

# Service Manual

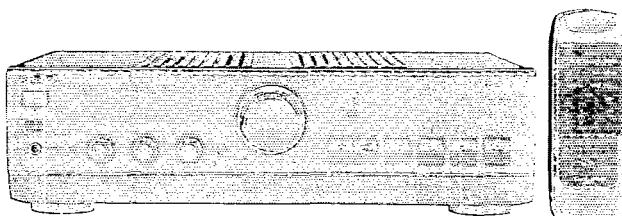
Amplifier

Stereo Integrated Amplifier

SU-A700MK2

Colour

(K) ..... Black Type



## Areas

Suffix for Model No.	Area	Colour
(E)	Europe	(K)
(EB)	Great Britain	
(EG)	Germany and Italy	
(EO)	Switzerland	

## Specifications (DIN 45 500)

20 Hz – 20 kHz continuous power output both channels driven	2 x 45 W (8 Ω)
1 kHz continuous power output both channels driven (THD: 1%)	2 x 55 W (8 Ω) 2 x 80 W (4 Ω)
63 Hz – 12.5 kHz continuous power output both channels driven (THD: 0.7%)	2 x 50 W (8 Ω) 2 x 70 W (4 Ω)
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	1 mV
Damping factor	60 (8 Ω) 30 (4 Ω)
Headphones output level/impedance	540 mV/330 Ω
Load impedance	A or B A and B
Input sensitivity/impedance	4 – 16 Ω 8 – 16 Ω
PHONO MM	2.5 mV/47 kΩ
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	150 mV/22 kΩ
Phono maximum input voltage (1 kHz, RMS)	150 mV (150 mV, IHF '66)
MM	S/N (rated power, 4 Ω)
PHONO MM	76 dB (78 dB, IHF '66)
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	91 dB (99 dB, IHF '66)
S/N at – 26 dB power (4 Ω)	68 dB
PHONO MM	70 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	64 dB
S/N at 50 mW power (4 Ω)	64 dB
PHONO MM	
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC	

Frequency response  
PHONO MMRIAA standard curve ±1 dB  
(30 Hz – 15 kHz)

TUNER, CD, AUX, TAPE 1, TAPE 2/DCC

3 Hz – 80 kHz (+0, –3 dB)  
+0 dB, –0.3 dB (20 Hz – 20 kHz)

## Tone controls

BASS  
TREBLE  
50 Hz, +10 to –10 dB  
20 kHz, +10 to –10 dB

## Output voltage

TAPE 1, TAPE 2/DCC REC OUT  
150 mV

Channel balance (AUX 250 Hz – 6.3 kHz)

±1 dB

Channel separation (AUX 1 kHz)

50 dB

## GENERAL

Power consumption

200 W

## Power supply

For (E), (EG), and (EO) areas  
50 Hz/60 Hz AC, 230 VFor (EB) area  
50 Hz/60 Hz AC, 230 V – 240 V

Dimensions (W × H × D)

430 × 125 × 318 mm

Weight

6.7 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.
3. For areas except Europe  
The specification values given have been measured while using a 240 V power supply.

## For (EB) area only

This apparatus was produced to BS 800.

**Technics**

## ■ Contents

	Page	Page	
● Before Repair .....	2	Schematic Diagram .....	14~20
● Protection Circuitry .....	2	Printed Circuit Board Diagram .....	21~24
● Accessories .....	2	Wiring Connection Diagram .....	25
● Caution for Mains Lead .....	3	Block Diagram .....	26
● Front Panel Controls .....	4	Function of IC Terminals .....	27
● Connections .....	5, 6	Replacement Parts List .....	28~34
● Listening to Sound .....	7, 8	Cabinet Parts Location .....	31, 32
● Recording .....	9	Packaging .....	34
● Operation Check and Main Component Replacement Procedures .....	10~13		

## ■ Before Repair

- (1) Turn off the power supply. Using a  $10\ \Omega$ , 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 should be shown below with respect to supply voltage 230 V—240 V.

Power supply voltage	AC 230 V	AC 240 V
Consumed current 50Hz	50~250 mA	40~240 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:**

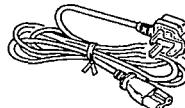
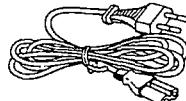
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

## ■ Accessories

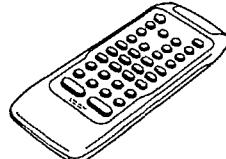
- AC power supply cord ..... 1

for (E), (EG) and (EO) areas : (RJA0019-2K)

for (EB) area : (VJA0733)



- Remote control transmitter  
(RAK-SU129WH) ..... 1



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

**Note:** These are available on sales route.



## Caution for AC Mains Lead (For United Kingdom)

### ("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:

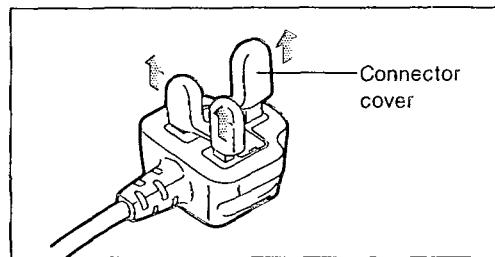
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

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 .

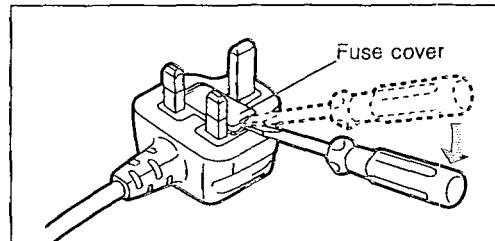
### Before use

Remove the connector cover as follows.

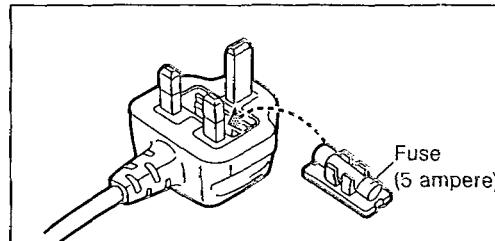


### How to replace the fuse

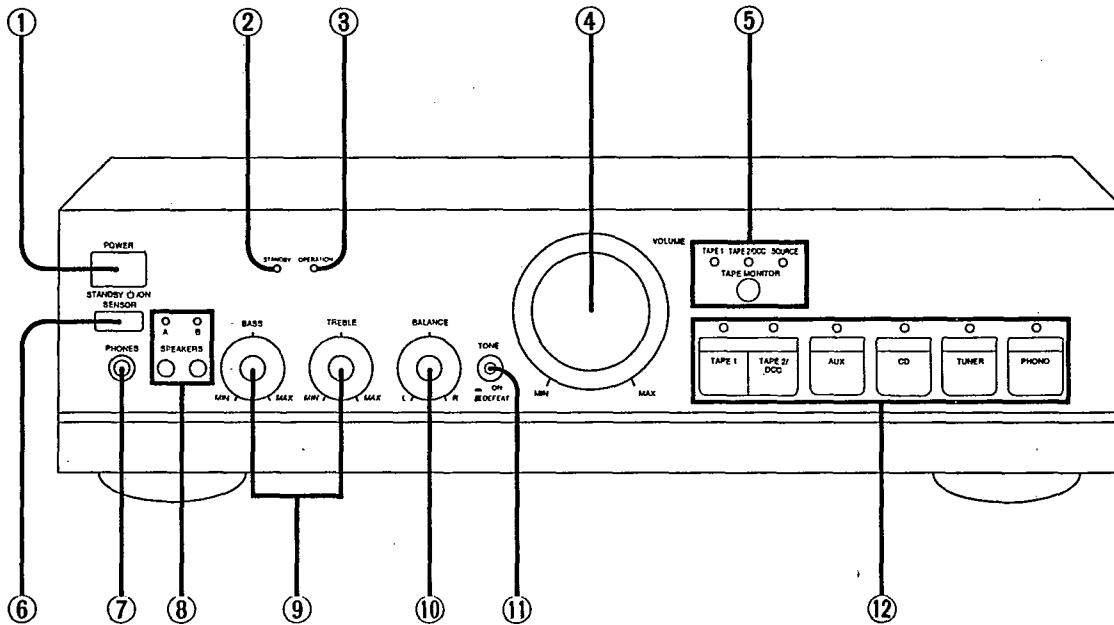
1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



## ■ Front Panel Controls



No.	Name
-----	------

**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 "STANDBY" Indicator (STANDBY)**

When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

**③ Operation indicator (OPERATION)**

When the power is switched ON, this indicator illuminates after about 3 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.

**④ Volume control (VOLUME)**

**⑤ Tape-monitor button/indicators  
(TAPE MONITOR)**

No.	Name
-----	------

**⑥ Remote control signal receptor  
(SENSOR)**

Receives the signals from the remote control.

