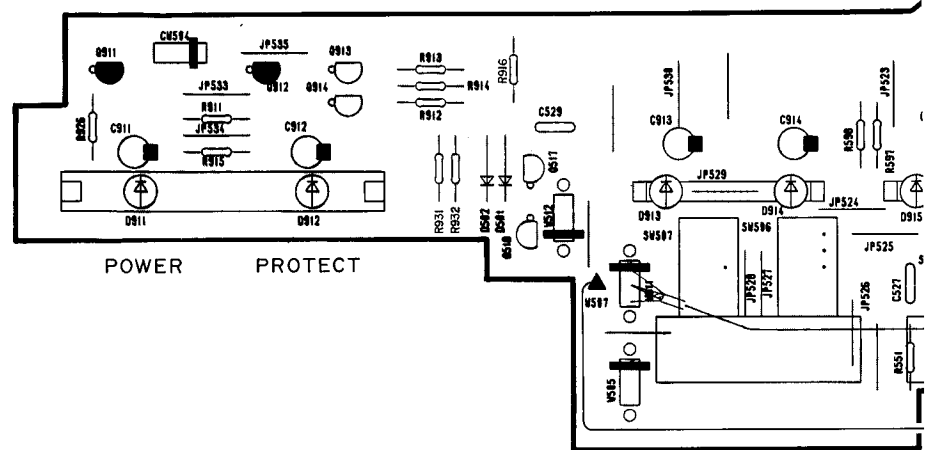
MONITOR
OUT
VCR 1
VCR 2

IN OUT



POWER PROTECT

MAIN DIRECT PHASE CORRECT LOUDNESS



F

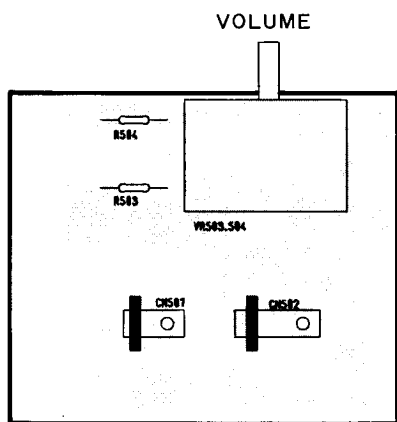
G

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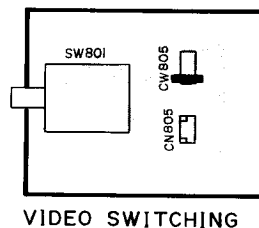
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J

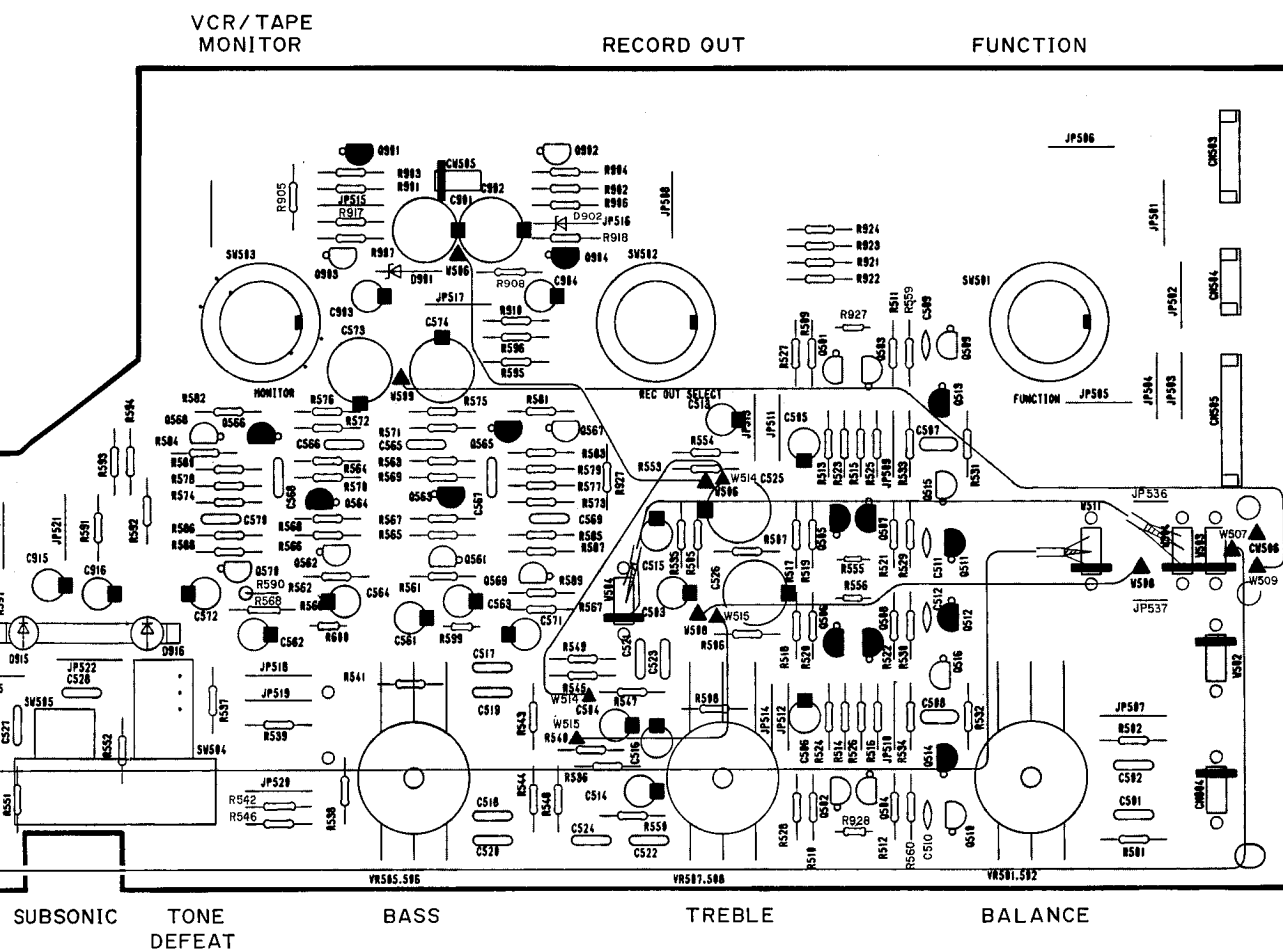
PCB-12 Volume P. C. Board



PCB-13 V/D Switch P. C. Board



PCB-2 Tone P. C. Board

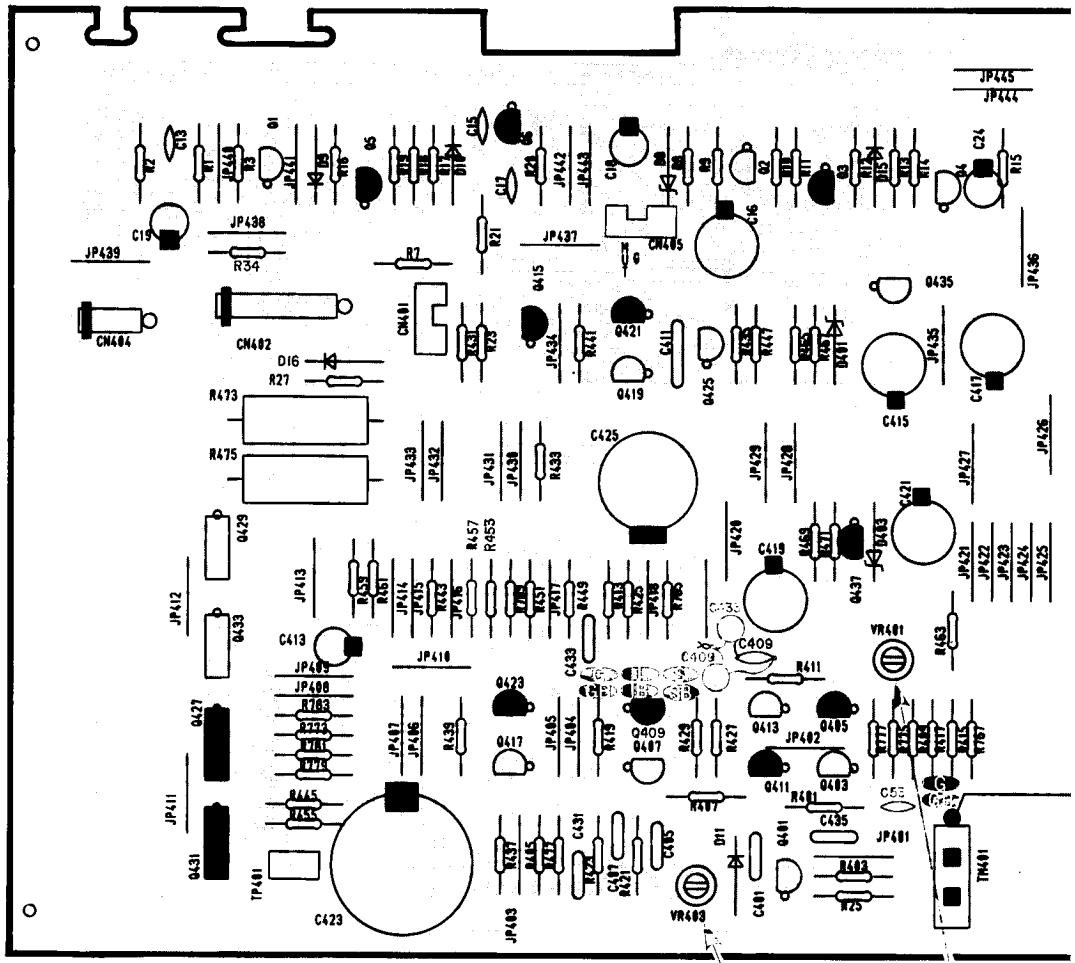


A B C D E

P. C. BOARDS

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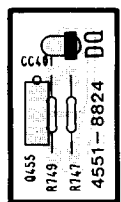
PCB-4 Driver P. C. Board

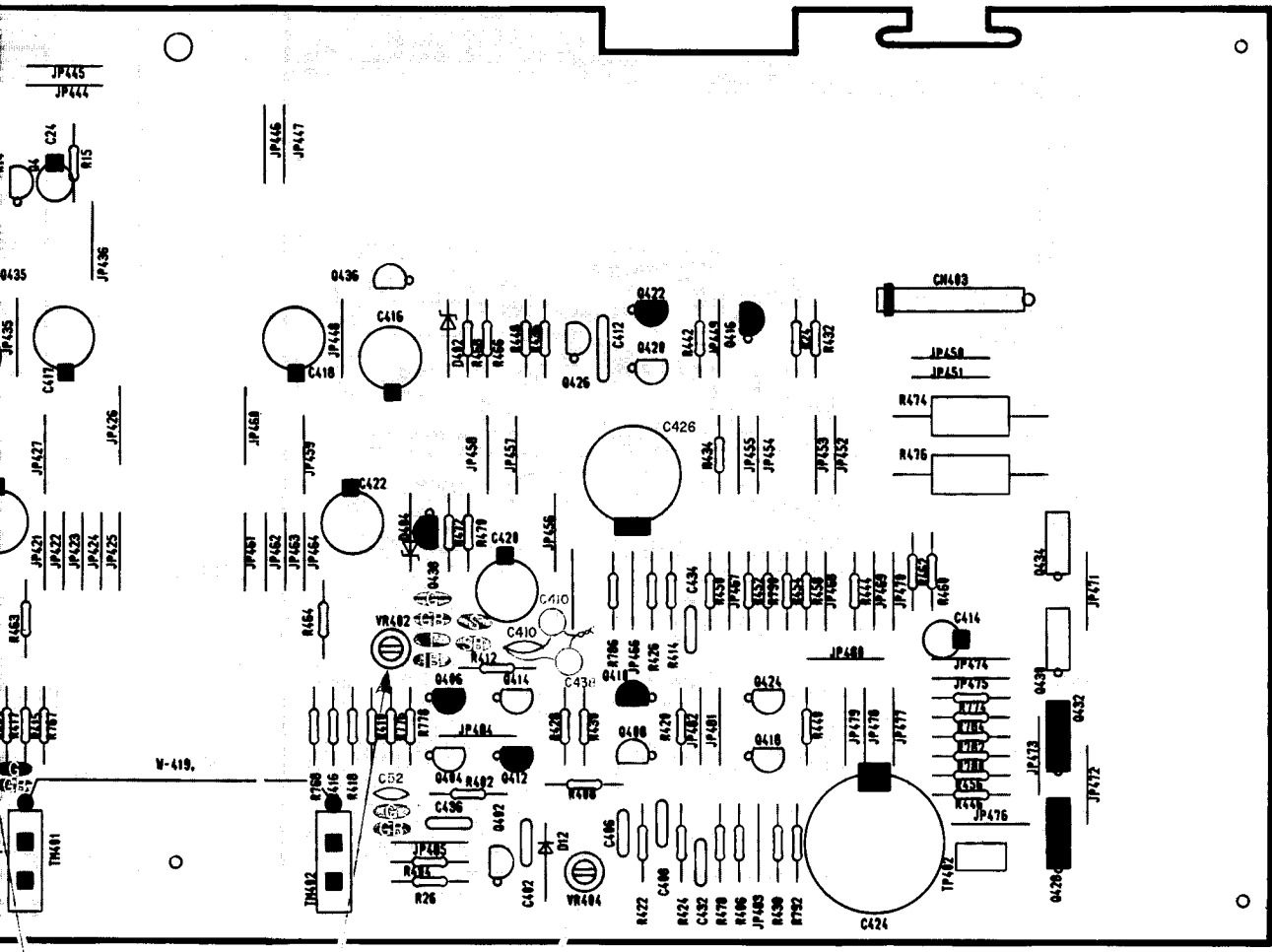


MAIN OFFSET ADJ. (L. 01)

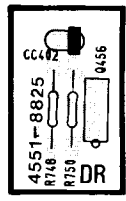
MAIN OFFSET ADJ. (L. 02)

PCB-15 Terminal L P. C. Board





PCB-16 Terminal R P.C. Board



A

B

C

D

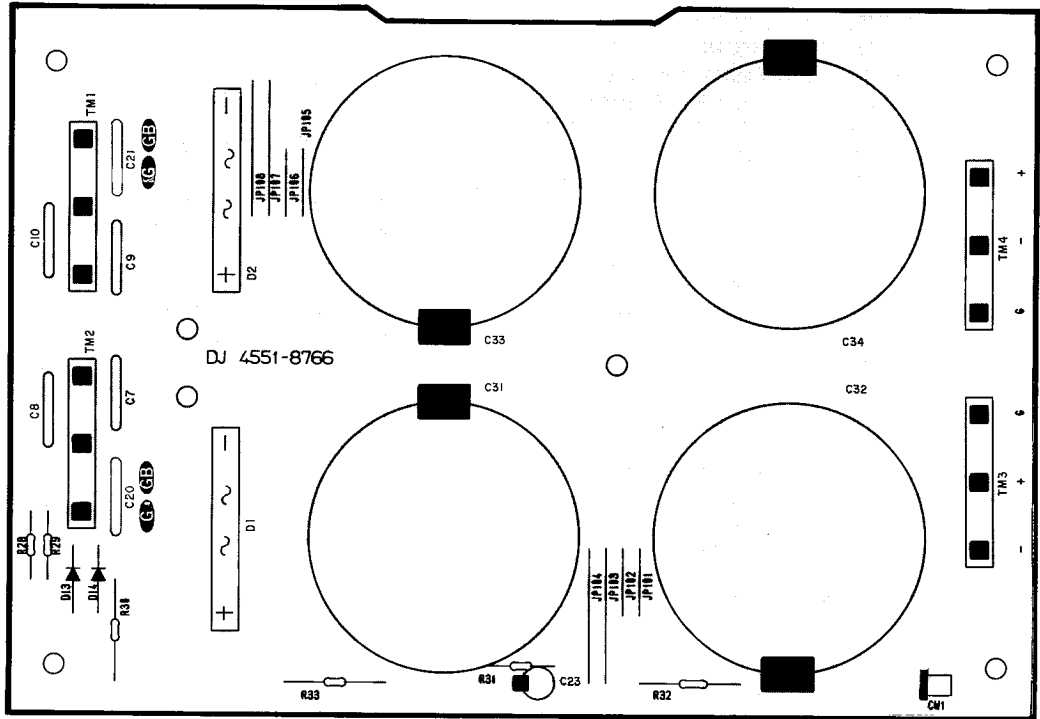
E

P. C. BOARDS

1

PCB-9 Main Power Supply P. C. Board

2



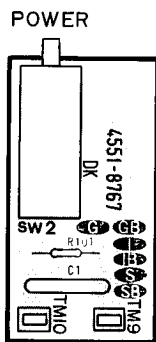
3

4

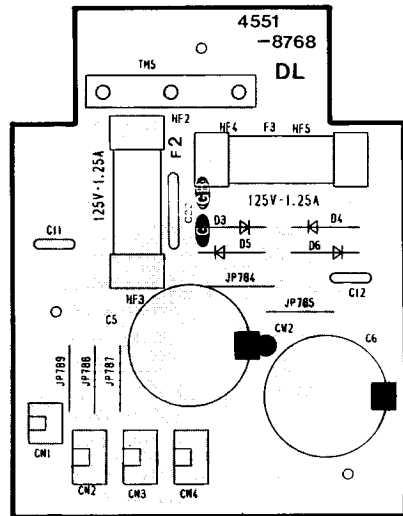
PCB-10 Power Switch P. C. Board

PCB-11 Sub Power Supply P. C. Board

5



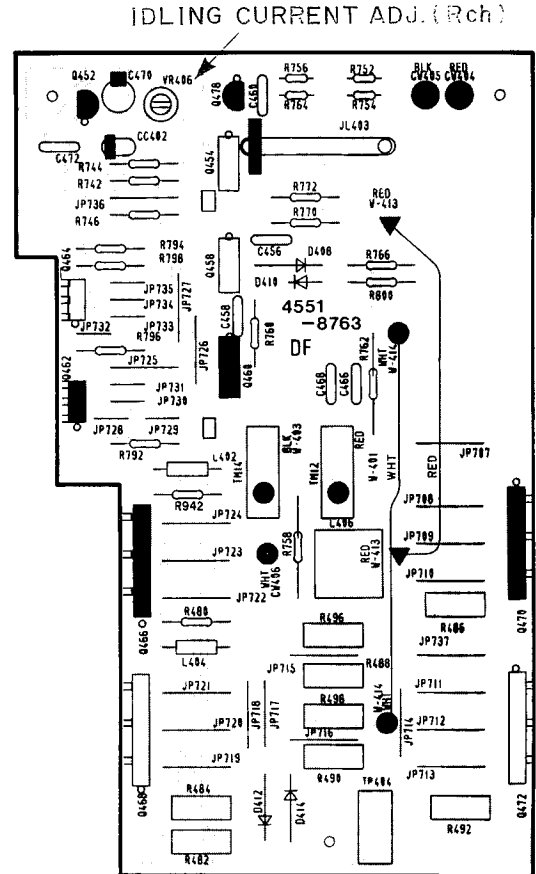
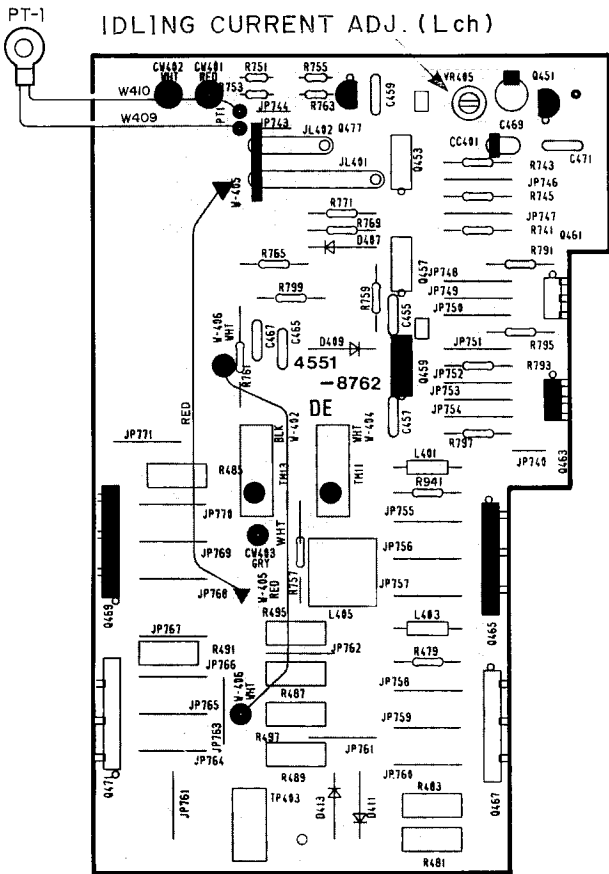
6



