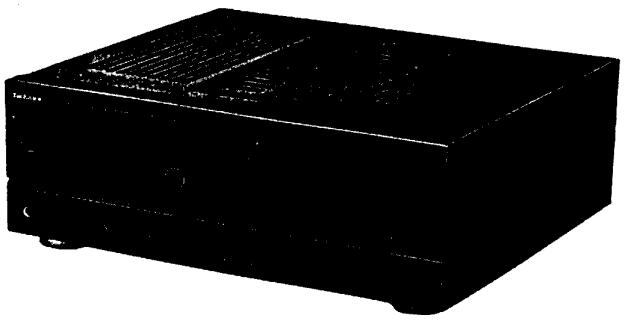
ORDER NO. AD9105134C9

Service Manual

Stereo Integrated Amplifier

Amplifier

SU-VX800



Color

(K)	Black Type

Areas

Country Code	Area	Color
(E)	Continental Europe	(K)
(EB)	Great Britain	
(EG)	F.R. Germany and Italy	
(GC)	Asia, Latin America, Middle Near East and Africa	
(GN)	Oceania	
(PX)	Far East-PX	

SPECIFICATIONS (DIN 45 500)

■ MAIN AMP. SECTION

(EXTENDED DIRECT DRIVE input)

20 Hz~20 kHz continuous power output both channels driven	2 × 110 W (8Ω)
1 kHz continuous power output both channels driven (THD 1%)	2 × 130 W (8 Ω) 2 × 180 W (4 Ω)
63 Hz~12.5 kHz continuous power output both channels driven (THD: 0.7%)	2 × 120 W (8 Ω) 2 × 160 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	0.003% (8 Ω)
Intermodulation distortion (50 Hz: 7 kHz = 4:1, SMPTE) rated power	0.009 % (8 Ω)
Residual hum and noise	0.02 mV
Damping factor	80 (8 Ω), 40 (4 Ω)
Headphones output level/impedance	735 mV/330 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, ADAPTOR	150 mV/22 kΩ
EXTENDED DIRECT DRIVE	
UNBALANCE	1 V/10 kΩ
BALANCE	1 V/20 kΩ
Phono maximum input voltage (1 kHz, RMS)	
MM	170 mV
MC	15 mV
S/N (Rated power 4 Ω)	
PHONO MM	79 dB (86 dB, IHF '66)
MC	67 dB (S = 250 µV, 68 dB, IHF '66)
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT, ADAPTOR	100 dB (103 dB, IHF '66)
EXTENDED DIRECT DRIVE	
UNBALANCE	106 dB (112 dB, IHF '66)
BALANCE	99 dB (107 dB, IHF '66)
S/N at −26 dB power (4 Ω)	
PHONO MM	78 dB
MC	67 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT, ADAPTOR	88 dB
EXTENDED DIRECT DRIVE	
UNBALANCE	102 dB
BALANCE	98 dB
S/N at 50 mW power (4 Ω)	
PHONO MM	75 dB
MC	67 dB
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT, ADAPTOR	86 dB
EXTENDED DIRECT DRIVE	
UNBALANCE	95 dB
BALANCE	95 dB
Frequency response	
PHONO MM	RIAA standard curve ±0.8 dB (30 Hz~15 kHz)
TUNER, CD, AUX, TAPE 1, TAPE 2/DAT, ADAPTOR	4 Hz~150 kHz (+0, −3 dB) +0 dB, −0.2 dB (20 Hz~20 kHz)
EXTENDED DIRECT DRIVE	4 Hz~170 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, +10 dB

Technics

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 870 W
Power supply
For Great Britain and Oceania: AC 50/60 Hz, 230/240 V
For F.R. Germany, Italy and Continental Europe: AC 50/60 Hz, 230 V
For Others: AC 50/60 Hz, 110 V/127 V/220 V/240 V

Dimensions (W × H × D) 430 × 158 × 429 mm (16-15/16" × 6-7/32" × 16-29/32")
Weight 17.0 kg (37.4 lb.)

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.

■ CONTENTS

■ 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, C607 and C608) 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 (VR401, VR402, VR403 and VR404) 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 110 V	AC 120 V	AC 220 V/230 V	AC 240 V	AC 240 V (GC, PX)
Consumed current	50 Hz	300~900 mA	270~810 mA	150~450 mA	140~430 mA	135~405 mA
	60 Hz	——	——	——	——	——

■ PROTECTION CIRCUITRY

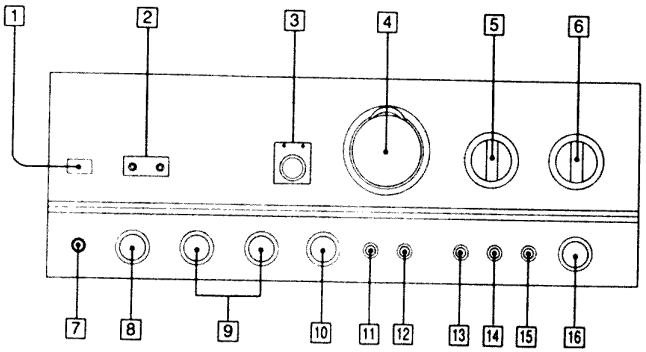
The protection circuitry of the amplifier may have operated if either of the following conditions is noticed:
- No sound is heard when the power is turned on.
- Sound stops during a performance.

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.

■ 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 Extended direct drive selector/indicator (EXTENDED DIRECT DRIVE)

This selector is used to listen to the sound from a component connected to the "EXTENDED DIRECT DRIVE" terminals.

Each time this selector is pressed, the mode changes from E.D.D-OFF→"UNBALANCE"→"BALANCE".

When this selector is set to the "BALANCE" position or "UNBALANCE" position, a superior level of tone quality can be obtained, because the signals from the component connected to the "EXTENDED DIRECT DRIVE" terminals are sent directly to the variable gain amplifier and 0dB power amplifier section of this unit.

The tone control circuit, balance control, loudness switch, muting switch, mode selector and adaptor switch 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 Adaptor switch (ADAPTOR)

This switch is used when enjoying music by changing the sound quality with the graphic equalizer, etc.

16 Phono cartridge selector (PHONO SELECTOR)

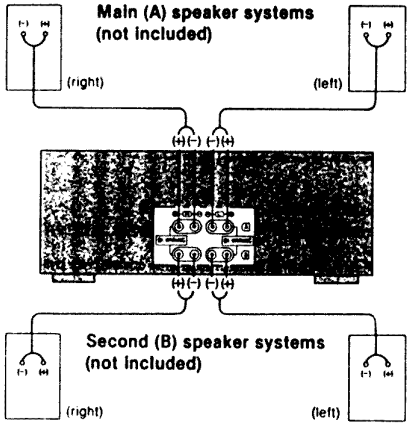
This selector should be set to the position which corresponds to the type of cartridge used on the turntable.

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.

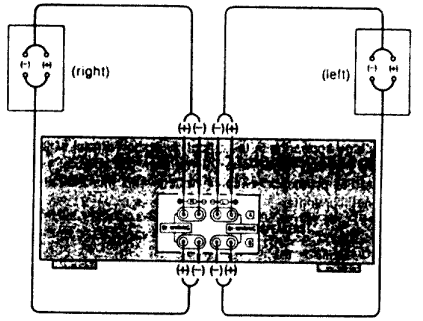
■ CONNECTIONS

Connection to speaker systems

To connect multiple speaker systems

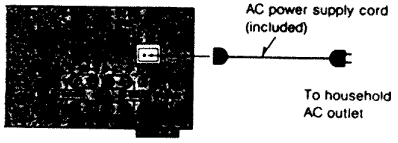


To connect bi-wired speaker systems



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

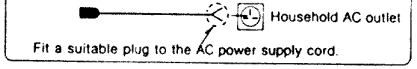
To connect the AC power supply cord (included)



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.

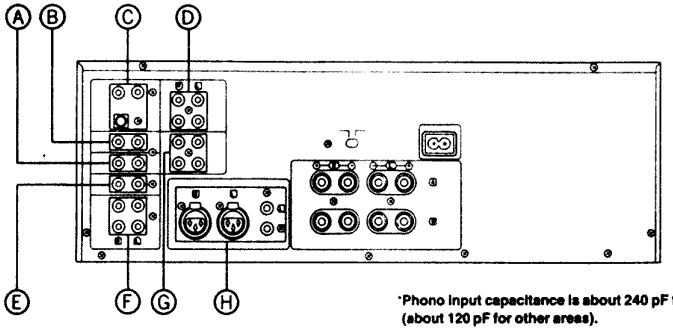
For United Kingdom



To connect to each terminals

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

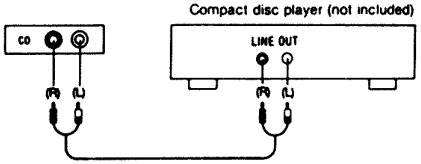
Stereo connection cable White (L) / Red (R)



*Phono input capacitance is about 240 pF for E, EB, EG, GN area (about 120 pF for other areas).

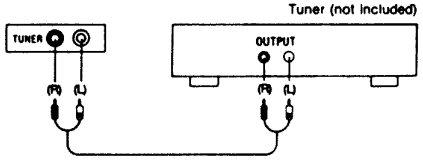
Ⓐ "CD" terminals

Connect a compact disc player.



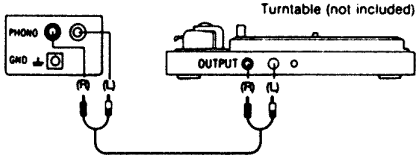
Ⓑ "TUNER" terminals

Connect a tuner.



Ⓒ "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.

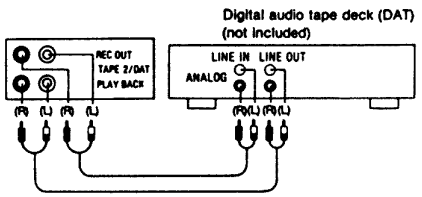
Using the short-circuit pins (included)

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.

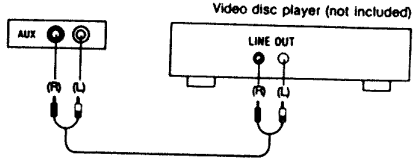
Ⓓ "TAPE/DAT" terminals

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



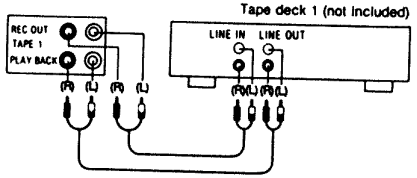
Ⓔ "AUX" terminals

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



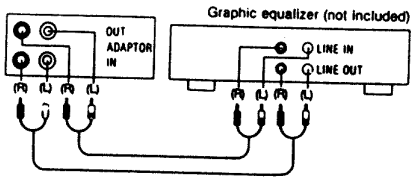
Ⓕ "TAPE 1" terminals

Connect a first tape deck.



Ⓖ "ADAPTOR" terminals

Connect a graphic equalizer.



Ⓗ "EXTENDED DIRECT DRIVE" terminals

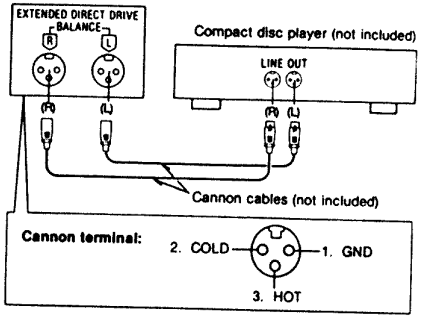
Connect a compact disc player, a digital audio tape deck, or a D/A converter.

A superior level of tone quality can be obtained, because the signal from these terminals are sent directly to the variable gain amplifier and 0dB power amplifier section of this unit.

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

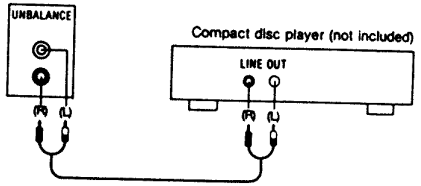
BALANCE

Connect to a compact disc player, a digital audio tape deck, or a D/A converter that has a cannon type output terminal (balanced output).

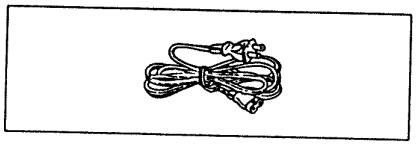


UNBALANCE

Connect to a compact disc player, a digital audio tape deck, or a D/A converter that has RCA type output terminal.



■ ACCESSORIES



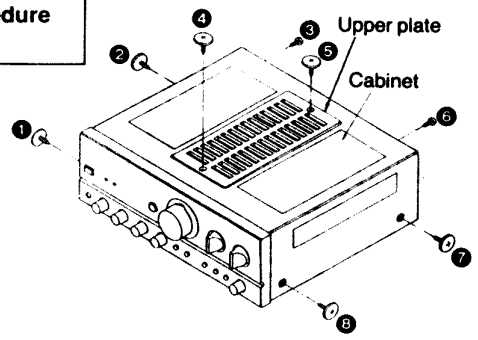
- AC Power supply cord 1
  - <SFDAC05E03> For (E), (EG) areas.
  - <SJA193> For (EB) area only.
  - <RJA0004> For (GC), (PX) areas.
  - <SJA173> For (GN) area only.
- AC Plug adaptor 1
  - <SJP9215> For (GC), (PX) areas.

■ DISASSEMBLY INSTRUCTIONS

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

Ref. No. 1	Removal of the cabinet

Procedure 1

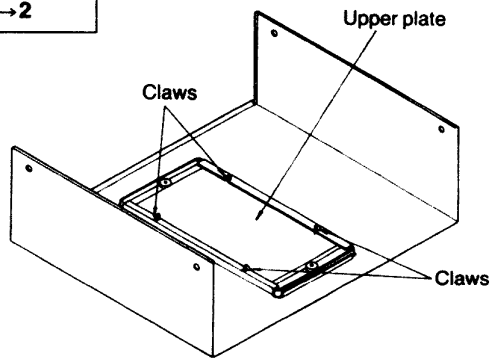


- Remove the 8 screws (❶~❽).

Attention:
When removing the cabinet from the unit, please don't forget to remove the 2 screws (❹, ❺) of the upper plate.
Unless you remove the 2 screws (❹, ❺), it may change shape of the cabinet.

Ref. No. 2	Removal of the Upper Plate

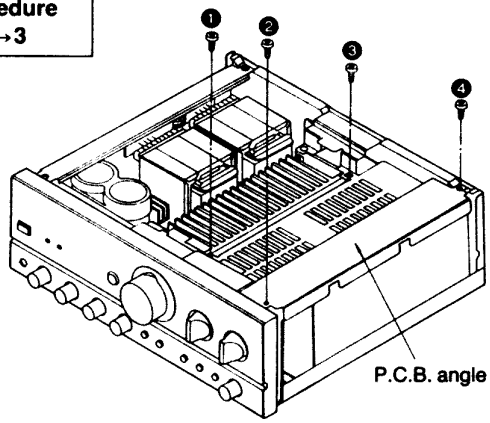
Procedure 1→2



- Release the 4 claws.

