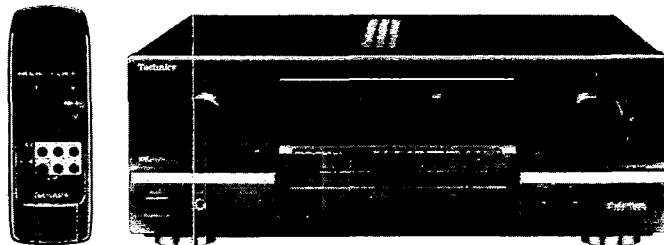


Service Manual

AV Control Stereo Receiver

Receiver

SA-GX670



Colour

(K) ... Black Type

Areas

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

SPECIFICATIONS (DIN 45 500)

■ AMPLIFIER SECTION

| | |
|---|-------------------------|
| Power output (at 240 V) | |
| DIN 1 kHz (T.H.D. 1%) | |
| [For (E, EB, EG) areas.] | 2 × 100 W (4 Ω) |
| [For (G, GN) areas.] | 2 × 110 W (8 Ω) |
| 20 Hz–20 kHz continuous power output both channels driven | |
| [For (E, EB, EG) areas.] | 2 × 65 W (8 Ω) |
| [For (G, GN) areas.] | 2 × 90 W (8 Ω) |
| Total harmonic distortion | |
| rated power at 20 Hz–20 kHz | 0.05% (8 Ω) |
| half power at 1 kHz | 0.03% (8 Ω) |
| Power output at the Dolby Pro Logic operation | |
| DIN 1 kHz (T.H.D. 1%) | |
| Front [For (E, EB, EG) areas.] | 2 × 60 W (4 Ω) |
| [For (G, GN) areas.] | 2 × 60 W (8 Ω) |
| Center [For (E, EB, EG) areas.] | 60 W (4 Ω) |
| [For (G, GN) areas.] | 60 W (8 Ω) |
| Rear [For (E, EB, EG) areas.] | 30 W (4 Ω) |
| [For (G, GN) areas.] | 60 W (8 Ω) |
| Intermodulation distortion | |
| rated power at 60 Hz: 7 kHz=4:1, SMPTE | 0.5% (8 Ω) |
| Power bandwidth | |
| both channels driven, –3 dB | 10 Hz–40 kHz (8 Ω) |
| Damping factor | 40 (8 Ω) |
| 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 (8 Ω) | |
| 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 [For (E, EB, EG) areas.] | 4–16 Ω |
| [For (G, GN) areas.] | 8–16 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 | 65 dB |
| Capture ratio | 1 dB |
| Image rejection at 98 MHz | 40 dB |
| IF rejection at 98 MHz | 70 dB |
| Spurious response rejection at 98 MHz | 70 dB |
| AM suppression | 50 dB |
| Stereo separation | |
| 1 kHz | 40 dB |
| Carrier leak | |
| 19 kHz | –30 dB (–35 dB, IHF) |
| 38 kHz | –50 dB (–55 dB, IHF) |
| Channel balance (250 Hz–6.3 kHz) | ± 1.5 dB |
| Limiting point | 1.2 μV |

Technics®

| | |
|---------------------|-------------------|
| Bandwidth | |
| IF amplifier | 180 kHz |
| FM demodulator | 1000 kHz |
| Antenna terminal(s) | 75 Ω (unbalanced) |

AM TUNER SECTION

• For (E, EB, G, GN) areas.

| | |
|------------------------|-----------------------------|
| Frequency range | |
| MW | 522–1611 kHz (9 kHz steps) |
| | 530–1620 kHz (10 kHz steps) |
| LW | 144–288 kHz |

| | |
|--------------------|-----------------|
| Sensitivity | |
| MW | 20 μV, 330 μV/m |
| LW | 45 μV |

| | |
|--------------------|-------|
| Selectivity | |
| MW (at 999 kHz) | 55 dB |
| LW (at 252 kHz) | 55 dB |

| | |
|------------------------|-------|
| Image rejection | |
| MW (at 999 kHz) | 40 dB |
| LW (at 252 kHz) | 40 dB |

| | |
|---------------------|-------|
| IF rejection | |
| MW (at 999 kHz) | 55 dB |
| LW (at 252 kHz) | 55 dB |

| | |
|------------------------|-----------------------------|
| • For (EG) area. | |
| Frequency range | 522–1611 kHz (9 kHz steps) |
| | 530–1620 kHz (10 kHz steps) |

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

VIDEO SECTION

| | |
|---|-------------------|
| Output voltage at 1 V input (unbalanced) | 1 ± 0.1 Vp-p |
| Maximum input voltage | 1.5 Vp-p |
| Input/output impedance | 75 Ω (unbalanced) |

GENERAL

| | |
|--------------------------|-------|
| Power consumption | |
| [For (E, EB, GN) areas.] | 230 W |
| [For (EG) area.] | 230 W |
| [For (G) area.] | 250 W |

| | |
|------------------------------|----------------------------------|
| Power supply | |
| [For (E, EB, EG, GN) areas.] | AC 50/60 Hz, 230–240 V |
| [For (G) area.] | AC 50/60 Hz, 110–127 V/220–240 V |

| | |
|-------------------------------|--------------------|
| Dimensions (W × H × D) | 430 × 158 × 352 mm |
| Weight | 9.5 kg |

REMOTE CONTROL TRANSMITTER

| | |
|--------------------------|---------|
| Control keys | |
| [For (E, EB, EG) areas.] | 38 keys |
| [For (G, GN) areas.] | 53 keys |

| | |
|-------------------------------|------------------|
| Dimensions (W × H × D) | |
| [For (E, EB, EG) areas.] | 62 × 27 × 175 mm |
| [For (G, GN) areas.] | 70 × 28 × 215 mm |

| | |
|-------------------------------------|----------------|
| Weight (including batteries) | |
| [For (E, EB, EG) areas.] | 106 g (3.2 oz) |
| [For (G, GN) areas.] | 160 g (4.8 oz) |

| | |
|---------------------|------------------------------------|
| Power source | Two UM-4/AAA |
| | (Panasonic R03/LR03 or equivalent) |

Notes:

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

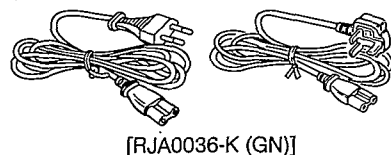
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ACCESSORIES

AC power supply cord..... 1 pc.
[RJA0019-2K [VJA0733 (EB)]
(E, EG, G)]



FM indoor antenna 1 pc.
(RSA0007)

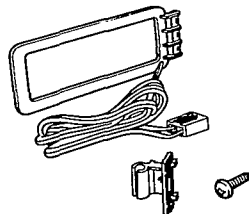


Attachment plug..... 1 pc.
[SJP9009 (EB)]



AM loop antenna set..... 1 pc.
(RSA0010)

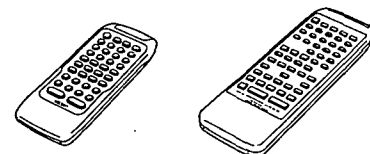
- AM antenna holder..... 1 pc.
(RMN0244)
- Screw..... 1 pc.
(XTN3+10AFZ)



Power plug adaptor..... 1 pc.
[SJP5213-1 (G)]



Remote control transmitter 1 pc.
[RAK-SA114XH [RAK-SA704XH
(E, EB, EG)] (G, GN)]

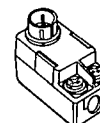


Batteries for remote control
transmitter..... 2 pcs.
("AAA", R03)



Note: These are available on sale route.

Antenna plug..... 1 pc.
[RFE0014 (G, GN)]





■ CAUTIONS 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:

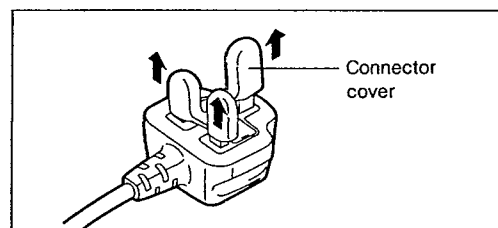
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

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 .

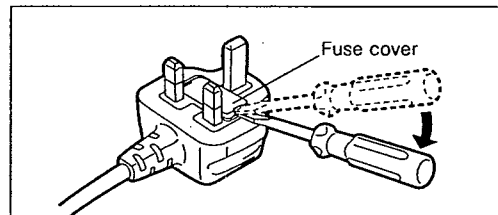
Before use

Remove the connector cover as follows.

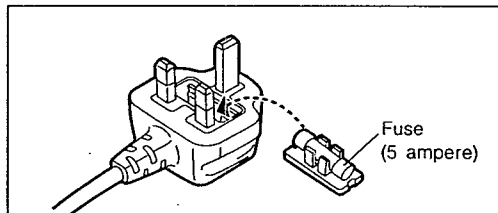


How to replace the fuse

1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover



[For (GN) area.]

THIS TUNER/RECEIVER IS CAPABLE OF RECEIVING THE NEW AM STEREO BROADCASTS FROM THE AM BAND RADIO STATIONS. HOWEVER LIKE MANY TUNERS AND RECEIVERS CURRENTLY AVAILABLE ON THE MARKET IT WILL REPRODUCE THIS AM STEREO SIGNAL ONLY IN AM MONO, WHICH, IN EFFECT, IS OF NO LESSER QUALITY THAN YOUR EXISTING AM MONO TUNER/RECEIVER.

■ PROTECTION CIRCUITRY

The protection circuitry 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.

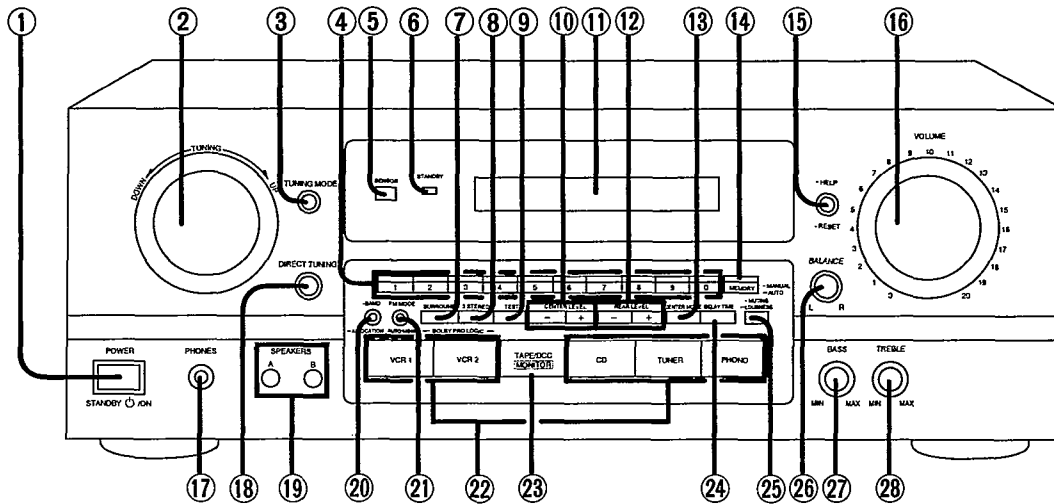
If this occurs, follow the procedure outlines below:

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.

FRONT PANEL CONTROLS





| No. | Name |
|-----|---|
| ① | Power "STANDBY /ON" switch (POWER, STANDBY /ON) Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power. |
| ② | Tuning control (TUNING) |
| ③ | Tuning mode select button (TUNING MODE) |
| ④ | Numeric buttons (1-0) |
| ⑤ | Remote control signal receptor (SENSOR) |
| ⑥ | "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. |
| ⑦ | DOLBY PRO LOGIC SURROUND ON/OFF button (SURROUND) |
| ⑧ | DOLBY PRO LOGIC 3 STEREO ON/OFF button (3 STEREO) |
| ⑨ | Test signal ON/OFF button (TEST) |
| ⑩ | Center level adjust button (CENTER LEVEL) |
| ⑪ | Display |
| ⑫ | Rear level adjust button (REAR LEVEL) |

| No. | Name |
|-----|---|
| ⑬ | Center mode select button (CENTER MODE) |
| ⑭ | Memory button (MEMORY) |
| ⑮ | Help/reset button (-HELP - RESET) |
| ⑯ | Volume control (VOLUME) |
| ⑰ | Headphone jack (PHONES) |
| ⑱ | Direct tuning button (DIRECT TUNING) |
| ⑲ | Speaker select buttons (SPEAKERS) |
| ⑳ | Band select button (BAND) |
| ㉑ | FM mode select button (FM MODE) |
| ㉒ | Input select buttons |
| ㉓ | Tape/DCC monitor button (TAPE/DCC MONITOR) |
| ㉔ | Delay time adjust button (DELAY TIME) |
| ㉕ | Muting/loudness button (-MUTING - LOUDNESS) |
| ㉖ | Balance control (BALANCE) |
| ㉗ | Bass control (BASS) |
| ㉘ | Treble control (TREBLE) |

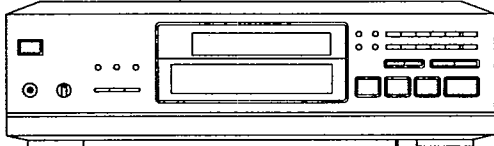
EQUIPMENT CONNECTIONS

Connecting audio equipment

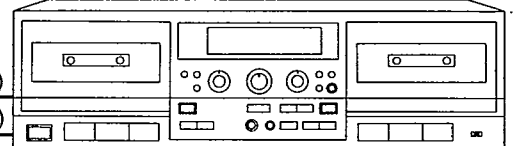
Stereo connection cable (not included)

White (L) 
Red (R) 

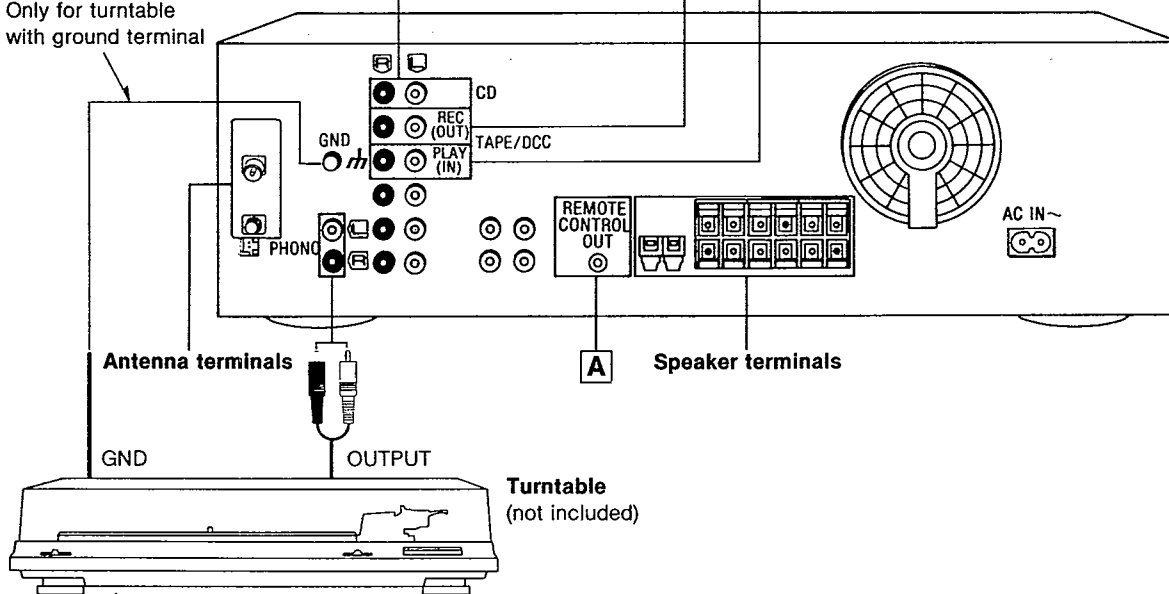
CD player (or CD changer)
(not included)



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

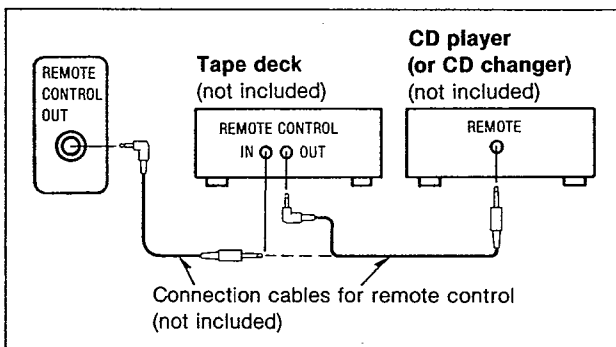


Only for turntable
with ground terminal



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.

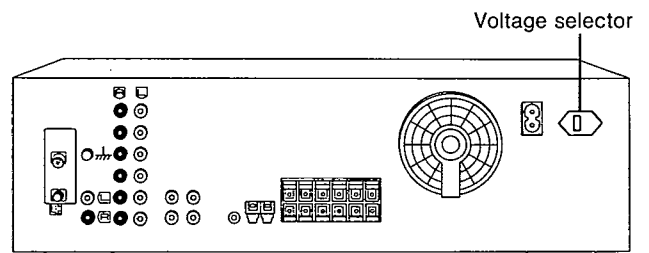
To set the power voltage

[For (G) area only.]

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

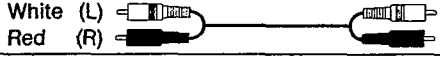
Note

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

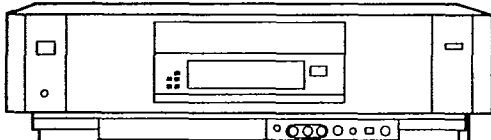


Connecting video equipment

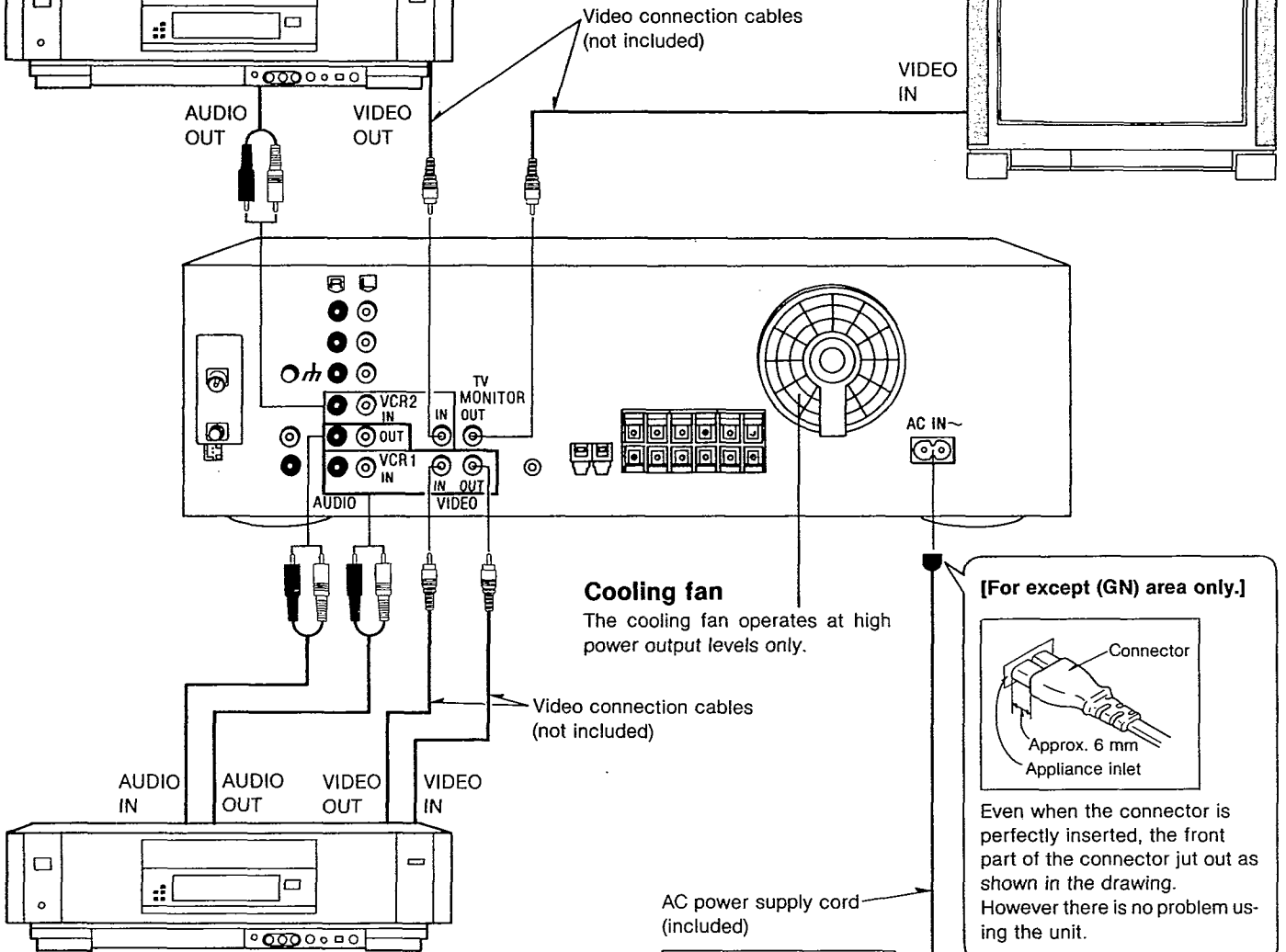
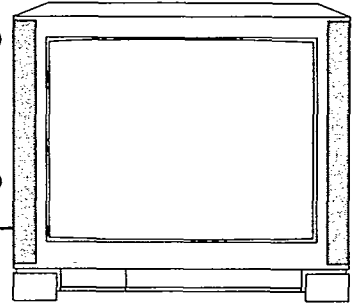
Stereo connection cable (not included)



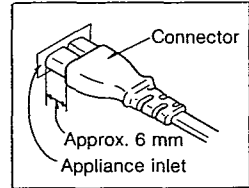
Second VCR (for playback only) (not included)



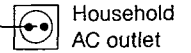
Monitor TV (not included)



[For except (GN) area only.]

