PSG1307001CE

Service Manual

Wireless Speaker System

Model No. SC-NP10EE
SC-NP10GS
SC-NP10GSX
SC-NP10GT

Product Color: (K)...Black Type

SC-NP10

⚠ 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.

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Panasonic

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 ⚠ 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.
2. 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.
3. 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.
4. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
5. 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

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. 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 1MΩ and 5.2MΩ. When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. Leakage Current Hot Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF 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.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. 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.

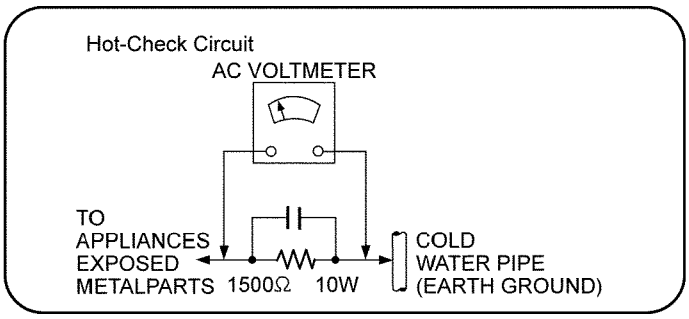


Figure 1-1

1.2. Caution for AC Cord (For GS/GSX 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 OFF 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 these colours 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 which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

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.

Figure A

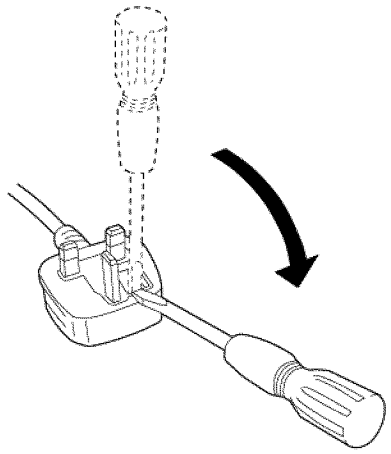
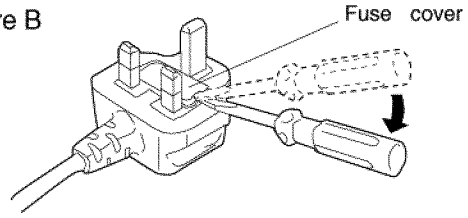


Figure B



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

Figure A

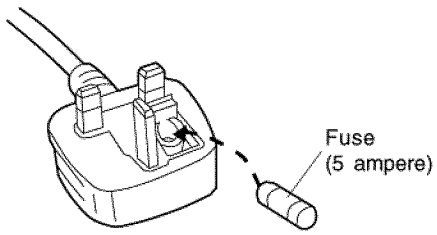
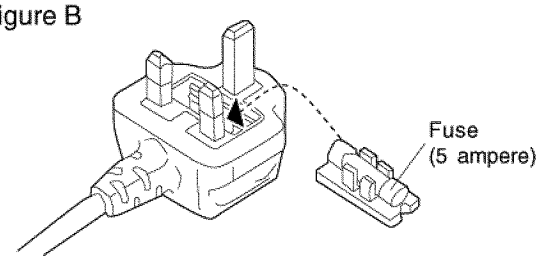


Figure B



1.3. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors (C1707, C1710, C1712, C1716, and C1725) through a 10W, 1W resistor to ground.

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 220V - 240V, at 50Hz during power on, (Selector : Standby mode) should be ~100 mA. (For EE only)
- Current consumption at AC 110V, at 60Hz during power on, (Selector : Standby mode) should be ~100 mA. (For GT only)
- Current consumption at AC 110V - 240V, at 50/60Hz during power on, (Selector : Standby mode) should be ~100 mA. (For GS/GSX only)

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: SG SCT, F1, T2A 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	RFKHCNP10GSK	BOTTOM CABINET ASS'Y	GS/GSX
⚠	10	RFKHCNP10GTK	BOTTOM CABINET ASS'Y	GT
⚠	10	RFKHCNP10EEK	BOTTOM CABINET ASS'Y	EE
⚠	A1	K2CA2CA00027	AC CORD	GT
⚠	A1	K2CP2YY00061	AC CORD	GS/GSX
⚠	A1	K2CQ2YY00119	AC CORD	EE/GS/GSX
⚠	A1	K2CT2YY00097	AC CORD	GS/GSX
⚠	A2	VQT4Y22	O/I BOOK (En/Po/Cz)	GS/GSX
⚠	A2	VQT4Y38	O/I BOOK (Co/Cn/Ar)	GS/GSX/GT
⚠	A2	VQT5A67	OI BOOK (Ru/Ur)	EE
⚠	C1707	F1BAF1020020	1000pF	GT
⚠	C1707	F1BAF221A013	220pF	EE/GS/GSX
⚠	C1710	F1BAF1020020	1000pF	
⚠	C1712	F1BAF1020020	1000pF	GT
⚠	C1712	F1BAF221A013	220pF	EE/GS/GSX
⚠	C1716	F0CAF104A105	0.1uF	
⚠	C1725	F0CAF104A105	0.1uF	
⚠	F1	K5G202Y00006	FUSE	
⚠	L1705	G0B123F00001	LINE FILTER	GT
⚠	L1705	G0B183E00004	LINE FILTER	EE/GS/GSX
⚠	P1701	K2AA2B000011	AC INLET	
⚠	PC1701	B3PBA0000454	PHOTO COUPLER	
⚠	PCB5	REP4973CA	SMPS P.C.B.	(RTL) EE/GS/GSX
⚠	PCB5	REP4973BA	SMPS P.C.B.	(RTL) GT
⚠	R1724	ERJ12YJ105U	1M 1/2W	
⚠	R1726	ERJ12YJ105U	1M 1/2W	
⚠	T1700	G4DYZ0000072	TRANSFORMER	
⚠	Z1752	D4EAY471A127	VARISTOR	

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).

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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.

- **Micro-processor:**

1) The following components are supplied as an assembled part.
   - Micro-processor IC, (IC1000) (RFKWMNP10PM)

4 Specifications

■ Amplifier Section

Output power:	
RMS Output Power	
10% total harmonic distortion	
Front (both ch driven):	7 W per channel (1 kHz, 6 Ω)
Subwoofer:	7 W (100 Hz, 6 Ω)
Total power	21 W

■ Terminal Section

DC OUT (USB A type):	(5 V/1.5 A) x 2
AUX input:	Stereo, 3.5 mm jack

■ Speaker Section

Front Speaker (L/R)	
Type	1 way, 1 speaker system (Closed type)
Unit(s)	3 cm x 10 cm
Impedance	6 Ω
Subwoofer	
Type	1 way, 1 speaker system (Bass reflex type)
Unit	8 cm
Impedance	6 Ω

■ Bluetooth Section

Bluetooth® system specification:	Ver. 3.0
Wireless equipment classification:	Class 2 (2.5 mW)
Supported profiles:	A2DP
Supported codec:	SBC
Frequency band:	2.4 GHz band FH-SS
Operating distance:	Approx. 10 m Line of Sight

■ General

Power supply:	
(For EE)	AC 220 to 240 V, 50 Hz
(For GT)	AC 110 V, 60 Hz
(For GS/GSX)	AC 110 to 240 V, 50/60 Hz
Power consumption:	
(For GT)	31 W
(For EE/GS/GSX)	32 W
Power consumption in standby mode:	
Bluetooth® Standby mode OFF	Approx. 0.45 W
Bluetooth® Standby mode ON	Approx. 1.3 W
Dimensions (W x H x D):	271 mm x 65 mm x 186 mm
Mass:	Approx. 1.6 kg
Operating temperature range	0 °C to +40 °C
Operating humidity range	35% to 80 % RH (no condensation)

Note:

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

Notes on Speaker:

- Decrease the volume when the audio is distorted.

4.1. Others (Licenses)

- Android and Google Play are trademarks of Google Inc.
- The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Panasonic Corporation is under license. Other trademarks and trade names are those of their respective owners.

5 General/Introduction

5.1. About Bluetooth®

Panasonic bears no responsibility for data and/or information that is compromised during a wireless transmission.

Frequency band used

This unit uses the 2.4 GHz frequency band.

Certification of this device

- This unit conforms to frequency restrictions and has received certification based on frequency laws. Thus, a wireless permit is not necessary.
- The actions below are punishable by law in some countries:
  – Taking apart/modifying the unit.
  – Removing specification indications.

Restrictions of use

- Wireless transmission and/or usage with all Bluetooth® equipped devices is not guaranteed.
- All devices must conform to standards set by Bluetooth SIG, Inc.
- Depending on the specifications and settings of a device, it can fail to connect or some operations can be different.
- This system supports Bluetooth® security features. But depending on the operating environment and/or settings, this security is possibly not sufficient. Transmit data wirelessly to this system with caution.
- This system cannot transmit data to a Bluetooth® device.

Range of use

Use this device at a maximum range of 10 m.
The range can decrease depending on the environment, obstacles or interference.

Interference from other devices

- This unit may not function properly and troubles such as noise and sound jumps may arise due to radio wave interference if this unit is located too close to other Bluetooth® devices or the devices that use the 2.4 GHz band.
- This unit may not function properly if radio waves from a nearby broadcasting station, etc. is too strong.

Intended usage

- This unit is for normal, general use only.
- Do not use this system near an equipment or in an environment that is sensitive to radio frequency interference (example: airports, hospitals, laboratories, etc).

5.2. Listening to audio from a Bluetooth® device

Preparation
After inserting the AC mains lead to this unit, turn on the Bluetooth® feature of the device and place the device near this unit.

If you intend to use an NFC (Near Field Communication)-compatible Bluetooth® device, proceed to “One-Touch Connection (Connecting by NFC)”.

Connecting via Bluetooth® menu

For each Bluetooth® device you want to connect to via Bluetooth®, perform pairing first.

Pairing with Bluetooth® device

1 Press [⏻/I] to turn this unit on.
- The Bluetooth® indicator blinks slowly.
- **If this unit is being used for the first time (factory preset state):**
  The Bluetooth® indicator blinks fast. → The unit will enter pairing standby. → Skip to step 3.

2 Press and hold [-PAIRING] until the Bluetooth® indicator blinks fast.
- The unit will enter pairing standby.

3 Select “SC-NP10” from the Bluetooth® device’s Bluetooth® menu.
- When the Bluetooth® device is paired and connected, the Bluetooth® indicator on the unit lights up.
- If prompted for a passkey, input “0000”.
- After the connection is established, proceed to “Selecting Transmission mode setting” (below).

Connecting a paired Bluetooth® device and listening to audio
When this unit is turned on, it searches for the last-used Bluetooth® device. If a connection to the last-used one is successful, the Bluetooth® indicator on the unit lights up.

If the Bluetooth® indicator blinks, you need to connect the Bluetooth® device.

1 Select “SC-NP10” from the Bluetooth® device’s Bluetooth® menu.
- When the Bluetooth® device is connected, the Bluetooth® indicator on the unit lights up.

2 Start playing back music, a movie, etc. on your Bluetooth® device.
- Adjust the volume using the [- VOL +] buttons on the unit.
  When the maximum or minimum volume is reached, you will be notified by a beep sound.

One-Touch Connection (Connecting by NFC)

For NFC-compatible Android™ devices only
By simply touching this unit to an NFC (Near Field Communication)-compatible Bluetooth® device, this unit automatically turns on, and performs the starting operation, from pairing the Bluetooth® device to establishing a connection. Designed to skip the starting operation, this feature is very convenient.

About NFC (Near Field Communication)
It is a short range wireless technology that makes use of interacting radio communications.

Preparation
Turn on the NFC feature of the device. And connect the device to the internet to install a dedicated app. Separate data charges apply for the internet use.

1 Download the app “Panasonic Music Streaming” (free of charge) to your Bluetooth® device from Google Play™.
- Enter “Panasonic Music Streaming” in the search box of Google Play™ and search. Select “Panasonic Music Streaming” to download the app.

2 Start the app “Panasonic Music Streaming” on your Bluetooth® device.
- Follow on-screen instructions on your device.
- Always use the latest version of the app.

3 Touch and hold your device on the NFC touch area of this unit.
(Until a pop-up window on your device indicates that the connection is established.)
- When this unit turns on and a connection is established, the Bluetooth® indicator lights up.
- When the Bluetooth® indicator does not light up even if you have touched the NFC touch area, change the touching position.

4 Start playing back music, a movie, etc. on your Bluetooth® device.

Connecting to another device
- If you touch another device to this unit, you can update the Bluetooth® connection. The previously connected device will be disconnected automatically.

Disabling some of the NFC functions of this unit
This operation prevents unintended use of the One-Touch Connection.
Perform the step below while this unit is turned on.

Disabling (Automatic power-on, device pairing and connection cancellation are disabled):

1 While pressing and holding [- VOL], press and hold [VOL +] until the Bluetooth® indicator and the “D.SURROUND” indicator blink once.
- Only a connection with a paired device while this unit is turned on remains possible.
- This operation automatically turns off the Bluetooth® Standby function.

Enabling all the functions again: Refer to “Reset (To the factory preset state)” (back side)
- This unit returns to the factory preset state by resetting it.

Selecting Transmission mode setting

This unit has two transmission modes: “Connectivity Priority MODE” and “Sound Quality Priority MODE”. After confirming that audio can be played back, select the mode while this unit is turned on.

The default mode is set to “Connectivity Priority MODE” to facilitate checking of the connection after a device registration. When cordless phones, wireless LAN routers, and other wireless devices that may interfere with this unit are not present in the surrounding area, select “Sound Quality Priority MODE”. You can enjoy audio with higher quality sound.

1 Set either of the following modes.
■ Connectivity Priority MODE:
While pressing and holding [D.SURROUND], press and hold [VOL +] until the Bluetooth® indicator and the “D.SURROUND” indicator blink once.
■ Sound Quality Priority MODE:
While pressing and holding [LIGHT], press and hold [VOL +] until the Bluetooth® indicator and the “D.SURROUND” indicator blink once.

2 Press [⏻/I] to turn this unit off, and press [⏻/I] again to turn on.
- The Bluetooth® connection is automatically established, and the Bluetooth® indicator lights up.

Setting the Bluetooth® Standby function

If you connect with Bluetooth® from a paired Bluetooth® device while this function is turned on, this unit will turn on automatically. Turn off this unit, and perform the following operation.

Turning on

1 While pressing and holding [LIGHT], press and hold [⏻/I] until the Bluetooth® indicator and the “D.SURROUND” indicator blink once.
- This operation enables all NFC functions of this unit.

Checking if the function is turned on: Press [LIGHT]. (The Bluetooth® indicator blinks three times)

Turning off: While pressing and holding [D.SURROUND], press and hold [⏻/I] until the Bluetooth® indicator and the “D.SURROUND” indicator blink once.

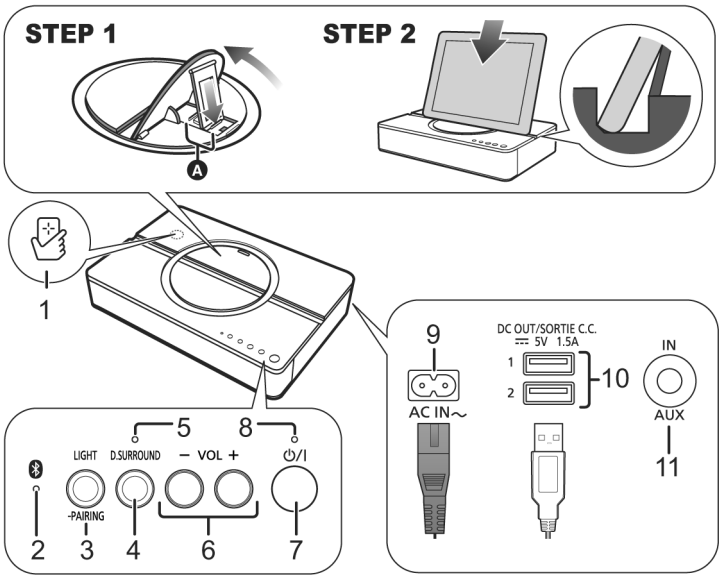
Disconnecting Bluetooth®

- Switch off this unit or the device.
- Stop / disable the Bluetooth® transmission of the device.
- (For NFC-compatible devices only) Touch and hold your device to NFC touch area of this unit again.

Note
- This unit can only be connected to one device at a time.
- This unit can register up to 8 devices. If a 9th device is paired, the device that has not been used for the longest time will be replaced.
- This unit automatically turns off if no operation is performed for approximately 30 minutes when not connected to Bluetooth®.
- If the image and sound are out of sync during playback, restart the playback app you are using. If the problem persists, connect the Bluetooth® device and this unit with an audio cable.
- The One-Touch Connection may not work properly depending on the type of device being used.
- Standby power consumption increases when the Bluetooth® standby function is turned on.

6 Location of Controls and Components

6.1. Main Unit & Remote Control Key Button Operations



Ⓐ: You can adjust the tilt of the backrest. Align the support for the backrest with the desired position between the lines Ⓐ.
To close the backrest, lift up the support slowly, and push it towards the backrest.

1 NFC touch area
- Refer to "One-Touch Connection (Connecting by NFC)".

2 Bluetooth® indicator

3 Light button/Bluetooth® pairing button
- You can turn on/off the circle light by pressing this button.

4 D.SURROUND button

5 "D.SURROUND" indicator

6 Volume buttons

7 Standby/on switch [⏻/I]
- 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.

8 Power indicator

9 AC IN terminal

10 USB (type A) DC output ports
- When using these ports, use a USB (type A) cable (not supplied).

(See OI Book : "About the DC output ports (USB)")

11 AUX jack

Note
- When using the AUX input, the Bluetooth® and NFC features are not available.
- When using the AUX input, the volume may seem low depending on the connected device. In that case, check if the volume limit can be changed on the device. For details, refer to the operating instructions of the device.
- When the backrest is propped up, do not move this unit or subject this unit to a strong shock.
- If the device cannot be placed securely against the backrest due to its shape, accessories, etc., avoid using the backrest.

7 Service Mode

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

7.1. Service Mode

Here is the procedures to enter into Service Mode.
Step 1 : Turn on the unit.
Step 2 : Press and hold [POWER] -> [POWER + D.SURROUND] -> [POWER + D.SURROUND + VOL+] on the unit.
Step 3 : LIGHT CIRCLE start blinking with 250ms (Refer to Figure 7-1) .

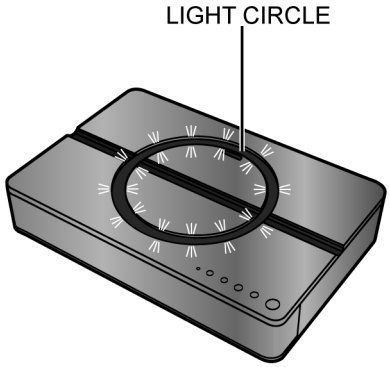


Figure 7-1

To exit the Service Mode
- Press the power button on the main unit.

7.1.1. Service Mode Table

Mode Name	Key Buttons	Panel Key				Service Mode Item				Mode Description
		SELECTOR	SOUND MODE	OTHER SETTING	VOLUME SETTING	LED 1 (LIGHT CIRCLE)	LED 2 (BT)	LED 3 (D.SUR-ROUND)	LED 4 (POWER)	
-	DEFAULT	AUTO (BT/AUX)	STEREO (Default)	(Default)	VOL 8 (Default)	*	X	X	X	When Enter, Serial Log output the following information - Software Version - BT module Version / BT Mac Address - Total Running Time - Error Histry (Max 10 events)
Software Version	VOLUME +	AUTO (BT/AUX)	STEREO (Default)	-	VOL 8 (Default)	*	Bit 2	Bit 1	Bit 0	Firmware version (Refer to Table 7-1)
Exit Service mode and power OFF		AUTO (BT/AUX)	STEREO (Default)	-	VOL 8 (Default)	X	X	X	X	Exit Service Mode and clear all setting without total Running Time, Error History
Link Status "O" means LED on "X" means LED off "*" means LED blink										

7.2. Doctor Mode

Here is the procedures to enter into Doctor Mode.
Step 1 : Turn on the unit.
Step 2 : Press and hold [POWER] -> [POWER + LIGHT] -> [POWER + LIGHT + VOL+] on the unit.
Step 3 : LIGHT CIRCLE start blinking with 250ms (Refer to Figure 7-2) .

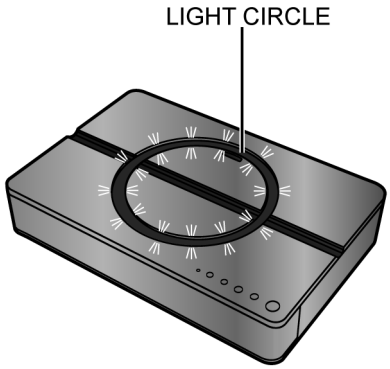


Figure 7-2

To exit the Doctor Mode
• Press the power button on the main unit.

7.2.1. Doctor Mode Table

Mode Name	Key Buttons	Panel Key				Service Mode Item				Mode Description
		SELECTOR	SOUND MODE	OTHER SETTING	VOLUME SETTING	LED 1 (LIGHT CIRCLE)	LED 2 (BT)	LED 3 (D.SUR-ROUND)	LED 4 (POWER)	
-	DEFAULT	AUTO (BT/AUX)	STEREO (Default)	(Default)	VOL 8 (Default)	*	X	X	X	When Enter, Serial Log output the following information - Software Version - BT module Version / BT Mac Address - Total Running Time - Error Histry (Max 10 events)
BBD Check	SURROUND	AUX	STEREO	Signal is output from all channel including subwoofer.	VOL 13	*	X	O	X	Firmware version (Refer to Table 7-1)
Software Version	VOLUME +	AUTO (BT/AUX)	STEREO (Default)	(Default)	-	*	Bit 2	Bit 1	Bit 0	Firmware version (Refer to Table 7-1)
Exit Doctor Modev	POWER	AUTO (BT/AUX)	STEREO (Default)	(Default)	-	X	X	X	X	Exit Doctor Mode and clear all setting and memory
Link Status "O" means LED on "X" means LED off "*" means LED blink										

7.3. Version Display Mapping

Version	LIGHT CIRCLE	BT	D.SUR-ROUND	POWER	Remarks
	Service/ Doctor	Bit 2	Bit 1	Bit 0	
-	*	X	X	X	No use in this blank pattern
01,08,15,22...	*	X	X	O	
02,09,16,23...	*	X	O	X	
03,10,17,24...	*	X	O	O	
04,11,18,23...	*	O	X	X	
05,12,19,24...	*	O	X	O	
06,13,20,25...	*	O	O	X	
07,14,20,25...	*	O	O	O	
Link Status “O” means LED on “X” means LED off “*” means LED blink 250ms					

Table 7-1

7.4. Error Code Display

Error Condition	BT	D.SUR-ROUND	POWER	Result
F76 / F61 / F76SUB (Power Malfuction) / (AMP Malfuction, SPK Short)	-	-	-	No Display (can’t display) Due to power should to turn OFF immediately when detect this failer condition.
F76 USB OVC (USB power over current)	*	*	*	Blinking with 125ms ON / 125ms OFF repeatedly unless switch OFF the power.
F70 DSP (DSP module error)		*	*	
F70 BT (BT module error)	*		*	

Table 7-2

8 Disassembly and Assembly Instructions

Caution Note:

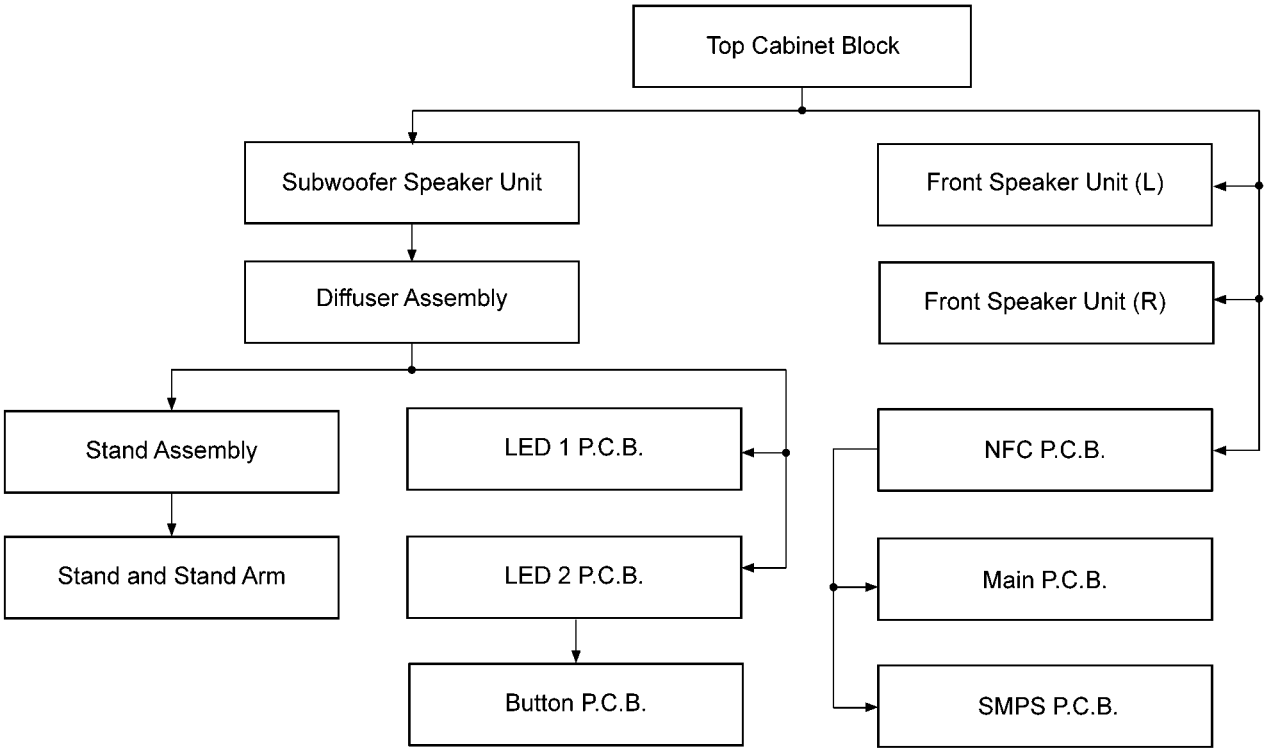
- **This section describes the disassembly and/or assembly procedures for all major printed circuit boards & main components for the unit. (You may refer to the section of “Main components and P.C.B Locations” as described in the service manual)**
- **Before carrying out the disassembly process, please 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. (See caution as described below)**

- **During disassembly and assembly, please ensure proper service tools, equipments or jigs is being used.**
- **During replacement of component parts, please refer to the section of “Replacement Parts List” as described in the service manual.**
- **Select items from the following indexes when disassembly or replacement are required.**

- **Disassembly of Top Cabinet Block**
- **Replacement of Subwoofer Speaker Unit**
- **Replacement of Diffuser Assembly**
- **Disassembly of Stand Assembly**
- **Replacement of Stand and Stand Arm**
- **Disassembly of LED 1 P.C.B.**
- **Disassembly of LED 2 P.C.B.**
- **Disassembly of Button P.C.B.**
- **Disassembly of Front Speaker Unit (L)**
- **Disassembly of Front Speaker Unit (R)**
- **Disassembly of NFC P.C.B.**
- **Disassembly of Main P.C.B.**
- **Disassembly of SMPS P.C.B.**

8.1. 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.



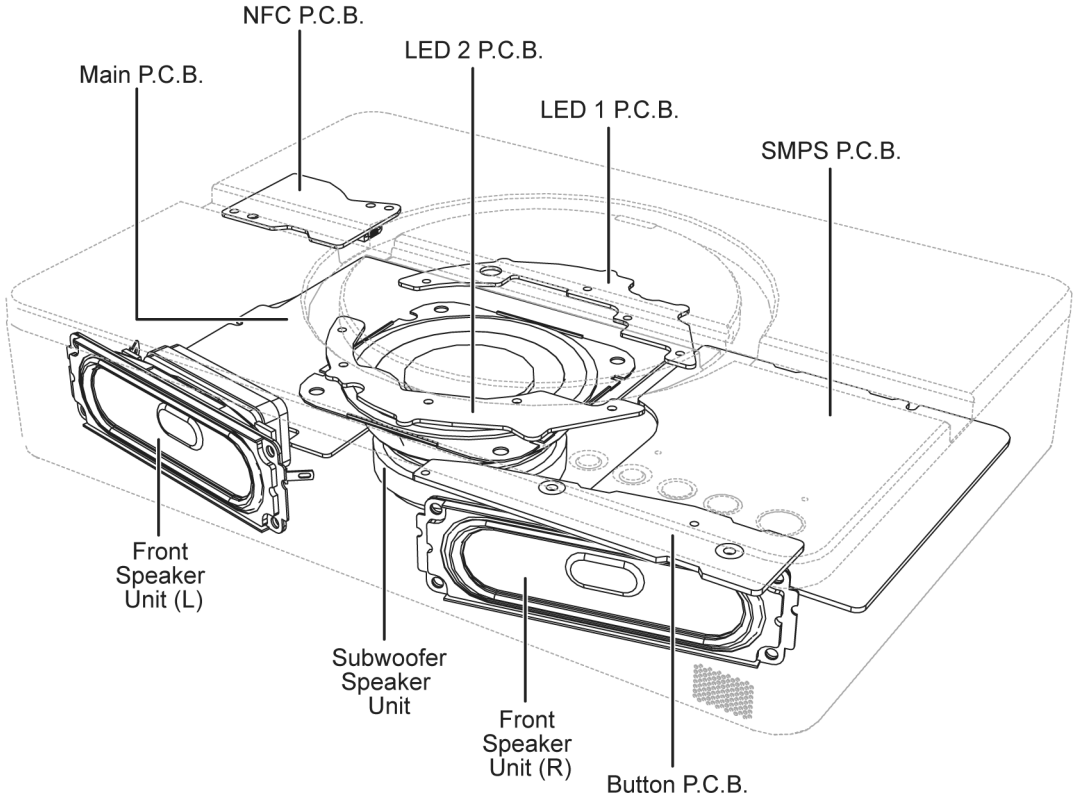
8.2. Types of Screws

CAUTION NOTE:
Please use original screw and at correct locations.

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

- ⓐ : RHD26066
- ⓑ : XTB26+8GFJ
- ⓒ : RHD26043-1
- ⓓ : XTB3+10JFJK
- ⓔ : RHD26056
- ⓕ : RHD26074

8.3. Main Parts Location Diagram

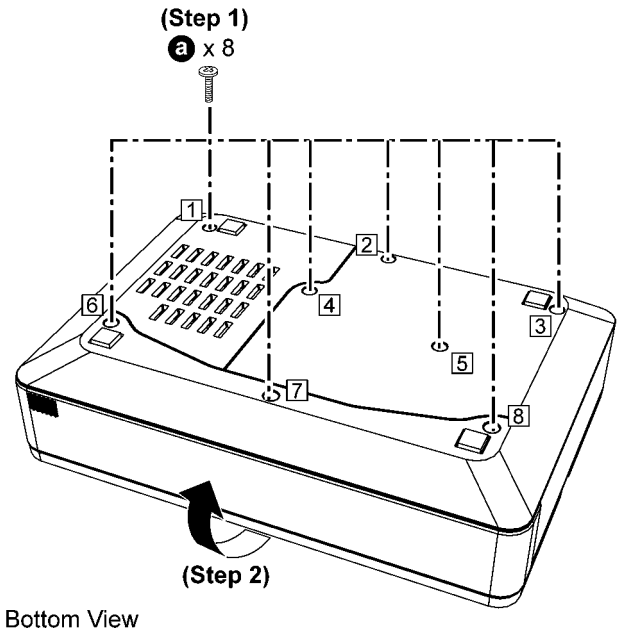


8.4. Disassembly of Top Cabinet Block

Step 1 : Remove 8 screws.

Caution : During assembling, ensure that the screws are fixed in sequence from 1 to 8.

