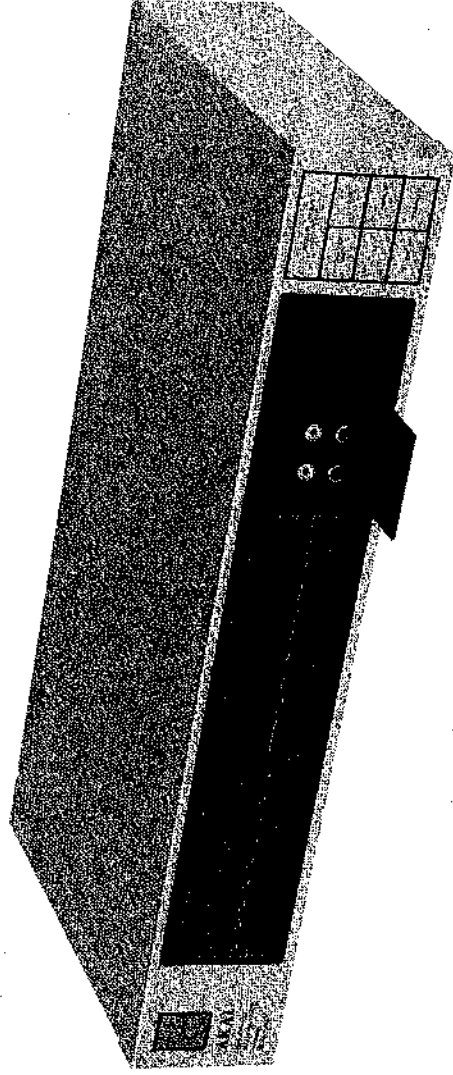


ABBREVIATIONS FOR SERVICE MANUAL

MODEL EA-A2

ABBREVIATION	EXPLANATION
AC	Alternating Current
EQ	EQualizer
RST	ReSeT
SW	SWitch
VOL	VOLume



STEREO GRAPHIC EQUALIZER

MODEL EA-A2

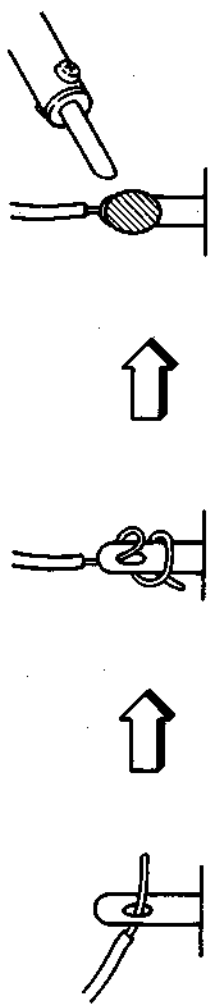
SECTION 1	SERVICE MANUAL	3
SECTION 2	PARTS LIST	9

SAFETY INSTRUCTIONS

SAFETY CHECK AFTER SERVICING

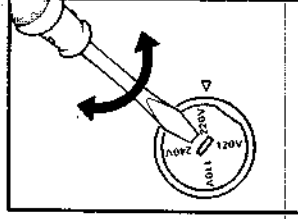
Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 Mohms, but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for [C] or [A], specified insulation resistance should be more than 2.2 Mohms (ground terminals, microphone jacks, headphone jacks, line-in-out jacks etc.)

PRECAUTIONS DURING SERVICING

1. Parts identified by the Δ symbol parts are critical for safety. Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (Insulating Barriers)
 - 4) Insulation sheets for transistors
 - 5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.
6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

VOLTAGE CONVERSION

Each machine is preset at the factory according to its destination, but some machines can be set to 110V, 120V, 220V or 240V as required, if your machine's voltage can be converted:
Before connecting the power cord, turn the VOLTAGE SELECTOR located on the rear panel with a screwdriver until the correct voltage is indicated. Models for USA, Canada, Europe, UK and Australia are not equipped with this facility.



SECTION I

SERVICE MANUAL

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I. SPECIFICATIONS	4
II. DISMANTLING OF UNIT	5
III. CONTROLS	6
IV. PRINCIPAL PARTS LOCATION	7
V. ADJUSTMENT	8
VI. PC BOARD TITLES AND NUMBERS	8

For basic adjustments, measuring methods, and operating principles, refer to **GENERAL TECHNICAL MANUAL**.

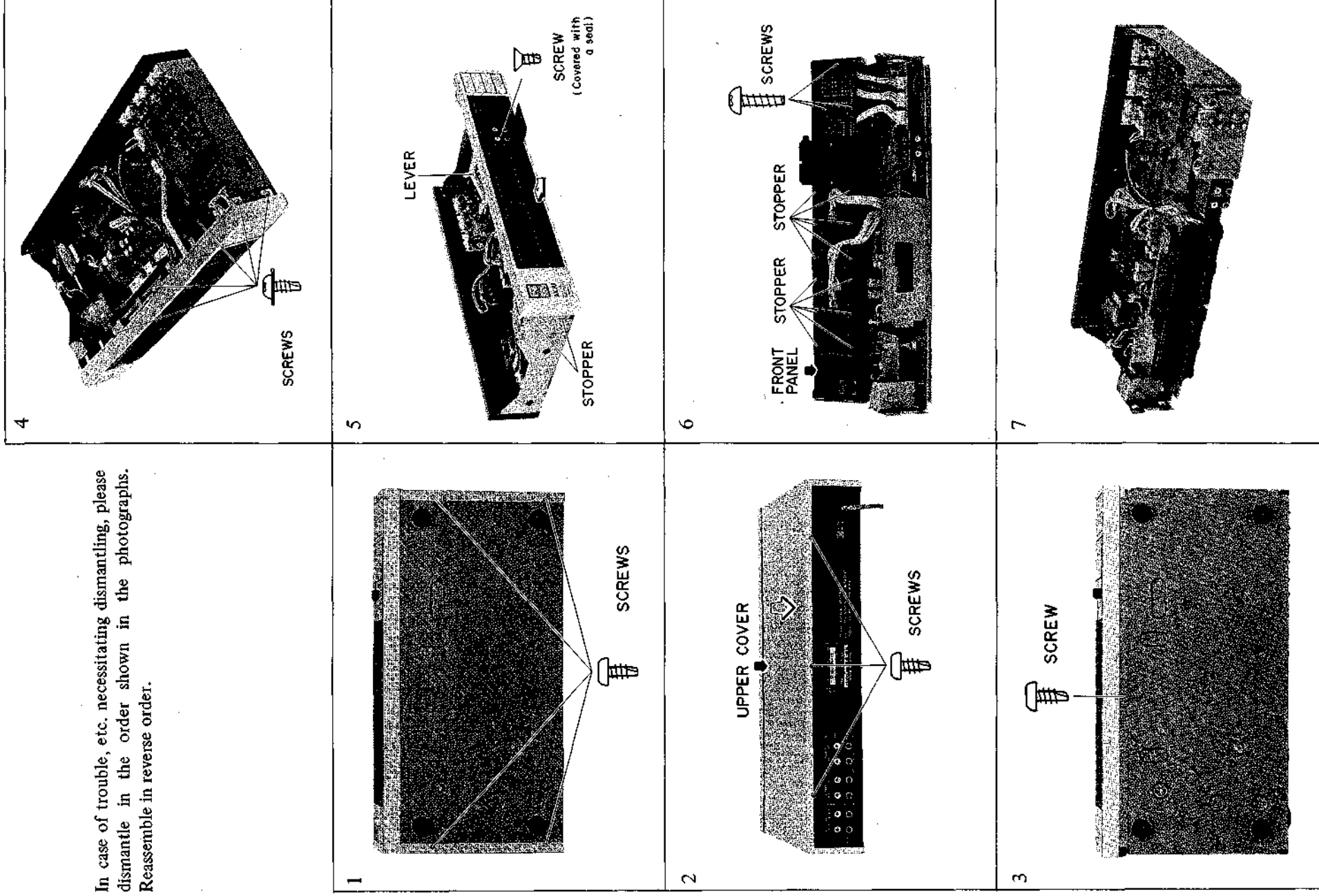
I. SPECIFICATIONS

CENTER FREQUENCY	63Hz/125Hz/250Hz/500Hz/1kHz/2kHz/4kHz/8kHz/16kHz
CONTROL RANGE	±12dB
INPUT SENSITIVITY/IMPEDANCE (LINE)	150mV/47kohms
OUTPUT IMPEDANCE	500 ohms
S/N (IHF-A)	95dB
GAIN (Flat Position)	0dB
DISTORTION	0.03% (20Hz to 20kHz)
POWER REQUIREMENTS	120V, 60Hz for USA and Canada 220V, 50Hz for Europe except UK 240V, 50Hz for UK and Australia 110V/120V/220V/240V/50/60Hz switachable for other countries
DIMENSIONS	440 (W) × 70 (H) × 255 (D) mm (17.3 × 2.8 × 10.0 inches)
WEIGHT	2.8kg (6.2 lbs)

* For improvement purposes, specifications and design are subject to change without notice.

