

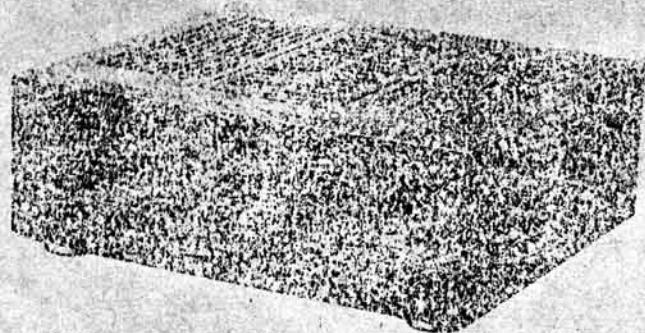
Service Manual

Stereo Integrated Amplifier

Amplifier

SU-VX700

Color

 Black Type


SPECIFICATIONS (DIN 45 500)

MAIN AMP. SECTION (POWER AMP. DIRECT Input)

20 Hz~20 kHz continuous power output both channels driven	2 × 90 W (8 Ω)
1 kHz continuous power output both channels driven (THD: 1%)	2 × 105 W (8 Ω) 2 × 135 W (4 Ω)
65 Hz~12.5 kHz continuous power output both channels driven (THD: 0.7%)	2 × 90 W (8 Ω) 2 × 125 W (4 Ω)
Total harmonic distortion	
rated power at 20 Hz~20 kHz	0.007% (8 Ω)
half power at 20 Hz~20 kHz	0.005% (8 Ω)
half power at 1 kHz	0.0009% (8 Ω) 5.002% (4 Ω)
Intermodulation distortion (50 Hz: 7 kHz = 4:1, SMPTE)	
rated power	0.007% (8 Ω)
Residual hum and noise	0.2 mV
Damping factor	80 (8 Ω), 40 (4 Ω)
Headphones output level/impedance	555 mV/30 Ω
Load impedance	
A or B, BI-WIRING	4~16 Ω
A and B	8~16 Ω

PRE AMP. SECTION

Input sensitivity/impedance	
PHONO MM	2.5 mV/47 kΩ
MC	250 μV/220 Ω
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT	150 mV/22 kΩ
POWER AMP. DIRECT	1 V/15 kΩ
Phono maximum input voltage (1 kHz, RMS)	
MM	170 mV
MC	15 mV
S/N (Rated power 4 Ω)	
PHONO MM	75 dB (88 dB, IHF '65)
MC	82 dB (55 dB, IHF '65)
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT	
	87 dB (100 dB, IHF '66)
POWER AMP. DIRECT	106 dB (115 dB, IHF '66)

Areas

Country Code	Area	Color
(E)	Continental Europe	
(EB)	Great Britain	(K)
(EG)	F.R. Germany & Italy	

S/N at -26 dB power (4 Ω)	
PHONO MM	77 dB
MC	87 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT	81 dB
S/N at 50 mW power (4 Ω)	
PHONO MM	75 dB
MC	87 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT	78 dB
Frequency response	
PHONO MM	RIAA standard curve ±0.8 dB (30 Hz~15 kHz)
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT	
	3 Hz~100 kHz (+0, -3 dB)
	+0 dB, -0.2 dB (30 Hz~20 kHz)
POWER AMP. DIRECT	
	3 Hz~120 kHz (+0, -3 dB)
	+0 dB, -0.2 dB (20 Hz~20 kHz)
Tone controls	
BASS	50 Hz, +10~-10 dB
TREBLE	20 kHz, +10~-10 dB
Muting	-20 dB
Subsonic filter	20 Hz, -12 dB/oct
Loudness control (volume at -30 dB)	50 Hz, +9 dB
Output voltage/impedance	
TAPE 1, TAPE 2/DAT REC OUT	150 mV
Channel balance (AUX 250 Hz~6.3 kHz)	±1 dB
Channel separation (AUX 1 kHz)	50 dB

GENERAL

Power consumption	590 W
Power supply	
For Great Britain:	AC 50 Hz/60 Hz, 240 V
For Others:	AC 50 Hz/60 Hz, 230 V
Dimensions (W × H × D)	420 × 153 × 425 mm (16 15/16" × 6 7/32" × 16 29/32")
Weight	14.0 kg (30.8 lb)

Notes:

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

Technics

■ CONTENTS

	Page		Page
BEFORE REPAIR AND ADJUSTMENT	2	PRINTED CIRCUIT BOARDS	15~18
PROTECTION CIRCUITRY	2	WIRING CONNECTION DIAGRAM	19
ACCESSORY	2	BLOCK DIAGRAM	20
LOCATION OF CONTROLS	3, 4	MEASUREMENTS AND ADJUSTMENTS	21
CONNECTIONS	4~6	REPLACEMENT PARTS LIST	22, 25~27
DISASSEMBLY INSTRUCTIONS	7~10	CABINET PARTS LOCATION	23, 24
SCHEMATIC DIAGRAM	11~14	PACKING	25

■ BEFORE REPAIR AND ADJUSTMENT

- (1) Turn off the power supply. Using a 10Ω, 10 W resistor, shortcircuit both ends of power supply capacitors (C601, C602) in order to discharge the voltage.
 - (2) Before turning on the power switch of the unit.
 - A. Connect the voltage controller to the primary side.
 - B. Connect the AC ampere meter to the primary side or connect the DC voltage meter to the "±B" circuit of the secondary side.
 - C. Turn the VR of ICQ (VR451, VR452, VR501 and VR502) to minimum (counterclockwise).
 - D. After setting the output to zero of the voltage controller, turn on the power switch of the unit.
And increase the output of voltage controller gradually.
Then, check carefully whether the current value of primary side become more than following value or whether the DC voltage of secondary side is increasing slowly.
 - E. If the value of current is increasing unusually or the DC voltage is not increasing, lower the output level of voltage controller immediately.
- The current value of the primary side at no signal. (Confirm the power supply voltage of each area and provided voltage of the unit.)

Power supply voltage		AC 230 V	AC 240 V
Consumed current	50 Hz	110~210 mA	100~200 mA
	60 Hz	———	———

■ PROTECTION CIRCUITRY

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

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function 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 the amplifier are used.

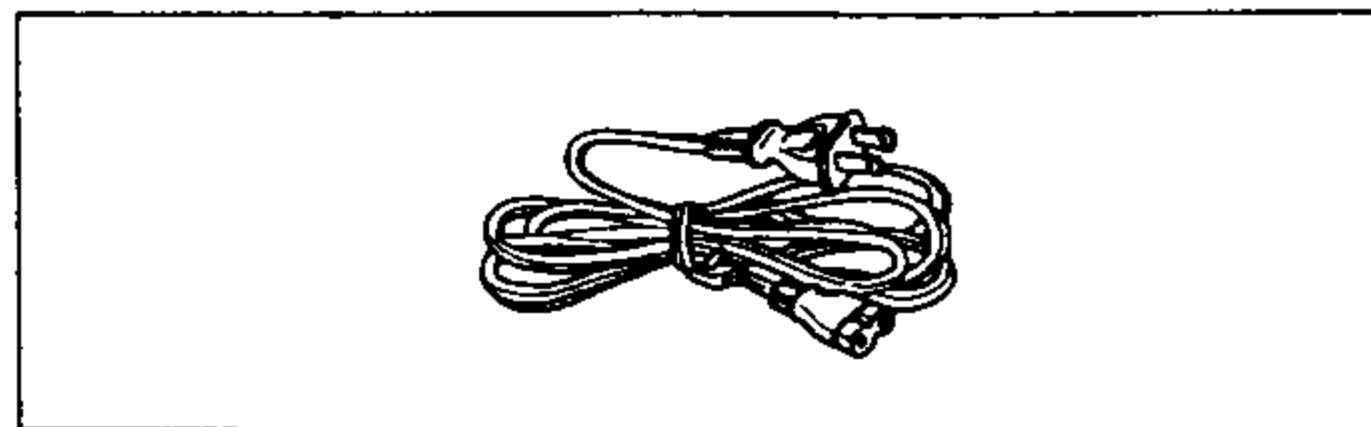
If this occurs, follow the procedure outlined below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again.

Note:

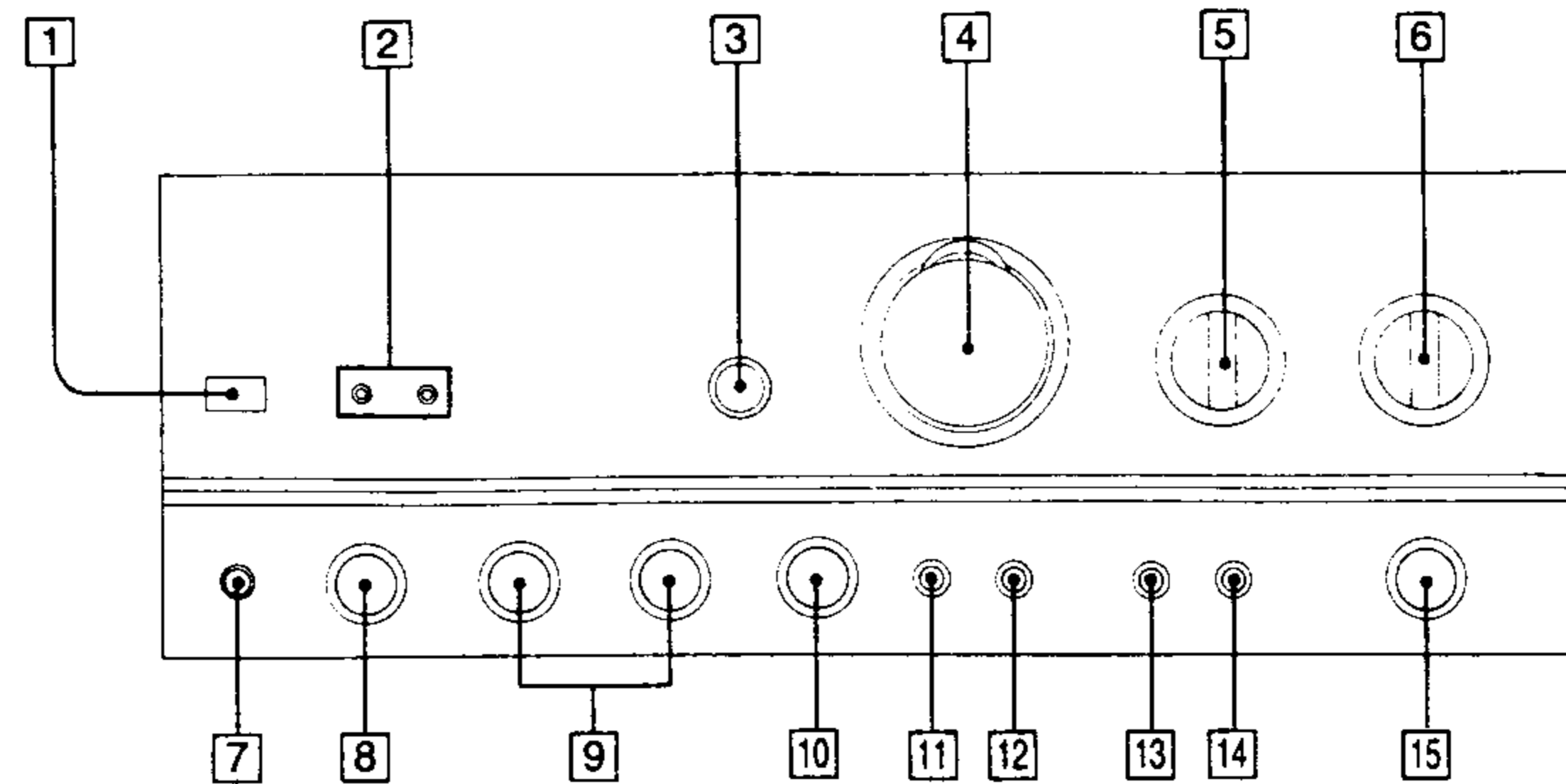
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

■ ACCESSORY



- AC power supply cords 1
- <SFDAC05E03> For (E), (EG) areas.
- <SJA193> For (EB) area only.

LOCATION OF CONTROLS



1 Power switch (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 operation condition.

CURRENT DRIVE:

When the power is switched ON, this indicator illuminates after about 4 seconds when the unit is in the operation 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 does not illuminate.

3 Power amplifier direct switch (POWER AMP DIRECT)

This switch is used to listen to the sound from a component connected to the "POWER AMP DIRECT" terminals.

When this switch is pressed inward to the "ON" position, a superior level of tone quality can be obtained, because the signals from the component connected to the "POWER AMP DIRECT" terminals are sent directly to the volume control and power amplifier section of this unit. The tone control circuit, balance control, loudness switch, muting switch and mode selector are bypassed.

4 Volume control/Indicator (VOLUME)

There are two types of volume scale indications: one for when the extended direct drive selector (for SU-VX800) or the power amplifier direct switch (for SU-VX700) is OFF, and one for when it is ON (Indicator will illuminate.).

5 Recording output selector (REC SELECTOR)

This selector is used to select the sound source to be recorded by the connected tape deck 1 and/or tape deck 2 (or DAT).

6 Input selector (INPUT SELECTOR)

This selector is used to select the sound source to be heard, such as a disc, radio broadcast, etc.

7 Headphones jack (PHONES)

8 Speaker selector (SPEAKERS)

This selector is used to select the speaker systems to be used.

OFF: No sound will be heard from the speaker systems.

A: Sound can be heard from the speaker systems connected to the "A" terminals.

B: Sound can be heard from the speaker systems connected to the "B" terminals.

A + B/BI-WIRING: Sound can be heard simultaneously from the speaker systems connected to the "A" terminals and the "B" terminals. Or, if bi-wired speaker systems are connected, sound can be heard from them.

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 Tone control switch (TONE CONTROL)

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

12 Loudness switch (LOUDNESS)

This switch is used when listening to music at a low volume level. Auditory perception of sound in the low frequency range falls off at low volume, but when the switch is set to the "ON" position, this deficiency is compensated for, so that the full impact of the musical performance can be enjoyed.

13 Muting switch (MUTING)

This switch is used to temporarily reduce the volume level (approx. 1/10).

The effect activates when setting this switch to the "ON" position.

14 Mode selector (MODE)

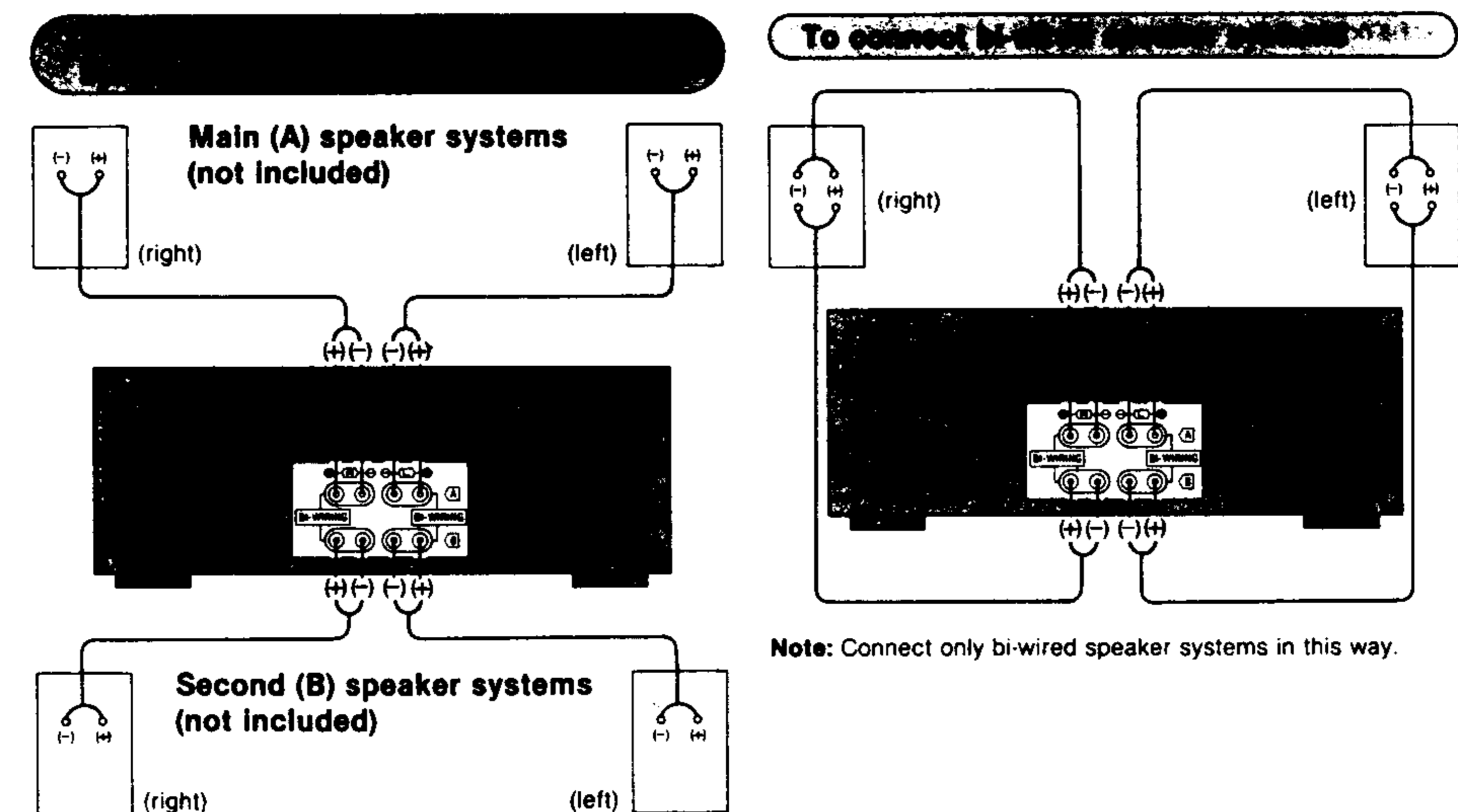
This selector is used to select stereo or monaural operation.

15 Phono cartridge selector (PHONO SELECTOR)

This selector should be set to the position which corresponds to the type of cartridge used on the turntable. The "SUBSONIC" position is used to eliminate ultra-low-frequency noise such as motor "rumble" and unusual vibration of the woofer cone caused by a warped disc, etc.

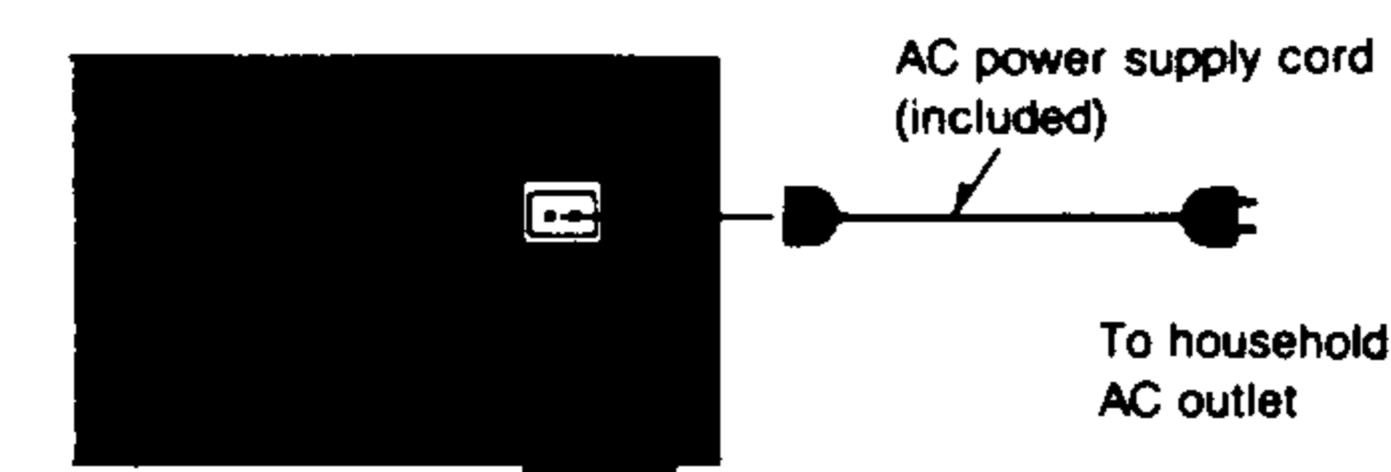
CONNECTIONS

Connection to speaker systems



Note: Connect only bi-wired speaker systems in this way.

To connect the AC power supply cord (included)



Notes:

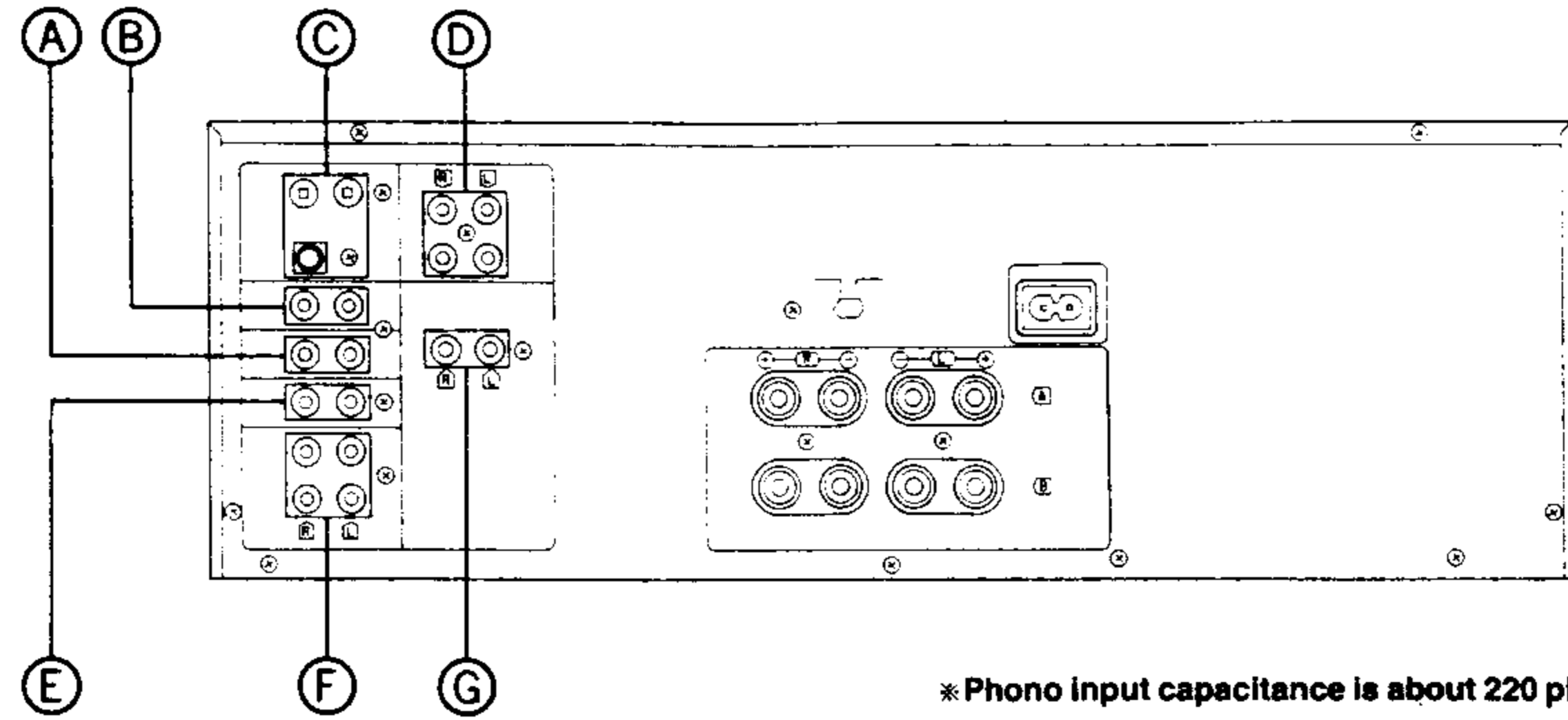
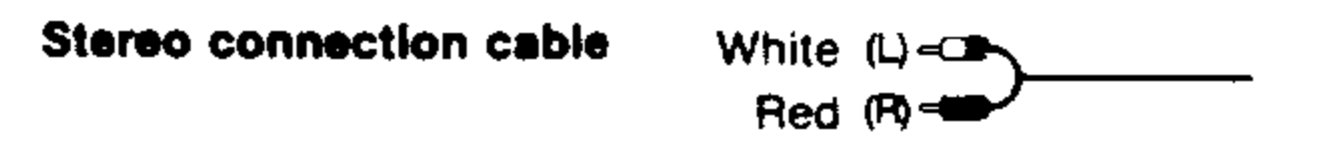
- Connect the AC power supply cord (included) after all other cables and cords are connected.
- The configuration of the AC outlet and AC power supply cord differs according to area.

For United Kingdom

Fit a suitable plug to the AC power supply cord.