**⑦ Headphones jack (PHONES)**

**⑧ Speaker select buttons/indicators  
(SPEAKERS)**

**⑨ Tone controls (BASS/TREBLE)**

**⑩ Balance control (BALANCE)**

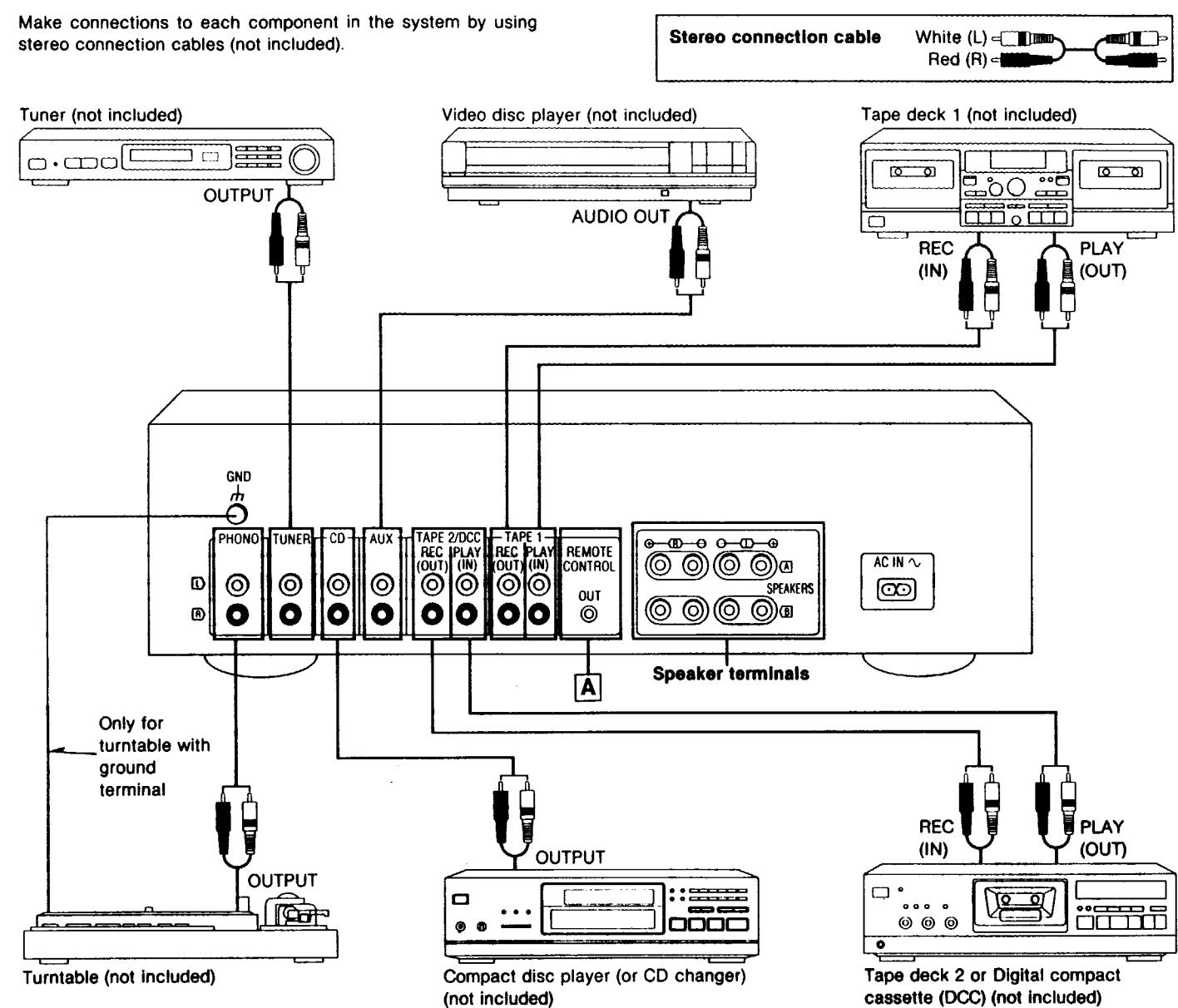
**⑪ Tone control button (TONE)**

**⑫ Input select buttons/indicators**

## ■ Connections

### To connect to each terminal

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



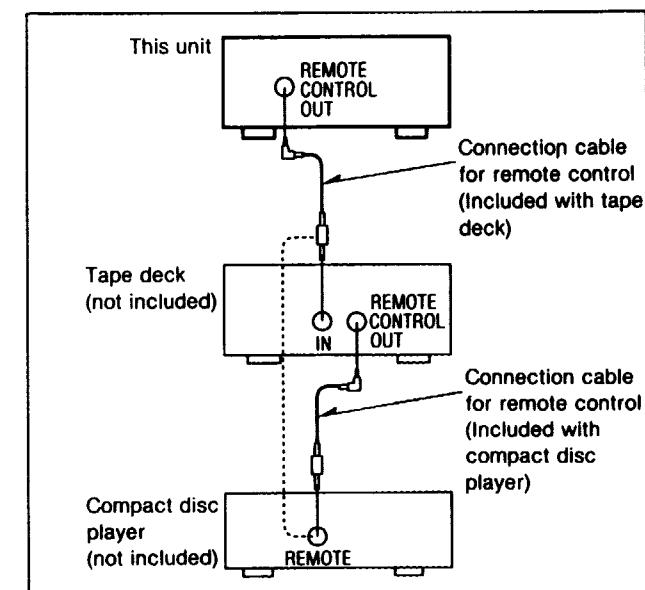
#### A "REMOTE CONTROL OUT" terminal

Connect the connection cable for the remote control to a Technics tape deck and/or CD player (or CD changer) which has the appropriate remote control terminal as shown at the right.

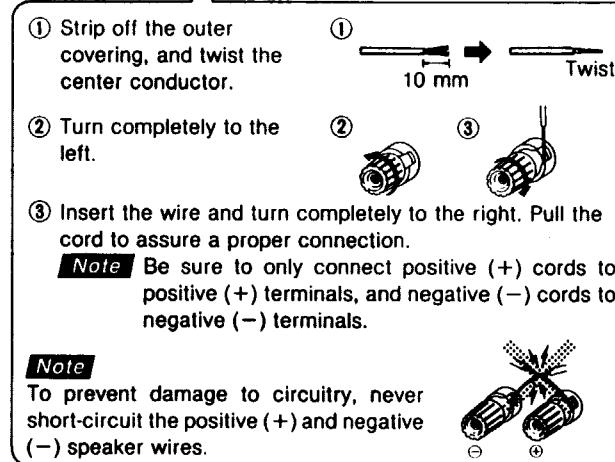
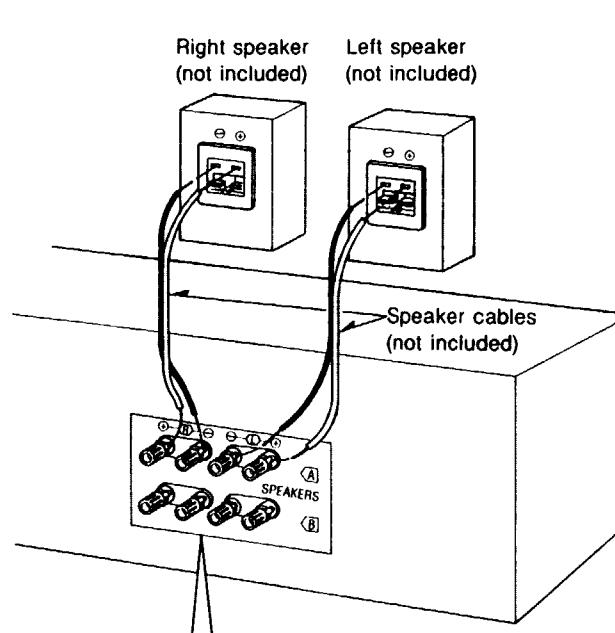
If a tape deck is not being used, the CD player (or CD changer) can be connected directly (dotted line).

**Note**

For a tape deck and/or CD player (or CD changer) with a remote control sensor, this connection is not necessary.



### To connect the speakers



#### ■ "B" terminals

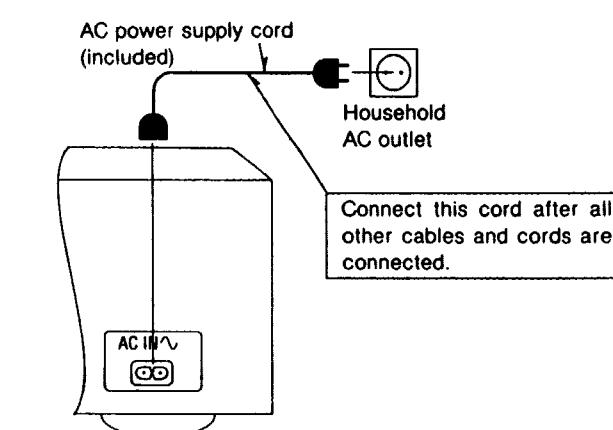
For connection to a second pair of speakers.

#### ■ Speaker 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

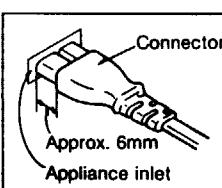
### To connect the AC power supply cord

**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.**



#### 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.

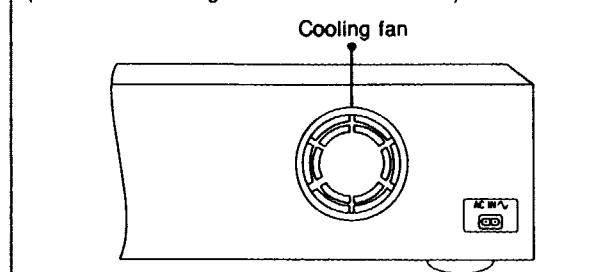


However there is no problem using the unit.

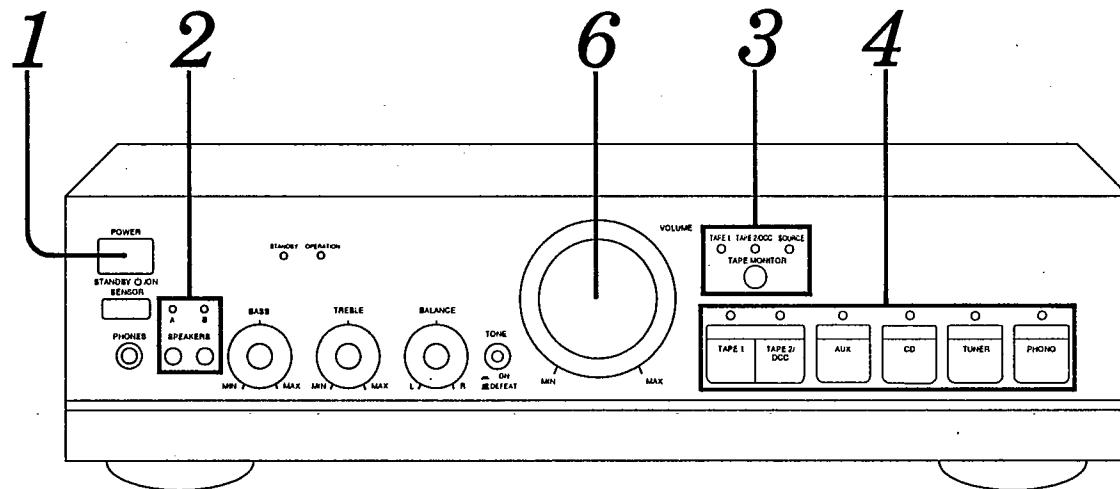
**Note** The configuration of the AC power supply cord differs according to area.

#### About the cooling fan

The cooling fan operates at high power output levels only.  
(There is no cooling fan for some countries.)



## ■ Listening to Sound

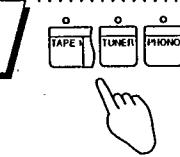


Before operation, set VOLUME to the "MIN" position.

**1** Press POWER to switch on the power.



**4**



Press to select the desired source.

The corresponding indicator above will illuminate to indicate which button is selected.  
TAPE 1: To listen to tape (TAPE 1).  
TAPE 2/DCC: To listen to tape (TAPE 2) or digital compact cassette (DCC).

AUX: To listen to equipment connected to the "AUX" terminals.  
CD: To listen to compact discs.  
TUNER: To listen to radio broadcasts.  
PHONO: To listen to phono discs.

**2** Press A and/or B to select the speaker system(s) to be used.



A and B refer to the speaker terminals at the rear of the unit.

The corresponding indicator above will illuminate to indicate which speaker system is selected.

**A:** Sound can be heard from the speakers connected to the "A" terminals.

**B:** Sound can be heard from the speakers connected to the "B" terminals.

**A and B:** Sound can be heard simultaneously from the speakers connected to the "A" terminals and the "B" terminals.

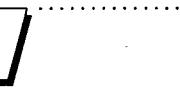
**off:** No sound will be heard from the speakers.  
(Both indicators will turn off.)

**3** Press TAPE MONITOR so that the "SOURCE" indicator illuminates.

**Note**

When a graphic equalizer connected to the "TAPE 1" or "TAPE 2/DCC" terminals is used, set the selector to the "TAPE 1" or "TAPE 2/DCC" position.

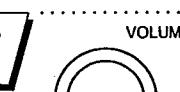
**5**



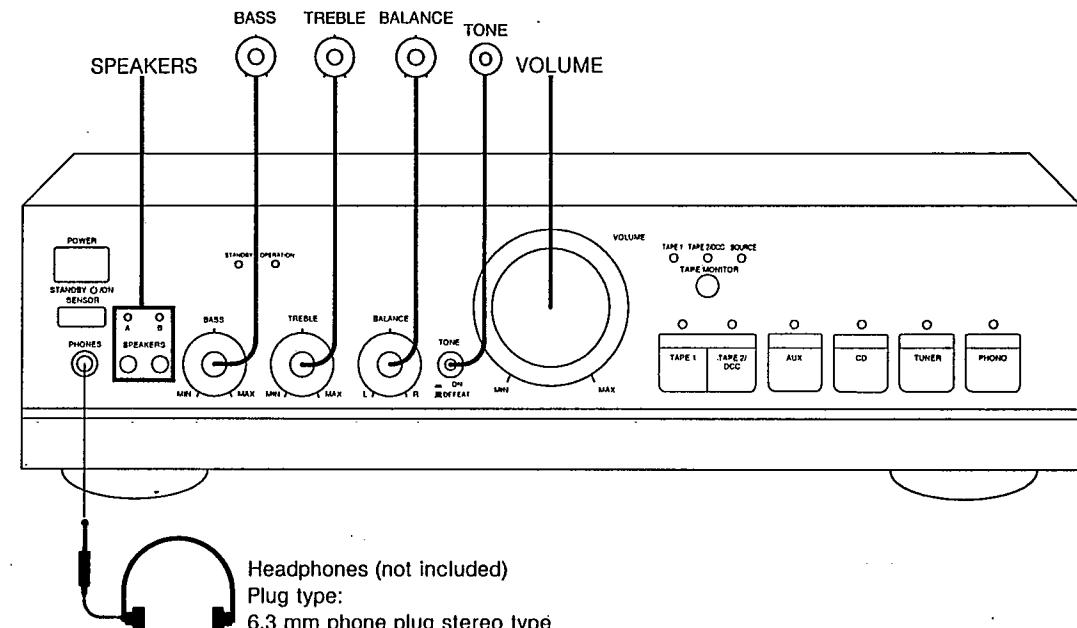
Start the desired source.