Ref. No. 3	Removal of the P.C.B. angle

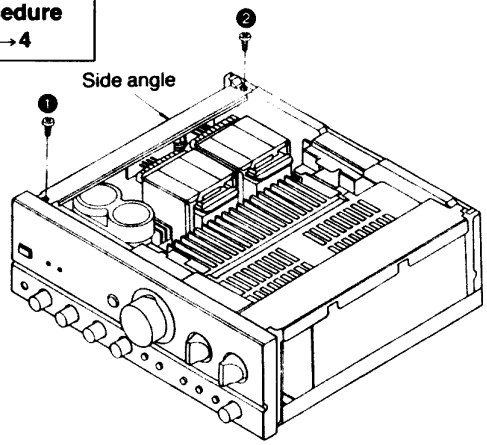
Procedure 1→3



- Remove the 4 screws (❶~❹).

Ref. No. 4	Removal of the side angle

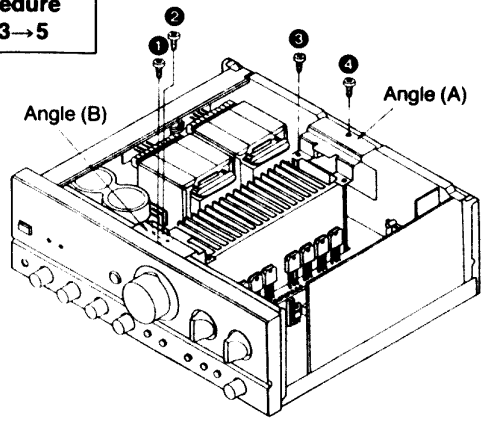
Procedure 1→4



- Remove the 2 screws (❶, ❷).

Ref. No. 5	Removal of the angle (A) and angle (B)

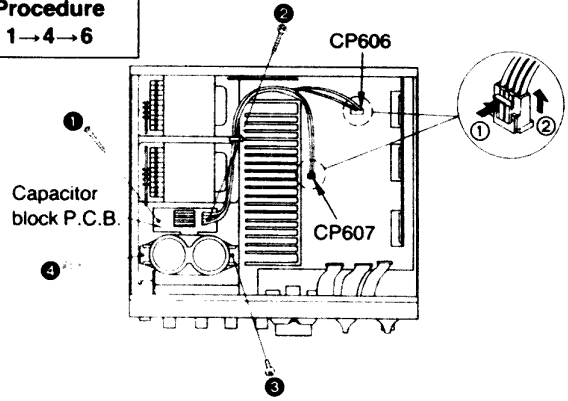
Procedure 1→3→5



- Remove the 4 screws (❶~❹).

Ref. No. 6	Removal of the capacitor block P.C.B.

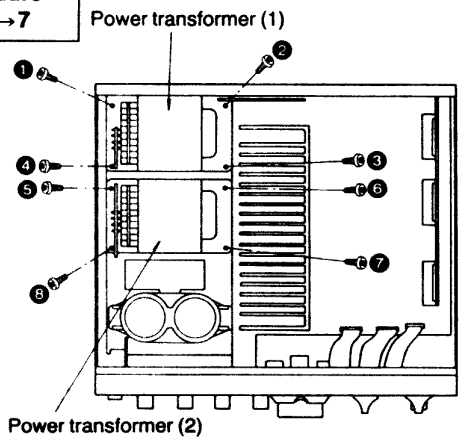
Procedure 1→4→6



1. Remove the 2 connectors (CP606, CP607).
2. Remove the 4 screws (❶~❹).

Ref. No. 7	Removal of the power transformer (1), (2)

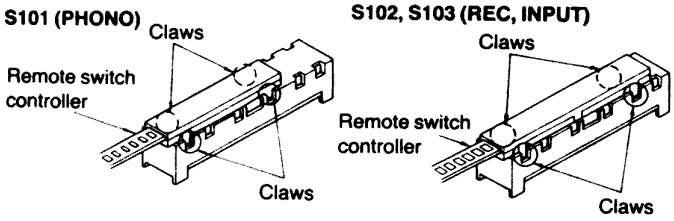
Procedure
1→4→7



- Remove the 8 screws (❶~❽).

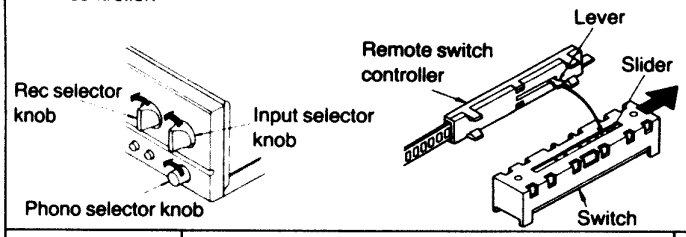
■ Removal of the remote switch controller

- Remove the 4 claws.



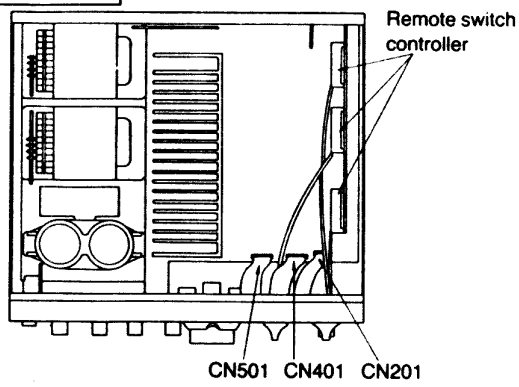
■ Replacing of the remote switch controller

1. Turn the selector knobs to the arrows.
2. Put the switch slider of switch to end and put in the remote switch controller.

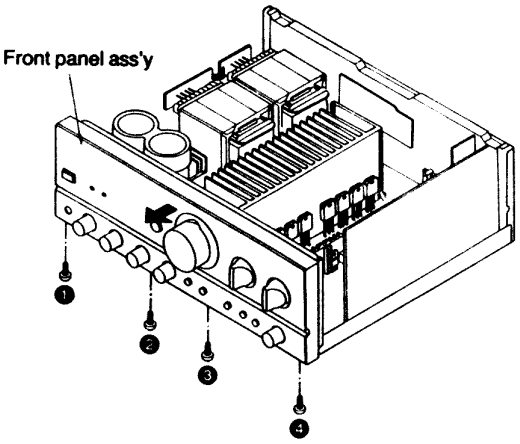


Ref. No. 8	Removal of the front panel ass'y

Procedure
1→3→4→5→8



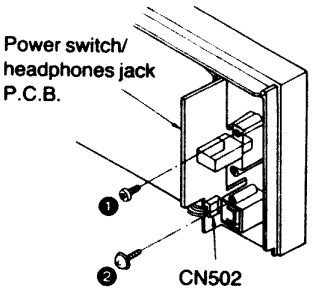
1. Remove the remote switch controller.
2. Remove the 3 flat cables (CN201, CN401, CN501).



3. Remove the 4 screws (❶~❹).
4. Remove the front panel ass'y in the direction of arrow.

Ref. No. 9	Removal of the power switch/ headphones jack P.C.B.

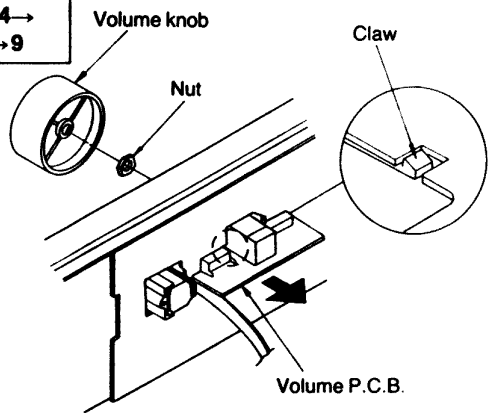
Procedure
1→3→4→5→8→9



1. Remove the 1 connector (CN502).
2. Remove the 2 screws (❶, ❷).

Ref. No. 10	Removal of the volume P.C.B.

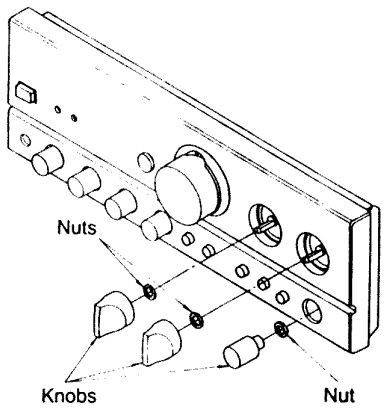
Procedure
1→3→4→5→8→9



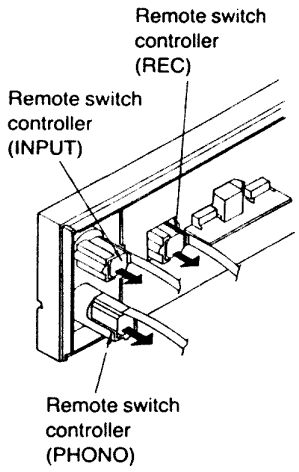
1. Pull out the volume knob.
2. Remove the nut.
3. Release the 1 claw.

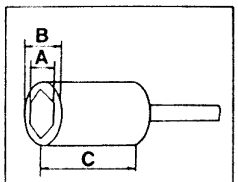
Ref. No. 11	Removal of the remote switch controller

Procedure
1→3→4→5→8→11



1. Pull out the 3 knobs.
2. Remove the 3 nuts.



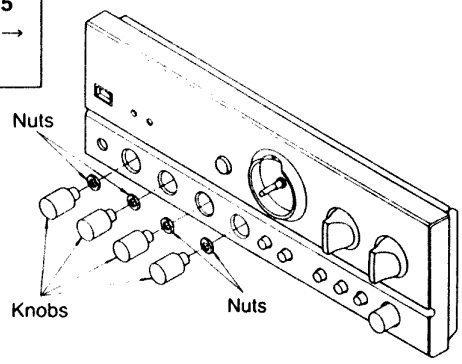


A: 11 mm
B: 16 mm
C: longer than 22 mm
- Use a wrench of the dimensions shown in the illustration above to remove nuts.

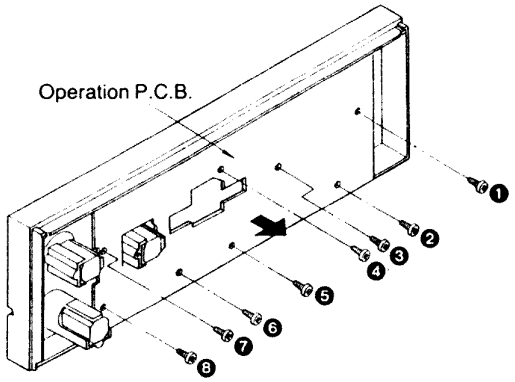
3. Remove the remote switch controller in the direction of arrow.

Ref. No. 12	Removal of the operation P.C.B.

Procedure
1→3→4→5→8→9→10→12



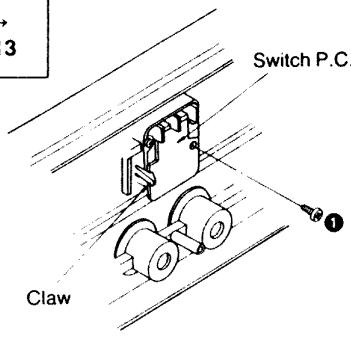
1. Pull out the 4 knobs.
2. Remove the 4 nuts.



3. Remove the 8 screws (❶~❽).
4. Remove the operation P.C.B. in the direction of arrow.

Ref. No. 13	Removal of the switch P.C.B.

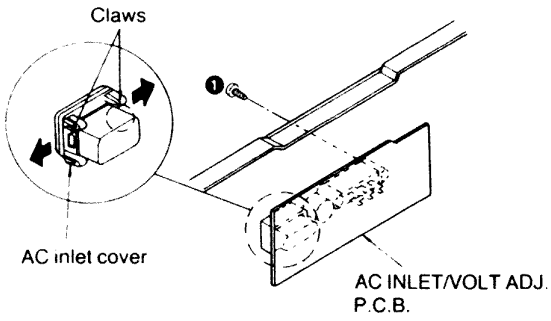
Procedure
1→3→4→5→8→9→10→12→13



1. Remove the 1 screw (❶).
2. Remove the 1 claw.

Ref. No. 14	Removal of the AC INLET/VOLT ADJ. P.C.B.

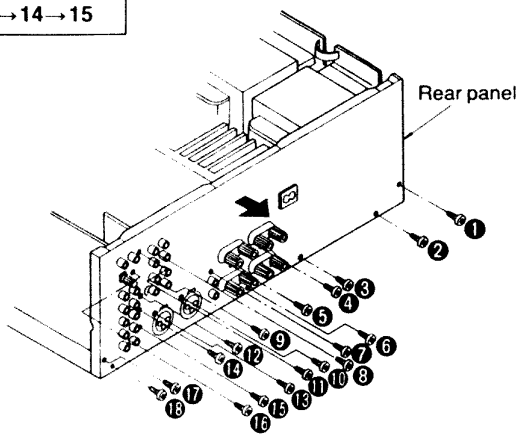
Procedure
1→14



1. Remove the 1 screw (❶).
2. Release the 2 claws of AC inlet cover.

Ref. No. 15	Removal of the rear panel

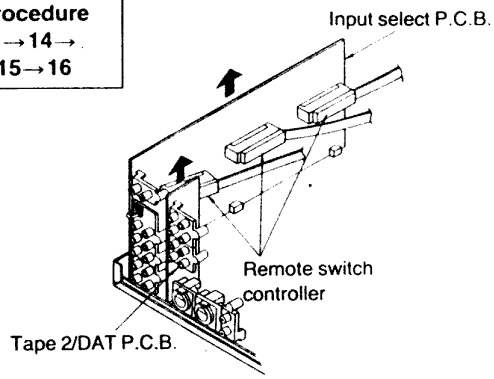
Procedure
1→14→15



1. Remove the 18 screws (❶~⓲).
2. Remove the rear panel in the direction of arrow.

Ref. No. 16	Removal of the input select P.C.B. and tape 2/DAT P.C.B.

Procedure
1→14→15→16



■ Input select P.C.B.

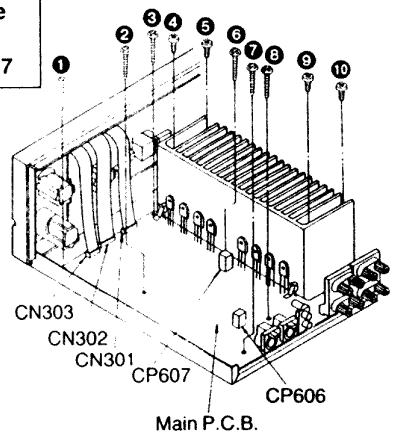
1. Remove the remote switch controller.
2. Remove the input select P.C.B. in the direction of arrow.

■ Tape 2/DAT P.C.B.

- Remove the tape 2/DAT P.C.B. in the direction of arrow.

Ref. No. 17	Removal of the main P.C.B.

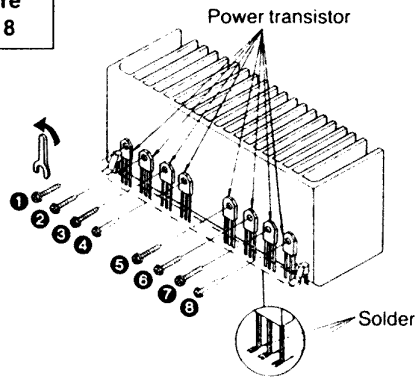
Procedure
1→14→15→16→17



1. Remove the 3-flat cables (CN301, CN302, CN303).
2. Remove the 2 connectors (CP606, CP607).
3. Remove the 10 screws (❶~⓾).

Ref. No. 18	Removal of the power transistor

Procedure
1→3→18



1. Unsolder the power transistor.
2. Remove the 8 screws (❶~❽).

- 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.