II. DISMANTLING OF UNIT

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



III. CONTROLS

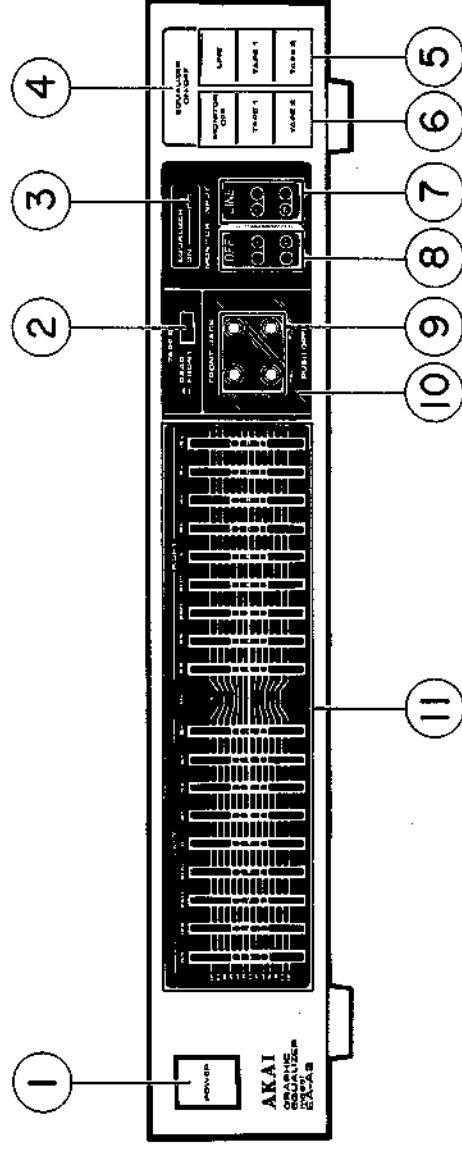


Fig. 3-1 Front View

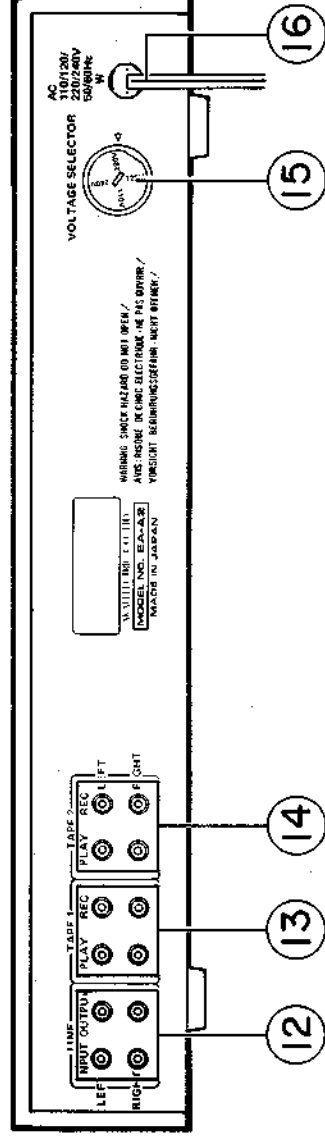


Fig. 3-2 Rear View

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. POWER SWITCH 2. TAPE 2 JACK SELECTOR SWITCH (FRONT/REAR) 3. EQUALIZER ON/OFF BUTTON 4. INPUT SELECTOR (LINE, TAPE 1, TAPE 2) BUTTONS 5. TAPE MONITOR SELECTOR (MONITOR OFF, TAPE 1, TAPE 2) BUTTONS 6. INPUT SOURCE INDICATORS 7. MONITOR INDICATORS | <ol style="list-style-type: none"> 9. TAPE 2 (PLAY/REC) FRONT JACKS 10. RETRACTABLE JACK COVER 11. LEFT AND RIGHT FREQUENCY LEVEL CONTROL LEVERS 12. LINE (IN/OUT) JACKS 13. TAPE 1 (PLAY/REC) JACKS 14. TAPE 2 (PLAY/REC) REAR JACKS 15. VOLTAGE SELECTOR (□ ONLY) 16. POWER CORD |
|---|--|

IV. PRINCIPAL PARTS LOCATION

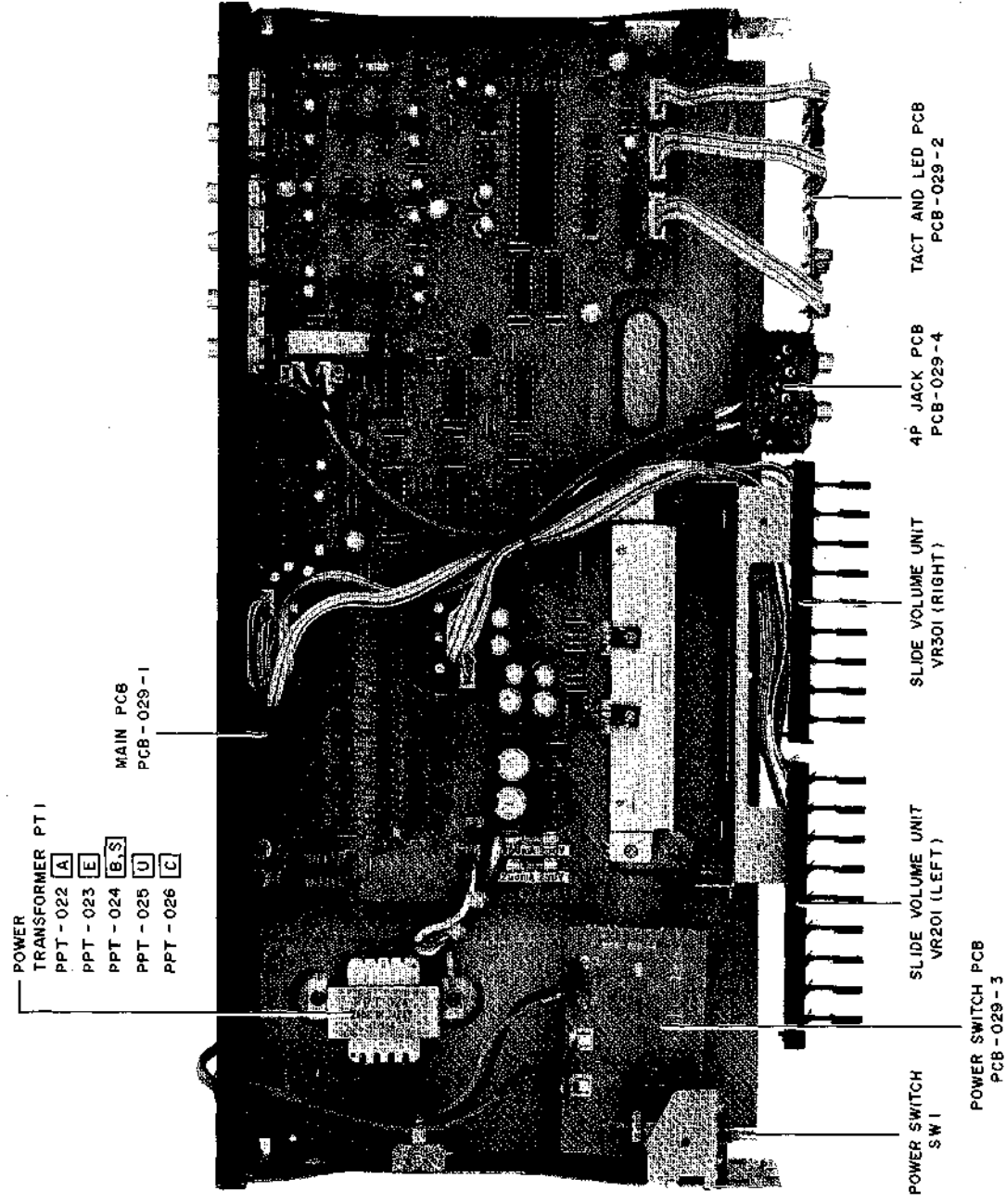


Fig. 4-1 Top View

V. ADJUSTMENT

No adjustment is necessary.