(Refer to the appropriate operating instructions for details.)

**6**



Turn VOLUME to adjust the volume level.

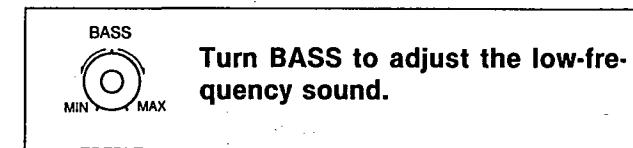
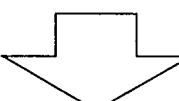


### To adjust the tone quality



Set TONE to the "ON" position.

If set to the "DEFEAT" position, tone controls have no effect.



Turn BASS to adjust the low-frequency sound.

Turn TREBLE to adjust the high-frequency sound.

### To adjust the sound balance



Turn BALANCE to adjust the left/right sound balance.

### When listening through headphones

Use VOLUME to reduce the volume level, and connect the headphones.

If sound from speakers is not wanted, press SPEAKERS (A) and/or (B) to turn off the speaker select indicators.

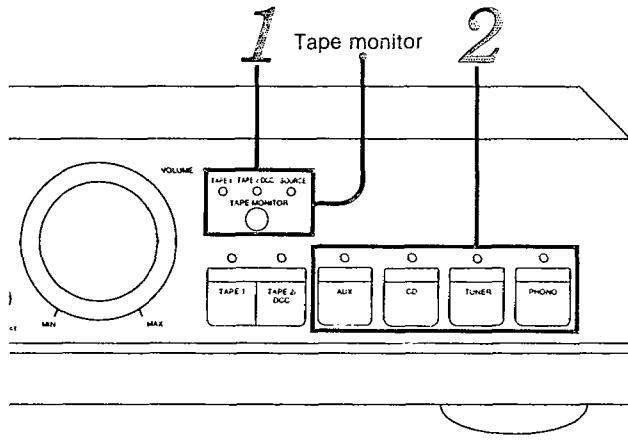
**Note**

Avoid listening for prolonged periods of time to prevent hearing damage.

## ■ Recording

### To record from compact discs, etc.

It is possible to record from units which are connected to the rear "AUX", "CD", "TUNER" or "PHONO" terminals to cassette tape decks or DCC decks which are connected to the "TAPE 1" or "TAPE 2/DCC" terminals.



Before recording, prepare the tape deck or DCC for recording (recording level adjustment, etc.).

See the tape deck's or DCC's operating instructions for details.

**1** Press TAPE MONITOR so that the "SOURCE" indicator illuminates.

**2** Select the program source to be recorded.

AUX: To record from equipment connected to the "AUX" terminals.

CD: To record from compact discs.

TUNER: To record from radio broadcasts.

PHONO: To record from phono discs.

**3** Begin recording.

Follow your tape deck's or DCC's operating instructions.

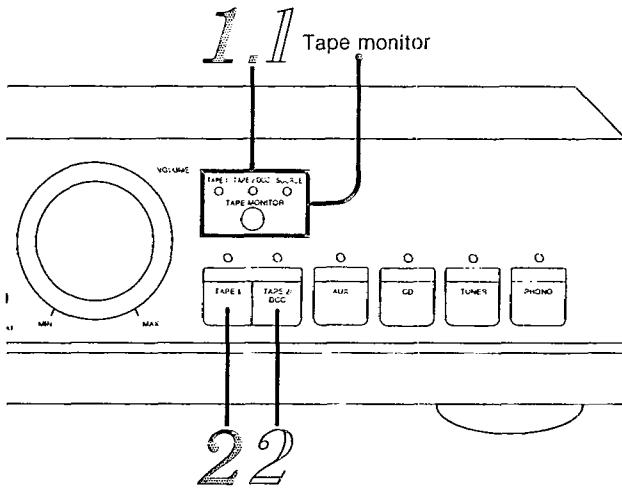
**4** Begin the source to be recorded.

### To check the sound recorded while recording is being made

If a cassette tape deck with 3 heads is connected to the "TAPE 1" or "TAPE 2/DCC" terminals, it is possible to check the sound being recorded onto the tape.

### Tape-to-tape recording

It is possible to record from tape deck 1 (the cassette tape deck which is connected to the "TAPE 1" terminals) to tape deck 2 (the cassette tape deck or DCC deck which is connected to the "TAPE 2/DCC" terminals) and vice versa.



#### Preparation

- Before recording, prepare the tape deck or DCC for recording (recording level adjustment, etc.).
- See the tape deck's or DCC's operating instructions for details.
- Load tapes which have been advanced to the end of the leader tape into both decks.

### To record from tape deck 2 to 1

**1** Press TAPE MONITOR so that the "SOURCE" indicator illuminates.

**2** Press "TAPE 2/DCC".

**3** Begin tape deck 1 for recording and tape deck 2 for playback.

### To record from tape deck 1 to 2

**1** Press TAPE MONITOR so that the "SOURCE" indicator illuminates.

**2** Press "TAPE 1".

**3** Begin tape deck 2 for recording and tape deck 1 for playback.

 Press TAPE MONITOR to select the deck (tape deck 1 or 2) and set the monitor switch on the tape deck to "TAPE".

TAPE 1: when recording on tape deck 1

TAPE 2/DCC: when recording on tape deck 2

## ■ Operation Check and Main Component Replacement Procedures

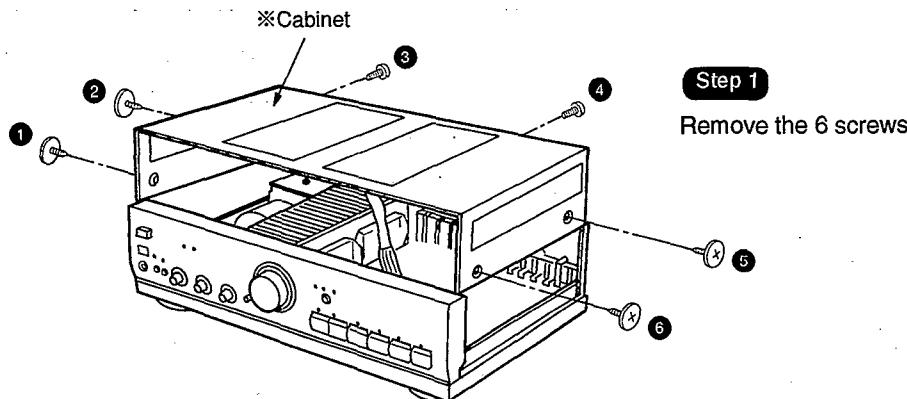
### NOTE

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.
4. Illustrated screws are equivalent to actual size.
5. [ ] indicates parts No.

### ● Contents

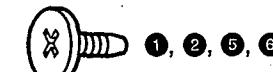
	Page
1. Checking for the Volume P.C.B. /Operation P.C.B. /Tone AMP P.C.B. ....	11.
2. Checking for the Main P.C.B. ....	12.
3. Replacement for power IC. ....	13.

### 1. Common disassembly procedures (Follow this procedure prior to other disassembly.)



※ (E, EG) : RKM0114A-K

※ (EB, EO): RKM0114B-K



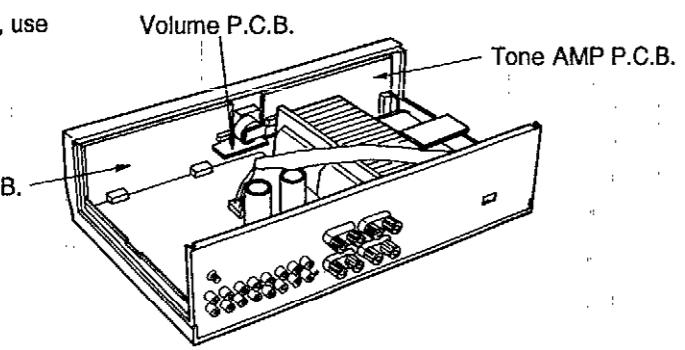
[RHD30035-K1] (Black)



[XTBS3+8JFZ1] (Black)

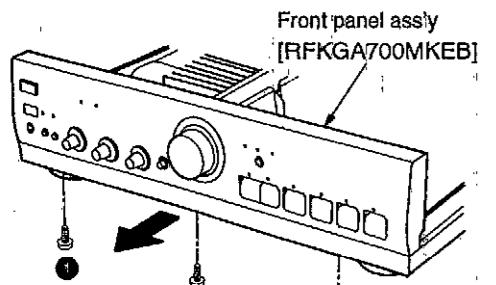
## 2. Checking for the Volume P.C.B. / Operation P.C.B. / Tone AMP P.C.B.

To check the operation of each P.C.B., use item 1 of page 10.

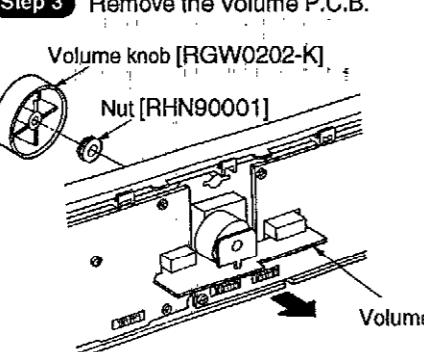


### To remove each P.C.B.

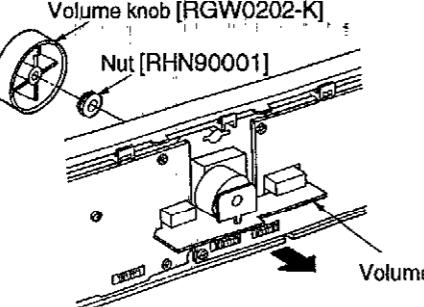
**Step 1** Remove the 3 screws.



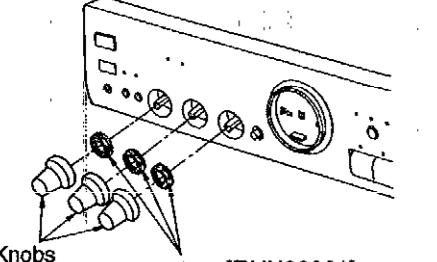
**Step 2** Remove the knob and nut.



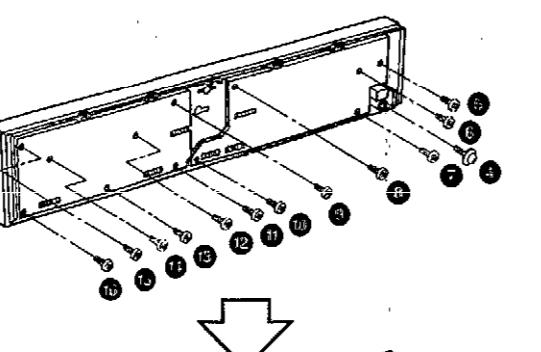
**Step 3** Remove the volume P.C.B.



