

# SERVICE MANUAL

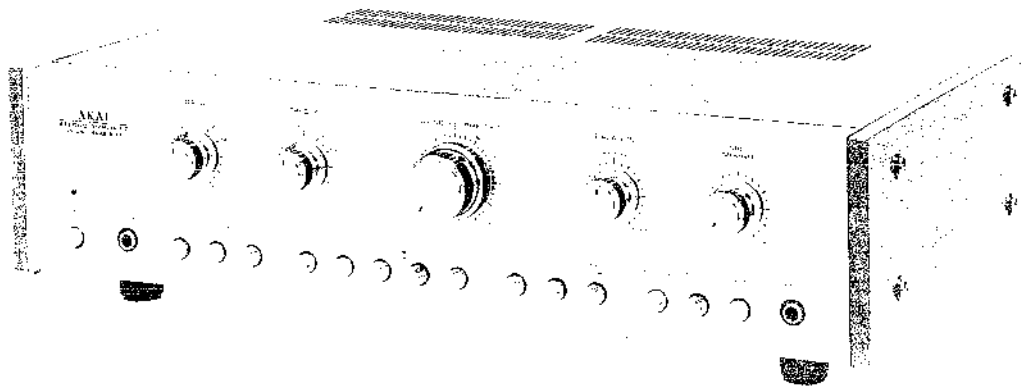
## PARTS LIST

AKAI STEREO AMPLIFIER

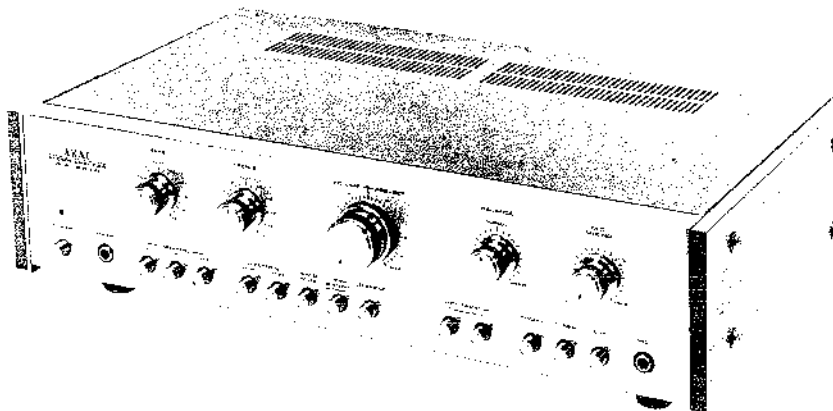
MODEL **AA-5810**

ALSO APPLICABLE TO MODEL AA-5510

AA-5810  
AA-5510



AA-5810



AA-5510

## STEREO AMPLIFIER

MODEL **AA-5810**

ALSO APPLICABLE TO MODEL AA-5510

SECTION 1	SERVICE MANUAL .....	3
SECTION 2	PARTS LIST .....	17
SECTION 3	PARTS LIST .....	27
SECTION 4	SCHEMATIC DIAGRAM .....	36

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SECTION 1

**SERVICE MANUAL**

TABLE OF CONTENTS

I.	SPECIFICATIONS .....	4
II.	DISMANTLING OF UNIT .....	6
III.	ADJUSTMENTS .....	7
	1. NECESSARY MEASURING INSTRUMENTS .....	7
	2. CLASSIFICATION OF VARIOUS P.C. BOARDS .....	7
	3. MAIN AMPLIFIER ADJUSTMENTS .....	8
IV.	COMPOSITE VIEWS OF COMPONENTS .....	9

# I. SPECIFICATIONS

## § MODEL AA-5810

An asterisk next to a figure indicates the minimum guaranteed performance.

RATED OUTPUT		50 W x 2/8 ohm (both channels driven)
HARMONIC DISTORTION		Less than 0.3% 20 Hz/8 ohm at rated output Less than 0.3% 20 kHz/8 ohm at rated output 0.15% 1 kHz/8 ohm at rated output
POWER BAND WIDTH (IHF)		15 to 35,000 Hz at 8 ohm
FREQUENCY RESPONSE	PHONO	RIAA $\pm 1.0$ dB *13.11 $\pm 1.0$ dB at 100 Hz *-13.75 $\pm 1.0$ dB at 10 kHz
	AUX	20 to 50,000 Hz $\pm 1.0$ dB
INPUT SENSITIVITY	PHONO	2.5 mV (-50 dBm $\pm 1.5$ dB)
	MIC	2.5 mV (-50 dBm $\pm 1.5$ dB)
	TUNER	140 mV (-15 dBm $\pm 1.5$ dB)
	AUX	140 mV (-15 dBm $\pm 1.5$ dB)
	TAPE	140 mV (-15 dBm $\pm 1.5$ dB)
INPUT IMPEDANCE	PHONO	50 kohm
	MIC	50 kohm
	TUNER	60 kohm
	AUX	60 kohm
	TAPE	60 kohm
SIGNAL TO NOISE RATIO	PHONO	Better than -35 dBm (input shorted)
	MIC	Better than -35 dBm (input shorted) Mic. Vol. max., Vol. min.
	TUNER	Better than -45 dBm (input open)
	AUX	Better than -45 dBm (input open)
	TAPE	Better than -45 dBm (input open)
RESIDUAL NOISE		Better than -50 dBm Vol. min.
TONE CONTROL	BASS	10 $\pm 1.5$ dB, -10 $\pm 1.5$ dB/100 Hz
	TREBLE	10 $\pm 1.5$ dB, -10 $\pm 1.5$ dB/10 kHz
LOUDNESS CONTROL		7 $\pm 1.0$ dB/100 Hz 4.5 $\pm 1.0$ dB/10 kHz -30 dB to rated output
FILTER	LOW	-10 $\pm 1$ dB/50 Hz
	HIGH	-10 $\pm 1$ dB/10 kHz
AUDIO MUTE		-20 dBm $\pm 2$ dB
CROSS TALK		Better than 50 dB at 1 kHz
L-R DEVIATION		Within 1 dB (Volume Control at center position)
RECORDING OUTPUT	PIN	140 mV (-15 $\pm 1.5$ dB)
	DIN	30 mV (-29.5 $\pm 1.5$ dB) (at standard PHONO input)
PROTECTION CIRCUIT		Operates at shorting load
TRANSISTOR		2SA640(D)(L)(M)(P)(Q)(R) . . . . 10      2SC1313(G)(H) . . . . . 4 2SA641(L)(M) . . . . . 1      2SC1384(Q)(R) . . . . . 1 2SA814(O)(Y) . . . . . 2      2SC1624(O)(Y) . . . . . 2 2SB557(O)(Y) . . . . . 2      2SC1628(O)(Y) . . . . . 3 2SC945(Q)(R) . . . . . 4      2SD234(O)(Y) . . . . . 1 2SC983(O)(Y) . . . . . 2      2SD427(Q)(Y) . . . . . 2 2SC1000(BL)(GR) . . . . 10
DIODE		10D1 . . . . . 1      HIFI-SPECIAL 400V . . . 4 10D2 . . . . . 7      1N4003 . . . . . 5
ZENER DIODE		WZ130 . . . . . 1      WZ240 . . . . . 1
VARIATOR		STV-4H
POWER SOURCE		100 to 240 V A.C. 50/60 Hz
POWER CONSUMPTION		250 W
DIMENSIONS		450(W) x 115(H) x 290(D) mm (17.7" x 4.5" x 11.4")
WEIGHT		10.2 kg. (22.4 lbs.)

NOTE: Specifications subject to change without notice.

## § MODEL AA-5510

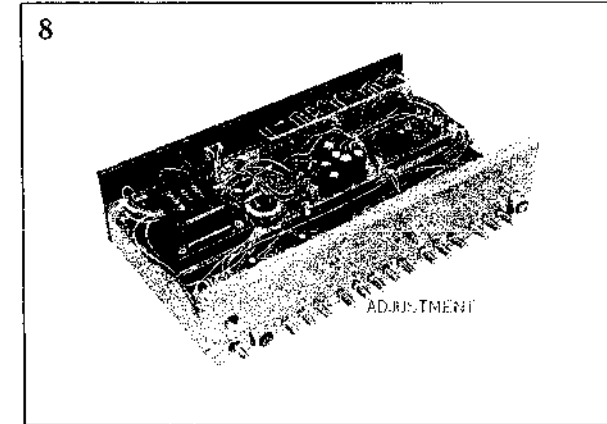
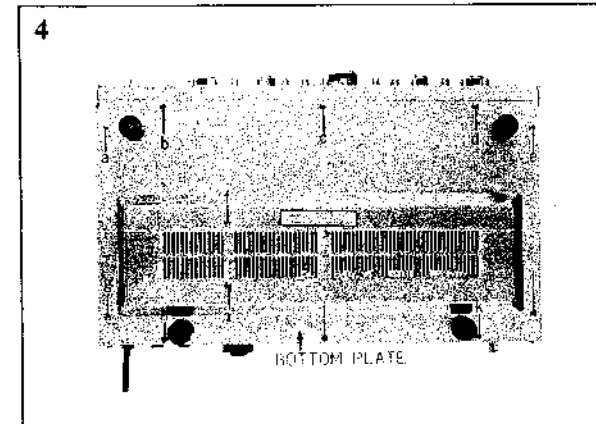
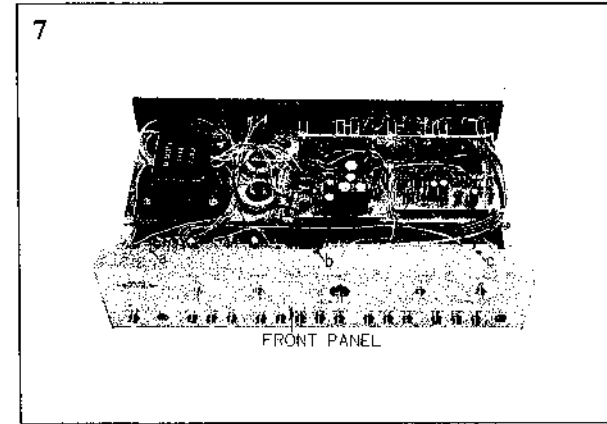
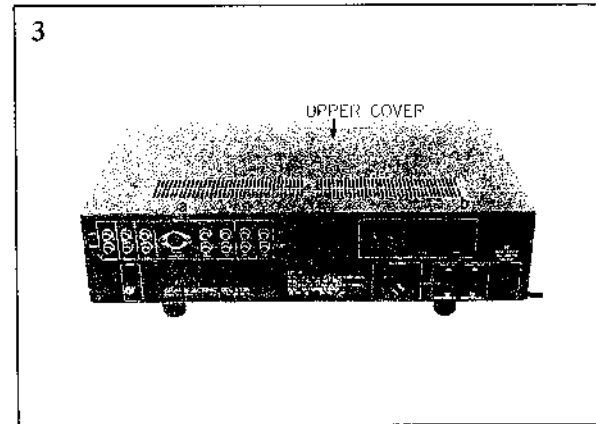
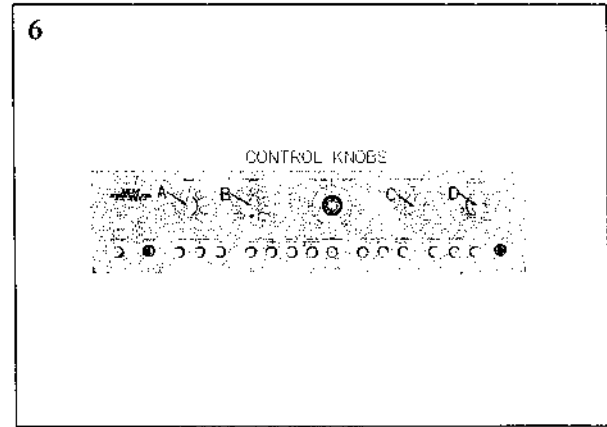
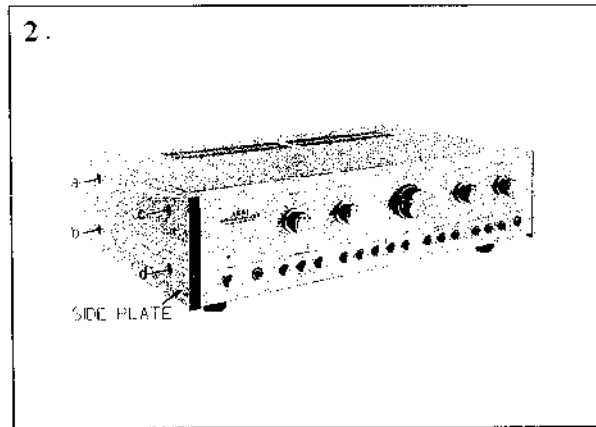
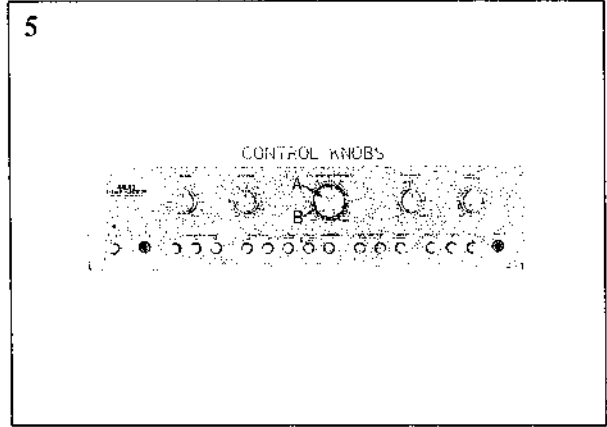
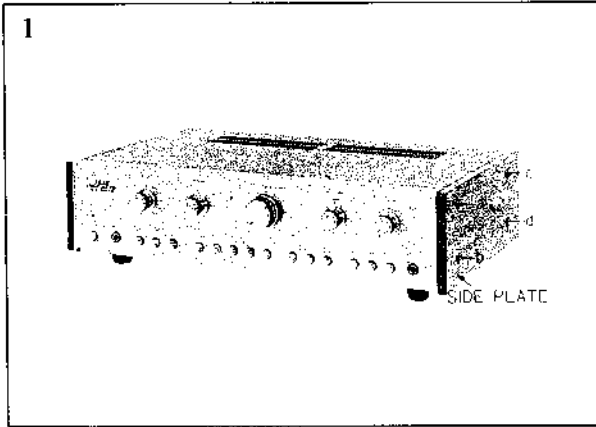
An asterisk next to a figure indicates the minimum guaranteed performance.

RATED OUTPUT		30 W × 2/8 ohm (both channels driven)
HARMONIC DISTORTION		0.5% 1 kHz/8 ohm at rated output
POWER BAND WIDTH		10 to 60,000 Hz at 8 ohm
FREQUENCY RESPONSE	PHONO	RIAA ±1.0 dB *13.11 ±1.0 dB at 100 Hz *-13.75 ±1.0 dB at 10 kHz
	AUX	20 to 50,000 Hz ±1.0 dB
INPUT SENSITIVITY	PHONO	3 mV (-48 dBm ±1.5 dB)
	MIC	2.5 mV (-50 dBm ±1.5 dB)
	TUNER	150 mV (-14.3 dBm ±1.5 dB)
	AUX	150 mV (-14.3 dBm ±1.5 dB)
	TAPE	150 mV (-14.3 dBm ±1.5 dB)
INPUT IMPEDANCE	PHONO	50 kohm
	MIC	50 kohm
	TUNER	70 kohm
	AUX	70 kohm
	TAPE	70 kohm
SIGNAL TO NOISE RATIO	PHONO	Better than -40 dBm (input shorted)
	MIC	Better than -40 dBm (input shorted) Mic. Vol. max., Vol. min.
	TUNER	Better than -50 dBm (input open)
	AUX	Better than -50 dBm (input open)
	TAPE	Better than -50 dBm (input open)
RESIDUAL NOISE		Better than -55 dBm Vol. min.
TONE CONTROL	BASS	10 ±1.5 dB, -10 ±1.5 dB/100 Hz
	TREBLE	10 ±1.5 dB, -10 ±1.5 dB/10 kHz
LOUDNESS CONTROL		8 ±1.5 dB/100 Hz 5.5 ±1.5 dB/10 kHz -30 dB at rated output
FILTER	LOW	-10 ±1.5 dB/50 Hz
	HIGH	-10 ±1.5 dB/10 kHz
AUDIO MUTE		-20 dBm ±1.5 dB
CROSS TALK		Better than 50 dB at 1 kHz
L-R DEVIATION		Within 2 dB (Volume Control at center position)
RECORDING OUTPUT	PIN	150 mV (-14.3 dBm ±2 dB)
	DIN	30 mV (-28.2 dBm ±2 dB) (at standard PHONO input)
TRANSISTOR		2SA640(L)(M) . . . . . 2                    2SC1312(G)(F) . . . . . 2 2SA706-3(1)(2) . . . . . 2                    2SC1312R(F)(G) . . . . . 8 2SC1111(O)(Y) . . . . . 4                    2SC1313(F)(G) . . . . . 6 2SC1124(1)(2) . . . . . 4                    2SD313(D)(E) . . . . . 1
DIODE		SR3AM4 . . . . . 4
VARIATOR		STV-3H . . . . . 2
POWER SOURCE		100 to 240 V A.C. 50/60 Hz
POWER CONSUMPTION		200 W
DIMENSIONS		450(W) × 115(H) × 290(D) mm (17.8" × 4.5" × 11.4")
WEIGHT		9.3 kg. (20.5 lbs.)

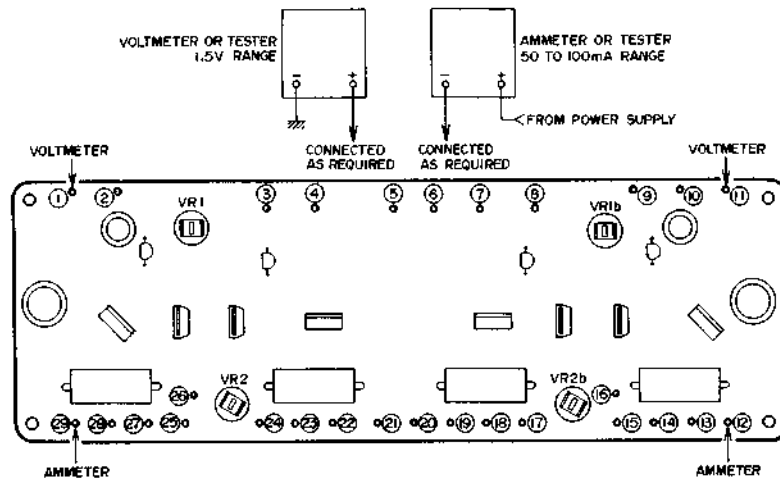
Note: Specifications subject to change without notice.