Procedure
1→19

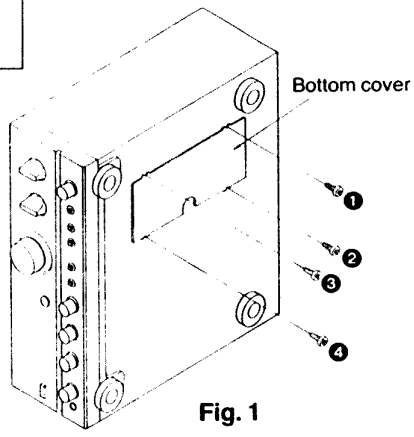


Fig. 1

1. Remove the 4 screws (❶~❹).

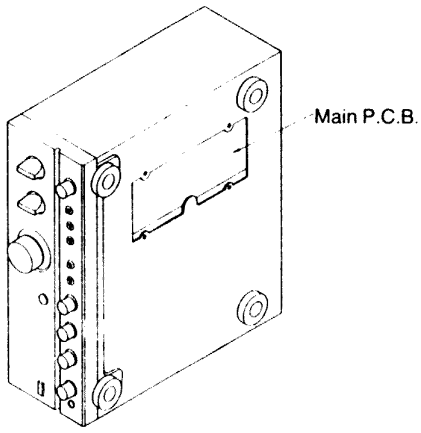
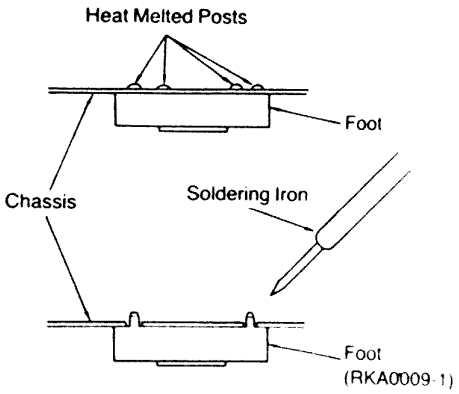


Fig. 2

2. When checking the soldered surface of the digital P.C.B. and replacing the parts, do as shown in the Fig. 2.

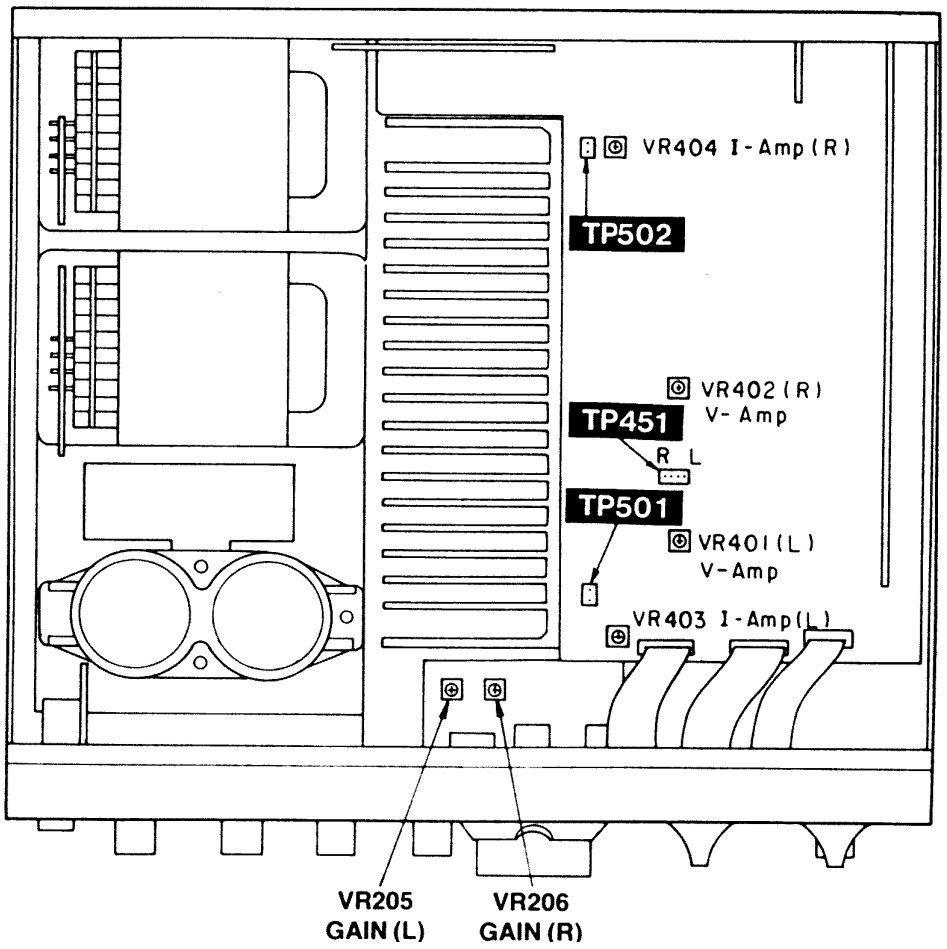
•Replacement of the Foot.

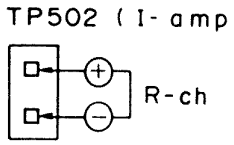
1. Remove the 4 heat melted posts on the chassis with a pair of nippers or similar tool.
2. To replace the foot (RKA0009-1) on the chassis, melt the 4 posts with a soldering iron.

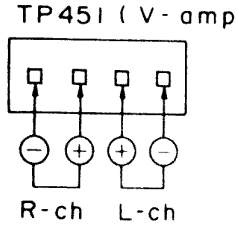


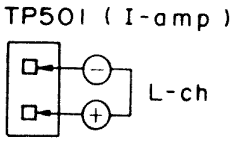
■ MEASUREMENTS AND ADJUSTMENTS

•ADJUSTMENT POINTS









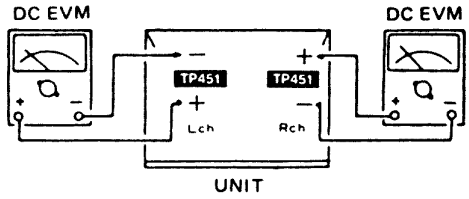
•ADJUSTMENT

Control positions and equipment used.

- •Volume knob . . . . . ∞ (Minimum)
- •Speaker selector . . . . . off
- •Oscillator
- •AC and DC electronic voltmeter (EVM)

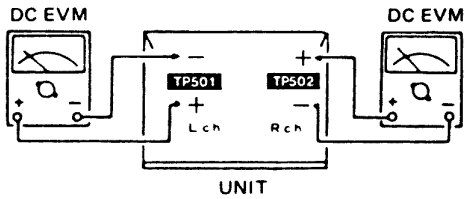
(1) VOLTAGE CONTROL (V) AMP. IDLING (ICQ) ADJUSTMENT

1. Test equipment connection is shown in figure. (Connect the DC EVM on both channels.)
2. Completely turn the (V) amp. adjusting volumes (**VR401, VR402**) counter-clockwise.
3. Turn ON the set when it is cold, and about 5 ~ 7 sec. later, adjust **VR401** and **VR402** 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.**).



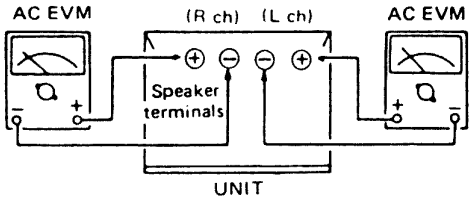
(2) CURRENT DRIVE (I) AMP. IDLING (ICQ) ADJUSTMENT

1. Test equipment connection is shown in figure. (Connect the DC EVM on both channels.)
2. Completely turn the (I) amp. adjusting volumes (**VR403, VR404**) counter-clockwise.
3. Turn ON the set when it is cold, and the "VOLTAGE CONTROL (V) AMP. IDLING (ICQ) ADJUSTMENT" later, adjust **VR403** and **VR404** 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.**).



(3) AMP. GAIN ADJUSTMENT

1. Test equipment connection is shown in figure. (Connect the AC EVM on both channels.)
2. Set the input selector to the "CD".
3. Connect the CD terminal of this unit to the Oscillator.
4. Set the Oscillator voltage to 150 mV.
5. Set the speaker systems to the "A" or "B".
6. Place the volume control scale to the "0 dB".
7. Adjust **VR205** (Lch) [**VR206** (Rch)] so that the voltage is **30±0.5 V**.



■ REPLACEMENT PARTS LIST

Notes : • Important safety notice:
Components identified by ⚠ 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
		INTEGRATED CIRCUIT(S)	
IC101, 102	UPC4570C	I. C. PHONO/EQ. AMP.	
IC105	NJM5532DD	I. C. BUFFER AMP.	
IC201	UPC4570C	I. C. TONE AMP.	
IC251	NJM5532DD	I. C. BUFFER AMP.	
IC401, 402	M5218AP	I. C. ACTIVE SERVO	
IC501	AN7073	I. C. POWER AMP.	
IC651	M5218AP	I. C. BUFFER AMP.	
IC701, 702	SVITC4013BAP	I. C. VOLTAGE AMP.	
IC703	AN78L05TA	I. C. REGULATOR	
		TRANSISTOR(S)	
Q101-104	2SK369GR	TRANSISTOR	
Q201, 202	2SK389BG	TRANSISTOR	
Q203-206	2SC3311A-Q	TRANSISTOR	
Q301, 302	2SA1123RSTTA	TRANSISTOR	
Q303-308	2SA1309A-R	TRANSISTOR	
Q309-312	2SC2631RSTTA	TRANSISTOR	
Q313, 314	2SK389BG	TRANSISTOR	
Q317, 318	2SC2631RSTTA	TRANSISTOR	
Q319, 320	2SA1123RSTTA	TRANSISTOR	
Q321, 322	2SC3311A-Q	TRANSISTOR	
Q323, 324	2SA1309A-R	TRANSISTOR	
Q325, 326	2SA1123RSTTA	TRANSISTOR	
Q327, 328	2SC2631RSTTA	TRANSISTOR	
Q329, 330	2SC3311A-Q	TRANSISTOR	
Q331, 332	2SC2631RSTTA	TRANSISTOR	
Q333, 334	2SA1123RSTTA	TRANSISTOR	
Q335, 336	2SC2631RSTTA	TRANSISTOR	
Q337, 338	2SA1123RSTTA	TRANSISTOR	
Q401, 402	2SA1123RSTTA	TRANSISTOR	
Q403-406	2SC2631RSTTA	TRANSISTOR	
Q407-410	2SA1123RSTTA	TRANSISTOR	
Q411-414	2SC2631RSTTA	TRANSISTOR	
Q415, 416	2SA1123RSTTA	TRANSISTOR	
Q417, 418	2SD1761EF	TRANSISTOR	
Q419, 420	2SC3311A-Q	TRANSISTOR	
Q421, 422	2SA1309A-R	TRANSISTOR	
Q423, 424	2SC2631RSTTA	TRANSISTOR	
Q425, 426	2SA1123RSTTA	TRANSISTOR	
Q427, 428	2SC3944AQRS	TRANSISTOR	
Q429, 430	2SA1535AQRS	TRANSISTOR	
Q501, 502	2SC1815BG	TRANSISTOR	
Q503, 504	2SC3944AQRS	TRANSISTOR	
Q505, 506	2SA1535AQRS	TRANSISTOR	
Q507, 508	2SC3182R	TRANSISTOR	
Q509, 510	2SA1265R	TRANSISTOR	
Q511, 512	2SB1036R	TRANSISTOR	
Q513	2SA992EFPTA	TRANSISTOR	
Q515, 516	2SC3182R	TRANSISTOR	
Q517, 518	2SA1265R	TRANSISTOR	
Q651	2SC3944AQRS	TRANSISTOR	
Q652	2SA1535AQRS	TRANSISTOR	
Q653	2SC3944AQRS	TRANSISTOR	
Q654	2SA1535AQRS	TRANSISTOR	
Q701, 702	UN4115	TRANSISTOR	
Q703, 704	2SC3311A-Q	TRANSISTOR	
Q705, 706	2SC1845EFTA	TRANSISTOR	
		DIODE(S)	
D101, 102	MA165	DIODE	
D151, 152	MA165	DIODE	
D153, 154	MA4120	DIODE	
D201, 202	MA4043M	DIODE	
D251	MA165	DIODE	
D252	MA4120	DIODE	
D301-314	MA29WA	DIODE	
D315, 316	MA4082MTA	DIODE	
D352	LN014304P	L. E. D.	
D353	LN018304P	L. E. D.	
D354	MA4030MTA	DIODE	
D401-404	MA165	DIODE	
D405-408	MA29WA	DIODE	
D409-412	MA4082MTA	DIODE	
D413-416	MA165	DIODE	
D501, 502	MA167	DIODE	
D503	MA4160M	DIODE	
D504	MA167	DIODE	
D505	MA165	DIODE	
D507, 508	MA165	DIODE	
D601	SVDS10VB20F	DIODE	⚠
D602	1SR35200TB	DIODE	⚠
D651, 652	MA4180-M	DIODE	
D653	MA165	DIODE	
D701, 702	MA165	DIODE	
D705	1SS291TA	DIODE	
D706, 707	MA165	DIODE	
D708-710	LN018304P	L. E. D.	
D711	MA165	DIODE	
D713	MA4043M	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
		VARIABLE RESISTOR(S)	
VR201	RRV18J02A	V. R, VOLUME CONTROL	
VR202	EVJ02QFA2G15	V. R, BALANCE	
VR203, 204	EVJYA1FA2C15	V. R, BASS/TREBLE CONT.	
VR205, 206	EVNDXAA00B33	V. R, GAIN ADJ.	
VR401-404	EVNDXAA00B52	V. R, ICQ ADJ.	
		THERMISTOR(S)	
TH501, 502	ERTD2ZHL104T	THERMISTOR	
		COIL(S)	
L1	SLQZ650MH49	COIL	⚠(E, EB, EG, GN)
L101, 102	SLM1Z33	COIL	(E, EB, EG, GN)
L501, 502	SLQY07G-40	COIL	
L503, 504	SLQY18G-10	COIL	
L551-554	SLQY07G-40	COIL	
		TRANSFORMER(S)	
T1, 2	RTP1P5E003-W	POWER TRANSFORMER	⚠(E, EB, EG, GN)
T1	RTP1R5E004-W	POWER TRANSFORMER	⚠(GC, PX)
		FUSE(S)	
F1, 2	XBA2C20TB0	FUSE, 250V T2A	⚠(E, EB, EG, GN)
F1, 2	XBA2C40TB0	FUSE, 250V T4A	⚠(GC, PX)
		SWITCH(ES)	
S1	ESB8249V	SW, POWER	⚠(E, EB, EG, GN)
S1	ESB8279V	SW, POWER	⚠(GC, PX)
S2	ESD26200A	SW, VOLTAGE SELECTOR	⚠(E, EB, EG, GN)
S2	ESE37263	SW, VOLTAGE SELECTOR	⚠(GC, PX)
S101	RSS4F001-A	SW, PHONO SELECTOR	
S102	RSS6D001	SW, REC SELECTOR	
S103	RSS6B001	SW, INPUT SELECTOR	
S201	ESB68131	SW, MUTING/MODE	
S202	ESB68130	SW, LOUDNESS/TONE	
S351	RSR4B004-A	SW, SPEAKER SELECTOR	
S701	EVQ21405R	SW, EXTENDED DIRECT DRIVE	
		CONNECTOR(S)	
CN101	RJU057W009	SOCKET(9P)	
CN102, 103	RJU057W004	SOCKET(4P)	
CN104, 105	RJU057W007	SOCKET(7P)	
CN201, 202	RJU003K009M	SOCKET(9P)	
CN701	SJT30548BB1	CONNECTOR(5P)	

