

Service Manual

Amplifier

Stereo Integrated Amplifier

**SU-A800****Colour**

(K) Black Type

Areas

Suffix for Model No.	Area	Colour
(E)	Europe	(K)
(EB)	Great Britain	
(EG)	Germany and Italy	
(EO)	Switzerland	
(GC)	Asia, Latin America, Middle Near East and Africa	
(GN)	Oceania	

SPECIFICATIONS (DIN 45 500)

20 Hz~20 kHz continuous power output	
both channels driven	2×55 W (8Ω)
1 kHz continuous power output	
both channels driven (THD: 1%)	2×70 W (8Ω) 2×100 W (4Ω)
63 Hz~12.5 kHz continuous power output	
both channels driven (THD: 0.7%)	2×65 W (8Ω) 2×85 W (4Ω)
Total harmonic distortion	
rated power at 20 Hz~20 kHz	0.01% (8 Ω)
Intermodulation distortion (50 Hz: 7 kHz = 4:1, SMPTE)	
rated power	0.007% (8 Ω)
Residual hum and noise	
Damping factor	1 mV
Headphones output level/impedance	
A or B, BI-WIRING	60 (8 Ω), 30 (4 Ω)
A and B	540 mV/47 Ω
Load impedance	
A or B, BI-WIRING	4 Ω~16 Ω
A and B	8 Ω~16 Ω
Input sensitivity/impedance	
PHONO MM	2.5 mV/47 kΩ
PHONO MC	170 μV/220Ω
TUNER, CD, AUX, TAPE 1, TAPE 2	150 mV/22 kΩ
Phono maximum input voltage (1 kHz, RMS)	
PHONO MM	160 mV (IHF '66)
PHONO MC	12 mV (IHF '66)
S/N (rated power, 4Ω)	
PHONO MM	78 dB (85 dB, IHF '66)
PHONO MC	64 dB (S=250 μV, 66 dB, IHF '66)
TUNER, CD, AUX, TAPE 1, TAPE 2	91 dB (100 dB, IHF '66)
S/N at -26 dB power (4Ω)	
PHONO MM	68 dB
PHONO MC	63 dB
TUNER, CD, AUX, TAPE 1, TAPE 2	70 dB
S/N at 50 mW power (4Ω)	
PHONO MM	64 dB
PHONO MC	60 dB
TUNER, CD, AUX, TAPE 1, TAPE 2	64 dB

Frequency response**PHONO MM**RIAA standard curve ±0.8 dB
(30 Hz~15 kHz)**TUNER, CD, AUX, TAPE 1, TAPE 2**3 Hz~80 kHz (+0, -3 dB)
+0 dB, -0.3 dB (20 Hz~20 kHz)**Tone controls****BASS**

50 Hz, +10~ -10 dB

TREBLE

20 kHz, +10~ -10 dB

Output voltage**TAPE 1, TAPE 2, REC OUT**

150 mV

Channel balance (AUX 250 Hz~6.3 kHz)

±1 dB

Channel separation (AUX 1 kHz)

50 dB

■ GENERAL**Power consumption**

230 W

Power supply

AC 50 Hz/60 Hz, 230 V

For (E) area

AC 50 Hz/60 Hz, 230 V~240 V

For (EG), (EB), (EO), (GN) areas

AC 50 Hz/60 Hz, 230 V~240 V

For (GC) area

AC 50 Hz/60 Hz, 110 V~127 V/220 V~240 V

Dimensions (W × H × D)

430×136×365 mm

Weight

8.6 kg

Notes:

1. Specifications are subject to change without notice.
Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

Technics

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■ BEFORE REPAIR

- (1) Turn off the power supply. Using a 10Ω, 10 W resistor, connect both ends of power supply capacitors (C701, C702) in order to discharge the voltage.
- (2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50/60 Hz in NO SIGNAL mode is mode should be shown below with respect to supply voltage 230 V/240 V.

Power supply voltage	AC 230 V	AC 240 V	AC 110~127 V	AC 220~240 V
Consumed current 50 Hz	60~350 mA	50~340 mA	100~550 mA	50~340 mA

■ PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is switched ON.
- Sound stops during a performance.

The functions of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined below:

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

For areas except (E) (EB) (EG) (EO) (GN)

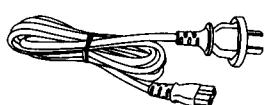
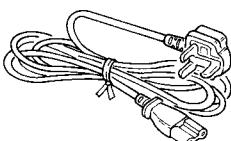
CAUTION:

**The AC voltage differs according to the area.
Be sure to set the proper voltage in your area before use.
(For details, please refer to page 6.)**

■ ACCESSORIES

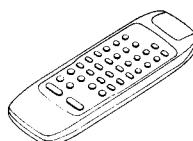
Check the packing carton for these accessories.

- AC power supply cord
- 1
- (VJA0733) For (EB) area (RJA0036-K) For (GN) area



(RJA0019-2K) For (E), (EG), (EO) and (GC) areas

- Remote control transmitter (EUR642210)
- 1



- Batteries
- 2
- UM-4 (AAA, R03)

Note: These are available on sale route.



- Power plug adaptor
- 1
- (SJP5213-2) For (GC) area



■ CAUTION FOR AC MAINS LEAD

(“EB” area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

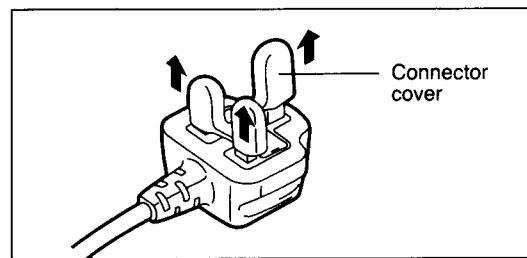
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol .

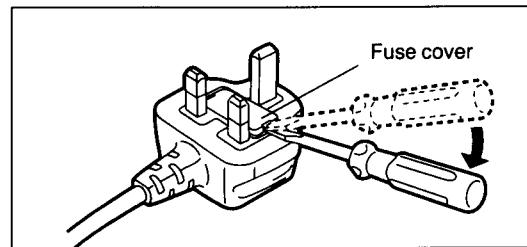
Before use

Remove the connector cover as follows.

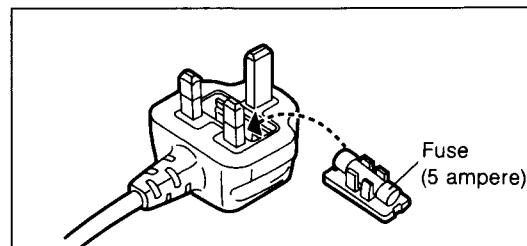


How to replace the fuse

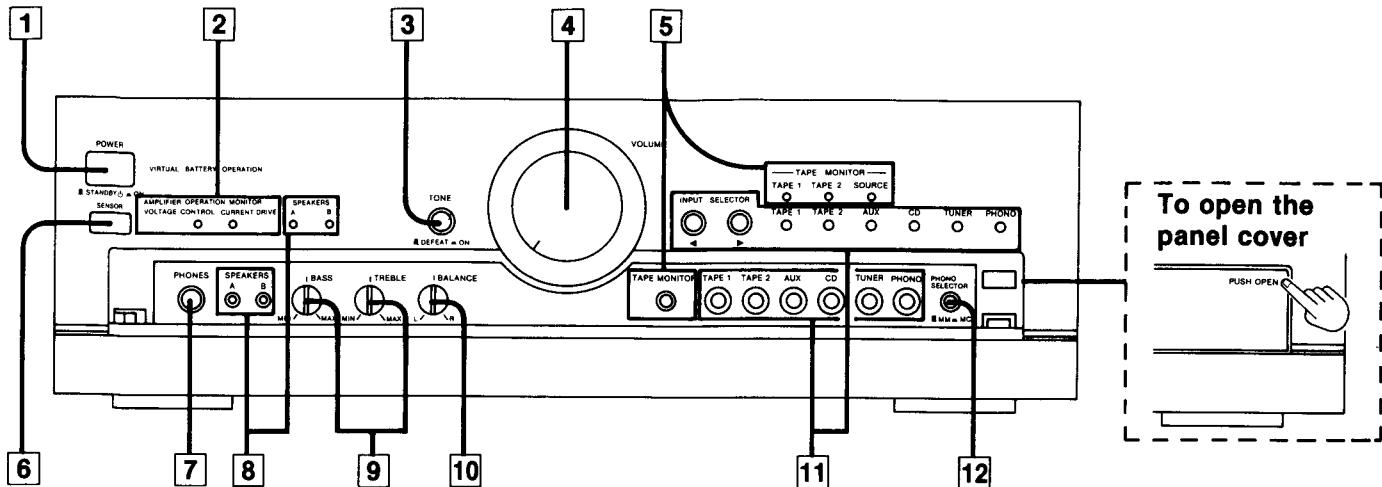
1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



■ LOCATION OF CONTROLS



1 Power "STANDBY /ON" switch (POWER, ■ STANDBY □ ON)

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

2 Operation indicators (AMPLIFIER OPERATION MONITOR)

These indicators illuminate to indicate the operating condition of this unit.

VOLTAGE CONTROL:

When the power is switched ON, this indicator illuminates when the unit is in the operating condition.

CURRENT DRIVE:

When the power is switched ON, this indicator illuminates after about 4 seconds when the unit is in the operating condition.

If an abnormal condition in the circuitry is detected, such as DC voltage appearing in the output or a short-circuit of the positive (+) and negative (-) wires from the speaker terminals, the protection circuit functions and this indicator will not illuminate.

3 Tone control button (TONE)

This switch is used to set the tone control circuit (bass, treble) to ON or DEFEAT.

4 Volume control (VOLUME)

5 Tape-monitor button/indicators (TAPE MONITOR)

This button is used to monitor the recorded sound during recording.

TAPE 1

Set to this position to monitor the sound from the equipment connected to the "TAPE 1" terminals.

TAPE 2

Set to this position to monitor the sound from the equipment connected to the "TAPE 2" terminals.

SOURCE

Set to this position to listen to a phono disc, radio broadcast, compact disc, etc.

6 Remote control signal receptor (SENSOR)

Receives the signals from the remote control.

7 Headphones jack (PHONES) (Ø6, 47Ω)

8 Speaker select buttons/indicators (SPEAKERS)

These select buttons are used to select the speakers to be used.

9 Tone controls (BASS/TREBLE)

The bass control is used to adjust the low-frequency sound range, and the treble control is used to adjust the high-frequency sound range.

10 Balance control (BALANCE)

This control is used to adjust the left/right volume balance.

11 Input selectors/indicators (INPUT SELECTOR)

These selectors are used to select the sound source to be heard, such as a disc, radio broadcast, etc.

The input source can be selected either by sequentially changing the selection or by direct selection.

12 Phono cartridge selector (PHONO SELECTOR)

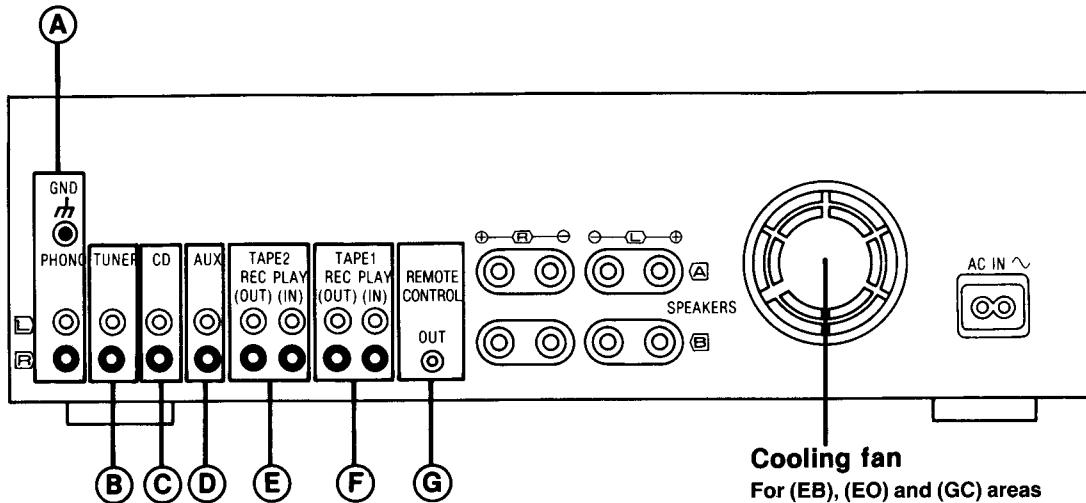
This selector should be set to the position which corresponds to the type of cartridge used on the turntable.

■ CONNECTIONS

To connect to each terminal

Make connections to each component in the system by using stereo connection cables (not included).

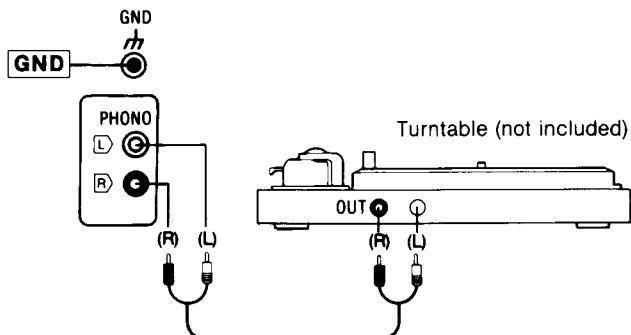
Stereo connection cable



•Phono input capacitance is about 470 pF.

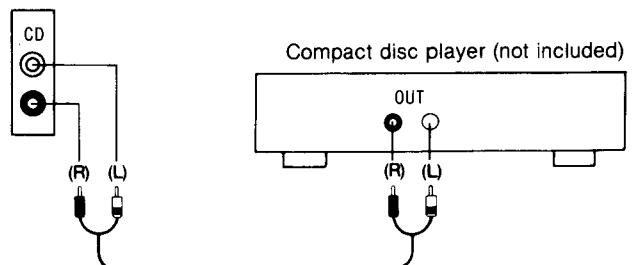
(A) "PHONO" terminals

Connect to a turntable.



(C) "CD" terminals

Connect to a compact disc player.

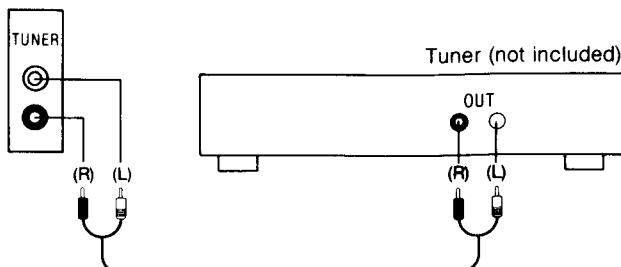


■ "GND" terminal

This terminal is for use with a turntable which has a ground wire.

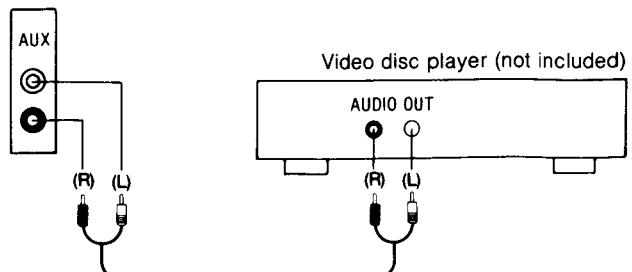
(B) "TUNER" terminals

Connect to a tuner.



