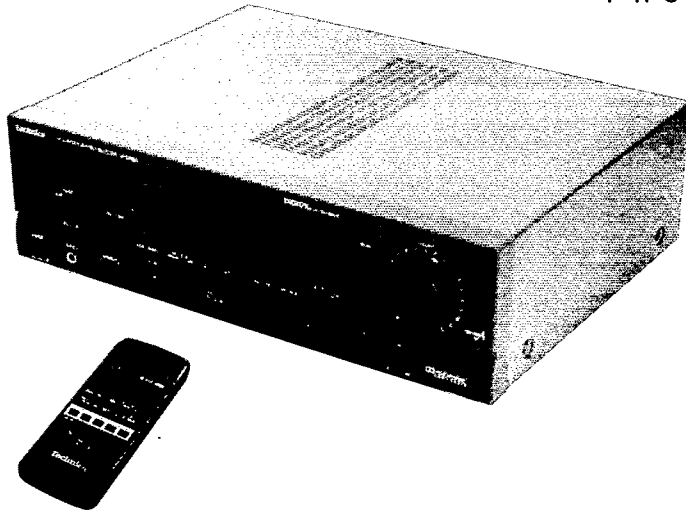
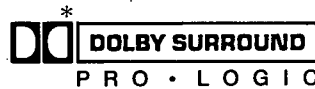


Service Manual

AV Control Stereo Receiver

Receiver

SA-GX350



Colour

(K) ... Black Type

Area

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

* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590; Canadian numbers 1,004,603 and 1,037,877.

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SPECIFICATIONS (DIN 45 500)

■ AMPLIFIER SECTION

Power output (at 240 V)	
DIN 1 kHz (T.H.D. 1%)	2 × 80 W (4Ω)
20 Hz–20 kHz continuous power output both channels driven	2 × 50 W (8Ω)
Total harmonic distortion	
rated power at 20 Hz–20 kHz	0.05% (8Ω)
half power at 1 kHz	0.03% (8Ω)
Power output at the Dolby Pro Logic operation	
DIN 1 kHz (T.H.D. 1%)	
Front	2 × 40 W (4Ω)
Center	40 W (4Ω)
Rear	20 W (4Ω)
Intermodulation distortion	
rated power at 60 Hz: 7 kHz=4: 1, SMPTE	0.5% (8Ω)
Power bandwidth	
both channels driven, -3 dB	10 Hz–40 kHz (8Ω)
Damping factor	40 (8Ω)
Input sensitivity and impedance	
PHONO	3 mV/47 kΩ
CD, VCR 1, VCR 2, TAPE/DCC	200 mV/22 kΩ
S/N at rated power (8Ω)	
PHONO	70 dB (IHF, A: 80 dB)
CD, VCR 1, VCR 2, TAPE/DCC	75 dB (IHF, A: 88 dB)
Frequency response	
PHONO	RIAA standard curve (30 Hz–15 kHz) ±0.8 dB
CD, VCR 1, VCR 2, TAPE/DCC	10 Hz–40 kHz, ±3 dB
Tone controls	
BASS	50 Hz, +10 to -10 dB
TREBLE	20 kHz, +10 to -10 dB

Output voltage

VCR 1 OUT, TAPE/DCC REC (OUT)	200 mV
Channel balance (250 Hz–6.3 kHz)	±1 dB
Channel separation	55 dB
Headphones output level and impedance	430 mV/330 Ω
Load impedance	
A or B	4–16 Ω
A and B	8–16 Ω

■ FM TUNER SECTION

Frequency range	87.50–108.00 MHz
Sensitivity	
S/N 30 dB	1.5 μV/75 Ω
S/N 26 dB	1.3 μV/75 Ω
S/N 20 dB	1.2 μV/75 Ω
IHF usable sensitivity (IHF '58)	1.5 μV/75 Ω
IHF 46 dB stereo quieting sensitivity	22 μV/75 Ω
Total harmonic distortion	
MONO	0.2%
STEREO	0.3%
S/N	
MONO	60 dB (75 dB, IHF)
STEREO	58 dB (71 dB, IHF)
Frequency response	20 Hz–15 kHz, +1 dB, -2 dB
Alternate channel selectivity	±400 kHz
Capture ratio	65 dB
Image rejection at 98 MHz	1.0 dB
IF rejection at 98 MHz	40 dB
Spurious response rejection at 98 MHz	70 dB
AM suppression	70 dB
Stereo separation	50 dB
1 kHz	40 dB

Technics

Carrier leak	
19kHz	-30dB (-35dB, IHF)
38kHz	-50dB (-55dB, IHF)
Channel balance (250Hz-6.3kHz)	±1.5dB
Limiting point	1.2μV
Bandwidth	
IF amplifier	180kHz
FM demodulator	1000kHz
Antenna terminal(s)	75Ω (unbalanced)

AM TUNER SECTION

• For (E, EB, G, GN) areas.	
Frequency range	
MW [For (E, EB) areas.]	522-1611kHz (9kHz steps)
	530-1620kHz (10kHz steps)
[For (G, GN) areas.]	531-1602kHz (9kHz steps)
	530-1600kHz (10kHz steps)
LW [For (E, EB) areas.]	144-288kHz
[For (G, GN) areas.]	153-279kHz
Sensitivity (S/N 20dB)	
MW	20μV, 330μV/m
LW	45μV
Selectivity	
MW (at 999kHz)	55dB
LW (at 252kHz)	55dB
Image rejection	
MW (at 999kHz)	40dB
LW (at 252kHz)	40dB
IF rejection	
MW (at 999kHz)	55dB
LW (at 252kHz)	55dB
• For (EG) area.	
Frequency range	522kHz~1611kHz (9-kHz steps)
	530kHz~1620kHz (10-kHz steps)

Selectivity (S/N 20dB)	20μV, 330μV/m
Selectivity at 999kHz	55dB
Image rejection at 999kHz	40dB
If rejection at 999kHz	55dB

VIDEO SECTION

Output voltage at 1V input (unbalanced)	1±0.1Vp-p
Maximum input voltage	1.5Vp-p

GENERAL

Power consumption	
For (E, EB, EG, GN) areas.	220W
For (G) area.	270W
Power supply	
For (E, EB, GN) areas.	AC 50Hz/60Hz, 230V-240V
For (EG) area.	AC 50/60Hz, 230V
For (G) area.	AC 50Hz/60Hz, 110-127V/220-240V
Dimensions (W × H × D)	430 × 136 × 352mm
Weight	8.8kg

REMOTE CONTROL TRANSMITTER

Control keys	40 keys
Dimensions (W × H × D)	70 × 27 × 175mm (2-3/4" × 1-1/16" × 6-57/64")
Weight	125g (4.4oz)
Power source	two "AAA", (UM-4/R03)

Notes:

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

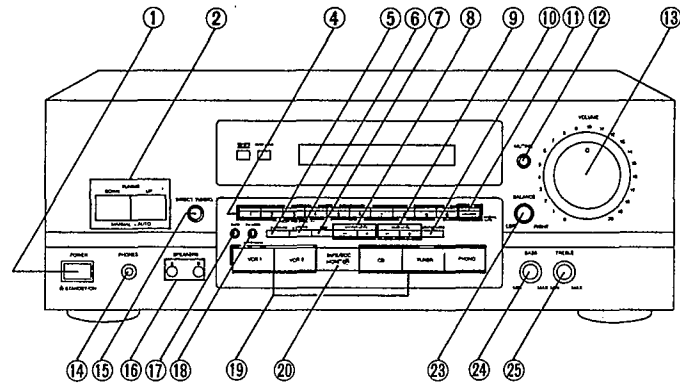
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FRONT PANEL CONTROLS

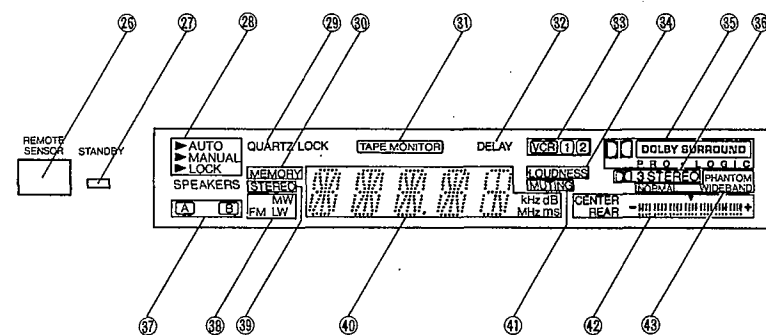
Control section



No.	Name
①	Power “⏻ STANDBY/ON” switch (POWER, ⏻ STANDBY/ON) Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
②	Tuning buttons (TUNING)
④	Numeric buttons (1-0)
⑤	DOLBY PRO LOGIC SURROUND ON/OFF button (SURROUND)
⑥	DOLBY PRO LOGIC 3 STEREO ON/OFF button (3 STEREO)
⑦	Test signal ON/OFF button (TEST)
⑧	Center level adjust button (CENTER LEVEL)
⑨	Rear level adjust button (REAR LEVEL)
⑩	Center mode select button (CENTER MODE)
⑪	Memory button (MEMORY)

No.	Name
⑫	Muting button (MUTING)
⑬	Volume control (VOLUME)
⑭	Headphone jack (PHONES)
⑮	Direct tuning button (DIRECT TUNING)
⑯	Speaker select buttons (SPEAKERS)
⑰	Band select button (BAND)
⑱	FM mode select button (FM MODE)
⑲	Input select buttons
⑳	Tape/DCC monitor button (TAPE/DCC MONITOR)
㉓	Balance control (BALANCE)
㉔	Bass control (BASS)
㉕	Treble control (TREBLE)

Display section



No.	Name
⑳	Remote control signal receptor
㉗	“STANDBY” indicator When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
㉙	Quartz lock indicator

No.	Name
⑳	Memory indicator
㉑	Tape monitor indicator
㉓	VCR select indicator
㉕	DOLBY PRO LOGIC SURROUND indicator
㉖	DOLBY PRO LOGIC 3 STEREO indicator
㉗	Speaker select indicators

No.	Name
㉘	Band indicators
㉙	FM stereo indicator
㉚	Input selector/frequency display
㉛	Muting indicator
㉜	Center/rear level display
㉝	Center mode indicators

CAUTION FOR AC MAINS LEAD

(“EB” area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5-ampere fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark ⚡ or the BSI mark ⚡ on the body of the fuse.

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

If you lose the fuse cover the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from your local dealer.

CAUTION!

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

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

If a new plug is to be fitted please observe the wiring code as shown below. If in any doubt please consult a qualified electrician.

IMPORTANT

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

- Blue: Neutral
- Brown: Live

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

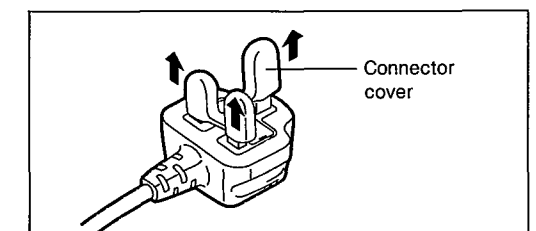
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

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

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

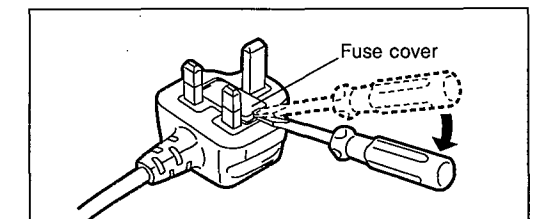
Before use

Remove the connector cover as follows.

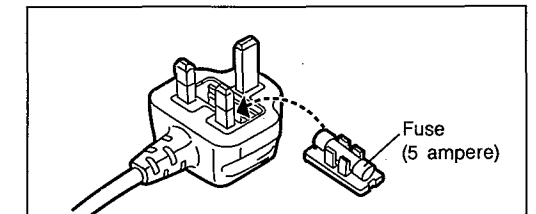


How to replace the fuse

1. Remove the fuse cover with a screwdriver.

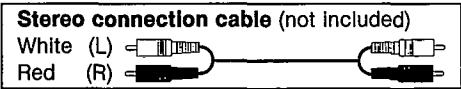


2. Replace the fuse and attach the fuse cover



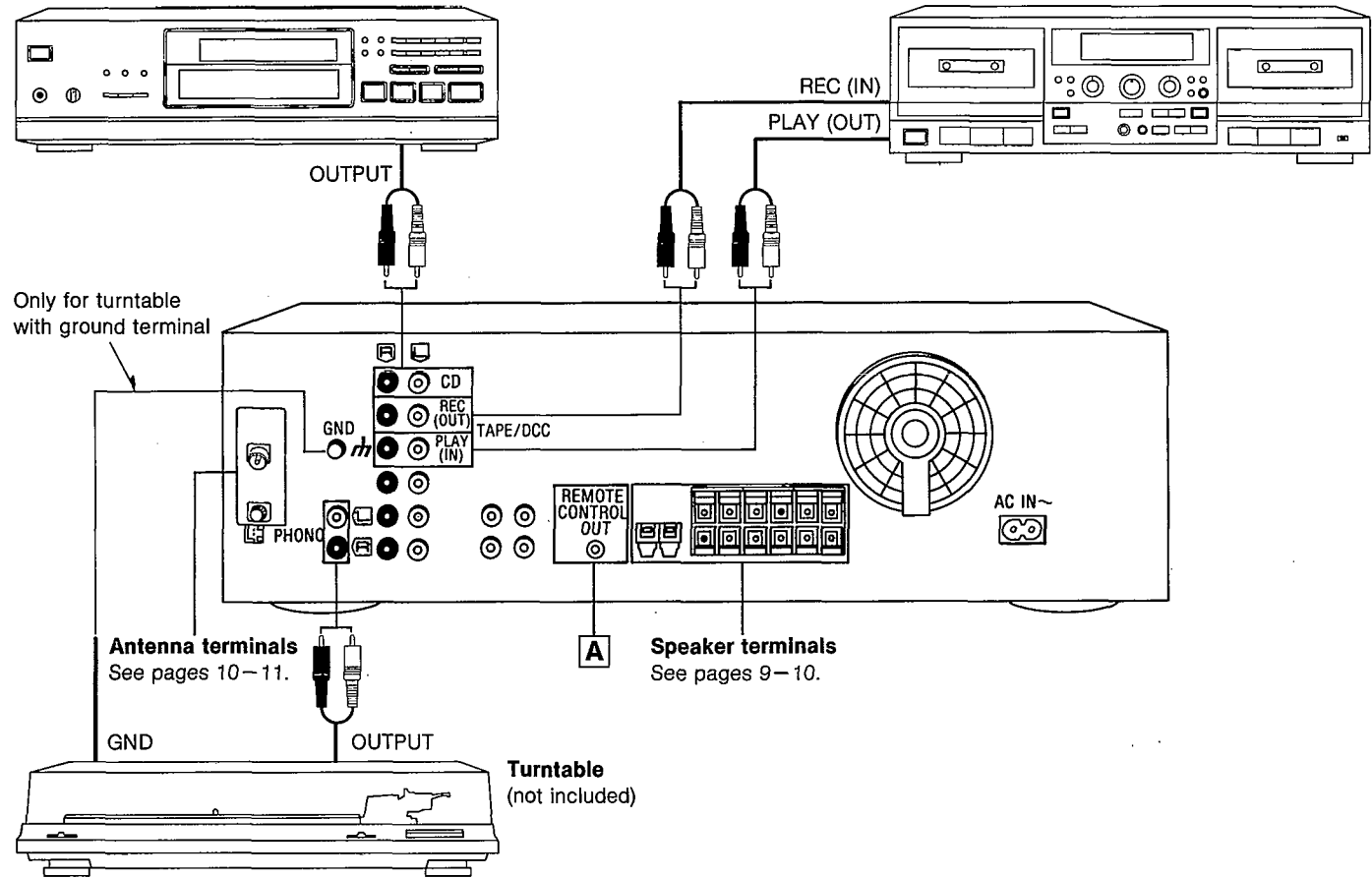
EQUIPMENT CONNECTIONS

Connecting audio equipment



CD player (or CD changer)
 (not included)

Tape deck or digital compact cassette deck (DCC)
 (not included)



Only for turntable with ground terminal

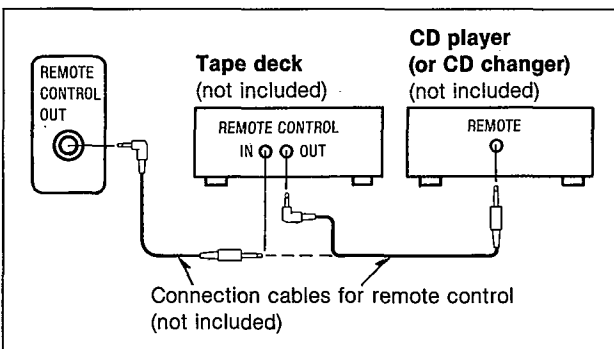
Antenna terminals
 See pages 10–11.

Speaker terminals
 See pages 9–10.

Turntable
 (not included)

A “REMOTE CONTROL OUT” terminal

Connect the connection cable for the remote control to a Technics tape deck and/or CD player (or CD changer) which has the appropriate remote control terminal as shown below. If a tape deck is not being used, the CD player (or CD changer) can be connected directly (dotted line).



For a CD player (or CD changer) with a remote control sensor the above connection is not necessary.

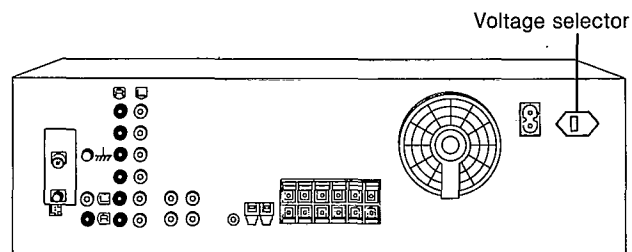
To set the power voltage

(For (G) area only.)

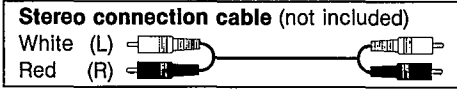
Set the voltage selector to the voltage setting for the area in which the unit will be used.

Note

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

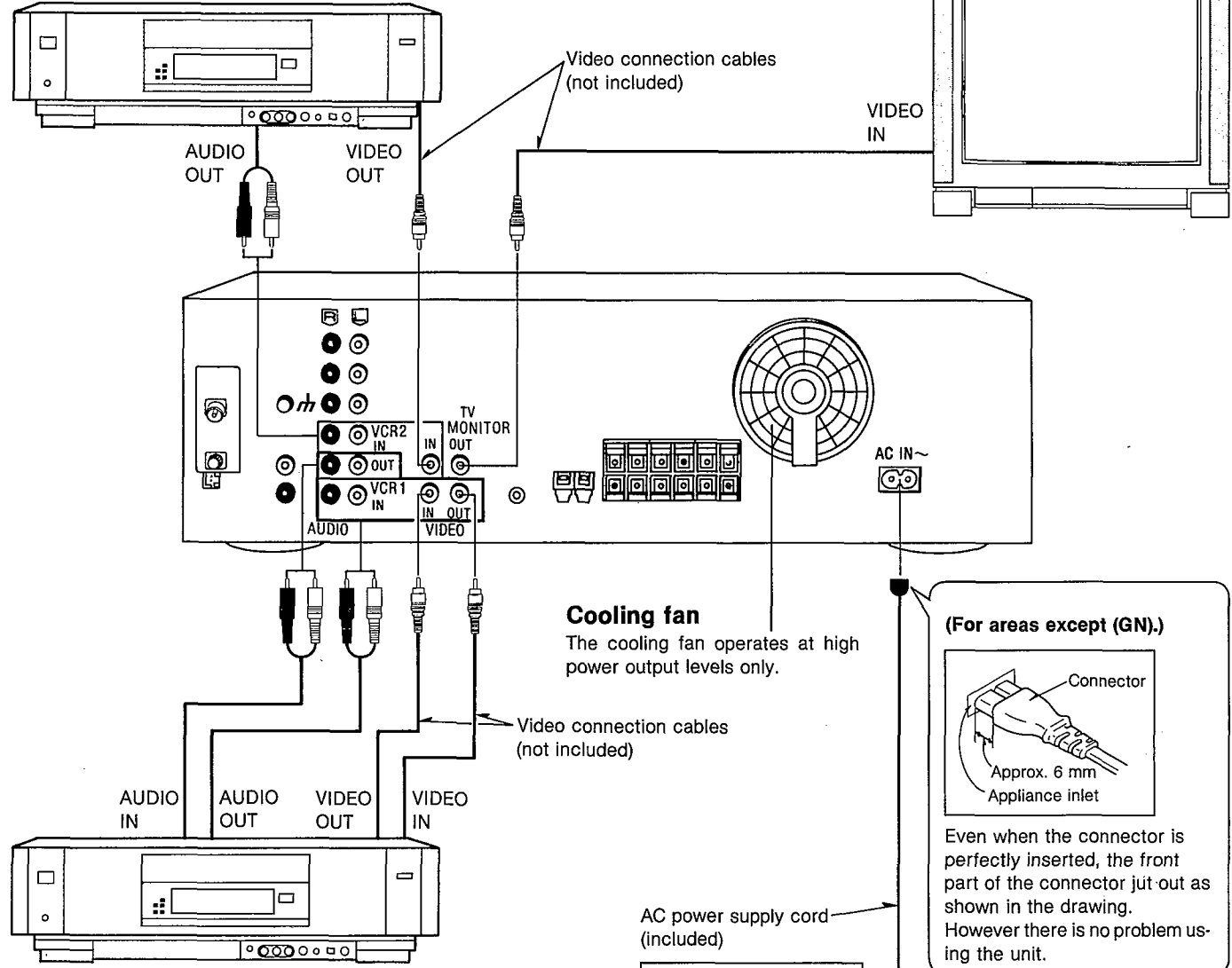


Connecting video equipment



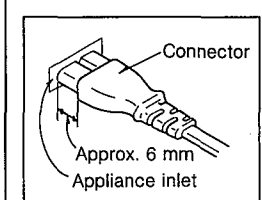
Second VCR (for playback only)
 (not included)

Monitor TV
 (not included)



Cooling fan
 The cooling fan operates at high power output levels only.

(For areas except (GN).)



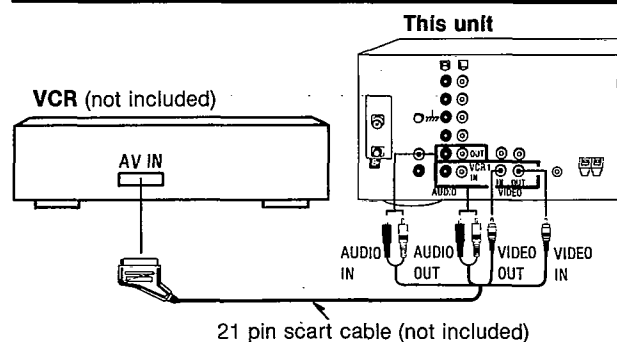
Even when the connector is perfectly inserted, the front part of the connector jut out as shown in the drawing. However there is no problem using the unit.

AC power supply cord (included)

Connect this cord after all other cables and cords are connected.

Household AC outlet

To connect a video deck with 21 pin scart terminal

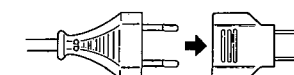


(For (EB) area only)

BE SURE TO READ THE CAUTION FOR THE AC POWER SUPPLY CORD ON PAGE 4 BEFORE CONNECTION.

(For (G) area only.)

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

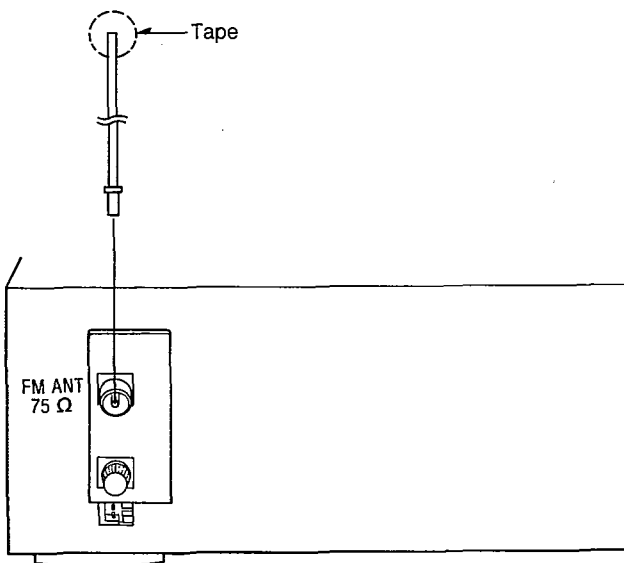


ANTENNA CONNECTIONS

FM indoor antenna (included)

This antenna is normally sufficient for reception of FM broadcasts.

FM indoor antenna (included)



Attach to a wall (using a tape) facing in the direction of best reception.

For best reception sound quality:

An FM outdoor antenna is recommended.

Disconnect the antenna if an FM outdoor antenna is installed.

FM outdoor antenna (not included)

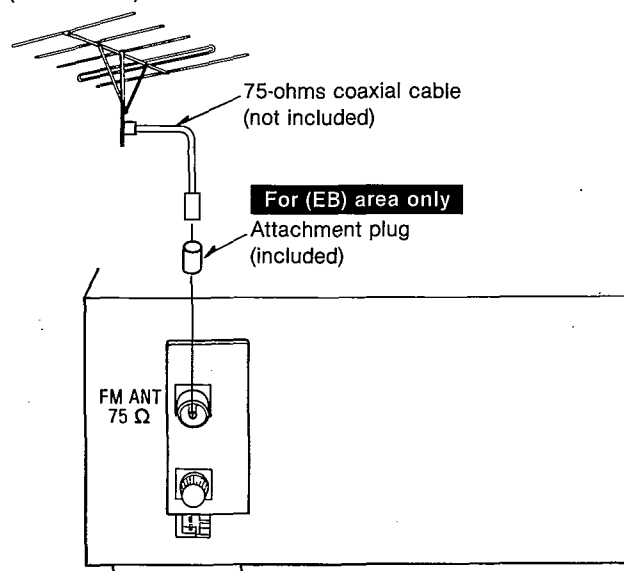
The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the FM indoor antenna (included) does not provide satisfactory reception.