Ref. No.	Part No.	Part Name & Description	Remarks
CN301A	RJS1A1704	SOCKET(4P)	
CN302A	RJS1A1704	SOCKET(4P)	
CN303A	RJS1A1705	CONNECTOR(5P)	
CN301B	RJS1A1704	SOCKET(4P)	
CN302B	RJS1A1704	SOCKET(4P)	
CN303B	RJS1A1705	CONNECTOR(5P)	
CN301C	RJS1A1704	SOCKET(4P)	
CP101	RJT057W009	CONNECTOR(9P)	
CP102, 103	RJT057W004	CONNECTOR(4P)	
CP104, 105	RJT057W007	CONNECTOR(7P)	
CP201, 202	RJT003K009M	CONNECTOR(9P)	
CP351	RJP3G9YA	CONNECTOR(3P)	
CP606	RJP1A4103	CONNECTOR(3P)	
CP607	RJP1A3202	CONNECTOR(2P)	
CP701	SJS50581BB	SOCKET(5P)	
		FUSE HOLDER(S)	
FC1-4	EYF52BC	FUSE HOLDER	
		RELAY(S)	
RL101, 102	RSYG5A237P12	RELAY	
RL201	RSYG5A237P12	RELAY	
RL501, 502	SSY134	RELAY	
RL503	RSY0009-0	RELAY	
JK1	SJS9231-1B	AC INLET	⚠(E, EB, EG, GC, PX)
JK1	SJS9234B	AC INLET	⚠(GN)
JK2, 3, 4	SJS9233B	AC OUTLET	⚠(GC, PX)
JK101	SJF3068N	PHONO JACK	
JK102	SJF3067N	TUNER/CD JACK	
JK103	SJF3068N	AUX JACK	
JK104	SJF3069N	TAPE1 JACK	
JK105	SJF3069N	TAPE2 JACK	
JK106	SJF3069N	ADAPT JACK	
JK107	SJF3068N	EDD JACK(UNBALANCE)	
JK109	RJS1A7904	EDD JACK(BALANCE)	
JK110	RJS1A7904	EDD JACK(BALANCE)	
JK351	QJA04552C-A	HEADPHONES JACK	
JK501	RJH4801-1	SPEAKER TERMINAL	

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

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R101-104	ERDS2TJ102	1/4W 1K E, EB, EG, GN
R105, 106	ERDS2TJ473	1/4W 47K
R107, 108	ERDS2TJ221	1/4W 220
R109, 110	ERDS2TJ220T	1/4W 22
R111, 112	ERDS2TJ100	1/4W 10
R113-118	ERDAS3G272T	1/4W 2.7K
R119, 120	ERDS2TJ101	1/4W 100
R121-124	ERDAS3G121	1/4W 120
R125, 126	ERDS2TKF5231	1/4W 5.23K
R127, 128	ERDS2TKG6802	1/4W 68K
R129, 130	ERDS2TJ334	1/4W 330K
R131, 132	ERDAS3G561	1/4W 560
R133, 134	ERDS2TJ274	1/4W 270K
R135, 136	ERDS2TJ223	1/4W 22K
R137, 138	ERDAS3G471T	1/4W 470
R151-154	ERDAS3G331T	1/4W 330
R155-160	ERDAS3G334T	1/4W 330K
R161, 162	ERDAS3G103T	1/4W 10K
R163-166	ERDS2TJ203T	1/4W 20K
R167, 168	ERDAS3G103T	1/4W 10K
R171, 172	ERDAS3G821T	1/4W 820
R173, 174	ERDAS3G334T	1/4W 330K
R175, 176	ERDAS3G821T	1/4W 820
R181-198	ERDAS3G471T	1/4W 470
R201, 202	ERDS2TJ332	1/4W 3.3K
R203, 204	ERDAS3G222T	1/4W 2.2K
R205, 206	ERDS2TJ183T	1/4W 18K
R207, 208	ERDS2TJ223	1/4W 22K
R209, 210	ERDAS3G561	1/4W 560
R211, 212	ERDS2TJ224T	1/4W 220K
R213-218	ERDAS3G472T	1/4W 4.7K
R219, 220	ERDS2TJ221	1/4W 220
R221, 222	ERDS2TJ224T	1/4W 220K
R223	ERDS2TJ824	1/4W 820K
R225, 226	ERDS2TJ821	1/4W 820
R227, 228	ERDS2TJ472	1/4W 4.7K
R229-232	ERDS2TJ223	1/4W 22K
R233, 234	ERDS2TJ392T	1/4W 3.9K
R235, 236	ERDS2TJ102	1/4W 1K
R237, 238	ERDS2TJ562	1/4W 5.6K
R239, 240	ERDS2TJ392T	1/4W 3.9K
R241, 242	ERDAS3G333	1/4W 33K
R243, 244	ERDAS3G182	1/4W 1.8K
R245, 246	ERDS2TJ333	1/4W 33K
R251, 252	ERDAS3G334T	1/4W 330K
R253-256	ERDAS3G103T	1/4W 10K

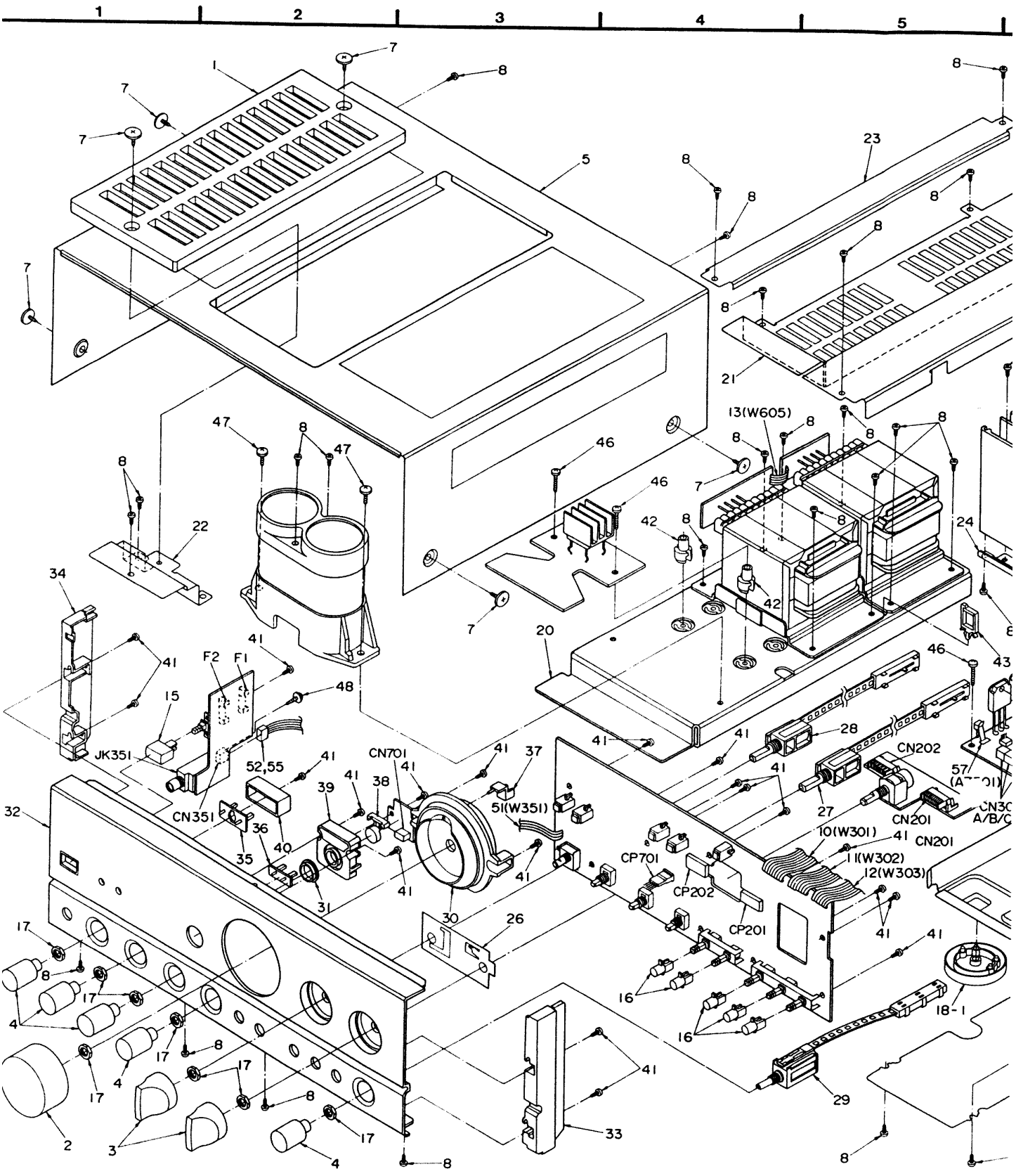
Ref. No.	Part No.	Values & Remarks
R257	ERDS2TJ680T	1/4W 68
R291-296	ERG1SJ152E	1W 1.5K
R301, 302	ERDS2TJ823T	1/4W 82K
R303, 304	ERDFS2VJ102T	1/4W 1K
R305-310	ERDFS2VJ681T	1/4W 680
R311, 312	ERDS2TJ151	1/4W 150
R317, 318	ERDFS2VJ101T	1/4W 100
R319, 320	ERDS2TJ224T	1/4W 220K
R321, 322	ERDFS2VJ681T	1/4W 680
R323, 324	ERDFS2VJ221T	1/4W 220
R325, 326	ERDS2TJ224T	1/4W 220K
R327, 328	ERDFS2VJ821T	1/4W 820
R329-332	ERDFS2VJ330T	1/4W 33
R333-336	ERDFS2VJ681T	1/4W 680
R341, 342	ERDAS3G681	1/4W 680
R343, 344	ERDAS3G471T	1/4W 470
R345, 346	ERDAS3G224	1/4W 220K
R352, 353	ERDS2TJ151	1/4W 150
R401, 402	ERDAS3G561	1/4W 560
R403, 404	ERDS2TJ224T	1/4W 220K
R409-412	ERDAS3G102T	1/4W 1K
R413-416	ERDFS2VJ101T	1/4W 100
R417-420	ERDFS2VJ222T	1/4W 2.2K
R421-424	ERDFS2VJ561T	1/4W 560
R425, 426	ERDS2TJ104	1/4W 100K
R427-432	ERDFS2VJ222T	1/4W 2.2K
R433, 434	ERDFS2VJ332T	1/4W 3.3K
R437, 438	ERDFS2VJ681T	1/4W 680
R439-442	ERDS2TJ223	1/4W 22K
R443-446	ERDFS2VJ101T	1/4W 100
R447, 448	ERDFS2VJ561T	1/4W 560
R449-452	ERDFS2VJ2R2T	1/4W 2.2
R453, 454	ERDFS2VJ681T	1/4W 680
R455-458	ERDFS2VJ121T	1/4W 120
R459-462	ERDFS2VJ332T	1/4W 3.3K
R463, 464	ERDFS2VJ101T	1/4W 100
R465, 466	ERDFS2VJ102T	1/4W 1K
R467, 468	ERDFS2VJ681T	1/4W 680
R469, 470	ERDFS2VJ1R0T	1/4W 1
R471-474	ERDS1FVJ100T	1/2W 10 ⚠
R475, 476	ERDAS3G101T	1/4W 100
R501, 502	ERDFS2VJ332T	1/4W 3.3K
R503, 504	ERDS2TJ183T	1/4W 18K
R505, 506	ERDFS2VJ6R8T	1/4W 6.8
R509-512	ERDFS2VJ681T	1/4W 680
R513, 514	ERDFS2VJ331T	1/4W 330
R515-518	ERDFS2VJ2R2T	1/4W 2.2
R519, 520	ERDS1FVJ100T	1/2W 10 ⚠
R521-524	ERF2EXXR22	2W 0.22

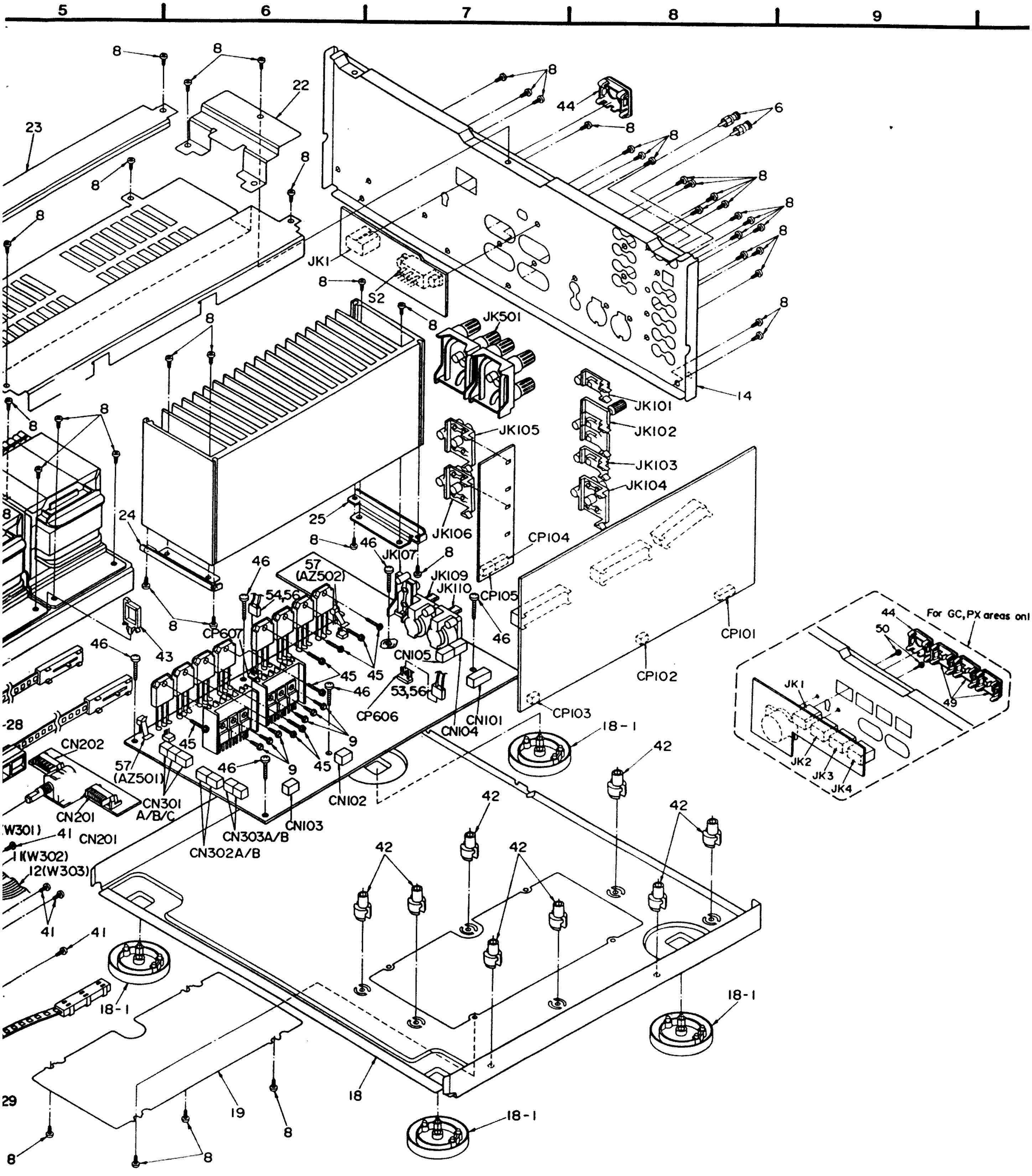
Ref. No.	Part No.	Values & Remarks
R525-528	ERDS1FVJ100T	1/2W 10 ⚠
R529, 530	ERDFS2VJ271T	1/4W 270
R531, 532	ERDS2TJ153	1/4W 15K
R533, 534	ERDFS2VJ472T	1/4W 4.7K
R535	ERDS2TJ473	1/4W 47K
R536	ERDS2TJ563	1/4W 56K
R537	ERDS2TJ153	1/4W 15K
R538	ERDS2TJ103	1/4W 10K
R539	ERDS2TJ223	1/4W 22K
R540	ERDS1FVJ682T	1/2W 6.8K ⚠
R541	ERDS2TJ153	1/4W 15K
R542-545	ERDS1FVJ561T	1/2W 560 ⚠
R546	ERDS1FVJ272T	1/2W 2.7K ⚠
R547-550	ERF2EXXR22	2W 0.22
R551, 552	ERG1SJ181E	1W 180
R553	ERD25FVJ150T	1/4W 15 ⚠
R553, 554	ERG1SJ151E	1W 150
R555-558	ERF2EXXR22	2W 0.22
R565-568	ERDFS2VJ2R2T	1/4W 2.2
R569-572	ERF2EXXR22	2W 0.22
R601	ERDS1FVJ180T	1/2W 18 ⚠
R602, 603	ERDFS2VJ6R8T	1/4W 6.8
R651, 652	ERDS2TJ153	1/4W 15K
R653, 654	ERDS2TJ102	1/4W 1K
R655, 656	ERDS2TJ183T	1/4W 18K
R657	ERDS2TJ102	1/4W 1K
R659	ERDS2TJ823T	1/4W 82K
R661-664	ERDFS2VJ100T	1/4W 10
R671	ERG2ANJ181	2W 180
R672	ERG1SJ331E	1W 330
R673	ERG2ANJP151S	2W 150
R674	ERG1SJ331E	1W 330
R676	ERG1SJ331E	1W 330
R677, 678	ERD25FVJ150T	1/4W 15
R680	ERG1SJ331E	1W 330
R701	ERDS2TJ100	1/4W 10
R702	ERDS2TJ823T	1/4W 82K
R703	ERDS2TJ103	1/4W 10K
R704	ERDS2TJ823T	1/4W 82K
R705-710	ERDS2TJ103	1/4W 10K
R713	ERDS2TJ101	1/4W 100
R714, 715	ERDS2TJ103	1/4W 10K
R716	ERDS2TJ221	1/4W 220
		CAPACITORS
C1	ECKWNS103ZVS	500V 0.01U ⚠
C101, 102	ECBT1H220J5	50V 22P
C103, 104	ECBT1H120J5	50V 12P