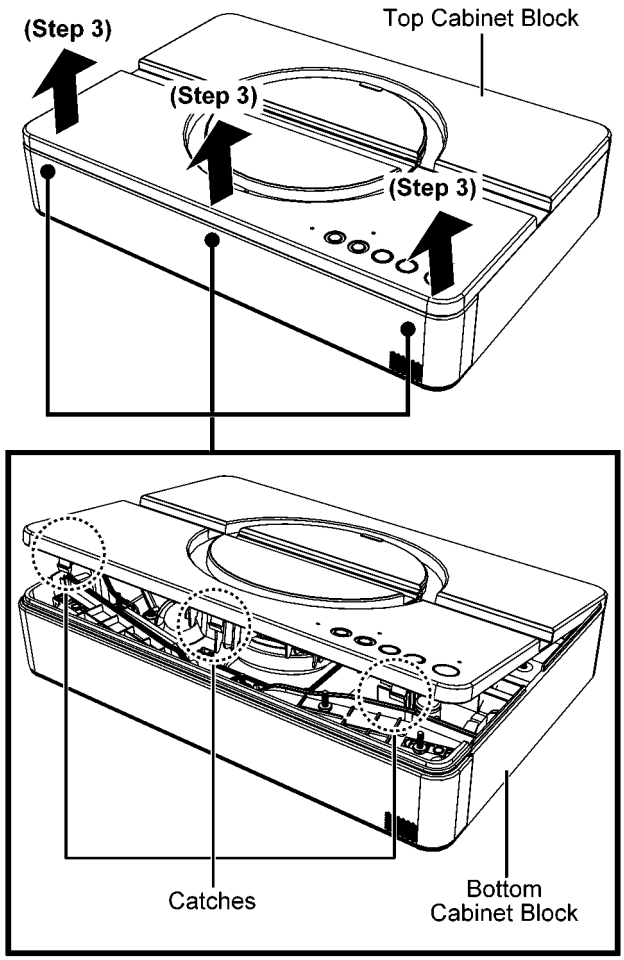
Step 2 : Upset the unit.



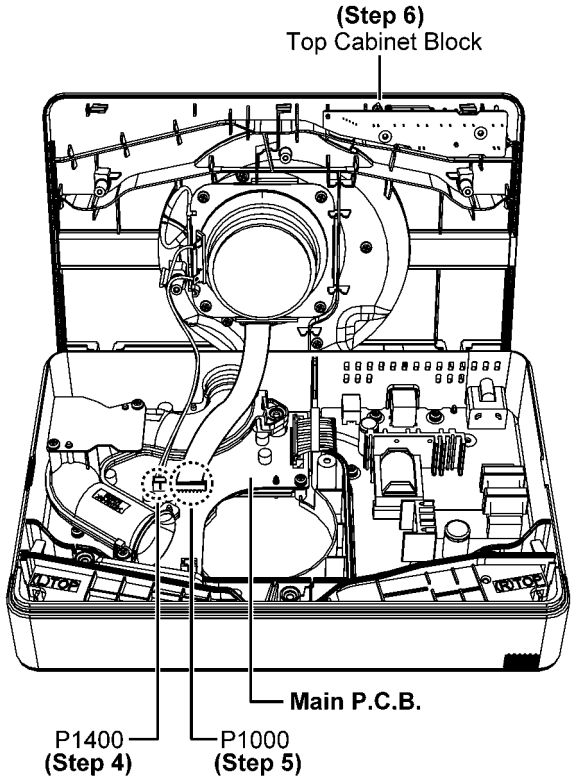
Bottom View

Step 3 : Gently lift up the Top Cabinet Block to release the catches.

Caution : During assembling, ensure that the Top Cabinet Block is catched and seated properly onto the Bottom Cabinet Block.



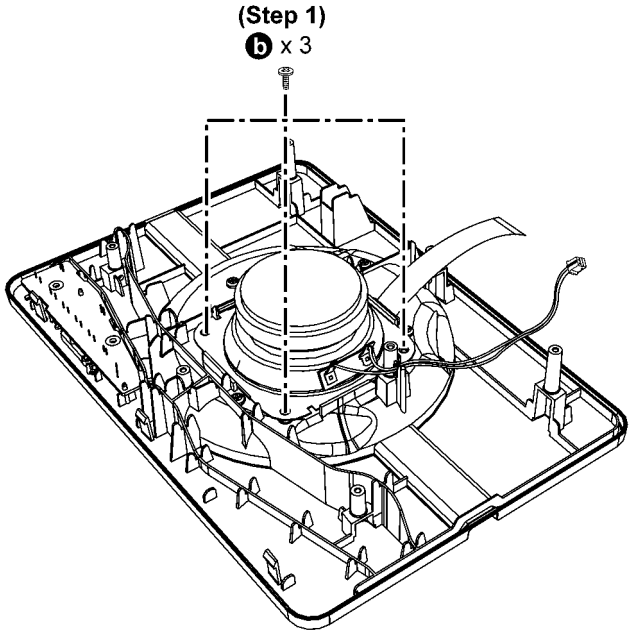
Step 4 : Detach 2P Wire at the connector (P1400) on the Main P.C.B..
Step 5 : Detach 15P FFC at the connector (P1000) on the Main P.C.B..
Step 6 : Remove the Top Cabinet Block.



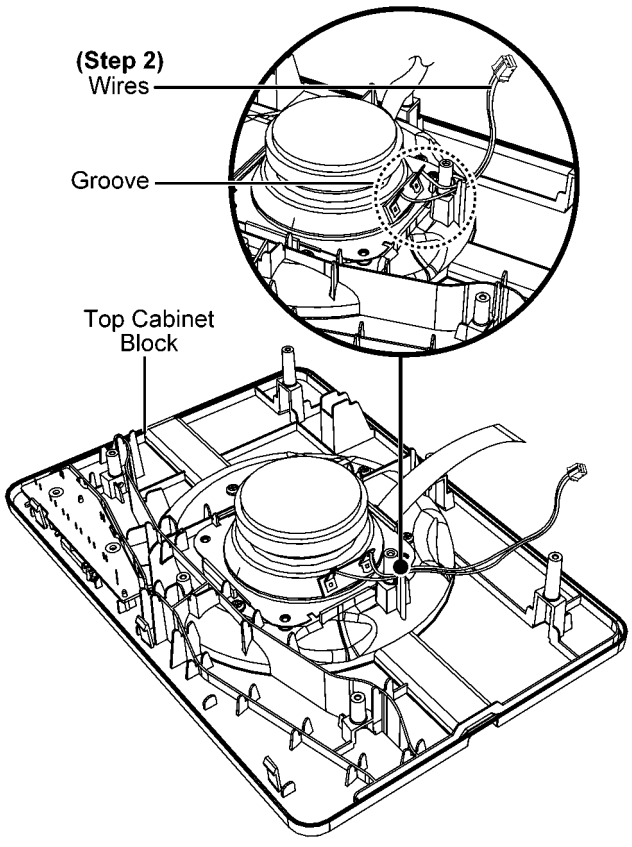
8.5. Disassembly of Subwoofer Speaker Unit

- Refer to “Disassembly of Top Cabinet Block”

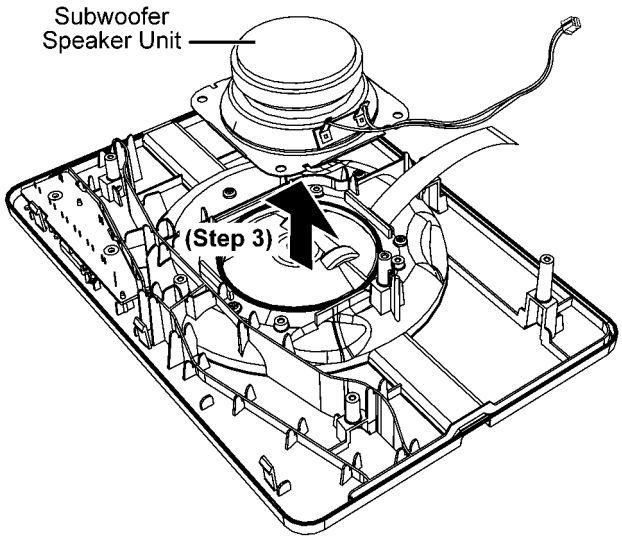
Step 1 : Remove 3 screws.



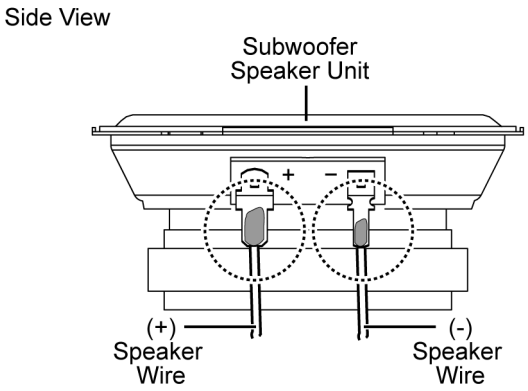
Step 2 : Release the Wires from the groove of the Top Cabinet Block.
Caution : During assembling, ensure that the Wires is dressed properly between the groove of the Top Cabinet Block as shown.



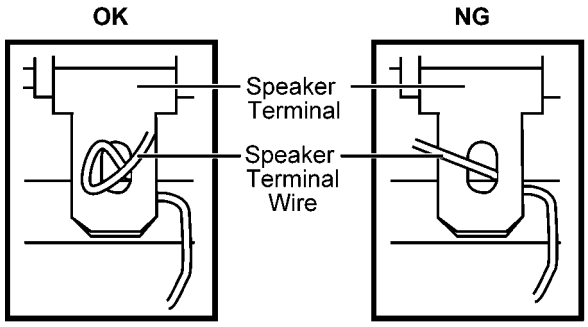
Step 3 : Remove the Subwoofer Speaker Unit.



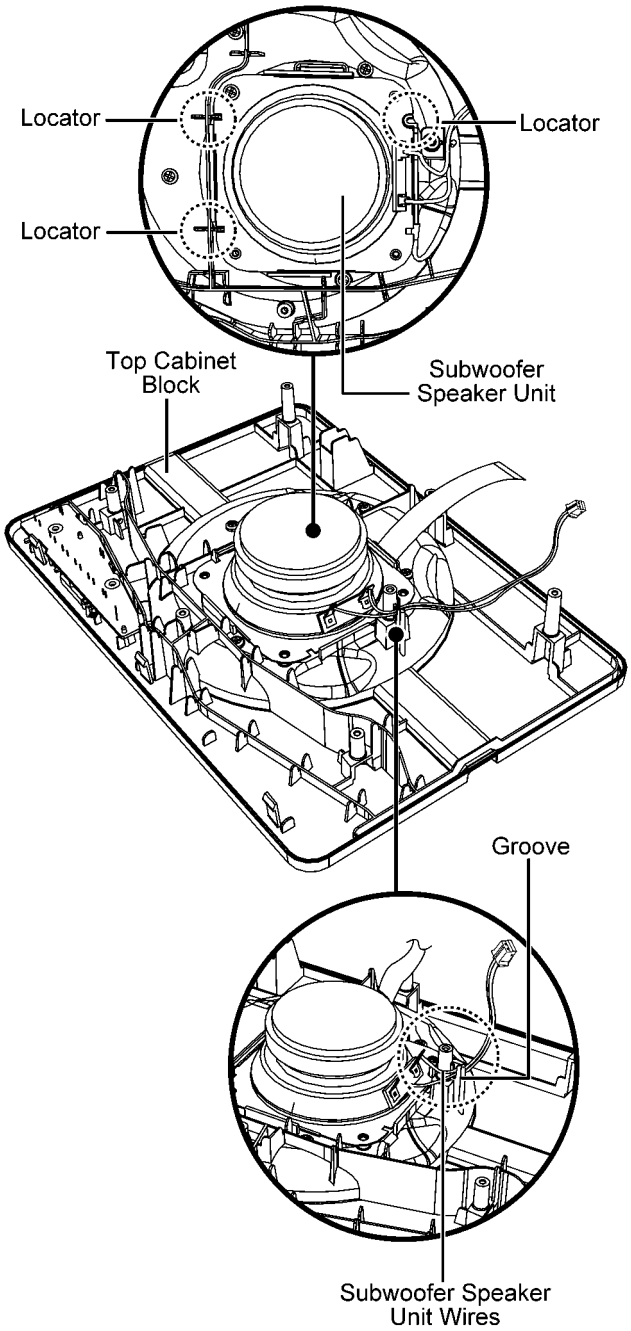
Step 4 : Desolder the Subwoofer speaker wires.



Caution : During assembling, ensure that the Subwoofer Speaker Terminal Wires are bend as below shown before solder.



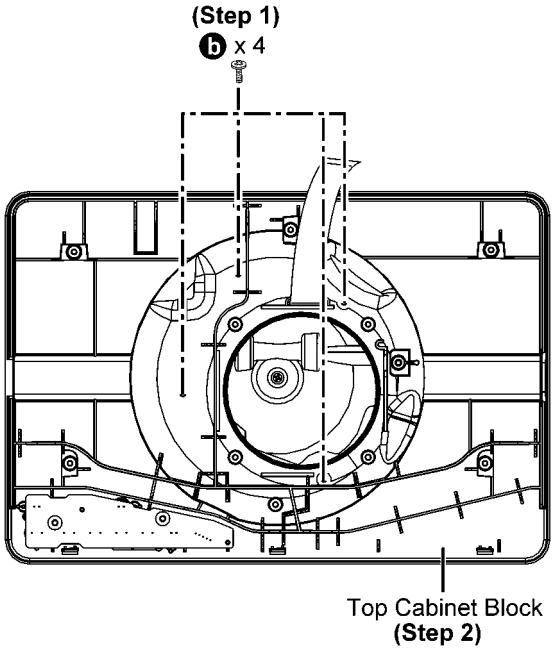
Caution 1 : During assembling, ensure that the Subwoofer Speaker Unit Wires fix near the groove.
Caution 2 : During assembling, ensure that the Subwoofer Speaker is seated properly onto the locators of the Top Cabinet Block.



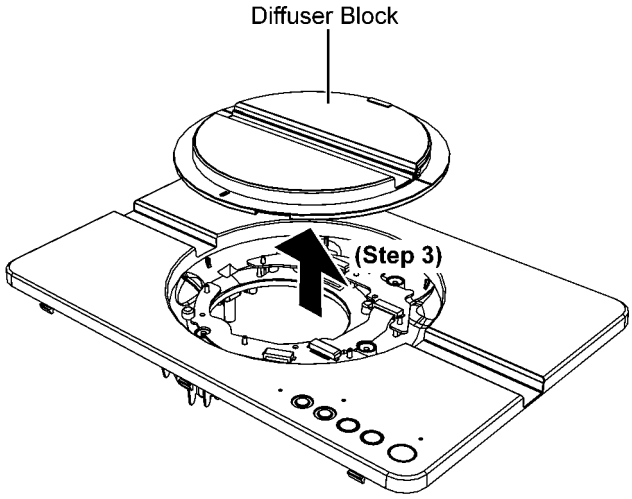
8.6. Disassembly of Diffuser Assembly

- Refer to “Disassembly of Top Cabinet Block”
- Refer to “Disassembly of Subwoofer Speaker Unit”

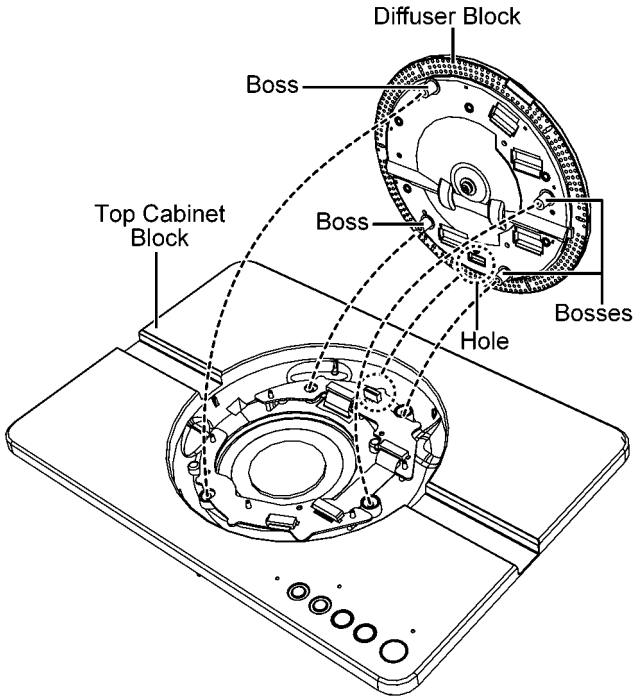
Step 1 : Remove 4 screws.
Step 2 : Upset the Top Cabinet Block.



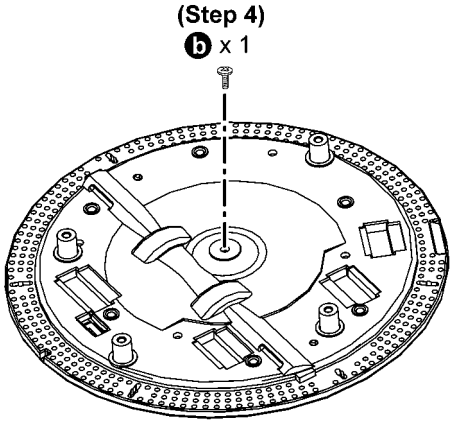
Step 3 : Lift up to remove the Diffuser Block.



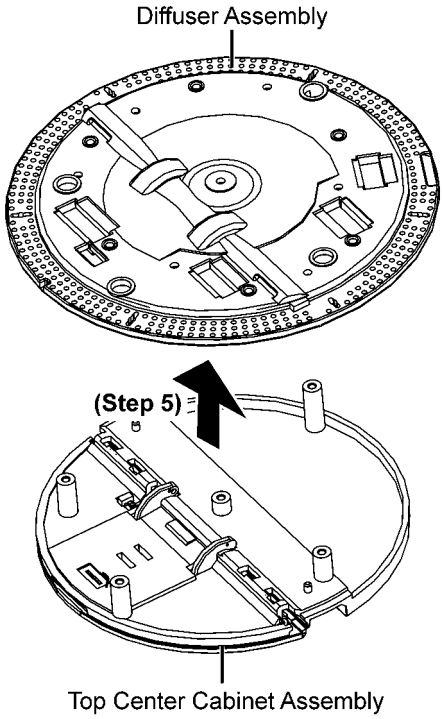
Caution : During assembling, align the hole of the Diffuser Block with the Top Cabinet Block and fix it properly.



Step 4 : Remove 1 screw.



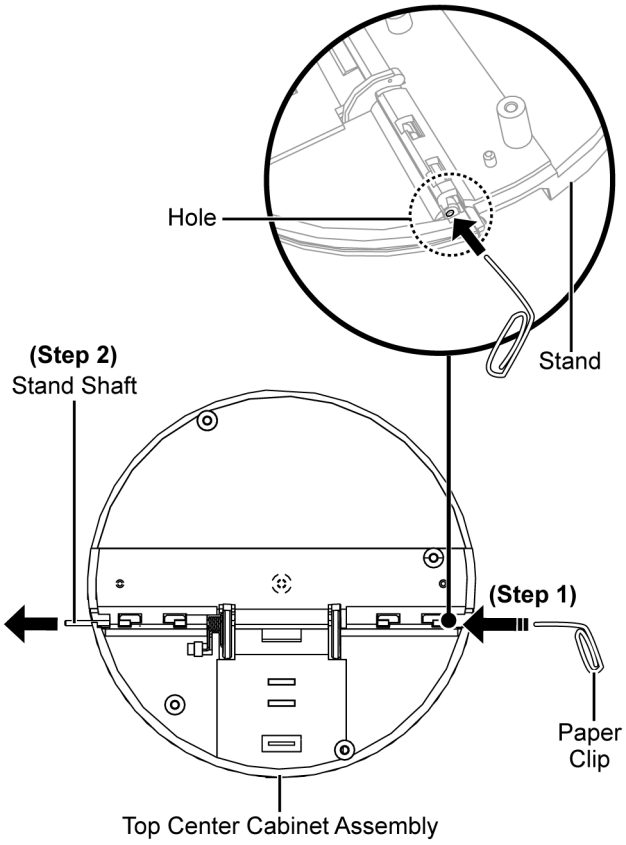
Step 5 : Remove the Diffuser Assembly.



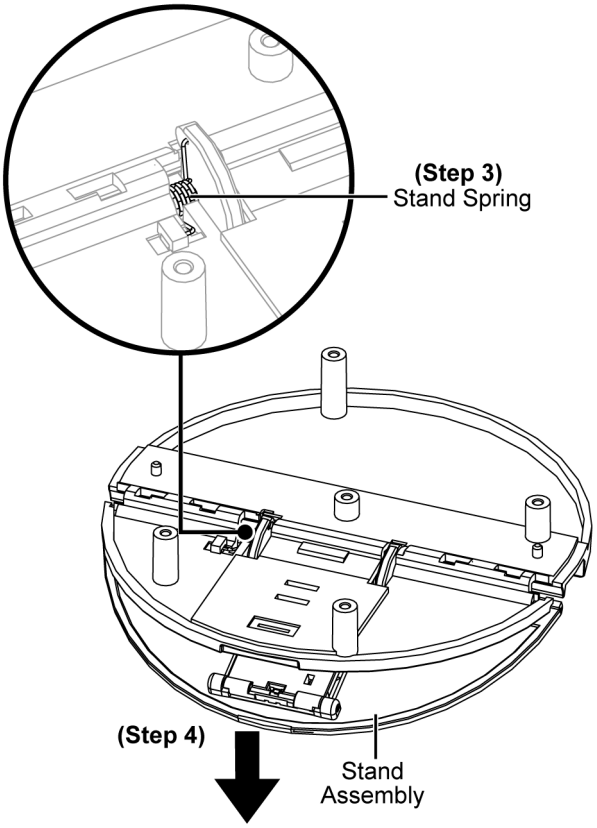
8.7. Disassembly of Stand Assembly

- Refer to “Disassembly of Top Cabinet Block”
- Refer to “Disassembly of Subwoofer Speaker Unit”
- Refer to “Disassembly of Diffuser Assembly”

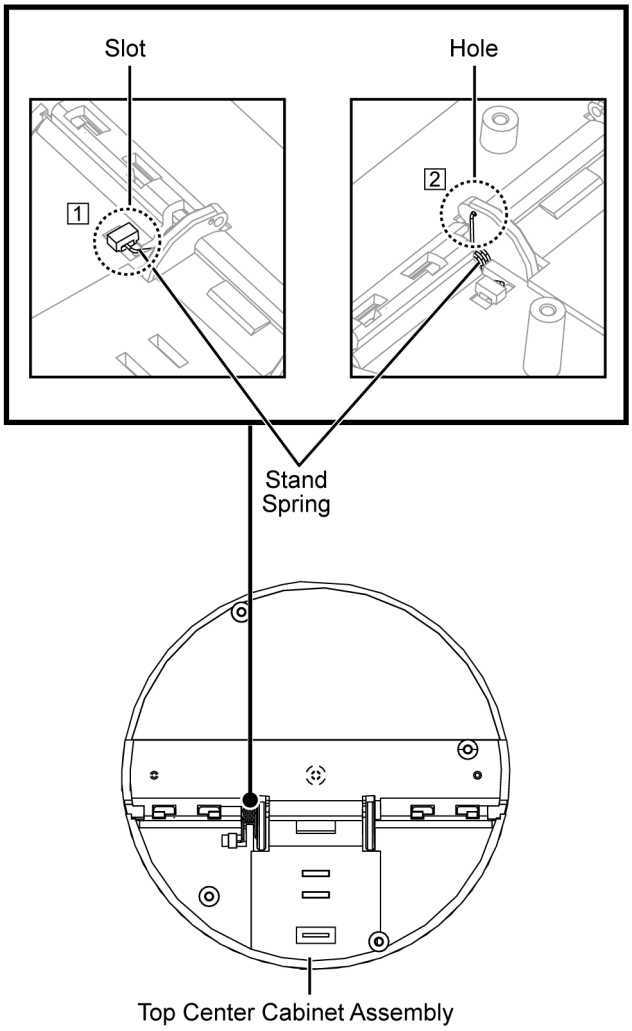
Step 1 : Use a Paper Clip to gently release the Stand Shaft.
Step 2 : Remove the Stand Shaft as arrow shown.



Step 3 : Remove the Stand Spring.
Step 4 : Remove the Stand Assembly.



Caution : During assembling, ensure that the Stand Spring is properly fix and slot into the hole respectively.

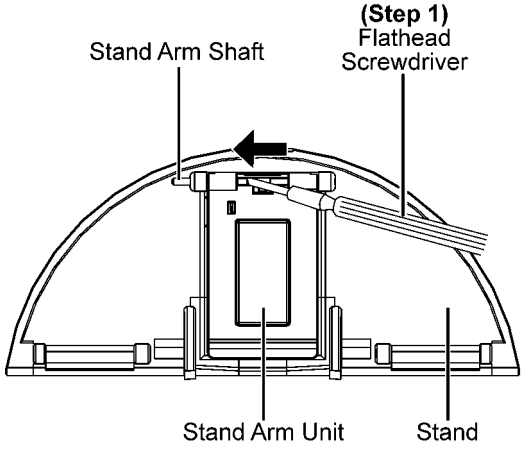


8.8. Replacement of Stand and Stand Arm

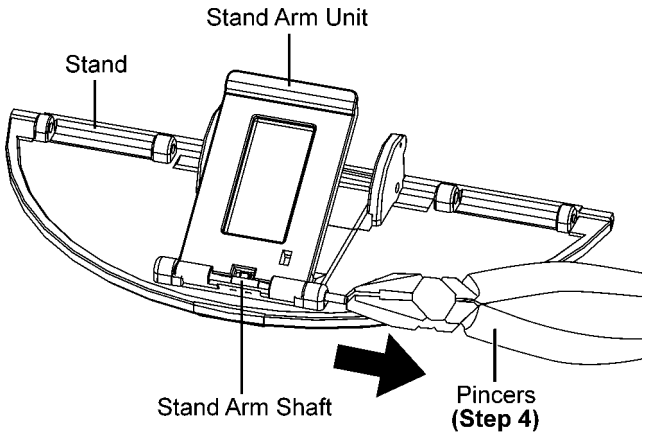
• Refer to “Disassembly of Stand Assembly”

8.8.1. Disassembly of Stand and Stand Arm

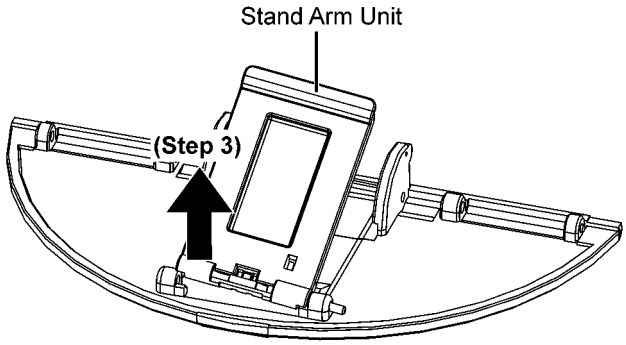
Step 1 : Use a flathead screwdriver to slightly push the Stand Arm Shaft.



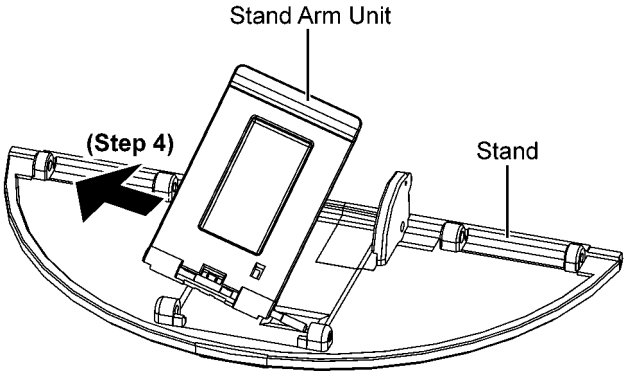
Step 2 : Use a Pincers to slowly pull out the Stand Arm Shaft until it release from the Stand.



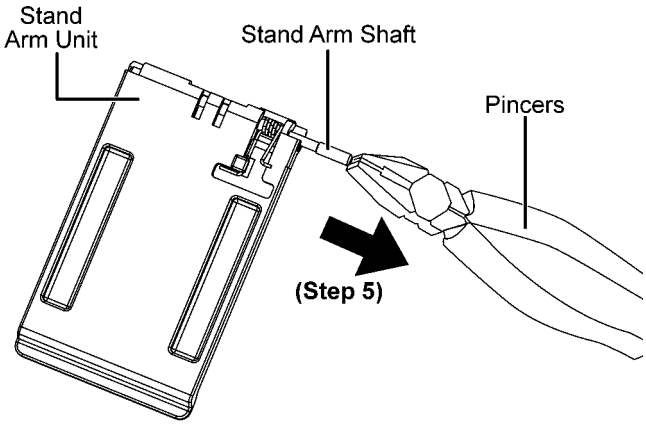
Step 3 : Lift up the Stand Arm Unit.



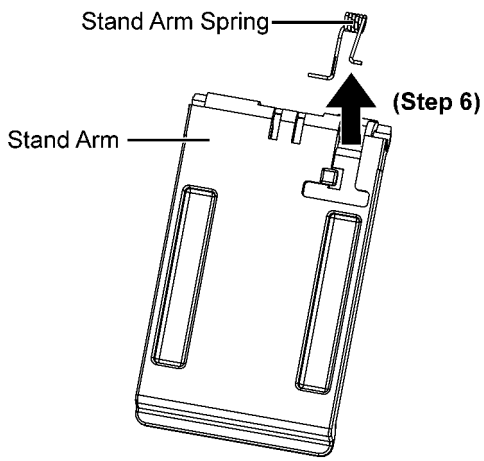
Step 4 : Remove the Stand Arm Unit.



Step 5 : Use a Pincers to slowly pull out the Stand Arm Shaft.

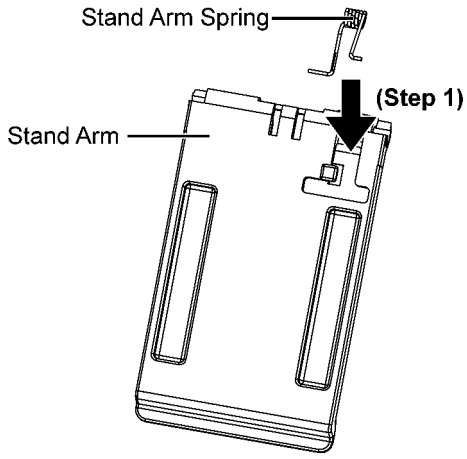


Step 6 : Remove the Stand Arm Spring.

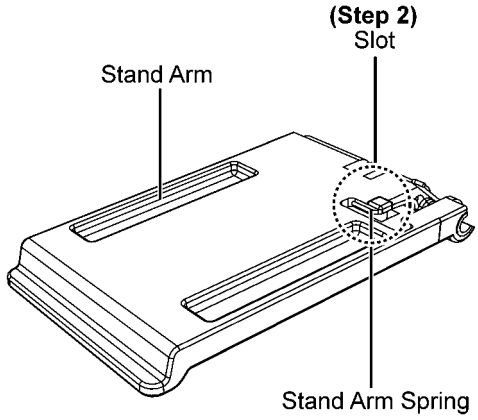


8.8.2. Assembly of Stand and Stand Arm

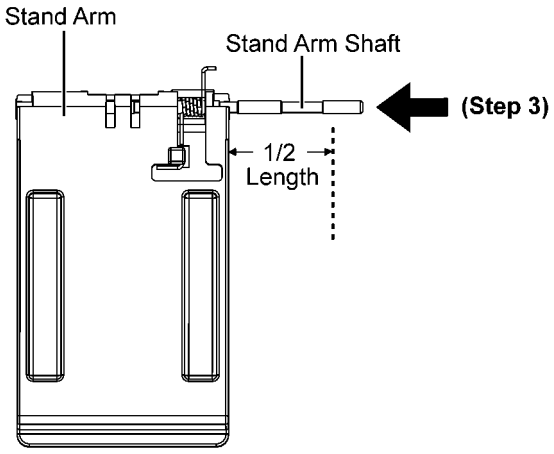
Step 1 : Fix the Stand Arm Spring into Stand Arm.