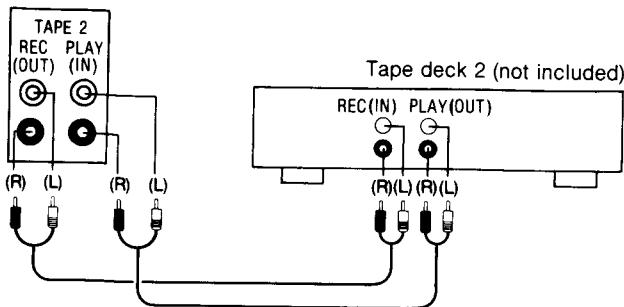
(D) "AUX" terminals

Connect to a component such as a video disc player (audio only connectable), etc.

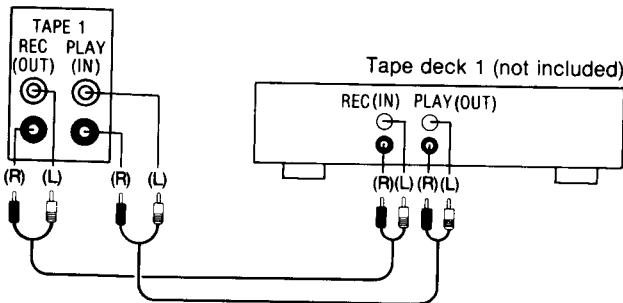


E "TAPE 2" terminals

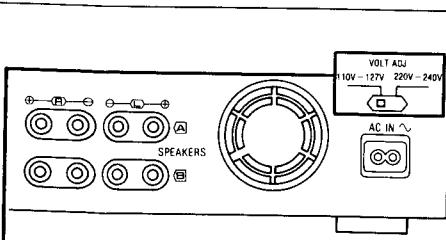
Connect to a second tape deck (Tape deck 2) or a graphic equalizer, etc.

**F "TAPE 1" terminals**

Connect to a first tape deck (Tape deck 1) or a digital compact cassette deck (DCC), etc.

**To set the power voltage**

For areas except (E), (EB), (EG), (EO) and (GN)



Set the voltage selector to "110 V-127 V" or "220 V-240 V" according to the area in which the unit will be used.
[Use a minus (-) screwdriver]

Note:

Note that this unit will be seriously damaged if this setting is not made correctly.

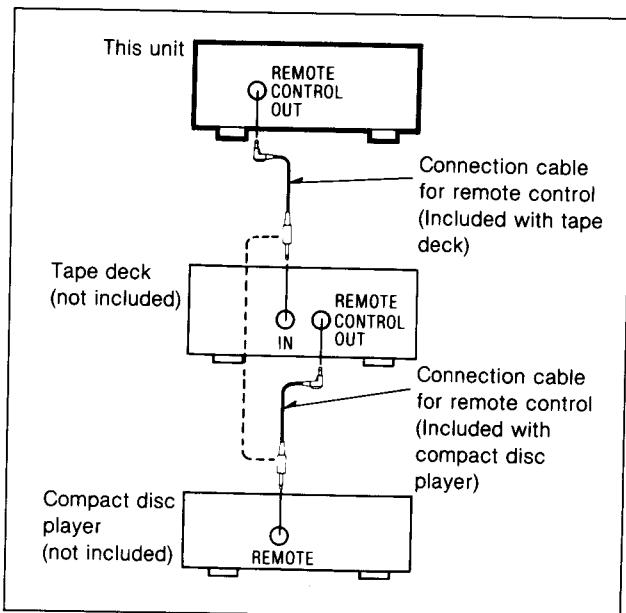
G "REMOTE CONTROL OUT" terminal

This terminal can be used only with Technics tape deck and compact disc player which have the appropriate remote control terminal. (Consult your dealer for details.)

Proper connection with remote control connection cables will allow control of some functions from this unit's remote control transmitter.

Connect to a tape deck and/or compact disc player as shown below.

If a tape deck is not being used, the compact disc player can be connected directly (dotted line).

**Note:**

For a compact disc player with a remote control sensor, the above connection is not necessary.

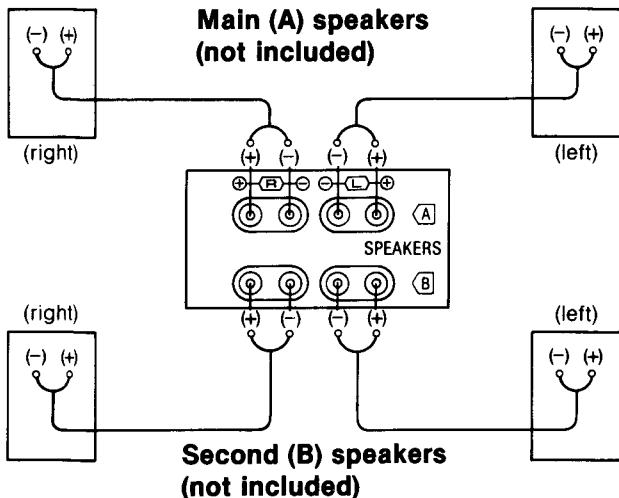
About the cooling fan**There is no cooling fan for some countries.**

The cooling fan operates at high power output levels only.

To connect to speakers

One pair of speakers can be connected to the "A" terminals of this unit and one pair to the "B" terminals, or only one pair of bi-wired speakers can be connected to all terminals.

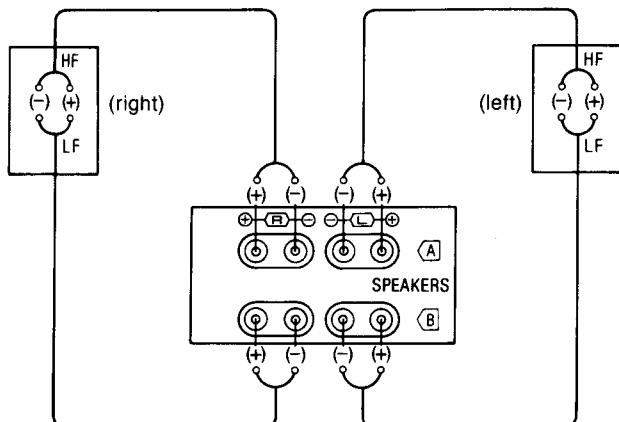
To connect main and/or second speakers



Load impedance

- When only the "A" or only the "B" terminals are used: 4–16 ohms
- When both the "A" and the "B" terminals are used simultaneously: 8–16 ohms

To connect bi-wired speakers (not included)



Note: Connect only bi-wired speakers in this way.

Load impedance

When bi-wired speakers are used: 4–16 ohms

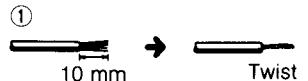
Bi-wiring

The treble range and the bass range of the speakers are connected to the speaker terminals of the amplifier by using two speaker connection cords separately for each.

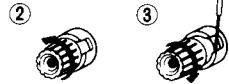
As a result of making connections in this way, sound can be reproduced with much greater nuance and detail, with the feelings of air oscillation and deepness of sound provided by an input source that suppresses reciprocal band-range interference.
(Refer to the operating instructions of the speakers.)

To connect cords to terminals

- Strip off the outer covering, and twist the center conductor.



- Turn completely to the left.

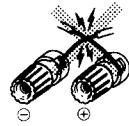


- Insert the wire and turn completely to the right. Pull the cord to assure a proper connection.

Note: Be sure to only connect positive (+) cords to positive (+) terminals, and negative (-) cords to negative (-) terminals.

Note:

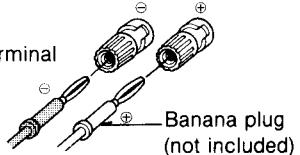
To prevent damage to circuitry, never short-circuit the positive (+) and negative (-) speaker wires.



For (EB) area only

When using banana plugs

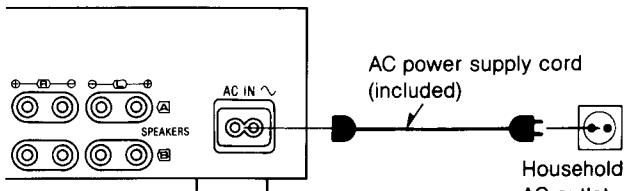
Use with the speaker terminal knob tightened completely.



To connect the AC power supply cord (included)

FOR UNITED KINGDOM ONLY
BE SURE TO READ THE CAUTION FOR THE
AC POWER SUPPLY CORD ON PAGE 3
BEFORE CONNECTING THE AC POWER
SUPPLY CORD.

Connect the AC power supply cord (included) after all other cables and cords are connected.



[For areas except (GN)]

Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.

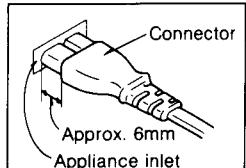
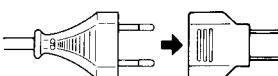
However there is no problem using the unit.

Note:

The configuration of the AC power supply cord differs according to area.

Not supplied for (E), (EB), (EG), (EO) and (GN) areas

If the power plug will not fit your socket, use the power plug adaptor (included).



■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the cabinet	Ref. No. 2	Removal of the front panel ass'y
Procedure 1	<p>• Remove the 6 screws (①~⑥).</p>	Procedure 1→2	<p>1. Remove the 3 screws (①~③). 2. Pull the front panel ass'y in both directions of arrow ① to unlock it from the projection of the bottom chassis. 3. Remove the front panel ass'y in the direction of arrow ②.</p>
Ref. No. 3	Removal of the volume P.C.B.	Ref. No. 4	Removal of the operation P.C.B.
Procedure 1→2→3	<p>1. Pull out the volume knob. 2. Remove the nut. 3. Release the claw and then remove the volume P.C.B. in the direction of arrow.</p>	Procedure 1→2→3→4	<p>1. Remove the 6 screws (①~⑥). 2. Remove the operation P.C.B. in the direction of arrow.</p>
Ref. No. 5	Removal of the tone amp P.C.B.		
Procedure 1→2→3→5	<p>※ Removal of the knob • Stick the cellophane tape to the end of knob as shown bellow and pull out the knob in the direction of arrow.</p> <p>Knob Operation door</p> <p>1. Open the operation door. 2. Remove the 3 knobs.</p>		<p>Tone amp P.C.B.</p> <p>3. Remove the 10 screws (①~⑩). 4. Remove the tone amp P.C.B. in the direction of arrow.</p>

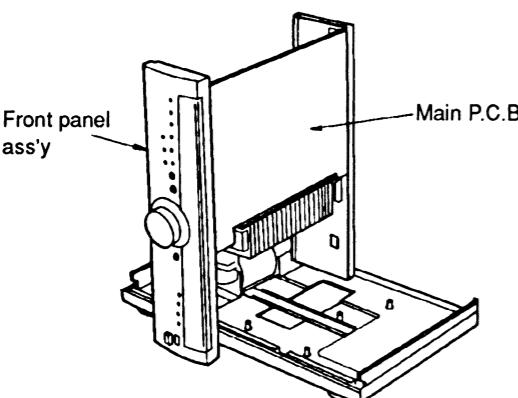
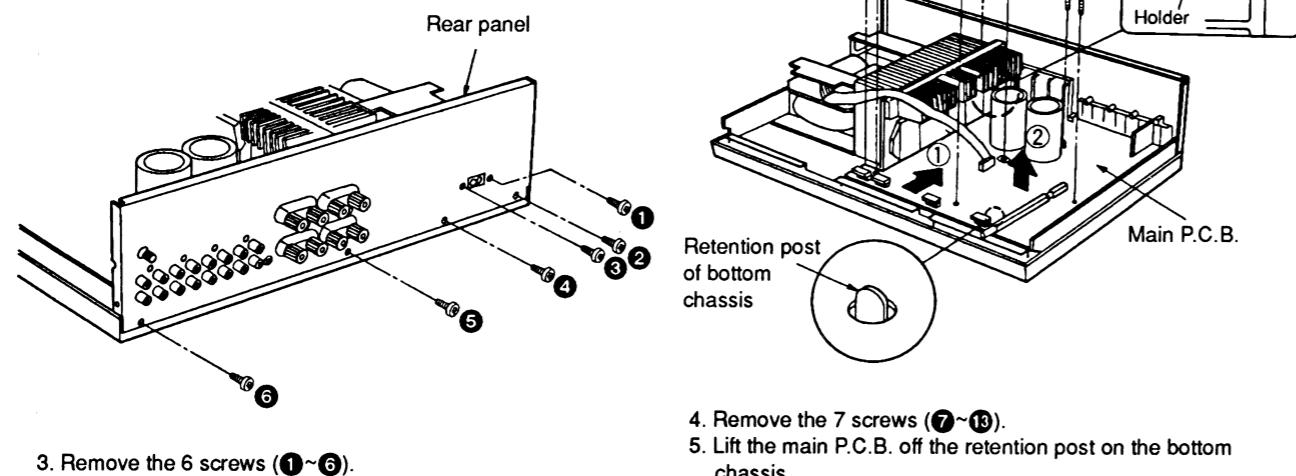
Ref. No. 6	Removal of the switch P.C.B.	Ref. No. 7	Removal of the power switch P.C.B. and headphones jack P.C.B.	
Procedure 1→2→3→4→6			<p>Power switch P.C.B.</p> <p>■ Removal of the power switch P.C.B. • Remove the power switch P.C.B. in the direction of arrow ①.</p> <p>■ Removal of the headphones jack P.C.B. • Remove the headphones jack P.C.B. in the direction of arrow ②.</p>	
<p>• Remove the 5 screws (①~⑤).</p>				
Ref. No. 8 Removal of the operation door Procedure 1→2→8 <p>1. Open the operation door. 2. Remove the 2 screws (①, ②). 3. Remove the operation door in the direction of arrow. 4. Remove the door holder (L) and the door holder (R).</p>				
Ref. No. 9 Removal of the door stopper Procedure 1→2→3→4→9 <p>• Release the 2 claws.</p>			Ref. No. 10 Removal of the rear panel Procedure 1→10 <p>1. Remove the 12 screws (①~⑫). 2. Pull the rear panel in both directions of arrow ① to unlock it from the projection of the bottom chassis. 3. Remove the rear panel in the direction of arrow ②.</p>	

Ref. No. 11	Removal of the power transformer P.C.B. (1) and (2)
Procedure 1→11	<p>■ Removal of the power transformer P.C.B. (1) 1. Remove the 1 connector (CN702). 2. Straighten the 2 pins with pliers or any similar tools. 3. Pull out the power transformer P.C.B. (1) in the direction of arrow ①.</p> <p>■ Removal of the power transformer P.C.B. (2) 1. Straighten the 2 pins with pliers or any similar tools. 2. Pull out the power transformer P.C.B. (2) in the direction of arrow ②.</p>
Ref. No. 12 Removal of the power transformer Procedure 1→11→12	<p>• Remove the 4 screws (①~④).</p>
Ref. No. 13 Removal of the power supply P.C.B. Procedure 1→13	
	<p>• Remove the 3 screws (①~③).</p>
Ref. No. 14 Removal of the main P.C.B. Procedure 1→2→10→14	
	<p>1. Remove the 7 screws (①~⑦). 2. Remove the 1 connector (CN702).</p>
	<p>3. Lift the main P.C.B. off the retention post on the bottom chassis. 4. Release the hook by sliding the main P.C.B. in the direction of arrow ①. 5. Remove the main P.C.B. in the direction of arrow ②.</p>