Ref. No.	Part No.	Values & Remarks
C107, 108	ECQB1H102JZ3	50V 1000P
C109, 110	ECQB1H222JZ3	50V 2200P
C111, 112	ECBT1H270J5	50V 27P
C113, 114	ECA0JAP332E	6.3V 3300U
C115, 116	ECQB1H392JZ	50V 3900P
C117, 118	ECQB1H103JZ	50V 0.01U
C119, 120	ECQV1H473JZ3	50V 0.047U
C121, 122	ECA1HPXS010B	50V 1U
C123, 124	ECQB1H472JZ	50V 4700P
C125, 126	ECQV1H564JZ3	50V 0.56U
C127, 128	ECQB1H223JF3	50V 0.022U
C129, 130	ECA1HPXS4R7B	50V 4.7U
C131-134	ECKT1H102KB	50V 1000P
C135, 136	ECBT1H390J5	50V 39P
C151-154	ECA1EPXS100B	25V 10U
C155-158	ECBT1H221KB5	50V 220P
C159, 160	ECBT1H390J5	50V 39P
C161, 162	ECBT1H680J5	50V 68P
C167, 168	ECBT1H104ZF5	50V 0.1U
C171, 172	ECBT1H271KB5	50V 270P
C173, 174	ECA1EPXS100B	25V 10U
C179, 180	ECBT1H104ZF5	50V 0.1U
C181-198	ECBT1H181KB5	50V 180P
C201, 202	ECQV1H563JZ3	50V 0.056U
C203, 204	ECBT1H121KB5	50V 120P
C205, 206	ECBT1H820KB5	50V 82P
C207, 208	ECQB1H222JZ3	50V 2200P
C209, 210	ECBT1H390J5	50V 39P
C211, 212	ECA1HPXS4R7B	50V 4.7U
C213, 214	ECA1CPXS220B	16V 22U
C215, 216	ECQV1H823JZ	50V 0.082U
C217, 218	ECQB1H153JZ	50V 0.015U
C219, 220	ECQB1H183JZ3	50V 0.018U
C221, 222	ECQB1H182JZ3	50V 1800P
C223-226	ECBT1H104ZF5	50V 0.1U
C227, 228	ECA1EPXS100B	25V 10U
C251, 252	ECA1EPXS100B	25V 10U
C253, 254	ECBT1H820KB5	50V 82P
C255	ECA1CAP470B	16V 47U
C257, 258	ECBT1H104ZF5	50V 0.1U
C259, 260	ECA1CPXS101B	16V 100U
C301, 302	ECQB1H222JZ3	50V 2200P
C303-306	ECCR2H270K5	500V 27P
C307, 308	ECBT1H104ZF5	50V 0.1U
C309, 310	ECCV2H070D	500V 7P
C311, 312	ECA2APXS010B	100V 1U
C313, 314	ECBT1H104ZF5	50V 0.1U
C315-318	ECKR2H103ZU	500V 0.01U
C401, 402	ECQB1H102JZ3	50V 1000P
C407-410	ECEA1EKA470B	25V 47U
C411-414	ECEA1EKA100B	25V 10U
C415, 416	ECBT1H221KB5	50V 220P

Ref. No.	Part No.	Values & Remarks
C417, 418	ECBT1H104ZF5	50V 0.1U
C419-422	ECEA1HKA010B	50V 1U
C423, 424	ECQB1H822JZ	50V 8200P
C425, 426	ECA2APXS010B	100V 1U
C429-432	ECA0JPXS101B	6.3V 100U
C433, 434	ECBT1H561KB5	50V 560P
C435, 436	ECBT1H150J5	50V 15P
C501-504	ECBA1H681KB5	50V 680P
C505, 506	ECBT1H104ZF5	50V 0.1U
C507-510	ECQV1H683JZ3	50V 0.068U
C511	ECA0JAP331B	6.3V 330U
C512	ECFR1E223KR	25V 0.022U
C513	ECEA0JKA470B	6.3V 47U
C514, 515	ECEA1EKA4R7B	25V 4.7U
C517-520	ECQV1H683JZ3	50V 0.068U
C551-554	ECKD1H681KB	50V 680P
C555-558	ECQB1H183JZ3	50V 0.018U
C559, 560	ECBT1H102KB5	50V 1000P
C601, 602	ECA2APXS101E	100V 100U ⚠
C603	ECA1CM221B	16V 220U
C605	ECQE2104KF3	100V 0.1U
C606	ECKR1H103ZF5	50V 0.01U
C607, 608	ECED71M153T	71V 15000 ⚠
C609, 610	ECHR1H103JZ3	50V 0.01U
C651, 652	ECA1HPXS4R7B	50V 4.7U
C653, 654	ECBT1H104ZF5	50V 0.1U
C655, 656	ECA1EPXS100B	25V 10U
C657, 658	ECA2APXS010B	100V 1U
C659	ECA1EPXS100B	25V 10U
C660	ECBT1H821KB5	50V 820P
C661	ECEA1HB24R7B	50V 4.7U
C701	ECQV1H334JZ3	50V 0.33U
C702	ECEA1HKAR33B	50V 0.33U
C703	ECQM1H333JZ	50V 0.033U
C704, 705	ECA0JM102B	6.3V 1000U
C706	ECEA1EKA100B	25V 10U
C707, 708	ECA1EPXS100B	25V 10U
C709	ECBT1H104ZF5	50V 0.1U

CABINET PARTS LOCATION





5
6
7
8
9
8
22
23
44
6
14
JK1
S2
JK501
JK101
JK102
JK103
JK104
JK105
JK106
JK107
JK109
JK110
24
25
46
57
(AZ502)
54,56
CP607
CP104
CP105
CP101
CP102
CP103
43
45
9
CN105
53,56
CP606
CN104
CN101
CN102
CN103
-28
CN202
CN201
57
(AZ501)
CN301
A/B/C
CN303A/B
CN302A/B
(W301)
41
1(W302)
12(W303)
18-1
42
18
19
29
For GC, PX areas onl
50
49
JK2
JK3
JK4

■ SCHEMATIC DIAGRAM (Parts list on pages 29~32.)

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

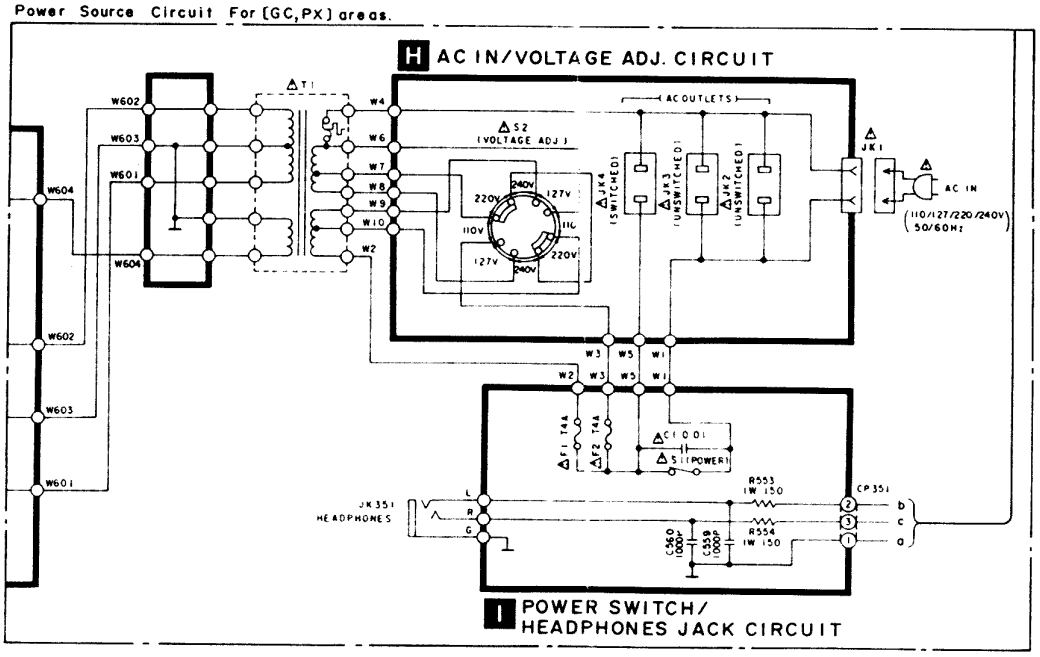
Notes:

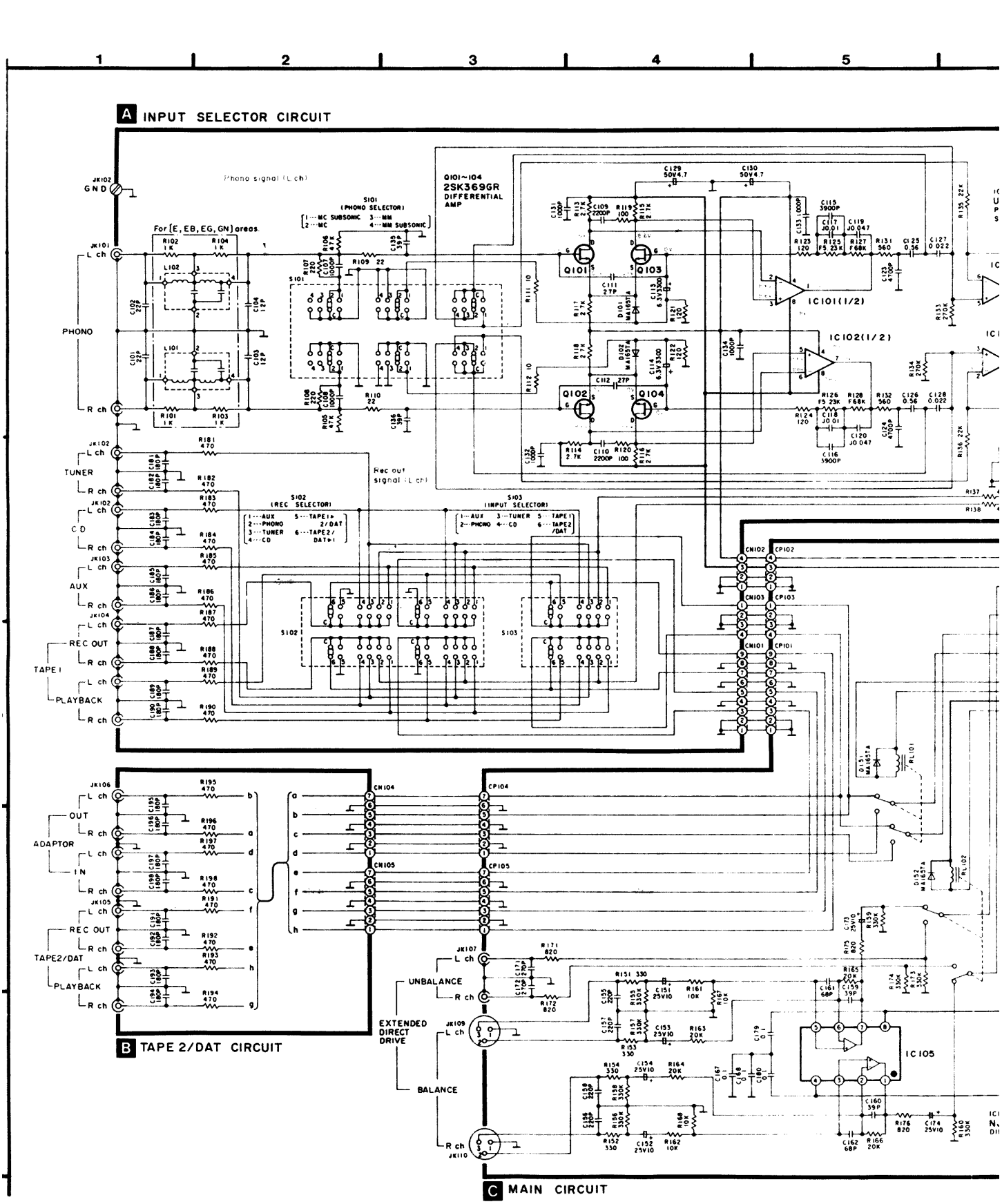
- •S1 : Power switch in **"on"** position.
- •S2 : Voltage selector switch in **"240 V"** position.
  (230 V/240 V) **For (E), (EB), (EG), (GN) areas only.**
  Voltage selector switch in **"220 V"** position.
  (110 V/127 V/220 V/240 V) **For (GC), (PX) areas only.**
- •S101 : Phono cartridge selector (PHONO SELECTOR) switch in **"MC"** position.
- •S102 : Recording output selector (REC SELECTOR) switch in **"TAPE2/DAT ▶1"** position.
- •S103 : Input selector (INPUT SELECTOR) switch in **"TAPE2/DAT"** position.
- •S201 : Muting (MUTING)/Mode selector (MODE)/Adaptor (ADAPTOR) switches.
- •S202 : Loudness (LOUDNESS)/Tone control (TONE CONTROL) switches.
- •S351 : Speaker selector (SPEAKERS) switch.
- •S701 : Extended direct drive selector (EXTENDED DIRECT DRIVE) switch.