## II. DISMANTLING OF UNIT

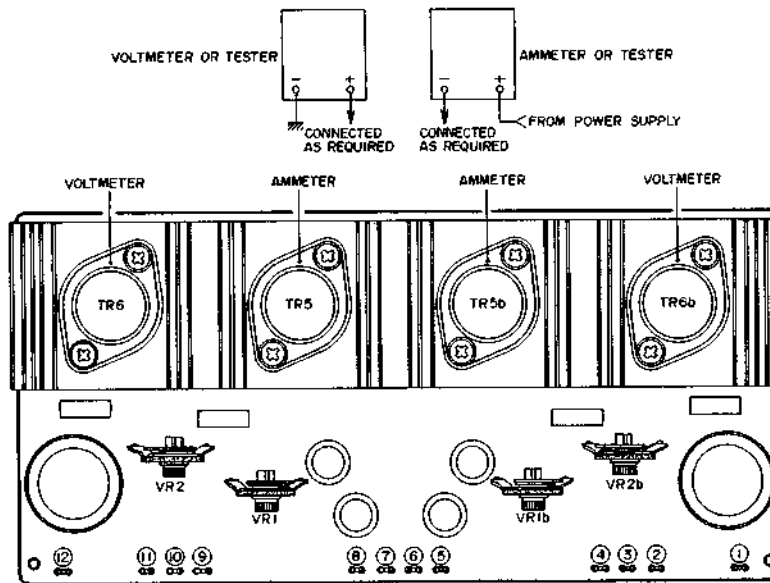
In case of trouble, etc. necessitating disassembly, please disassemble in the order shown in photographs. Reassemble in reverse order.



### III. ADJUSTMENTS



MAIN AMP. P.C. BOARD 94-5013



MAIN AMP. P.C. BOARD 92-5005 5ED

#### 1. NECESSARY MEASURING INSTRUMENTS

- Ammeter or Tester . . . . .Yokogawa 2011
- Voltmeter or Tester . . . . .Kikusui 107A
- Oscilloscope . . . . .Matsushita VP508A

#### 2. CLASSIFICATION OF VARIOUS P.C. BOARDS

P.C. BOARD	MODEL AA-5810	MODEL AA-5510
TONE CONTROL P.C. BOARD	A5-5219	A5-5219
POWER SUPPLY P.C. BOARD	A5-5309	A5-5216
SPEAKER SW. P.C. BOARD	A5-5310	A5-5215
EQUALIZER SW. P.C. BOARD	A5-5311	A5-5217
VOLUME P.C. BOARD	A5-5312	A5-5218
PROTECTOR P.C. BOARD	94-5010	
MAIN AMP. P.C. BOARD	94-5013	92-5005 5ED



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### 3. MAIN AMPLIFIER ADJUSTMENTS

#### MODEL AA-5810

##### 1) IDLING CURRENT ADJUSTMENT

Adjust VR2 (left channel) and VR2b (right channel) to obtain an idling current of 40mA.

##### 2) D.C. BALANCE ADJUSTMENT

Adjust VR1 (left channel) and VR1b (right channel) to obtain Zero Voltage at Main Amp. P.C. Board terminal ① (left channel) and terminal ② (right channel).

#### MODEL AA-5510

##### 1) IDLING CURRENT

Adjust VR2 (left channel) and VR2b (right channel) to obtain an idling current of 40mA.

##### 2) D.C. BALANCE ADJUSTMENT

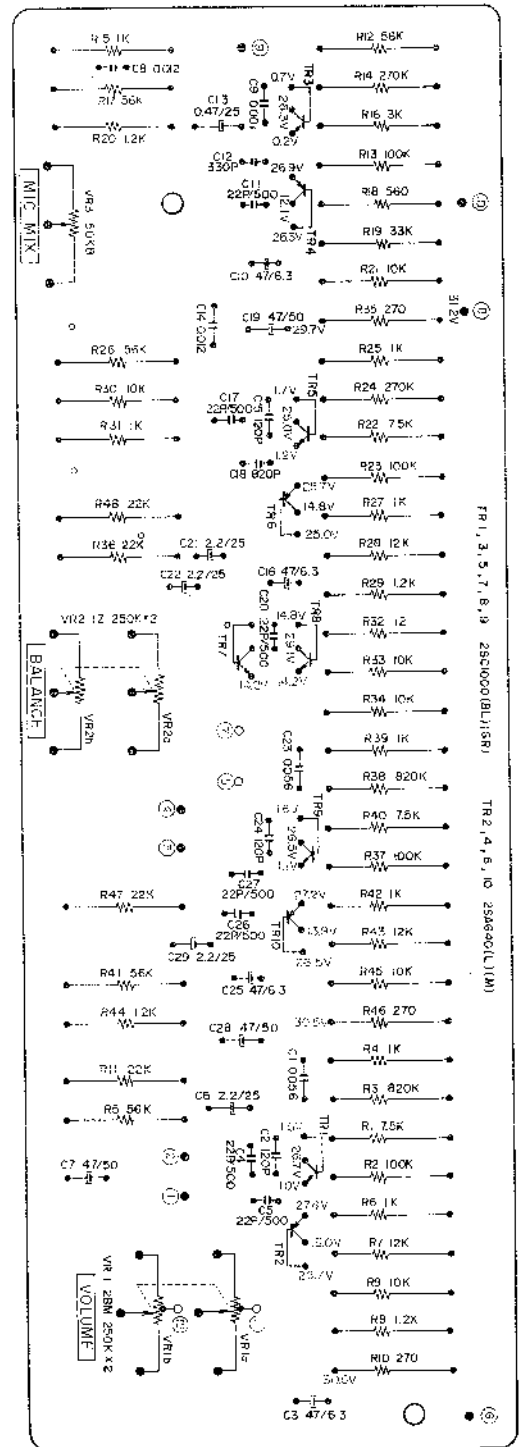
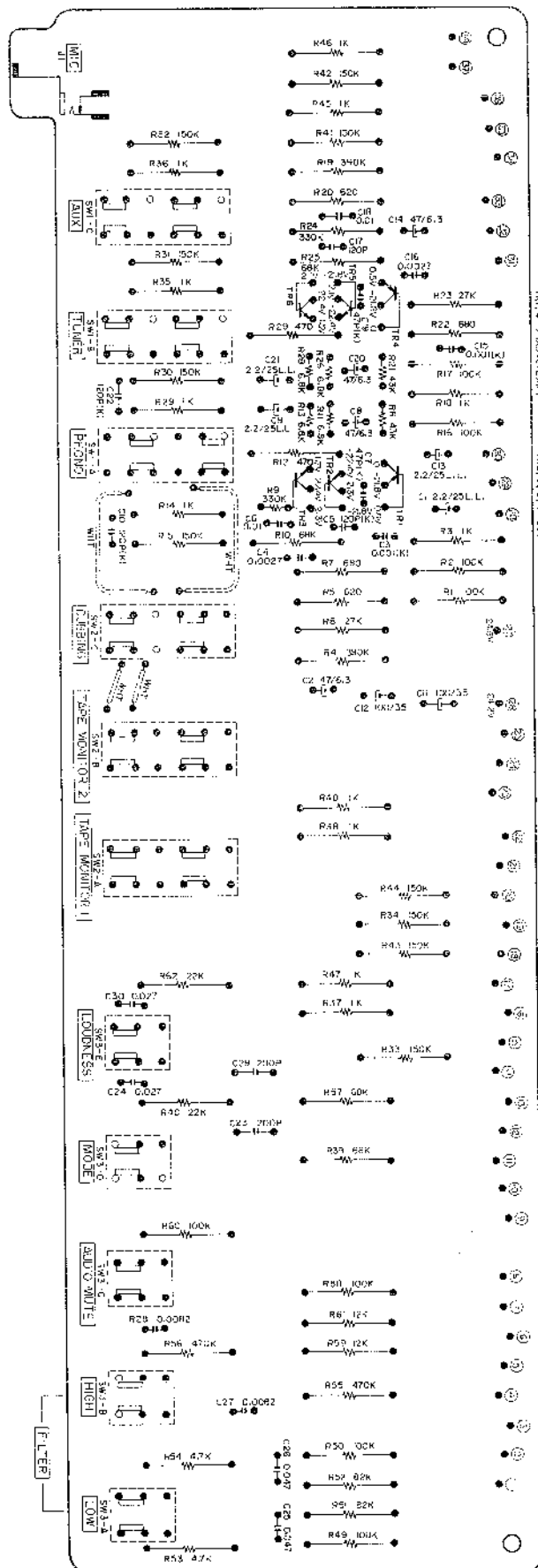
Adjust VR1 (left channel) and VR1b (right channel) so that the collector voltage of Main Amp. P.C. Board Power Transistor TR6 (left channel) and TR6b (right channel) is 1/2 voltage of TR5 and TR5b collector voltage.

# IV. COMPOSITE VIEWS OF COMPONENTS

[1] MODEL AA-5810

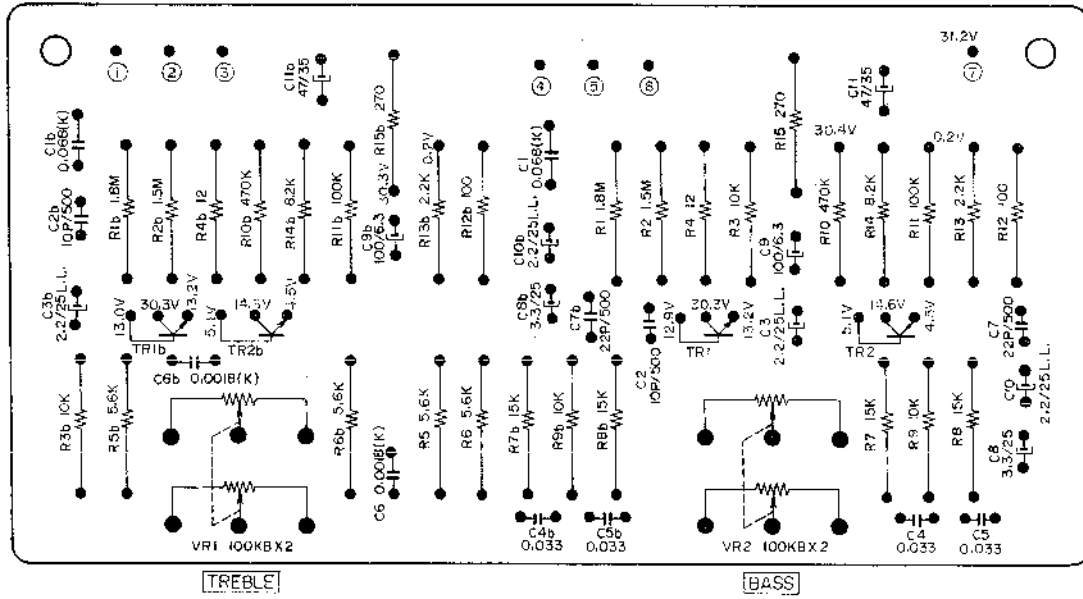
1. EQUALIZER SW. P.C. BOARD A5-5311

2. VOLUME P.C. BOARD A5-5312

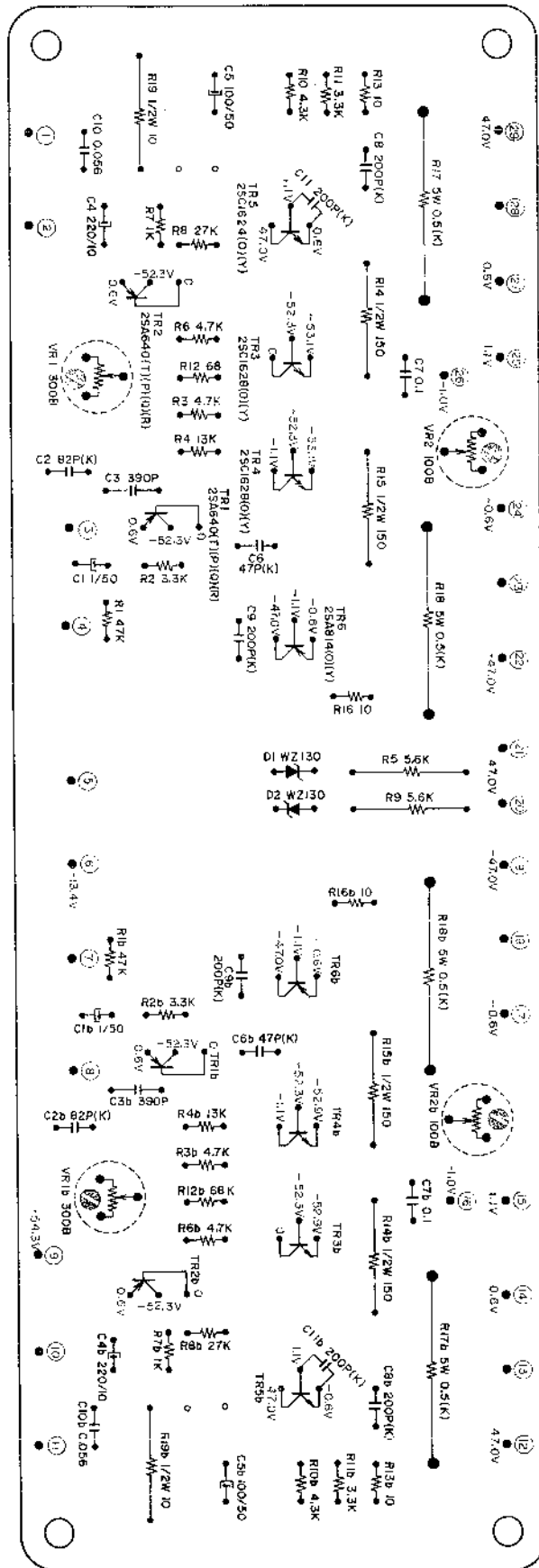


### 3. TONE CONTROL P.C. BOARD A5-5219

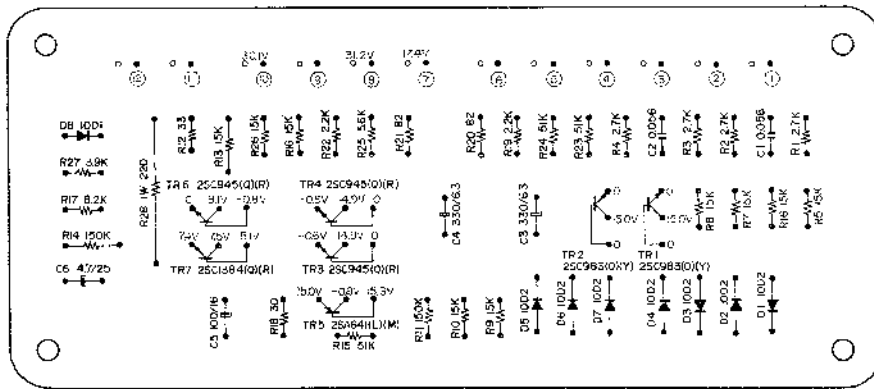
	AA - 5510	AA - 5810
TR: 2, 1b, 2b	25C1312R(F)(G)	25C1000:BL1(GR)