7

PCB-5 Main Lch P. C. Board

PCB-6 Main Rch P. C. Board



ELECTRICAL PARTS LIST

Ser.No	Ref. No.	Part No.	Description
PCB-1 PHONO P.C.BOARD			
CAPACITORS			
059B	C54	5353-470534	CAP, MCA 47p G GB
059B	C55	5353-470534	CAP, MCA 47p G GB
060B	C56	5359-1035851	CAP, PPP .01μ G GB
060B	C57	5359-1035851	CAP, PPP .01μ G GB
060B	C58	5359-1035851	CAP, PPP .01μ G GB
060B	C59	5359-1035851	CAP, PPP .01μ G GB
061B	C60	5359-4725851	CAP, PPP 4700p G GB
061B	C61	5359-4725851	CAP, PPP 4700p G GB
062B	C62	5359-1215851	CAP, PPP 120p G GB
062B	C63	5359-1215851	CAP, PPP 120p G GB
334	C601	5359-1215851	CAP, PPP 120p
334B	C601	5353-820534	CAP, MCA 82p G GB
334	C602	5359-1215851	CAP, PPP 120p
334B	C602	5353-820534	CAP, MCA 82p G GB
335	C603	5359-2215851	CAP, PPP 220p
335	C604	5359-2215851	CAP, PPP 220p
335	C605	5359-2215851	CAP, PPP 220p
335	C606	5359-2215851	CAP, PPP 220p
341	C607	5354-224593	CAP, MYL .22μ
341	C608	5354-224593	CAP, MYL .22μ
341	C609	5354-224593	CAP, MYL .22μ
341	C610	5354-224593	CAP, MYL .22μ
333	C611	5345-477A0952	CAP, MINI ELE 470μ/6.3V
333	C612	5345-477A0952	CAP, MINI ELE 470μ/6.3V
336	C613	5359-1035851	CAP, PPP .01μ
336	C614	5359-1035851	CAP, PPP .01μ
340	C617	5359-2715851	CAP, PPP 270p
340	C618	5359-2715851	CAP, PPP 270p
337	C621	5359-3325851	CAP, PPP 3300p
337	C622	5359-3325851	CAP, PPP 3300p
332	C623	5345-106C0951	CAP, MINI ELE 10μ/16V
332	C624	5345-106C0951	CAP, MINI ELE 10μ/16V
331	C627	5345-476C0951	CAP, MINI ELE 47μ/16V
331	C628	5345-476C0951	CAP, MINI ELE 47μ/16V
392	C631	5345-227F045	CAP, MINI ELE 220μ/50V
392	C632	5345-227F045	CAP, MINI ELE 220μ/50V
392	C633	5345-227F045	CAP, MINI ELE 220μ/50V
392	C634	5345-227F045	CAP, MINI ELE 220μ/50V
330	C635	5345-227F045	CAP, MINI ELE 220μ/50V
330	C636	5345-227F045	CAP, MINI ELE 220μ/50V
330	C637	5345-227F045	CAP, MINI ELE 220μ/50V
330	C638	5345-227F045	CAP, MINI ELE 220μ/50V
331	C639	5345-476C0951	CAP, MINI ELE 47μ/16V
331	C640	5345-476C0951	CAP, MINI ELE 47μ/16V
329	C641	5345-336C0951	CAP, MINI ELE 33μ/16V
329	C642	5345-336C0951	CAP, MINI ELE 33μ/16V
338	C643	5359-8215851	CAP, PPP 820p
338	C644	5359-8215851	CAP, PPP 820p
664	C645	5361-103KB	CAP, CER .01μ
664	C646	5361-103KB	CAP, CER .01μ
298	C701	5345-226B0951	CAP, MINI ELE 22μ/10V
298	C702	5345-226B0951	CAP, MINI ELE 22μ/10V
298	C703	5345-226B0951	CAP, MINI ELE 22μ/10V
298	C704	5345-226B0951	CAP, MINI ELE 22μ/10V
320	C705	5345-227D041	CAP, MINI ELE 220μ/25V
320	C706	5345-227D041	CAP, MINI ELE 220μ/25V
320	C707	5345-227D041	CAP, MINI ELE 220μ/25V
320	C708	5345-227D041	CAP, MINI ELE 220μ/25V
311	C709	5353-050934	CAP, MCA 5p
311	C710	5353-050934	CAP, MCA 5p

Ser.No	Ref. No.	Part No.	Description
RESISTORS			
063B	R51	5135-102522	RES, CBN 1/2P 1K G GB
063B	R52	5135-102522	RES, CBN 1/2P 1K G GB
344	R601	5135-470522	RES, CBN 1/2P 47
344B	R601	5135-102522	RES, CBN 1/2P 1K G GB
344	R602	5135-470522	RES, CBN 1/2P 47
344B	R602	5135-102522	RES, CBN 1/2P 1K G GB
345	R603	5135-473522	RES, CBN 1/2P 47K

Ser.No	Ref. No.	Part No.	Description
345	R604	5135-473522	RES, CBN 1/2P 47K
363	R605	5174-102381	RES, MTL 1/4P 1K
363	R606	5174-102381	RES, MTL 1/4P 1K
363	R607	5174-102381	RES, MTL 1/4P 1K
363	R608	5174-102381	RES, MTL 1/4P 1K
359	R609	5135-221522	RES, CBN 1/2P 220
359	R610	5135-221522	RES, CBN 1/2P 220
359	R611	5135-221522	RES, CBN 1/2P 220
359	R612	5135-221522	RES, CBN 1/2P 220
350	R613	5135-330522	RES, CBN 1/2P 33
350	R614	5135-330522	RES, CBN 1/2P 33
361	R615	5135-331522	RES, CBN 1/2P 330
361	R616	5135-331522	RES, CBN 1/2P 330
361	R617	5135-331522	RES, CBN 1/2P 330
361	R618	5135-331522	RES, CBN 1/2P 330
360	R619	5135-680522	RES, CBN 1/2P 68
360	R620	5135-680522	RES, CBN 1/2P 68
360	R621	5135-680522	RES, CBN 1/2P 68
360	R622	5135-680522	RES, CBN 1/2P 68
349	R623	5135-105522	RES, CBN 1/2P 1M
349	R624	5135-105522	RES, CBN 1/2P 1M
349	R625	5135-105522	RES, CBN 1/2P 1M
349	R626	5135-105522	RES, CBN 1/2P 1M
351	R627	5135-334522	RES, CBN 1/2P 330K
351	R628	5135-334522	RES, CBN 1/2P 330K
351	R629	5135-334522	RES, CBN 1/2P 330K
351	R630	5135-334522	RES, CBN 1/2P 330K
364	R631	5174-221381	RES, MTL 1/4P 220
364	R632	5174-221381	RES, MTL 1/4P 220
362	R633	5135-102522	RES, CBN 1/2P 1K
362	R634	5135-102522	RES, CBN 1/2P 1K
362	R635	5135-102522	RES, CBN 1/2P 1K
362	R636	5135-102522	RES, CBN 1/2P 1K
357	R637	5135-181522	RES, CBN 1/2P 180
357	R638	5135-181522	RES, CBN 1/2P 180
367	R639	5174-434381	RES, MTL 1/4P 430K
367	R640	5174-434381	RES, MTL 1/4P 430K
365	R643	5174-223381	RES, MTL 1/4P 22K
365	R644	5174-223381	RES, MTL 1/4P 22K
369	R645	5174-221381	RES, MTL 1/4P 220
369	R646	5174-221381	RES, MTL 1/4P 220
369	R647	5174-221381	RES, MTL 1/4P 220
369	R648	5174-221381	RES, MTL 1/4P 220
346	R649	5135-683522	RES, CBN 1/2P 68K
346	R650	5135-683522	RES, CBN 1/2P 68K
347	R651	5135-333522	RES, CBN 1/2P 33K
347	R652	5135-333522	RES, CBN 1/2P 33K
348	R653	5135-101522	RES, CBN 1/2P 100
348	R654	5135-101522	RES, CBN 1/2P 100
348	R655	5135-101522	RES, CBN 1/2P 100
348	R656	5135-101522	RES, CBN 1/2P 100
355	R657	5135-182522	RES, CBN 1/2P 1.8K
355	R658	5135-182522	RES, CBN 1/2P 1.8K
354	R659	5135-102522	RES, CBN 1/2P 1K
354	R660	5135-102522	RES, CBN 1/2P 1K
356	R661	5135-470522	RES, CBN 1/2P 47
356	R662	5135-470522	RES, CBN 1/2P 47
356	R663	5135-470522	RES, CBN 1/2P 47
356	R664	5135-470522	RES, CBN 1/2P 47
354	R665	5135-102522	RES, CBN 1/2P 1K
354	R666	5135-102522	RES, CBN 1/2P 1K
358	R669	5135-104522	RES, CBN 1/2P 100K
358	R670	5135-104522	RES, CBN 1/2P 100K
348	R673	5135-101522	RES, CBN 1/2P 100
348	R674	5135-101522	RES, CBN 1/2P 100
348	R675	5135-101522	RES, CBN 1/2P 100
348	R676	5135-101522	RES, CBN 1/2P 100
394	R677	5135-182522	RES, CBN 1/2P 1.8K
394	R678	5135-182522	RES, CBN 1/2P 1.8K
395	R691	5135-102522	RES, CBN 1/2P 1K
395	R692	5135-102522	RES, CBN 1/2P 1K
398	△ R693	5102-1005116	RES, FUSE 10

Ser.No	Ref. No.	Part No.	Description
398	△ R694	5102-1005116	RES, FUSE 10
301	R701	5135-1R0522	RES, CBN 1/2P 1
301B	R701	5135-5R6522	RES, CBN 1/2P 5.6 G GB
301	R702	5135-1R0522	RES, CBN 1/2P 1
301B	R702	5135-5R6522	RES, CBN 1/2P 5.6 G GB
302	R703	5135-560522	RES, CBN 1/2P 56
302	R704	5135-560522	RES, CBN 1/2P 56
308	R705	5174-471381	RES, MTL 1/4P 470
308	R706	5174-471381	RES, MTL 1/4P 470
308	R707	5174-471381	RES, MTL 1/4P 470
308	R708	5174-471381	RES, MTL 1/4P 470
303	R709	5135-332522	RES, CBN 1/2P 3.3K
303	R710	5135-332522	RES, CBN 1/2P 3.3K
303	R711	5135-332522	RES, CBN 1/2P 3.3K
303	R712	5135-332522	RES, CBN 1/2P 3.3K
310	R713	5174-390381	RES, MTL 1/4P 39
310	R714	5174-390381	RES, MTL 1/4P 39
309	R715	5174-911381	RES, MTL 1/4P 910
309	R716	5174-911381	RES, MTL 1/4P 910
304	R717	5135-820522	RES, CBN 1/2P 82
304	R718	5135-820522	RES, CBN 1/2P 82
304	R719	5135-820522	RES, CBN 1/2P 82
304	R720	5135-820522	RES, CBN 1/2P 82
305	R723	5135-562522	RES, CBN 1/2P 5.6K
305	R724	5135-562522	RES, CBN 1/2P 5.6K
306	R725	5135-331522	RES, CBN 1/2P 330
306	R726	5135-331522	RES, CBN 1/2P 330
318	△ R727	5102-1005116	RES, FUSE 10
318	△ R728	5102-1005116	RES, FUSE 10

TRANSISTORS

322	Q601	5616-2SK170BL	FET, N-CH
322	Q602	5616-2SK170BL	FET, N-CH
321	Q603	5615-2SJ74(BL)	FET, P-CH
321	Q604	5615-2SJ74(BL)	FET, P-CH
326	Q605	5613-1844(E)	XISTOR, NPN R
326	Q606	5613-1844(E)	XISTOR, NPN R
325	Q607	5611-991(E)	XISTOR, PNP R
325	Q608	5611-991(E)	XISTOR, PNP R
323	Q609	5611-999L(F)	XISTOR, PNP R
323	Q610	5611-999L(F)	XISTOR, PNP R
324	Q611	5613-2320L(F)	XISTOR, NPN R
324	Q612	5613-2320L(F)	XISTOR, NPN R
323	Q613	5611-999L(F)	XISTOR, PNP R
323	Q614	5611-999L(F)	XISTOR, PNP R
324	Q615	5613-2320L(F)	XISTOR, NPN R
324	Q616	5613-2320L(F)	XISTOR, NPN R
327	Q617	5612-646A(C)	XISTOR, PNP A
327	Q618	5612-646A(C)	XISTOR, PNP A
328	Q619	5614-666A(C)	XISTOR, NPN A
328	Q620	5614-666A(C)	XISTOR, NPN A
324	Q625	5613-2320L(F)	XISTOR, NPN R
324	Q626	5613-2320L(F)	XISTOR, NPN R
328	Q627	5614-666A(C)	XISTOR, NPN A
328	Q628	5614-666A(C)	XISTOR, NPN A
327	Q629	5612-646A(C)	XISTOR, PNP A
327	Q630	5612-646A(C)	XISTOR, PNP A
384	Q635	5612-941(P)	XISTOR, NPN A
385	Q636	5614-1266(P)	XISTOR, NPN A
387	Q637	5613-2320L(F)	XISTOR, NPN R
386	Q638	5611-999L(F)	XISTOR, PNP R
292	Q701	5613-1844(E)	XISTOR, NPN R
292	Q702	5613-1844(E)	XISTOR, NPN R
292	Q703	5613-1844(E)	XISTOR, NPN R
292	Q704	5613-1844(E)	XISTOR, NPN R
291	Q705	5611-991(E)	XISTOR, PNP R
291	Q706	5611-991(E)	XISTOR, PNP R
291	Q707	5611-991(E)	XISTOR, PNP R
291	Q708	5611-991(E)	XISTOR, PNP R
293	Q709	5611-999L(F)	XISTOR, PNP R
293	Q710	5611-999L(F)	XISTOR, PNP R
294	Q711	5613-2320L(F)	XISTOR, NPN R
294	Q712	5613-2320L(F)	XISTOR, NPN R

Ser.No	Ref. No.	Part No.	Description
315	Q713	5614-667A(C)	XISTOR, NPN A
314	Q714	5612-647A(C)	XISTOR, PNP A
316	Q715	5616-2SK246G1	FET, N-CH
316	Q716	5616-2SK246G1	FET, N-CH

CONTROLS

343	VR601	5101-S0401332	RES, SEMI FIX 3.3K
343	VR602	5101-S0401332	RES, SEMI FIX 3.3K

COILS

065B	L701	5597-3	CORE, BEADS G GB
065B	L702	5597-3	CORE, BEADS G GB
065B	L703	5597-3	CORE, BEADS G GB
065B	L704	5597-3	CORE, BEADS G GB

DIODES

389	D601	5635-HZ24-1L	DIODE, ZENER
389	D602	5635-HZ24-1L	DIODE, ZENER
372	D603	5631-1S2473	DIODE, DET
372	D604	5631-1S2473	DIODE, DET
372	D605	5631-1S2473	DIODE, DET
372	D606	5631-1S2473	DIODE, DET
317	D701	5635-HZ15-2L	DIODE, ZENER
317	D702	5635-HZ15-2L	DIODE, ZENER

MISCELLANEOUS

795	CN701	4443-030185	CONNECTOR
794	CW701	4163-S0203551	CONNECTOR W/W
797	CW702	4163-0109040	CONNECTOR W/W
798	CW703	4163-0190039	CONNECTOR W/W
658	△ PJ1	4489-03001004	PIN JACK, 4P
911	SW701	4431-S0302102	SWITCH, PUSH
796	TP701	4443-027114	CONNECTOR
796	TP702	4443-027114	CONNECTOR

PCB-2 TONE P.C. BOARD

CAPACITORS

881	C501	5359-1015851	CAP, PPP 100p
881	C502	5359-1015851	CAP, PPP 100p
811	C503	5345-106C0951	CAP, MINI ELE 10μ/16V
811	C504	5345-106C0951	CAP, MINI ELE 10μ/16V
807	C505	5345-107B0951	CAP, MINI ELE 100μ/10V
808	C506	5345-107B0951	CAP, MINI ELE 100μ/10V
814	C507	5353-020934	CAP, MCA 2p
814	C508	5353-020934	CAP, MCA 2p
813	C509	5353-680534	CAP, MCA 68p
813	C510	5353-680534	CAP, MCA 68p
813	C511	5353-680534	CAP, MCA 68p
813	C512	5353-680534	CAP, MCA 68p
809	C513	5345-476C0951	CAP, MINI ELE 47μ/16V
809	C514	5345-476C0951	CAP, MINI ELE 47μ/16V
810	C515	5345-226D0951	CAP, MINI ELE 22μ/25V
810	C516	5345-226D0951	CAP, MINI ELE 22μ/25V
818	C517	5354-273J1HM	CAP, MYL .027μ
818	C518	5354-273J1HM	CAP, MYL .027μ
816	C519	5354-154593	CAP, MYL .15μ
816	C520	5354-154593	CAP, MYL .15μ
819	C521	5354-682J1HM	CAP, MYL 6800p
819	C522	5354-682J1HM	CAP, MYL 6800p
817	C523	5354-393J1HM	CAP, MYL .039μ
817	C524	5354-393J1HM	CAP, MYL .039μ
812	C525	5345-227F045	CAP, MINI ELE 220μ/50V
812	C526	5345-227F045	CAP, MINI ELE 220μ/50V
880	C527	5354-394593	CAP, MYL .39μ
880	C528	5354-394593	CAP, MYL .39μ
882	C529	5359-S010J102	CAP, PPP 1000p
838	C561	5345-106C0951	CAP, MINI ELE 10μ/16V
838	C562	5345-106C0951	CAP, MINI ELE 10μ/16V
837	C563	5345-107C041	CAP, MINI ELE 100μ/16V
837	C564	5345-107C041	CAP, MINI ELE 100μ/16V
841	C565	5354-104593	CAP, MYL .1μ
841	C566	5354-104593	CAP, MYL .1μ

Ser.No	Ref. No.	Part No.	Description
TRANSISTORS			
801	Q501	5613-2240(BL)	XISTOR, NPN R
801	Q502	5613-2240(BL)	XISTOR, NPN R
801	Q503	5613-2240(BL)	XISTOR, NPN R
801	Q504	5613-2240(BL)	XISTOR, NPN R
802	Q505	5611-970(BL)	XISTOR, PNP R
802	Q506	5611-970(BL)	XISTOR, PNP R
802	Q507	5611-970(BL)	XISTOR, PNP R
802	Q508	5611-970(BL)	XISTOR, PNP R
803	Q509	5613-2320L(F)	XISTOR, NPN R
803	Q510	5613-2320L(F)	XISTOR, NPN R
804	Q511	5611-999L(F)	XISTOR, PNP R
804	Q512	5611-999L(F)	XISTOR, PNP R
806	Q513	5612-646A(C)	XISTOR, PNP A
806	Q514	5612-646A(C)	XISTOR, PNP A
805	Q515	5614-666A(C)	XISTOR, NPN A
805	Q516	5614-666A(C)	XISTOR, NPN A
866	Q517	5616-2SK364BL	FET, N-CH
866	Q518	5616-2SK364BL	FET, N-CH
833	Q561	5613-2320L(F)	XISTOR, NPN R
833	Q562	5613-2320L(F)	XISTOR, NPN R
834	Q563	5611-999L(F)	XISTOR, PNP R
834	Q564	5611-999L(F)	XISTOR, PNP R
832	Q565	5611-970(BL)	XISTOR, PNP R
832	Q566	5611-970(BL)	XISTOR, PNP R
831	Q567	5613-2240(BL)	XISTOR, NPN R
831	Q568	5613-2240(BL)	XISTOR, NPN R
833	Q569	5613-2320L(F)	XISTOR, NPN R
833	Q570	5613-2320L(F)	XISTOR, NPN R
862	Q901	5612-941(Q)	XISTOR, PNP A
861	Q902	5614-1266(Q)	XISTOR, NPN A
863	Q903	5613-2320L(F)	XISTOR, NPN R
864	Q904	5611-999L(F)	XISTOR, PNP R
865	Q911	5611-RN2203	XISTOR, PNP R
865	Q912	5611-RN2203	XISTOR, PNP R
863	Q913	5613-2320L(F)	XISTOR, NPN R
863	Q914	5613-2320L(F)	XISTOR, NPN R

