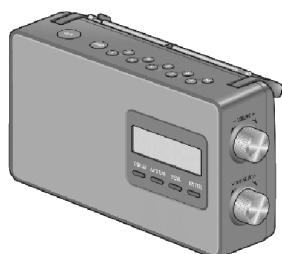


Service Manual

DAB-FM Radio

Model No. RF-D10EB
RF-D10EG
RF-D10GN



RF-D10

Product Color: (K)...Black Type
 (W)...White Type (EG, GN)

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE


There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

TABLE OF CONTENTS

	PAGE		PAGE
1 Safety Precautions -----	3	7.5. Disassembly of Power P.C.B., Battery (-)	
1.1. General Guidelines-----	3	P.C.B. and Battery (+) P.C.B.-----	16
1.2. Caution for AC Mains Lead (For EB only)-----	4	7.6. Disassembly of D-AMP P.C.B. -----	17
1.3. Before Repair and Adjustment-----	4	7.7. Disassembly of Volume P.C.B. -----	18
1.4. Protection Circuitry-----	4	7.8. Disassembly of Main P.C.B. -----	19
1.5. Caution For Fuse Replacement-----	4	7.9. Disassembly of Top Key P.C.B. and	
1.6. Safety Part Information-----	5	Headphone P.C.B.-----	22
2 Warning -----	6	7.10. Disassembly of Speaker (SP1) -----	25
2.1. Prevention of Electrostatic Discharge (ESD)		8 Service Position -----	26
to Electrostatically Sensitive (ES) Devices-----	6	8.1. Checking of Power P.C.B.-----	26
2.2. Service caution based on Legal restrictions-----	7	8.2. Checking of D-AMP P.C.B.-----	27
3 Service Navigation -----	8	8.3. Checking of Main P.C.B. (Side A)-----	28
3.1. Service Information-----	8	8.4. Checking of Main P.C.B. (Side B)-----	30
4 Specifications -----	9	9 Wiring Connection Diagram -----	33
5 Location of Controls and Components -----	10	10 Schematic Diagram -----	35
6 Self Diagnostic Mode -----	11	10.1. Schematic Diagram Notes-----	35
7 Disassembly and Assembly Instructions -----	12	10.2. MAIN CIRCUIT-----	37
7.1. Disassembly flow chart-----	13	10.3. D-AMP, VOLUME, LED & HEADPHONE	
7.2. Types of Screws-----	13	CIRCUIT-----	38
7.3. Main Parts Location Diagram-----	14	10.4. TOP KEY / POWER / BATTERY (-) /	
7.4. Disassembly of Rear Cabinet Block-----	15	BATTERY (+) CIRCUIT-----	39

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11 Printed Circuit Board	40
11.1. MAIN P.C.B.	40
11.2. DAMP / VOLUME / LED / HEADPHONE P.C.B.	41
11.3. TOP KEY / POWER / BATTERY (-) / BATTERY (+) P.C.B.	42
12 Appendix Information of Schematic Diagram	43
12.1. Voltage Measurement & Waveform Chart	43
13 Exploded View and Replacement Parts List	47
13.1. Exploded View and Mechanical replacement Parts List	47
13.2. Electrical Replacement Parts List	51

1 Safety Precautions

1.1. General Guidelines

1. IMPORTANT SAFETY NOTICE

- There are special components used in this equipment which are important for safety. These parts are marked by \triangle in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.
- An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.
- When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
- After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
- After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. Leakage Current Cold Check

- Unplug the AC cord and connect a jumper between the two prongs on the plug.
- measure the resistance value, with an ohmmeter between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1M\Omega$ and $5.2M\Omega$. When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. Leakage Current Hot Check

- Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
- Connect a $1.5k\Omega$, 10 watts resistor, in parallel with a $0.15\mu F$ capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1-1.
- Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
- Check each exposed metallic part, and measure the voltage at each point.
- Reverse the AC plug in the AC outlet and repeat each of the above measurements.
- The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

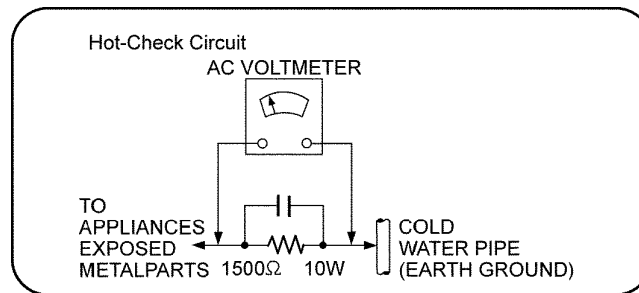




Figure 1-1

1.2. Caution for AC Mains Lead (For EB 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.

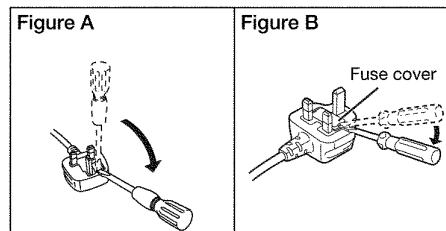
Before use

Remove the connector cover.

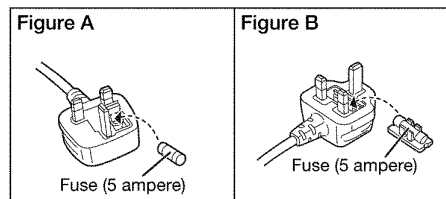
How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



1.3. Before Repair and Adjustment

Caution :

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 AC 240V, at 50Hz during power on at volume minimum, (Selector : AUX mode) should be ~200 mA. (For EB/EG/GN)
- Current consumption at AC 120V, at 60Hz during power on at volume minimum, (Selector : AUX mode) should be ~200 mA. (For P/PC)

1.4. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are 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.

1.5. Caution For Fuse Replacement

CAUTION:

Replace with the same type fuse:

(Manufacturer: Skygate, Type: SCT, F901, T3.15A, 250V)

1.6. Safety Part Information

Safety Parts List:

There are special components used in this equipment which are important for safety.

These parts are marked by ⚠ in the Schematic Diagrams, Exploded View & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
⚠	10	RYKN0119C-K	BACK CABINET ASS'Y	GN-K
⚠	10	RYKN0119C-W	BACK CABINET ASS'Y	GN-W
⚠	26	RGNN0183	NAME PLATE	EB-K
⚠	26	RGNN0184B	NAME PLATE	EG-W
⚠	26	RGNN0184A	NAME PLATE	EG-K
⚠	A1	K2CQ2YY00119	AC CORD	EG-K EG-W
⚠	A1	K2CT2YY00097	AC CORD	EB-K
⚠	A1	K2CJ2DA00014	AC CORD	GN-K GN-W
⚠	A2	RQTN0172	O/I BOOK(En)	EB-K
⚠	A2	RQTN0173	O/I BOOK(En/Ge/It/Fr/Du/Da/Cz/Sw/No)	EG-K EG-W
⚠	A2	RQTN0174	O/I BOOK(En)	GN-K GN-W
⚠	VA901	ERZE08A471CS	VARISTOR	
⚠	T901	RTPN11IE06-G	TRANSFORMER	EG-K EG-W
⚠	T901	RTPN11IG07-G	TRANSFORMER	EB-K GN-K GN-W
⚠	F901	K5G312Y00007	FUSE	
⚠	JK901	K2AA2B000014	AC INLET	
⚠	R206	ERJ2GEYJ105V	1M 1/16W	

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices.

Examples of typical ES devices are IC (integrated circuits) and some field-effect transistors and semiconductor "chip" components.

The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION:

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by \triangle in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

2.2. Service caution based on Legal restrictions

2.2.1. General description about Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

Definition of PCB Lead Free Solder being used

The letter of "PbF" is printed either foil side or components side on the PCB using the lead free solder. (See right figure)	PbF
---	-----

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
(Definition: The letter of "PbF" is printed on the PCB using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
RFKZ03D01K------(0.3mm 100g Reel)
RFKZ06D01K------(0.6mm 100g Reel)
RFKZ10D01K------(1.0mm 100g Reel)

Note

* Ingredient: Tin (Sn), 96.5%, Silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

3 Service Navigation

3.1. Service Information

This service manual contains technical information which will allow service personnel's to understand and service this model. Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

4 Specifications

Power supply

AC	AC 230 V to 240 V, 50 Hz (For EB/GN)
AC	AC 230 V, 50 Hz (For EG)
Battery	DC 6 V (4 x R14/LR14, C)

Power consumption 7 W

Frequency range 7 W (100 Hz, 6 Ω)
FM 87.50 MHz to 108.00 MHz (50 kHz steps)
DAB/DAB+ BAND III 5A to 13F
(174.928 MHz to 239.200 MHz)

Terminal

Headphones Stereo, 3.5 mm jack (16 Ω)

Speaker

Full range Stereo, 3.5 mm jack
10 cm (4 Ω)

Output power 2 W (RMS 10% THD)

Battery life 2 W (RMS 10% THD)

FM Approx. 9 H (Manganese R14 battery)

Approx. 30 H (Alkaline LR14 battery)

DAB/DAB+ Approx. 12 H (Manganese R14 battery)

Approx. 40 H (Alkaline LR14 battery)

Dimensions (W x H x D): 251 mm x 138 mm x 91 mm

Mass:

With batteries Approx. 1.3 kg

Without batteries Approx. 1.0 kg

Operating temperature range 0 °C to +40 °C

Operating humidity range 35% to 80 % RH (no condensation)

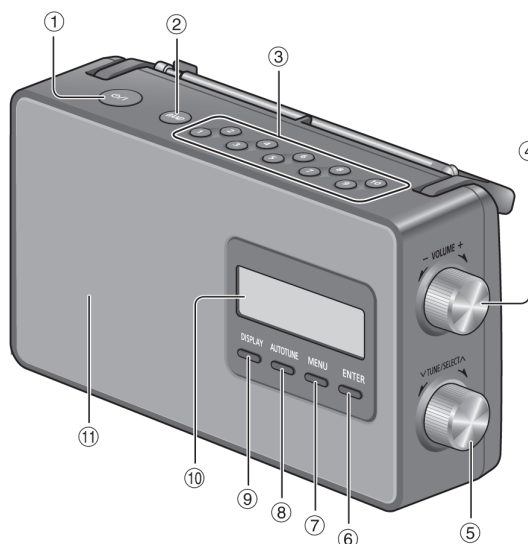
Power consumption in standby mode 0.6 W (approximate)

Note:

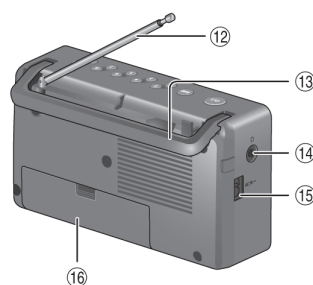
- Specifications are subject to change without notice.
Mass and dimensions are approximate.

5 Location of Controls and Components

Front view



Rear view



- ① **Standby/on switch** [⏻/⏻]
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 Select FM or DAB radio

- ③ Direct preset buttons

- ④ Adjust the volume

- ⑤ Select desired frequency in manual tuning
View available options

- ⑥ Confirm an option

- ⑦ View available menu

- ⑧ Auto tuning for FM stations

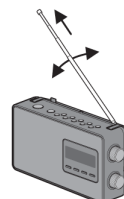
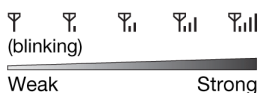
- ⑨ View available information

- ⑩ Display panel

- ⑪ **Speaker (monaural)**
The speaker does not have magnetic shielding. Do not put this unit near TVs, PCs or other equipment easily influenced by magnetism.

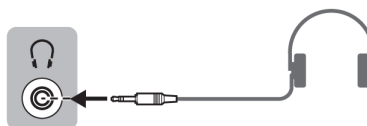
- ⑫ **Antenna**
Extend the antenna, adjust the length, angle and direction for best reception.

Signal strength indicator



- ⑬ Handle

- ⑭ **Headphones jack**



Plug type: Ø 3.5 mm stereo (not supplied)
– Excessive sound pressure from earphones and headphones can cause hearing loss.
– Listening at full volume for long periods may damage the user's ears.

- ⑮ AC IN terminal

- ⑯ Battery compartment

6 Self Diagnostic Mode

This unit is equipped with features of service mode & doctor mode setting for checking the functions & reliability.

Here is the procedures to enter into Self Diagnostic Mode.

Step 1 : Turn on the unit.

Step 2 : Press [MENU] button and turn the jog [TUNER/SELECT] to the left or right.

Step 3 : Select [SYSTEM] and press [ENTER] button.

Step 4 : Turn the jog [TUNER/SELECT] to select [Factory Reset] and press [ENTER] button.

Step 5 : Press and hold [Preset 2], followed by the sequence to press [DISPLAY]→ [AUTOTUNE]→ [MENU] → [ENTER].

The software version is shown on the display. (The software version shown below is an example. It will be revised when there is an update)

SW version V5.1.7.EX39486-1

To exit the Self Diagnostic Mode

- Unplug the AC cord.

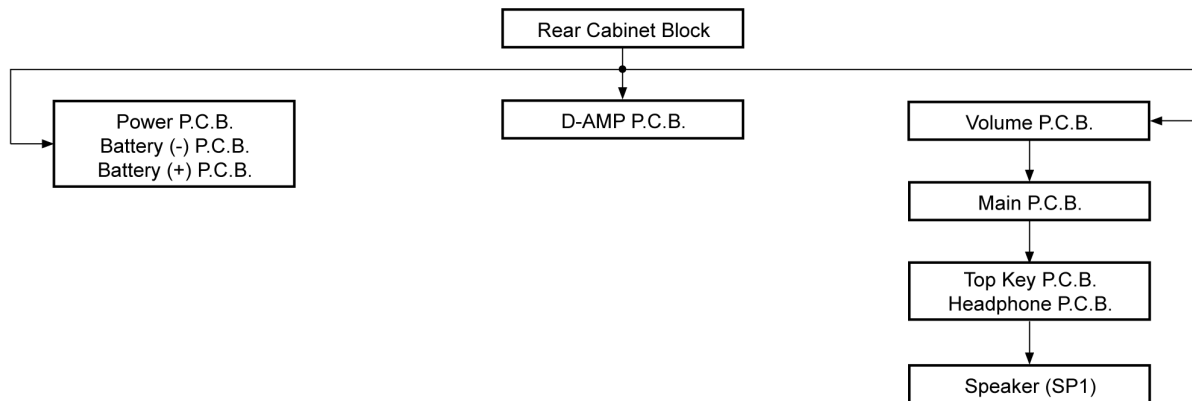
7 Disassembly and Assembly Instructions

- This section describes the disassembly and/or assembly procedures for all major printed circuit boards & main components for the unit. (You may refer to the section of “Main components and P.C.B Locations” as described in this service manual)
 - Before carrying out the disassembly process, please ensure all the safety precautions & procedures are followed.
 - During the disassembly and/or assembly process, please handle with care as there may be chassis components with sharp edges.
 - Avoid touching heatsinks due to its high temperature after prolong use.
 - Be sure to use proper service tools , equipments or jigs during repair.
 - Select items from the following indexes when disassembly or replacement are required.
-
- Disassembly of Rear Cabinet Block
 - Disassembly of Power P.C.B., Battery (-) P.C.B. and Battery (+) P.C.B.
 - Disassembly of D-AMP P.C.B.
 - Disassembly of Volume P.C.B.
 - Disassembly of Main P.C.B.
 - Disassembly of Top Key P.C.B and Headphone P.C.B.
 - Disassembly of Speaker (SP1)

7.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

To assemble the unit, reverse the steps shown in the chart below.



7.2. Types of Screws

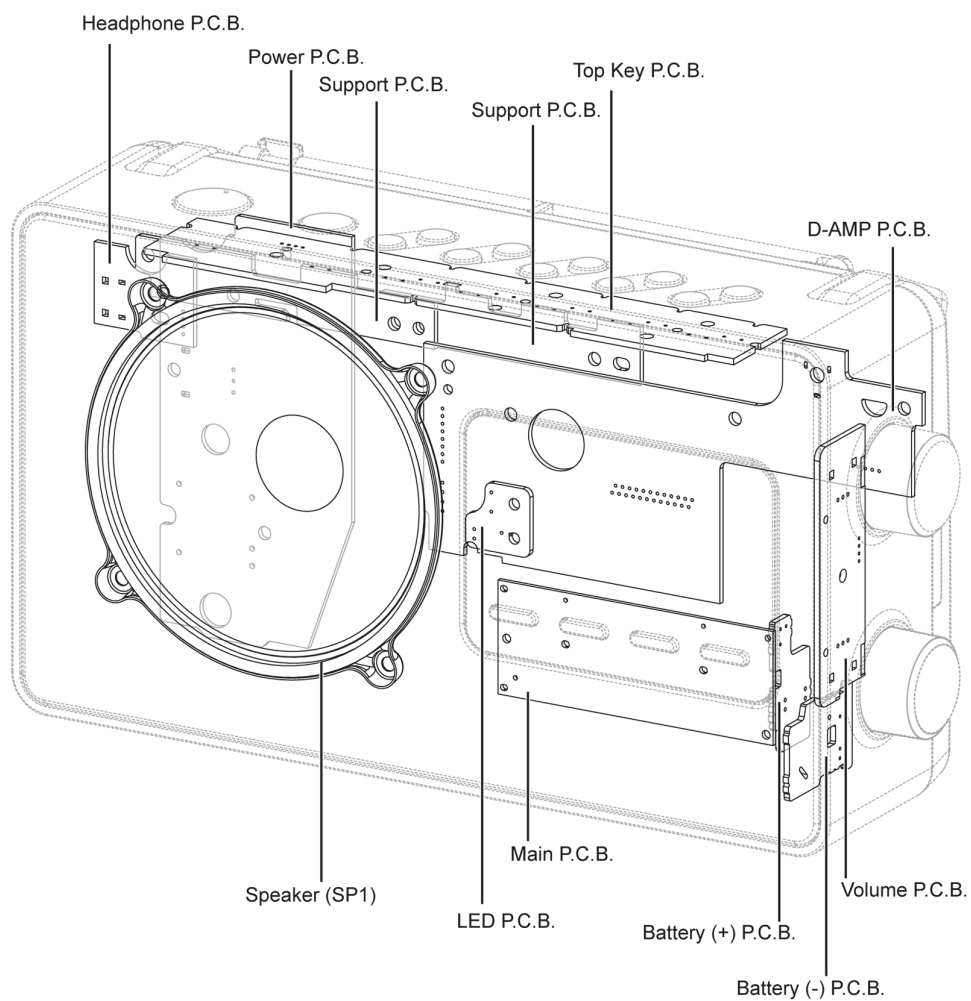
CAUTION NOTE:

Please use original screw and at correct locations.