Note

An outdoor antenna should be installed by a qualified technician only.

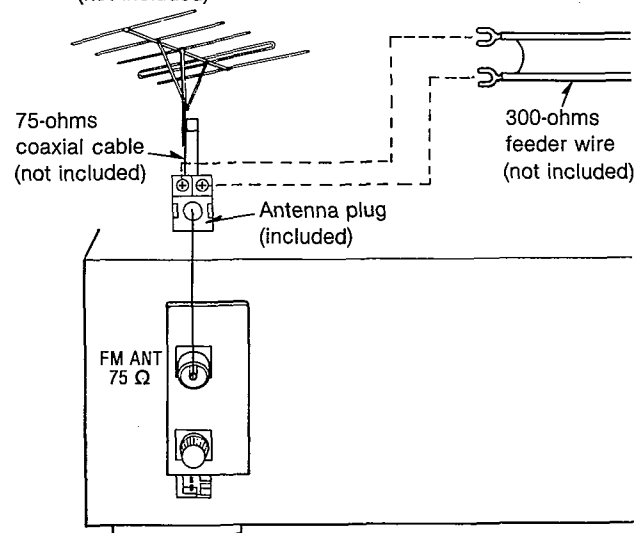
For (E, EB, EG) areas.

FM outdoor antenna (not included)



For (G, GN) areas.

FM outdoor antenna (not included)



See page 8 for using the antenna plug (included).

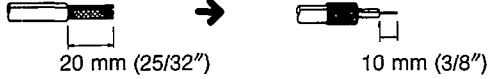
How to use the antenna plug (included)

(For G, GN areas.)

Two types of wire are most commonly used for connection from the antenna: 300-ohms parallel feeder wire or 75-ohms coaxial cable. For best resistance to outside interference, the use of 75-ohms coaxial cable is suggested.

To connect a 75-ohms coaxial cable

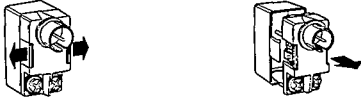
- ① Remove a piece of the outer vinyl insulator.



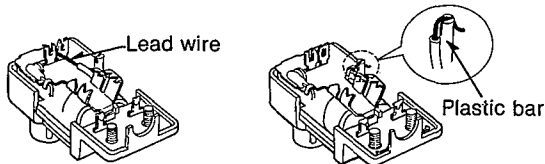
- ② Remove the cover while pulling the tabs.

Note

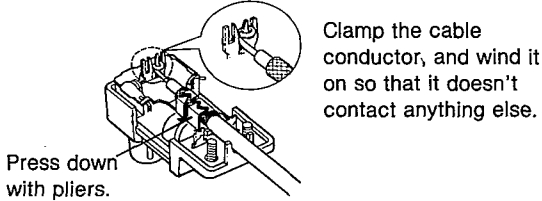
If the tabs are pulled too hard, the casing may be damaged.



- ③ Remove the lead wire and clamp it with the plastic bar.

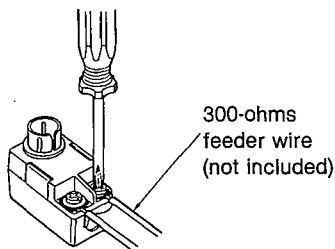


- ④ Install the coaxial cable.



- ⑤ Attach the cover.

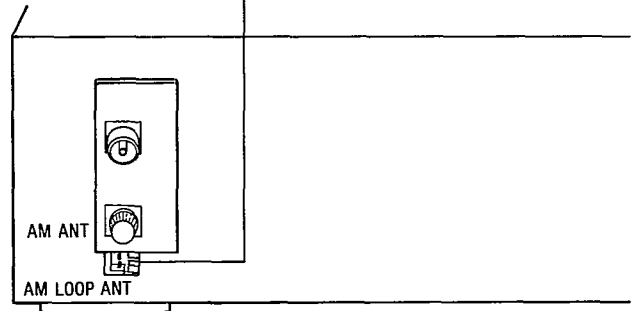
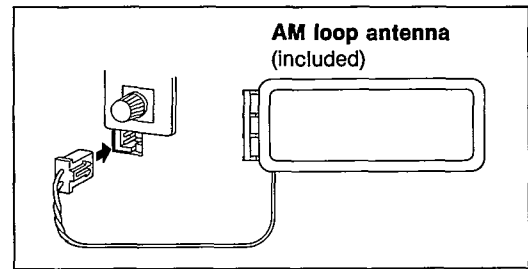
To connect a 300-ohms feeder wire



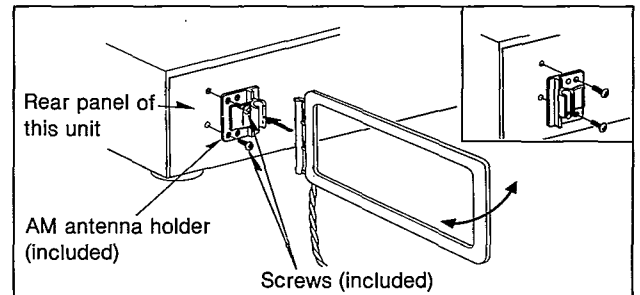
Loosen the screw to connect the feeder wire and tighten it to secure the connection.

AM loop antenna (included)

This antenna is normally sufficient for reception of MW/LW broadcasts.

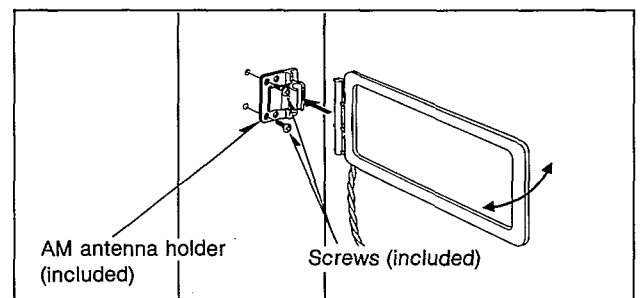


Connect the AM loop antenna to the AM loop antenna terminals, and mount it vertically to the rear panel of this unit.



When mounting the antenna to a column, a wall or rack

Mount it vertically.

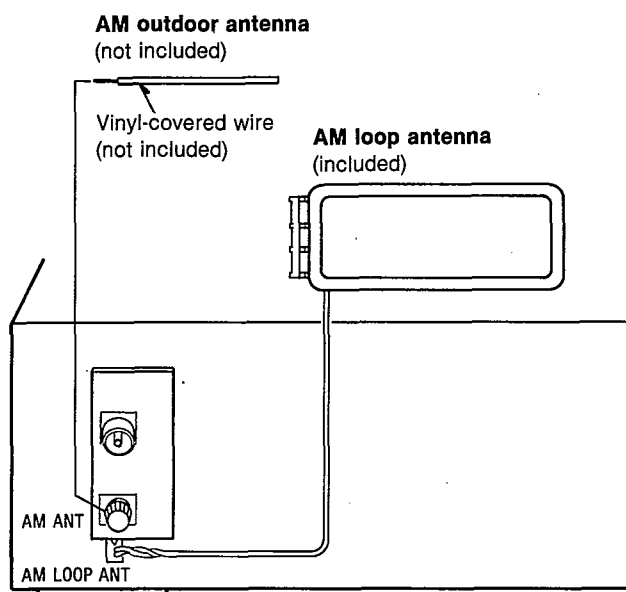


Pay attention to the following points when mounting the antenna.

- Do not mount it horizontally (doing so will impair reception).
- Do not mount it close to power cords, speaker wires or metal surfaces (doing so will result in noise).
- Do not mount it close to a tape deck. When the tape deck is being used, chirping or beeping sounds may result.

AM outdoor antenna (not included)

The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the AM loop antenna (included) does not provide satisfactory reception.



Use 5–12 m (16–40 ft.) of vinyl-covered wire horizontally at the window, or the convenient location.

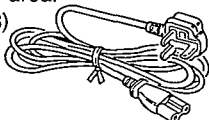
When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.

Note

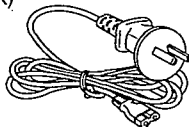
Be sure to connect the AM loop antenna even when an outdoor antenna is used.

ACCESSORIES

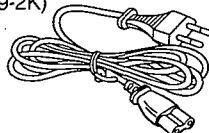
- AC power supply cord 1 pc.
FOR (EB) area.
(VJA0733)



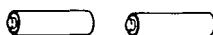
For (GN) area.
(RJA0036-K)



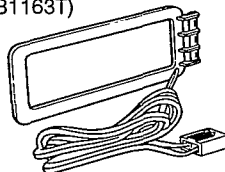
For (E, EG, G) areas.
(RJA0019-2K)



- Batteries "AAA" (R03/UM-4)
for remote control
transmitter 2 pcs.



- AM loop antenna 1 pc.
(SPB1163T)



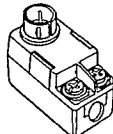
- AM antenna holder 1 pc.
(SMA233-1M)



- Screws 2 pcs.
(XTN3+10AFZ)



- Antenna plug 1 pc.
For (G, GN) areas.
(RFE0014)



- Remote control
transmitter 1 pc.
(RAK-SA009XH)

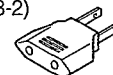


(RAK-SA009XH)

- Attachment plug 1 pc.
For (EB) area.
(SJP9009)



- Power plug adaptor 1 pc.
For (G) area.
(SJP5213-2)



- FM indoor antenna 1 pc.
(RSA0007)



Note: These are available on sale route.

SPEAKER CONNECTIONS

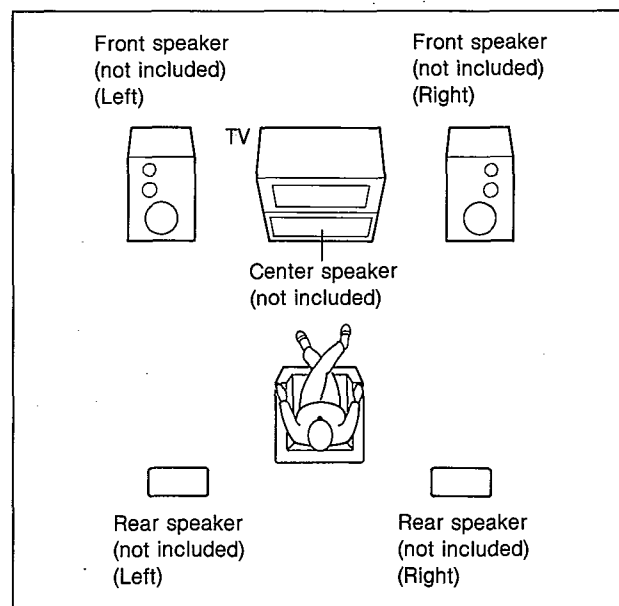
Placement of speakers

As well as enjoying normal stereo reproduction with both the left and right front speakers connected, a center speaker and rear speakers can also be connected to the main unit in order to enjoy playback using the Dolby Pro-Logic Systems.

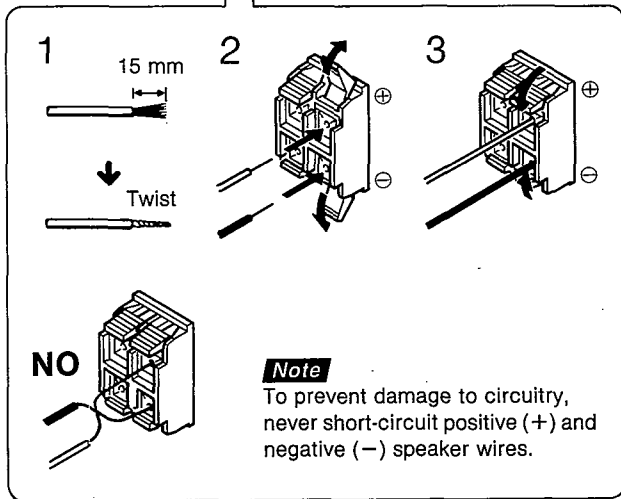
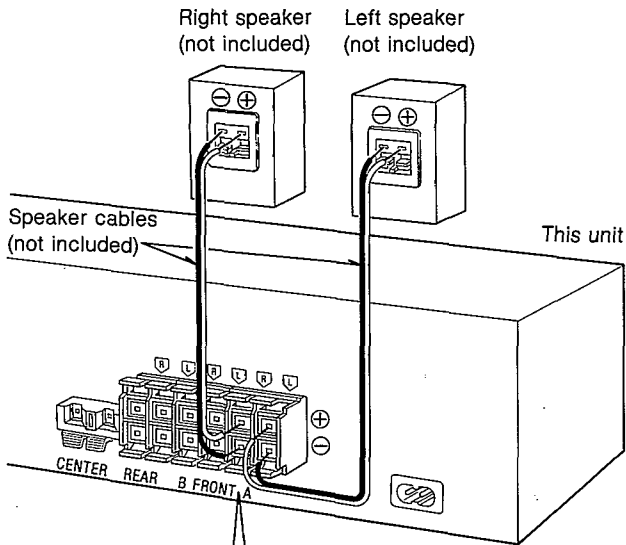
The illustration below shows where to place the speakers when enjoying sound with Dolby Pro-Logic systems.

The listening position at which the effect is the greatest is a position slightly to the rear of a center position of five-speaker systems.

However the position should be adjusted to your personal preference, because the effect varies to some degree depending upon the type of music and the music source.



Connection of front speakers



■ "B" terminals

For connection to a second pair of speakers.

■ Speaker impedance

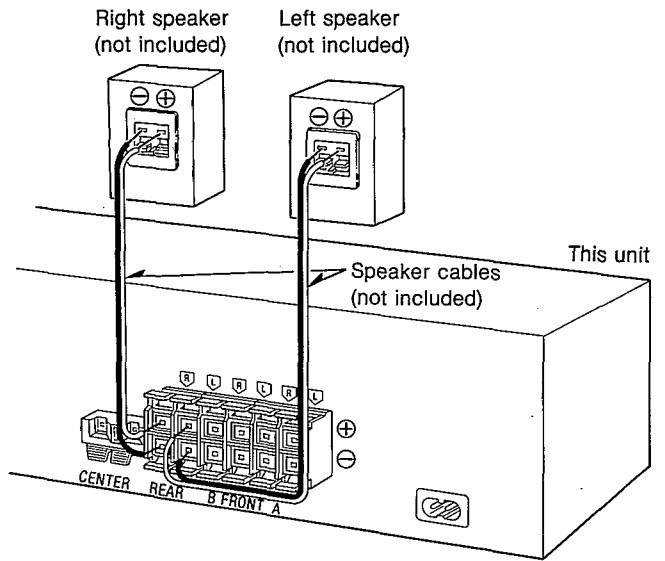
When only the "A" or only the "B" speakers are connected:

The impedance of the speaker used with this unit must be 4–16 Ω.

When both the "A" and the "B" speakers are connected simultaneously:

The impedance of the speaker used with this unit must be 8–16 Ω.

Connection of rear speakers



Note

Before sound can be heard, the SURROUND mode (of the Dolby Pro-Logic system) must be on and both rear speakers must be connected.

■ Speaker impedance

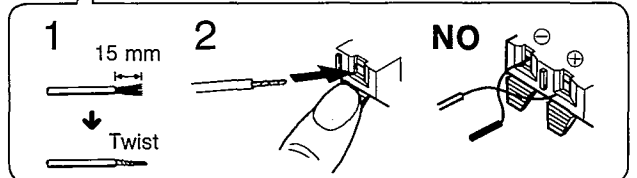
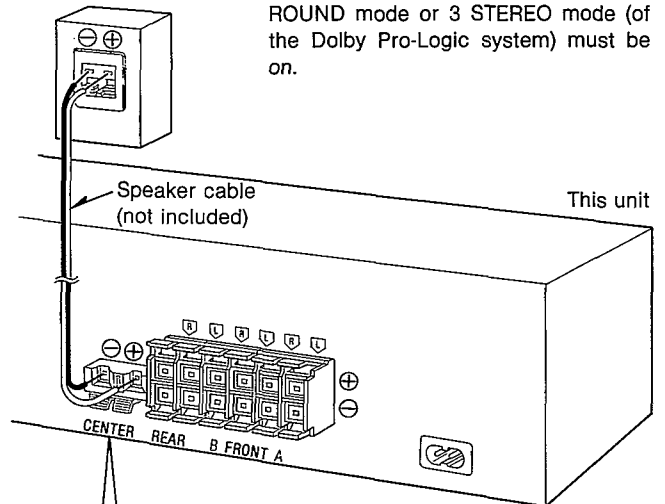
The impedance of any speaker used with this unit must be 4–16 Ω.

Connection of center speaker

Center speaker (not included)

Note

Before sound can be heard, the SURROUND mode or 3 STEREO mode (of the Dolby Pro-Logic system) must be on.

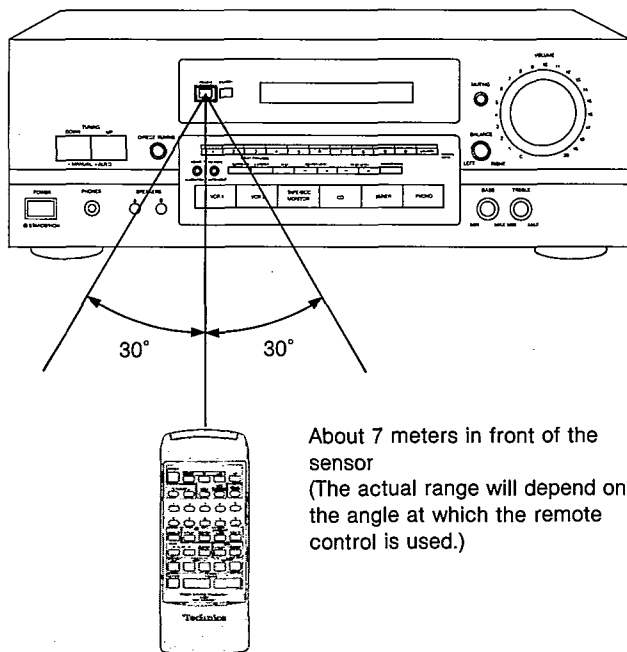


■ Speaker impedance

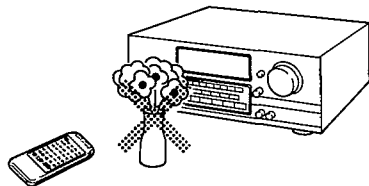
The impedance of any speaker used with this unit must be 4–16 Ω.

METHOD FOR USE

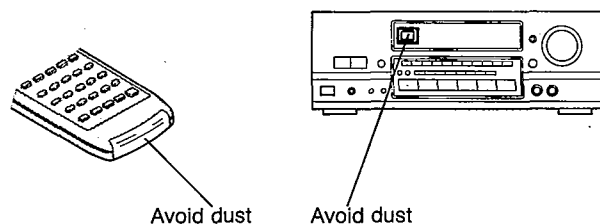
Use the remote control within 60 degrees and within 7 meters facing directly toward the receiver's remote control signal receptor.



Operation notes



Aim the remote control's transmission window toward the unit's sensor. Avoid any obstacles.



Be sure the transmission window and the unit's sensor are free from dust. Excessive dust might affect performance.

The operation may not be correct if direct sunlight or another strong light source strikes the receiving sensor of this unit. If there is a problem, place the unit away from the light source.

When operating a TV, VCR or a CD player (or CD changer) with a remote control sensor, face this remote control toward the remote control sensor of the unit to be operated.

REMOTE CONTROL OPERATION

This remote control transmitter can be used to operate units manufactured by this company other than this receiver unit, including CD players (or CD changers), tape decks and also TVs and VCRs.

Preparations before use

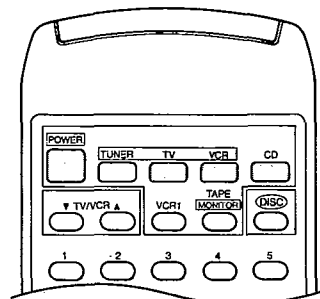
- Check the appropriate connection of the power cords and connection cables for the remote control in order to operate CD players (or CD changers) and tape decks correctly. (See page 8 of the operating instructions for the main unit.)
- Make sure that the power of each unit is set to the "ON" position, before beginning the operations.

Note

If you operate a TV, VCR or CD player (or CD changer) using this remote control, the unit may fail to operate due to the differing nature of the remote control signal.

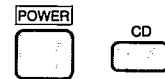
If the remote control fails to operate:

It is necessary to reprogram the signal within the remote control by following this simple procedure.



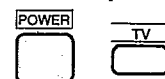
For CD player (or CD changer) operation

Press **POWER** and **CD** simultaneously, hold for 2 seconds.



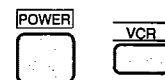
For TV operation

Press **POWER** and **TV** simultaneously, hold for 2 seconds.



For VCR operation

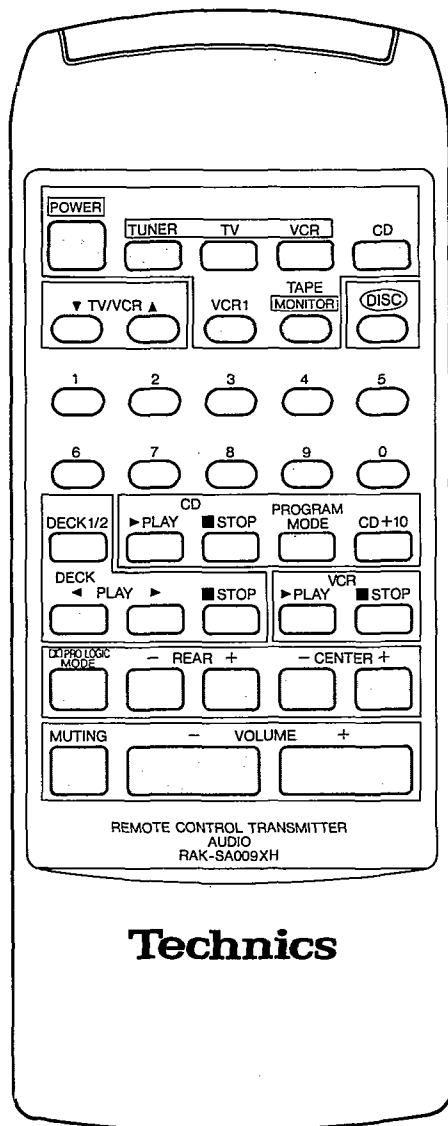
Press **POWER** and **VCR** simultaneously, hold for 2 seconds.



To restore the previous memory contents, carry out the same operations one more time.

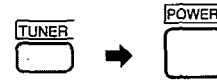
Depending on the model, there may be cases where operation is still not possible even if the remote control signal is switched over due to differences in frequency range characteristics.

Operating the receiver



Basic operations

To turn the unit ON/OFF



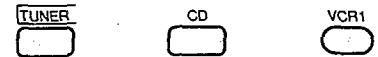
Once the unit has been set to ON, it can be turned ON and OFF simply by pressing POWER. (See **Note** below.)

To turn the tape monitor function ON/OFF



To listen to sources other than a tape or DCC, be sure to turn off the tape monitor indicator on the main unit.

To select an input source



To select the Dolby Pro Logic mode



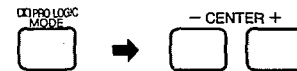
Changes as follows each time the button is pressed.
SURROUND → 3 STEREO → (OFF)

To adjust the output level of the rear speakers



Select SURROUND.

To adjust the output level of the center speaker



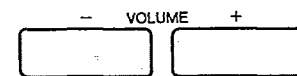
Select SURROUND or 3 STEREO.

To mute the sound level



Press once more to return to the original volume.

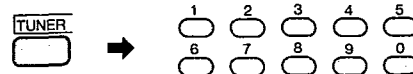
To adjust the volume level



Note

After carrying out the operation on the reverse page for turning the TV or VCR ON or OFF, always press TUNER before pressing POWER when turning the receiver ON and OFF.

To listen to radio broadcasts



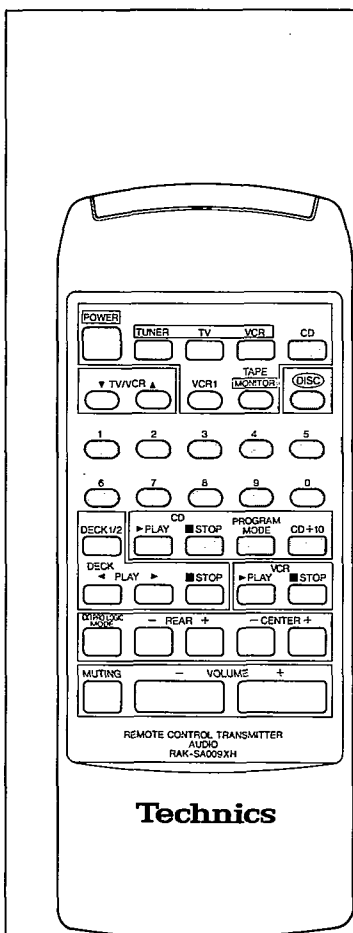
Specify the preset channel using the numeric buttons.

(Example: Channel 12)



(Within 2 sec.)