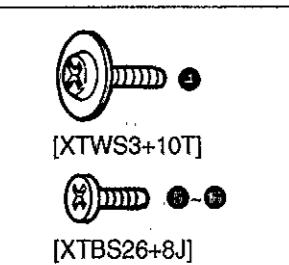
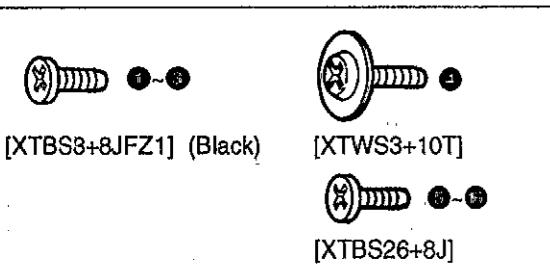
**Step 4** Remove the knobs and nuts.



**Step 5** Remove the 13 screws.



**Adhesive tape** Pull out the knobs with using adhesive tape when the knob is hardly removed.



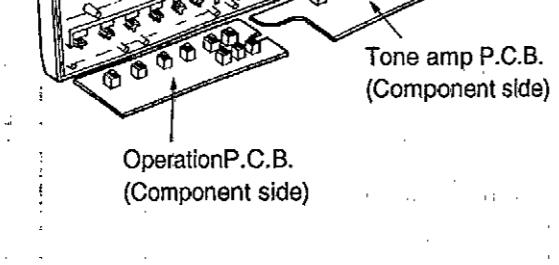
[XTBS26+8J]

[XTBS3+8JFZ1] (Black)

[XTWS3+10T]

[XTBS26+8J]

[XTBS3+8JFZ1] (Black)



[XTBS3+8JFZ1] (Black)

[XTWS3+10T]

[XTBS26+8J]

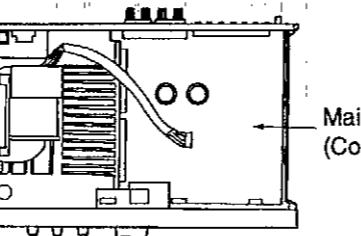
[XTBS3+8JFZ1] (Black)

[XTWS3+10T]

[XTBS26+8J]

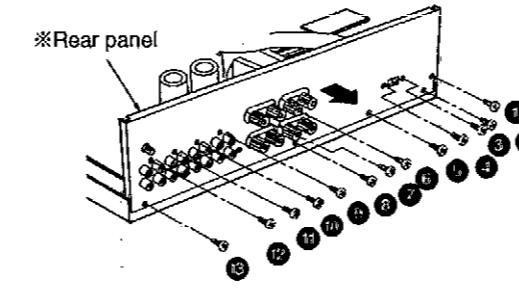
## 3. Checking for the Main P.C.B.

**Step 1** Follow the disassembly procedure described in item 1 on page 10.

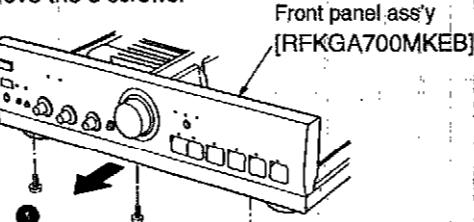


※ (E, EG) : RGR0170A-CB  
※ (EO) : RGR0170H-BB  
※ (EB) : RGR0170B-BB

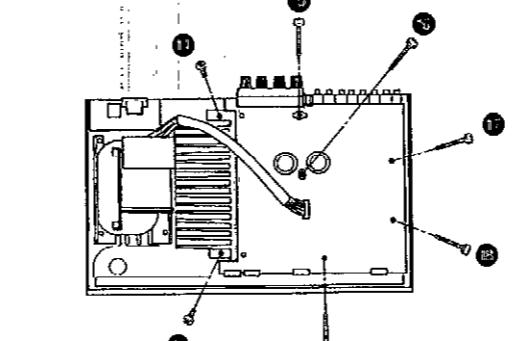
**Step 2** Remove the 13 screws.



**Step 3** Remove the 3 screws.

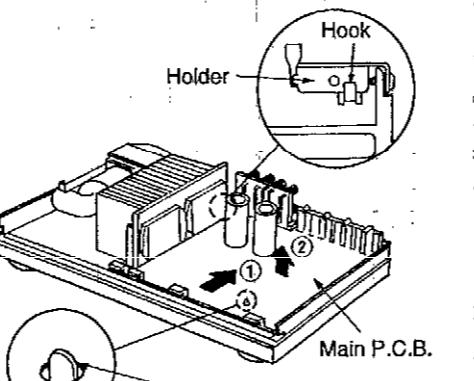


**Step 4** Remove the 7 screws.

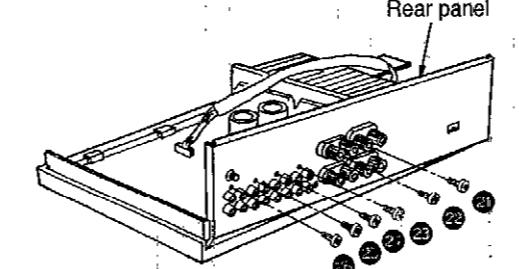


**Step 5** Lift the main P.C.B. off the retention post on the bottom chassis.

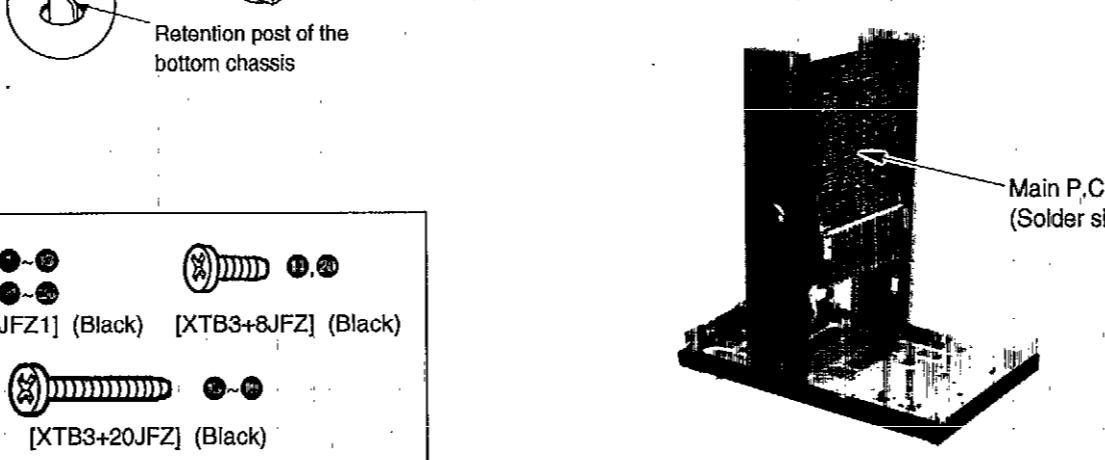
**Step 6** Remove the main P.C.B. in the direction of arrow ①, ②.



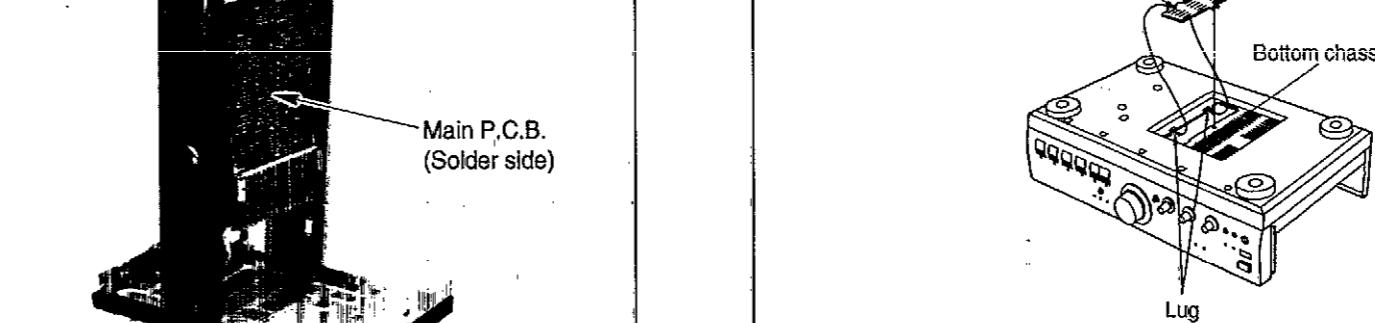
**Step 7** Install the rear panel temporarily on the main P.C.B. again.



**Step 8** Connect the front panel ass'y of the P.C.B. connectors to the main P.C.B. and set it as the illustration below.



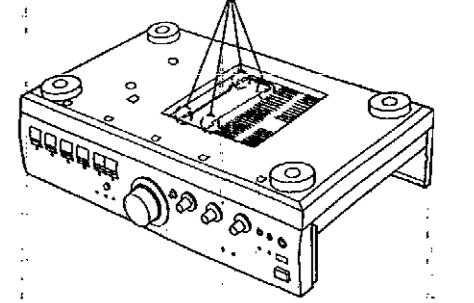
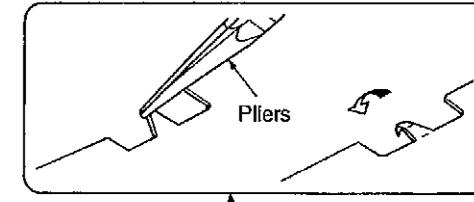
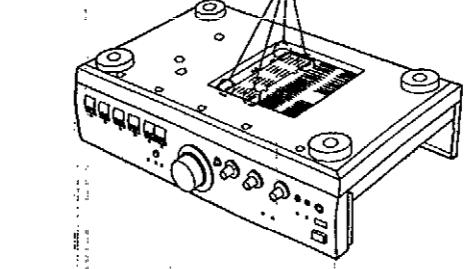
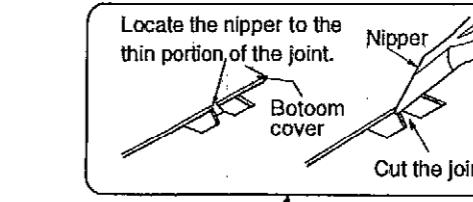
[XTBS3+8JFZ1] (Black) [XTWS3+10T] [XTBS3+8JFZ] (Black)  
[XTB3+20JFZ] (Black)



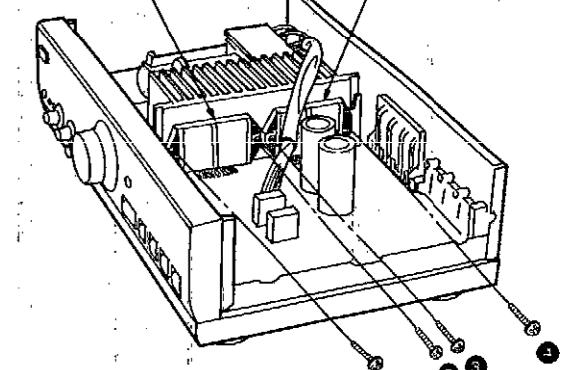
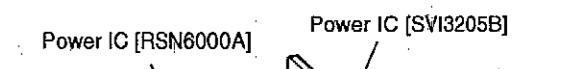
### CAUTION

- After replacing the power IC, apply a sufficient quantity of compound grease (RFKX0002/SZZ0L15) between the heat sink and the power IC (Radiation of power IC).
- Tighten enough the screws (1~4) after replacing the power IC. Otherwise, the heat radiation works little.