Below shown is part no. of different screw types used:

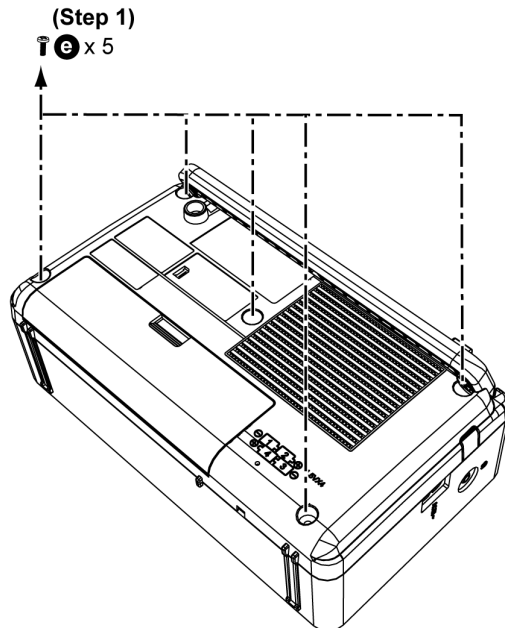
- a** : XTV3+10GFJ
- b** : XTN2+3FFJ
- c** : XTNR2+8CFJK
- d** : XTV3+8GFJ
- e** : XTV3+14GFJK(Black)
XTV3+14GFJ(White)

7.3. Main Parts Location Diagram



7.4. Disassembly of Rear Cabinet Block

Step 1 : Remove 5 screws.



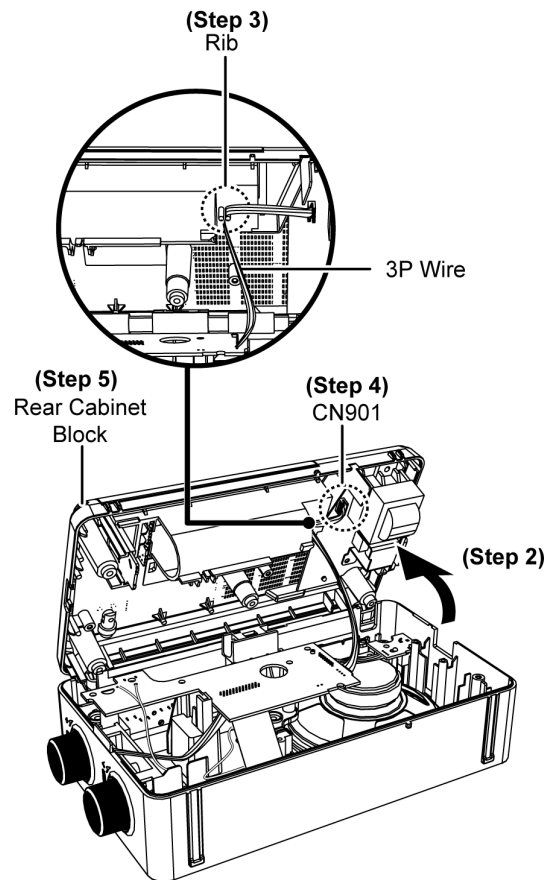
Step 2 : Lift up Rear Cabinet Block.

Caution : Do not exert too much force as it may damage the wiring within.

Step 3 : Release 3P Wire from the ribs.

Step 4 : Detach it from the connector (CN901) on the Power P.C.B..

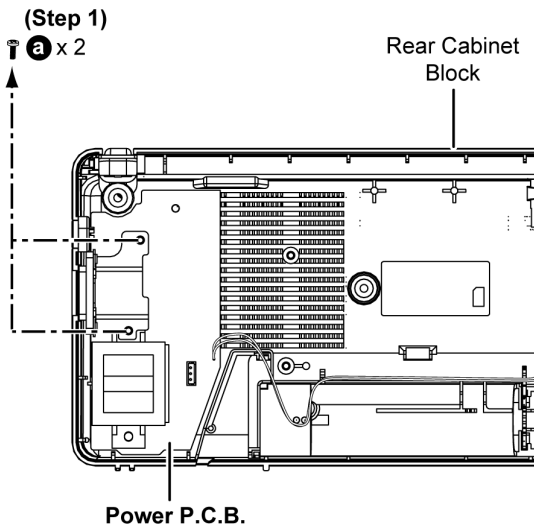
Step 5 : Remove the Rear Cabinet Block.



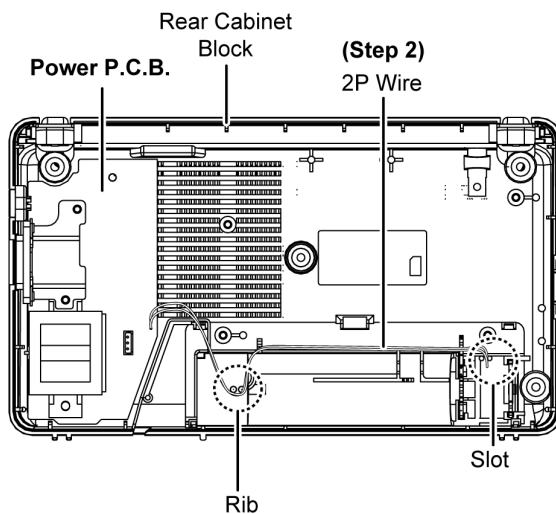
7.5. Disassembly of Power P.C.B., Battery (-) P.C.B. and Battery (+) P.C.B.

• Refer to "Disassembly of Rear Cabinet Block"

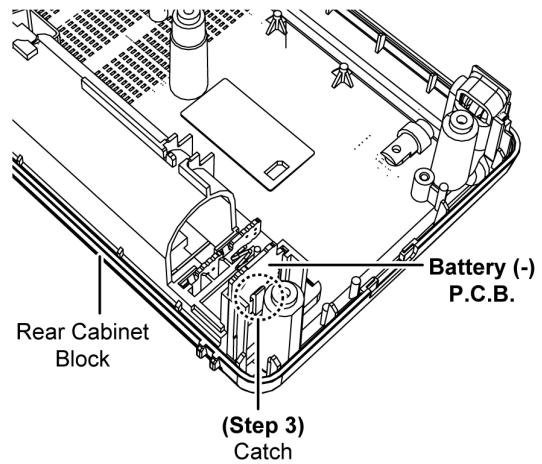
Step 1 : Remove 2 screws.



Step 2 : Remove the 2P wire from the slots and ribs as shown.

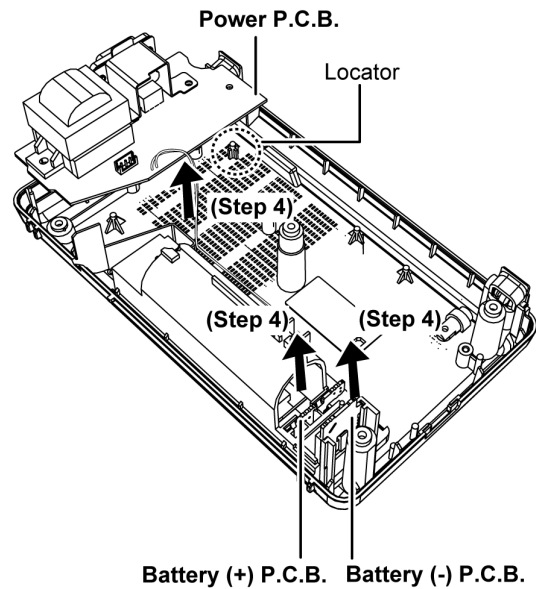


Step 3 : Release the catch..



Step 4 : Lift up the Power P.C.B., Battery (+) P.C.B. and Battery (-) P.C.B. as arrow shown.

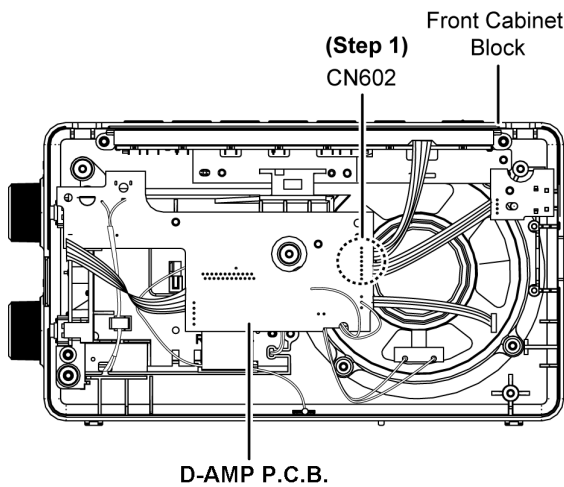
Step 5 : Remove the Power P.C.B., Battery (+) P.C.B. and Battery (-) P.C.B.



7.6. Disassembly of D-AMP P.C.B.

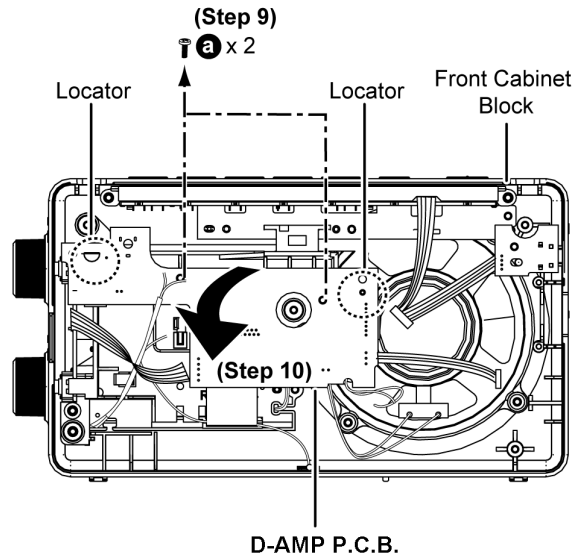
- Refer to "Disassembly of Rear Cabinet Block"

Step 1 : Detach the 8P wire from connector (CN602) on D-AMP P.C.B..



Step 9 : Remove 2 screws.

Step 10 : Upset the D-AMP P.C.B. as arrow shown.



Step 2 : Desolder the 1P wire at (CK602) on the D-AMP P.C.B..

Step 3 : Desolder the 1P wire at (CK600) on the D-AMP P.C.B..

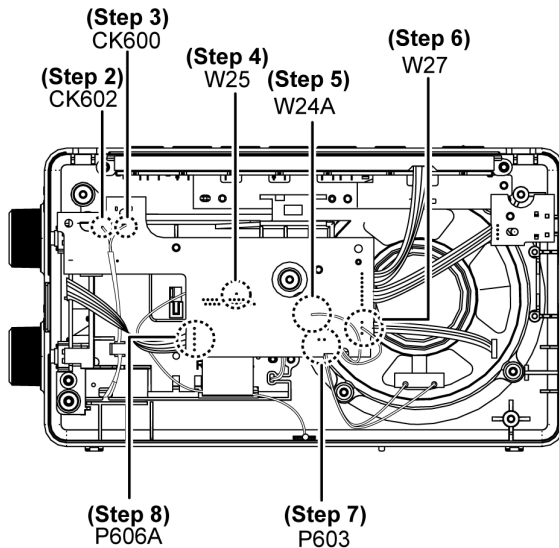
Step 4 : Desolder the 1P wire at (W25) on the D-AMP P.C.B..

Step 5 : Desolder the 1P wire at (W24A) on the D-AMP P.C.B..

Step 6 : Desolder the 1P wire at (W27) on the D-AMP P.C.B..

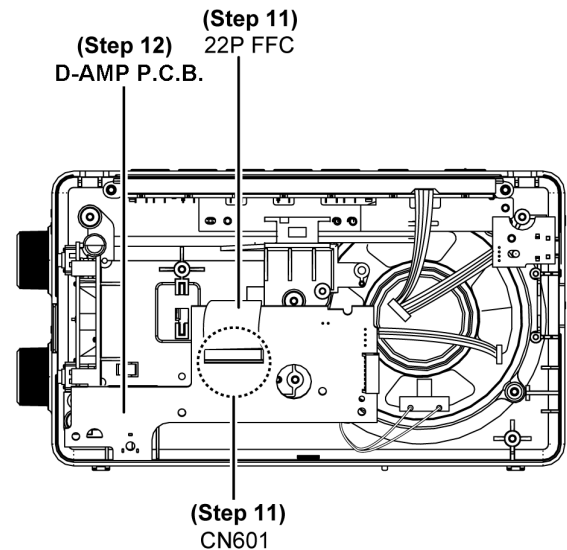
Step 7 : Desolder the 2P wire at (P603) on the D-AMP P.C.B..

Step 8 : Desolder the 5P wire at (P606A) on the D-AMP P.C.B..



Step 11 : Detach the 22P FFC from connector (CN601) on the D-AMP P.C.B..

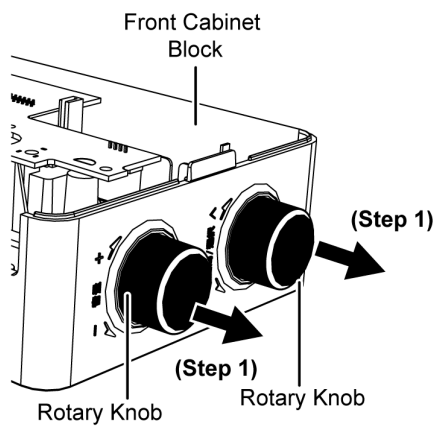
Step 12 : Remove D-AMP P.C.B..



7.7. Disassembly of Volume P.C.B.

- Refer to "Disassembly of Rear Cabinet Block"

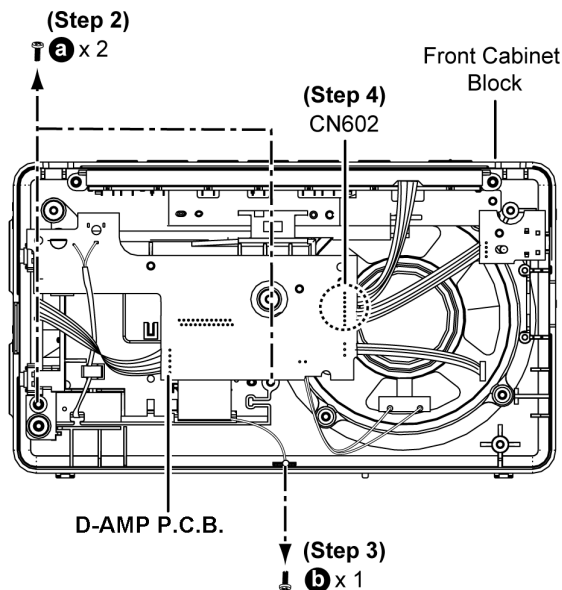
Step 1 : Remove the 2 Rotary Knobs.



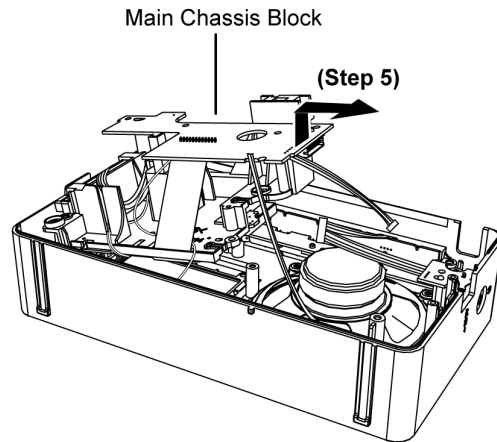
Step 2 : Remove 2 screws.

Step 3 : Remove 1 screw.

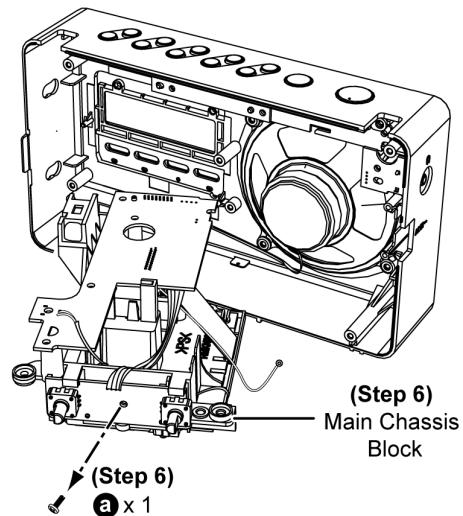
Step 4 : Detach the 8P wire from connector (CN602) on the D-AMP P.C.B..



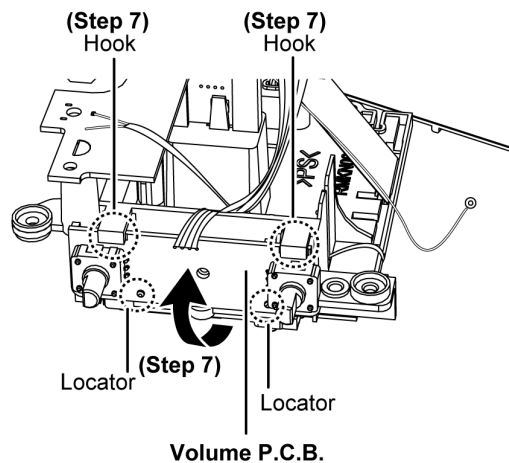
Step 5 : Lift up the Main Chassis Block.



Step 6 : Remove 1 screw.



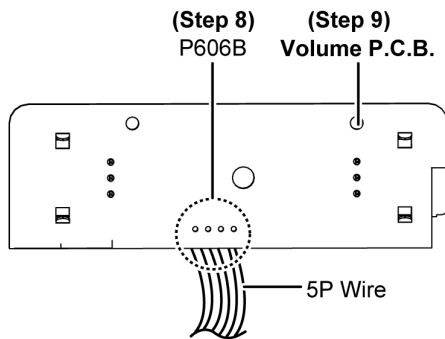
Step 7 : Release the Volume P.C.B..



Step 8 : Desolder the 5P wire at (P606B) on the Volume P.C.B..

Step 9 : Remove the Volume P.C.B..