VI. PC BOARD TITLES AND NUMBERS

PC BOARD TITLE	PC BOARD NUMBER
MAIN	PCB-029-1
TACT AND LED	PCB-029-2
POWER SW	PCB-029-3
4P JACK	PCB-029-4

SECTION 2

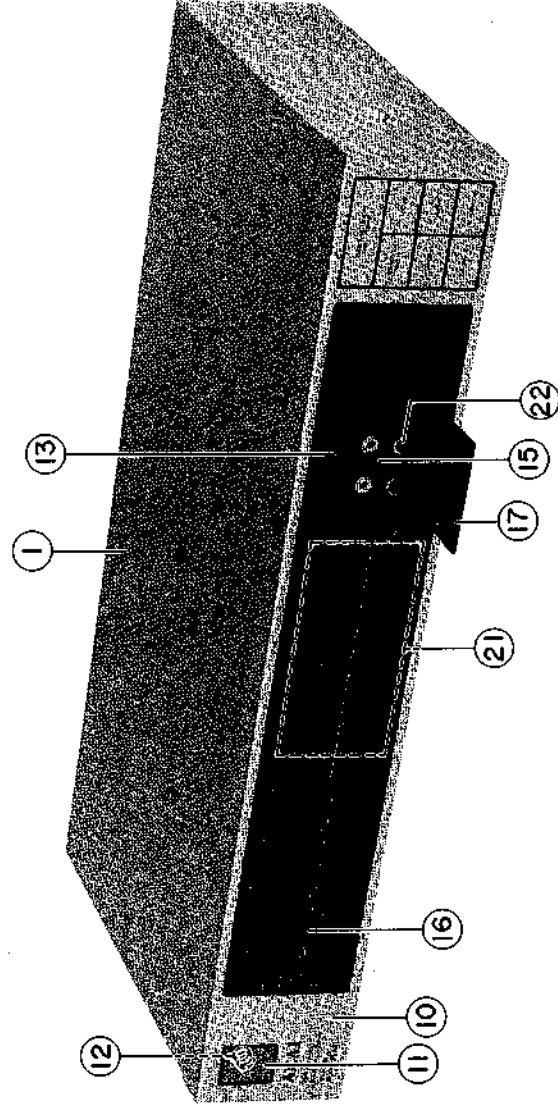
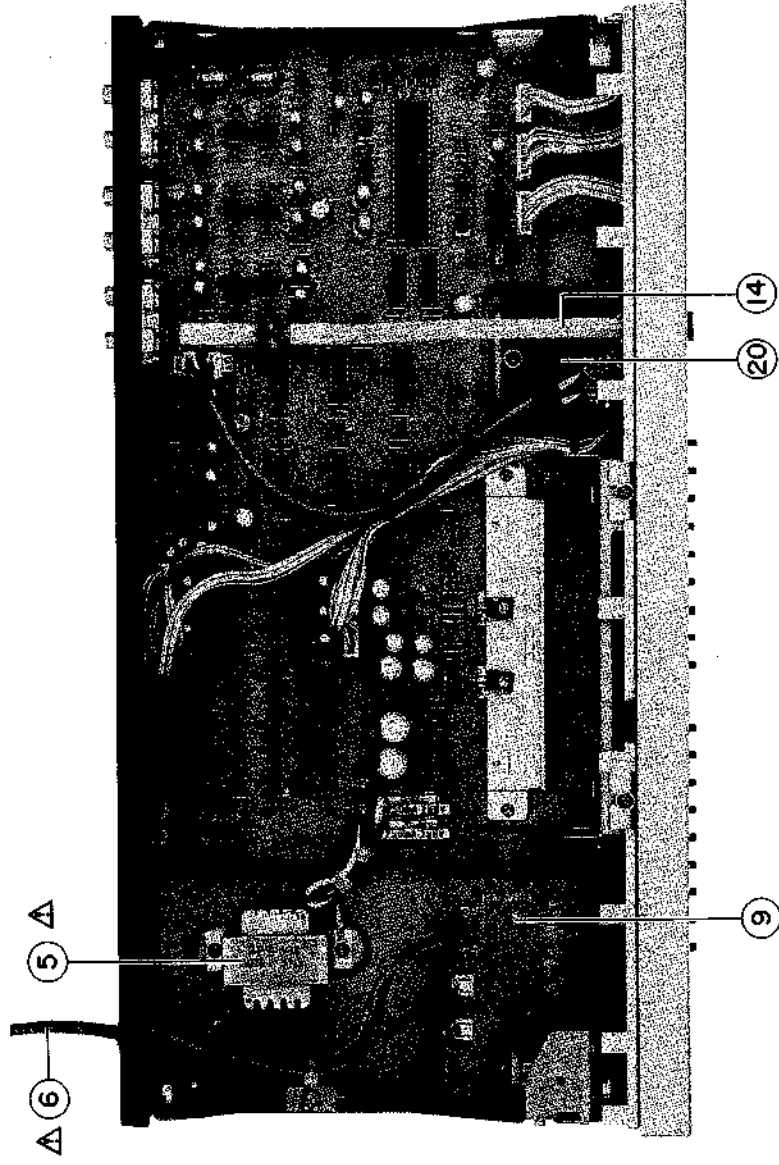
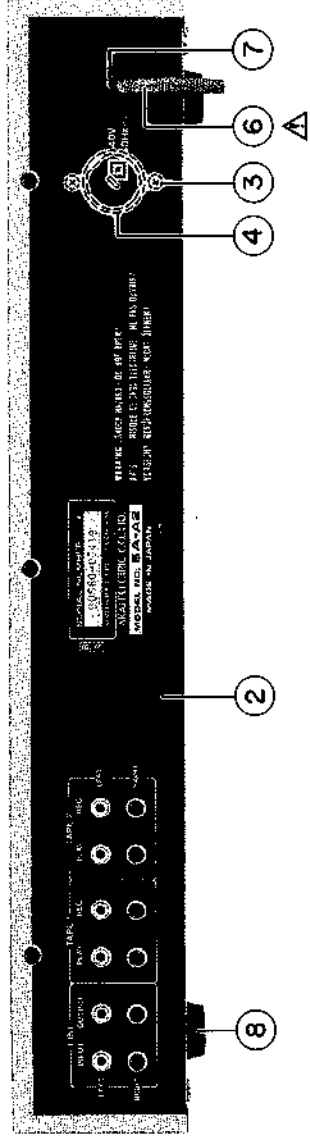
PARTS LIST

TABLE OF CONTENTS

RECOMMENDED SPARE PARTS	11
1. PC BOARD BLOCK	11
2. MAIN PC BOARD	11
3. TACT AND LED PC BOARD	11
4. POWER SW PC BOARD	11
5. FINAL ASSEMBLY BLOCK	13
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Resistor and Capacitor which is not listed in this parts list, please refer to
COMMON LIST FOR SERVICE PARTS.

FINAL ASSEMBLY BLOCK



RECOMMENDED SPARE PARTS

Because, if the parts listed below are on hand, almost any repair can be accomplished, we suggest that you stock these Recommended Spare Parts Items.

REF. NO.	PARTS NO.	DESCRIPTION
1	BT-713123	△ TRANS POWER PPT-022(A) (A)
2	BT-713126	△ TRANS POWER PPT-022(B,S) (B,S)
3	BT-713128	△ TRANS POWER PPT-022(C) (C)
4	BT-713124	△ TRANS POWER PPT-022(E,V) (E,V)
5	BT-713127	△ TRANS POWER PPT-022(U) (U)
6	ED-713113	D LED GL5HD27 RED
7	ED-713112	D LED GL5NG27 YLW
8	ED-712568	D SILICON H DSF10B
9	ED-344280	D SILICON H GMA-01-FY2 F05
10	ED-623182	D ZENER H RD11E B
11	ED-308860	D ZENER H RD16E B
12	ED-324458	D ZENER H RD5.1E B
13 N	EF-300575	△ FUSE EAWK T 250V 0.10A (U)
14 N	EF-322975	△ FUSE EAWK T 250V 0.16A (B)
15 N	EF-300586	△ FUSE EAWK T 250V 0.25A (E,V,B,S)
16	EF-906700	△ FUSE SS2 250V 0.10A (A,C)
17	EL-713109	IC BA 6250
18	EL-336761	IC LA 6458S
19	EL-349870	IC LC 6505C-650
20	EL-780152	IC MC14016B
21	EL-713110	IC IR2C05
22	EL-780148	OSC CE KBR 400B
23	EQ-712575	RELAY POWER G5A237P
24	ES-337902	△ SW PUSH SLDIP 01-1
25	ES-780175	△ SW SELECTOR HXW-0103-01-430 (U)
26	ES-713111	SW PUSH SUL192A 2-04-02N
27	ES-336780	SW TACT KHH10902
28	ET-322778	TR 2SA608K-NP E,F,G
29	ET-322598	TR 2SB632K E,F
30	ET-245790	TR 2SC1570NP G,H
31	ET-403413	TR 2SC536NP H
32	ET-310148	TR 2SD612K E,F
33	EV-713141	VR SLIDE UNIT VJK303(9R)

"NOTE" N : New Parts

SYMBOL FOR DESTINATION

- A : AAL (U.S.A.)
- B : UK (England)
- C : CSA (Canada)
- E : CEE (Europe)
- S : SAA (Australia)
- U : U/T (Universal Area)
- V : VDE (West Germany)

1. PC BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
MAIN PC BOARD BLOCK		
1-1A	BA-713142	PC MAIN BLK EA-A2(A,C)
1-1E	BA-713143	PC MAIN BLK EA-A2(E,V,S)
1-1B	BA-713144	PC MAIN BLK EA-A2(B)
1-1U	BA-713145	PC MAIN BLK EA-A2(U)

NOTE: MAIN PC BOARD BLOCK CONSISTS OF FOLLOWING PC BOARDS.