Ser.No	Ref. No.	Part No.	Description
DIODES			
868	D501	5631-1S2473	DIODE, DET
868	D502	5631-1S2473	DIODE, DET
867	D901	5635-HZ24-1L	DIODE, ZENER
867	D902	5635-HZ24-1L	DIODE, ZENER
908	D911	5637-LT3E47E	LED
909	D912	5637-LT3P47E	LED
908	D913	5637-LT3E47E	LED
908	D914	5637-LT3E47E	LED
908	D915	5637-LT3E47E	LED
908	D916	5637-LT3E47E	LED

Ser.No	Ref. No.	Part No.	Description
CONTROLS			
898	VR501/ 502	5113-S0901503	RES, V CBN 16 50K
902	VR505/ 506	5113-S0903104	RES, V CBN 16 100K
900	VR507/ 508	5113-S0902503	RES, V CBN 16 50K

Ser.No	Ref. No.	Part No.	Description
MISCELLANEOUS			
778	CN503	4443-0701141	CONNECTOR
779	CN504	4443-0501141	CONNECTOR
780	CN506	4443-1001141	CONNECTOR
781	CN804	4443-030185	CONNECTOR
789	CW504	4163-S0203351	CONNECTOR W/W
790	CW505	4163-S0203301	CONNECTOR W/W
791	CW506	4163-0140039	CONNECTOR W/W
891	SW501	4411-00303205	SWITCH, ROTARY (FUNCTION)
891	SW502	4411-00303205	SWITCH, ROTARY (REC OUT)
893	SW503	4411-00304203	SWITCH, ROTARY (MONITOR)
906	SW504/ 505	4431-S1303210	SWITCH, PUSH
905	SW506/ 507	4431-S1302212	SWITCH, PUSH

PCB-3 CONTROL P.C. BOARD

Ser.No	Ref. No.	Part No.	Description
CAPACITORS			
068B	C71	5359-3315851	CAP, PPP 330p
068B	C72	5359-3315851	CAP, PPP 330p
068B	C73	5359-3315851	CAP, PPP 330p
068B	C74	5359-3315851	CAP, PPP 330p
068B	C75	5359-3315851	CAP, PPP 330p
068B	C76	5359-3315851	CAP, PPP 330p
068B	C77	5359-3315851	CAP, PPP 330p
068B	C78	5359-3315851	CAP, PPP 330p
946	C801	5359-S010J102	CAP, PPP 1000p
946	C802	5359-S010J102	CAP, PPP 1000p
946	C803	5359-S010J102	CAP, PPP 1000p
946	C804	5359-S010J102	CAP, PPP 1000p
946	C805	5359-S010J102	CAP, PPP 1000p
946	C806	5359-S010J102	CAP, PPP 1000p
946	C807	5359-S010J102	CAP, PPP 1000p
944	C808	5345-106D0951	CAP, MINI ELE 10μ25V
944	C809	5345-106D0951	CAP, MINI ELE 10μ25V
945	C811	5345-104F0951	CAP, MINI ELE .1μ50V
647	C812	5345-107D041	CAP, MINI ELE 100μ25V
647	C813	5345-107D041	CAP, MINI ELE 100μ25V
647	C814	5345-107D041	CAP, MINI ELE 100μ25V
647	C815	5345-107D041	CAP, MINI ELE 100μ25V
944	C816	5345-106D0951	CAP, MINI ELE 10μ25V
944	C817	5345-106D0951	CAP, MINI ELE 10μ25V
943	C851	5345-107D045	CAP, MINI ELE 100μ25V
943	C852	5345-107D045	CAP, MINI ELE 100μ25V
943	C853	5345-107D045	CAP, MINI ELE 100μ25V
941	C854	5345-477C045	CAP, MINI ELE 470μ16V
941	C855	5345-477C045	CAP, MINI ELE 470μ16V
941	C856	5345-477C045	CAP, MINI ELE 470μ16V
944	C857	5345-106D0951	CAP, MINI ELE 10μ25V
942	C858	5345-107D041	CAP, MINI ELE 100μ25V
944	C859	5345-106D0951	CAP, MINI ELE 10μ25V
944	C860	5345-106D0951	CAP, MINI ELE 10μ25V
637	C861	5345-107D041	CAP, MINI ELE 100μ25V
637	C862	5345-107D041	CAP, MINI ELE 100μ25V
665	C863	5361-103KB	CAP, CER .01μ
665	C864	5361-103KB	CAP, CER .01μ
665	C865	5361-103KB	CAP, CER .01μ
665	C866	5361-103KB	CAP, CER .01μ
665	C867	5361-103KB	CAP, CER .01μ
665	C868	5361-103KB	CAP, CER .01μ

Ser.No	Ref. No.	Part No.	Description
RESISTORS			
959	R801	5135-102522	RES, CBN 1/2P 1K
959	R802	5135-102522	RES, CBN 1/2P 1K
959	R803	5135-102522	RES, CBN 1/2P 1K
959	R804	5135-102522	RES, CBN 1/2P 1K
959	R805	5135-102522	RES, CBN 1/2P 1K
959	R806	5135-102522	RES, CBN 1/2P 1K
959	R807	5135-102522	RES, CBN 1/2P 1K
959	R808	5135-102522	RES, CBN 1/2P 1K
959	R809	5135-102522	RES, CBN 1/2P 1K
959	R810	5135-102522	RES, CBN 1/2P 1K
959	R811	5135-102522	RES, CBN 1/2P 1K
959	R812	5135-102522	RES, CBN 1/2P 1K
959	R813	5135-102522	RES, CBN 1/2P 1K
959	R814	5135-102522	RES, CBN 1/2P 1K
959	R815	5135-102522	RES, CBN 1/2P 1K
959	R816	5135-102522	RES, CBN 1/2P 1K
959	R817	5135-102522	RES, CBN 1/2P 1K
959	R818	5135-102522	RES, CBN 1/2P 1K
959	R819	5135-102522	RES, CBN 1/2P 1K
959	R820	5135-102522	RES, CBN 1/2P 1K
959	R821	5135-102522	RES, CBN 1/2P 1K
959	R822	5135-102522	RES, CBN 1/2P 1K
959	R823	5135-102522	RES, CBN 1/2P 1K
959	R824	5135-102522	RES, CBN 1/2P 1K
964	R825	5232-224J16P	RES, CBN 1/6P 220K

Ser.No	Ref. No.	Part No.	Description	Ser.No	Ref. No.	Part No.	Description
480	C15	5354-334593	CAP, MYL .33μ	450	R401	5135-331522	RES, CBN 1/2P 330
483	C16	5345-336C0951	CAP, MINI ELE 33μ/16V	450	R402	5135-331522	RES, CBN 1/2P 330
480	C17	5354-334593	CAP, MYL .33μ	451	R403	5135-223522	RES, CBN 1/2P 22K
484	C18	5345-105F0951	CAP, MINI ELE 1μ/50V	451	R404	5135-223522	RES, CBN 1/2P 22K
485	C19	5345-105J0962	CAP, MINI ELE 1μ/100V	444	△ R405	5102-3314713	RES, FUSE 330
476	C24	5345-476B041	CAP, MINI ELE 47μ/10V	444	△ R406	5102-3314713	RES, FUSE 330
058B	C52	5353-470534	CAP, MCA 47p G GB	454	R407	5135-301522	RES, CBN 1/2P 300
058B	C53	5353-470534	CAP, MCA 47p G GB	454	R408	5135-301522	RES, CBN 1/2P 300
481	C401	5359-S010J223	CAP, PPP .022μ	467	R409	5135-121522	RES, CBN 1/2P 120
481	C402	5359-S010J223	CAP, PPP .022μ	467	R410	5135-121522	RES, CBN 1/2P 120
434	C405	5354-104593	CAP, MYL .1μ	454	R411	5135-301522	RES, CBN 1/2P 300
434	C406	5354-104593	CAP, MYL .1μ	454	R412	5135-301522	RES, CBN 1/2P 300
434	C407	5354-104593	CAP, MYL .1μ	444	△ R413	5102-3314713	RES, FUSE 330
434	C408	5354-104593	CAP, MYL .1μ	444	△ R414	5102-3314713	RES, FUSE 330
437	C409	5353-150534	CAP, MCA 15p BK NB	449	R415	5174-151381	RES, MTL 1/4P 150
437B	C409	5353-330534	CAP, MCA 33p G GB I	449	R416	5174-151381	RES, MTL 1/4P 150
			IB S SB	449	R417	5174-151381	RES, MTL 1/4P 150
			BK NB	449	R418	5174-151381	RES, MTL 1/4P 150
437	C410	5353-150534	CAP, MCA 15p BK NB	455	R419	5135-105522	RES, CBN 1/2P 1M
437B	C410	5353-330534	CAP, MCA 33p G GB I	455	R420	5135-105522	RES, CBN 1/2P 1M
			IB S SB	456	R421	5135-224522	RES, CBN 1/2P 220K
439	C411	5359-1025851	CAP, PPP 1000p	456	R422	5135-224522	RES, CBN 1/2P 220K
439	C412	5359-1025851	CAP, PPP 1000p	456	R423	5135-224522	RES, CBN 1/2P 220K
430	C413	5345-106C0951	CAP, MINI ELE 10μ/16V	456	R424	5135-224522	RES, CBN 1/2P 220K
430	C414	5345-106C0951	CAP, MINI ELE 10μ/16V	455	R425	5135-105522	RES, CBN 1/2P 1M
429	C415	5345-227D041	CAP, MINI ELE 220μ/25V	455	R426	5135-105522	RES, CBN 1/2P 1M
429	C416	5345-227D041	CAP, MINI ELE 220μ/25V	457	R427	5135-103522	RES, CBN 1/2P 10K
429	C417	5345-227D041	CAP, MINI ELE 220μ/25V	457	R428	5135-103522	RES, CBN 1/2P 10K
429	C418	5345-227D041	CAP, MINI ELE 220μ/25V	468	R429	5135-822522	RES, CBN 1/2P 8.2K
429	C419	5345-227D041	CAP, MINI ELE 220μ/25V	468	R430	5135-822522	RES, CBN 1/2P 8.2K
429	C420	5345-227D041	CAP, MINI ELE 220μ/25V	460	R431	5135-122522	RES, CBN 1/2P 1.2K
429	C421	5345-227D041	CAP, MINI ELE 220μ/25V	460	R432	5135-122522	RES, CBN 1/2P 1.2K
429	C422	5345-227D041	CAP, MINI ELE 220μ/25V	461	R433	5135-563522	RES, CBN 1/2P 56K
431	△ C423	5345-477J0962	CAP, MINI ELE 470μ/100V	461	R434	5135-563522	RES, CBN 1/2P 56K
431	△ C424	5345-477J0962	CAP, MINI ELE 470μ/100V	458	R435	5135-562522	RES, CBN 1/2P 5.6K
431	△ C425	5345-477J0962	CAP, MINI ELE 470μ/100V	458	R436	5135-562522	RES, CBN 1/2P 5.6K
431	△ C426	5345-477J0962	CAP, MINI ELE 470μ/100V	447	R437	5174-222381	RES, MTL 1/4P 2.2K
438	C431	5359-3315851	CAP, PPP 330p	447	R438	5174-222381	RES, MTL 1/4P 2.2K
438	C432	5359-3315851	CAP, PPP 330p	466	R439	5135-472522	RES, CBN 1/2P 4.7K
438	C433	5359-3315851	CAP, PPP 330p	466	R440	5135-472522	RES, CBN 1/2P 4.7K
438	C434	5359-3315851	CAP, PPP 330p	463	R441	5135-391522	RES, CBN 1/2P 390
436	C435	5353-680534	CAP, MCA 68p	463	R442	5135-391522	RES, CBN 1/2P 390
436	C436	5353-680534	CAP, MCA 68p	466	R443	5135-472522	RES, CBN 1/2P 4.7K
437B	C437	5353-330534	CAP, MCA 33p G GB I	466	R444	5135-472522	RES, CBN 1/2P 4.7K
			IB S SB	445	△ R445	5102-1014713	RES, FUSE 100
			G GB I	445	△ R446	5102-1014713	RES, FUSE 100
			IB S SB	451	R447	5135-223522	RES, CBN 1/2P 22K
			G GB I	451	R448	5135-223522	RES, CBN 1/2P 22K
			IB S SB	452	R449	5135-680522	RES, CBN 1/2P 68
			G GB I	452	R450	5135-680522	RES, CBN 1/2P 68
			IB S SB	447	R451	5174-222381	RES, MTL 1/4P 2.2K
			G GB I	447	R452	5174-222381	RES, MTL 1/4P 2.2K
			IB S SB	445	△ R453	5102-1014713	RES, FUSE 100
			G GB I	445	△ R454	5102-1014713	RES, FUSE 100
			IB S SB	445	△ R455	5102-1014713	RES, FUSE 100
			G GB I	445	△ R456	5102-1014713	RES, FUSE 100
			IB S SB	445	△ R457	5102-1014713	RES, FUSE 100
			G GB I	445	△ R458	5102-1014713	RES, FUSE 100
			IB S SB	464	R459	5135-123522	RES, CBN 1/2P 12K
			G GB I	464	R460	5135-123522	RES, CBN 1/2P 12K
			IB S SB	464	R461	5135-123522	RES, CBN 1/2P 12K
			G GB I	464	R462	5135-123522	RES, CBN 1/2P 12K
			IB S SB	448	R463	5174-362381	RES, MTL 1/4P 3.6K
			G GB I	448	R464	5174-362381	RES, MTL 1/4P 3.6K
			IB S SB	446	△ R465	5102-2205116	RES, FUSE 22
			G GB I	446	△ R466	5102-2205116	RES, FUSE 22
			IB S SB	458	R467	5135-562522	RES, CBN 1/2P 5.6K
			G GB I	458	R468	5135-562522	RES, CBN 1/2P 5.6K
			IB S SB	446	△ R469	5102-2205116	RES, FUSE 22
			G GB I	446	△ R470	5102-2205116	RES, FUSE 22
			IB S SB	458	R471	5135-562522	RES, CBN 1/2P 5.6K
			G GB I	458	R472	5135-562522	RES, CBN 1/2P 5.6K
			IB S SB				

RESISTORS

Ser.No	Ref. No.	Part No.	Description
502	Q459	5612-648A(C)	XISTOR, PNP A
506	Q461	5611-1306A(Y)	XISTOR, PNP R
507	Q463	5613-3298A(Y)	XISTOR, NPN R
508	Q465	5611-1302(O)	XISTOR, PNP R
510	Q467	5613-3281(O)	XISTOR, NPN R
508	Q469	5611-1302(O)	XISTOR, PNP R
510	Q471	5613-3281(O)	XISTOR, NPN R
690	Q477	5611-970(BL)	XISTOR, PNP R

DIODES

514	D407	5632-10DF2	DIODE, RECT
514	D409	5632-10DF2	DIODE, RECT
514	D411	5632-10DF2	DIODE, RECT
514	D413	5632-10DF2	DIODE, RECT

COILS

550	L401	5597-45502	CORE, BEADS
550	L403	5597-45502	CORE, BEADS
535	L405	5991-7165	SPRING COIL

CONTROL

543	VR405	5101-S0401102	RES, SEMI FIX 1K
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MISCELLANEOUS

744	CC401	4132-R0110121	CORD, 2C
741	CW401	4163-0135021	CONNECTOR W/W
742	CW402	4163-0135023	CONNECTOR W/W
743	CW403	4163-0140022	CONNECTOR W/W
738	JL401	4242-R0406141	JUMPER LEAD
737	JL402	4242-R0403141	JUMPER LEAD
606	PT1	5192-00104	POSISTOR
735	TP403	4443-024116	CONNECTOR

PCB-6 MAIN Rch P.C.BOARD

CAPACITORS

594	C456	5353-330534	CAP, MCA 33p
594	C458	5353-330534	CAP, MCA 33p
699	C460	5354-104593	CAP, MYL .1μ
601	C466	5354-473593	CAP, MYL .047μ
601	C468	5354-473593	CAP, MYL .047μ
602	C470	5345-106C0951	CAP, MINI ELE 10μ/16V
600	C472	5354-104593	CAP, MYL .1μ

RESISTORS

612	R480	5135-100522	RES, CBN 1/2P 10
578	R482	5272-S010KR15	RES, CEM 2P .15
578	R484	5272-S010KR15	RES, CEM 2P .15
578	R486	5272-S010KR15	RES, CEM 2P .15
577	R488	5272-S010JR22	RES, CEM 2P .22
577	R490	5272-S010JR22	RES, CEM 2P .22
578	R492	5272-S010KR15	RES, CEM 2P .15
577	R496	5272-S010JR22	RES, CEM 2P .22
577	R498	5272-S010JR22	RES, CEM 2P .22
584	R742	5135-221522	RES, CBN 1/2P 220
588	R744	5135-102522	RES, CBN 1/2P 1K
585	R746	5135-561522	RES, CBN 1/2P 560
701	R752	5232-562J16P	RES, CBN 1/6P 5.6K
701	R754	5232-562J16P	RES, CBN 1/6P 5.6K
702	R756	5232-272J16P	RES, CBN 1/6P 2.7K
591	R758	5171-100572	RES, MTL 1P 10
586	R760	5135-121522	RES, CBN 1/2P 120
591	R762	5171-100572	RES, MTL 1P 10
703	R764	5232-472J16P	RES, CBN 1/6P 4.7K
587	R766	5135-150522	RES, CBN 1/2P 15
583	△ R770	5102-2215116	RES, FUSE 220
583	△ R772	5102-2215116	RES, FUSE 220
580	△ R792	5102-1015116	RES, FUSE 100
580	△ R794	5102-1015116	RES, FUSE 100
581	△ R796	5102-1005116	RES, FUSE 10
581	△ R798	5102-1005116	RES, FUSE 10
587	R800	5135-150522	RES, CBN 1/2P 15
612	R942	5135-100522	RES, CBN 1/2P 10

Ser.No	Ref. No.	Part No.	Description
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TRANSISTORS

561	Q452	5611-970(BL)	XISTOR, PNP R
565	Q454	5613-3423(Y)	XISTOR, NPN R
563	Q458	5614-668A(C)	XISTOR, NPN A
562	Q460	5612-648A(C)	XISTOR, PNP A
566	Q462	5611-1306A(Y)	XISTOR, PNP R
567	Q464	5613-3298A(Y)	XISTOR, NPN R
568	Q466	5611-1302(O)	XISTOR, PNP R
570	Q468	5613-3281(O)	XISTOR, NPN R
568	Q470	5611-1302(O)	XISTOR, PNP R
570	Q472	5613-3281(O)	XISTOR, NPN R
698	Q478	5611-970(BL)	XISTOR, PNP R

DIODES

574	D408	5632-10DF2	DIODE, RECT
574	D410	5632-10DF2	DIODE, RECT
574	D412	5632-10DF2	DIODE, RECT
574	D414	5632-10DF2	DIODE, RECT

COILS

613	L402	5597-45502	CORE, BEADS
613	L404	5597-45502	CORE, BEADS
595	L406	5991-7165	SPRING COIL

CONTROL

603	VR406	5101-S0401102	RES, SEMI FIX 1K
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MISCELLANEOUS

748	CC402	4132-R0110121	CORD, 2C
752	CW404	4163-0135021	CONNECTOR W/W
753	CW405	4163-0135020	CONNECTOR W/W
754	CW406	4163-0140023	CONNECTOR W/W
750	JL403	4242-R0407141	JUMPER LEAD
747	TP404	4443-024116	CONNECTOR

PCB-7 HEADPHONE P.C.BOARD

MISCELLANEOUS

917	J1	4451-00161	JACK, 1P
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PCB-8 SPEAKER P.C.BOARD

CAPACITORS

069B	C83	5359-1215851	CAP, PPP 120p
069B	C84	5359-1215851	CAP, PPP 120p
069B	C85	5359-1215851	CAP, PPP 120p
069B	C86	5359-1215851	CAP, PPP 120p