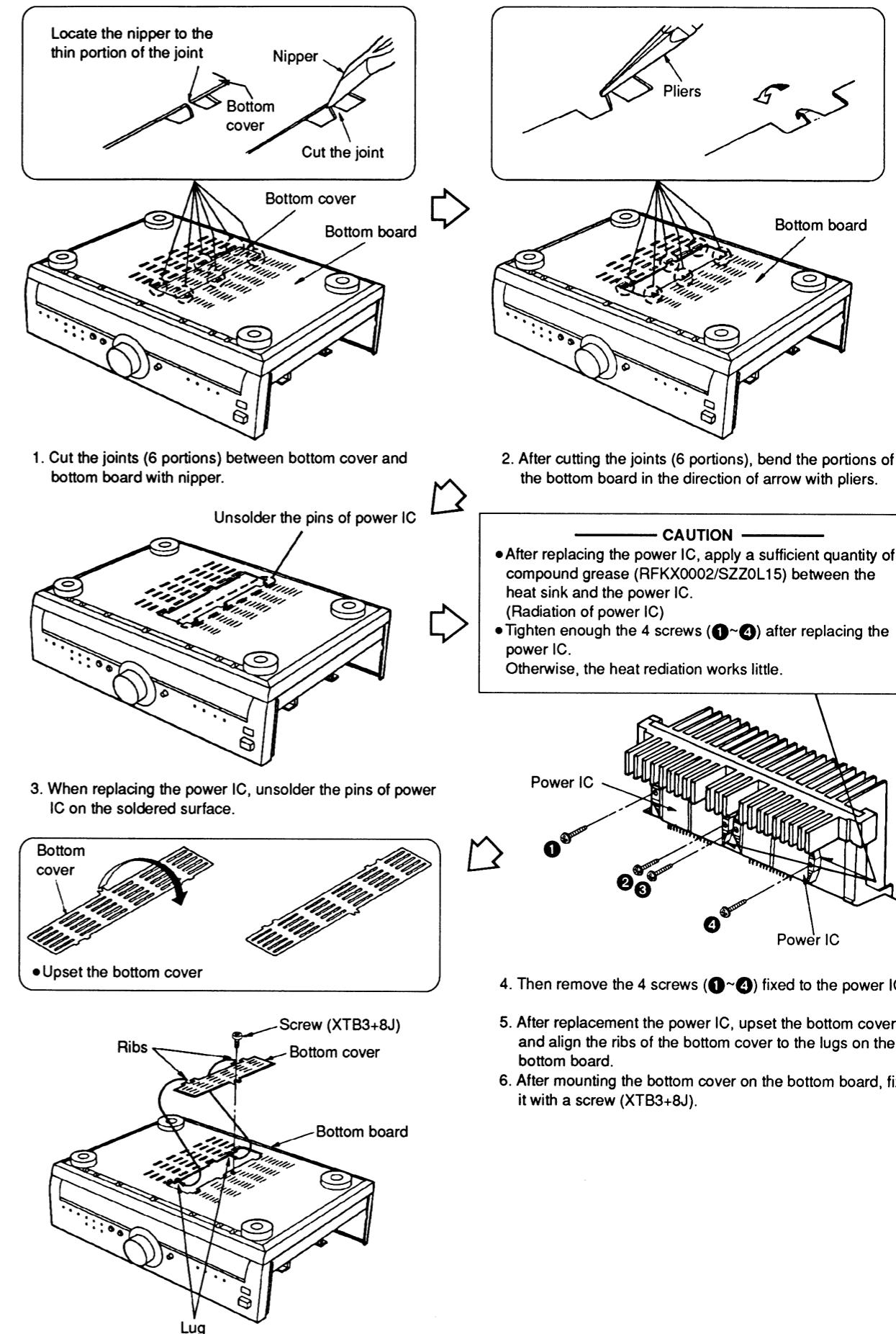
Ref. No. 15	Removal of the rubber base, bottom board and foots	Ref. No. 16	Removal of the fan motor		
Procedure 1→2→10→11→12 →13→14→15			Procedure 1→16		
<p>• Remove the 9 screws (1~9).</p>			<p>1. Remove the 1 connector (CN601). 2. Release the 3 claws.</p>		

■ HOW TO CHECK THE MAIN P.C.B.

1. Remove the cabinet (see Ref. No. 1 of the disassembly instructions).
2. Remove the front panel ass'y (see Ref. No. 2 of the disassembly instructions).



■ HOW TO REPLACE THE POWER IC



SCHEMATIC DIAGRAM (Parts list on pages 28, 29, 33 and 34)

Notes:

- S1 Power "STANDBY ON" switch in "on" position. (POWER, ■ STANDBY □ ON)
- S2 Voltage select switch in "220-240 V" position. (VOLT ADJ) for (GC) area
- S103 Phono cartridge select switch in "MC" position. (PHONO SELECTOR)
- S204 Tone control switch in "on" position. (TONE)
- S801 Tape-monitor switch. (TAPE MONITOR)
- S802 Input selectors switch. (TAPE 1)
- S803 Input selectors switch. (TAPE 2)
- S804 Input selectors switch. (AUX)
- S805 Input selectors switch. (CD)
- S806 Input selectors switch. (TUNER)
- S807 Input selectors switch. (PHONO)
- S808 Input selector switch. (◀)
- S809 Input selector switch. (▶)
- S810 Speaker select switch. (SPEAKERS A)
- S811 Speaker select switch. (SPEAKERS B)

Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

No mark: Power ON

Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

This schematic diagram may be modified at any time with the development of new technology.

Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

Put a conductive mat on the work table.

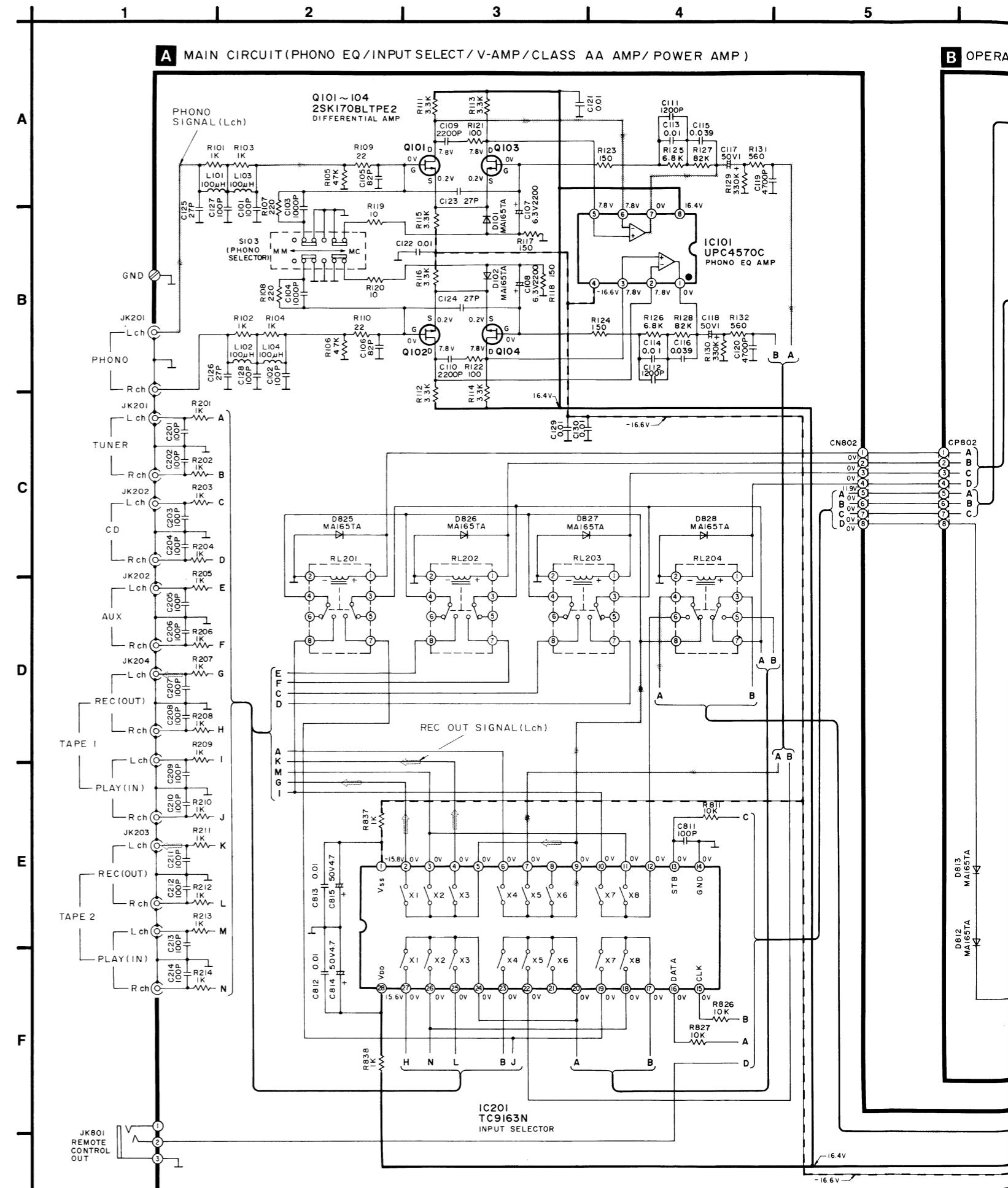
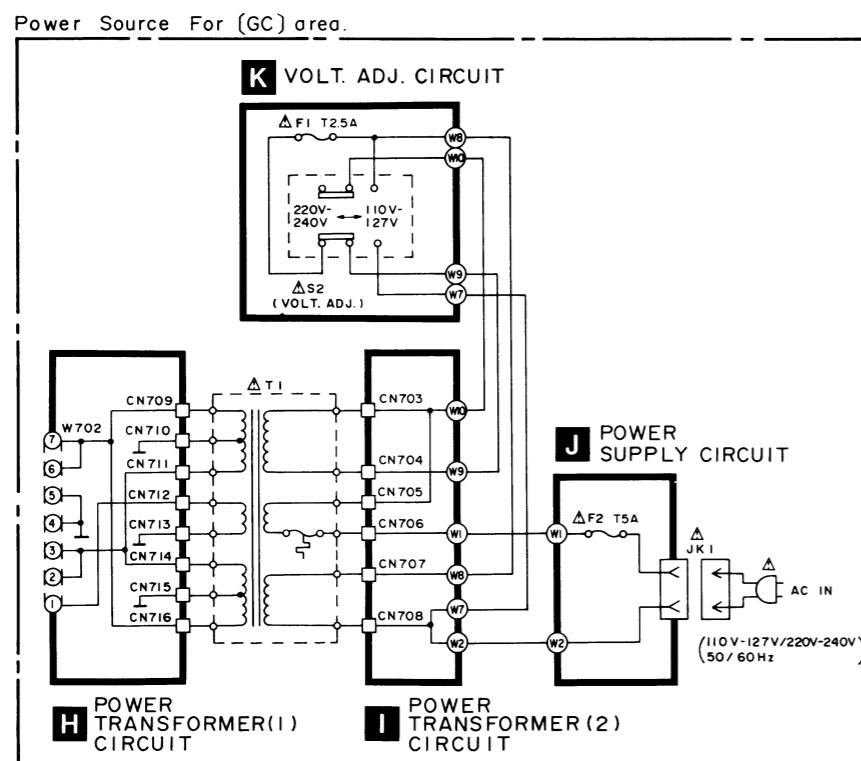
Do not touch the legs of IC or LSI with the fingers directly.