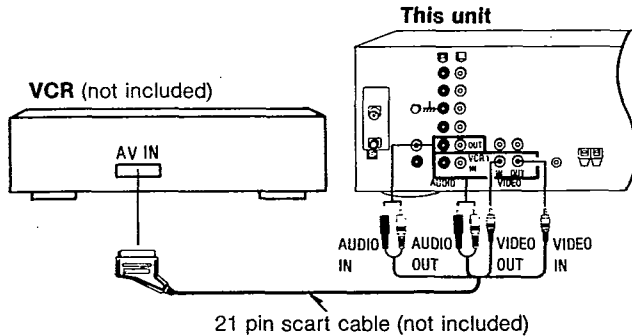


Even when the connector is perfectly inserted, the front part of the connector jut out as shown in the drawing. However there is no problem using the unit.



VCR (not included)

To connect a video deck with 21 pin scart terminal

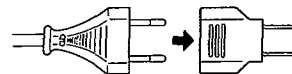


[For (EB) area only.]

BE SURE TO READ THE CAUTION FOR THE AC POWER SUPPLY CORD ON PAGE 2 BEFORE CONNECTION.

[For (G) area only.]

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



REMOTE CONTROL OPERATION

| | | |
|---|---|---|
| | To turn the unit ON/OFF | POWER |
| | To select an input source | TUNER CD TAPE VCR 1 |
| | To select the Dolby Pro Logic mode | MODE — PRO LOGIC Changes as follows each time the button is pressed. → SURROUND → 3 STEREO → (OFF) |
| | To adjust the output level of the rear speakers | When the SURROUND mode is ON - REAR + |
| | To adjust the output level of the center speaker | When the 3 STEREO or SURROUND mode is ON - CENTER + |
| | To output a test signal | When the 3 STEREO or SURROUND mode is ON Press once more to stop the test signal. |
| | To mute the sound level | MUTING Press once more to return to the original volume. |
| | To adjust the volume level | - VOLUME + |
| | If your unit is equipped with the New Technics Remote Control System (see below) | |
| | To turn the system OFF | AUDIO OFF |
| To listen to radio broadcasts | | |
| <p>Specify the preset channel using the numeric button(s).</p> <p>TUNER → → </p> <p>(Example: Channel 12) Within 2 sec.</p> | | |

BEFORE REPAIR AND ADJUSTMENT

Disconnect AC power, Discharge both Power Supply Capacitors C703 and C704 (63V 6800 μ F/75V 7500 μ F), C705 and C706 (35V 4700 μ F) through a 10 Ω , 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 AC 230V/240V.

| Power supply voltage | AC 230V | | AC 240V | | AC 110-127V | | AC 220-240V | |
|----------------------|--------------------------|-----------|-----------|-----------|-------------|-----------|-------------|-----------|
| | Consumed current 50/60Hz | 50Hz | 140~400mA | 50Hz | 150~420mA | 50Hz | 400~1000mA | 50Hz |
| | 60Hz | 112~320mA | 60Hz | 120~336mA | 60Hz | 320~800mA | 60Hz | 120~336mA |

■ OPERATION CHECKS AND MAIN COMPONENT REPLACEMENT PROCEDURES

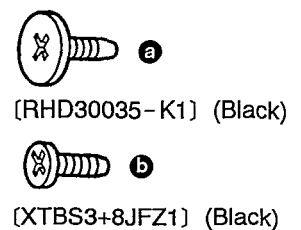
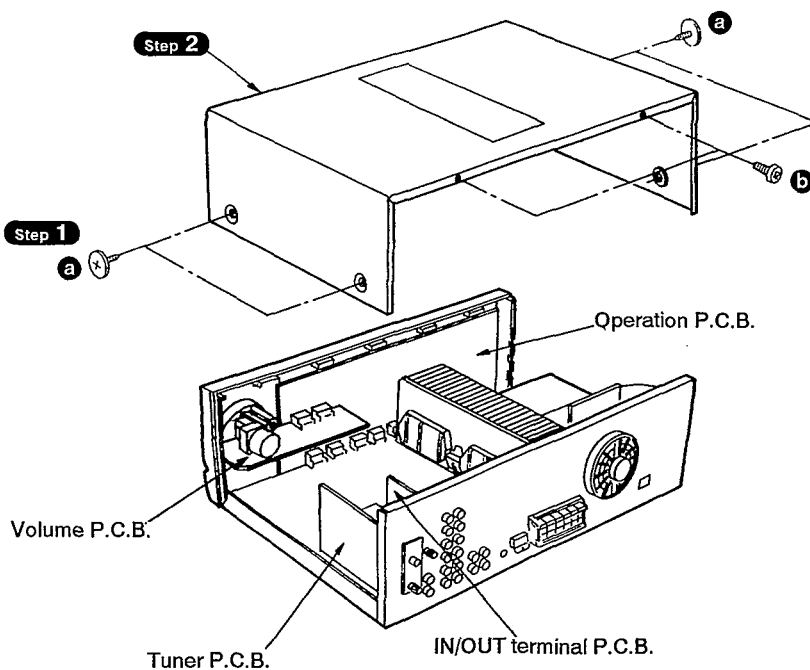
NOTE

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

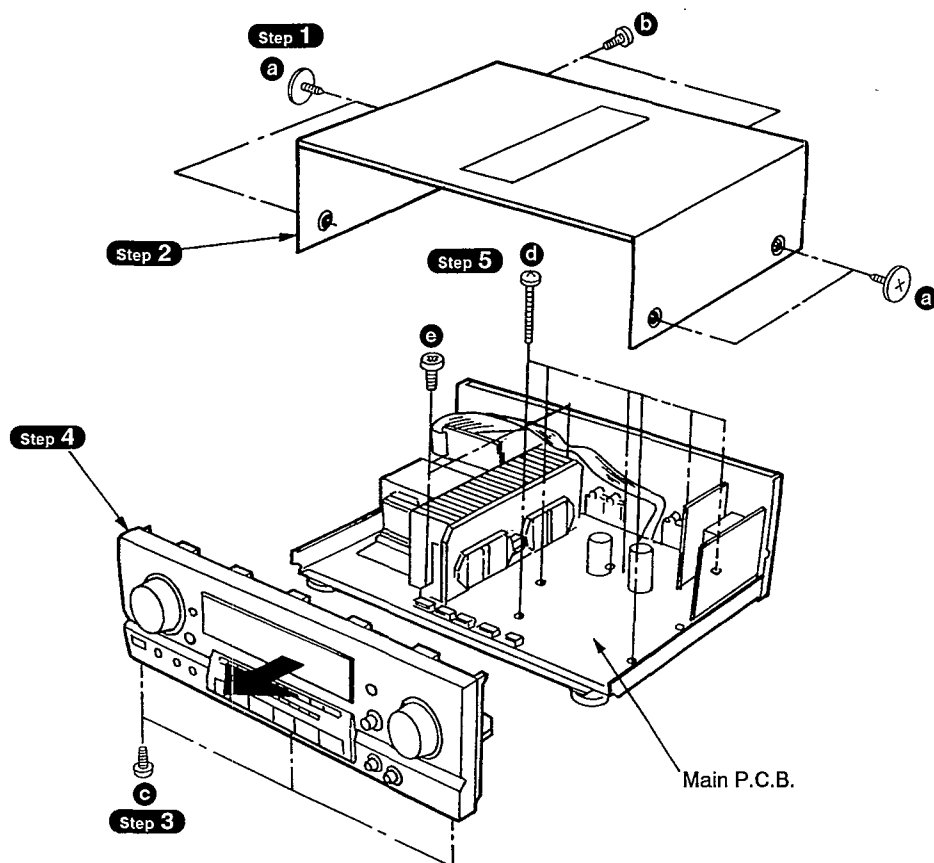
● Contents

| | |
|---|-------------|
| 1. Checking for the volume P.C.B., tuner P.C.B., IN/OUT terminal P.C.B. and operation P.C.B. | page. 8. |
| 2. Checking for the main P.C.B. | 9. |
| 3. Replacement for the power IC and regulator transistor | 10. |

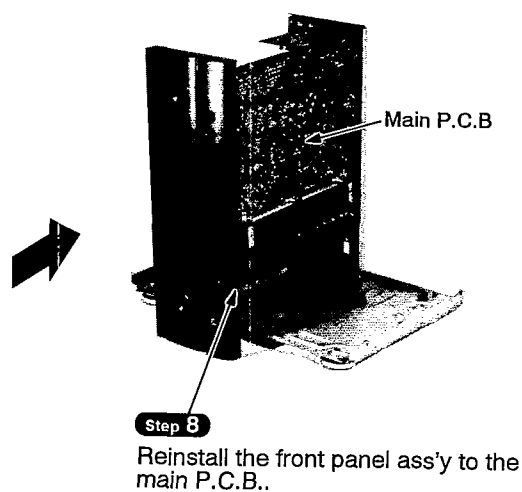
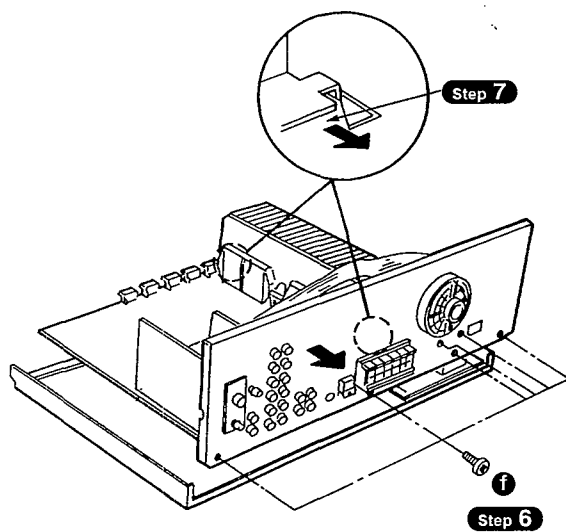
1. Checking for the volume P.C.B., tuner P.C.B., IN/OUT terminal P.C.B. and operation P.C.B.



2. Checking for the main P.C.B.

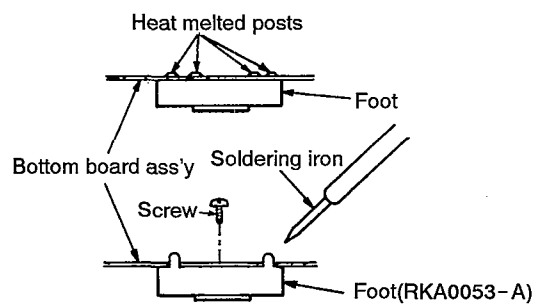


- a**
[RHD30035-K1] (Black)
- b, c, f**
[XTBS3+8JFZ1] (Black)
- d**
[XTB3+20JFZ] (Black)
- e**
[XTB3+8JFZ] (Black)



• Replacement of the foot

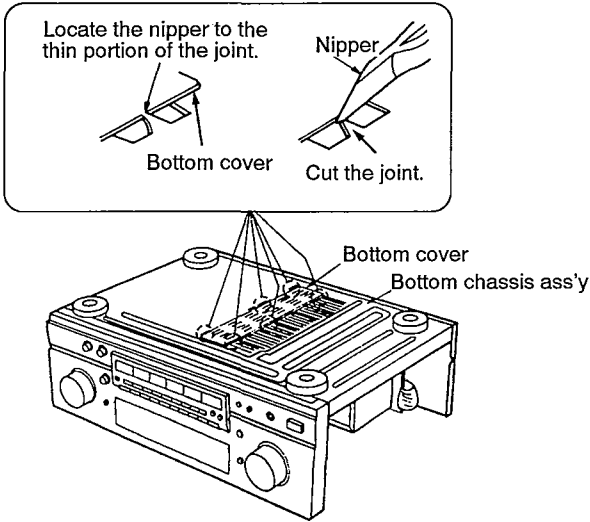
1. Remove the 4 heat melted posts on the Bottom board ass'y with a pair of nippers or similar tool.
2. To replace the foot(RKA0053-A) on the Bottom board ass'y melt the 4 posts with a soldering iron or install it with a screw (XTB3+6J).



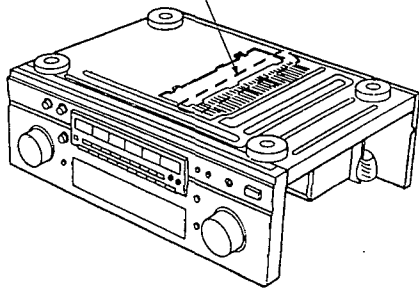
3. Replacement for the power IC and regulator transistor

Step 1 Follow the disassembly procedure described in item 1 on page 8.

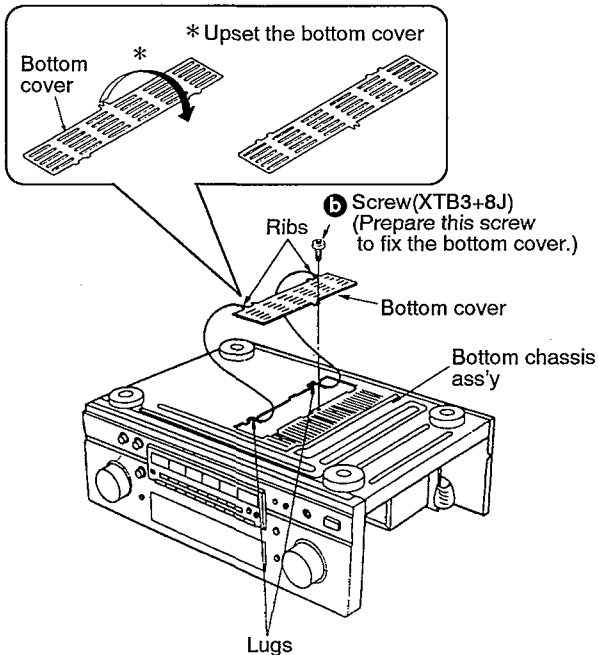
Step 2 Cut the joints as shown below.(6 portions)



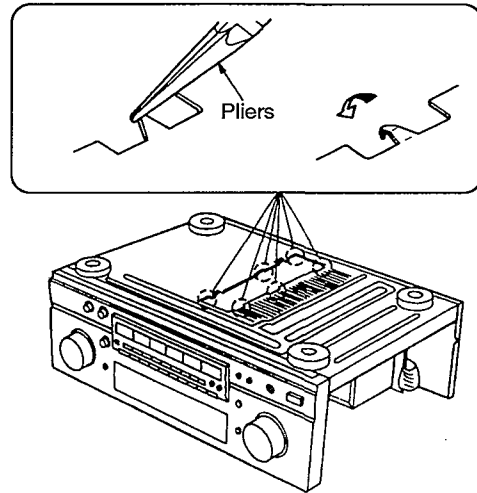
Step 4 Unsolder the terminals of power IC or regulator transistor.



Step 7 Fix the bottom cover with screw.

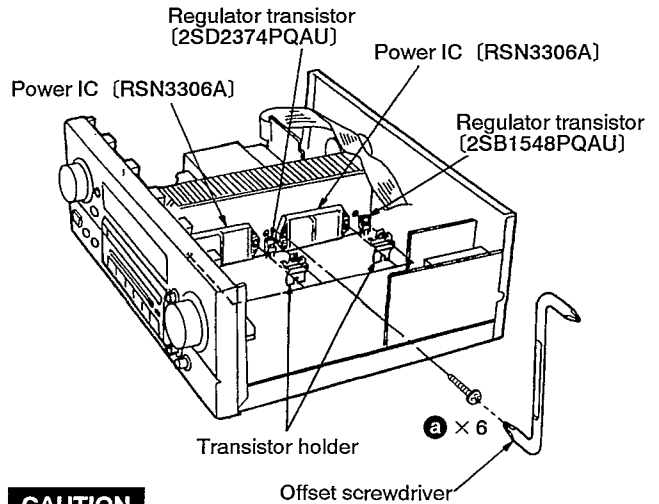


Step 3 Fold the joints.(6 portions)



Step 5 Remove the 6 screws.

Step 6 Remove the transistor holder.



CAUTION

- After replacing the power IC or regulator transistor, apply a sufficient quantity of compound grease (RFKX0002/ SZZ0L15) between the heat sink and the power IC or regulator transistor (Radiation of power IC and regulator transistor).
- Tighten enough the screws (**a**) after replacing the power IC or regulator transistor. Otherwise, the heat radiation works little.
- When installing or removing the power IC or transistor holder, be sure to use an offset screwdriver.



[XTW3+15T]

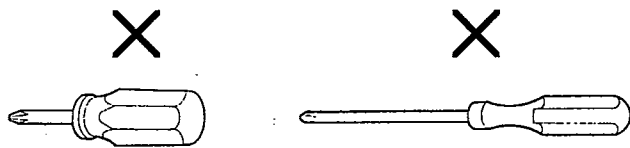


(Prepare this screw to fix the bottom cover.)

[XTB3+8J] (Black)

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)



A short straight screwdriver

Fig.2

A long straight screwdriver

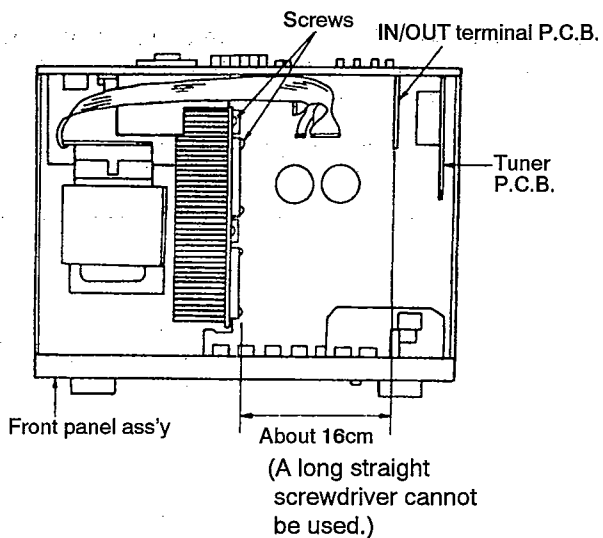
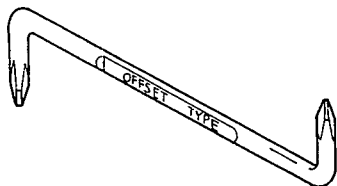



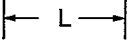
Fig.1

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. |  |  |
|--------|---|---|
| 34 1/4 | 1 & 2 | 4 3/4" |

- The address of PROTO International Sales is as follows.