To connect to each terminals

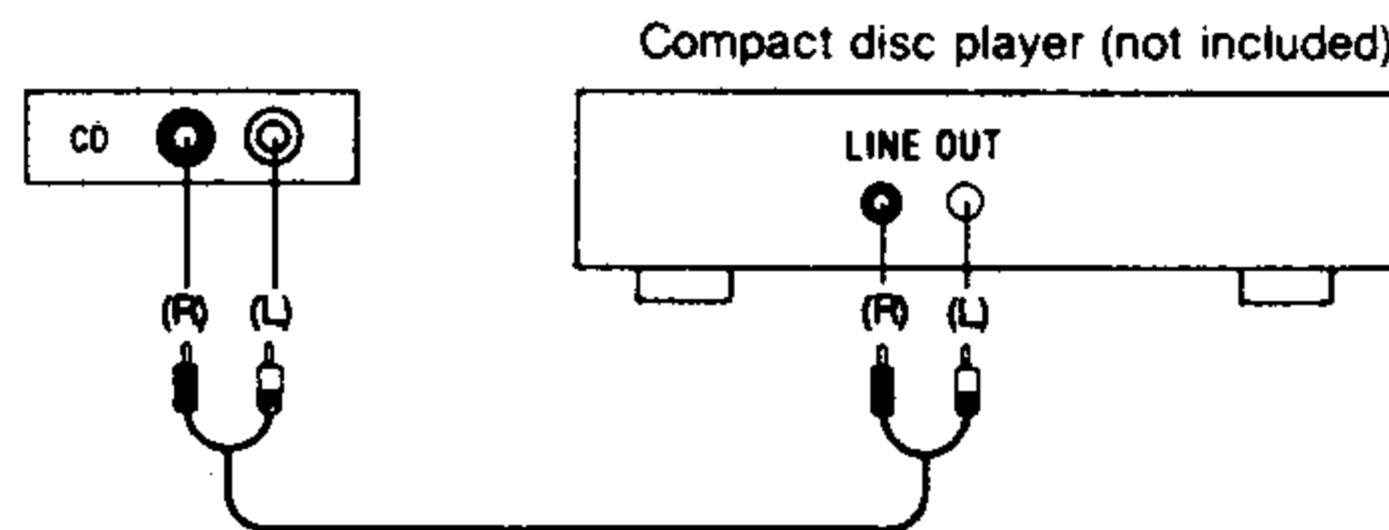
Make connections to each component in the system by using stereo connection cables (not included).



* Phono input capacitance is about 220 pF.

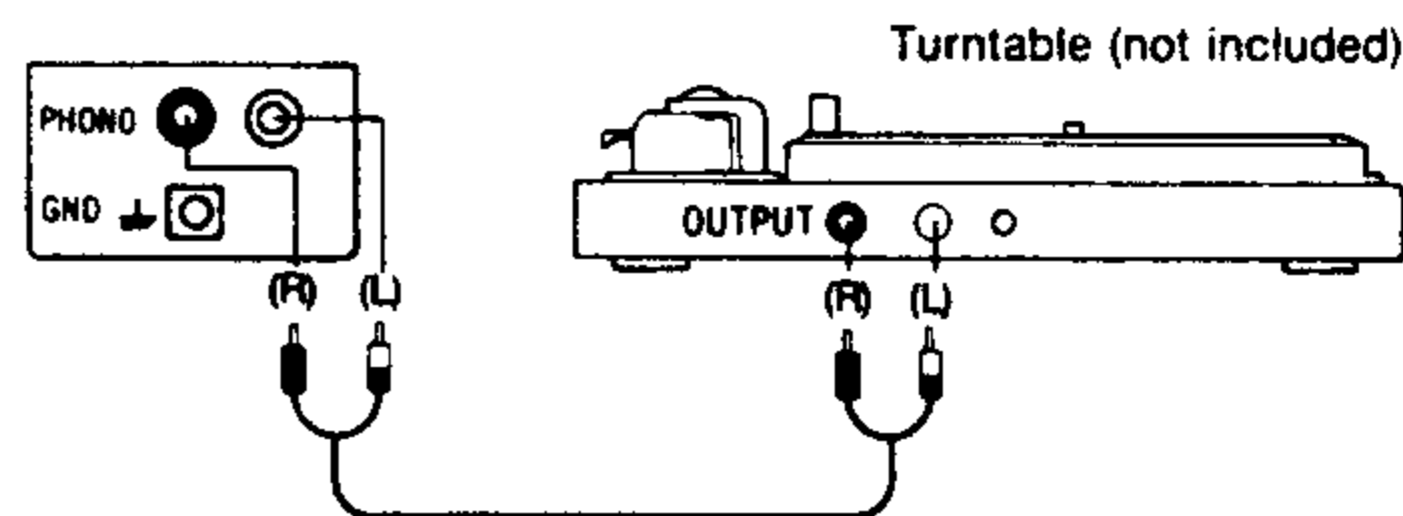
A "CD" terminals

Connect a compact disc player.



C "PHONO" terminals

Connect a turntable. See "Using the short-circuit pins", below.



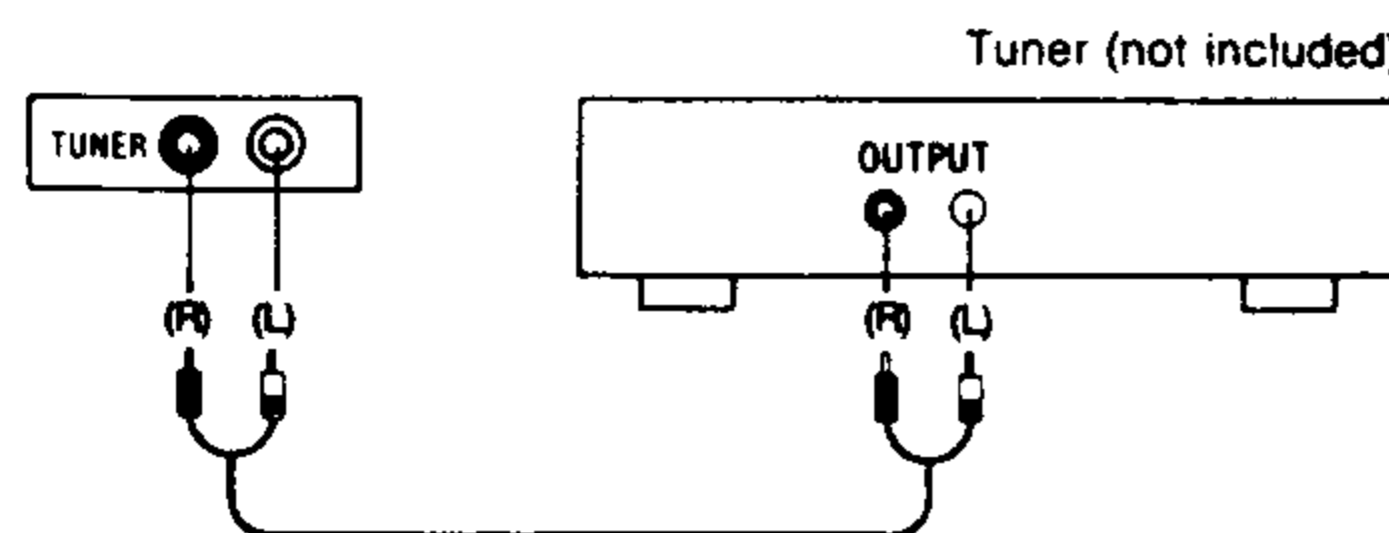
"GND" terminal

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

Using the short-circuit pins (included)
 Short-circuit pins are inserted into the "PHONO" terminals to reduce noise.
 Remove the pins before connecting a turntable and reinsert the pins if the turntable is later disconnected. Never connect a short-circuit pin to a "REC OUT" terminal or any terminal other than those above.

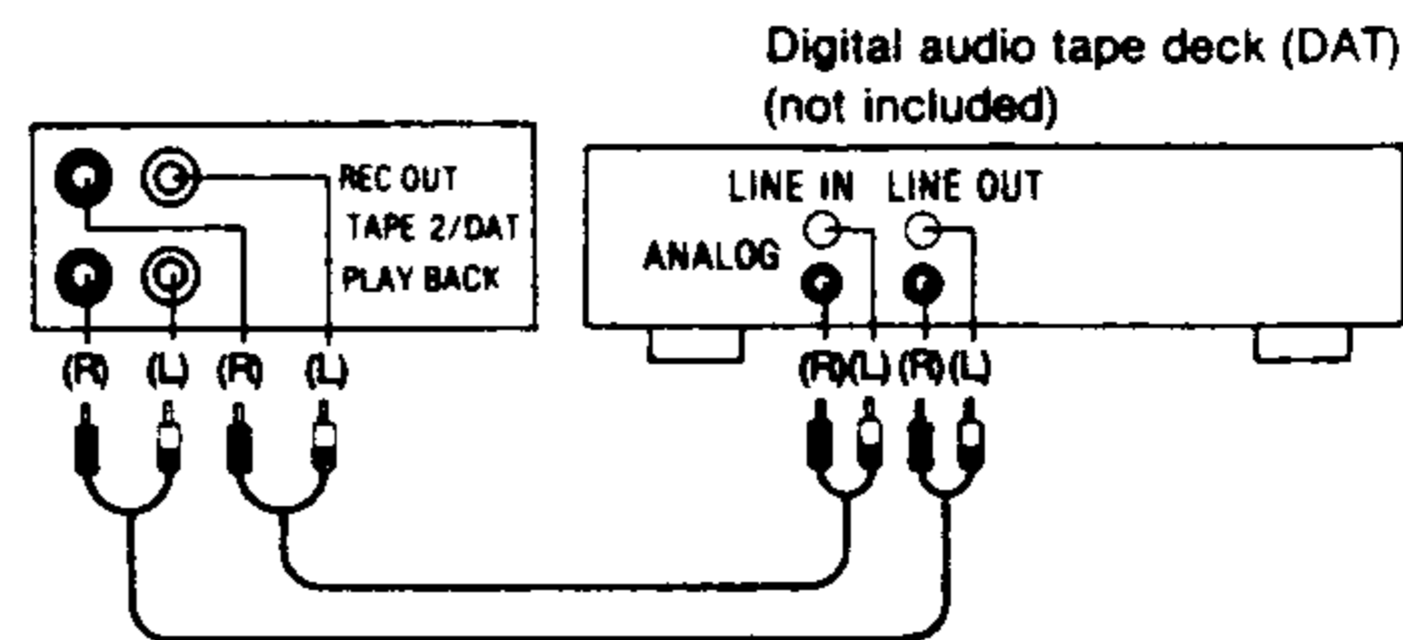
B "TUNER" terminals

Connect a tuner.



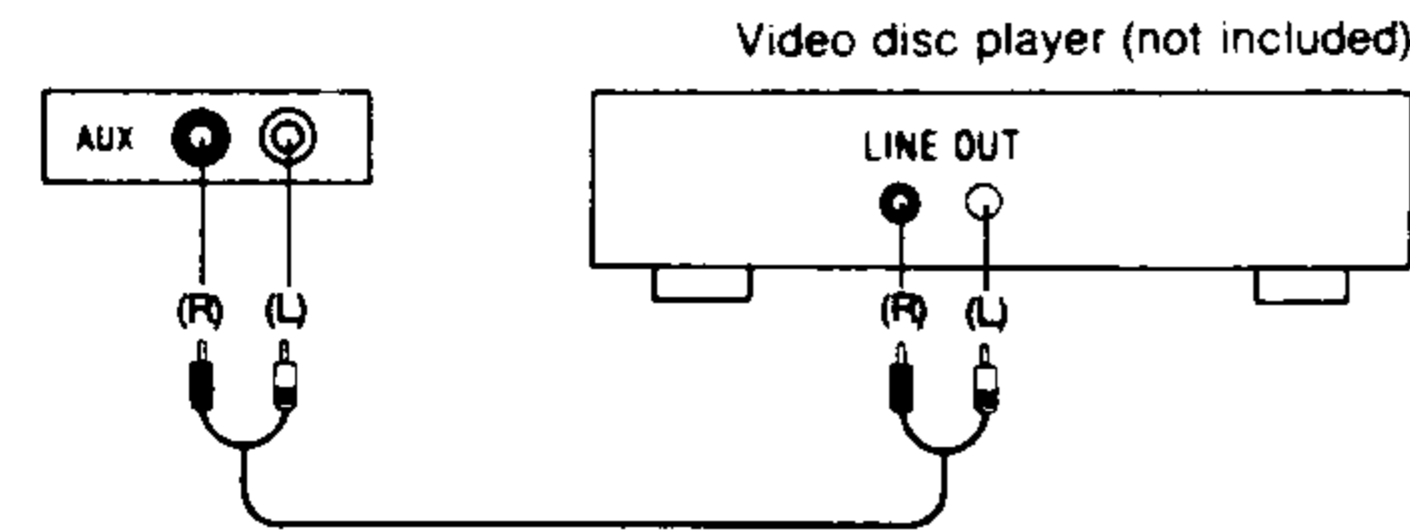
D "TAPES" terminals

Connect a second tape deck or a digital audio tape deck (DAT).



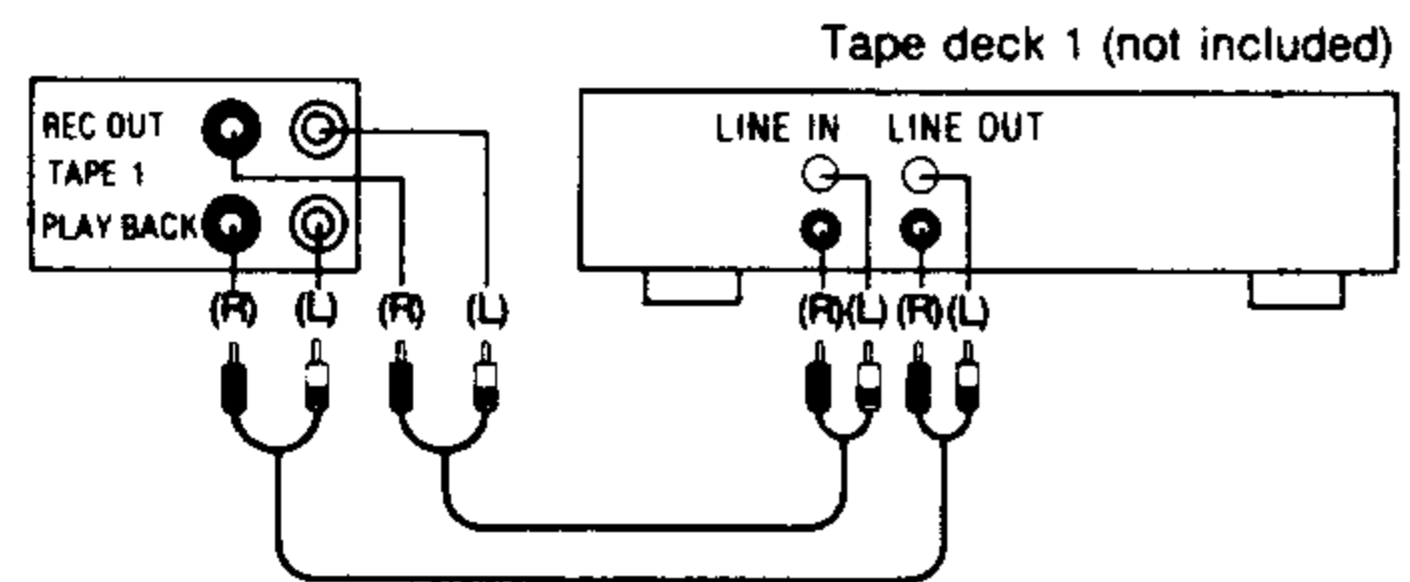
E "AUX" terminals

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

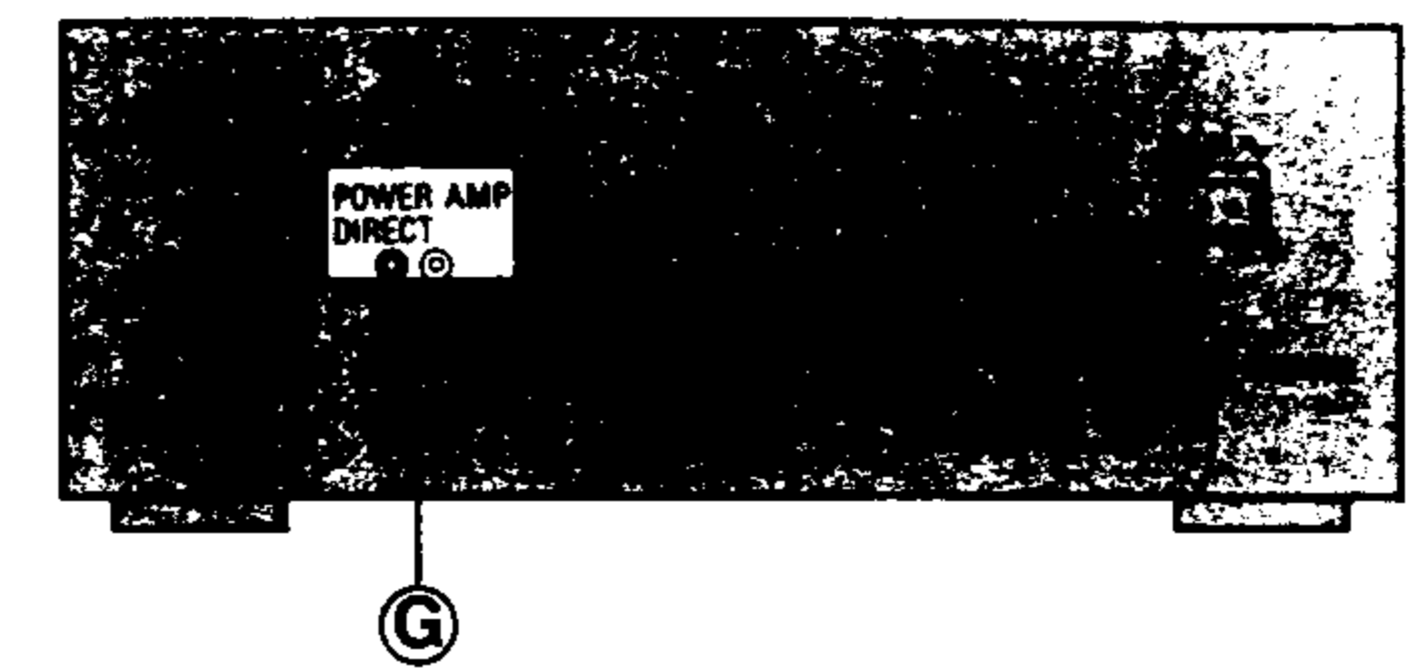


F "TAPE 1" terminals

Connect a first tape deck.



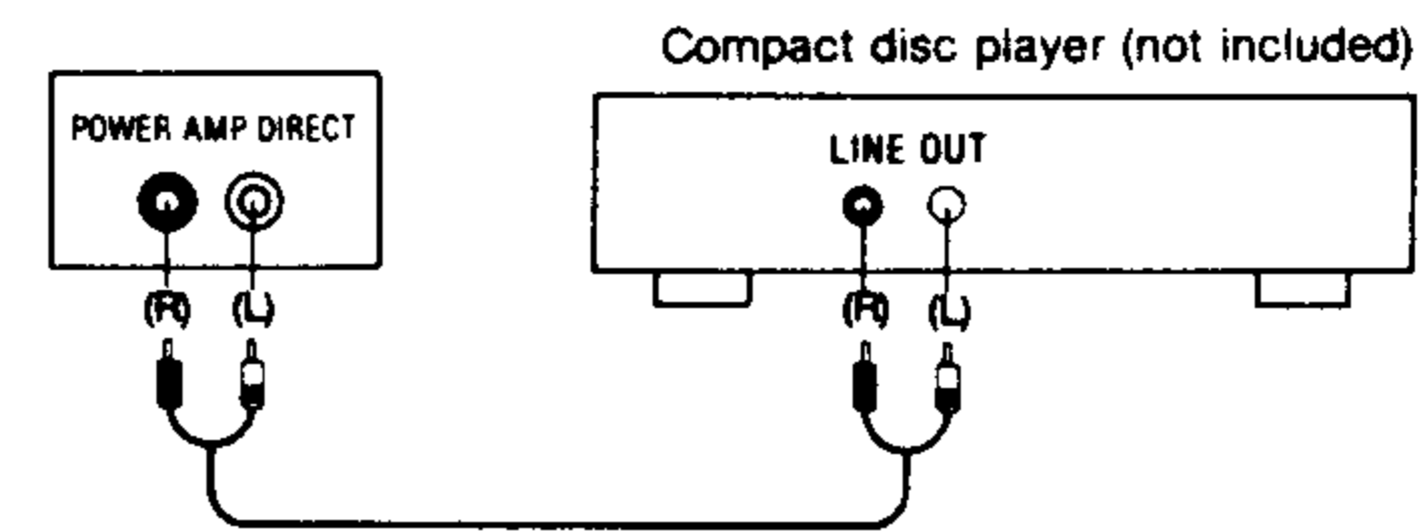
G "POWER AMP DIRECT" terminals



Connect a compact disc player, a digital audio tape deck, or a D/A converter.

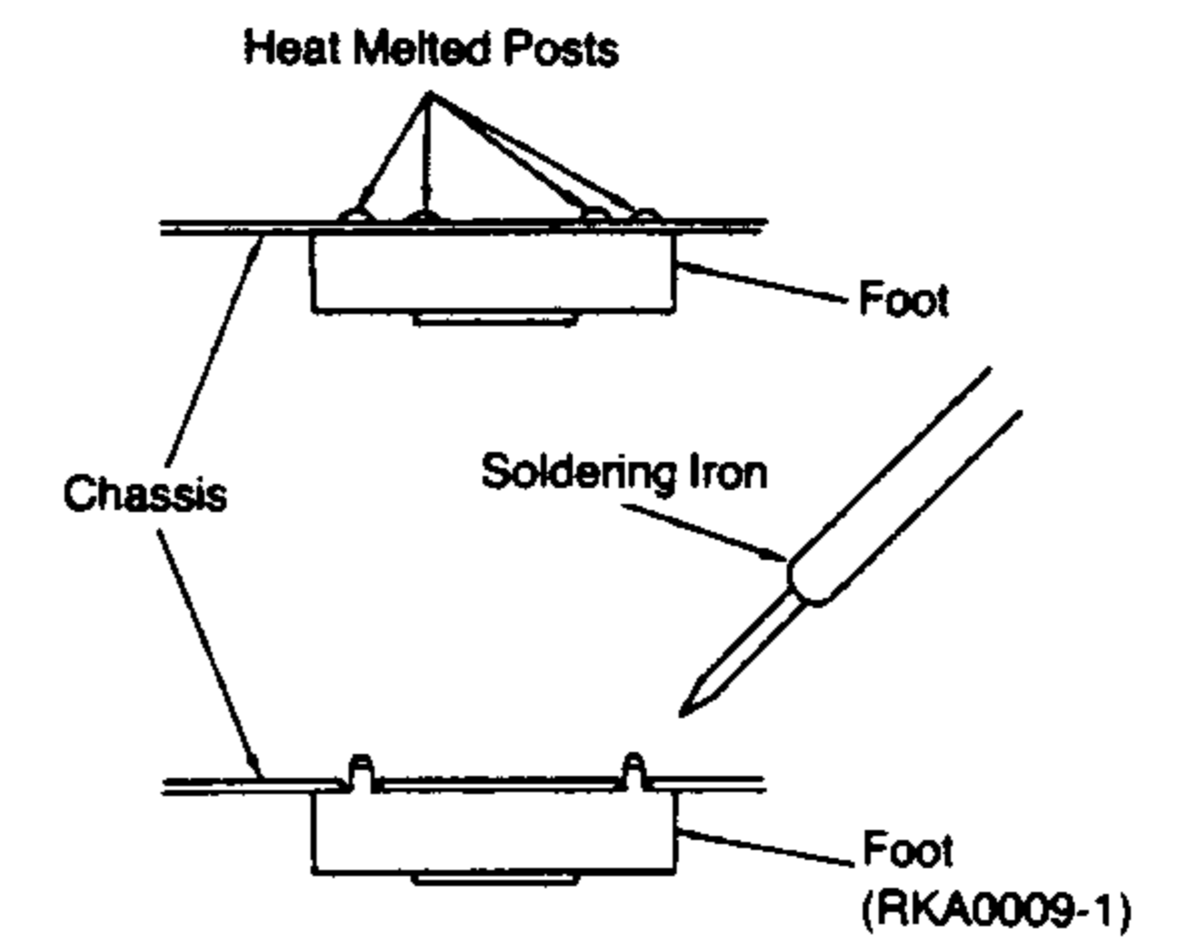
A superior level of tone quality can be obtained, because the signal from these terminals are sent directly to the volume control and power amplifier section of this unit.

The sounds from a component connected to these terminals cannot be recorded.



Replacement of the Foot.