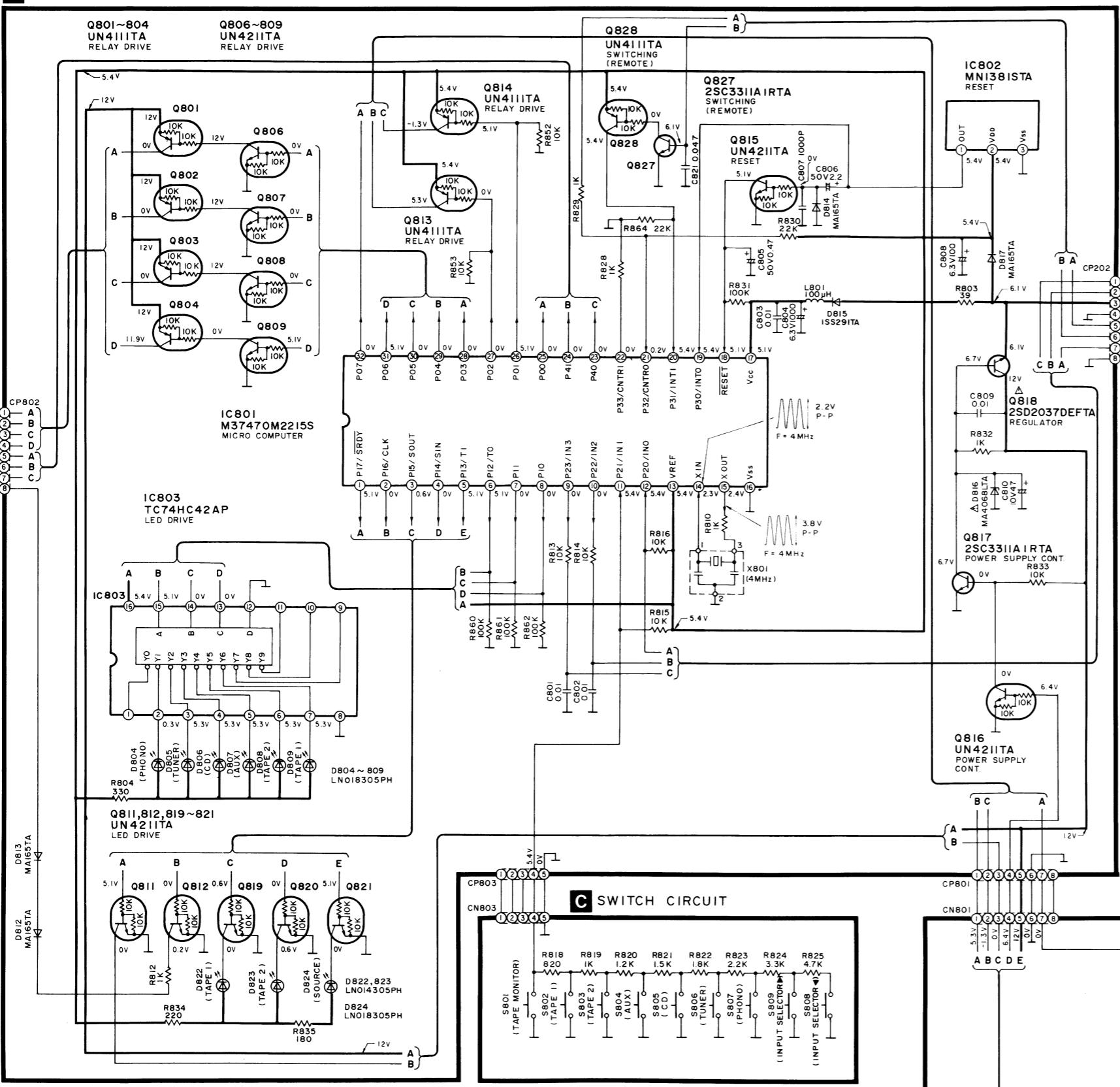
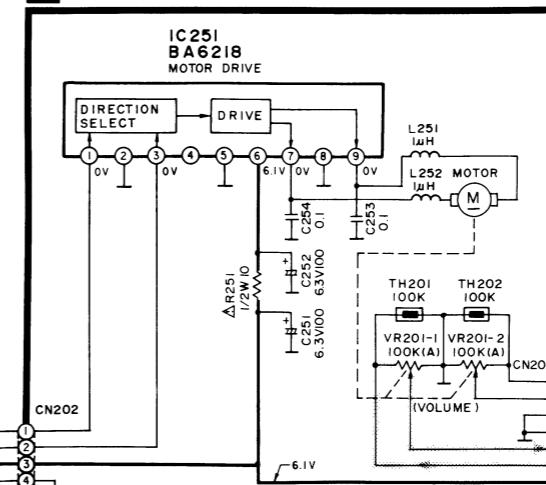
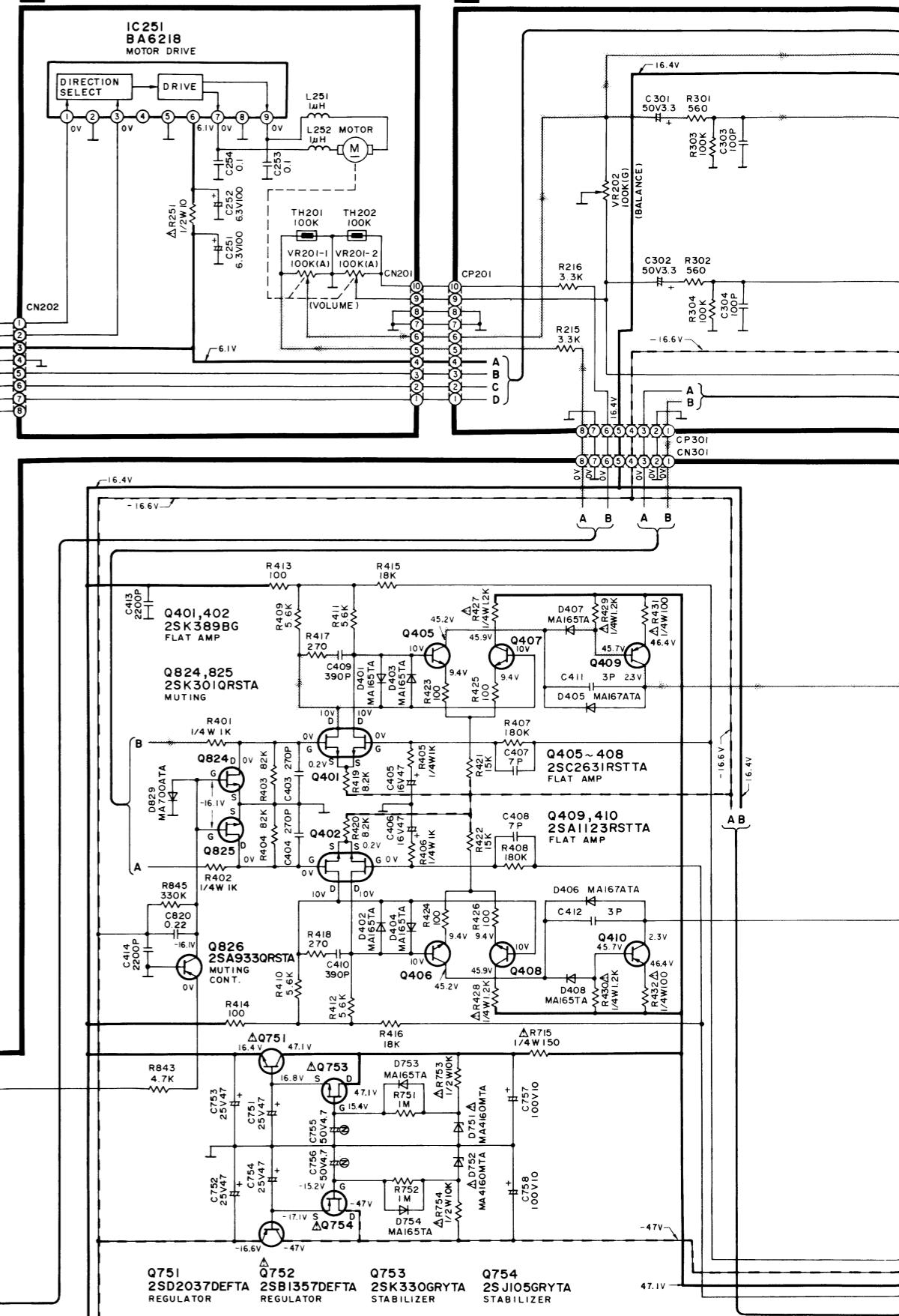
Voltage and signal line

- Positive voltage line.
- - - Negative voltage line.
- Phono signal line.
- Recording output signal line.

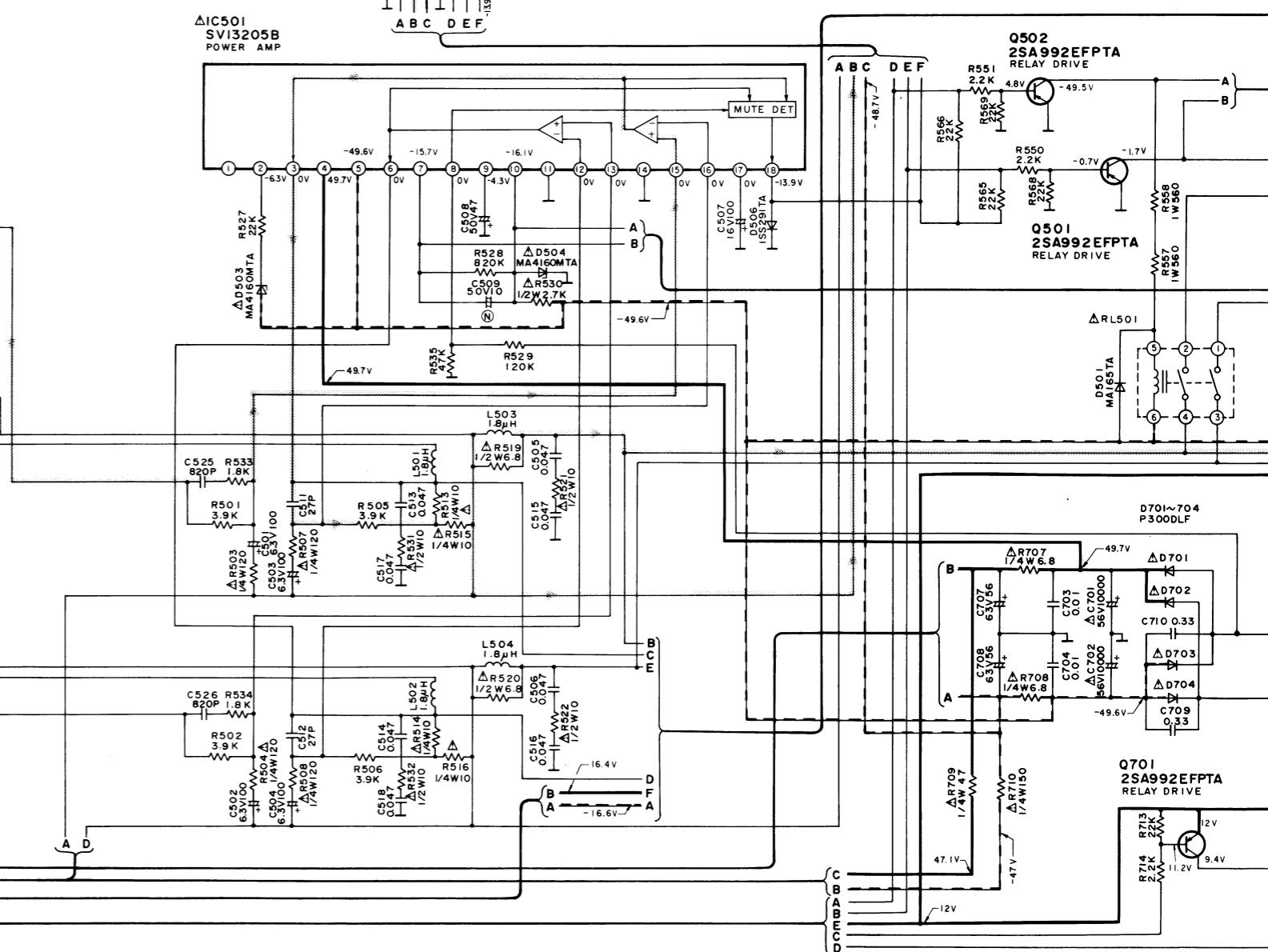
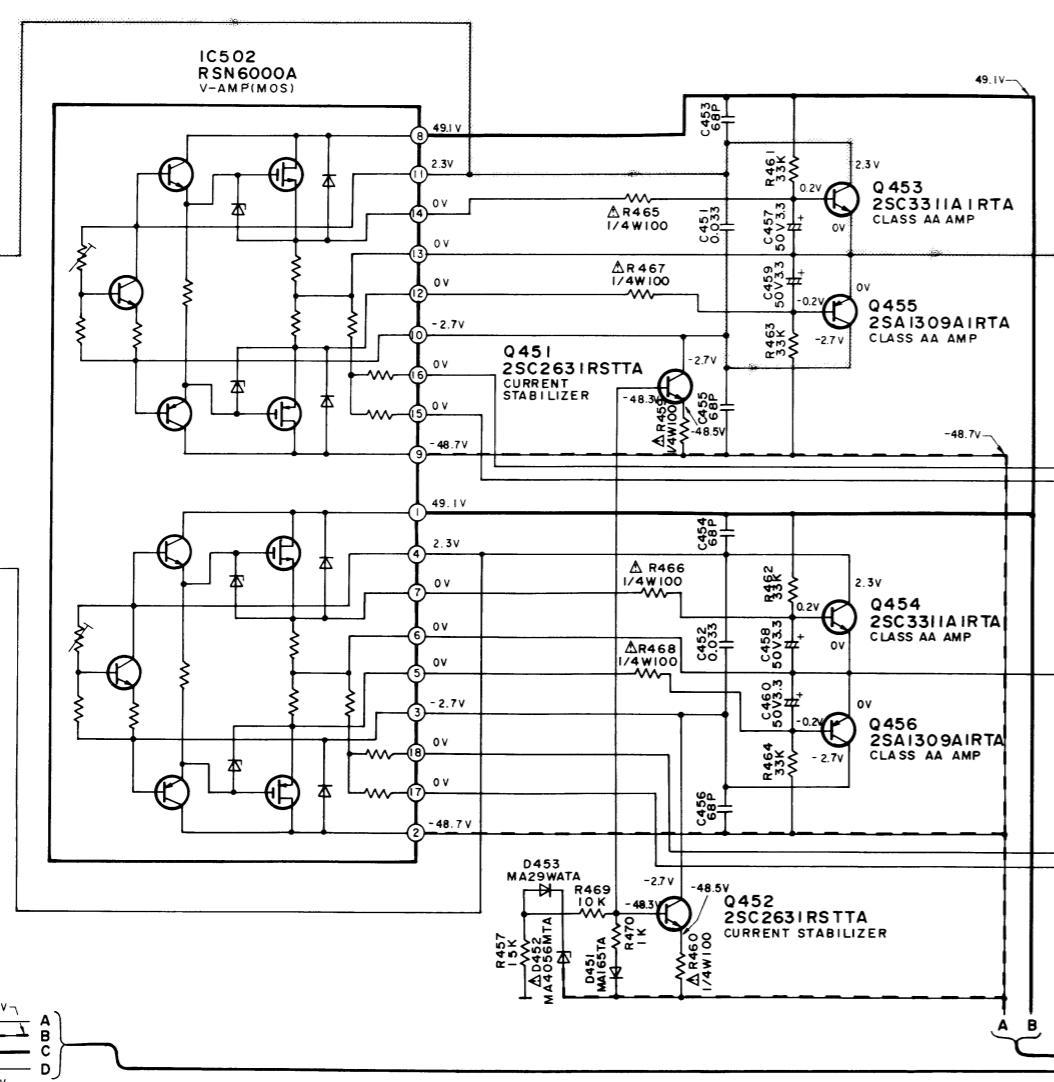
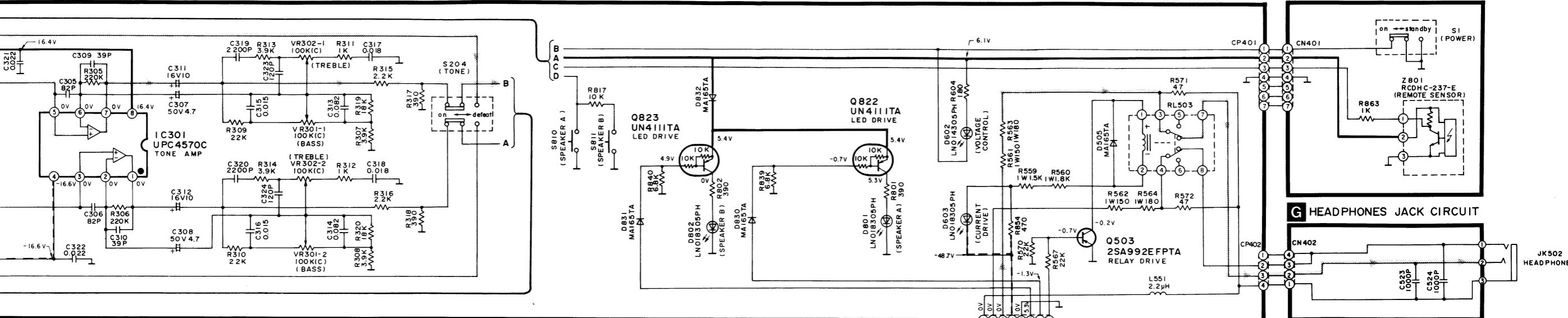
The supply part number is described alone in the replacement parts list.