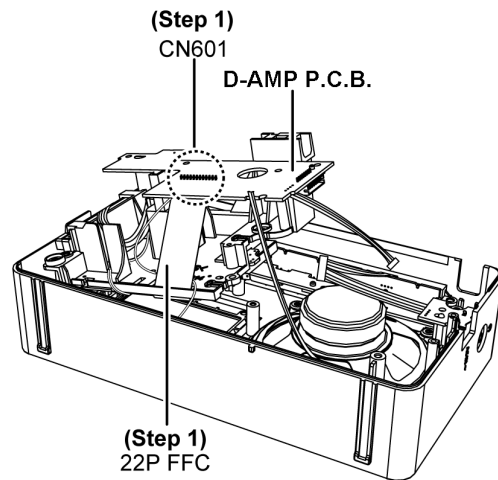
[Solder side of Volume P.C.B]



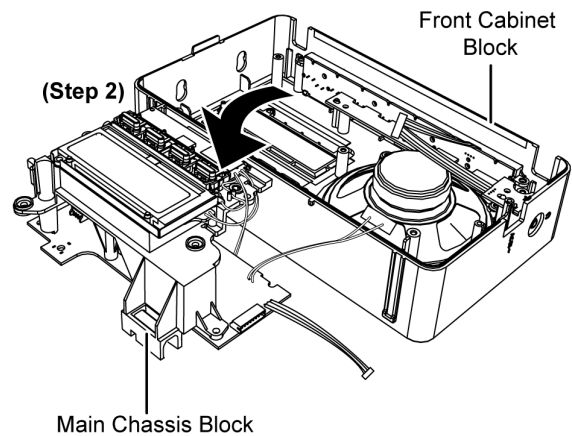
7.8. Disassembly of Main P.C.B.

- Refer to "Disassembly of Rear Cabinet Block"
- Refer to (Step 1) - (Step 5) "Disassembly of Volume P.C.B.".

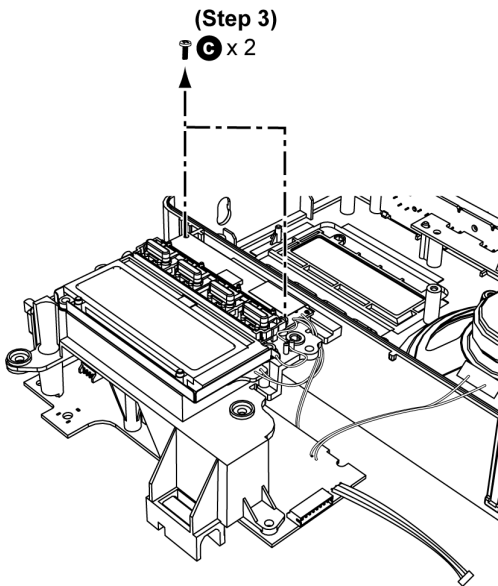
Step 1 : Detach the 22P FFC from connector (CN601) on the D-AMP P.C.B..



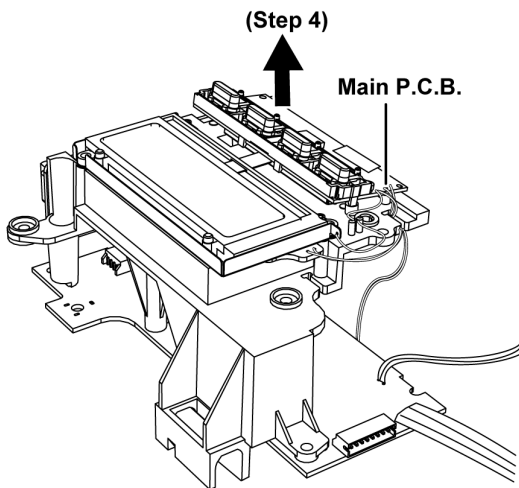
Step 2 : Upset the Main Chassis Block.



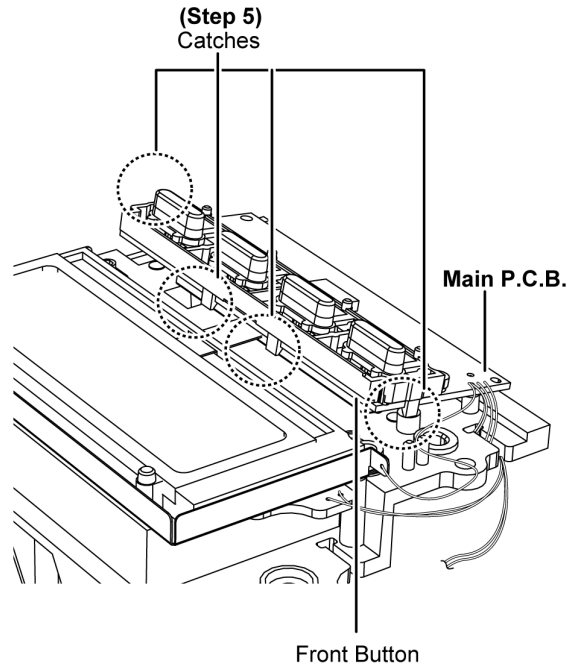
Step 3 : Remove 2 screws.



Step 4 : Slightly lift up the Main P.C.B. as shown.



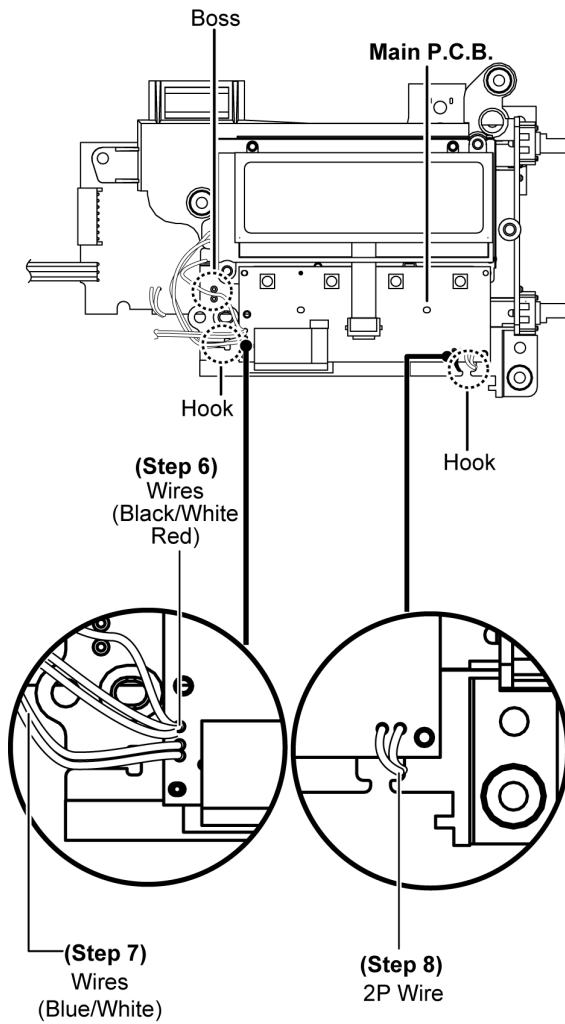
Step 5 : Release the catches and remove the Front Button from the Main P.C.B..



Step 6 : Desolder the wires (Black/White/Red).

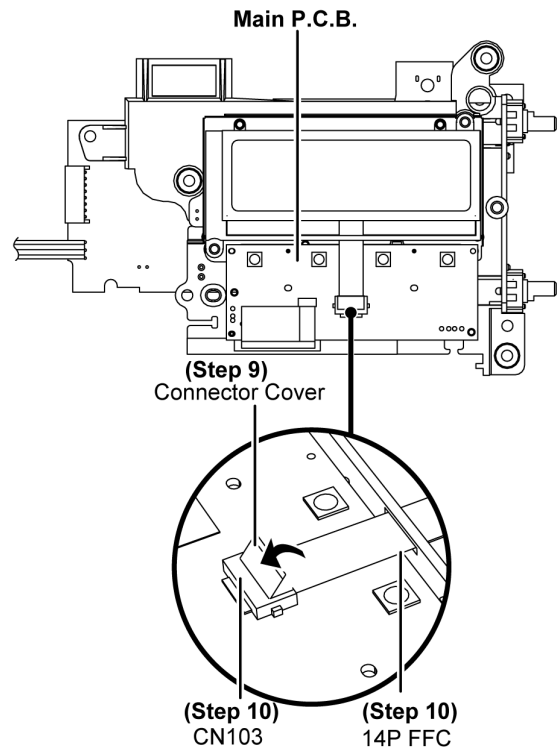
Step 7 : Desolder the wires (Blue/White).

Step 8 : Desolder the 2P wire.



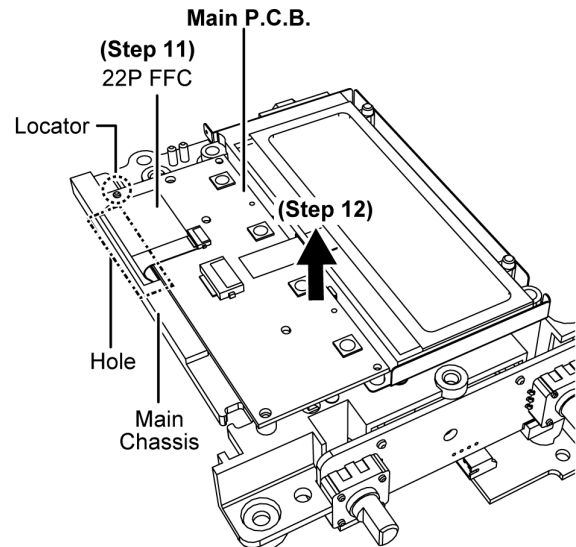
Step 9 : Lift up the Connector Cover.

Step 10 : Detach the 14P FFC at connector (CN103) from the Main P.C.B..



Step 11 : Release the 22P FFC from the hole of the Main Chassis.

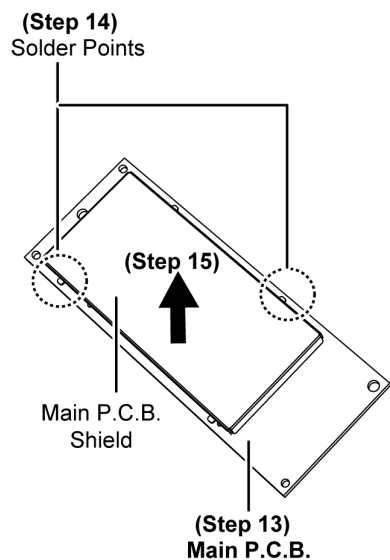
Step 12 : Lift up and remove the Main P.C.B..



Step 13 : Upset Main P.C.B..

Step 14 : Desolder the pins of Main P.C.B. shield.

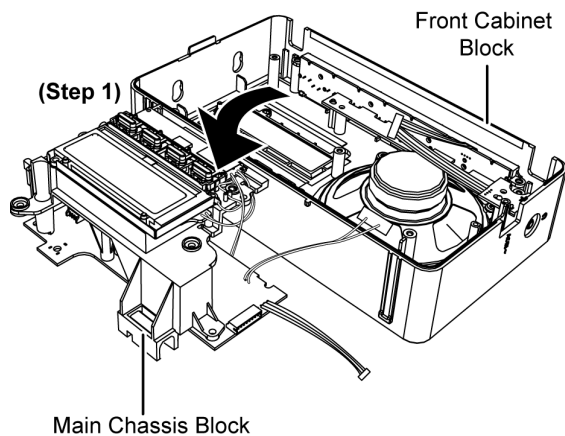
Step 15 : Remove the Main P.C.B. shield.



7.9. Disassembly of Top Key P.C.B and Headphone P.C.B.

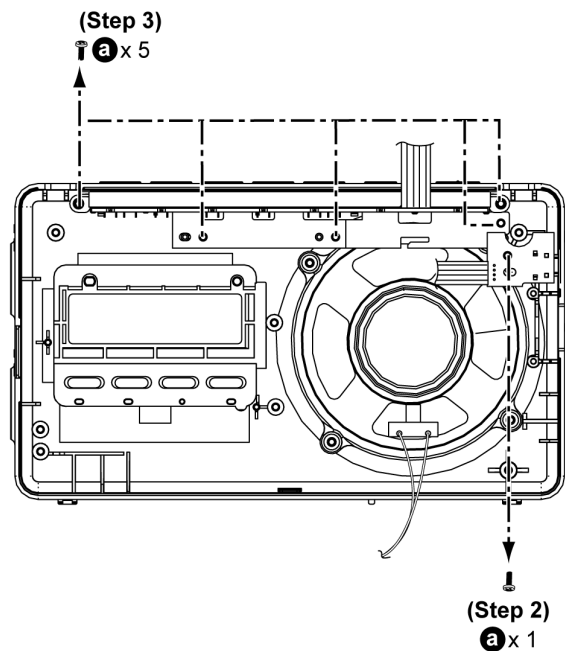
- Refer to "Disassembly of Rear Cabinet Block"
- Refer to (Step 1) - (Step 5) "Disassembly of Volume P.C.B."

Step 1 : Upset the Main Chassis Block as arrow shown.

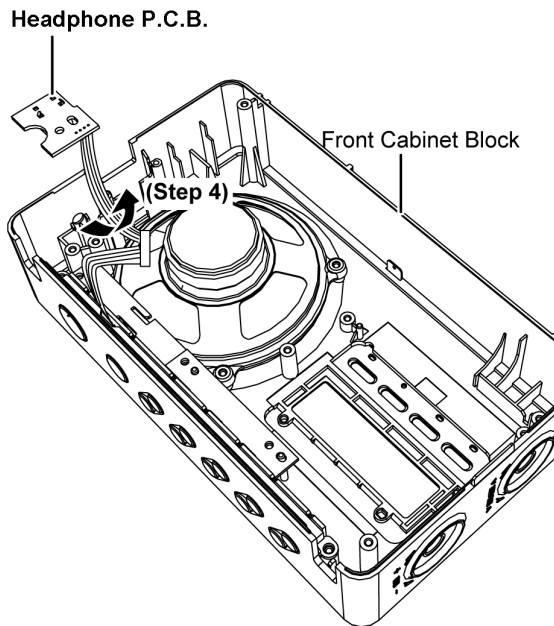


Step 2 : Remove 1 screw.

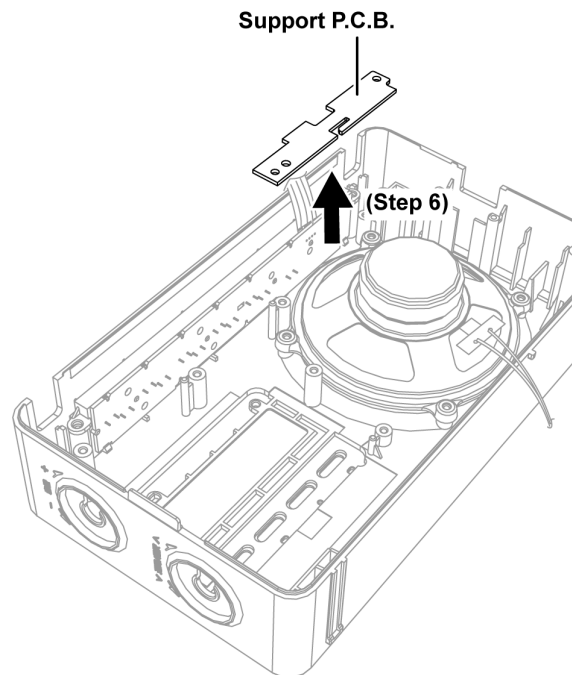
Step 3 : Remove 5 screws.



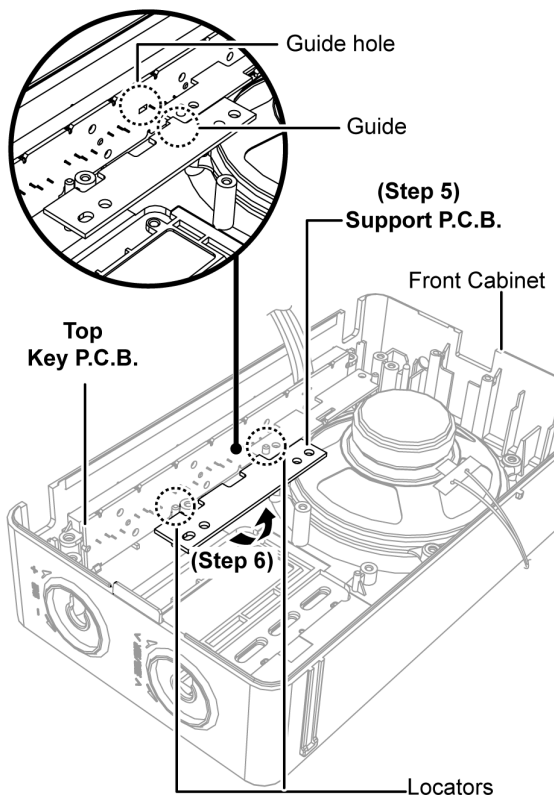
Step 4 : Remove the Headphone P.C.B..



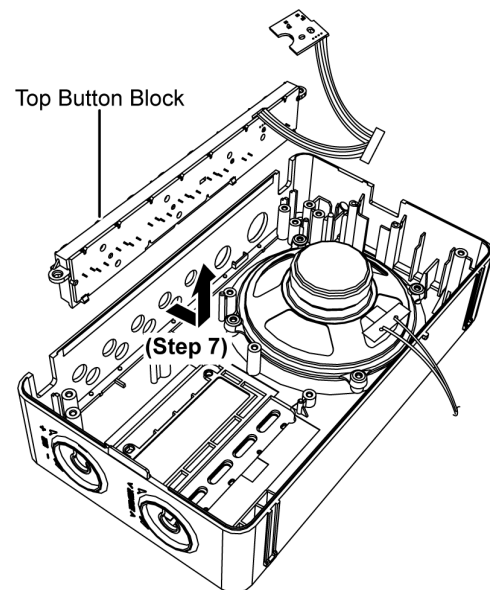
Step 6 : Remove the Support P.C.B..



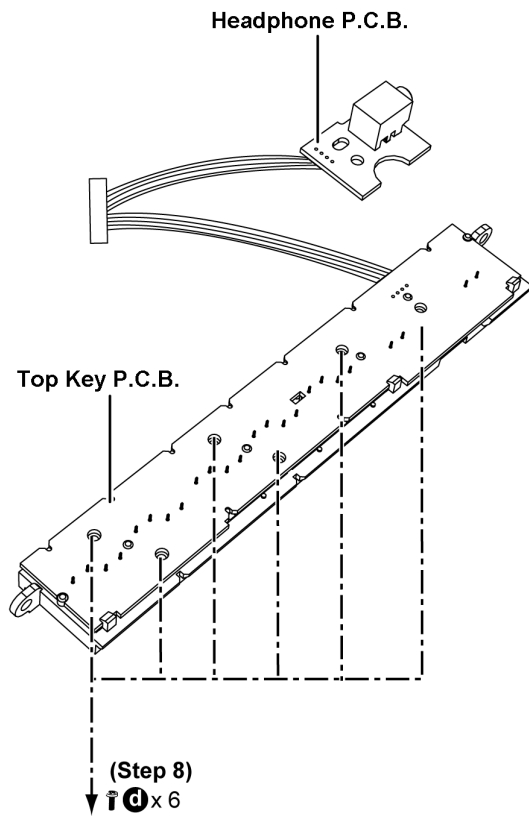
Step 5 : Remove the Support P.C.B..