To listen to compact discs

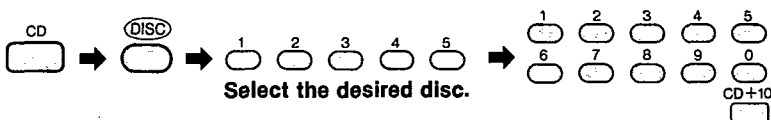


Note
Selecting the desired disc(s) is only applicable to a Technics CD changer.

Sequential play



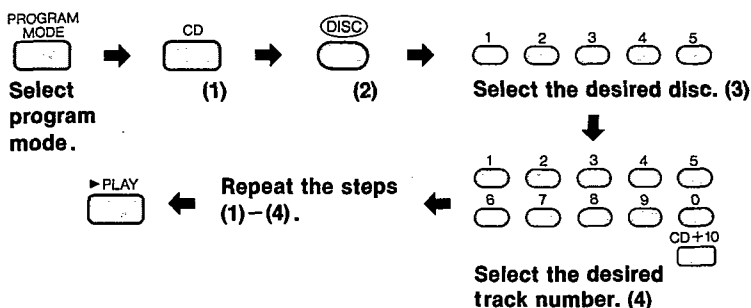
Direct access play



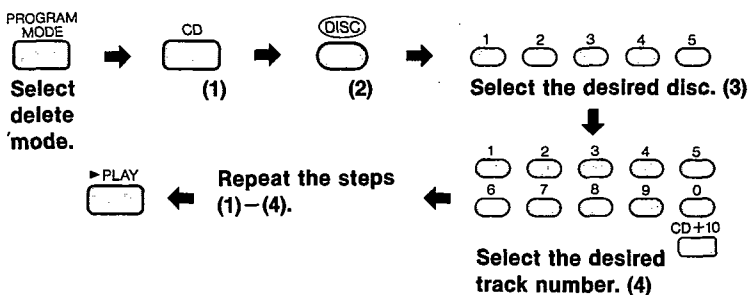
Play will start from the selected track.

Select the desired track number. To select a two-digit track number over 10, press CD+10 the necessary number of times and then one of the buttons.

Program play



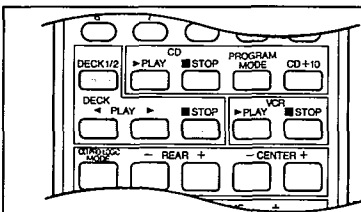
Delete play (only for a Technics CD changer with delete play function)



To stop play

STOP For program play and delete play, if this button is pressed while playback is stopped, all contents which have been input will be cleared.

To listen to tapes

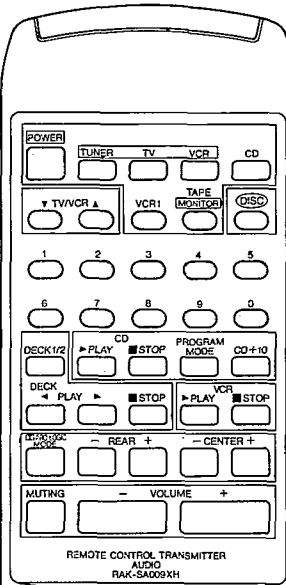


Only when using a double cassette deck
DECK 1/2 Select tape deck (DECK 1 or DECK 2)
The remote control indicator of the cassette deck is changed over each time the button is pressed.

To stop play



To watch TV broadcasts



Technics

To watch TV broadcasts with a VCR tuner

Facing toward the TV: → → Turn ON the TV.

Facing toward the VCR: → → Turn ON the VCR.

Set the TV/VIDEO mode on the TV to "VIDEO".

Facing toward the receiver: →

Facing toward the VCR: → Select the desired channel.

To watch TV broadcasts with just a TV

Facing toward the TV: → → Turn ON the TV.

Set the TV/VIDEO mode on the TV to "TV".

Facing toward the TV: → Select the desired channel.

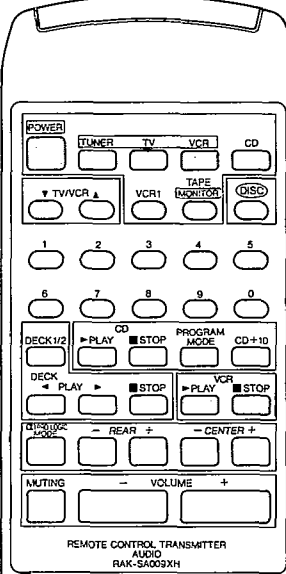
To turn OFF the TV

→

To turn OFF the VCR

→

To watch video tapes



Technics

To watch video tapes

Facing toward the TV: → → Turn ON the TV.

Facing toward the VCR: → → Turn ON the VCR.

Set the TV/VIDEO mode on the TV to "VIDEO".

Facing toward the receiver: →

Facing toward the VCR: →

To stop play

To turn OFF the TV

→

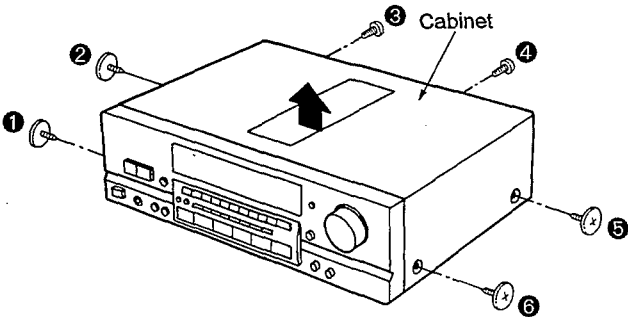
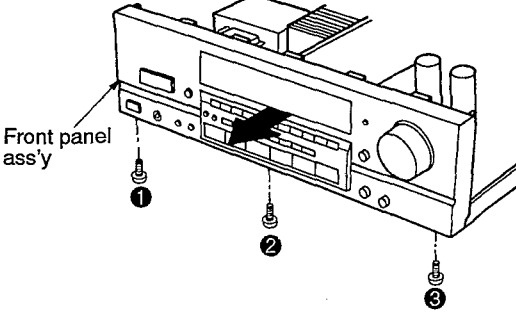
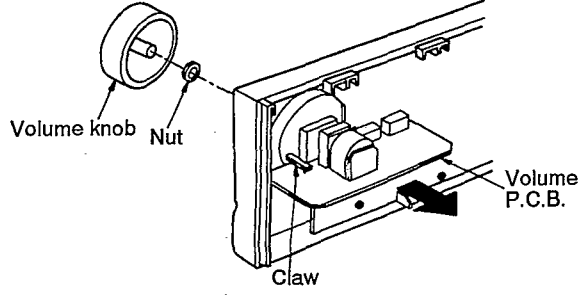
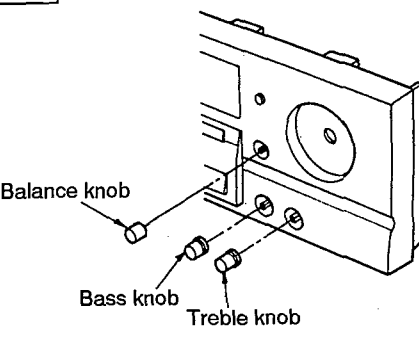
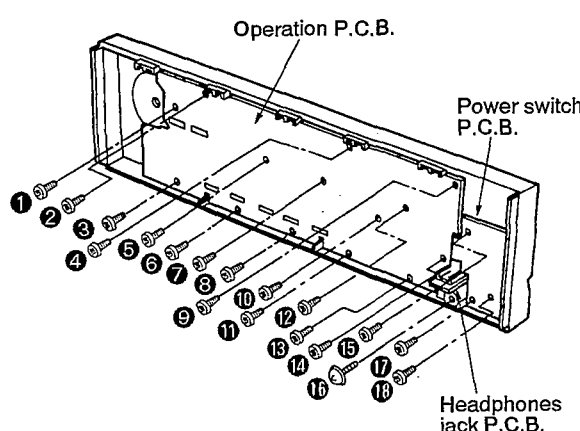
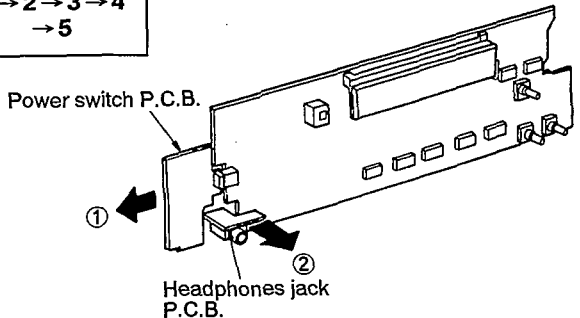
To turn OFF the VCR

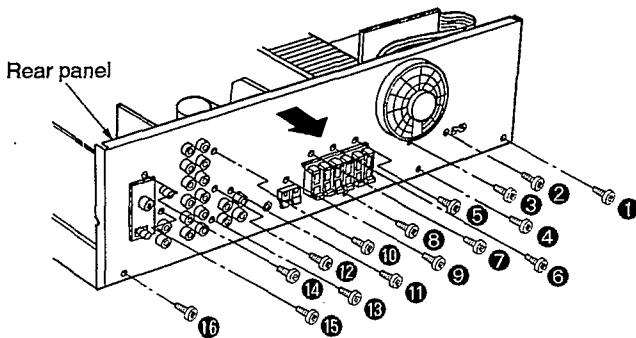
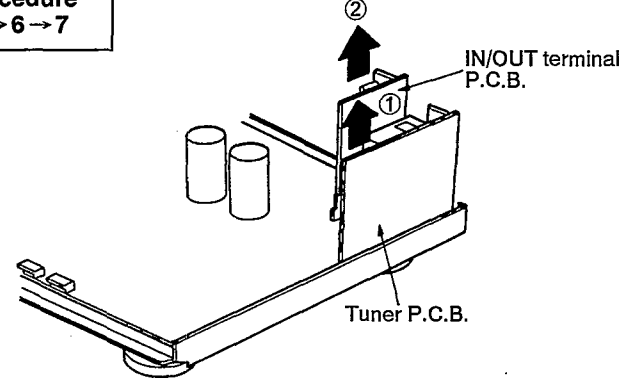
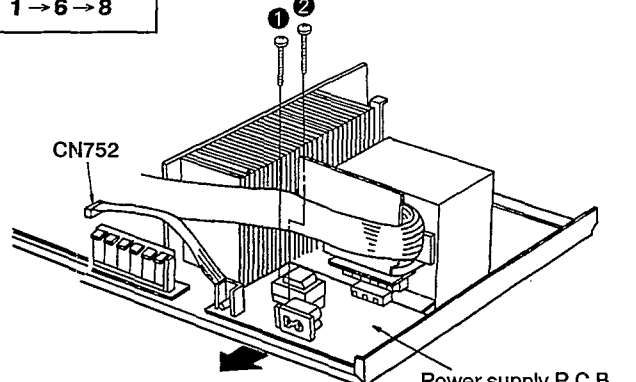
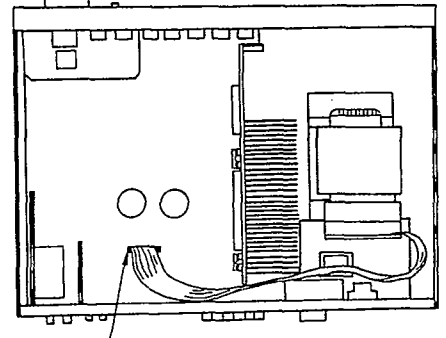
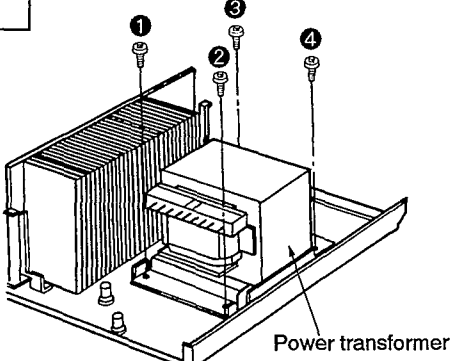
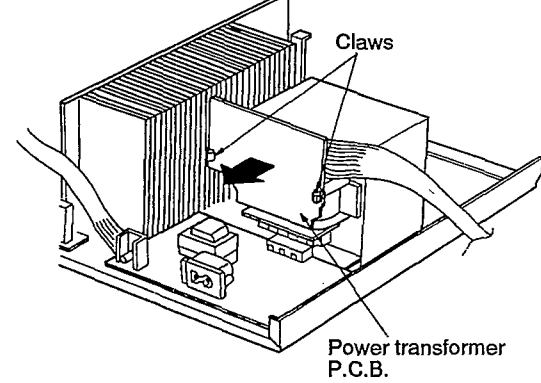
→

DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"

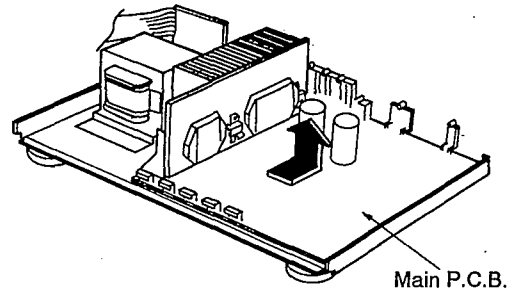
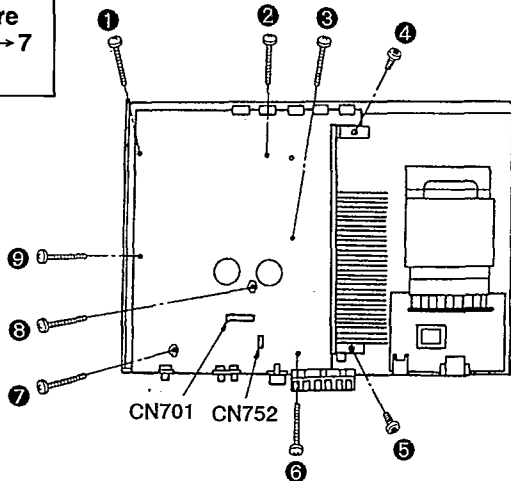
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref.No. 1	Removal of the cabinet	Ref.No. 2	Removal of the front panel ass'y
Procedure 1	 <p>• Remove the 6 screws(①~⑥).</p>	Procedure 1→2	 <p>1. Remove the 3 screws(①~③). 2. Remove the front panel ass'y in the direction of arrow.</p>
Ref.No. 3	Removal of the volume P.C.B.	Ref.No. 4	Removal of the operation P.C.B., power switch P.C.B. and headphones jack P.C.B.
Procedure 1→2→3	 <p>1. Pull out the volume knob. 2. Remove the nut. 3. Release the 1 claw. 4. Remove the volume P.C.B. in the direction of arrow.</p>	Procedure 1→2→3→4	 <p>1. Pull out the balance knob, bass knob and treble knob.</p>
Ref.No. 5	Removal of the power switch P.C.B. and headphones jack P.C.B.	 <p>2. Remove the 18 screws(①~⑱).</p>	
Procedure 1→2→3→4→5	 <p>■ POWER SWITCH P.C.B. • Remove the power switch P.C.B. in the direction of arrow ①.</p> <p>■ HEADPHONES JACK P.C.B. • Remove the headphones jack P.C.B. in the direction of arrow ②.</p>		

<p>Ref.No. 6</p>	<p>Removal of the rear panel</p>	<p>Ref.No. 7</p>	<p>Removal of the tuner P.C.B. and IN/OUT terminal P.C.B.</p>
<p>Procedure 1 → 6</p>	 <p>Rear panel</p> <ol style="list-style-type: none"> 1. Remove the 16 screws(① ~ ⑯). 2. Remove the rear panel in the direction of arrow. 	<p>Procedure 1 → 6 → 7</p>	 <p>IN/OUT terminal P.C.B.</p> <p>Tuner P.C.B.</p> <ul style="list-style-type: none"> ■ TUNER P.C.B. <ul style="list-style-type: none"> • Remove the tuner P.C.B. in the direction of arrow ①. ■ IN/OUT TERMINAL P.C.B. <ul style="list-style-type: none"> • Remove the IN/OUT terminal P.C.B. in the direction of arrow ②.
<p>Ref.No. 8</p>	<p>Removal of the power supply P.C.B.</p>	<p>Ref.No. 9</p>	<p>Removal of the power transformer P.C.B.</p>
<p>Procedure 1 → 6 → 8</p>	 <p>CN752</p> <p>Power supply P.C.B.</p> <ol style="list-style-type: none"> 1. Remove the 1 flat cable(CN752). 2. Remove the 2 screws(①, ②). 3. Remove the power supply P.C.B. in the direction of arrow. 	<p>Procedure 1 → 9</p>	 <p>CN701</p> <ol style="list-style-type: none"> 1. Remove the 1 flat cable(CN701).
<p>Ref.No. 10</p>	<p>Removal of the power transformer</p>		
<p>Procedure 1 → 6 → 8 → 9 → 10</p>	 <p>Power transformer</p> <ul style="list-style-type: none"> • Remove the 4 screws(① ~ ④). 	 <p>Claws</p> <p>Power transformer P.C.B.</p> <ol style="list-style-type: none"> 2. Remove the 2 claws. 3. Remove the power transformer P.C.B. in the direction of arrow. 	

Ref.No. 11 **Removal of the main P.C.B.**

Procedure
1 → 2 → 6 → 7 → 11



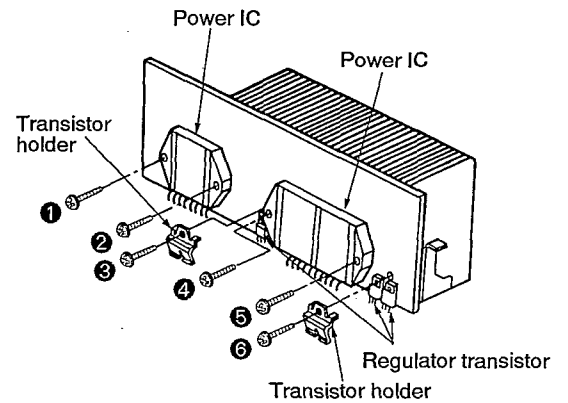
1. Remove the 2 flat cables(CN701, CN752).
2. Remove the 9 screws(① ~ ⑨).

3. Remove the main P.C.B. in the direction of arrow.

Ref.No. 12 **Removal of the power IC and regulator transistor**

Procedure
1 → 2 → 6 → 7 → 11 → 12

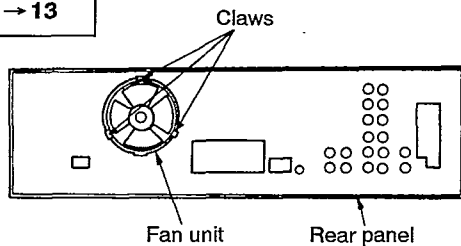
1. Unsolder the power IC or regulator transistor.
2. Remove the 6 screws(① ~ ⑥).
3. Remove the 2 transistor holders.



- **When mounting the power IC or regulator transistor.**
Apply silicone compound(RFKX0002) to the rear side of power IC or regulator transistor.

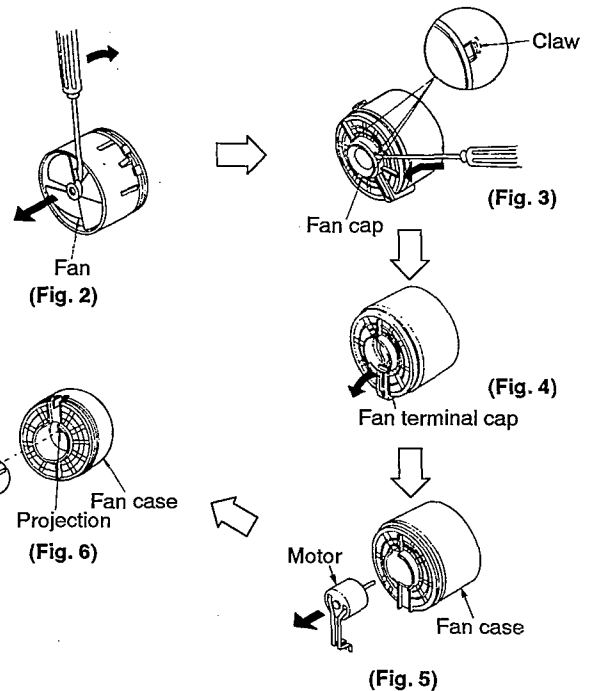
Ref.No. 13 **Removal of the cooling fan motor**

Procedure
1 → 6 → 13

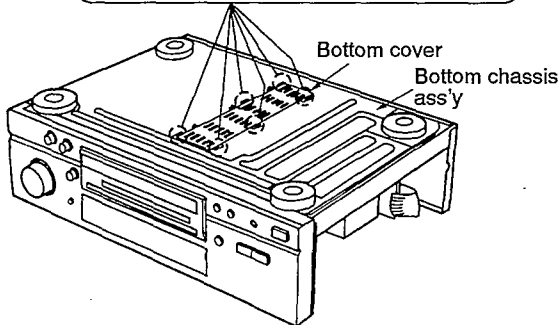
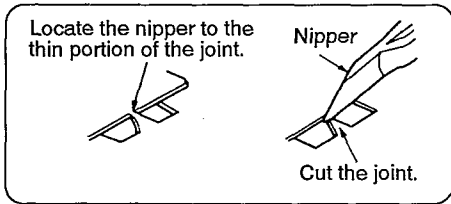


(Fig. 1)

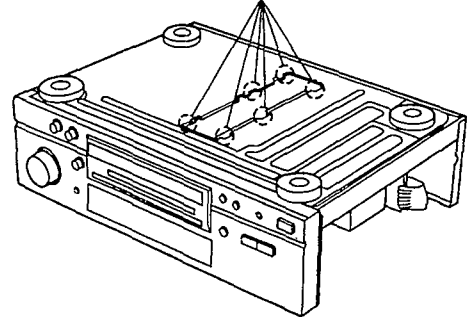
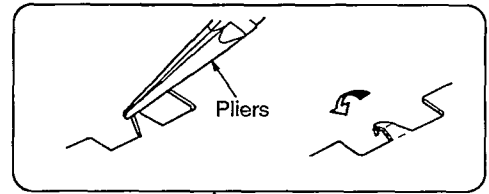
1. Release the 3 claws.(See Fig. 1)
2. Insert a screwdriver at the foot of the fan. Force it out of the motor shaft.(See Fig. 2)
3. Remove the fan cap by used ⊖ screwdriver. (See Fig. 3)
4. Remove the fan terminal cap in the direction of arrow. (See Fig. 4)
5. Remove the motor from the fan case. (See Fig. 5)
6. When mounting the motor, align the fan casing's projection with the hole of the motor.(See Fig. 6)



HOW TO REPLACEMENT THE POWER IC AND REGULATOR IC



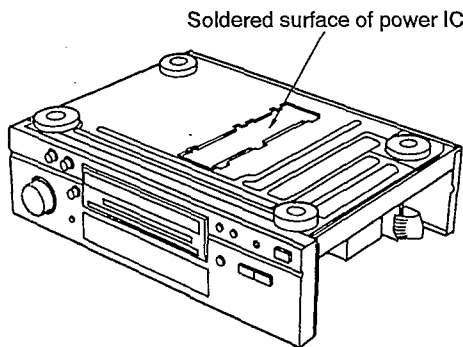
1. Cut the joints(6 portions) between bottom cover and bottom chassis ass'y with nipper.



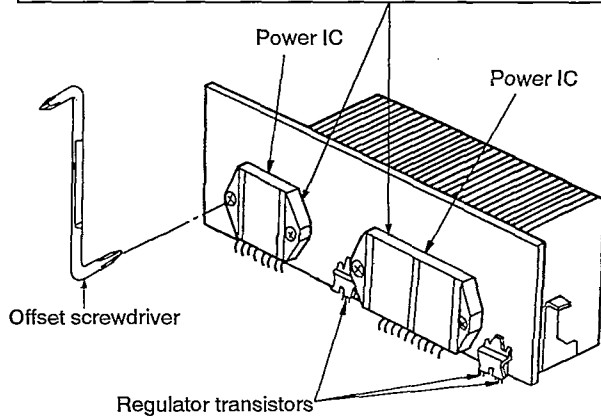
2. After cutting the joints(6 portions), bend the portions of the bottom chassis ass'y in the direction of arrow with pliers.

———— CAUTION ————

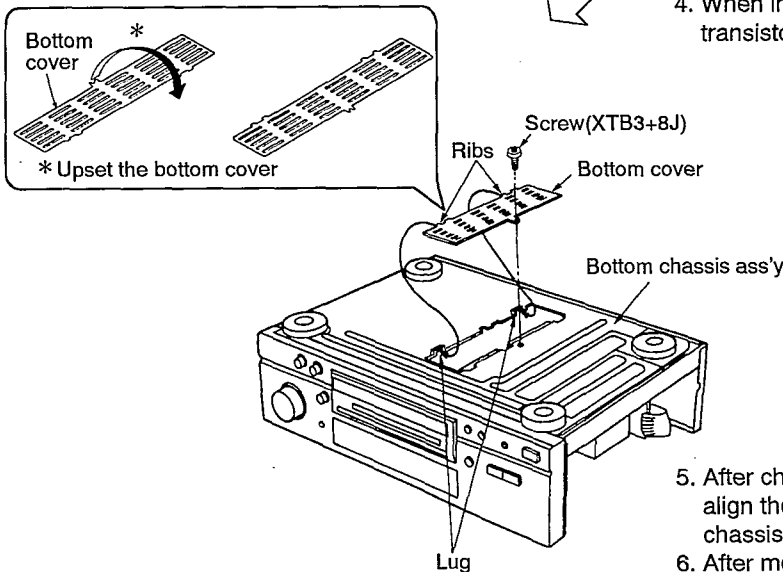
After replacing the power IC or regulator transistor, apply a sufficient quantity of compound grease (RFKX0002) between the heat sink and the power IC or regulator transistor. (Radiation of power IC & transistor)



3. When checking the soldered surface of power IC, perform as shown above.



4. When installing or removing the power IC or regulator transistor, be sure to use an offset screwdriver.



5. After checking the power IC, upset the bottom cover and align the ribs of the bottom cover to the lugs on the bottom chassis ass'y.