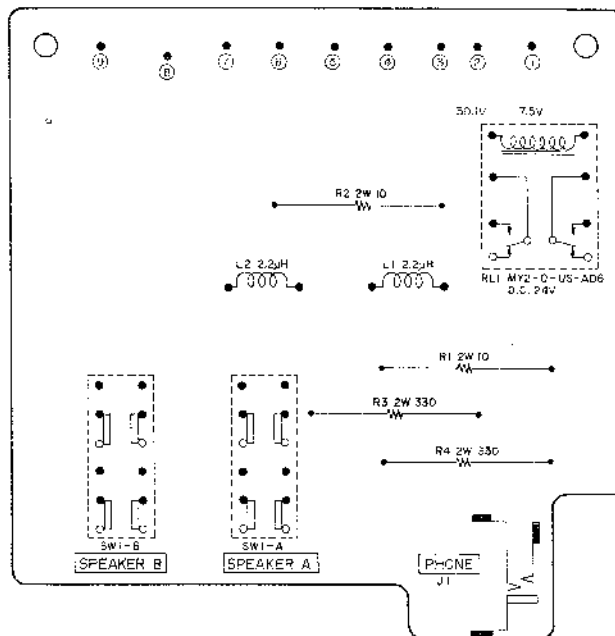
4. MAIN AMP. P.C. BOARD 94-5013



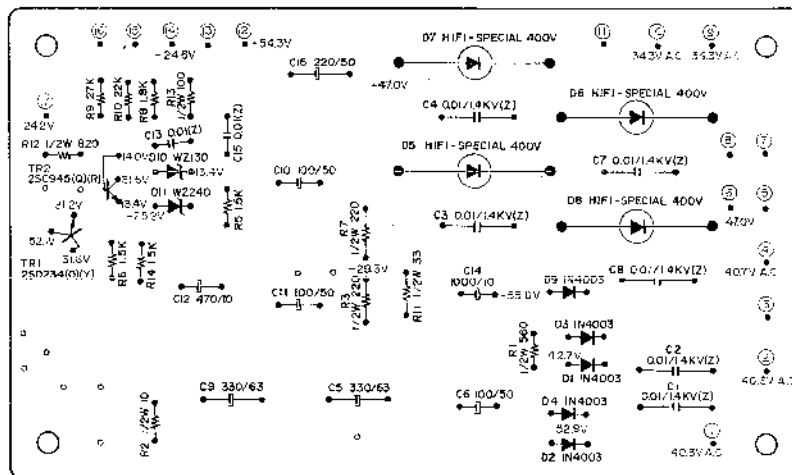
5. PROTECTOR P.C. BOARD 94-5010



6. SPEAKER SW. P.C. BOARD A5-5310



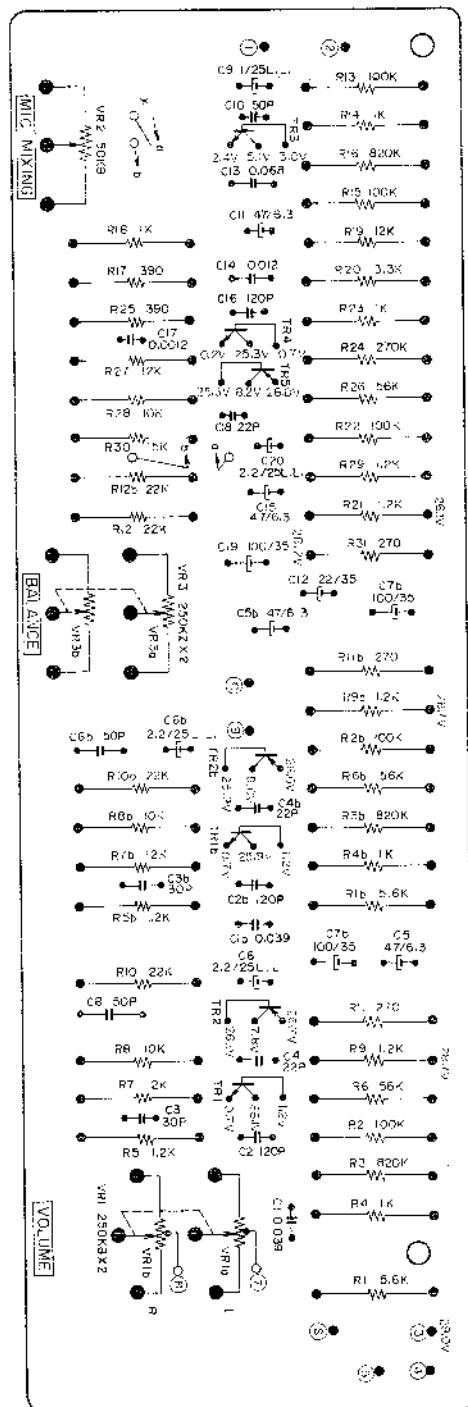
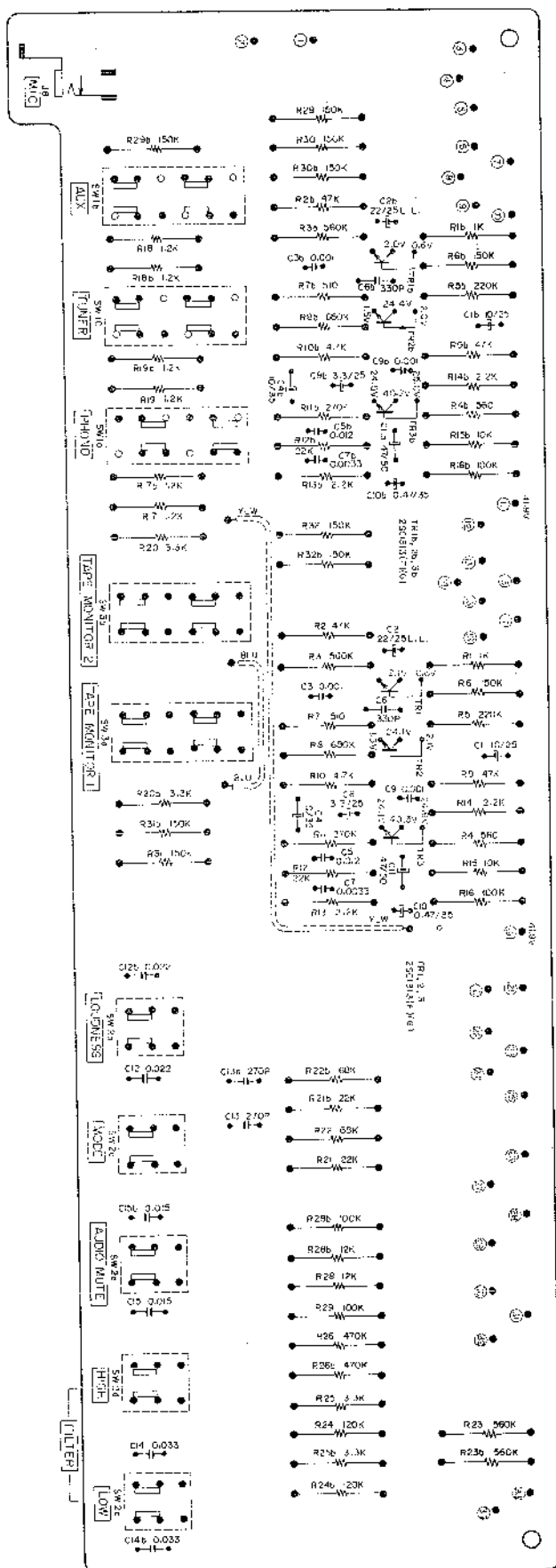
7. POWER SUPPLY P.C. BOARD A5-5309



[2] MODEL AA-5510

1. EQUALIZER SW. P.C. BOARD A5-5217

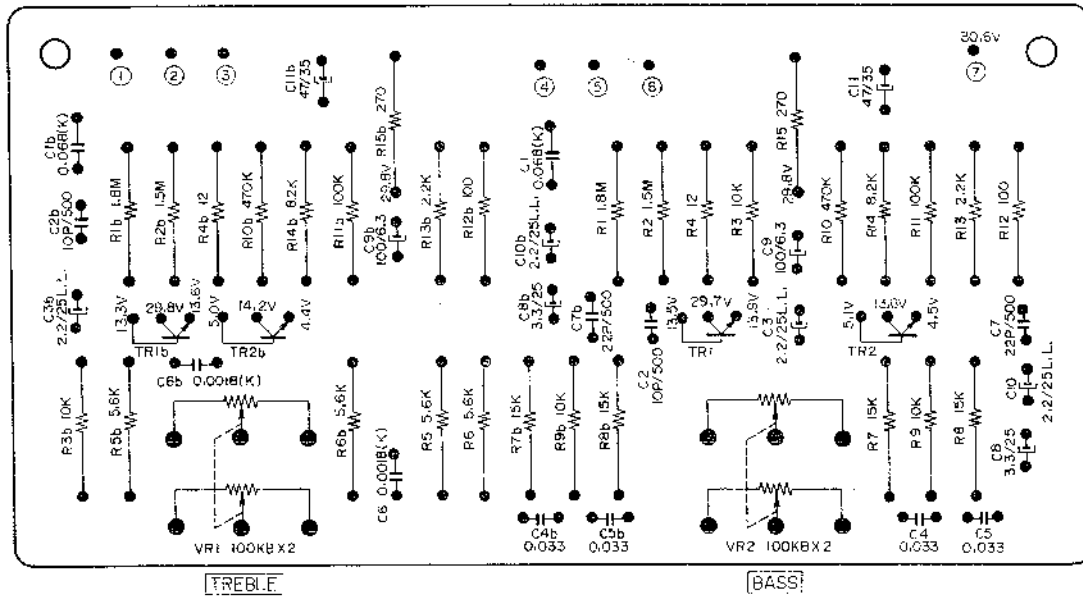
2. VOLUME P.C. BOARD A5-5218



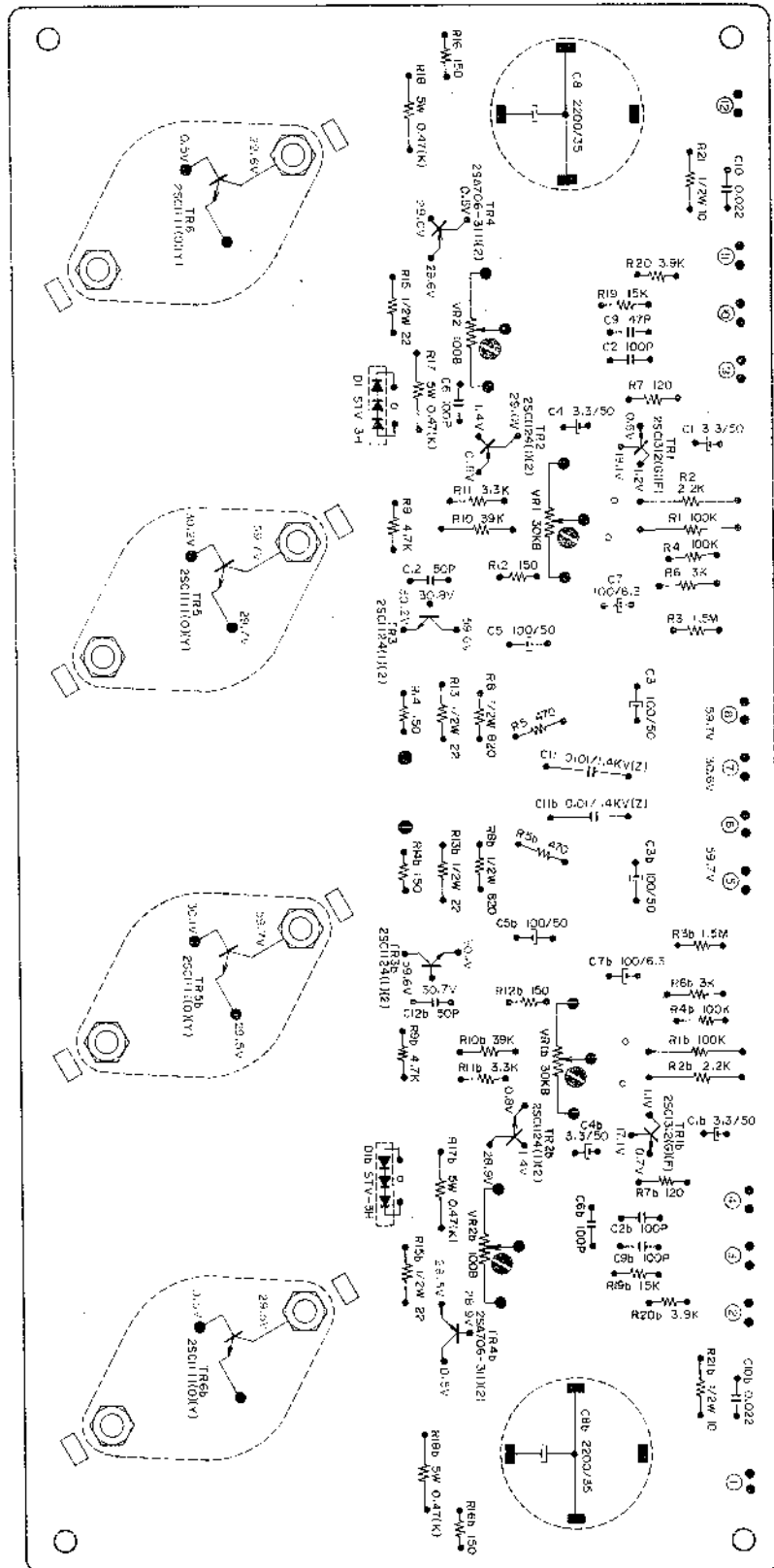
3. DRAWING W/ 11. MIC MIXING VOLUME  
T.M. No. 3 - 4 (5/21/81) REV. 1  
TR2/26, 5 (25/24/81) REV. 1

### 3. TONE CONTROL P.C. BOARD A5-5219

	AA - 5510	AA - 5810
TR1, 2, 1b, 2b	2SC1312R(F)(G)	2SC1000(BL)(GR)

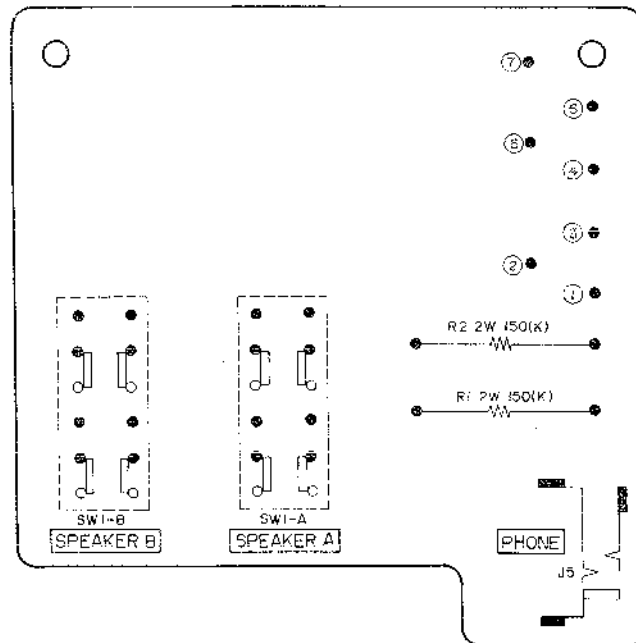


4. MAIN AMP. P.C. BOARD 92-5005

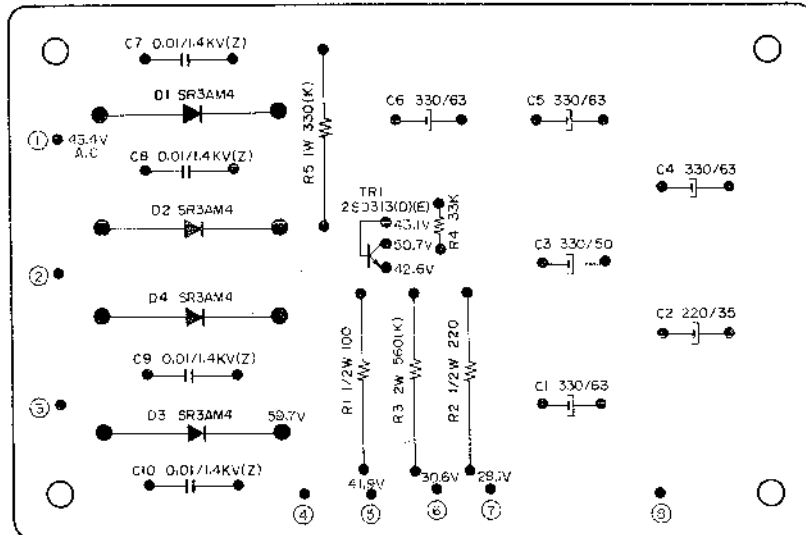




5. SPEAKER SW. P.C. BOARD A5-5215



6. POWER SUPPLY P.C. BOARD A5-5216



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SECTION 2

**PARTS LIST**

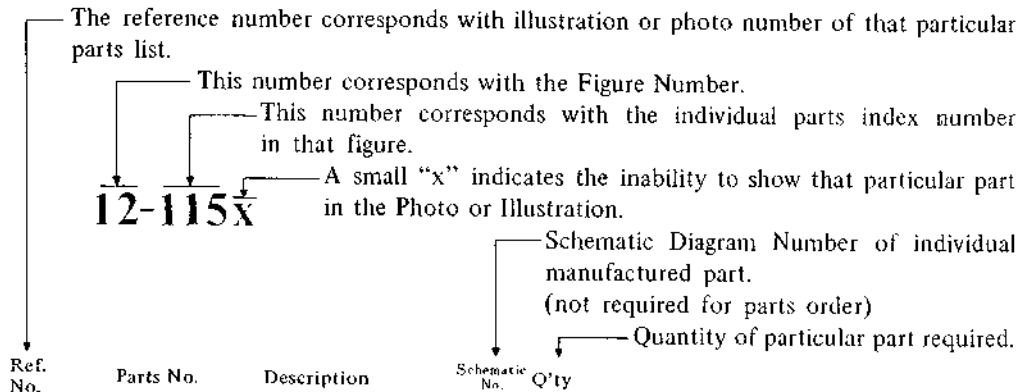
AA-5810

TABLE OF CONTENTS

Fig. 1	EQ. SW. P.C. BOARD (A5-5311) BLOCK .....	20
Fig. 2	VOL. P.C. BOARD (A5-5312) BLOCK .....	20
Fig. 3	TONE CONTROL P.C. BOARD (A5-5219) BLOCK .....	20
Fig. 4	MAIN AMP. (94-5013) BLOCK .....	22
Fig. 5	PROTECTOR P.C. BOARD (94-5010) BLOCK .....	22
Fig. 6	SPEAKER SW. P.C. BOARD (A5-5310) BLOCK .....	23
Fig. 7	POWER SUPPLY P.C. BOARD (A5-5309) BLOCK .....	23
Fig. 8	ASSEMBLY BLOCK .....	24
Fig. 9	FINAL ASSEMBLY BLOCK .....	26

## HOW TO USE THIS PARTS LIST

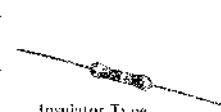

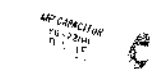




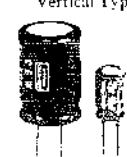
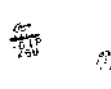
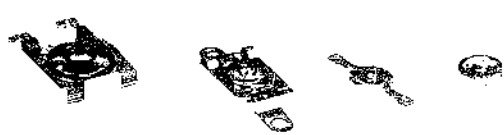



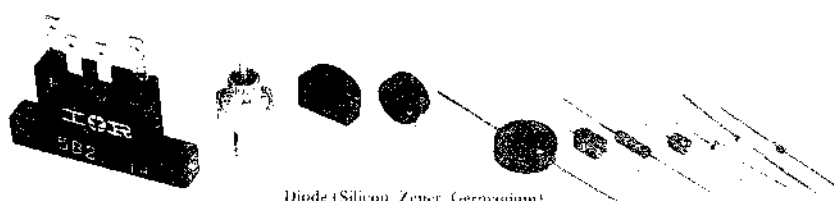
1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read List



Ref. No.	Parts No.	Description	Schematic No.	Q'ty
<b>FLYWHEEL BLOCK #13</b>				
12-115x	800425	Flywheel Block Assy. Comp.	RDG #13	1
12-116	244506	Flywheel Only	RD-233	1
12-117x	244754	Felt, Flywheel	RD-275	1
12-118	251324	Main Metal Case	RD-236	1
12-119	253080	Main Metal	RD-237	1

4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of Components of the Schematic Diagram or Service Manual.
5. The indications of Resistors and Capacitors in the photos of P.C. Board are being eliminated.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Please utilize separate "Common List for Service Parts" for Resistor Parts orders.
8. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.  
It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
9. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

## ELECTRICAL PARTS TABLE

<p>Because the inclusion of resistors and capacitors in the P.C. Board photos are being eliminated, please confirm parts name and shape by comparing them with the parts shown in this table.</p>	1	2	Stripper Type 3
	 Solid Resistor	 Insulator Type Carbon Resistor	 Metal Oxide Film Resistor
4	5	6	7
 Cement Resistor	 Wire-Wound Resistor	 Thermistor	 Enamel Resistor
1	2	3	4
 MP Capacitor (Tubular Type)	 Plastic Capacitor	 Mylar Capacitor	 VFM (H-O) Capacitor
5	6	7	8
 Mylar Capacitor	 Tantalum Capacitor	 Oil Capacitor (Tubular Type)	 Vertical Type Tubular Type Styrol Capacitor
9	10	11	12
 Electrolytic Capacitor (Tubular Type)	 Vertical Type Tubular Type Electrolytic Capacitor	 Ceramic Capacitor	 Metalized Mylar (Paper) Capacitor
13	VR		
 Trimmer Condenser	 Semi-Fixed Volume		
L	TR		
 Ferri Inductor	 Transistor		
CR	D		
 Spark Quencher	 Diode (Silicon, Zener, Germanium)		

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FIG. 1 PHOTO OF EQ. SW. P.C. BOARD (A5-5311) BLOCK