Step 7 : Lift up to remove the Top Button Block.

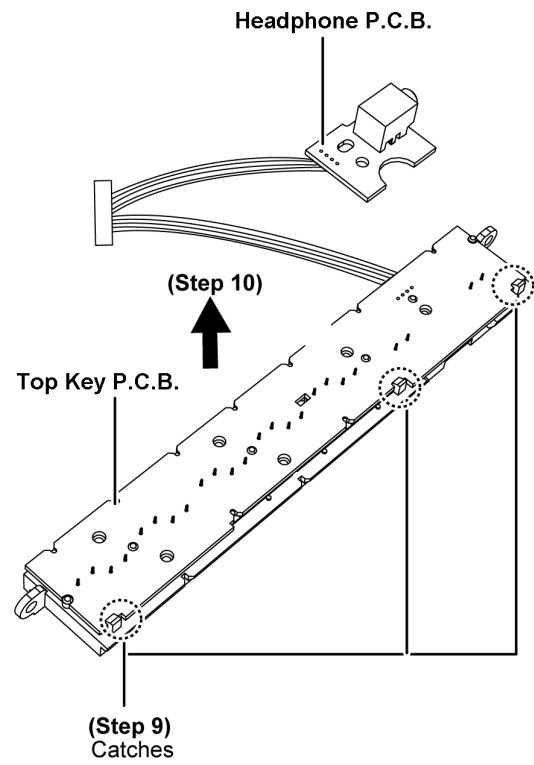


Step 8 : Remove 6 screws.



Step 9 : Release 3 catches.

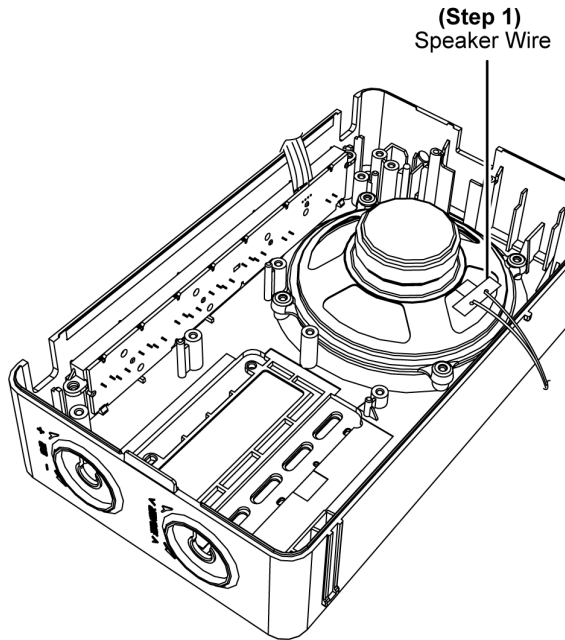
Step 10 : Remove the Headphone P.C.B. and the Top Key P.C.B..



7.10. Disassembly of Speaker (SP1)

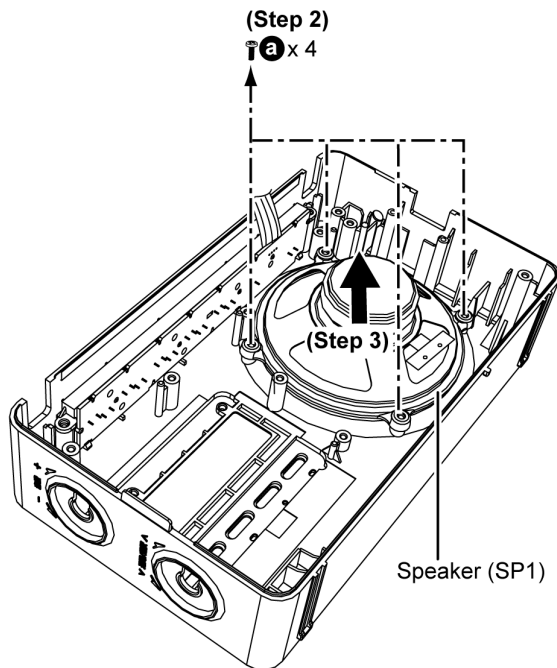
- Refer to "Disassembly of Rear Cabinet Block"
- Refer to (Step 1) - (Step 6) "Disassembly of Top Key P.C.B and Headphone P.C.B."

Step 1 : Desolder the Speaker Wire.



Step 2 : Remove 4 screws.

Step 3 : Remove the Speaker (SP1)

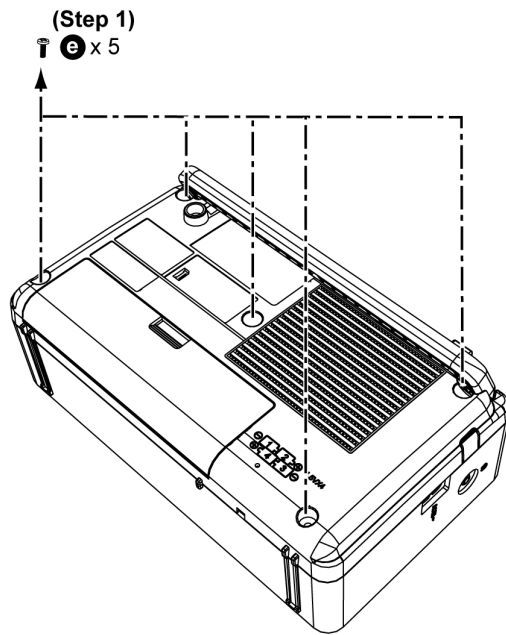


8 Service Position

Note: For description of the disassembly procedures, see the Section 7

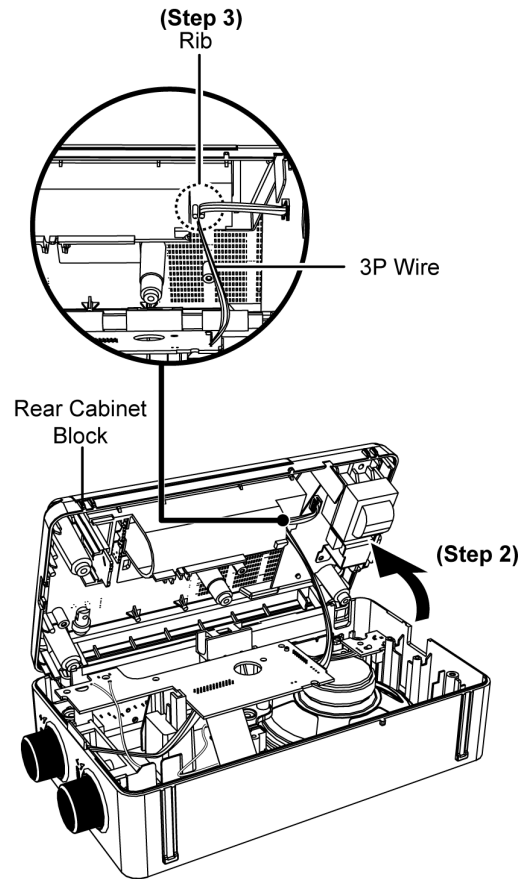
8.1. Checking of Power P.C.B.

Step 1 : 1: Remove 5 screws.



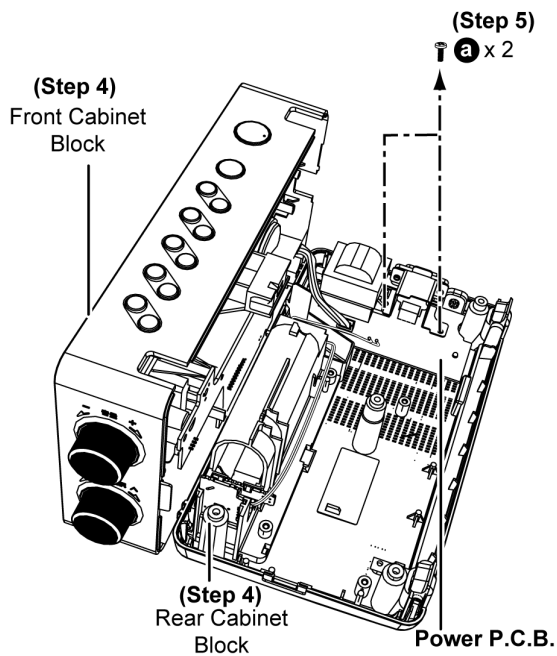
Step 2 : Lift up the Rear Cabinet Block.

Step 3 : Release the 3P wire from the ribs.



Step 4 : Place the Front and Rear Cabinet Block as shown in the diagram.

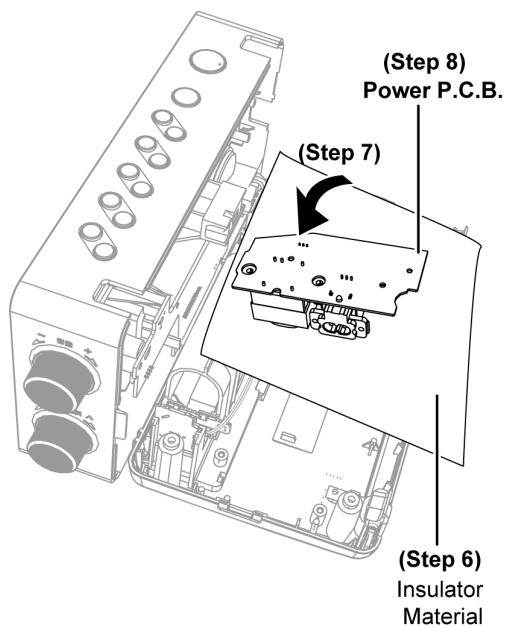
Step 5 : Remove 2 screws.



Step 6 : Place the Power P.C.B. on an insulator material.

Step 7 : Upset the Power P.C.B..

Step 8 : Power P.C.B. can be checked as diagram shown.

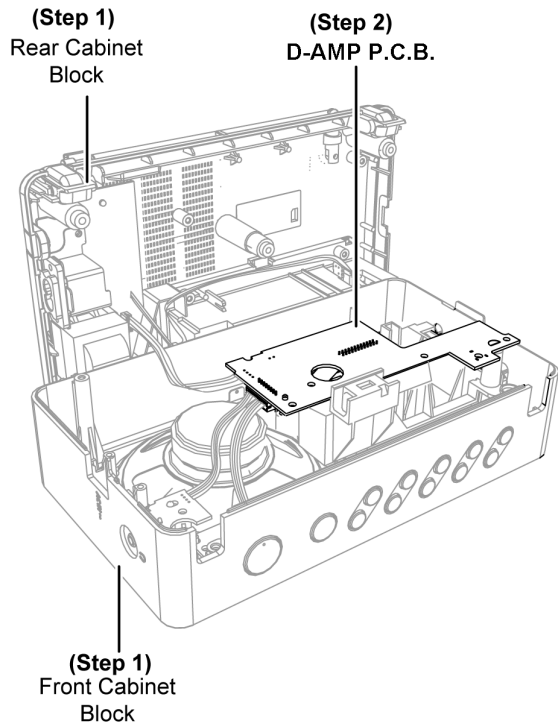


8.2. Checking of D-AMP P.C.B.

- Refer to (Step 1) - (Step 3) of item 8.1.

Step 1 : Place the Front and Rear Cabinet Block as shown in the diagram.

Step 2 : D-AMP P.C.B. can be checked as diagram shown.

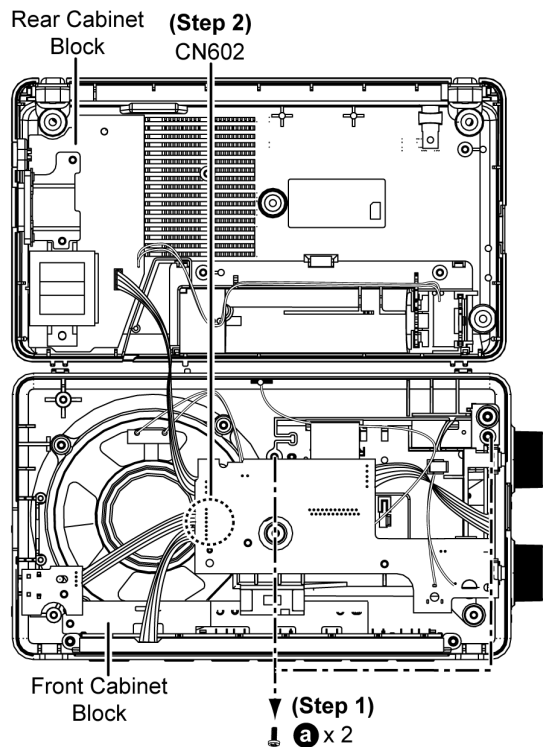


8.3. Checking of Main P.C.B. (Side A)

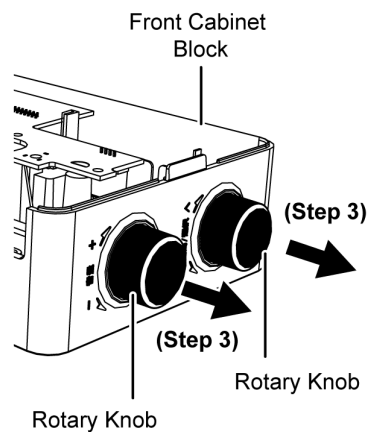
- Refer to (Step 1) - (Step 3) of item 8.1.

Step 1 : Remove 2 screws.

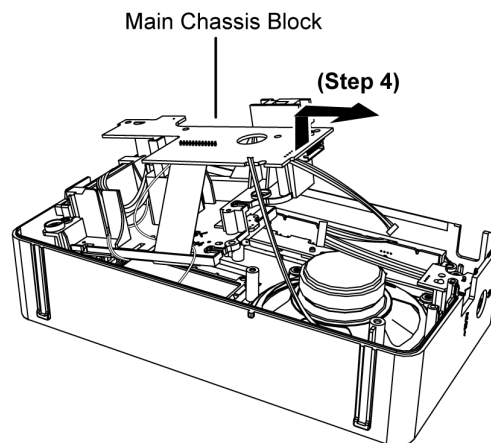
Step 2 : Detach the 8P wire from connector (CN602) on the D-AMP P.C.B..



Step 3 : Remove the 2 Rotary Knobs.

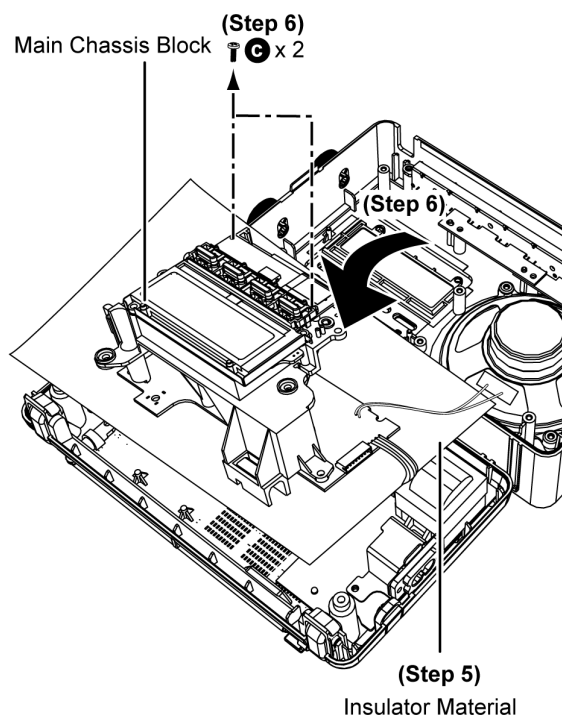


Step 4 : Lift up the Main Chassis Block.

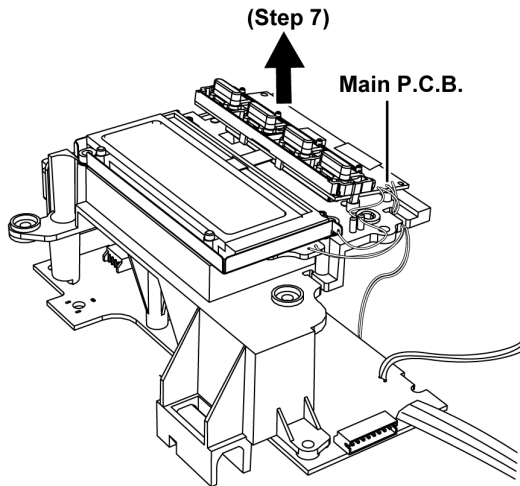


Step 5 : Place the Main Chassis Block on an insulator material on the Rear Cabinet block.

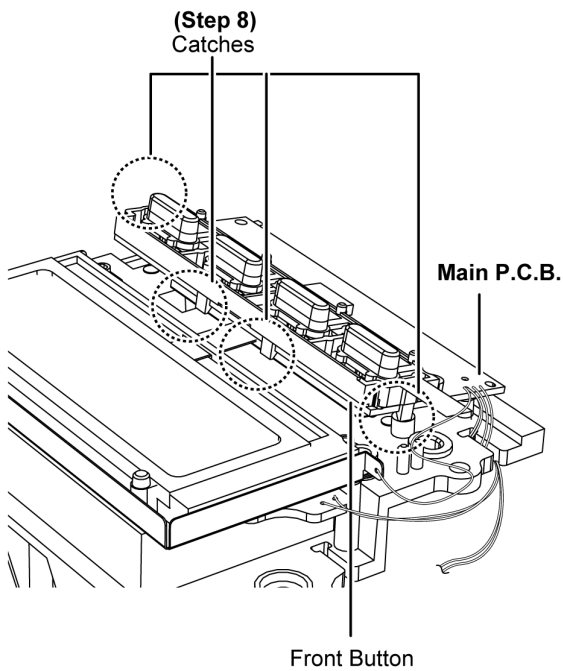
Step 6 : Remove 2 screws.