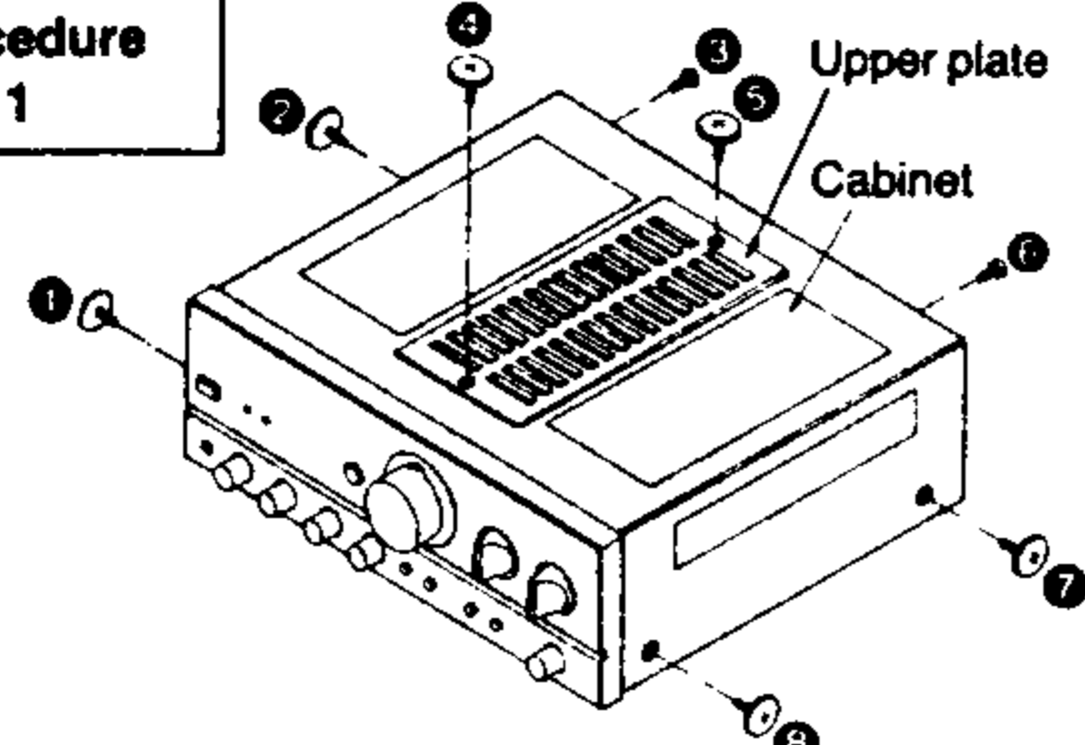
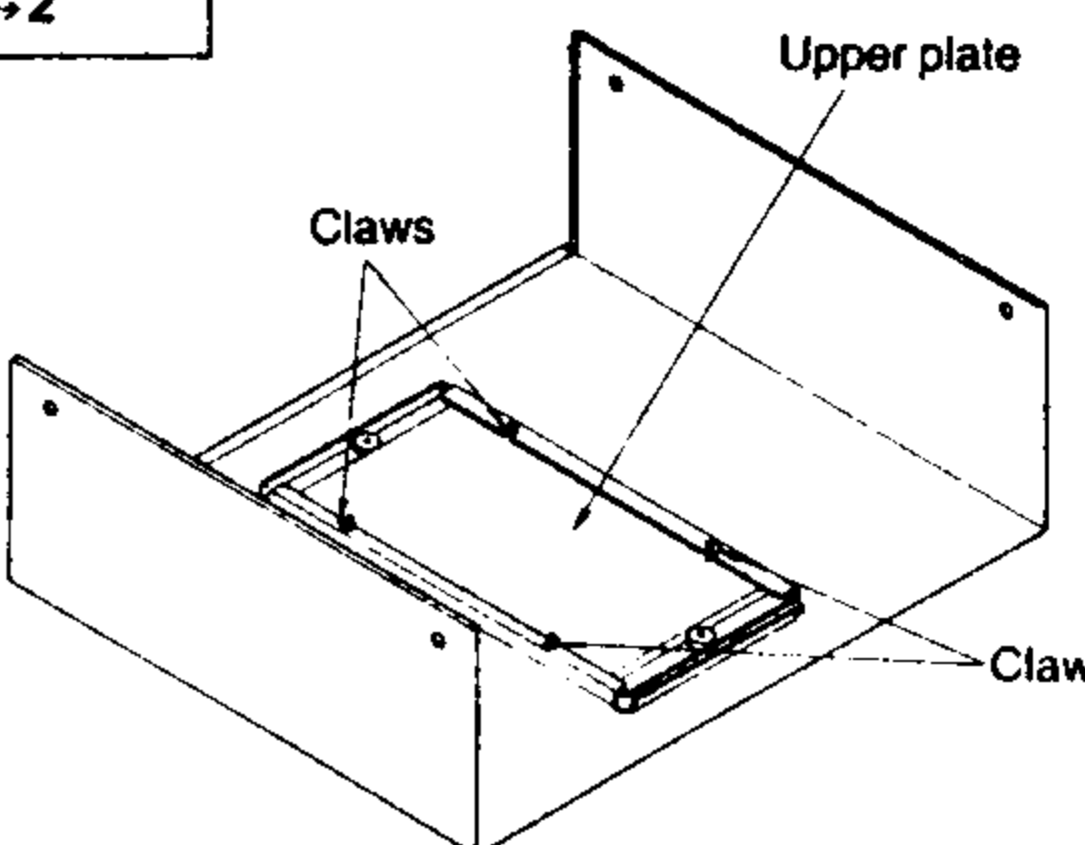
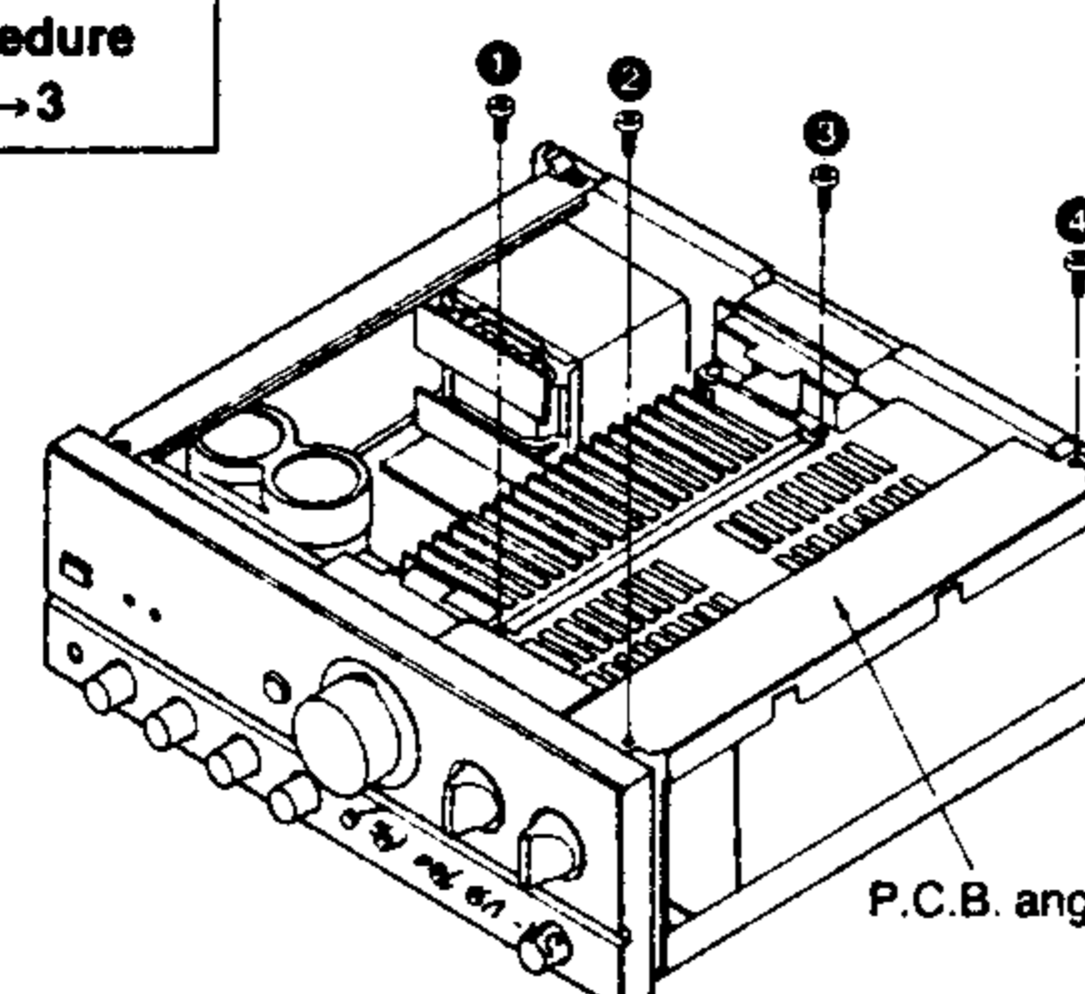
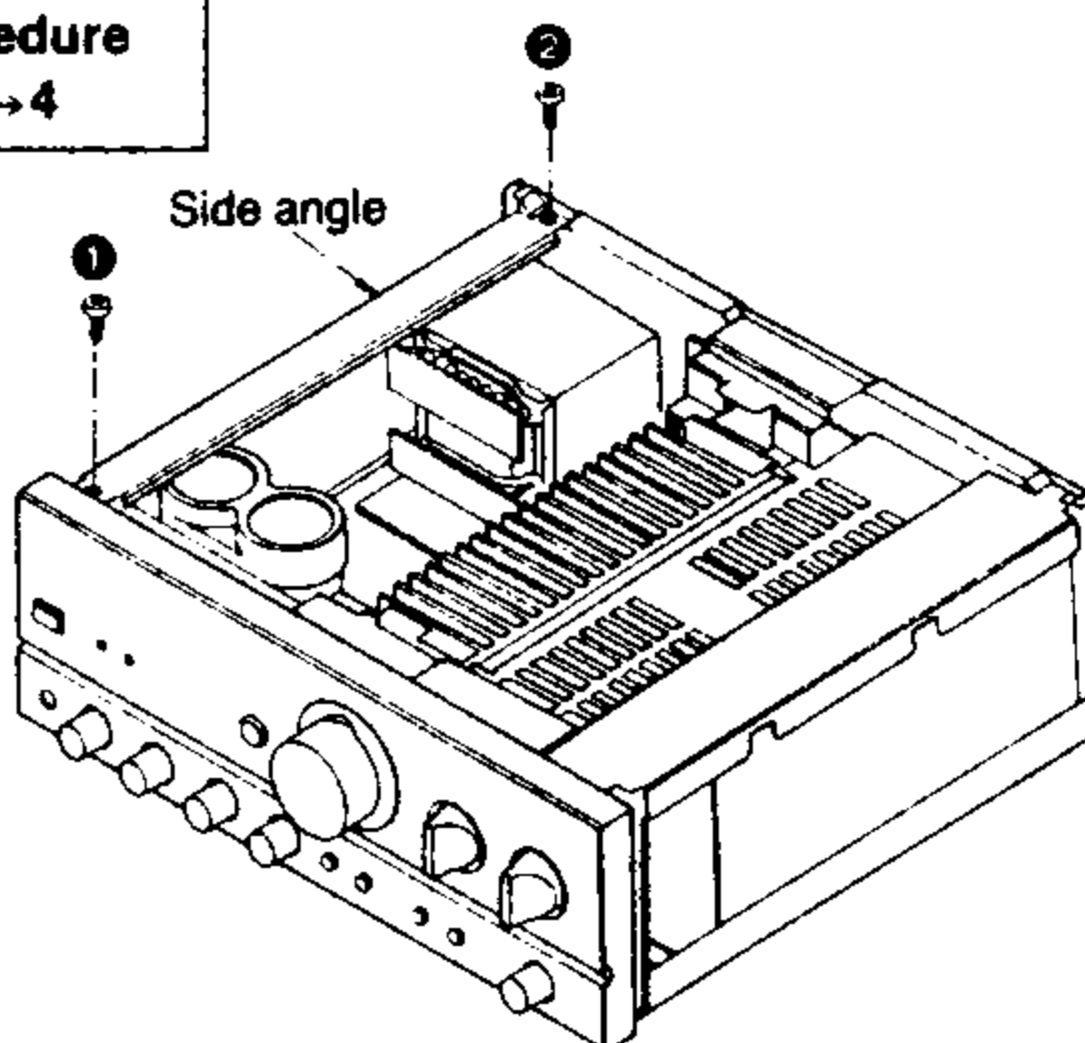
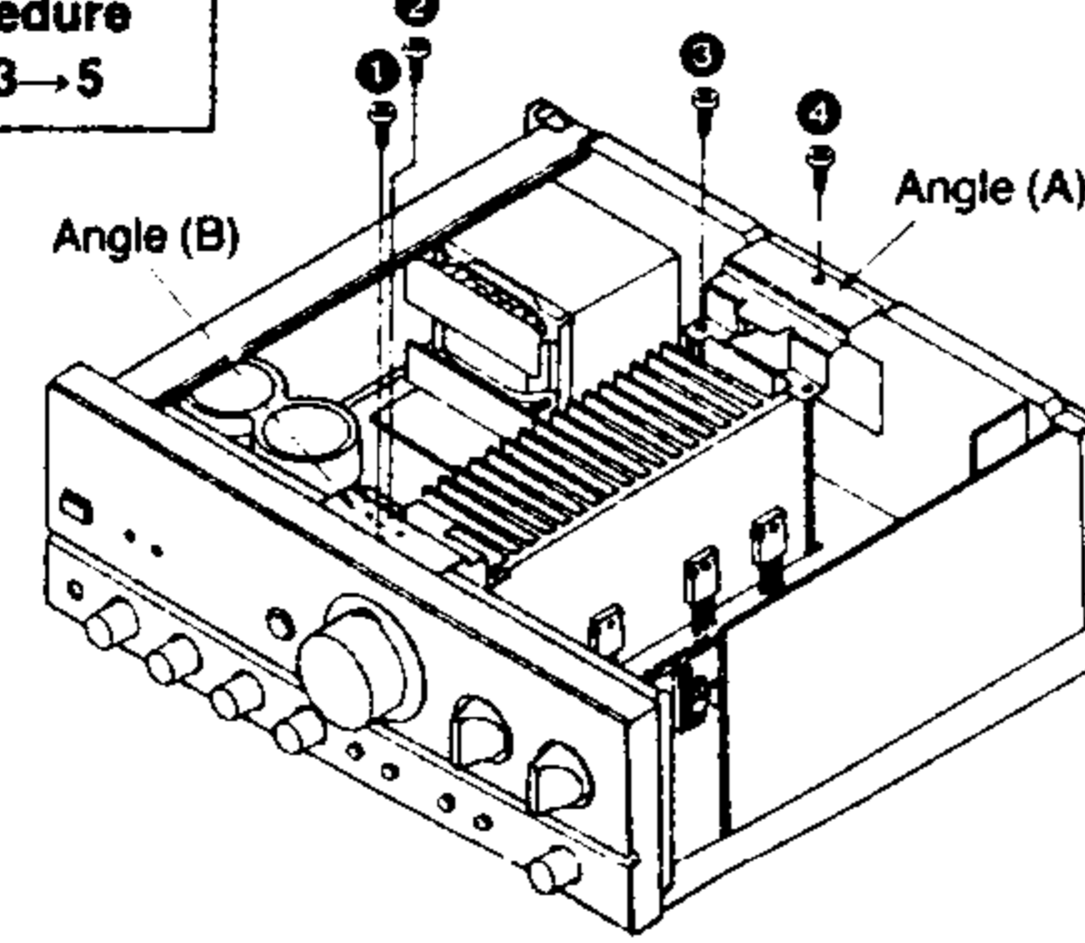
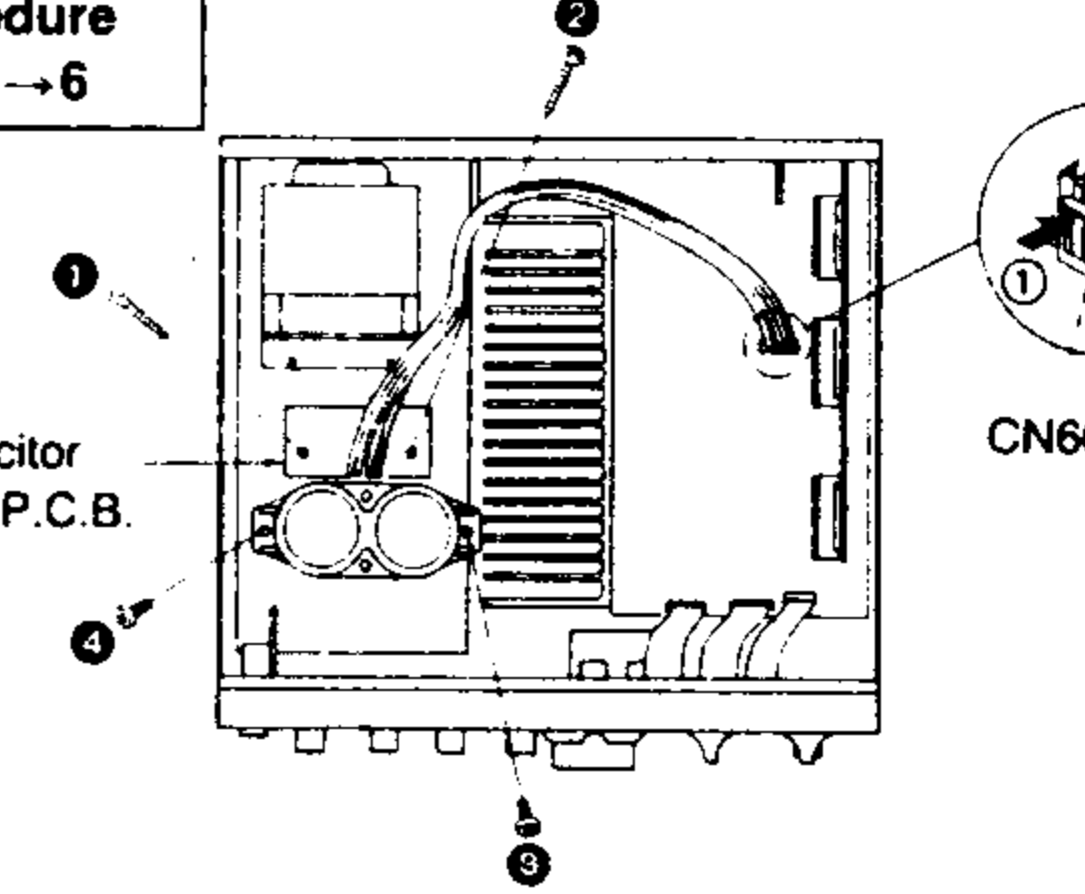
1. Remove the 4 heat melted posts on the chassis with a pair of nippers or similar tool.
2. To replace the foot (RKA0009-1) on the chassis, melt the 4 posts with a soldering iron.