- A : MAIN PC BOARD
- B : TACT AND LED PC BOARD
- C : POWER-SW-PC BOARD

2. MAIN PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
2-IC201	EL-336761	IC LA6458S
to 203		
2-IC204	IC MC14016B	
to 206		
2-IC207	EL-336761	IC LA6458S
2-IC304		
to 306		
2-IC307	EL-780152	IC MC14016B
2-IC401	EL-336761	IC LA6458S
2-IC402	EL-349870	IC LC6505C-650
2-IC403,	EL-713109	IC BA6250
404	EL-713110	IC IR2C05
2-Q101	ET-310148	TR 2SD612K E,F
2-Q102	ET-322598	TR 2SB632K E,F
2-Q103	ET-403413	TR 2SC536NP H
2-Q104	ET-322778	TR 2SA608K-NP E,F,G
2-Q201		
to 209		
2-Q301	ET-245790	TR 2SC1570NP G,H
to 309		
2-Q402		
to 404		
2-D101	ET-403413	TR 2SC536NP H
to 105		
2-D106,	ED-712568	△ D SILICON H DSF10B
107	ED-308860	△ D ZENER H RD16E B
2-D108,		
109	ED-623182	D ZENER H RD11E B
2-D110	ED-324458	D ZENER H RD5.1E B
2-D111,		
112	ED-344280	D SILICON H GMA-01-FY2 F05
2-D113	ED-712568	D SILICON H DSF10B
2-D401		
to 403		
2-X401	EL-780148	OSC CE KBR400B
2-RE201,		
301	EQ-712575	RELAY POWER G5A237P
2-S201	ES-713111	SW PUSH SUL192A 2-04-02N
2-R107,		
108	ER-311874	△ R OMF H FS 2W 101J
2-P7201		
to 203		
2-F101,	EJ-709341	PIN JAJC-035-AAAB 4P
102	EF-300586	△ FUSE EAWK T 250V 0.25A (U,E,V,B,S)

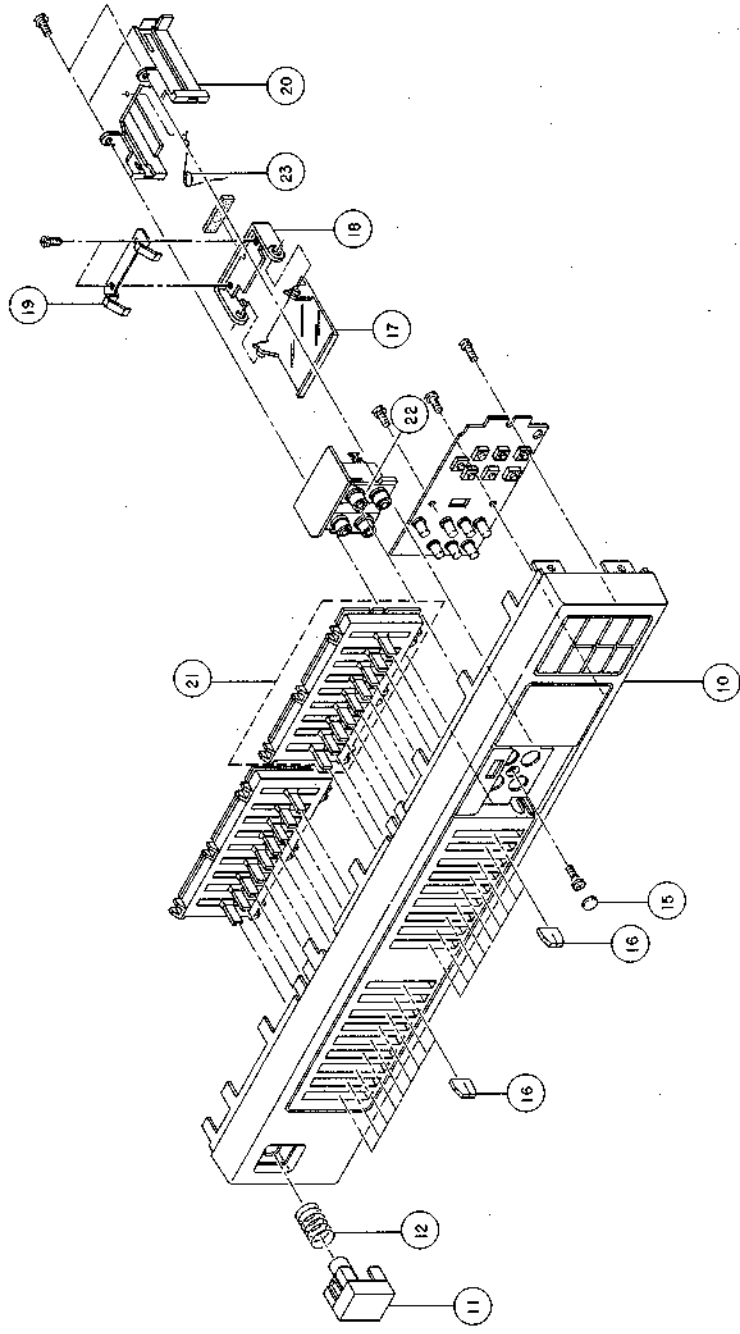
3. TACT AND LED PC BOARD

REF. NO.	PARTS NO.	DESCRIPTION
3-D405		
to 410		
3-LED401	ED-344280	D SILICON H GMA-01-FY2 F05
to 404		
3-LED405	ED-713112	D LED GL5NG27 YLW
to 407		
3-S401	ED-713113	D LED GL5HD27 RED
to 407		
	ES-336780	SW TACT KHH10902

4. POWER SW PC BOARD

4-SW1	ES-337902	△ SW PUSH SLDIP 01-1
4-C1U	EC-256950	△ C MP V 103M 250AC (U,E,B,S,V)
4-C1A	EC-330308	△ C MMY V ECQUF 103M 250AC (C,A)
4-F1A	EF-306700	△ FUSE SS2 250V 0.10A (A,C)
4-F1U	EF-300575	△ FUSE EAWK T 250V 0.10A (U)
4-F1B	EF-322975	△ FUSE EAWK T 250V 0.16A (B)

FINAL ASSEMBLY BLOCK



5. FINAL ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
5-1S	SP-713116	COVER UPPER EA-A2
5-1P	SP-713117	COVER UPPER EA-A2-P
5-2A	SP-713118	PANEL REAR EA-A2(A,C)
5-2U	SP-713119	PANEL REAR EA-A2(U)
5-2E	SP-713120	PANEL REAR EA-A2(E,V)
5-2B	SP-713121	PANEL REAR EA-A2(B,S)
5-3	SP-713122	RV NYL S3055 (U)
5-4	ES-780175	△ SW SELECTOR HXW-0103-01-430 (U)
5-5A	BT-713123	△ TRANS POWER PPT-022(A) (A)
5-5E	BT-713124	△ TRANS POWER PPT-022(E,V) (E,V)
5-5B	BT-713126	△ TRANS POWER PPT-022(B,S) (B,S)
5-5U	BT-713127	△ TRANS POWER PPT-022(U) (U)
5-5C	BT-713128	△ TRANS POWER PPT-022(C) (C)
5-6A	EW-305691	△ AC CORD 2 CORES KP-8, SPT-1 UC (A,C)
5-6E	EW-336923	△ AC CORD 2 CORES KP-419C, LTCE-2F EV (E,V)
5-6S	EW-336924	△ AC CORD 2 CORES KP-560, LTSA-2F S (S)
5-6U	EW-306428	△ AC CORD 2 CORES KP-700A, VFF U/T (U)
5-6B	EW-347025	△ AC COARD 2 CORES LTBS-2F B (B)
5-7U	EZ-631945	STRAIN RELIEF SR-4N-4 (U,C,A)
5-7E	EJ-692908	STRAIN RELIEF SR-5N-4 (E,V,B,S)

REF. NO.	PARTS NO.	DESCRIPTION
5-8	SA-710514	RUBBER FOOT EA-M7
5-9	MZ-713129	SPACER SUPPORT
5-10S	BD-713130	PANEL FRONT BLK EA-A2
5-10P	BD-713131	PANEL FRONT BLK EA-A2-P
5-11S	SK-342820D	KNOB POWER (3)
5-11P	SK-342820C	KNOB POWER-P (2)
5-12	ZS-713132	SP COIL
5-13	SK-351443C	KNOB PUSH (B)-2
5-14	SZ-713133	SHAFT KNOB
5-15	SE-713134	PLATE
5-16	SK-713135	KNOB SLIDE
5-17	SP-713137	DOOR
5-18	TA-713138	SLIDE BAR
5-19	ZS-713139	SP DOOR
5-20	SZ-713140	SLIDE COVER
5-21	EV-713141	VR SLIDE UNIT VJK303(9R) (VR201, 202)
5-22	EJ-713115	PIN J A1C-035-AAB P 4P
5-23	ZG-713377	SP TORSION