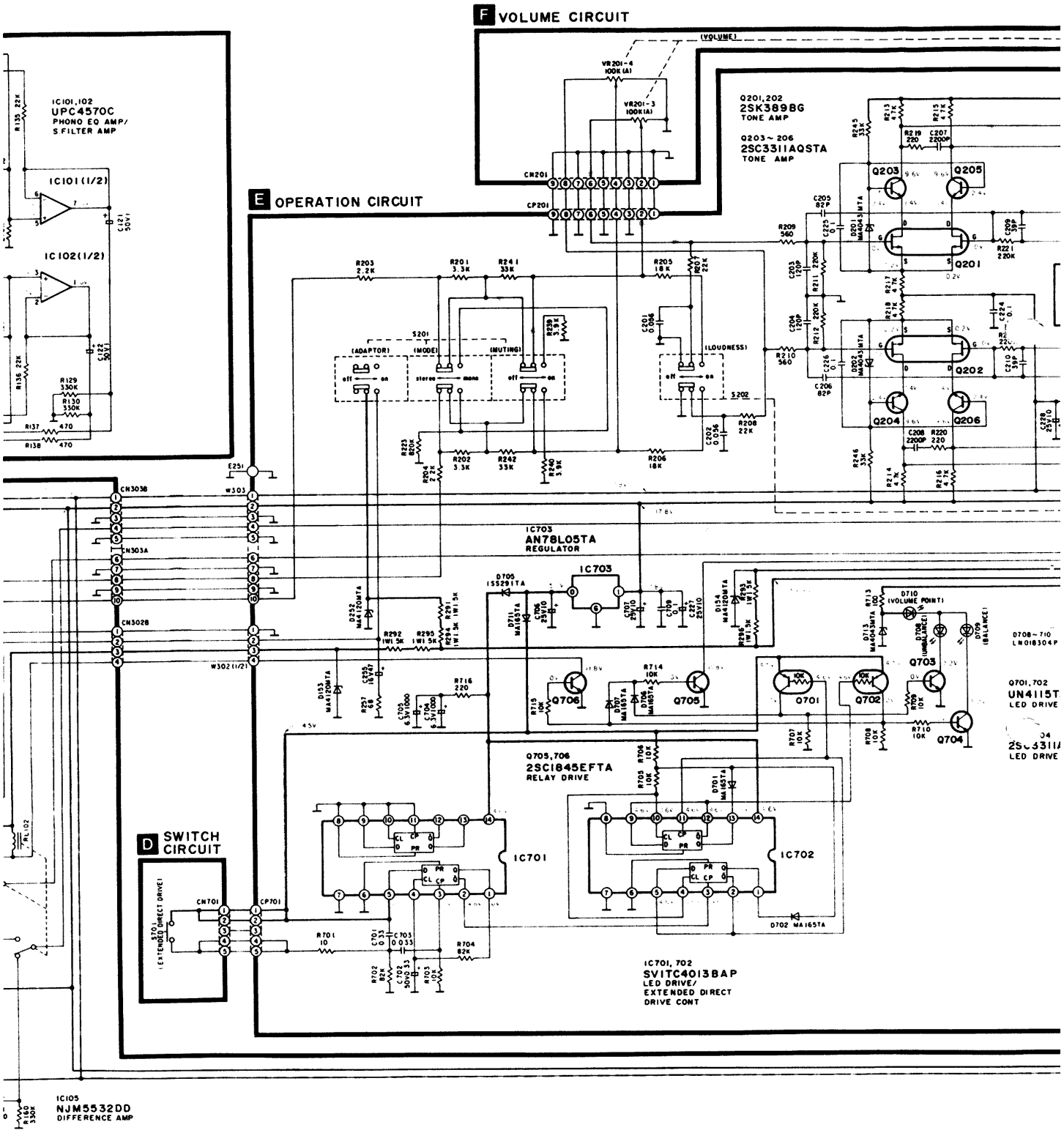
• ——— : Positive voltage line.
: Phono signal line.
– – – – : Negative voltage line.
: Recording signal line.

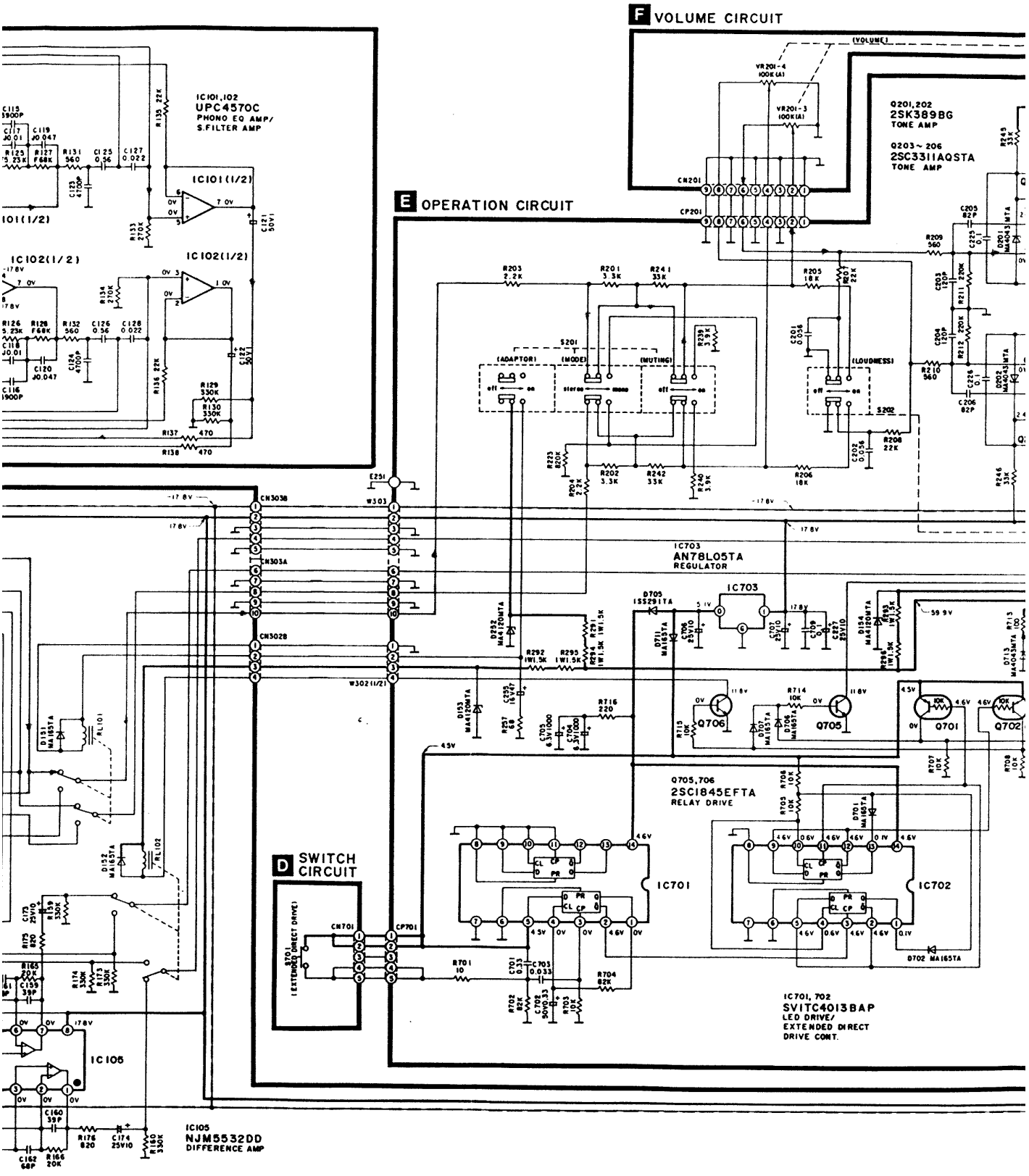
- •Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- •Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

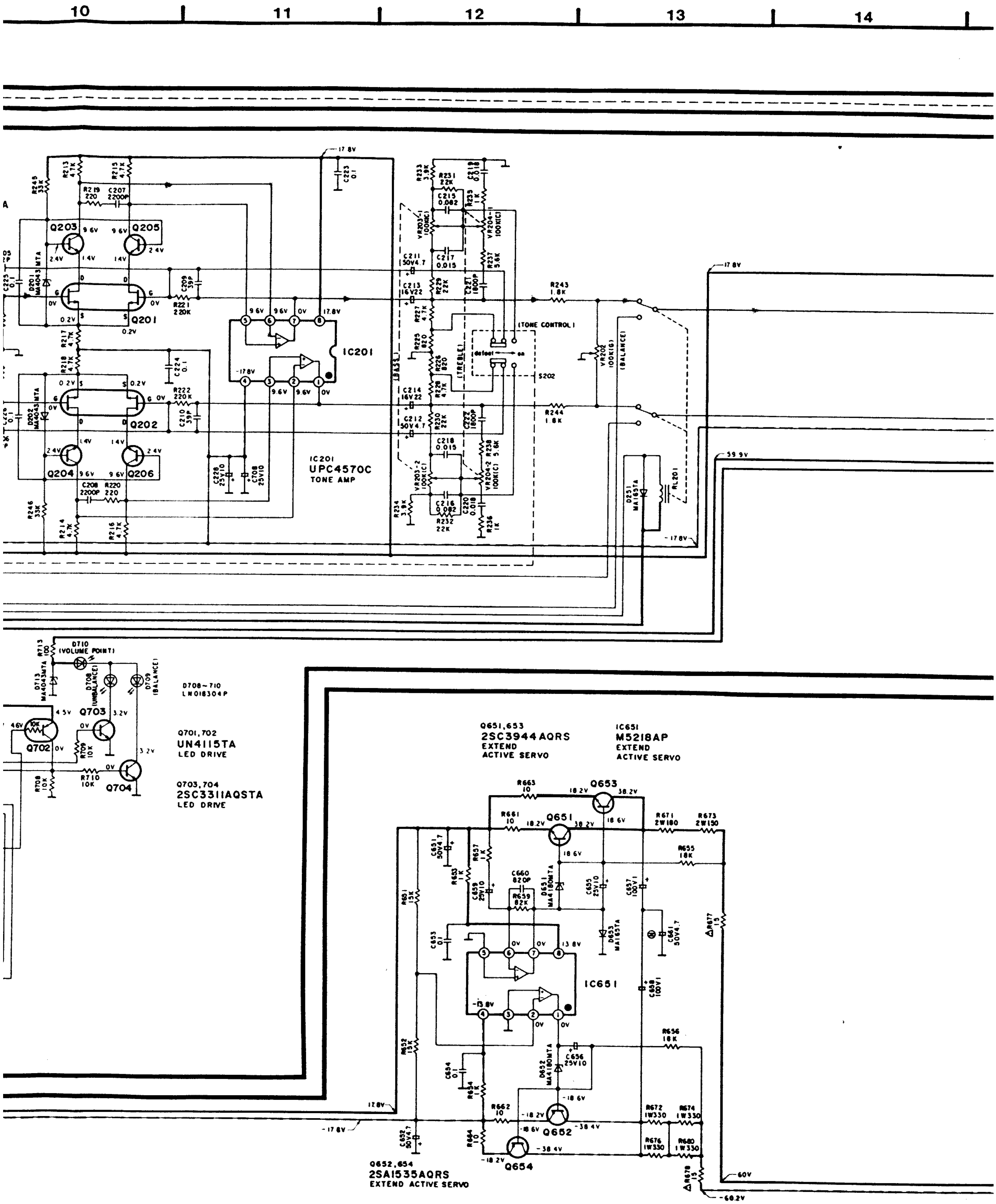
- •**Caution!**
  IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care furing repair.
  Cover the parts boxes made of plastics with aluminum foil.
  Ground the soldering iron.
  Put a conductive mat on the word table.
  Do not touch the legs of IC or LSI with the fingers directly.