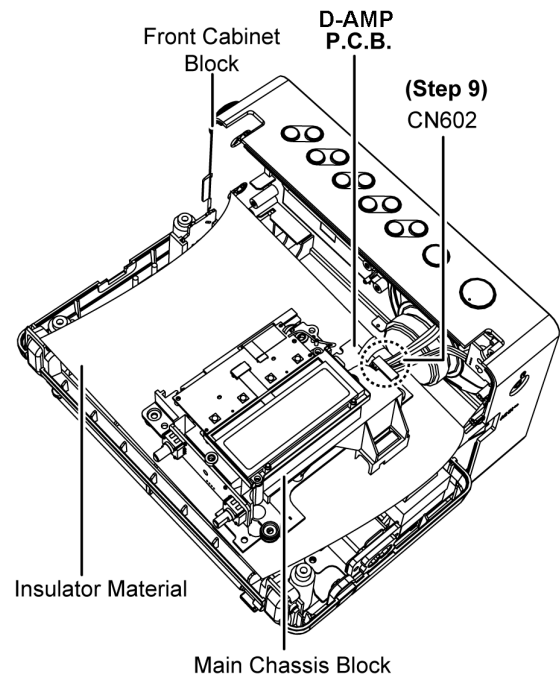
Step 7 : Slightly lift up the Main P.C.B..



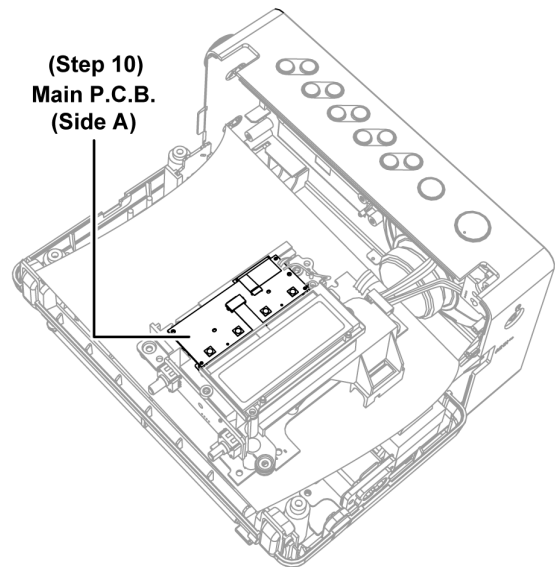
Step 8 : Release 4 catches and remove the Front Button.



Step 9 : Connect the 8P wire to connector (CN602) on the D-AMP P.C.B..



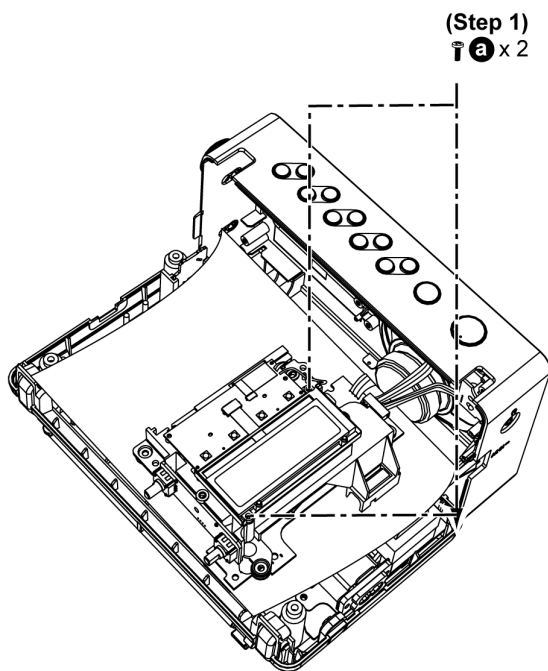
Step 10 : Main P.C.B (Side A) can be checked as diagram shown.



8.4. Checking of Main P.C.B. (Side B)

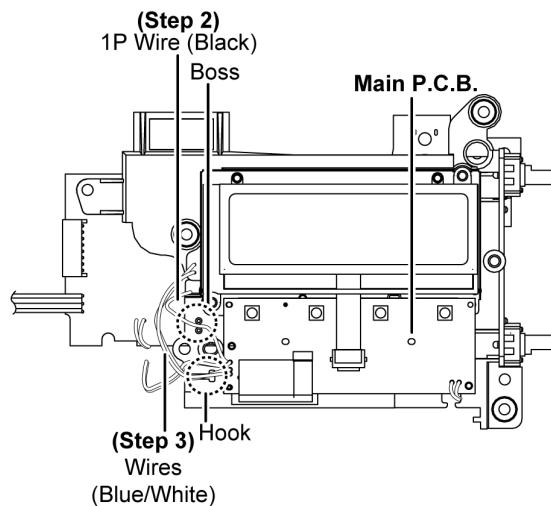
- Refer to item 8.3.

Step 1 : Remove 2 screws.

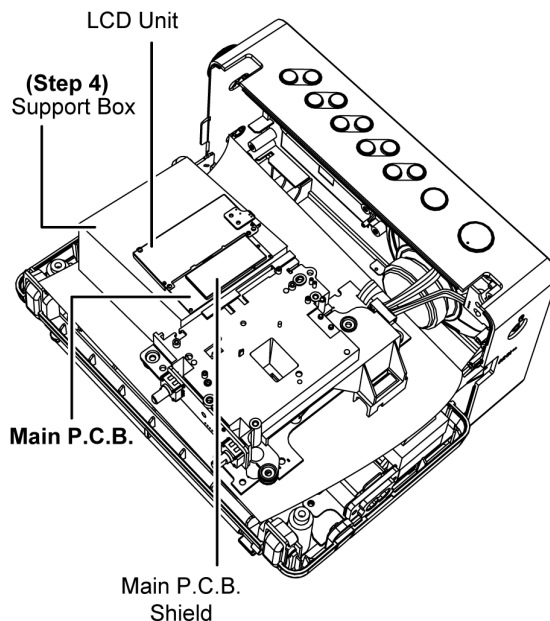


Step 2 : Release the 1P Wire (Black) from the boss.

Step 3 : Release the wires (Blue/White) from the hook.

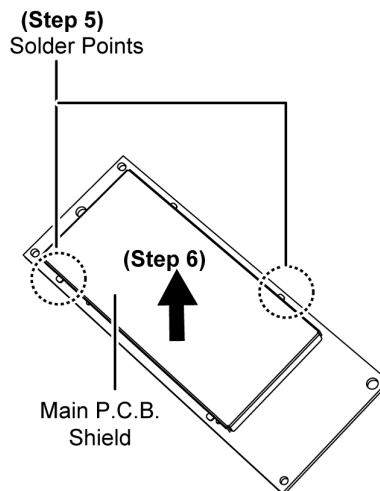


Step 4 : Upset the Main P.C.B. and the LCD unit together on a support box.

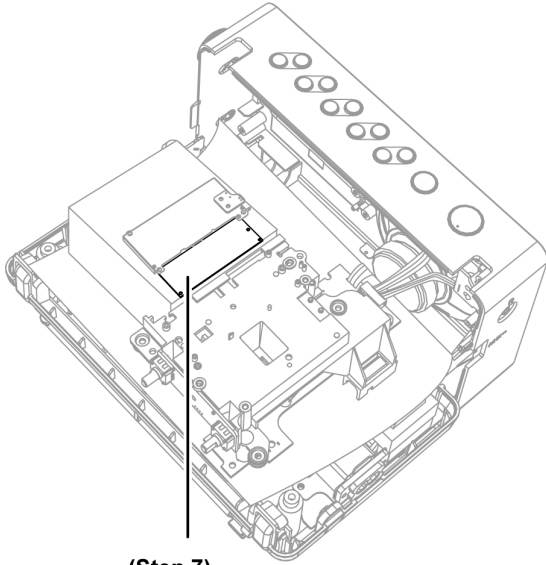


Step 5 : Desolder the pins of Main P.C.B. shield.

Step 6 : Remove the Main P.C.B. shield.

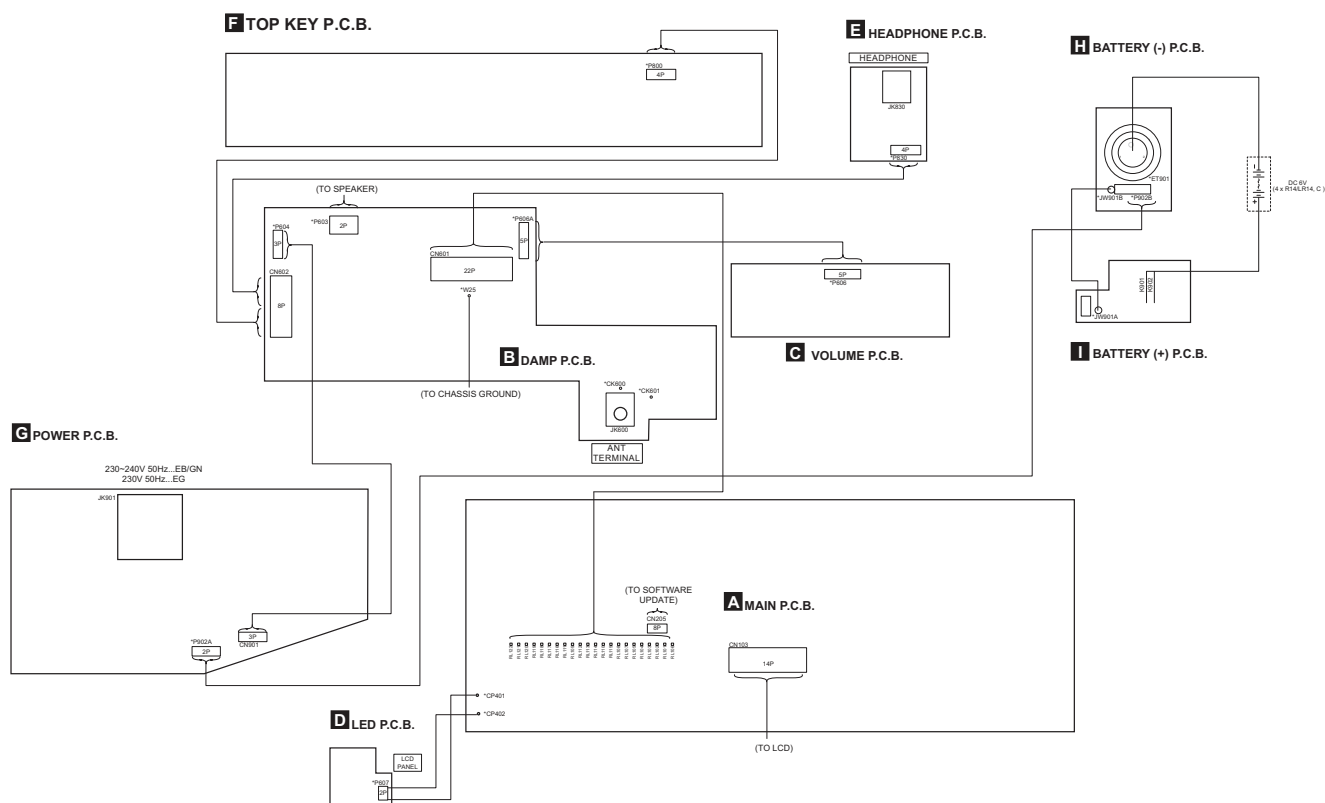


Step 7 : Main P.C.B (Side B) can be checked as diagram shown.



(Step 7)
Main P.C.B.
(Side B)

9 Wiring Connection Diagram



Note : " * " REF IS FOR INDICATION ONLY.

RF-D10
WIRING CONNECTION DIAGRAM

10 Schematic Diagram

10.1. Schematic Diagram Notes

(All schematic diagrams may be modified at any time with the development of new technology)

Notes:

S461:	DISPLAY switch.
S462:	AUTOTUNE switch.
S463:	MENU switch.
S464:	ENTER switch.
S800:	POWER switch (ϕ/I).
S801:	BAND switch.
S802:	MEMORY2 switch.
S803:	MEMORY4 switch.
S804:	MEMORY6 switch.
S805:	MEMORY8 switch.
S806:	MEMORY10 switch.
S807:	MEMORY9 switch.
S808:	MEMORY7 switch.
S809:	MEMORY1 switch.
S810:	MEMORY3 switch.
S811:	MEMORY5 switch.
S821:	VOLUME switch.
S822:	TUNE/SELECT switch

- Important safety notice:

Components identified by \triangle 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.

- Resistor

Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).

- Capacitor

Unit of capacitance is μ F, unless otherwise noted. F=Farads, pF=pico-Farad.

- Coil

Unit of inductance is H, unless otherwise noted.

- *

REF IS FOR INDICATION ONLY.

- Voltage and signal line



: +B Signal Line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F901 T3.15A, 250V FUSE



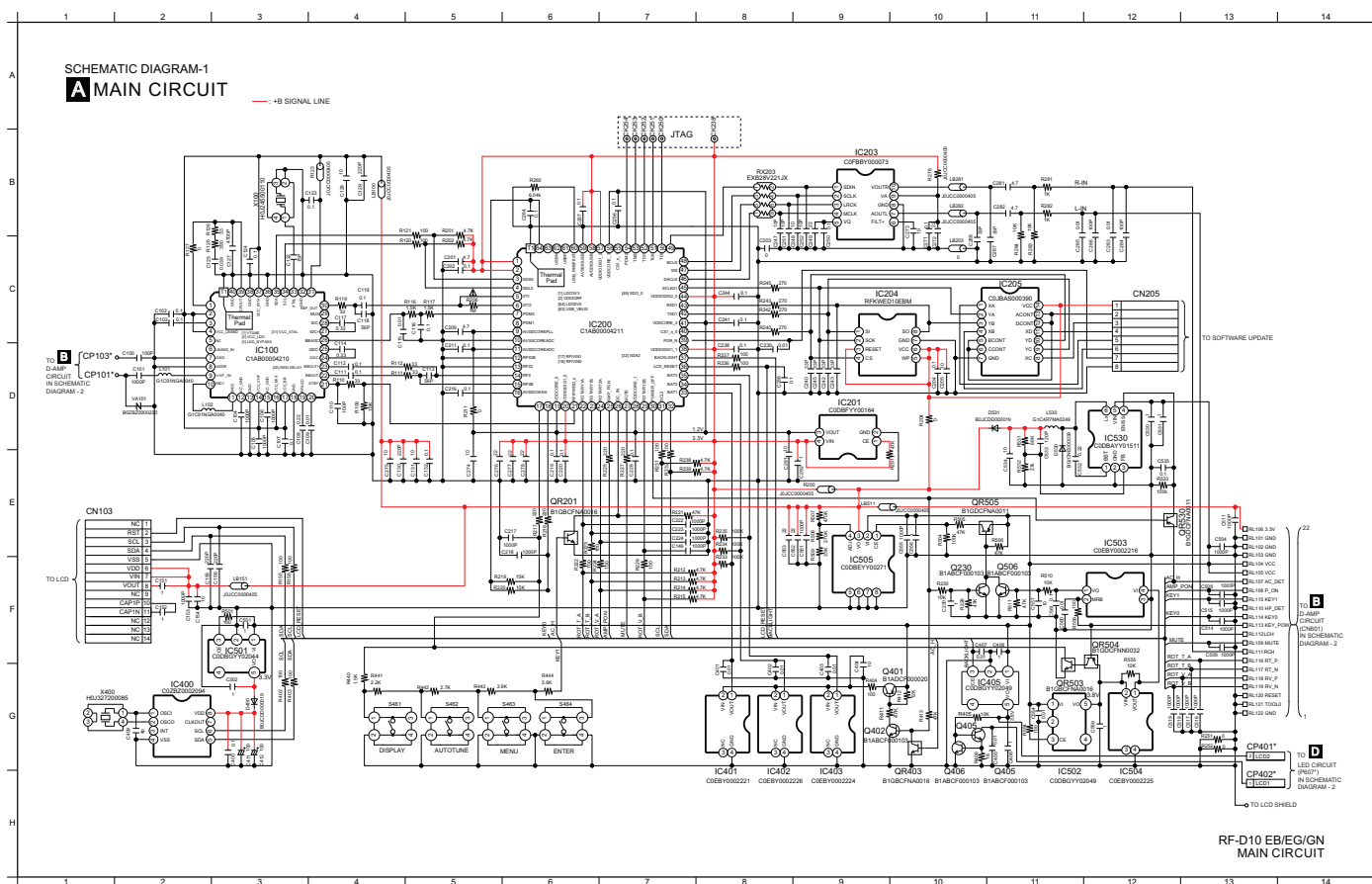
RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