International Sales

International Sales Office
 Stanley-Proto Industrial Tools
 14117 Industrial Park Blvd.
 Covington, GA 30209 U.S.A.
 Fax: 706-786-4387
 Phone: 706-787-3800

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

Singapore, Indonesia,
 Philippines, Korea, Hong
 Kong, Malaysia, China.
 Stanley-Proto Asia Pacific
 12 Gul Drive
 Singapore 2262
 Fax: 65-861-3206
 Phone: 65-862-0883

Thailand
 Stanley-Proto Thailand Ltd.
 1017 Moo 13 Bangnatrad
 Highway, Tambol Bankaew
 Amphur Bangplee
 Samutprakarn, Thailand
 Fax: 66-2-316-6071
 Phone: 66-2-316-8655

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

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

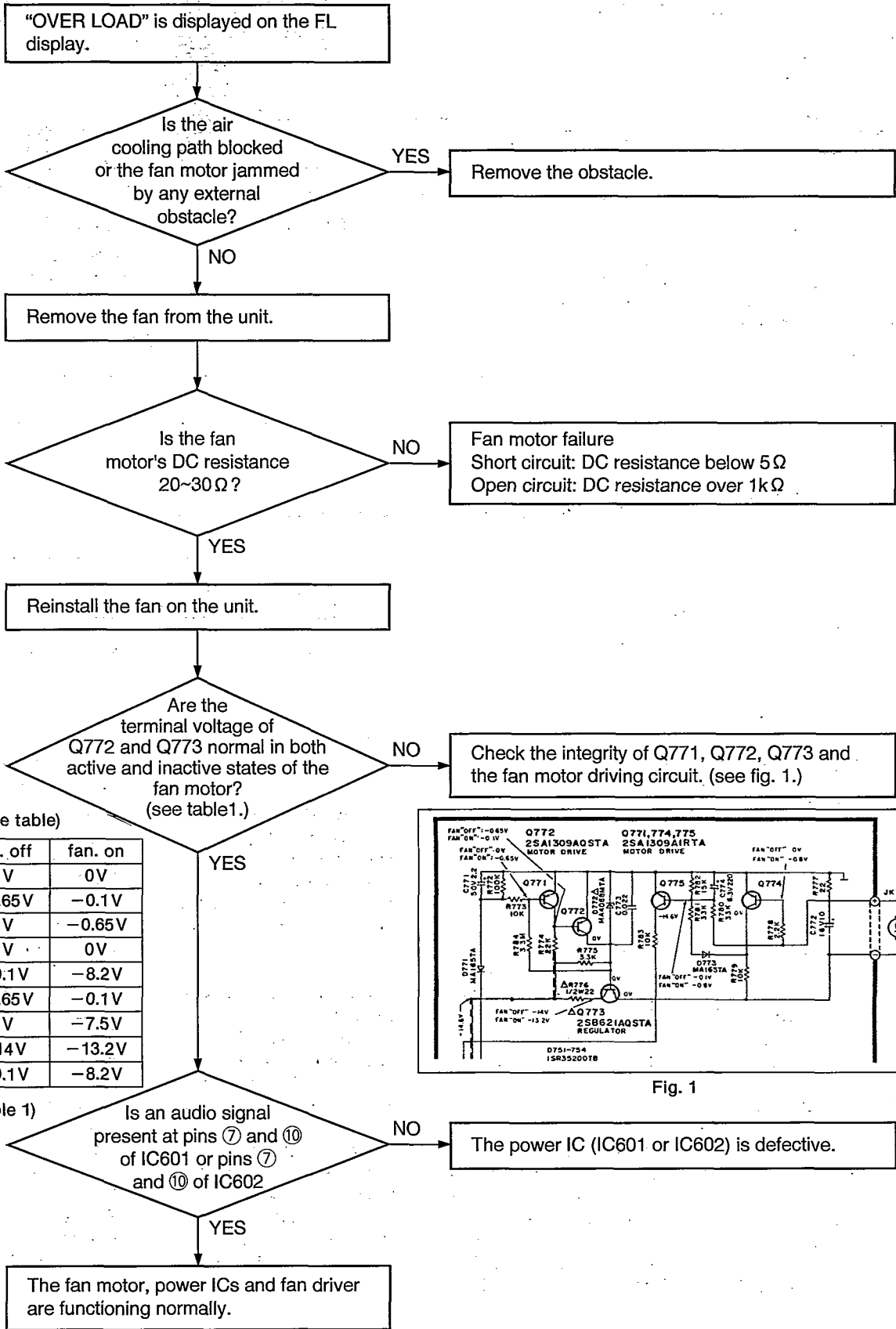
Europe
 Stanley-Proto Europe
 Woodside, Sheffield
 S39PD
 England
 Fax: 44-742-739-038
 Phone: 44-742-768-888

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

FAN MOTOR TROUBLESHOOTING GUIDE

The Model SA-GX670 employ fan motor error sensing electronics. If the cooling fan is not operation and "OVER LOAD" is displayed on the FL display, check the fan motor and its driving circuit.



(Voltage table)

| | | fan. off | fan. on |
|------|---|----------|---------|
| Q771 | E | 0V | 0V |
| | C | -0.65V | -0.1V |
| | B | 0V | -0.65V |
| Q772 | E | 0V | 0V |
| | C | -0.1V | -8.2V |
| | B | -0.65V | -0.1V |
| Q773 | E | 0V | -7.5V |
| | C | -14V | -13.2V |
| | B | -0.1V | -8.2V |

(Table 1)

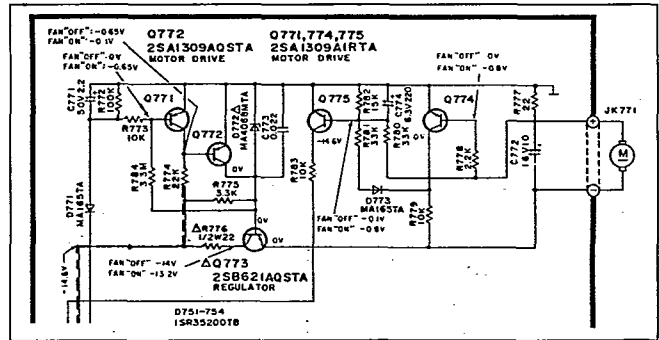
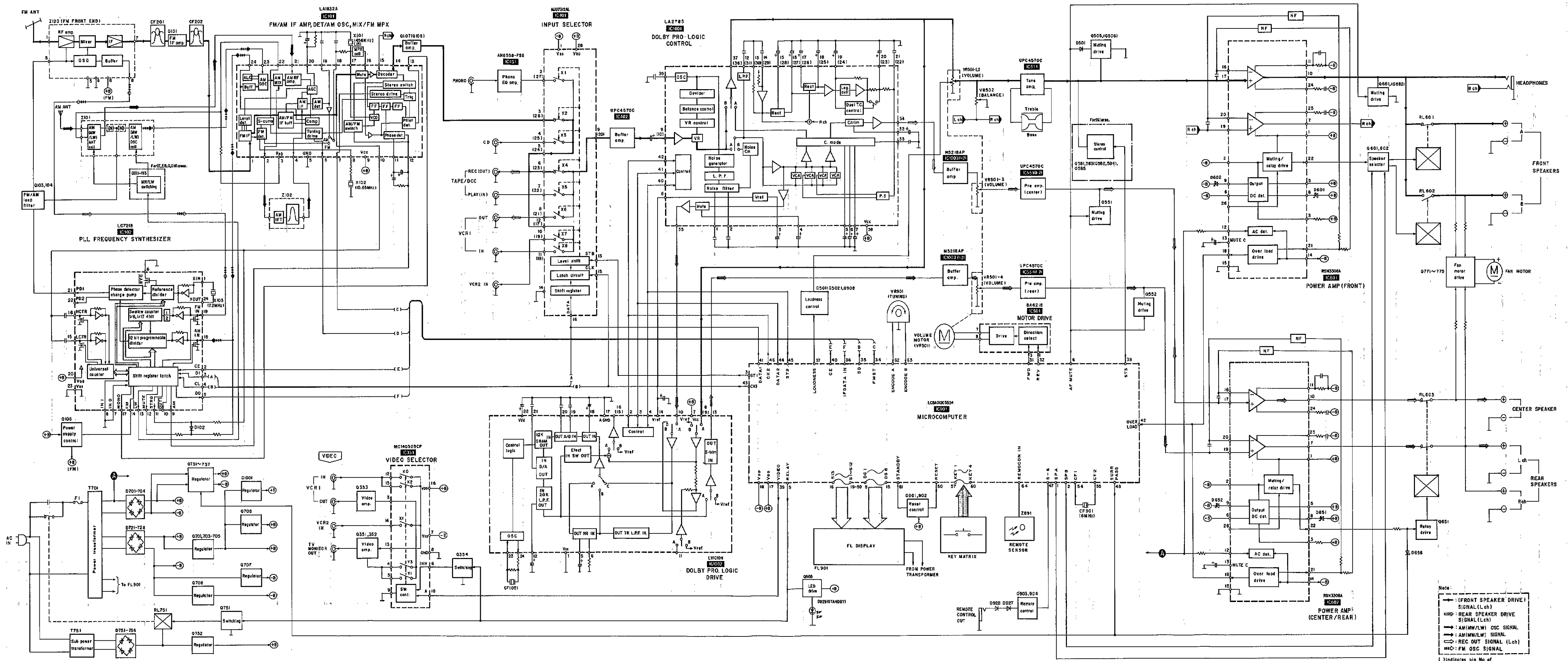


Fig. 1

BLOCK DIAGRAM



Note:

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

() indicates pin No of right channel.

SCHEMATIC DIAGRAM (Parts list on pages 43~49.)

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

Note 1:

- 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 (Lch)

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 these components, be sure to use only manufacturer's specified parts shown in the parts list.

All voltage values shown in circuitry are DC voltage in FM signal (Stereo signal) reception mode.

* Figures in () stand for DC-voltage in MW-signal reception mode.

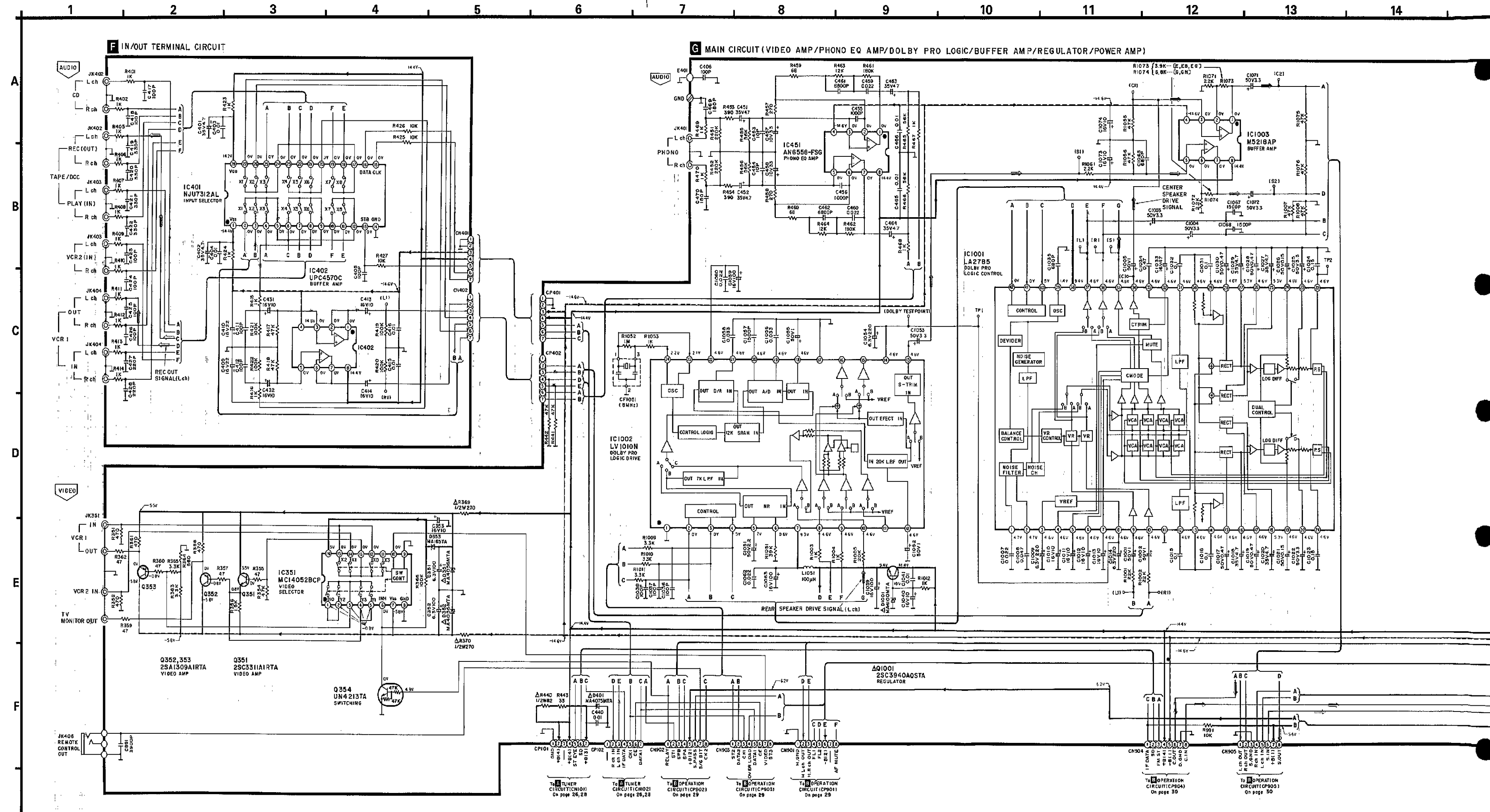
* Figures in < > stand for DC-voltage in LW signal reception mode.

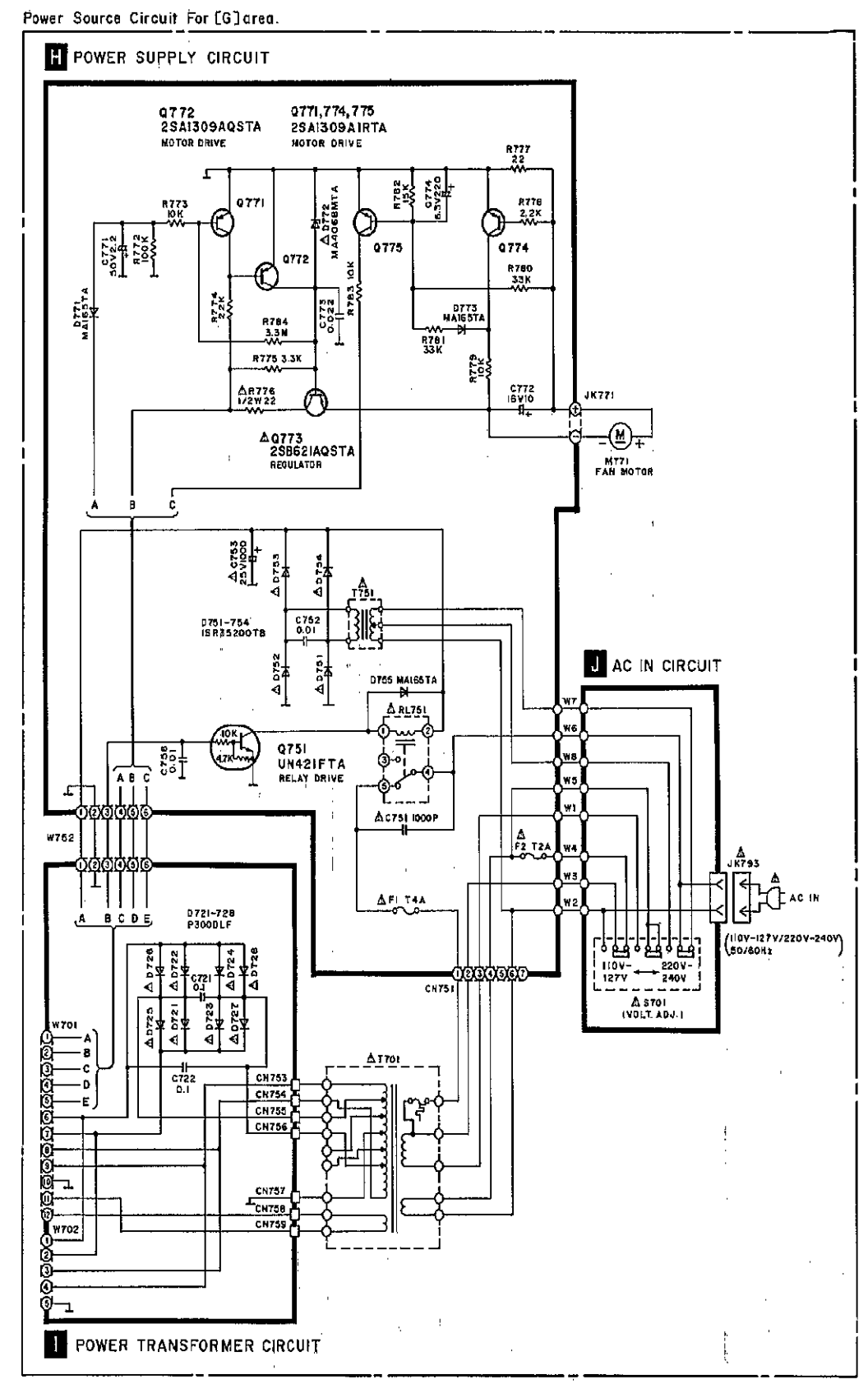
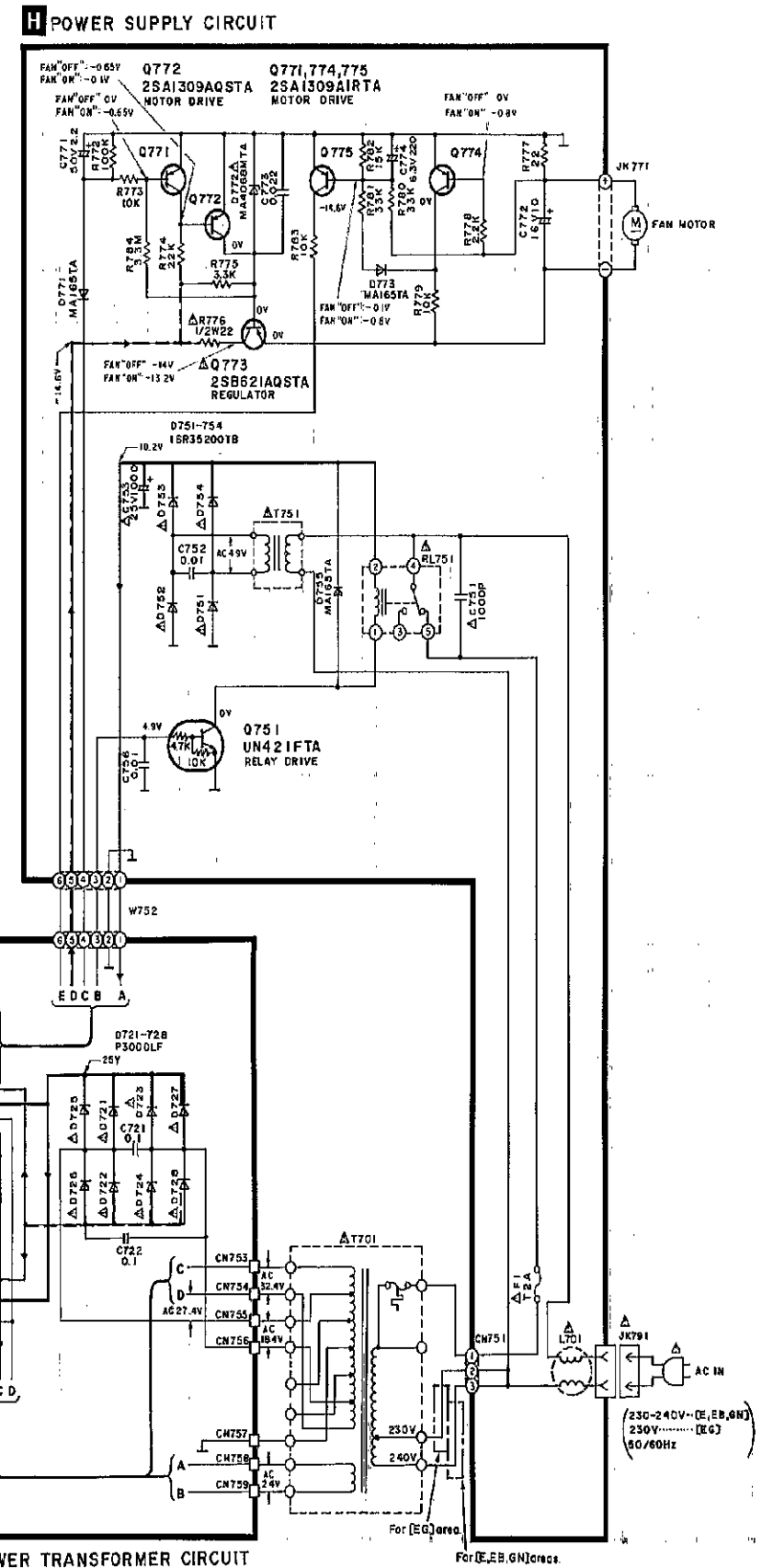
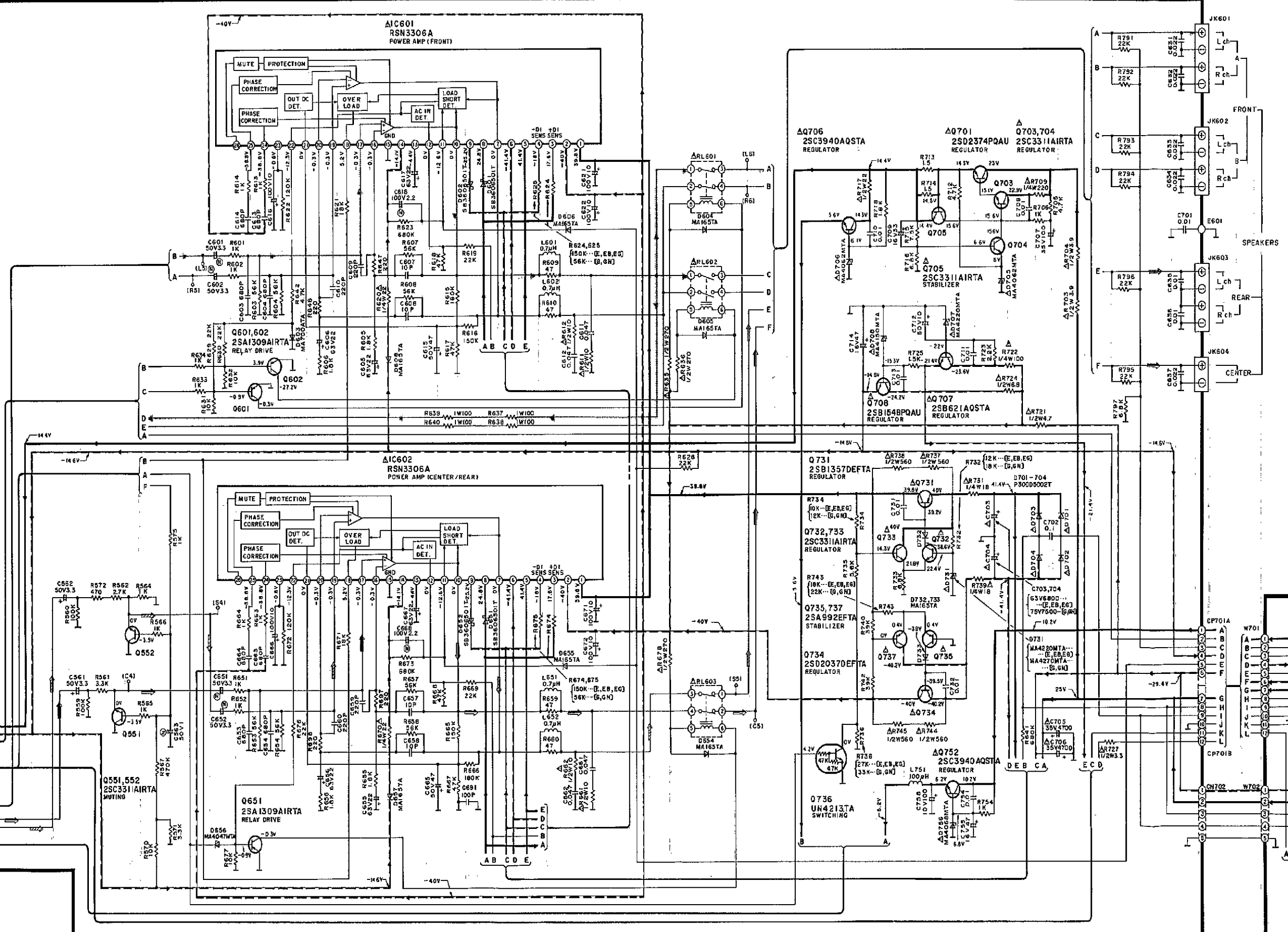
Caution!
IC and LSI are sensitive to static electricity. Secondary trouble can be prevented by taking care during repair.