RESISTORS

679	R737	5135-102522	RES, CBN 1/2P 1K
679	R738	5135-102522	RES, CBN 1/2P 1K
679	R739	5135-102522	RES, CBN 1/2P 1K
679	R740	5135-102522	RES, CBN 1/2P 1K

MISCELLANEOUS

772	JL404	4242-R0303451	JUMPER LEAD
651	△ SPT1	4214-221	TERMINAL
914	SW3	4411-204715	SWITCH, ROTARY

PCB-9 MAIN POWER SUPPLY P.C.BOARD

CAPACITORS

624	C7	5352-1041957	CAP, MTL .1μ
624	C8	5352-1041957	CAP, MTL .1μ
624	C9	5352-1041957	CAP, MTL .1μ
624	C10	5352-1041957	CAP, MTL .1μ
051B	C20	5352-1041957	CAP, MTL .1μ
051B	C21	5352-1041957	CAP, MTL .1μ
683	C23	5345-475J0962	CAP, MINI ELE 4.7μ/100V
623	△ C31	5341-S10HM758	CAP, ELE 7500μ/75V
623	△ C32	5341-S10HM758	CAP, ELE 7500μ/75V
623	△ C33	5341-S10HM758	CAP, ELE 7500μ/75V
623	△ C34	5341-S10HM758	CAP, ELE 7500μ/75V

Ser.No	Ref. No.	Part No.	Description
RESISTORS			
685	△ R28	5102-8205116	RES, FUSE 82
685	△ R29	5102-8205116	RES, FUSE 82
688	R30	5171-331593	RES, MTL 1P 330
687	R31	5135-103522	RES, CBN 1/2P 10K
689	R32	5171-471593	RES, MTL 1P 470
688	R33	5171-331593	RES, MTL 1P 330

DIODES			
621	△ D1	5685-D5SB40	SILICON, BRIG
621	△ D2	5685-D5SB40	SILICON, BRIG
681	△ D13	5632-S5566B	DIODE, RECT
681	△ D14	5632-S5566B	DIODE, RECT

MISCELLANEOUS			
762	CW1	4163-S0202201	CONNECTOR W/W
759	△ TM1	4214-11033	TERMINAL
759	△ TM2	4214-11033	TERMINAL

PCB-10 POWER SWITCH P.C.BOARD

CAPACITORS			
913	△ C1	5352-S010M103	CAP, MTL .01μ BK NB
913B	△ C1	5352-4720958	CAP, MTL 4700p G GB I IB S SB

RESISTOR			
054B	R101	5135-335J50P	RES, CBN 12P 3.3M G GB I IB S SB

MISCELLANEOUS			
912	△ SW2	4433-01101	SWITCH, PU-PW
916	△ TM9	4214-122	TERMINAL
916	△ TM10	4214-122	TERMINAL

PCB-11 SUB POWER SUPPLY P.C.BOARD

CAPACITORS			
629	△ C5	5345-228F0962	CAP, MINI ELE 2200μ50V
629	△ C6	5345-228F0962	CAP, MINI ELE 2200μ50V
630	C11	5354-104593	CAP, MYL .1μ
630	C12	5354-104593	CAP, MYL .1μ
052B	C22	5352-1041957	CAP, MTL .1μ G GB

DIODES			
627	△ D3	5632-S5566B	DIODE, RECT
627	△ D4	5632-S5566B	DIODE, RECT
627	△ D5	5632-S5566B	DIODE, RECT
627	△ D6	5632-S5566B	DIODE, RECT

MISCELLANEOUS			
764	CN1	4443-0201140	CONNECTOR
765	CN2	4443-0301140	CONNECTOR
765	CN3	4443-0301140	CONNECTOR
765	CN4	4443-0301140	CONNECTOR
766	CW2	4163-0140039	CONNECTOR W/W
632	△ F2	5732-122031	FUSE BK
632B	△ F2	5732-122030	FUSE G GB I IB S SB
632F	△ F2	5732-122037	FUSE NB
632	△ F3	5732-122031	FUSE BK
632B	△ F3	5732-122030	FUSE G GB I IB S SB
632F	△ F3	5732-122037	FUSE NB
633	△ HF2	4472-0131	HOLDER, FUSE
633	△ HF3	4472-0131	HOLDER, FUSE
633	△ HF4	4472-0131	HOLDER, FUSE
633	△ HF5	4472-0131	HOLDER, FUSE
763	TM5	4214-11033	TERMINAL

PCB-12 VOLUME P.C.BOARD

RESISTORS			
920	R503	5135-472522	RES, CBN 1/2P 4.7K
920	R504	5135-472522	RES, CBN 1/2P 4.7K

CONTROLS			
896	VR503/ 504	5113-10472147	RES, V CBN 16 100K

MISCELLANEOUS			
767	CN502	4443-030185	CONNECTOR
767	CN507	4443-030185	CONNECTOR

PCB-13 V/D SWITCH P.C.BOARD

MISCELLANEOUS			
756	CN805	4443-0201141	CONNECTOR
755	CW809	4163-S0202451	CONNECTOR W/W
904	SW801	4431-A027610	SWITCH, PUSH

PCB-14 PRE OUT P.C.BOARD

CAPACITOR			
066B	C79	5359-1215851	CAP, PPP 120p G GB
066B	C80	5359-1215851	CAP, PPP 120p G GB
067B	C81	5359-4715851	CAP, PPP 470p G GB
067B	C82	5359-4715851	CAP, PPP 470p G GB
666	C577	5361-103KB	CAP, CER .01μ

RESISTORS			
919	R929	5135-331522	RES, CBN 1/2P 330
919B	R929	5135-182522	RES, CBN 1/2P 1.8K G GB
919	R930	5135-331522	RES, CBN 1/2P 330
919B	R930	5135-182522	RES, CBN 1/2P 1.8K G GB

MISCELLANEOUS			
770	CN501	4443-030185	CONNECTOR
661	△ PJ2	4489-02601002	PIN JACK, MLT

PCB-15 TERMINAL L P.C.BOARD

RESISTORS			
553	R747	5135-561522	RES, CBN 1/2P 560
554	R749	5135-122522	RES, CBN 1/2P 1.2K

TRANSISTOR			
557	Q455	5613-3423(Y)	XISTOR, NPN R

PCB-16 TERMINAL R P.C.BOARD

RESISTORS			
615	R748	5135-561522	RES, CBN 1/2P 560
616	R750	5135-122522	RES, CBN 1/2P 1.2K

TRANSISTOR			
618	Q456	5613-3423(Y)	XISTOR, NPN R

CHASSIS MISCELLANEOUS

MISCELLANEOUS			
057B	C51	5361-223KB	CAP, CER .022μ G GB
056B	△ CO1	4443-712	CONNECTOR G GB I IB S SB
667	△ F1	5732-632029	FUSE BK
667B	△ F1	5732-312030	FUSE G GB I IB S SB
667F	△ F1	5732-632056	FUSE NB
668	△ HF1	4472-014	HOLDER, FUSE BK NB
668B	△ HF1	4472-7118	HOLDER, FUSE G GB I IB S SB
654	△ P1	4161-04801252	CORD W/PLUG BK

Ser.No	Ref. No.	Part No.	Description
654B	△ P1	4161-71150	CORD W/PLUG G GB I IB
654F	△ P1	4161-04901252	CORD W/PLUG NB
654G	△ P1	4161-71159	CORD W/PLUG S SB
652	△ SO1	4474-156	SOCKET BK NB
656	△ SW1	4433-01002	SWITCH, PU-PW BK NB
656B	△ SW1	4433-01001	SWITCH, PU-PW G GB I IB S SB
053B	△ SW101	4411-102729	SWITCH, ROTARY G GB I IB S SB
674	△ T1	5584-S2513	XFORMER, POWER BK
674B	△ T1	5584-S2514	XFORMER, POWER G GB I IB S SB
674F	△ T1	5584-S2515	XFORMER, POWER NB
055B		4150-8	TUBING, SPE G GB I IB S SB
663		4442-14	PIN PLUG

PACKAGE PARTS LIST

021	1756-06303	LABEL G GB I IB S SB
021	1756-03113	LABEL NB
022	1756-03124	LABEL, (G) G GB
022	1756-03108	LABEL, (I) I IB
022	1756-03106	LABEL, (SEV) S SB
022	1751-07705	LABEL, AC CORD NB
023	1241-PB	POLYETHYLENE BAG NB
107	1111-J30317	OWNER GUIDE, OG BK
107	1111-J30318	OWNER GUIDE, OG G GB I IB S SB
107	1111-J2052	OWNER GUIDE NB
108	1113-717004	OWNER CARD BK
108	1113-0C	OWNER GUIDE NB
109	1119-047	ATTACH SHEET, WARRANTY BK
109	1116-GC	GUARANT CARD NB
110	1119-0137	ATTACH SHEET BK
111	1119-01201	ATTACH SHEET, UL BK
111	1119-0135	ATTACH SHEET FTZ G GB
113	1241-R0123350	POLYETHYLENE BAG, OG
122	1241-C1494	POLYETHYLENE BAG, SET
125	1221-737198	CARTON BOX G I S
125	1221-747198	CARTON BOX BK GB NB IB SB
126	1222-7357	CUSHION, L
127	1222-7358	CUSHION, R
128	1223-11747	SOFT SHEET, SET
129	1223-11115	SOFT SHEET, AC CORD

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

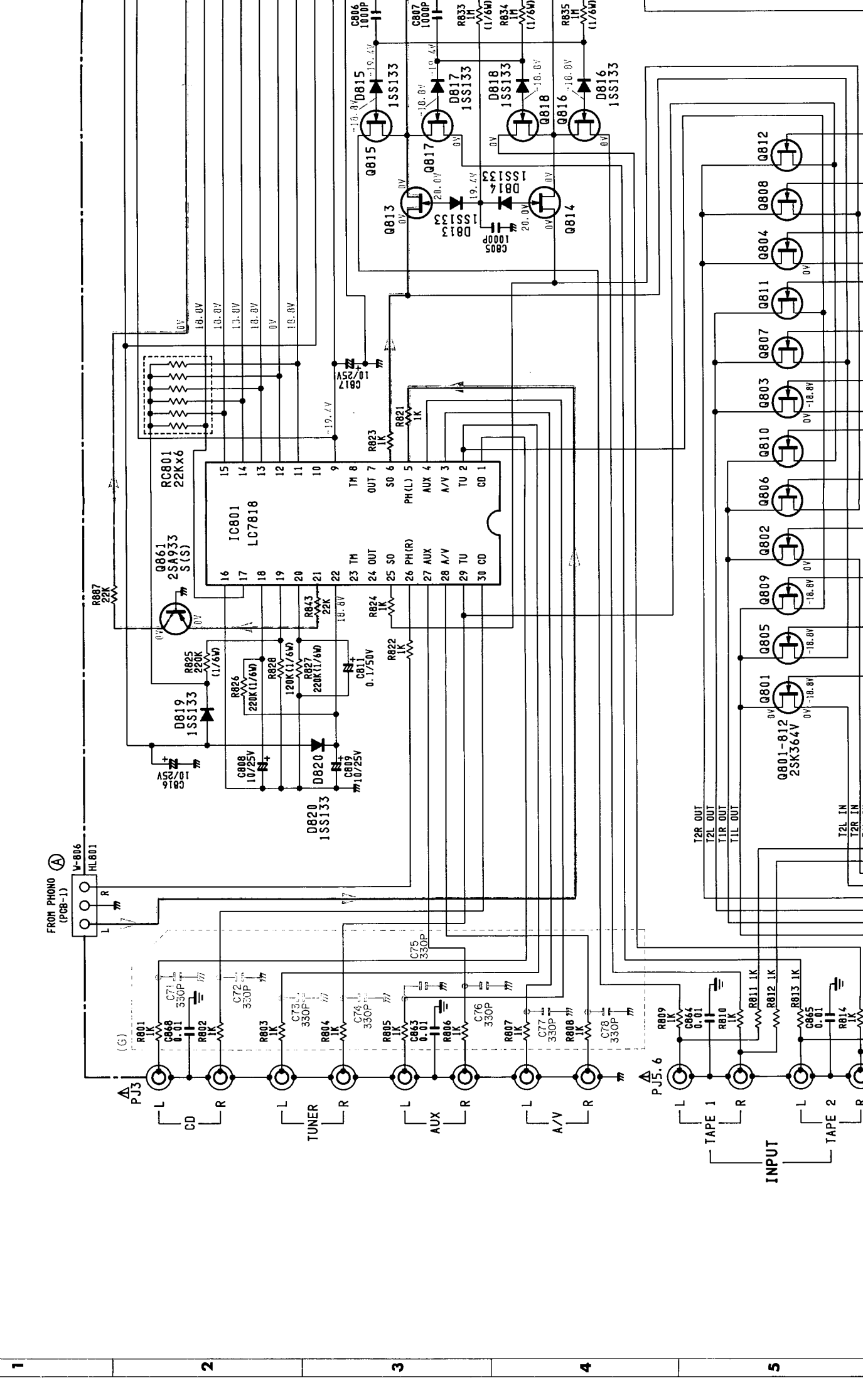
RES, V CBN	: Variable Carbon Resistor
RES, SEMI FIX	: Semi-fixed Resistor

NOTE



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

SCHEMATIC DIAGRAM (FUNCTION & VIDEO SECTION)



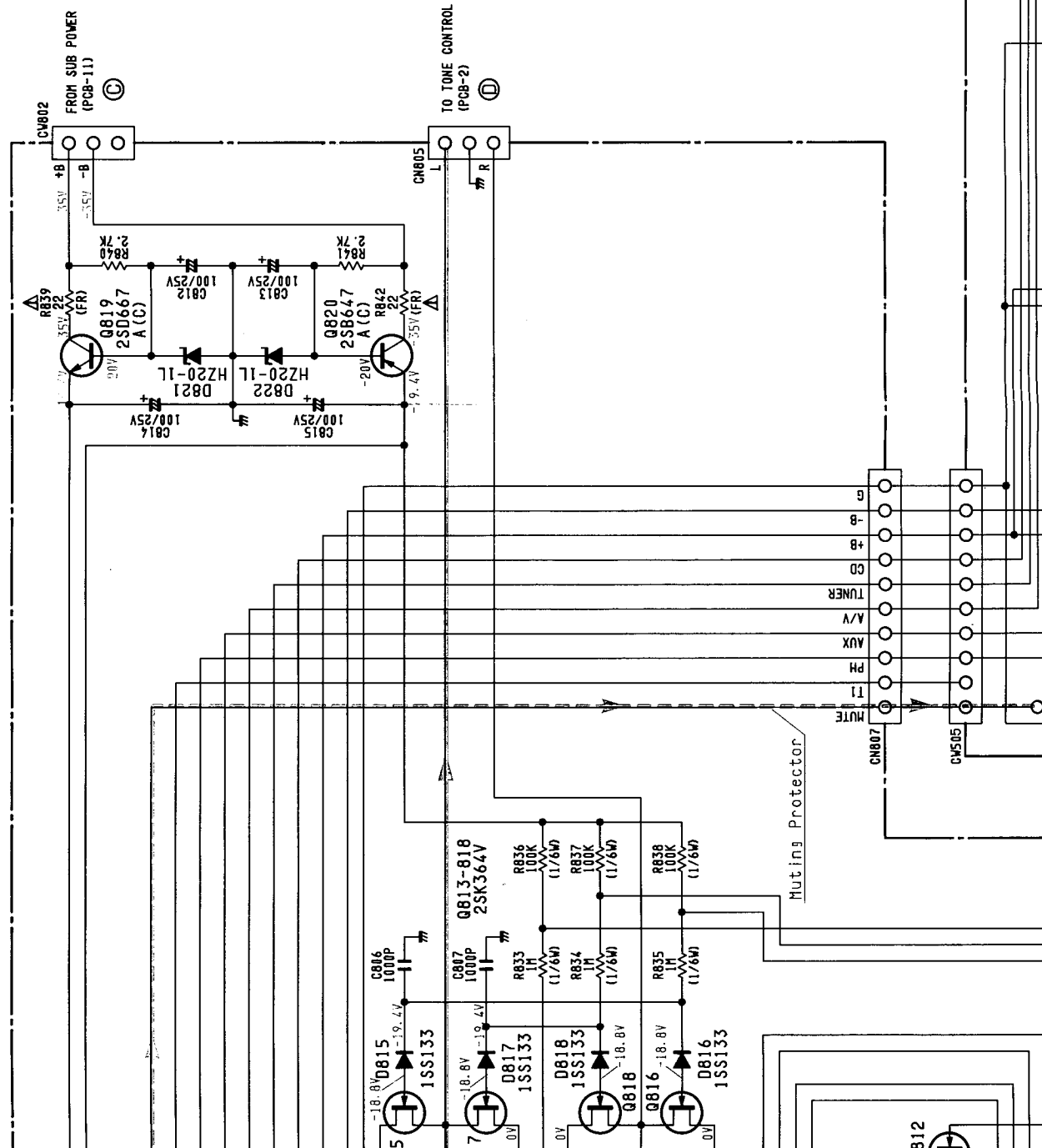
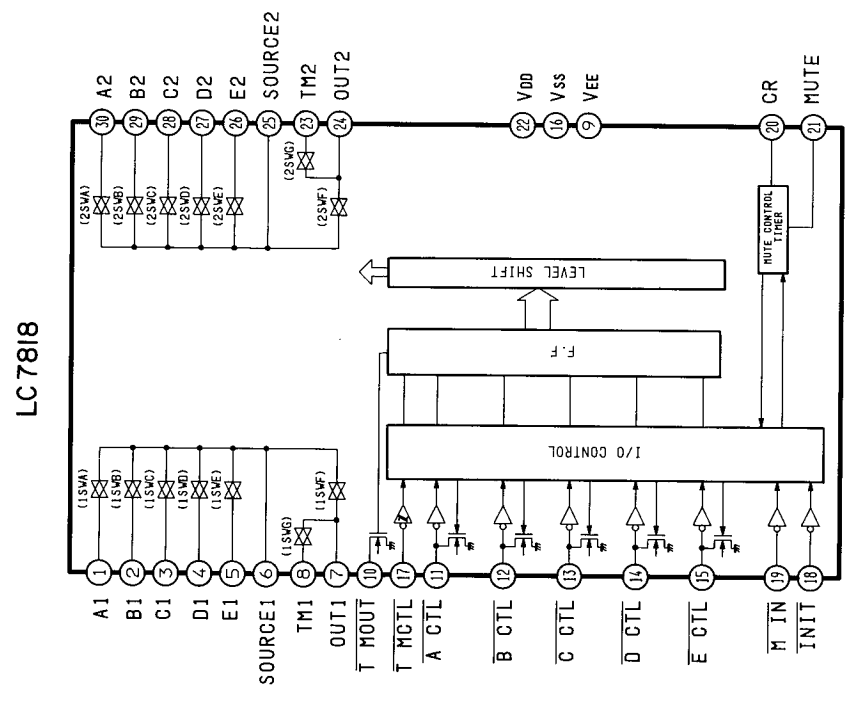
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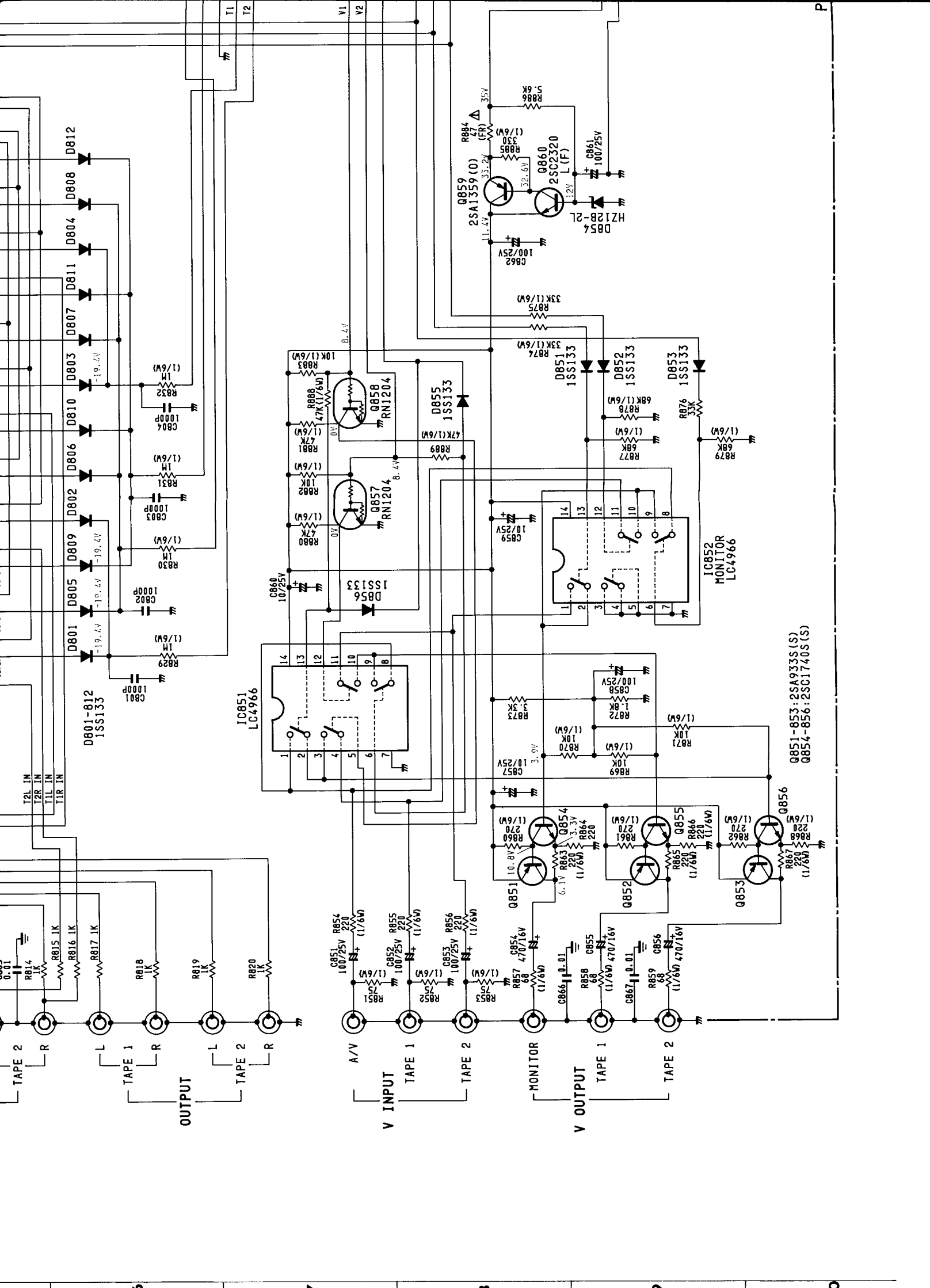
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T1 IN
T2 IN
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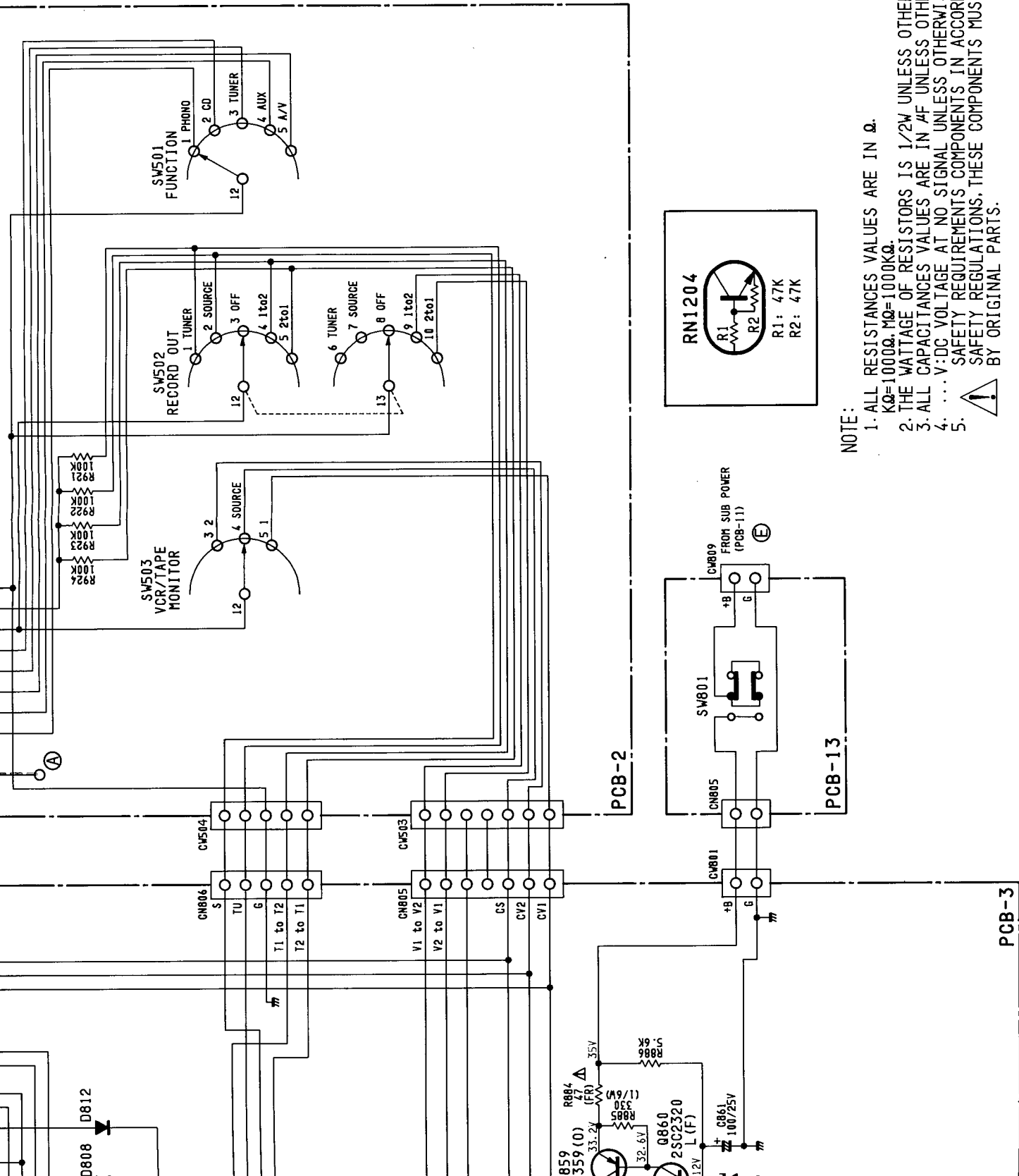
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NOTE:

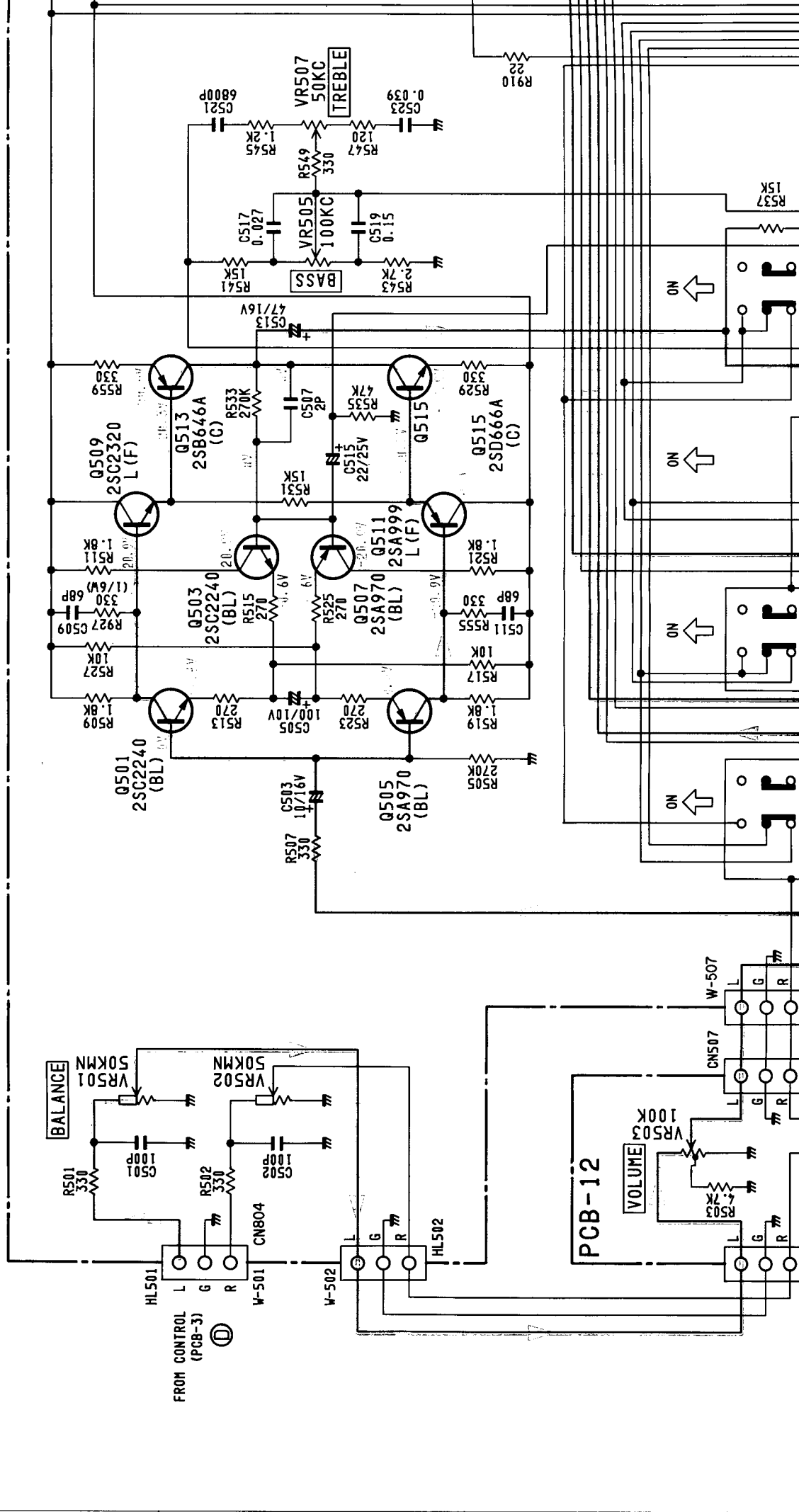
1. ALL RESISTANCE VALUES ARE IN Ω .
K Ω =1000 Ω , M Ω =100K Ω .
2. THE WATTAGE OF RESISTORS IS 1/2W UNLESS OTHERWISE NOTED.
3. ALL CAPACITANCE VALUES ARE IN μ F UNLESS OTHERWISE NOTED. P= μ F.
4. ... V:DC VOLTAGE AT NO SIGNAL UNLESS OTHERWISE NOTED.
5. SAFETY REGULATIONS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS, THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.

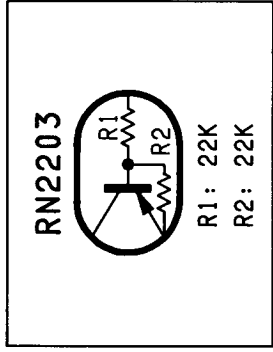


A B C D E F G

SCHEMATIC DIAGRAM (TONE CONTROL SECTION)

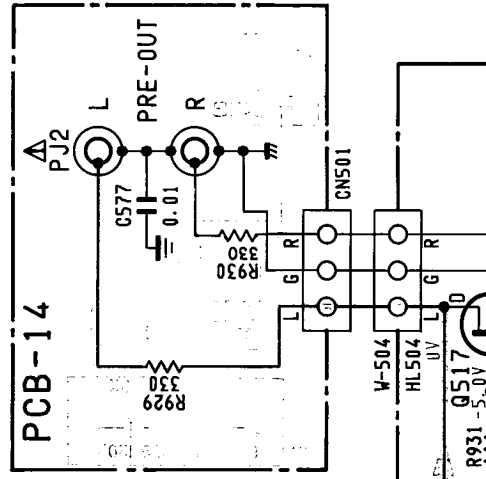
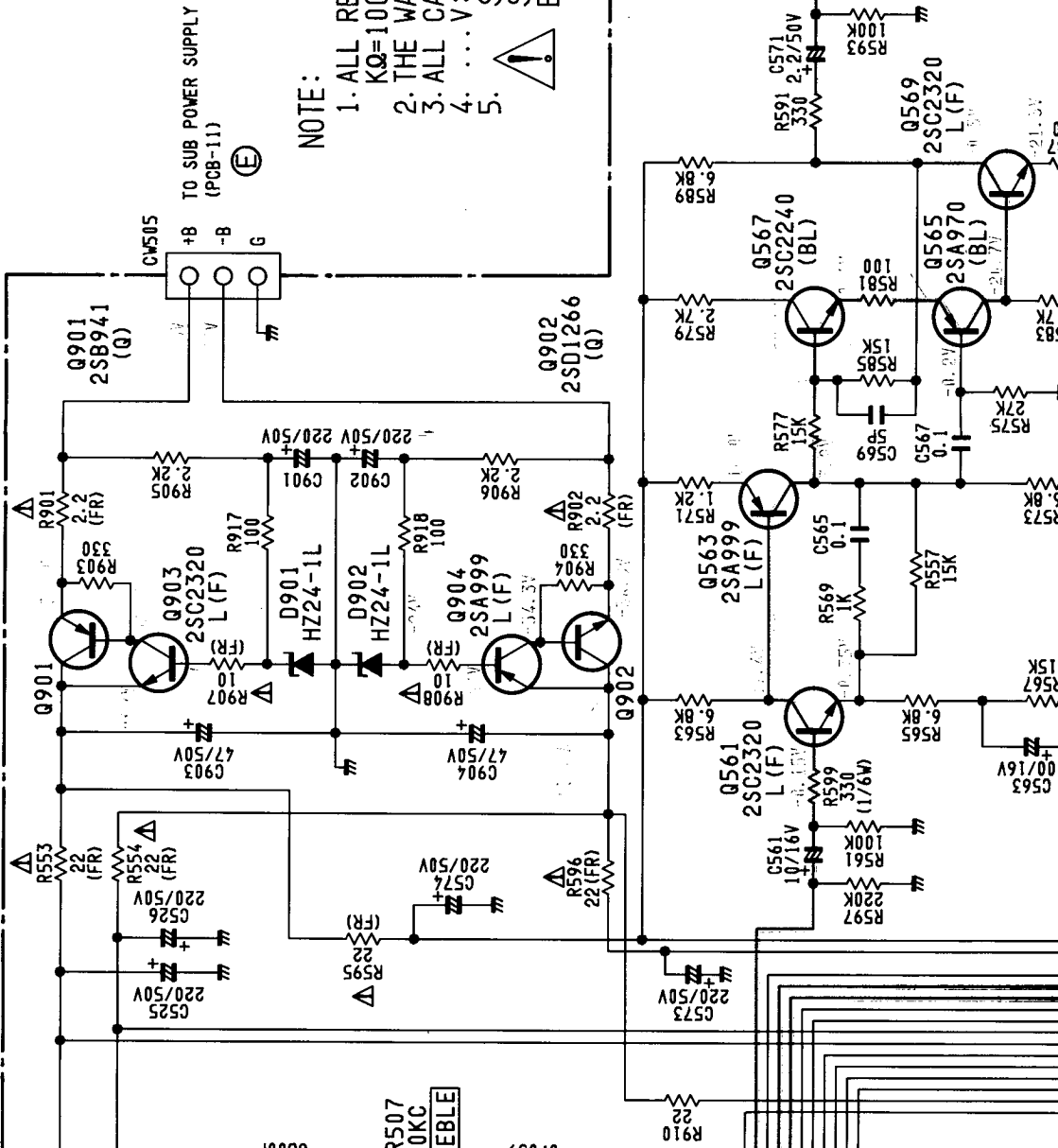
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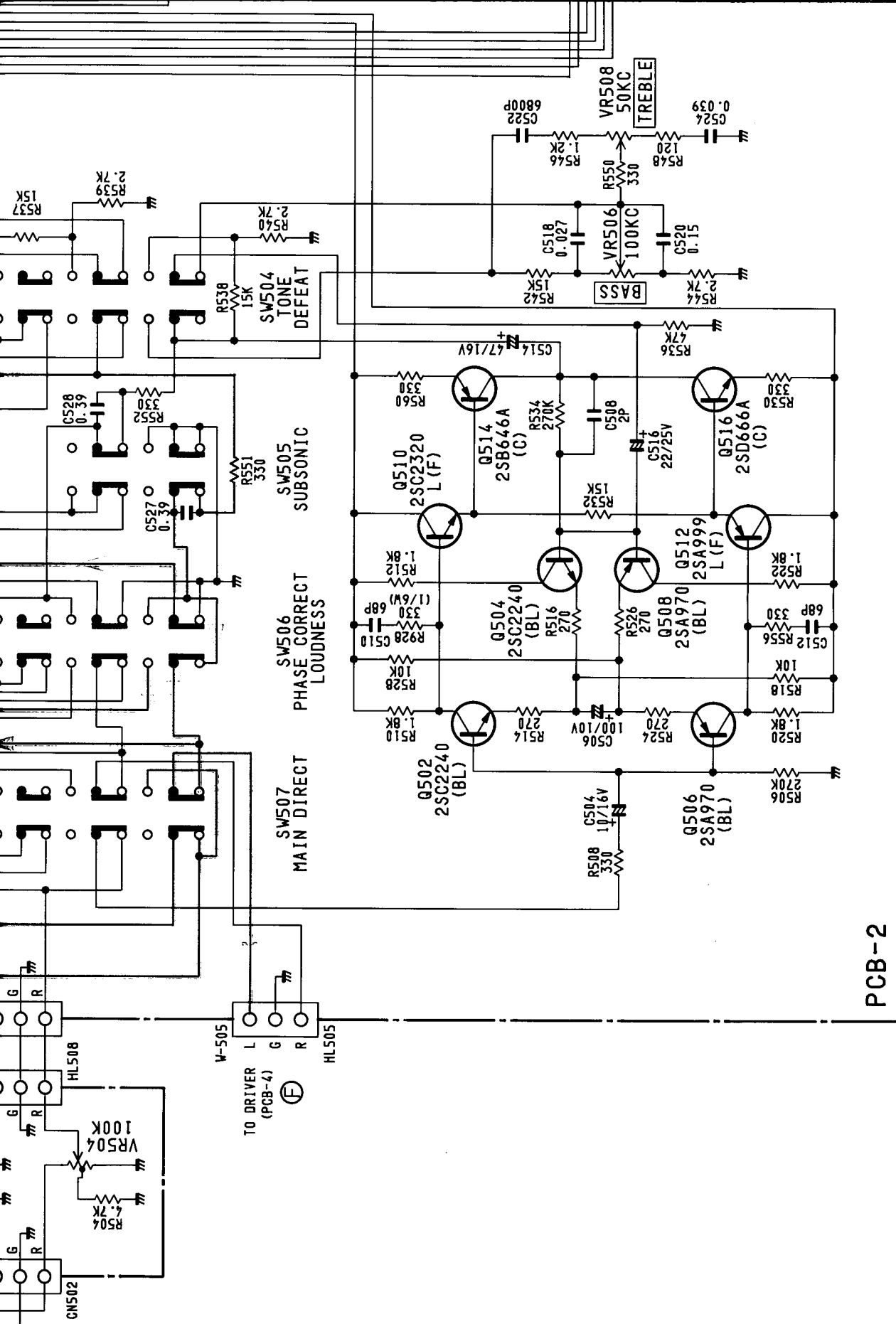




NOTE:

1. ALL RESISTANCE 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 CAPACITANCE VALUES ARE IN μF UNLESS OTHERWISE NOTED. $P=\mu\mu F$.
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.