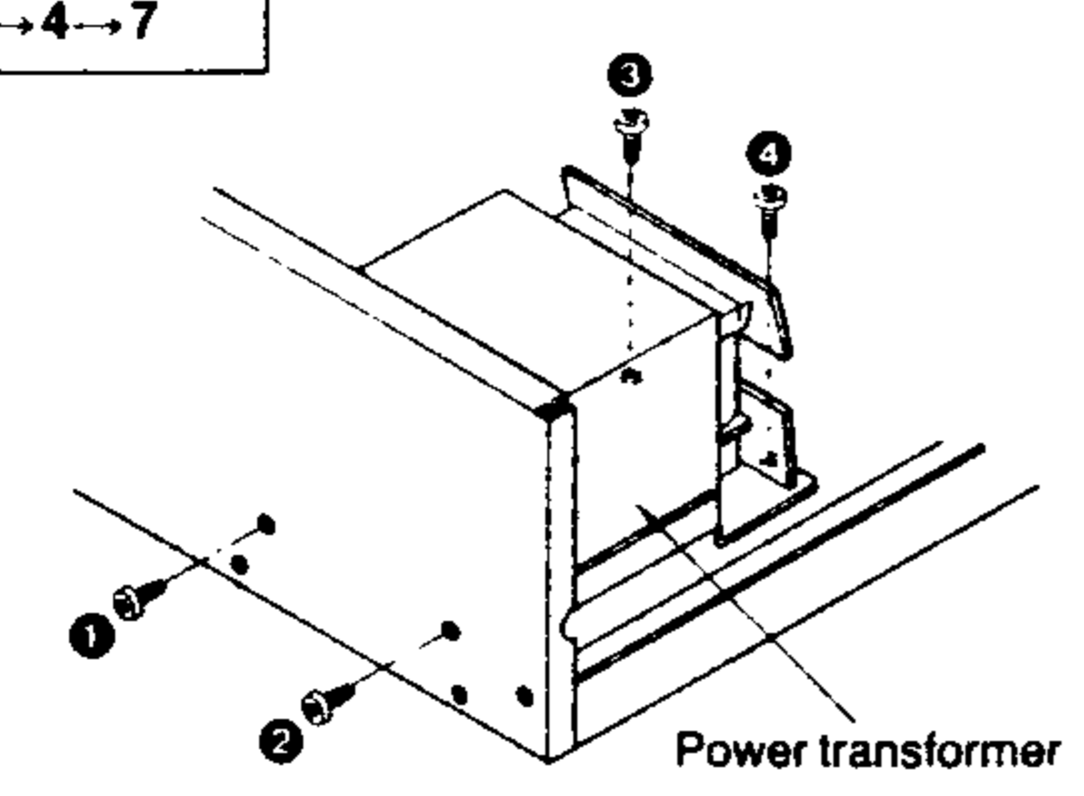
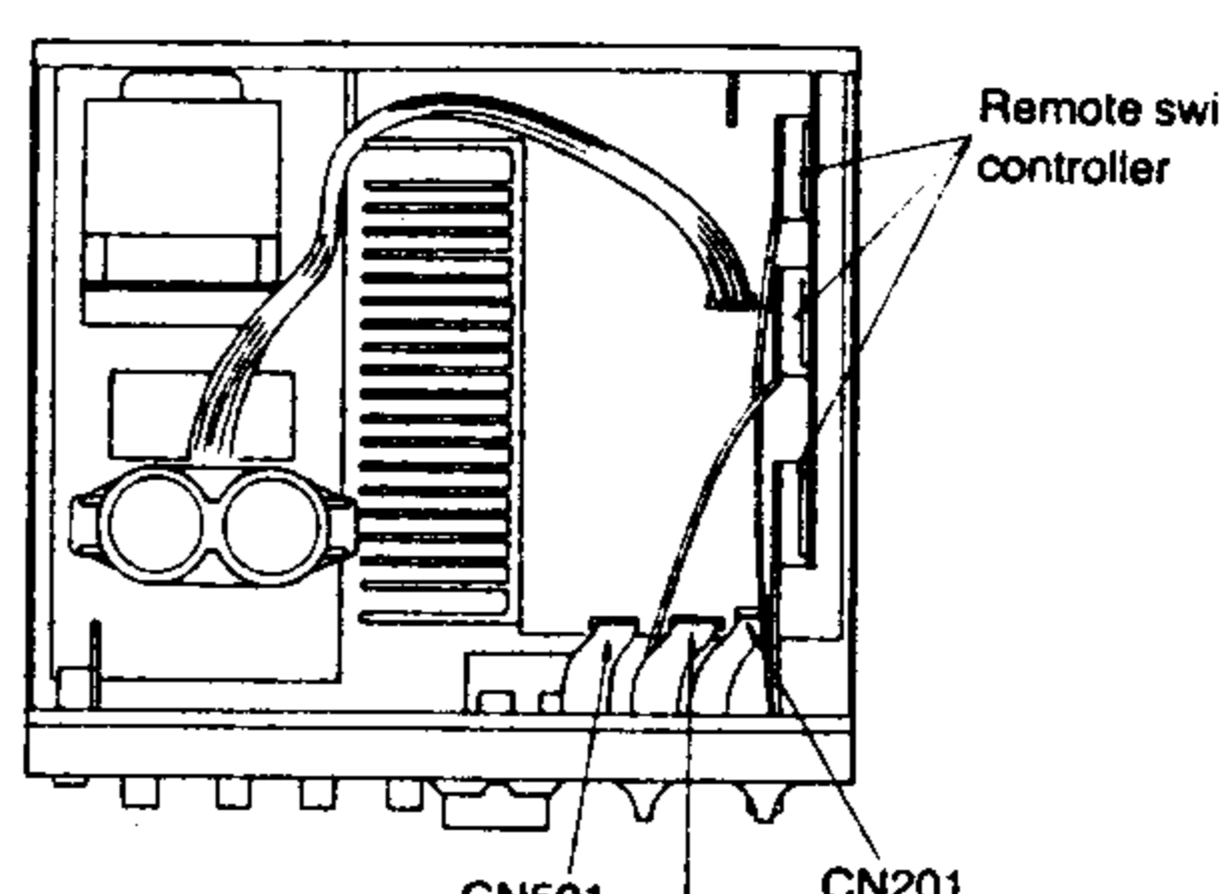
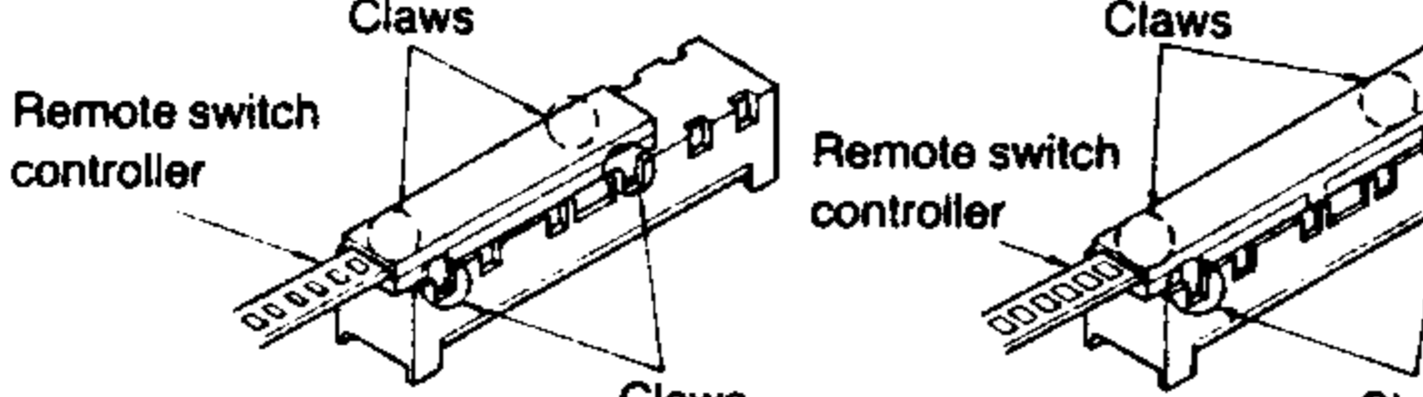
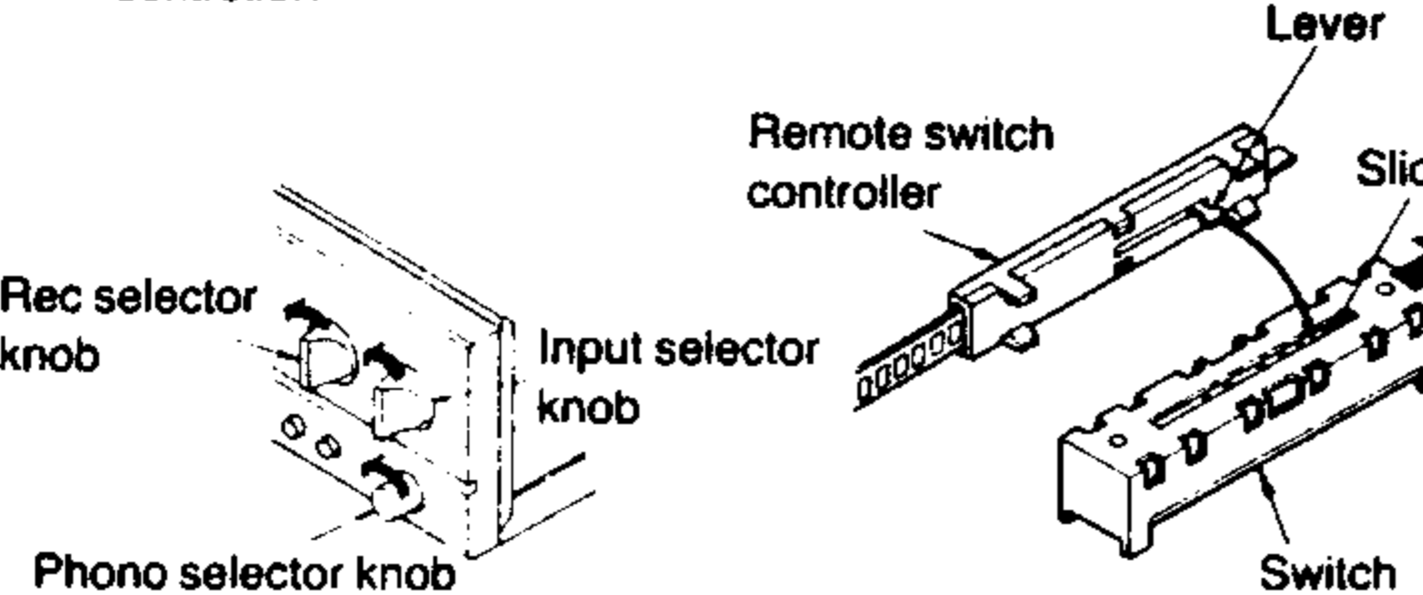
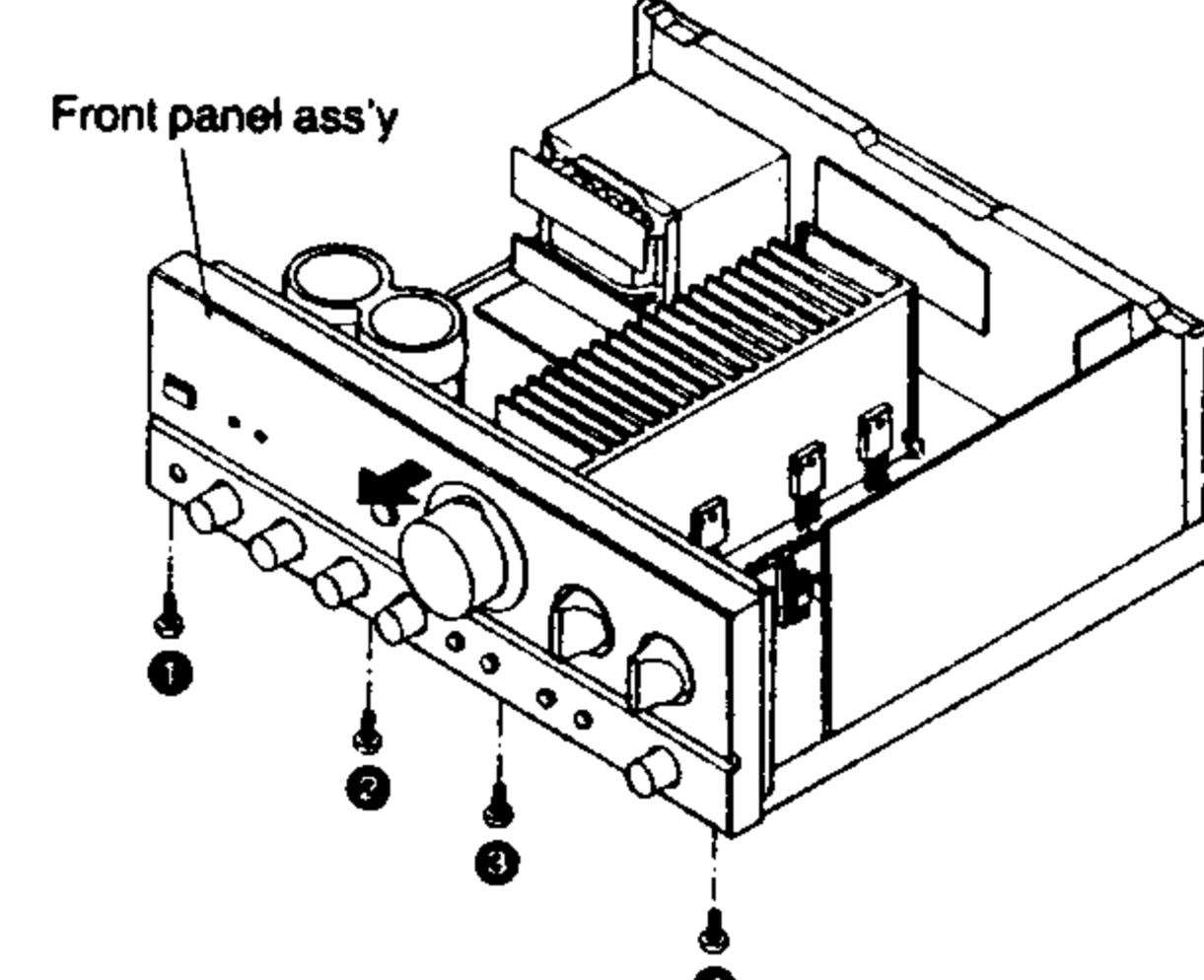
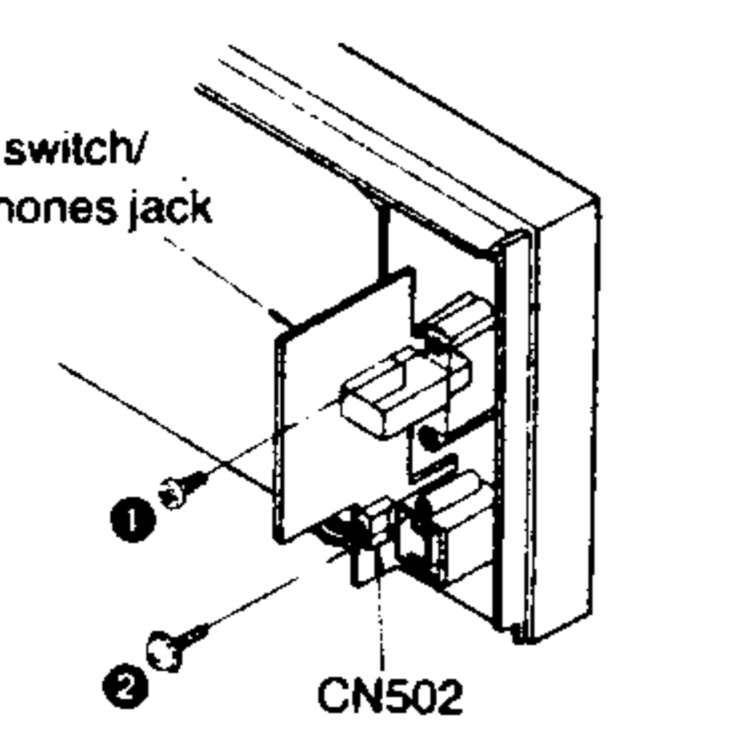
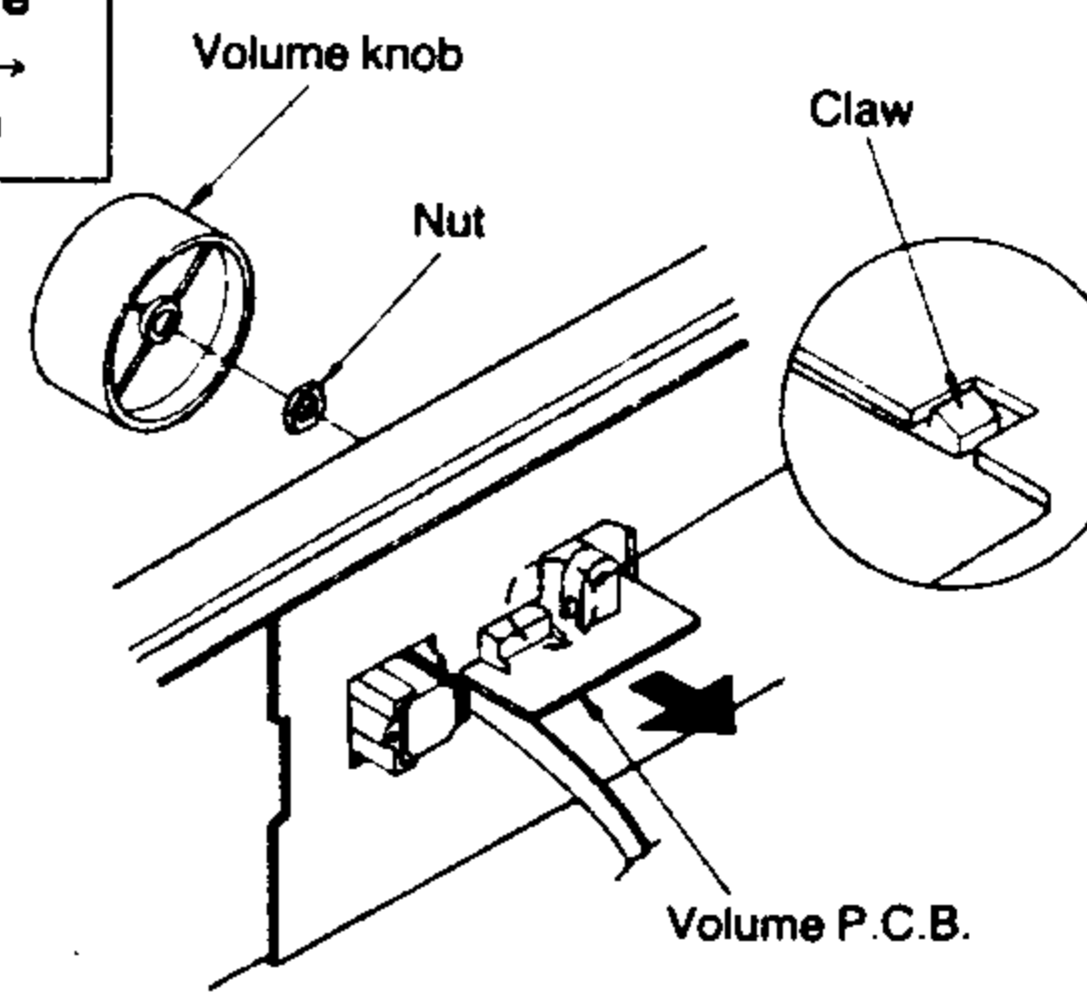


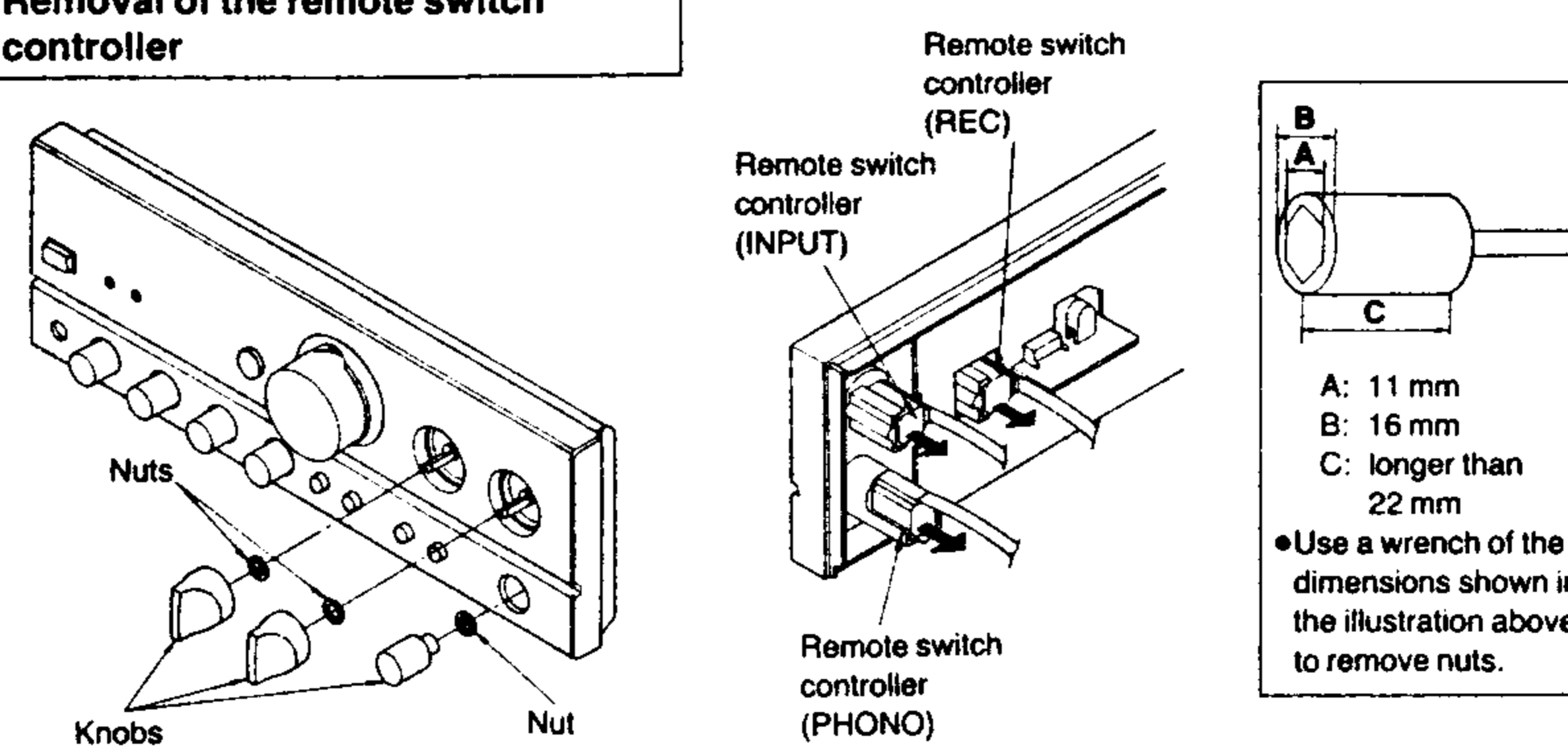
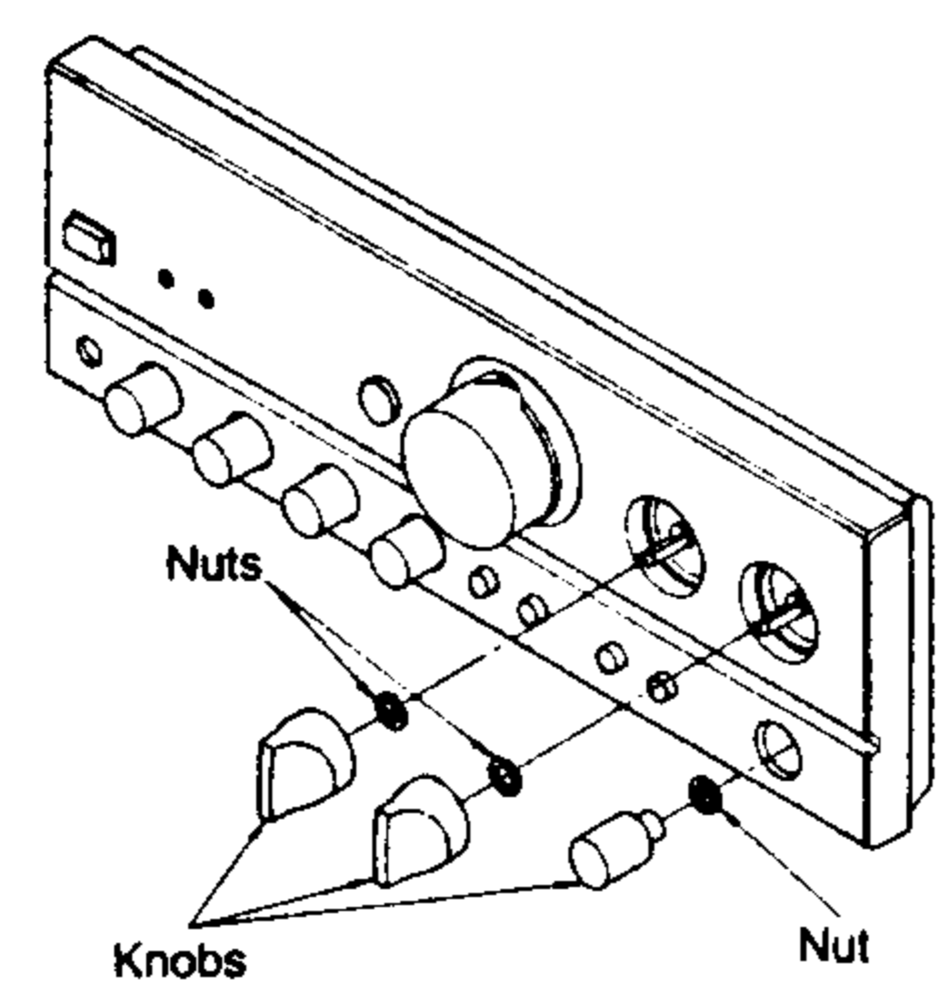
DISASSEMBLY INSTRUCTIONS

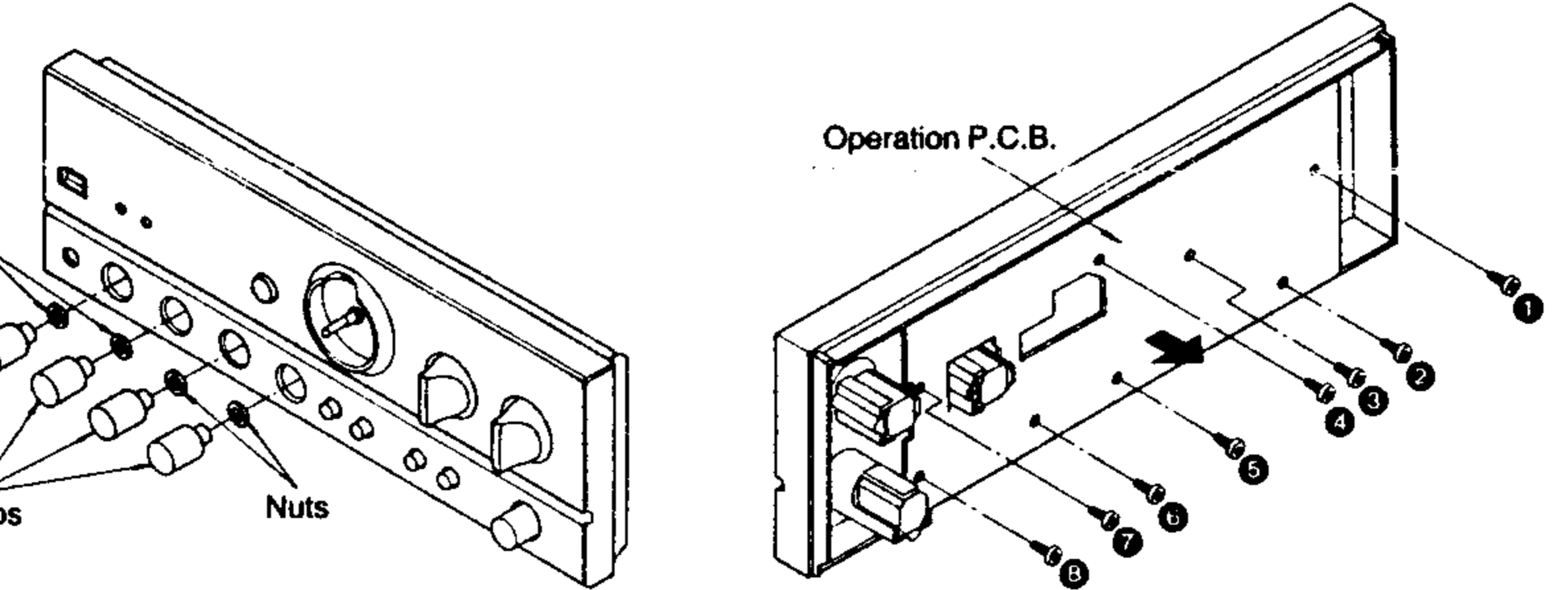
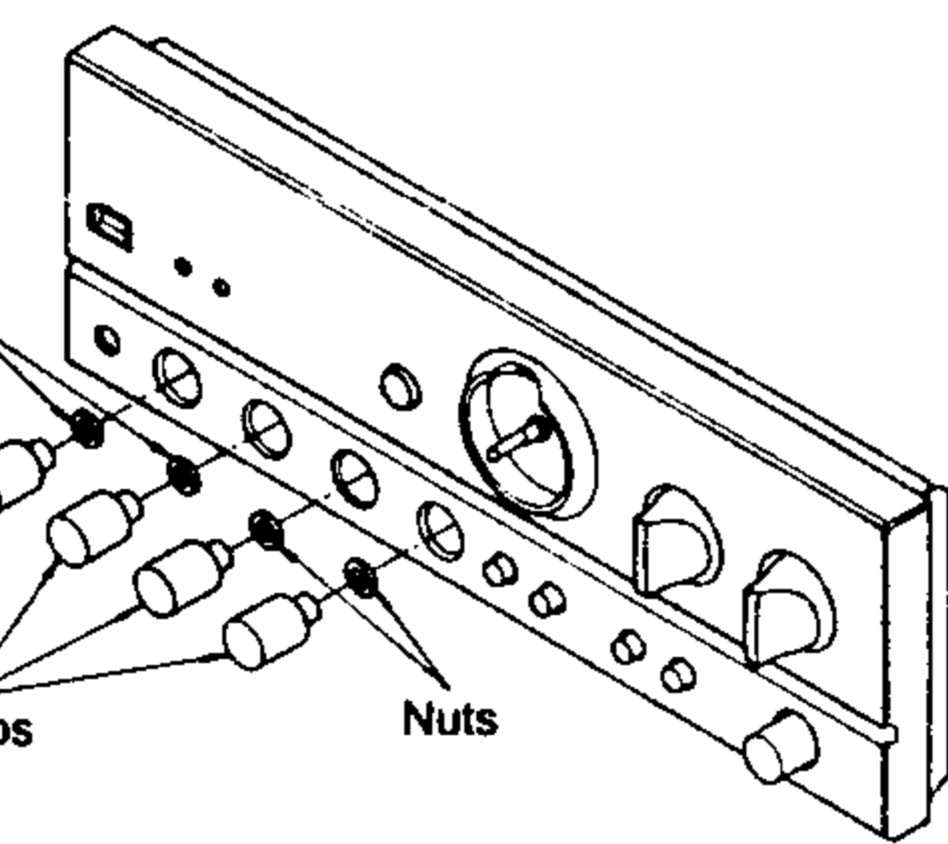
"ATTENTION SERVICER"