6. After mounting the bottom cover on the bottom chassis ass'y, fix it with a screw(XTB3+8J).

CAUTION:
 1. A long straight screwdriver cannot be used for removal or mounting since its long grip interferes with the neighboring P.C.B. (See Fig.1)
 2. A short straight screwdriver may be used for removal, but cannot be used for mounting because the limited space in the unit will not allow sufficient tightening torque. (See Fig.2)

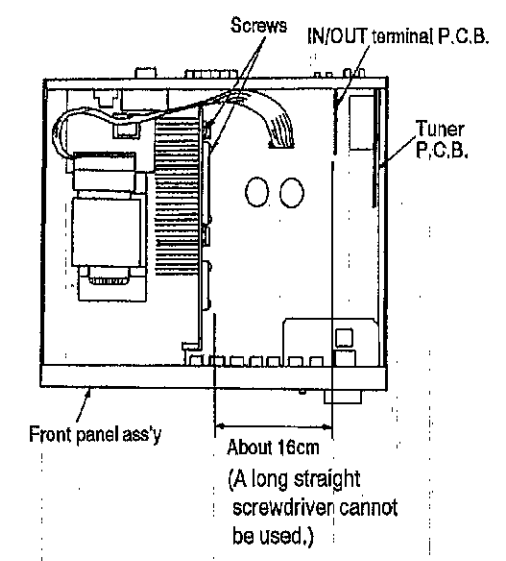


Fig.1

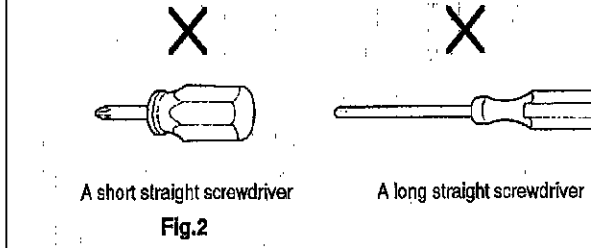
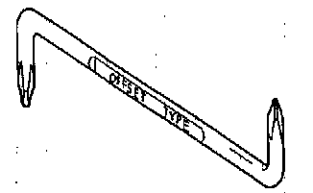


Fig.2

3. Insufficient tightening will cause poor heat dissipation from the power IC and regulator transistor and, in the worst case, may lead their thermal breakdown. (See Fig.2)

OFFSET SCREWDRIVER
 • The PROTO offset screwdriver No.34-1/4 is recommended for use in the application above.



No.	+	L
34 1/4	1 & 2	4 3/4"

• The address of PROTO International Sales is as follows.



International Sales

Japan
 Stanley Works Japan
 2-7-16 Hyakunin-cho
 Shinjuku-ku
 Tokyo 160 Japan
 Fax: 81-3-3360-8456
 Phone: 81-3-3360-8458

Singapore, Indonesia, Philippines, Korea, Hong Kong, Malaysia, China.
 Stanley-Proto Asia Pacific
 12 Gul Drive
 Singapore 2282
 Fax: 65-861-3206
 Phone: 65-862-0883

Mexico
 Herramientas Stanley S.A.
 DE C.V.
 Apartado Postal 675
 72030 Puebla, Pue, Mexico
 Fax: 52-22-494-4880
 Phone: 52-22-495-300

South & Central America, Puerto Rico, The Caribbean
 Stanley Inter-America
 2101 N.W. 84th Ave.
 Miami, Florida 33122
 Fax: 305-594-4261
 Phone: 305-591-3828

Thailand
 Stanley-Proto Thailand Ltd.
 1017 Moo 13 Bangnatrad Highway, Tambol Bankaew Amphur Bangplee
 Samutprakarn, Thailand
 Fax: 66-2-316-6071
 Phone: 66-2-316-8855

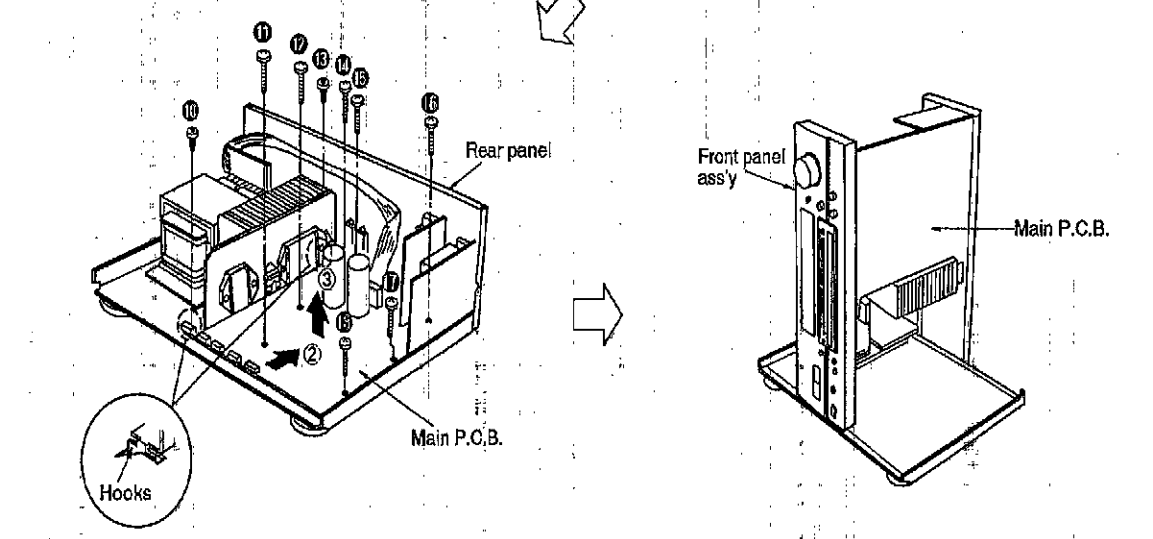
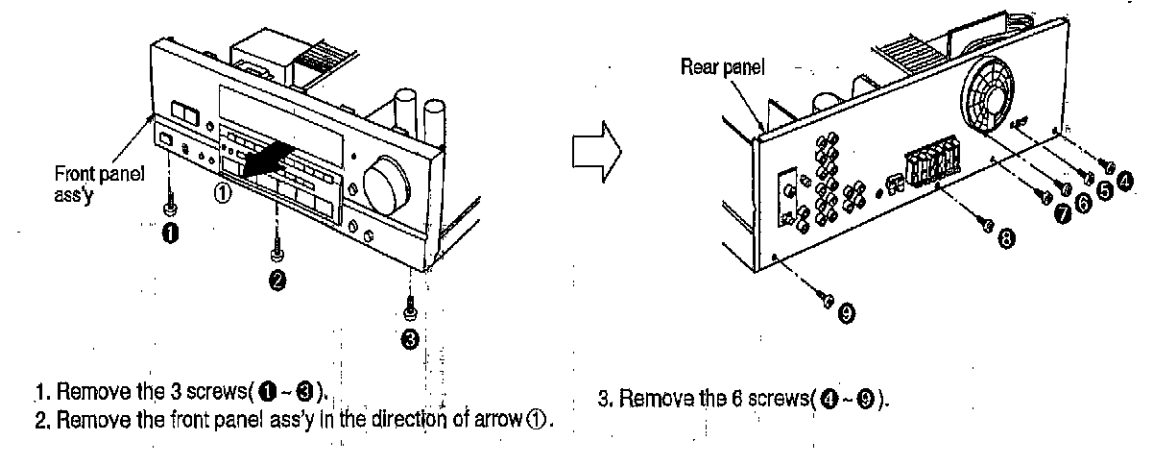
Australia, New Zealand & South Pacific
 Stanley-Proto Industrial Tools
 P.O.Box 10
 400 Whitehorse Road
 Nunawading 3131
 Victoria, Australia
 Fax: 61-3-894-1173
 Phone: 61-3-878-9244

Europe
 Stanley-Proto Europe
 Woodside, Sheffield
 S39PD
 England
 Fax: 44-742-739-038
 Phone: 44-742-768-888

Canada
 Stanley-Proto Canada
 1100 Corporate Drive
 Burlington, Ontario
 Canada, L7L 5R6
 Fax: 416-335-0075
 Phone: 416-335-0075

Middle East, Mediterranean & Africa
 Stanley-MEMA
 Cory House The Ring
 Bracknell Berkshire
 RG 12 1A2
 England
 Fax: 44-344-485-526
 Phone: 44-344-51813

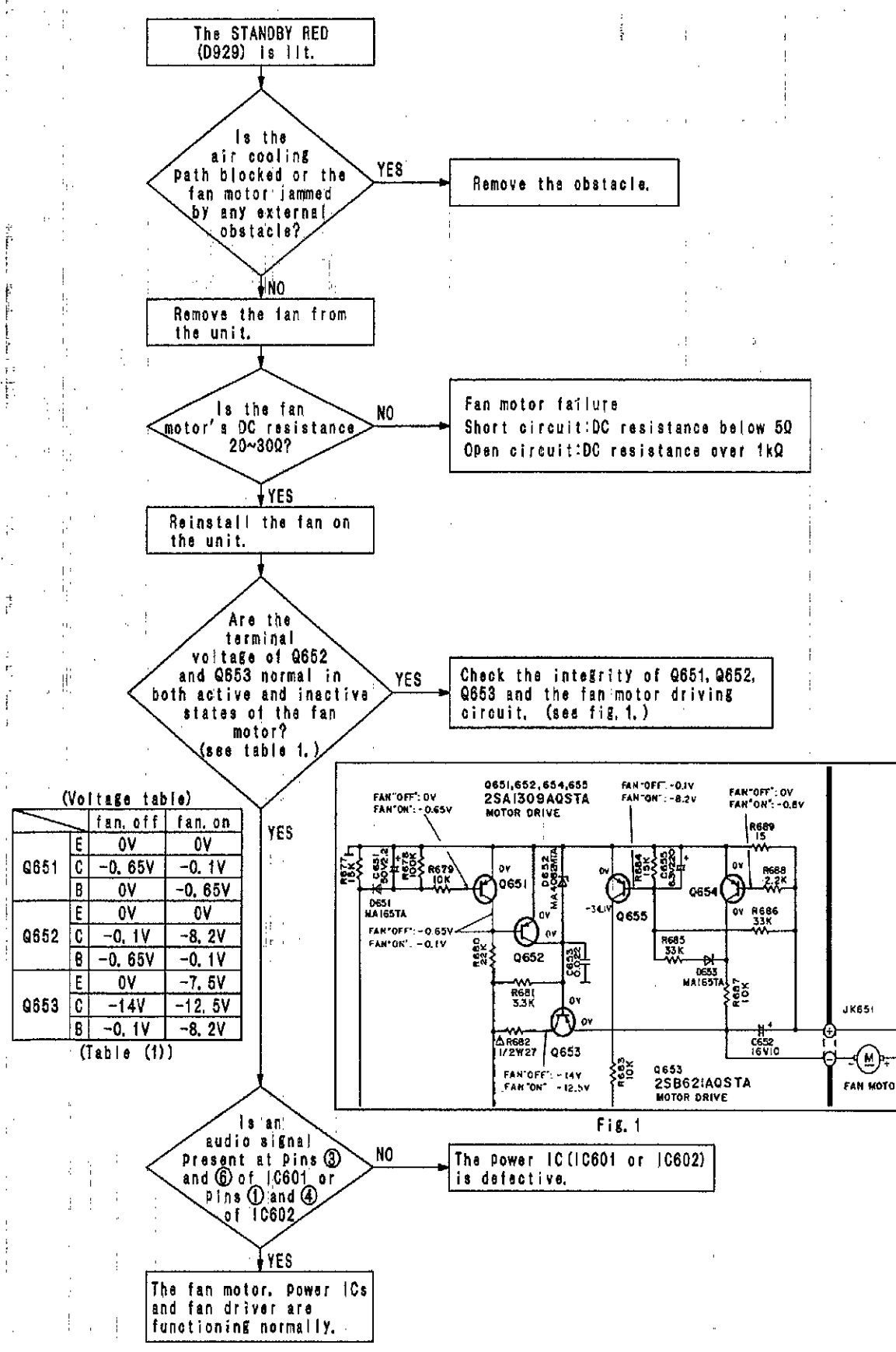
HOW TO CHECK THE MAIN P.C.B.



- Remove the 3 screws (1-3).
- Remove the front panel ass'y in the direction of arrow ①.
- Remove the 6 screws (4-9).
- Remove the 9 screws (10-18).
- Release the 2 hooks by sliding the main P.C.B. in the direction of arrow ②, and then remove the main P.C.B. equipped with rear panel in the direction of arrow ③.
- Reinstall the front panel ass'y to the main P.C.B.
- When checking the soldered surface of the main P.C.B. and replacing the parts, do as shown in above.

FAN MOTOR TROUBLESHOOTING GUIDE

The Models SA-GX350/GX550/GX650 employ fan motor error sensing electronics. If the cooling fan is not operation and its STANDBY light (D929) is on, check the fan motor and its STANDBY light (D929) is on, check the fan motor and its driving circuit.

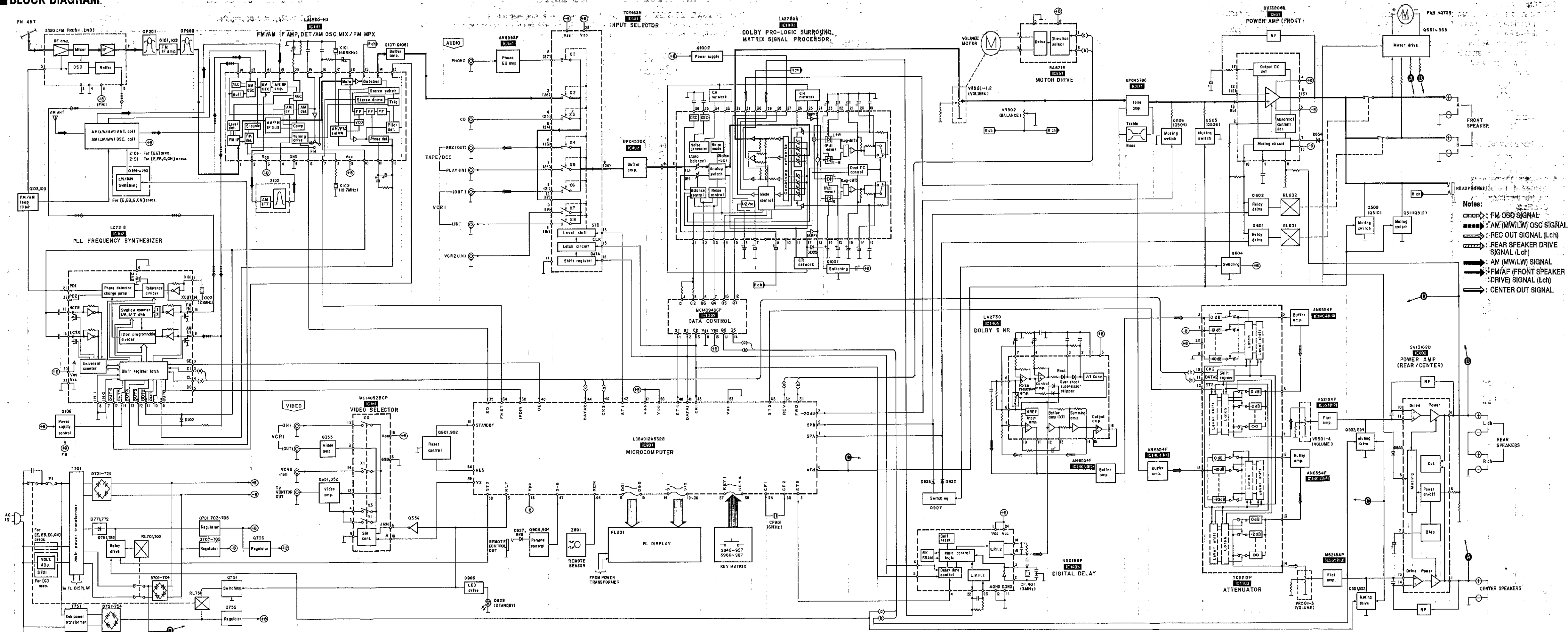


TERMINAL FUNCTION OF IC

• IC901 (LC8A012A5328): Microcomputer

Pin No.	Mark	I/O Division	Function	Pin No.	Mark	I/O Division	Function
1	SPA	O	Speaker select control terminal	41	DATA1	O	Serial data signal
2	SPB	O	Speaker select control terminal	42	ST1	O	Level shift control terminal
3	ST5	O	Level shift control terminal	43	CK1	O	Serial clock signal
4	RFM	-	Not used, open	44	DATA2	O	Serial data signal
5	RLY	O	Relay control terminal	45	ST2	O	Level shift control terminal
6	AFM	O	Muting control terminal	46	CK2	O	Serial clock Serial clock signal
7	-20dB	O	Muting control (-20dB) terminal	47	5-6	O	Remote control terminal
8	DG1	O	Digit signal of FL display	48	ST4	O	Level shift control terminal
15	DG8	O	Digit signal of FL display	49	TEST1	-	Test terminal
16	S13	O	Segment signal of FL display	50	RES	I	Reset detect terminal
17	VDD	I	Power supply terminal	51	XT1	-	Not used, connected to power supply
18	VPP	I	Power supply terminal of FL display	52	XT2	-	Not used, open
19	S12	O	Segment signal of FL display	53	VSS	-	GND terminal
30	S1	O	Segment signal of FL display	54	CF1	I	Crystal oscillator
31	FWD	O	Rotation control terminal of volume motor	55	CF2	O	Terminal (6MHz)
32	REV	O	Rotation control terminal of volume motor	56	VDD	I	Power supply terminal
33	INI	-	Not used, connected to resistor	57	KEY1	I	Key matrix detect terminal
34	FMST	I	Stereo signal detect terminal	60	KEY4	I	
35	SD	I	Received signal detect terminal	61	STANDBY	O	Power detect terminal
36	IFDAIN	O	Serial data signal	62	ENCODE A	-	Not used, connected to power supply
37	LOUD	-	Not used, open	63	ENCODE B	-	
38	ST3	O	Level shift control terminal	64	REM	I	Remote control terminal
39	V2	O	Video selector control terminal				
40	CE	O	Chip enable terminal				

BLOCK DIAGRAM



- Notes:
- FM OSC SIGNAL
 - AM (MW/LW) OSC SIGNAL
 - REC OUT SIGNAL (Lch)
 - REAR SPEAKER DRIVE SIGNAL (Lch)
 - AM (MW/LW) SIGNAL
 - FM/AF (FRONT SPEAKER DRIVE) SIGNAL (Lch)
 - CENTER OUT SIGNAL

PROTECTION CIRCUITRY

The protection circuitry may be 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 outlines below:

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

Note:

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

BEFORE REPAIR AND ADJUSTMENT

Disconnect AC power, Discharge both Power Supply Capacitors C703 and C704 through a 10Ω, 5W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices. After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at 50Hz/60Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230V/240V/110-127V/220-240V.

Power supply voltage	AC 230V		AC 240V		AC 120V (AC 110-127V)		AC 240V (AC 220-240V)	
	50Hz	150~400mA	50Hz	160~420mA	50Hz	300~800mA	50Hz	150~400mA
Consumed current 50/60Hz	60Hz	120~320mA	60Hz	128~336mA	60Hz	240~640mA	60Hz	120~320mA

TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

<p>LC8A012A5328</p>	<p>M50198P</p>	<p>M5218AP 8Pin LA1830-H3 24Pin LC7218 24Pin</p>	<p>AN6554F 14Pin LA2730 16Pin</p>
<p>AN6558-FSG 8Pin UPC4570C 8Pin MC14052BCP 16Pin MC14094BCP 16Pin LA2780N 36Pin</p>	<p>TC9212P 20Pin TC9163N 28Pin</p>	<p>SVI3102D SVI3206D</p>	
<p>BA6218</p>	<p>2SB621AQSTA 2SC2631QRSTA</p>	<p>2SC3940AQSTA</p>	<p>2SA1309AQSTA 2SC2787LTA 2SC2785FETA 2SC3311AQSTA UN411FTA UN4113TA UN4211TA UN4213TA</p>
<p>2SC3327ABTP</p>	<p>2SB1187DEF 2SD1761DEF</p>	<p>P300DLF</p>	<p>LN018304P</p>
<p>MA4030MTA MA4039MTA MA4051MTA MA4056MTA MA4062MTA MA4068MTA MA4075MTA</p>	<p>MA4150MTA MA4220MTA MA4240MTA</p>		


■ SCHEMATIC DIAGRAM (Parts list on pages 54~60.)

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

Note 1:

- S701 : Voltage adjustment switch.
- S946 : Numeric (5) switch.
- S947 : Center level adjust (CENTER LEVEL -) switch.
- S948 : Test signal ON/OFF (TEST) switch.
- S949 : Numeric (4) switch.
- S950 : Numeric (6) switch.
- S951 : Center level adjust (CENTER LEVEL +) switch.
- S952 : Numeric (7) switch.
- S953 : Rear level adjust (REAR LEVEL -) switch.
- S954, 955 : Input select switches.
[S954: CD, S955: TUNER]
- S956 : Center mode select (CENTER MODE) switch.
- S957 : Numeric (9) switch.
- S960 : Rear level adjust (REAR LEVEL +) switch.
- S961 : Numeric (8) switch.
- S962 : Numeric (0) switch.
- S964 : Input select (PHONO) switch.
- S966 : Memory (MEMORY) switch.
- S967 : Muting (MUTING) switch.
- S970 : Tape/DCC monitor (TAPE/DCC MONITOR) switch.
- S971 : Input select (VCR2) switch.
- S972 : Input select (VCR1) switch.
- S973 : Speaker select (B) switch.
- S974 : FM mode select (FM MODE) switch.
- S975 : Band select (BAND) switch.
- S976 : Direct tuning (DIRECT TUNING) switch.
- S977 : Tuning (TUNING -) switch.
- S978 : Power (POWER) switch.
- S980 : Dolby pro logic 3 STEREO ON/OFF (3 STEREO) switch.
- S981 : Speaker select (A) switch.
- S982 : Dolby pro logic surround ON/OFF (SURROUND) switch.
- S983 : Numeric (3) switch.
- S984 : Numeric (2) switch.
- S985 : Numeric (1) switch.
- S987 : Tuning (TUNING +) switch.

Signal line

-  : FM OSC signal
-  : AM (MW/LW) OSC signal
-  : Rec out signal (Lch)
-  : Rear speaker drive signal (Lch)
-  : Positive voltage lines
-  : Negative voltage lines
-  : FM signal
-  : AM (MW/LW) signal
-  : AF signal (Lch)
-  : Center speaker drive signal

Important safety notice

Components identified by Δ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used as occasion calls. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

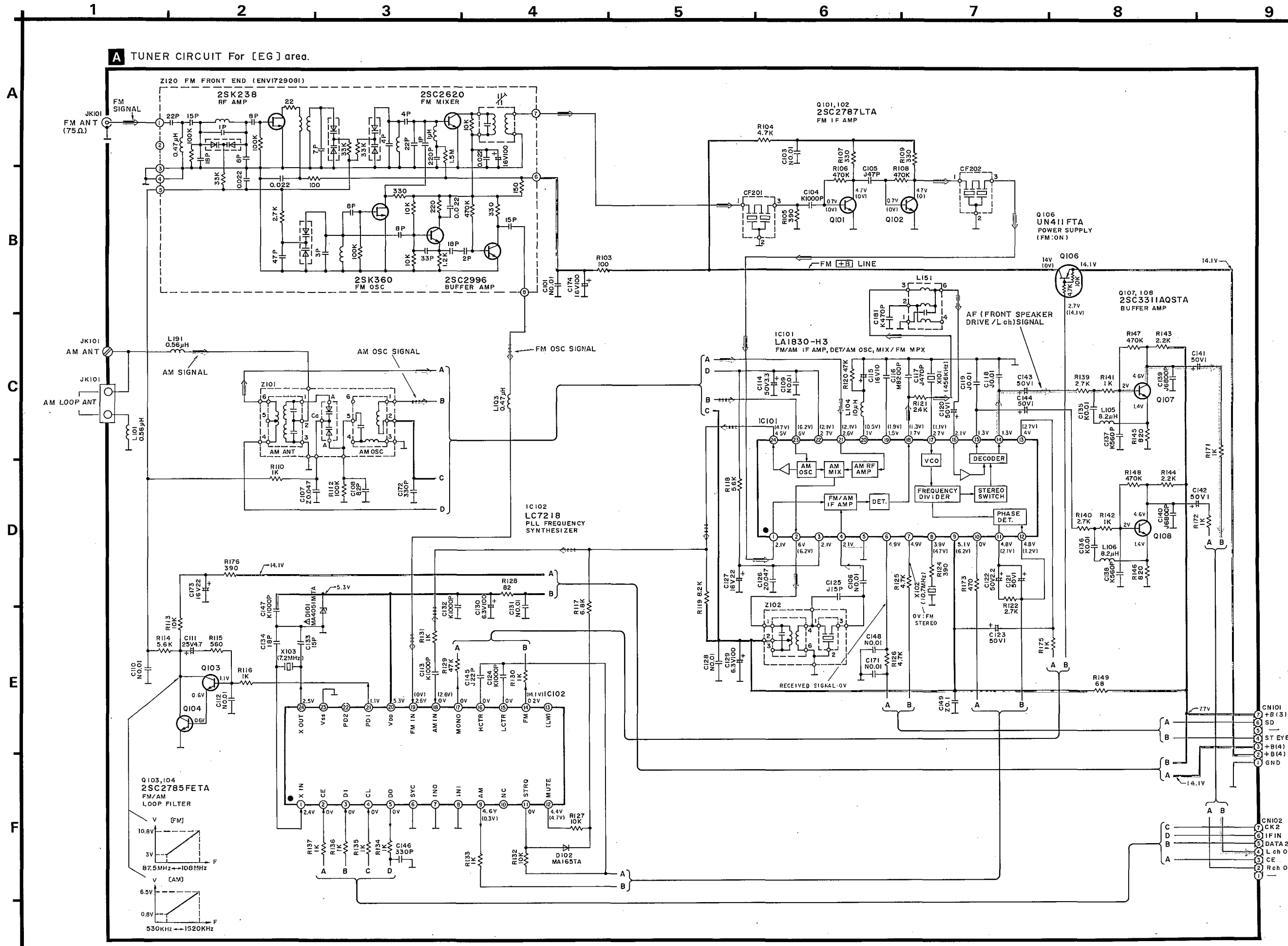
- The supply parts number is described alone in the replacement parts.