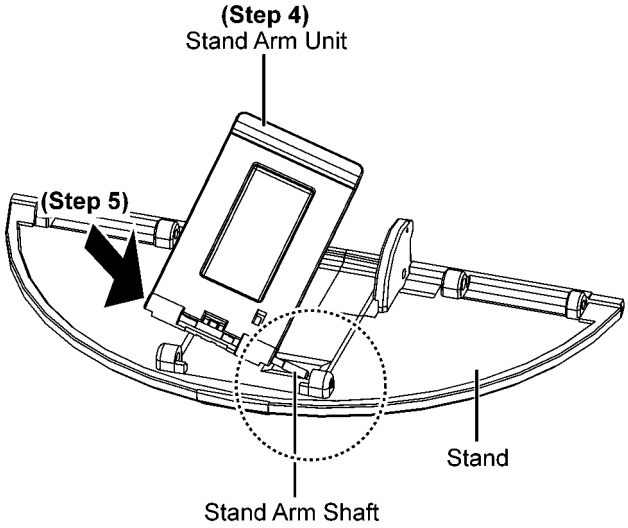
Step 2 : Push the Stand Arm Spring into the slot of the Stand Arm.



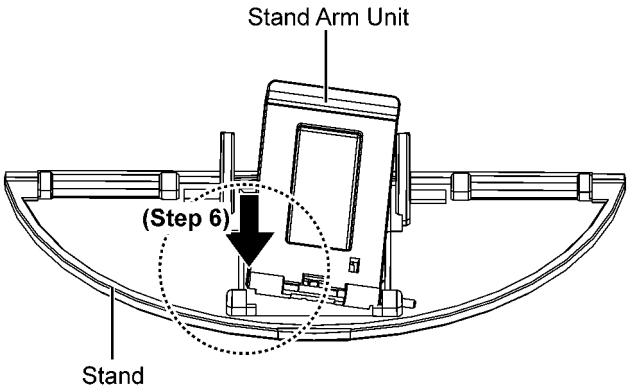
Step 3 : Fix the Stand Arm Shaft until 1/2 lenght into the slot of the Stand Arm.



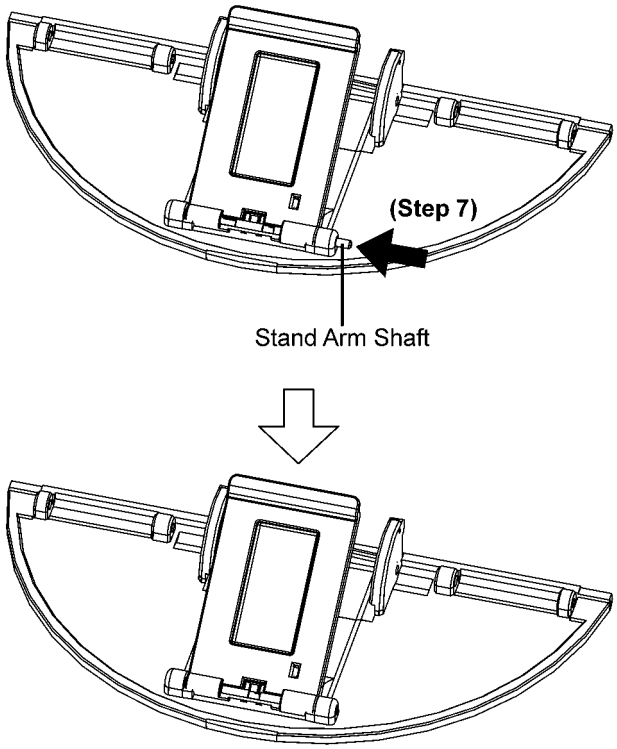
Step 4 : Slot the Stand Arm Shaft into the Stand.
Step 5 : Slightly push inward the Stand Arm Shaft.



Step 6 : Insert the Stand Arm Unit into the Stand.



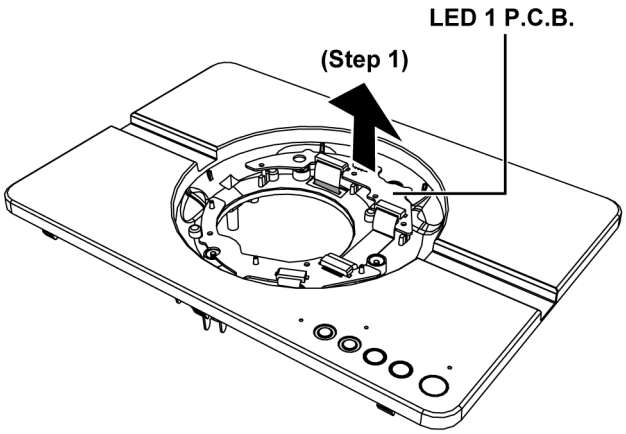
Step 7 : Fix the Stand Arm Shaft.



8.9. Disassembly of LED 1 P.C.B.

- Refer to “Disassembly of Top Cabinet Block”
- Refer to “Disassembly of Subwoofer Speaker Unit”
- Refer to (Step 1) - (Step 3) of item 10.6.

Step 1 : Slightly lift up the LED 1 P.C.B..



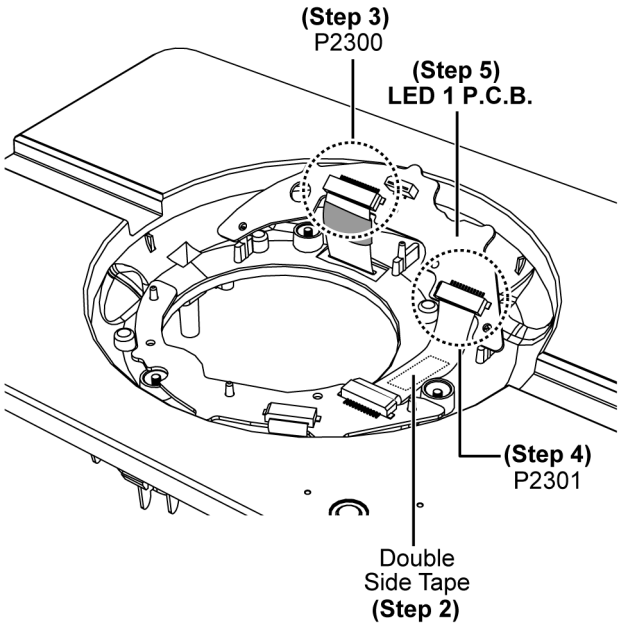
Step 2 : Release the Double Side Tape.

Caution : Replace the Double Side Tape if they are torn during disassembling.

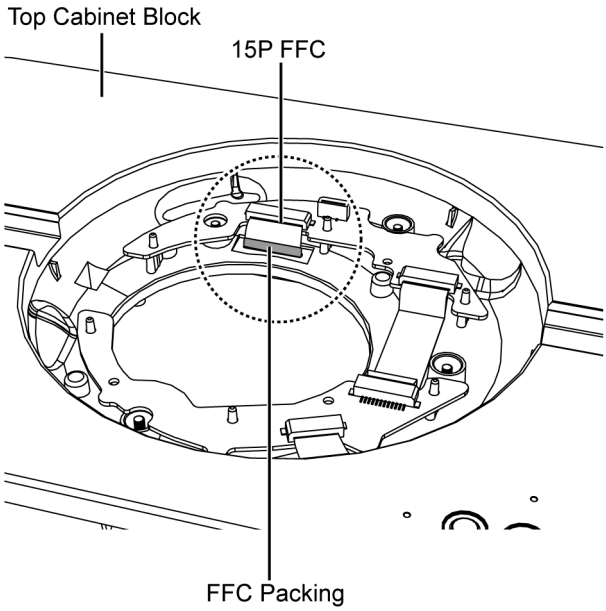
Step 3 : Detach 15P FFC at the connector (P2300) on the LED 1 P.C.B..

Step 4 : Detach 12P FFC at the connector (P2301) on the LED 1 P.C.B..

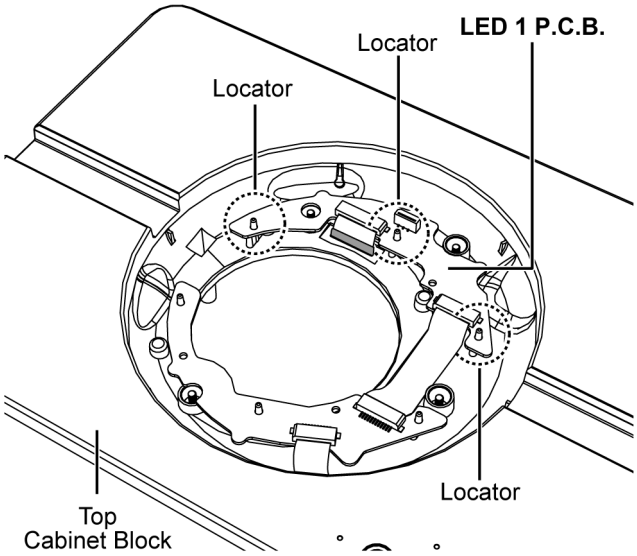
Step 5 : Remove the LED 1 P.C.B..



Caution 1 : During assembling, ensure that the 15P FFC with FFC Packing is properly inserted throught the hole of the Top Cabinet Block.



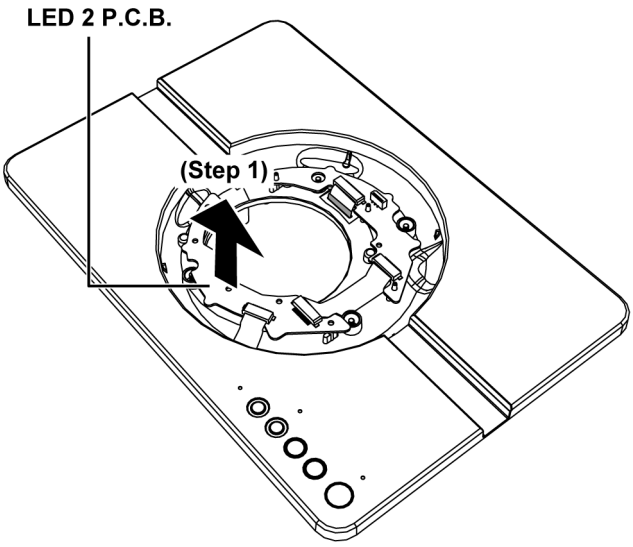
Caution 2 : During assembling, ensure that the LED 1 P.C.B. is seated properly onto the locators of the Top Cabinet Block.



8.10. Disassembly of LED 2 P.C.B.

- Refer to “Disassembly of Top Cabinet Block”
- Refer to “Disassembly of Subwoofer Speaker Unit”
- Refer to (Step 1) - (Step 3) of item 10.6.

Step 1 : Slightly lift up the LED 2 P.C.B..



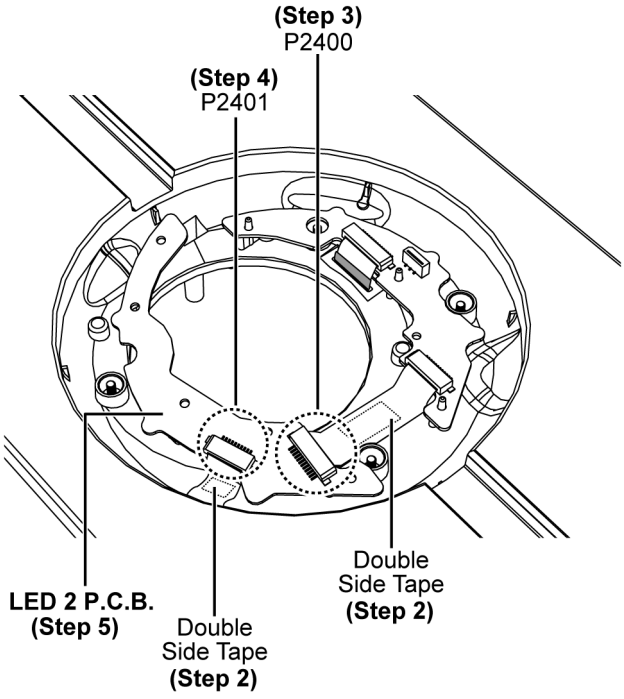
Step 2 : Release both Double Side Tapes.

Caution : Replace the Double Side Tape if they are torn during disassembling.

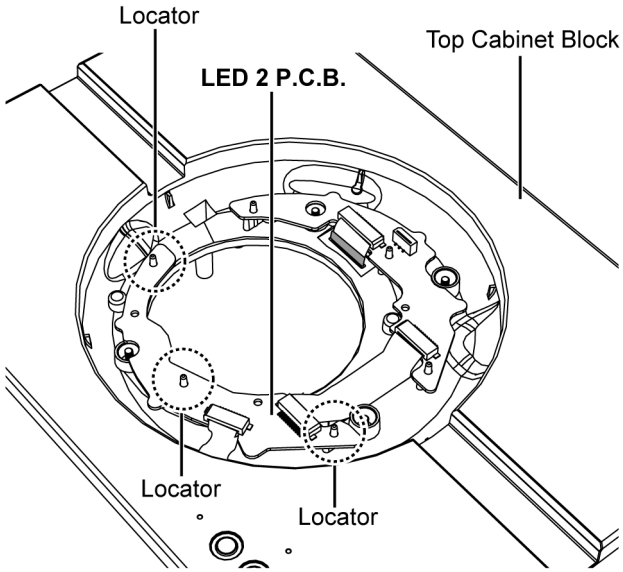
Step 3 : Detach 12P FFC at the connector (P2400) on the LED 2 P.C.B..

Step 4 : Detach 10P FFC at the connector (P2401) on the LED 2 P.C.B..

Step 5 : Remove the LED 2 P.C.B..



Caution : During assembling, ensure that the LED 2 P.C.B. is seated properly onto the locators of the Top Cabinet Block.



8.11. Disassembly of Button P.C.B.

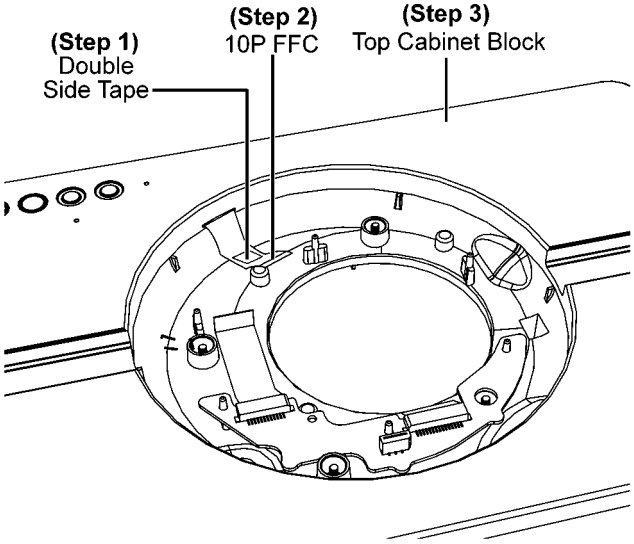
- Refer to “Disassembly of Top Cabinet Block”
- Refer to “Disassembly of Subwoofer Speaker Unit”
- Refer to (Step 1) - (Step 3) of item 10.6.
- Refer to “Disassembly of LED 2 P.C.B.”

Step 1 : Release the Double Side Tape.

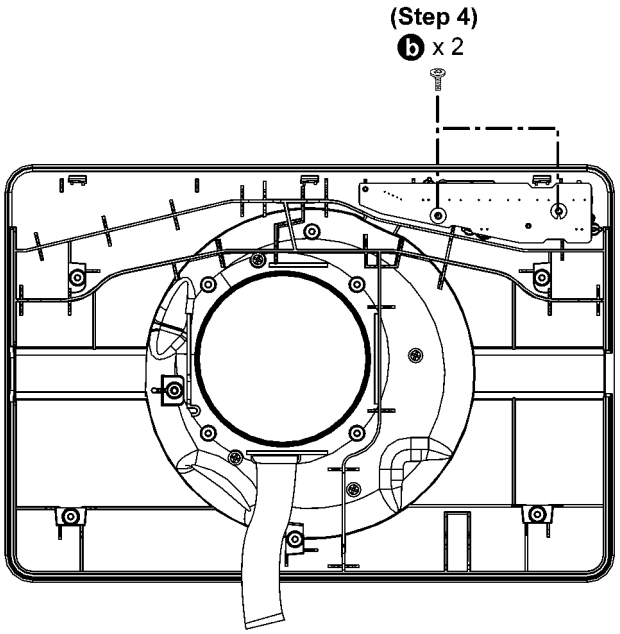
Caution : Replace the Double Side Tape if they are torn during disassembling.

Step 2 : Lift up the 10P FFC.

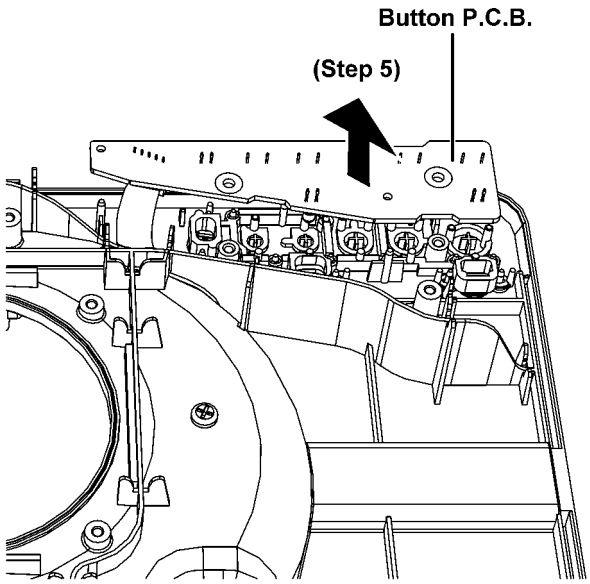
Step 3 : Upset the Top Cabinet Block.



Step 4 : Remove 2 screws.



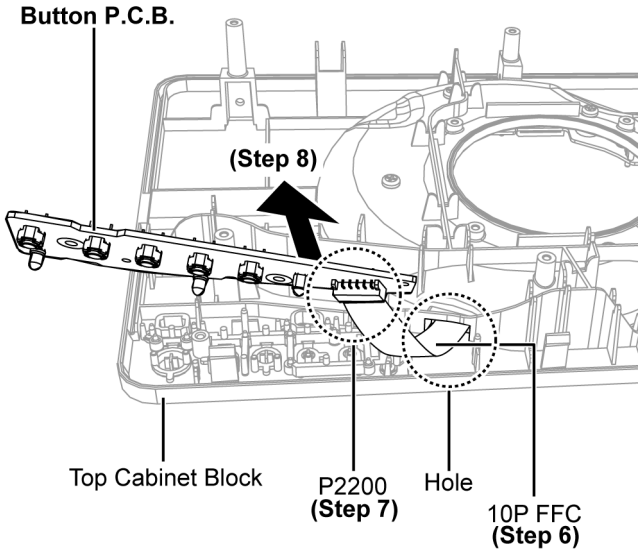
Step 5 : Slightly lift up the Button P.C.B..



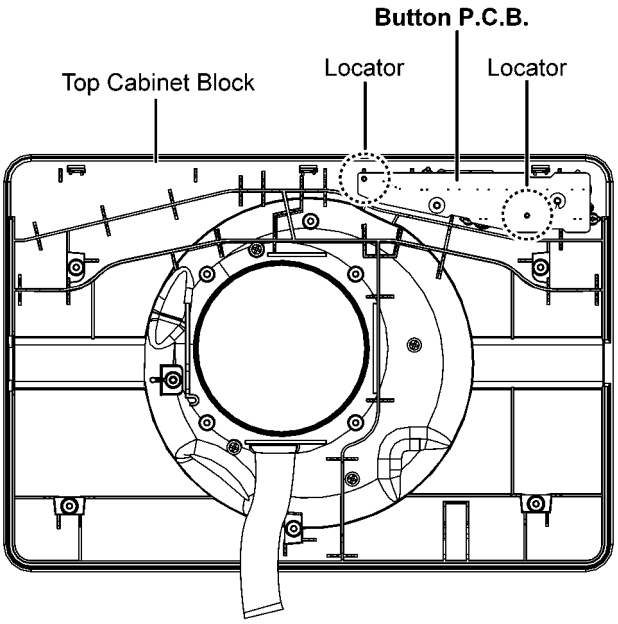
Step 6 : Release the 10P FFC from the hole of the Top Cabinet Block.

Step 7 : Detach 10P FFC at the connector (P2200) on the Button P.C.B.

Step 8 : Remove the Button P.C.B..



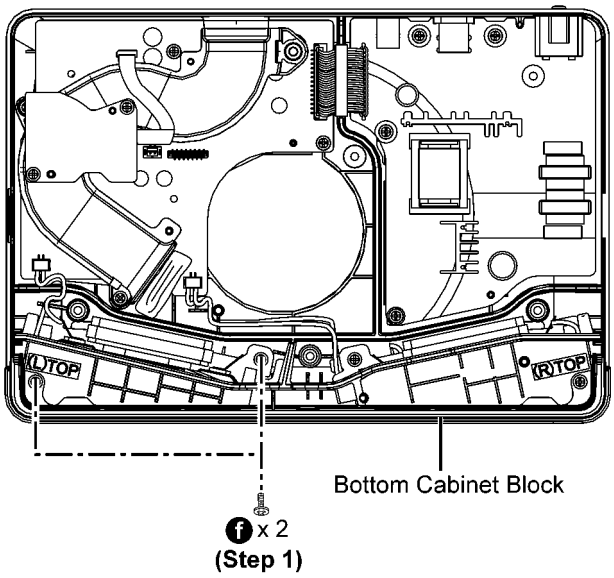
Caution : During assembling, ensure that the Button P.C.B. is seated properly onto the locators of the Top Cabinet Block.



8.12. Disassembly of Front Speaker Unit (L)

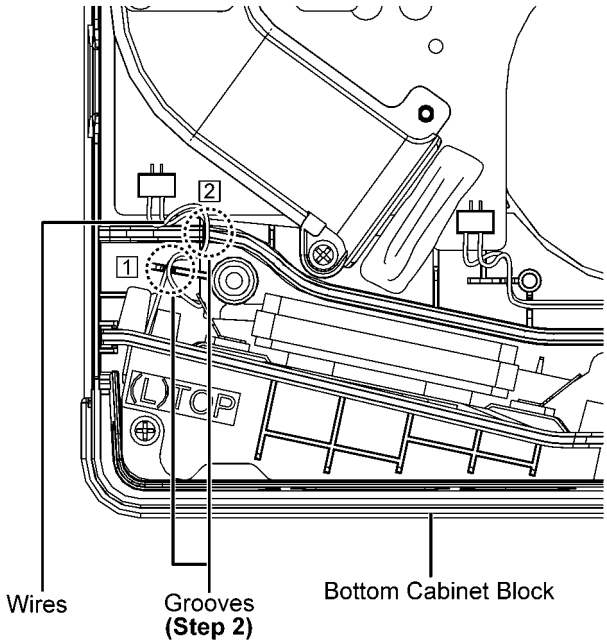
• Refer to “Disassembly of Top Cabinet Block”

Step 1 : Remove 2 screws.

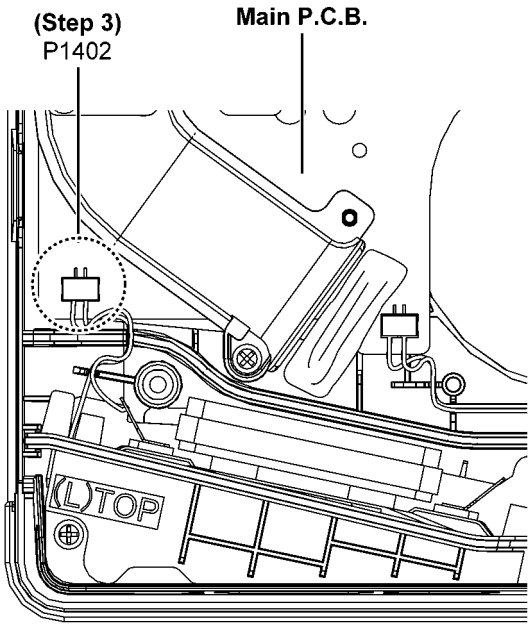


Step 2 : Release the wires from the grooves of the Bottom Cabinet Assembly.

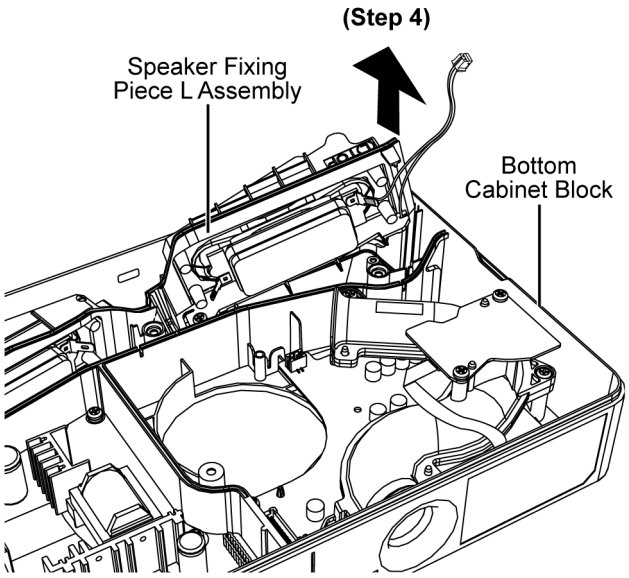
Caution : During assembling, ensure that the Wires is dressed properly onto the grooves of the Bottom Cabinet Block in sequence from 1 to 2.



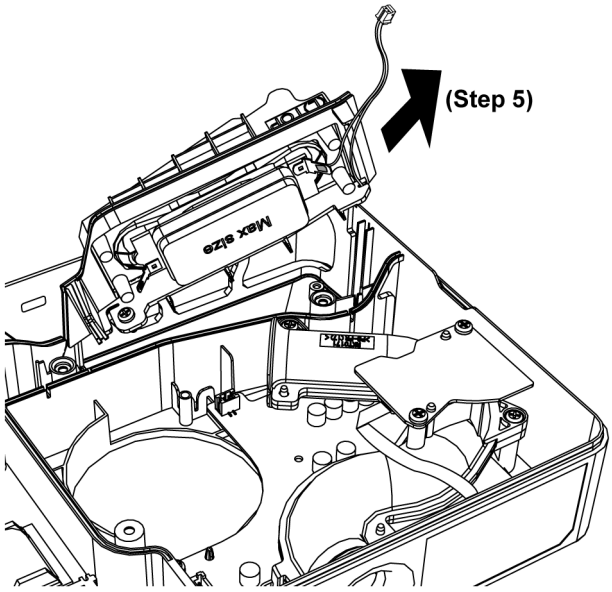
Step 3 : Detach 2P Wire at the connector (P1402) on the Main P.C.B..



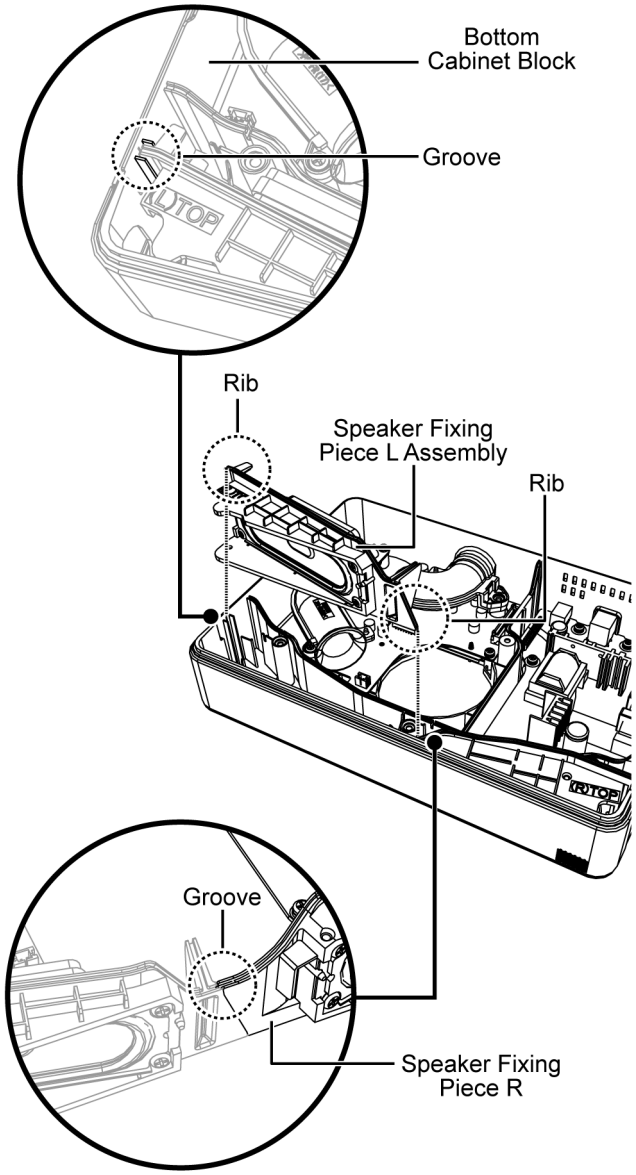
Step 4 : Lift up the Speaker Fixing Piece L Assembly from the Bottom Cabinet Block.



Step 5 : Remove the Speaker Fixing Piece L Assembly.

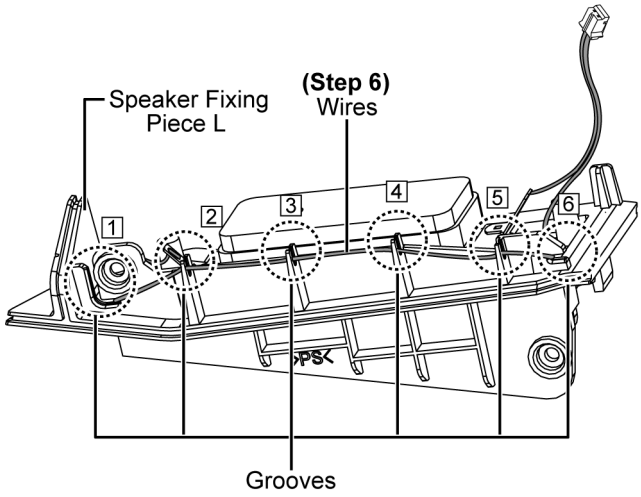


Caution : During assembling, ensure that the Ribs are fixed and seated properly onto the grooves of the Bottom Cabinet Block and Speaker Fixing Piece R.

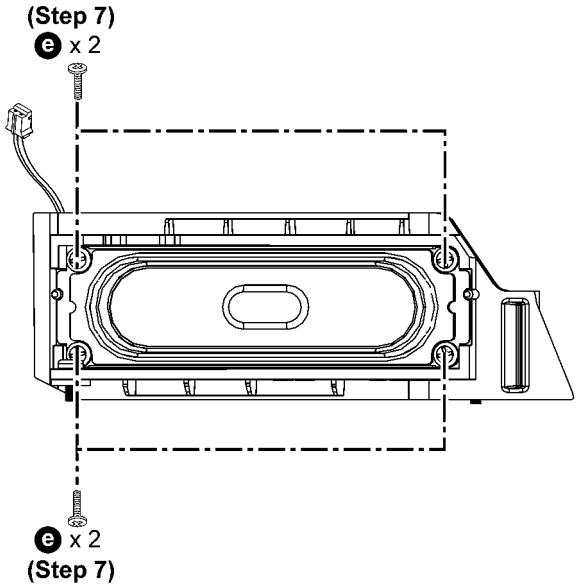


Step 6 : Remove the wires from the grooves.

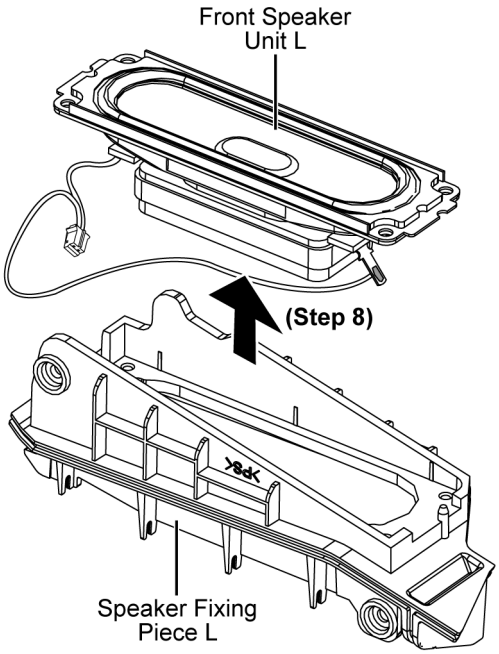
Caution : During assembling, ensure that the Wires is dressed properly onto the grooves of the Speaker Fixing Piece L in sequence from 1 to 6.