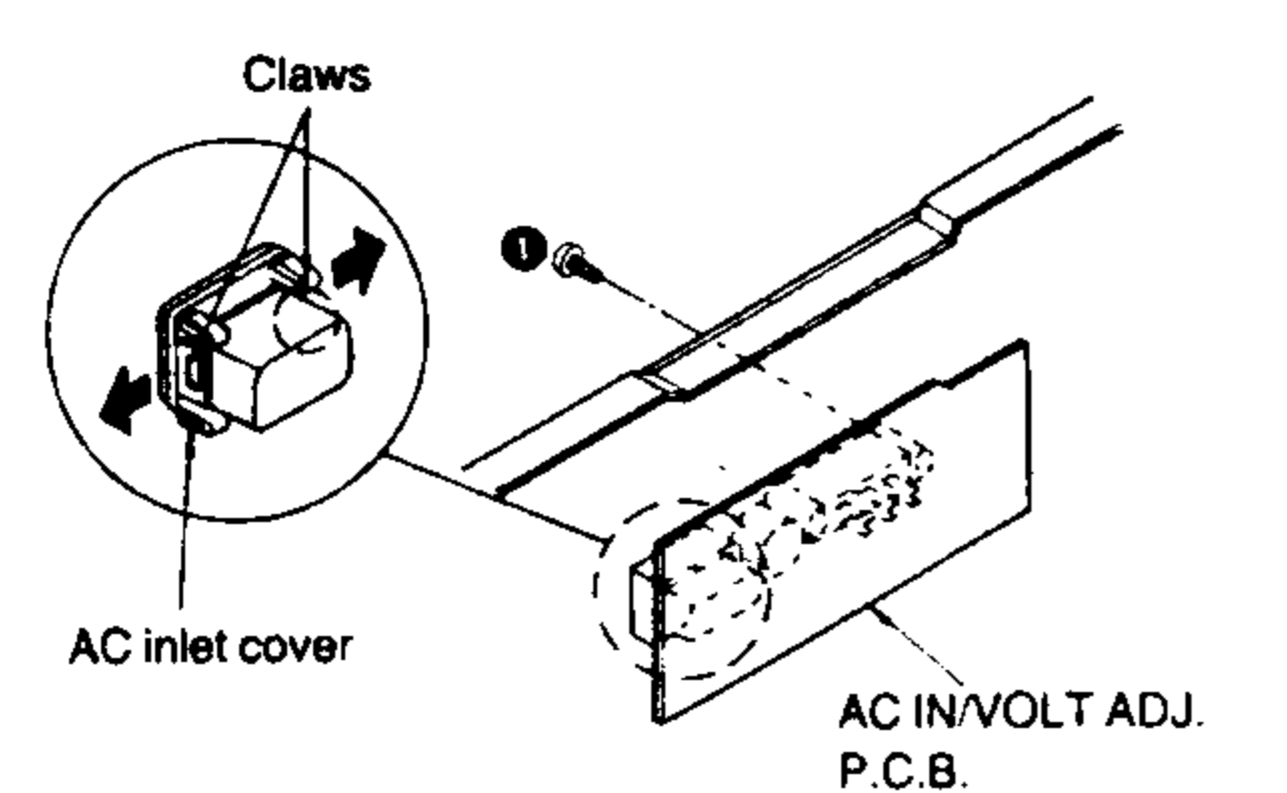
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

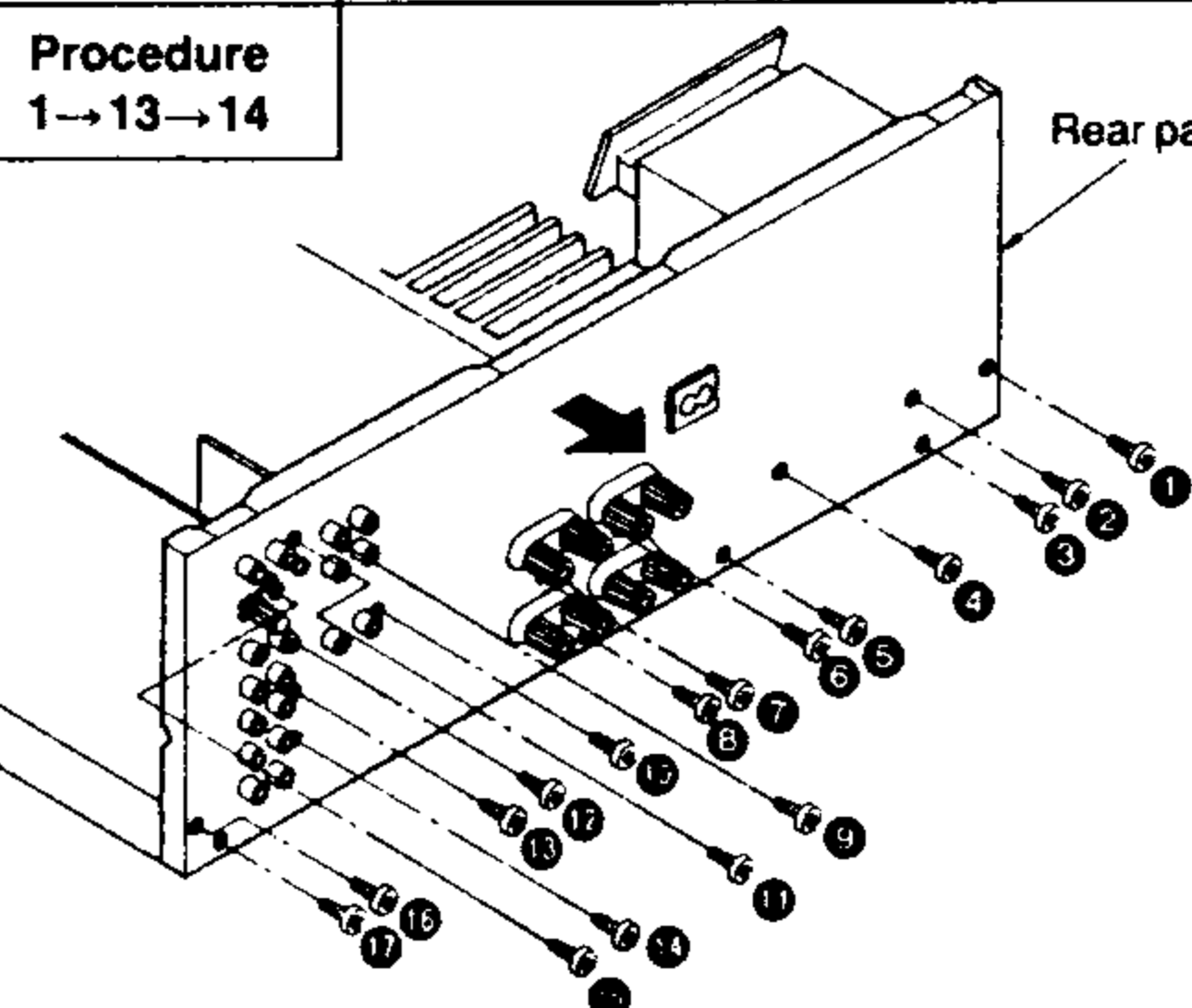
<p>Ref. No. 1</p> <p>Removal of the cabinet</p>	<p>Ref. No. 2</p> <p>Removal of the Upper Plate</p>
<p>Procedure 1</p>  <p>Upper plate Cabinet</p> <p>● Remove the 8 screws (1~8). Attention: When removing the cabinet from the unit, please don't forget to remove the 2 screws (4, 5) of the upper plate. Unless you remove the 2 screws (4, 5), it may change shape of the cabinet.</p>	<p>Procedure 1→2</p>  <p>Upper plate Claws</p> <p>● Release the 4 claws.</p>
<p>Ref. No. 3</p> <p>Removal of the P.C.B. angle</p>	<p>Ref. No. 4</p> <p>Removal of the side angle</p>
<p>Procedure 1→3</p>  <p>P.C.B. angle</p> <p>● Remove the 4 screws (1~4).</p>	<p>Procedure 1→4</p>  <p>Side angle</p> <p>● Remove the 2 screws (1, 2).</p>
<p>Ref. No. 5</p> <p>Removal of the angle (A) and angle (B)</p>	<p>Ref. No. 6</p> <p>Removal of the capacitor block P.C.B.</p>
<p>Procedure 1→3→5</p>  <p>Angle (B) Angle (A)</p> <p>● Remove the 4 screws (1~4).</p>	<p>Procedure 1→4→6</p>  <p>Capacitor block P.C.B. CN601</p> <p>1. Remove the 1 connector (CN601). 2. Remove the 4 screws (1~4).</p>

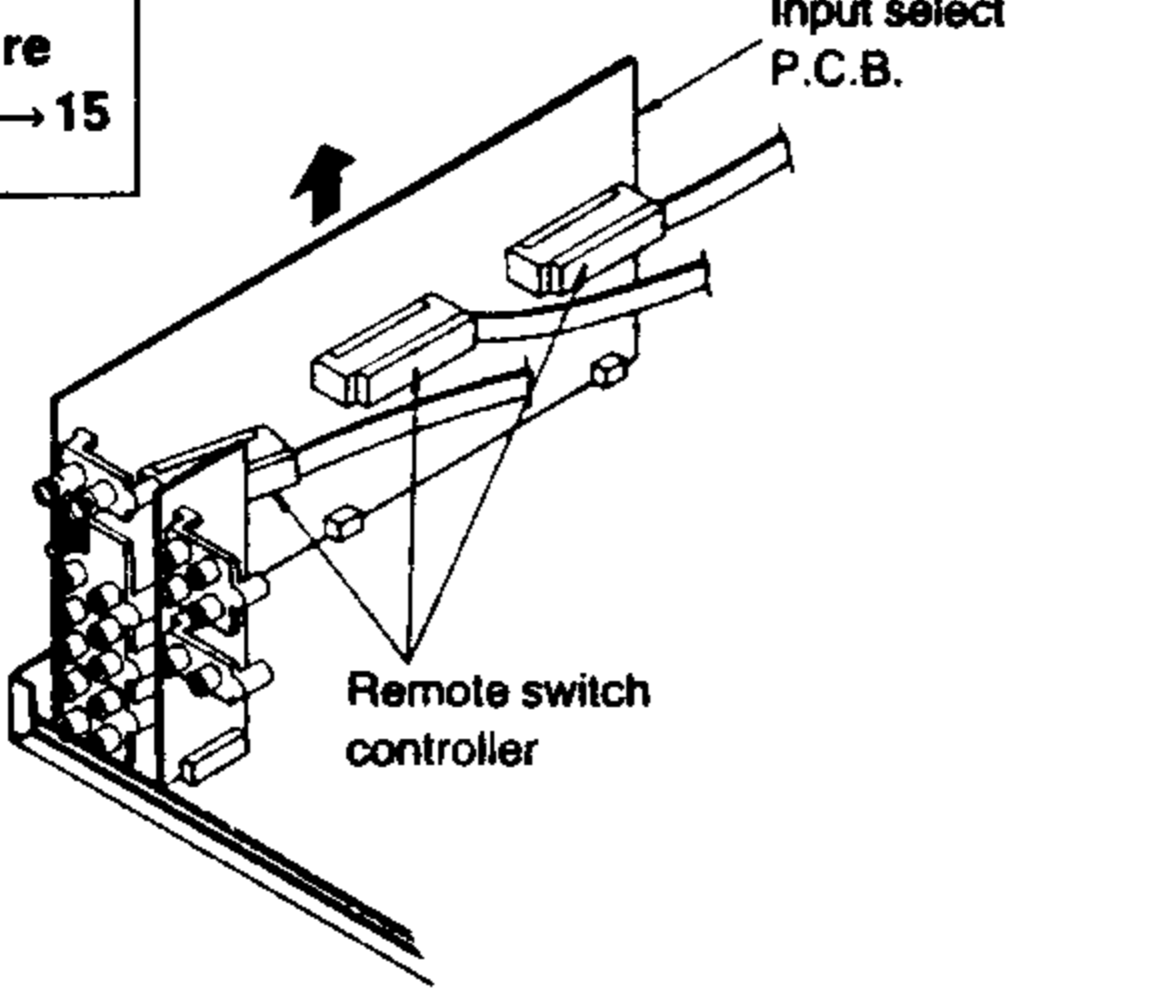
<p>Ref. No. 7</p> <p>Removal of the power transformer</p>	<p>Ref. No. 8</p> <p>Removal of the front panel ass'y</p>
<p>Procedure 1→4→7</p>  <p>Power transformer</p> <p>● Remove the 4 screws (1~4).</p>	<p>Procedure 1→3→4→5→8</p>  <p>Remote switch controller CN501 CN401 CN201</p> <p>1. Remove the remote switch controller. 2. Remove the 3 flat cables (CN201, CN401, CN501).</p>
<p>Removal of the remote switch controller</p> <p>● Remove the 4 claws.</p> <p>S101 (PHONO) S102, S103 (REC, INPUT)</p>	
 <p>Remote switch controller Claws</p>	<p>Replacing of the remote switch controller</p> <p>1. Turn the selector knobs to the arrows. 2. Put the switch slider of switch to end and put in the remote switch controller.</p>  <p>Rec selector knob Input selector knob Phono selector knob Remote switch controller Lever Slider Switch</p>
 <p>Front panel ass'y</p> <p>3. Remove the 4 screws (1~4). 4. Remove the front panel ass'y in the direction of arrow.</p>	
<p>Ref. No. 9</p> <p>Removal of the power switch/ headphones jack P.C.B.</p>	<p>Ref. No. 10</p> <p>Removal of the volume P.C.B.</p>
<p>Procedure 1→3→4→5→8→9</p>  <p>Power switch/ headphones jack P.C.B. CN502</p> <p>1. Remove the 1 connector (CN502). 2. Remove the 2 screws (1, 2).</p>	<p>Procedure 1→3→4→5→8→9</p>  <p>Volume knob Nut Claw Volume P.C.B.</p> <p>1. Pull out the volume knob. 2. Remove the nut. 3. Release the 1 claw.</p>

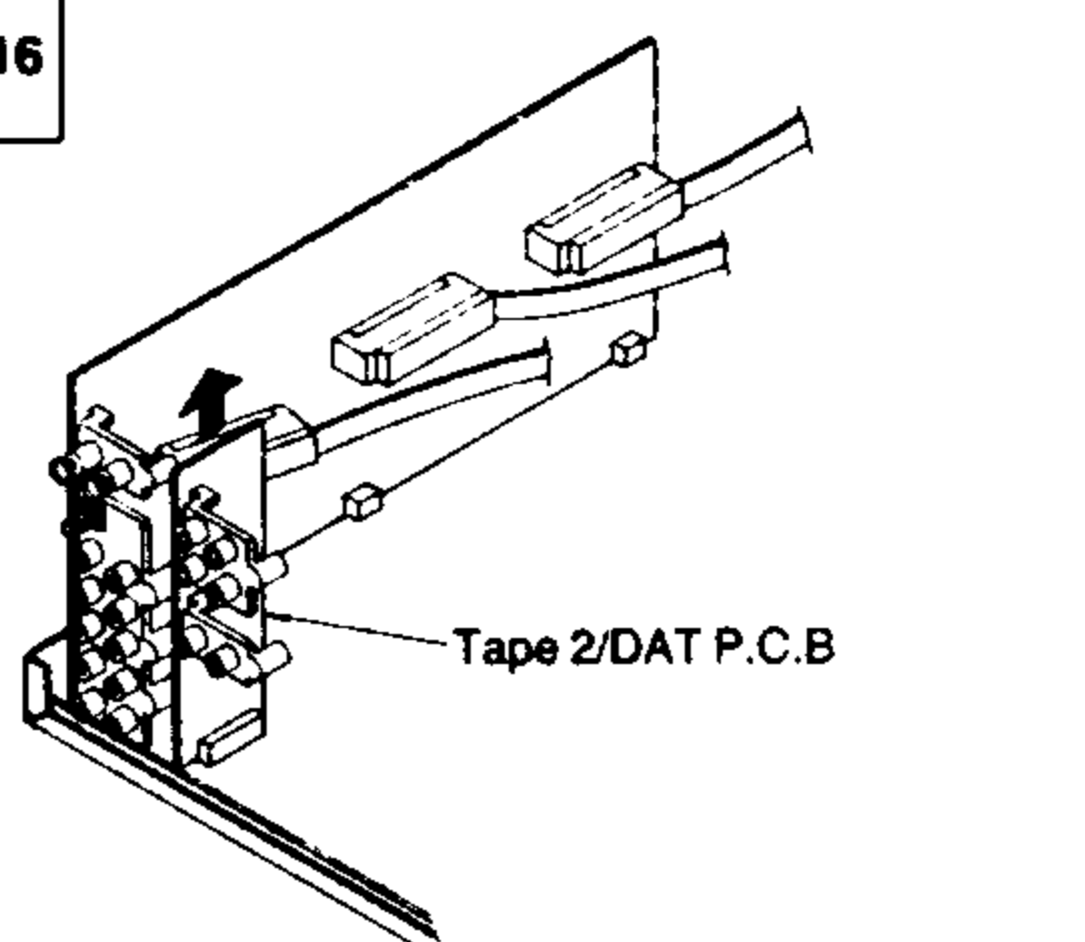
Ref. No. 11	Removal of the remote switch controller	 <p>Remote switch controller (REC) Remote switch controller (INPUT) Remote switch controller (PHONO)</p> <p>A: 11 mm B: 16 mm C: longer than 22 mm ● Use a wrench of the dimensions shown in the illustration above to remove nuts.</p>
Procedure 1→3→4→ 5→8→11		<ol style="list-style-type: none"> 1. Pull out the 3 knobs. 2. Remove the 3 nuts. 3. Remove the remote switch controller in the direction of arrow.

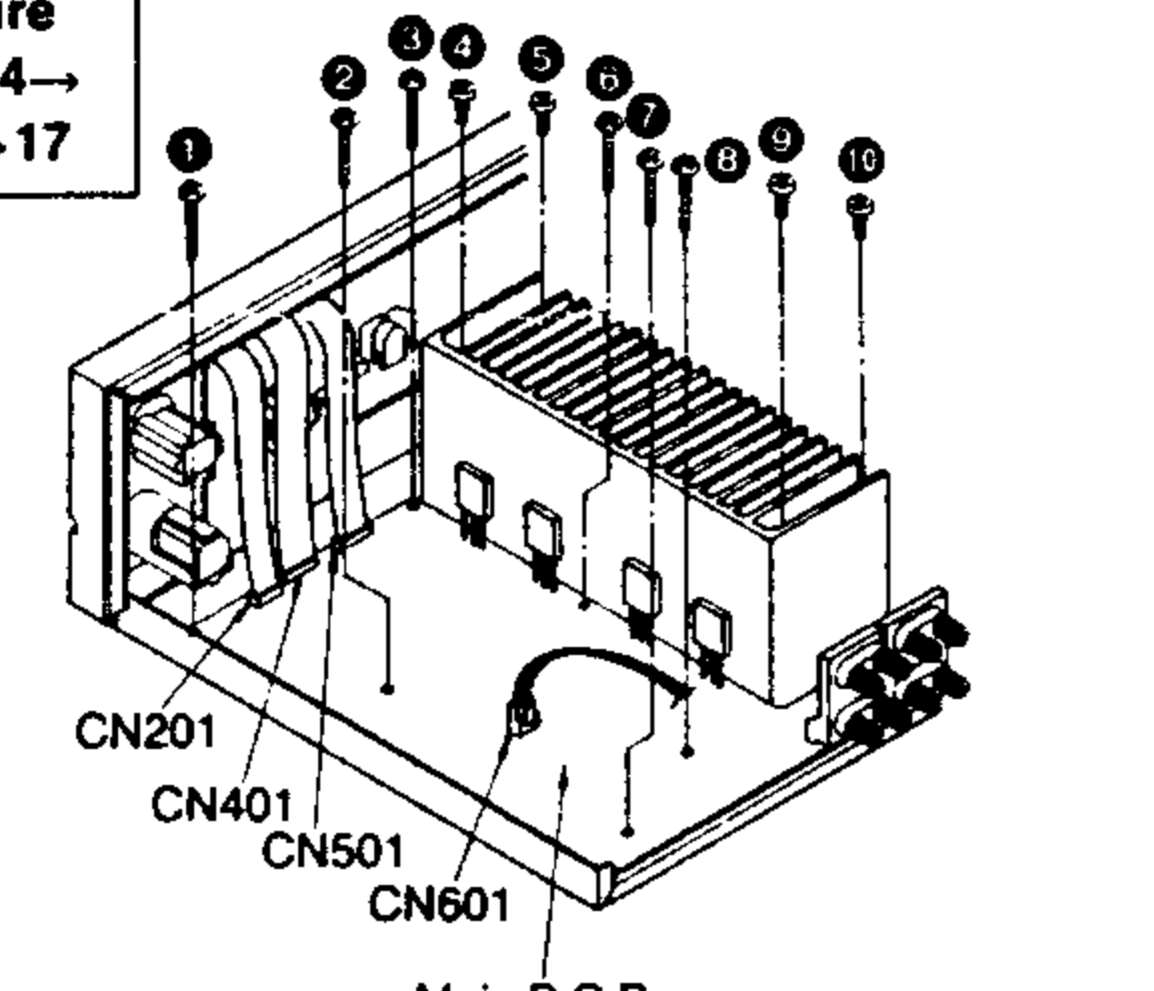
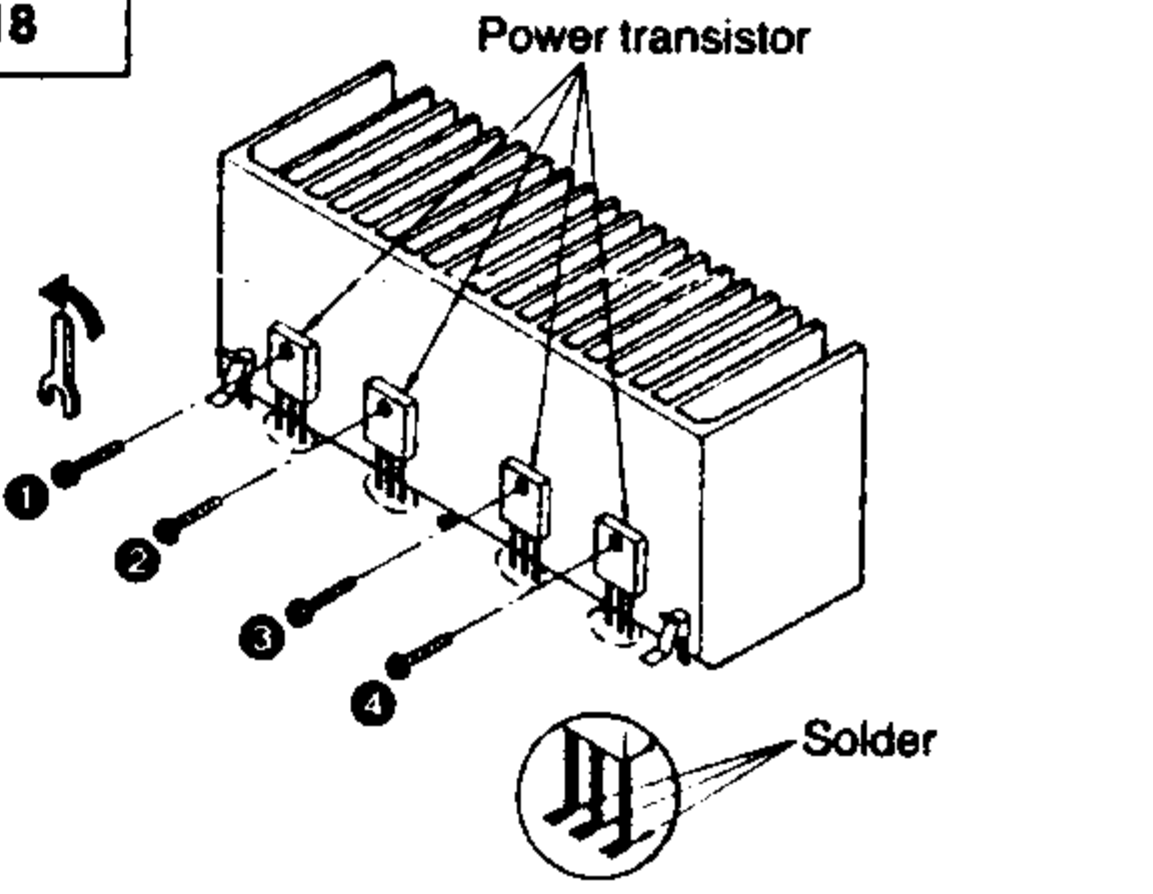
Ref. No. 12	Removal of the operation P.C.B.	 <p>Operation P.C.B.</p>
Procedure 1→3→4→5 →8→9→10→ 12		<ol style="list-style-type: none"> 1. Pull out the 4 knobs. 2. Remove the 4 nuts. 3. Remove the 8 screws (①-⑧). 4. Remove the operation P.C.B. in the direction of arrow.