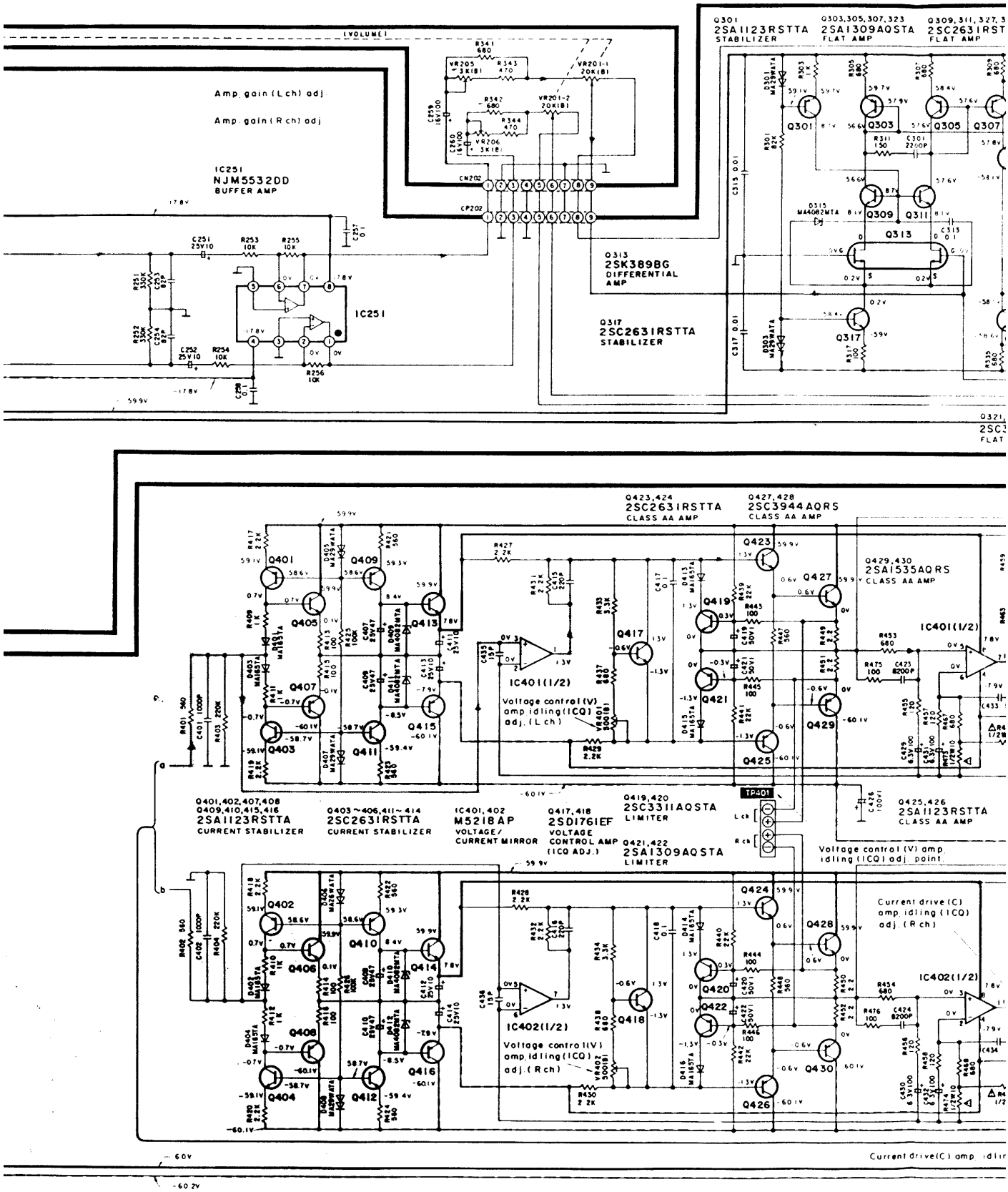


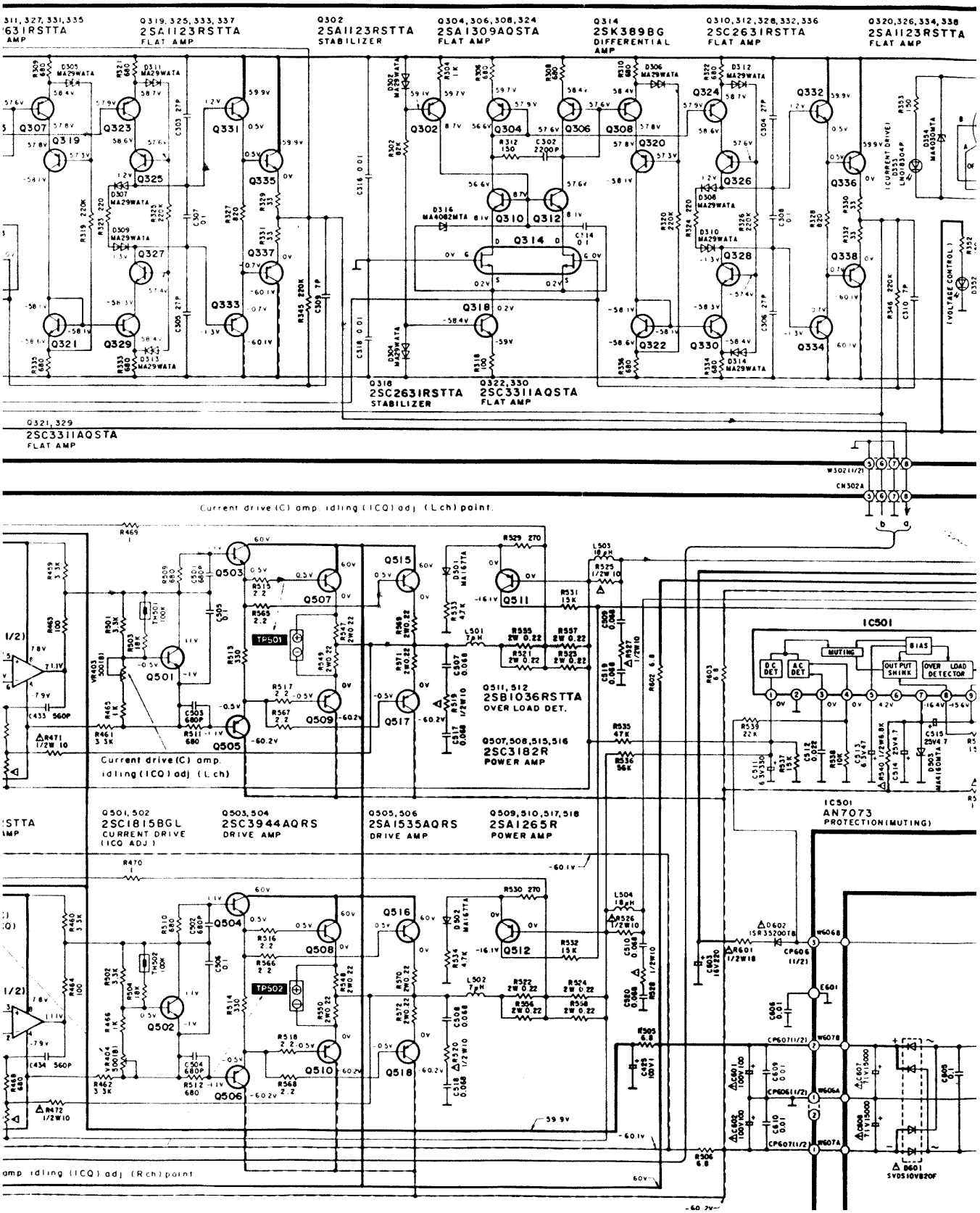

1
2
3
4
5
A INPUT SELECTOR CIRCUIT
B TAPE 2/DAT CIRCUIT
C MAIN CIRCUIT
PHONO
TUNER
CD
AUX
REC OUT
PLAYBACK
TAPE 1
TAPE2/DAT
ADAPTOR
OUT
IN
UNBALANCE
BALANCE
EXTENDED DIRECT DRIVE
Phono signal (L ch)
Rec out signal (L ch)
For [E, EB, EG, GN] areas.
S101 (PHONO SELECTOR)
S102 (REC SELECTOR)
S103 (INPUT SELECTOR)
Q101~104 2SK369GR DIFFERENTIAL AMP
IC101(1/2)
IC102(1/2)
IC105

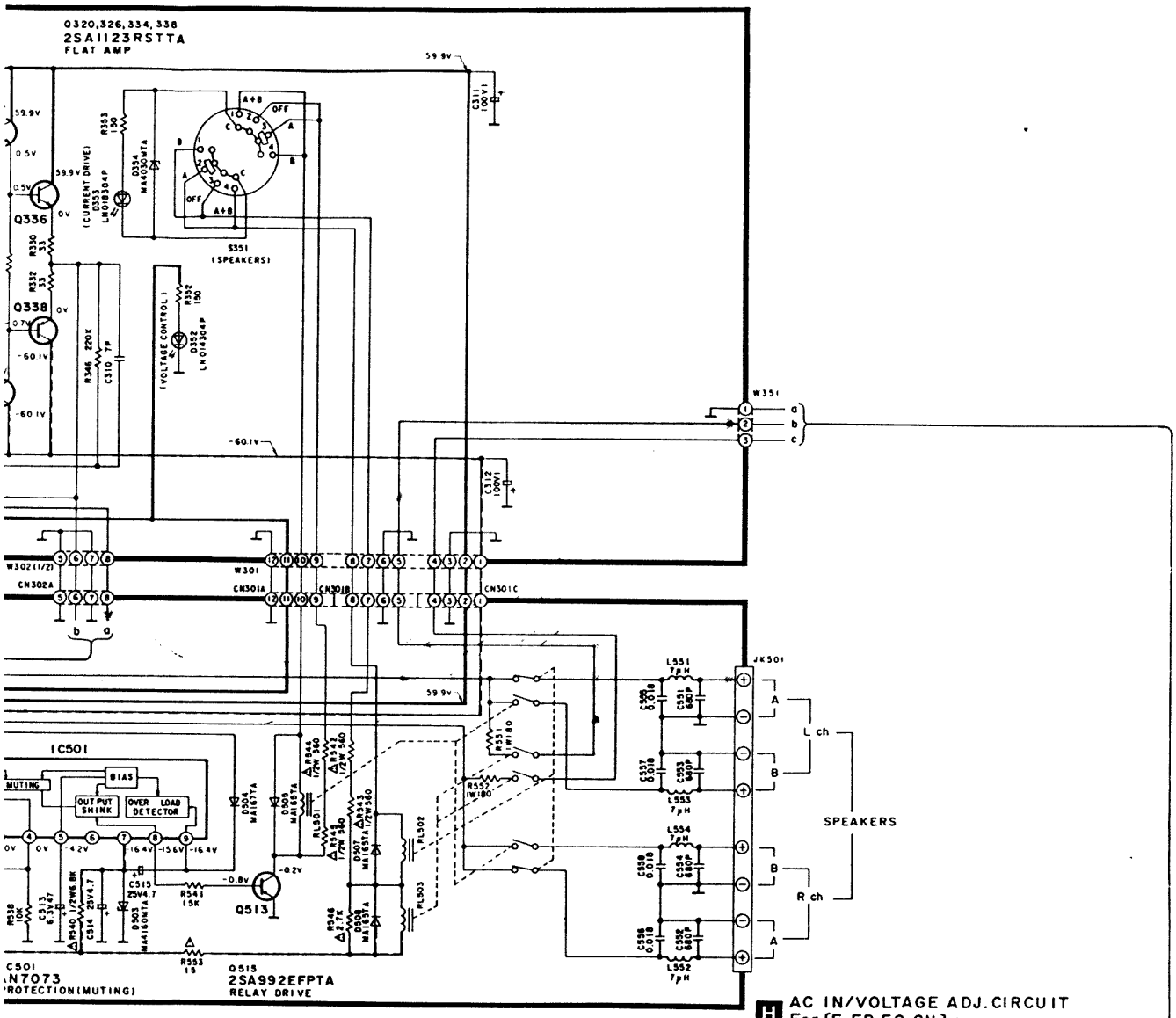

F VOLUME CIRCUIT
E OPERATION CIRCUIT
D SWITCH CIRCUIT
IC101,102
UPC4570C
PHONO EQ AMP/
S.FILTER AMP
IC101(1/2)
IC102(1/2)
Q201,202
2SK389BG
TONE AMP
Q203~206
2SC3311AQSTA
TONE AMP
IC703
AN78L05TA
REGULATOR
Q705,706
2SC1845EFTA
RELAY DRIVE
IC701, 702
SVITC4013BAP
LED DRIVE/
EXTENDED DIRECT
DRIVE CONT
IC105
NJM5532DD
DIFFERENCE AMP
Q701,702
UN4115T
LED DRIVE
D708~710
LN0183O4P
(VOLUME)
(ADAPTOR)
(MODE)
(MUTING)
(LOUDNESS)
(VOLUME POINT)
(BALANCE)
(UNBALANCE)
(EXTENDED DIRECT DRIVE)


F VOLUME CIRCUIT
E OPERATION CIRCUIT
D SWITCH CIRCUIT
IC101,102
UPC4570C
PHONO EQ AMP/
S.FILTER AMP
IC101(1/2)
IC102(1/2)
Q201,202
2SK389BG
TONE AMP
Q203~206
2SC3311AQSTA
TONE AMP
IC703
AN78L05TA
REGULATOR
Q705,706
2SC1845EFTA
RELAY DRIVE
IC701,702
SVITC4013BAP
LED DRIVE/
EXTENDED DIRECT
DRIVE CONT.
IC105
NJM5532DD
DIFFERENCE AMP
CN303B
CN303A
CN302B
W303
W302(1/2)
CN701
CP701
E251
S201
S202
IC701
IC702
IC703
IC105
Q701
Q702
Q705
Q706

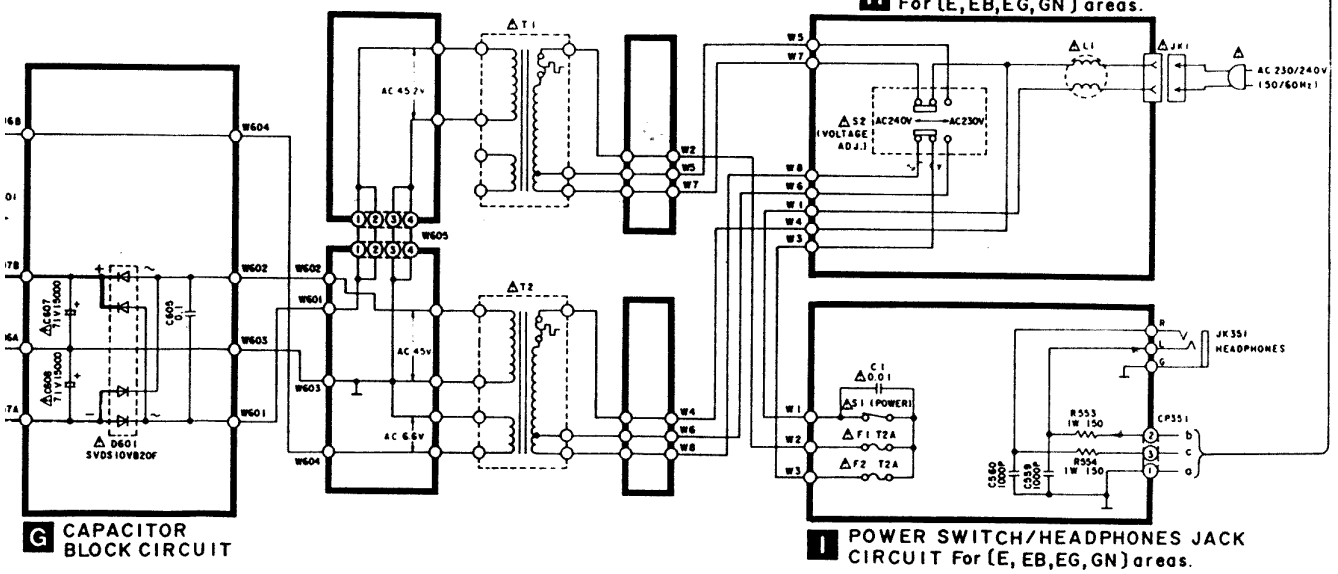

10
11
12
13
14
Q203
Q205
Q201
Q202
Q204
Q206
IC201
IC201
UPC4570C
TONE AMP
(TONE CONTROL)
defeat
on
S202
(TREBLE)
(BASS)
VR202
100K(G)
(BALANCE)
RL201
D710
(VOLUME POINT)
D708
(UNBALANCE)
D709
(BALANCE)
D708~710
LN018304P
Q703
Q702
Q704
Q701,702
UN4115TA
LED DRIVE
Q703,704
2SC3311AQSTA
LED DRIVE
Q651,653
2SC3944AQRS
EXTEND
ACTIVE SERVO
IC651
M5218AP
EXTEND
ACTIVE SERVO
Q653
Q651
IC651
Q652
Q654
Q652,654
2SA1535AQRS
EXTEND ACTIVE SERVO


(VOLUME)
Amp. gain (L ch) adj.
Amp. gain (R ch) adj.
IC251
NJM5532DD
BUFFER AMP
Q301
2SA1123RSTTA
STABILIZER
Q303,305,307,323
2SA1309AQSTA
FLAT AMP
Q309,311,327,3
2SC2631RST
FLAT AMP
Q313
2SK389BG
DIFFERENTIAL AMP
Q317
2SC2631RSTTA
STABILIZER
Q423,424
2SC2631RSTTA
CLASS AA AMP
Q427,428
2SC3944AQRS
CLASS AA AMP
Q429,430
2SA1535AQRS
CLASS AA AMP
IC401(1/2)
Voltage control (V) amp. idling (ICQ) adj. (L ch)
IC402(1/2)
Voltage control (V) amp. idling (ICQ) adj. (R ch)
Q401,402,407,408
Q409,410,415,416
2SA1123RSTTA
CURRENT STABILIZER
Q403~406,411~414
2SC2631RSTTA
CURRENT STABILIZER
IC401,402
M5218AP
VOLTAGE/ CURRENT MIRROR
Q417,418
2SD1761EF
VOLTAGE CONTROL AMP (ICQ ADJ.)
Q419,420
2SC3311AQSTA
LIMITER
Q421,422
2SA1309AQSTA
LIMITER
Q425,426
2SA1123RSTTA
CLASS AA AMP
TP401
Voltage control (V) amp. idling (ICQ) adj. point
Current drive (C) amp. idling (ICQ) adj. (R ch)
Current drive(C) amp. idlir


Q311, 327, 331, 335
2SC2631RSTTA
FLAT AMP
Q319, 325, 333, 337
2SA1123RSTTA
FLAT AMP
Q302
2SA1123RSTTA
STABILIZER
Q304, 306, 308, 324
2SA1309AQSTA
FLAT AMP
Q314
2SK389BG
DIFFERENTIAL AMP
Q310, 312, 328, 332, 336
2SC2631RSTTA
FLAT AMP
Q320, 326, 334, 338
2SA1123RSTTA
FLAT AMP
Q316
2SC2631RSTTA
STABILIZER
Q322, 330
2SC3311AQSTA
FLAT AMP
Q321, 329
2SC3311AQSTA
FLAT AMP
Current drive (C) amp. idling (ICQ) adj. (L ch) point.
Current drive (C) amp. idling (ICQ) adj. (L ch)
Q501, 502
2SC1815BGL
CURRENT DRIVE (ICQ ADJ.)
Q503, 504
2SC3944AQRS
DRIVE AMP
Q505, 506
2SA1535AQRS
DRIVE AMP
Q509, 510, 517, 518
2SA1265R
POWER AMP
Q511, 512
2SB1036RSTTA
OVER LOAD DET.
Q507, 508, 515, 516
2SC3182R
POWER AMP
IC501
AN7073
PROTECTION (MUTING)
MUTING
BIAS
DC DET
AC DET
OUT PUT SHINK
OVER LOAD DETECTOR
W3021(1/2)
CN302A
amp. idling (ICQ) adj. (R ch) point.