**Step 3** Fold the joints. (4 portions)

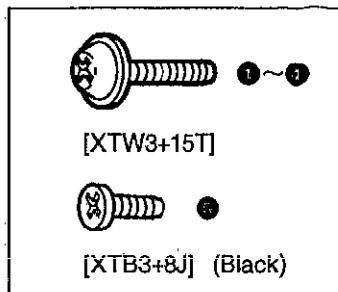


**Step 5** Remove the 4 screws.

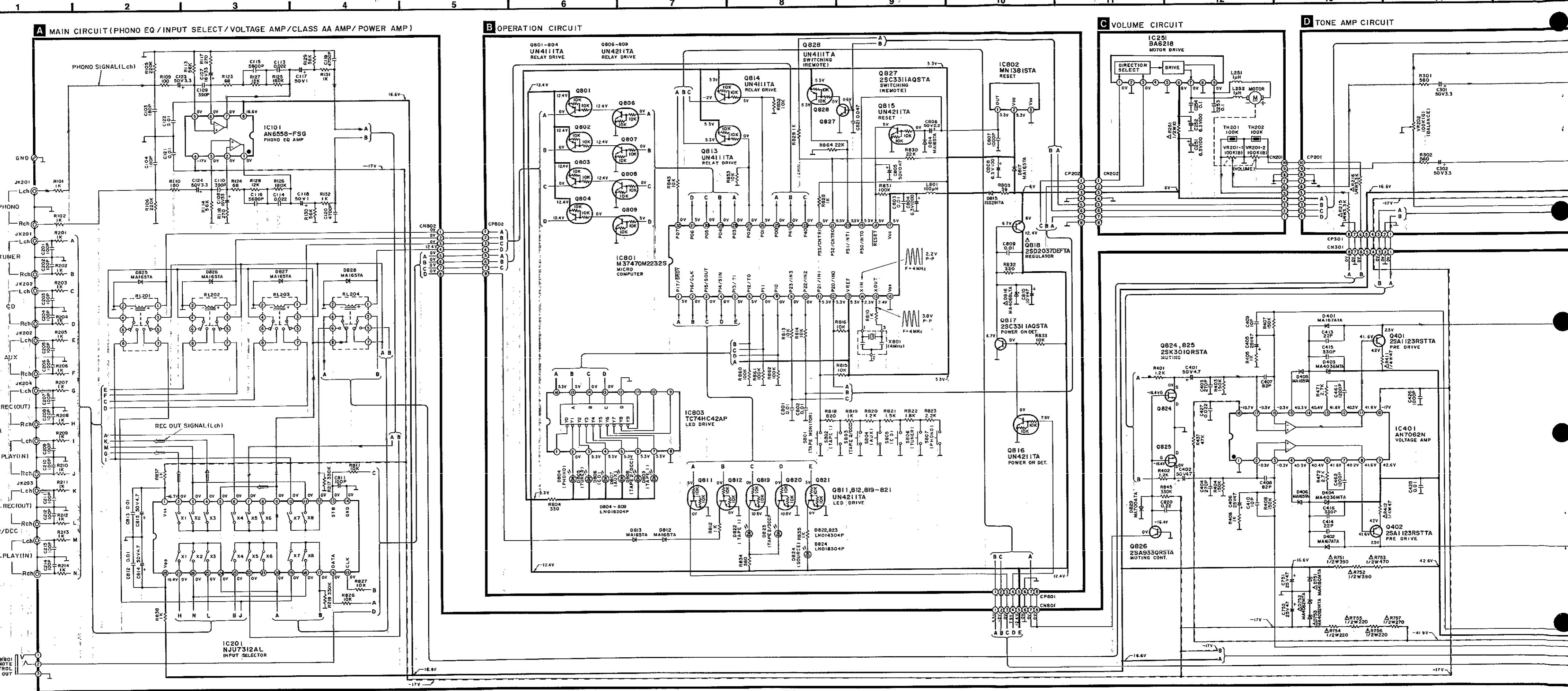


### CAUTION

- After replacing the power IC, apply a sufficient quantity of compound grease (RFKX0002/SZZ0L15) between the heat sink and the power IC (Radiation of power IC).
- Tighten enough the screws (1~4) after replacing the power IC. Otherwise, the heat radiation works little.



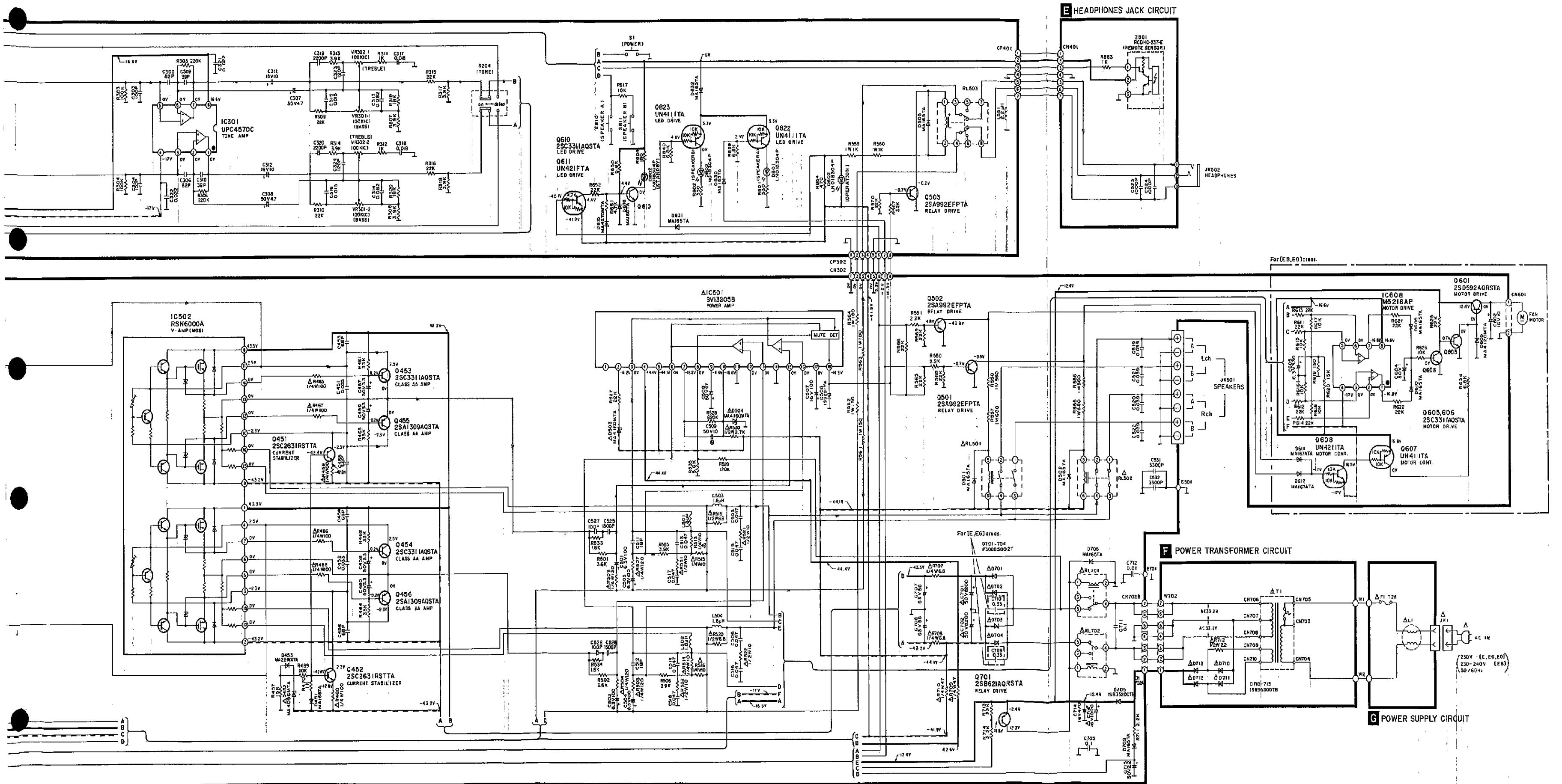
**Schematic Diagram • Main/Operation/Volume/Tone Amp. Circuit** (Parts list on page 28~34.)



## Power Switch/Headphones Jack/Power Supply/Power Transformer Circuit

(Parts list on page 28~34.)

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35



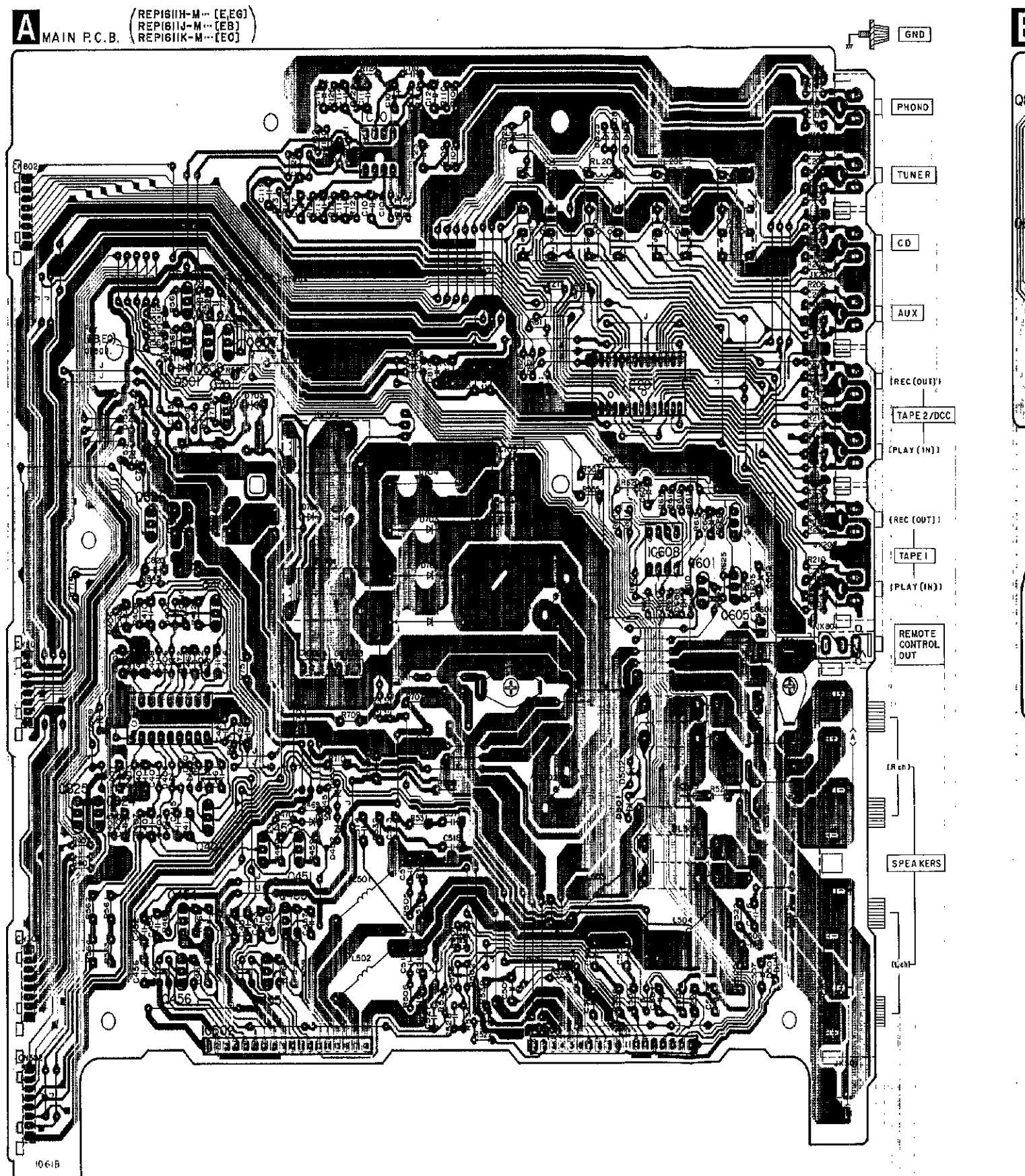
- S1 : Power Standby ON switch.
  - S204: TONE control switch (ON/DEFEAT).
  - S801: TAPE MONITOR switch.
  - S802: Input selector switch (TAPE 1).
  - S803: Input selector switch (TAPE 2/OC).
  - S804: Input selector switch (AUX).
  - S805: Input selector switch (OD).
  - S806: Input selector switch (TUNER).
  - S807: Input selector switch (PHONO).
  - S810: Speaker select switch (SPEAKER A).
  - S811: Speaker select switch (SPEAKER 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.
- Important safety notice:**  
Components identified by  $\Delta$  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.