Ref. No. 13	Removal of the AC IN/VOLT ADJ. P.C.B.	 <p>Claws AC inlet cover AC IN/VOLT ADJ. P.C.B.</p>
Procedure 1→13	<ol style="list-style-type: none"> 1. Remove the 1 screw (①). 2. Release the 2 claws of AC inlet cover. 	<ol style="list-style-type: none"> 1. Remove the 17 screws (①-⑰). 2. Remove the rear panel in the direction of arrow.

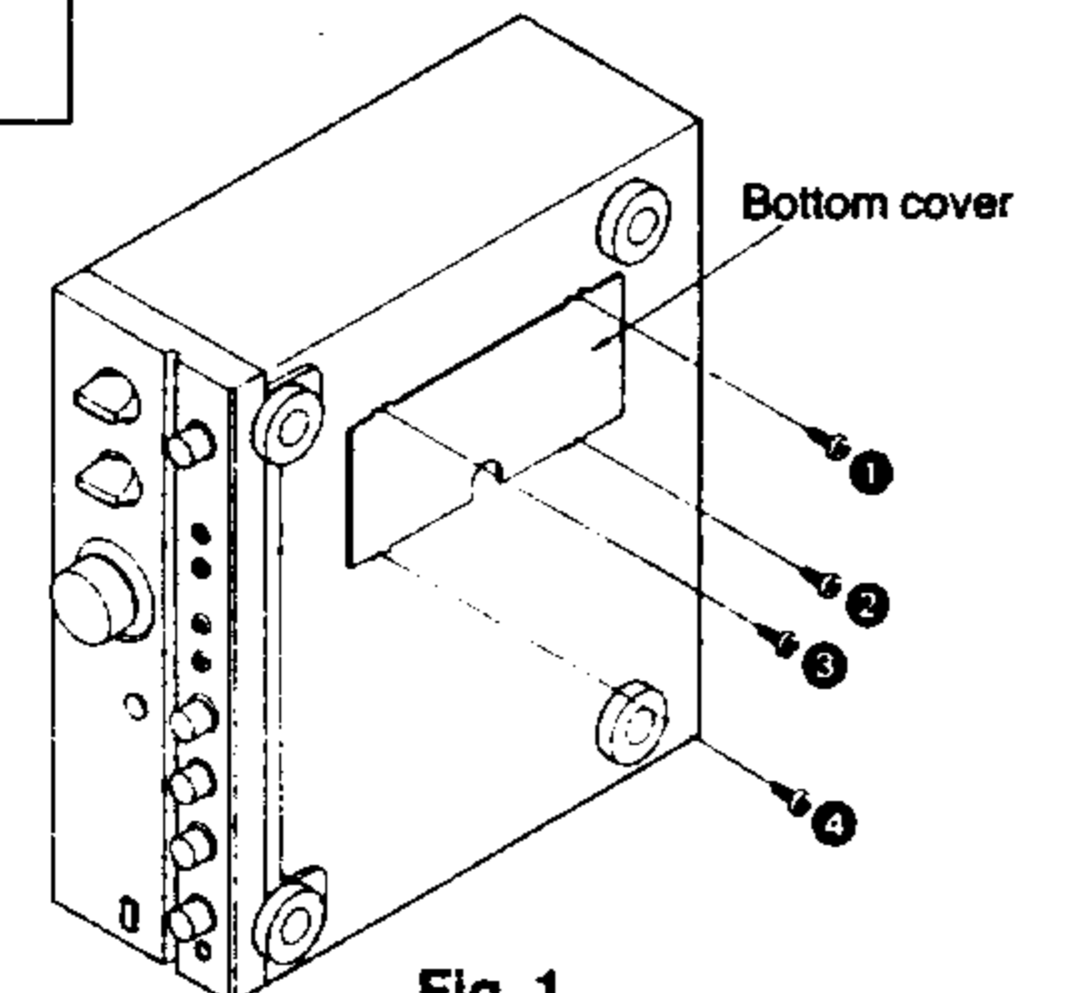
Ref. No. 14	Removal of the rear panel	 <p>Rear panel</p>
Procedure 1→13→14	<ol style="list-style-type: none"> 1. Remove the 17 screws (①-⑰). 2. Remove the rear panel in the direction of arrow. 	

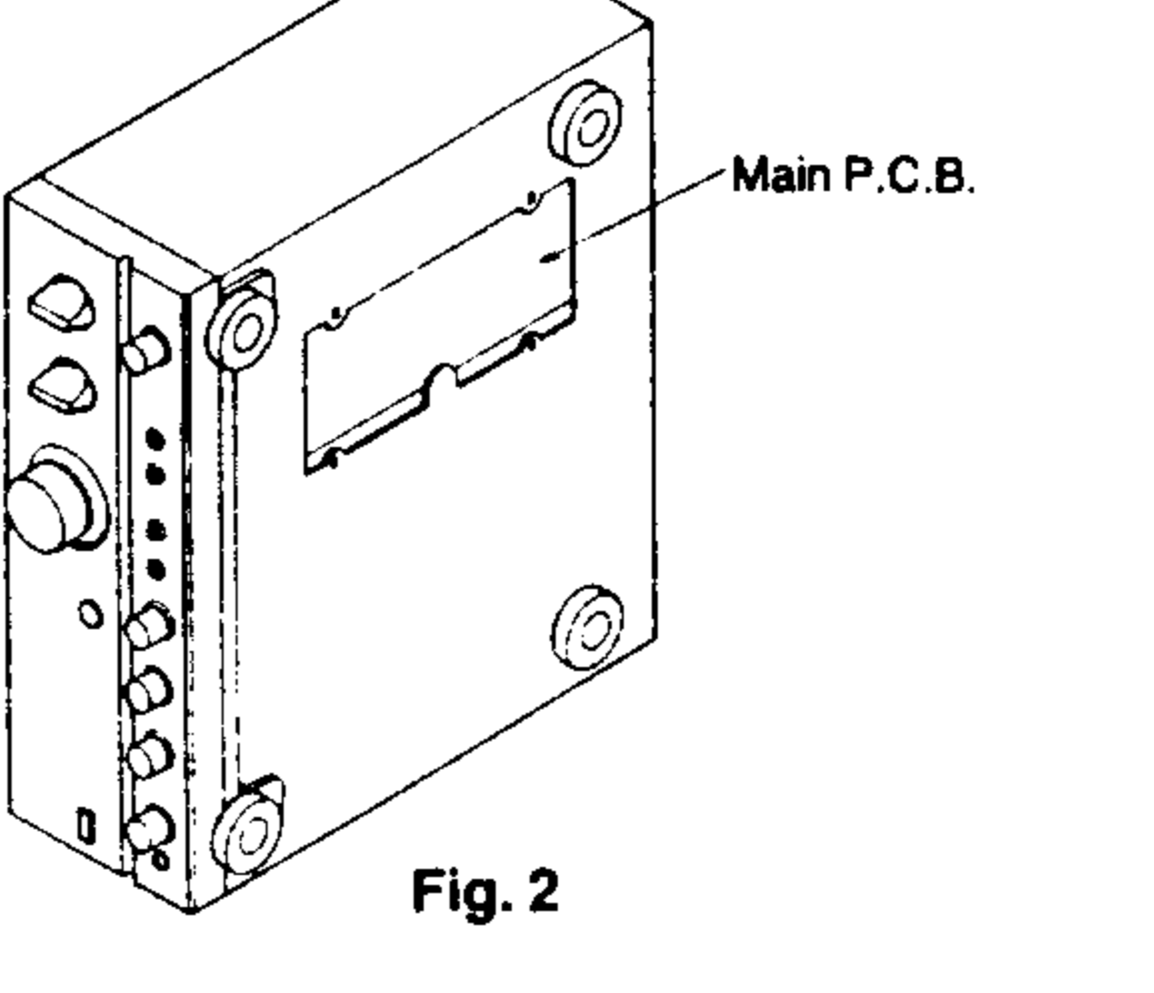
Ref. No. 15	Removal of the input select P.C.B.	 <p>Input select P.C.B. Remote switch controller</p>
Procedure 1→13→14→15	<ol style="list-style-type: none"> 1. Remove the remote switch controller. 2. Remove the input select P.C.B. in the direction of arrow. 	<ol style="list-style-type: none"> 1. Remove the tape 2/DAT P.C.B. in the direction of arrow.

Ref. No. 16	Removal of the tape 2/DAT P.C.B.	 <p>Tape 2/DAT P.C.B.</p>
Procedure 1→13→14→16	<ol style="list-style-type: none"> 1. Remove the tape 2/DAT P.C.B. in the direction of arrow. 	

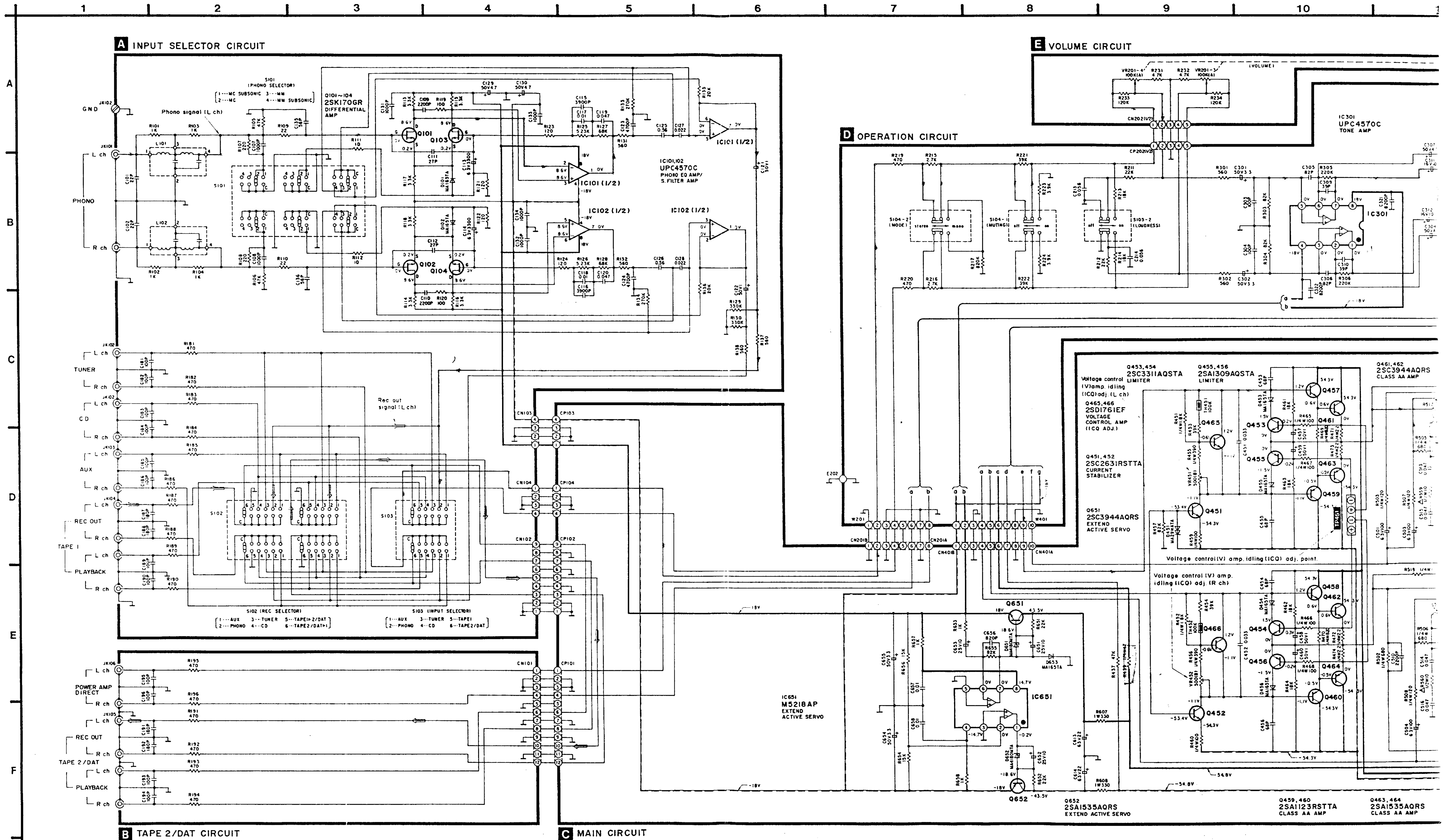
Ref. No. 17	Removal of the main P.C.B.	 <p>CN201 CN401 CN501 CN601 Main P.C.B.</p>
Procedure 1→13→14→ 15→16→17	<ol style="list-style-type: none"> 1. Remove the 3-flat cables (CN201, CN401, CN501). 2. Remove the 1 connector (CN601). 3. Remove the 10 screws (①-⑩). 	 <p>Power transistor Solder</p> <ol style="list-style-type: none"> 1. Unsolder the power transistor. 2. Remove the 4 screws (①-④). ● When mounting the power transistor, apply silicon thermal compound (SZZ0L15) to the rear of the power transistor.

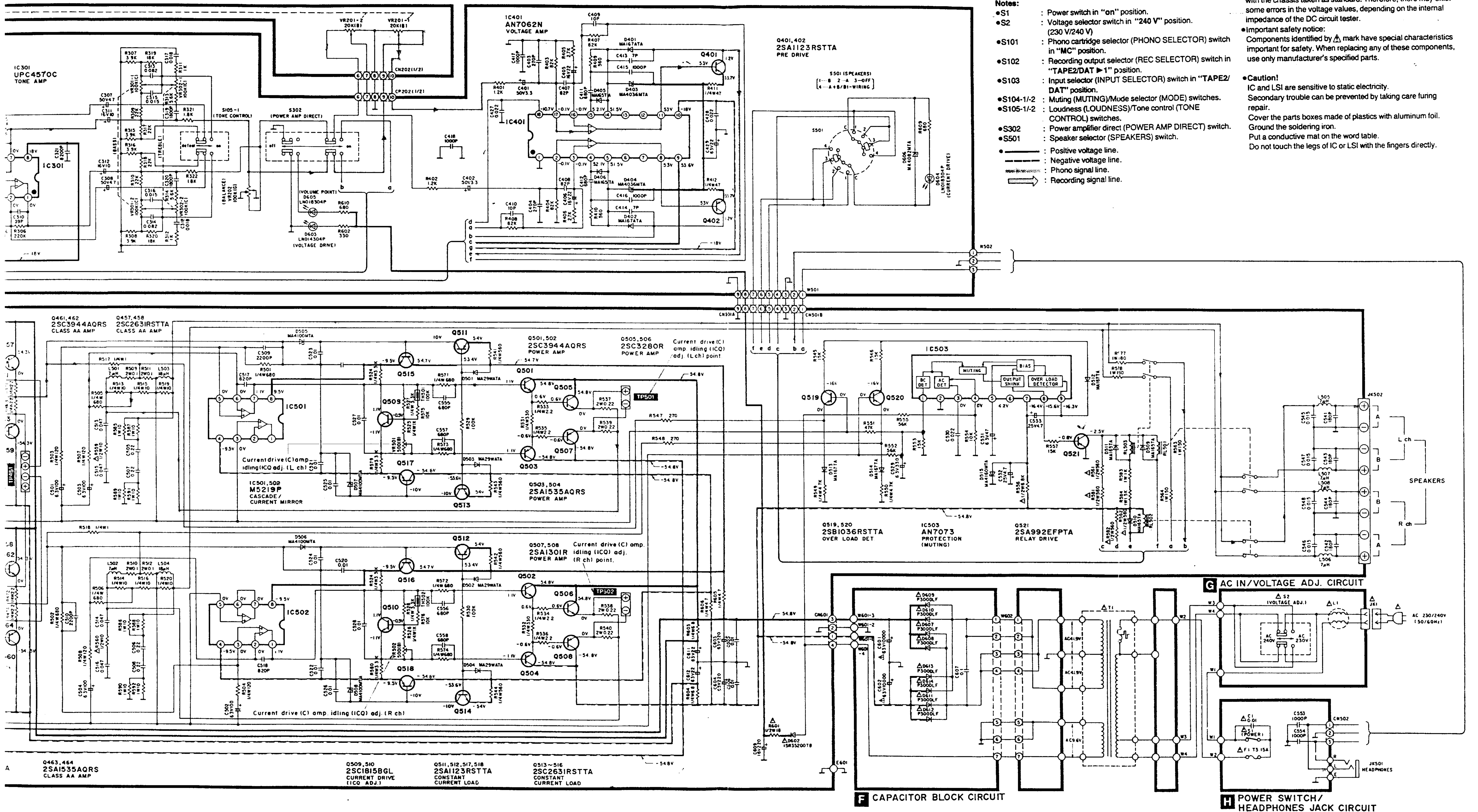
Ref. No. 18	Removal of the power transistor	<ol style="list-style-type: none"> 1. Unsolder the power transistor. 2. Remove the 4 screws (①-④). ● When mounting the power transistor, apply silicon thermal compound (SZZ0L15) to the rear of the power transistor.
----------------	---------------------------------	---

Ref. No. 19	Check of the main P.C.B.	 <p>Bottom cover Main P.C.B.</p>
Procedure 1→19	<ol style="list-style-type: none"> 1. Remove the 4 screws (①-④). 	<ol style="list-style-type: none"> 2. When checking the soldered surface of the digital P.C.B. and replacing the parts, do as shown in the Fig. 2.

Ref. No. 19	Check of the main P.C.B.	 <p>Main P.C.B.</p>
Procedure 1→19	<ol style="list-style-type: none"> 1. Remove the 4 screws (①-④). 	<ol style="list-style-type: none"> 2. When checking the soldered surface of the digital P.C.B. and replacing the parts, do as shown in the Fig. 2.

SCHEMATIC DIAGRAM (Parts list on pages 25~27.)





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

- Notes:**
- S1 : Power switch in "on" position.
 - S2 : Voltage selector switch in "240 V" position. (230 V/240 V)
 - S101 : Phono cartridge selector (PHONO SELECTOR) switch in "MC" position.
 - S102 : Recording output selector (REC SELECTOR) switch in "TAPE/DAT ▶ 1" position.
 - S103 : Input selector (INPUT SELECTOR) switch in "TAPE/DAT" position.
 - S104-1/2 : Muting (MUTING)/Mute selector (MODE) switches.
 - S105-1/2 : Loudness (LOUDNESS)/Tone control (TONE CONTROL) switches.
 - S302 : Power amplifier direct (POWER AMP DIRECT) switch.
 - S501 : Speaker selector (SPEAKERS) switch.
- Positive voltage line.
 ○ Negative voltage line.
 ○ Phono signal line.
 ⇨ Recording signal line.

• 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 Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

• Caution!
IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking care tuning 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.

A 0463, 464 2SA1535AQRS CLASS AA AMP
 0509, 510 2SC1815BGL CURRENT DRIVE (IC0 ADJ.)
 0511, 512, 517, 518 2SA1123RSTTA CONSTANT CURRENT LOAD
 0513~516 2SC2631RSTTA CONSTANT CURRENT LOAD

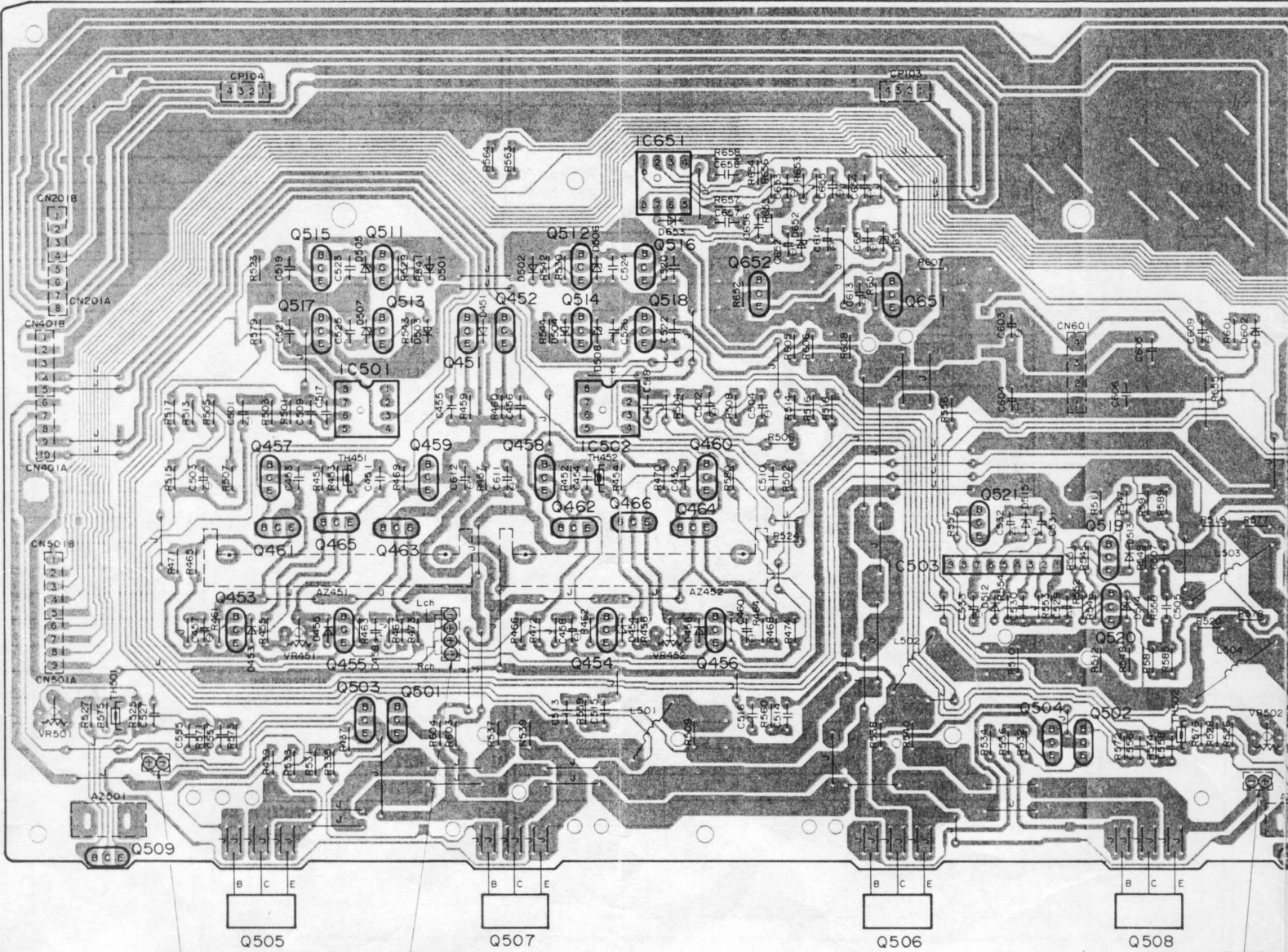
F CAPACITOR BLOCK CIRCUIT

H POWER SWITCH/ HEADPHONES JACK CIRCUIT

PRINTED CIRCUIT BOARDS (Parts list on pages 25~27.)

1 2 3 4 5 6

C MAIN P.C.B.

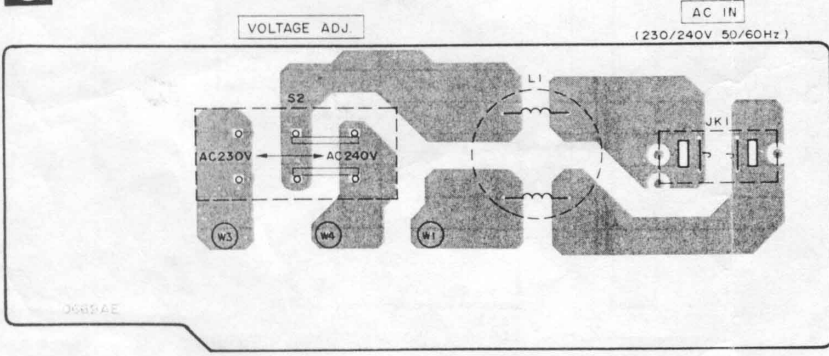


TP501 Current drive (C) amp. idling (ICQ) adj. (Lch)

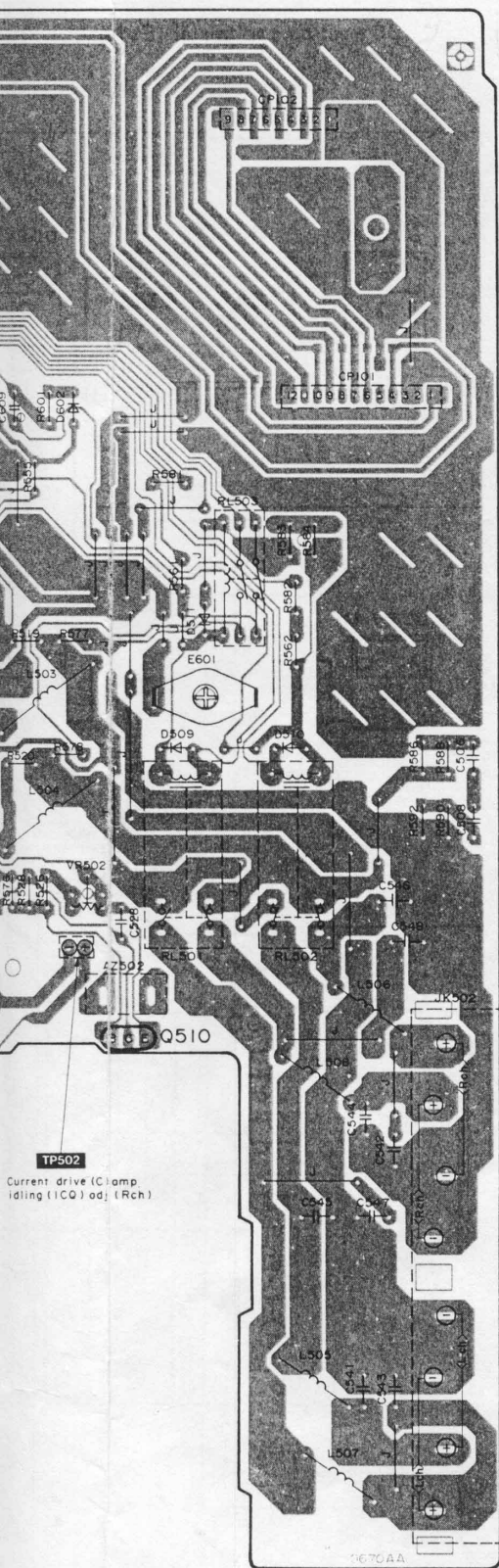
TP451 Voltage control (V) amp. idling (ICQ) adj.