Step 7 : Remove 4 screws.

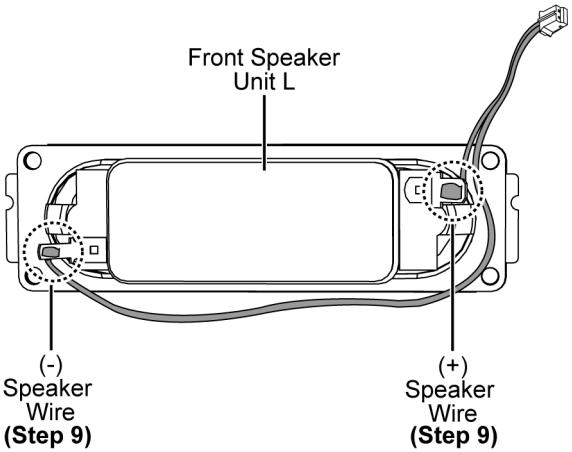


Step 8 : Remove the Front Speaker Unit L as shown.

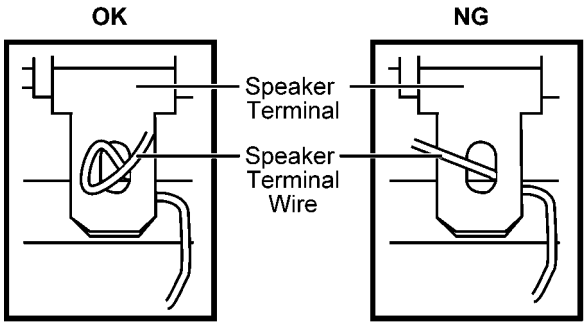


Step 9 : Desolder the speaker wires.

Rear View



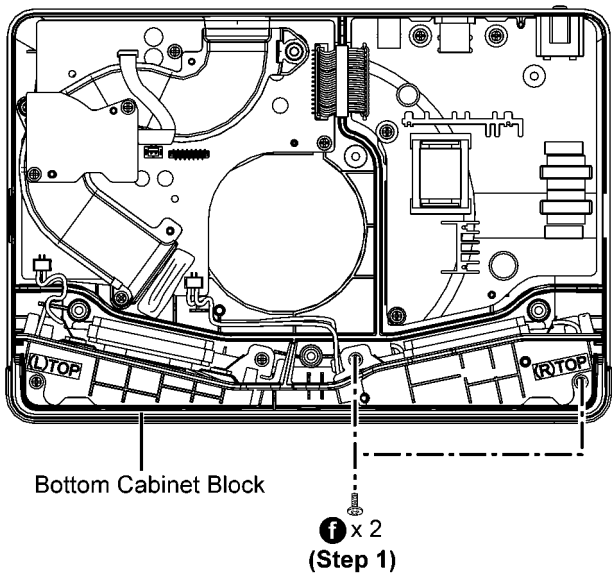
Caution : During assembling, ensure that the Speaker Terminal Wires are bend as below shown before solder.



8.13. Disassembly of Front Speaker Unit (R)

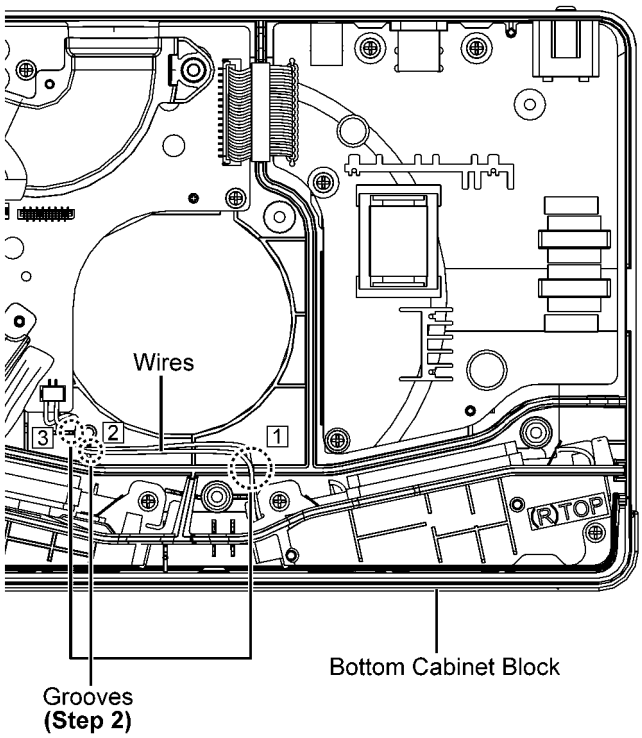
• Refer to “Disassembly of Top Cabinet Block”

Step 1 : Remove 2 screws.

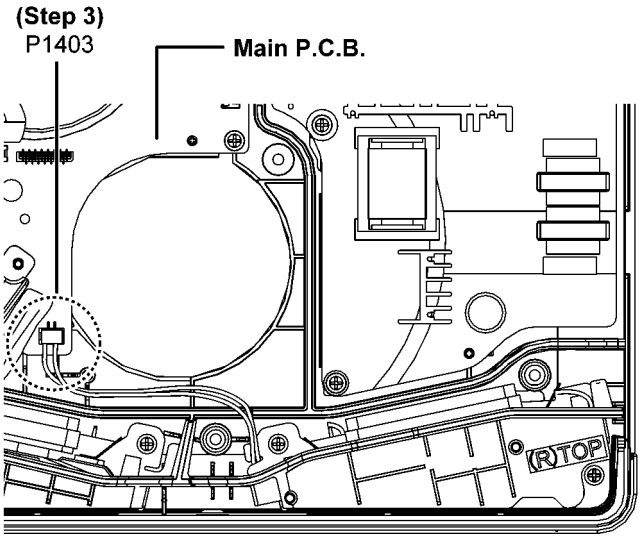


Step 2 : Release the wires from the grooves of the Bottom Cabinet Assembly.

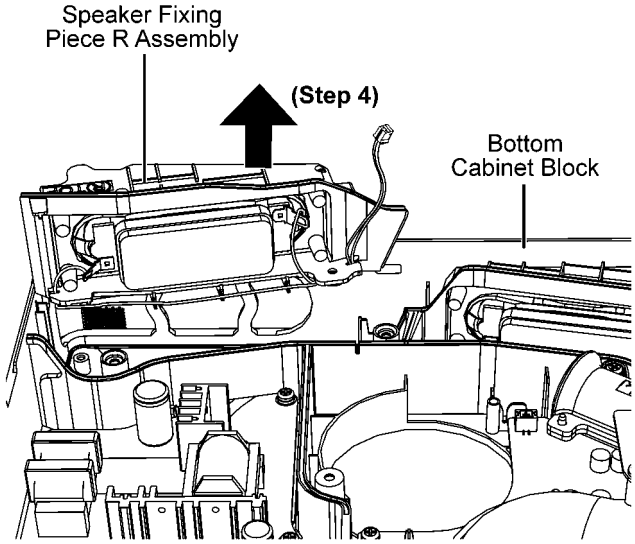
Caution : During assembling, ensure that the Wires is dressed properly onto the grooves of the Bottom Cabinet Block in sequence from 1 to 3.



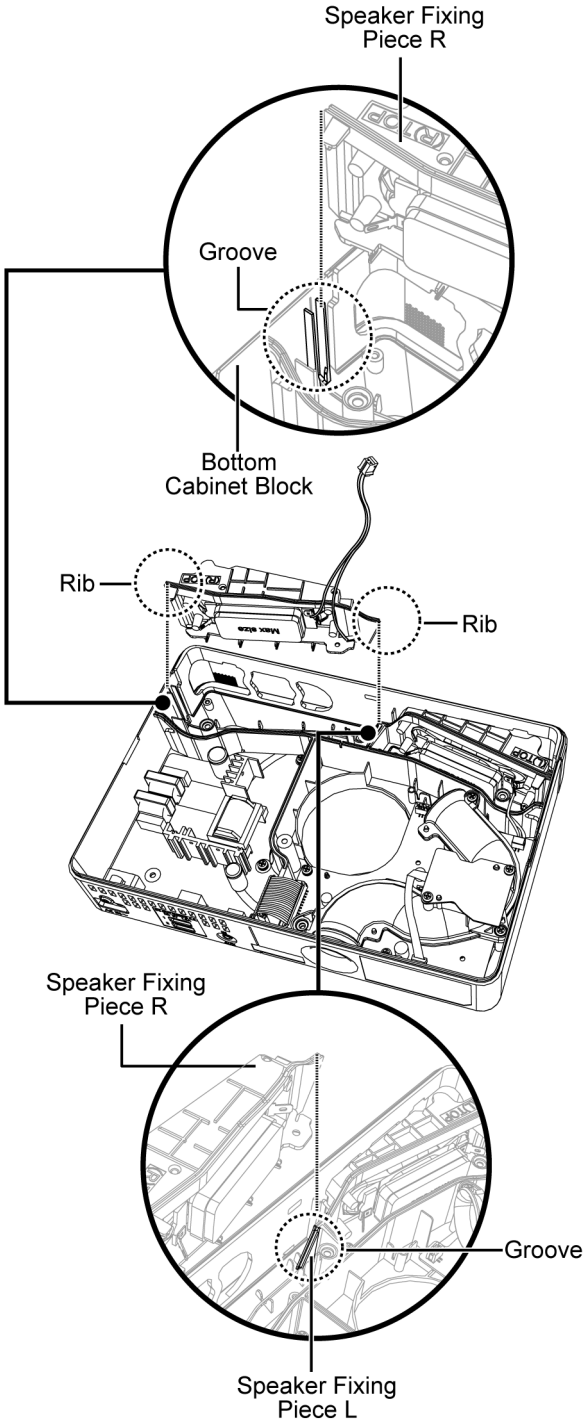
Step 3 : Detach 2P Wire at the connector (P1403) on the Main P.C.B..



Step 4 : Lift up to remove the Speaker Fixing Piece R Assembly from the Bottom Cabinet Block.

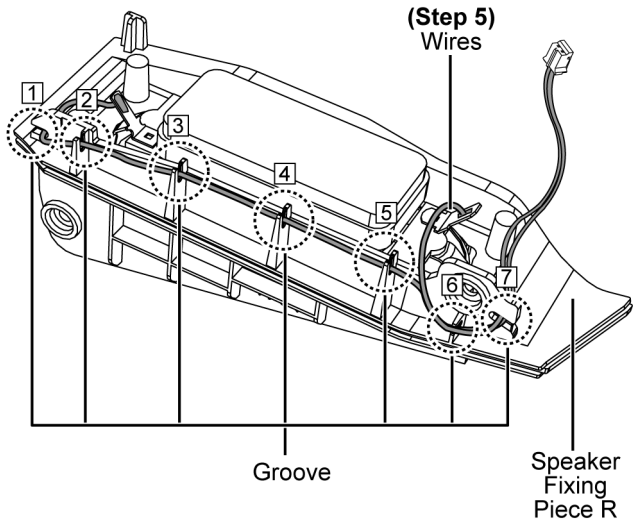


Caution : During assembling, ensure that the Ribs are fixed and seated properly onto the grooves of the Bottom Cabinet Block and Speaker Fixing Piece L.

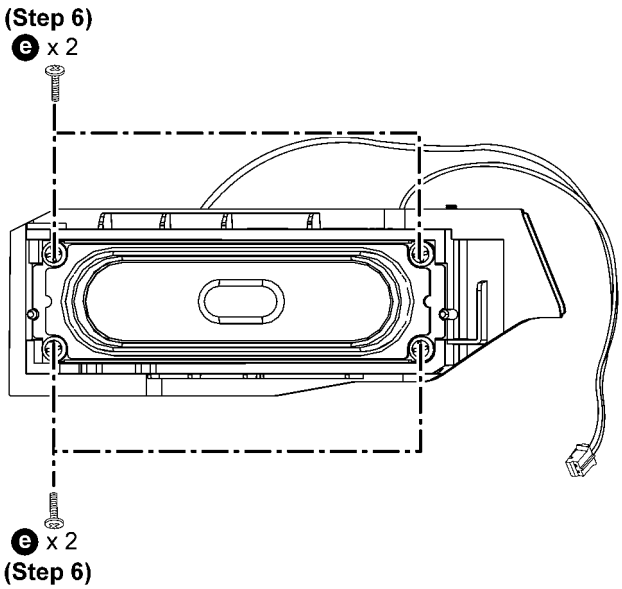


Step 5 : Remove the wires from the grooves.

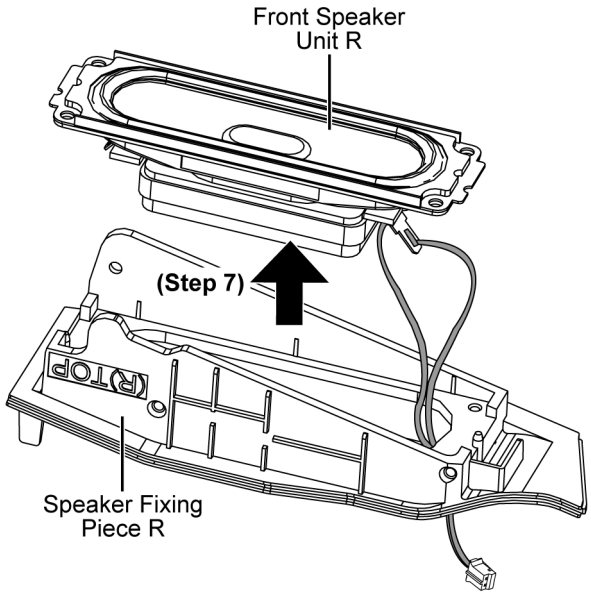
Caution : During assembling, ensure that the Wires is dressed properly onto the grooves of the Speaker Fixing Piece R in sequence from 1 to 7.



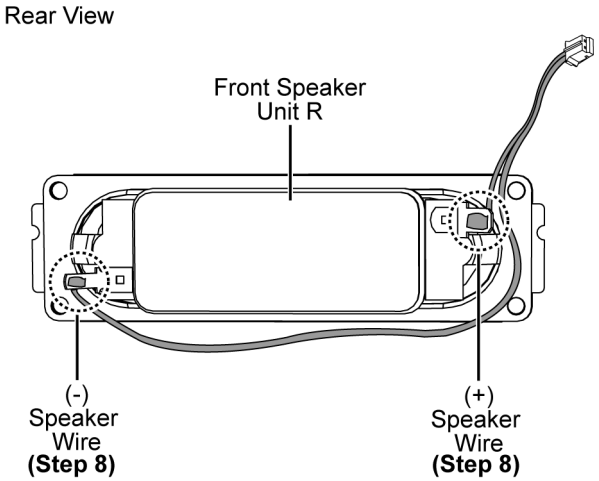
Step 6 : Remove 4 screws.



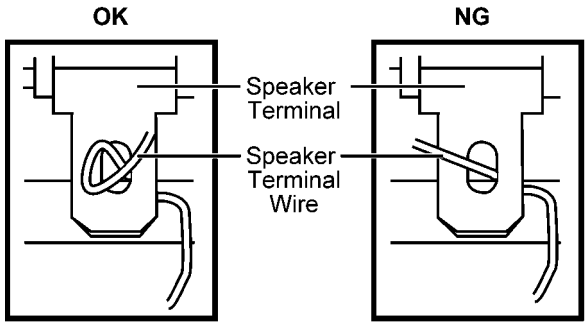
Step 7 : Remove the Front Speaker Unit R as shown.



Step 8 : Desolder the speaker wires.



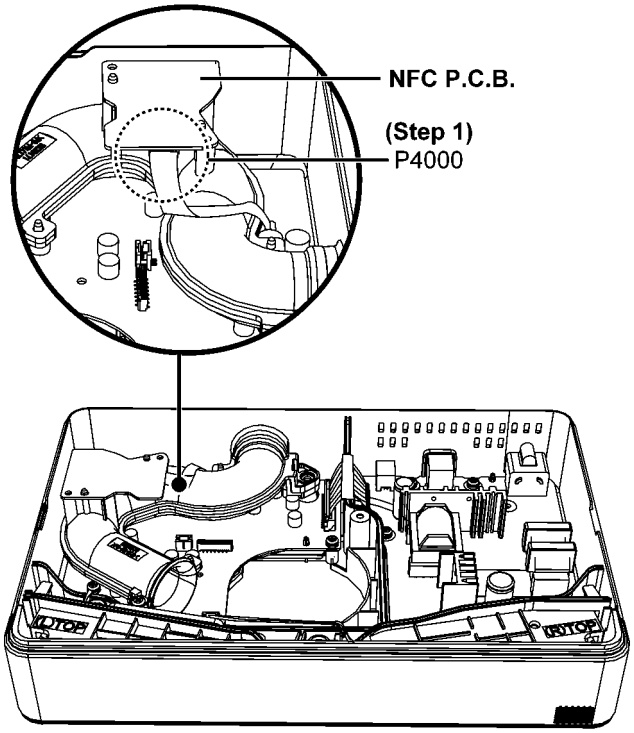
Caution : During assembling, ensure that the Speaker Terminal Wires are bend as below shown before solder.



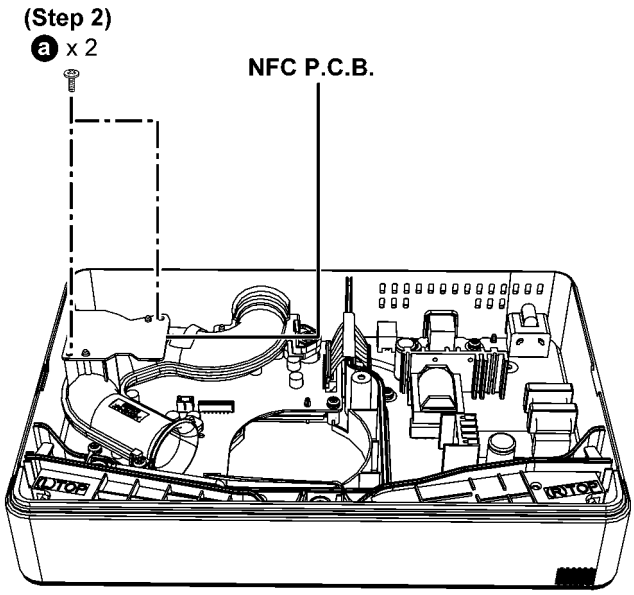
8.14. Disassembly of NFC P.C.B.

• Refer to “Disassembly of Top Cabinet Block”

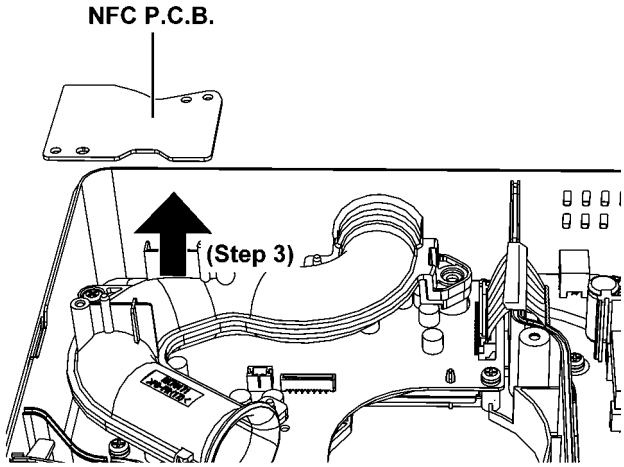
Step 1 : Detach 6P FFC at the connector (P4000) on the NFC P.C.B..



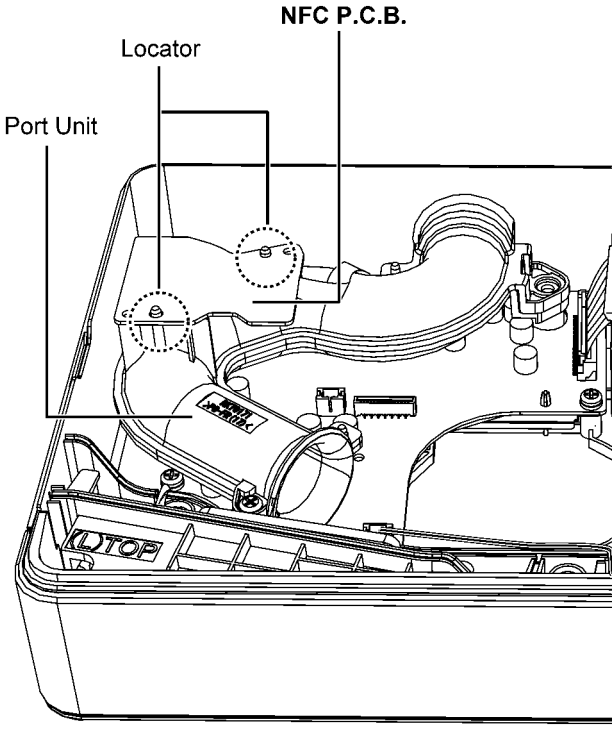
Step 2 : Remove 2 screws.



Step 3 : Remove the NFC P.C.B..



Caution : During assembling, ensure that the NFC P.C.B. is seated properly onto the locators of the Port Unit.

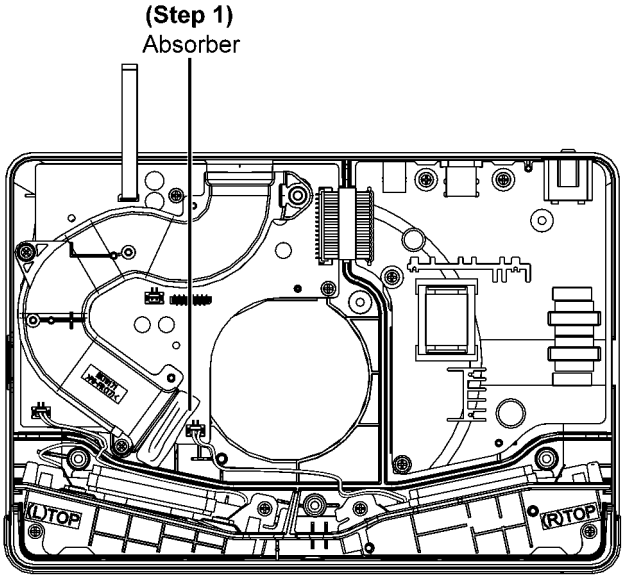


8.15. Disassembly of Main P.C.B.

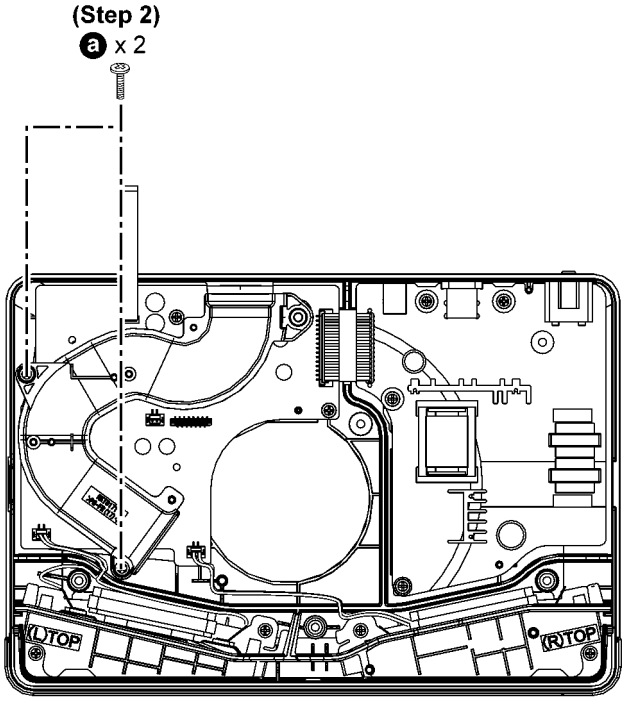
- Refer to “Disassembly of Top Cabinet Block”
- Refer to “Disassembly of NFC P.C.B.”

Step 1 : Remove the Absorber.

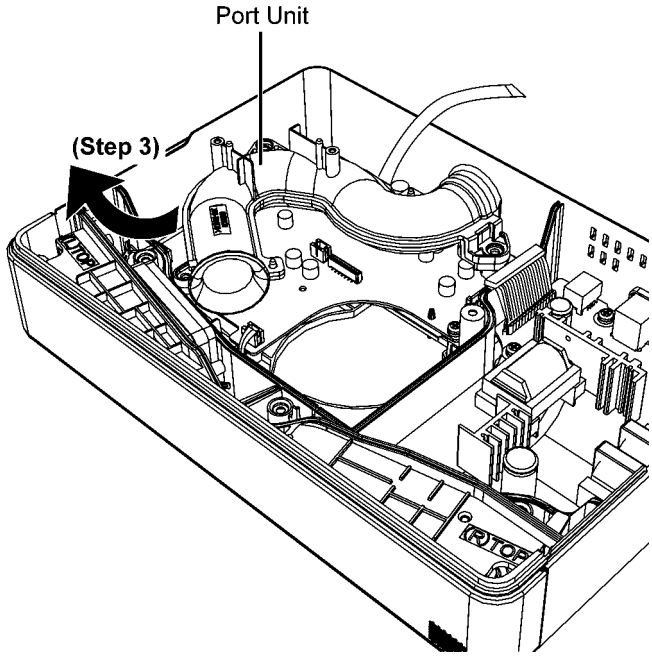
Caution : Safe keep the Absorber and place them back during assembling.



Step 2 : Remove 2 screws.

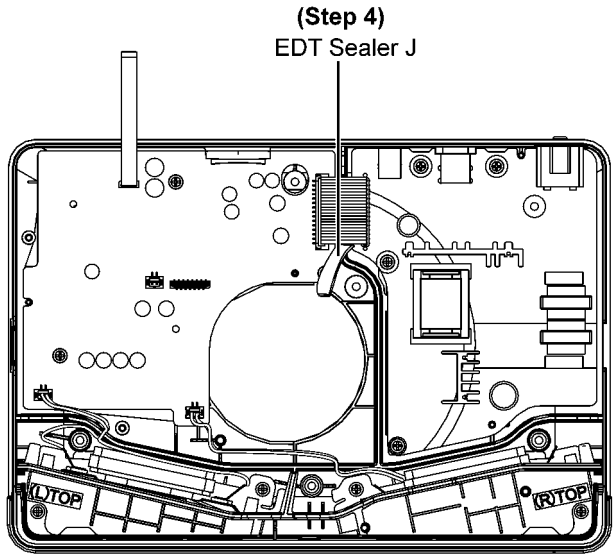


Step 3 : Remove the Port Unit.



Step 4 : Lift up the EPT Sealer J.

Caution : Replace the EPT Sealer J if they are torn during disassembling.

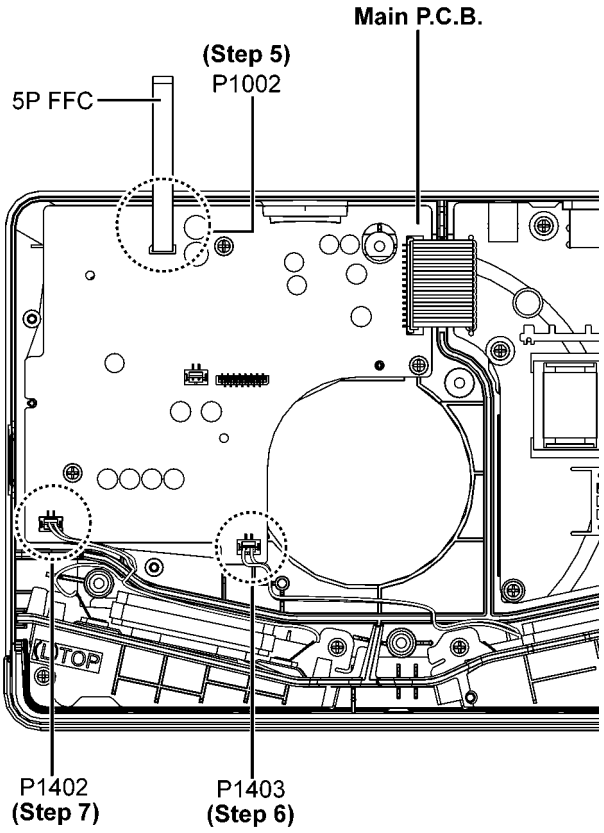


Step 5 : Detach 5P FFC at the connector (P1002) on the Main P.C.B..

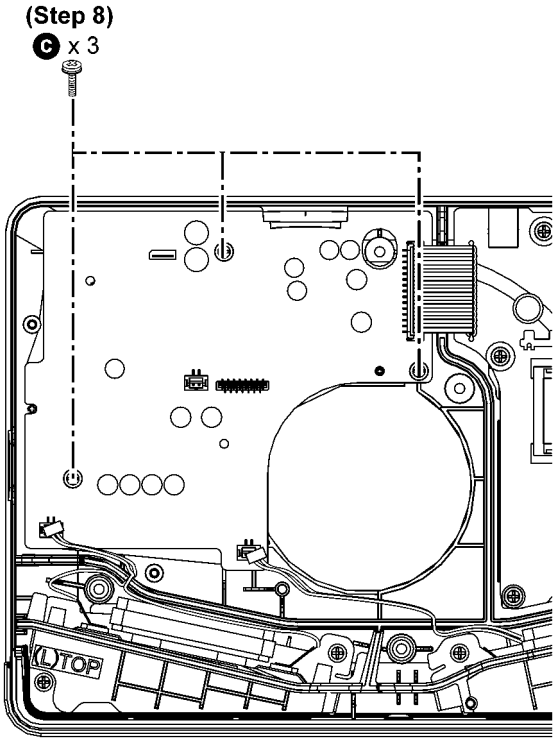
Caution : Safe keep the 5P FFC and place it back during assembling.

Step 6 : Detach 2P Wires at the connector (P1403) on the Main P.C.B..

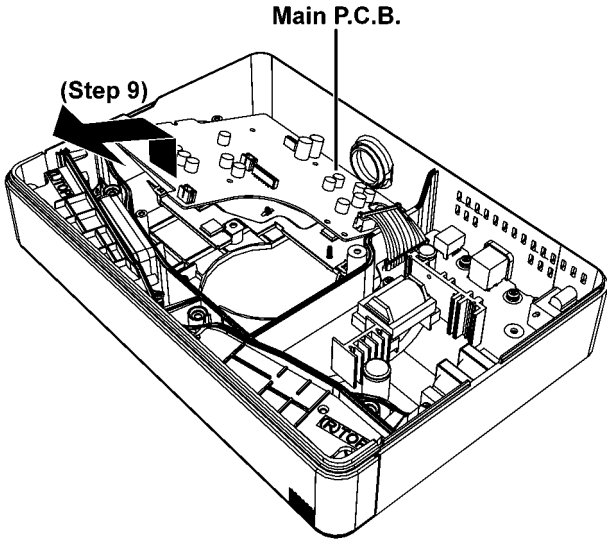
Step 7 : Detach 2P Wires at the connector (P1402) on the Main P.C.B..



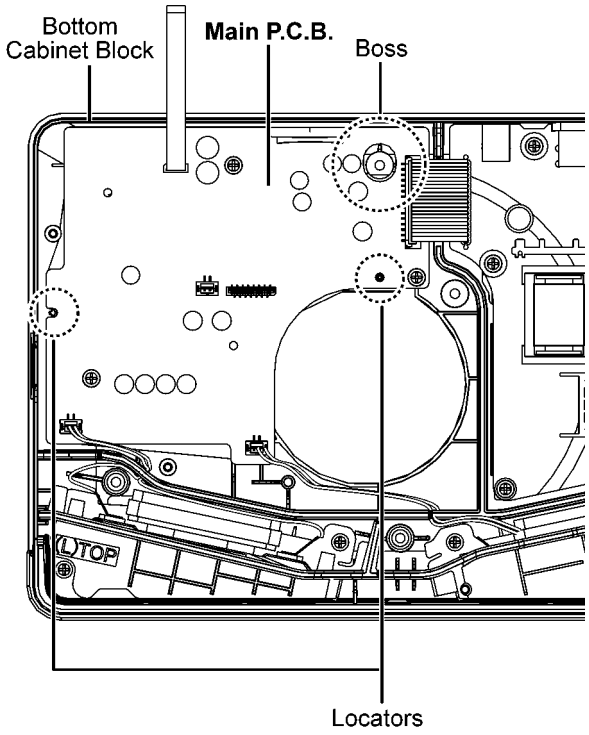
Step 8 : Remove 3 screws.