- 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.

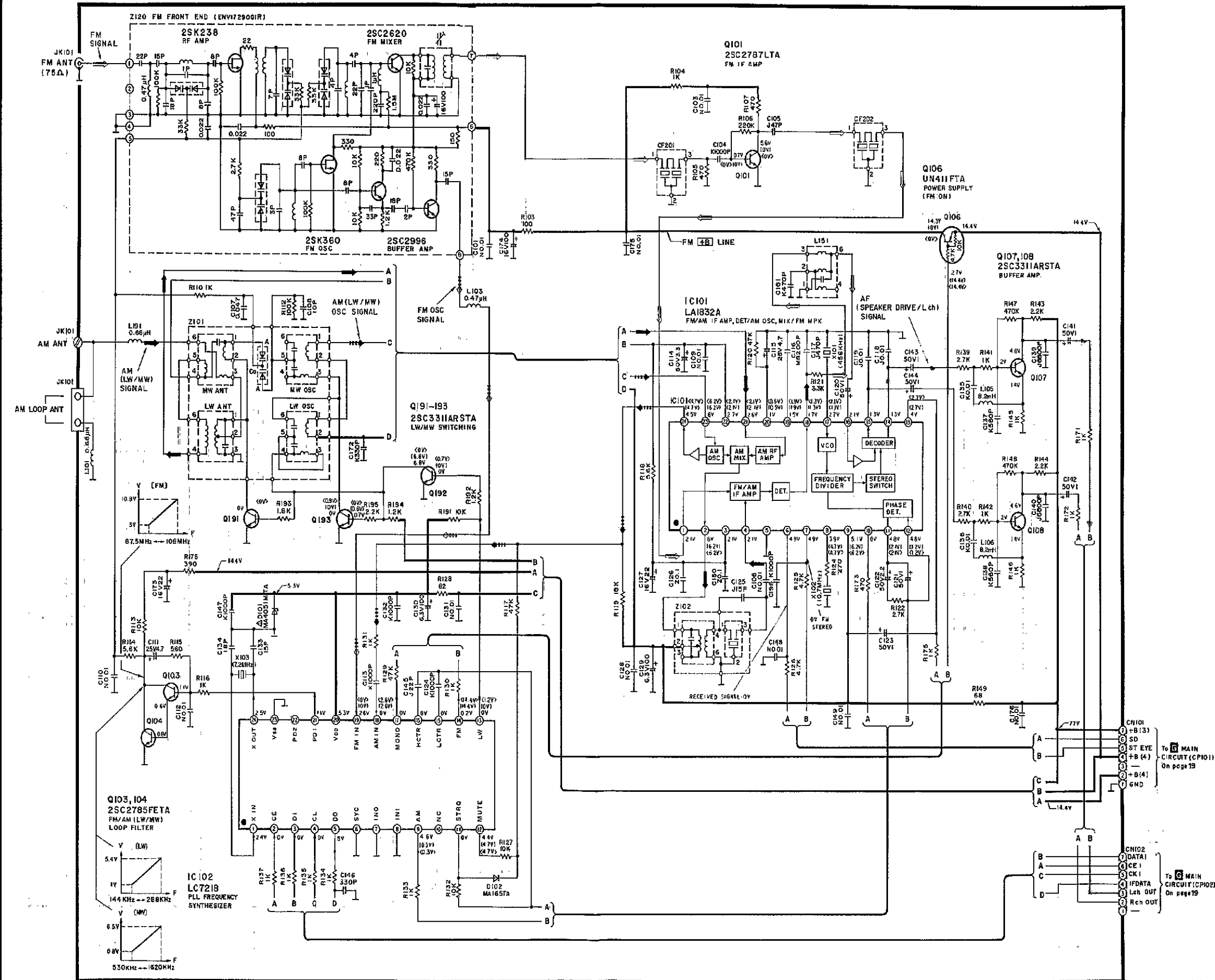
Terminal guide of IC's, transistors and diodes

| | | | |
|--|--|--|--|
| <p>LC8A012C5524</p> | <p>M5218AP 8Pin LV1010N 24Pin LA1832A 24Pin LC7219 24Pin</p> | <p>AN6558-FSG 8Pin LA2785 42Pin</p> | <p>RSN3306A</p> |
| <p>U1PC4570C 8Pin MC14052BCP 16Pin NJU7312AL 28Pin</p> | <p>BA6218</p> | <p>2SA992EFTA 2SB621AQSTA</p> | <p>2SC3940AQSTA</p> |
| <p>2SA1309AIRTA 2SC2785FETA 2SC2787LTA 2SC3311AIRTA 2SC3311ARSTA UN411FTA UN4113TA</p> | <p>UN421FTA UN4211TA UN4213TA UN4214TA 2SA1309AQSTA</p> | <p>2SC3327ABTP</p> | <p>2SD2374PQAU 2SB1357DEFTA 2SD2037DEFTA</p> |
| <p>MA165TA MA700ATA 1S5291TA 1R35200TB</p> | <p>P300DLF P300D5002T S93608591T</p> | <p>LND18304P</p> | |
| <p>MA4030MTA MA4039MTA MA4047MTA MA4056MTA MA4062MTA MA4068MTA MA4075MTA</p> | <p>MA4051MTA MA4270MTA</p> | <p>MA4100MTA MA4150MTA MA4220MTA</p> | |

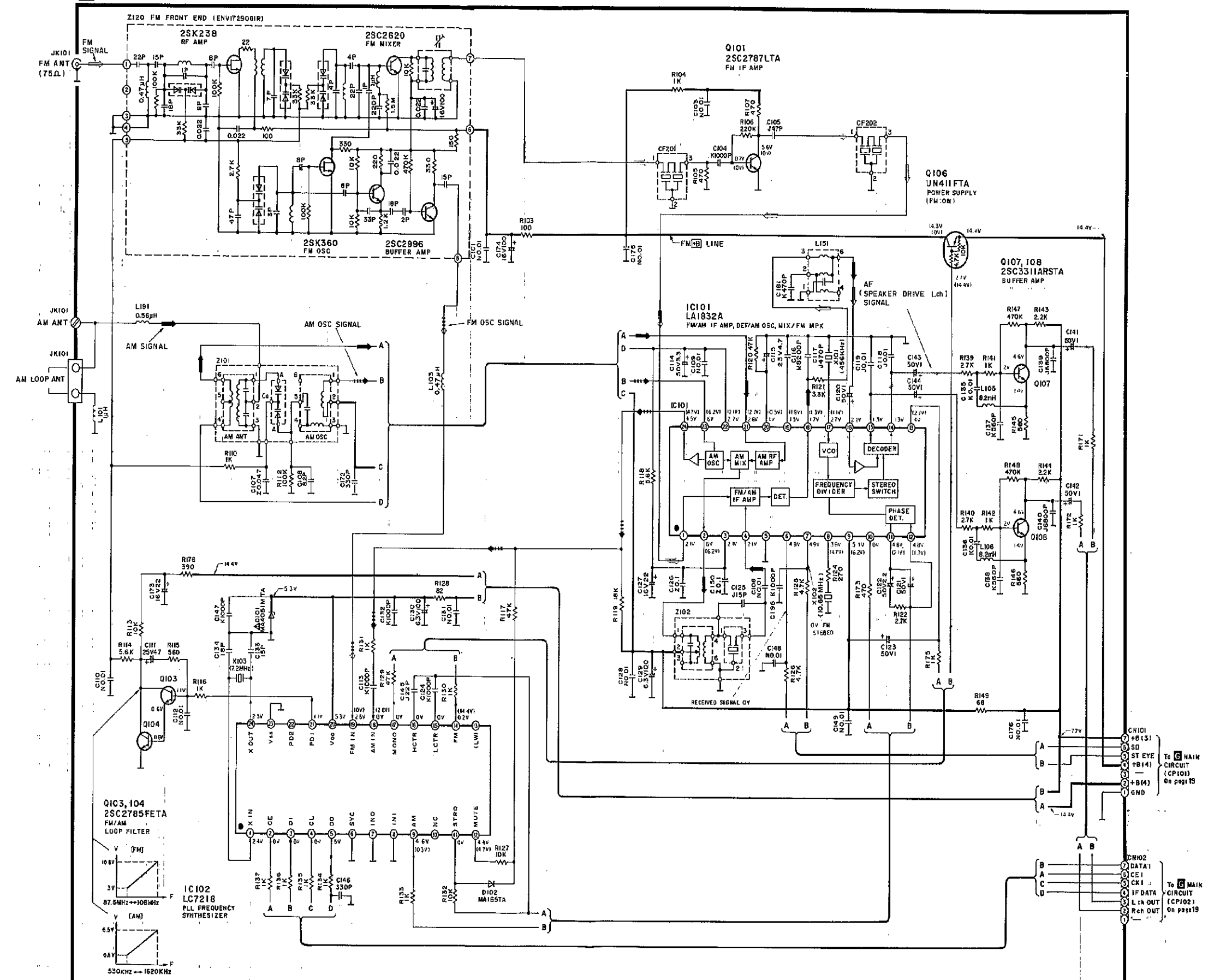


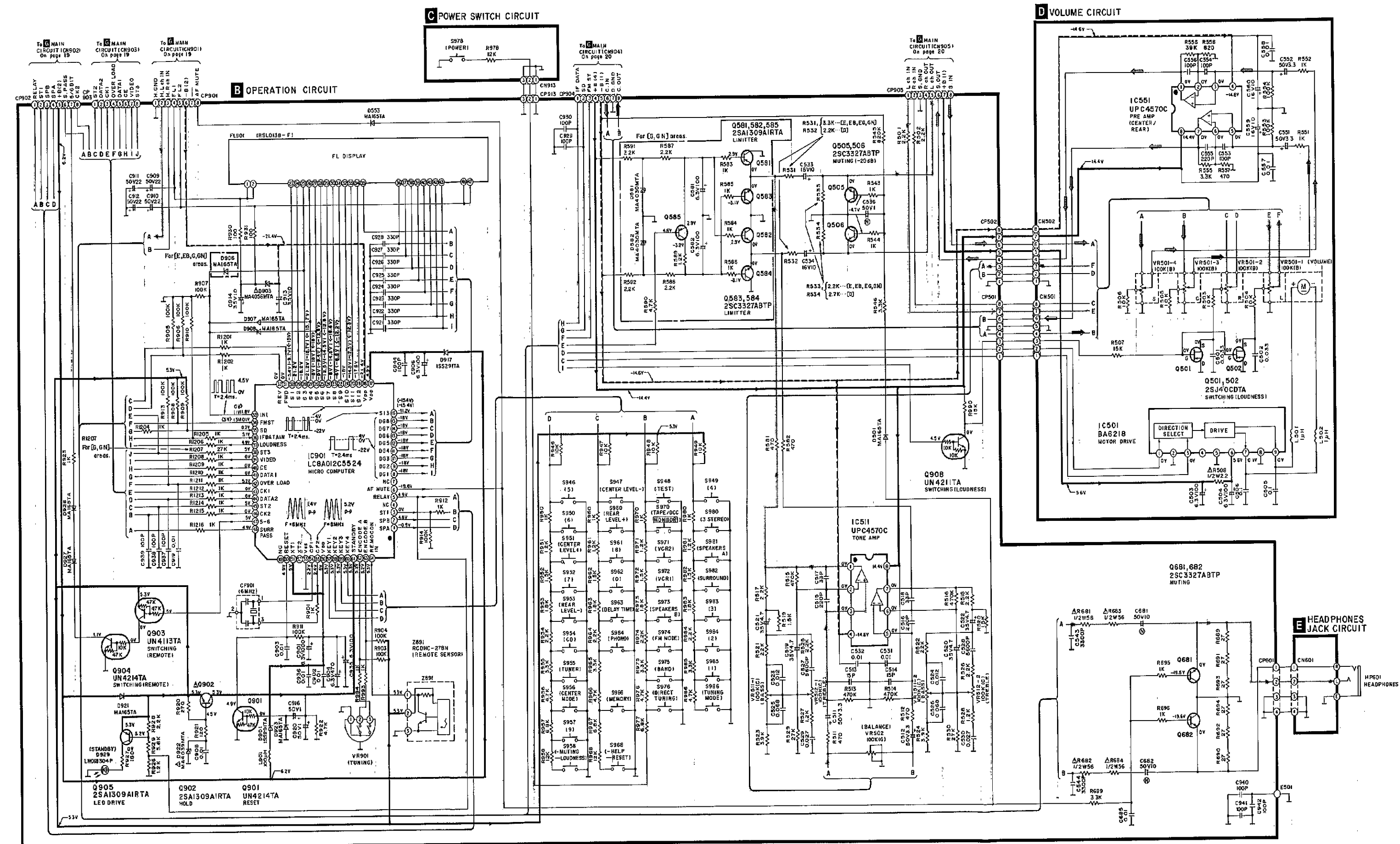


A TUNER CIRCUIT For [E,EB,G,GN] areas.



A TUNER CIRCUIT For [EG] area.

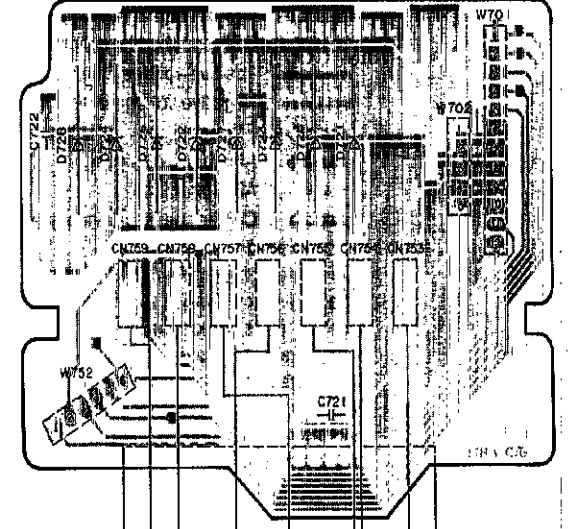




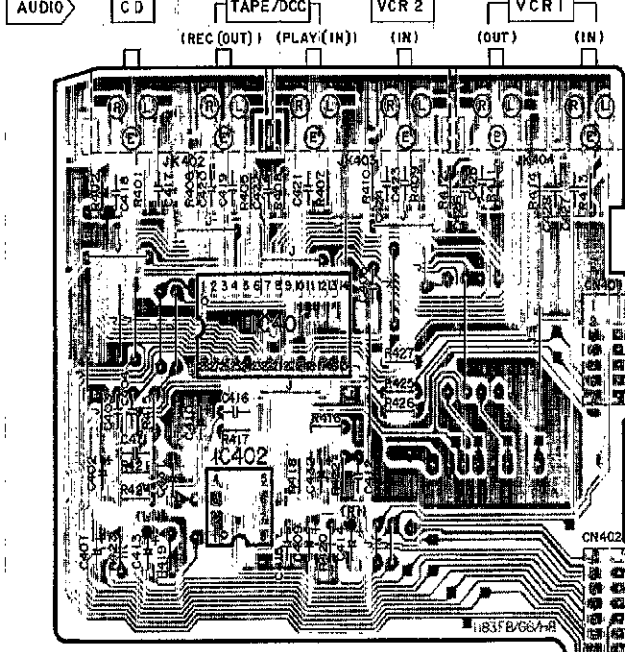
- Note 2:
- S701 : Voltage selector switch in "240V" position. (110V ↔ 127V ↔ 220V ↔ 240V) [For (G) area only.]
 - S946 : Numeric (5) switch.
 - S947 : Center level adjust (CENTER LEVEL (-)) switch.
 - S948 : Test signal ON/OFF (TEST) switch.
 - S949 : Numeric (4) switch.
 - S950 : Numeric (6) switch.
 - 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.
 - S958 : Muting/Loudness (-MUTING-LOUDNESS) switch.
 - S960 : Rear level adjust (REAR LEVEL (+)) switch.
 - S961 : Numeric (8) switch.
 - S962 : Numeric (0) switch.
 - S963 : Delay time adjust (DELAY TIME) switch.
 - S964 : Input select (PHONO) switch.
 - S966 : Memory (MEMORY) switch.
 - S968 : Help/reset (-HELP-RESET) switch.
 - S970 : Tap/DCC monitor (TAPE/DCC MONITOR) switch.
 - S971, 972 : Input select switch. (S971: VCR 2, S972: VCR 1)
 - S973 : Speaker select (SPEAKERS B) switch.
 - S974 : FM mode select (FM MODE) switch.
 - S975 : Band select (BAND) switch.
 - S976 : Direct tuning (DIRECT TUNING) switch.
 - S978 : Power (POWER) switch.
 - S980 : DOLBY PRO LOGIC 3 STEREO ON/OFF (3 STEREO) switch.
 - S981 : Speaker select (SPEAKERS A) switch.
 - S982 : DOLBY PRO LOGIC SURROUND ON/OFF (SURROUND) switch.
 - S983 : Numeric (3) switch.
 - S984 : Numeric (2) switch.
 - S985 : Numeric (1) switch.
 - S986 : Tuning mode select (TUNING MODE) 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 (Lch)
- 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.
- All voltage values shown in circuitry are DC voltage in FM signal (Stereo signal) reception mode.
- * Figures in () stand for DC-voltage in MW 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.