TP502 Current drive (C) amp. idling (ICQ) adj.

G AC IN/VOLTAGE ADJ. P.C.B.



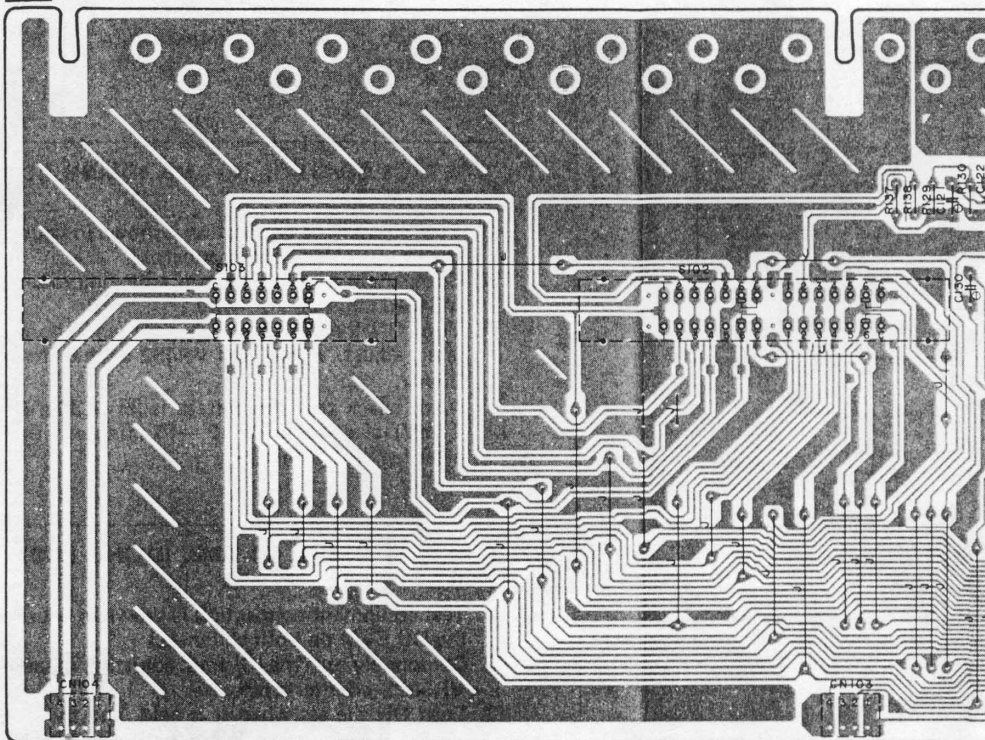
6 | 7 | 8 | 9 | 10 | 11



TP502
Current drive (Clamp, idling (IC) adj; (Rch)

(A) SPEAKERS (B)

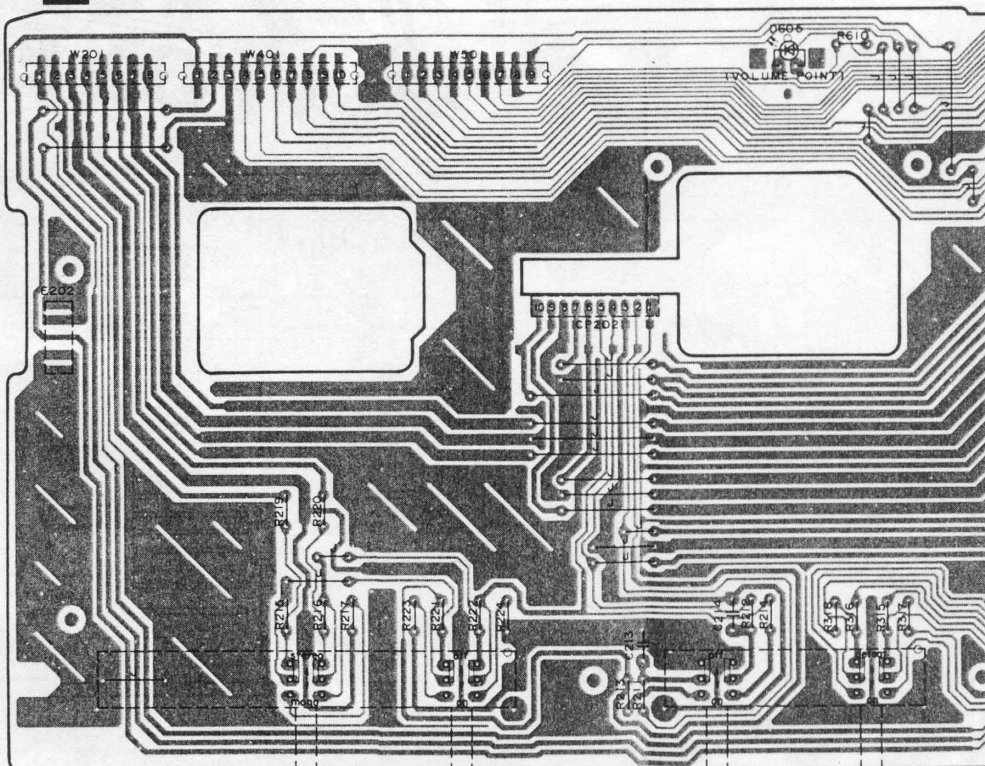
A INPUT SELECTOR P.C.B.



(S103) INPUT SELECTOR
{ 1-AUX 3-TUNER 5-TAPE1
2-PHONO 4-CD 6-TAPE2/DAT }

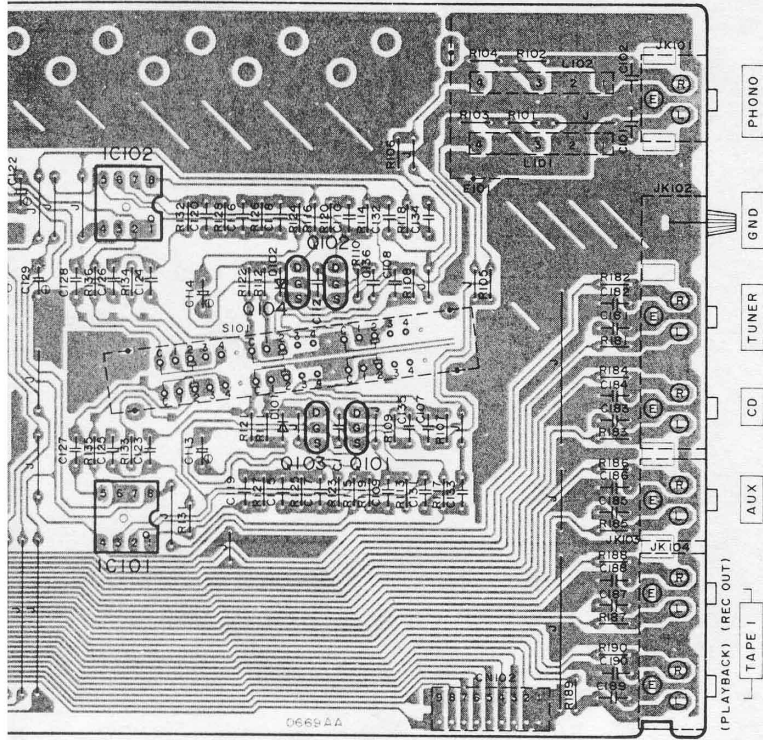
(S102) REC SELECTOR
{ 1-AUX 3-TUNER 5-TAPE1/2/DAT
2-PHONO 4-CD 6-TAPE2/DAT }

D OPERATION P.C.B.

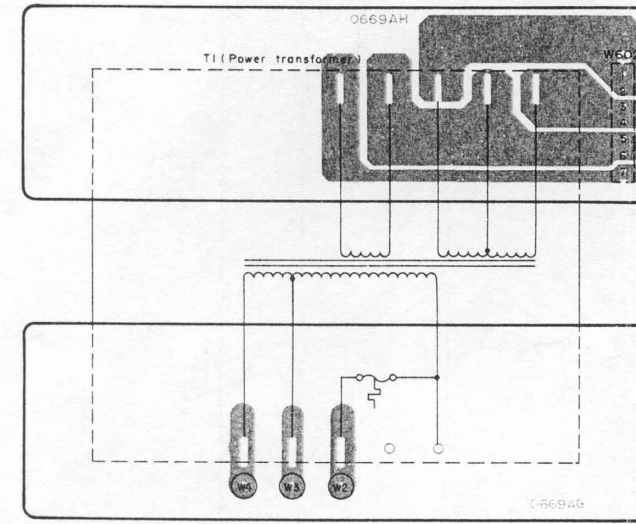
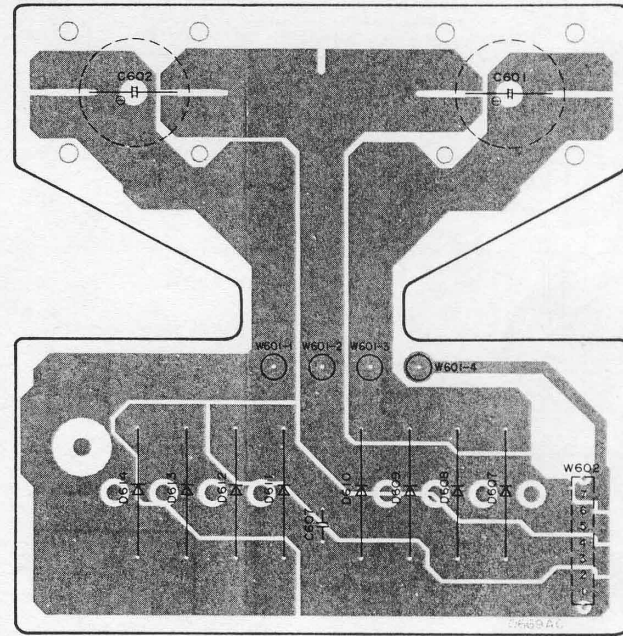


(S104-2) MODE (S104-1) MUTING (S105-2) LOUDNESS (S105-1) TONE CONTROL

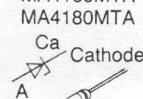
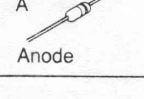
12 13 14 15 16 17 18 19 20 21 22



F CAPACITOR BLOCK P.C.B.

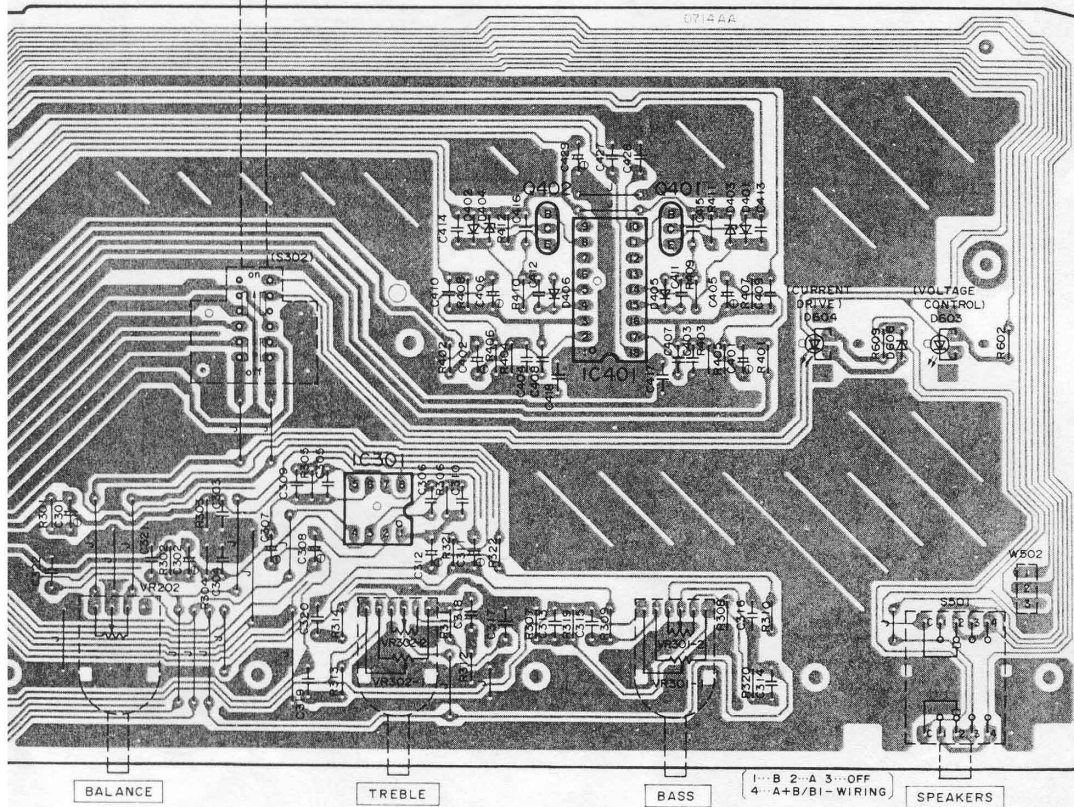


•Terminal guide of IC's, transistors and diodes

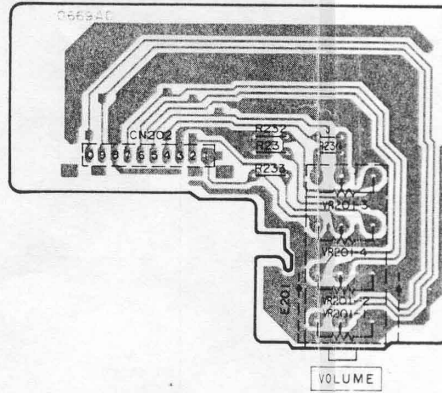
M5218AP 	M5219P 	UPC4570C 8 pin AN7062N 18 pin 
AN7073 		2SA1309AQSTA 2SB1036RSTTA 2SC3311AQSTA
	2SA992EFPT 2SA1123RSTTA 2SC1815BGL 2SC2631RSTTA	2SK170GR 
	2SA1535AQRS 2SC3944AQRS 2SD1761EF	2SA1301R 2SC3280R 
	1SR35200TB MA165TA MA167TA MA167ATA MA29WATA	MA4036MTA MA4082MTA 
	MA4100MTA MA4160MTA MA4180MTA	P300DLF 
	LN014304P LN018304P	

(S101) PHONO SELECTOR
1- MC SUBSONIC 3-MM
2- MC 4-MM SUBSONIC

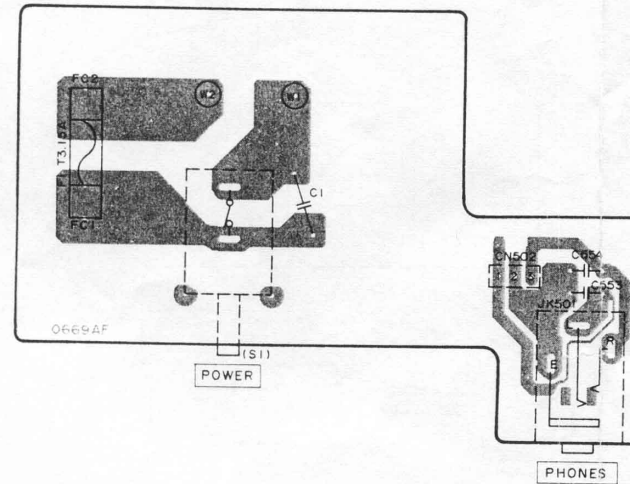
POWER AMP DIRECT



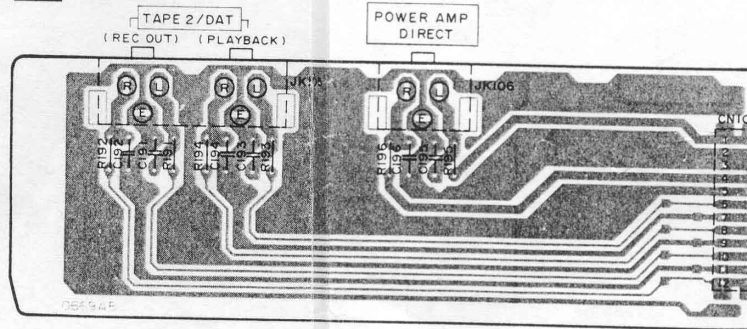
E VOLUME P.C.B.



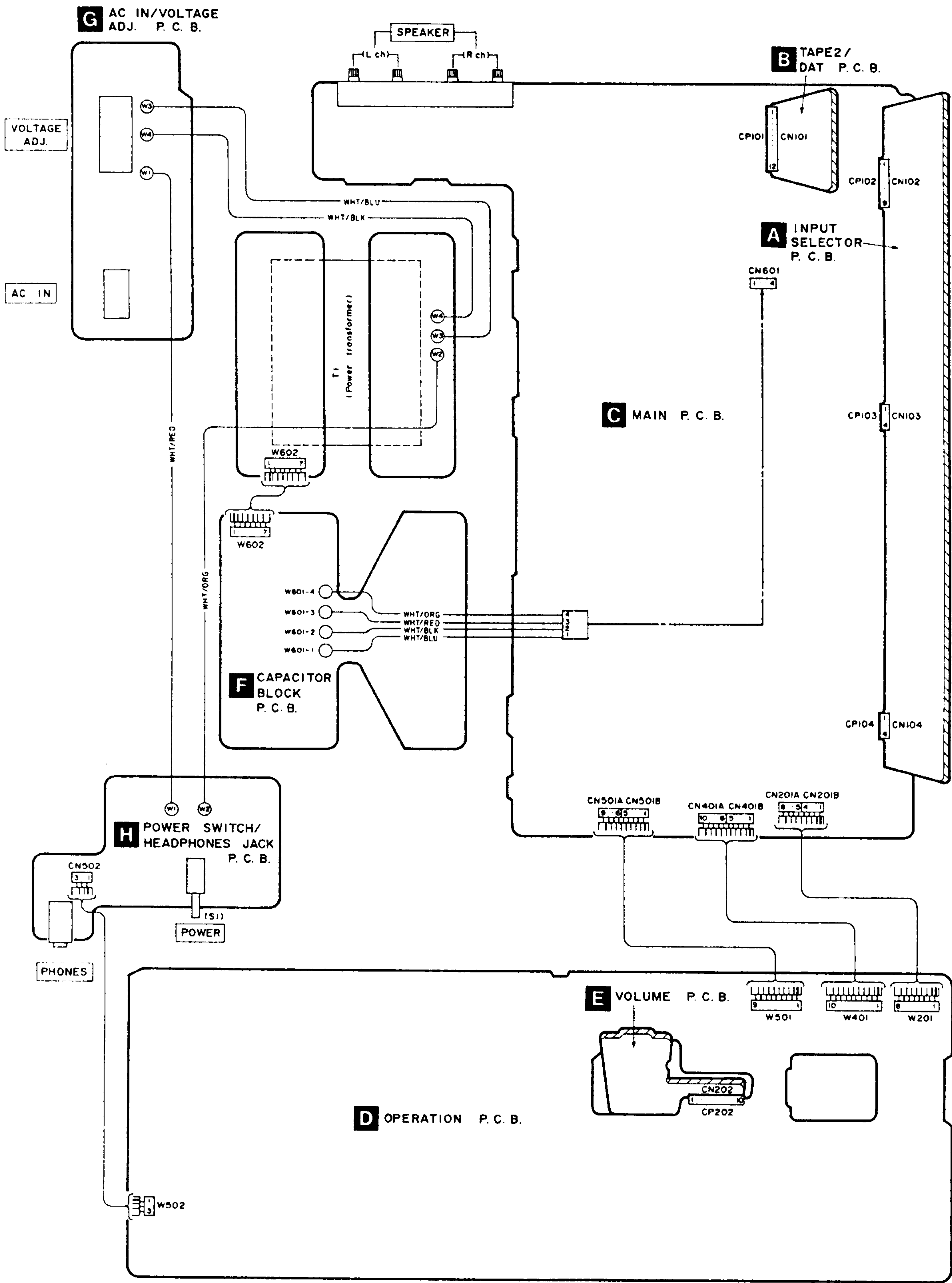
H POWER SWITCH/HEADPHONES JACK P.C.B.



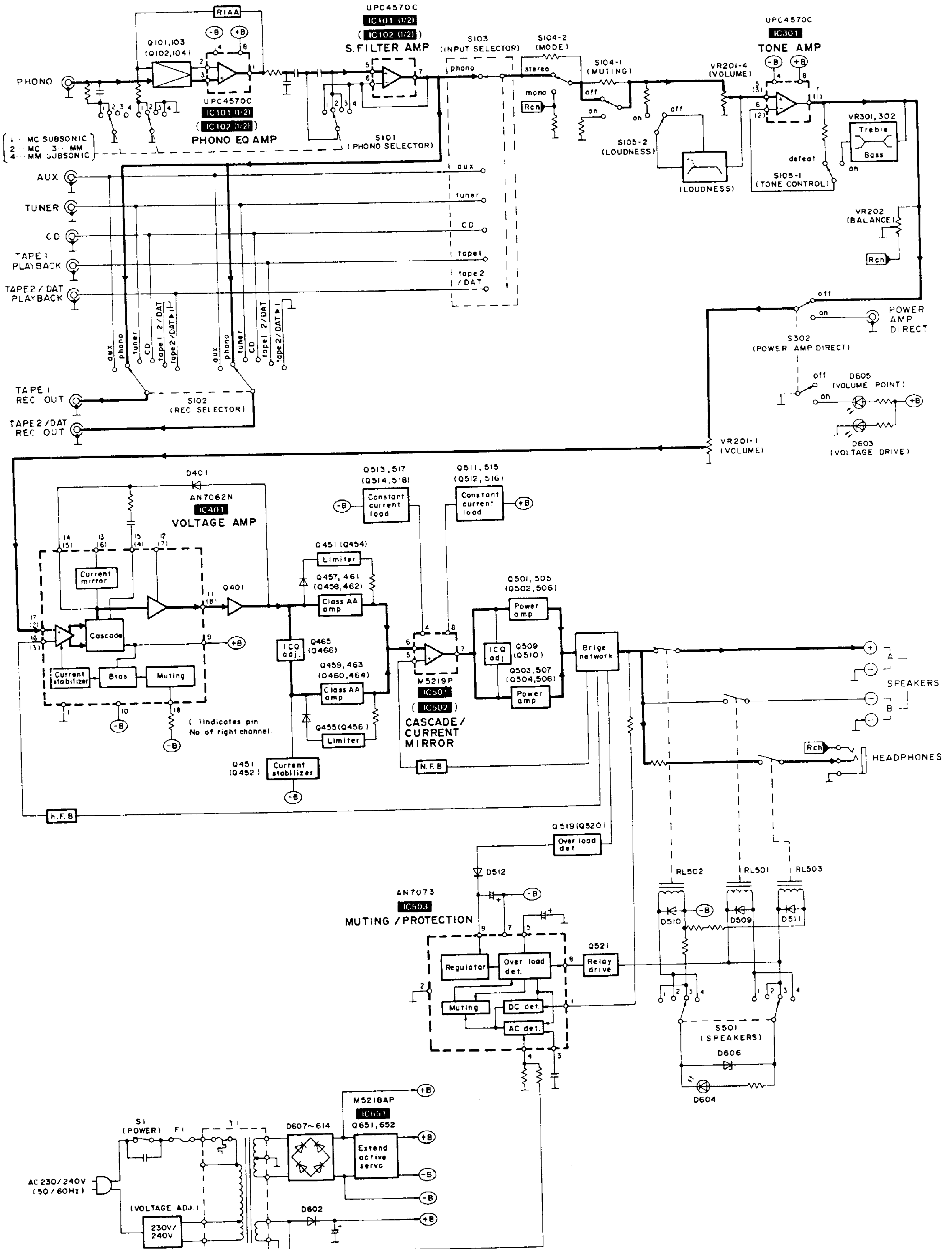
B TAPE2/DAT P.C.B.