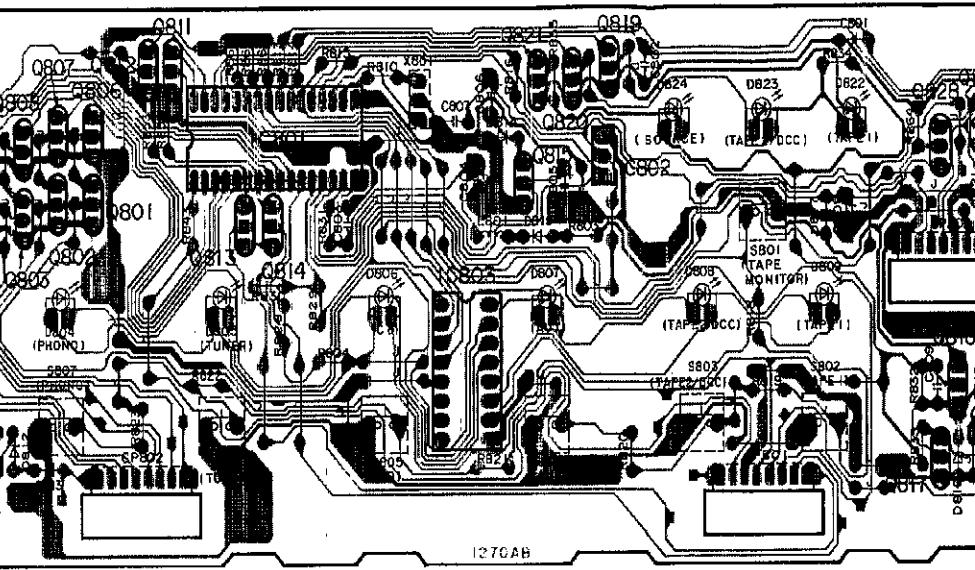
Part No.	Production Part No.	Supply Part No.
Z801	RCDHC-237-E	RCDHC-237

## ■ Printed Circuit Board Diagram

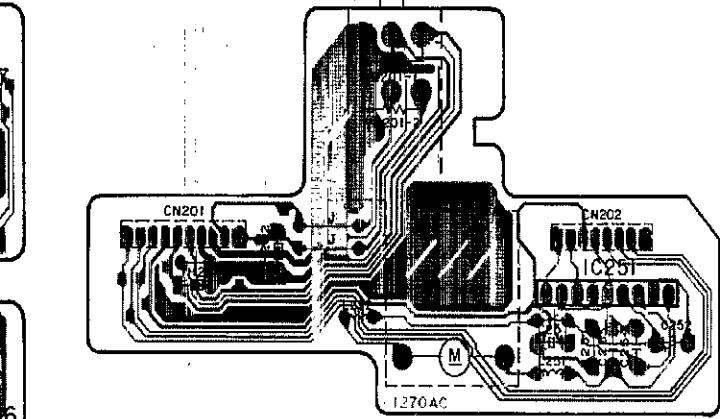
- This circuit board diagram may be modified at any time with the development of new technology.



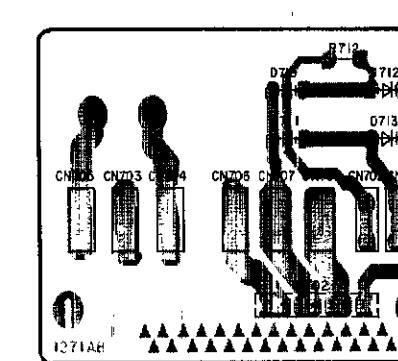
**OPERATION P.C.B. (REP1869A-S)**



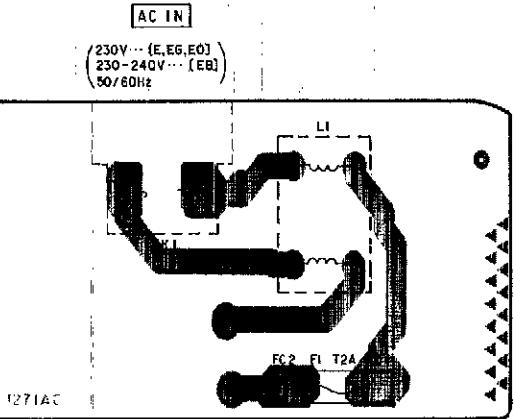
C VOL  
(RE)



**F** POWER TRANSFORMER P.C.B.  
(PEP1872A-P)



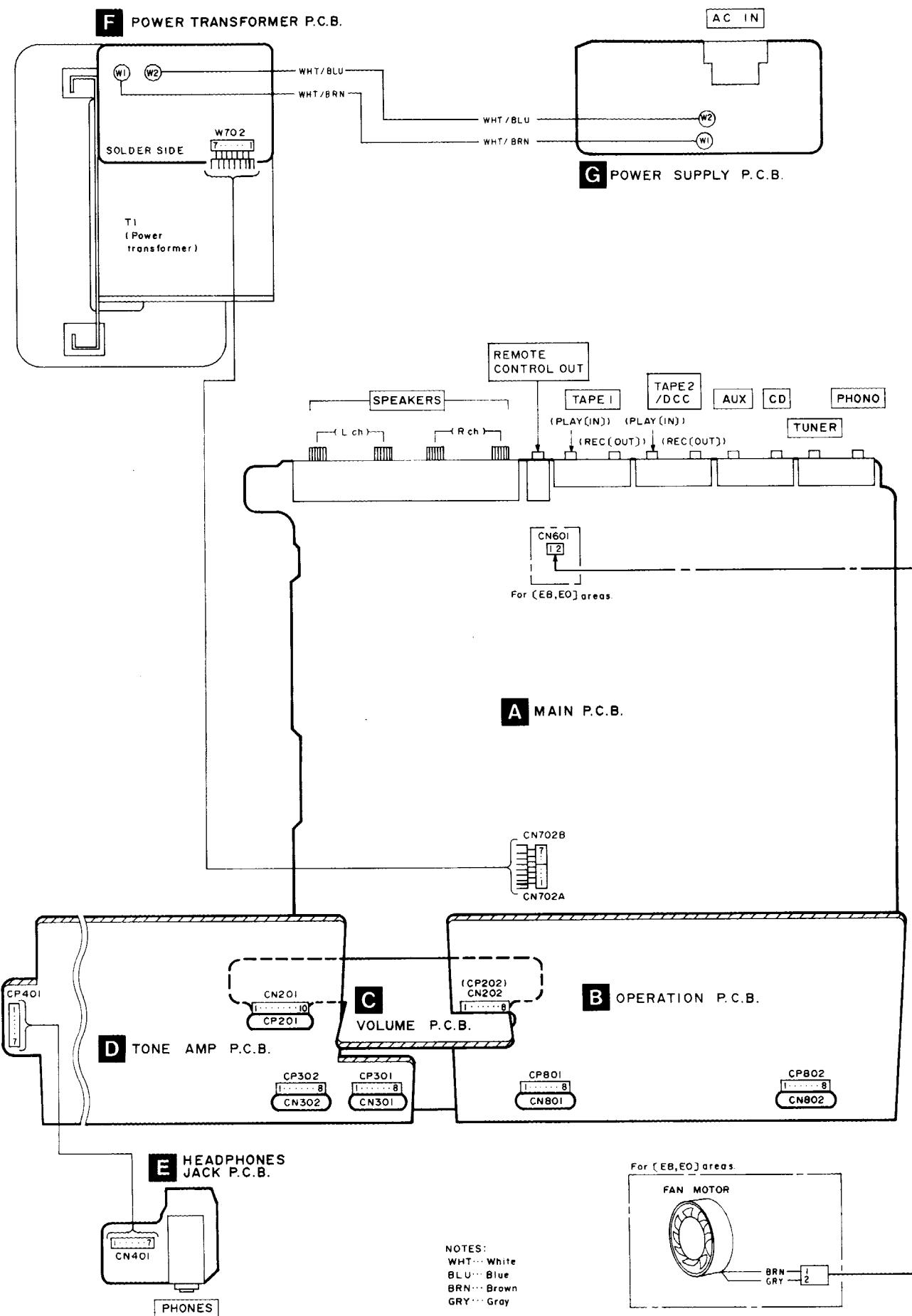
POWER SUPPLY P.C.B.(REPI872A-P)



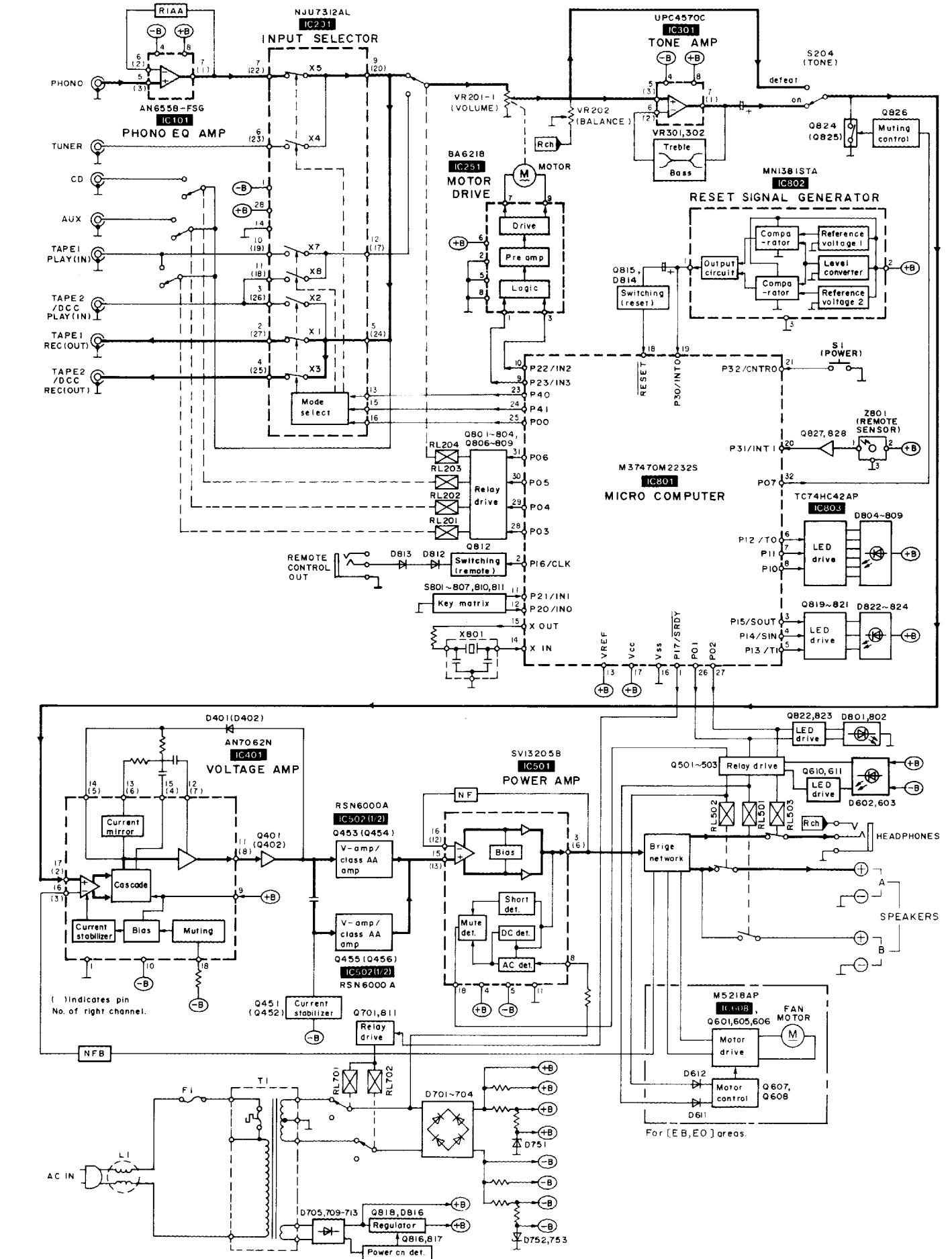
- Terminal guide of IC's, transistors and diodes