PRINTED CIRCUIT BOARDS

I POWER TRANSFORMER P.C.B. (REP1735B-P... (E,EB)
REP1735C-P... (EG)
REP1735E-P... (GN))

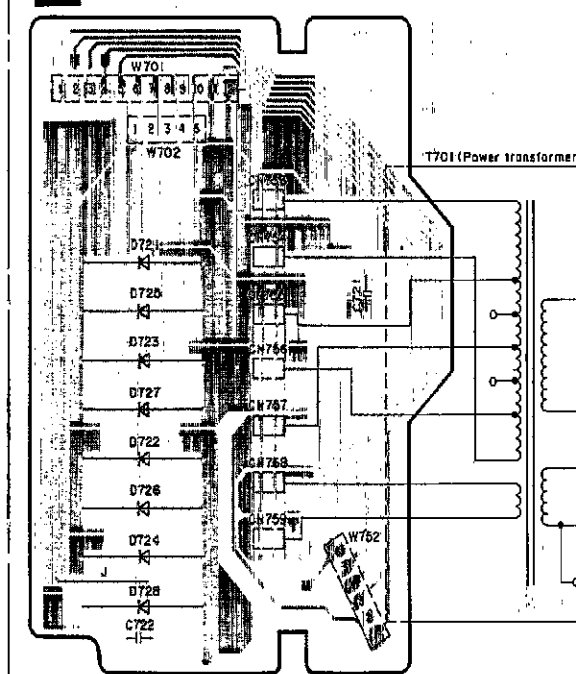


F IN/OUT TERMINAL P.C.B. (REP1735B-P... (E,EB)
REP1735C-P... (EG)
REP1735D-P... (G)
REP1735E-P... (GN))

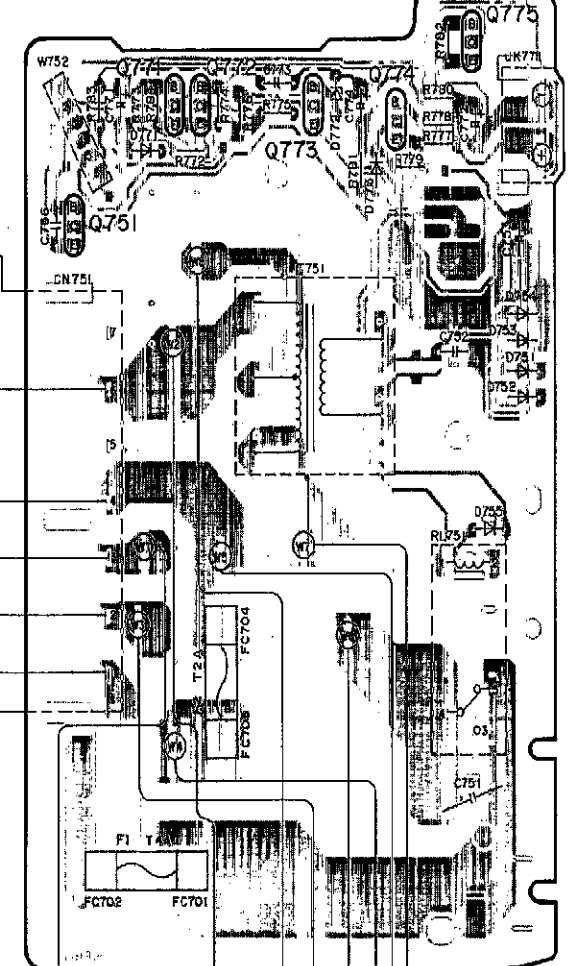


Power Source P.C.B. For (G) area.

I POWER TRANSFORMER P.C.B. (REP1735D-P)

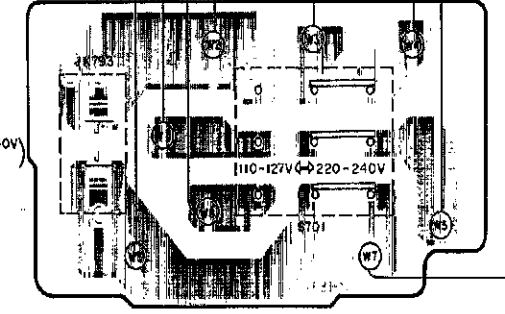
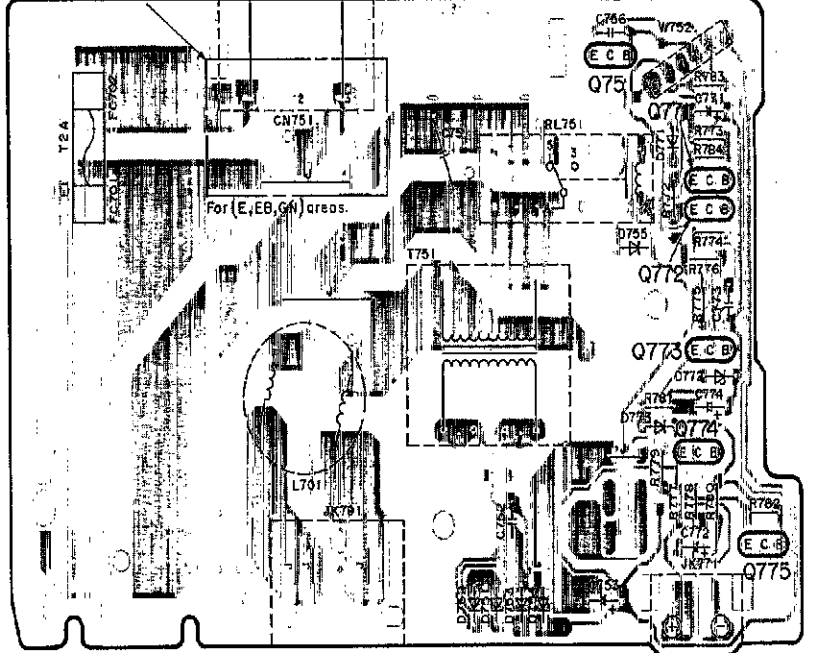
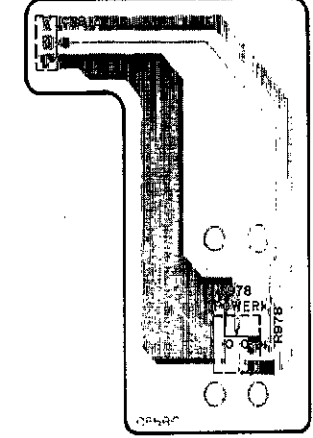


H POWER SUPPLY P.C.B. (REP1735D-P)



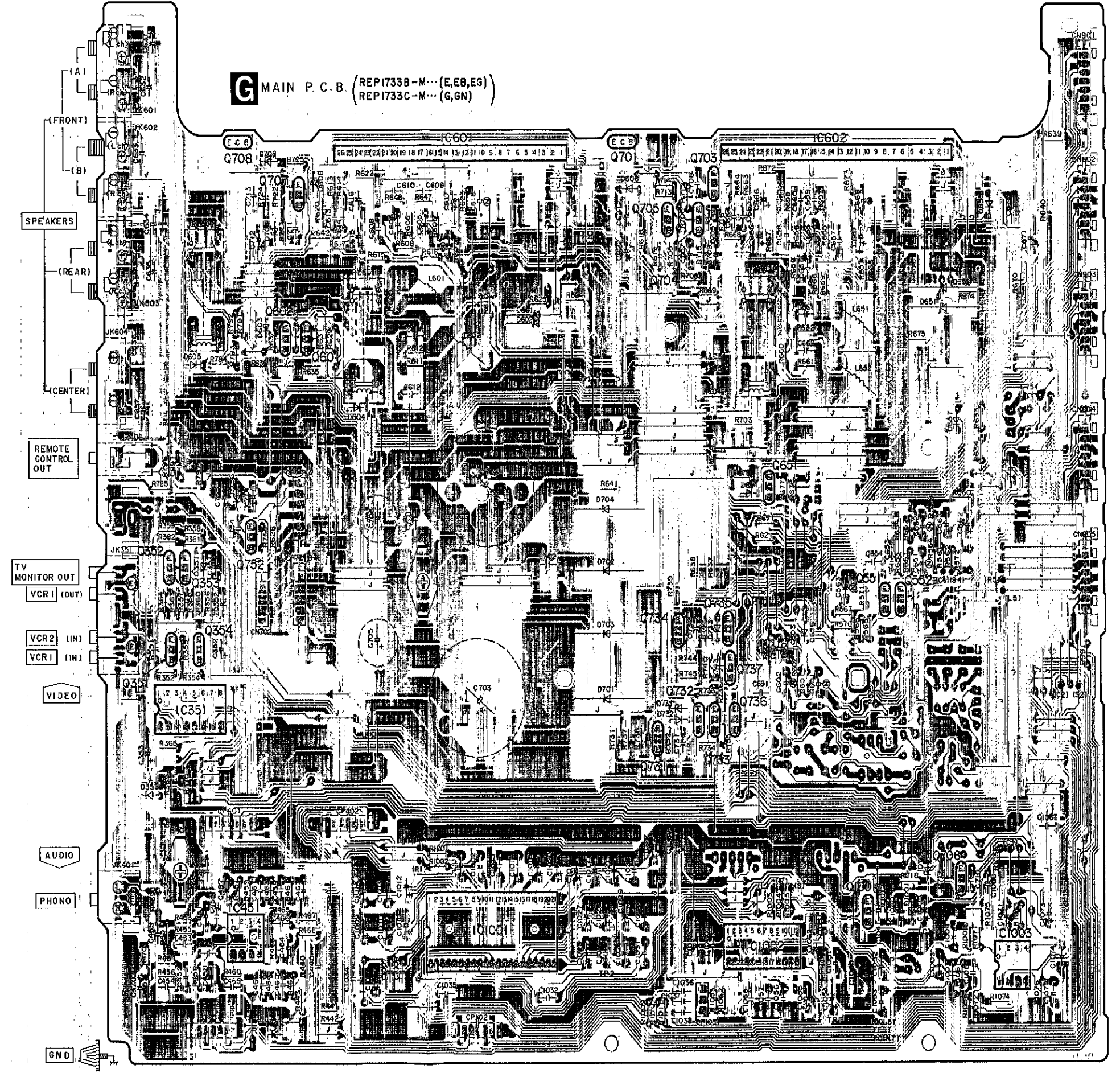
H POWER SUPPLY P.C.B. (REP1735B-P... (E,EB)
REP1735C-P... (EG)
REP1735E-P... (GN))

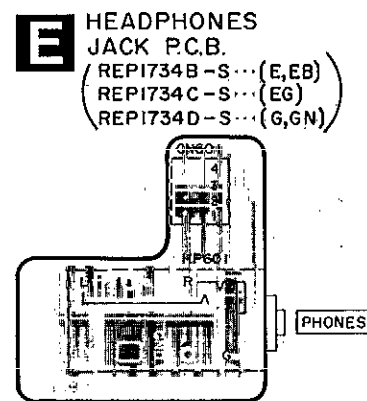
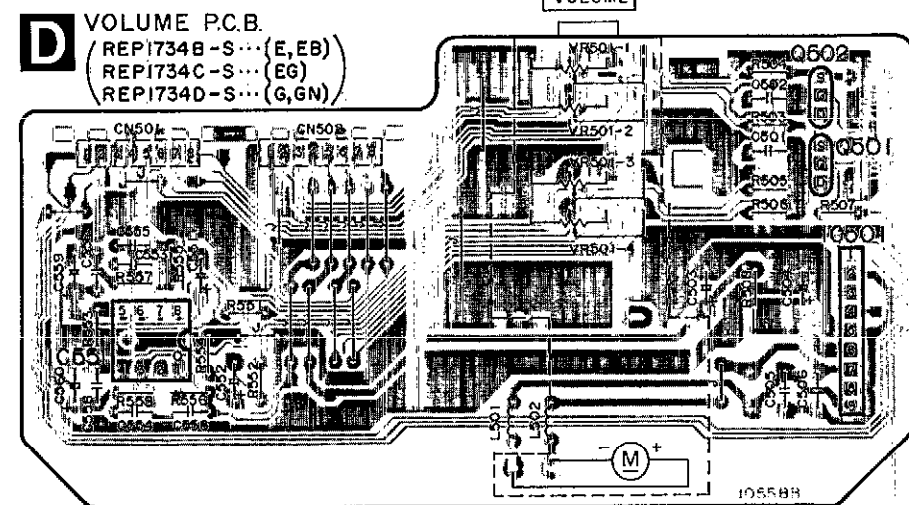
C POWER SWITCH P.C.B. (REP1734B-S... (E,EB)
REP1734C-S... (EG)
REP1734D-S... (G,GN))



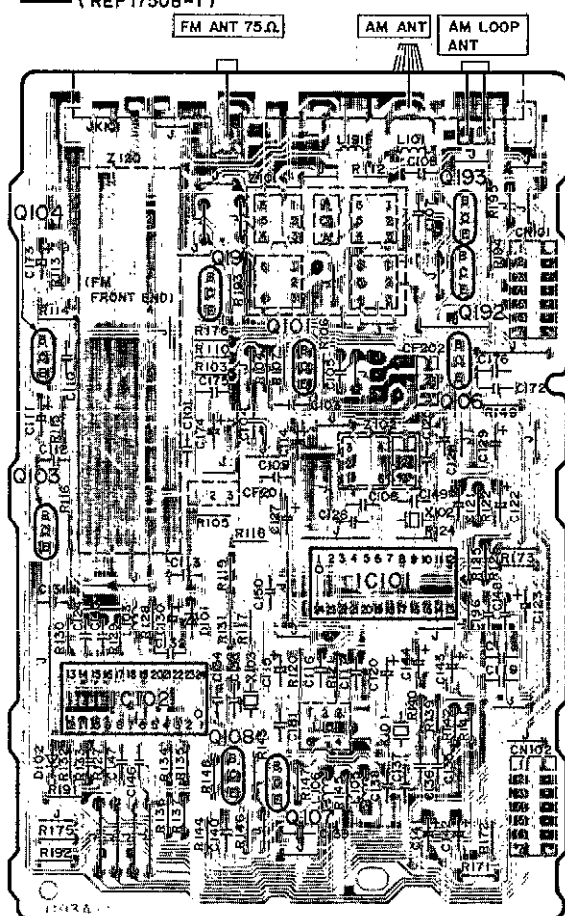
J AC IN P.C.B. (REP1735D-P)

G MAIN P.C.B. (REP1733B-M... (E,EB,EG)
REP1733C-M... (G,GN))

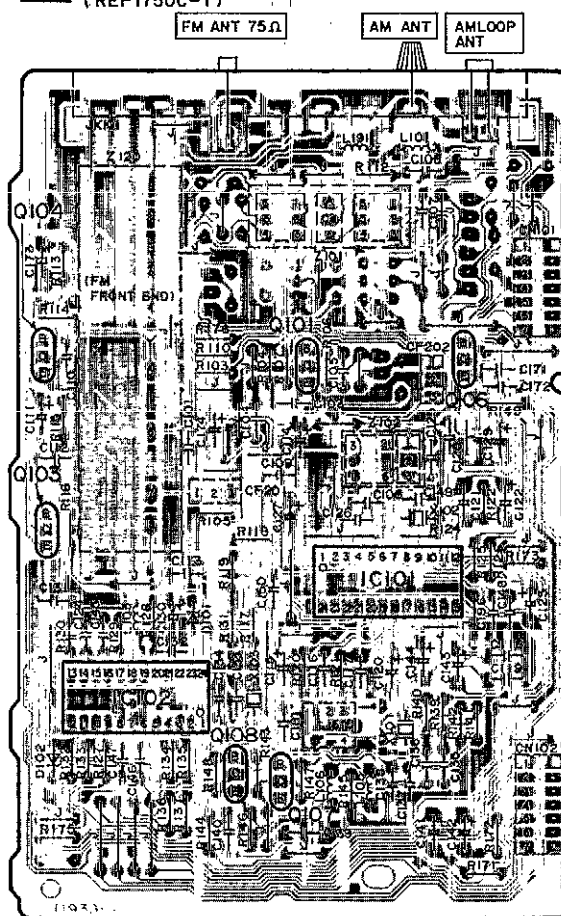




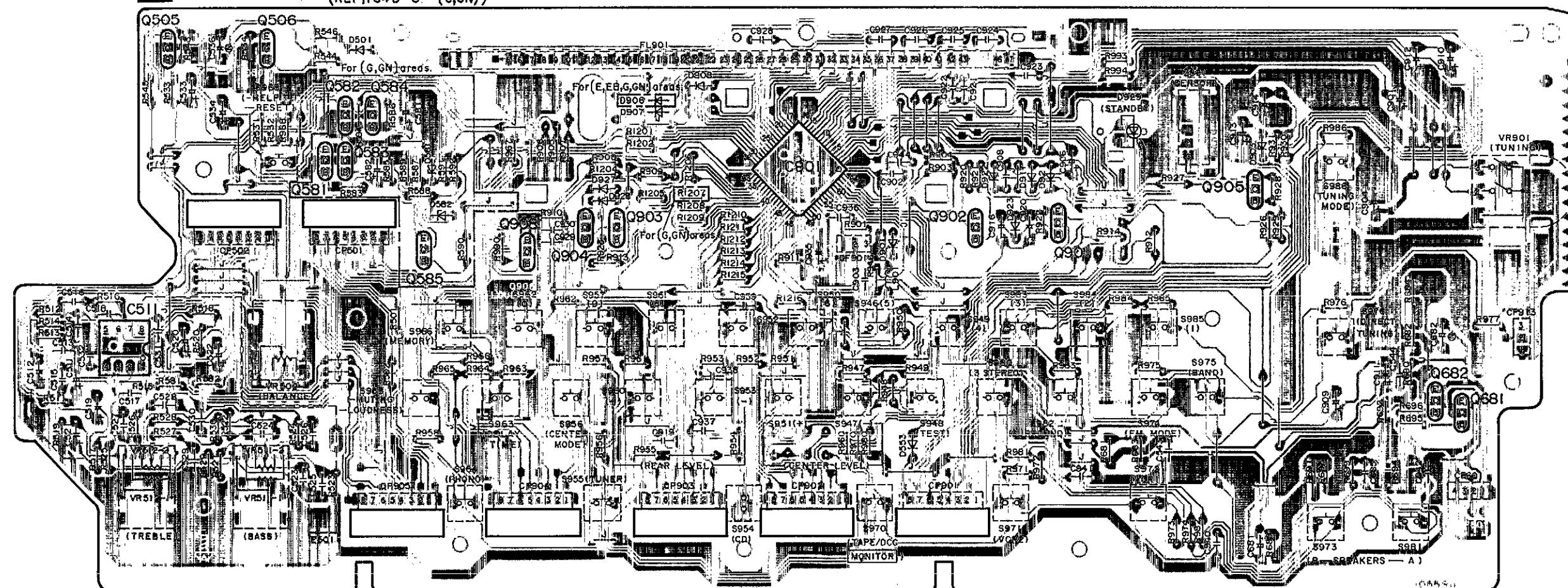
A TUNER P.C.B. For (E,EB,G,GN) areas.
 (REP1750B-T)



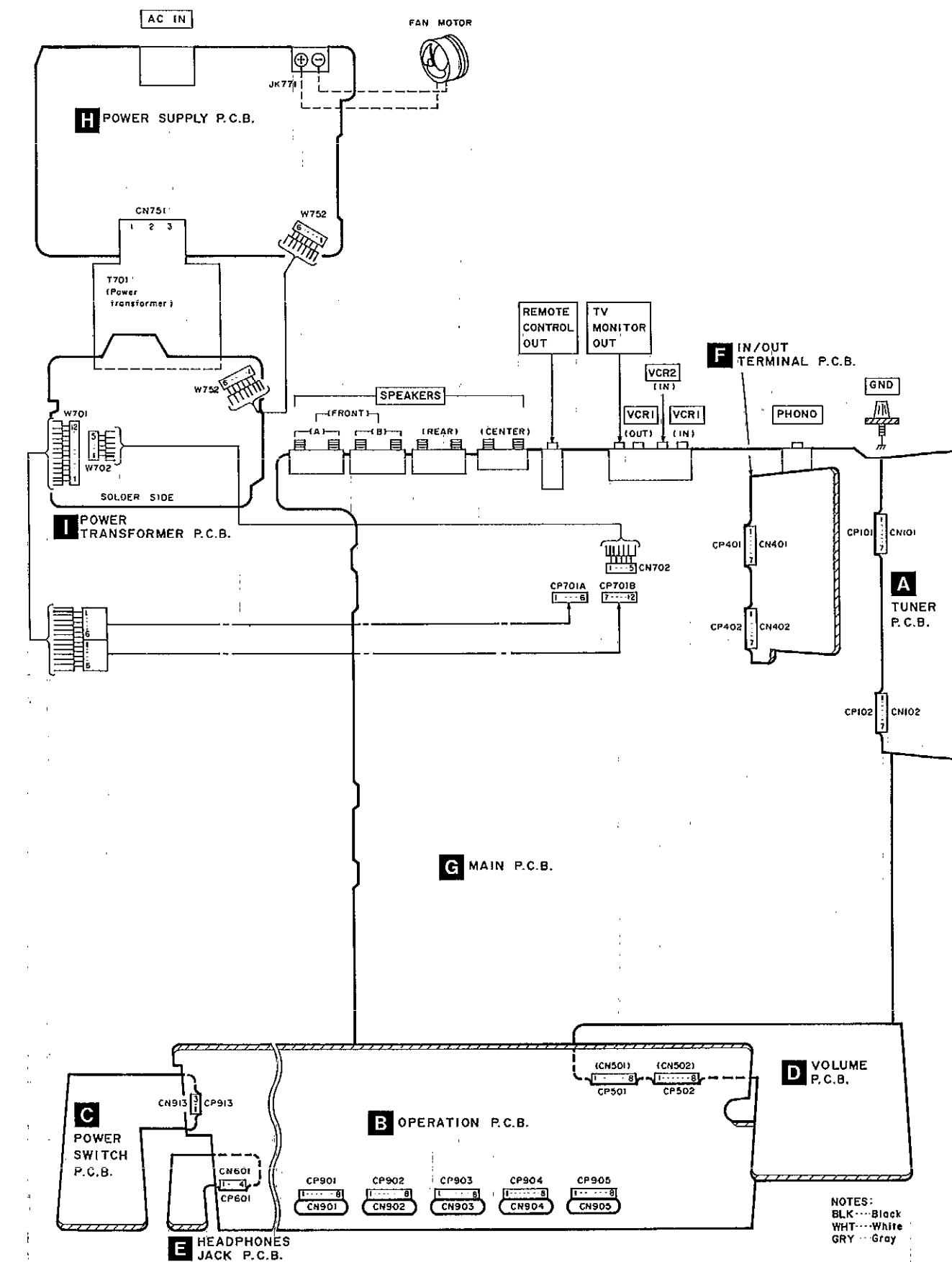
A TUNER P.C.B. For (EG) area.
 (REP1750C-T)