Part No.	Production Part No.	Supply Part No.
Z801	RCDHC-237-E	RCDHC-237

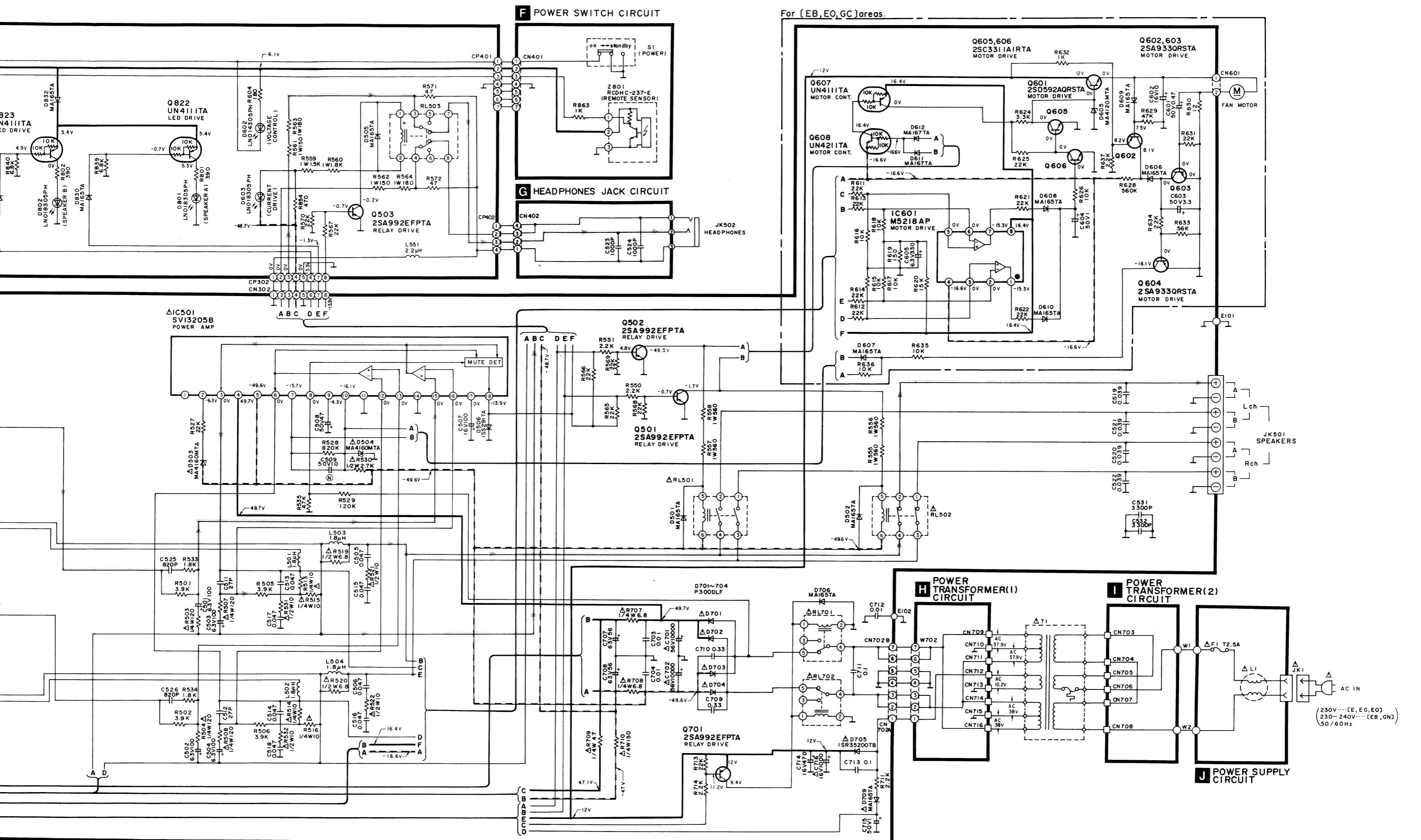


B OPERATION CIRCUIT**D VOLUME CIRCUIT****E TONE AMP CIRCUIT**

F POWER SWITCH CIRCUIT



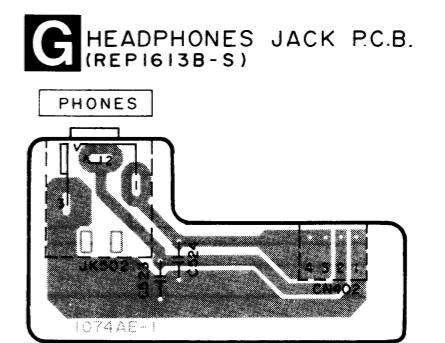
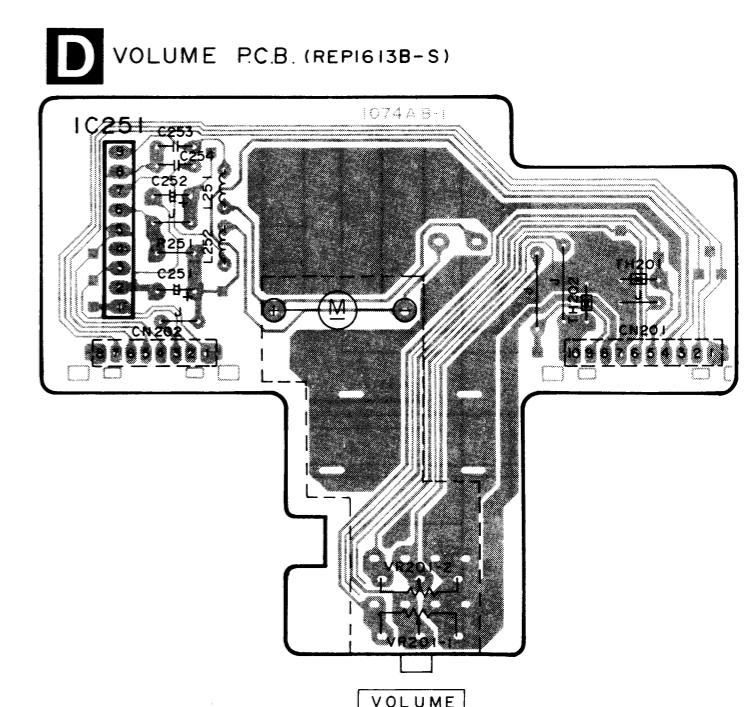
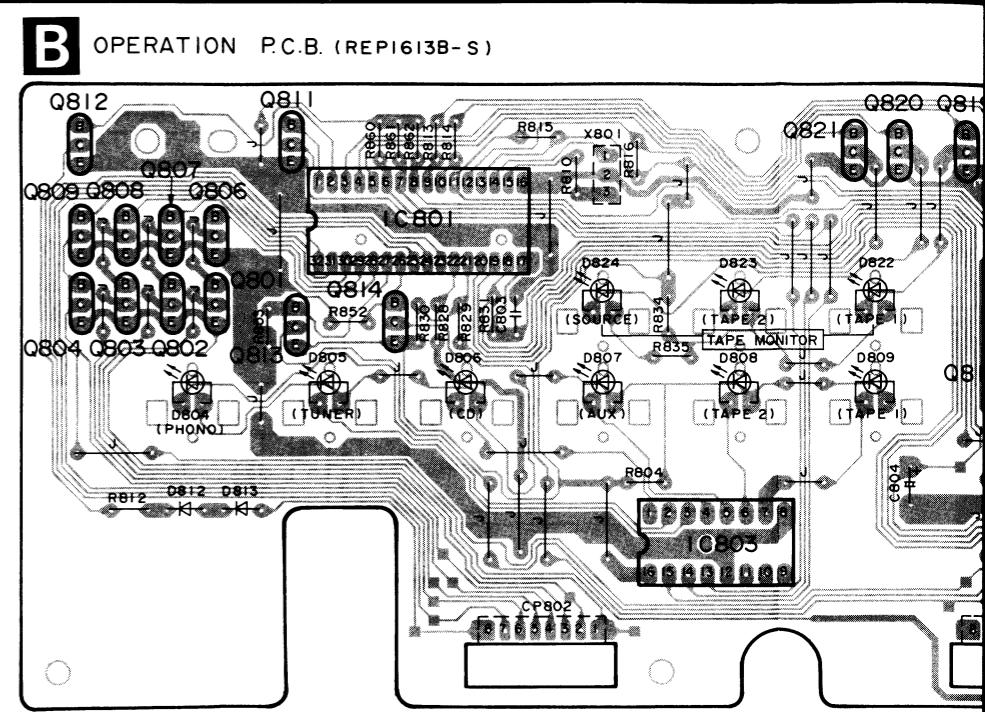
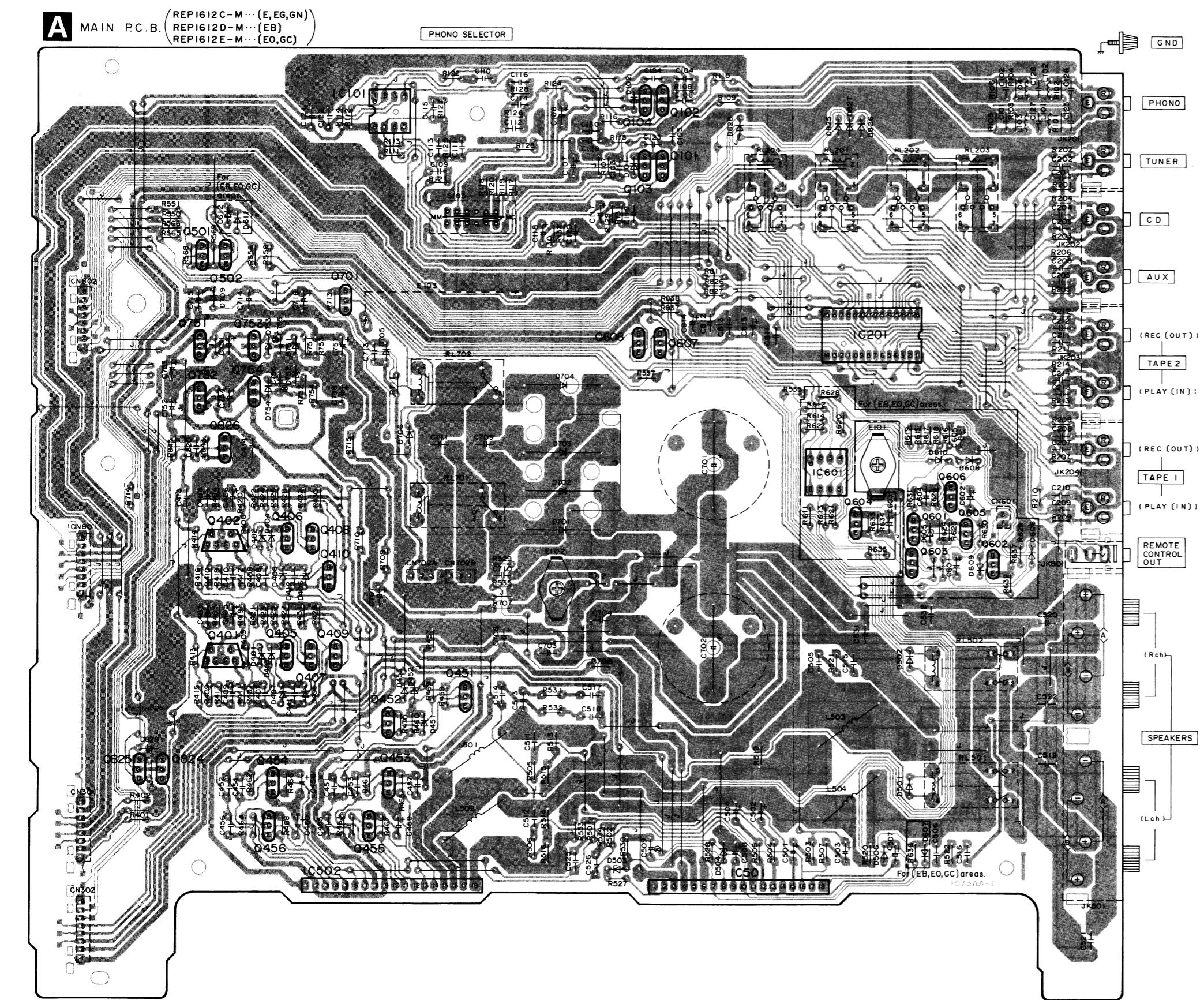
21 _____ **22** _____ **23** _____ **24** _____ **25** _____ **26** _____ **27** _____ **28** _____ **29** _____ **30** _____



■ PRINTED CIRCUIT BOARD DIAGRAM

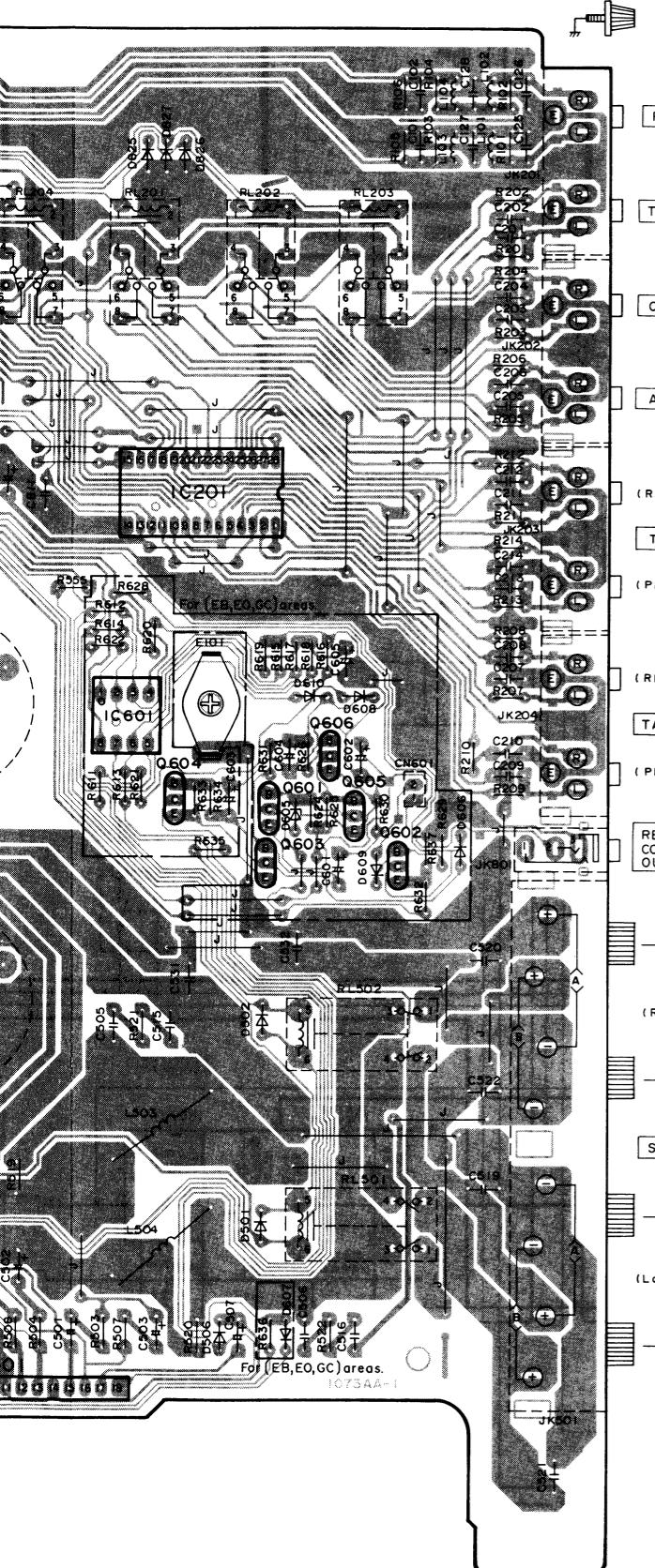
1 2 3 4 5 6 7 8 9

- This circuit board diagram may be modified at any time with the development of new technology.