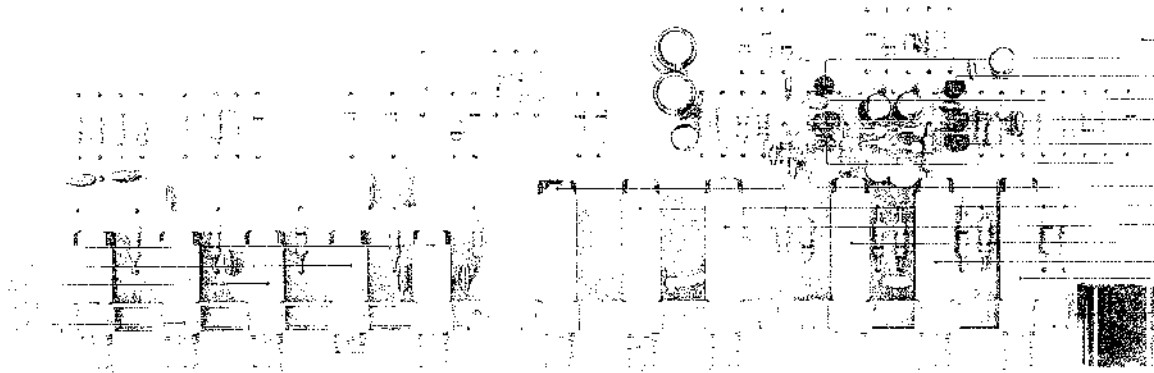


FIG. 2 PHOTO OF VOL. P.C. BOARD (A5-5312) BLOCK

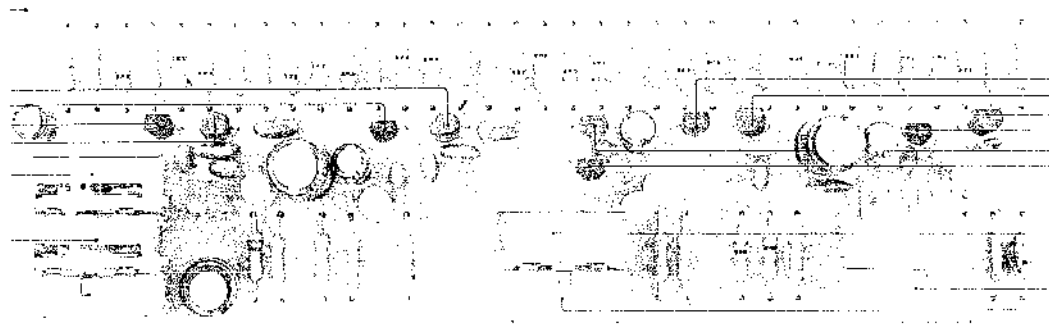
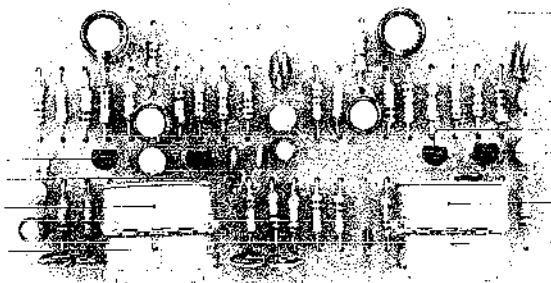


FIG. 3 PHOTO OF TONE CONTROL P.C. BOARD (A5-5219) BLOCK



## EQ. SW. P.C. BOARD (A5-5311) BLOCK

Symbol No.	Parts No.	Description	Qty
1-1X	BA622890	EQ. SW. P.C. Board Comp. (A5-5311)	1
1-TR1	ET460912	Transistor 2SA640 (L) (M)	1
1-TR2,3	ET604124	Transistor 2SC1313 (G) (H)	2
1-TR4	ET460912	Transistor 2SA640 (L) (M)	1
1-TR5,6	ET604124	Transistor 2SC1313 (G) (H)	2
1-SW1	ES623968	Push SW. 31T-0001FF1320	1
1-SW2	ES624148	Push SW. 31S 12U-173	1
1-SW3	ES628672	Push SW. 5FT-0004FF-1320	1
1-J1	EJ391094	Mic. Jack 2PMJ1P	1
1-2	EJ539662	Wrapping Post 1x17	9
<b>Capacitor, Vertical Type</b>			
1-C1	EC478945	Elect. 2.2 $\mu$ F 25WV NL	1
1-C2	EC329771	Elect. 47 $\mu$ F 6.3WV	1
1-C3	EC302264	Mylar 0.001 $\mu$ F (K) 50WV	1
1-C4	EC379776	Mylar 0.0027 $\mu$ F (J) 50WV	1
1-C5	EC290542	VFM 120PF (K) 50WV	1
1-C6	EC302321	Mylar 0.01 $\mu$ F (J) 50WV	1
1-C7	EC487394	VFM 47PF (K) 50WV	1
1-C8	EC329771	Elect. 47 $\mu$ F 6.3WV	1
1-C9	EC478945	Elect. 2.2 $\mu$ F 25WV NL	1
1-C10	EC290542	VFM 120PF (K) 50WV	1
1-C11,12	EC455354	Elect. 100 $\mu$ F 35WV	2
1-C13	EC 478945	Elect. 2.2 $\mu$ F 25WV NL	1
1-C14	EC329771	Elect. 47 $\mu$ F 6.3WV	1
1-C15	EC302264	Mylar 0.001 $\mu$ F (K) 50WV	1
1-C16	EC379776	Mylar 0.0027 $\mu$ F (J) 50WV	1
1-C17	EC290542	VFM 120PF (K) 50WV	1
1-C18	EC302321	Mylar 0.01 $\mu$ F (J) 50WV	1
1-C19	EC487394	VFM 47PF (K) 50WV	1
1-C20	EC329771	Elect. 47 $\mu$ F 6.3WV	1
1-C21	EC478945	Elect. 2.2 $\mu$ F 25WV NL	1
1-C22	EC290542	VFM 120PF (K) 50WV	1
1-C23	EC389237	VFM 200PF (J) 50WV	1
1-C24	EC329872	Mylar 0.047 $\mu$ F (J) 50WV	1
1-C25,26	EC379225	Mylar 0.047 $\mu$ F (J) 50WV	2
1-C27,28	EC413684	Mylar 0.0082 $\mu$ F (J) 50WV	2
1-C29	EC389237	VFM 200PF (J) 50WV	1
1-C30	EC329872	Mylar 0.027 $\mu$ F (J) 50WV	1
Carbon Resistor Omitted.			

## VOL. P.C. BOARD (A5-5312) BLOCK

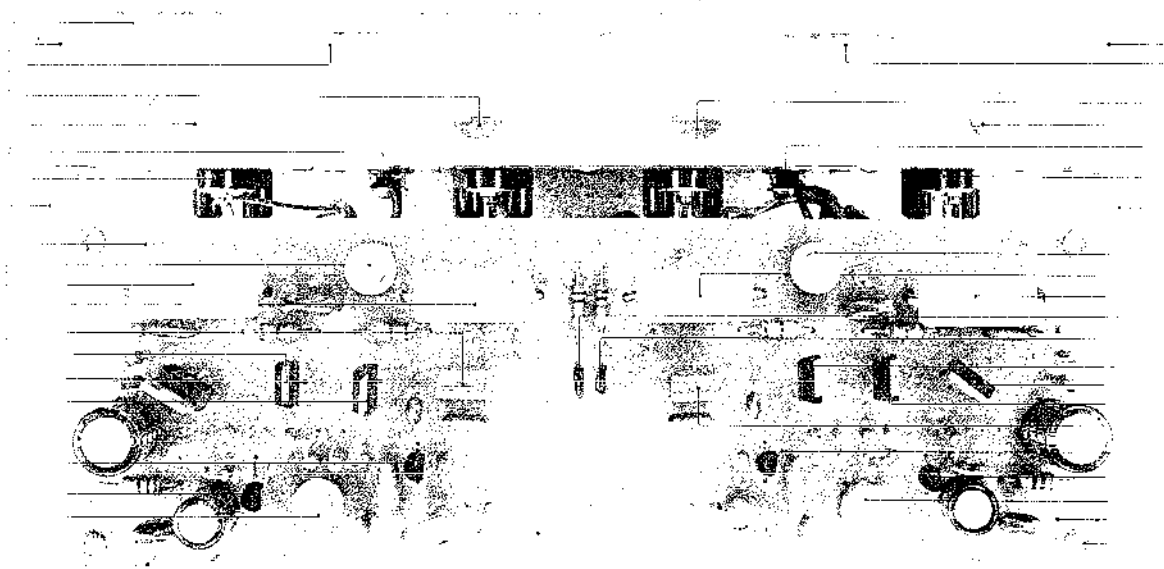
Symbol No.	Parts No.	Description	Qty
2-1X	BA622858	Vol. P.C. Board Comp. (A5-5312)	1
2-TR1	ET622181	Transistor 2SC1000 (BL) (GR)	1
2-TR2	ET460912	Transistor 2SA640 (L) (M)	1
2-TR3	ET622181	Transistor 2SC1000 (BL) (GR)	1
2-TR4	ET460912	Transistor 2SA640 (L) (M)	1
2-TR5	ET622181	Transistor 2SC1000 (BL) (GR)	1
2-TR6	ET460912	Transistor 2SA640 (L) (M)	1
2-TR7to9	ET622181	Transistor 2SC1000 (BL) (GR)	3
2-TR10	ET460912	Transistor 2SA640 (L) (M)	1
2-VR1	EV616623	Co-axial 2-throw/Vol. (w/pre set) V24L5DGM 2BM250kx2	1
2-VR2	EV616645	Co-axial 2-throw/Vol. V24L5GPHN 1Z250kx2	1
2-VR3	EV616634	Vol. (w/switch) VJ11R SF22 50kA	1
2-2	EJ539662	Wrapping Post 1x17	10
<b>Capacitor, Vertical Type</b>			
2-C1	EC251201	Mylar 0.056 $\mu$ F (K) 50WV	1
2-C2	EC290542	VFM 120PF (K) 50WV	1
2-C3	EC329771	Elect. 47 $\mu$ F 6.3WV	1
2-C4,5	EC556525	FM 22PF (K) 500WV	2
2-C6	EC478945	Elect. 2.2 $\mu$ F 25WV NL	1
2-C7	EC346735	Elect. 47 $\mu$ F 50WV	1
2-C8	EC338670	Mylar 0.012 $\mu$ F (K) 50WV	1
2-C9	EC302264	Mylar 0.001 $\mu$ F (K) 50WV	1
2-C10	EC329771	Elect. 47 $\mu$ F 6.3WV	1
2-C11	EC556525	FM 22PF (K) 500WV	1
2-C12	EC516745	Styrol 330PF (K) 50WV	1
2-C13	EC622991	Elect. 0.47 $\mu$ F 25WV	1
2-C14	EC338670	Mylar 0.012 $\mu$ F (K) 50WV	1
2-C15	EC290542	VFM 120PF (K) 50WV	1
2-C16	EC329771	Elect. 47 $\mu$ F 6.3WV	1
2-C17	EC556525	FM 22PF (K) 500WV	1
2-C18	EC623002	Styrol 820PF (K) 50WV	1
2-C19	EC346735	Elect. 47 $\mu$ F 50WV	1
2-C20	EC556525	FM 22PF (K) 500WV	1
2-C21,22	EC478945	Elect. 2.2 $\mu$ F 25WV NL	2
2-C23	EC251201	Mylar 0.056 $\mu$ F (K) 50WV	1
2-C24	EC290542	VFM 120PF (K) 50WV	1
2-C25	EC329771	Elect. 47 $\mu$ F 6.3WV	1
2-C26,27	EC556525	FM 22PF (K) 500WV	2
2-C28	EC346735	Elect. 47 $\mu$ F 50WV	1
2-C29	EC478945	Elect. 2.2 $\mu$ F 25WV NL	1

## TONE CONTROL P.C. BOARD (A5-5219)

## BLOCK

Symbol No.	Parts No.	Description	Qty
3-1X	BA622877	Tone Control P.C. Board Comp. (A5-5219)	1
3-TR1,2	ET517263	Transistor 2SC1312 (G) (H)	4
3-VR1,2	EV602458	Co-axial 2-throw/Vol. V24L5GPHN 1kB 100kx2	2
3-2	EJ539662	Wrapping Post 1x17	7
<b>Capacitor, Vertical Type</b>			
3-C1	EC313323	Mylar 0.068 $\mu$ F (K) 50WV	2
3-C2	EC474671	VFM 10PF (K) 50WV	2
3-C3	EC478945	Elect. 2.2 $\mu$ F 25WV NL	2
3-C4,5	EC379157	Mylar 0.033 $\mu$ F (J) 50WV	4
3-C6	EC362068	Mylar 0.0018 $\mu$ F (K) 50WV	2
3-C7	EC556525	FM 22PF (K) 500WV	2
3-C8	EC331828	Elect. 3.3 $\mu$ F 25WV	2
3-C9	EC336104	Elect. 100 $\mu$ F 6.3WV	2
3-C10	EC478945	Elect. 2.2 $\mu$ F 25WV NL	2
3-C11	EC590837	Elect. 47 $\mu$ F 35WV	2
Carbon Resistor Omitted.			

FIG. 4 PHOTO OF MAIN AMP. (94-5013) BLOCK



MAIN AMP. (94-5013) BLOCK

Symbol No.	Parts No.	Description	Qty
<b>MAIN AMP. BLOCK</b>			
4-1x	BA622822	Main Amp. Block Comp.	1
4-2	EZ626152	Heat-sink Plate	1
4-3	E/626141	Heat-sink Plate (Small)	1
4-4	EL624186	Power TR. Socket	4
4-5	ET623013	Transistor 2SD427 (O) (Y)	2
4-6	LF623024	Transistor 2SB557 (O) (Y)	2
4-7	ED551733	Silicon Varistor STV-4H	2
4-8x	ZS609835	Tapping Screw #2 3x12, w/washer	2
4-9	EZ626220	Heat-sink Mt. Plate A	1
4-10	EZ626354	Heat-sink Mt. Plate B	1
4-11x	ZS379350	ISO Screw, pan head 3x6	2
4-12	ZS325495	Tapping Screw #2 3x6	4
4-13	BA622833	Main Amp. P.C. Board Comp.	1
<b>MAIN AMP. P.C. BOARD BLOCK</b>			
4-13	BA622833	Main Amp. P.C. Board Comp.	1
4-TR1,2	ET561802	Transistor 2SA640 (I)	4
4-TR3,4	ET623035	Transistor 2SC1628 (O) (Y)	4
4-TR5	ET623046	Transistor 2SC1624 (O) (Y)	2
4-TR6	ET623057	Transistor 2SA814 (O) (Y)	2
4-D1,2	ED539976	Zener Diode WZ-130	2
4-VR1	EV551643	Semi-fixed/Vol. SR19R 330ΩB (Solid Type)	2
4-VR2	EV361798	Semi fixed/Vol. SR19R 100ΩB (Solid Type)	2
4-R17,18	ER442653	Cement/R. SW 0.5Ω (K) (Wire-wound Type)	4
4-14	EJ551654	Wrapping Post 1x23	18
4-15	EJ539662	Wrapping Post 1x17	11
<b>Capacitor, Vertical Type</b>			
4-C1	EC313108	Elect. 1μF 50WV	2
4-C2	EC369024	VFM 82PF (K) 50WV	2
4-C3	EC350717	VFM 390PF (J) 50WV	2
4-C4	EC329782	Elect. 220μF 10WV	2
4-C5	EC321221	Elect. 100μF 50WV	2
4-C6	EC487394	VFM 47PF (K) 50WV	2
4-C7	EC379170	Mylar 0.1μF (J) 50WV	2
4-C8,9	EC539842	VFM 200PF (K) 50WV	4
4-C10	EC368357	Mylar 0.056μF (J) 50WV	2
4-C11	EC539842	VFM 200PF (K) 50WV	2
		Carbon Resistor Omitted.	

FIG. 5 PHOTO OF PROTECTOR P.C. BOARD (94-5010) BLOCK



PROTECTOR P.C. BOARD (94-5010) BLOCK

Symbol No.	Parts No.	Description	Qty
5-1x	BA622855	Protector P.C. Board Comp. (94-5010)	1
5-TR1,2	ET552690	Transistor 2SC983 (O) (Y)	2
5-TR3,4	ET398711	Transistor 2SC945 (Q) (R)	2
5-TR5	ET562701	Transistor 2SA641 (L) (M)	1
5-TR6	ET398711	Transistor 2SC945 (Q) (R)	1
5-TR7	EY565852	Transistor 2SC1384 (Q) (R)	1
5-D1to7	ED224548	Silicon Diode 10D2	7
5-D8	ED224520	Silicon Diode 10D1	1
5-2	EJ539662	Wrapping Post 1x17	12
5-R28	ER429715	Metal Oxide Film/R. 1W 220Ω (J)	1
<b>Capacitor, Vertical Type</b>			
5-C1,2	EC368357	Mylar 0.056μF (J) 50WV	2
5-C3,4	EC343236	Elect. 330μF 6.3WV	2
5-C5	EC220127	Elect. 100μF 16WV	1
5-C6	EC450527	Elect. 4.7μF 25WV	1
		Carbon Resistor Omitted.	

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 6 PHOTO OF SPEAKER SW. P.C. BOARD (A5-5310) BLOCK

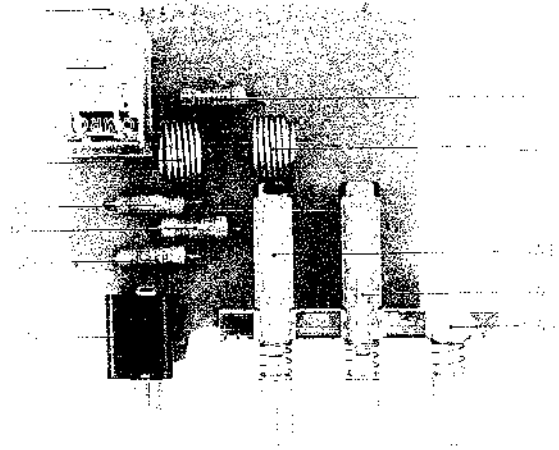
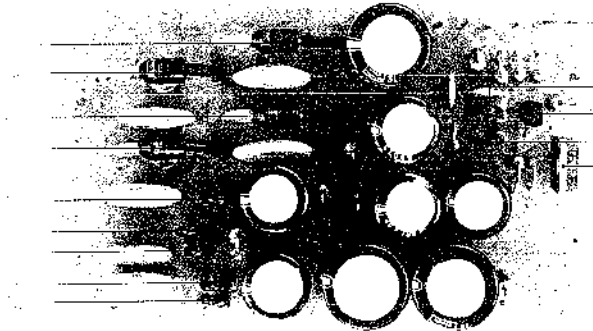


FIG. 7 PHOTO OF POWER SUPPLY P.C. BOARD (A5-5309) BLOCK



**SPEAKER SW. P.C. BOARD (A5-5310) BLOCK**

Symbol No.	Parts No.	Description	Qty
6-1x	BA622901	Speaker SW. P.C. Board Comp. (A5-5310)	1
6-11	EJ391083	Mic. Jack 3PM11P	1
6-R1.1	EP325585	Relay MY2-0-AD6 24V	1
6-L1.2	ED551711	Phase Repair Coil 2.2μH	2
6-SW1	ES616612	Push SW. 31-0006FF2010	1
6-2	EJ539662	Wrapping Post 1x17	9
6-R1.2	ER624745	Metal Oxide Film/R. 2W 10Ω (J)	2
6-R3.4	ER624756	Metal Oxide Film/R. 2W 330Ω (J)	2