B OPERATION P.C.B. (REP1734B-S... (E,EB)
 REP1734C-S... (EG)
 REP1734D-S... (G,GN))



■ WIRING CONNECTION DIAGRAM



NOTES:
 BLK...Black
 WHT...White
 GRY...Gray

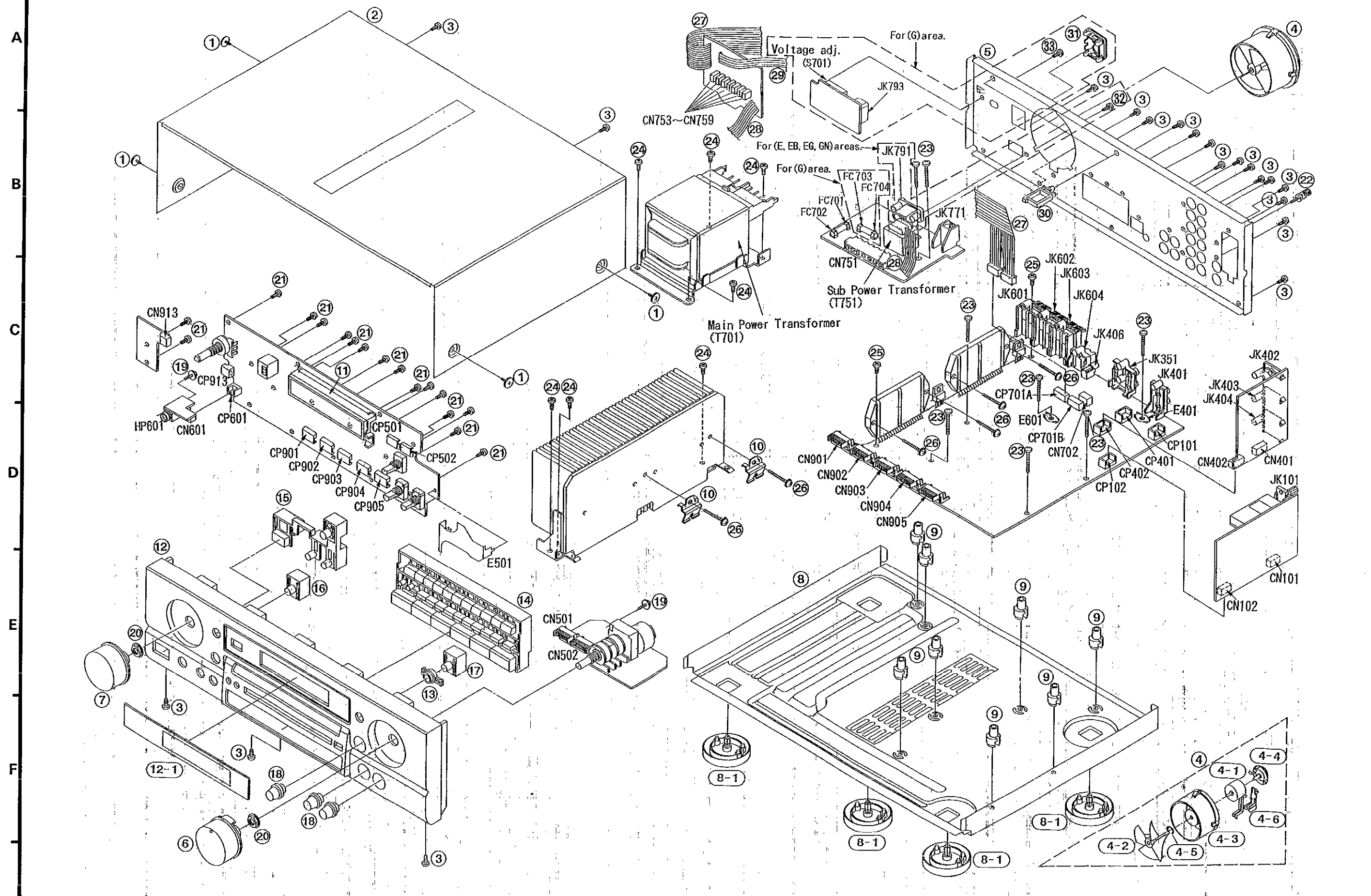
■ TERMINAL FUNCTION OF IC

• IC901 (LC8A012C5524): Microcomputer

| Pin No. | Mark | I/O Division | Function |
|----------|------------|--------------|---|
| 1 2 | SPA SPB | O | Speaker select control terminal |
| 3 | ST1 | O | Level shift control terminal |
| 4 | NC | — | Not used, open |
| 5 | RELAY | O | Relay control terminal |
| 6 | AF MUTE | O | Muting control terminal |
| 7 | NC | — | Not used, open |
| 8 15 | DG1 DG8 | O | Digit signal of FL display |
| 16 | S13 | O | Segment signal of FL display |
| 17 | VDD | I | Power supply terminal |
| 18 | VPP | I | Power supply terminal of FL display |
| 19 30 | S12 S1 | O | Segment signal of FL display |
| 31 32 | FWD REV | O | Rotation control terminal of volume motor |
| 33 | IN1 | — | Not used, connected to resistor |
| 34 | FM ST | I | Stereo signal detect terminal |
| 35 | SD | I | Received signal detect terminal |
| 36 | IFDATAIN | I | Serial data signal |
| 37 | LOUDNESS | — | Not used, open |
| 38 | ST3 | O | Level shift control terminal |
| 39 | VIDEO | O | Video selector control terminal |
| 40 | CE | O | Chip enable terminal |

| Pin No. | Mark | I/O Division | Function |
|----------|----------------------|--------------|-------------------------------------|
| 41 | DATA1 | O | Serial data signal |
| 42 | OVER LOAD | I | Over load detect terminal |
| 43 | CK1 | O | Serial clock signal |
| 44 | DATA2 | O | Serial data signal |
| 45 | ST2 | O | Level shift control terminal |
| 46 | CK2 | O | Serial clock signal |
| 47 | 5-6 | O | Remote control terminal |
| 48 | SURR. PASS | O | Level shift control terminal |
| 49 | NC | — | Test terminal |
| 50 | RESET | I | Reset detect terminal |
| 51 | XT1 | — | Not used, connected to power supply |
| 52 | XT2 | — | Not used, open |
| 53 | VSS | — | GND terminal |
| 54 | CF1 | I | Crystal oscillator |
| 55 | CF2 | O | Terminal (6MHz) |
| 56 | VDD | I | Power supply terminal |
| 57 80 | KEY1 KEY4 | I | Key matrix detect terminal |
| 61 | STANDBY | I | Power detect terminal |
| 62 63 | ENCODE A ENCODE B | I | Not used, connected to power supply |
| 64 | REMOCON IN | I | Remote control terminal |

■ 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 columns specify the areas. (Refer to the cover page for area.)
 Parts without these indications can be used for all areas.

| Ref. No. | Part No. | Part Name & Description | Remarks | Ref. No. | Part No. | Part Name & Description | Remarks |
|----------|--------------|------------------------------|-------------|------------|--------------|-------------------------|-----------------|
| | | CABINET AND CHASSIS | | 32 | XTBS3+8JFZ1 | SCREW | (E, EB, EG, GN) |
| | | | | 33 | XTBS3+8JFZ1 | SCREW | (G) |
| | | | | | | INTEGRATED CIRCUIT(S) | |
| 1 | RHD30035-K1 | SCREW | | IC101 | LA1832A | FM/AM IF AMP./AM OSC | |
| 2 | RKMO041A-K | CABINET | | IC102 | LC7218 | PLL FREQ. SYNTHESIZER | |
| 3 | XTBS3+8JFZ1 | SCREW | | IC351 | MC14052BCP | VIDEO SELECTOR | |
| 4 | REMO020-1 | FAN MOTOR UNIT | | IC401 | NJU7312AL | INPUT SELECTOR | |
| 4-1 | MDN-4RB4MRC | MOTOR | | IC402 | UPC4570C | BUFFER AMP. | |
| 4-2 | SHE232-1 | FAN | | IC451 | AN6558-FSG | PHONO EQ AMP. | |
| 4-3 | RMQ0209-K | FAN CASE | | IC501 | BA6218 | MOTOR DRIVE | |
| 4-4 | RMQ0208-K | FAN CAP | | IC511 | UPC4570C | TONE AMP. | |
| 4-5 | SUS271 | SPRING | | IC551 | UPC4570C | PRE AMP. | |
| 4-6 | RMQ0212-K | FAN TERMINAL CAP | | IC601, 602 | RSN3306A | POWER AMP. | Δ |
| 5 | RGRD168G-B2 | REAR PANEL | (E) | IC901 | LC8A012C5524 | MICROCOMPUTER | |
| 5 | RGRD168G-C2 | REAR PANEL | (EB) | IC1001 | LA2785 | DOLBY PRO-LOGIC CONTROL | |
| 5 | RGRD168G-A | REAR PANEL | (EG) | IC1002 | LV1010N | DOLBY PRO-LOGIC DRIVE | |
| 5 | RGRD168H-A | REAR PANEL | (G) | IC1003 | M5218AP | BUFFER AMP. | |
| 5 | RGRD168G-D2 | REAR PANEL | (GN) | | | TRANSISTOR(S) | |
| 6 | RGWD163-K | VOLUME KNOB | | Q101 | 2SC2787L | TRANSISTOR | |
| 7 | RGWD171-K | TUNING KNOB | | Q103, 104 | 2SC2785FE | TRANSISTOR | |
| 8 | RFKJAGX470PK | BOTTOM CHASSIS ASS'Y | | Q106 | UN411FTA | TRANSISTOR | |
| 8-1 | RKA0053-A | FOOT | | Q107, 108 | 2SC3311ARSTA | TRANSISTOR | |
| 9 | RKQ0089 | P. C. B. SUPPORT | | Q191-193 | 2SC3311ARSTA | TRANSISTOR | (E, EB, G, GN) |
| 10 | RMCO158 | TRANSISTOR HOLDER | | Q351 | 2SC3311AIRTA | TRANSISTOR | |
| 11 | RMNO205 | FL HOLDER | | Q352, 353 | 2SA1309AIRTA | TRANSISTOR | |
| 12 | RFKGAGX670EK | FRONT PANEL ASS'Y | (E, EB, EG) | Q354 | UN4213 | TRANSISTOR | |
| 12 | RFKGAGX670GK | FRONT PANEL ASS'Y | (G, GN) | Q501, 502 | 2SJ40CDTA | TRANSISTOR | |
| 12-1 | RKWD268D-Q | TRANSPARENT PLATE | | Q505, 506 | 2SC3327-A | TRANSISTOR | |
| 13 | RGK0604-N | ORNAMENT BUTTON | | Q551, 552 | 2SC3311AIRTA | TRANSISTOR | |
| 14 | RGU0837B-K | SELECTOR BUTTON | | Q581, 582 | 2SA1309AIRTA | TRANSISTOR | (G) |
| 15 | RFKNAGX550PA | POWER BUTTON ASS'Y | | Q583, 584 | 2SC3327-A | TRANSISTOR | (G) |
| 16 | RFKNAGX550PB | MODE BUTTON ASS'Y | | Q585 | 2SA1309AIRTA | TRANSISTOR | (G) |
| 17 | RFKNAGX350PB | MUTING BUTTON ASS'Y | | Q601, 602 | 2SA1309AIRTA | TRANSISTOR | |
| 18 | RGWD175-1K | BALANCE/TREBLE/BASS KNOB | | Q651 | 2SA1309AIRTA | TRANSISTOR | |
| 19 | RHD26016 | SCREW | | Q681, 682 | 2SC3327-A | TRANSISTOR | |
| 20 | RHN90001 | NUT | | Q701 | 2SD2374PQAU | TRANSISTOR | Δ |
| 21 | XTBS26+8J | SCREW | | Q703-705 | 2SC3311AIRTA | TRANSISTOR | Δ |
| 22 | SNE2123 | GND TERMINAL | | Q706 | 2SC3940AQSTA | TRANSISTOR | Δ |
| 23 | XTB3+20JFZ | SCREW | | Q707 | 2SB621AQSTA | TRANSISTOR | Δ |
| 24 | XTB3+8JFZ | SCREW | | Q708 | 2SB1548PQAU | TRANSISTOR | Δ |
| 25 | XTWS3+8T | SCREW | | Q731 | 2SB1357DEFTA | TRANSISTOR | Δ |
| 26 | XTW3+15T | SCREW | | Q732, 733 | 2SC3311AIRTA | TRANSISTOR | Δ |
| 27 | RFKEUG95GAK | CONNECTOR ASS'Y (W701) (12P) | | Q734 | 2SD2037DEFTA | TRANSISTOR | Δ |
| 28 | RFKEUG95GBK | FLAT CABLE ASS'Y (W752) (6P) | | | | | |
| 29 | REZO684 | FLAT CABLE (5P) | | | | | |
| 30 | SHR9814 | CLAMPER | | | | | |
| 31 | SJS9231A | AC INLET COVER | (G) | | | | |

| Ref. No. | Part No. | Part Name & Description | Remarks | Ref. No. | Part No. | Part Name & Description | Remarks |
|-----------|--------------|-------------------------|------------------|------------|--------------|-----------------------------|-------------------|
| Q735 | 2SA992EFTA | TRANSISTOR | △ | D906 | MA165 | DIODE | (E, EB, G, GN) |
| Q736 | UN4213 | TRANSISTOR | | D907, 908 | MA165 | DIODE | |
| Q737 | 2SA992EFTA | TRANSISTOR | △ | D917 | 1SS291TA | DIODE | |
| Q751 | UN421FTA | TRANSISTOR | | D921 | MA165 | DIODE | |
| Q752 | 2SC3940AQSTA | TRANSISTOR | △ | D922 | MA4039MTA | DIODE | △ |
| Q771 | 2SA1309AIRTA | TRANSISTOR | | D923 | MA165 | DIODE | |
| Q772 | 2SA1309A-R | TRANSISTOR | | D927, 928 | MA165 | DIODE | |
| Q773 | 2SB621AQSTA | TRANSISTOR | △ | D929 | LN018304P | L. E. D. | |
| Q774, 775 | 2SA1309AIRTA | TRANSISTOR | | D1001 | MA4100MTA | DIODE | △ |
| Q901 | UN4214TA | TRANSISTOR | | | | VARIABLE RESISTOR(S) | |
| Q902 | 2SA1309AIRTA | TRANSISTOR | △ | | | | |
| Q903 | UN4113TA | TRANSISTOR | | VR501 | EUWMK3002B15 | VOLUME CONTROL | |
| Q904 | UN4214TA | TRANSISTOR | | VR502 | EVJ02SFA5G15 | BALANCE CONTROL | |
| Q905 | 2SA1309AIRTA | TRANSISTOR | | VR511, 512 | EVJYA1F02C15 | TONE CONTROL | |
| Q908 | UN4211 | TRANSISTOR | | VR901 | EVQWPF02024B | TUNING CONTROL | |
| Q1001 | 2SC3940AQSTA | TRANSISTOR | △ | | | COIL(S) | |
| | | DIODE(S) | | | | | |
| D101 | MA4051MTA | DIODE | △ | L101 | ELESNR68MA | COIL | (E, EB, G, GN) |
| D102 | MA165 | DIODE | | L101 | ELESN1ROMA | COIL | (EG) |
| D351, 352 | MA4056MTA | DIODE | △ | L103 | ELETR47MA9 | COIL | |
| D353 | MA165 | DIODE | | L105, 106 | RLQZB822KT-D | COIL | |
| D401 | MA4075MTA | DIODE | △ | L151 | SLM1B10M-1M | COIL | |
| D501 | MA165 | DIODE | | L191 | ELESNR68MA | COIL | (E, EB, G, GN) |
| D553 | MA165 | DIODE | | L191 | ELESNR56MA | COIL | (EG) |
| D581, 582 | MA4030MTA | DIODE | (G) | L501, 502 | RLQZP1ROKT-Y | COIL | |
| D601, 602 | SB3606501T | DIODE | | L601, 602 | RLQYR73M | COIL | |
| D603 | MA700 | DIODE | | L651, 652 | RLQYR73M | COIL | |
| D604-606 | MA165 | DIODE | | L701 | SLQZ650MH49 | COIL | (E, EB, EG, GN) △ |
| D608 | MA165 | DIODE | | L751 | ELEPK101KA | COIL | |
| D651, 652 | SB3606501T | DIODE | | L901 | RLQZP101KT-Y | COIL | |
| D654, 655 | MA165 | DIODE | | L1051 | ELEPK101KA | COIL | |
| D656 | MA4047MTA | DIODE | | | | TRANSFORMER(S) | |
| D657 | MA165 | DIODE | | | | | |
| D701-704 | P300D5002T | DIODE | △ | T701 | RTP1P5E011-V | POWER TRANSFORMER (MAIN) | (E, EB, EG) △ |
| D705, 706 | MA4062MTA | DIODE | △ | T701 | RTP1P5E012-V | POWER TRANSFORMER (MAIN) | (G) △ |
| D707 | MA4220MTA | DIODE | △ | T701 | RTP1P5E013-V | POWER TRANSFORMER (MAIN) | (GN) △ |
| D708 | MA4150M | DIODE | △ | T751 | RTP1I5E003-V | POWER TRANSFORMER (SUB) | (E, EB, EG, GN) △ |
| D721-724 | P300DLF | DIODE | △ | T751 | RTP1I5E005-V | POWER TRANSFORMER (SUB) | (G) △ |
| D725-728 | P300DLF | DIODE | (E, EB, EG, G) △ | | | COMPONENT COMBINATION(S) | |
| D731 | MA4220MTA | DIODE | (E, EB, EG) △ | Z101 | RLA6Z005M-T | COMPONENT COMBINATION | (E, EB, G, GN) |
| D731 | MA4270 | DIODE | (G, GN) △ | Z101 | RLA2Z002M-T | COMPONENT COMBINATION | (EG) |
| D732, 733 | MA165 | DIODE | | Z102 | RL12Z006M-T | COMPONENT COMBINATION | |
| D751-754 | 1SR35200TB | DIODE | △ | Z891 | RCDHC-278N | REMOTE SENSOR | |
| D755 | MA165 | DIODE | | | | FILTER(S) AND OSCILLATOR(S) | |
| D756 | MA4068M | DIODE | △ | | | | |
| D771 | MA165 | DIODE | | CF201, 202 | RLFFETNGD01L | FILTER | |
| D772 | MA4068M | DIODE | △ | | | | |
| D773 | MA165 | DIODE | | | | | |
| D901 | 1SS291TA | DIODE | | | | | |
| D903 | MA4056MTA | DIODE | △ | | | | |