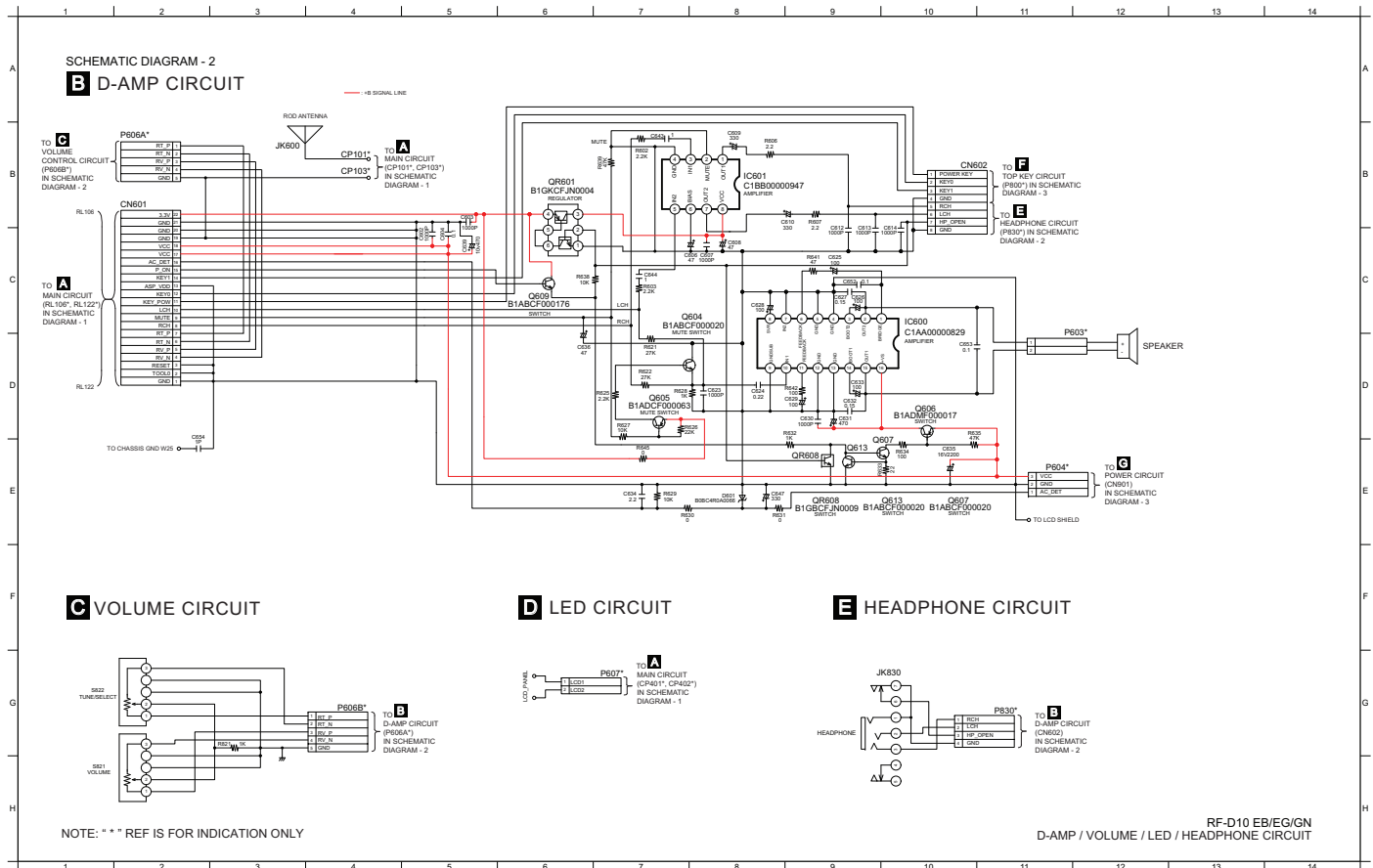


These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

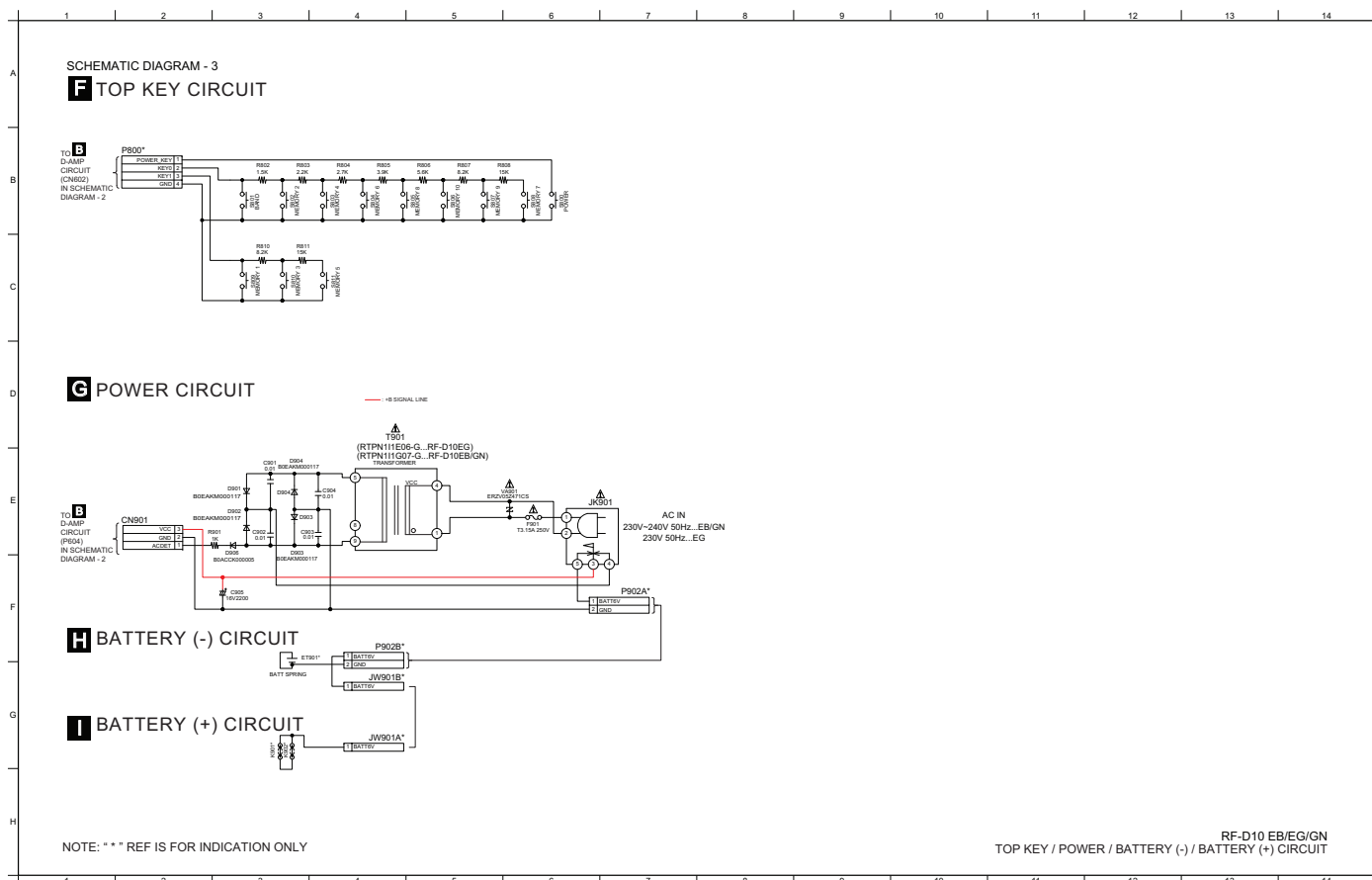
10.2. MAIN CIRCUIT



10.3. D-AMP, VOLUME, LED & HEADPHONE CIRCUIT

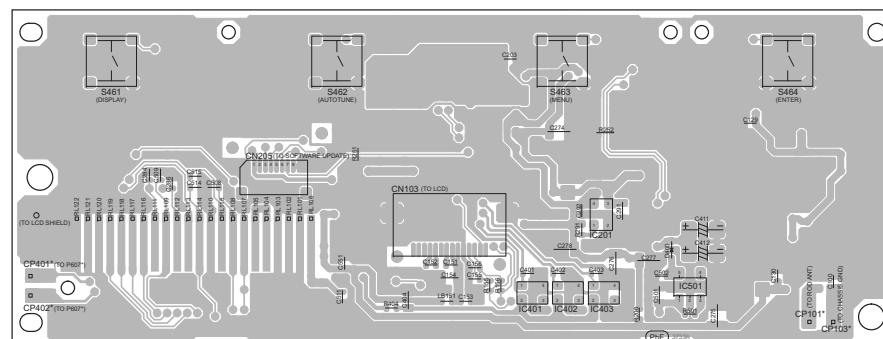


10.4. TOP KEY, POWER, BATTERY (-) & BATTERY (+) CIRCUIT



11.1. MAIN P.C.B.

(SIDE A)

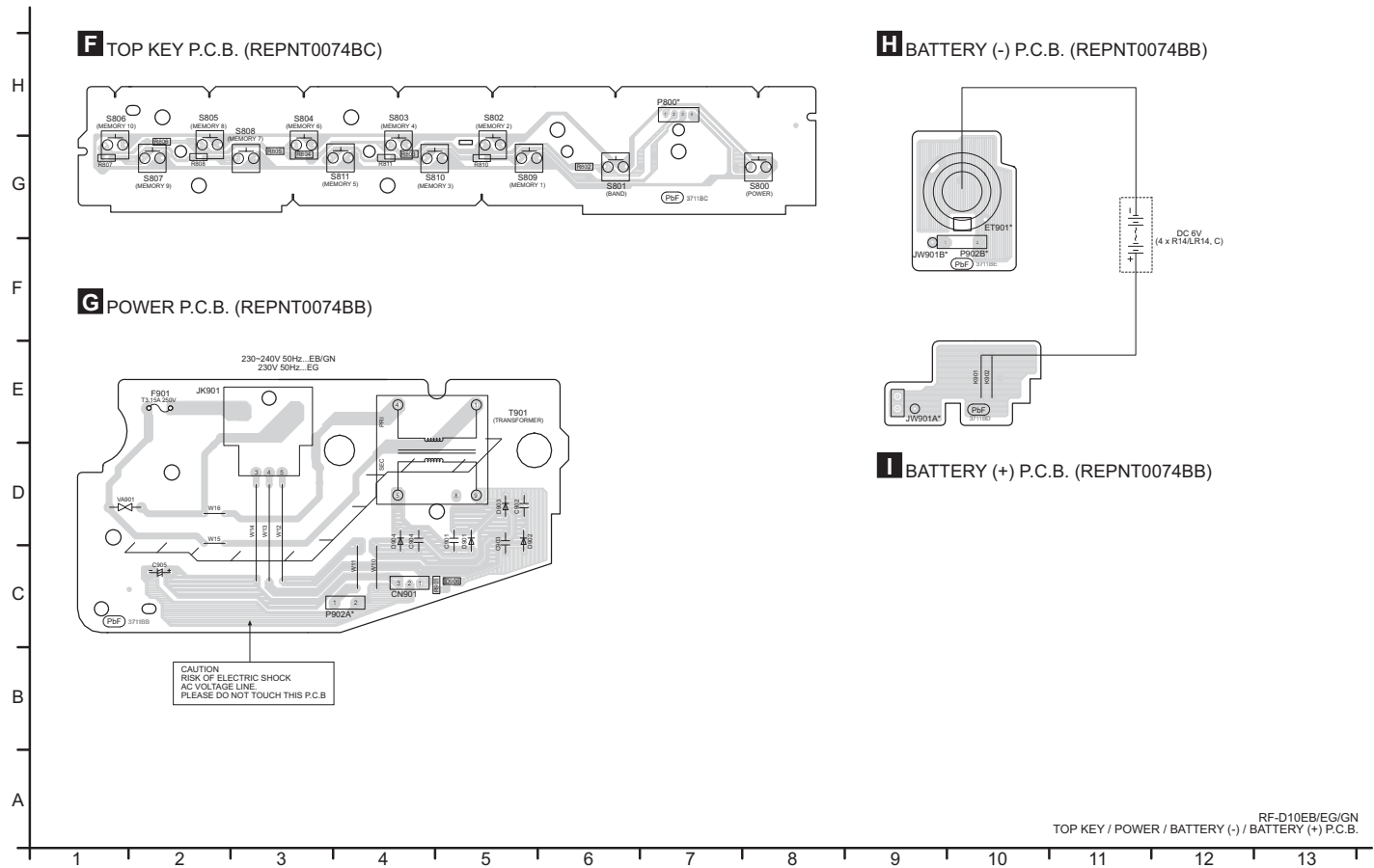


(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY

RF-D10EB/EG/GN
MAIN P.C.B.

11.3. TOP KEY, POWER, BATTERY (-) & BATTERY (+) P.C.B.



12 Appendix Information of Schematic Diagram

12.1. Voltage Measurement & Waveform Chart

Note:

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point because it may differ from actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

12.1.1. MAIN P.C.B. (1/3)

REF NO.	IC100																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RADIO ON	3.1	3.1	2.5	3.1	0	0	0	0	1.5	0.6	0.6	0.6	0	3.1	0.6	3.1	3.1	0	2.5	0
STANDBY	0	3.2	0	3.2	0	0	0	0	0	0	0	0	0	3.2	0	3.2	3.2	0	0	0

REF NO.	IC100																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
RADIO ON	3.1	1.5	1.5	1.7	1.7	1.8	1.7	1.7	3.1	1.2	3.1	0	1.5	3.1	3.1	0	3.1	0	1.7	0
STANDBY	0	2	2	0.7	0.7	2.2	0.7	0.7	3.2	1.2	3.2	0	1.5	3.1	3.2	0	3.2	0	0	0

REF NO.	IC200																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RADIO ON	3.1	3.1	3.1	3.1	1.5	1.6	2.1	0	1.2	0	1.2	0	0	0.7	0.7	2.5	2.5	2.5	1.2	3.1
STANDBY	3.2	3.2	3.2	3.2	1.5	1.6	2.3	0	1.2	0	1.2	0	0	1.2	1.2	2.5	2.5	2.5	1.2	3.2

REF NO.	IC200																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
RADIO ON	3.1	2.8	3.1	3.1	3.1	0	3.1	1.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0	3.1	3.1	3.1
STANDBY	0	2.8	3.2	3.2	0	0	0	1.2	3.2	0	3.2	3.2	3.1	3.1	3.1	3.2	0	3.2	3.2	3.2

REF NO.	IC200																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
RADIO ON	1.2	0	0	3.1	0	1.6	1.6	1.6	1.6	3.1	3.1	3.1	3.1	0	3.1	1.2	3.1	3.1	0	0
STANDBY	1.2	0	0	3.2	0	3.2	3.2	0	0	3.1	3.1	3.1	3.1	0	3.2	1.2	3.2	3.2	0	0

REF NO.	IC200																			
MODE	61	62	63	64																
RADIO ON	0	0	0	2.5																
STANDBY	0	0	0	2.5																

REF NO.	IC201																			
MODE	1	2	3	4																
RADIO ON	3.1	0	1.2	3.1																
STANDBY	3.1	0	1.2	3.2																

REF NO.	IC203																			
MODE	1	2	3	4	5	6	7	8	9	10										
RADIO ON	1.6	1.6	1.6	1.6	1.5	3	1.5	0	3	1.5										
STANDBY	0	0	0	0	0	2.6	0	0	3.2	0										

REF NO.	IC204																			
MODE	1	2	3	4	5	6	7	8												
RADIO ON	0	0	3.1	3.1	3.1	3.1	0	0												
STANDBY	0	0	3.2	3.2	3.2	3.2	0	0												

REF NO.	IC205																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
RADIO ON	1.5	0	0	1.5	2.2	2.2	0	1.5	0	3.1	1.5	2.5	2.5	3.1						
STANDBY	0.9	0	0	0.9	0.8	0.8	0	0.9	0	3.2	0.9	0.8	0.8	3.2						

RF-D10EB/EG/GN MAIN P.C.B.

12.1.2. MAIN P.C.B. (2/3)

REF NO.	IC400																	
MODE	1	2	3	4	5	6	7	8										
RADIO ON	1	0.3	0	0	3.1	3.1	0	3.2										
STANDBY	1.5	0.2	0	0	3.2	3.2	0	3.2										
REF NO.	IC401																	
MODE	1	2	3	4														
RADIO ON	3.1	0	0	0														
STANDBY	3.1	0	0	0														
REF NO.	IC402																	
MODE	1	2	3	4														
RADIO ON	3.1	0	0	0														
STANDBY	3.1	0	0	0														
REF NO.	IC403																	
MODE	1	2	3	4														
RADIO ON	3.1	0	0	0														
STANDBY	3.1	0	0	0														
REF NO.	IC405																	
MODE	1	2	3	4	5													
RADIO ON	9.3	0	0	0	0													
STANDBY	12.6	0	0	0	0													
REF NO.	IC501																	
MODE	1	2	3	4	5													
RADIO ON	9.2	0	9.2	0	3.3													
STANDBY	12.7	0	12.7	0	3.3													
REF NO.	IC502																	
MODE	1	2	3	4	5													
RADIO ON	9.3	0	9.3	0	3.8													
STANDBY	12.6	0	12.6	0	3.8													
REF NO.	IC503																	
MODE	1	2	3	4														
RADIO ON	0	3.8	0	3.8														
STANDBY	0	3.8	0	3.8														
REF NO.	IC504																	
MODE	1	2	3	4														
RADIO ON	3.8	3.8	0	0														
STANDBY	3.8	3.8	0	0														
REF NO.	IC505																	
MODE	1	2	3	4	5	6	7	8										
RADIO ON	5.8	9.3	3.1	1.3	0	0	0	0										
STANDBY	0	12.5	3.2	1.2	0	0	0	0										

RF-D10EB/EG/GN MAIN P.C.B.

12.1.3. MAIN P.C.B. (3/3)

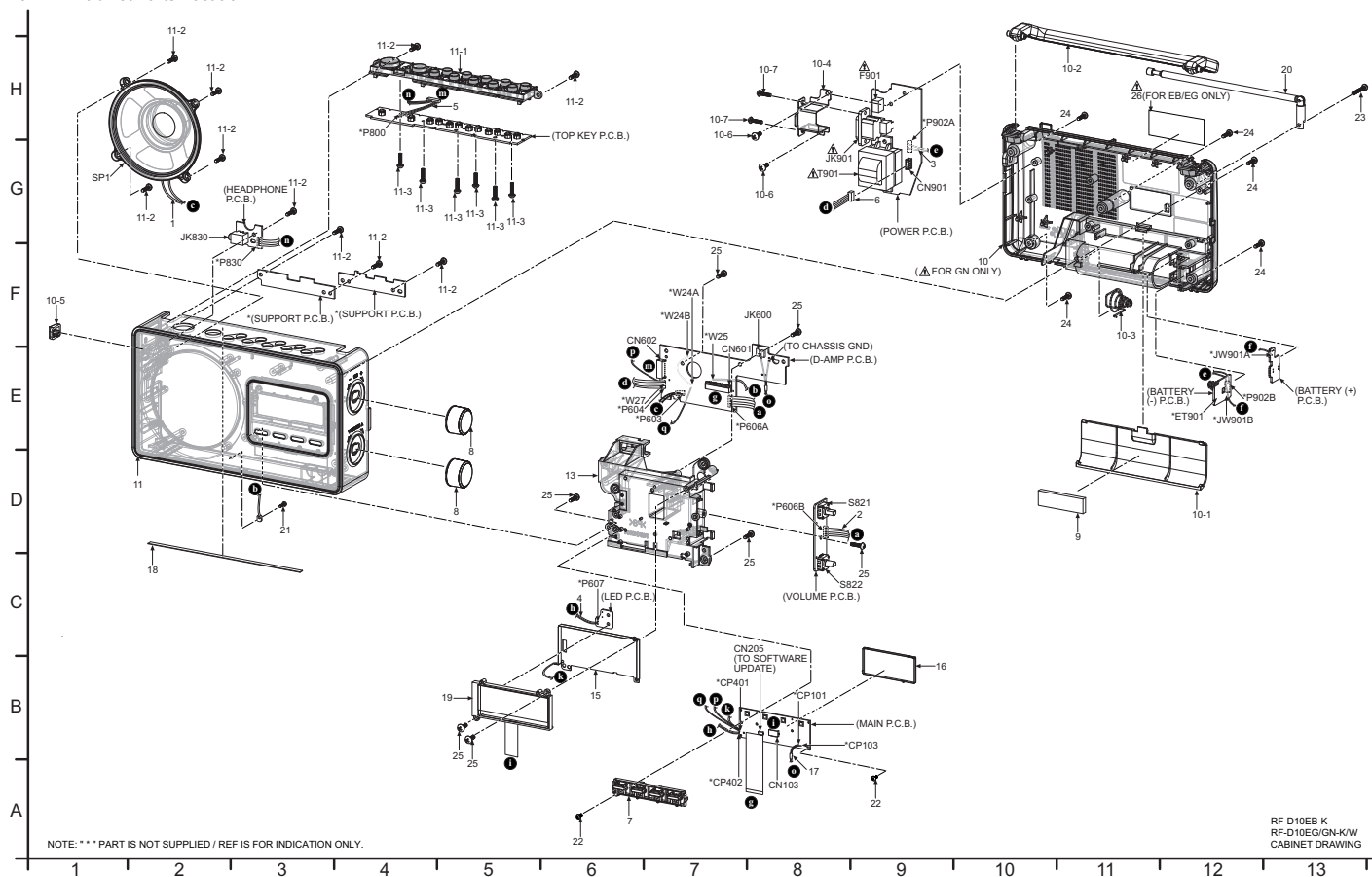
REF NO.	IC530																			
MODE	1	2	3	4	5	6														
RADIO ON	0	0	0	0	9.3	0														
STANDBY	6.9	0	1	3.6	12.6	3.5														
REF NO.	Q230				Q401				Q402				Q405				Q406			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
RADIO ON	0	0	0.6		9.3	0	9.3		0	9.2	0		0	0.3	0		0	0	0	
STANDBY	0	12.6	0		12.6	0	12.6		0	12.5	0		0	0	0		0	0	0	
REF NO.	Q506				QR201				QR403				QR503				QR504			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
RADIO ON	0	0	0		0	0	3.5		0	0	3.5		0	2.5	0		3.8	0	3.8	
STANDBY	0	12.6	0		0	0	3.6		0	0	3.6		0	2.5	0		3.8	0	3.8	
REF NO.	QR505				QR530															
MODE	E	C	B		E	C	B													
RADIO ON	9.3	9.3	0		3.5	0	3.1													
STANDBY	12.6	0	12.6		3.6	3.6	0													
RF-D10EB/EG/GN MAIN P.C.B.																				