Part No.	Original Part No.	Supply Part No.
Z891	RCDHC-278-E	RCDHC-278

- All voltage values shown in circuitry are DC voltage in FM signal (Stereo signal) reception mode.
- * Figures in () Stand for DC-voltage in AM (MW/LW) signal reception mode.
- * Figures in [] Stand for DC-voltage in LW signal reception mode.

Caution!

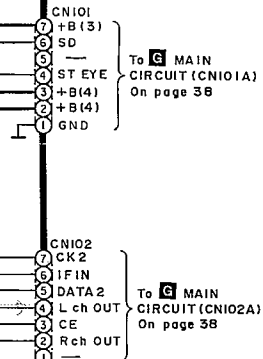
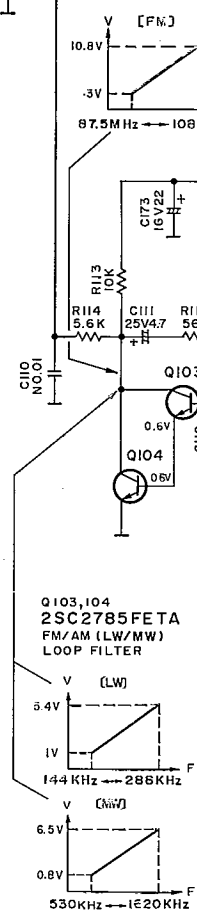
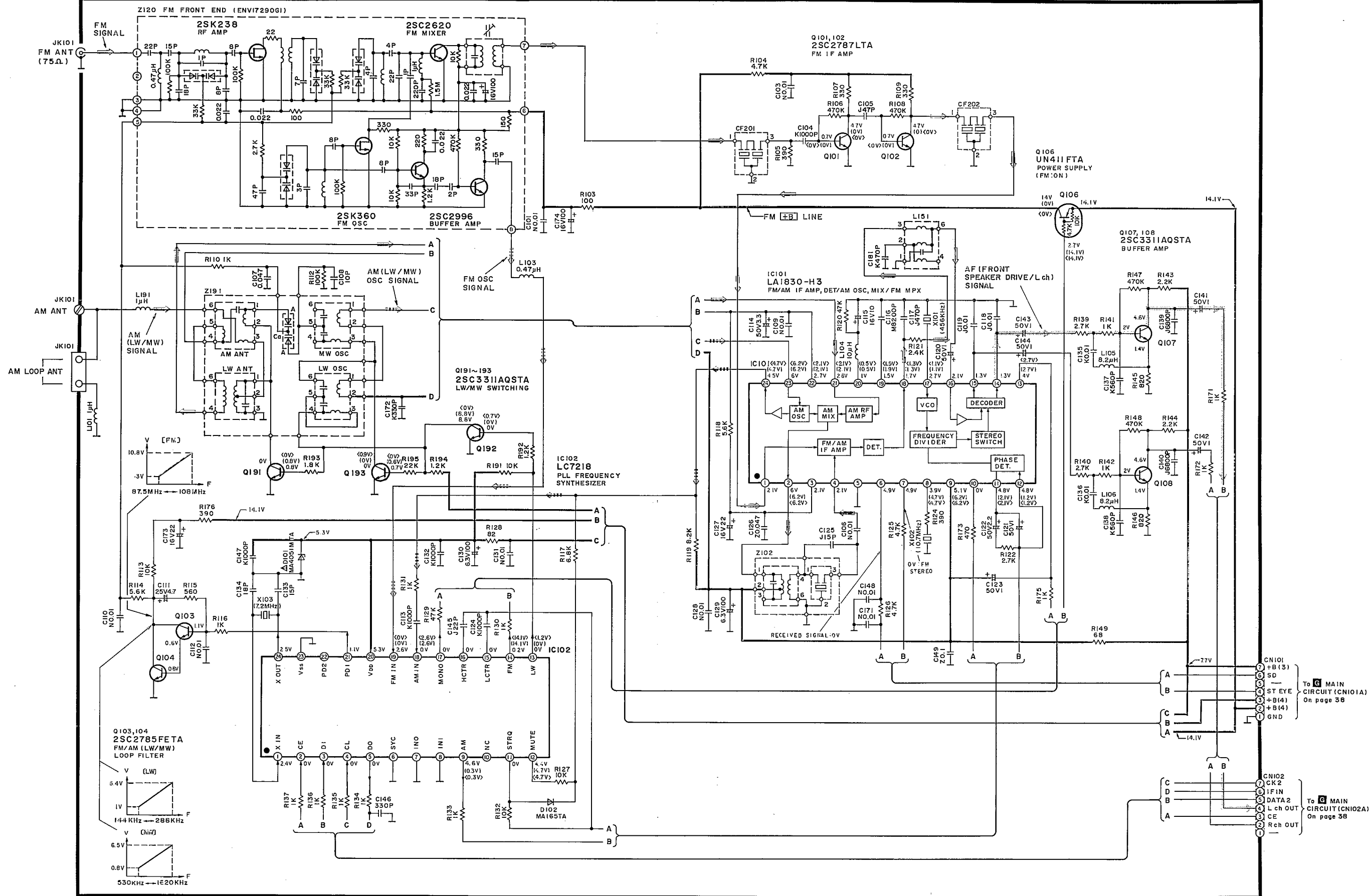
- IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers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

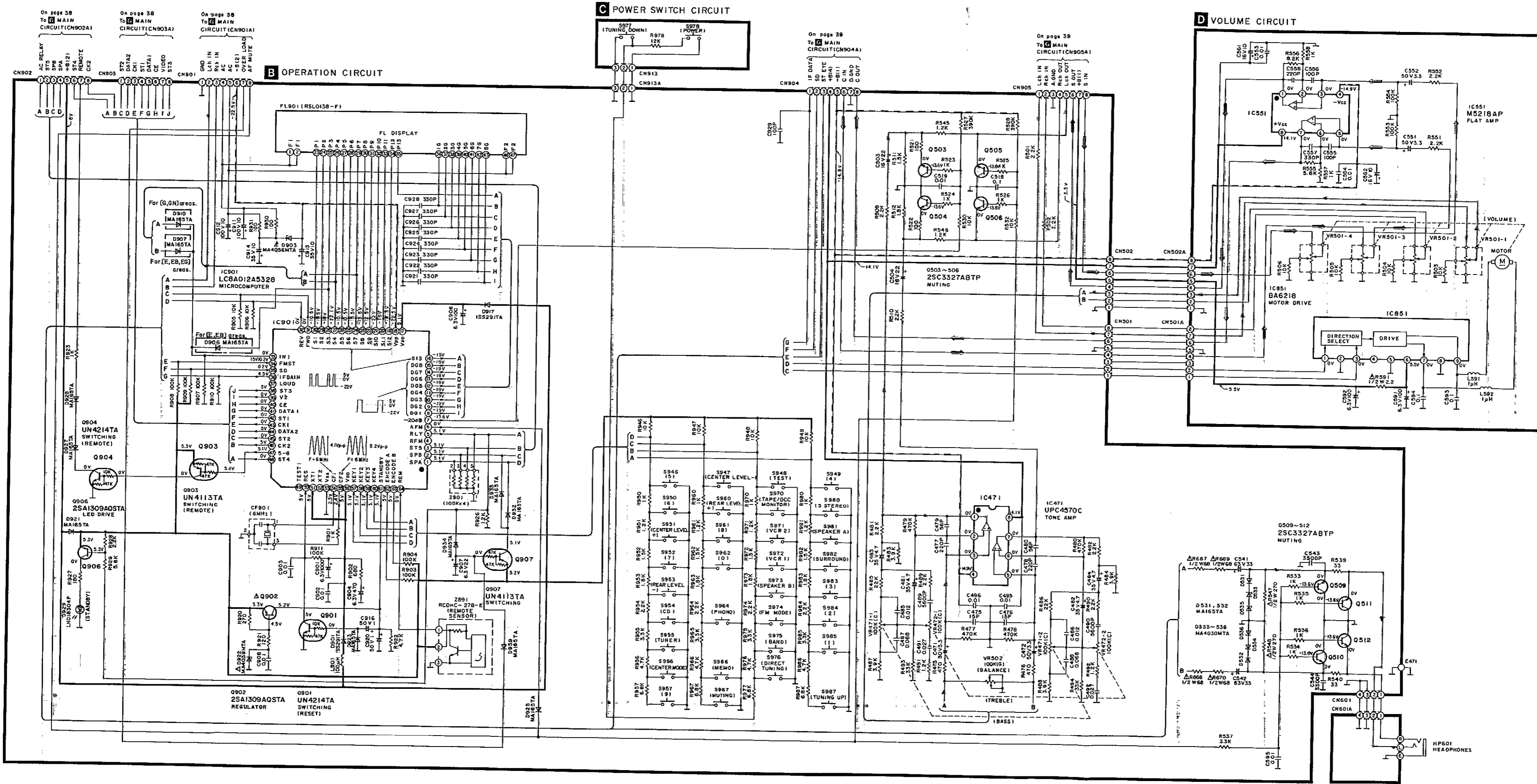


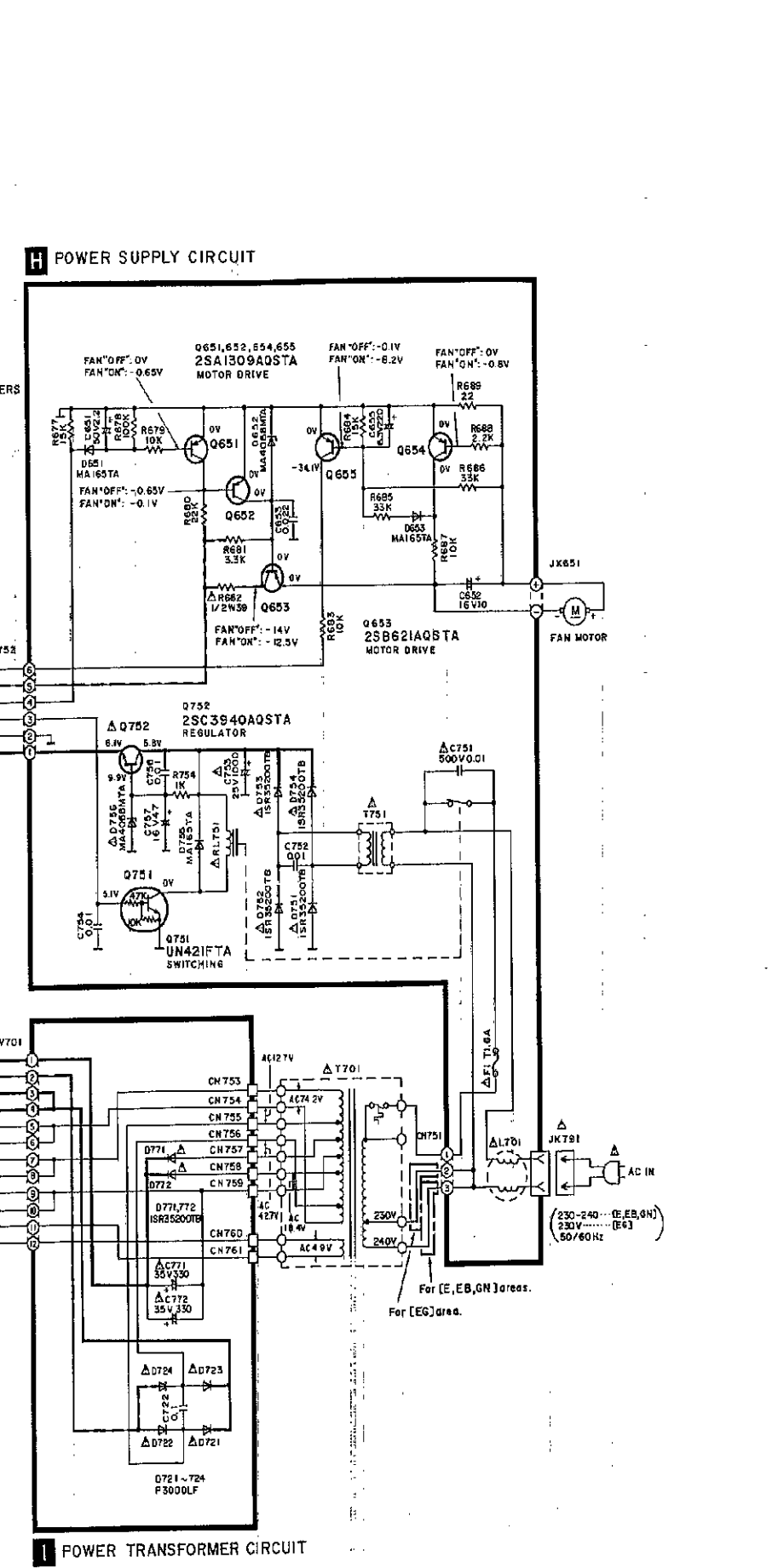
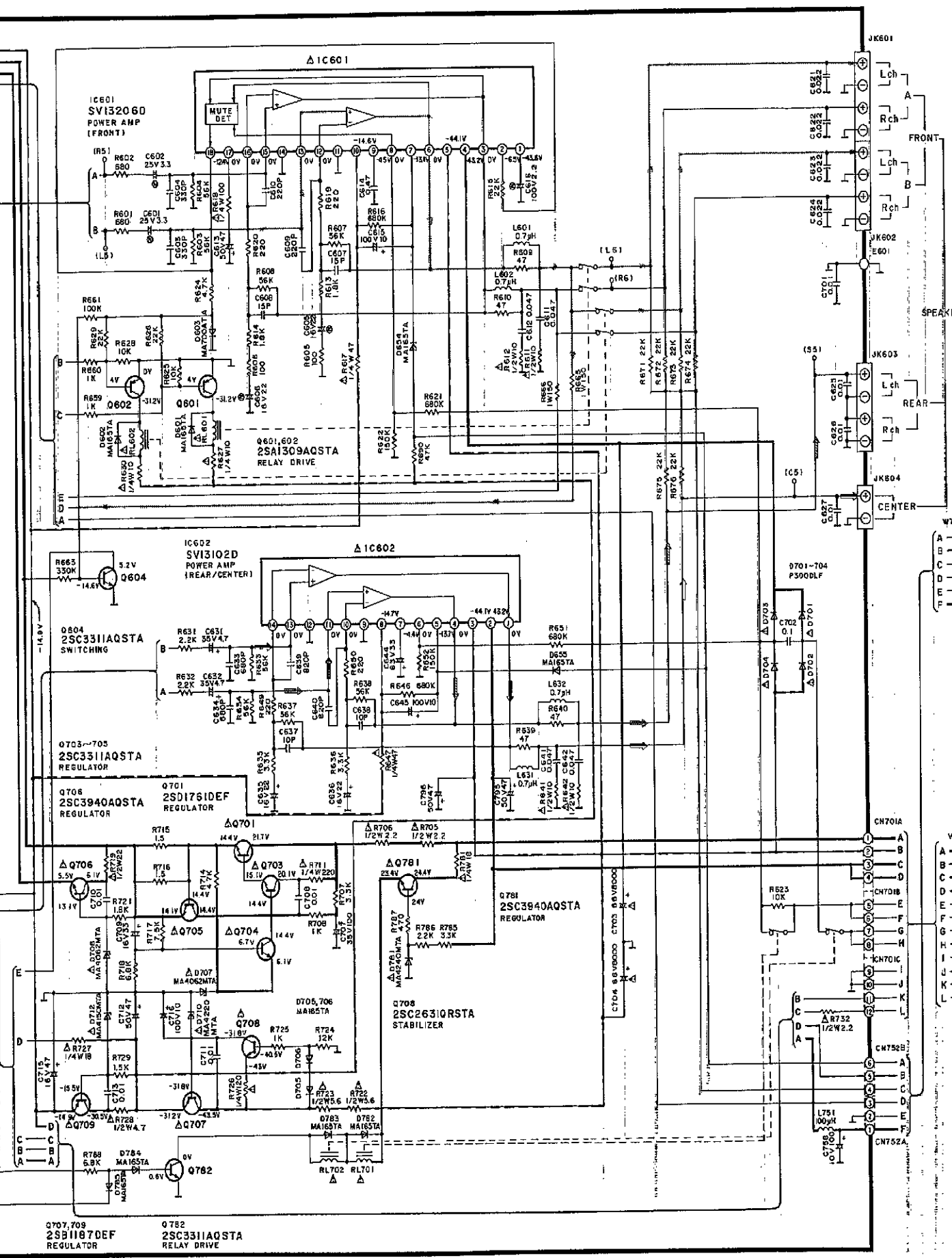
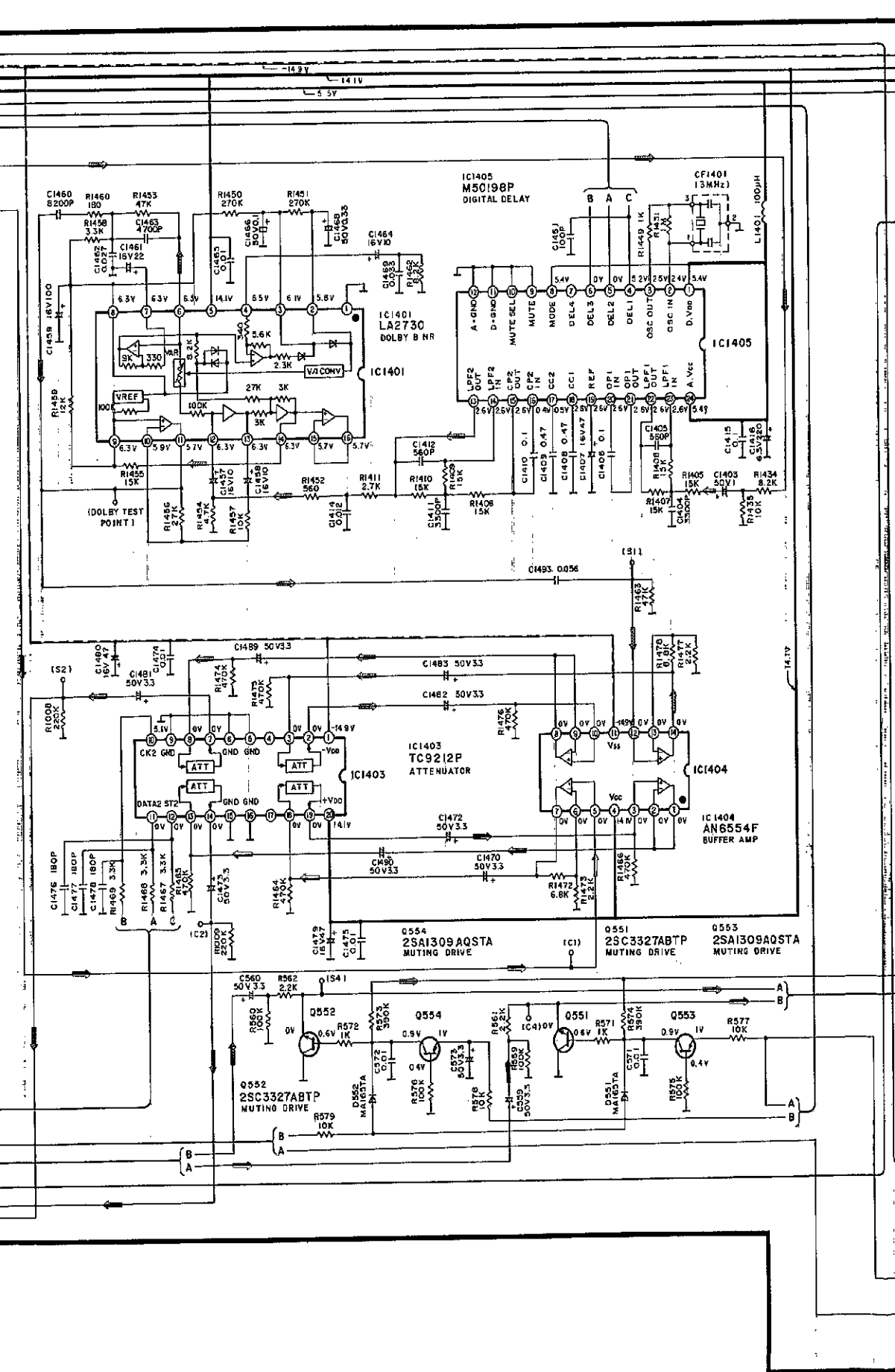
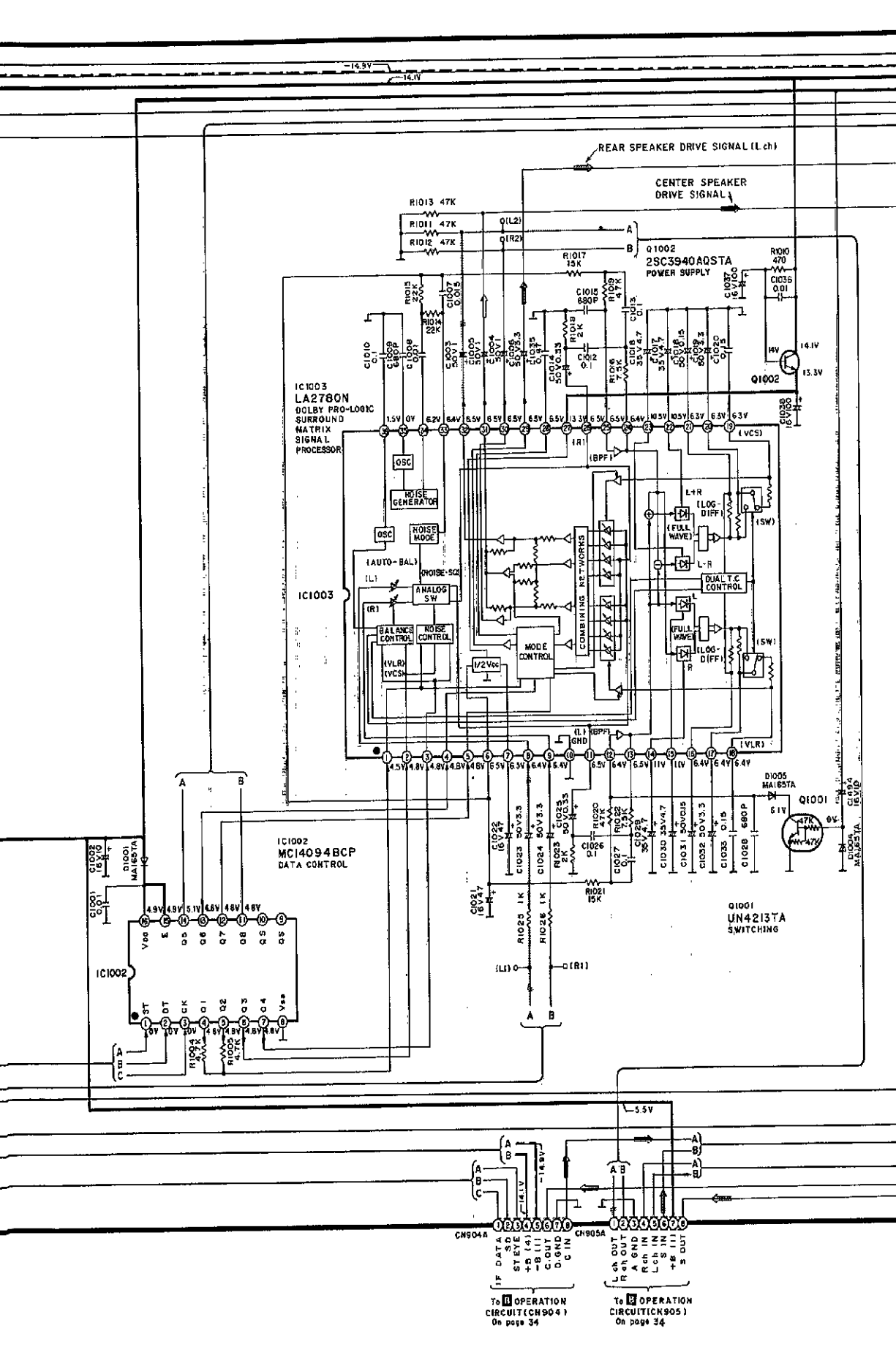
To **3** MAIN CIRCUIT (CN101A) On page 38

To **4** MAIN CIRCUIT (CN102A) On page 38

A TUNER CIRCUIT For [E,EB,G,GN] areas.