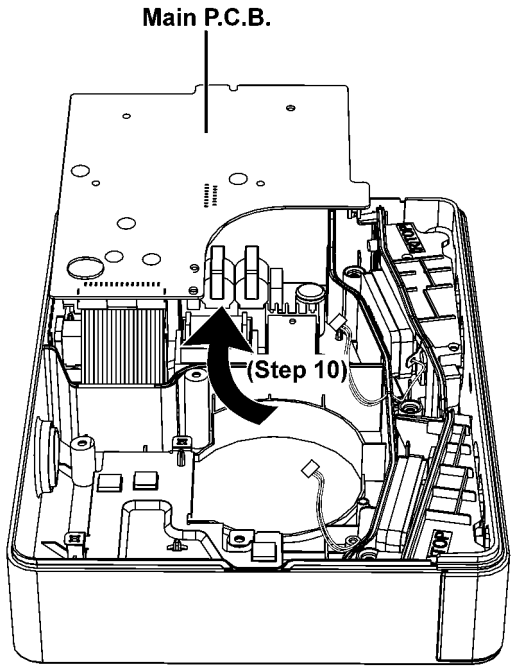
Step 9 : Slightly lift up the Main P.C.B..



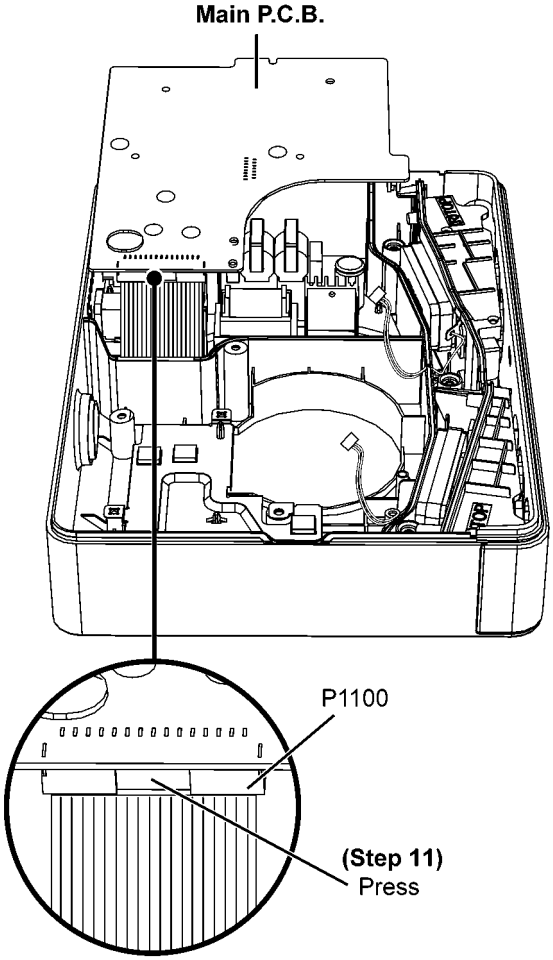
Caution : During assembling, ensure that the Main P.C.B. is seated properly onto the boss and locators of the Bottom Cabinet Block.



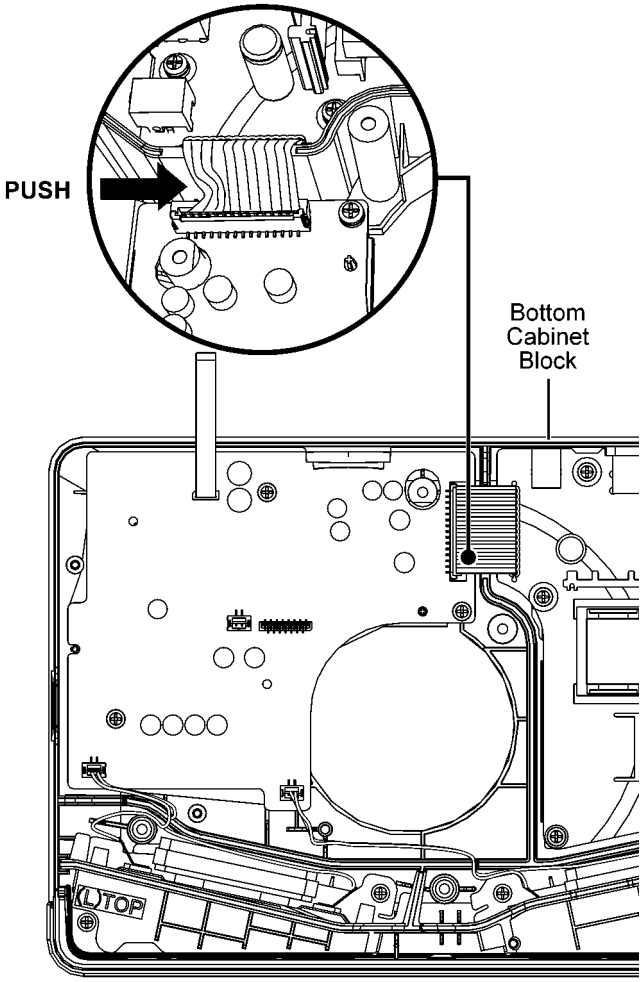
Step 10 : Upset the Main P.C.B..



Step 11 : Press to detach 15P Cable Wire at the connector (P1100) on the Main P.C.B..



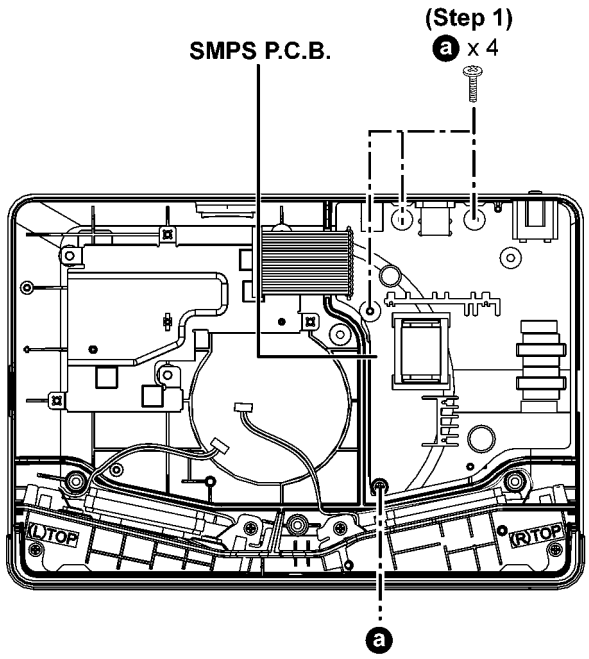
Caution : During assembling, ensure that 15P Cable Wire is push to the right side as shown.



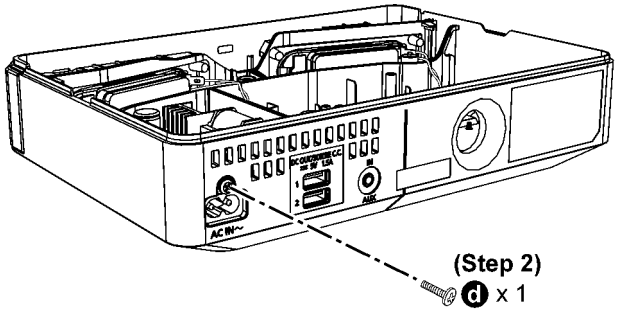
8.16. Disassembly of SMPS P.C.B.

- Refer to “Disassembly of Top Cabinet Block”
- Refer to “Disassembly of NFC P.C.B.”
- Refer to “Disassembly of Main P.C.B.”

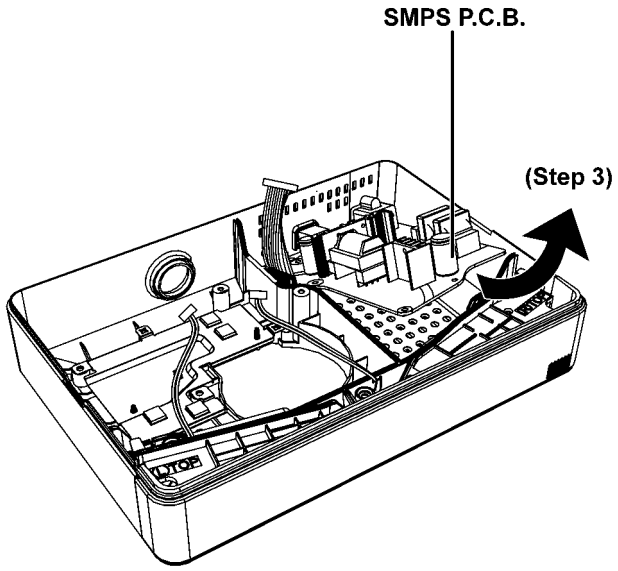
Step 1 : Remove 4 screws.



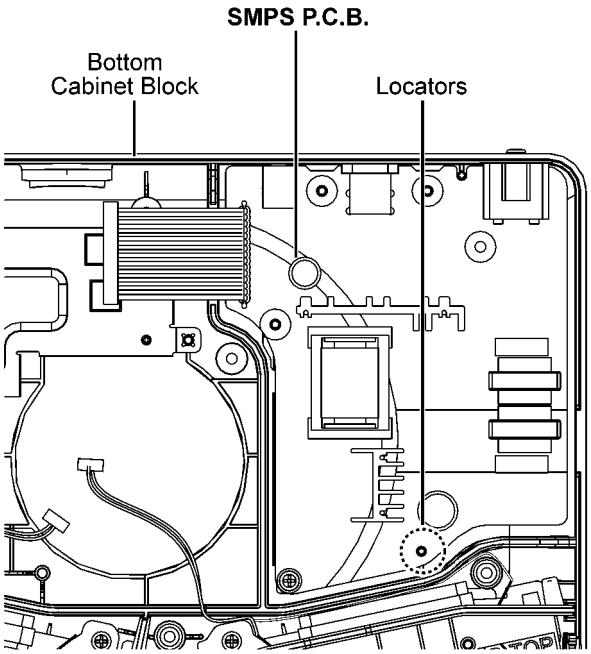
Step 2 : Remove 1 screw.



Step 3 : Lift up to remove the SMPS P.C.B..



Caution : During assembling, ensure that the SMPS P.C.B. is seated properly onto the locator of the Bottom Cabinet Block.

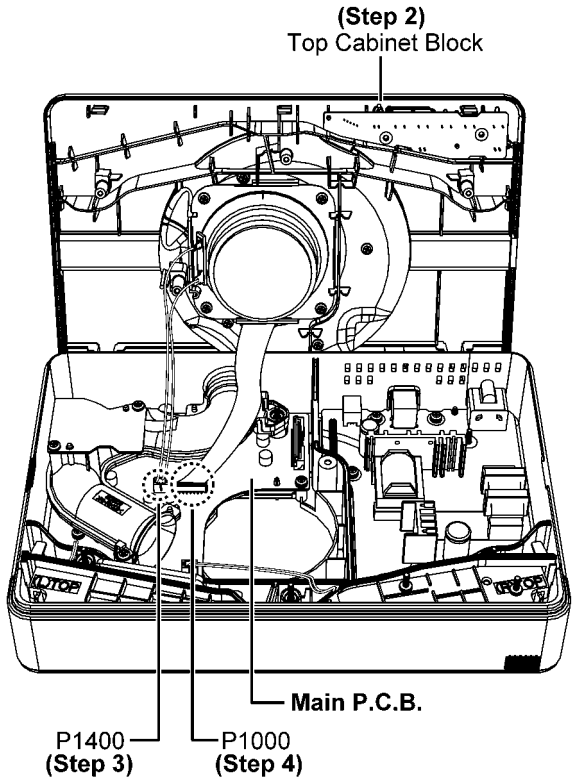


9 Service Position

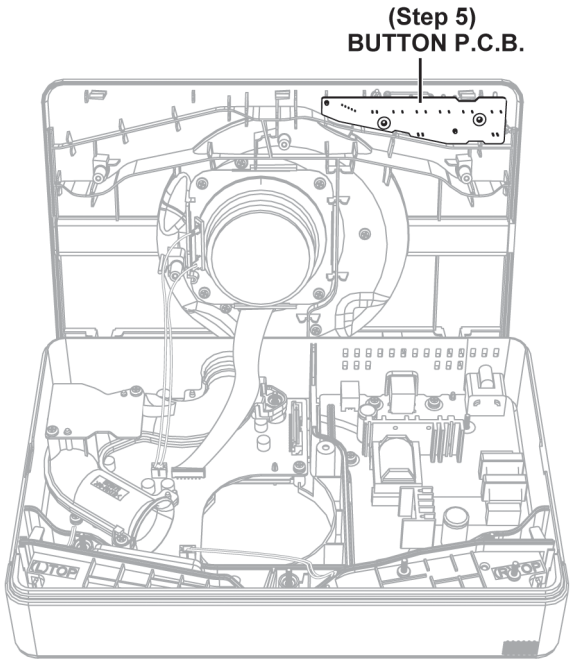
Note: For description of the disassembly procedures, see the Section 8

9.1. Checking of Button P.C.B.

Step 1 : Remove the Top Cabinet Block.
Step 2 : Place the Top Cabinet Block as shown.
Step 3 : Connect 2P Wire at the connector (P1400) on the Main P.C.B..
Step 4 : Connect 15P FFC at the connector (P1000) on the Main P.C.B..

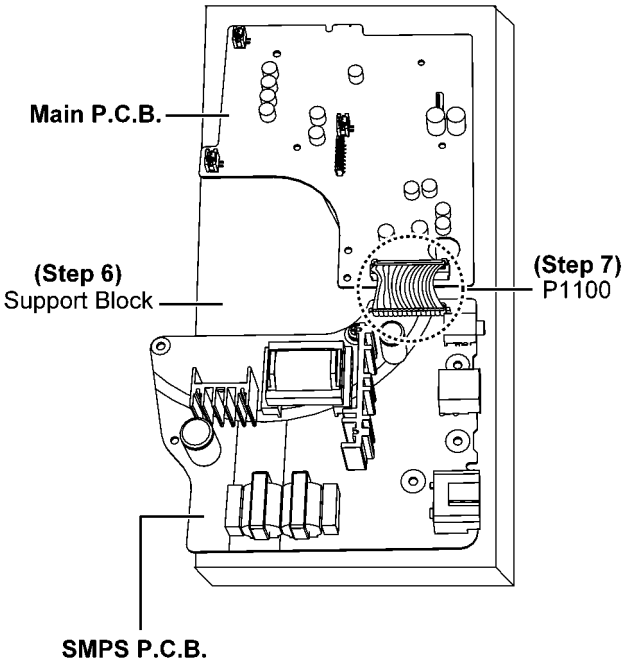


Step 5 : Button P.C.B. can be check as the diagram shown.

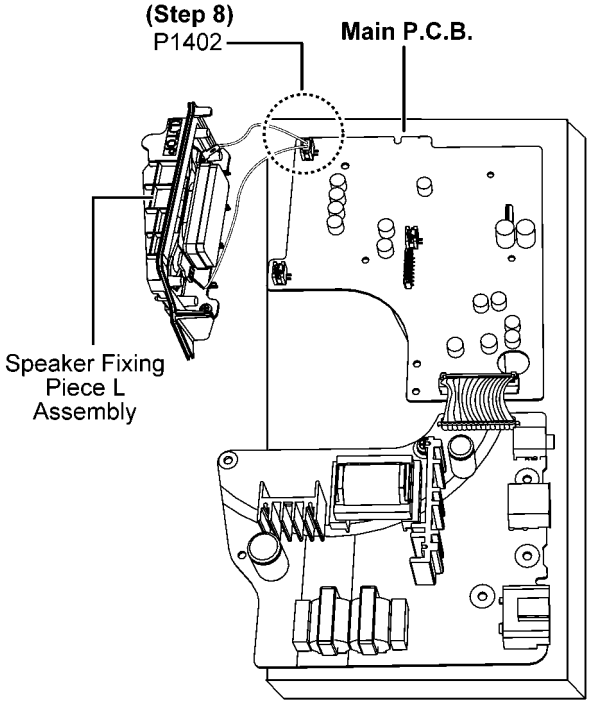


9.2. Checking of Main P.C.B. (Side B) and NFC P.C.B. (Side B)

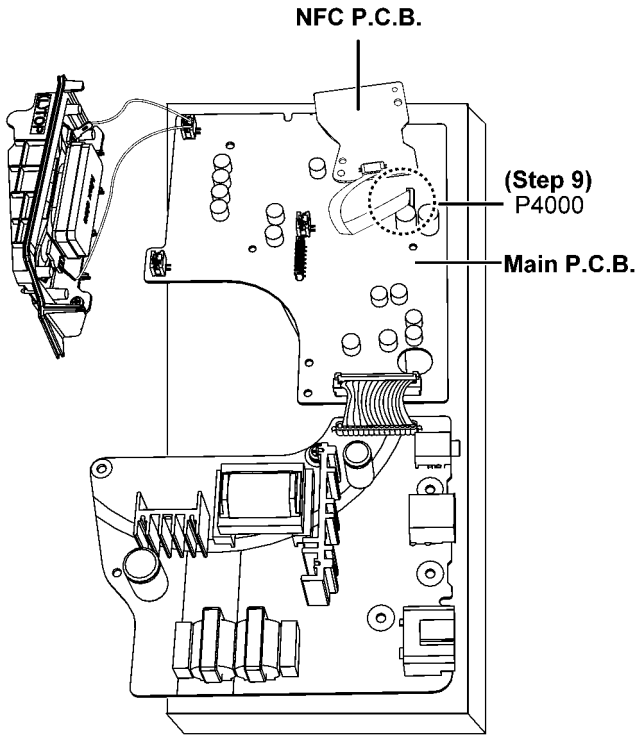
Step 1 : Remove the Top Cabinet Block.
Step 2 : Remove Speaker Fixing Piece L Assembly.
Step 3 : Remove NFC P.C.B..
Step 4 : Remove Main P.C.B..
Step 5 : Remove SMPS P.C.B..
Step 6 : Place the Main P.C.B. and SMPS P.C.B. on the Support Block.
Step 7 : Connect 15P Cable Wire at the connector (P1100) on the Main P.C.B..



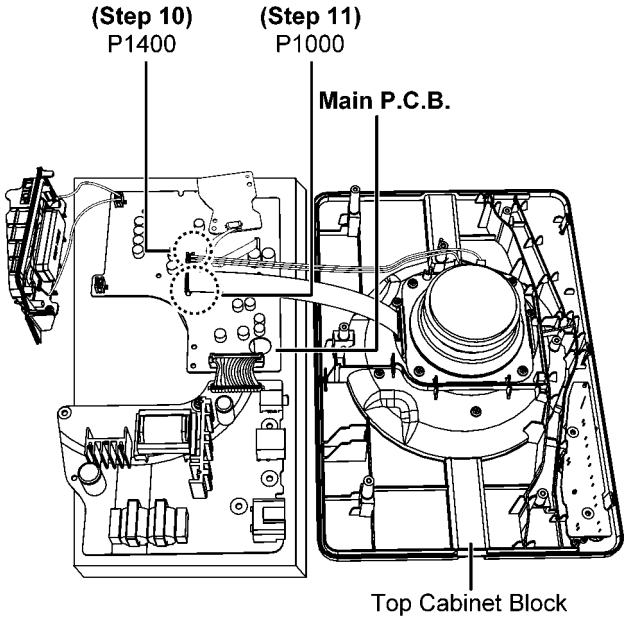
Step 8 : Connect 2P Wire at the connector (P1402) on the Main P.C.B..



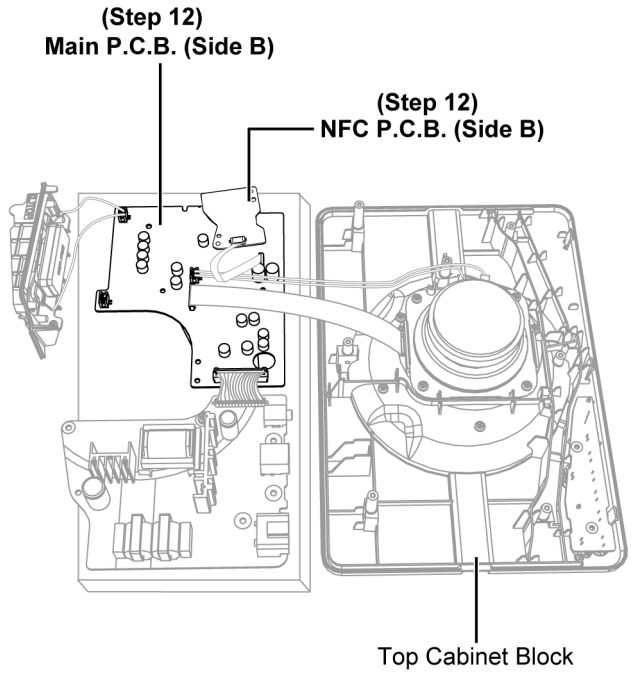
Step 9 : Connect 6P FFC at the connector (P4000) on the NFC P.C.B..



Step 10 : Connect 2P Wire at the connector (P1400) on the Main P.C.B..
Step 11 : Connect 15P FFC at the connector (P1000) on the Main P.C.B..



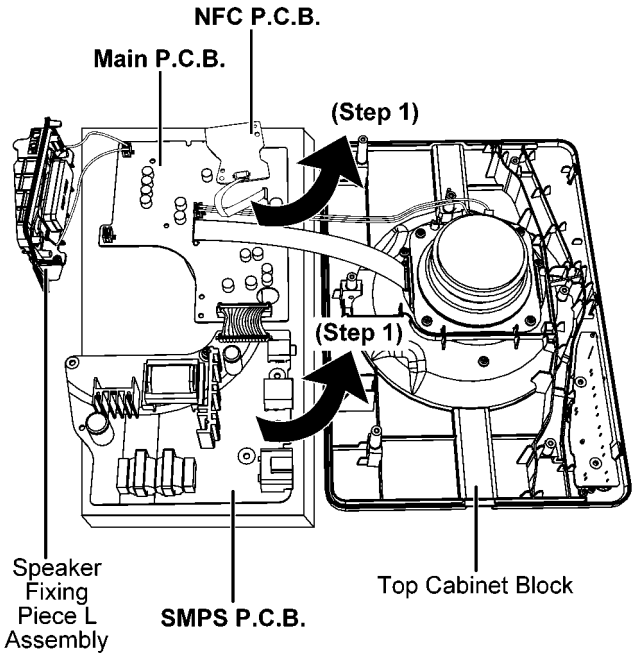
Step 12 : Main P.C.B. (Side B) and NFC P.C.B. (Side B) can be check as the diagram shown.



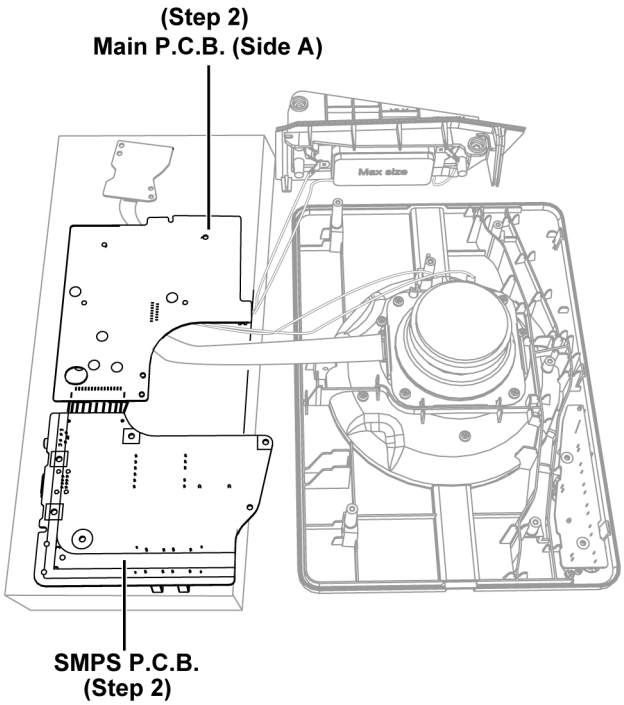
9.3. Checking of Main P.C.B. (Side A) and SMPS P.C.B.

- Refer to (Step 1) - (Step 11) of item 11.2.

Step 1 : Upset the Main P.C.B., SMPS P.C.B., Speaker Fixing Piece L Assembly and NFC P.C.B..



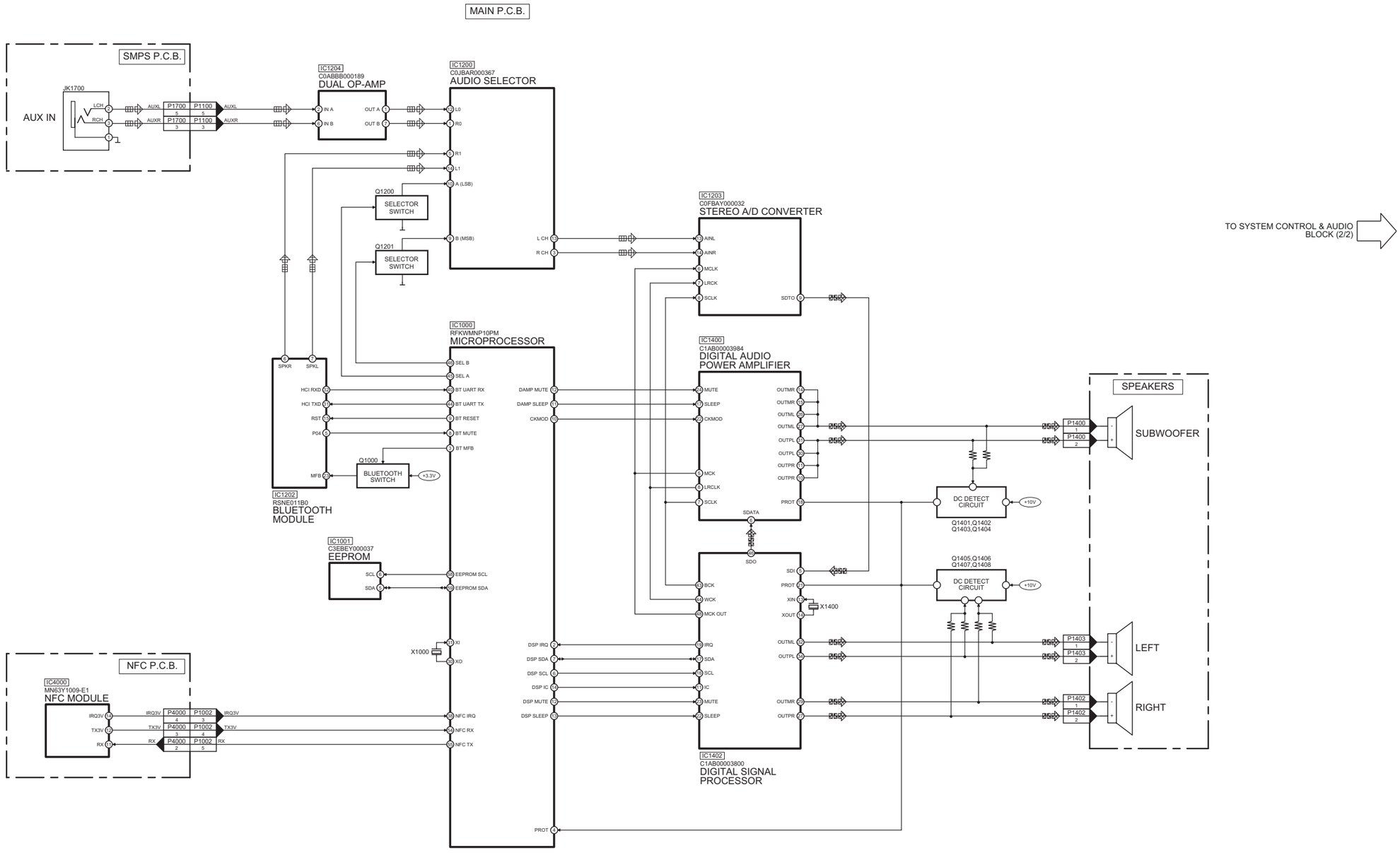
Step 2 : Main P.C.B. (Side A) and SMPS P.C.B. can be check as the diagram shown.