| Ref. No. | Part No. | Part Name & Description | Remarks | Ref. No. | Part No. | Part Name & Description | Remarks |
|----------|--------------|----------------------------|-------------------|------------|--------------|-----------------------------|-----------------|
| CF901 | EFOEC6004T4 | OSCILLATOR(6MHz) | | S981 | EVQ21405R | SPEAKER A | |
| CF1051 | EFOEC8004T4 | OSCILLATOR(8MHz) | | S982 | EVQ21405R | SURROUND | |
| X101 | RSXZ456KM07M | OSCILLATOR(456KHz) | | S983 | EVQ21405R | NUMERIC 3 | |
| X102 | RLFDGTD01I | OSCILLATOR(10.65MHz) | | S984 | EVQ21405R | NUMERIC 2 | |
| X103 | SVQ49U722-S | OSCILLATOR. (7.2MHz) | | S985 | EVQ21405R | NUMERIC 1 | |
| | | DISPLAY TUBE(S) | | S986 | EVQ21405R | TUNING MODE | |
| | | | | | | RELAY(S) | |
| FL901 | RSL0138-F | DISPLAY TUBE | | RL601-603 | RSY0013M-0 | RELAY | △ |
| | | FM FRONT END PACK ASS'Y(S) | | RL751 | RSY0019-0 | RELAY | △ |
| | | | | | | CONNECTOR(S) AND SOCKET(S) | |
| Z120 | ENV17290G1R | FM FRONT END | | CN101, 102 | RJU057W007 | SOCKET(7P) | |
| | | FUSE(S) | | CN401, 402 | RJU057W007 | SOCKET(7P) | |
| F1 | XBA2C20TBO | FUSE, 250V, 2A | (E, EB, EG, GN) △ | CN501, 502 | RJU003K008M1 | SOCKET(8P) | |
| F1 | XBA2C40TBO | FUSE, 250V, 4A | (G) △ | CN601 | RJU057W004 | SOCKET(4P) | |
| F2 | XBA2C20TBO | FUSE, 250V, 2A | (G) △ | CN702 | RJS1A6605 | CONNECTOR(5P) | |
| | | SWITCH(ES) | | CN751 | SJS305-1 | CONNECTOR(3P) | (E, EB, EG, GN) |
| | | | | CN751 | SJS702-1 | CONNECTOR(7P) | (G) |
| S701 | ESD26840A | VOLTAGE SELECTOR | (G) △ | CN753-759 | RJS1A1101T1 | CONNECTOR(1P) | |
| S946 | EVQ21405R | NUMERIC 5 | | CN901-905 | RJU003K008M1 | SOCKET(8P) | |
| S947 | EVQ21405R | CENTER LEVEL(-) | | CN913 | SJS50382JQH | SOCKET(3P) | |
| S948 | EVQ21405R | TEST | | CP101, 102 | RJT057W007-1 | CONNECTOR(7P) | |
| S949 | EVQ21405R | NUMERIC 4 | | CP401, 402 | RJT057W007-1 | CONNECTOR(7P) | |
| S950 | EVQ21405R | NUMERIC 6 | | CP501, 502 | RJT003K008-1 | CONNECTOR(8P) | |
| S951 | EVQ21405R | CENTER LEVEL(+) | | CP601 | RJT057W004-1 | CONNECTOR(4P) | |
| S952 | EVQ21405R | NUMERIC 7 | | CP701A | RJT039W06T | CONNECTOR(6P) | |
| S953 | EVQ21405R | REAR LEVEL(-) | | CP701B | RJT039W06T | CONNECTOR(6P) | |
| S954 | EVQ21405R | CD | | CP901-905 | RJT003K008-1 | CONNECTOR(8P) | |
| S955 | EVQ21405R | TUNER | | CP913 | SJT30345JQ | CONNECTOR(3P) | |
| S956 | EVQ21405R | CENTER MODE | | | | JACK(S) | |
| S957 | EVQ21405R | NUMERIC 9 | | | | | |
| S958 | EVQ21405R | MUTING/LOUDNESS | | JK101 | RJH4202M | ANT TERMINAL | |
| S960 | EVQ21405R | REAR LEVEL(+) | | JK351 | SJF3069-3N | TV MONITOR OUT/VIDEO | |
| S961 | EVQ21405R | NUMERIC 8 | | JK401 | SJF3068-7N | PHONO TERMINAL | |
| S962 | EVQ21405R | NUMERIC 0 | | JK402 | SJF3069N | CD IN/REC OUT TERMINAL | |
| S963 | EVQ21405R | DELAY TIME | | JK403 | SJF3069N | PLAY IN/VCR2 IN TERMINAL | |
| S964 | EVQ21405R | PHONO | | JK404 | SJF3069N | VCR1 OUT/VCR1 IN TERMINAL | |
| S966 | EVQ21405R | MEMORY | | JK406 | RJJ33TR01 | REMOTE CONTROL OUT TERMINAL | |
| S968 | EVQ21405R | HELP/RESET | | JK601 | RJR0054 | FRONT SPEAKER(A) TERMINAL | |
| S970 | EVQ21405R | TAPE/DCC MONITOR | | JK602 | RJR0054 | FRONT SPEAKER(B) TERMINAL | |
| S971 | EVQ21405R | VCR2 | | JK603 | RJR0054 | REAR SPEAKER TERMINAL | |
| S972 | EVQ21405R | VCR1 | | JK604 | SJF5201M-1 | CENTER SPEAKER TERMINAL | |
| S973 | EVQ21405R | SPEAKER B | | JK771 | RJS1A7402-1 | FAN MOTOR TERMINAL | |
| S974 | EVQ21405R | FM MODE | | JK791 | SJS9236 | AC INLET | (E, EB, EG) △ |
| S975 | EVQ21405R | BAND | | JK791 | SJSD16 | AC INLET | (GN) △ |
| S976 | EVQ21405R | DIRECT TUNING | | JK793 | SJS9231-1B | AC INLET | (G) △ |
| S978 | EVQ21405R | POWER | | HP601 | RJJ63TA01 | HEADPHONES JACK | |
| S980 | EVQ21405R | 3 STEREO | | | | | |

| Ref. No. | Part No. | Part Name & Description | Remarks | | | | |
|------------|-----------|-------------------------|---------|--|--|--|--|
| | | GND PLATE(S) | | | | | |
| E401 | SNE1004-2 | GND PLATE | | | | | |
| E501 | RSC0370 | GND PLATE | | | | | |
| E601 | SNE1004-2 | GND PLATE | | | | | |
| | | FUSE HOLDER(S) | | | | | |
| FC701, 702 | EYF52BC | FUSE HOLDER | | | | | |
| FC703, 704 | EYF52BC | FUSE HOLDER | (G) | | | | |

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 | R139, 140 | ERDS2TJ272T | 1/4W 2.7K | R366 | ERDS2TJ104 | 1/4W 100K |
| | | | R141, 142 | ERDS2TJ102 | 1/4W 1K | R369, 370 | ERDS1FVJ271T | 1/2W 270 Δ |
| | | | R143, 144 | ERDS2TJ222 | 1/4W 2.2K | R401, 402 | ERDS2TJ102 | 1/4W 1K |
| R103 | ERDS2TJ101 | 1/4W 100 | R145, 146 | ERDS2TJ102 | 1/4W 1K E, EB, G, GN | R405-416 | ERDS2TJ102 | 1/4W 1K |
| R104 | ERDS2TJ102 | 1/4W 1K | R145, 146 | ERDS2TJ561 | 1/4W 560 EG | R417, 418 | ERDS2TJ473 | 1/4W 47K |
| R105 | ERDS2TJ471 | 1/4W 470 | R147, 148 | ERDS2TJ474 | 1/4W 470K | R419-422 | ERDS2TJ104 | 1/4W 100K |
| R106 | ERDS2TJ224T | 1/4W 220K | R149 | ERDS2TJ680T | 1/4W 68 | R423, 424 | ERDS2TJ102 | 1/4W 1K |
| R107 | ERDS2TJ471 | 1/4W 470 | R171, 172 | ERDS2TJ102 | 1/4W 1K | R425-427 | ERDS2TJ103 | 1/4W 10K |
| R110 | ERDS2TJ102 | 1/4W 1K | R173 | ERDS2TJ471 | 1/4W 470 | R440 | ERDS1FVJ820T | 1/2W 82 Δ |
| R112 | ERDS2TJ104 | 1/4W 100K | R175 | ERDS2TJ102 | 1/4W 1K | R441, 442 | ERDS2TJ473 | 1/4W 47K |
| R113 | ERDS2TJ103 | 1/4W 10K | R176 | ERDS2TJ391 | 1/4W 390 | R443 | ERDS2TJ330 | 1/4W 33 |
| R114 | ERDS2TJ562 | 1/4W 5.6K | R191 | ERDS2TJ103 | 1/4W 10K E, EB, G, GN | R451, 452 | ERDS2TJ224T | 1/4W 220K |
| R115 | ERDS2TJ561 | 1/4W 560 | R192 | ERDS2TJ122 | 1/4W 1.2K E, EB, G, GN | R453, 454 | ERDS2TJ391 | 1/4W 390 |
| R116 | ERDS2TJ102 | 1/4W 1K | R193 | ERDS2TJ182 | 1/4W 1.8K E, EB, G, GN | R455, 456 | ERDS2TJ563 | 1/4W 56K |
| R117 | ERDS2TJ473 | 1/4W 47K | R194 | ERDS2TJ122 | 1/4W 1.2K E, EB, G, GN | R457, 458 | ERDS2TJ271 | 1/4W 270 |
| R118 | ERDS2TJ562 | 1/4W 5.6K | R195 | ERDS2TJ222 | 1/4W 2.2K E, EB, G, GN | R459, 460 | ERDS2TJ680T | 1/4W 68 |
| R119 | ERDS2TJ183T | 1/4W 18K | R351, 352 | ERDS2TJ471 | 1/4W 470 | R461, 462 | ERDS2TJ184T | 1/4W 180K |
| R120 | ERDS2TJ473 | 1/4W 47K | R354 | ERDS2TJ472 | 1/4W 4.7K | R463, 464 | ERDS2TJ123 | 1/4W 12K |
| R121 | ERDS2TJ332 | 1/4W 3.3K | R355 | ERDS2TJ470 | 1/4W 47 | R465, 466 | ERDS2TJ563 | 1/4W 56K |
| R122 | ERDS2TJ272T | 1/4W 2.7K | R356 | ERDS2TJ152 | 1/4W 1.5K | R467-470 | ERDS2TJ102 | 1/4W 1K |
| R124 | ERDS2TJ271 | 1/4W 270 | R357 | ERDS2TJ470 | 1/4W 47 | R501, 502 | ERDS2TJ222 | 1/4W 2.2K |
| R125, 126 | ERDS2TJ472 | 1/4W 4.7K | R358 | ERDS2TJ471 | 1/4W 470 | R503-506 | ERDS2TJ103 | 1/4W 10K |
| R127 | ERDS2TJ103 | 1/4W 10K | R359, 360 | ERDS2TJ470 | 1/4W 47 | R507 | ERDS2TJ153 | 1/4W 15K |
| R128 | ERDS2TJ820 | 1/4W 82 | R361 | ERDS2TJ471 | 1/4W 470 | R508 | ERDS1FVJ2R2T | 1/2W 2.2 Δ |
| R129 | ERDS2TJ473 | 1/4W 47K | R362 | ERDS2TJ470 | 1/4W 47 | R511, 512 | ERDS2TJ471 | 1/4W 470 |
| R130, 131 | ERDS2TJ102 | 1/4W 1K | R363 | ERDS2TJ332 | 1/4W 3.3K | R513-516 | ERDS2TJ474 | 1/4W 470K |
| R132 | ERDS2TJ103 | 1/4W 10K | R364 | ERDS2TJ561 | 1/4W 560 | R517, 518 | ERDS2TJ222 | 1/4W 2.2K |
| R133-137 | ERDS2TJ102 | 1/4W 1K | R365 | ERDS2TJ332 | 1/4W 3.3K | R519, 520 | ERDS2TJ152 | 1/4W 1.5K |

| Ref. No. | Part No. | Values & Remarks | Ref. No. | Part No. | Values & Remarks | Ref. No. | Part No. | Values & Remarks |
|-----------|--------------|-------------------------|-----------|--------------|---------------------|-----------|--------------|--------------------|
| R521, 522 | ERDS2TJ223 | 1/4W 22K | R633, 634 | ERDS2TJ102 | 1/4W 1K | R734 | ERDS2TJ123 | 1/4W 12K G, GN |
| R523, 524 | ERDS2TJ392T | 1/4W 3.9K | R635, 636 | ERDS1FVJ271T | 1/2W 270 Δ | R735 | ERDS2TJ562 | 1/4W 5.6K |
| R525, 526 | ERDS2TJ222 | 1/4W 2.2K | R637-640 | ERG1SJ101E | 1W 100 | R736 | ERDS2TJ273 | 1/4W 27K E, EB, EG |
| R527, 528 | ERDS2TJ122 | 1/4W 1.2K | R641 | ERDS2TJ684 | 1/4W 680K | R736 | ERDS2TJ333 | 1/4W 33K G, GN |
| R529, 530 | ERDS2TJ273 | 1/4W 27K | R642 | ERDS2TJ472 | 1/4W 4.7K | R737, 738 | ERDS1FVJ561T | 1/2W 560 Δ |
| R531, 532 | ERDS2TJ332 | 1/4W 3.3K E, EB, EG, GN | R647, 648 | ERDS2TJ221 | 1/4W 220 | R739 | ERD25FVJ180T | 1/4W 18 Δ |
| R531, 532 | ERDS2TJ222 | 1/4W 2.2K G | R651, 652 | ERDS2TJ102 | 1/4W 1K | R740 | ERDS2TJ393 | 1/4W 39K |
| R533, 534 | ERDS2TJ222 | 1/4W 2.2K E, EB, EG, GN | R653, 654 | ERDS2TJ563 | 1/4W 56K | R742 | ERDS2TJ393 | 1/4W 39K |
| R533, 534 | ERDS2TJ272 | 1/4W 2.7K G | R655, 656 | ERDS2TJ182 | 1/4W 1.8K | R743 | ERDS2TJ183T | 1/4W 18K E, EB, EG |
| R543, 544 | ERDS2TJ102 | 1/4W 1K | R657, 658 | ERDS2TJ563 | 1/4W 56K | R743 | ERDS2TJ223 | 1/4W 22K G, GN |
| R545 | ERDS2TJ824 | 1/4W 820K | R659, 660 | ERDS2TJ470 | 1/4W 47 | R744, 745 | ERDS1FVJ561T | 1/2W 560 Δ |
| R546 | ERDS2TJ332 | 1/4W 3.3K | R661, 662 | ERDS1FVJ100T | 1/2W 10 Δ | R754 | ERDS2TJ102 | 1/4W 1K |
| R551, 552 | ERDS2TJ102 | 1/4W 1K | R663, 664 | ERDS2TJ102 | 1/4W 1K | R772 | ERDS2TJ104 | 1/4W 100K |
| R553, 554 | ERDS2TJ104 | 1/4W 100K | R665 | ERDS2TJ154 | 1/4W 150K | R773 | ERDS2TJ103 | 1/4W 10K |
| R555 | ERDS2TJ332 | 1/4W 3.3K | R666 | ERDS2TJ184T | 1/4W 180K | R774 | ERDS2TJ223 | 1/4W 22K |
| R556 | ERDS2TJ393 | 1/4W 39K | R667, 668 | ERDS2TJ473 | 1/4W 47K | R775 | ERDS2TJ332 | 1/4W 3.3K |
| R557 | ERDS2TJ471 | 1/4W 470 | R669 | ERDS2TJ223 | 1/4W 22K | R776 | ERDS1FVJ220T | 1/2W 22 Δ |
| R558 | ERDS2TJ821 | 1/4W 820 | R670 | ERD25FJ220 | 1/4W 22 Δ | R777 | ERDS2TJ220T | 1/4W 22 |
| R559, 560 | ERDS2TJ104 | 1/4W 100K | R671 | ERDS2TJ183T | 1/4W 18K | R778 | ERDS2TJ222 | 1/4W 2.2K |
| R561 | ERDS2TJ332 | 1/4W 3.3K | R672 | ERDS2TJ124T | 1/4W 120K | R779 | ERDS2TJ103 | 1/4W 10K |
| R562 | ERDS2TJ272T | 1/4W 2.7K | R673 | ERDS2TJ684 | 1/4W 680K | R780, 781 | ERDS2TJ333 | 1/4W 33K |
| R564-566 | ERDS2TJ102 | 1/4W 1K | R674, 675 | ERDS2TJ154 | 1/4W 150K E, EB, EG | R782 | ERDS2TJ153 | 1/4W 15K |
| R567 | ERDS2TJ474 | 1/4W 470K | R674, 675 | ERDS2TJ563 | 1/4W 56K G, GN | R783 | ERDS2TJ103 | 1/4W 10K |
| R570 | ERDS2TJ103 | 1/4W 10K | R676 | ERDS2TJ223 | 1/4W 22K | R784 | ERDS2TJ335T | 1/4W 3.3M |
| R571 | ERDS2TJ332 | 1/4W 3.3K | R677 | ERDS2TJ103 | 1/4W 10K | R791-796 | ERDS2TJ223 | 1/4W 22K |
| R572 | ERDS2TJ471 | 1/4W 470 | R678 | ERDS1FVJ271T | 1/2W 270 Δ | R797 | ERDS2TJ682T | 1/4W 6.8K |
| R575 | ERDS2TJ102 | 1/4W 1K | R681-684 | ERDS1FVJ560T | 1/2W 56 Δ | R901 | ERDS2TJ102 | 1/4W 1K |
| R581, 582 | ERDS2TJ471 | 1/4W 470 | R689-694 | ERDS2TJ270T | 1/4W 27 | R903-911 | ERDS2TJ104 | 1/4W 100K |
| R583-586 | ERDS2TJ102 | 1/4W 1K G | R695, 696 | ERDS2TJ102 | 1/4W 1K | R912 | ERDS2TJ102 | 1/4W 1K |
| R587, 588 | ERDS2TJ222 | 1/4W 2.2K G | R697, 698 | ERDS2TJ221 | 1/4W 220 | R913, 914 | ERDS2TJ104 | 1/4W 100K |
| R589 | ERDS2TJ122 | 1/4W 1.2K G | R699 | ERDS2TJ332 | 1/4W 3.3K | R920 | ERDS2TJ271 | 1/4W 270 |
| R590 | ERDS2TJ472 | 1/4W 4.7K G | R703, 704 | ERDS1FVJ3R9T | 1/2W 3.9 Δ | R921 | ERDS2EJ121 | 1/4W 120 |
| R591, 592 | ERDS2TJ222 | 1/4W 2.2K G | R705 | ERDS2TJ472 | 1/4W 4.7K | R922 | ERDS2TJ472 | 1/4W 4.7K |
| R601, 602 | ERDS2TJ102 | 1/4W 1K | R706 | ERDS2TJ102 | 1/4W 1K | R923 | ERDS2TJ102 | 1/4W 1K |
| R603, 604 | ERDS2TJ563 | 1/4W 56K | R709 | ERD25FVJ221T | 1/4W 220 Δ | R926 | ERDS2TJ122 | 1/4W 1.2K |
| R605, 606 | ERDS2TJ182 | 1/4W 1.8K | R712 | ERDS2TJ472 | 1/4W 4.7K | R927 | ERDS2TJ181T | 1/4W 180 |
| R607, 608 | ERDS2TJ563 | 1/4W 56K | R713, 714 | ERDS2TJ1R5T | 1/4W 1.5 | R928 | ERDS2TJ222 | 1/4W 2.2K |
| R609, 610 | ERDS2TJ470 | 1/4W 47 | R715 | ERDS2TJ752T | 1/4W 7.5K | R929 | ERDS2TJ562 | 1/4W 5.6K |
| R611, 612 | ERDS1FVJ100T | 1/2W 10 Δ | R716 | ERDS2TJ682T | 1/4W 6.8K | R930, 931 | ERDS2TJ101 | 1/4W 100 |
| R613, 614 | ERDS2TJ102 | 1/4W 1K | R717 | ERDS1FVJ220T | 1/2W 22 Δ | R946-949 | ERDS2TJ103 | 1/4W 10K |
| R615 | ERDS2TJ184T | 1/4W 180K | R718 | ERDS2TJ182 | 1/4W 1.8K | R950 | ERDS2TJ102 | 1/4W 1K |
| R616 | ERDS2TJ154 | 1/4W 150K | R721 | ERDS1FVJ4R7T | 1/2W 4.7 Δ | R951 | ERDS2TJ122 | 1/4W 1.2K |
| R617, 618 | ERDS2TJ473 | 1/4W 47K | R722 | ERD25FJ101 | 1/4W 100 Δ | R952 | ERDS2TJ152 | 1/4W 1.5K |
| R619 | ERDS2TJ223 | 1/4W 22K | R723 | ERDS2TJ222 | 1/4W 2.2K | R953 | ERDS2TJ182 | 1/4W 1.8K |
| R620 | ERD25FJ220 | 1/4W 22 Δ | R724 | ERDS1FVJ6R8T | 1/2W 6.8 Δ | R954 | ERDS2TJ222 | 1/4W 2.2K |
| R621 | ERDS2TJ183T | 1/4W 18K | R725 | ERDS2TJ152 | 1/4W 1.5K | R955 | ERDS2TJ332 | 1/4W 3.3K |
| R622 | ERDS2TJ124T | 1/4W 120K | R727 | ERDS1FVJ3R3T | 1/2W 3.3 Δ | R956 | ERDS2TJ472 | 1/4W 4.7K |
| R623 | ERDS2TJ684 | 1/4W 680K | R731 | ERD25FVJ180T | 1/4W 18 Δ | R957 | ERDS2TJ682T | 1/4W 6.8K |
| R624, 625 | ERDS2TJ154 | 1/4W 150K E, EB, EG | R732 | ERDS2TJ123 | 1/4W 12K E, EB, EG | R958 | ERDS2TJ123 | 1/4W 12K |
| R624, 625 | ERDS2TJ563 | 1/4W 56K G, GN | R732 | ERDS2TJ183T | 1/4W 18K G, GN | R960 | ERDS2TJ102 | 1/4W 1K |
| R628-630 | ERDS2TJ223 | 1/4W 22K | R733 | ERDS2TJ682T | 1/4W 6.8K | R961 | ERDS2TJ122 | 1/4W 1.2K |
| R631, 632 | ERDS2TJ103 | 1/4W 10K | R734 | ERDS2TJ103 | 1/4W 10K E, EB, EG | R962 | ERDS2TJ152 | 1/4W 1.5K |