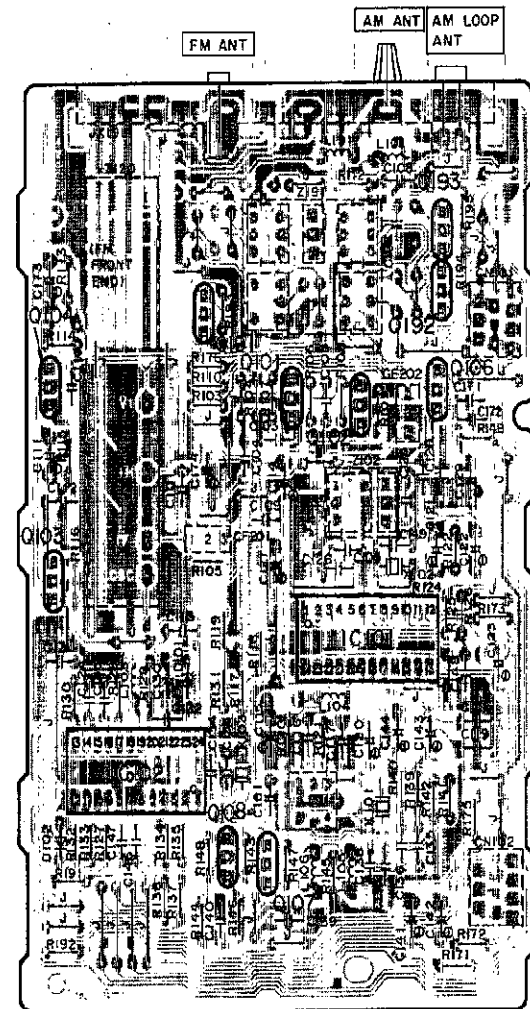




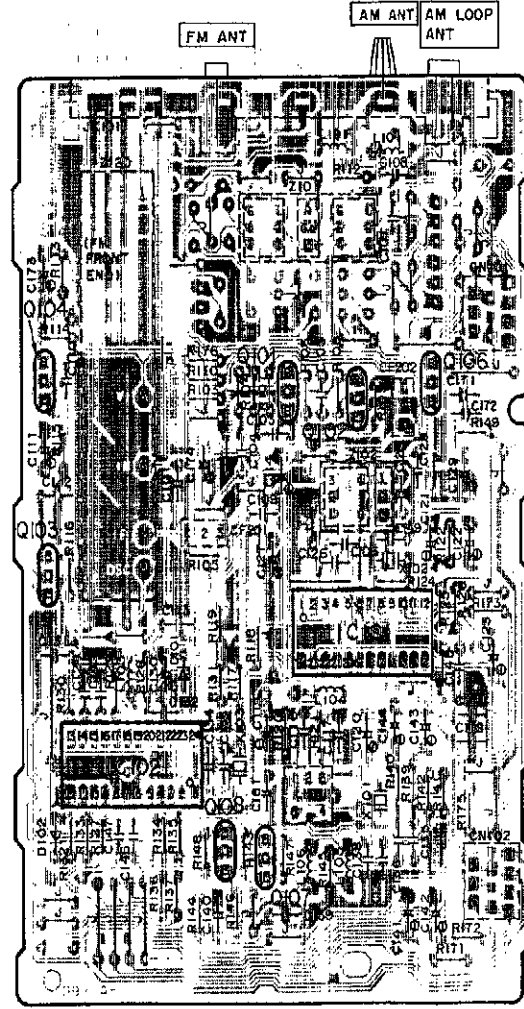


PRINTED CIRCUIT BOARDS

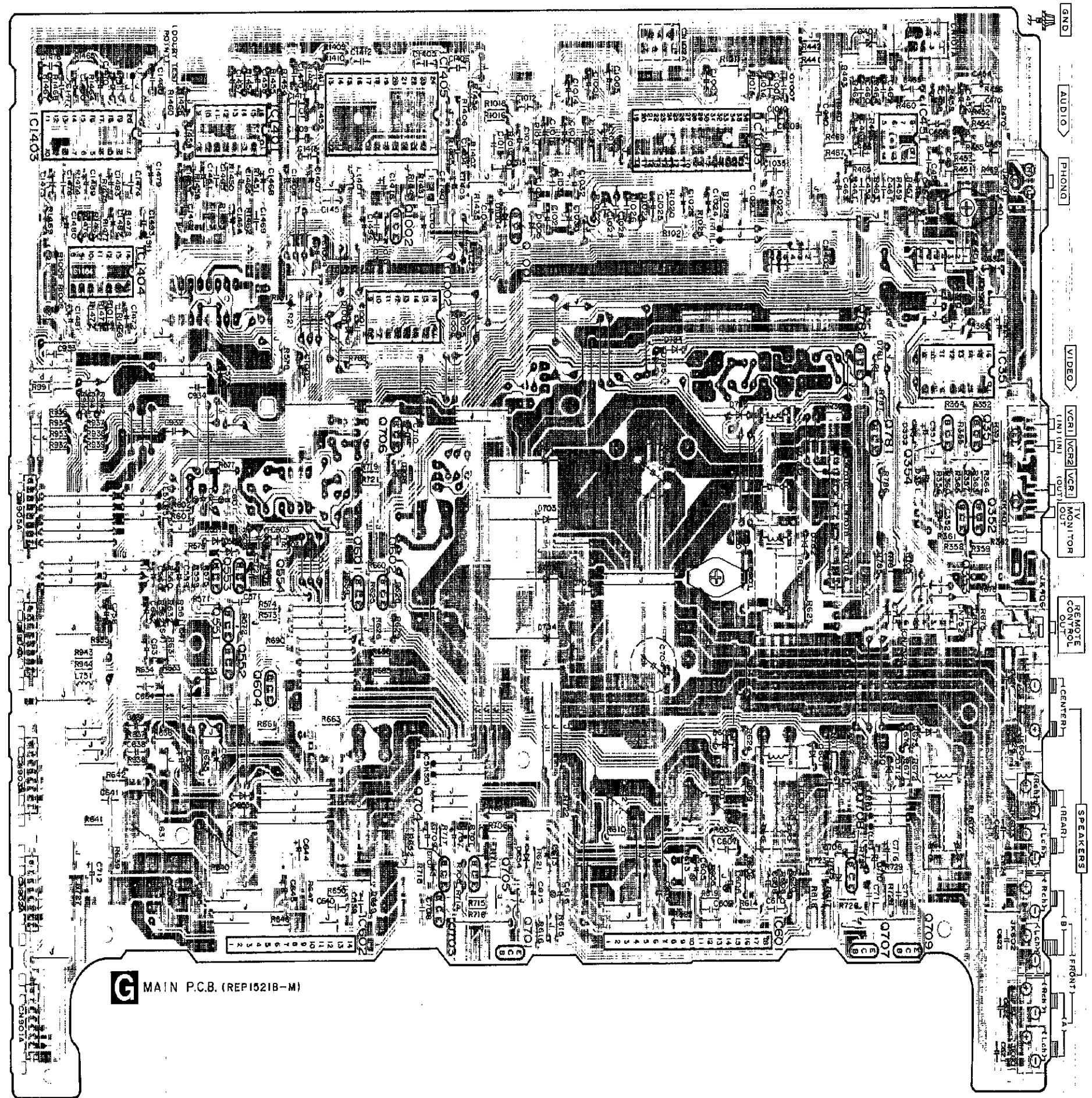
A TUNER P.C.B. For (E,EB,G,GN) areas.
(REP1452H-T)



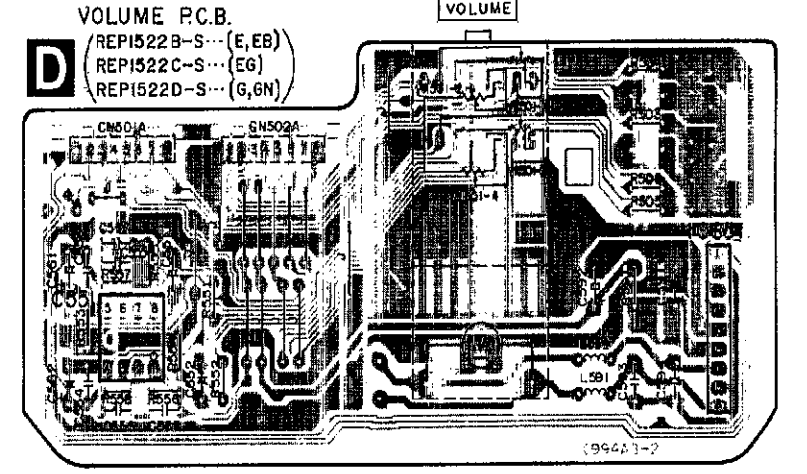
A TUNER P.C.B. For (EG) area.
(REP1452G-T)



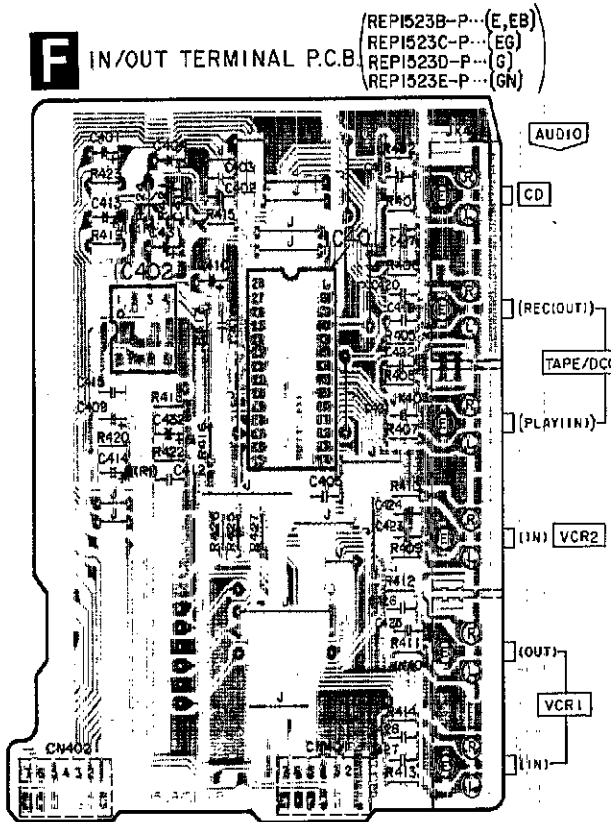
G MAIN P.C.B. (REP1521B-M)



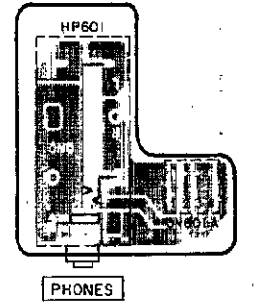
D VOLUME P.C.B.
/REP1522B-S... (E,EB)
/REP1522C-S... (EG)
/REP1522D-S... (G,GN)



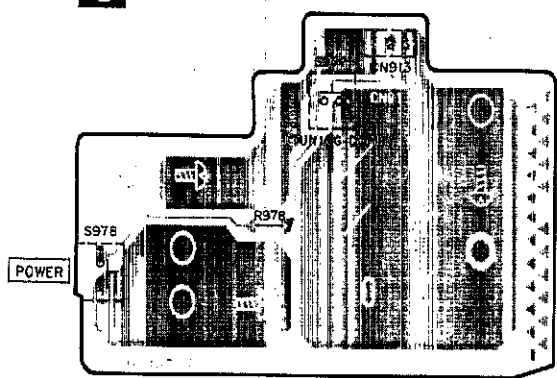
F IN/OUT TERMINAL P.C.B.
/REP1523B-P... (E,EB)
/REP1523C-P... (EG)
/REP1523D-P... (G)
/REP1523E-P... (GN)



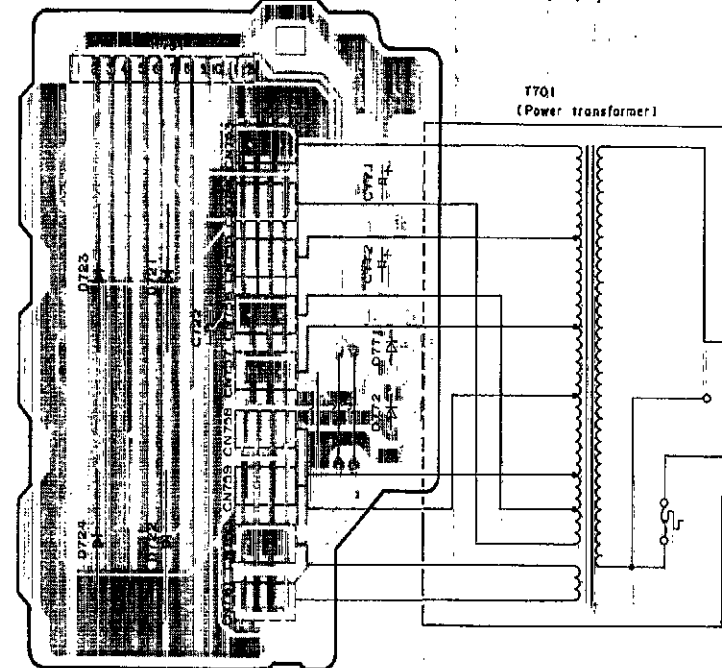
E HEADPHONES JACK P.C.B.
(REP1522B-S... (E,EB)
/REP1522C-S... (EG)
/REP1522D-S... (G,GN)



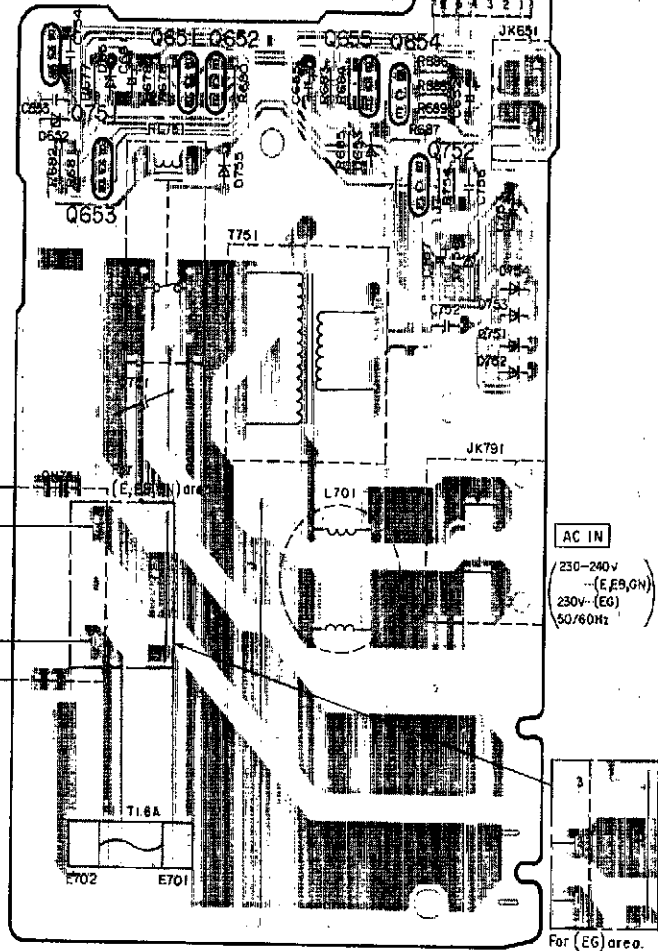
C POWER SWITCH P.C.B. (REP1522B-S... (E,EB)
REP1522C-S... (EG)
REP1522D-S... (G,GN)



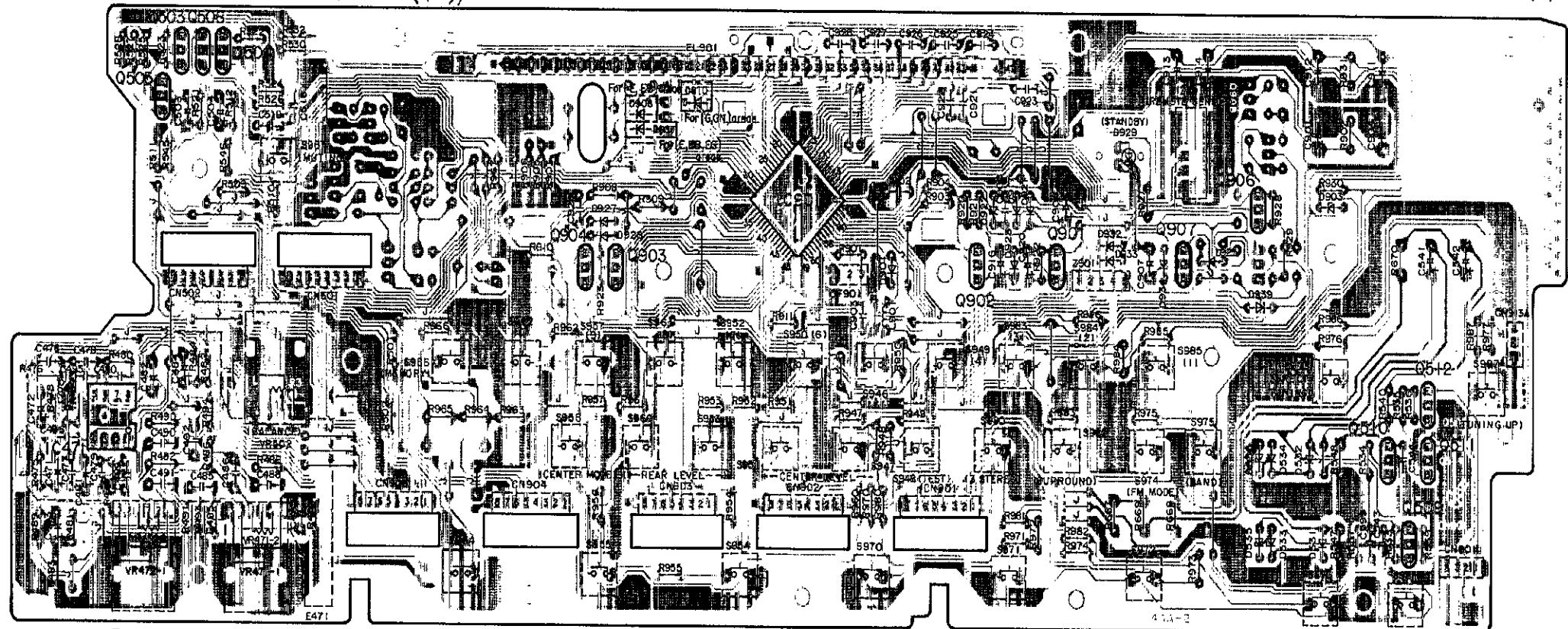
I POWER TRANSFORMER P.C.B. (REP1523B-P... (E,EB)
REP1523C-P... (EG)
REP1523E-P... (GN)



H POWER SUPPLY P.C.B. (REP1523B-P... (E,EB)
REP1523C-P... (EG)
REP1523E-P... (GN)

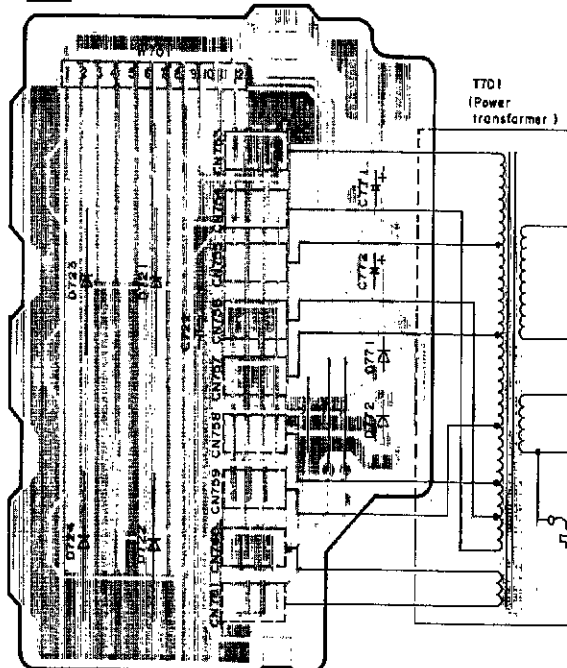


B OPERATION P.C.B. (REP1522B-S... (E,EB)
REP1522C-S... (EG)
REP1522D-S... (G,GN)

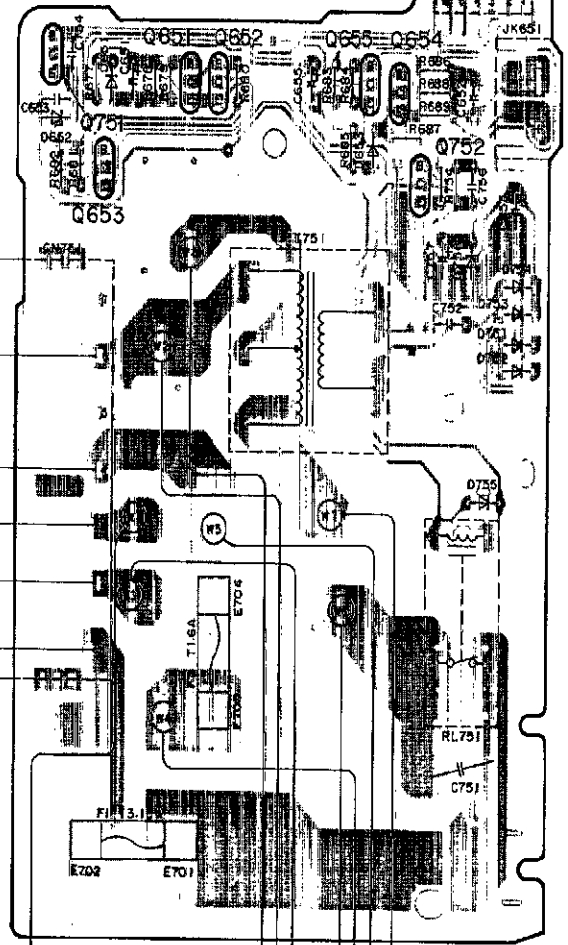


Power Source P.C.B. For (G) area.

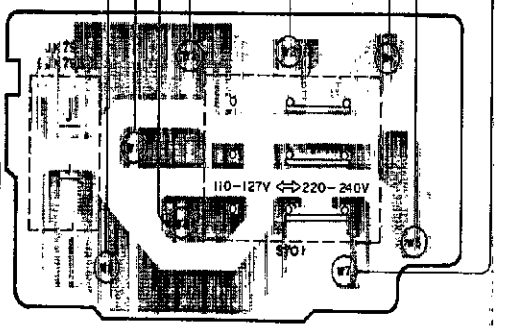
I POWER TRANSFORMER P.C.B. (REP1523D-P)



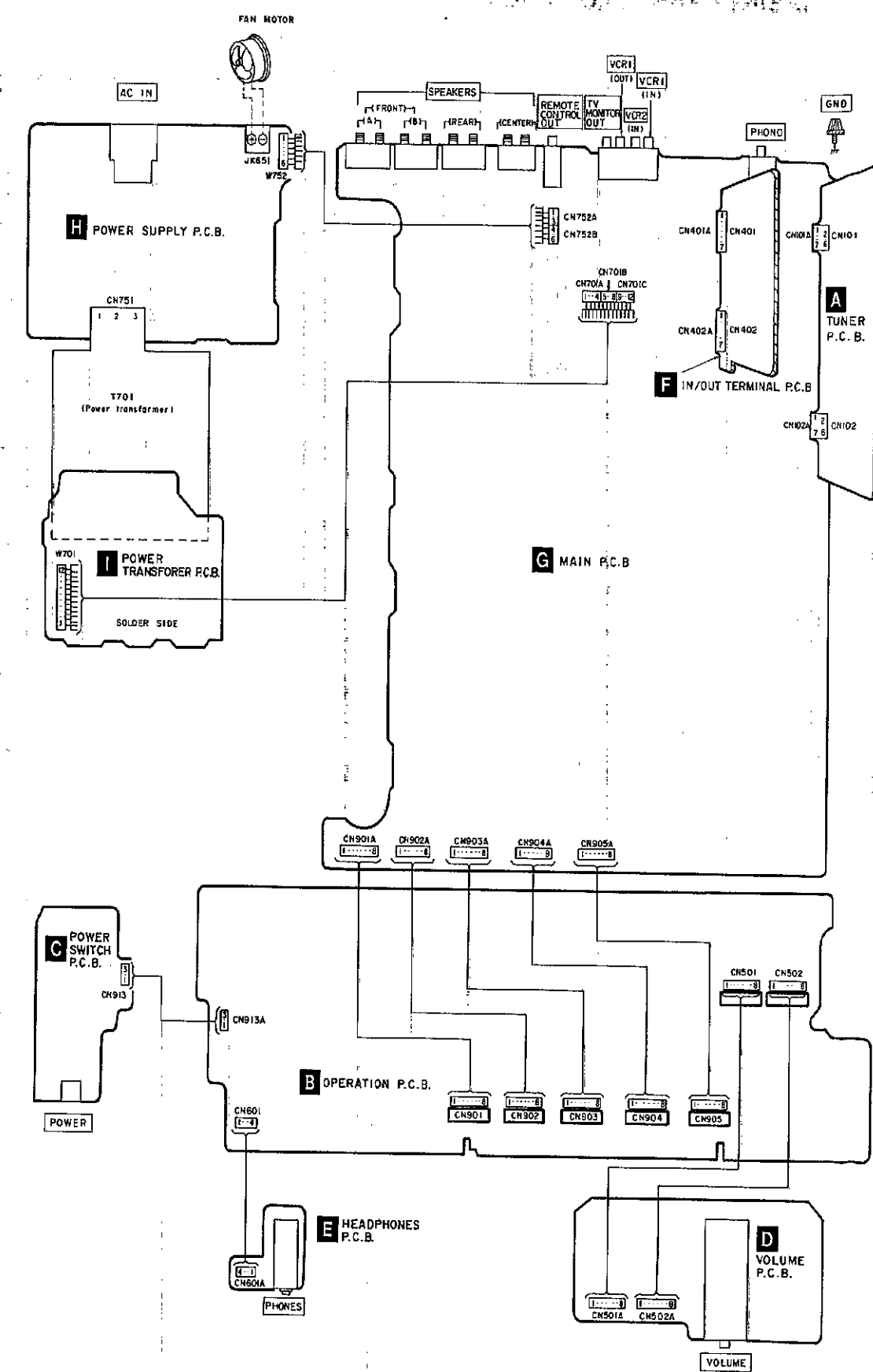
H POWER SUPPLY P.C.B. (REP1523D-P)