RF-D10EB/EG/GN MAIN P.C.B.

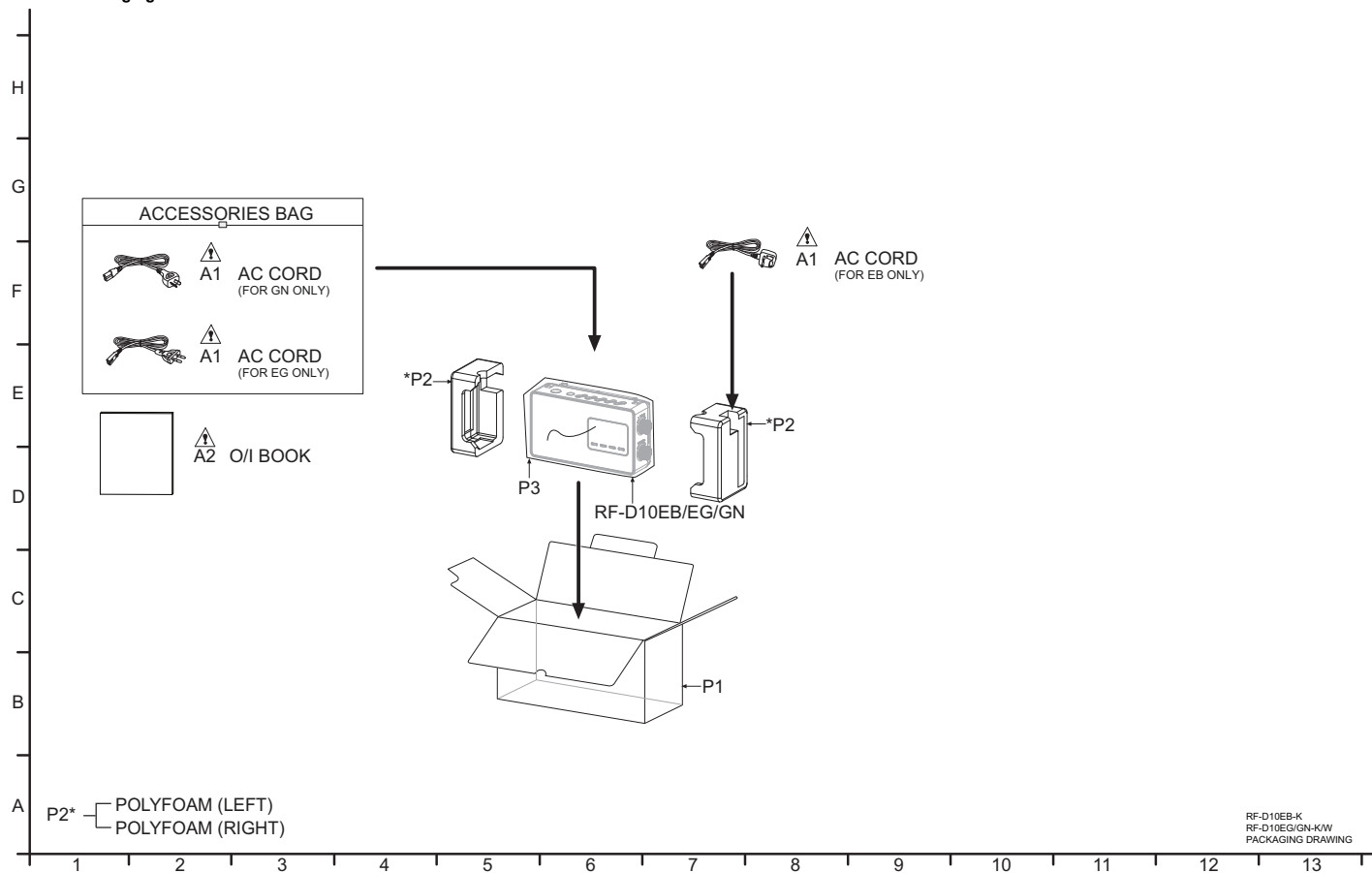
13 Exploded View and Replacement Parts List

13.1. Exploded View and Mechanical replacement Parts List

13.1.1. Cabinet Parts Location



13.1.2. Packaging



13.1.3. Mechanical Replacement Parts List

Important Safety Notice

Components identified by \triangle mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- All parts mentioned are supplied by PAVCJM unless indicated likewise.
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplified Chinese
Pe:	Persian	Ur:	Ukraine	Pr:	Portuguese	Fi:	Finnish

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
			CABINET AND CHASSIS		
	1	RWJ4202120XG	2P WIRE (SP1 - D-AMP)	1	
	2	RWJ0205095XX	5P WIRE (VOLUME - D-AMP)	1	
	3	RWJ4202250XX	2P WIRE (POWER - BATTERY (-))	1	
	4	REEN0030	2P WIRE (LED - MAIN)	1	
	5	REXN0092-1	8P WIRE (HEADPHONE & TOP KEY - D-AMP)	1	
	6	REXN0093-1	3P WIRE (POWER - D-AMP)	1	
	7	RGUN0062-K	FRONT BUTTON	1	EB/EG/GN-K
	7	RGUN0062-W	FRONT BUTTON	1	EG/GN-W
	8	RGWN0024-1S	ROTARY KNOB	2	EB/EG/GN-K
	8	RGWN0024-2S	ROTARY KNOB	2	EG/GN-W
	9	RMQN0025	BATTERY CUSHION	1	
	10	RYKN0119B-K	BACK CABINET ASS'Y	1	EG-K
\triangle	10	RYKN0119C-K	BACK CABINET ASS'Y	1	GN-K
\triangle	10	RYKN0119C-W	BACK CABINET ASS'Y	1	GN-W
	10	RYKN0119B-W	BACK CABINET ASS'Y	1	EG-W

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	10	RYKN0119D-K	BACK CABINET ASS'Y	1	EB-K
	10-1	RKK0084-W1	BATTERY COVER	1	EG/GN-W
	10-1	RKK0084-1K	BATTERY COVER	1	EB/EG/GN-K
	10-2	RKH0028-W1	HANDLE	1	EG/GN-W
	10-2	RKH0028-K	HANDLE	1	EB/EG/GN-K
	10-3	RJC92002-2	BATTERY TERMINAL	1	
	10-4	RMAN0053	AC IN BRACKET	1	
	10-5	RMVN0095-K1	JACK HOLE COVER	1	EB/EG/GN-K
	10-5	RMVN0095-W1	JACK HOLE COVER	1	EG/GN-W
	10-6	XTV3+10GFJ	SCREW	2	
	10-7	XTV3+8FFJ	SCREW	2	
	11	RYKN0118A-K	FRONT CABINET ASS'Y	1	EB/EG/GN-K
	11	RYKN0118A-W	FRONT CABINET ASS'Y	1	EG/GN-W
	11-1	RGUN0061-3S	TOP BUTTON	1	EB/EG/GN-K
	11-1	RGUN0061-4S	TOP BUTTON	1	EG/GN-W
	11-2	XTV3+10GFJ	SCREW	10	
	11-3	XTV3+8FFJ	SCREW	6	
	13	RMKN0014-1	MAIN CHASSIS	1	
	15	RMVN0092	LCD SHIELD	1	
	16	RMVN0094	MAIN PCB SHIELD	1	
	17	RWK101110	2P WIRE (MAIN - D-AMP)	1	
	18	RMVN0096	HIMERON	1	
	19	L5DYAYY00123	LCD MODULE	1	
	20	XEARR150EA-2	ROD ANTENNA	1	
	21	XTN2+3FFJ	SCREW	1	

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	22	XTNR2+8CFJK	SCREW	2	
	23	XYN3+F25FN	SCREW	1	
	24	XTV3+14GFJK	SCREW	5	K
	24	XTV3+14GFJ	SCREW	5	W
	25	XTV3+10GFJ	SCREW	7	
⚠	26	RGNN0183	NAME PLATE	1	EB-K
⚠	26	RGNN0184B	NAME PLATE	1	EG-W
⚠	26	RGNN0184A	NAME PLATE	1	EG-K
			SPEAKERS		
	SP1	RASN10PL12-G	SPEAKER	1	
			PACKING MATERI-ALS		
	P1	RPGN00143	PACKING CASE	1	EB-K
	P1	RPGN00144	PACKING CASE	1	EG-K
	P1	RPGN00145	PACKING CASE	1	EG-W
	P1	RPGN00146	PACKING CASE	1	GN-K
	P1	RPGN00147	PACKING CASE	1	GN-W
	P2	RPNN0068	POLYFOAM	1	
	P3	RPF0161	MIRAMAT BAG	1	
			ACCESSORIES		
⚠	A1	K2CQ2YY00119	AC CORD	1	EG-K EG-W
⚠	A1	K2CT2YY00097	AC CORD	1	EB-K
⚠	A1	K2CJ2DA00014	AC CORD	1	GN-K GN-W
⚠	A2	RQTN0172	O/I BOOK (En)	1	EB-K
⚠	A2	RQTN0173	O/I BOOK (En/Ge/ It/Fr/Du/Da/Cz/ Sw/No)	1	EG-K EG-W
⚠	A2	RQTN0174	O/I BOOK (En)	1	GN-K GN-W

13.2. Electrical Replacement Parts List

Important Safety Notice

Components identified by \triangle mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- Capacitor value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1000 (OHM).
- All parts mentioned are supplied by PAVCJM unless indicated likewise.

E.S.D. standards for Electrostatically Sensitive Devices, refer to "PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATIC SENSITIVE (ES) DEVICES" section.

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
			PRINTED CIRCUITS BOARD		
	PCB1	REPNT0073A	MAIN P.C.B.	1	(RTL)
	PCB2	REPNT0074BA	D-AMP P.C.B.	1	(RTL)
	PCB3	REPNT0074BA	VOLUME P.C.B.	1	(RTL)
	PCB4	REPNT0074BI	LED P.C.B.	1	(RTL)
	PCB5	REPNT0074BG	HEADPHONE P.C.B.	1	(RTL)
	PCB6	REPNT0074BC	TOP KEY P.C.B.	1	(RTL)
	PCB7	REPNT0074BB	POWER P.C.B.	1	(RTL)
	PCB8	REPNT0074BB	BATTERY (-) P.C.B.	1	(RTL)
	PCB9	REPNT0074BB	BATTERY (+) P.C.B.	1	(RTL)
			INTEGRATED CIRCUITS		
	IC100	C1AB00004210	IC	1	(E.S.D)
	IC200	C1AB00004211	IC	1	(E.S.D)
	IC201	C0DBFY00164	IC	1	(E.S.D)
	IC203	C0FBY000073	IC	1	(E.S.D)
	IC204	RFKWD10EBM	IC	1	(E.S.D)
	IC205	C0JBAS000390	IC	1	(E.S.D)
	IC400	C0ZB20002094	IC	1	(E.S.D)
	IC401	C0EBY0002221	IC	1	(E.S.D)
	IC402	C0EBY0002226	IC	1	(E.S.D)
	IC403	C0EBY0002224	IC	1	(E.S.D)
	IC405	C0DBGY02049	IC	1	(E.S.D)
	IC501	C0DBGY02044	IC	1	(E.S.D)
	IC502	C0DBGY02049	IC	1	(E.S.D)
	IC503	C0EBY0002216	IC	1	(E.S.D)
	IC504	C0EBY0002225	IC	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	IC505	C0DBEY000271	IC	1	(E.S.D)
	IC530	C0DBAY01511	IC	1	(E.S.D)
	IC600	C1AA00000829	IC	1	(E.S.D)
	IC601	C1BB00000947	IC	1	(E.S.D)
			TRANSISTORS		
	Q230	B1ABCF000103	TRANSISTOR	1	(E.S.D)
	Q401	B1ADCF000020	TRANSISTOR	1	(E.S.D)
	Q402	B1ABCF000103	TRANSISTOR	1	(E.S.D)
	Q405	B1ABCF000103	TRANSISTOR	1	(E.S.D)
	Q406	B1ABCF000103	TRANSISTOR	1	(E.S.D)
	Q506	B1ABCF000103	TRANSISTOR	1	(E.S.D)
	Q604	B1ABCF000020	TRANSISTOR	1	(E.S.D)
	Q605	B1ADCF000063	TRANSISTOR	1	(E.S.D)
	Q606	B1ADMF000017	TRANSISTOR	1	(E.S.D)
	Q607	B1ABCF000020	TRANSISTOR	1	(E.S.D)
	Q609	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q613	B1ABCF000020	TRANSISTOR	1	(E.S.D)
	QR201	B1GBCFNA0016	TRANSISTOR	1	(E.S.D)
	QR403	B1GBCFNA0016	TRANSISTOR	1	(E.S.D)
	QR503	B1GBCFNA0016	TRANSISTOR	1	(E.S.D)
	QR504	B1GDCFN00032	TRANSISTOR	1	(E.S.D)
	QR505	B1GDCFNA0011	TRANSISTOR	1	(E.S.D)
	QR530	B1GDCFNA0011	TRANSISTOR	1	(E.S.D)
	QR601	B1GKCFJN0004	TRANSISTOR	1	(E.S.D)
	QR608	B1GBCFJN0009	TRANSISTOR	1	(E.S.D)
			DIODES		
	D400	B0JCDD000019	DIODE	1	(E.S.D)
	D530	B0JCNE000039	DIODE	1	(E.S.D)
	D531	B0JCDD000019	DIODE	1	(E.S.D)
	D601	B0BC4R0A0006	DIODE	1	(E.S.D)
	D901	B0EAKM000117	DIODE	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	D902	B0EAKM000117	DIODE	1	(E.S.D)
	D903	B0EAKM000117	DIODE	1	(E.S.D)
	D904	B0EAKM000117	DIODE	1	(E.S.D)
	D906	B0ACCK000005	DIODE	1	(E.S.D)
			VARISTORS		
	VA101	B0ZBZ0000230	VARISTOR	1	
△	VA901	ERZE08A471CS	VARISTOR	1	
			SWITCHES		
	S461	EVQPQMB55	SW DISPLAY	1	
	S462	EVQPQMB55	SW AUTO TUNE	1	
	S463	EVQPQMB55	SW MENU	1	
	S464	EVQPQMB55	SW ENTER	1	
	S800	EVQ11G05R	SW POWER	1	
	S801	EVQ11G05R	SW BAND	1	
	S802	EVQ11G05R	SW MEMORY 2	1	
	S803	EVQ11G05R	SW MEMORY 4	1	
	S804	EVQ11G05R	SW MEMORY 6	1	
	S805	EVQ11G05R	SW MEMORY 8	1	
	S806	EVQ11G05R	SW MEMORY 10	1	
	S807	EVQ11G05R	SW MEMORY 9	1	
	S808	EVQ11G05R	SW MEMORY 7	1	
	S809	EVQ11G05R	SW MEMORY 1	1	
	S810	EVQ11G05R	SW MEMORY 3	1	
	S811	EVQ11G05R	SW MEMORY 5	1	
	S821	K0N201C00002	SW VOLUME	1	
	S822	K0N201C00002	SW TUNE/SELECT	1	
			CONNECTORS		
	CN103	K1MN14BA0059	14P CONNECTOR	1	
	CN205	K1MN08B00136	8P CONNECTOR	1	
	CN601	K1MN22B00014	22P CONNECTOR	1	
	CN602	K1KA08BA0061	8P CONNECTOR	1	
	CN901	K1KA03AA0180	3P CONNECTOR	1	
			COILS AND INDUC-TORS		
	L101	G1C91NGA0040	INDUCTOR	1	
	L102	G1C91NGA0040	INDUCTOR	1	
	L530	G1C4R7MA0249	INDUCTOR	1	
	LB100	J0JCC0000405	INDUCTOR	1	
	LB151	J0JCC0000405	INDUCTOR	1	
	LB281	J0JCC0000405	INDUCTOR	1	
	LB282	J0JCC0000405	INDUCTOR	1	
	LB511	J0JCC0000405	INDUCTOR	1	
	R123	J0JCC0000405	COIL	1	
	R200	J0JCC0000405	COIL	1	
	R276	J0JCC0000405	COIL	1	
			TRANSFORMER		
△	T901	RTPN111E06-G	TRANSFORMER	1	EG-K EG-W
△	T901	RTPN111G07-G	TRANSFORMER	1	EB-K GN-K GN-W
			OSCILLATORS		
	X100	H0J245500110	OSCILLATOR	1	
	X400	H0J327200085	OSCILLATOR	1	
			FUSE		
△	F901	K5G312Y00007	FUSE	1	
			JACKS		
	JK600	RJT865ZA	ROD ANT TERMINAL	1	