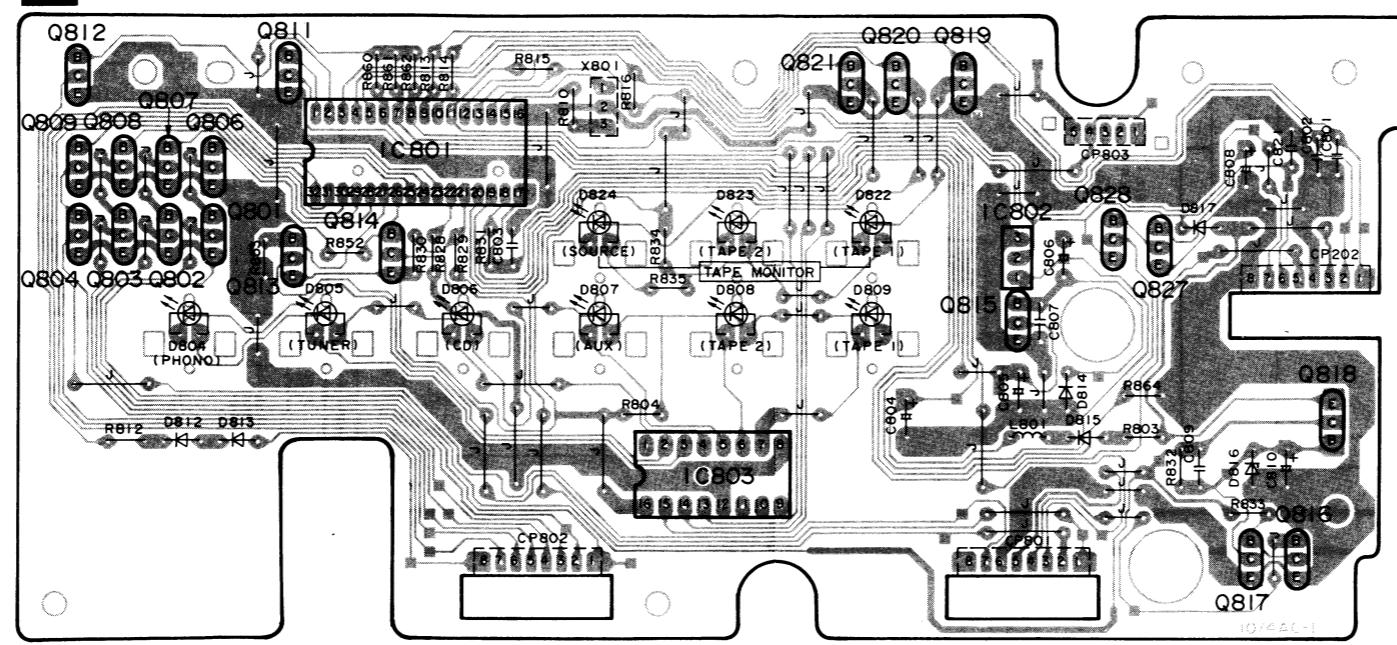


5 6 7 8 9 10 11 12 13 14 15

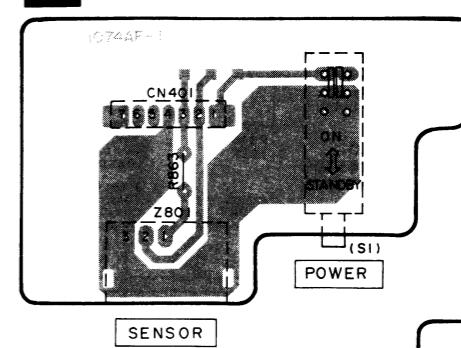
...y time with the development of new technology.



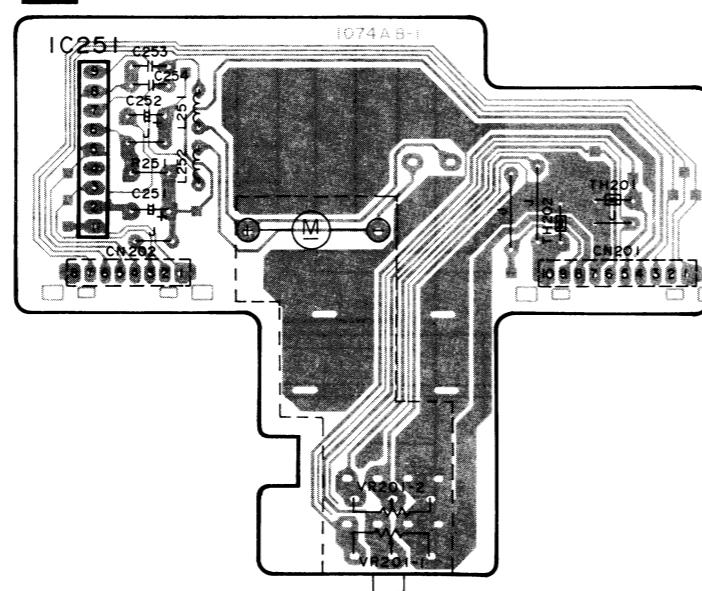
B OPERATION P.C.B. (REPI613B-S)



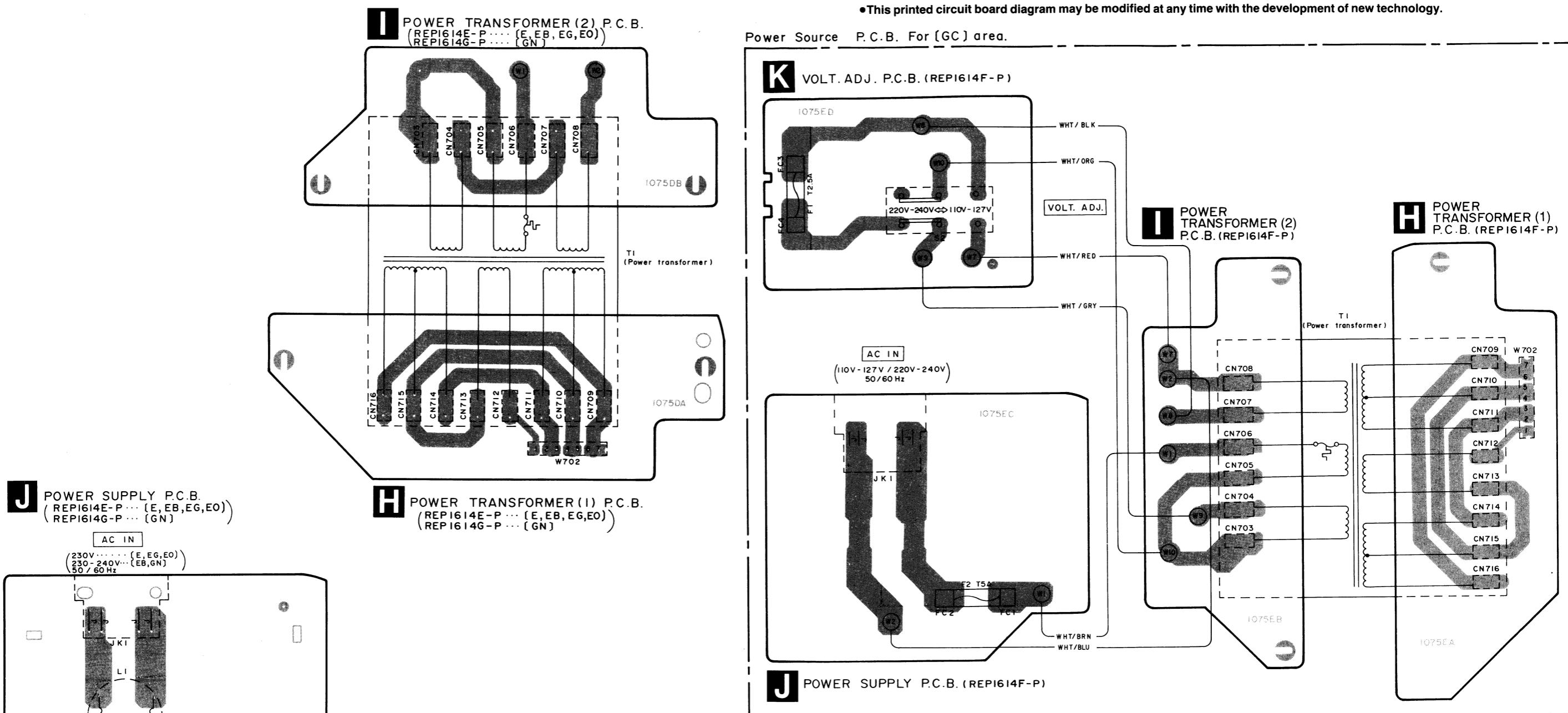
F POWER SWITCH P.C.B.
(REPI613B-S)



D VOLUME PCB. (REPI613B-S)



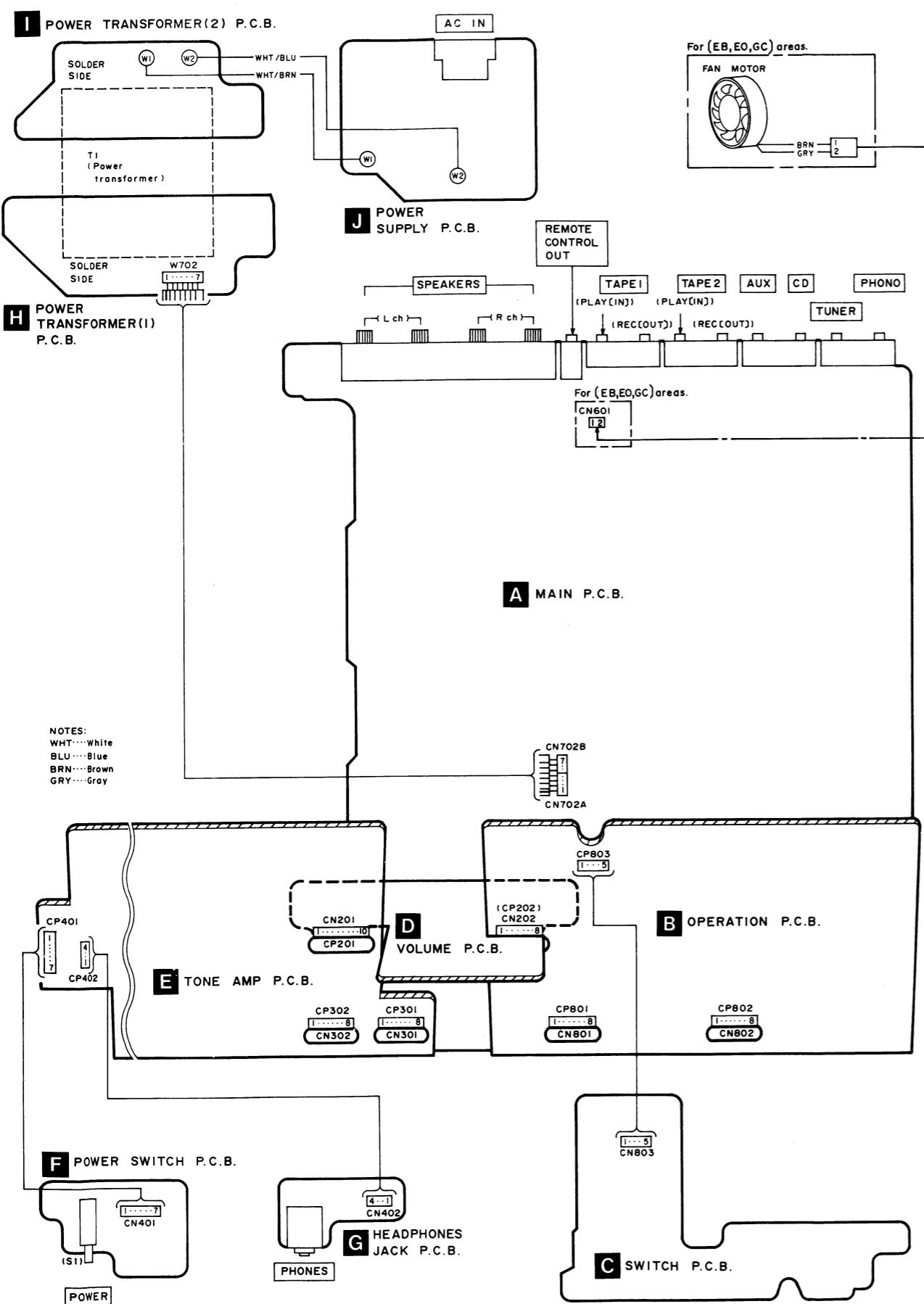
16 17 18 19 20 21 22 23 24 25



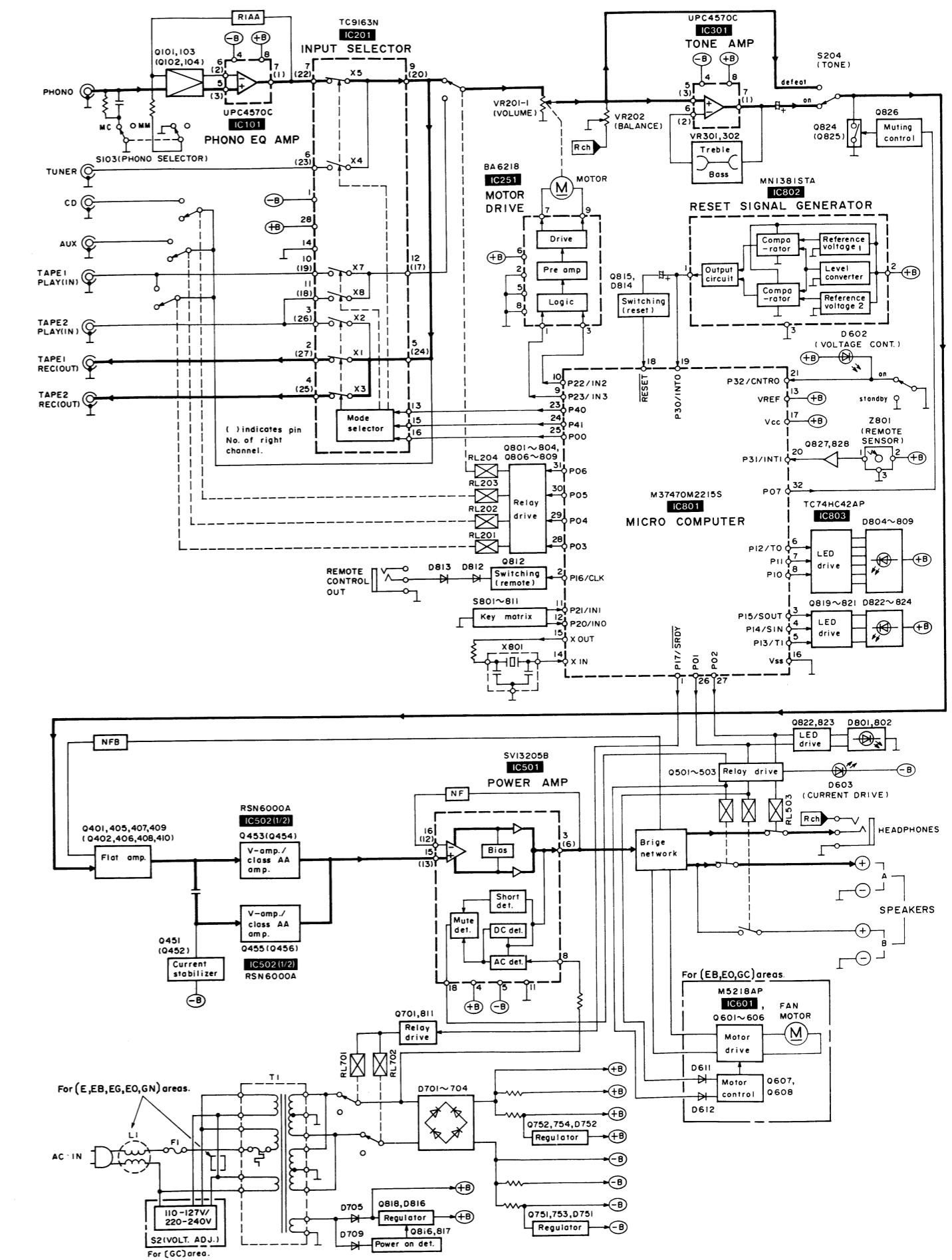
•Terminal guide of IC's, transistors and diodes