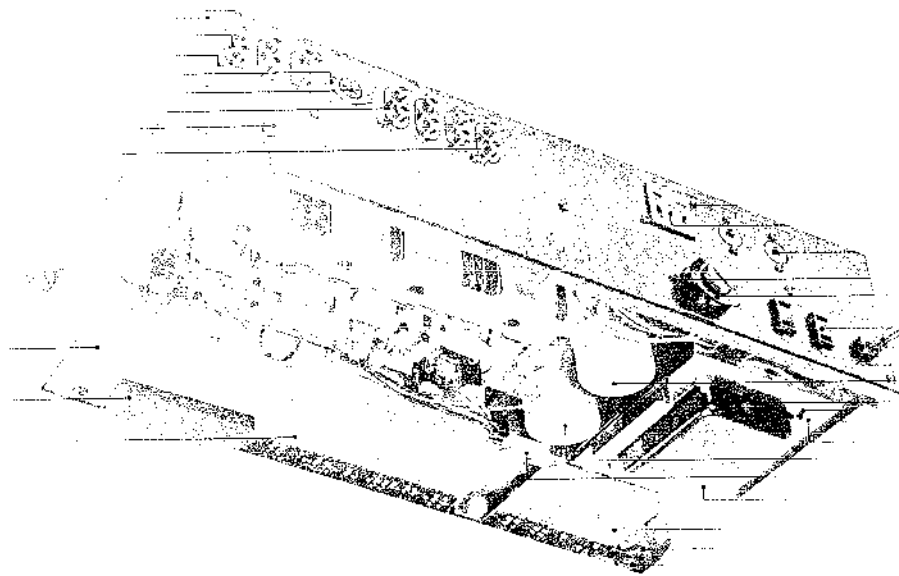
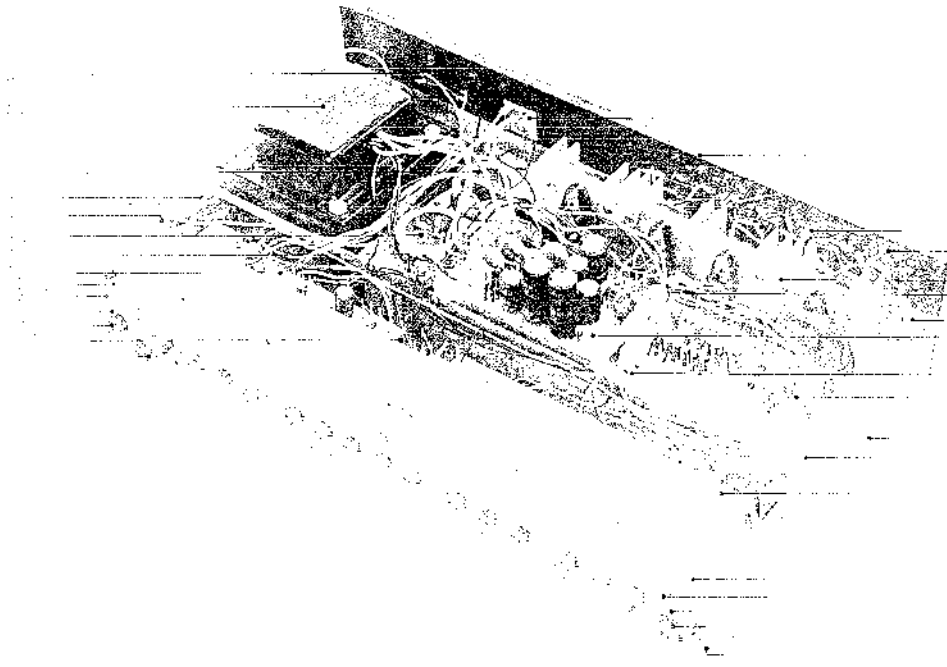
**POWER SUPPLY P.C. BOARD (A5-5309) BLOCK**

Symbol No.	Parts No.	Description	Qty
7-1x	BA622844	Power Supply P.C. Board Comp. (A5-5309)	1
7-TR1	ET393568	Transistor 2SD234 (Y) (O)	1
7-TR2	ET398711	Transistor 2SC945 (Q) (R)	1
7-D11o4	ED570295	Silicon Diode 1N4003	4
7-D5to8	ED558033	Silicon Diode HUF1 400V 3A (Special)	4
7-D9	ED570295	Silicon Diode 1N4003	1
7-D10	ED539976	Zener Diode WZ-130	1
7-D11	ED511918	Zener Diode WZ-240	1
7-2	EZ532203	Power Supply Heat-sink Plate	1
7-3	ZS522922	ISO Screw, pan head 3x6	1
7-4	EJ539662	Wrapping Post 1x17	17
<b>Capacitor, Vertical Type</b>			
7-C11o4	EC551160	Ceramic NB821 YZ 0.01μF (Z) 1.4 kWV	4
7-C5	EC603112	Elect. 330μF 63WV	1
7-C6	EC321221	Elect. 100μF 50WV	1
7-C7,8	EC551160	Ceramic NB821 YZ 0.01μF (Z) 1.4 kWV	2
7-C9	EC603112	Elect. 330μF 63WV	1
7-C10,11	EC321221	Elect. 100μF 50WV	2
7-C12	EC220768	Elect. 470μF 10WV	1
7-C13	EC557627	Ceramic DB203 YZ 0.01μF (Z) 50WV	1
7-C14	EC220410	Elect. 1000μF 10WV	1
7-C15	EC557627	Ceramic DB203 YZ 0.01μF (Z) 50WV	1
7-C16	EC337533	Elect. 220μF 50WV Carbon Resistor Omitted.	1

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.



FIG. 8 PHOTO OF ASSEMBLY BLOCK

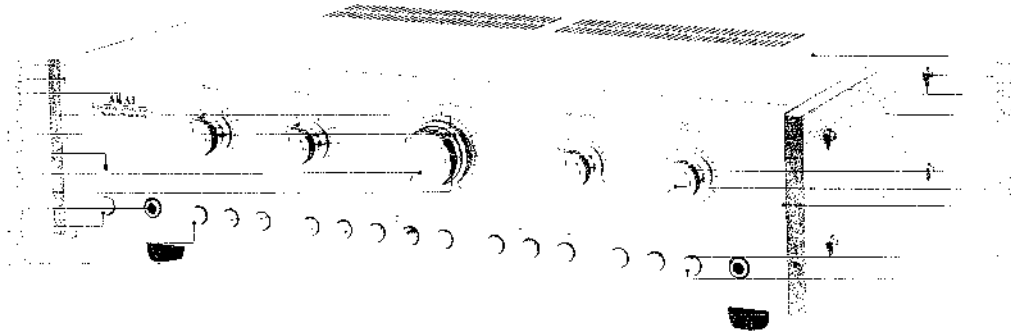


## ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Qty	Ref. No.	Parts No.	Description	Schematic No.	Qty
<b>FRONT CHASSIS BLOCK</b>									
8-1	TA610918	Front Chassis	A5 5204	1	8-50	BA622822	Main Amp. Block Comp. AA-5810		1
8-2	EZ610806	Jack Mt. Parts	A5 5205	2	8-51	BT622135	Power Trans. AA-5810T-1	A5 5302	1
8-3	ZS325495	Tapping Screw #2 3x6		4	8-52	ZW622146	Washer (SPC) D4.1x8x0.5t		3
8-4	ES469541	Push SW. TV-3 JB52	35 560	1	8-53x	ZW273914	Spring Washer M4		4
8-5	ZS422076	Screw, pan head 3x5		16	8-54	ZW416698	Nut M4		4
8-6	TA669761	SW. Angle	A5 5309	1	8-55	TA626218	Trans. Mt. Plate	A5 5302	1
8-7x	EC551160	Ceramic/C. NB821 YZ 0.01μF (Z) 1.4 kVW	24 555	1	8-56x	TA605878	Lead Protector	A5 5307	1
8-8	BA622901	Speaker SW. P.C. Board Block, AA-5810	A5 5310	1	8-57	TA626163	Shield Plate 1, w/plate 3	A5 5304	1
8-9x	EZ225180	Nylon Collar, Jack	LD 529	2	8-58	TA626130	Retaining Cushion	A5 5313	2
8-10	ZW270191	E Jack Nut		2	8-59	EZ626117	P.C. Board Support	A5 5313	1
8-11	BA622888	Vol. P.C. Board Comp. AA-5810	A5 5312	1	8-60	EJ510333	Wire Clip 220-JD-481640-0104 (Nylon)	2 7 17	2
8-12	BA622877	Tone Control P.C. Board Comp. AA-5810	A5 5319	1	8-61	MZ229138	Wire Bundle Holder N-108	2 5 1	4
8-13	EZ626128	Shield Plate 2	A5 5314	1	8-62	EZ136217	Collar For Jack	MC 9005	2
8-14	BA622890	EQ. SW. P.C. Board Block AA-5810	A5 5311	1					
8-15	ZW260368	Washer (Fiber) D9.2x18x0.5t		1					
<b>REAR PANEL BLOCK</b>									
8-16	SP626174	Rear Panel	A5 5305	1					
8-17	EJ557878	Wrapping Pin Jack 2P	31 1 10	1					
8-18	EJ551340	Wrapping Pin Jack B T-5347 (B) 6P	31 1 102	2					
8-19	ZS570385	Tap-Tight Screw, pan head 3x8 (Black)		16					
8-20	EJ589533	5P Dio Jack	31 1 111	1					
8-21	ZS447761	Tapping Screw #2 3x6 (BR) (Black)		2					
8-22x	ER482777	Carbon/R. RD1/4 160k (J) (Insu. Type)	35 9 5	2					
8-23x	ER364994	Carbon/R. RD1/4 39k (J) (Insu. Type)	35 9 5	2					
8-24	EJ603731	Metal Terminal	32 1 51	1					
8-25x	ZW273802	Toothed Lock Washer M3		1					
8-26	EJ551316	Speaker Consent P0409	31 1 96	1					
8-27	EJ378944	Socket, AC U/L S1 9122	31 1 17	2					
8-28x	EC551160	Ceramic/C. NB821 YZ 0.01μF (Z) 1.4 kVW	24 555	1					
8-29	EJ233370	Socket S18010 (Volt. Selector)	46 2 3	1					
8-30	ZS421740	Screw, pan head 3x8 (Black)		2					
8-31	EJ602886	Socket CS-220	31 1 117	2					
8-32	EW524845	AC Cord 2.5M (J)	26 3 31	1					
8-33x	EW374894	U/L AC Cord 3M	26 3 19	1					
8-34x	EW315448	Australia Cord (3 core)	26 3 11	1					
8-35	EZ382263	Strain Relief SR-4K-4	2 7 15	1					
8-36x	EZ246936	Strain Relief SR-6W 1 (3 core)	2 7 8	1					
8-37x	ZW562487	Earth Lug M4		1					
8-38x	ZW273756	Nut M3		4					
<b>ASSEMBLY BLOCK</b>									
8-39	TA605924	Side Plate Metal Parts A (Right)	A5 5002	1					
8-40	TA606058	Side Plate Metal Parts B (Left)	A5 5002	1					
8-41	ZS325495	Tapping Screw #2 3x6		18					
8-42	EL443520	Pilot Lamp (L/T) 8V 80MA (60M/Mx2)	26 2 29	1					
8-43	TA510502	Lamp Holder	T3 5035	1					
8-44	EJ551035	Wrapping Terminal T 5251 4P	32 1 56	2					
8-45	EJ254957	Lug Plate KP1L	33 3 2	1					
8-46	EC551024	Elect./C. 6800μF 50WV (Lug Type)	24 10 82	2					
8-47	BA622844	Power Supply P.C. Board Comp. AA-5810	A5 5309	1					
8-48	EJ514034	PC Support	2 7 20	8					
8-49	BA622855	Protector P.C. Board Comp. AA-5810	54 5010	1					

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 9 PHOTO OF FINAL ASSEMBLY BLOCK



**FINAL ASSEMBLY BLOCK**

Ref. No.	Parts No.	Description	Schematic No.	Qty
9-1	SP626196	Front Panel	A5 5007	1
9-2	TA609816	Side Fitting (Right)	A5 5017	1
9-3	TA609794	Side Fitting (Left)	A5 5017	1
9-4	EZ436217	Collar For Jack	MC 5006	2
9-5	TA545905	Push Button Bush	95 5061	15
9-6	SZ457975	Lamp Lens B	55 5012	1
9-7x	ZS447840	Tapping Screw #2 3x8 (BR)		3
9-8	SK609838	Volume Knob	A5 5048	1
9-9	MB609851	Knob Rubber Ring C (D=28)	A5 5054	1
9-10x	ZS444240	Set Screw, hexagon socket 4x8 (Cup/p.)		1
9-11x	ZW493312	Washer (Nylon) D6.2x10x1t		1
9-12	SK631192	Memory Knob Ring	A5 5044	1
9-13	SK605850	Knob Rubber Ring D (D=3.3)	A5 5053	1
9-14	SK531224	Push Button Knob	21 5051	14
9-15	SK627524	Push Button Knob G(Orange)	91 5051	1
9-16	SK627535	Single Knob B-2	A5 5053	4
9-17	MB551092	Single Knob Rubber Ring	3 10 6	4
9-18x	BC610907	Bottom Plate	A5 5010	1
9-19	SA616590	Tran Leg G	2 6 12	4
9-20x	ZS447840	Tapping Screw #2 3x8 (BR)		12
9-21x	ZW559135	Tapping Screw #2 4x18 pan head		4
9-22	SP606036	Upper Plate	A5 5019	1
9-23x	ZS447761	Tapping Screw #2 3x6 (BR) (Black)		2
9-24	SP605946	Side Plate A (Left)	A5 5020	1
9-25	SP606047	Side Plate B (Right)	A5 5020	1
9-26	ZW602381	Washer (SPC) D4.2x11x1t		8
9-27	ZW552824	SIO Screw, binding head 4x18		8
9-28x	EF563657	Fuse 3A 250V	39 1 50	1
9-29x	EF563692	Fuse 1.5A 250V	39 1 50	1
9-30x	EJ552778	Short Pin Plug ASB-2	42 1 65	2
9-31x	EJ550912	Speaker Plug ASP-1	42 1 64	2
9-32x	EJ602346	Speaker Plug CP045-1-1	42 1 75	2
9-33x	EW602357	Pin Plug Cord TP-M6	42 1 74	4

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

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SECTION 3

**PARTS LIST**

AA-5510

TABLE OF CONTENTS

Fig. 10	EQ. SW. P.C. BOARD (A5-5217) BLOCK .....	28
Fig. 11	VOL. CONTROL P.C. BOARD (A5-5218) BLOCK .....	28
Fig. 12	TONE CONTROL P.C. BOARD (A5-5219) BLOCK .....	28
Fig. 13	MAIN AMP. P.C. BOARD (92-5005) BLOCK .....	30
Fig. 14	SPEAKER SW. P.C. BOARD (A5-5215) BLOCK .....	31
Fig. 15	POWER SUPPLY P.C. BOARD (A5-5216) BLOCK .....	31
Fig. 16	ASSEMBLY BLOCK .....	32
Fig. 17	FINAL ASSEMBLY BLOCK .....	34
	INDEX .....	35

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FIG. 10 PHOTO OF EQ. SW. P.C. BOARD (A5-5217) BLOCK

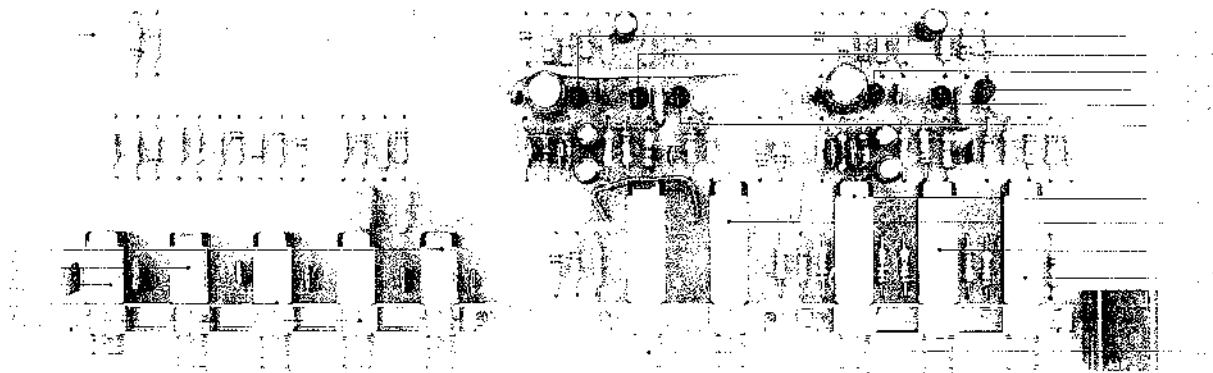


FIG. 11 PHOTO OF VOL. CONTROL P.C. BOARD (A5-5218) BLOCK

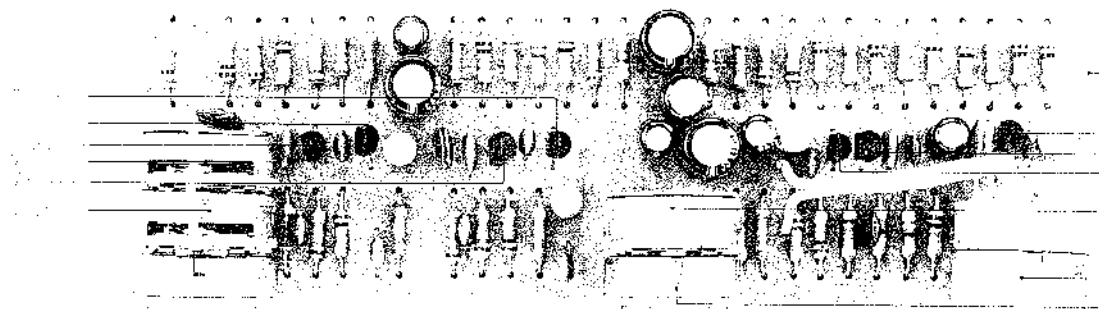
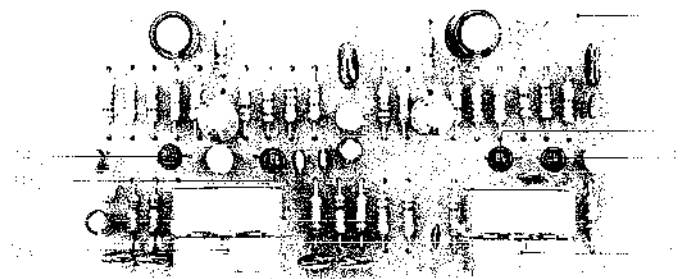


FIG. 12 PHOTO OF TONE CONTROL P.C. BOARD (A5-5219) BLOCK



**EQ. SW. P.C. BOARD (A5-5217) BLOCK**

Symbol No.	Parts No.	Description	Qty
10-1x	BA616792	EQ. SW. P.C. Board Comp. (A5-5217)	1
10-TR1,2,3	ET602460	Transistor 2SC1313 (F) (G) (H)	6
10-SW1	ES623968	Push SW. 3FT-0001FF1320	1
10-SW2	ES628672	Push SW. 5FT-0004FF-1320	1
10-SW3	ES551272	Push SW. 2FS-8U 70	1
10-J1	EJ391094	Mic. Jack 2PMJ1P	1
10-2	EJ539662	Wrapping Post 1x17	34
<b>Capacitor, Vertical Type</b>			
10-C1	EC220994	Elect. 10 $\mu$ F 25WV	2
10-C2	EC478945	Elect. 2.2 $\mu$ F 25WV NL	2
10-C3	EC302264	Mylar 0.001 $\mu$ F (K) 50WV	2
10-C4	EC460888	Elect. 10 $\mu$ F 35WV	2
10-C5	EC311793	Mylar 0.012 $\mu$ F (J) 50WV	2
10-C6	EC290575	VFM 330PF (K) 50WV	2
10-C7	EC391004	Mylar 0.0033 $\mu$ F (J) 50WV	2
10-C8	EC331828	Elect. 3.3 $\mu$ F 25WV	2
10-C9	EC302264	Mylar 0.001 $\mu$ F (K) 50WV	2
10-C10	EC496866	Tantalum 0.47 $\mu$ F (M) 35WV (DTS Type)	2
10-C11	EC346735	Elect. 47 $\mu$ F 50WV	2
10-C12	EC368335	Mylar 0.022 $\mu$ F (J) 50WV	2
10-C13	EC336194	VFM 270PF (I) 50WV	2
10-C14	EC379157	Mylar 0.033 $\mu$ F (J) 50WV	2
10-C15	EC250975	Mylar 0.015 $\mu$ F (J) 50WV	2
Carbon Resistor Omitted.			