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	JK830	RJJ37TK09	JK HEADPHONE	1	
△	JK901	K2AA2B000014	AC INLET	1	
			CHIP JUMPERS		
	C203	ERJ2GEYJ0R0V	0 1/16W	1	
	LB203	ERJ3GEY0R00V	0 1/10W	1	
	W503	D0GDR00JA055	0 1/8W	1	
	W507	D0GDR00JA055	0 1/8W	1	
	W508	D0GDR00JA055	0 1/8W	1	
	W520	D0GDR00JA055	0 1/10W	1	
	W521	D0GDR00JA055	0 1/10W	1	
	W522	D0GDR00JA055	0 1/10W	1	
			RESISTORS		
	R109	ERJ2GEYJ103V	10K 1/16W	1	
	R110	ERJ2GEYJ330V	33 1/16W	1	
	R111	ERJ2GEYJ330V	33 1/16W	1	
	R112	ERJ2GEYJ330V	33 1/16W	1	
	R116	ERJ2GEYJ152V	1.5K 1/16W	1	
	R117	ERJ2GEYJ152V	1.5K 1/16W	1	
	R119	ERJ2GEYJ330V	33 1/16W	1	
	R120	ERJ2GEYJ101V	100 1/16W	1	
	R121	ERJ2GEYJ101V	100 1/16W	1	
	R125	ERJ2GEYJ391V	390 1/16W	1	
	R126	ERJ2GEYJ330V	33 1/16W	1	
	R127	ERJ2GEYJ0R0V	0 1/16W	1	
	R155	ERJ2GEYJ101V	100 1/16W	1	
	R156	ERJ2GEYJ101V	100 1/16W	1	
	R201	ERJ2GEYJ472V	4.7K 1/16W	1	
	R202	ERJ2GEYJ472V	4.7K 1/16W	1	
	R204	ERJ2GEYJ0R0V	0 1/16W	1	
△	R206	ERJ2GEYJ105V	1M 1/16W	1	
	R211	ERJ2GEYJ0R0V	0 1/16W	1	
	R212	ERJ2GEYJ472V	4.7K 1/16W	1	
	R213	ERJ2GEYJ472V	4.7K 1/16W	1	
	R214	ERJ2GEYJ472V	4.7K 1/16W	1	
	R215	ERJ2GEYJ472V	4.7K 1/16W	1	
	R217	ERJ2GEYJ221V	220 1/16W	1	
	R218	ERJ2GEYJ221V	220 1/16W	1	
	R219	ERJ2GEYJ153V	15K 1/16W	1	
	R220	ERJ2GEYJ153V	15K 1/16W	1	
	R221	ERJ2GEYJ473V	47K 1/16W	1	
	R222	ERJ2GEYJ101V	100 1/16W	1	
	R223	ERJ2GEYJ101V	100 1/16W	1	
	R224	ERJ2GEYJ101V	100 1/16W	1	
	R225	ERJ2GEYJ221V	220 1/16W	1	
	R226	ERJ2GEYJ473V	47K 1/16W	1	
	R227	ERJ2GEYJ221V	220 1/16W	1	
	R229	ERJ2GEYJ101V	100 1/16W	1	
	R230	ERJ2GEYJ103V	10K 1/16W	1	
	R231	ERJ2GEYJ101V	100 1/16W	1	
	R232	ERJ2GEYJ101V	100 1/16W	1	
	R233	ERJ2GEYJ104V	100K 1/16W	1	
	R234	ERJ2GEYJ104V	100K 1/16W	1	
	R235	ERJ2GEYJ104V	100K 1/16W	1	
	R236	ERJ2GEYJ101V	100 1/16W	1	
	R237	ERJ2GEYJ101V	100 1/16W	1	
	R238	ERJ2GEYJ472V	4.7K 1/16W	1	
	R239	ERJ2GEYJ472V	4.7K 1/16W	1	
	R240	ERJ2GEYJ271V	270 1/16W	1	
	R242	ERJ2GEYJ271V	270 1/16W	1	
	R243	ERJ2GEYJ271V	270 1/16W	1	
	R245	ERJ2GEYJ271V	270 1/16W	1	
	R251	ERJ2GEYJ0R0V	0 1/16W	1	
	R252	ERJ3GEYJ0R0V	0 1/10W	1	
	R260	D1BA6041A023	6.04K 1/16W	1	
	R281	ERJ2GEYJ102V	1K 1/10W	1	
	R282	ERJ2GEYJ102V	1K 1/10W	1	
	R283	ERJ2GEYJ103V	10K 1/16W	1	
	R284	ERJ2GEYJ103V	10K 1/16W	1	
	R291	ERJ2GEYJ473V	47K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	R402	ERJ2GEYJ101V	100 1/16W	1	
	R403	ERJ2GEYJ101V	100 1/16W	1	
	R404	ERJ2GEYJ101V	100 1/16W	1	
	R405	ERJ2GEYJ103V	10K 1/16W	1	
	R406	ERJ2GEYJ180V	18 1/16W	1	
	R411	ERJ2GEYJ473V	47K 1/16W	1	
	R412	ERJ2GEYJ123V	12K 1/16W	1	
	R413	ERJ2GEYJ473V	47K 1/16W	1	
	R440	ERJ2GEYJ152V	1.5K 1/16W	1	
	R441	ERJ2GEYJ222V	2.2K 1/16W	1	
	R442	ERJ2GEYJ272V	2.7K 1/16W	1	
	R443	ERJ2GEYJ392V	3.9K 1/16W	1	
	R444	ERJ2GEYJ562V	5.6K 1/16W	1	
	R501	ERJ2GEYJ101V	100 1/16W	1	
	R504	ERJ2GEYJ104V	100K 1/16W	1	
	R505	ERJ2GEYJ473V	47K 1/16W	1	
	R506	ERJ2GEYJ473V	47K 1/16W	1	
	R507	ERJ2GEYJ474V	470K 1/16W	1	
	R508	ERJ2GEYJ274V	270K 1/16W	1	
	R509	ERJ2GEYJ333V	33K 1/16W	1	
	R510	ERJ2GEYJ103V	10K 1/16W	1	
	R511	ERJ2GEYJ473V	47K 1/16W	1	
	R531	ERJ2GEYJ683V	68K 1/16W	1	
	R532	ERJ2GEYJ273V	27K 1/16W	1	
	R533	ERJ2GEYJ104V	100K 1/16W	1	
	R554	ERJ2GEYJ101V	100 1/16W	1	
	R555	ERJ2GEYJ103V	10K 1/16W	1	
	R559	ERJ2GEYJ101V	100 1/16W	1	
	R602	ERJ3GEYJ222V	2.2K 1/10W	1	
	R603	ERJ3GEYJ222V	2.2K 1/10W	1	
	R606	ERJ3GEYJ2R2V	2.2 1/10W	1	
	R607	ERJ3GEYJ2R2V	2.2 1/10W	1	
	R621	ERJ3GEYJ183V	18K 1/10W	1	
	R622	ERJ3GEYJ183V	18K 1/10W	1	
	R625	ERJ3GEYJ222V	2.2K 1/10W	1	
	R626	ERJ3GEYJ223V	22K 1/10W	1	
	R627	ERJ3GEYJ103V	10K 1/10W	1	
	R628	ERJ3GEYJ102V	1K 1/10W	1	
	R629	ERJ3GEYJ103V	10K 1/10W	1	
	R630	ERJ3GEY0R00V	0 1/10W	1	
	R631	ERJ3GEY0R00V	0 1/10W	1	
	R632	ERJ3GEYJ102V	1K 1/10W	1	
	R633	ERJ3GEYJ220V	22 1/10W	1	
	R634	D0C1101JA020	100 1W	1	
	R635	ERJ3GEYJ473V	47K 1/10W	1	
	R638	ERJ3GEYJ103V	10K 1/10W	1	
	R639	ERJ3GEYJ473V	47K 1/10W	1	
	R641	ERJ3GEYJ470V	47 1/10W	1	
	R642	ERJ3GEYJ101V	100 1/10W	1	
	R645	ERJ3GEY0R00V	0 1/10W	1	
	R802	ERJ3GEYF152V	1.5K 1/10W	1	
	R803	ERJ3GEYF222V	2.2K 1/10W	1	
	R804	ERJ3GEYF272V	2.7K 1/10W	1	
	R805	ERJ3GEYF392V	3.9K 1/10W	1	
	R806	ERJ3GEYF562V	5.6K 1/10W	1	
	R807	ERJ3GEYF822V	8.2K 1/10W	1	
	R808	ERJ3GEYF153V	15K 1/10W	1	
	R810	ERJ3GEYF822V	8.2K 1/10W	1	
	R811	ERJ3GEYF153V	15K 1/10W	1	
	R821	D0GDR00JA055	0 1/10W	1	
	R901	ERJ3GEYJ102V	1K 1/10W	1	
			RESISTOR NETWORK		
	RX203	EXB28V221JX	RESISTOR NETWORK	1	
			CAPACITORS		
	C100	FIG1H101A557	100pF 50V	1	
	C101	FIG1H102A459	1000pF 50V	1	
	C102	FIG1A104A012	0.1uF 10V	1	
	C103	FIG1A104A012	0.1uF 10V	1	
	C104	FIG1H102A459	1000pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	C105	FIG1H102A459	1000pF 50V	1	
	C106	FIG1H102A459	1000pF 50V	1	
	C107	FIG1A104A012	0.1uF 10V	1	
	C108	FIG0J224A004	0.22uF 6.3V	1	
	C109	FIG1C103A044	0.01uF 16V	1	
	C110	FIG1H101A557	100pF 50V	1	
	C111	FIG1A104A012	0.1uF 10V	1	
	C112	FIG1A104A012	0.1uF 10V	1	
	C113	FIG1H560A557	56pF 50V	1	
	C114	FIG0J334A004	0.33uF 6.3V	1	
	C115	FIG1C103A044	0.01uF 16V	1	
	C116	FIG1A104A012	0.1uF 10V	1	
	C117	FIG0J334A004	0.33uF 6.3V	1	
	C118	FIG1H560A557	56pF 50V	1	
	C119	FIG1A104A012	0.1uF 10V	1	
	C122	FIG1H150A557	15pF 50V	1	
	C123	FIG1A104A012	0.1uF 10V	1	
	C124	FIG1A104A012	0.1uF 10V	1	
	C125	FIG1C393A081	0.039uF 16V	1	
	C127	FIG1H472A459	4700pF 50V	1	
	C128	FIG1A106A024	10uF 10V	1	
	C129	FIG1H221A551	220pF 50V	1	
	C130	FIG1H221A551	220pF 50V	1	
	C131	FIG1A106A024	10uF 10V	1	
	C132	FIG1A104A012	0.1uF 10V	1	
	C146	FIG1H102A459	1000pF 50V	1	
	C151	FIG0J1050007	1uF 6.3V	1	
	C152	FIG0J1050007	1uF 6.3V	1	
	C153	FIG1H102A459	1000pF 50V	1	
	C154	FIG0J1060003	10uF 6.3V	1	
	C155	FIG1H221A551	220pF 50V	1	
	C156	FIG1H221A551	220pF 50V	1	
	C201	FIG0J4750004	4.7uF 6.3V	1	
	C202	FIG1A104A012	0.1uF 10V	1	
	C204	FIG1A104A012	0.1uF 10V	1	
	C205	FIG1A106A024	10uF 10V	1	
	C209	FIG0J4750004	4.7uF 6.3V	1	
	C211	FIG1A104A012	0.1uF 10V	1	
	C216	FIG1A104A012	0.1uF 10V	1	
	C217	FIG1H102A459	1000pF 50V	1	
	C218	FIG1H102A459	1000pF 50V	1	
	C219	FIG1A104A012	0.1uF 10V	1	
	C220	FIG1A104A012	0.1uF 10V	1	
	C222	FIG1H102A459	1000pF 50V	1	
	C223	FIG1H102A459	1000pF 50V	1	
	C224	FIG1H102A459	1000pF 50V	1	
	C228	FIG1A104A012	0.1uF 10V	1	
	C230	FIG0J1050007	1uF 6.3V	1	
	C236	FIG1A104A012	0.1uF 10V	1	
	C238	FIG1A104A012	0.1uF 10V	1	
	C239	FIG1C103A044	0.01uF 16V	1	
	C240	FIG1H330A557	33pF 50V	1	
	C241	FIG1A104A012	0.1uF 10V	1	
	C242	FIG1H330A557	33pF 50V	1	
	C243	FIG1H330A557	33pF 50V	1	
	C244	FIG1A104A012	0.1uF 10V	1	
	C245	FIG1H330A557	33pF 50V	1	
	C247	FIG1H100A723	10uF 50V	1	
	C248	FIG1H100A723	10uF 50V	1	
	C249	FIG0J476A013	47uF 6.3V	1	
	C250	FIG1A104A012	0.1uF 10V	1	
	C251	FIG1H100A723	10pF 50V	1	
	C252	FIG1H100A723	10pF 50V	1	
	C256	FIG1A104A012	0.1uF 10V	1	
	C257	FIG1A104A012	0.1uF 10V	1	
	C264	FIG1A104A012	0.1uF 10V	1	
	C271	FIG1A104A012	0.1uF 10V	1	
	C272	FIG0J2260004	22uF 6.3V	1	
	C273	FIG0J1060003	10uF 6.3V	1	
	C274	FIG1A106A024	10uF 10V	1	
	C275	FIG1A106A024	10uF 10V	1	
	C276	FIG0J2260004	22uF 6.3V	1	
	C277	FIG0J2260004	22uF 6.3V	1	

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	C278	F1J0J2260004	22uF 6.3V	1	
	C281	F1H0J4750004	4.7uF 6.3V	1	
	C282	F1H0J4750004	4.7uF 6.3V	1	
	C283	F1G1C103A044	0.01uF 16V	1	
	C284	F1G1H101A557	100pF 50V	1	
	C285	F1G1C103A044	0.01uF 16V	1	
	C286	F1G1H101A557	100pF 50V	1	
	C287	F1G1H330A557	33pF 50V	1	
	C288	F1G1H330A557	33pF 50V	1	
	C291	F1H0J1060003	10uF 6.3V	1	
	C292	F1G0J1050007	1uF 6.3V	1	
	C400	F1G1A104A012	0.1uF 10V	1	
	C401	F1G1C103A044	0.01uF 16V	1	
	C402	F1G1C103A044	0.01uF 16V	1	
	C403	F1G1C103A044	0.01uF 16V	1	
	C404	F1H0J1060003	10uF 6.3V	1	
	C405	F1G1C103A044	0.01uF 16V	1	
	C406	F1G0J1050007	1uF 6.3V	1	
	C407	F1G1C103A044	0.01uF 16V	1	
	C408	F1H1E105A116	1uF 25V	1	
	C409	F1G1H4R0A736	4pF 50V	1	
	C411	F3F0J107A064	100uF 6.3V	1	
	C412	F3F0J107A064	100uF 6.3V	1	
	C501	F1H1E105A116	1uF 25V	1	
	C502	F1G0J1050007	1uF 6.3V	1	
	C504	F1G1H102A459	1000pF 50V	1	
	C508	F1G1H102A459	1000pF 50V	1	
	C509	F1G1H102A459	1000pF 50V	1	
	C511	F1G1H102A459	1000pF 50V	1	
	C514	F1G1H102A459	1000pF 50V	1	
	C515	F1G1H102A459	1000pF 50V	1	
	C516	F1G1H102A459	1000pF 50V	1	
	C517	F1G1H102A459	1000pF 50V	1	
	C518	F1G1H102A459	1000pF 50V	1	
	C519	F1G1H102A459	1000pF 50V	1	
	C530	F1H1E105A116	1uF 25V	1	
	C531	F1H1E105A116	1uF 25V	1	
	C532	F1H1E224A098	0.22uF 25V	1	
	C533	F1G1H121A557	120pF 50V	1	
	C534	F1J0J106A020	10uF 6.3V	1	
	C535	F1G1A104A012	0.1uF 10V	1	
	C551	F1G1H102A459	1000pF 50V	1	
	C552	F1J0J2260004	22uF 6.3V	1	
	C553	F1J0J2260004	22uF 6.3V	1	
	C554	F1G1C103A044	0.01uF 16V	1	
	C555	F1G1H102A459	1000pF 50V	1	
	C556	F1H1E105A116	1uF 25V	1	
	C557	F1H0J1060003	10uF 6.3V	1	
	C559	F1G0J1050007	1uF 6.3V	1	
	C560	F1G1C103A044	0.01uF 16V	1	
	C561	F1G1A104A012	0.1uF 10V	1	
	C602	F1H1H102A219	1000pF 50V	1	
	C603	F1H1H102A219	1000pF 50V	1	
	C604	F1H1H104A913	0.1uF 50V	1	
	C606	RCA0JKA470BT	47 6.3V	1	
	C607	F1H1H102A219	1000pF 50V	1	
	C608	RCA0JKA470BT	47 6.3V	1	
	C609	F2A1A331A025	330uF 10V	1	
	C610	F2A1A331A025	330uF 10V	1	
	C612	F1H1H102A219	1000pF 50V	1	
	C613	F1H1H102A219	1000pF 50V	1	
	C614	F1H1H102A219	1000pF 50V	1	
	C623	F1H1H102A219	1000pF 50V	1	
	C624	F1H1A224A012	0.22uF 10V	1	
	C625	F2A1A101A271	100uF 10V	1	
	C626	F2A1A101A271	100uF 10V	1	
	C627	F1H1A154A025	0.15uF 10V	1	
	C628	F2A1C101A030	100uF 16V	1	
	C629	F2A1A101A271	100uF 10V	1	
	C630	F1H1H102A219	1000pF 50V	1	
	C631	F2A1C471A030	470uF 16V	1	
	C632	F1H1A154A025	0.15uF 10V	1	
	C633	F2A1A101A271	100uF 10V	1	

Safety	Ref. No.	Part No.	Part Name & Description	QTY	Remarks
	C634	F1H1C225A065	2.2uF 16V	1	
	C635	F2A1C222A321	2200uF 16V	1	
	C636	RCA0JKA470BT	47 6.3V	1	
	C639	F2A1C471A030	470uF 16V	1	
	C643	F1H1A105A047	1uF 10V	1	
	C644	F1H1A105A047	1uF 10V	1	
	C647	F2A1A331A025	330uF 10V	1	
	C652	F1H1H104A913	0.1uF 50V	1	
	C653	F1H1H104A913	0.1uF 50V	1	
	C654	F1H1H1R0A016	1pF 50V	1	
	C901	F1D1C103A021	0.01uF 16V	1	
	C902	F1D1C103A021	0.01uF 16V	1	
	C903	F1D1C103A021	0.01uF 16V	1	
	C904	F1D1C103A021	0.01uF 16V	1	
	C905	F2A1C222A321	2200uF 16V	1	

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