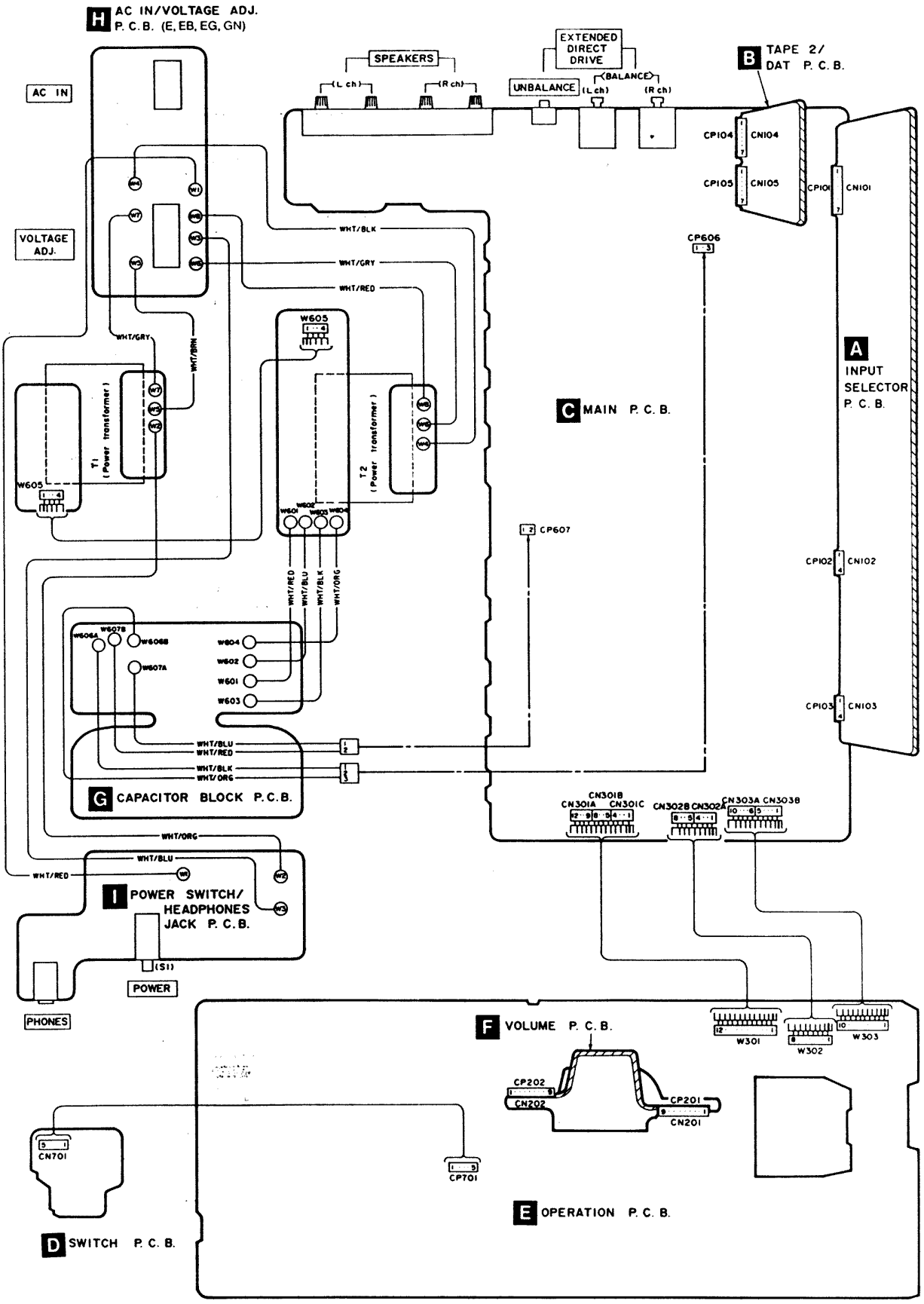
H AC IN/VOLTAGE ADJ. CIRCUIT
For (E, EB, EG, GN) areas.



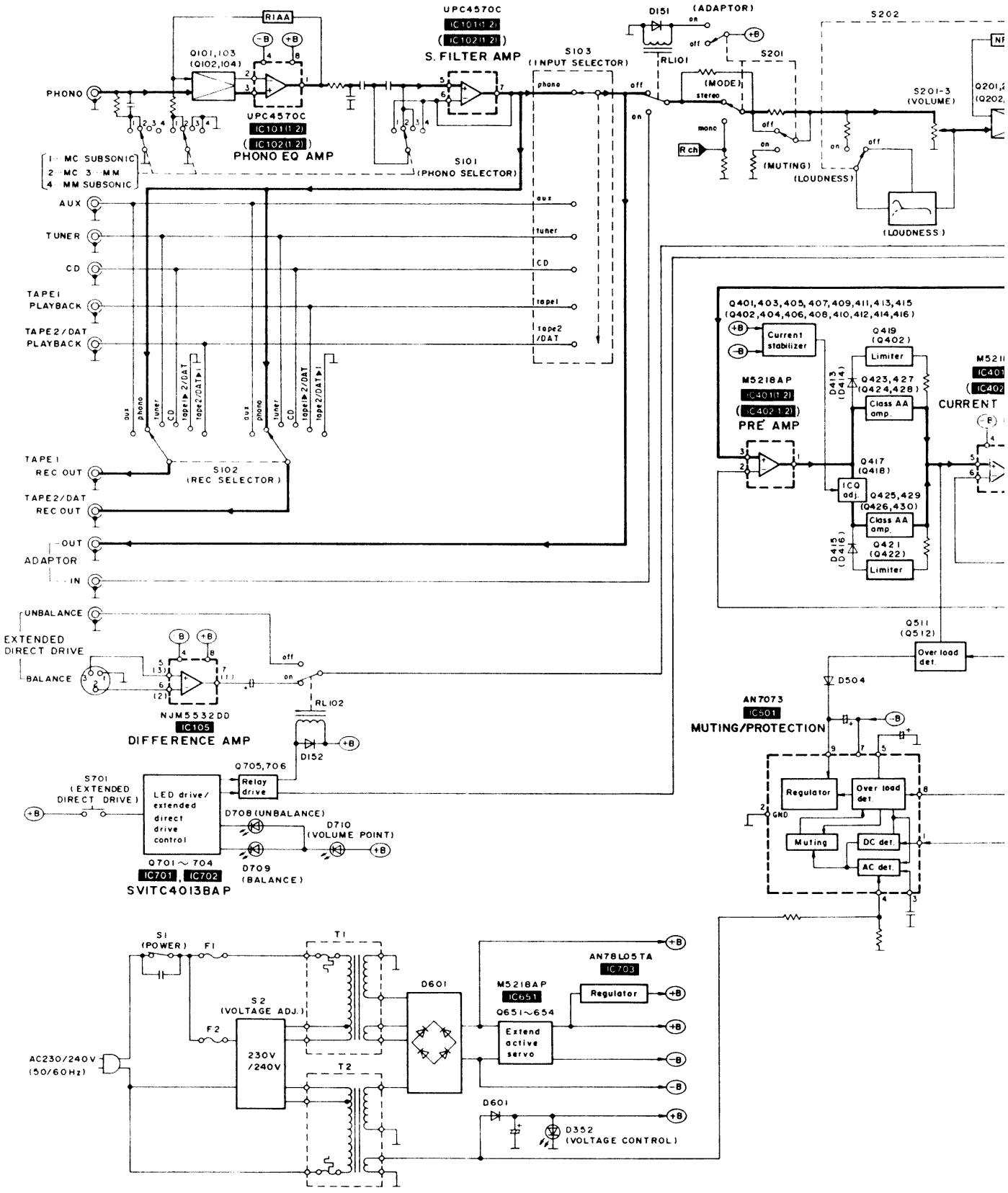
G CAPACITOR BLOCK CIRCUIT

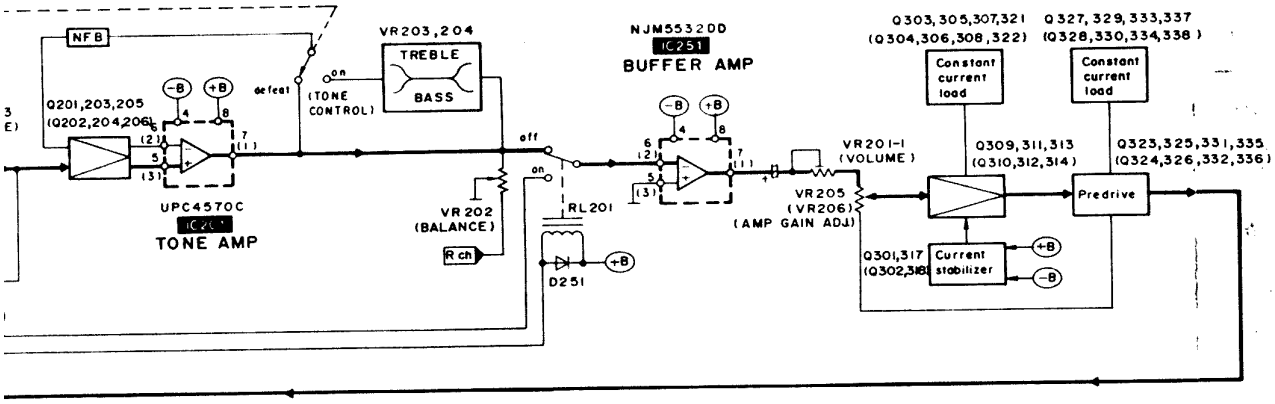
I POWER SWITCH/HEADPHONES JACK CIRCUIT For (E, EB, EG, GN) areas.

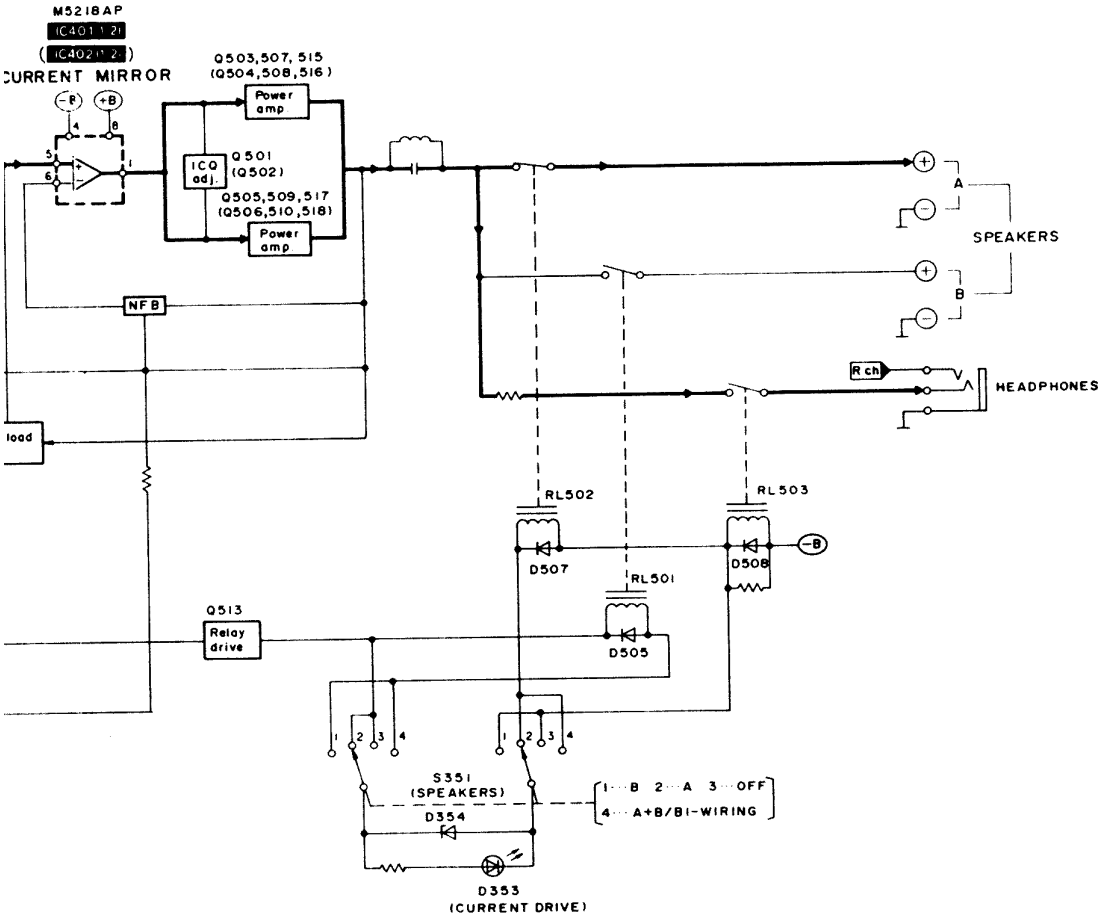
■ WIRING CONNECTION DIAGRAM



■ BLOCK DIAGRAM




NFB
Q201,203,205
(Q202,204,206)
UPC4570C
TONE AMP
defeat
(TONE CONTROL)
VR203,204
TREBLE
BASS
VR202
(BALANCE)
RL201
D251
R ch
NJM5532DD
BUFFER AMP
VR201-1
(VOLUME)
VR205
(VR206)
(AMP GAIN ADJ)
Q303,305,307,321
(Q304,306,308,322)
Constant current load
Q327,329,333,337
(Q328,330,334,338)
Constant current load
Q309,311,313
(Q310,312,314)
Q323,325,331,335
(Q324,326,332,336)
Predrive
Q301,317
(Q302,318)
Current stabilizer


M5218AP
CURRENT MIRROR
Q503,507,515
(Q504,508,516)
Power amp
ICQ adj.
Q501
(Q502)
Q505,509,517
(Q506,510,518)
Power amp
NFB
SPEAKERS
A
B
R ch
HEADPHONES
RL502
RL503
D507
D508
RL501
D505
Q513
Relay drive
S351
(SPEAKERS)
D354
D353
(CURRENT DRIVE)
1 B 2 A 3 OFF
4 A+B/BI-WIRING