M5218AP	AN6558-FSG	 No.1	UPC4570C AN7062N NJU7312AL	8 Pin 18Pin 28Pin	TC74HC42AP M37470M2232S	16Pin 32Pin
BA6218	RSN6000A SVI3205B		MN1381STA		2SA933QRSTA 2SA992EFPTA 2SA1123RSTTA 2SB621A-R 2SC2631RSTTA 2SD592ANCQ	2SK301QRS
			2SA1309A-R 2SC3311A-Q UN421FTA UN4111 UN4211	2SD2037DEFTA	 	MA165 MA167 MA29WA MA700 1SS291TA 1SR35200TB
	MA4036MTA MA4056NTA MA4068L MA4082MTA	 	MA4160M MA4120 MA4270		LN014304P LN018304P	
 		 				

## ■ Wiring Connection Diagram



## ■ Block Diagram



## ■ Function of IC Terminals

**IC801 (M37470M2232S)**

Pin No.	Terminal Name	I/O	Function
1	P17/SRDY	O	Relay (Power SW) drive signal output.
2	P16/CLK	O	Remote control signal output.
3	P15/SOUT	O	LED (TAPE 1) drive signal output.
4	P14/SIN	O	LED (TAPE 2) drive signal output.
5	P13/TI	O	LED (SOURCE) drive signal output.
6	P12/TO	O	Input select LED drive signal output.
7	P11	O	
8	P10	O	
9	P23/IN3	O	Motor (volume control) drive signal output.
10	P22/IN2		
11	P21/IN1	I	Input select switch signal input.
12	P20/IN0	I	Switch (POWER, SPEAKER A, SPEAKER B) signal input.
13	VREF	I	Reference voltage input.
14	XIN	I	Oscillator signal I/O terminal. (4 MHz)
15	XOUT	O	
16	VSS	—	GND terminal.
17	VCC	I	Power supply (+5V).

Pin No.	Terminal Name	I/O	Function
18	RESET	I	System reset signal input.
19	P30/INTO	I	Back-up detect signal input.
20	P31/INTI	I	Remote control receive signal input.
21	P32/CNRO	I	Power SW signal input.
22	P33/CNRI	—	No used. Connected to GND.
23	P40	O	Strobe signal input for Input Selector IC (IC201).
24	P41	O	Clock signal input for Input Selector IC (IC201).
25	P00	O	Data signal input for Input Selector IC (IC201).
26	P01	O	SPEAKER A select signal output.
27	P02		SPEAKER B select signal output.
28	P03		Selector Relay drive signal output.
29	P04		
30	P05		
31	P06		
32	P07	O	Audio muting control signal output.

## ■ Replacement Parts List

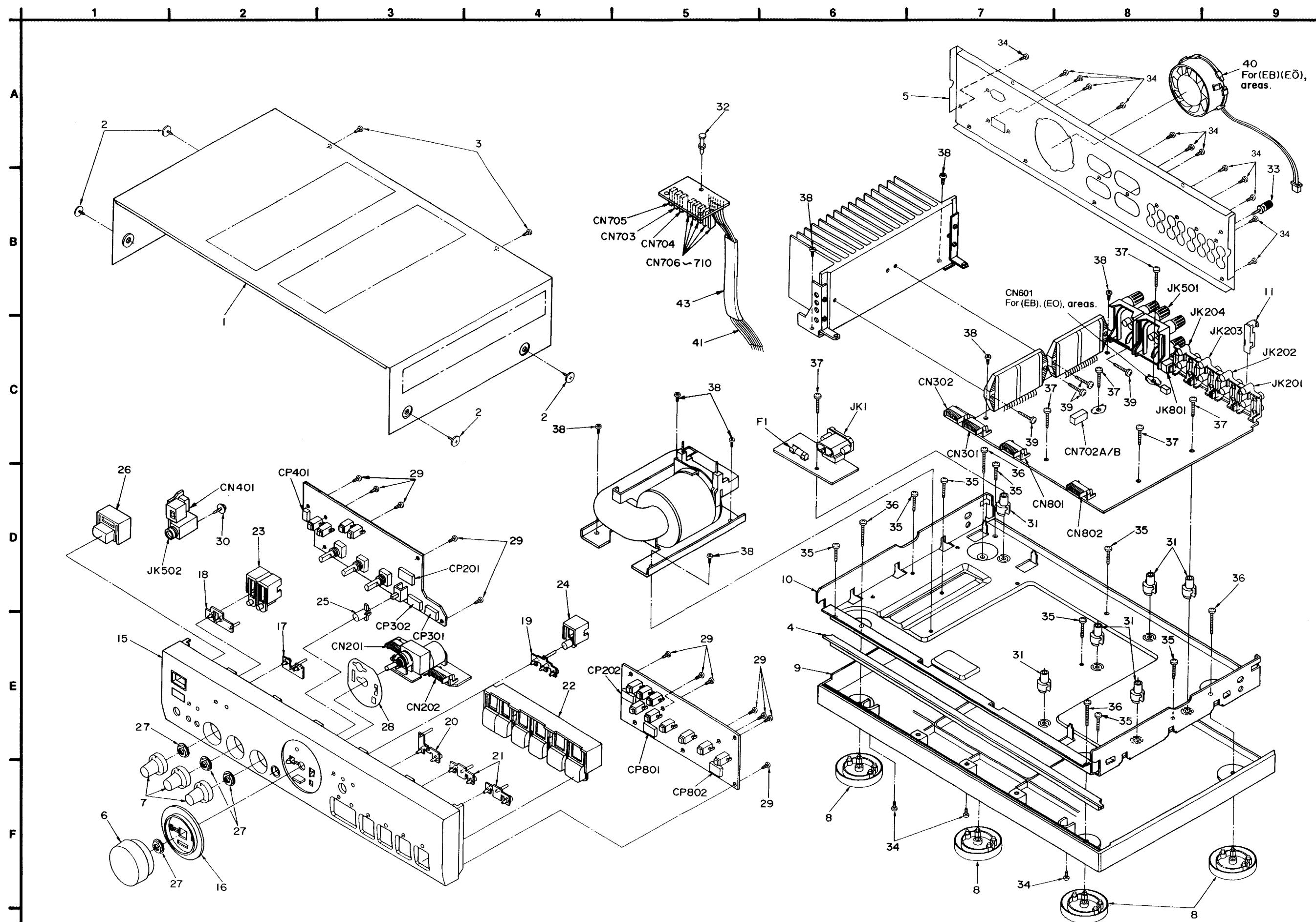
**Notes:** \*Important safety notice:  
Components identified by  $\Delta$  mark have special characteristics important for safety.  
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.  
When replacing any 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
		INTEGRATED CIRCUIT(S)	
IC101	AN6558-FSG	I. C. PHONO EQ. AMP.	
IC201	NJU7312AL	I. C. INPUT SELECTOR	
IC251	BA6218	I. C. VOLUME MOTOR DRIVE	
IC301	UPC4570C	I. C. TONE AMP.	
IC401	AN7062N	I. C. VOLTAGE AMP.	
IC501	SVI3205B	I. C. POWER AMP.	$\Delta$
IC502	RSN6000A	I. C. V-AMP.	
IC608	M5218AP	I. C. FUN MOTOR DRIVE	(EB, EO)
IC801	M37470M2232S	I. C. MICRO COMPUTER	
IC802	MN1381STA	I. C. RESET	
IC803	TC74HC42AP	I. C. LED DRIVE	
		TRANSISTOR(S)	
Q401, 402	2SA1123RSTA	TRANSISTOR	
Q451, 452	2SC2631RSTA	TRANSISTOR	
Q453, 454	2SC3311A-Q	TRANSISTOR	
Q455, 456	2SA1309A-R	TRANSISTOR	
Q501-503	2SA992EFPTA	TRANSISTOR	
Q601	2SD592ANQ	TRANSISTOR	(EB, EO)
Q605, 606	2SC3311A-Q	TRANSISTOR	(EB, EO)
Q607	UN4111	TRANSISTOR	(EB, EO)
Q608	UN4211	TRANSISTOR	(EB, EO)
Q610	2SC3311A-Q	TRANSISTOR	
Q611	UN421FTA	TRANSISTOR	
Q701	2SB621A-R	TRANSISTOR	
Q801-804	UN4111	TRANSISTOR	
Q806-809	UN4211	TRANSISTOR	
Q811, 812	UN4211	TRANSISTOR	
Q813, 814	UN4111	TRANSISTOR	
Q815, 816	UN4211	TRANSISTOR	
Q817	2SC3311A-Q	TRANSISTOR	
Q818	2SD2037DEFTA	TRANSISTOR	$\Delta$
Q819-821	UN4211	TRANSISTOR	
Q822, 823	UN4111	TRANSISTOR	
Q824, 825	2SK301QRS	TRANSISTOR	
Q826	2SA933QRSTA	TRANSISTOR	
Q827	2SC3311A-Q	TRANSISTOR	
Q828	UN4111	TRANSISTOR	
		DIODE(S)	
D401, 402	MA167	DIODE	
		VARIABLE RESISTOR(S)	
VR201	RRV16B03B15A	V. R. MAIN VOLUME	
VR202	EVJ02QF04G15	V. R. BALANCE	
VR301	EVJYA1F04C15	V. R. BASS	
VR302	EVJYA1F04C15	V. R. TREBLE	
		THERMISTOR(S)	
TH201, 202	ERTD2ZHL104T	THERMISTOR	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		COMPONENT COMBINATION(S)		CP301, 302	RJT003K008-1	CONNECTOR(8P)	
				CP401	RJT057W007 1	CONNECTOR(7P)	
2801	RCDHC-237	REMOTE SENSOR		CP801, 802	RJT003K008 1	CONNECTOR(8P)	
		COIL(S)				EARTH TERMINAL	
L1	RLQZ271M	COIL	△	E501	SNE1004-2	GND PLATE	
L251, 252	ELEXT1ROKA9	COIL		E701	SNE1004-2	GND PLATE	
L501, 504	SLQY18G-10	COIL					
L551	ELEPK2R2MA	COIL				FUSE	
L801	ELEXT101KA9	COIL		FC1, 2	EYF52BC	FUSE HOLDER	
		TRANSFORMER(S)				RELAY(S)	
T1	RTP7K5B005-W	POWER TRANSFORMER	△(EB)	RL201-204	RSY0020M-R	RELAY	
T1	RTP7K5E009-W	POWER TRANSFORMER	△(E, EG, EO)	RL501, 502	RSY0013M-0	RELAY	△
		OSCILLATOR(S)		RL503	RSY0020M-R	RELAY	
X801	EF0GC4004A4	OSCILLATOR(4MHz)		RL701, 702	RSY0012M-0	RELAY	△
		FUSE(S)				JACK(S)	
F1	XBA2C20TB0	FUSE, 250V, 2A	△	JK1	SJS9236	AC INLET	△
		SWITCH(ES)		JK201	SJF3069N	INPUT TERMINAL (PHONO/TUNER)	
S1	EVQ21405R	SW, POWER		JK202	SJF3069N	INPUT TERMINAL (CD/AUX)	
S204	ESB68046	SW, TONE CONTROL		JK203	SJF3069N	IN/OUTPUT TERMINAL	
S801	EVQ21405R	SW, TAPE MONITOR		JK204	SJF3069N	IN/OUTPUT TERMINAL	
S802	EVQ21405R	SW, TAPE 1		JK501	RJH4801M-2	SPEAKERS TERMINAL (EB)	
S803	EVQ21405R	SW, TAPE 2/DCC		JK501	RJH4801M-1	SPEAKERS TERMINAL (E, EG, EO)	
S804	EVQ21405R	SW, AUX		JK502	RJJ63TA01	HEADPHONE JACK	
S805	EVQ21405R	SW, CD		JK801	RJJ33TR01	REMOTE CONTROL JACK	
S806	EVQ21405R	SW, TUNER					
S807	EVQ21405R	SW, PHONO					
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)					
CN401	RJT057W007	SOCKET(7P)					
CN601	SJT3213	CONNECTOR(2P)	(EB, EO)				
CN703-710	RJS1AI101T1	SOCKET(1P)					
CN801, 802	RJU003K008M1	SOCKET(8P)					
CN702A	RJS1A6604	CONNECTOR(4P)					
CN702B	RJS1A6603	CONNECTOR(3P)					
CP201	RJT003K010-1	CONNECTOR(10P)					
CP202	RJT003K008-1	CONNECTOR(8P)					