10 Block Diagram

10.1. SYSTEM CONTROL & AUDIO (1/2) BLOCK DIAGRAM

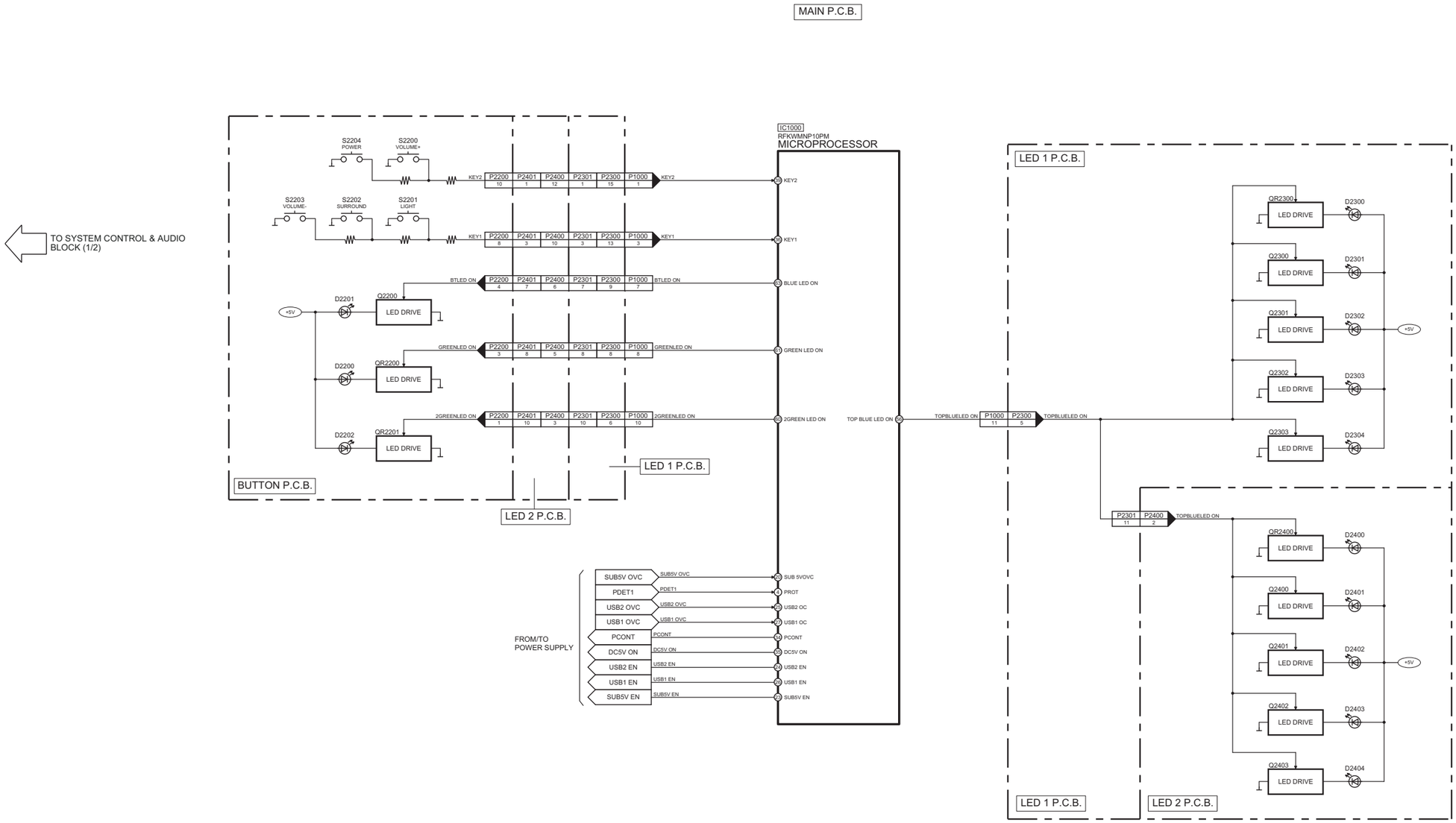
: AUX/BLUETOOTH AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



SC-NP10EE/GS/GSX/GT SYSTEM CONTROL & AUDIO (1/2) BLOCK DIAGRAM

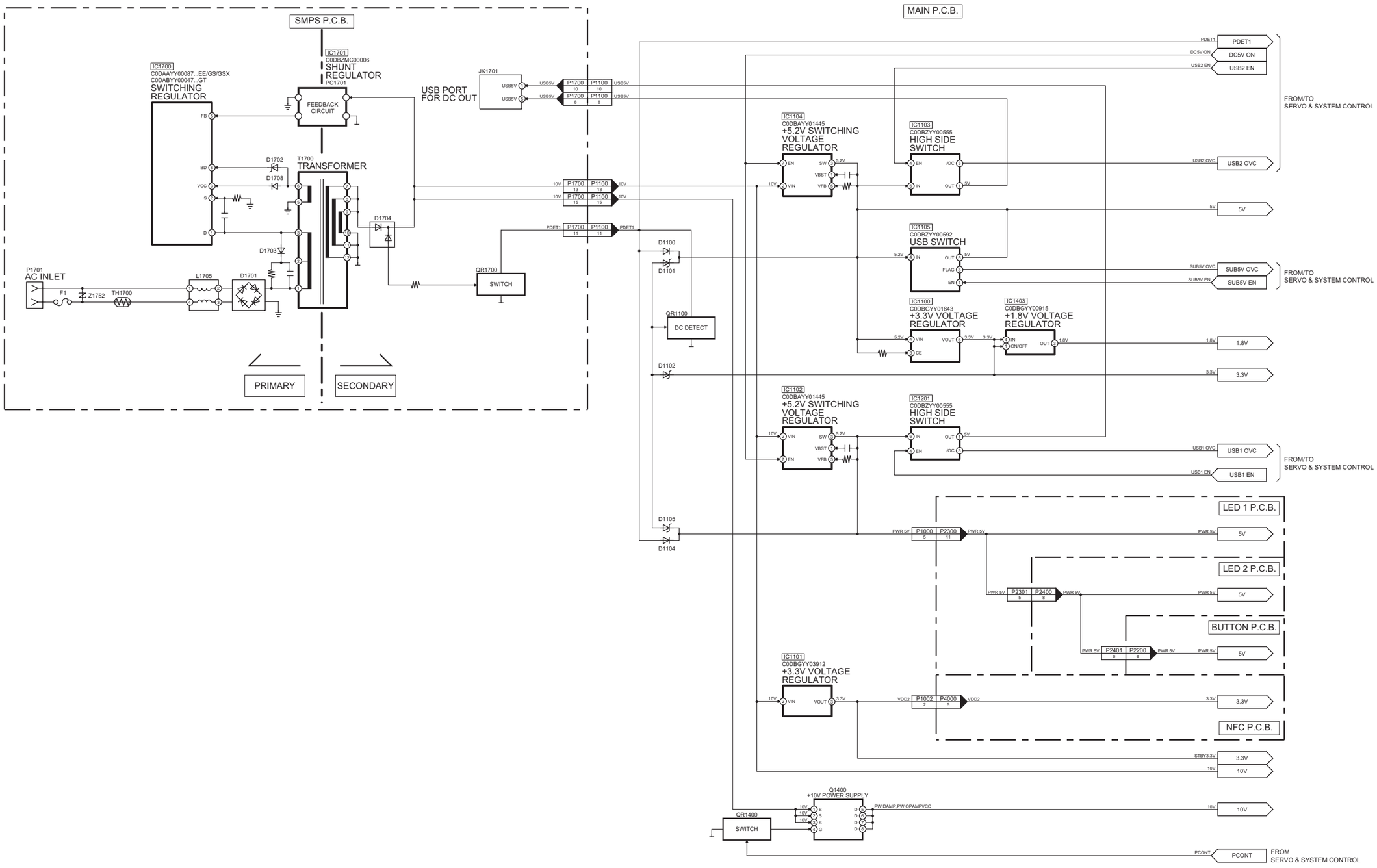
10.2. SYSTEM CONTROL & AUDIO (2/2) BLOCK DIAGRAM

: AUX/BLUETOOTH AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



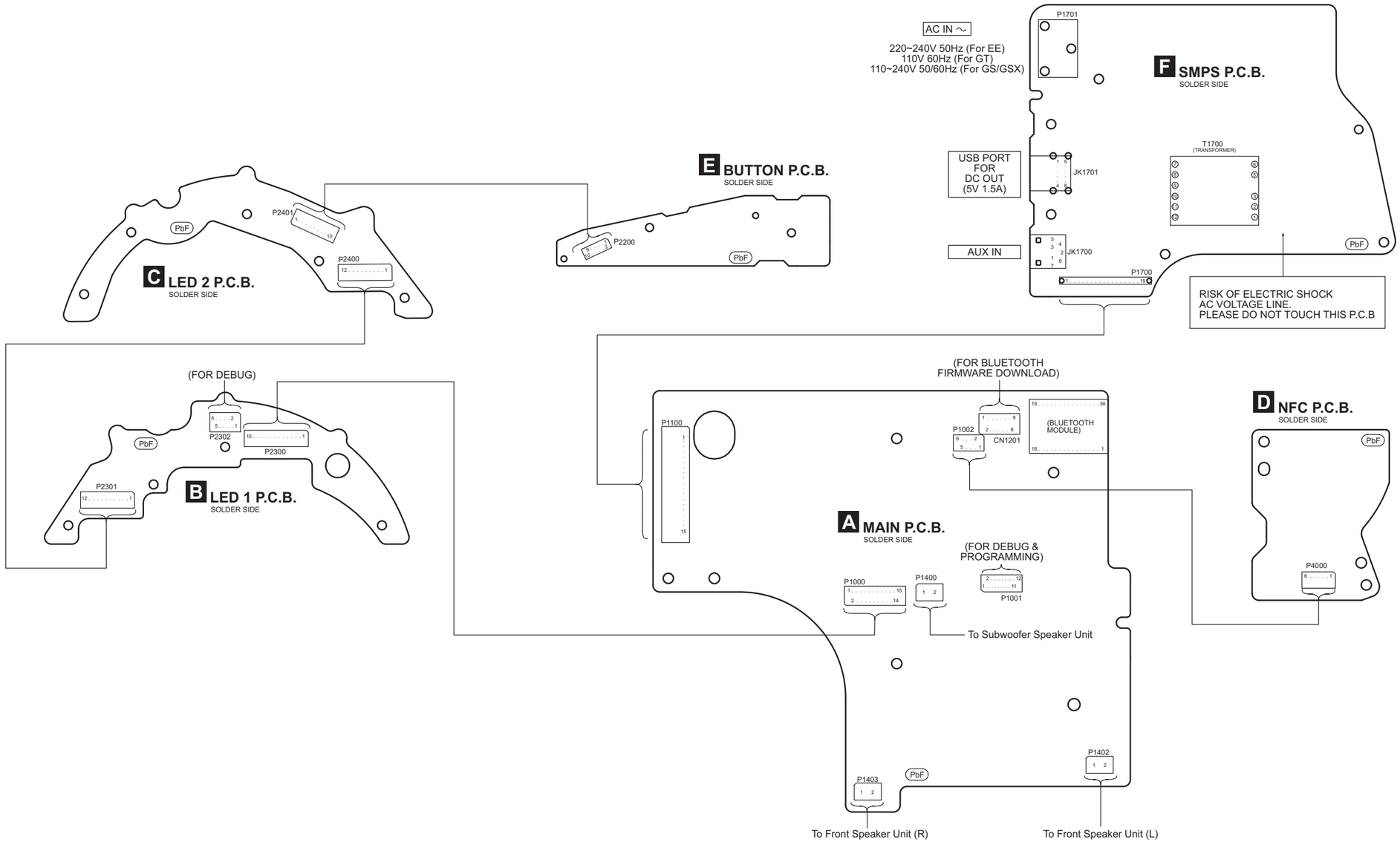
SC-NP10EE/GS/GSX/GT SYSTEM CONTROL & AUDIO (2/2) BLOCK DIAGRAM

10.3. POWER SUPPLY BLOCK DIAGRAM



SC-NP10EE/GS/GSX/GT POWER SUPPLY BLOCK DIAGRAM

11 Wiring Connection Diagram



Note : “ * ” REF IS FOR INDICATION ONLY.

SC-NP10EE/GS/GSX/GT
WIRING CONNECTION DIAGRAM

12 Schematic Diagram

12.1. Schematic Diagram Notes

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

Notes:

S2200:	VOL+ switch.
S2201:	LIGHT / PAIRING switch.
S2202:	D.SURROUND switch.
S2203:	VOL- switch.
S2204:	POWER switch (⏻/I).

- Important safety notice:

  Components identified by ⚠ 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.

- In case of AC rated voltage Capacitors, the part no. and values will be indicated in the Schematic Diagram.
  AC rated voltage capacitors:
  C1707, C1710, C1712, C1716, C1725

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

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

- **Coil**
  Unit of inductance is H, unless otherwise noted.

- *****
  REF IS FOR INDICATION ONLY.

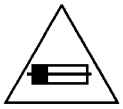
- Voltage and signal line

  : +B Signal Line

  : AUX Audio Input Signal Line

  : Audio Output Signal Line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 T2A, 250V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

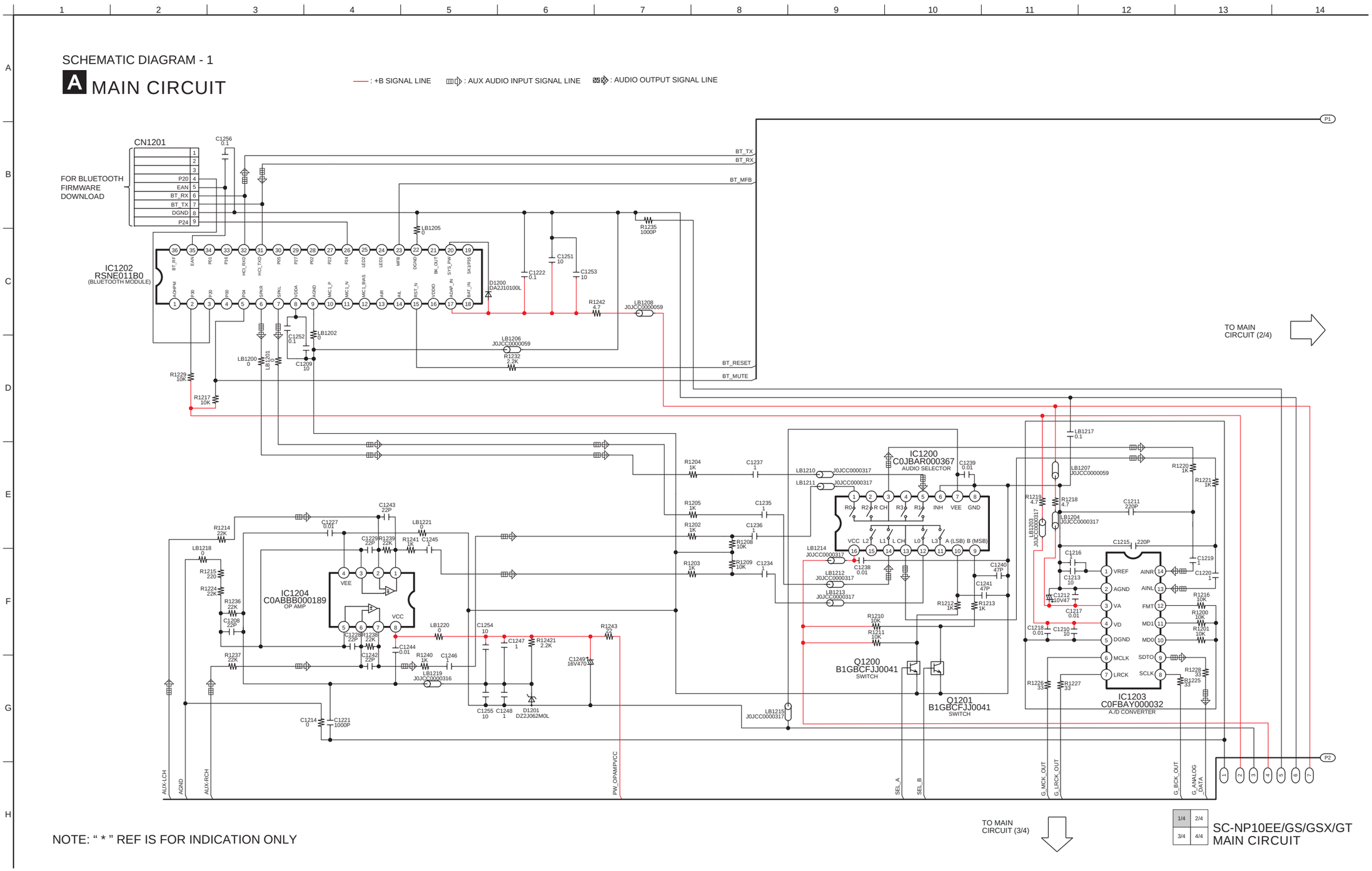
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

12.2. MAIN CIRCUIT (1/4)

SCHEMATIC DIAGRAM - 1

A MAIN CIRCUIT

—— : +B SIGNAL LINE : AUX AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



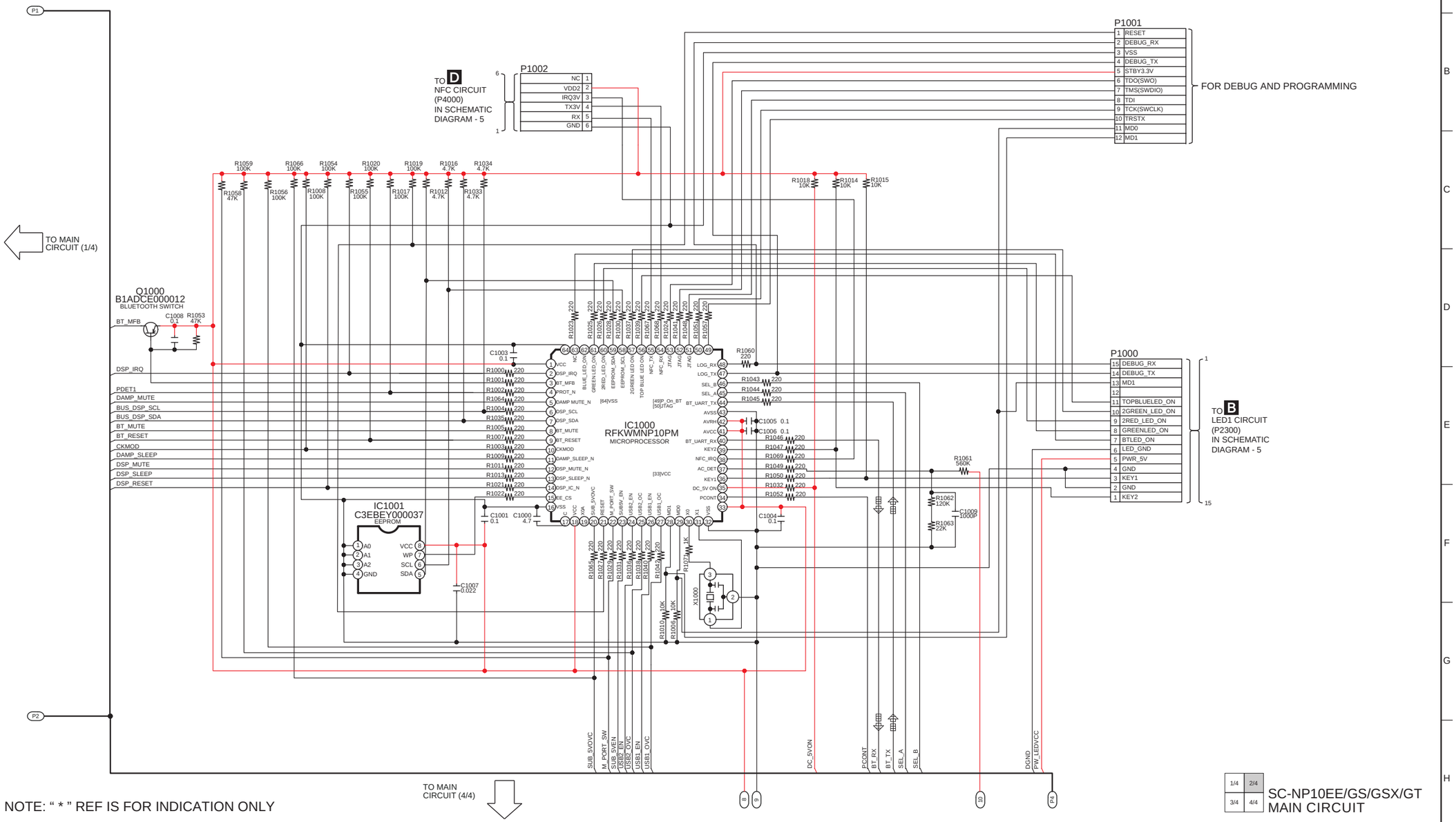
NOTE: " * " REF IS FOR INDICATION ONLY

12.3. MAIN CIRCUIT (2/4)

SCHEMATIC DIAGRAM - 2

A MAIN CIRCUIT

—— : +B SIGNAL LINE : AUX AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE

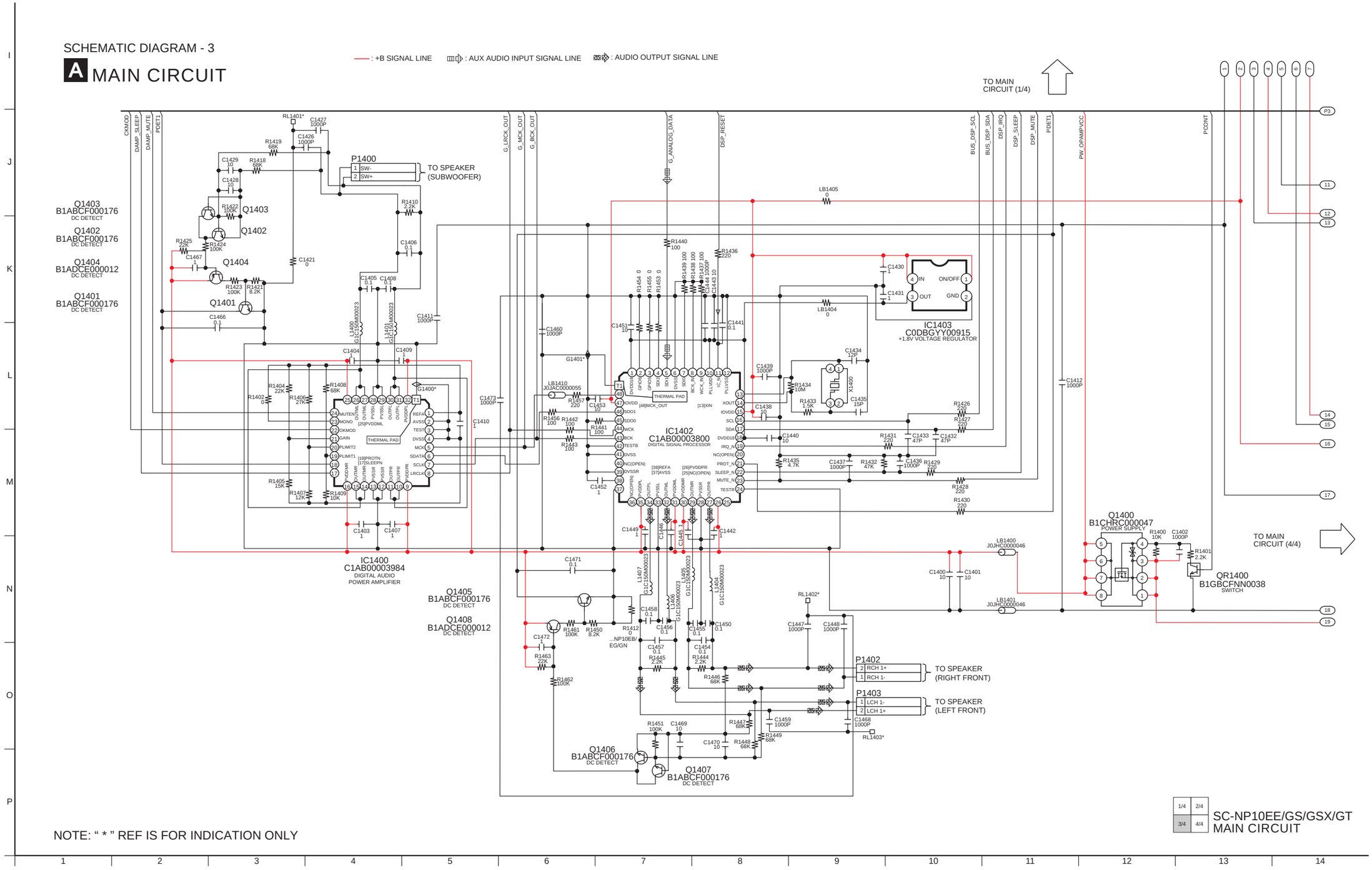


NOTE: " * " REF IS FOR INDICATION ONLY

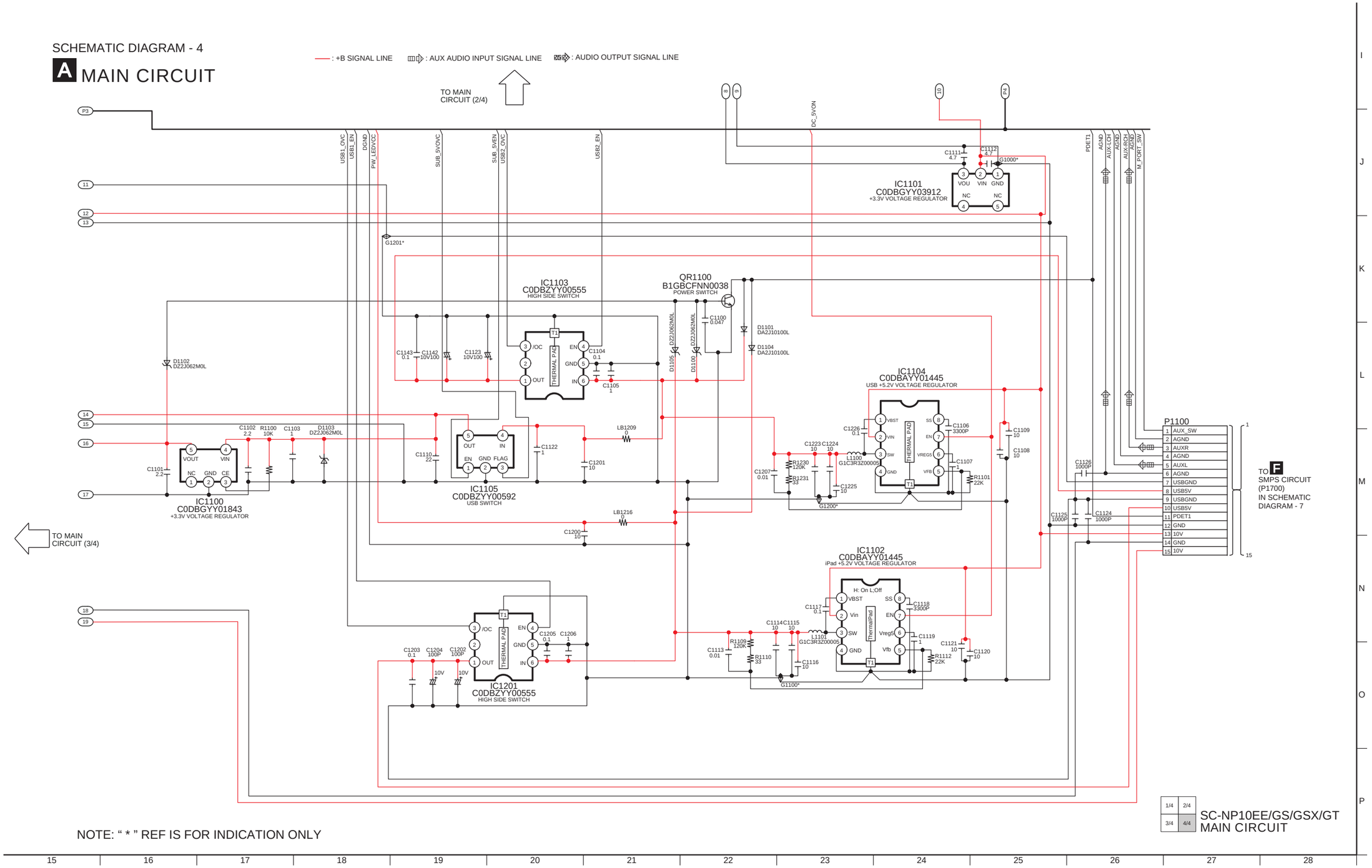
1/4	2/4
3/4	4/4

SC-NP10EE/GS/GSX/GT
MAIN CIRCUIT

12.4. MAIN CIRCUIT (3/4)



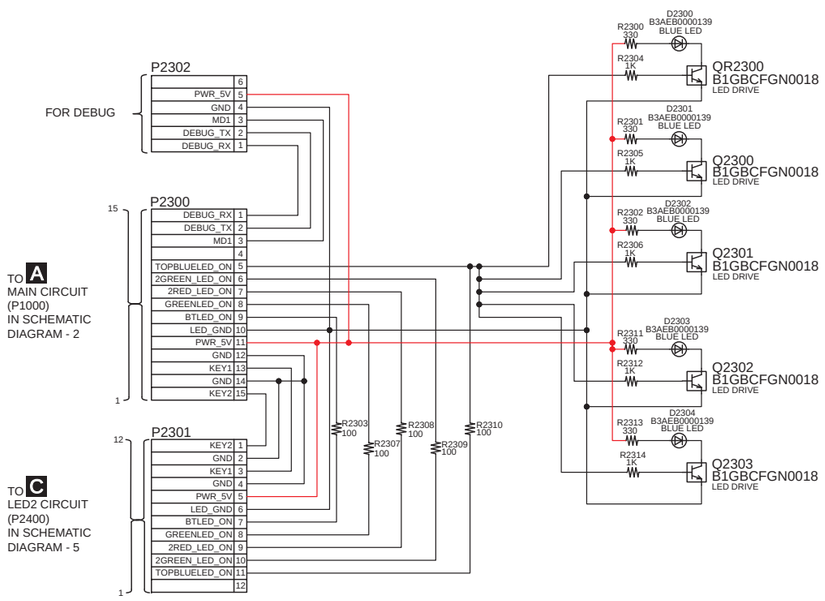
12.5. MAIN CIRCUIT (4/4)



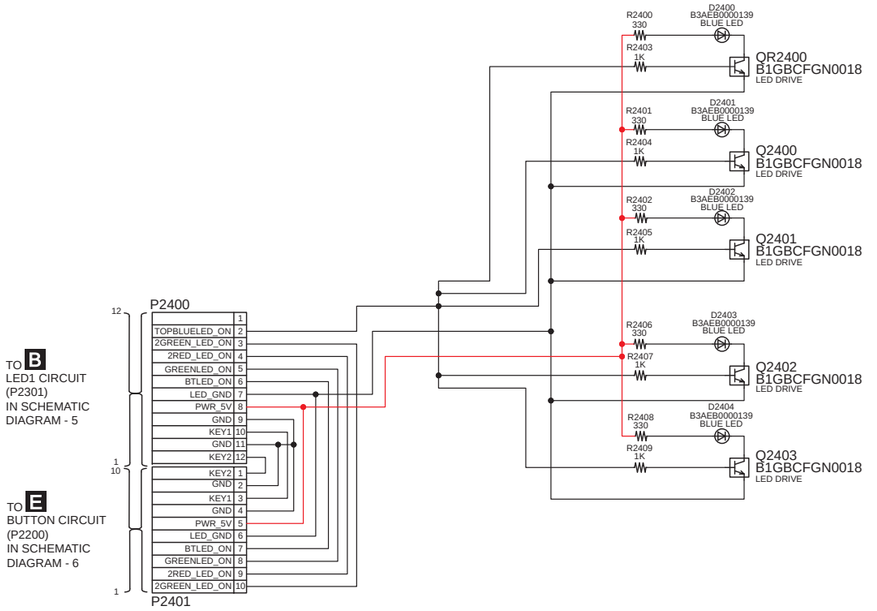
12.6. LED 1, LED 2 & NFC CIRCUIT

SCHEMATIC DIAGRAM - 5

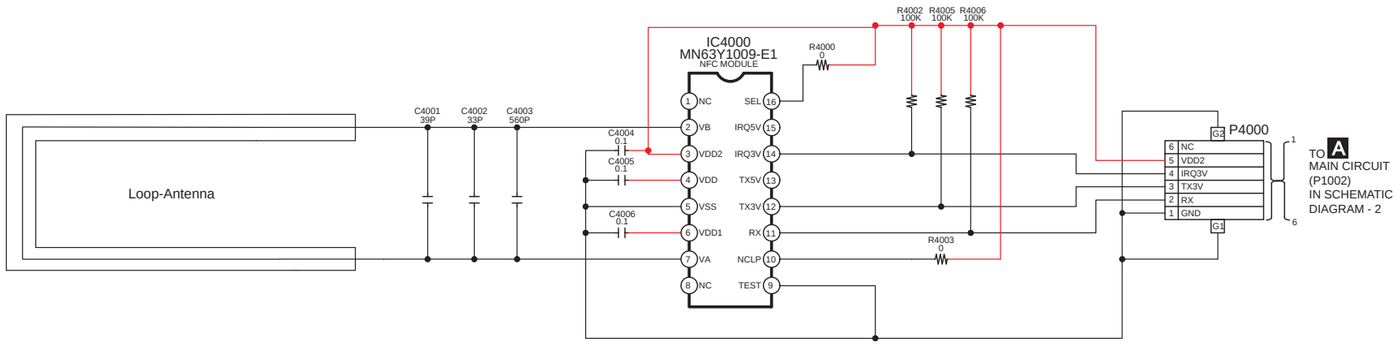
B LED 1 CIRCUIT



C LED 2 CIRCUIT



D NFC CIRCUIT



NOTE: " * " REF IS FOR INDICATION ONLY

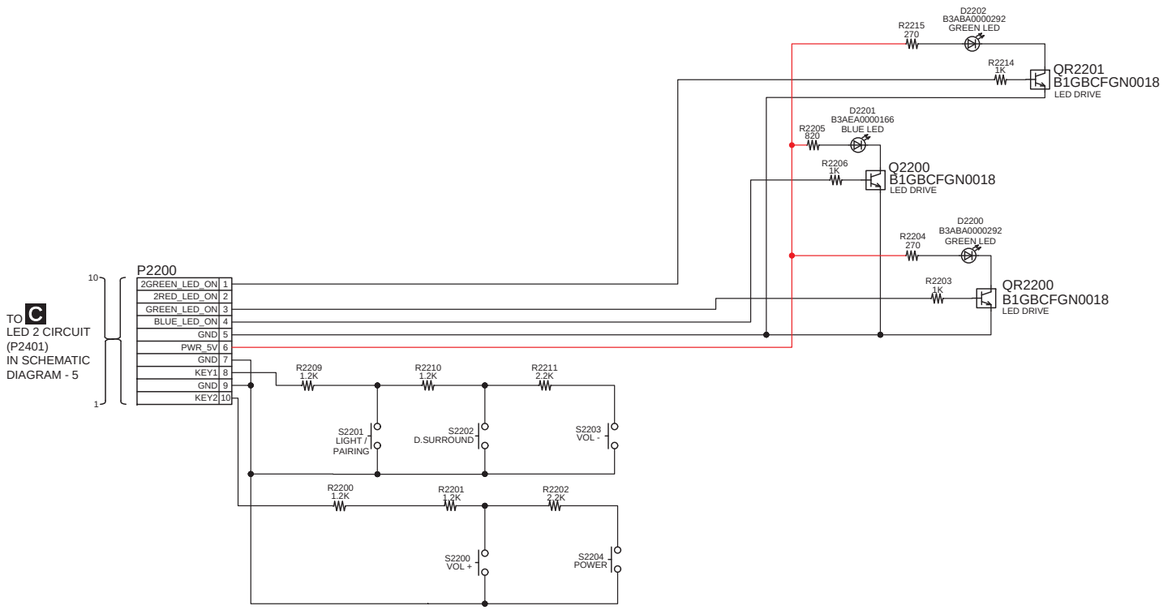
SC-NP10EE/GS/GSX/GT
LED 1 / LED 2 / NFC CIRCUIT