NOTE: SYMBOL FOR COLOR VARIATION

S : SILVER

P : PEARL SHADOW

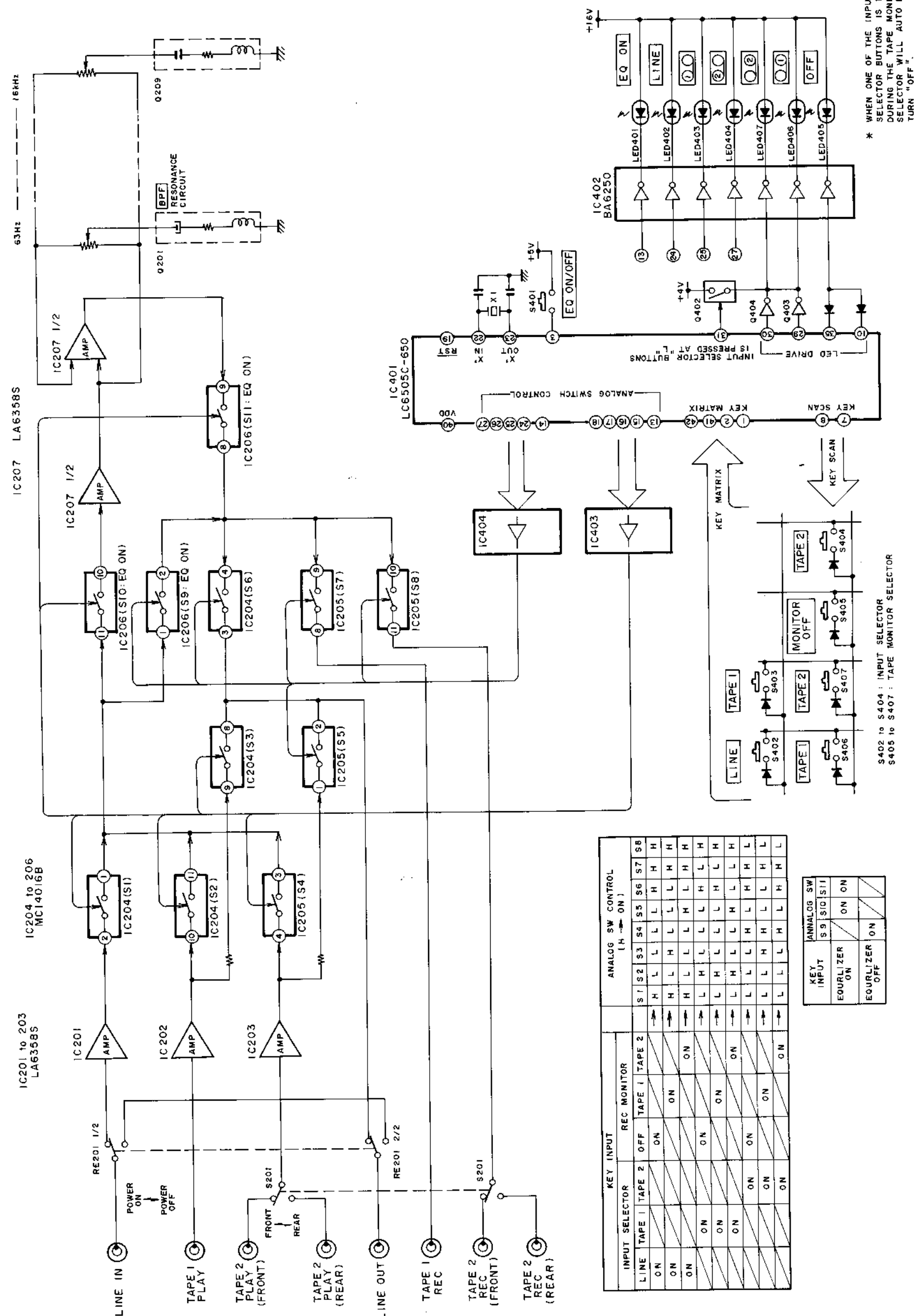
INDEX

PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.	PARTS NO.	REF. NO.
BA-713142	1-1A	ES-713111	2-S201						
BA-713143	1-1E	ES-780175	5-4						
BA-713144	1-1B	ET-245790	2-Q201						
BA-713145	1-1U	ET-245790	2-Q202						
BD-713130	5-10S	ET-245790	2-Q203						
BD-713131	5-10P	ET-245790	2-Q204						
BT-713123	5-5A	ET-245790	2-Q205						
BT-713124	5-5E	ET-245790	2-Q206						
BT-713126	5-5B	ET-245790	2-Q207						
BT-713127	5-5U	ET-245790	2-Q208						
BT-713128	5-5C	ET-245790	2-Q209						
EC-256950	4-C1U	ET-245790	2-Q301						
EC-330308	4-C1A	ET-245790	2-Q302						
ED-308860	2-D106	ET-245790	2-Q303						
ED-308860	2-D107	ET-245790	2-Q304						
ED-324458	2-D110	ET-245790	2-Q305						
ED-344280	2-D402	ET-245790	2-Q306						
ED-344280	2-D403	ET-245790	2-Q307						
ED-344280	2-D111	ET-245790	2-Q308						
ED-344280	2-D112	ET-245790	2-Q309						
ED-344280	2-D401	ET-310148	2-Q101						
ED-344280	3-D405	ET-322598	2-Q102						
ED-344280	3-D406	ET-322778	2-Q104						
ED-344280	3-D407	ET-403413	2-Q103						
ED-344280	3-D408	ET-403413	2-Q402						
ED-344280	3-D409	ET-403413	2-Q403						
ED-344280	3-D410	ET-403413	2-Q404						
ED-623182	2-D108	EV-713141	5-21						
ED-623182	2-D109	EW-305691	5-6A						
ED-712568	2-D101	EW-306428	5-6U						
ED-712568	2-D102	EW-336923	5-6E						
ED-712568	2-D103	EW-336924	5-6S						
ED-712568	2-D104	EW-347025	5-6B						
ED-712568	2-D105	EZ-631945	5-7U						
ED-712568	2-D113	MZ-713129	5-9						
ED-713112	3-LED401	SA-710514	5-8						
ED-713112	3-LED402	SE-713134	5-15						
ED-713112	3-LED403	SK-342820C	5-11P						
ED-713112	3-LED404	SK-342820D	5-11S						
ED-713113	3-LED405	SK-351443C	5-13						
ED-713113	3-LED406	SK-713135	5-16						
ED-713113	3-LED407	SP-713116	5-1S						
EF-300575	4-F1U	SP-713117	5-1P						
EF-300586	2-F101	SP-713118	5-2A						
EF-300586	2-F102	SP-713119	5-2U						
EF-306700	4-F1A	SP-713120	5-2E						
EF-322975	4-F1B	SP-713121	5-2B						
EI-336761	2-IC201	SP-713122	5-3						
EI-336761	2-IC202	SP-713137	5-17						
EI-336761	2-IC203	SZ-713133	5-14						
EI-336761	1-IC207	SZ-713140	5-20						
EI-336761	2-IC307	TA-713138	5-18						
EI-349870	2-IC401	ZG-713377	5-23						
EI-713109	2-IC402	ZS-713132	5-12						
EI-713110	2-IC403	ZS-713139	5-19						
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EI-780152	2-IC304								
EI-780152	2-IC305								
EI-780152	2-IC306								
EJ-692908	5-7E								
EJ-709341	2-PJ201								
EJ-709341	2-PJ202								
EJ-709341	2-PJ203								
EJ-713115	5-22								
EQ-712575	2-RE201								
EQ-712575	2-RE301								
ER-311874	2-R107								
ER-311874	2-R108								
ES-336780	3-S401								
ES-336780	3-S402								
ES-336780	3-S403								
ES-336780	3-S404								
ES-336780	3-S405								
ES-336780	3-S406								
ES-336780	3-S407								
ES-337902	4-SW1								

AKAI

MODEL EA-A2

**PC BOARD
SCHEMATIC DIAGRAM**



* WHEN ONE OF THE INPUT SELECTOR BUTTONS IS PRESSED DURING THE TAPE MONITOR SELECTOR WILL AUTO Matically TURN "OFF".