PCB-2

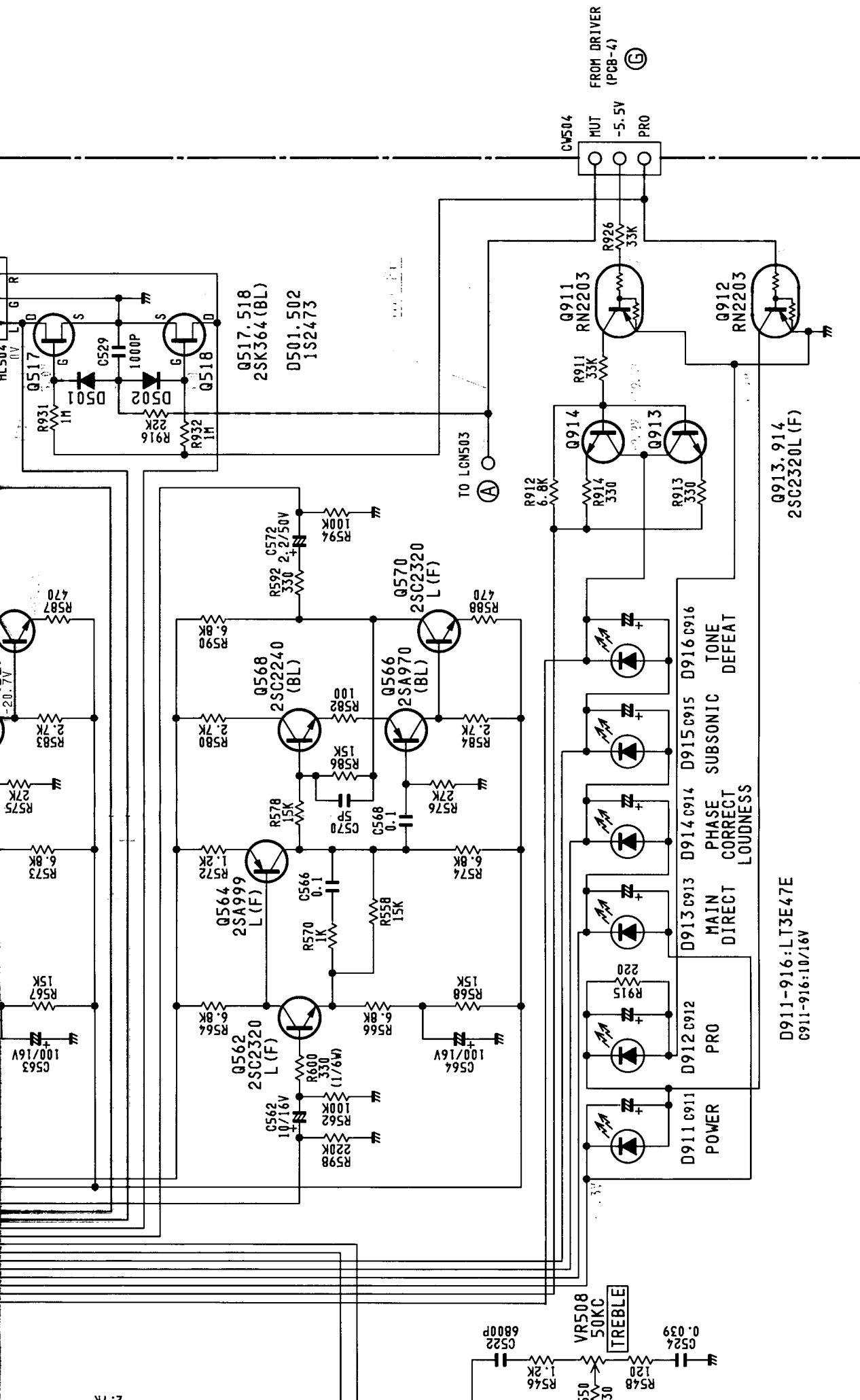
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FROM DRIVER
(PCB-4) $\text{\textcircled{C}}$

CV504
MUT
-5.5V
PRO

TO LCN503
A

D911-916:LT3E47E
C911-916:10/16V

VR508
50K
TREBLE

R546 1.2K
R548 120
C524 0.039
C522 6800P

Q913, 914
2SC2320L (F)

Q911
RN2203

Q912
RN2203

Q914
RN2203

Q913
RN2203

Q570
2SC2320
L (F)

Q566
2SA970
(BL)

Q568
2SC2240
(BL)

Q562
2SC2320
L (F)

Q517
2SK364 (BL)

Q518
D501.502
1S2473

Q911
RN2203

Q912
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Q913
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Q914
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Q562
2SC2320
L (F)

Q564
2SA999
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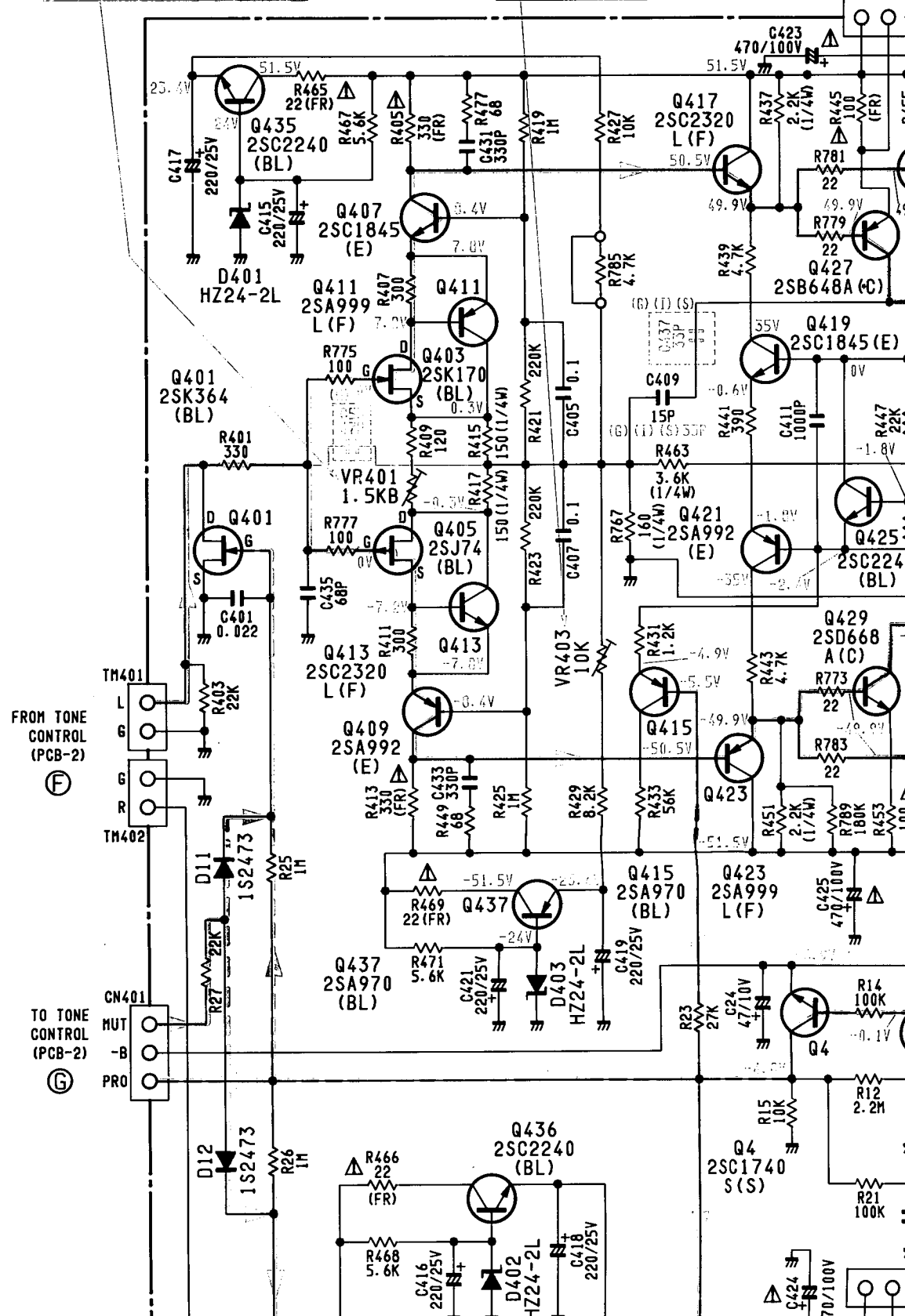
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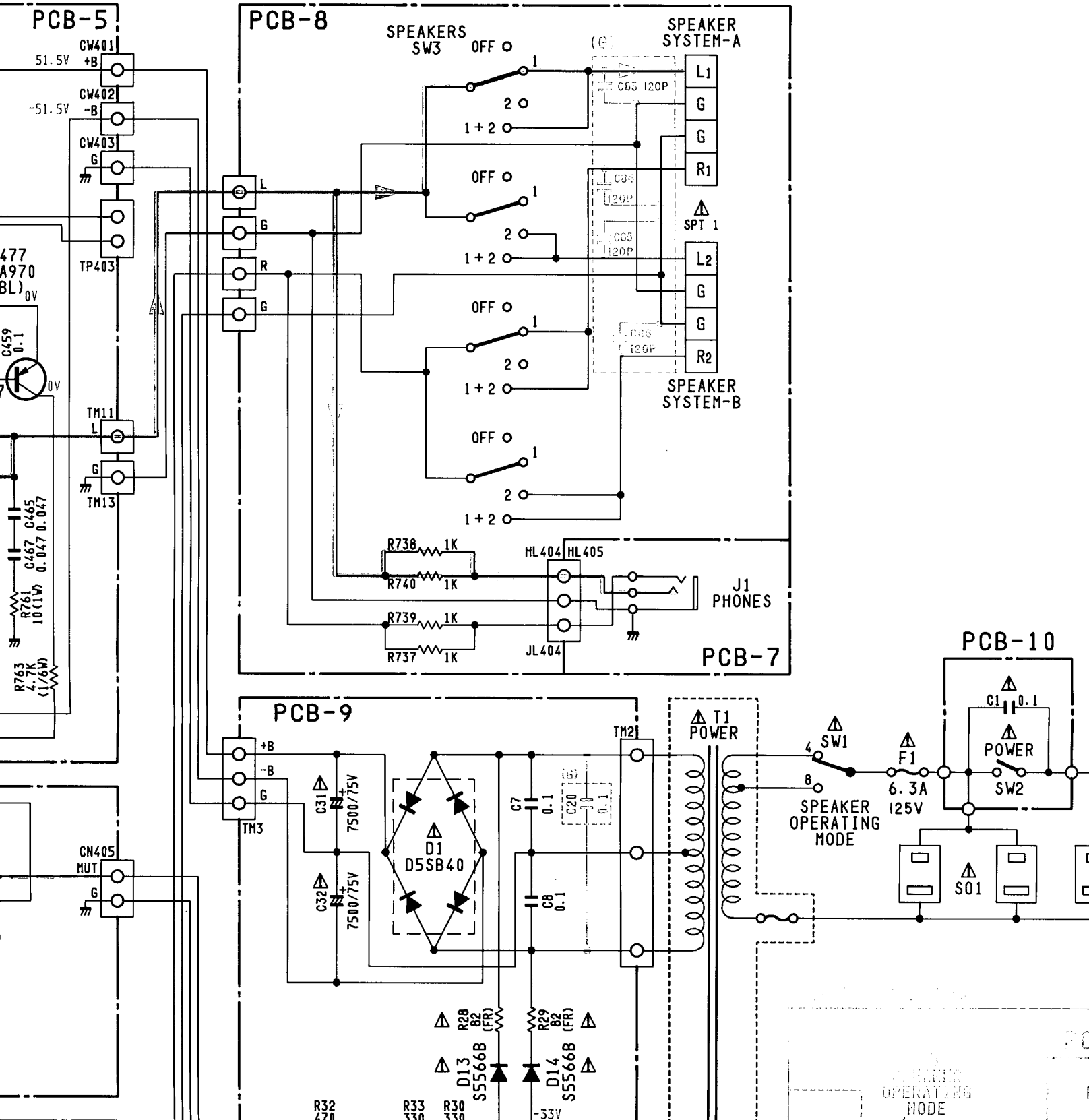
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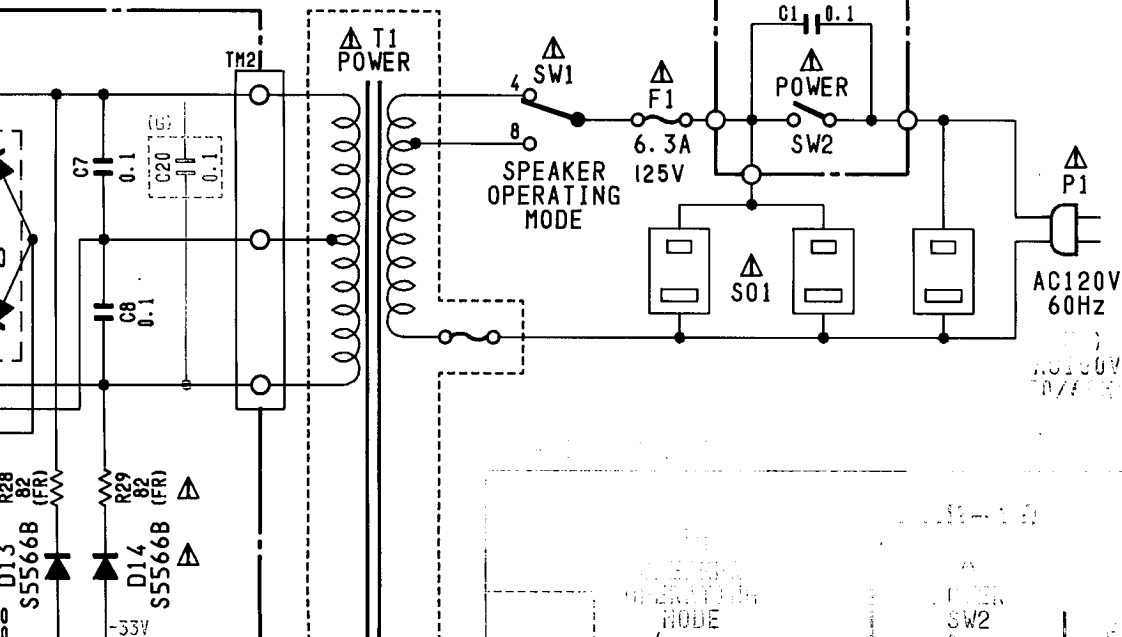
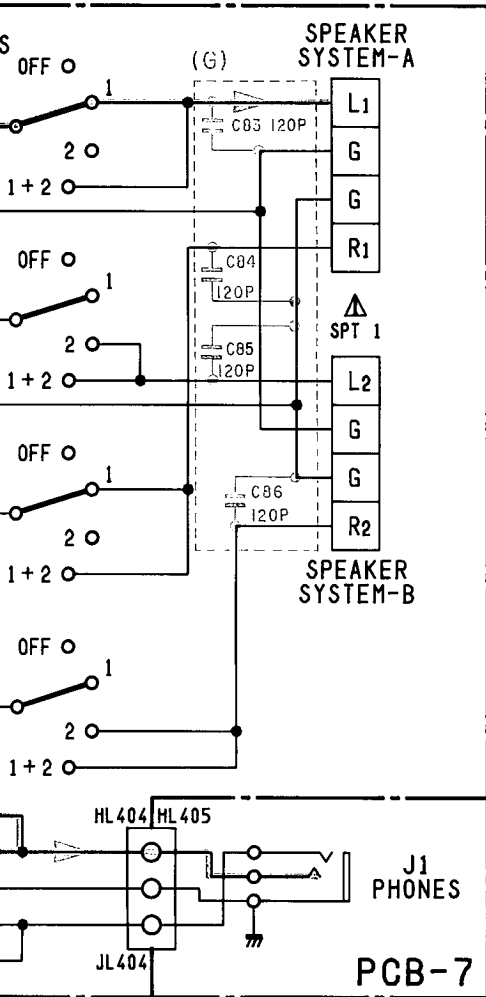
SCHEMATIC DIAGRAM (POWER AMP SECTION)

MAIN DRIVER ADJ. (Lch)

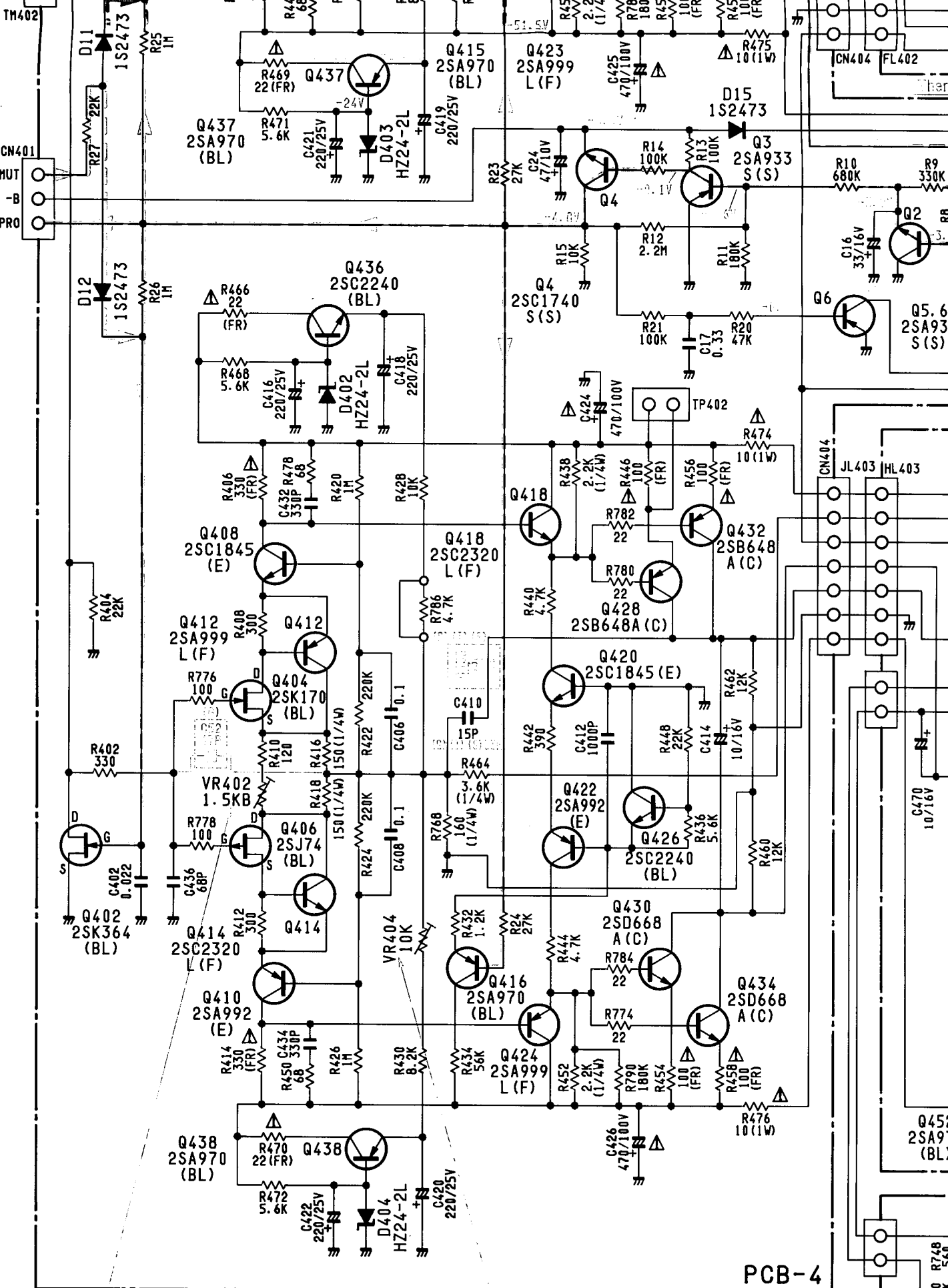
MAIN OFFSET ADJ. (Lch)