UPC4570C	TC74HC42AP TC9163N M37470M2215S	RSN6000A SVI3205B	BA6218	M5218AP	MN1381STA	2SA1309AIRTA 2SC3311AIRTA UN4111TA UN4211TA
	 No.1					
2SA933QRSTA 2SA992EFPTA 2SA1123RSTA 2SC2631RSTA 2SD592AQRSTA	2SB1357DEFTA 2SD2037DEFTA	2SK170BLTPE2 2SK301QRSTA	2SJ105GRYTA 2SK330GRYTA	2SK389BG	MA165TA MA167TA MA167ATA MA29WATA MA700ATA ISS291TA ISR35200TB	MA4056MTA MA406LTA
					 Anode → Cathode	MA4120MTA MA4160MTA

■ WIRING CONNECTION DIAGRAM



■ BLOCK DIAGRAM



■ FUNCTION OF IC TERMINALS

•IC801 (M37470M2215S)

Pin No.	Terminal Name	I/O	Function
1	P17/SRDY	O	Relay drive signal output.
2	P16/CLK	O	Remote control signal output.
3	P15/SOUT	O	Tape monitor 1 LED drive signal.
4	P14/SIN	O	Tape monitor 2 LED drive signal.
5	P13/TI	O	Source LED drive signal.
6	P12/TO	O	Input selector LED drive signal.
7	P11		
8	P10		
9	P23/IN3	O	Volume control motor drive signal output
10	P22/IN2		
11	P21/IN1	I	Input select switch signal input.
12	P20/INO	I	Speakers select switch signal input.
13	VREF	—	Reference voltage input.
14	X IN	I	Connected to ceramic oscillator. (X801: 4 MHz).
15	X OUT	O	
16	V _{ss}	—	GND terminal.
17	V _{cc}	—	Power supply (+5 V).

Pin No.	Terminal Name	I/O	Function
18	RESET	I	Reset signal input.
19	P30/INTO	I	Back-up detector signal input.
20	P31/INTI	I	Remote control receiving signal input. Not used.
21	P32/CNTRO	I	POWER switch input.
22	P33/CNTRI	—	Not used.
23	P40	O	Input select IC (IC201) control signal output.
24	P41		
25	P00		
26	P01	O	Speaker (A) relay and LED drive signal.
27	P02	O	Speaker (B) relay and LED drive signal.
28	P03	O	SELECTOR RELAY RL201 drive signal output.
29	P04	O	SELECTOR RELAY RL202 drive signal output.
30	P05	O	SELECTOR RELAY RL203 drive signal output.
31	P06	O	SELECTOR RELAY RL204 drive signal output.
32	P07	O	Muting control signal output.

■ REPLACEMENT PARTS LIST

Notes: *Important safety notice:
Components identified by Δ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*Remote Control Ass'y: Supply period for three years from termination of production.
*The "(SF)" mark denotes the standard part.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)		Q828	UN4111	TRANSISTOR	
IC101	UPC4570C	I. C. PHONO EQ. AMP.				DIODE (S)	
IC201	TC9163N	I. C. INPUT SELECTOR		D101, 102	MA165	DIODE	
IC251	BA6218	I. C. VOLUME MOTOR DRIVE		D401-404	MA165	DIODE	
IC301	UPC4570C	I. C. TONE AMP.		D405, 406	MA167	DIODE	
IC501	SVI3205B	I. C. POWER AMP.	Δ	D407, 408	MA165	DIODE	
IC502	RSN6000A	I. C. V-AMP.		D451	MA165	DIODE	
IC601	M5218AP	I. C. FAN MOTOR DRIVE	(EB, EO, GC)	D452	MA4056MTA	DIODE	Δ
IC801	M37470M2215S	I. C. MICRO COMPUTER		D453	MA29WA	DIODE	
IC802	MN1381STA	I. C. RESET		D501, 502	MA165	DIODE	
IC803	TC74HC42AP	I. C. LED DRIVE		D503, 504	MA4160M	DIODE	Δ
		TRANSISTOR(S)		D505	MA165	DIODE	
Q101-104	2SK170BLTPE2	TRANSISTOR		D506	ISS291TA	DIODE	
Q401, 402	2SK389BG	TRANSISTOR		D602	LN014305PH	DIODE	
Q405-408	2SC2631RSTTA	TRANSISTOR		D603	LN018305PH	DIODE	
Q409, 410	2SA1123RSTTA	TRANSISTOR		D605	MA4120	DIODE	(EB, EO, GC)
Q451, 452	2SC2631RSTTA	TRANSISTOR		D606-610	MA165	DIODE	(EB, EO, GC)
Q453, 454	2SC3311AIRTA	TRANSISTOR		D611, 612	MA167	DIODE	(EB, EO, GC)
Q455, 456	2SA1309AIRTA	TRANSISTOR		D701-704	P300DLF	DIODE	Δ
Q501-503	2SA992EFPTA	TRANSISTOR		D705	1SR35200TB	DIODE	Δ
Q601	2SD592ANCQ	TRANSISTOR	(EB, EO, GC)	D706	MA165	DIODE	
Q602-604	2SA933QRSTA	TRANSISTOR	(EB, EO, GC)	D709	MA165	DIODE	Δ
Q605, 606	2SC3311AIRTA	TRANSISTOR	(EB, EO, GC)	D751, 752	MA4160M	DIODE	Δ
Q607	UN4111	TRANSISTOR	(EB, EO, GC)	D753, 754	MA165	DIODE	
Q608	UN4211	TRANSISTOR	(EB, EO, GC)	D801, 802	LN018305PH	DIODE	
Q701	2SA992EFPTA	TRANSISTOR		D804-809	LN018305PH	DIODE	
Q751	2SD2037DEFTA	TRANSISTOR	Δ	D812-814	MA165	DIODE	
Q752	2SB1357DEFTA	TRANSISTOR	Δ	D815	ISS291TA	DIODE	
Q753	2SK330GRYTA	TRANSISTOR	Δ	D816	MA4068L	DIODE	Δ
Q754	2SJ105GRYTA	TRANSISTOR	Δ	D817	MA165	DIODE	
Q801-804	UN4111	TRANSISTOR		D822, 823	LN014305PH	DIODE	
Q806-809	UN4211	TRANSISTOR		D824	LN018305PH	DIODE	
Q811, 812	UN4211	TRANSISTOR		D825-828	MA165	DIODE	
Q813, 814	UN4111	TRANSISTOR		D829	MA700	DIODE	
Q815, 816	UN4211	TRANSISTOR		D830-832	MA165	DIODE	
Q817	2SC3311AIRTA	TRANSISTOR				VARIABLE RESISTOR(S)	
Q818	2SD2037DEFTA	TRANSISTOR	Δ	VR201	RRV16B03B15A	V. R. MAIN VOLUME CONTROL	
Q819-821	UN4211	TRANSISTOR		VR202	EVJ02QF01G15	V. R. BALANCE	
Q822, 823	UN4111	TRANSISTOR		VR301, 302	EVJYA1F01C15	V. R. BASS/TREBLE CONTROL	
Q824, 825	2SK301QRS	TRANSISTOR				THERMISTOR(S)	
Q826	2SA933QRSTA	TRANSISTOR		Q827	2SC3311AIRTA	TRANSISTOR	

SU-A800

SU-A800

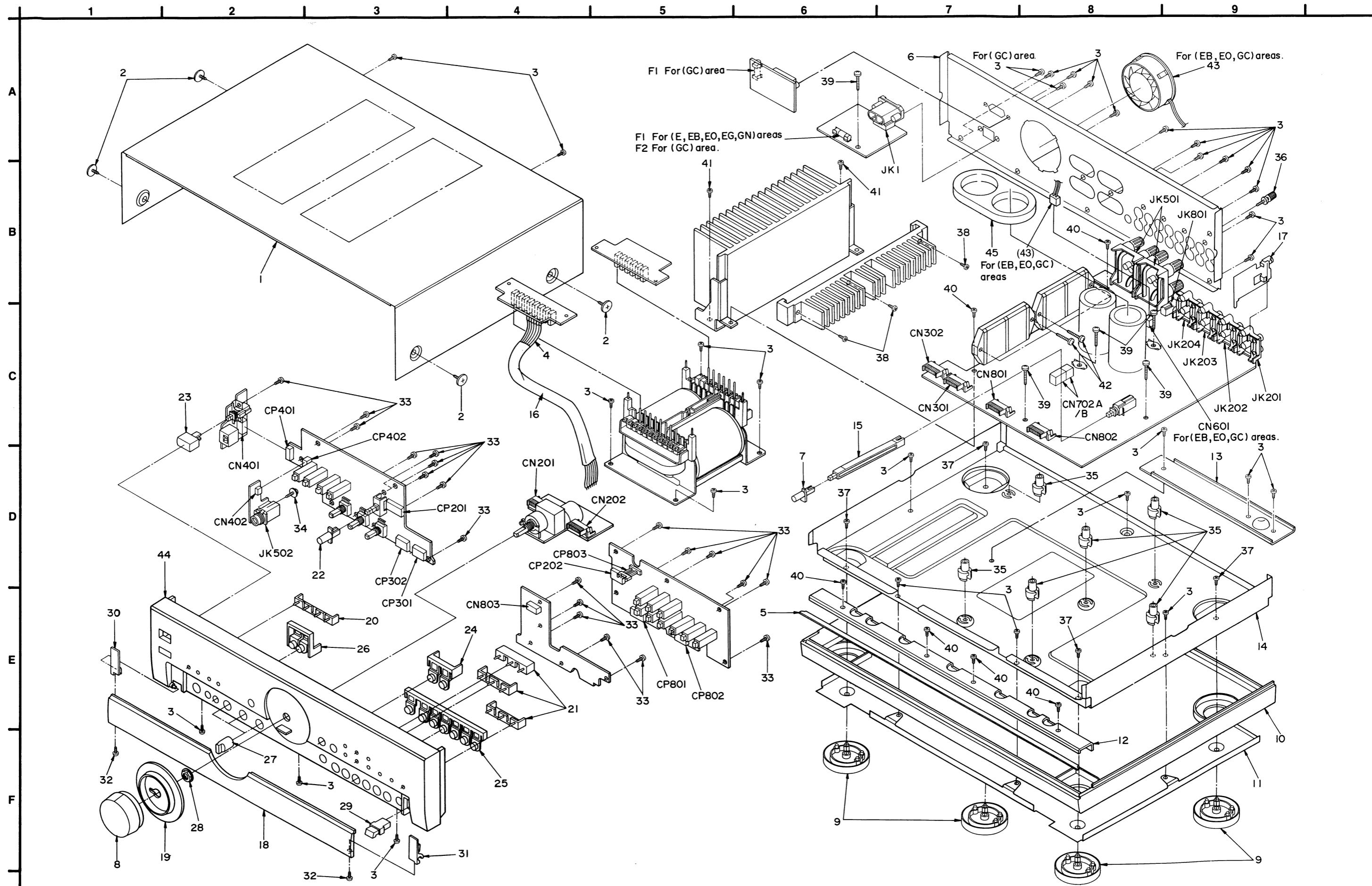
Ref. No.	Part No.	Part Name & Description	Remarks
TH201, 202	ERTD2ZHL104T	THERMISTOR	
		COMPONENT COMBINATION(S)	
Z801	RCDHC-237	REMOTE SENSOR	
		COIL (S)	
L1	RLQ2271M	COIL	△(E, EB, EG, EO, GN)
L101-104	ELEX101KA9	COIL	
L251, 252	ELEX110KA9	COIL	
L501-504	SLQY18G-10	COIL	
L551	ELEPK2R2MA	COIL	
L801	ELEX101KA9	COIL	
		TRANSFORMER(S)	
T1	RTP7K5E003-W	POWER TRANSFORMER	△(E, EG, EO)
T1	RTP7K5B002-W	POWER TRANSFORMER	△(EB, GC, GN)
		OSCILLATOR(S)	
X801	EFOGC4004A4	OSCILLATOR(4MHz)	
		FUSE (S)	
F1	XBA2C25TB0	FUSE, 250V T2.5A	△
F2	XBA2C50TB0	FUSE, 250V T5A	△(GC)
		SWITCH(ES)	
S1	SSH1238	SW, POWER	
S2	ESD26200A	SW, VOLTAGE SELECTOR	△(GC)
S103	RSP2D010-J	SW, PHONO SELECTOR	
S204	ESB68113	SW, TONE ON/DEFEAT	
S801	EVQ21405R	SW, TAPE MONITOR	
S802	EVQ21405R	SW, INPUT SELECTOR(TAPE1)	
S803	EVQ21405R	SW, INPUT SELECTOR(TAPE2)	
S804	EVQ21405R	SW, INPUT SELECTOR(AUX)	
S805	EVQ21405R	SW, INPUT SELECTOR(CD)	
S806	EVQ21405R	SW, INPUT SELECTOR(TUNER)	
S807	EVQ21405R	SW, INPUT SELECTOR(PHONO)	
S808	EVQ21405R	SW, INPUT SELECTOR(LEFT)	
S809	EVQ21405R	SW, INPUT SELECTOR(RIGHT)	
S810	EVQ21405R	SW, SPEAKER(A)	
S811	EVQ21405R	SW, SPEAKER(B)	
		CONNECTOR(S)	
CN201	RJU003K010M1	SOCKET(10P)	
CN202	RJU003K008M1	SOCKET(8P)	
CN301, 302	RJU003K008M1	SOCKET(8P)	