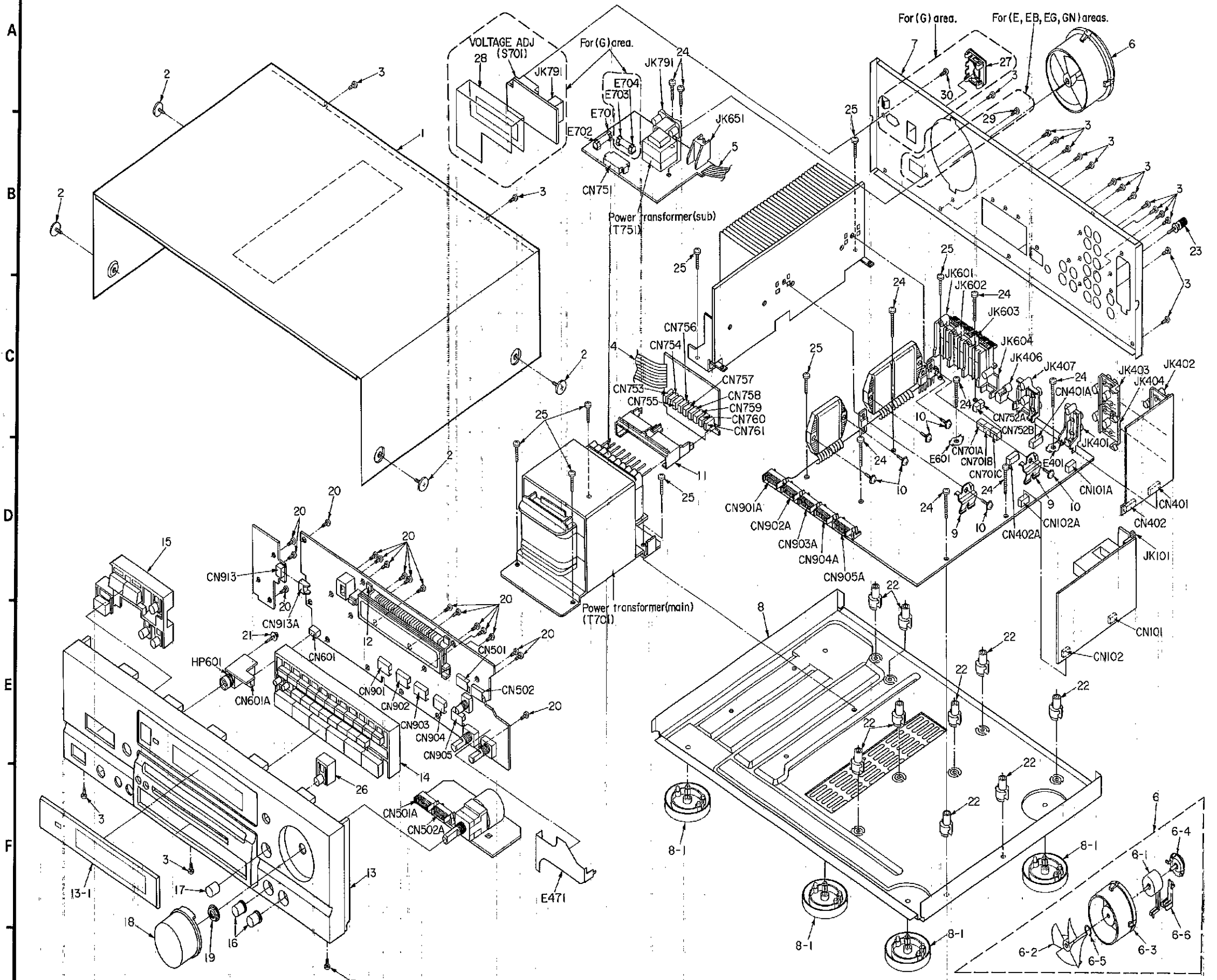
J AC IN P.C.B. (REP1523D-P)



WIRING CONNECTION DIAGRAM



CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

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

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
CABINET AND CHASSIS							
	P1	RP61601	PACKING CASE				(E, EG, G, GN)
	P1	RP61602	PACKING CASE				(EB)
	P2	RPW0324-2	CUSHION				
	P3	RPQ0370	PAD (ACCESSORIES)				(E, EG, G)
	P3	RPQ0164	PAD (ACCESSORIES)				(EB, GN)
	P4	XZB60X65A012	PROTECTION BAG (UNIT)				
	P5	XZB24X34C04	PROTECTION BAG (ACCESSORIES)				
	P6	RPQ0350	PAD				(EB, GN)
	P7	XZB10X30C03	PROTECTION BAG (CORD)				(EB, GN)
1	RWD219A-K	CABINET					
2	SHE2129-3	SCREW					
3	XTB3+8JF21	SCREW					
4	RWJ18124400K	FLAT CABLE (W701) (12P)					
5	RWJ181806300K	FLAT CABLE (W752) (5P)					
6	RWD020-1	FAN UNIT					
6-1	MW-4R84MBC	MOTOR					
6-2	SHE232-1	FAN					
6-3	RWD0209-K	FAN CASE					
6-4	RWD0208-K	FAN CAP					ACCESSORIES
6-5	SUS271	SPRING		A1	RFK3AG350EX	INSTRUCTION MANUAL ASS'Y	(E)
6-6	RWD212-K	FAN TERMINAL CAP		A1	RFK3AG350EB	INSTRUCTION MANUAL ASS'Y	(EB)
7	RWD161B-A	REAR PANEL	(E)	A1	RFK3AG350EG	INSTRUCTION MANUAL ASS'Y	(EG)
7	RWD161B-B	REAR PANEL	(EB, GN)	A1	RFK3AG350G	INSTRUCTION MANUAL ASS'Y	(G)
7	RWD161B-C	REAR PANEL	(EG)	A1	RFK3AG350GN	INSTRUCTION MANUAL ASS'Y	(GN)
7	RWD161C-A	REAR PANEL	(G)	A2	RJAD019-2K	AC POWER SUPPLY CORD	(E, EG, G) Δ (SF)
8	RFK3AG350PK	BOTTOM CHASSIS ASS'Y		A2	WJAD733	AC POWER SUPPLY CORD	(EB) Δ (SF)
8-1	RWD053-A	FOOT		A2	RJAD038-K	AC POWER SUPPLY CORD	(GN) Δ (SF)
9	RWD155	TRANSISTOR HOLDER		A3	RSAD007	FM INDOOR ANTENNA	
10	XTW3+15T	SCREW		A4	SPB1153T	AM LOOP ANTENNA	
11	RWD217-1	P. C. B. HOLDER		A4-1	SMA233-1M	AM ANTENNA HOLDER	
12	RWD205	FL. HOLDER		A4-2	XTW3+10AF2	SCREWS	
13	RFK3AG350E	FRONT PANEL ASS'Y		A5	RWD0169	SERVICE CENTER LIST	
13-1	RWD252A-Q	TRANSPARENT PLATE		A6	RQAD013	WARRANTY CARD	(E, EB, EG)
14	RWD037A-K	SELECTOR BUTTON		A6	RQ44332A	WARRANTY CARD	(GN)
15	RFK3AG350PA	MODE BUTTON ASS'Y		A7	RAK-SAD09KH	REMOTE CONTROL TRANSMITTER	
15	RWD012-K1	BASS/TREBLE KNOB		A7-1	RWD020-K	BATTERY COVER	FOR R/C TRANSMITTER
17	RWD020	BALANCE KNOB		A8	SJF9009	ATTACHMENT PLUG	(EB) Δ
18	RWD163A-K	VOLUME KNOB	(E, EB, EG)	A9	RFED014	ANTENNA PLUG	(G, GN)
18	RWD145-1K	VOLUME KNOB	(G, GN)	A10	RQAD0134	VOLTAGE CAUTION LABEL	(G)
19	RWD0001	NUT		A11	SJPE213-2	POWER PLUG ADAPTOR	(G) Δ
20	XTB3+8J	SCREW		A12	SQX40022	AM STEREO CAUTION LABEL	(GN)
21	XTW3+10T	SCREW					
22	SHE187-2	P. C. B. SUPPORT					
23	SHE2123	GND TERMINAL					
24	XTB3+2JF2	SCREW					
25	XTB3+8JF2	SCREW					
26	RFK3AG350PB	MUTING BUTTON ASS'Y					
27	SJS9231A	AC INLET COVER	(G)				
28	RWD0243	BARRIER	(G)				
29	XTB3+8JF21	SCREW	(E, EB, EG, GN)				
30	XTB3+8JF21	SCREW	(G)				
		PACKING MATERIAL					

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)		Q902	2SA1309A-R	TRANSISTOR	Δ
				Q903	1N4113TA	TRANSISTOR	
				Q904	1N4214TA	TRANSISTOR	
IC101	LA1830-1G3	IC, FM/AM IF AMP./AM OSC		Q906	2SA1309A-R	TRANSISTOR	
IC102	LC7218	IC, PLL FREQ SYNTHESIZER		Q907	1N4113TA	TRANSISTOR	
IC351	MC14052BCP	IC, VIDEO SELECTOR		Q1001	1N4213	TRANSISTOR	
IC401	TC9153N	IC, INPUT SELECTOR		Q1002	2SC3940AQSTA	TRANSISTOR	
IC402	UPC4570C	IC, BUFFER AMP					DIODE(S)
IC451	AN6558-FSG	IC, PHONO EQ AMP					
IC471	UPC4570C	IC, TONE AMP		D101	MA4051MTA	DIODE	Δ
IC551	MS218A-2	IC, FLAT AMP		D102	MA165	DIODE	
IC601	SV13203D	IC, POWER AMP (FRONT)	Δ	D351, 352	MA4050MTA	DIODE	Δ
IC602	SV13102D	IC, POWER AMP (REAR/CENTER)	Δ	D353	MA165	DIODE	
IC851	BA6215	IC, VOLUME MOTOR DRIVE		D401	MA4075MTA	DIODE	Δ
IC901	LC8A012A5328	IC, MICROCOMPUTER		D531, 532	MA165	DIODE	
IC1002	MC14048CP	IC, DATA CONTROL		D533-536	MA4030MTA	DIODE	
IC1003	LA2780N	IC, DOLBY PRO-LOGIC		D551, 552	MA165	DIODE	
IC1401	LA2730	IC, DOLBY B NR		D601, 602	MA165	DIODE	
IC1403	TU9212P	IC, ATTENUATOR		D603	MA700	DIODE	
IC1404	AN6554F	IC, BUFFER AMP		D651	MA165	DIODE	
IC1405	MS0138P	IC, DIGITAL DELAY		D652	MA4068M	DIODE	
		TRANSISTOR(S)		D653-655	MA165	DIODE	
Q101, 102	2SC2787L	TRANSISTOR		D701-704	P300DLF	DIODE	Δ
Q103, 104	2SC2785FE	TRANSISTOR		D705, 706	MA165	DIODE	
Q105	1N4117TA	TRANSISTOR		D707, 708	MA4062MTA	DIODE	Δ
Q107, 108	2SC3311A-Q	TRANSISTOR		D710	MA4220MTA	DIODE	Δ
Q191-193	2SC3311A-Q	TRANSISTOR	(E, EB, G, GN)	D712	MA4150M	DIODE	Δ
Q351	2SA1309A-R	TRANSISTOR		D721-724	P300DLF	DIODE	Δ
Q352, 353	2SC3311A-Q	TRANSISTOR		D751-754	1SR3520TB	DIODE	Δ
Q354	1N4211	TRANSISTOR		D755	MA165	DIODE	
Q503-506	2SC3327-A	TRANSISTOR		D756	MA4068M	DIODE	Δ
Q509-512	2SC3327-A	TRANSISTOR		D771, 772	1SR3520TB	DIODE	Δ
Q551, 552	2SC3327-A	TRANSISTOR		D781	MA4240H	DIODE	Δ
Q553, 554	2SA1309A-R	TRANSISTOR		D782-785	MA165	DIODE	
Q601, 602	2SA1309A-R	TRANSISTOR		D901	1SS291TA	DIODE	
Q604	2SC3311A-Q	TRANSISTOR		D903	MA4050MTA	DIODE	Δ
Q651, 652	2SA1309A-R	TRANSISTOR		D906	MA165	DIODE	(E, EB)
Q653	2SB21AQSTA	TRANSISTOR		D907	MA165	DIODE	(E, EB, EG)
Q654, 655	2SA1309A-R	TRANSISTOR		D910	MA165	DIODE	(G, GN)
Q701	2SD1761DEF	TRANSISTOR	Δ	D917	1SS291TA	DIODE	
Q702-705	2SC3311A-Q	TRANSISTOR	Δ	D921	MA165	DIODE	
Q706	2SC3940AQSTA	TRANSISTOR	Δ	D922	MA4030MTA	DIODE	Δ
Q707	2SB1187DEF	TRANSISTOR	Δ	D923	MA165	DIODE	
Q708	2SC2631QBSTA	TRANSISTOR	Δ	D925	MA165	DIODE	
Q709	2SB1187DEF	TRANSISTOR	Δ	D927, 928	MA165	DIODE	
Q751	1N4217TA	TRANSISTOR	Δ	D929	1N018304P	LED	
Q752	2SC3940AQSTA	TRANSISTOR	Δ	D932-934	MA165	DIODE	
Q781	2SC3940AQSTA	TRANSISTOR	Δ	D939	MA165	DIODE	
Q782	2SC3311A-Q	TRANSISTOR	Δ	D1001	MA165	DIODE	
Q901	1N4214TA	TRANSISTOR		D1004, 1005	MA165	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		VARIABLE RESISTOR(S)		FL901	RSL0138-F	DISPLAY TUBE	
						FUSE (S)	
VR471, 472	EVJYA1FA5C15	V. R. TONE CONTROL					
VR501	RRV24D01A	V. R. VOLUME CONTROL		F1	XBA2C16TB0	FUSE, 250V 1. 6A	(E, EB, EG, GN) △
VR502	EVJ02QF02G15	V. R.-BALANCE CONTROL		F1	XBA2C31TB0	FUSE, 250V 3. 15A	(G) △
		COMPONENT COMBINATION (S)		F2	XBA2C16TB0	FUSE, 250V 1. 6A	(G) △
						SWITCH(ES)	
Z101	RLA2Z002M-T	COMPONENT COMBINATION	(EG)	S701	ESD26840A	SW, VOLTAGE ADJ.	(G) △
Z102	RLI2Z006M-T	COMPONENT COMBINATION		S946	EVQ21405R	SW, PRESET TUNING 5	
Z120	ENV17290G1	COMPONENT COMBINATION		S947	EVQ21405R	SW, CENTER LEVEL-	
Z191	RLA6Z005M-T	COMPONENT COMBINATION	(E, EB, G, GN)	S948	EVQ21405R	SW, TEST	
Z891	RCDC-278	REMOTE SENSOR		S949	EVQ21405R	SW, PRESET TUNING 4	
Z901	EXBF5E104J	COMPONENT COMBINATION		S950	EVQ21405R	SW, PRESET TUNING 6	
		COIL (S)		S951	EVQ21405R	SW, CENTER LEVEL+	
				S952	EVQ21405R	SW, PRESET TUNING 7	
L101	ELESN1R0MA	COIL	(E, EB, G, GN)	S953	EVQ21405R	SW, REAR LEVEL-	
L101	ELESNR56MA	COIL	(EG)	S954	EVQ21405R	SW, CD	
L103	ELEXTR47MA9	COIL		S955	EVQ21405R	SW, TUNER	
L104	ELEXT100KA9	COIL		S956	EVQ21405R	SW, CENTER MODE	
L105, 106	RLQZB822KT-D	COIL		S957	EVQ21405R	SW, PRESET TUNING 9	
L151	SLMB10M-1M	COIL		S960	EVQ21405R	SW, REAR LEVEL+	
L191	ELESN1R0MA	COIL	(E, EB, G, GN)	S961	EVQ21405R	SW, PRESET TUNING 8	
L191	ELESNR56MA	COIL	(EG)	S962	EVQ21405R	SW, PRESET TUNING 0	
L591, 592	RLQZP1R0KT-Y	COIL		S964	EVQ21405R	SW, PHONO	
L601, 602	SLQY07G-40	COIL		S966	EVQ21405R	SW, MEMORY	
L631, 632	SLQY07G-40	COIL		S967	EVQ21405R	SW, MUTING	
L701	SLQZ650MH49	COIL	(E, EB, EG, GN) △	S970	EVQ21405R	SW, TAPE/DCC MONI	
L751	ELEPK101KA	COIL		S971	EVQ21405R	SW, VCR2	
L901	RLQZP101KT-Y	COIL		S972	EVQ21405R	SW, VCRI	
L1401	ELEPK101KA	COIL		S973	EVQ21405R	SW, SPEAKER-B	
		TRANSFORMER (S)		S974	EVQ21405R	SW, FM MODE	
				S975	EVQ21405R	SW, BAND	
T701	RTP1P5E008-W	POWER TRANSFORMER (MAIN)	(E, EB, EG, GN) △	S976	EVQ21405R	SW, DIRECT TUNING	
T701	RTP1P5E009-W	POWER TRANSFORMER (MAIN)	(G) △	S977	EVQ21405R	SW, TUNING DOWN	
T751	RTP115E003-V	POWER TRANSFORMER (SUB)	(E, EB, EG, GN) △	S978	EVQ21405R	SW, POWER	
T751	RTP115E005-V	POWER TRANSFORMER (SUB)	(G) △	S980	EVQ21405R	SW, 3 STEREO	
		FILTER (S)		S981	EVQ21405R	SW, SPEAKER-A	
				S982	EVQ21405R	SW, SURROUND	
CF201	RLFFETNGD01L	FILTER		S983	EVQ21405R	SW, PRESET TUNING 3	
CF202	RLFFETMGD01L	FILTER		S984	EVQ21405R	SW, PRESET TUNING 2	
CF901	EFOEC6004T4	OSCILLATOR (6MHz)		S985	EVQ21405R	SW, PRESET TUNING 1	
CF1401	EF0GC3004T4	OSCILLATOR (3MHz)		S987	EVQ21405R	SW, TUNING UP	
X101	RSXZ456K007M	OSCILLATOR (456KHz)				JACK (S)	
X102	RLFDFTD03M1	OSCILLATOR (10. 7MHz)					
X103	SVQ49U722-S	OSCILLATOR (7. 2MHz)		JK101	RJH4202M	ANT TERMINAL	
		DISPLAY TUBE (S)		JK401	SJF3068N	PHONO TERMINAL	
				JK402	SJF3069N	CD IN/REC OUT TERMINAL	
				JK403	SJF3069N	PLAY IN/VCR2 IN TERMINAL	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
JK404	SJF3069N	VCRI OUT/VCRI IN TERMINAL					
JK406	RJJ33TR01	REMOTE CONTROL OUT TERMINAL		RL601, 602	RSY0013M-0	RELAY	△
JK407	SJF3069-3N	TV MONITOR OUT/VCRI, 2		RL701, 702	RSY0012M-0	RELAY	△
JK601	RJR0054	FRONT SPEAKER(A) TERMINAL		RL751	RSY0012M-0	RELAY	△
JK602	RJR0054	FRONT SPEAKER(B) TERMINAL					
JK603	RJR0054	REAR SPEAKER TERMINAL					
JK604	SJF5201M-1	CENTER SPEAKER TERMINAL					
JK651	RJSLA7402-1	FAN JACK					
JK791	SJS9236	AC INLET	(E, EB, EG) △				
JK791	SJS9231-1B	AC INLET	(G) △				
JK791	SJSD16	AC INLET	(GN) △				
HP601	RJJ63TS01	HEADPHONES JACK					
		CONNECTOR(S) AND SOCKET(S)					
CN101, 102	RJU063W07T	SOCKET (7P)					
CN401, 402	RJU057W007	SOCKET (7P)					
CN501, 502	RJT003K008M1	CONNECTOR (8P)					
CN601	RJT057W004-1	CONNECTOR (4P)					
CN751	SJS305-1	CONNECTOR (3P)	(E, EB, EG, GN)				
CN751	SJS702-1	CONNECTOR (7P)	(G)				
CN753-761	RJS1A1101T1	CONNECTOR (1P)					
CN901-905	RJT003K008M1	CONNECTOR (8P)					
CN913	SJT30345JQ	CONNECTOR (3P)					
CN101A	RJT063W07T	CONNECTOR (7P)					
CN102A	RJT063W07T	CONNECTOR (7P)					
CN401A	RJT057W007-1	CONNECTOR (7P)					
CN402A	RJT057W007-1	CONNECTOR (7P)					
CN501A	RJU003K008M1	SOCKET (8P)					
CN502A	RJU003K008M1	SOCKET (8P)					
CN601A	RJU057W004	SOCKET (4P)					
CN701A	RJS1A1704	SOCKET (4P)					
CN752A	RJS1A1703	CONNECTOR (3P)					
CN901A	RJU003K008M1	SOCKET (8P)					
CN902A	RJU003K008M1	SOCKET (8P)					
CN903A	RJU003K008M1	SOCKET (8P)					
CN904A	RJU003K008M1	SOCKET (8P)					
CN905A	RJU003K008M1	SOCKET (8P)					
CN913A	SJS50382JQH	SOCKET (3P)					
CN701B	RJS1A1704	SOCKET (4P)					
CN752B	RJS1A1703	CONNECTOR (3P)					
CN701C	RJS1A1704	SOCKET (4P)					
		GND PLATE(S)					
E401	SNE1004-1	GND PLATE					
E471	RSC0319	GND PLATE					
E601	SNE1004-1	GND PLATE					
E701, 702	EYF52BC	FUSE HOLDER					
E703, 704	EYF52BC	FUSE HOLDER	(G)				
		RELAY(S)					