| Ref. No. | Part No. | Values & Remarks | Ref. No. | Part No. | Values & Remarks | Ref. No. | Part No. | Values & Remarks |
|-------------|--------------|---------------------|-----------|--------------|----------------------|-----------|--------------|------------------|
| R963 | ERDS2TJ182 | 1/4W 1.8K | C107 | ECBT1H473ZF5 | 50V 0.047U | C427, 428 | ECBT1H221KB5 | 50V 220P |
| R964 | ERDS2TJ222 | 1/4W 2.2K | C108 | ECBT1H100JC5 | 50V 10P E, EB, G, GN | C431, 432 | ECEA1CKA100B | 16V 10U |
| R965 | ERDS2TJ332 | 1/4W 3.3K | C108 | ECBT1H8R2KC5 | 50V 8.2P EG | C440 | ECBT1E103ZF | 25V 0.01U |
| R966 | ERDS2TJ472 | 1/4W 4.7K | C109, 110 | ECBT1C103NS5 | 16V 0.01U | C451, 452 | ECEA1VKA4R7B | 35V 4.7U |
| R967 | ERDS2TJ682T | 1/4W 6.8K | C111 | ECEA1EKA4R7B | 25V 4.7U | C453, 454 | ECBT1H100JC5 | 50V 10P |
| R968 | ERDS2TJ123 | 1/4W 12K | C112 | ECBT1C103NS5 | 16V 0.01U | C455, 456 | ECBT1H102KB5 | 50V 1000P |
| R970 | ERDS2TJ102 | 1/4W 1K | C113 | ECBT1H102KB5 | 50V 1000P | C457, 458 | ECEA1AKA330B | 10V 33U |
| R971 | ERDS2TJ122 | 1/4W 1.2K | C114 | ECEA1HKA3R3B | 50V 3.3U | C459, 460 | ECFR1E223KR | 25V 0.022U |
| R972 | ERDS2TJ152 | 1/4W 1.5K | C115 | ECEA1EKA4R7B | 25V 4.7U | C461, 462 | ECFR1E682KR | 25V 6800P |
| R973 | ERDS2TJ182 | 1/4W 1.8K | C116 | ECBT1C822MS5 | 16V 8200P | C463, 464 | ECEA1VKA4R7B | 35V 4.7U |
| R974 | ERDS2TJ222 | 1/4W 2.2K | C117 | ECQB1H471JF3 | 50V 470P | C465, 466 | ECBT1E103ZF | 25V 0.01U |
| R975 | ERDS2TJ332 | 1/4W 3.3K | C118, 119 | ECQB1H103JF3 | 50V 0.01U | C469, 470 | ECBT1H181KB5 | 50V 180P |
| R976 | ERDS2TJ472 | 1/4W 4.7K | C120, 121 | ECEA1HKA010B | 50V 1U | C501, 502 | ECFR1E333KR | 25V 0.033U |
| R977 | ERDS2TJ682T | 1/4W 6.8K | C122 | ECEA1HKA2R2B | 50V 2.2U | C503, 504 | ECEA0JKA101B | 6.3V 100U |
| R978 | ERDS2TJ123 | 1/4W 12K | C123 | ECEA1HKA010B | 50V 1U | C505, 506 | ECFR1E104KR | 25V 0.1U |
| R980 | ERDS2TJ102 | 1/4W 1K | C124 | ECBT1H102KB5 | 50V 1000P | C511, 512 | ECEA1HKA3R3B | 50V 3.3U |
| R981 | ERDS2TJ122 | 1/4W 1.2K | C125 | ECBT1H150JC5 | 50V 15P | C513, 514 | ECBT1H150J5 | 50V 15P |
| R982 | ERDS2TJ152 | 1/4W 1.5K | C126 | ECBT1H104ZF5 | 50V 0.1U | C515, 516 | ECBT1H221KB5 | 50V 220P |
| R983 | ERDS2TJ182 | 1/4W 1.8K | C127 | ECEA1CKA220B | 16V 22U | C517, 518 | ECBT1H330J5 | 50V 33P |
| R984 | ERDS2TJ222 | 1/4W 2.2K | C128 | ECBT1C103NS5 | 16V 0.01U | C519-522 | ECEA1VKA4R7B | 35V 4.7U |
| R985 | ERDS2TJ332 | 1/4W 3.3K | C129, 130 | ECEA0JKA101B | 6.3V 100U | C523, 524 | ECFR1E123KR | 25V 0.012U |
| R986 | ERDS2TJ472 | 1/4W 4.7K | C131 | ECBT1C103NS5 | 16V 0.01U | C525, 526 | ECQV1H683JM3 | 50V 0.068U |
| R990 | ERDS2TJ153 | 1/4W 15K | C132 | ECBT1H102KB5 | 50V 1000P | C527, 528 | ECFR1E562KR | 25V 5600P |
| R991 | ERDS2TJ103 | 1/4W 10K | C133 | ECBT1H150JC5 | 50V 15P | C529, 530 | ECQB1H273JF3 | 50V 0.027U |
| R993, 994 | ERDS2TJ102 | 1/4W 1K | C134 | ECBT1H180JC5 | 50V 18P | C531, 532 | ECBT1E103ZF | 25V 0.01U |
| R1001, 1002 | ERDS2TJ223 | 1/4W 22K | C135, 136 | ECBT1C103KS5 | 16V 0.01U | C533, 534 | ECEA1CKA100B | 16V 10U |
| R1003, 1004 | ERDS2TJ102 | 1/4W 1K | C137, 138 | ECBT1H561KB5 | 50V 560P | C536 | ECEA1HKN010B | 50V 1U |
| R1005 | ERDS2TJ203T | 1/4W 20K | C139, 140 | ECQB1H682JF3 | 50V 6800P | C543, 544 | ECBT1C332KR5 | 16V 3300P |
| R1007, 1008 | ERDS2TJ473 | 1/4W 47K | C141-144 | ECEA1HKA010B | 50V 1U | C551, 552 | ECEA1HKA3R3B | 50V 3.3U |
| R1009-1011 | ERDS2TJ332 | 1/4W 3.3K | C145 | ECBT1H220JC5 | 50V 22P | C553, 554 | ECBT1H101KB5 | 50V 100P |
| R1012 | ERDS2TJ102 | 1/4W 1K | C146 | ECBT1H331KB5 | 50V 330P | C555 | ECBT1H221KB5 | 50V 220P |
| R1051 | ERDS2TJ393 | 1/4W 39K | C147 | ECBT1H102KB5 | 50V 1000P | C556 | ECBT1H101KB5 | 50V 100P |
| R1052 | ERDS2TJ105T | 1/4W 1M | C148, 149 | ECBT1C103NS5 | 16V 0.01U | C557, 558 | ECBT1E103ZF | 25V 0.01U |
| R1053 | ERDS2TJ102 | 1/4W 1K | C150 | ECBT1H104ZF5 | 50V 0.1U | C559, 560 | ECEA1CKA100B | 16V 10U |
| R1055, 1056 | ERDS2TJ473 | 1/4W 47K | C172 | ECBT1H331KB5 | 50V 330P | C561, 562 | ECEA1HKA3R3B | 50V 3.3U |
| R1061 | ERDS2TJ222 | 1/4W 2.2K | C173 | ECEA1CKA220B | 16V 22U | C563 | ECEA1HKN010B | 50V 1U |
| R1071, 1072 | ERDS2TJ222 | 1/4W 2.2K | C174 | ECEA1CKA101B | 16V 100U | C581, 582 | ECEA0JKA101B | 6.3V 100U G |
| R1073, 1074 | ERDS2TJ392T | 1/4W 3.9K E, EB, EG | C175, 176 | ECBT1C103NS5 | 16V 0.01U | C601, 602 | ECEA1HKN3R3B | 50V 3.3U |
| R1073, 1074 | ERDS2TJ682T | 1/4W 6.8K G, GN | C181 | ECBT1H471KB5 | 50V 470P | C603, 604 | ECBA1H681KB5 | 50V 680P |
| R1075, 1076 | ERDS2TJ473 | 1/4W 47K | C196 | ECBT1H102KB5 | 50V 1000P | C605, 606 | RCE1JU220BV | 63V 22U |
| R1201, 1202 | ERDS2TJ102 | 1/4W 1K | C351, 352 | ECEA0JKA101B | 6.3V 100U | C607, 608 | ECCR1H100K5 | 50V 10P |
| R1204-1206 | ERDS2TJ102 | 1/4W 1K | C353 | ECEA1CKA100B | 16V 10U | C609, 610 | ECBT1H221KB5 | 50V 220P |
| R1207 | ERDS2TJ273 | 1/4W 27K G, GN | C401, 402 | ECEA1VKA4R7B | 35V 4.7U | C611, 612 | ECQV1H473JM3 | 50V 0.047U |
| R1208-1216 | ERDS2TJ102 | 1/4W 1K | C403, 404 | ECBT1E103ZF | 25V 0.01U | C613, 614 | ECBA1H681KB5 | 50V 680P |
| | | | C405, 406 | ECBT1H101KB5 | 50V 100P | C615 | ECA1HM470B | 50V 47U |
| | | | C409, 410 | ECEA1CKA220B | 16V 22U | C616 | ECEA2AU100 | 100V 10U |
| | | | C411, 412 | ECBT1H101KB5 | 50V 100P | C617 | RCE1JU220BV | 63V 22U |
| | | | C413, 414 | ECEA1CKA100B | 16V 10U | C618 | ECEA2AN2R2SB | 100V 2.2U |
| C101 | ECBT1C103NS5 | 16V 0.01U | C415, 416 | ECBT1E103ZF | 25V 0.01U | C621, 622 | ECEA2AU100 | 100V 10U |
| C103 | ECBT1C103NS5 | 16V 0.01U | C417, 418 | ECBT1H101KB5 | 50V 100P | C631-634 | ECKT1H223ZF | 50V 0.022U |
| C104 | ECBT1H102KB5 | 50V 1000P | C419-422 | ECBT1H331KB5 | 50V 330P | C635, 636 | ECKR1H103ZF5 | 50V 0.01U |
| C105 | ECBT1H470J5 | 50V 47P | C423-426 | ECBT1H101KB5 | 50V 100P | C637 | ECKT1H223ZF | 50V 0.022U |
| C106 | ECBT1C103NS5 | 16V 0.01U | | | | | | |

| Ref. No. | Part No. | Values & Remarks | Ref. No. | Part No. | Values & Remarks | Ref. No. | Part No. | Values & Remarks |
|-----------|--------------|-----------------------|-------------|--------------|------------------|----------|----------|------------------|
| C651, 652 | ECEA1HKN3R3B | 50V 3. 3U | C921-928 | ECBT1H331KB5 | 50V 330P | | | |
| C653, 654 | ECBA1H681KB5 | 50V 680P | C929, 930 | ECBT1H101KB5 | 50V 100P | | | |
| C655, 656 | RCE1JU220BV | 63V 22U | C935 | ECEA0JKA101B | 6. 3V 100U | | | |
| C657, 658 | ECR1H100K5 | 50V 10P | C936 | ECBT1E103ZF | 25V 0. 01U | | | |
| C659, 660 | ECBT1H221KB5 | 50V 220P | C937-942 | ECBT1H101KB5 | 50V 100P | | | |
| C661, 662 | ECQV1H473JM3 | 50V 0. 047U | C944 | ECBT1H101KB5 | 50V 100P | | | |
| C663, 664 | ECBA1H681KB5 | 50V 680P | C1001, 1002 | ECEA1HKA010B | 50V 1U | | | |
| C665 | ECA1HM470B | 50V 47U | C1003, 1004 | ECEA1HKA3R3B | 50V 3. 3U | | | |
| C666 | ECEA2AU100 | 100V 10U | C1005 | ECEA1HKA010B | 50V 1U | | | |
| C667 | RCE1JU220BV | 63V 22U | C1007 | ECFR1E223KR | 25V 0. 022U | | | |
| C668 | ECEA2AN2R2SB | 100V 2. 2U | C1008 | ECFR1E473KR | 25V 0. 047U | | | |
| C671, 672 | ECEA2AU100 | 100V 10U | C1009 | RCE0JKA221BV | 6. 3V 220U | | | |
| C681, 682 | ECEA1HN100SB | 50V 10U | C1010-1013 | ECEA1CKA100B | 16V 10U | | | |
| C685 | ECBT1E103ZF | 25V 0. 01U | C1014 | RCE0JKA221BV | 6. 3V 220U | | | |
| C691 | ECKT1H101KB | 50V 100P | C1015, 1016 | ECQV1H104JM3 | 50V 0. 1U | | | |
| C701 | ECBT1E103ZF | 25V 0. 01U | C1017 | ECEA1HKA47B | 50V 0. 47U | | | |
| C702 | ECQE2104KF3 | 250V 0. 1U | C1018 | ECEA1VKA4R7B | 35V 4. 7U | | | |
| C703, 704 | ECOS1JP682GZ | 63V 6800U E, EB, EG Δ | C1019 | ECEA1HKA47B | 50V 0. 47U | | | |
| C703, 704 | ECES75V752UX | 75V 7500U G, GN Δ | C1020 | ECEA1VKA4R7B | 35V 4. 7U | | | |
| C705, 706 | ECA1VM472B | 35V 4700U Δ | C1021 | ECEA1HKAR15B | 50V 0. 15U | | | |
| C707 | RCE1VM101BV | 35V 100U | C1022 | ECEA1HKA3R3B | 50V 3. 3U | | | |
| C708 | ECKR1H103ZF5 | 50V 0. 01U | C1023, 1024 | ECQV1H154JM3 | 50V 0. 15U | | | |
| C709 | ECEA1CKA330B | 16V 33U | C1025 | ECEA1HKA3R3B | 50V 3. 3U | | | |
| C710 | ECBT1E103ZF | 25V 0. 01U | C1026 | ECEA1HKAR15B | 50V 0. 15U | | | |
| C711 | ECKR1H103ZF5 | 50V 0. 01U | C1027 | ECEA1VKA4R7B | 35V 4. 7U | | | |
| C712 | ECEA1HKA100B | 50V 10U | C1028 | ECEA1HKA47B | 50V 0. 47U | | | |
| C713 | ECKR1H103ZF5 | 50V 0. 01U | C1029 | ECEA1VKA4R7B | 35V 4. 7U | | | |
| C714 | ECEA1CKA470B | 16V 47U | C1030 | ECEA1HKA47B | 50V 0. 47U | | | |
| C721, 722 | ECQE2104KF3 | 250V 0. 1U | C1031, 1032 | ECQV1H104JM3 | 50V 0. 1U | | | |
| C731, 732 | ECKR1H103ZF5 | 50V 0. 01U | C1033 | ECEA1CKA470B | 16V 47U | | | |
| C751 | ECKWNS102MBM | 400V 1000P Δ | C1034 | ECQV1H474JM3 | 50V 0. 47U | | | |
| C752 | ECKR1H103ZF5 | 50V 0. 01U | C1035 | ECBA1H681KB5 | 50V 680P | | | |
| C753 | ECA1EM102B | 25V 1000U Δ | C1036-1038 | ECBT1H101KB5 | 50V 100P | | | |
| C754 | ECBT1E103ZF | 25V 0. 01U | C1039 | ECEA1CKA101B | 16V 100U | | | |
| C755 | ECEA1CKA470B | 16V 47U | C1040 | ECEA1CKA100B | 16V 10U | | | |
| C756 | ECBT1E103ZF | 25V 0. 01U | C1041 | ECBT1E103ZF | 25V 0. 01U | | | |
| C758 | ECEA1AKA101B | 10V 100U | C1051 | ECEA1HKA2R2B | 50V 2. 2U | | | |
| C771 | ECEA1HKA2R2B | 50V 2. 2U | C1052 | ECEA1HKA010B | 50V 1U | | | |
| C772 | ECEA1CKA100B | 16V 10U | C1053 | ECEA1HKA3R3B | 50V 3. 3U | | | |
| C773 | ECBT1E223ZF | 25V 0. 022U | C1054 | RCE0JKA221BV | 6. 3V 220U | | | |
| C774 | RCE0JKA221BV | 6. 3V 220U | C1055 | ECEA1HKA010B | 50V 1U | | | |
| C891 | ECFR1E392KR | 25V 3900P | C1056 | ECFR1E333KR | 25V 0. 033U | | | |
| C901 | ECA0JM102B | 6. 3V 1000U | C1057 | ECFR1E152KR | 25V 1500P | | | |
| C902, 903 | ECBT1E103ZF | 25V 0. 01U | C1058 | ECFR1E333KR | 25V 0. 033U | | | |
| C904 | ECA0JM471B | 6. 3V 470U | C1059 | ECEA1CKA101B | 16V 100U | | | |
| C906 | ECEA0JKA101B | 6. 3V 100U | C1060 | ECBT1E223ZF | 25V 0. 022U | | | |
| C908 | ECBT1E103ZF | 25V 0. 01U | C1062 | ECBT1E223ZF | 25V 0. 022U | | | |
| C909-912 | ECEA1HKA220B | 50V 22U | C1063 | ECEA1CKA101B | 16V 100U | | | |
| C913, 914 | ECEA1VKA100B | 35V 10U | C1065 | ECBA1H681KB5 | 50V 680P | | | |
| C916 | ECEA1HKA010B | 50V 1U | C1067, 1068 | ECBT1C152KR5 | 16V 1500P | | | |
| C919 | ECBT1E103ZF | 25V 0. 01U | C1071, 1072 | ECEA1HKA3R3B | 50V 3. 3U | | | |
| C920 | ECEA1HKA010B | 50V 1U | C1073, 1074 | ECEA1CKA100B | 16V 10U | | | |

REPLACEMENT PARTS LIST

Notes: *Important safety notice:

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

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

*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

Parts without these indications can be used for all areas.

*Remote Control Ass'y: Supply period for three years from termination of production.

*The "(SF)" mark denotes the standard part.

| Ref. No. | Part No. | Part Name & Description | Remarks | Ref. No. | Part No. | Part Name & Description | Remarks |
|----------|--------------|--------------------------|-----------------|----------|-------------|-------------------------------|--------------------------|
| | | PACKING MATERIAL | | A2 | RJA0019-2K | AC POWER SUPPLY CORD | (E, EG, G) Δ (SF) |
| | | | | A2 | VJA0733 | AC POWER SUPPLY CORD | (EB) Δ (SF) |
| | | | | A2 | RJA0036-K | AC POWER SUPPLY CORD | (GN) Δ (SF) |
| P1 | RPG2086 | PACKING CASE | (EB) | A3 | RSA0007 | FM INDOOR ANTENNA | |
| P1 | RPG2085 | PACKING CASE | (E, EG, G, GN) | A4 | RSA0010 | AM LOOP ANTENNA SET | |
| P2 | RPND682-2 | CUSHION | | A4-1 | RMND244 | AM ANTENNA HOLDER | |
| P3 | RPQ0164 | PAD (ACCESSORIES) | (EB, EG, G, GN) | A4-2 | XTN3+10AFZ | SCREW | |
| P4 | SPP730 | PROTECTION BAG (UNIT) | | A5 | RQCB0169 | SERVICENTER LIST | |
| P5 | RPF0134 | PROTECTION BAG (F. B.) | | A6 | RQA0013 | WARRANTY CARD | (E, EB, EG) |
| P6 | RPH0032 | PROTECTION SHEET | (EB, GN) | A6 | RQX7433ZA | WARRANTY CARD | (GN) |
| | | ACCESSORIES | | A7 | RAK-SA114XH | REMOTE CONTROL TRANSMITTER | (E, EB, EG) |
| | | | | A7 | RAK-SA704XH | REMOTE CONTROL TRANSMITTER | (G, GN) |
| A1 | RFKSAGX470E | INSTRUCTION MANUAL ASS'Y | (E) | A7-1 | RKK0057-K | BATT. COVER (R/C TRANSMITTER) | (E, EB, EG) |
| A1 | RFKSAGX470EB | INSTRUCTION MANUAL ASS'Y | (EB) | A7-1 | RKK0020-K | BATT. COVER (R/C TRANSMITTER) | (G, GN) |
| A1 | RFKSAGX470EG | INSTRUCTION MANUAL ASS'Y | (EG) | A8 | SJP9009 | ATTACHMENT PLUG | (EB) Δ |
| A1 | RFKSAGX670G | INSTRUCTION MANUAL ASS'Y | (G) | A9 | RFE0014 | ANTENNA PLUG | (G, GN) |
| A1 | RFKSAGX670GN | INSTRUCTION MANUAL ASS'Y | (GN) | A10 | RQLA0134 | VOLTAGE CAUTION LABEL | (G) |
| | | | | A11 | SJP5213-1 | POWER PLUG ADAPTOR | (G) Δ |

PACKAGING