12.7. BUTTON CIRCUIT

SCHEMATIC DIAGRAM - 6

E BUTTON CIRCUIT

: +B SIGNAL LINE



NOTE: “ * ” REF IS FOR INDICATION ONLY

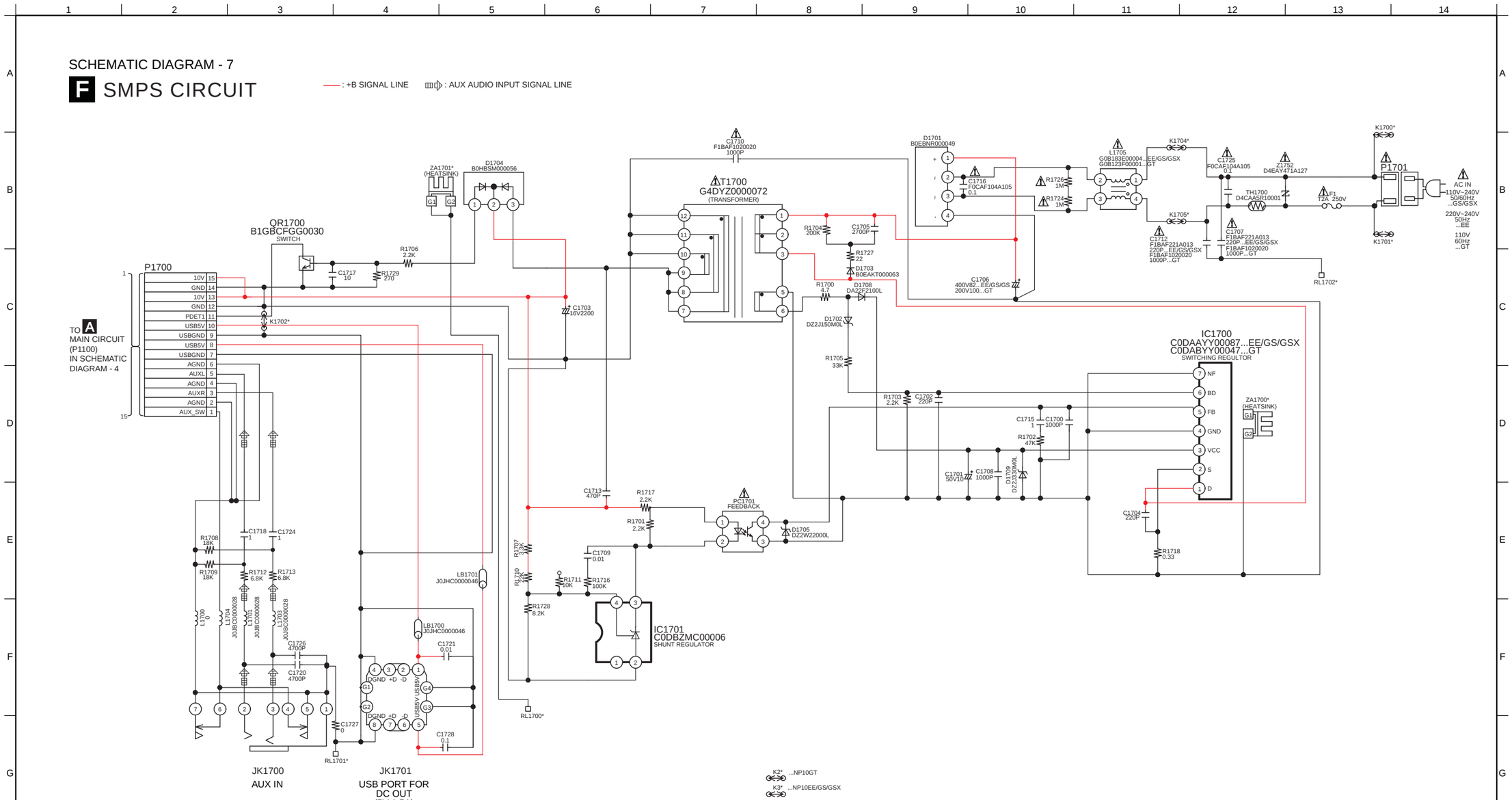
SC-NP10EE/GS/GSX/GT
BUTTON CIRCUIT

12.8. SMPS CIRCUIT

SCHEMATIC DIAGRAM - 7

F SMPS CIRCUIT

—— : +B SIGNAL LINE ⇨ : AUX AUDIO INPUT SIGNAL LINE



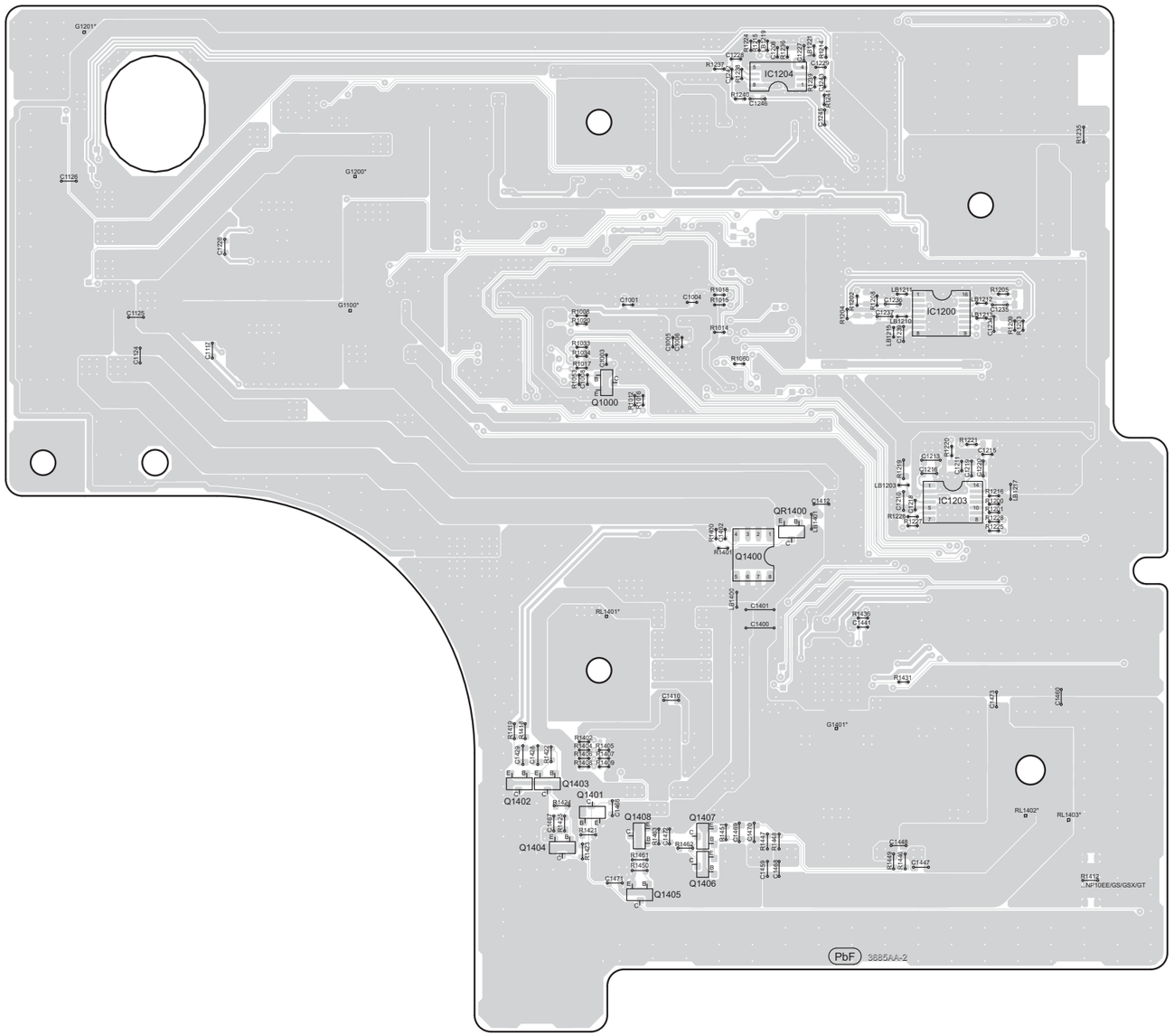
NOTE: " * " REF IS FOR INDICATION ONLY

SC-NP10EE/GS/GSX/GT
SMPS CIRCUIT

13 Printed Circuit Board

13.1. MAIN P.C.B. (Side A)

A MAIN P.C.B. (REP4974BA)



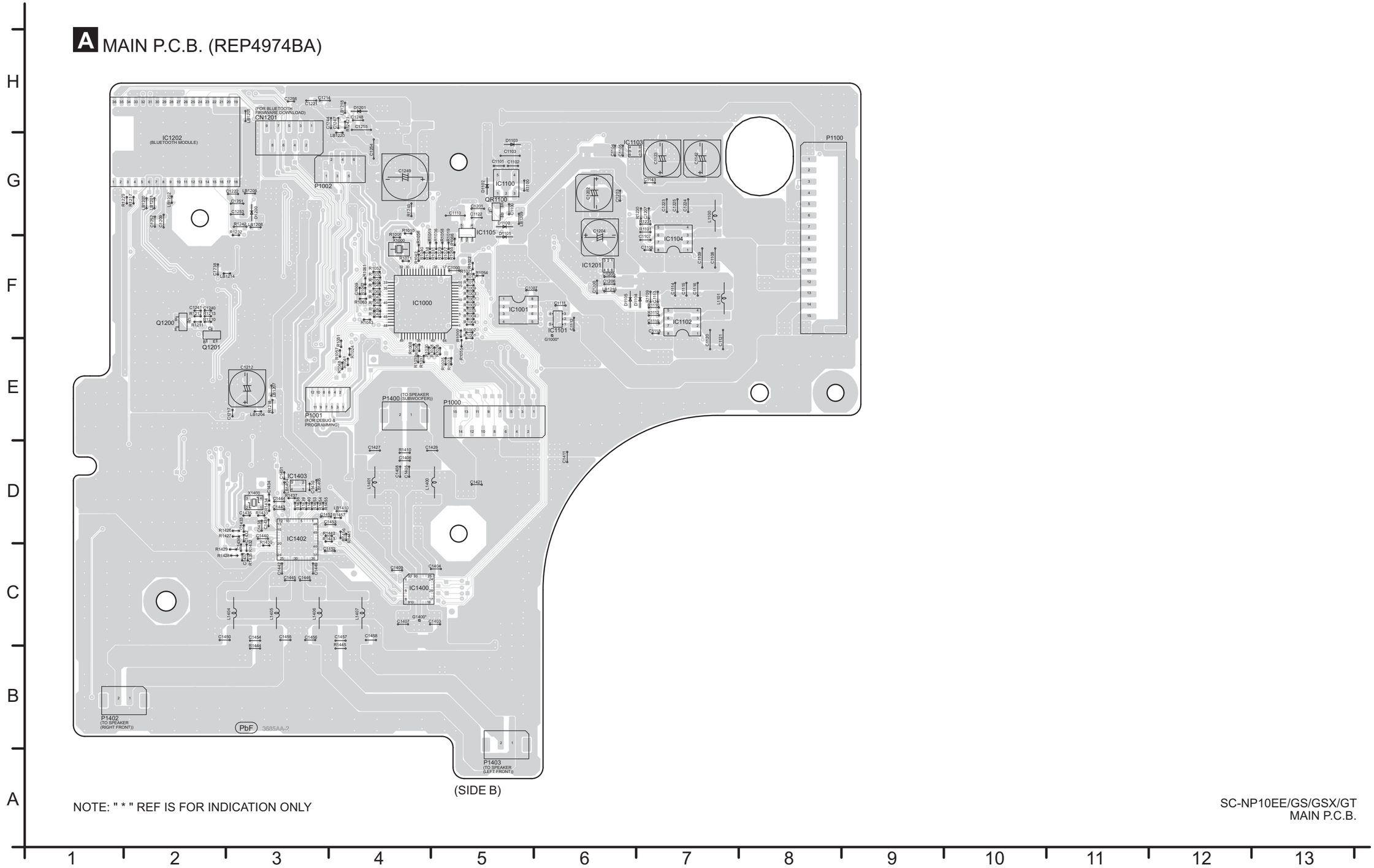
(SIDE A)

NOTE: " * " REF IS FOR INDICATION ONLY

SC-NP10EE/GS/GSX/GT
MAIN P.C.B.

13.2. MAIN P.C.B. (Side B)

A MAIN P.C.B. (REP4974BA)



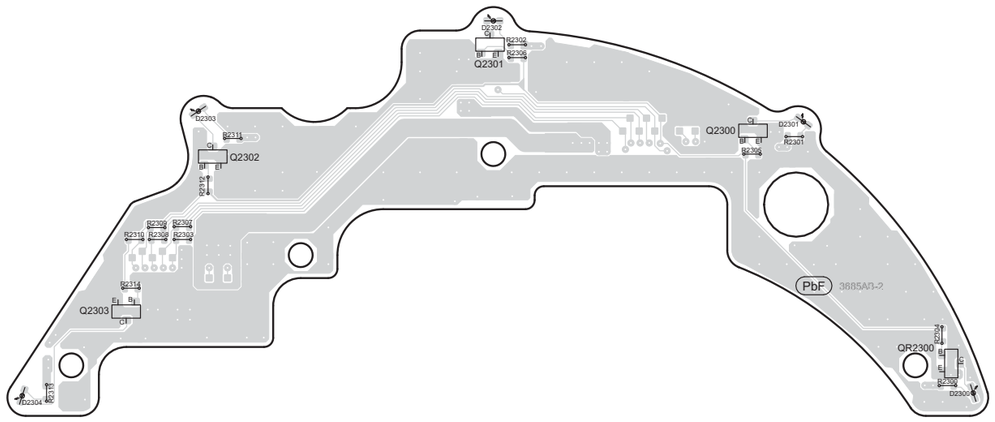
(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY

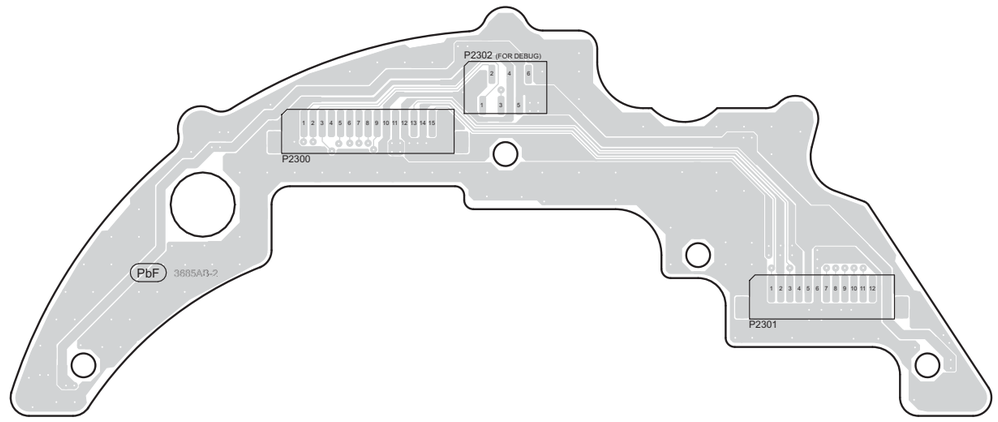
SC-NP10EE/GS/GSX/GT
MAIN P.C.B.

13.3. LED 1 & LED 2 P.C.B.

B LED 1 P.C.B. (REP4974BB)

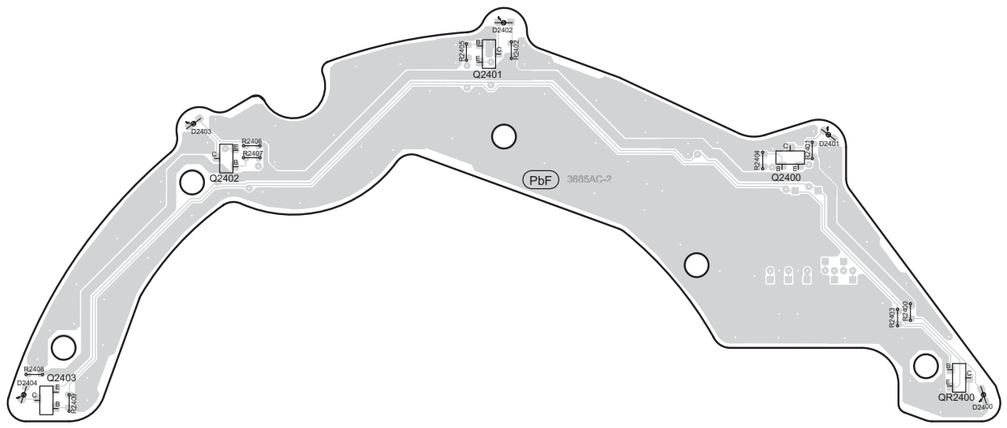


(SIDE A)

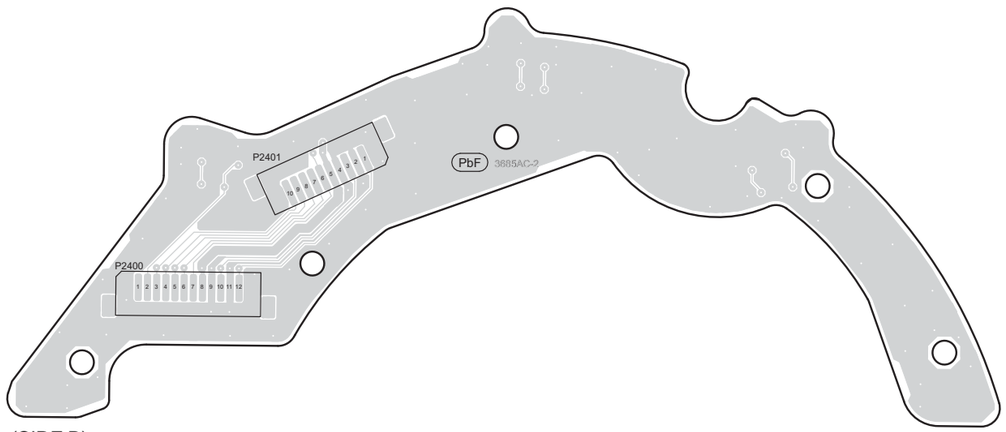


(SIDE B)

C LED 2 P.C.B. (REP4974BC)



(SIDE A)

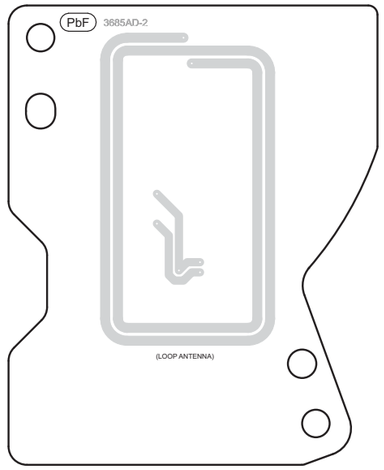


(SIDE B)

SC-NP10EE/GS/GSX/GT
LED 1 / LED 2 P.C.B.

13.4. NFC, BUTTON & SMPS P.C.B.

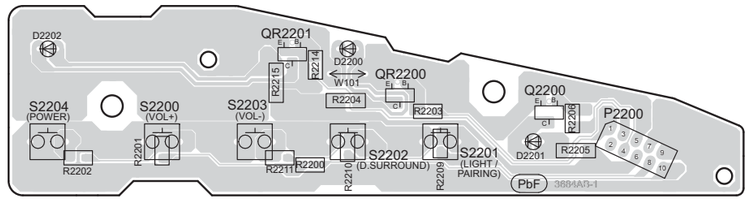
D NFC P.C.B. (REP4974BD)



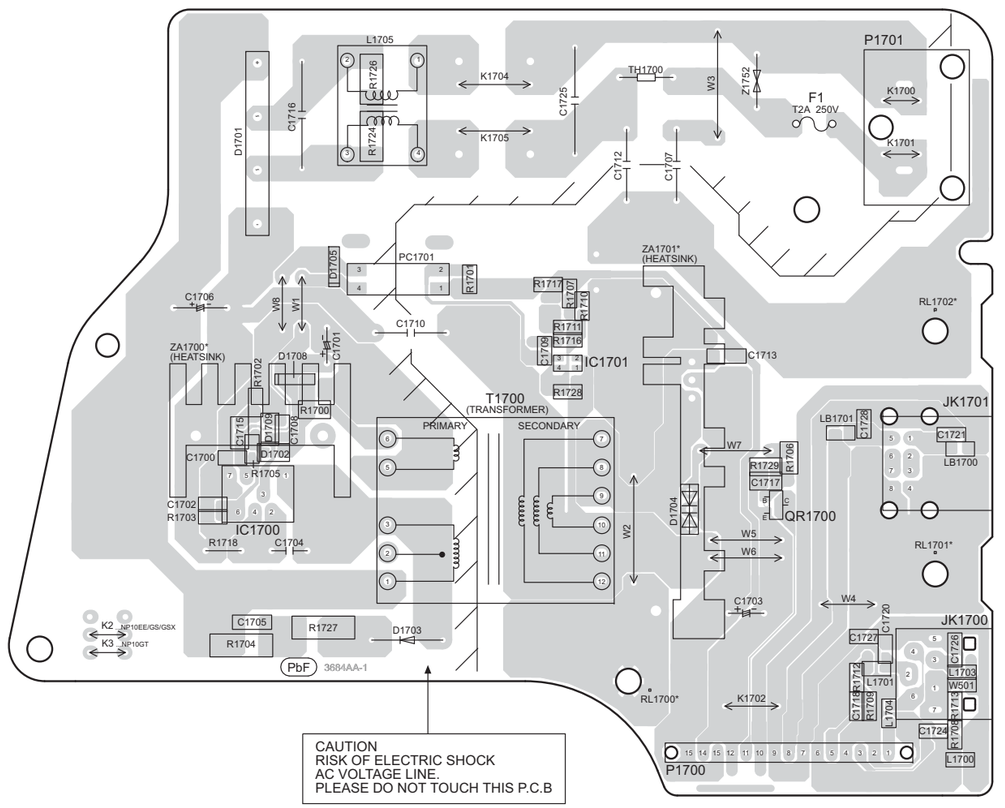
(SIDE A)

(SIDE B)

E BUTTON P.C.B. (REP4973CB)...EE/GS/GSX
(REP4973BB)...GT



F SMPS P.C.B. (REP4973CA)...EE/GS/GSX
(REP4973BA)...GT



NOTE: " * " REF IS FOR INDICATION ONLY

SC-NP10EE/GS/GSX/GT
NFC / BUTTON / SMPS P.C.B.

14 Appendix Information of Schematic Diagram

14.1. 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.

14.1.1. MAIN P.C.B. (1/2)

REF NO.	IC1100																			
MODE	1	2	3	4	5															
MUSIC PLAY	0	0	5.0	5.0	3.3															
STANDBY	0	0	5.0	5.0	3.3															

REF NO.	IC1101																			
MODE	1	2	3	4	5															
MUSIC PLAY	0	10.1	3.3	0	0															
STANDBY	0	10.1	3.3	0	0															

REF NO.	IC1102																			
MODE	1	2	3	4	5	6	7	8												
MUSIC PLAY	10.4	10.1	5.0	0	0.8	5.5	3.3	5.5												
STANDBY	10.4	10.1	5.0	0	0.8	5.5	3.3	5.5												

REF NO.	IC1103																			
MODE	1	2	3	4	5	6														
MUSIC PLAY	5.0	0	0	3.3	0	5.0														
STANDBY	5.0	0	0	3.3	0	5.0														

REF NO.	IC1104																			
MODE	1	2	3	4	5	6	7	8												
MUSIC PLAY	10.4	10.1	5.0	0	0.8	5.5	3.3	5.5												
STANDBY	10.4	10.1	5.0	0	0.8	5.5	3.3	5.5												

REF NO.	IC1200																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
MUSIC PLAY	2.5	0	1.6	0	5.0	0	0	0	10.1	10.1	0	2.5	1.6	5.0	0	10.1				
STANDBY	2.5	0	1.6	0	5.0	0	0	0	10.1	10.1	0	2.5	1.6	5.0	0	10.1				

REF NO.	IC1201																			
MODE	1	2	3	4	5	6														
MUSIC PLAY	5.0	0	0	3.3	0	5.0														
STANDBY	5.0	0	0	3.3	0	5.0														

REF NO.	IC1203																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
MUSIC PLAY	0	0	3.3	3.3	0	3.3	3.3	3.3	0	0.8	0.8	1.0	1.6	1.6						
STANDBY	0	0	3.3	3.3	0	3.3	3.3	3.3	0	0.8	0.8	1.0	1.6	1.6						

REF NO.	IC1204																			
MODE	1	2	3	4	5	6	7	8												
MUSIC PLAY	2.5	0	2.5	0	2.5	0	2.5	10.1												
STANDBY	2.5	0	2.5	0	2.5	0	2.5	10.1												

REF NO.	IC1400																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
MUSIC PLAY	0	0	0	0	1.6	0.6	1.6	1.6	10.1	1.6	1.6	0	0	1.6	1.6	10.1	3.3	3.3	0.4	1.0
STANDBY	0	0	0	0	1.6	0.6	1.6	1.6	10.1	1.6	1.6	0	0	1.6	1.6	10.1	3.3	3.3	0.4	1.0

SC-NP10EE/GS/GSX/GT MAIN P.C.B.

14.1.2. MAIN P.C.B. (2/2)

REF NO.	IC1400																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
MUSIC PLAY	1.4	3.3	3.3	3.3	10.1	1.6	1.6	0	0	1.6	1.6	10.1								
STANDBY	1.4	3.3	3.3	3.3	10.1	1.6	1.6	0	0	1.6	1.6	10.1								

REF NO.	IC1403																			
MODE	1	2	3	4																
MUSIC PLAY	3.3	0	1.8	3.3																
STANDBY	3.3	0	1.8	3.3																

REF NO.	Q1000				Q1400									Q1401				Q1402		
MODE	E	C	B		1	2	3	4	5	6	7	8		E	C	B		E	C	B
MUSIC PLAY	3.3	0	3.3		10.1	10.1	10.1	0	10.1	10.1	10.1	10.1		0	1.6	0		0	10.1	1.6
STANDBY	3.3	0	3.3		10.1	10.1	10.1	0	10.1	10.1	10.1	10.1		0	1.6	0		0	10.1	1.6

REF NO.	Q1403				Q1404				Q1405				Q1406				Q1407			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
MUSIC PLAY	0	10.1	1.6		10.1	0	10.1		0	3.3	0.8		8.9	10.1	8.9		8.9	10.1	8.9	
STANDBY	0	10.1	1.6		10.1	0	10.1		0	3.3	0.8		8.9	10.1	8.9		8.9	10.1	8.9	

REF NO.	Q1408				QR1100															
MODE	E	C	B		E	C	B													
MUSIC PLAY	10.1	0.8	10.1		0	3.3	5.0													
STANDBY	10.1	0.8	10.1		0	3.3	5.0													

SC-NP10EE/GS/GSX/GT MAIN P.C.B.

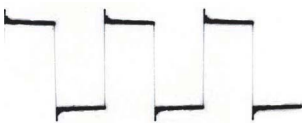
14.1.3. SMPS P.C.B.

REF NO.	IC1700																			
MODE	1	2	3	4	5	6	7													
POWER ON	0	12.5	3.3	0	12.0	3.3	0													
STANDBY	0	12.5	3.3	0	12.0	3.3	0													

REF NO.	IC1701																			
MODE	1	2	3	4																
POWER ON	0	0	12.0	2.5																
STANDBY	0	0	12.0	2.5																

SC-NP10EE/GS/GSX/GT SMPS P.C.B.