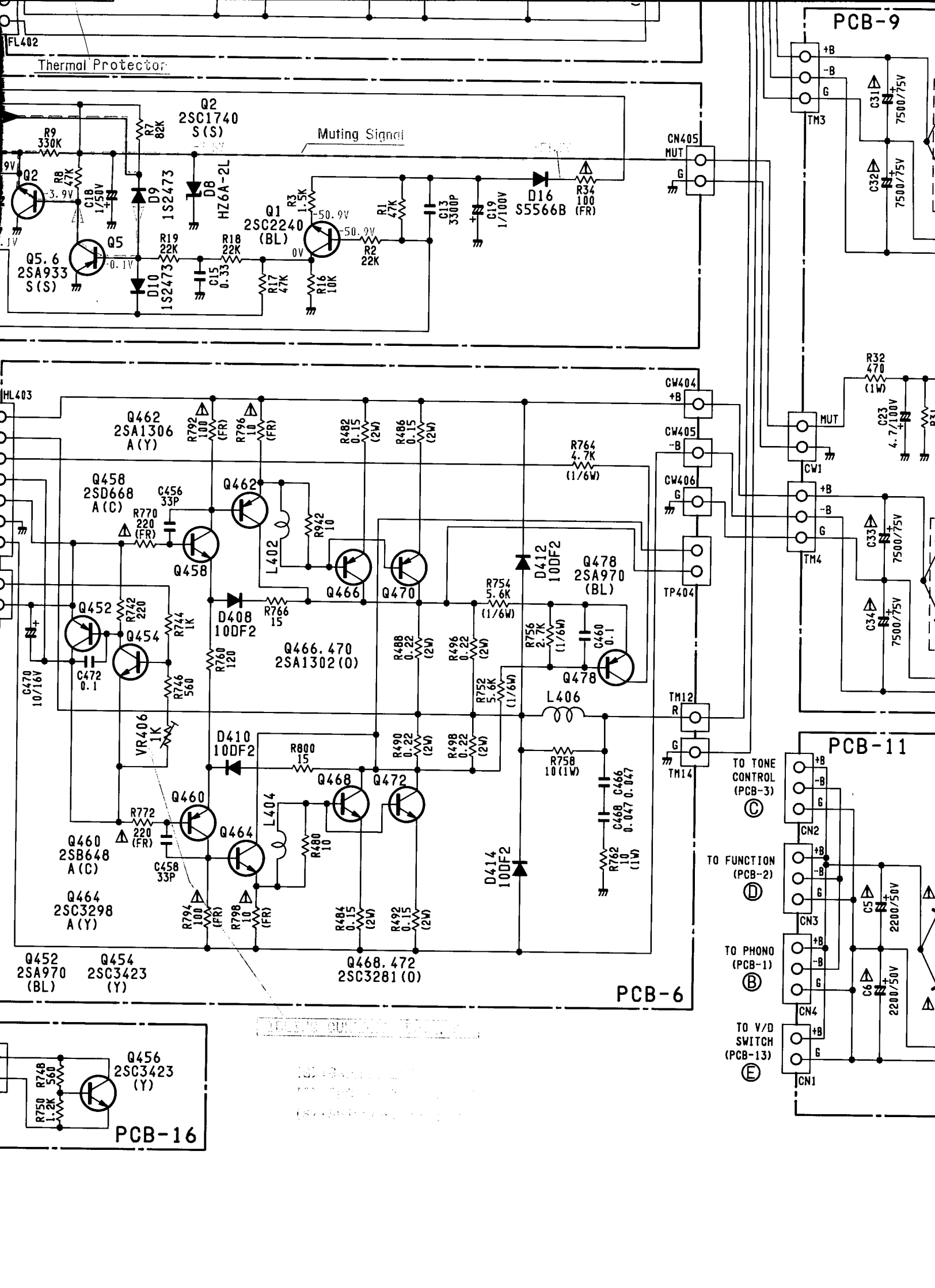




TO TONE CONTROL (PCB-2)



PCB-4

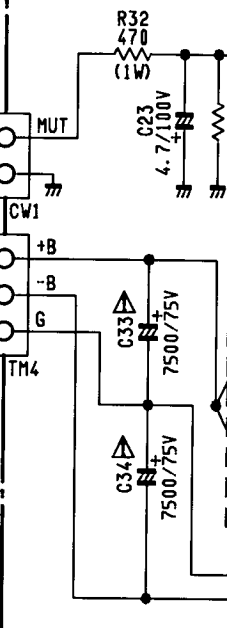
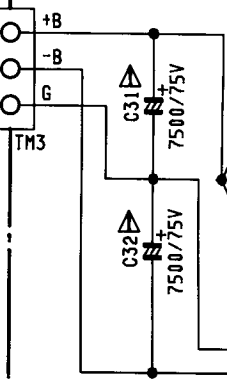


PCB-9

Thermal Protector

Muting Signal

CN405
MUT



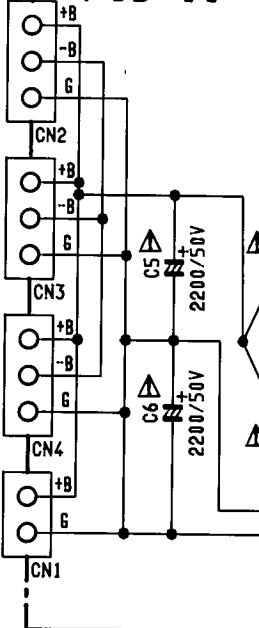
PCB-11

TO TONE CONTROL (PCB-3)

TO FUNCTION (PCB-2)

TO PHONO (PCB-1)

TO V/D SWITCH (PCB-13)



PCB-6

HL403

CW404
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CW405
-B

CW406
G

TP404

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R

TH14
G

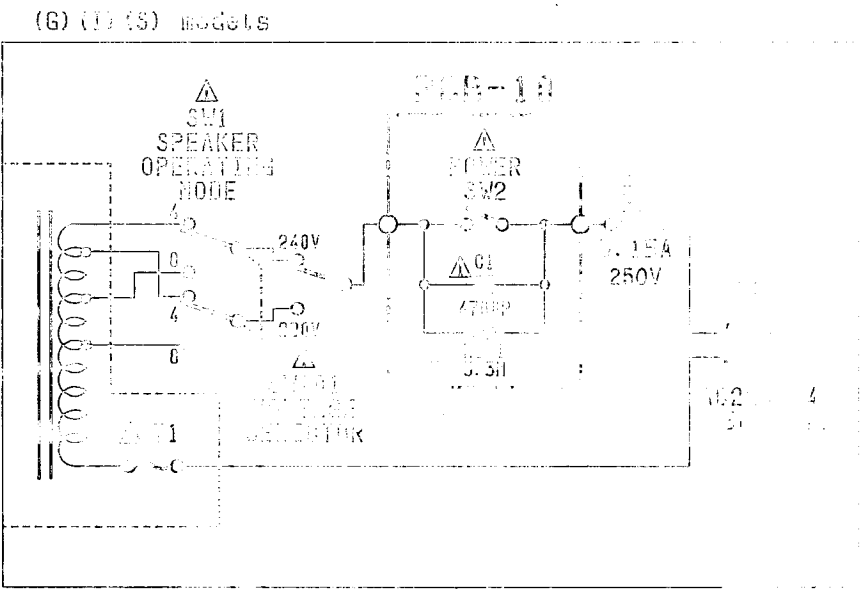
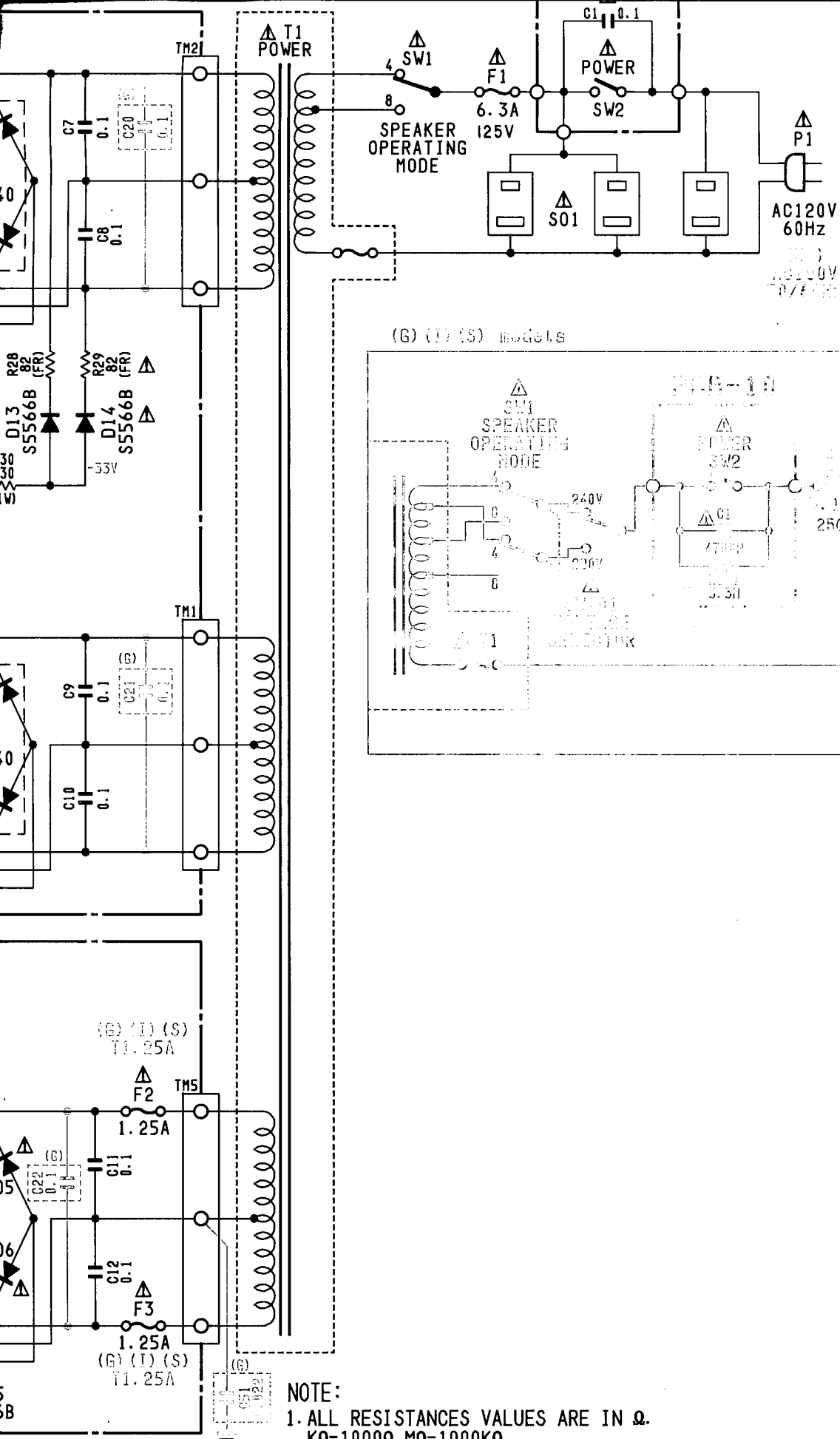
Q452 2SA970 (BL)
Q454 2SC3423 (Y)
Q460 2SB648 A (C)
Q464 2SC3298 A (Y)
Q466.470 2SA1302 (O)
Q468.472 2SC3281 (O)
Q478 2SA970 (BL)

Q456 2SC3423 (Y)

PCB-16

REVISIONS

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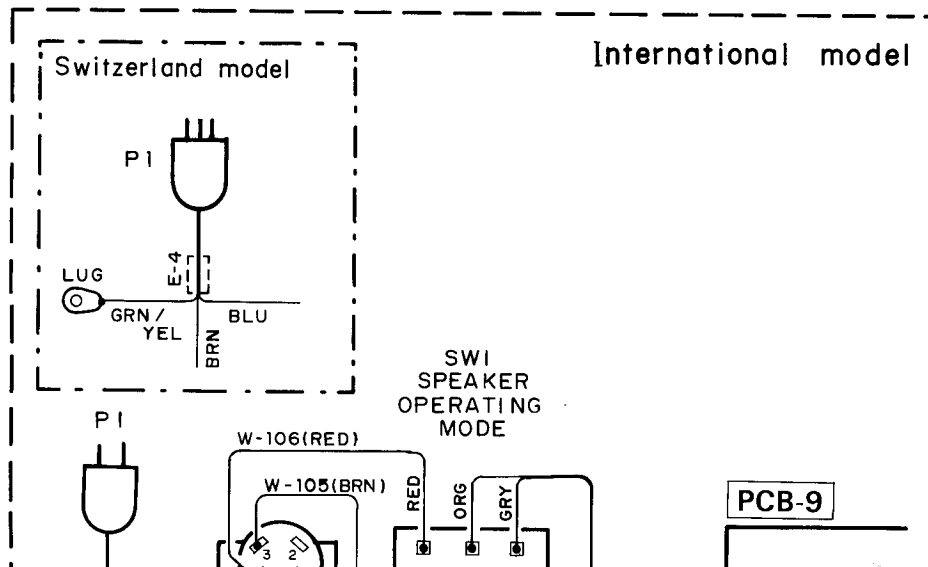
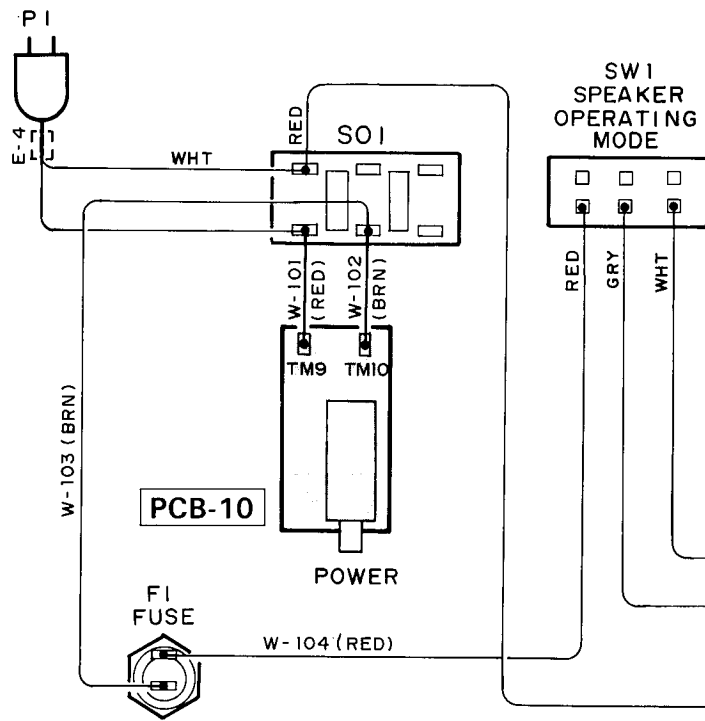
- NOTE:**
1. ALL RESISTANCES VALUES ARE IN Ω .
K Ω =1000 Ω , M Ω =1000K Ω .
 2. THE WATTAGE OF RESISTORS IS 1/2W UNLESS OTHERWISE NOTED.
 3. ALL CAPACITANCES VALUES ARE IN μ F UNLESS OTHERWISE NOTED. P= μ F.
 4. ... V:DC VOLTAGE AT NO SIGNAL UNLESS OTHERWISE NOTED.
 5. SAFETY REQUIREMENTS COMPONENTS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



WIRING DIAGRAM

WIRE COLOR ABBREVIATIONS

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



PCB-8

PCB-10

PCB-9

T
POW

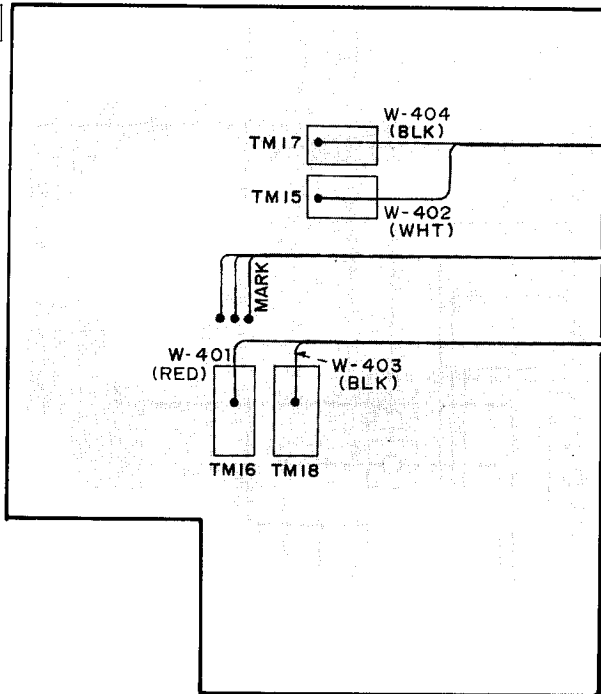
WHT
YEL
GRY
BLU
PUP

SW1
SPEAKER
OPERATING
MODE

PCB-9

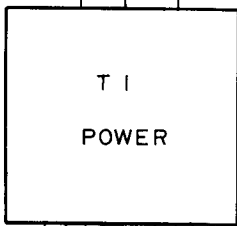
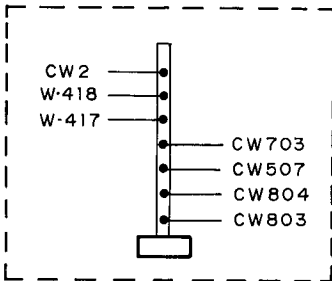
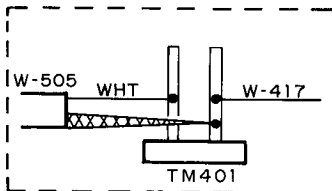
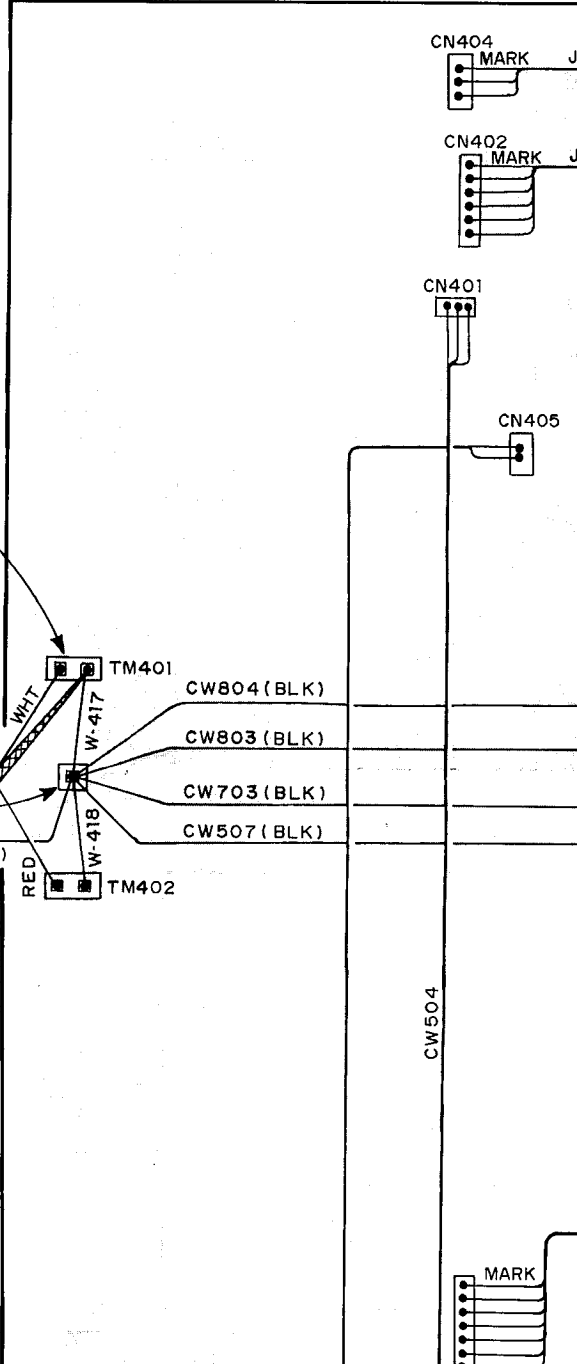
TM1
RED
ORG
BLK
GRY