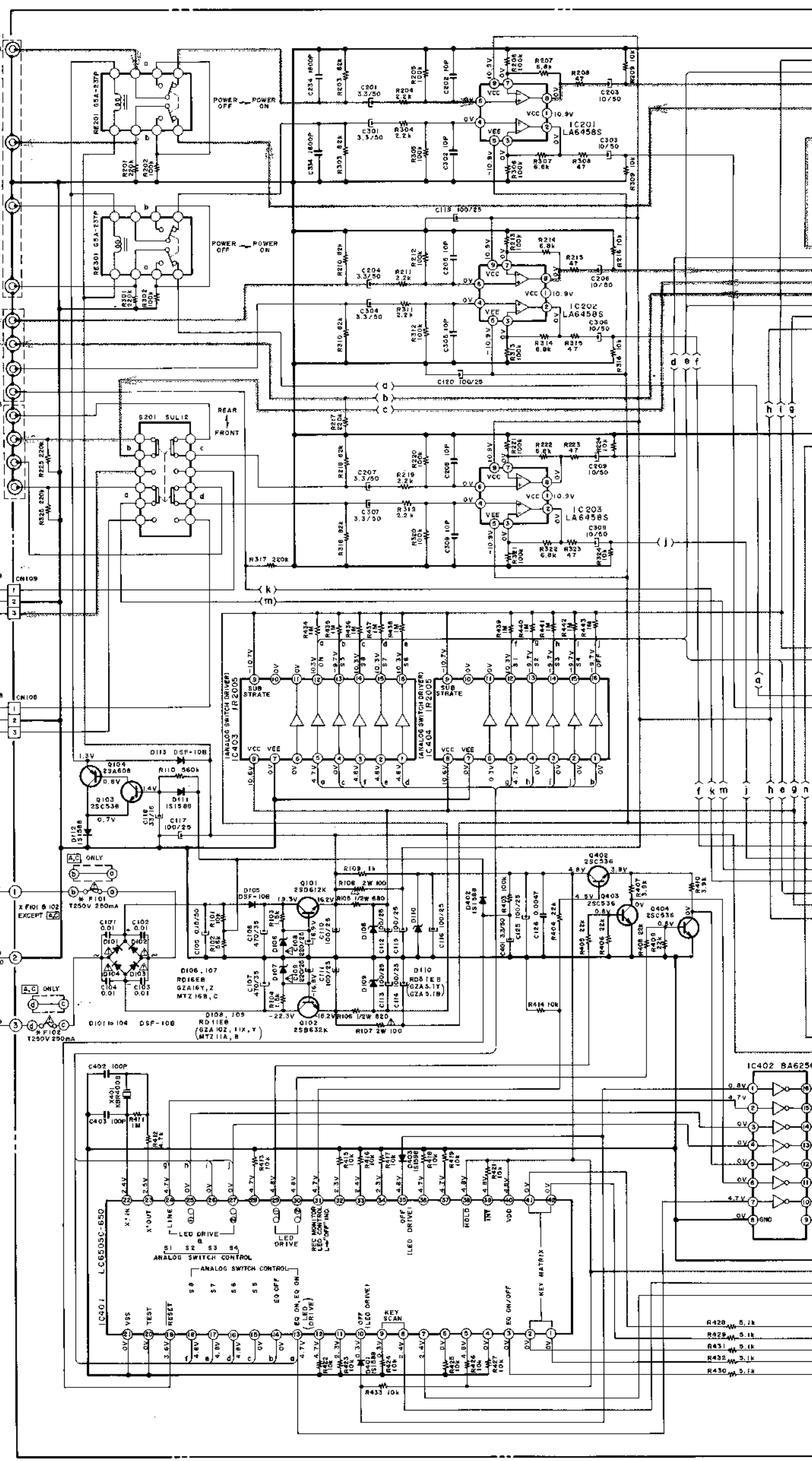
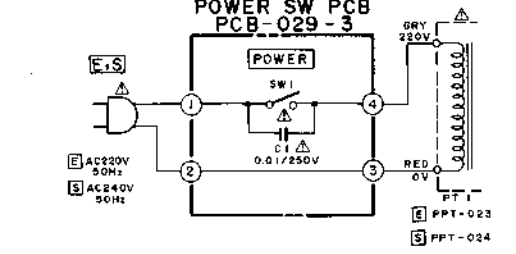
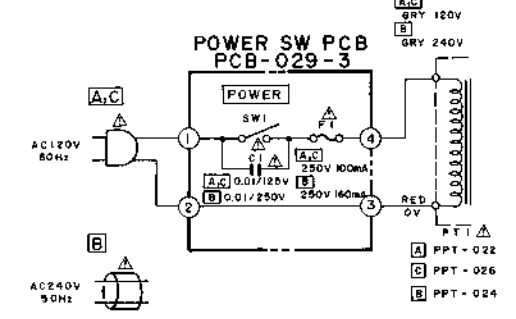
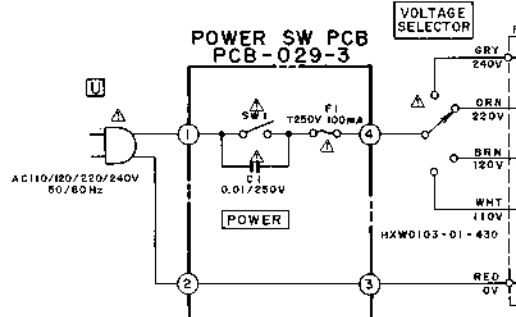
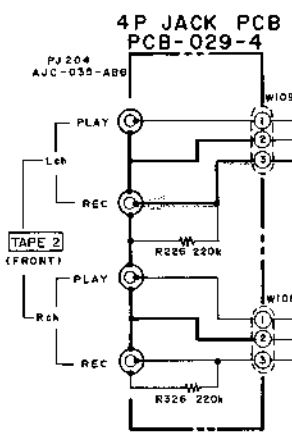
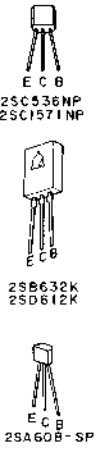
EA - A2
BLOCK DIAGRAM
NO.840731A (IAR)

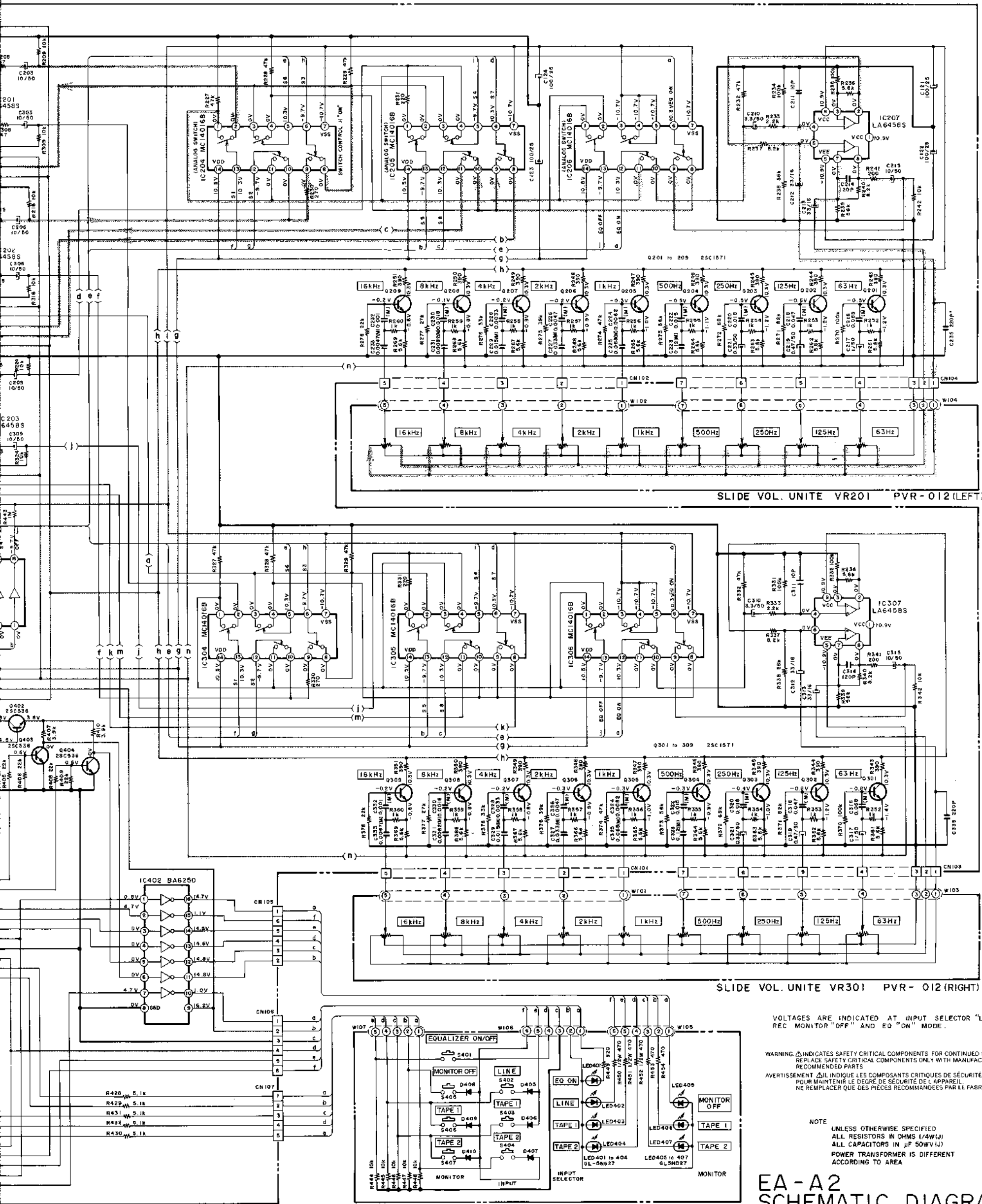
KEY INPUT		ANALOG SW CONTROL (H → ON)							
INPUT SELECTOR	REC MONITOR	S1	S2	S3	S4	S5	S6	S7	S8
LINE	TAPE 1	H	L	L	L	L	L	H	H
ON	ON	H	L	L	L	L	L	H	H
ON	ON	H	L	L	L	L	L	H	H
ON	ON	L	L	L	L	L	L	L	L
ON	ON	L	L	L	L	L	L	L	L
ON	ON	L	L	L	L	L	L	L	L
ON	ON	L	L	L	L	L	L	L	L
ON	ON	L	L	L	L	L	L	L	L
ON	ON	L	L	L	L	L	L	L	L

KEY INPUT	ANALOG SW	S9	S10	S11
EQURLIZER ON	ON	ON	ON	ON
EQURLIZER OFF	OFF	ON	ON	ON

S402 to S404 : INPUT SELECTOR
S405 to S407 : TAPE MONITOR SELECTOR

B (POWER SUPPLY) LINE
 SIGNAL LINE
 SIGNAL LINE IS INDICATED
 LEFT CHANNEL ONLY AT
 INPUT SELECTOR "LINE",
 REC MONITOR "TAPE 1" MODE.