## ■ Cabinet Parts Location



## ■ Packaging

1038

Notes : \* Capacity values are in microfarads ( $\mu\text{F}$ ) unless specified otherwise, P=Pico-farads ( $\text{pF}$ ) F=Farads ( $\text{F}$ )  
 \* Resistance values are in ohms, unless specified otherwise, 1K=1,000 ( $\text{OHM}$ ), 1M=1,000k ( $\text{OHM}$ )

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
			R519, 520△	ERDS1FVJ6R8T	1/2W 6.8	R820	ERDS2TJ122	1/4W 1.2K
		RESISTORS	R521, 522△	ERDS1FVJ100T	1/2W 10	R821	ERDS2TJ152	1/4W 1.5K
R101, 102	ERDS2TJ102	1/4W 1K	R527	ERDS2TJ223	1/4W 22K	R822	ERDS2TJ182	1/4W 1.8K
R105, 106	ERDS2TJ224T	1/4W 220K	R528	ERDS2TJ824	1/4W 820K	R823	ERDS2TJ222	1/4W 2.2K
R109, 110	ERDS2TJ101	1/4W 100	R529	ERDS2TJ124T	1/4W 120K	R826, 827	ERDS2TJ103	1/4W 10K
R113, 114	ERDS2TJ563	1/4W 56K	R530△	ERDS1FVJ272T	1/2W 2.7K	R828, 829	ERDS2TJ102	1/4W 1K
R117, 118	ERDS2TJ271	1/4W 270	R531, 532△	ERDS1FVJ100T	1/2W 10	R830	ERDS2TJ223	1/4W 22K
R123, 124	ERDS2TJ680T	1/4W 68	R533, 534	ERDS2TJ182	1/4W 1.8K	R831	ERDS2TJ104	1/4W 100K
R125, 126	ERDS2TJ184T	1/4W 180K	R535	ERDS2TJ562	1/4W 5.6K	R832	ERDS2TJ331	1/4W 330
R127, 128	ERDS2TJ123	1/4W 12K	R550, 551	ERDS2TJ222	1/4W 2.2K	R833	ERDS2TJ103	1/4W 10K
R129, 130	ERDS2TJ563	1/4W 56K	R555	ERG1SJ681E	1W 680	R834	ERDS2TJ561	1/4W 560
R131, 132	ERDS2TJ102	1/4W 1K	R556	ERG1SJ561E	1W 560	R835	ERDS2TJ102	1/4W 1K
R201-206	ERDAS3G102T	1/4W 1K	R557	ERG1SJ681E	1W 680	R837, 838	ERDS2TJ102	1/4W 1K
R207, 208	ERDAS2TJ102	1/4W 1K	R558	ERG1SJ561E	1W 560	R839, 840	ERDS2TJ682T	1/4W 6.8K
R209, 210	ERDAS3G102T	1/4W 1K	R559, 560	ERG1SJ102E	1W 1K	R843	ERDS2TJ103	1/4W 10K
R211, 212	ERDAS2TJ102	1/4W 1K	R561, 562	ERG1SJ151E	1W 150	R845	ERDS2TJ334	1/4W 330K
R213, 214	ERDAS3G102T	1/4W 1K	R563, 564	ERG1SJ181E	1W 180	R852, 853	ERDS2TJ103	1/4W 10K
R215, 216△	ERDLS2VJ332T	1/4W 3.3K	R565-570	ERDS2TJ223	1/4W 22K	R854	ERDS2TJ471	1/4W 470
R217, 218	ERDAS2TJ334	1/4W 330K	R604	ERDS2TJ181T	1/4W 180	R860-862	ERDS2TJ104	1/4W 100K
R251△	ERDS1FVJ100T	1/2W 10	R611-614	ERDS2TJ223	1/4W 22K (EB, EO)	R863	ERDS2TJ102	1/4W 1K
R301, 302	ERDAS3G561	1/4W 560	R615-618	ERDS2TJ103	1/4W 10K (EB, EO)	R864	ERDS2TJ223	1/4W 22K
R303, 304	ERDAS2TJ104	1/4W 100K	R619	ERDS2TJ151	1/4W 150 (EB, EO)			CAPACITORS
R305, 306	ERDAS2TJ224T	1/4W 220K	R620	ERDAS2TJ153	1/4W 15K (EB, EO)			
R307, 308*	ERDAS2TJ392T	1/4W 3.9K	R621, 622	ERDAS2TJ223	1/4W 22K (EB, EO)			
R309, 310	ERDAS2TJ223	1/4W 22K	R624	ERDAS2TJ682T	1/4W 6.8K (EB, EO)	C103, 104	ECBT1H181KB5	50V 180P
R311, 312	ERDAS2TJ102	1/4W 1K	R625	ERDAS2TJ223	1/4W 22K (EB, EO)	C107, 108	ECEA1CKA330B	16V 33U
R313, 314	ERDAS2TJ392T	1/4W 3.9K	R626	ERDAS2TJ103	1/4W 10K (EB, EO)	C109, 110	ECBT1H391KB5	50V 390P
R315, 316	ERDAS2TJ223	1/4W 22K	R650	ERDAS2TJ562	1/4W 5.6K	C113, 114	ECQB1H223JF3	50V 0.022U
R317, 318	ERDAS2TJ392T	1/4W 3.9K	R651	ERDAS2TJ472	1/4W 4.7K	C115, 116	ECQB1H562JF3	50V 5600P
R319, 320	ERDAS2TJ183T	1/4W 18K	R652	ERDAS2TJ223	1/4W 22K	C117, 118	ECEA1HKA010B	50V 1U
R401, 402	ERDAS3G122	1/4W 1.2K	R707, 708△	ERDAF2VJ6R8T	1/4W 6.8	C119, 120	ECQB1H472JP3	50V 4700P
R403, 404	ERDAS2TJ154	1/4W 150K	R709, 710△	ERDAF2VJ470T	1/4W 4.7	C121, 122	ECBT1C103NS5	16V 0.01U
R405, 406	ERDAS3G102T	1/4W 1K	R711	ERDAS2TJ222	1/4W 2.2K	C123, 124	ECEA1HKA3R3B	50V 3.3U
R407, 408	ERDAS3G154T	1/4W 150K	R712△	ERDS1FVJ2R2T	1/2W 2.2	C201-214	ECKT1H101KB	50V 100P
R411, 412△	ERDAF2VJ470T	1/4W 47	R713	ERDAS2TJ223	1/4W 22K	C251, 252	ECEA0JKA101B	6.3V 100U
R437	ERDAS2TJ473	1/4W 47K	R714	ERDAS2TJ222	1/4W 2.2K	C253, 254	ECQV1H104JM3	50V 0.1U
R457	ERDAS3G153T	1/4W 15K	R751, 752△	ERDS1FVJ391T	1/2W 390	C301, 302	ECA1HPXSR3B	50V 3.3U
R459, 460△	ERDAF2VJ101T	1/4W 100	R753△	ERDS1FVJ471T	1/2W 470	C303, 304	ECCR1H101K5	50V 100P
R461-464	ERDAS2TJ333	1/4W 33K	R754-756△	ERDS1FVJ221T	1/2W 220	C305, 306	ECBT1H820KB5	50V 82P
R465-468△	ERDAF2VJ101T	1/4W 100	R757△	ERDS1FVJ271T	1/2W 270	C307, 308	ECA1HPXSR7B	50V 4.7U
R469	ERDAS3G103T	1/4W 10K	R801, 802	ERDAS2TJ331	1/4W 330	C309, 310	ECBT1H390J5	50V 39P
R470	ERDAS3G102T	1/4W 1K	R803	ERDAS2TJ390	1/4W 39	C311, 312	ECA1CPKS100B	16V 10U
R471, 472	ERDAS2TJ272T	1/4W 2.7K	R804	ERDAS2TJ331	1/4W 330	C313, 314	ECQV1H823JM3	50V 0.082U
R501, 502	ERDAS2TJ362T	1/4W 3.6K	R810	ERDAS2TJ102	1/4W 1K	C315, 316	ECQB1H153JF3	50V 0.015U
R503, 504△	ERDAF2VJ121T	1/4W 120	R811	ERDAS2TJ103	1/4W 10K	C317, 318	ECQB1H183JF3	50V 0.018U
R505, 506	ERDAS2TJ392T	1/4W 3.9K	R812	ERDAS2TJ102	1/4W 1K	C319, 320	ECQB1H222JF3	50V 2200P
R507, 508△	ERDAF2VJ121T	1/4W 120	R813-817	ERDAS2TJ103	1/4W 10K	C321, 322	ECBT1E223ZF	25V 0.022U
R513-516△	ERDAF2VJ100T	1/4W 10	R818	ERDAS2TJ621	1/4W 820	C323, 324	ECBT1H21KB5	50V 120P
			R819	ERDAS2TJ102	1/4W 1K	C401, 402	ECEA1HBZ4R7B	50V 4.7U

Ref. No.	Part No.	Values & Remarks
C403, 404	ECCR1H271K5	50V 270P
C405, 406	ECBT1H820KB5	25V 47U
C407, 408	ECCR2H100K5	50V 10P
C409, 410	ECCR2H220J5	50V 22P
C413, 414	ECKR1H331KB5	50V 330P
C415, 416	ECKT1H102KB5	50V 1000P
C426	ECBT1H102KB5	25V 0.022U
C427	ECKT1E223ZF	50V 0.01U
C428	ECKR1H103ZF5	50V 0.033U
C451, 452	ECKR1H333ZF5	50V 0.033U
C453-456	ECCV2H680K	50V 68P
C457-460	ECA1HKA3R3B	50V 3.3U
C461, 462	ECKT1H122KB	50V 1200P
C501-504	ECA0JPXS101B	6.3V 100U
C505, 506	ECQV1H473JM3	50V 0.047U
C507	ECA1CKA101B	16V 100U
C508	ECA1HM470B	50V 47U
C509	ECEA1HN100SB	50V 10U
C511, 512	ECBT1H180J5	50V 18P
C513-518	ECQV1H473JM3	50V 0.047U
C519-522	ECQB1H393JF3	50V 0.033U
C523, 524	ECBT1H102KB5	50V 1000P
C525, 526	ECBT1C152JR5	16V 1500P
C527, 528	ECBT1H101KB5	50V 100P
C531, 532	ECBT1C332KR5	16V 3300P
C602	ECA1CKA100B	16V 10U (EB, EO)
C604	E	