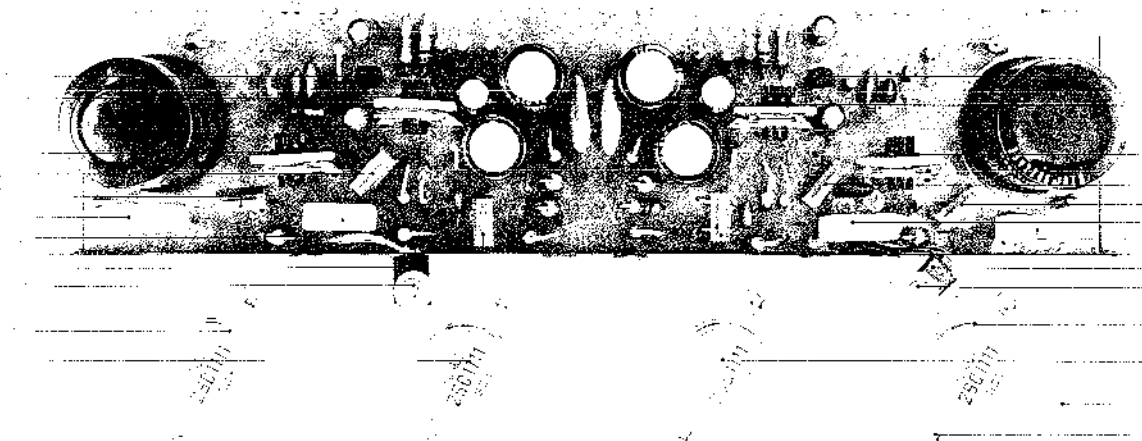
**TONE CONTROL P.C. BOARD (A5-5219) BLOCK**

Symbol No.	Parts No.	Description	Qty
12-1x	BA616781	Tone Control P.C. Board Comp. (A5-5219)	1
12-TR1,2	ET539987	Transistor 2SC1312 (F) (G)	4
12-VR1,2	EV602458	Co-axial 2-throw/Vol. V24L5GPHN 1 k $\Omega$ 100kx2	2
12-2	EJ539662	Wrapping Post 1x17	7
<b>Capacitor, Vertical Type</b>			
12-C1	EC313323	Mylar 0.068 $\mu$ F (K) 50WV	2
12-C2	EC474671	VFM 10PF (K) 50WV	2
12-C3	EC478945	Elect. 2.2 $\mu$ F 25WV NL	2
12-C4,5	EC379157	Mylar 0.033 $\mu$ F (J) 50WV	4
12-C6	EC362068	Mylar 0.0018 $\mu$ F (K) 50WV	2
12-C7	EC556525	FM 22PF (K) 500WV	2
12-C8	EC331828	Elect. 3.3 $\mu$ F 25WV	2
12-C9	EC336104	Elect. 100 $\mu$ F 6.3WV	2
12-C10	EC478945	Elect. 2.2 $\mu$ F 25WV NL	2
12-C11	EC590837	Elect. 47 $\mu$ F 35WV	2
Carbon Resistor Omitted.			

**VOL. CONTROL P.C. BOARD (A5-5218) BLOCK**

Symbol No.	Parts No.	Description	Qty
11-1x	BA616814	Vol. Control P.C. Board Comp. (A5-5218)	1
11-TR1	ET539987	Transistor 2SC1312 (F) (G)	2
11-TR2	ET460912	Transistor 2SA640 (L) (M)	2
11-TR3,4	ET539987	Transistor 2SC1312 (F) (G)	2
11-TR5	ET460912	Transistor 2SA640 (L) (M)	1
11-VR1	EV616623	Co-axial 2-throw/Vol. (w/pre set) V24L5DGM 2B $\Omega$ 250kx2	1
11-VR2	EV616634	Vol. (w/switch) VJ11R-SF22 50k $\Omega$	1
11-VR3	EV616645	Co-axial 2-throw/Vol. V24L5GPHN 1Z 250kx2	1
11-2	EJ539662	Wrapping Post 1x17	8
<b>Capacitor, Vertical Type</b>			
11-C1	EC459505	Mylar 0.039 $\mu$ F (K) 50WV	2
11-C2	EC290542	VFM 120PF (K) 50WV	2
11-C3	EC556018	VFM 30PF (K) 50WV	2
11-C4	EC556525	FM 22PF (K) 500WV	2
11-C5	EC329771	Elect. 47 $\mu$ F 6.3WV	2
11-C6	EC478945	Elect. 2.2 $\mu$ F 25WV NL	2
11-C7	EC455354	Elect. 100 $\mu$ F 35WV	2
11-C8	EC357827	VFM 50PF (K) 50WV	2
11-C9	EC493323	Elect. 1 $\mu$ F 25WV NL	1
11-C10	EC357827	VFM 50PF (K) 50WV	1
11-C11	EC329771	Elect. 47 $\mu$ F 6.3WV	1
11-C12	EC405044	Elect. 22 $\mu$ F 35WV	1
11-C13	EC313323	Mylar 0.068 $\mu$ F (K) 50WV	1
11-C14	EC250964	Mylar 0.012 $\mu$ F (K) 50WV	1
11-C15	EC329771	Elect. 47 $\mu$ F 6.3WV	1
11-C16	EC290542	VFM 120PF (K) 50WV	1
11-C17	EC557381	Mylar 0.0012 $\mu$ F (K) 50WV	1
11-C18	EC556525	FM 22PF (K) 500WV	1
11-C19	EC455354	Elect. 100 $\mu$ F 35WV	1
11-C20	EC478945	Elect. 2.2 $\mu$ F 25WV NL	1
Carbon Resistor Omitted.			

FIG. 13 PHOTO OF MAIN AMP. P.C. BOARD (92-5005) BLOCK

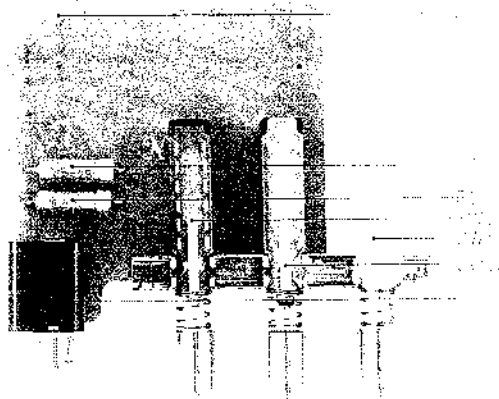


MAIN AMP. P.C. BOARD (92-5005) BLOCK

Symbol No.	Parts No.	Description	Qty
13-1x	BA616757	Main Amp. P.C. Board Comp. (92-5005)	1
13-TR1	ET539987	Transistor 2SC1312 (F) (G)	2
13-TR2,3	ET551564	Transistor 2SC1124 (I) (J)	4
13-TR4	ET556020	Transistor 2SA706-3 (I) (J)	2
13-TR5,6	ET556648	Transistor 2SC1111 (O) (Y)	4
13-D1	ED556514	Varistor SFV-3H	2
13-VR1	EV383398	Semi-fixed/Vol. V18K3-2 30 KB (40S)	2
13-VR2	EV409858	Semi-fixed/Vol. V18K3-2 100ΩB (40S)	2
13-2	EJ539728	Wrapping Terminal T4434	12
13-3	EZ542755	Heat-sink B	1
13-4	TA610536	Transistor Mt. Plate A	4
13-5	ZS419861	Screw, binding head 3x16	8
13-6	ZW273756	Nut M3	8
13-7	ZW273745	Spring Washer M3	8
13-8	ZW273802	Toothed Lock Washer M3	8
13-9	ZS608332	Screw, pan head 3x8, w/washer	2
13-R17,18	ER622978	Metal Plate/R. MPC71F1 5W 0.07Ω (K)	4
Capacitor, Vertical Type			
13-C1	EC539943	Elect. 3.3μF 50WV	2
13-C2	EC290531	VFM 100PF (K) 50WV	2
13-C3	EC321221	Elect. 100μF 50WV	2
13-C4	EC539943	Elect. 3.3μF 50WV	2
13-C5	EC321221	Elect. 100μF 50WV	2
13-C6	EC290531	VFM 100PF (K) 50WV	2
13-C7	EC220364	Elect. 100μF 6.3WV	2
13-C8	EC556176	Elect. 2200μF 35WV	2
13-C9	EC487394	VFM 47PF (K) 50WV	2
13-C10	EC384085	Ceramic DB20SYZ 0.022μF (Z) 50WV	2
13-C11	EC551160	Ceramic NB8Z1 YZ 0.01μF (Z) 1.4 kWV	2
13-C12	EC357827	VFM 50PF (K) 50WV Carbon Resistor Omitted.	2

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

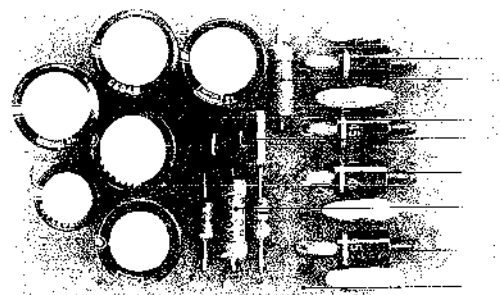
FIG. 14 PHOTO OF SPEAKER SW.  
P.C. BOARD (A5-5215) BLOCK



**SPEAKER SW. P.C. BOARD (A5-5215) BLOCK**

Symbol No.	Parts No.	Description	Qty
14-1x	BA616803	Speaker SW. P.C. Board Comp. (A5-5215)	1
14-SW1	ES616612	Push SW. 3F-0006FF2010	1
14-J1	EJ391083	Mc. Jack 3PMJ1P	1
14-2	EJ539662	Wrapping Post 1x17	7
14-R1,2	ER515070	Metal Oxide Film/R. 2W 150Ω (K)	2

FIG. 15 PHOTO OF POWER SUPPLY  
P.C. BOARD (A5-5216) BLOCK

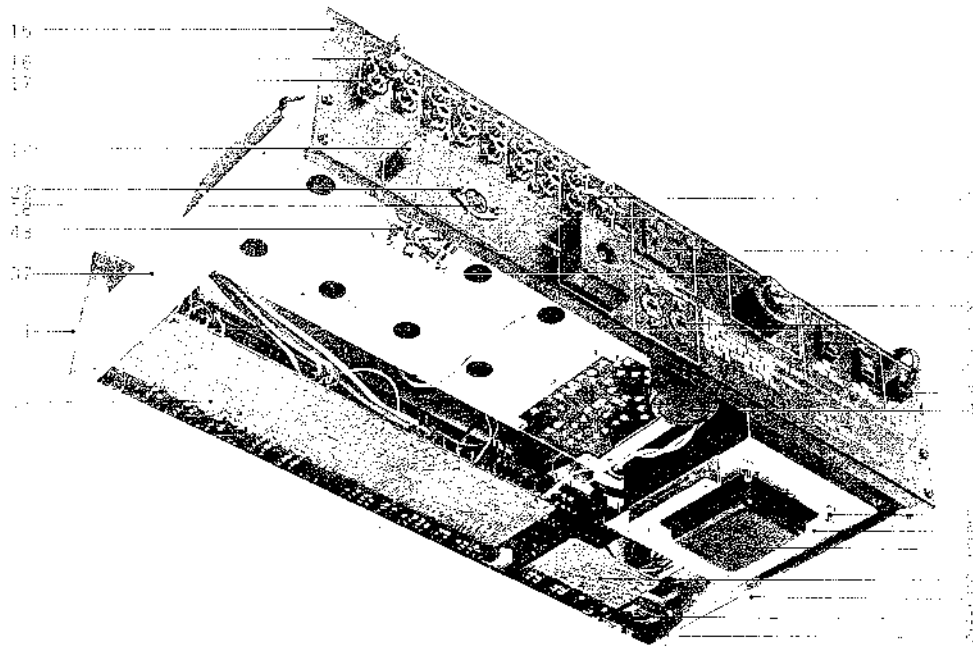
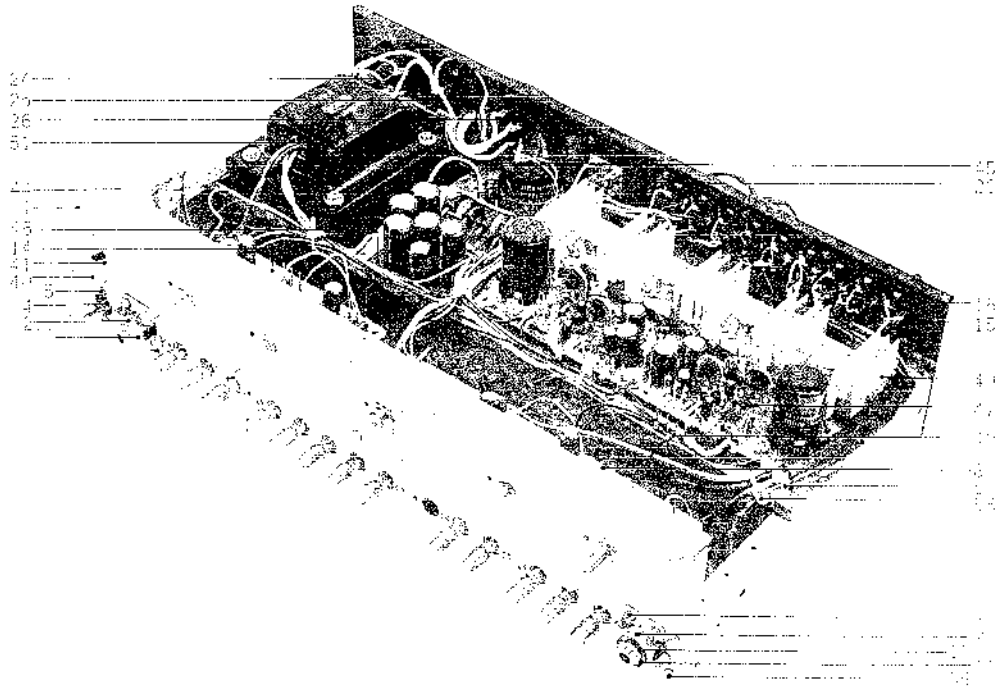


**POWER SUPPLY P.C. BOARD (A5-5216)  
BLOCK**

Symbol No.	Parts No.	Description	Qty
15-1x	BA616768	Power Supply P.C. Board Comp. (A5-5216)	1
15-TR1	ET556086	Transistor 2SD313 (D) (E)	1
15-D1to4	ED556110	Silicon Diode SR3AM-4	4
15-2	EJ539662	Wrapping Post 1x17	8
15-R3	ER490836	Metal Oxide Film/R. 2W 560Ω (K)	1
15-R5	ER372093	Metal Oxide Film/R. 1W 330Ω (K)	1
<b>Capacitor, Vertical Type</b>			
15-C1	EC603112	Elect. 330μF 63WV	1
15-C2	EC372148	Elect. 220μF 35WV	1
15-C3	EC403468	Elect. 330μF 50WV	1
15-C4to6	EC603112	Elect. 330μF 63WV	3
15-C7to10	EC551160	Ceramic NB821 YZ 0.01 μF (Z) 1.4 KWV	4
Carbon Resistor Omitted.			