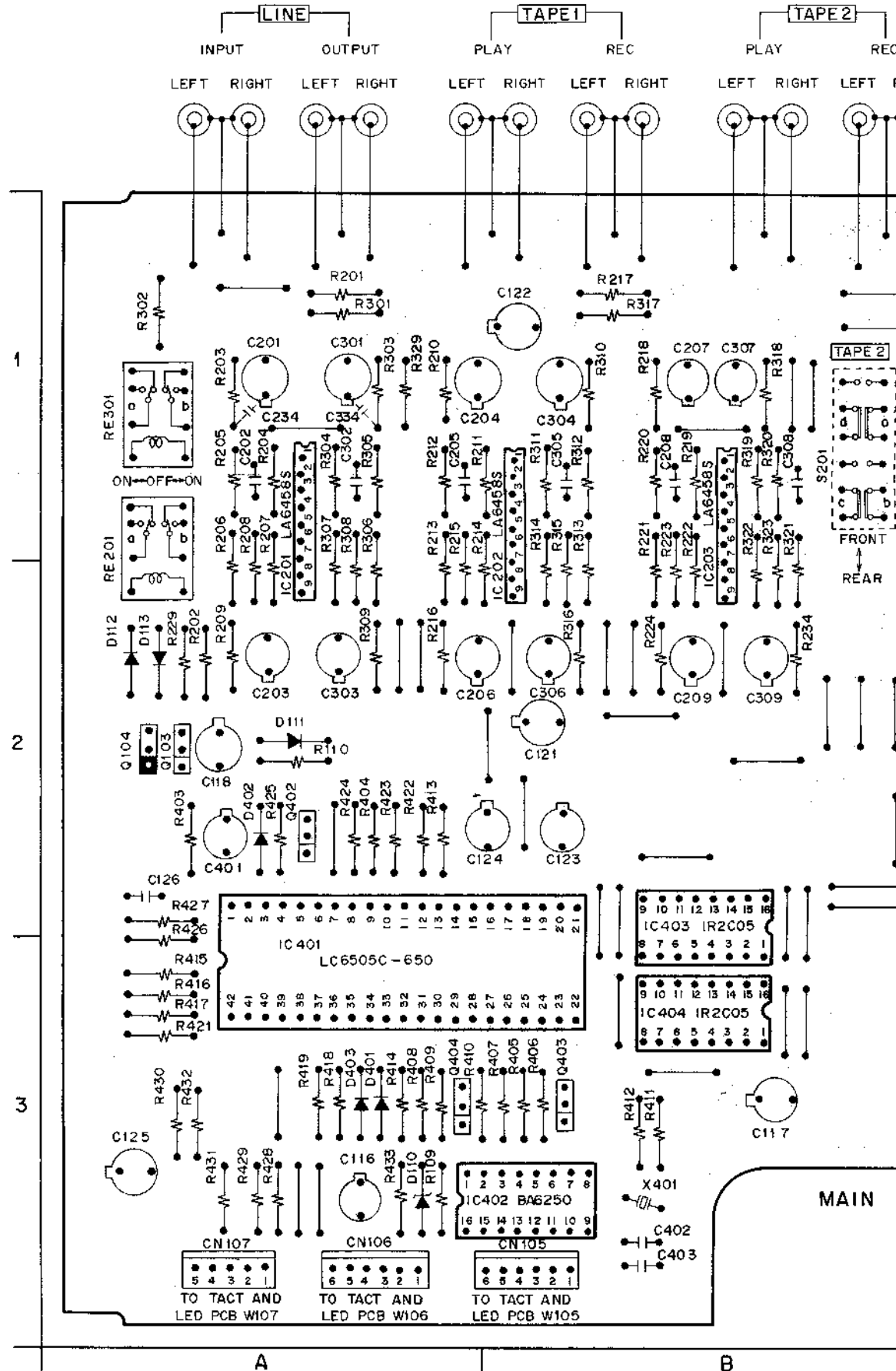
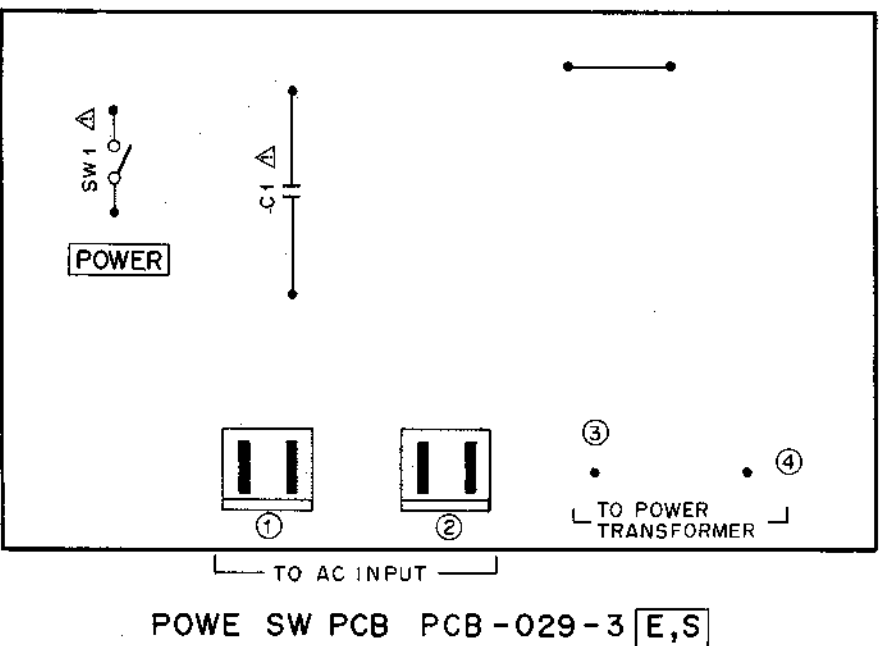
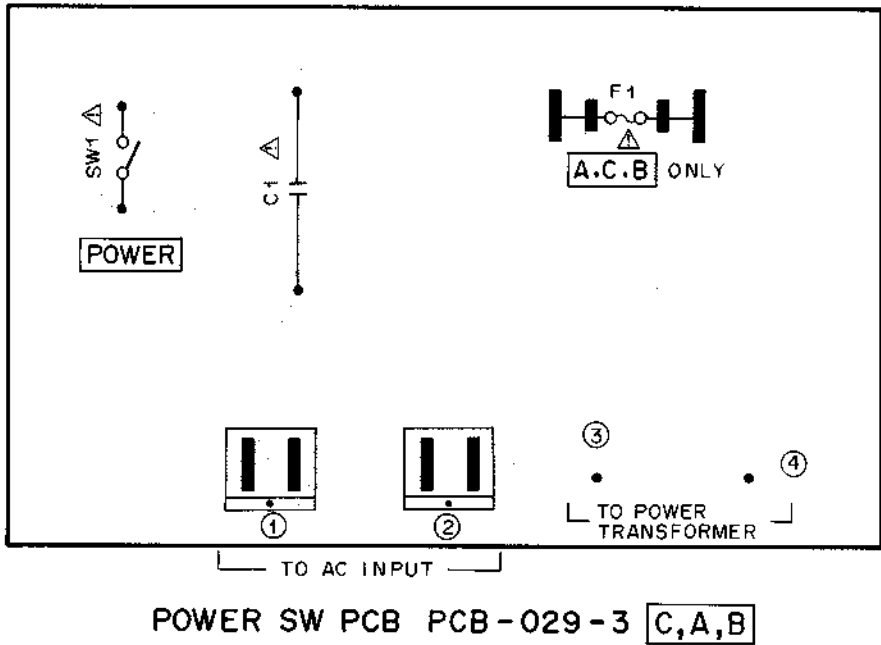
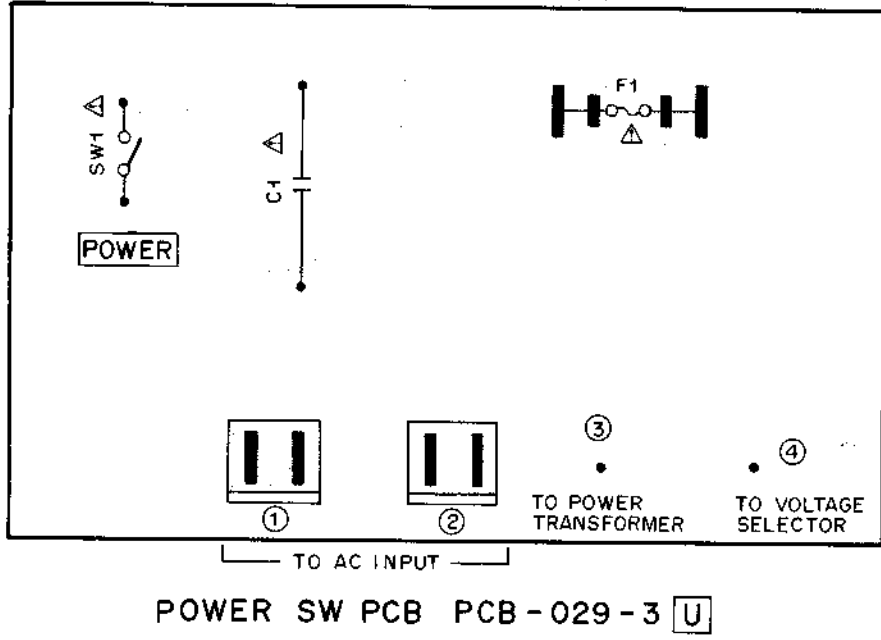
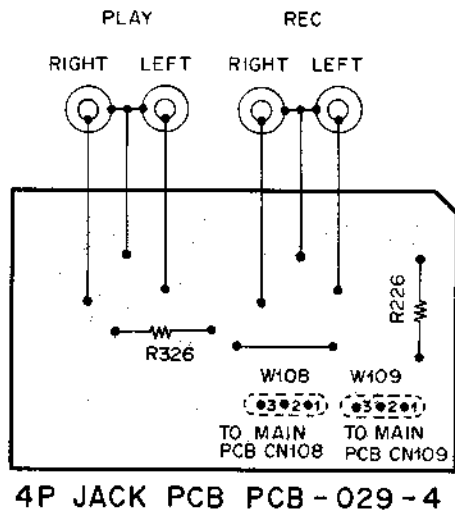
VOLTAGES ARE INDICATED AT INPUT SELECTOR "LINE",
REC MONITOR "OFF" AND EQ "ON" MODE.

WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS.

AVERTISSEMENT: Δ INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS (1/4W/1J)
ALL CAPACITORS IN μ F (50V/1J)
POWER TRANSFORMER IS DIFFERENT
ACCORDING TO AREA

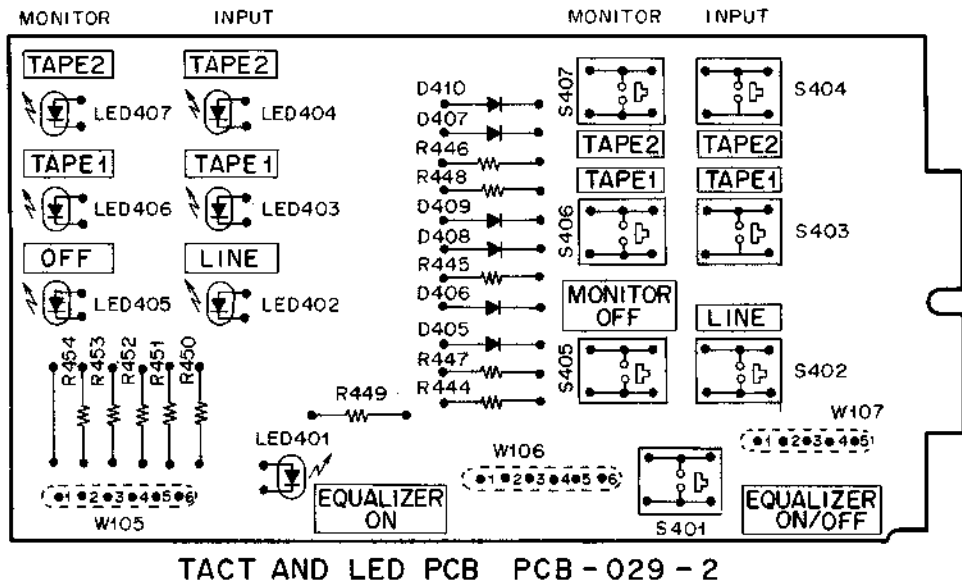
EA-A2
SCHEMATIC DIAGRAM
NO. 840732A



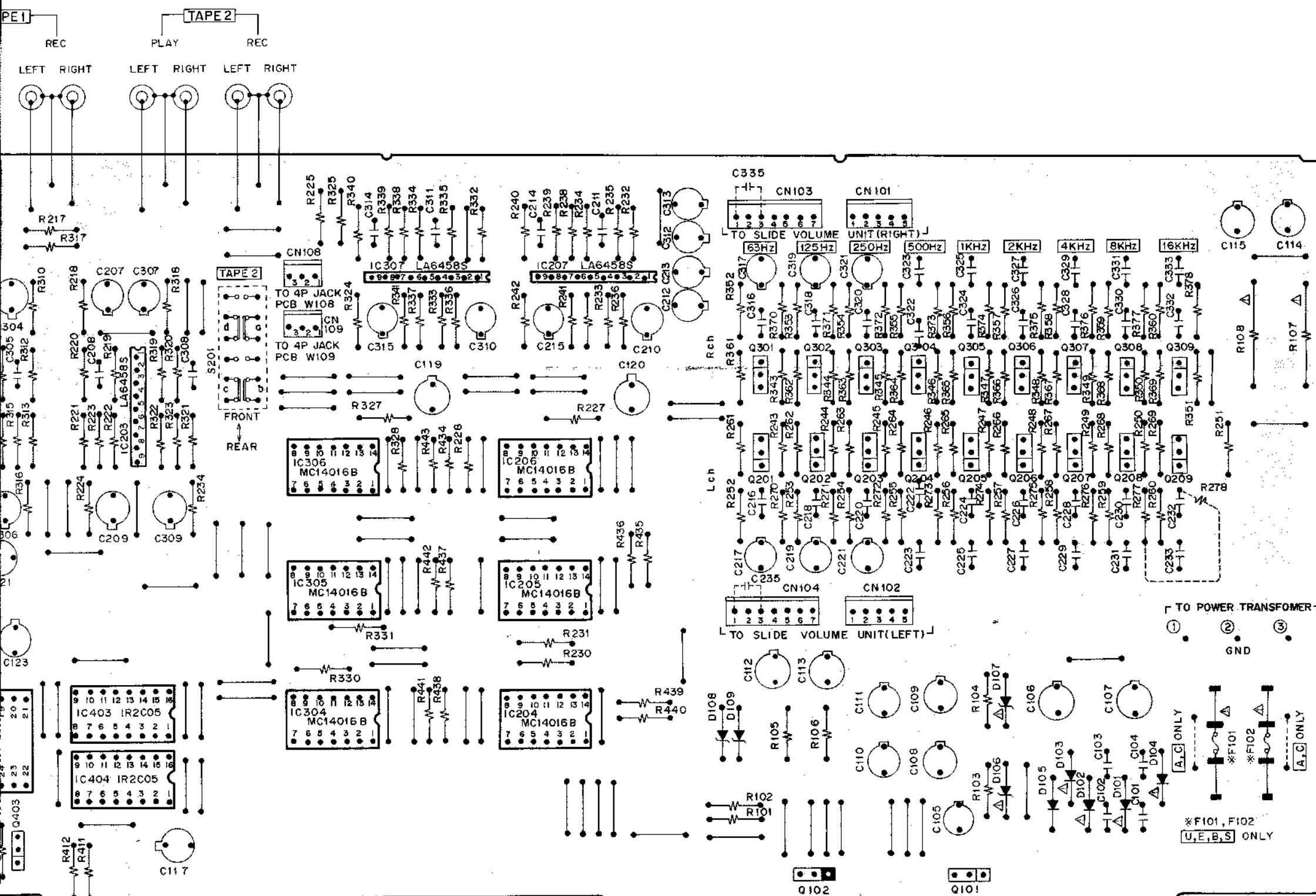
LOCATION OF COMPONENTS

IC	TR	TERMINAL
IC201-----A1	Q101,102----D3	CN101-----D1
IC202,203----B1	Q103,104----A2	CN102-----D2
IC204 to 206--C2	Q201 to 205--D2	CN103-----D1
IC207-----C1	Q206 to 209--E2	CN104-----D2
IC304 to 306--C2	Q301 to 305--D1	CN105-----B3
IC307-----C1	Q306 to 309--E1	CN106,107--A3
IC401-----A3	Q402-----A2	CN108,109--B1
IC402-----B3	Q403-----B3	① to ③-----E2
IC403-----B2	Q404-----A3	
IC404-----A3		

Q101-----25D612K(E,F)
Q102-----25B632K(E,F)
Q103-----25C536NP(D,E)
Q104-----25A608-SP(D)
Q201 to 209--25C1571NP(F)
Q301 to 309--25C1571NP(F)
Q402 to 404--25C536NP(D)

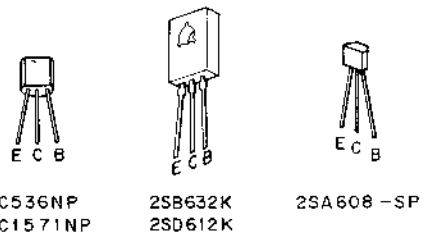


TACT AND LED PCB PCB-029-2



MAIN PCB PCB-029-1

- D1
 - D2
 - D1
 - D2
 - B3
 - A3
 - B1
 - E2
- Q101-----2SD612K (E,F)
 - Q102-----2SB632K (E,F)
 - Q103-----2SC536NP (D,E,F)
 - Q104-----2SA608-SP (D,E,F)
 - Q201 to 209---2SC1571NP (F,G,H)
 - Q301 to 309---2SC1571NP (F,G,H)
 - Q402 to 404---2SC536NP (D,E,F)



WARNING: Δ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

AVERTISSEMENT: Δ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