WIRING CONNECTION DIAGRAM



■ BLOCK DIAGRAM



MEASUREMENTS AND ADJUSTMENTS

ADJUSTMENT

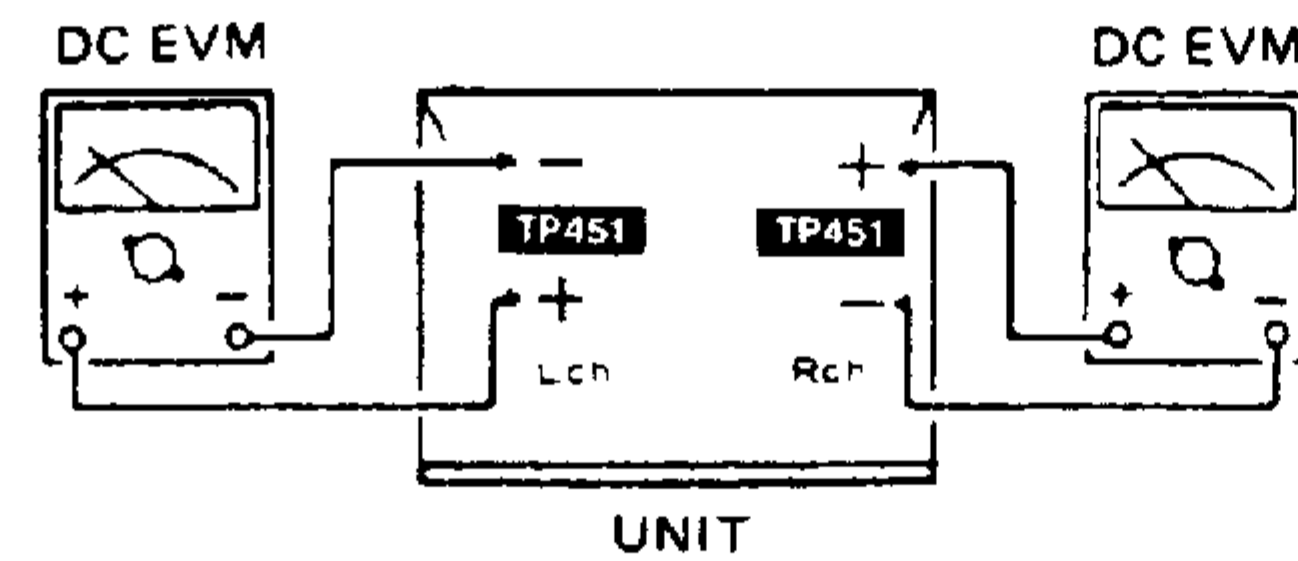
Control positions and equipment used.

- Volume knob ∞ (Minimum)
- Speaker selector off

● AC and DC electronic voltmeter (EVM)

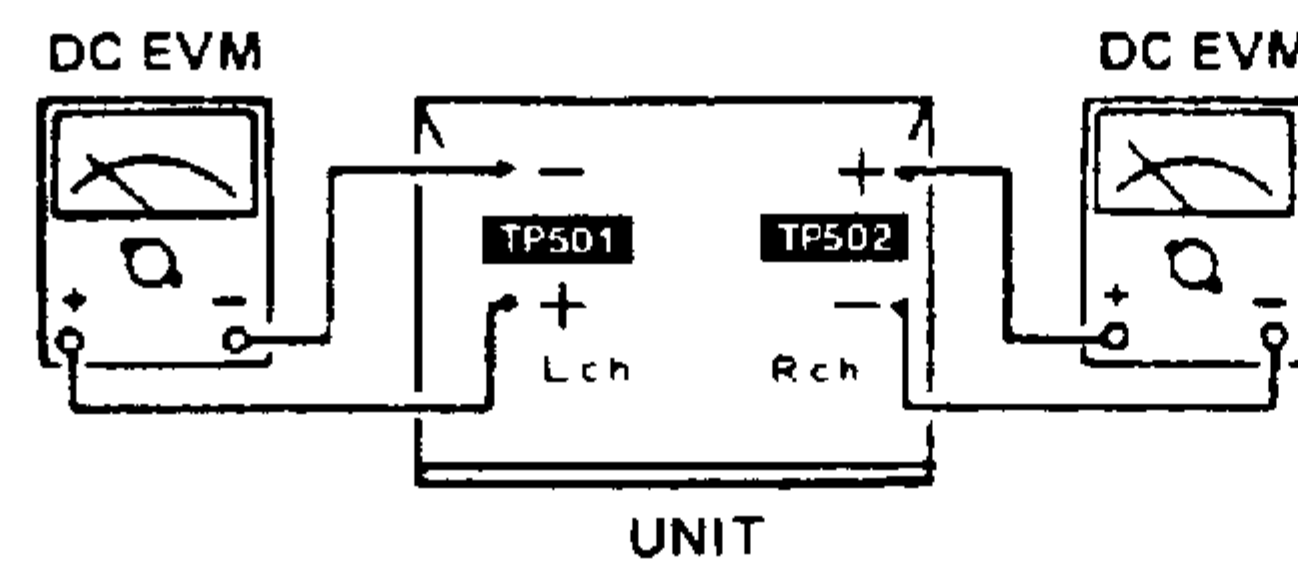
(1) VOLTAGE CONTROL (V) AMP. IDLING (ICQ) ADJUSTMENT

1. Test equipment connection is shown in figure. (Connect the DC EVM on both channels.)
2. Completely turn the (V) amp. adjusting volumes (VR451, VR452) counter-clockwise.
3. Turn ON the set when it is cold, and about 5 ~ 7 sec. later, adjust VR451 and VR452 so that the voltage is 25mV.
Also, check that the voltage is 25 ~ 30mV (standard: 27mV) after lapse of 10 - 15 minutes. (Below 50mV after lapse of 20min.).

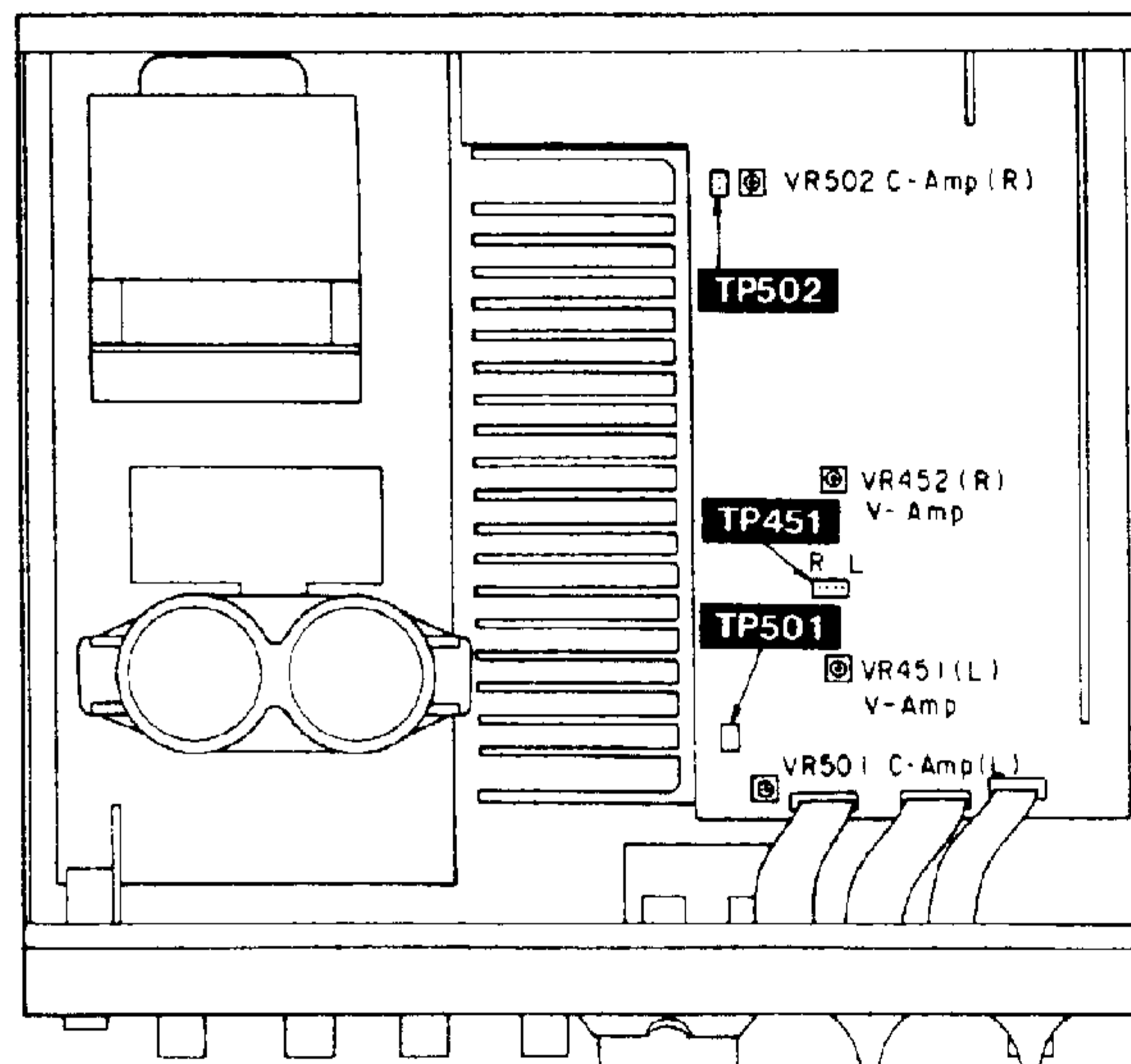


(2) CURRENT DRIVE (C) AMP. IDLING (ICQ) ADJUSTMENT

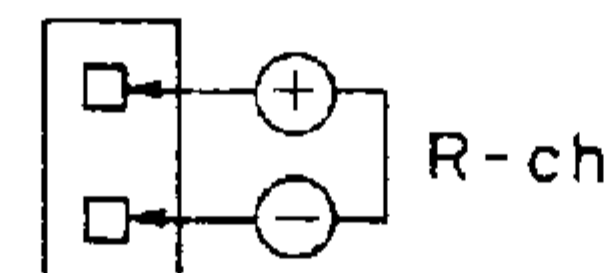
1. Test equipment connection is shown in figure. (Connect the DC EVM on both channels.)
2. Completely turn the (C) amp. adjusting volumes (VR501, VR502) counter-clockwise.
3. Turn ON the set when it is cold, and the "VOLTAGE CONTROL (V) AMP. IDLING (ICQ) ADJUSTMENT" later, adjust VR501 and VR502 so that the voltage is 3mV.
Also, check that the voltage is 4 ~ 7mV (standard: 5mV) after lapse of 10 - 15 minutes. (Below 15mV after lapse of 20 min.).



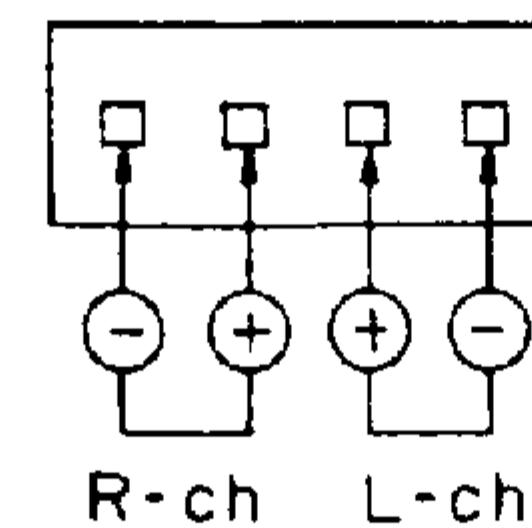
ADJUSTMENT POINTS



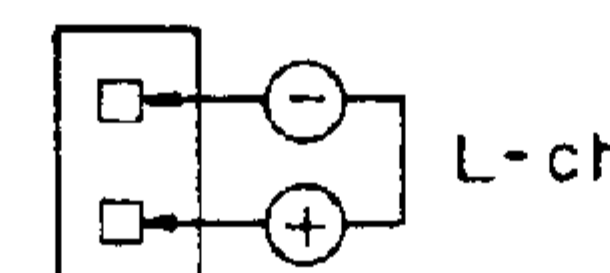
TP502 (C-amp)



TP451 (V-amp)



TP501 (C-amp)

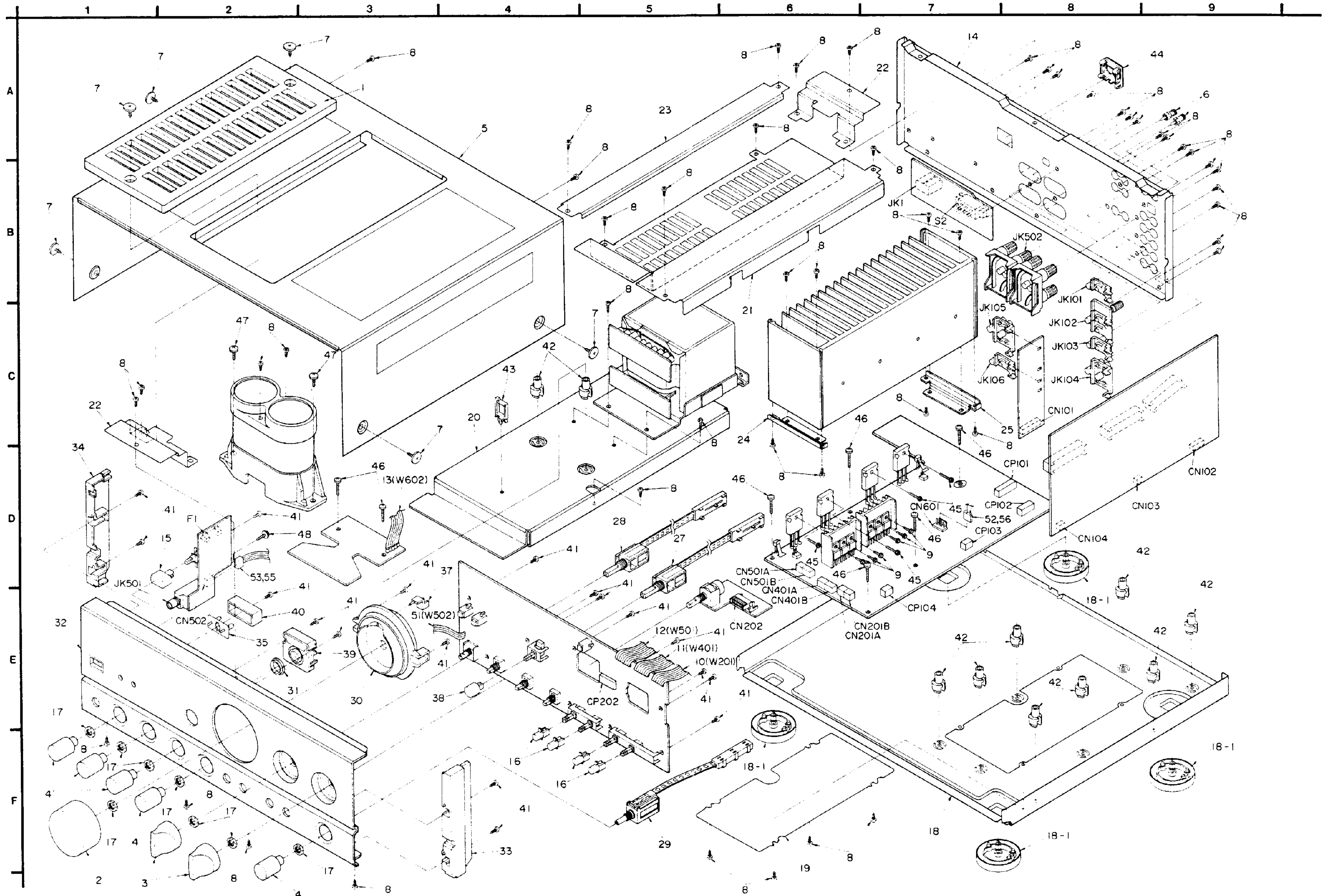


REPLACEMENT PARTS LIST

- Notes : • Important safety notice:
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
• 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.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
				43	SHR9814	CLUMPER	
				44	SJS9231A	AC INLET COVER	
				45	SNE2117-1	SCREW	
				46	XTB3+20JFZ	SCREW	
				47	XTB4+10FFZ	SCREW	
				48	XTWS3+8T	SCREW	
1	RGKD397-K	UPPER PLATE		51	RWJ3903070XK	CABLE ASS'Y (3P) (W502)	
2	RGWD122-K	KNOB, VOLUME		52	RJSA13404	SOCKET (4P)	
3	RGWD123-K	KNOB, REC. /INPUT		53	SJSS331	SOCKET (3P)	
4	RGWD124-K	KNOB, TONE/PHONO/S. P. SEL.		55	SJT783	TERMINAL	
5	RKMD172-K	CABINET		56	RJT053	TERMINAL	
6	SJPA11-1	SHORT PIN		57	SJSS227	SPRING (AZ501, 502)	
7	SNE2129-1	SCREW					
8	XTBS3+BJF21	SCREW					
9	XTW3+8T	SCREW					
10	RWJ39081700Q	CABLE ASS'Y (8P) (W201)					
11	RWJ39101700Q	CABLE ASS'Y (10P) (W401)					
12	RWJ39091700Q	CABLE ASS'Y (9P) (W501)					
13	RWJ39071500Q	CABLE ASS'Y (7P) (W602)					
14	RGRO124A-A	REAR PANEL	(E)	P1	RPG0941	PACKING CASE	
14	RGRO124A-C	REAR PANEL	(EB)	P2	RPN0511	PAD	
14	RGRO124A-B	REAR PANEL	(EG)	P3	SPH223	PROTECTION SHEET (A)	
15	RGJ0030	BUTTON, POWER		P4	SPH6434	PROTECTION SHEET (B)	
16	RGJ0609-K	BUTTON		P5	SPSD152	ACCESSORY BOX	
17	RHN90001	NUT		P6	SPB1061	PROTECTION COVER (MANUAL)	
18	RFKJUVX800EK	BOTTOM BOARD ASS'Y					
18-1	RKAD009-1	FOOT					
19	RKJ0036	BOTTOM PLATE					
20	RMA0476	ANGLE		A1	RQF1147	INSTRUCTIONS MANUAL ASS'Y	(E)
21	RMA0477	ANGLE		A1	RQF1148	INSTRUCTIONS MANUAL ASS'Y	(EB)
22	RMA0478	ANGLE		A1	RQF1149	INSTRUCTIONS MANUAL ASS'Y	(EG)
23	RMA0484	ANGLE		A1-1	RFKSUVX800EK	INSTRUCTIONS MANUAL ASS'Y	(E)
24	RMQ0239	ANGLE		A1-1	RQT1060-B	INSTRUCTIONS MANUAL	(EB)
25	RMQ0240	ANGLE		A1-1	RQT1061-D	INSTRUCTIONS MANUAL	(EG)
26	RMQ0255	ANGLE		A1-2	RQAD013	WARRANTY CARD	
27	RSQ0019	REMOTE SWITCH (INPUT)		A1-3	RQCB0169	SERVICE CENTER LIST	
28	RSQ0020	REMOTE SWITCH (REC.)		A2	SFDAC05E03	AC POWER SUPPLY CORD	Δ (E, EG)
29	RSQ0021	REMOTE SWITCH (PHONO)		A2	SJA193	AC POWER SUPPLY CORD	Δ (EB)
30	RGKD393-K	VOLUME ORNAMENT					
31	RGKD394-A	RING					
32	RFKJUVX700EK	FRONT PANEL ASS'Y					
33	RGKD398-K	SIDE ORNAMENT (R)					
34	RGKD399-K	SIDE ORNAMENT (L)					
35	RGL0134-C	ORNAMENT					
37	RGL0136-C	ORNAMENT					
38	RGJ0611-K	BUTTON, DIRECT					
39	RMRO460-K	HOLDER					
40	RMRO461-K	HOLDER					
41	XTBS26+BJ	SCREW					
42	SHE187-2	SPACER					

CABINET PARTS LOCATION



PACKING

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R563, 564	ERG1SJ151E	1W 150	C313, 314	ECQV1H823JZ	50V 0.082U
R571-574	ERDFS2VJ681T	1/4W 680	C315, 316	ECQB1H153JF3	50V 0.015U
R575, 576	ERDS2TJ103	1/4W 10K	C317, 318	ECQB1H183JF3	50V 0.018U
R577, 578	ERG1SJ181E	1W 180	C319, 320	ECQB1H182JF3	50V 1800P
R579, 580	ERDFS2VJ332T	1/4W 3.3K	C321, 322	ECQB1H822JF3	50V 8200P
R581, 582	ERDS1FVJ561T	1/2W 560 Δ	C401, 402	ECA1HPXS3R3B	50V 3.3U
R583	ERG1SJ102E	1W 1K	C403, 404	ECBT1H271KB5	50V 270P
R584	ERG1SJ152E	1W 1.5K	C405, 406	ECA1CPXS220B	16V 22U
R585-592	ERG1SJ100E	1W 10	C407, 408	ECBT1H820KB5	50V 82P
R601	ERDS1FVJ180T	1/2W 18 Δ	C409, 410	ECBT1H100J5	50V 10P
R602	ERDS2TJ331	1/4W 330	C411, 412	ECBA1H681KB5	50V 680P
R603, 604	ERDFS2VJ688T	1/4W 6.8	C413, 414	ECCV2H070D	500V 7P
R605, 606	ERDFS2VJ4R7T	1/4W 4.7	C415-418	ECBT1H102KB5	50V 1000P
R607, 608	ERG1SJ331E	1W 330	C427, 428	ECQB1H223JF3	50V 0.022U
R609, 610	ERDS2TJ681	1/4W 680	C429	ECA1JAP220B	63V 22U
R651, 652	ERDS2TJ223	1/4W 22K	C451, 452	ECKR1H332F5	50V 0.033U
R653	ERDS2TJ102	1/4W 1K	C453-456	ECCV2H680K	500V 68P
R654	ERDS2TJ153	1/4W 15K	C457-460	ECEA1HKA010B	50V 1U
R655	ERDS2TJ823T	1/4W 82K	C501-504	ECA0JPKS101B	6.3V 100U
R656	ERDS2TJ153	1/4W 15K	C505-508	ECQM1H224JZ	50V 0.22U
R657, 658	ERDS2TJ102	1/4W 1K	C509, 510	ECQB1H222JF3	50V 2200P
		CAPACITORS	C513-516	ECKR1H4732F5	50V 0.047U
C1	ECKWNS103ZYS	500V 0.01U Δ	C517, 518	ECBT1H821KB5	50V 820P
C101, 102	ECBT1H220J5	50V 22P	C519-528	ECKR1H1032F5	50V 0.01U
C107, 108	ECQB1H102KF3	50V 1000P	C529	ECEADJKA331Q	6.3V 330U
C109, 110	ECQB1H222JF3	50V 2200P	C530	ECFR1E223KR	25V 0.022U
C111, 112	ECBT1H270J5	50V 27P	C531	ECEADJKA470B	6.3V 47U
C113, 114	ECA0JAP332E	6.3V 3300P	C532, 533	ECEA1EKA4R7B	25V 4.7U
C115, 116	ECQB1H392JF3	50V 3900P	C541-544	ECCR1H181K5	50V 180P
C117, 118	ECQB1H103JF3	50V 0.01U	C545-548	ECQB1H153KF3	50V 0.015U
C119, 120	ECQV1H473JZ3	50V 0.047U	C553, 554	ECKT1H102KB	50V 1000P
C121, 122	ECA1HPXS010B	50V 1U	C555-558	ECBA1H681KB5	50V 680P
C123, 124	ECQB1H472JF3	50V 4700P	C601, 602	ECEA1JMI03T	63V 10000U Δ
C125, 126	ECQV1H564JZ3	50V 0.56U	C603, 604	ECA1JPKS221E	63V 220U
C127, 128	ECQB1H223JF3	50V 0.022U	C605, 606	ECHR1H103JZ3	50V 0.01U
C129, 130	ECA1HPXS4R7B	50V 4.7U	C607	ECQE2104KF3	100V 0.1U
C131-134	ECQB1H102KF3	50V 1000P	C609	ECA1CM221B	16V 220U
C135, 136	ECBT1H560J5	50V 56P	C611-614	ECA1JAP220B	63V 22U
C181-186	ECCR1H101K5	50V 100P	C651-653	ECA1EPXS100B	25V 10U
C187, 188	ECCR1H181K5	50V 180P	C654, 655	ECA1HPXS3R3B	50V 3.3U
C189, 190	ECCR1H101K5	50V 100P	C656	ECBT1H821KB5	50V 820P
C191, 192	ECBT1H181KB5	50V 180P	C657, 658	ECKR1H1032F5	50V 0.01U
C193-196	ECCR1H101K5	50V 100P			
C213, 214	ECQV1H563JZ3	50V 0.056U			
C301, 302	ECA1HPXS3R3B	50V 3.3U			
C303, 304	ECBT1H101KB5	50V 100P			
C305, 306	ECBT1H820KB5	50V 82P			
C307, 308	ECA1HPXS4R7B	50V 4.7U			
C309, 310	ECBT1H390J5	50V 39P			
C311, 312	ECA1CPXS100B	16V 10U			