RESISTORS AND CAPACITORS

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

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS	R357	ERDS2TJ470	1/4W 47	R545, 546	ERDS2TJ122	1/4W 1.2K
			R358	ERDS2TJ391	1/4W 390	R547, 548	ERDS1FVJ271T	1/2W 270 Δ
			R359, 360	ERDS2TJ470	1/4W 47	R551, 552	ERDS2TJ222	1/4W 2.2K
R103	ERDS2TJ101	1/4W 100	R361	ERDS2TJ391	1/4W 390	R553, 554	ERDS2TJ104	1/4W 100K
R104	ERDS2TJ472	1/4W 4.7K	R362	ERDS2TJ470	1/4W 47	R555	ERDS2TJ562	1/4W 5.6K
R105	ERDS2TJ391	1/4W 390	R363	ERDS2TJ332	1/4W 3.3K	R556	ERDS2TJ822	1/4W 8.2K
R106	ERDS2TJ474	1/4W 470K	R364	ERDS2TJ561	1/4W 560	R557, 558	ERDS2TJ102	1/4W 1K
R107	ERDS2TJ331	1/4W 330	R365	ERDS2TJ332	1/4W 3.3K	R559, 560	ERDS2TJ104	1/4W 100K
R108	ERDS2TJ474	1/4W 470K	R366	ERDS2TJ473	1/4W 47K	R561, 562	ERDS2TJ222	1/4W 2.2K
R109	ERDS2TJ331	1/4W 330	R369, 370	ERDS1FVJ221T	1/2W 220 Δ	R571, 572	ERDS2TJ102	1/4W 1K
R110	ERDS2TJ102	1/4W 1K	R401, 402	ERDS2TJ102	1/4W 1K	R573, 574	ERDS2TJ394	1/4W 390K
R112	ERDS2TJ104	1/4W 100K	R405-416	ERDS2TJ102	1/4W 1K	R575, 576	ERDS2TJ104	1/4W 100K
R113	ERDS2TJ103	1/4W 10K	R417, 418	ERDS2TJ473	1/4W 47K	R577-579	ERDS2TJ103	1/4W 10K
R114	ERDS2TJ562	1/4W 5.6K	R419-422	ERDS2TJ104	1/4W 100K	R591	ERDS1FVJ2R2T	1/2W 2.2 Δ
R115	ERDS2TJ561	1/4W 560	R423, 424	ERDS2TJ102	1/4W 1K	R601, 602	ERDS2TJ681	1/4W 680
R116	ERDS2TJ102	1/4W 1K	R425-427	ERDS2TJ103	1/4W 10K	R603, 604	ERDS2TJ563	1/4W 56K
R117	ERDS2TJ682T	1/4W 6.8K	R440	ERDS1FVJ820T	1/2W 82 Δ	R605, 606	ERDS2TJ101	1/4W 100
R118	ERDS2TJ562	1/4W 5.6K	R441, 442	ERDS2TJ473	1/4W 47K	R607, 608	ERDS2TJ563	1/4W 56K
R119	ERDS2TJ822	1/4W 8.2K	R443	ERDS2TJ330	1/4W 33	R609, 610	ERDS2TJ470	1/4W 47
R120	ERDS2TJ473	1/4W 47K	R451, 452	ERDS2TJ224T	1/4W 220K	R611, 612	ERDS1FVJ100T	1/2W 10 Δ
R121	ERDS2TJ242	1/4W 2.4K	R453, 454	ERDS2TJ391	1/4W 390	R613, 614	ERDS2TJ182	1/4W 1.8K
R122	ERDS2TJ272T	1/4W 2.7K	R455, 456	ERDS2TJ563	1/4W 56K	R615	ERDS2TJ223	1/4W 22K
R124	ERDS2TJ391	1/4W 390	R457, 458	ERDS2TJ271	1/4W 270	R616	ERDS2TJ684	1/4W 680K
R125, 126	ERDS2TJ472	1/4W 4.7K	R459, 460	ERDS2TJ680T	1/4W 68	R617	ERD2FCVG470T	1/4W 47 Δ
R127	ERDS2TJ103	1/4W 10K	R461, 462	ERDS2TJ184T	1/4W 180K	R618	ERD25FJ101	1/4W 100 Δ
R128	ERDS2TJ820	1/4W 82	R463, 464	ERDS2TJ123	1/4W 12K	R619, 620	ERDS2TJ221	1/4W 220
R129	ERDS2TJ473	1/4W 47K	R465, 466	ERDS2TJ563	1/4W 56K	R621	ERDS2TJ684	1/4W 680K
R130, 131	ERDS2TJ102	1/4W 1K	R467-470	ERDS2TJ102	1/4W 1K	R622	ERDS2TJ154	1/4W 150K
R132	ERDS2TJ103	1/4W 10K	R475, 476	ERDS2TJ471	1/4W 470	R623	ERDS2TJ103	1/4W 10K
R133-137	ERDS2TJ102	1/4W 1K	R477-480	ERDS2TJ474	1/4W 470K	R624	ERDS2TJ472	1/4W 4.7K
R139, 140	ERDS2TJ272T	1/4W 2.7K	R481, 482	ERDS2TJ222	1/4W 2.2K	R625	ERDS2TJ103	1/4W 10K
R141, 142	ERDS2TJ102	1/4W 1K	R483, 484	ERDS2TJ392T	1/4W 3.9K	R626	ERDS2TJ223	1/4W 22K
R143, 144	ERDS2TJ222	1/4W 2.2K	R485, 486	ERDS2TJ223	1/4W 22K	R627	ERD25FVJ100T	1/4W 10 Δ
R145, 146	ERDS2TJ821	1/4W 820	R487, 488	ERDS2TJ392T	1/4W 3.9K	R628	ERDS2TJ103	1/4W 10K
R147, 148	ERDS2TJ474	1/4W 470K	R489, 490	ERDS2TJ222	1/4W 2.2K	R629	ERDS2TJ223	1/4W 22K
R149	ERDS2TJ680T	1/4W 68	R491, 492	ERDS2TJ122	1/4W 1.2K	R630	ERD25FVJ100T	1/4W 10 Δ
R171, 172	ERDS2TJ102	1/4W 1K	R493, 494	ERDS2TJ333	1/4W 33K	R631, 632	ERDS2TJ222	1/4W 2.2K
R173	ERDS2TJ471	1/4W 470	R501, 502	ERDS2TJ222	1/4W 2.2K	R633, 634	ERDS2TJ563	1/4W 56K
R175	ERDS2TJ102	1/4W 1K	R503-506	ERDS2TJ103	1/4W 10K	R635, 636	ERDS2TJ332	1/4W 3.3K
R176	ERDS2TJ391	1/4W 390	R509, 510	ERDS2TJ222	1/4W 2.2K	R637, 638	ERDS2TJ563	1/4W 56K
R191	ERDS2TJ103	1/4W 10K E, EB, G, GN	R511, 512	ERDS2TJ152	1/4W 1.5K	R639, 640	ERDS2TJ470	1/4W 47
R192	ERDS2TJ122	1/4W 1.2K E, EB, G, GN	R521, 522	ERDS2TJ101	1/4W 100	R641, 642	ERDS1FVJ100T	1/2W 10 Δ
R193	ERDS2TJ182	1/4W 1.8K E, EB, G, GN	R523-526	ERDS2TJ102	1/4W 1K	R646	ERDS2TJ684	1/4W 680K
R194	ERDS2TJ122	1/4W 1.2K E, EB, G, GN	R527, 528	ERDS2TJ394	1/4W 390K	R647	ERD25FJ470	1/4W 47 Δ
R195	ERDS2TJ223	1/4W 22K E, EB, G, GN	R530	ERDS2TJ103	1/4W 10K	R649, 650	ERDS2TJ221	1/4W 220
R351, 352	ERDS2TJ471	1/4W 470	R532	ERDS2TJ103	1/4W 10K	R651	ERDS2TJ684	1/4W 680K
R354	ERDS2TJ472	1/4W 4.7K	R533-536	ERDS2TJ102	1/4W 1K	R652	ERDS2TJ154	1/4W 150K
R355	ERDS2TJ470	1/4W 47	R537	ERDS2TJ332	1/4W 3.3K	R659, 660	ERDS2TJ102	1/4W 1K
R356	ERDS2TJ102	1/4W 1K	R539, 540	ERDS2TJ330	1/4W 33	R661	ERDS2TJ104	1/4W 100K

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R663	ERDS2TJ334	1/4W 330K	R928	ERDS2TJ222	1/4W 2. 2K	R1023	ERDS2TJ202T	1/4W 2K
R665, 666	ERG1SJ151E	1W 150	R929	ERDS2TJ562	1/4W 5. 6K	R1025, 1026	ERDS2TJ102	1/4W 1K
R667-670	ERDS1FVJ680T	1/2W 68 Δ	R930, 931	ERDS2TJ101	1/4W 100	R1405-1410	ERDS2TJ153	1/4W 15K
R671-676	ERDS2TJ223	1/4W 22K	R932-934	ERDS2TJ102	1/4W 1K	R1411	ERDS2TJ272T	1/4W 2. 7K
R677	ERDS2TJ153	1/4W 15K	R935	ERDS2TJ473	1/4W 47K	R1431	ERDS2TJ105T	1/4W 1M
R678	ERDS2TJ104	1/4W 100K	R936-944	ERDS2TJ102	1/4W 1K	R1434	ERDS2TJ822	1/4W 8. 2K
R679	ERDS2TJ103	1/4W 10K	R946-949	ERDS2TJ103	1/4W 10K	R1435	ERDS2TJ103	1/4W 10K
R680	ERDS2TJ223	1/4W 22K	R950	ERDS2TJ102	1/4W 1K	R1449	ERDS2TJ102	1/4W 1K
R681	ERDS2TJ332	1/4W 3. 3K	R951	ERDS2TJ122	1/4W 1. 2K	R1450, 1451	ERDS2TJ274	1/4W 270K
R682	ERDS1FVJ390T	1/2W 39 Δ	R952	ERDS2TJ152	1/4W 1. 5K	R1452	ERDS2TJ561	1/4W 560
R683	ERDS2TJ103	1/4W 10K	R953	ERDS2TJ182	1/4W 1. 8K	R1453	ERDS2TJ473	1/4W 47K
R684	ERDS2TJ153	1/4W 15K	R954	ERDS2TJ222	1/4W 2. 2K	R1454	ERDS2TJ472	1/4W 4. 7K
R685, 686	ERDS2TJ333	1/4W 33K	R955	ERDS2TJ332	1/4W 3. 3K	R1455	ERDS2TJ153	1/4W 15K
R687	ERDS2TJ103	1/4W 10K	R956	ERDS2TJ472	1/4W 4. 7K	R1456	ERDS2TJ273	1/4W 27K
R688	ERDS2TJ222	1/4W 2. 2K	R957	ERDS2TJ682T	1/4W 6. 8K	R1457	ERDS2TJ103	1/4W 10K
R689	ERDS2TJ220T	1/4W 22	R960	ERDS2TJ102	1/4W 1K	R1458	ERDS2TJ332	1/4W 3. 3K
R690	ERDS2TJ473	1/4W 47K	R961	ERDS2TJ122	1/4W 1. 2K	R1459	ERDS2TJ123	1/4W 12K
R705, 706	ERDS1FVJ2R2T	1/2W 2. 2 Δ	R962	ERDS2TJ152	1/4W 1. 5K	R1460	ERDS2TJ181T	1/4W 180
R707	ERDS2TJ332	1/4W 3. 3K	R963	ERDS2TJ182	1/4W 1. 8K	R1462	ERDS2TJ822	1/4W 8. 2K
R708	ERDS2TJ102	1/4W 1K	R964	ERDS2TJ222	1/4W 2. 2K	R1463	ERDS2TJ473	1/4W 47K
R711	ERD25FVJ221T	1/4W 220 Δ	R965	ERDS2TJ332	1/4W 3. 3K	R1464-1466	ERDS2TJ474	1/4W 470K
R714	ERDS2TJ472	1/4W 4. 7K	R966	ERDS2TJ472	1/4W 4. 7K	R1467-1469	ERDS2TJ332	1/4W 3. 3K
R715, 716	ERDS2TJ1R5T	1/4W 1. 5	R967	ERDS2TJ682T	1/4W 6. 8K	R1472	ERDS2TJ682T	1/4W 6. 8K
R717	ERDS2TJ752T	1/4W 7. 5K	R970	ERDS2TJ102	1/4W 1K	R1473	ERDS2TJ222	1/4W 2. 2K
R718	ERDS2TJ682T	1/4W 6. 8K	R971	ERDS2TJ122	1/4W 1. 2K	R1474-1476	ERDS2TJ474	1/4W 470K
R719	ERDS1FVJ220T	1/2W 22 Δ	R972	ERDS2TJ152	1/4W 1. 5K	R1477	ERDS2TJ222	1/4W 2. 2K
R721	ERDS2TJ182	1/4W 1. 8K	R973	ERDS2TJ182	1/4W 1. 8K	R1478	ERDS2TJ682T	1/4W 6. 8K
R722, 723	ERDS1FVJ5R6T	1/2W 5. 6 Δ	R974	ERDS2TJ222	1/4W 2. 2K			
R724	ERDS2TJ123	1/4W 12K	R975	ERDS2TJ332	1/4W 3. 3K			CAPACITORS
R725	ERDS2TJ102	1/4W 1K	R976	ERDS2TJ472	1/4W 4. 7K			
R726	ERD25FVJ121T	1/4W 120 Δ	R977	ERDS2TJ682T	1/4W 6. 8K	C101	ECBT1C103NS5	16V 0. 01U
R727	ERD25FVJ180T	1/4W 18 Δ	R978	ERDS2TJ123	1/4W 12K	C103	ECBT1C103NS5	16V 0. 01U
R728	ERDS1FVJ4R7T	1/2W 4. 7 Δ	R980	ERDS2TJ102	1/4W 1K	C104	ECBT1H102KB5	50V 1000P
R729	ERDS2TJ152	1/4W 1. 5K	R981	ERDS2TJ122	1/4W 1. 2K	C105	ECBT1H470JC5	50V 47P
R732	ERDS1FVJ2R2T	1/2W 2. 2 Δ	R982	ERDS2TJ152	1/4W 1. 5K	C106	ECBT1C103NS5	16V 0. 01U
R754	ERDS2TJ102	1/4W 1K	R983	ERDS2TJ182	1/4W 1. 8K	C107	ECBT1H473ZF5	50V 0. 047U
R781	ERD25FVJ180T	1/4W 18 Δ	R984	ERDS2TJ222	1/4W 2. 2K	C108	ECBT1H100JC5	50V 10P E, EB, G, GN
R785	ERDS2TJ332	1/4W 3. 3K	R985	ERDS2TJ332	1/4W 3. 3K	C108	ECBT1H8R2KC5	50V 8. 2P EG
R786	ERDS2TJ222	1/4W 2. 2K	R986	ERDS2TJ472	1/4W 4. 7K	C109, 110	ECBT1C103NS5	16V 0. 01U
R787	ERDS2TJ471	1/4W 470	R987	ERDS2TJ682T	1/4W 6. 8K	C111	ECEA1EKA4R7B	25V 4. 7U
R788	ERDS2TJ682T	1/4W 6. 8K	R991	ERDS2TJ103	1/4W 10K	C112	ECBT1C103NS5	16V 0. 01U
R901	ERDS2TJ102	1/4W 1K	R1004, 1005	ERDS2TJ472	1/4W 4. 7K	C113	ECBT1H102KB5	50V 1000P
R902	ERDS2TJ681	1/4W 680	R1008, 1009	ERDS2TJ224T	1/4W 220K	C114	ECEA1HKA3R3B	50V 3. 3U
R903, 904	ERDS2TJ104	1/4W 100K	R1010	ERDS2TJ471	1/4W 470	C115	ECEA1CKA100B	16V 10U
R905, 906	ERDS2TJ103	1/4W 10K	R1011-1013	ERDS2TJ473	1/4W 47K	C116	ECBT1C822MS5	16V 8200P
R907-911	ERDS2TJ104	1/4W 100K	R1014, 1015	ERDS2TJ223	1/4W 22K	C117	ECQP2A471J2T	100V 470P
R920	ERDS2TJ271	1/4W 270	R1016	ERDS2TJ752T	1/4W 7. 5K	C118, 119	ECQB1H103JF3	50V 0. 01U
R921	ERDS2EJ121	1/4W 120	R1017	ERDS2TJ153	1/4W 15K	C120, 121	ECEA1HKA010B	50V 1U
R922	ERDS2TJ472	1/4W 4. 7K	R1018	ERDS2TJ202T	1/4W 2K	C122	ECEA1HKA2R2B	50V 2. 2U
R923	ERDS2TJ102	1/4W 1K	R1019, 1020	ERDS2TJ473	1/4W 47K	C123	ECEA1HKA010B	50V 1U
R926	ERDS2TJ122	1/4W 1. 2K	R1021	ERDS2TJ153	1/4W 15K	C124	ECBT1H102KB5	50V 1000P
R927	ERDS2TJ181T	1/4W 180	R1022	ERDS2TJ752T	1/4W 7. 5K	C125	ECBT1H150JC5	50V 15P

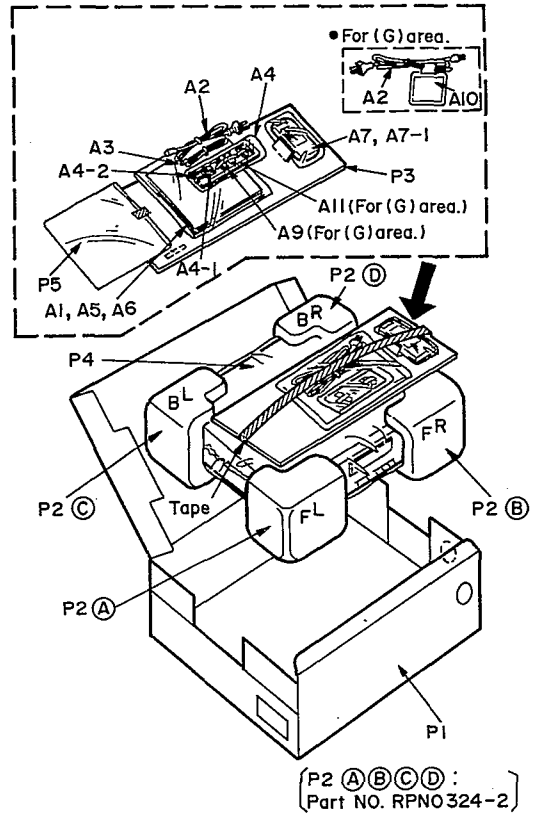
Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
C126	ECBT1H473ZF5	50V 0.047U	C485, 486	ECFR1E123KR	25V 0.012U	C710	ECBT1E103ZF	25V 0.01U
C127	ECEA1CKA220B	16V 22U	C487, 488	ECQV1H683JM3	50V 0.068U	C711	ECKR1H103ZF5	50V 0.01U
C128	ECBT1C103NS5	16V 0.01U	C489, 490	ECFR1E562KR	25V 5600P	C712	ECA1HM470B	50V 47U
C129, 130	ECEA0JKA101B	6.3V 100U	C491, 492	ECFR1E273KR	25V 0.027U	C713	ECKR1H103ZF5	50V 0.01U
C131	ECBT1C103NS5	16V 0.01U	C495, 496	ECBT1E103ZF	25V 0.01U	C715	ECEA1CKA470B	16V 47U
C132	ECBT1H102KB5	50V 1000P	C503, 504	ECEA1CKA220B	16V 22U	C716	ECEA2AU100	100V 10U
C133	ECBT1H150JC5	50V 15P	C518	ECBT1H104ZF5	50V 0.1U	C722	ECQE2104KF3	250V 0.1U
C134	ECBT1H180JC5	50V 18P	C519	ECBT1E103ZF	25V 0.01U	C751	ECKWNS103ZVS	500V 0.01U Δ
C135, 136	ECBT1C103KS5	16V 0.01U	C541, 542	ECA1JM330B	63V 33U	C752	ECKR1H103ZF5	50V 0.01U
C137, 138	ECBT1H561KB5	50V 560P	C543, 544	ECBT1H332KR5	50V 3300P	C753	ECA1EM102B	25V 1000U Δ
C139, 140	ECQB1H682JF3	50V 6800P	C551, 552	ECEA1HKA3R3B	50V 3.3U	C754	ECBT1E103ZF	25V 0.01U
C141-144	ECEA1HKA010B	50V 1U	C553, 554	ECBT1E103ZF	25V 0.01U	C756	ECBT1E103ZF	25V 0.01U
C145	ECBT1H220JC5	50V 22P	C555, 556	ECBT1H101KB5	50V 100P	C757	ECEA1CKA470B	16V 47U
C146	ECBT1H331KB5	50V 330P	C557	ECBT1H331KB5	50V 330P	C758	ECEA1KA101B	10V 100U
C147	ECBT1H102KB5	50V 1000P	C558	ECBT1H221KB5	50V 220P	C771, 772	ECA1VM331B	35V 330U Δ
C148	ECBT1C103NS5	16V 0.01U	C559, 560	ECEA1HKA3R3B	50V 3.3U	C795, 796	ECA1HM470B	50V 47U
C149	ECBT1H104ZF5	50V 0.1U	C561, 562	ECEA1CKA100B	16V 10U	C891	ECFR1E392KR	25V 3900P
C171	ECBT1C103NS5	16V 0.01U	C571, 572	ECBT1E103ZF	25V 0.01U	C901	ECADJM102B	6.3V 1000U
C172	ECBT1H331KB5	50V 330P	C573	ECEA1HKA3R3B	50V 3.3U	C902, 903	ECBT1E103ZF	25V 0.01U
C173	ECEA1CKA220B	16V 22U	C591, 592	ECEA0JKA101B	6.3V 100U	C904	ECADJM471B	6.3V 470U
C174	ECEA1CKA101B	16V 100U	C593, 594	ECFR1E104KR	25V 0.1U	C906	ECEA0JKA101B	6.3V 100U
C181	ECBT1H471KB5	50V 470P	C595	ECBT1E103ZF	25V 0.01U	C907	ECEA0JKA220B	6.3V 22U
C351, 352	ECEA0JKA101B	6.3V 100U	C601, 602	ECEA1EKN3R3B	25V 3.3U	C908	ECBT1E103ZF	25V 0.01U
C353	ECEA0JKA470B	6.3V 47U	C603, 604	ECBT1H331KB5	50V 330P	C911, 912	ECEA2AU100	100V 10U
C401	ECEA1VKA4R7B	35V 4.7U	C605, 606	ECEA1CKN220B	16V 22U	C913, 914	ECEA1VKA100B	35V 10U
C402, 403	ECBT1E103ZF	25V 0.01U	C607, 608	ECCD1H150KC	50V 15U	C916	ECEA1HKA010B	50V 1U
C404	ECEA1VKA4R7B	35V 4.7U	C609, 610	ECBT1H221KB5	50V 220P	C920	ECEA1HKA010B	50V 1U
C405, 406	ECBT1H101KB5	50V 100P	C611, 612	ECQV1H473JM3	50V 0.047U	C921-928	ECBT1H331KB5	50V 330P
C409, 410	ECEA1CKA220B	16V 22U	C613	ECA1HM470B	50V 47U	C929	ECBT1H101KB5	50V 100P
C411, 412	ECBT1H101KB5	50V 100P	C614	ECQV1H474JM3	50V 0.47U	C932	ECBT1E103ZF	25V 0.01U
C413, 414	ECEA1CKA100B	16V 10U	C615	ECEA2AU100	100V 10U	C933, 934	ECBT1H101KB5	50V 100P
C415, 416	ECBT1E103ZF	25V 0.01U	C616	ECEA2AN2R2SB	100V 2.2U	C1001	ECBT1E103ZF	25V 0.01U
C417, 418	ECBT1H101KB5	50V 100P	C621-624	ECKT1H223ZF	50V 0.022U	C1002	ECEA1CKA100B	16V 10U
C419-422	ECBT1H331KB5	50V 330P	C625-627	ECKR1H103ZF5	50V 0.01U	C1003-1005	ECEA1HKA010B	50V 1U
C423-426	ECBT1H101KB5	50V 100P	C631, 632	ECEA1VKA4R7B	35V 4.7U	C1006	ECEA1HKA3R3B	50V 3.3U
C427, 428	ECBT1H221KB5	50V 220P	C633, 634	ECBA1H681KB5	50V 680P	C1007	ECFR1E153KR	25V 0.015U
C431, 432	ECEA1CKA100B	16V 10U	C635, 636	ECEA1CKA220B	16V 22U	C1008	ECFR1E103KR	25V 0.01U
C440	ECBT1E103ZF	25V 0.01U	C637, 638	ECCR1H100K5	50V 10P	C1009	ECBA1H681KB5	50V 680P
C451, 452	ECEA1VKA4R7B	35V 4.7U	C639, 640	ECBT1H821KB5	50V 820P	C1010	ECQV1H104JM3	50V 0.1U
C453, 454	ECBT1H100JC5	50V 10P	C641, 642	ECQV1H473JM3	50V 0.047U	C1012, 1013	ECQV1H104JM3	50V 0.1U
C455, 456	ECBT1H102KB5	50V 1000P	C644	ECA1JM330B	63V 33U	C1014	ECEA1HKAR33B	50V 0.33U
C457, 458	ECEA1AKA330B	10V 33U	C645	ECEA2AU100	100V 10U	C1015	ECBA1H681KB5	50V 680P
C459, 460	ECFR1E223KR	25V 0.022U	C651	ECEA1HKA2R2B	50V 2.2U	C1016, 1017	ECEA1VKA4R7B	35V 4.7U
C461, 462	ECFR1E682KR	25V 6800P	C652	ECEA1CKA100B	16V 10U	C1018	ECEA1HKAR15B	50V 0.15U
C463, 464	ECEA1VKA4R7B	35V 4.7U	C653	ECBT1E223ZF	25V 0.022U	C1019	ECEA1HKA3R3B	50V 3.3U
C465, 466	ECBT1E103ZF	25V 0.01U	C655	ECEA0JKA221B	6.3V 220U	C1020	ECQV1H154JM3	50V 0.15U
C469, 470	ECBT1H181KB5	50V 180P	C701	ECBT1E103ZF	25V 0.01U	C1021, 1022	ECEA1CKA470B	16V 47U
C471, 472	ECEA1HKA3R3B	50V 3.3U	C702	ECQE2104KF3	250V 0.1U	C1023, 1024	ECEA1HKA3R3B	50V 3.3U
C475, 476	ECBT1H150J5	50V 15P	C703, 704	ECE566V802UZ	66V 8000U Δ	C1025	ECEA1HKAR33B	50V 0.33U
C477, 478	ECBT1H221KB5	50V 220P	C707	ECA1VM101B	35V 100U	C1026, 1027	ECQV1H104JM3	50V 0.1U
C479, 480	ECBT1H560J5	50V 56P	C708	ECKR1H103ZF5	50V 0.01U	C1028	ECBA1H681KB5	50V 680P
C481-484	ECEA1VKA4R7B	35V 4.7U	C709	ECEA1CKA330B	16V 33U	C1029, 1030	ECEA1VKA4R7B	35V 4.7U

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Ref. No.	Part No.	Values & Remarks
C1031	ECEA1HKAR15B	50V 0.15U
C1032	ECEA1HKA3R3B	50V 3.3U
C1033	ECQV1H154JM3	50V 0.15U
C1035	ECQV1H474JM3	50V 0.47U
C1036	ECBT1E103ZF	25V 0.01U
C1037, 1038	ECEA1CKA101B	16V 100U
C1403	ECEA1HKA010B	50V 1U
C1404	ECFR1E332KR	25V 3300P
C1405	ECBT1H561KB5	50V 560P
C1406	ECQV1H104JM3	50V 0.1U
C1407	ECEA1CKA470B	16V 47U
C1408, 1409	ECQV1H474JM3	50V 0.47U
C1410	ECQV1H104JM3	50V 0.1U
C1411	ECFR1E332KR	25V 3300P
C1412	ECBT1H561KB5	50V 560P
C1414	ECFR1E123KR	25V 0.012U
C1415	ECBT1H104ZF5	50V 0.1U
C1416	ECEA0JKA221B	6.3V 220U
C1451	ECBT1H101KB5	50V 100P
C1457, 1458	ECEA1CKA100B	16V 10U
C1459	ECEA1CKA101B	16V 100U
C1460	ECFR1E822KR	25V 8200P
C1461	ECEA1CKA220B	16V 22U
C1462	ECFR1E273KR	25V 0.027U
C1463	ECFR1E472KR	25V 4700P
C1464	ECEA1CKA100B	16V 10U
C1465	ECBT1E103ZF	25V 0.01U
C1466	ECEA1HKAOR1B	50V 0.1U
C1468	ECEA1HKAR33B	50V 0.33U
C1469	ECFR1E333KR	25V 0.033U
C1470	ECEA1HKA3R3B	50V 3.3U
C1472, 1473	ECEA1HKA3R3B	50V 3.3U
C1474, 1475	ECBT1E103ZF	25V 0.01U
C1476-1478	ECBT1H181KB5	50V 180P
C1479, 1480	ECEA1CKA470B	16V 47U
C1481-1483	ECEA1HKA3R3B	50V 3.3U
C1489, 1490	ECEA1HKA3R3B	50V 3.3U
C1493	ECQV1H563JM3	50V 0.056U
C1494	ECEA1CKA100B	16V 10U

PACKAGING

• For (E, EG, G) areas.



• For (EB, GN) areas.