FIG. 16 PHOTO OF ASSEMBLY BLOCK

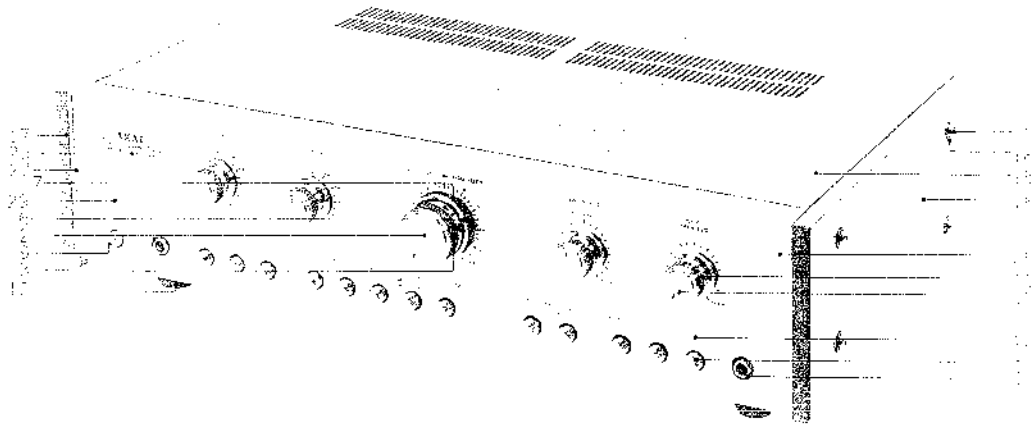


## ASSEMBLY BLOCK

Ref. No.	Parts No.	Description	Schematic No.	Qty	Ref. No.	Parts No.	Description	Schematic No.	Qty
<b>FRONT CHASSIS BLOCK</b>									
16-1	TA610918	Front Chassis	A5-5204	1	16-52x	ZW273914	Spring Washer M4		4
16-2	EZ610806	Jack Mt. Paris	A5-5205	2	16-53	ZW416698	Nut M4		4
16-3	ZS325495	Tapping Screw #2 3x6		4	16-54	MZ610828	Trans. Mt. Table	A5-5202	1
16-4	ES469541	Push SW. TV-3 JB52	25-5-60	1	16-55x	ZS447840	Tapping Screw #2 3x8 (BR)		20
16-5	ZS422076	Screw, pan head 3x5		12	16-56x	TA605878	Lead Protector	A5-5007	2
16-6	TA609761	SW. Angle	A5-5009	1	16-57	EJ510333	Wire Clip 220-JD481610-0104 (Nylon)	2-7-17	1
16-7x	EC551160	Ceramic/C. NB821 YZ 0.01μF (Z) 1.4 kWV	25-5-55	1	16-58	MZ229138	Wire Bundle Holder N-10E	2-35-1	3
16-8	BA616814	Vol. Control P.C. Board Comp. AA-5510	A5-5218	1					
16-9	BA616803	SP. SW. P.C. Board Comp. AA-5510	A5-5215	1					
16-10x	EZ225180	Nylon Collar, Jack	LD-520	2					
16-11	ZW270191	E Jack Nut		2					
16-12	BA616792	EQ SW. P.C. Board Comp. AA-5217	A5-5217	1					
16-13	ZW260368	Washer (Fiber)D9.2x18x0.51		1					
16-14	BA616784	Tone Control P.C. Board Comp. (AA-5510)	A5-5219	1					
<b>REAR PANEL BLOCK</b>									
16-15	SP610896	Rear Panel	A5-5206	1					
16-16	EJ551340	Wrapping Pin Jack B F-5347 (B) 6P	31-1-02	3					
16-17	ZS370385	Tap-Tight Screw, pan head 3x8 (Black)		6					
16-18	EJ378990	Jack, 5P Din S 1 8123	31-1-1	1					
16-19	EZ486257	Metal Terminal T-10	32-1-27	1					
16-20	EJ551316	Speaker Consent P0409	31-1-98	1					
16-21	EJ602886	Socket CS-220	31-1-17	2					
16-22	ZS421740	Screw, pan head 3x8		6					
16-23x	ZW273756	Nut M3		4					
16-24	EC551160	Ceramic/C. NB821 YZ 0.01μF (Z) 1.4 kWV	25-5-55	1					
16-25	EJ378944	Socket, AC U/L S-1 9122		2					
16-26	EJ233370	Socket S-18010 (Volt. Selector)	40-1-3	1					
16-27x	ER452777	Carbon/R. RD1/4 160k (J) (Insu. Type)	35-9-5	2					
16-28x	ER364994	Carbon/R. RD1/4 39k (J) (Insu. Type)	35-9-5	2					
16-29x	EJ539796	2P Fuse Holder	40-1-23	1					
16-30x	ZS463353	Tapping Screw #2 3x8 (BR) (Black)		2					
16-31	EZ382263	Strain Relief SR-4K 4	27-1-2	1					
16-32x	EZ246936	Strain Relief SR-6W-1 (3 core)	27-5	1					
16-33	EW374894	AC Cord 2.5M (CUL)	26-3-19	1					
16-31x	EW315448	Australia Cord (3 core)	26-3-11	1					
16-35	EJ554578	Short Plug	42-1-66	2					
16-36x	ZW318341	Earth Lug M3 (Special)		1					
<b>ASSEMBLY BLOCK</b>									
16-37	TA605924	Side Plate Metal Parts A (Right)	A5-5002	1					
16-38	TA606058	Side Plate Metal Parts B (Left)	A5-5002	1					
16-39	ZS325495	Tapping Screw #2 3x6		18					
16-40	EL458864	Pilot Lamp (L/T) 8V 30mA (150M/Mx2)	28-2-22	1					
16-41	TA510502	Lamp Holder	T5-5035	1					
16-42	EJ551035	4P Wrapping Terminal T-5251	32-1-36	2					
16-43	EJ255025	Lug Plate KP2L1	33-3-4	1					
16-44	EJ254957	Lug Plate KP1L	33-3-2	1					
16-45	EC616533	Elect./C. 3300μF 63WV (Lug Type)	24-10-99	1					
16-46	BA616768	Power Supply P.C. Board Comp. AA-5510	A5-5216	1					
16-47	BA616757	Main Amp. P.C. Board Comp. AA-5510	92-5005	1					
16-48x	ZS422076	Screw, pan head 3x5		4					
16-49	EZ610784	Heat-sink Mt. Plate A(Right)	A5-5203	1					
16-50x	EZ610795	Heat-sink Mt. Plate B(Left)	A5-5203	1					
16-51	BT616544	Power Trans. AA-5510T-1	38-4-287	1					

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 17 PHOTO OF FINAL ASSEMBLY BLOCK



**FINAL ASSEMBLY BLOCK**

Ref. No.	Parts No.	Description	Sub-assembly No.	Qty
17-1	EZ436217	Collar For Jack	MC 5006	2
17-2	SK609838	Volume Knob	A5 5049	1
17-3	MB609851	Knob Rubber Ring C	A5 5054	1
17-4x	ZS444240	Set Screw, hexagon socket 4x8 (Cup/p.)		1
17-5x	ZW493312	Washer (Nylon) D6.2x10x11		1
17-6	SK631192	Memory Knob Ring	A5 5048	1
17-7	MB605880	Knob Rubber Ring D	A5 5035	1
17-8	SK531224	Push Button Knob	91 5037	13
17-9	SK627524	Push Button Knob G (Orange)	91 5057	1
17-10	SK627535	Single Knob B-2	A5 5053	4
17-11	MB551092	Single Knob Rubber Ring	3 10 E	4
17-12x	BC610907	Bottom Plate	A5 5029	1
17-13	SA616590	Tran Leg G	2 6 12	4
17-14x	ZW559135	Tapping Screw #2 4x18 pan head		4
17-15	SP606036	Upper Plate	A5 5019	1
17-16	SP605946	Side Plate A (Right)	A5 5020	1
17-17	SP606047	Side Plate B (Left)	A5 5029	1
17-18	ZW616656	Washer (SPC) D4.1x11x11		8
17-19	ZW552824	ISO Screw, binding head 4x18 (Black)		8
17-20x	EF563681	Fuse 1A 250V	36 1 50	1
17-21x	EF563703	Fuse 2A 250V	36 1 50	1
17-22x	EF277413	Fuse SJ-2 2A	38 1 36	2
17-23x	TA539537	2P Fuse Holder Cover	2 34 73	1
17-24x	ZS355522	Screw, pan head 3x6		1
17-25	SP610885	Front Panel	A5 5208	1
17-26	TA609816	Side Fitting (Right)	A5 5017	1
17-27	TA609794	Side Fitting (Left)	A5 5017	1
17-28	TA549505	Push Button Bush	95 5061	14
17-29	SZ457975	Lamp Lens B	55 5012	1
17-30x	EJ552778	Short Pin Plug ASB-2	42 1 65	2
17-31x	EJ550912	Speaker Plug	42 1 64	2
17-32x	EJ602346	Speaker Plug	42 1 75	2
17-33x	EW602357	Pin Plug Cord	42 1 74	4

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

# INDEX

Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.
TA606058	16-38	ZS419861	13-5	ZW260368	16-13	ZW559135	17-14x		
TA609761	8-6	ZS421740	8-30	ZW270191	8-10	ZW602381	9-26		
TA609761	16-6	ZS421740	16-22	ZW270191	16-11	ZW616656	17-18		
TA609794	9-3	ZS422076	8-5	ZW273745	13-7	ZW622146	8-52		
TA609794	17-27	ZS422076	16-5	ZW273756	8-38x				
TA609816	9-2	ZS422076	16-48x	ZW273756	13-6				
TA609816	17-26	ZS444240	9-10x	ZW273756	16-23x				
TA610536	13-4	ZS444240	17-4x	ZW273802	8-25x				
TA610918	8-1	ZS447761	8-21	ZW273802	13-8				
TA610918	16-1	ZS447761	9-23x	ZW273914	8-53x				
TA626130	8-58	ZS447840	9-7x	ZW273914	16-52x				
TA626163	8-57	ZS447840	16-55x	ZW318341	16-36x				
TA626218	8-55	ZS447840	9-20x	ZW416698	8-54				
ZS325495	4-12	ZS463353	16-30x	ZW416698	16-53				
ZS325495	8-3	ZS522922	7-3	ZW493312	9-11x				
ZS325495	8-41	ZS570385	8-19	ZW493312	17-5x				
ZS325495	16-3	ZS570385	16-17	ZW552824	9-27				
ZS325495	16-39	ZS608332	13-9	ZW552824	17-19				
ZS355522	17-24x	ZS609535	4-8x	ZW562487	8-37x				
ZS379350	4-11x	ZW260368	8-15	ZW559135	9-21x				

## SECTION 4

# SCHEMATIC DIAGRAM

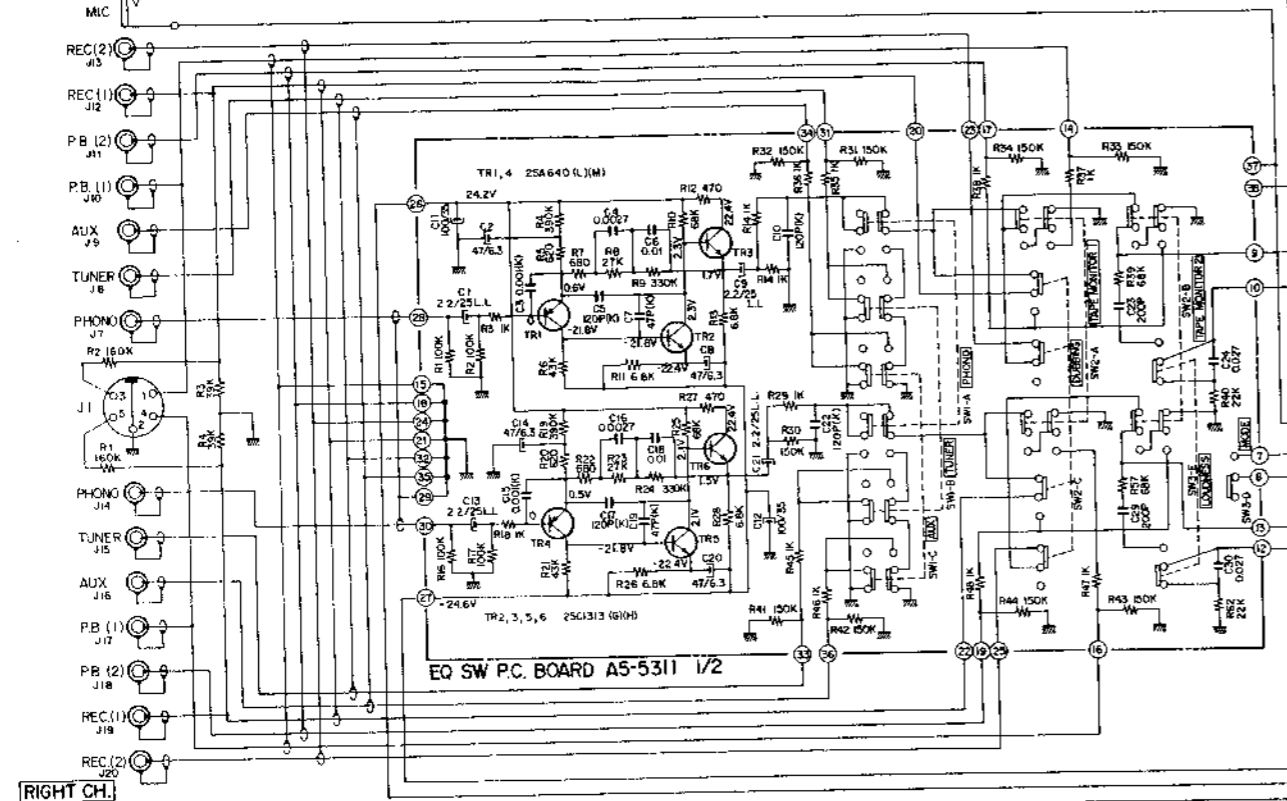
1. AA-5810 SCHEMATIC DIAGRAM
2. AA-5510 SCHEMATIC DIAGRAM

# INDEX

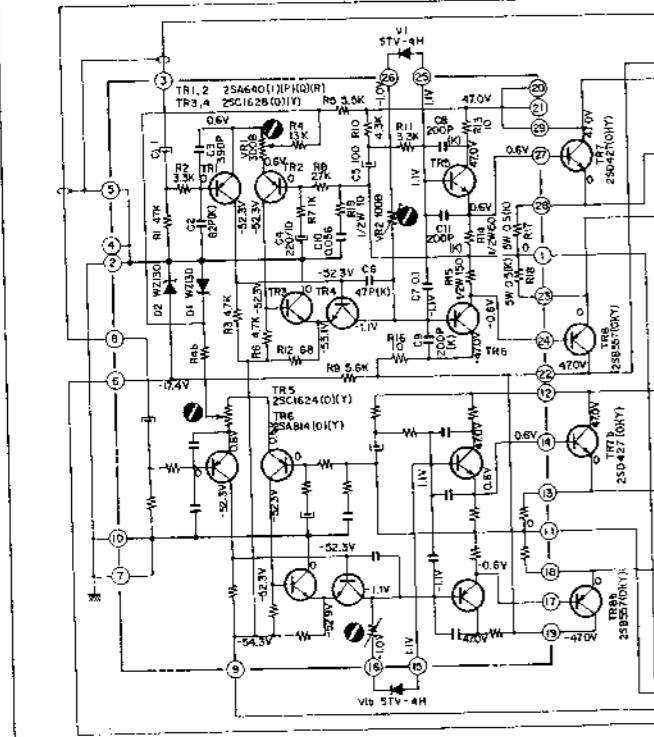
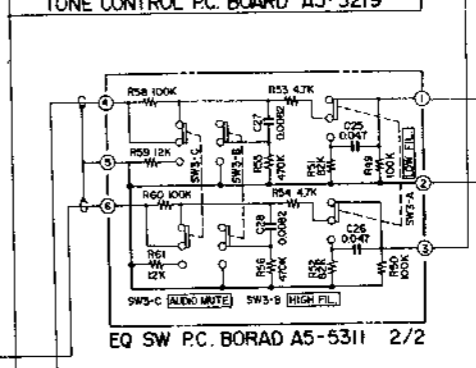
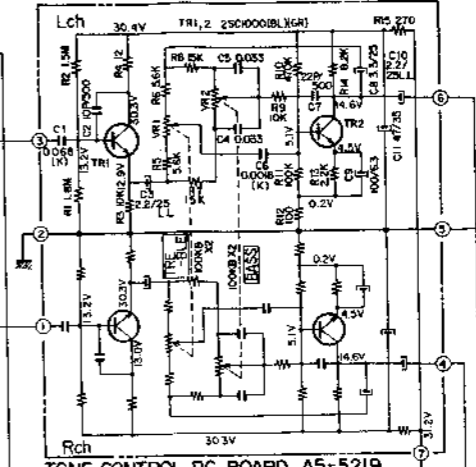
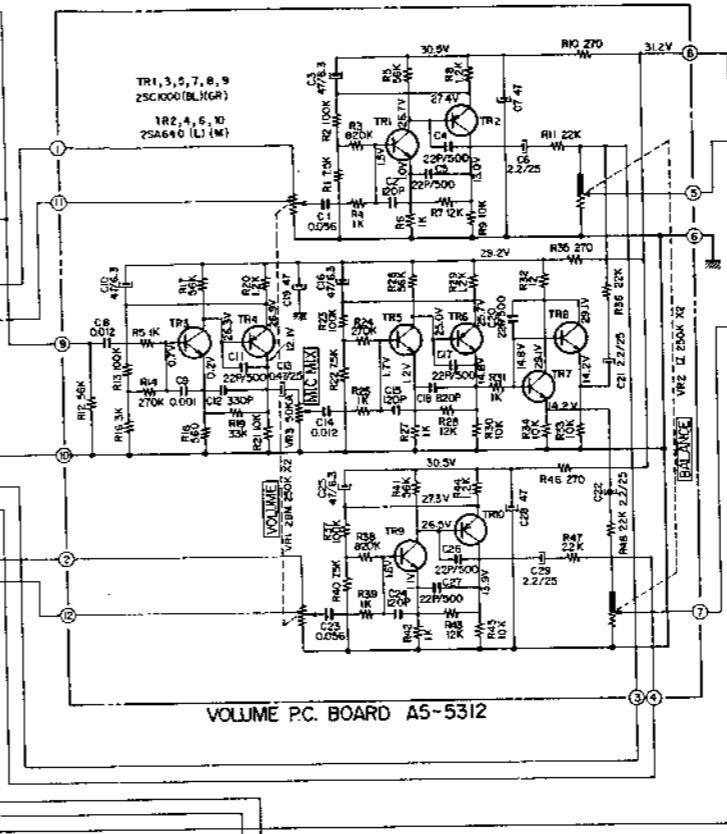
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BA616757	13-1x	EC329771	11-C15	EC551024	8-46	EJ551340	8-18	EV602458	3-VR1,2
BA616757	16-47	EC329782	4-C4	EC551160	13-C11	EJ551340	16-16	EV602458	12-VR1,2
BA616768	15-1x	EC329872	1-C24	EC551160	15-C7to10	EJ551654	4-14	EV616623	2-VR1
BA616768	16-46	EC329872	1-C30	EC551160	16-7x	EJ552778	9-30x	EV616623	11-VR1
BA616781	12-1x	EC331828	3-C8	EC551160	16-24	EJ552778	17-30x	EV616634	2-VR3
BA616781	16-14	EC331828	10-C8	EC556018	11-C3	EJ554578	16-35	EV616634	11-VR2
BA616792	10-1x	EC331828	12-C8	EC556176	13-C8	EJ557875	8-17	EV616645	2-VR2
BA616792	16-12	EC336104	3-C9	EC556525	2-C4,5	EJ589533	8-20	EV616645	11-VR3
BA616803	14-1x	EC336104	12-C9	EC556525	2-C11	EJ602346	9-32x	EW315448	8-34x
BA616803	16-9	EC336194	10-C13	EC556525	2-C17	EJ602346	17-32x	EW315448	16-34x
BA616814	11-1x	EC337533	7-C16	EC556525	2-C20	EJ602886	8-31	EW374894	8-33x
BA616814	16-8	EC338670	2-C8	EC556525	2-C26,27	EJ602886	16-21	EW374894	16-33
BA622822	4-1x	EC338670	2-C14	EC556525	3-C7	EJ603731	8-24	EW524845	8-32
BA622822	8-50	EC343236	5-C3,4	EC556525	11-C4	EJ624468	4-4	EW602357	9-33x
BA622833	4-13	EC346735	2-C7	EC556525	11-C18	EL443520	8-42	EW602357	17-33x
BA622833	4-13	EC346735	2-C19	EC556525	12-C7	EL458864	16-40	EZ225180	8-9x
BA622844	7-1x	EC346735	2-C28	EC557381	11-C17	EP325585	6-RL1	EZ225180	16-10x
BA622844	8-47	EC346735	10-C11	EC557627	7-C13	ER364994	8-23x	EZ246936	8-36x
BA622855	5-1x	EC350717	4-C3	EC557627	7-C15	ER364994	16-28x	EZ246936	16-32x
BA622855	8-49	EC357827	11-C8	EC590837	3-C11	ER372093	15-R5	EZ382263	8-35
BA622877	3-1x	EC357827	11-C10	EC590837	12-C11	ER429715	5-R28	EZ382263	16-31
BA622877	8-12	EC357827	13-C12	EC603112	7-C5	ER442653	4-R17,18	EZ436217	8-62
BA622888	2-1x	EC362068	3-C6	EC603112	7-C9	ER452777	8-22x	EZ436217	9-4
BA622888	8-11	EC362068	12-C6	EC603112	15-C1	ER452777	16-27x	EZ436217	17-1
BA622890	1-1x	EC368335	10-C12	EC603112	15-C4to6	ER490836	15-R3	EZ486257	16-19
BA622890	8-14	EC368357	4-C10	EC616533	16-45	ER515070	14-R1,2	EZ532203	7-2
BA622901	6-1x	EC368357	5-C1,2	EC622991	2-C13	ER622978	13-R17,18	EZ542755	13-3
BA622901	8-8	EC372148	15-C2	EC623002	2-C18	ER624745	6-R1,2	EZ610784	16-49
BC610907	9-18x	EC379157	3-C4,5	ED224526	5-D8	ER624756	6-R3,4	EZ610795	16-50x
BC610907	17-12x	EC379157	10-C14	ED224548	5-D1to7	ES469541	8-4	EZ610806	8-2
BT616544	16-51	EC379157	12-C4,5	ED511918	7-D11	ES469541	16-4	EZ610806	16-2
BT622135	8-51	EC379170	4-C7	ED539976	4-D1,2	ES551272	10-SW3	EZ626117	8-59
EC220127	5-C5	EC379225	1-C25,26	ED539976	7-D10	ES616612	6-SW1	EZ626128	8-13
EC220364	13-C7	EC379776	1-C4	ED551711	6-L1,2	ES616612	14-SW1	EZ626141	4-3
EC220410	7-C14	EC379776	1-C16	ED551733	4-7	ES623968	1-SW1	EZ626152	4-2
EC220768	7-C12	EC384085	13-C10	ED556110	15-D1to4	ES623968	10-SW1	EZ626220	4-9
EC220994	10-C1	EC389024	4-C2	ED556514	13-D1	ES624148	1-SW2	EZ626354	4-10
EC250964	11-C14	EC389237	1-C23	ED558033	7-D5to8	ES628672	1-SW3	MB551092	9-17
EC250975	10-C15	EC389237	1-C29	ED570295	7-D1to4	ES628672	10-SW2	MB551092	17-11
EC251201	2-C1	EC391004	10-C7	ED570295	7-D9	ET393568	7-TR1	MB605880	17-7
EC251201	2-C23	EC403468	15-C3	EF277413	17-22x	ET398711	5-TR3,4	MB609851	9-9
EC290531	13-C2	EC405044	11-C12	EF563657	9-28x	ET398711	5-TR6	MB609851	17-3
EC290531	13-C6	EC413684	1-C27,28	EF563681	17-20x	ET398711	7-TR2	MZ229138	8-61
EC290542	1-C5	EC450527	5-C6	EF563692	9-29x	ET460912	1-TR1	MZ229138	16-58
EC290542	1-C10	EC455354	1-C11,12	EF563703	17-21x	ET460912	1-TR4	MZ610828	16-54
EC290542	1-C17	EC455354	11-C7	EJ233370	8-29	ET460912	2-TR2	SA616590	9-19
EC290542	1-C22	EC455354	11-C19	EJ233370	16-26	ET460912	2-TR4	SA616590	17-13
EC290542	2-C2	EC459505	11-C1	EJ254957	8-45	ET460912	2-TR6	SK531224	9-14
EC290542	2-C15	EC460888	10-C4	EJ254957	16-44	ET460912	2-TR10	SK531224	17-8
EC290542	2-C24	EC474671	3-C2	EJ255025	16-43	ET460912	11-TR2	SK605880	9-13
EC290542	11-C2	EC474671	12-C2	EJ378944	8-27	ET460912	11-TR5	SK609838	9-8
EC290542	11-C16	EC478945	1-C1	EJ378944	16-25	ET517263	3-TR1,2	SK609838	17-2
EC290575	10-C6	EC478945	1-C9	EJ378990	16-18	ET539987	11-TR1	SK627524	9-15
EC302264	1-C3	EC478945	1-C13	EJ391083	6-J1	ET539987	11-TR3,4	SK627524	17-9
EC302264	1-C15	EC478945	1-C21	EJ391083	14-J1	ET539987	12-TR1,2	SK627535	9-16
EC302264	2-C9	EC478945	2-C6	EJ391094	1-J1	ET539987	13-TR1	SK627535	17-10
EC302264	10-C3	EC478945	2-C21,22	EJ391094	10-J1	ET551564	13-TR2,3	SK631192	9-12
EC302264	10-C9	EC478945	2-C29	EJ510333	8-60	ET552690	5-TR1,2	SK631192	17-6
EC302321	1-C6	EC478945	3-C3	EJ510333	16-57	ET552701	5-TR5	SP605946	9-24
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EC311793	10-C5	EC478945	10-C2	EJ539662	1-2	ET556086	15-TR1	SP606036	9-22
EC313108	4-C1	EC478945	11-C6	EJ539662	2-2	ET556648	13-TR5,6	SP606036	17-15
EC313323	3-C1	EC478945	11-C20	EJ539662	3-2	ET561802	4-TR1,2	SP606047	9-25
EC313323	11-C13	EC478945	12-C3	EJ539662	4-15	ET565852	5-TR7	SP606047	17-17
EC313323	12-C1	EC478945	12-C10	EJ539662	5-2	ET602460	10-TR1,2,3	SP610885	17-25
EC321221	4-C5	EC487394	1-C7	EJ539662	6-2	ET604124	1-TR2,3	SP610896	16-15
EC321221	7-C6	EC487394	1-C19	EJ539662	7-4	ET604124	1-TR5,6	SP626174	8-16
EC321221	7-C10,11	EC487394	4-C6	EJ539662	10-2	ET622181	2-TR1	SP626196	9-1
EC321221	13-C3	EC487394	13-C9	EJ539662	11-2	ET622181	2-TR3	SZ457975	9-6
EC321221	13-C5	EC493323	11-C9	EJ539662	12-2	ET622181	2-TR5	SZ457975	17-29
EC329771	1-C2	EC496866	10-C10	EJ539662	14-2	ET622181	2-TR7to9	TA510502	8-43
EC329771	1-C8	EC516745	2-C12	EJ539662	15-2	ET623013	4-5	TA510502	16-41
EC329771	1-C14	EC539842	4-C8,9	EJ539728	13-2	ET623024	4-6	TA539537	17-23x
EC329771	1-C20	EC539842	4-C11	EJ539796	16-29x	ET623035	4-TR3,4	TA545905	9-5
EC329771	2-C3	EC539943	13-C1	EJ550912	9-31x	ET623046	4-TR5	TA545905	17-28
EC329771	2-C10	EC539943	13-C4	EJ550912	17-31x	ET623057	4-TR6	TA605878	8-56x
EC329771	2-C16	EC551160	7-C1to4	EJ551035	8-44	EV361798	4-VR2	TA605878	16-56x
EC329771	2-C25	EC551160	7-C7,8	EJ551035	16-42	EV383398	13-VR1	TA605924	8-39
EC329771	11-C5	EC551160	8-7x	EJ551316	8-26	EV409858	13-VR2	TA605924	16-37
EC329771	11-C11	EC551160	8-28x	EJ551316	16-20	EV551643	4-VR1	TA606058	8-40