PCB-8

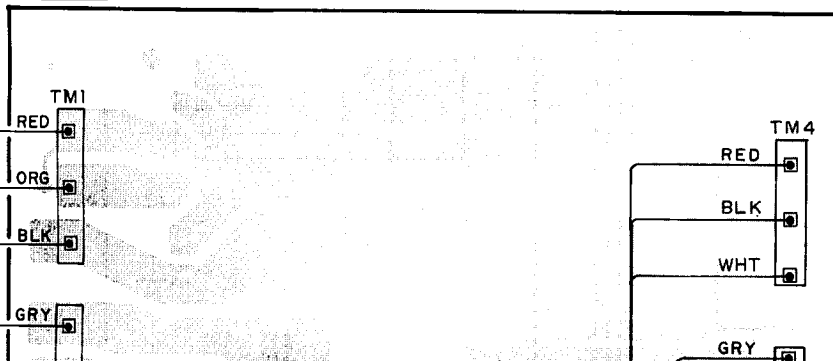


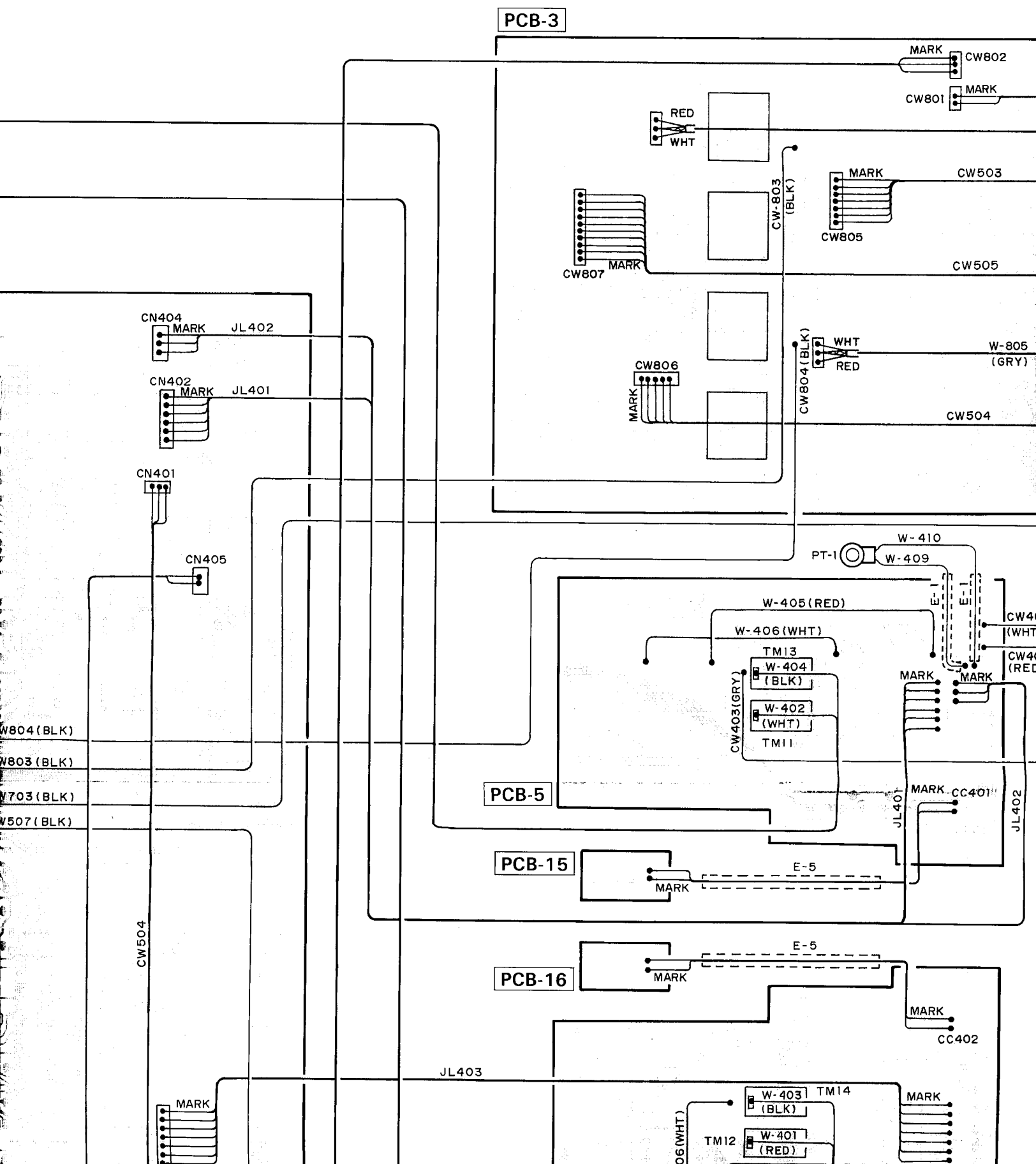
JL404

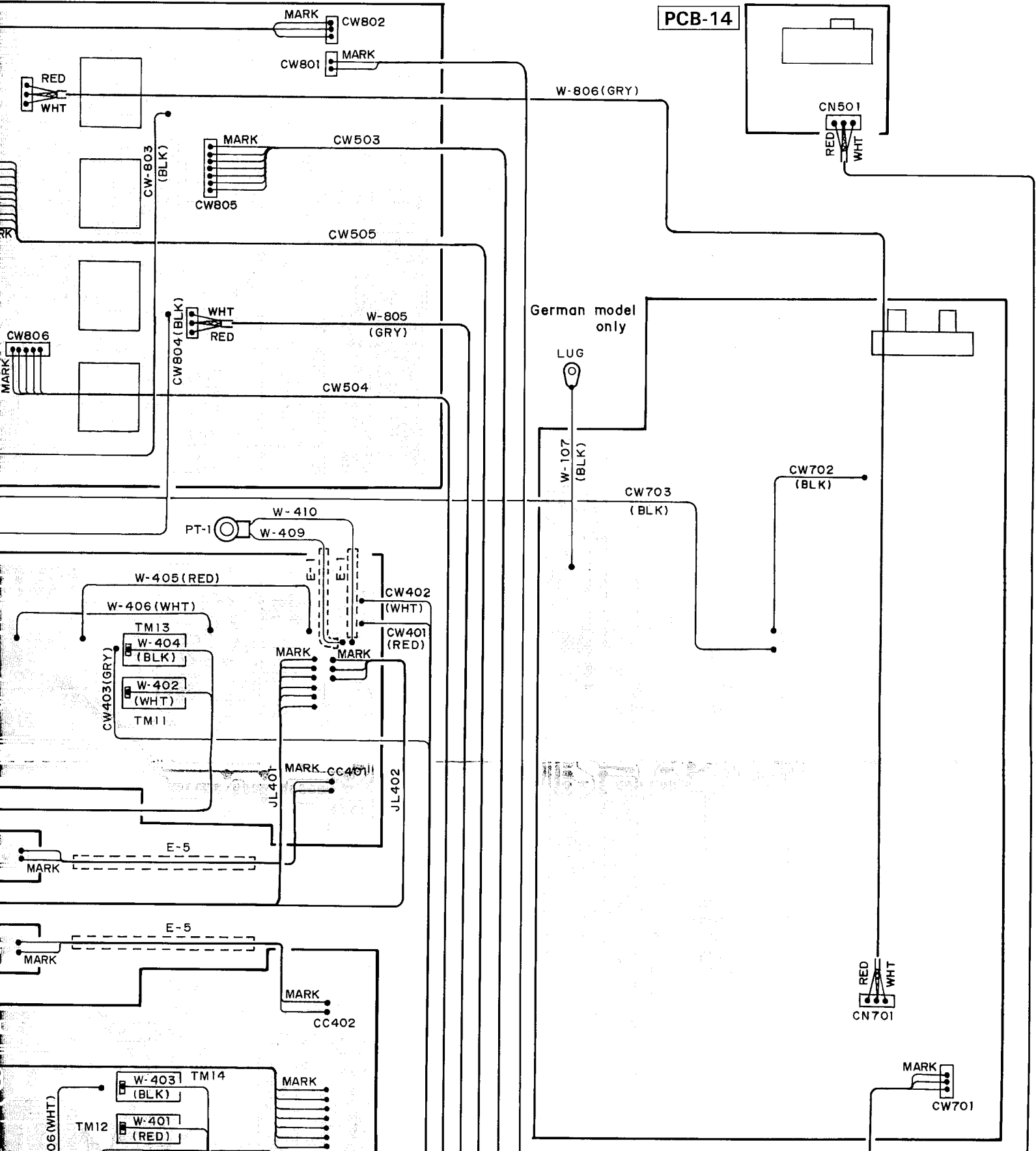
PCB-4



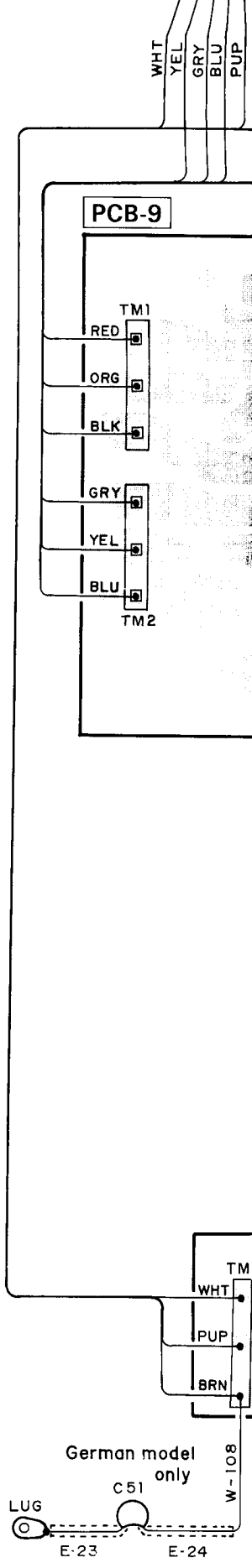
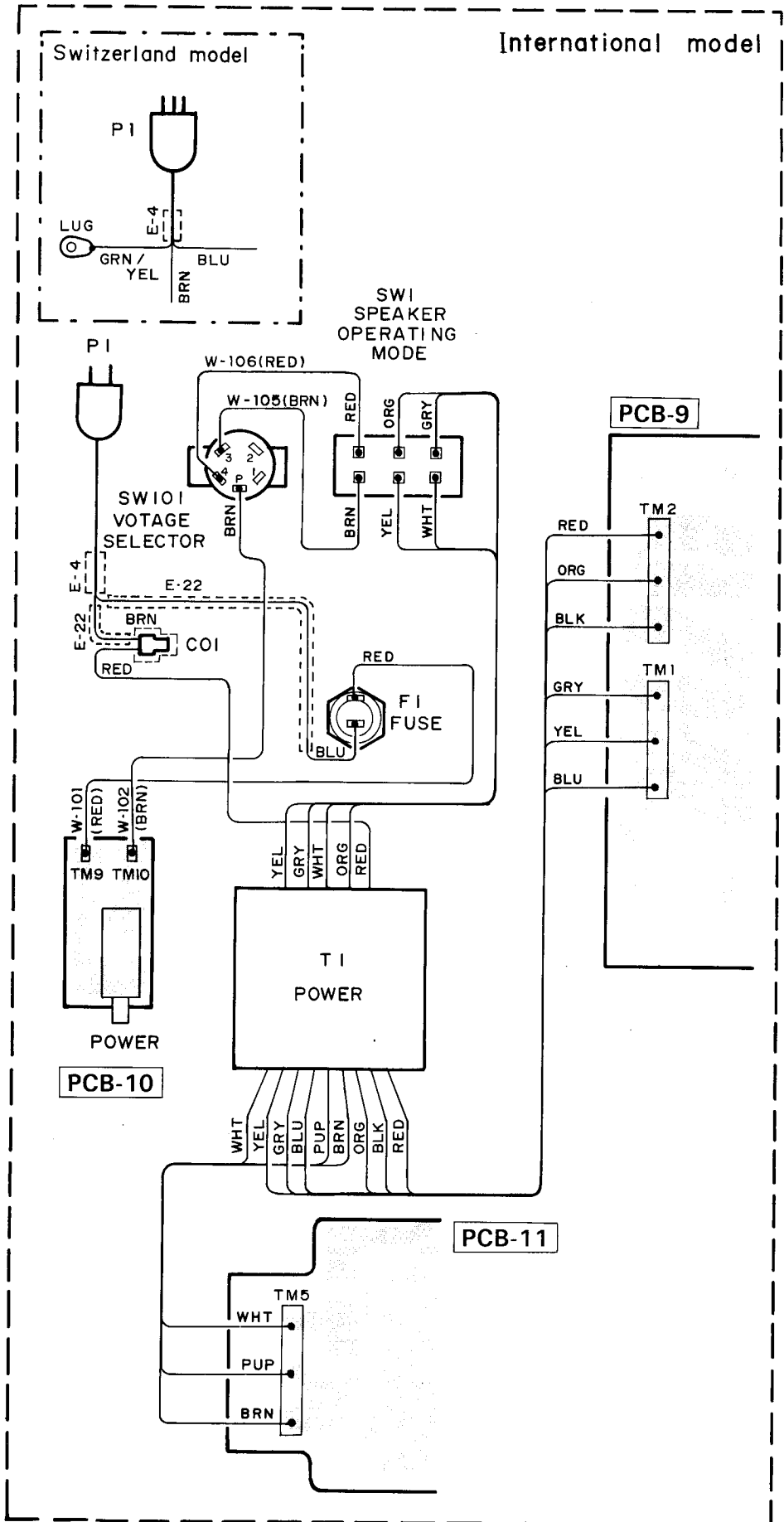
PCB-9

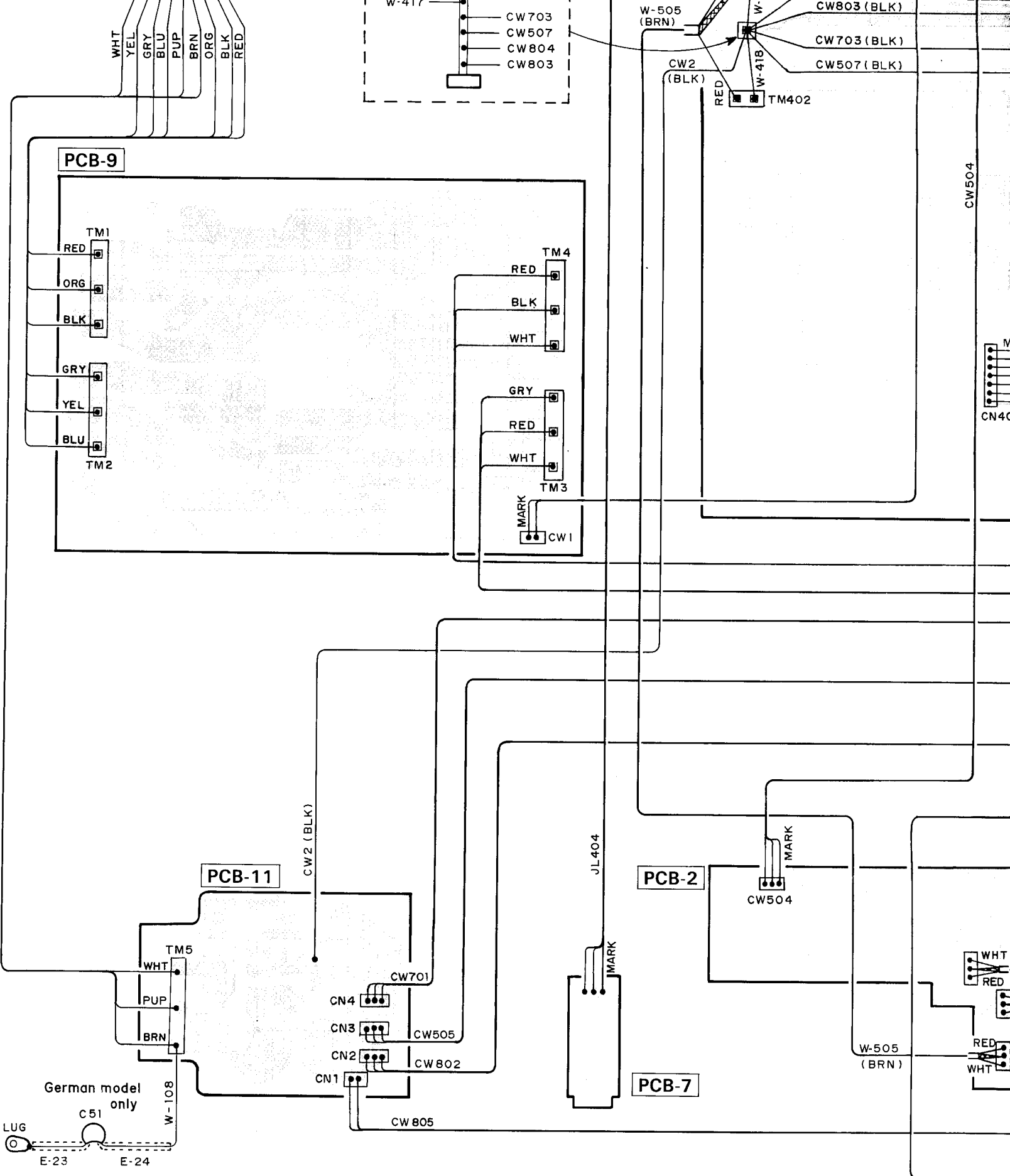


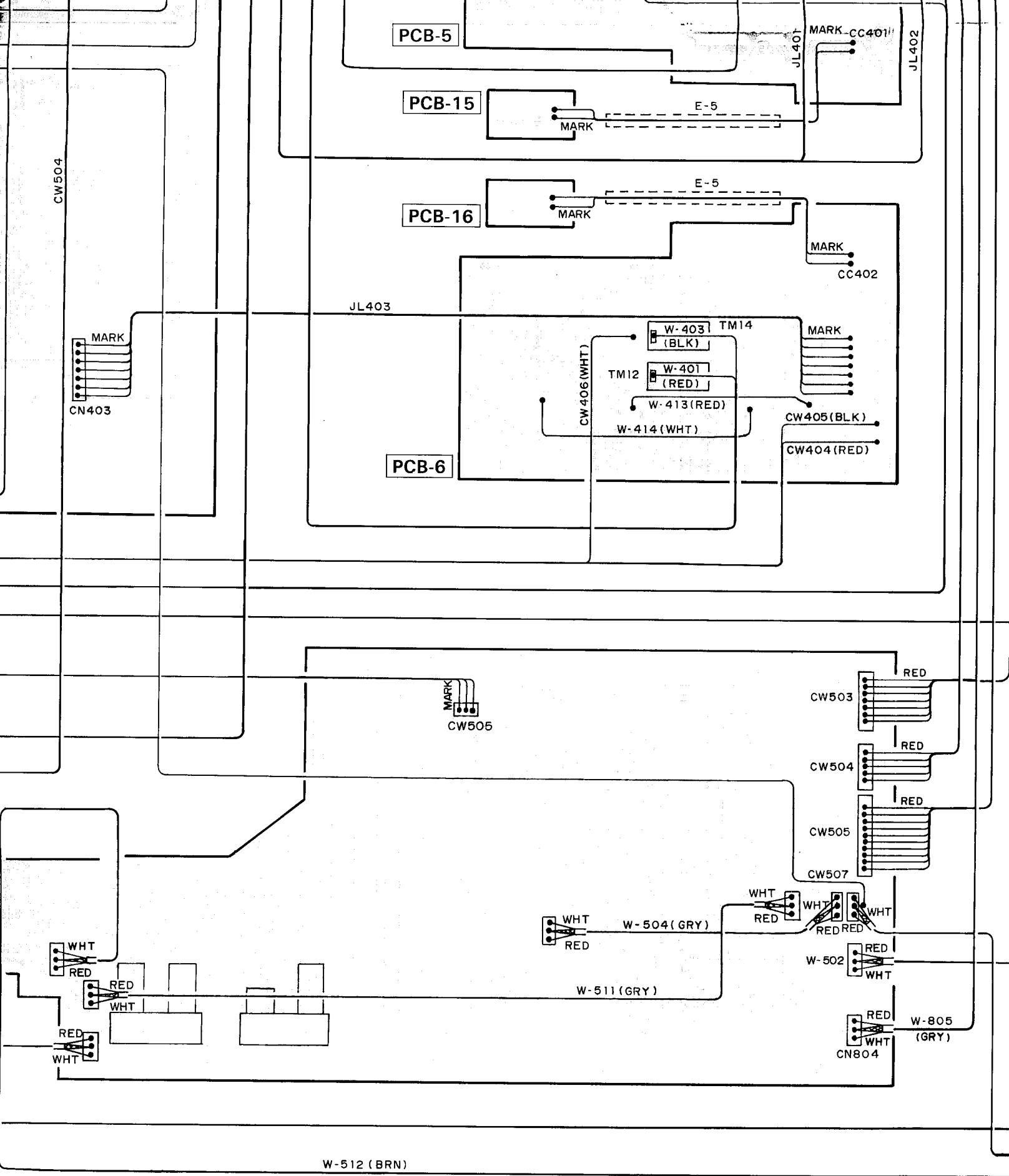




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8
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12







W-512 (BRN)