Ref. No.	Part No.	Part Name & Description	Remarks
CN401	RJT057W007-1	CONNECTOR(7P)	
CN402	RJU057W004	SOCKET(4P)	
CN601	SJT3213	CONNECTOR(2P)	(EB, EO, GC)
CN703-716	RJS1A1101T1	SOCKET(1P)	
CN801, 802	RJU003K008M1	SOCKET(8P)	
CN803	RJU066H05	SOCKET(5P)	
CN702A	RJS1A6604	SOCKET(4P)	
CN702B	RJS1A6603	SOCKET(3P)	
CP201	RJT003K010-1	CONNECTOR(10P)	
CP202	RJT003K008-1	CONNECTOR(8P)	
CP301, 302	RJT003K008-1	CONNECTOR(8P)	
CP401	RJU057W007	SOCKET(7P)	
CP402	RJT057W004-1	CONNECTOR(4P)	
CP801, 802	RJT003K008-1	CONNECTOR(8P)	
CP803	RJT066H05A	CONNECTOR(5P)	
		JACK(S)	
		EARTH TERMINAL (S)	
E101, 102	SNE1004-1	GND PLATE	
E103	SMC949	SHIELD PLATE	
E201	RSC0340	SHIELD PLATE	
		FUSE HOLDER(S)	
FC1, 2	EYF52BC	FUSE HOLDER	
FC3, 4	SJT388	FUSE HOLDER	(GC)
		RELAY(S)	
RL201-204	RSY0014M-0	RELAY	
RL501, 502	RSY0013-0	RELAY	△
RL503	RSY0014M-0	RELAY	
RL701, 702	RSY0012M-0	RELAY	△

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RKM0089B-1K	CABINET	(E, EG, GN)
1	RKM0089C-1K	CABINET	(EB, EO, GC)
2	SNE2129-1	SCREW	
3	XTBS3+8JFZ1	SCREW	
4	RWJ3907330QQ	FLAT CABLE(7P)	
5	RGK0588-T	ORNAMENT RUBBER	
6	RGR0171D-A1	REAR PANEL	(E, EG)
6	RGR0171E-B1	REAR PANEL	(EB)
6	RGR0171A-D1	REAR PANEL	(EO)
6	RGR0171B-B	REAR PANEL	(GC)
6	RGR0171D-C1	REAR PANEL	(GN)
7	RGU0609-K	BUTTON, PHONO SELECTOR	
8	RGW0179-K	KNOB, VOLUME	
9	RKA0053-A	FOOT	
10	RKU0050-K	RUBBER BASE	
11	RMA0694	BOTTOM BOARD	
12	RMA0734	ANGLE	
13	RFKNUA800E-K	ANGLE ASS' Y	
14	RFKJUA800E-K	BOTTOM CHASSIS	
15	RMM0104	SWITCH SHAFT	
16	RWZ080UFW240	TUBE	
17	RSC0322	SHIELD PLATE(PHONO)	
18	RKF0314-K	OPERATION DOOR	
19	RGK0551-S	ORNAMENT	
20	RGL0189-Q	PANEL LIGHT(A)	
21	RGL0190-Q	PANEL LIGHT(B)	
22	RGU0282	BUTTON, TONE	
23	RGU0890-K	BUTTON, POWER	
24	RGU0891-K	BUTTON, INPUT SELECTOR	
25	RGU0892-K	BUTTON, TAPE MONITOR etc.	
26	RGU0893-K	BUTTON, SPEAKERS	
27	RGW0178-K	KNOB, BASS/TREBLE etc.	
28	RHN90001	NUT	
29	RMQ0215A	DOOR STOPPER	
30	RMQ0378	DOOR HOLDER(R)	
31	RMQ0379	DOOR HOLDER(L)	
32	XQN26+AJ6FZ	SCREW	
33	XTBS3+8J	SCREW	
34	XTWS3+8T	SCREW	
35	SHE187-2	P. C. B. SUPPORT	
36	SNE2123	GND SCREW	
37	XTB3+14G	SCREW	
38	XTB3+16JFZ	SCREW	
39	XTB3+20JFZ	SCREW	
40	XTB3+8JFZ	SCREW	
41	XTWS3+8T	SCREW	
42	XTW3+15T	SCREW	
43	REM0040	FAN MOTOR	(EB, EO, GC)
44	RFKGUA800E-K	FRONT PANEL ASS' Y	

Ref. No.	Part No.	Part Name & Description	Remarks
45	RMF0050	CUSHION	
		PACKING MATERIALS	
P1	RPG1573	PACKING CASE	(E, EG, EO, GC, GN)
P1	RPG1577-1	PACKING CASE	(EB)
P2	RPN0685	PAD	
P3	RPQ0164	ACCESSORY PAD	
P4	XZB50X65A02Z	PROTECTION COVER	
P5	XZB24X34C04	PROTECTION COVER	
P6	RPH0032	PROTECTION SHEET	(EB, GN)
		ACCESSORIES	
A1	EUR642210	REMOTE CONTROL TRANSMITTER	
A1-1	UR64EC1371	BATTERY COVER	
A2	RJA0019-2K	AC POWER SUPPLY CORD	△(E, EG, EO, GC)
A2	VJA0733	AC POWER SUPPLY CORD	△(EB) (SF)
A2	RJA0036-K	AC POWER SUPPLY CORD	△(GN)
A3	RQA0013	WARRANTY CARD	(E, EB, EG, EO)
A3	RQX7433ZA	WARRANTY CARD	(GN)
A4	RQCBO169	SERVICE CENTER LIST	
A5	RQT1980-B	INSTRUCTIONS MANUAL	(EB, GN)
A5	RFKSUA800E-K	INSTRUCTIONS MANUAL	(E)
A5	RFKSUA800EGK	INSTRUCTIONS MANUAL	(EG)
A5	RFKSUA800GCK	INSTRUCTIONS MANUAL	(GC)
A5	RFKSUA800EOK	INSTRUCTIONS MANUAL	(EO)
A6	RQLA0134	CAUTION LABEL	(GC)
A7	SJP5213-2	POWER PLUG ADAPTOR	△(GC)

■ CABINET PARTS LOCATION



Notes : * Capacity values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
 * Resistance values are in ohms, unless specified otherwise, 1K=1,000 (Ω) , 1M=1,000k (Ω)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R101-104	ERDS2TJ102	1/4W 1K
R105, 106	ERDS2TJ473	1/4W 47K
R107, 108	ERDS2TJ221	1/4W 220
R109, 110	ERDS2TJ220T	1/4W 22
R111-116	ERDAS3G332T	1/4W 3.3K
R117, 118	ERDS2TJ151	1/4W 150
R119, 120	ERDS2TJ100	1/4W 10
R121, 122	ERDS2TJ101	1/4W 100
R123, 124	ERDS2TJ151	1/4W 150
R125, 126	ERDS2TJ682T	1/4W 6.8K
R127, 128	ERDS2TJ823T	1/4W 82K
R129, 130	ERDS2TJ334	1/4W 330K
R131, 132	ERDS2TJ561	1/4W 560
R201-214	ERDAS3J102T	1/4W 1K
R215, 216	ERDLS2VJ332T	1/4W 3.3K
R251	ERDS1FVJ100T	1/2W 10 Δ
R301, 302	ERDAS3G561	1/4W 560
R303, 304	ERDS2TJ104	1/4W 100K
R305, 306	ERDS2TJ224T	1/4W 220K
R307, 308	ERDS2TJ392T	1/4W 3.9K
R309, 310	ERDS2TJ223	1/4W 22K
R311, 312	ERDS2TJ102	1/4W 1K
R313, 314	ERDS2TJ392T	1/4W 3.9K
R315, 316	ERDS2TJ222	1/4W 2.2K
R317, 318	ERDS2TJ391	1/4W 390
R319, 320	ERDS2TJ183T	1/4W 18K
R401, 402	ERDLS2VJ102T	1/4W 1K
R403, 404	ERDAS3G823T	1/4W 82K
R405, 406	ERDLS2VJ102T	1/4W 1K
R407, 408	ERDAS3G184T	1/4W 180K
R409-412	ERDAS3G562T	1/4W 5.6K
R413, 414	ERDAS3G101T	1/4W 100
R415, 416	ERDS2TJ183T	1/4W 18K
R417, 418	ERDAS3J271T	1/4W 270
R419, 420	ERDAS3G822T	1/4W 8.2K
R421, 422	ERDAS3G153T	1/4W 15K
R423-426	ERDAS3G101T	1/4W 100
R427-430	ERDAF2VJ122T	1/4W 1.2K Δ
R431, 432	ERDAF2VJ101T	1/4W 100 Δ
R457	ERDS2TJ153	1/4W 15K
R459, 460	ERDAF2VJ101T	1/4W 100 Δ
R461-464	ERDS2TJ333	1/4W 33K
R465-468	ERDAF2VJ101T	1/4W 100 Δ
R469	ERDS2TJ103	1/4W 10K
R470	ERDS2TJ102	1/4W 1K
R501, 502	ERDS2TJ392T	1/4W 3.9K

Ref. No.	Part No.	Values & Remarks
R503, 504	ERDAF2VJ121T	1/4W 120 Δ
R505, 506	ERDS2TJ392T	1/4W 3.9K
R507, 508	ERDAF2VJ121T	1/4W 120 Δ
R513-516	ERDAF2VJ100T	1/4W 10 Δ
R519, 520	ERDS1FVJ6R8T	1/2W 6.8 Δ
R521, 522	ERDS1FVJ100T	1/2W 10 Δ
R527	ERDS2TJ223	1/4W 22K
R528	ERDS2TJ824	1/4W 820K
R529	ERDS2TJ124T	1/4W 120K
R530	ERDS1FVJ472T	1/2W 4.7K Δ
R531, 532	ERDS1FVJ100T	1/2W 10 Δ
R533, 534	ERDS2TJ182	1/4W 1.8K
R535	ERDS2TJ473	1/4W 47K
R550, 551	ERDS2TJ222	1/4W 2.2K
R555-558	ERG1SJ561E	1W 560
R559	ERG1SJ152E	1W 1.5K
R560	ERG1SJ182E	1W 1.8K
R561, 562	ERG1SJ151E	1W 150
R563, 564	ERG1SJ181E	1W 180
R565-570	ERDS2TJ223	1/4W 22K
R571, 572	ERDS2TJ470	1/4W 47
R604	ERDS2TJ181T	1/4W 180
R611-614	ERDAS3G223T	1/4W 22K (EB, EO, GC)
R615-618	ERDAS3G103T	1/4W 10K (EB, EO, GC)
R619	ERDS2TJ151	1/4W 150 (EB, EO, GC)
R620	ERDS2TJ153	1/4W 15K (EB, EO, GC)
R621, 622	ERDS2TJ223	1/4W 22K (EB, EO, GC)
R624	ERDS2TJ332	1/4W 3.3K (EB, EO, GC)
R625	ERDS2TJ223	1/4W 22K (EB, EO, GC)
R626	ERDS2TJ103	1/4W 10K (EB, EO, GC)
R628	ERDS2TJ564	1/4W 560K (EB, EO, GC)
R629	ERDS2TJ473	1/4W 47K (EB, EO, GC)
R630	ERDS2TJ120T	1/4W 12 (EB, EO, GC)
R631	ERDS2TJ223	1/4W 22K (EB, EO, GC)
C101, 102	ECBT1H101KB5	50V 100P
R632	ERDS2TJ102	1/4W 1K (EB, EO, GC)
R633	ERDS2TJ563	1/4W 56K (EB, EO, GC)
R634	ERDS2TJ223	1/4W 22K (EB, EO, GC)
R635, 636	ERDS2TJ103	1/4W 10K (EB, EO, GC)
C107, 108	ECA0JM222B	6.3V 2200U
R637	ERDS2TJ222	1/4W 2.2K (EB, EO, GC)
R707, 708	ERDAF2VJ6R8T	1/4W 6.8 Δ
R709	ERDAF2VJ470T	1/4W 47 Δ
R710	ERDAF2VJ151T	1/4W 150 Δ
R711	ERDS2TJ222	1/4W 2.2K
R712	ERDS2TJ223	1/4W 22K
R713	ERDS2TJ222	1/4W 2.2K
R714	ERDS2TJ222	1/4W 2.2K
R715	ERDAF2VJ151T	1/4W 150 Δ
R751, 752	ERDS2TJ105T	1/2W 10K
R753, 754	ERDS1FVJ103T	1/2W 10K Δ
R801, 802	ERDS2TJ391	1/4W 390
R201-214	ECKT1H101KB	50V 100P

Ref. No.	Part No.	Values & Remarks
C251, 252	ECEAOJKA101B	6.3V 100U
C253, 254	ECBT1H104ZF5	50V 0.1U
C301, 302	ECA1HPXS3R3B	50V 3.3U
C303, 304	ECCR1H101K5	50V 100P
C305, 306	ECBT1H820KB5	50V 82P
C307, 308	ECA1HPXS4R7B	50V 4.7U
C309, 310	ECBT1H390J5	50V 39P
C311, 312	ECA1CPXS100B	16V 10U
C313, 314	ECQV1H823JM3	50V 0.082U
C315, 316	ECQB1H153JF3	50V 0.015U
C317, 318	ECQB1H183JF3	50V 0.018U
C319, 320	ECQB1H222JF3	50V 2200P
C321, 322	ECBT1E223ZF	25V 0.022U
C323, 324	ECBT1H121KB5	50V 120P
C403, 404	ECKR1H271KB5	50V 270P
C405, 406	ECA1CPXS470B	16V 47U
C407, 408	ECCR1H070C5	50V 7P
C409, 410	ECKR1H391KB5	50V 390P
C411, 412	ECCR1H030C5	50V 3P
C413, 414	ECQB1H222JF3	50V 2200P
C451, 452	ECKR1H333ZF5	50V 0.033U
C453-456	ECCV2H680K	500V 68P
C457-460	ECEA1HKA3R3B	50V 3.3U
C501-504	ECA0JPXS101B	6V 100U
C505, 506	ECQV1H473JM3	50V 0.047U
C507	ECEA1CKA101B	16V 100U
C508	ECA1HM470B	50V 47U
C509	ECEA1HN100SB	50V 10U
C511, 512	ECBT1H270J5	50V 27P
C513-518	ECQV1H473JM3	50V 0.047U
C519-522	ECQB1H393JF3	50V 0.039U
C523, 524	ECBT1H102KB5	50V 1000P
C525, 526	ECKD1H821KB	50V 820P
C531, 532	ECBT1C332KR5	16V 3300P
C601	ECEA1HKA47B	50V 0.47U (EB, EO, GC)
C602	ECEA1CKA100B	16V 10U (EB, EO, GC)
C603	ECEA1HKA3R3B	50V 3.3U (EB, EO, GC)
C604	ECEA1HKA010B	50V 1U (EB, EO, GC)
C605	ECEAOJKA331Q	6.3V 330U (EB, EO, GC)
C701, 702	ECETX56103KM	56V 10000U Δ
C703, 704	ECHR1H103JZ3	50V 0.01U
C707, 708	ECA1JPXH560B	63V 56U
C709, 710	ECQE2334KF3	250V 0.33U
C711	ECQE2104KF3	250V 0.1U
C712	ECBT1C103NS5	16V 0.01U
C713	ECBT1H104ZF5	50V 0.1U
C714	ECA1CM471B	16V 470U
C715	ECEA1HKA010B	50V 1U
C716	ECA1CM102B	16V 1000U
C751-754	ECA1EPXS470B	25V 47U
C755, 756	ECEA1HB24R7B	50V 4.7U
C757, 758	ECA2APXS100B	100V 10U

Ref. No.	Part No.	Values & Remarks

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