AA-5810

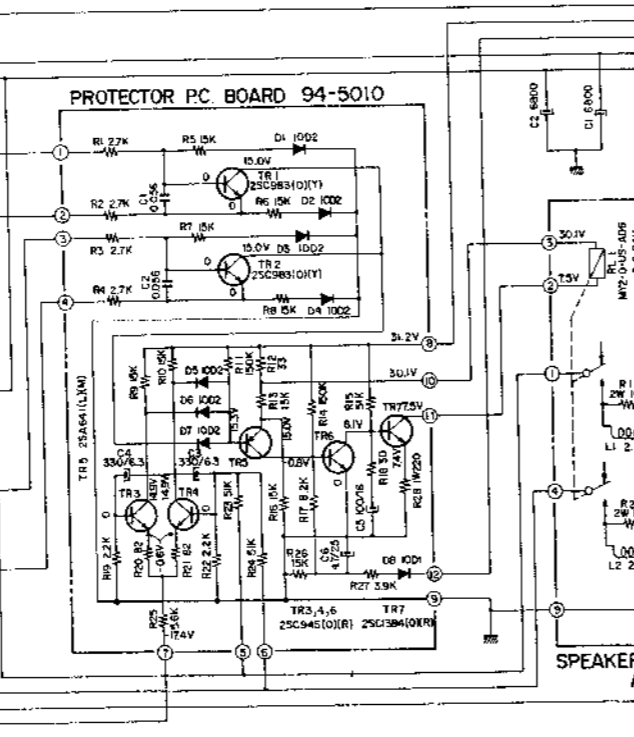
LEFT CH.



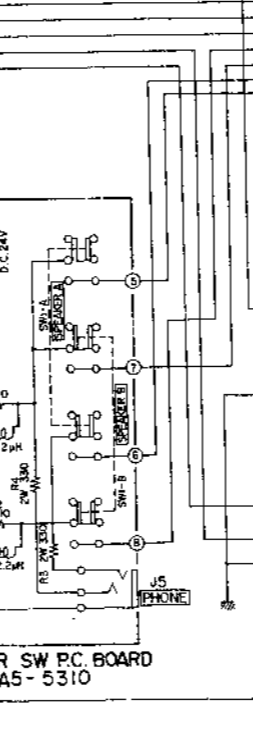
RIGHT CH.



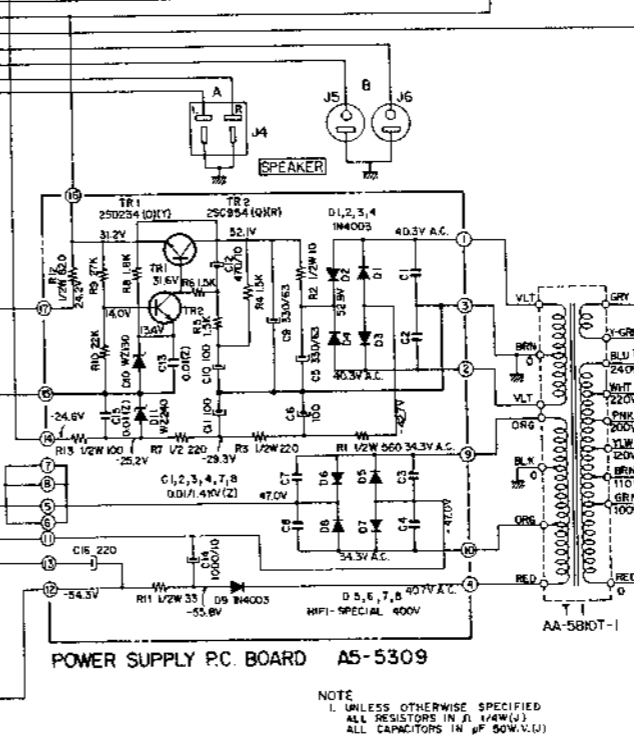
MAIN AMP P.C. BOARD 94-5013



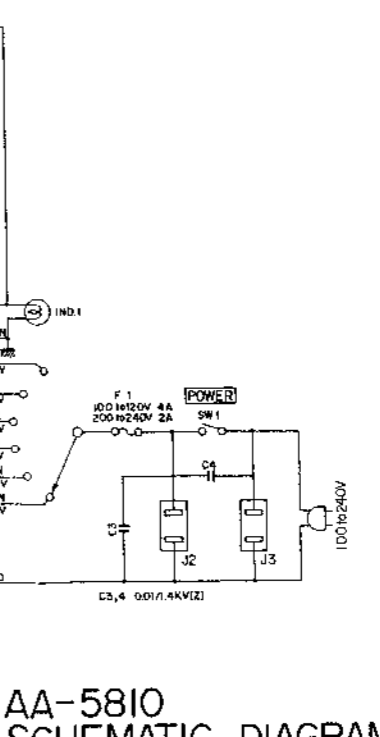
PROTECTOR P.C. BOARD 94-5010



SPEAKER SW P.C. BOARD A5-5310



POWER SUPPLY P.C. BOARD A5-5309



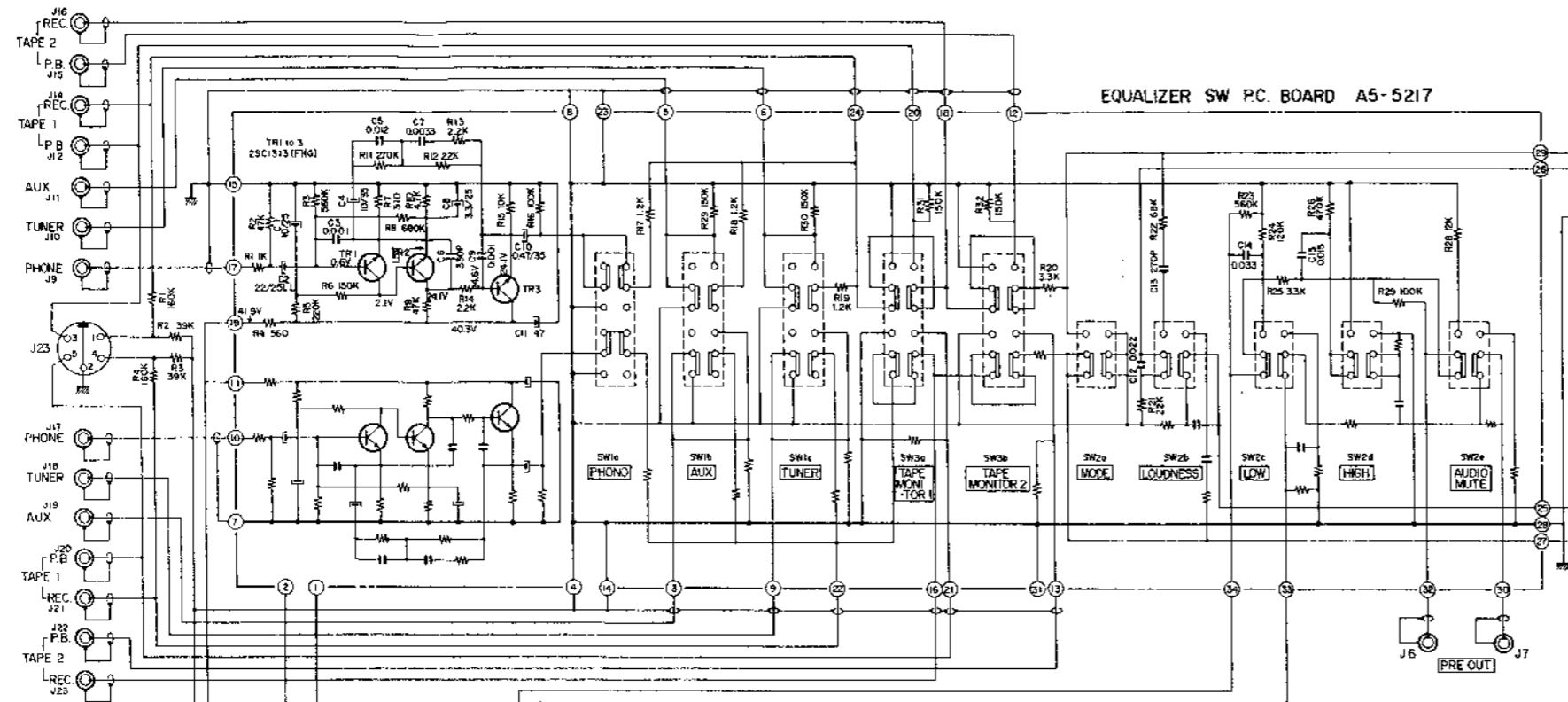
AA-5810-1

NOTE  
 1. UNLESS OTHERWISE SPECIFIED  
 ALL RESISTORS IN Ω (4W/1/2)  
 ALL CAPACITORS IN μF (50WV/1U)  
 2. L.L. INDICATES LOW LEAKAGE  
 CAPACITORS

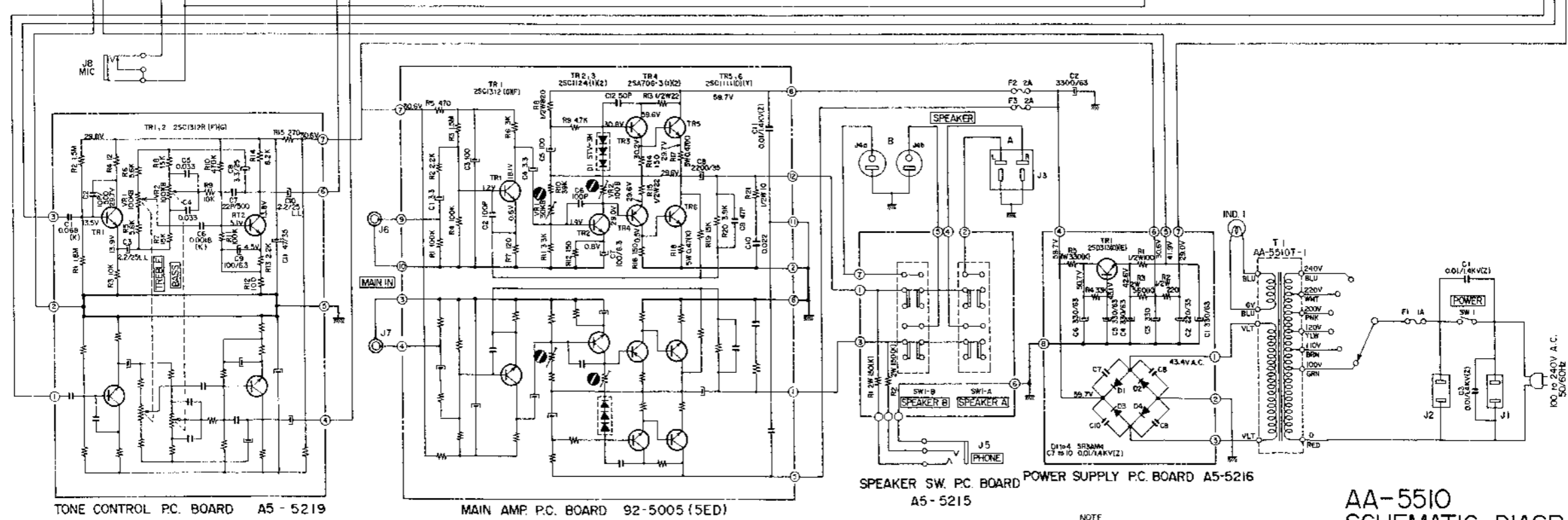
AA-5810  
 SCHEMATIC DIAGRAM  
 No. 1500618A

AA-5510

LEFT CH.



RIGHT CH.



NOTE  
 1. UNLESS OTHERWISE SPECIFIED  
 ALL RESISTORS IN  $\Omega$  (W/W)  
 ALL CAPACITORS IN  $\mu$ F 50W.V.(V)  
 2. L.L. INDICATES LOW LEAKAGE CAPACITORS

AA-5510  
 SCHEMATIC DIAGRAM  
 No. 1500620A  
 2C