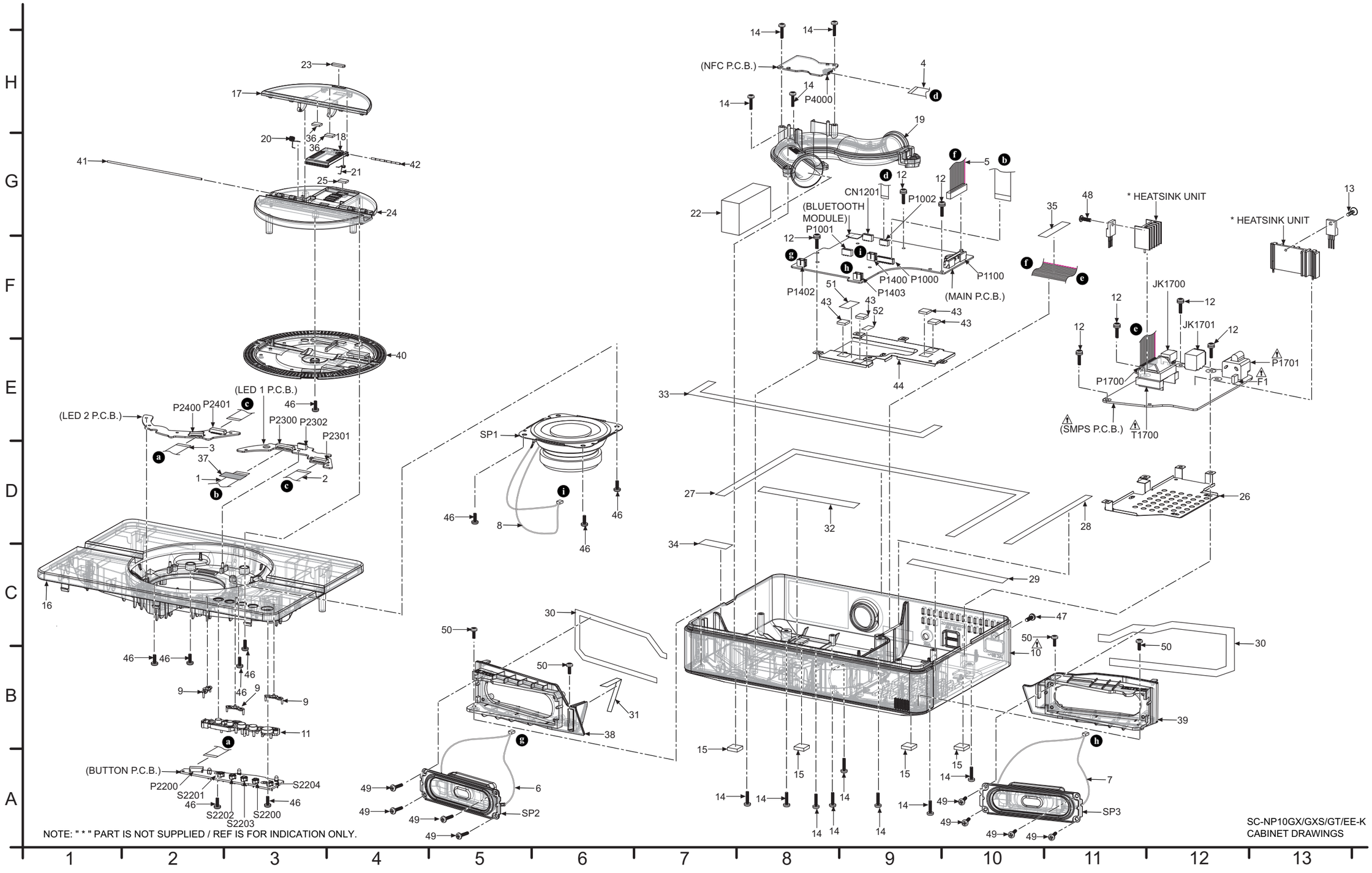
14.1.4. Waveform Chart

WF No. IC1000-30 (PLAY)  1.4Vp-p(10usec/div)	WF No. IC1000-31 (PLAY)  2.2Vp-p(10usec/div)	WF No. IC1200-1,12 (PLAY)  2.4Vp-p(50nsec/div)	WF No. IC1200-3,13 (PLAY)  2Vp-p(50nsec/div)
WF No. IC1200-5,14 (PLAY)  4.8Vp-p(50nsec/div)	WF No. IC1402-13 (PLAY)  1Vp-p(10usec/div)	WF No. IC1402-14 (PLAY)  1.8Vp-p(10usec/div)	WF No. IC1402-27,29,32,34 (PLAY)  8Vp-p(1usec/div)

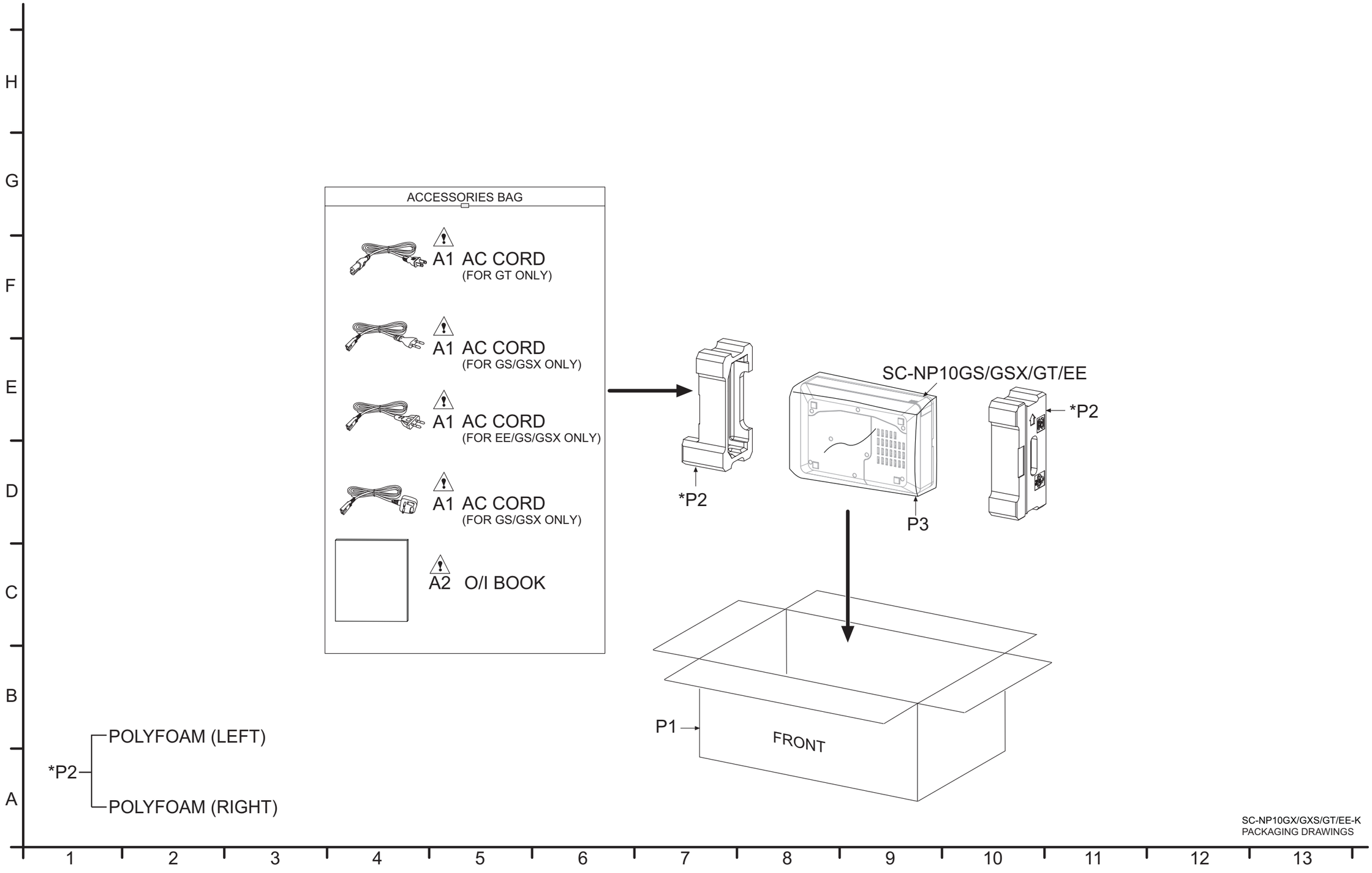
15 Exploded View and Replacement Parts List

15.1. Exploded View and Mechanical replacement Parts List

15.1.1. Cabinet Parts Location



15.1.2. Packaging



15.1.3. Mechanical Replacement Parts List

Important Safety Notice

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

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.
- This product uses a laser diode. Refer to "Precaution of Laser Diode".
- 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	REE1800	15P FFC (MAIN - LED 1)	1	
	2	REE1801	12P FFC (LED 1 - LED 2)	1	
	3	REE1802	10P FFC (BUTTON - LED 2)	1	
	4	REE1818	6P FFC (MAIN - NFC)	1	
	5	REX1611-1	15P CABLE WIRE (SMPS - MAIN)	1	
	6	REX1612	2P WIRE (SP L WIRE)	1	
	7	REX1613	2P WIRE (SP R WIRE)	1	
	8	REX1614	2P WIRE (SUB WOOFER)	1	
	9	RGL0791-Q	LED LIGHTING PIECE	3	
⚠	10	RFKHCNP10GSK	BOTTOM CABINET ASS'Y	1	GS/GSX
⚠	10	RFKHCNP10GTK	BOTTOM CABINET ASS'Y	1	GT
⚠	10	RFKHCNP10EEK	BOTTOM CABINET ASS'Y	1	EE
	11	RGU2895-K	OPERATION BUTTON	1	
	12	RHD26043-1	SCREW	7	
	13	RHD26046	SCREW	1	
	14	RHD26066	SCREW	12	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	15	RKAX0028-K	LEG CUSHION	4	
	16	RKM0722A-K	TOP CABINET	1	
	17	RKQ0361-K1	STAND	1	
	18	RKQ0362-K1	STAND ARM	1	
	19	RYQ1232-K	PORT UNIT	1	
	20	RMB0965	STAND SPRING	1	
	21	RMB0966	STAND ARM SPRING	1	
	22	RMF0644	ACOUSTIC ABSORBER	1	
	23	RMG0947-K	STAND CUSHION	1	
	24	RFKKCNP10P-K	TOP CENTER CABINET ASS'Y	1	
	25	RMG0956-K	TOP CABINET CUSHION	1	
	26	RMK0856	SMPS PCB HEAT SINK	1	
	27	RMQ2172	EPT SEALER A (BTM CAB)	1	
	28	RMQ2173	EPT SEALER B (BTM CAB)	1	
	29	RMQ2174	EPT SEALER C (BTM CAB)	1	
	30	RMQ2175	EPT SEALER D	2	
	31	RMQ2176	EPT SEALER E (SPEAKER FIXING)	1	
	32	RMQ2177	EPT SEALER F (BTM CAB)	1	
	33	RMQ2180	EPT SEALER G (BTM CAB)	1	
	34	RMQ2193	EPT SEALER H (BTM CAB)	1	
	35	RMQ2201	EPT SEALER J	1	
	36	RMQ2211	EPT SEALER K (STAND)	2	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	37	RMQ2202	FFC PACKING	1	
	38	RMR2120-K	SP FIXING PIECE L	1	
	39	RMR2121-K	SP FIXING PIECE R	1	
	40	RFKNCNP10P-K	DIFFUSER ASS'Y	1	
	41	RMS0932	STAND SHAFT	1	
	42	RMS0933	STAND ARM SHAFT	1	
	43	RSC1097	D-AMP HEAT ABSORBER	4	
	44	RSC1229	MAIN PCB SHIELD	1	
	46	XTB26+8GFJ	SCREW	10	
	47	XTB3+10JFJK	SCREW	1	
	48	XTB3+8JFJ-J	SCREW	1	
	49	RHD26056	SCREW	8	
	50	RHD26074	SCREW	4	
	51	RMV0424-1	INSULATOR SHEET A	1	
	52	RMV0425	INSULATOR SHEET B	1	
			SPEAKERS		
	SP1	L0AA08A00038	SUBWOOFER SPEAKER	1	
	SP2	L0AA10C00014	FRONT SPEAKER	1	
	SP3	L0AA10C00014	FRONT SPEAKER	1	
			PACKING MATERI-ALS		
	P1	RPG0F47	PACKING CASE	1	GS/GSX
	P1	RPG0F83	PACKING CASE	1	GT
	P1	RPG0G86	PACKING CASE	1	EE
	P2	RPN2579-1	POLYFOAM	1	
	P3	RPFX1012-1	MIRAMAT BAG	1	
			ACCESSORIES		
⚠	A1	K2CA2CA00027	AC CORD	1	GT
⚠	A1	K2CP2YY00061	AC CORD	1	GS/GSX
⚠	A1	K2CQ2YY00119	AC CORD	1	EE/GS/GSX
⚠	A1	K2CT2YY00097	AC CORD	1	GS/GSX
⚠	A2	VQT4Y22	O/I BOOK (En/Po/Cz)	1	GS/GSX
⚠	A2	VQT4Y38	O/I BOOK (Co/Cn/Ar)	1	GS/GSX/GT
⚠	A2	VQT5A67	OI BOOK (Ru/Ur)	1	EE

15.2. Electrical Replacement Parts List

Important Safety Notice

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

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 CIRCUIT BOARDS		
	PCB1	REP4974BA	MAIN P.C.B.	1	(RTL)
	PCB2	REP4974BB	LED 1 P.C.B.	1	(RTL)
	PCB3	REP4974BC	LED 2 P.C.B.	1	(RTL)
	PCB4	REP4974BD	NFC P.C.B.	1	(RTL)
⚠	PCB5	REP4973CA	SMPS P.C.B.	1	(RTL) EE/GS/ GSX
⚠	PCB5	REP4973BA	SMPS P.C.B.	1	(RTL) GT
	PCB6	REP4973CB	BUTTON P.C.B.	1	(RTL) EE/GS/ GSX
	PCB6	REP4973BB	BUTTON P.C.B.	1	(RTL) GT
	PCB7	RSNE011B0	BLUETOOTH MODULE	1	
			INTERGRATED CIR-CUITS		
	IC1000	RFKWMNP10PM	IC	1	(E.S.D)
	IC1001	C3EBEY000037	IC	1	(E.S.D)
	IC1100	C0DBGYY01843	IC	1	(E.S.D)
	IC1101	C0DBGYY03912	IC	1	(E.S.D)
	IC1102	C0DBAYY01445	IC	1	(E.S.D)
	IC1103	C0DBZYY00555	IC	1	(E.S.D)
	IC1104	C0DBAYY01445	IC	1	(E.S.D)
	IC1105	C0DBZYY00592	IC	1	(E.S.D)
	IC1200	C0JBAR000367	IC	1	(E.S.D)
	IC1201	C0DBZYY00555	IC	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC1202	RSNE011B0	BLUETOOTH MODULE	1	(E.S.D) JIGS & ADJ
	IC1203	C0FBAY000032	IC	1	(E.S.D)
	IC1204	C0ABBB000189	IC	1	(E.S.D)
	IC1400	C1AB00003984	IC	1	(E.S.D)
	IC1402	C1AB00003800	IC	1	(E.S.D)
	IC1403	C0DBGYY00915	IC	1	(E.S.D)
	IC1700	C0DAAYY00087	IC	1	(E.S.D) EE/GS/ GSX
	IC1700	C0DABYY00047	IC	1	(E.S.D) GT
	IC1701	C0DBZMC00006	IC	1	(E.S.D)
	IC4000	MN63Y1009-E1	IC	1	(E.S.D)
			TRANSISTORS		
	Q1000	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q1200	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q1201	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
	Q1400	B1CHRC000047	TRANSISTOR	1	(E.S.D)
	Q1401	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1402	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1403	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1404	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q1405	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1406	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1407	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q1408	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q2200	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	Q2300	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	Q2301	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	Q2302	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	Q2303	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	Q2400	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Q2401	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	Q2402	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	Q2403	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	QR1100	B1GBCFNN0038	TRANSISTOR	1	(E.S.D)
	QR1400	B1GBCFNN0038	TRANSISTOR	1	(E.S.D)
	QR1700	B1GBCFGG0030	TRANSISTOR	1	(E.S.D)
	QR2200	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	QR2201	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	QR2300	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
	QR2400	B1GBCFGN0018	TRANSISTOR	1	(E.S.D)
			DIODES		
	D1100	DZ2J062M0L	DIODE	1	(E.S.D)
	D1101	DA2J10100L	DIODE	1	(E.S.D)
	D1102	DZ2J062M0L	DIODE	1	(E.S.D)
	D1103	DZ2J062M0L	DIODE	1	(E.S.D)
	D1104	DA2J10100L	DIODE	1	(E.S.D)
	D1105	DZ2J062M0L	DIODE	1	(E.S.D)
	D1200	DA2J10100L	DIODE	1	(E.S.D)
	D1201	DZ2J062M0L	DIODE	1	(E.S.D)
	D1701	B0EBNR000049	DIODE	1	(E.S.D)
	D1702	DZ2J150M0L	DIODE	1	(E.S.D)
	D1703	B0EAKT000063	DIODE	1	(E.S.D)
	D1704	B0HBSM000056	DIODE	1	(E.S.D)
	D1705	DZ2W22000L	DIODE	1	(E.S.D)
	D1708	DA22F2100L	DIODE	1	(E.S.D)
	D1709	DZ2J330M0L	DIODE	1	(E.S.D)
	D2200	B3ABA0000292	DIODE	1	(E.S.D)
	D2201	B3AEA0000166	DIODE	1	(E.S.D)
	D2202	B3ABA0000292	DIODE	1	(E.S.D)
	D2300	B3AEB0000139	DIODE	1	(E.S.D)
	D2301	B3AEB0000139	DIODE	1	(E.S.D)
	D2302	B3AEB0000139	DIODE	1	(E.S.D)
	D2303	B3AEB0000139	DIODE	1	(E.S.D)
	D2304	B3AEB0000139	DIODE	1	(E.S.D)
	D2400	B3AEB0000139	DIODE	1	(E.S.D)
	D2401	B3AEB0000139	DIODE	1	(E.S.D)
	D2402	B3AEB0000139	DIODE	1	(E.S.D)
	D2403	B3AEB0000139	DIODE	1	(E.S.D)
	D2404	B3AEB0000139	DIODE	1	(E.S.D)
			SWITCHES		
	S2200	EVQ11G04M	SW VOL +	1	
	S2201	EVQ11G04M	SW LIGHT/PAIRING	1	
	S2202	EVQ11G04M	SW D. SURROUND	1	
	S2203	EVQ11G04M	SW VOL -	1	
	S2204	EVQ11G04M	SW POWER	1	
			CONNECTORS		
	CN1201	K1MN09AA0046	9P CONNECTOR	1	
	P1000	K1MN15AA0046	15P CONNECTOR	1	
	P1001	K1MN12AA0041	12P CONNECTOR	1	
	P1002	K1MN06AA0046	6P CONNECTOR	1	
	P1100	K1KA15AA0409	15P CONNECTOR	1	
	P1400	K1KA02AA0150	2P CONNECTOR	1	
	P1402	K1KA02AA0150	2P CONNECTOR	1	
	P1403	K1KA02AA0150	2P CONNECTOR	1	
	P2200	K1MN10B00016	10P CONNECTOR	1	
	P2300	K1MN15BA0147	15P CONNECTOR	1	
	P2301	K1MN12BA0147	12P CONNECTOR	1	
	P2302	K1MN06AA0046	6P CONNECTOR	1	
	P2400	K1MN12BA0147	12P CONNECTOR	1	
	P2401	K1MN10BA0147	10P CONNECTOR	1	
	P4000	K1MN06BA0147	6P CONNECTOR	1	
			COILS AND INDUCTORS		
	L1100	G1C3R3Z00005	INDUCTOR	1	
	L1101	G1C3R3Z00005	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	L1400	G1C150M00023	INDUCTOR	1	
	L1401	G1C150M00023	INDUCTOR	1	
	L1404	G1C150M00023	INDUCTOR	1	
	L1405	G1C150M00023	INDUCTOR	1	
	L1406	G1C150M00023	INDUCTOR	1	
	L1407	G1C150M00023	INDUCTOR	1	
	L1701	J0JBC0000028	INDUCTOR	1	
	L1703	J0JBC0000028	INDUCTOR	1	
	L1704	J0JBC0000028	INDUCTOR	1	
⚠	L1705	G0B123F00001	LINE FILTER	1	GT
⚠	L1705	G0B183E00004	LINE FILTER	1	EE/GS/GSX
	LB1200	D0GBR00J0004	INDUCTOR	1	
	LB1201	D0GBR00J0004	INDUCTOR	1	
	LB1203	J0JCC0000317	INDUCTOR	1	
	LB1204	J0JCC0000317	INDUCTOR	1	
	LB1206	J0JCC0000059	INDUCTOR	1	
	LB1207	J0JCC0000059	INDUCTOR	1	
	LB1208	J0JCC0000059	INDUCTOR	1	
	LB1209	D0GBR00J0004	INDUCTOR	1	
	LB1210	J0JCC0000317	INDUCTOR	1	
	LB1211	J0JCC0000317	INDUCTOR	1	
	LB1212	J0JCC0000317	INDUCTOR	1	
	LB1213	J0JCC0000317	INDUCTOR	1	
	LB1214	J0JCC0000317	INDUCTOR	1	
	LB1215	J0JCC0000317	INDUCTOR	1	
	LB1216	D0GBR00J0004	INDUCTOR	1	
	LB1218	D0GBR00J0004	INDUCTOR	1	
	LB1219	J0JCC0000316	INDUCTOR	1	
	LB1400	J0JHC0000046	INDUCTOR	1	
	LB1401	J0JHC0000046	INDUCTOR	1	
	LB1404	D0GBR00J0004	INDUCTOR	1	
	LB1405	D0GBR00J0004	INDUCTOR	1	
	LB1410	J0JAC0000055	INDUCTOR	1	
	LB1700	J0JHC0000046	INDUCTOR	1	
	LB1701	J0JHC0000046	INDUCTOR	1	
			TRANSFORMER		
⚠	T1700	G4DYZ0000072	TRANSFORMER	1	
			VARISTOR		
⚠	Z1752	D4EAY471A127	VARISTOR	1	
			PHOTO COUPLER		
⚠	PC1701	B3PBA0000454	PHOTO COUPLER	1	
			OSCILLATORS		
	X1000	H2D400400018	OSCILLATOR	1	
	X1400	H0J245500110	OSCILLATOR	1	
			FUSE		
⚠	F1	K5G202Y00006	FUSE	S	
			THERMISTOR		
	TH1700	D4CAA5R10001	THERMISTOR	1	EE/GS/GSX
			JACKS		
	JK1700	K2HC1YYB0033	JK AUX	1	
	JK1701	K1FY208B0011	USB CONNECTOR	1	
	P1700	K1YZ15000001	15P WIRE HOLDER	1	
⚠	P1701	K2AA2B000011	AC INLET	1	
			CHIP JUMPERS		
	L1700	D0GBR00J0004	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB1202	D0GAR00J0005	0 1/16W	1	
	LB1205	D0GBR00J0004	0 1/10W	1	
	LB1220	D0GAR00J0005	0 1/16W	1	
	LB1221	D0GAR00J0005	0 1/16W	1	
	W501	D0GBR00JA008	0 1/10W	1	
			RESISTORS		
	R1000	D0GA221JA023	220 1/16W	1	
	R1001	D0GA221JA023	220 1/16W	1	
	R1002	D0GA221JA023	220 1/16W	1	
	R1003	D0GA221JA023	220 1/16W	1	
	R1004	D0GA221JA023	220 1/16W	1	
	R1005	D0GA221JA023	220 1/16W	1	
	R1006	D0GA103JA023	10K 1/16W	1	
	R1007	D0GA221JA023	220 1/16W	1	
	R1008	D0GA104JA023	100K 1/16W	1	
	R1009	D0GA221JA023	220 1/16W	1	
	R1010	D0GA103JA023	10K 1/16W	1	
	R1011	D0GA221JA023	220 1/16W	1	
	R1012	D0GA472JA023	4.7K 1/16W	1	
	R1013	D0GA221JA023	220 1/16W	1	
	R1014	D0GA103JA023	10K 1/16W	1	
	R1015	D0GA103JA023	10K 1/16W	1	
	R1016	D0GA472JA023	4.7K 1/16W	1	
	R1017	D0GA104JA023	100K 1/16W	1	
	R1018	D0GA103JA023	10K 1/16W	1	
	R1019	D0GA104JA023	100K 1/16W	1	
	R1020	D0GA104JA023	100K 1/16W	1	
	R1021	D0GA221JA023	220 1/16W	1	
	R1022	D0GA221JA023	220 1/16W	1	
	R1023	D0GA221JA023	220 1/16W	1	
	R1024	D0GA221JA023	220 1/16W	1	
	R1025	D0GA221JA023	220 1/16W	1	
	R1026	D0GA221JA023	220 1/16W	1	
	R1027	D0GA221JA023	220 1/16W	1	
	R1028	D0GA221JA023	220 1/16W	1	
	R1029	D0GA221JA023	220 1/16W	1	
	R1030	D0GA221JA023	220 1/16W	1	
	R1031	D0GA221JA023	220 1/16W	1	
	R1032	D0GA221JA023	220 1/16W	1	
	R1033	D0GA472JA023	4.7K 1/16W	1	
	R1034	D0GA472JA023	4.7K 1/16W	1	
	R1035	D0GA221JA023	220 1/16W	1	
	R1036	D0GA221JA023	220 1/16W	1	
	R1037	D0GA221JA023	220 1/16W	1	
	R1038	D0GA221JA023	220 1/16W	1	
	R1039	D0GA221JA023	220 1/16W	1	
	R1040	D0GA221JA023	220 1/16W	1	
	R1041	D0GA221JA023	220 1/16W	1	
	R1042	D0GA221JA023	220 1/16W	1	
	R1043	D0GA221JA023	220 1/16W	1	
	R1044	D0GA221JA023	220 1/16W	1	
	R1045	D0GA221JA023	220 1/16W	1	
	R1046	D0GA221JA023	220 1/16W	1	
	R1047	D0GA221JA023	220 1/16W	1	
	R1048	D0GA221JA023	220 1/16W	1	
	R1049	D0GA221JA023	220 1/16W	1	
	R1050	D0GA221JA023	220 1/16W	1	
	R1051	D0GA221JA023	220 1/16W	1	
	R1052	D0GA221JA023	220 1/16W	1	
	R1053	D0GA473JA023	47K 1/16W	1	
	R1054	D0GA104JA023	100K 1/16W	1	
	R1055	D0GA104JA023	100K 1/16W	1	
	R1056	D0GA104JA023	100K 1/16W	1	
	R1057	D0GA221JA023	220 1/16W	1	
	R1058	D0GA473JA023	47K 1/16W	1	
	R1059	D0GA104JA023	100K 1/16W	1	
	R1060	D0GA221JA023	220 1/16W	1	
	R1061	D0GA564JA023	560K 1/16W	1	
	R1062	D0GA124JA023	120K 1/16W	1	
	R1063	D0GA223JA023	22K 1/16W	1	
	R1064	D0GA221JA023	220 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R1065	D0GA221JA023	220 1/16W	1	
	R1066	D0GA104JA023	100K 1/16W	1	
	R1067	D0GA221JA023	220 1/16W	1	
	R1068	D0GA221JA023	220 1/16W	1	
	R1069	D0GA221JA023	220 1/16W	1	
	R1071	D0GA102JA023	1K 1/16W	1	
	R1100	D0GB103JA065	10K 1/10W	1	
	R1101	ERJ3RBD223V	22K 1/16W	1	
	R1109	ERJ3RED124V	120K 1/16W	1	
	R1110	D1BB3301A074	3.3K 1/10W	1	
	R1112	ERJ3RBD223V	22K 1/16W	1	
	R1200	D0GA103JA023	10K 1/16W	1	
	R1201	D0GA103JA023	10K 1/16W	1	
	R1202	D0GA102JA023	1K 1/16W	1	
	R1203	D0GA102JA023	1K 1/16W	1	
	R1204	D0GA102JA023	1K 1/16W	1	
	R1205	D0GA102JA023	1K 1/16W	1	
	R1208	D0GA103JA023	10K 1/16W	1	
	R1209	D0GA103JA023	10K 1/16W	1	
	R1210	D0GA103JA023	10K 1/16W	1	
	R1211	D0GA103JA023	10K 1/16W	1	
	R1212	D0GA102JA023	1K 1/16W	1	
	R1213	D0GA102JA023	1K 1/16W	1	
	R1214	D0GA223JA023	22K 1/16W	1	
	R1215	D0GA221JA023	220 1/16W	1	
	R1216	D0GA103JA023	10K 1/16W	1	
	R1217	D0GA103JA023	10K 1/16W	1	
	R1218	D0GD4R7JA052	4.7 1/8W	1	
	R1219	D0GD4R7JA052	4.7 1/8W	1	
	R1220	D0GA102JA023	1K 1/16W	1	
	R1221	D0GA102JA023	1K 1/16W	1	
	R1224	D0GA223JA023	22K 1/16W	1	
	R1225	D0GA330JA023	33 1/16W	1	
	R1226	D0GA330JA023	33 1/16W	1	
	R1227	D0GA330JA023	33 1/16W	1	
	R1228	D0GA330JA023	33 1/16W	1	
	R1229	D0GA103JA023	10K 1/16W	1	
	R1230	ERJ3RED124V	120K 1/16W	1	
	R1231	D1BB3301A074	3.3K 1/10W	1	
	R1232	D0GA222JA023	2.2K 1/16W	1	
	R1236	D0GA223JA023	22K 1/16W	1	
	R1237	D0GA223JA023	22K 1/16W	1	
	R1238	D0GA223JA023	22K 1/16W	1	
	R1239	D0GA223JA023	22K 1/16W	1	
	R1240	D0GA102JA023	1K 1/16W	1	
	R1241	D0GA102JA023	1K 1/16W	1	
	R1242	D0GD4R7JA052	4.7 1/8W	1	
	R1243	D0GD220JA052	22 1/8W	1	
	R1400	D0GA103JA023	10K 1/16W	1	
	R1401	D0GA222JA023	2.2K 1/16W	1	
	R1402	D0GAR00J0005	0 1/16W	1	
	R1404	D0GA223JA023	22K 1/16W	1	
	R1405	D0GA153JA023	15K 1/16W	1	
	R1406	D0GA273JA023	27K 1/16W	1	
	R1407	D0GA123JA023	12K 1/16W	1	
	R1408	D0GA683JA023	68K 1/16W	1	
	R1409	D0GA103JA023	10K 1/16W	1	
	R1410	D0GB222JA065	2.2K 1/10W	1	
	R1412	D0GBR00J0004	0 1/10W	1	
	R1418	D0GB683JA065	68K 1/10W	1	
	R1419	D0GB683JA065	68K 1/10W	1	
	R1421	D0GB822JA065	8.2K 1/10W	1	
	R1422	D0GB104JA065	100K 1/10W	1	
	R1423	D0GB104JA065	100K 1/10W	1	
	R1424	D0GB104JA065	100K 1/10W	1	
	R1425	D0GB223JA065	22K 1/10W	1	
	R1426	D0GA221JA023	220 1/16W	1	
	R1427	D0GA221JA023	220 1/16W	1	
	R1428	D0GA221JA023	220 1/16W	1	
	R1429	D0GA221JA023	220 1/16W	1	
	R1430	D0GA221JA023	220 1/16W	1	
	R1431	D0GA221JA023	220 1/16W	1	
	R1432	D0GA473JA023	47K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R1433	D0GA152JA023	1.5K 1/16W	1	
	R1434	D0GA106JA023	10M 1/16W	1	
	R1435	D0GA472JA023	4.7K 1/16W	1	
	R1436	D0GA221JA023	220 1/16W	1	
	R1437	D0GA101JA023	100 1/16W	1	
	R1438	D0GA101JA023	100 1/16W	1	
	R1439	D0GA101JA023	100 1/16W	1	
	R1440	D0GA101JA023	100 1/16W	1	
	R1441	D0GA101JA023	100 1/16W	1	
	R1442	D0GA101JA023	100 1/16W	1	
	R1443	D0GA101JA023	100 1/16W	1	
	R1444	D0GB222JA065	2.2K 1/10W	1	
	R1445	D0GB222JA065	2.2K 1/10W	1	
	R1446	D0GB683JA065	68K 1/10W	1	
	R1447	D0GB683JA065	68K 1/10W	1	
	R1448	D0GB683JA065	68K 1/10W	1	
	R1449	D0GB683JA065	68K 1/10W	1	
	R1450	D0GB822JA065	8.2K 1/10W	1	
	R1451	D0GB104JA065	100K 1/10W	1	
	R1453	D0GAR00J0005	0 1/16W	1	
	R1454	D0GAR00J0005	0 1/16W	1	
	R1455	D0GAR00J0005	0 1/16W	1	
	R1456	D0GA101JA023	100 1/16W	1	
	R1457	D0GA221JA023	220 1/16W	1	
	R1461	D0GB104JA065	100K 1/10W	1	
	R1462	D0GB104JA065	100K 1/10W	1	
	R1463	D0GB223JA065	22K 1/10W	1	
	R1700	D0GD4R7JA052	4.7 1/8W	1	
	R1701	D0GB222JA065	2.2K 1/10W	1	
	R1702	D0GB473JA065	47K 1/10W	1	
	R1703	D0GB222JA065	2.2K 1/10W	1	
	R1704	ERJ1TYJ204U	200K 1W	1	
	R1705	D0GB333JA065	33K 1/10W	1	
	R1706	D0GD222JA052	2.2K 1/8W	1	
	R1707	D1BB3301A074	3.3K 1/10W	1	
	R1708	D0GB183JA065	18K 1/10W	1	
	R1709	D0GB183JA065	18K 1/10W	1	
	R1710	D1BB2202A074	22K 1/10W	1	
	R1711	D0GB103JA065	10K 1/10W	1	
	R1712	D0GB682JA065	6.8K 1/10W	1	
	R1713	D0GB682JA065	6.8K 1/10W	1	
	R1716	D0GB104JA065	100K 1/10W	1	
	R1717	D0GB222JA065	2.2K 1/10W	1	
	R1718	ERX2SJR33E	0.33 2W	1	
⚠	R1724	ERJ12YJ105U	1M 1/2W	1	
⚠	R1726	ERJ12YJ105U	1M 1/2W	1	
	R1727	ERJ1TYJ220U	22 1W	1	
	R1728	D1BB8201A074	8.2K 1/10W	1	
	R1729	D0GD271JA052	270 1/8W	1	
	R2200	D0GB122JA065	1.2K 1/10W	1	
	R2201	D0GB122JA065	1.2K 1/10W	1	
	R2202	D0GB222JA065	2.2K 1/10W	1	
	R2203	D0GB102JA008	1K 1/10W	1	
	R2204	ERJ8GEYJ271V	270 1/4W	1	
	R2205	ERJ8GEYJ821V	820 1/4W	1	
	R2206	D0GB102JA008	1K 1/10W	1	
	R2209	D0GB122JA065	1.2K 1/10W	1	
	R2210	D0GB122JA065	1.2K 1/10W	1	
	R2211	D0GB222JA065	2.2K 1/10W	1	
	R2214	D0GB102JA008	1K 1/10W	1	
	R2215	ERJ8GEYJ271V	270 1/4W	1	
	R2300	D0GB331JA065	330 1/10W	1	
	R2301	D0GB331JA065	330 1/10W	1	
	R2302	D0GB331JA065	330 1/10W	1	
	R2303	D0GB101JA065	100 1/10W	1	
	R2304	D0GB102JA065	1K 1/10W	1	
	R2305	D0GB102JA065	1K 1/10W	1	
	R2306	D0GB102JA065	1K 1/10W	1	
	R2307	D0GB101JA065	100 1/10W	1	
	R2308	D0GB101JA065	100 1/10W	1	
	R2309	D0GB101JA065	100 1/10W	1	
	R2310	D0GB101JA065	100 1/10W	1	
	R2311	D0GB331JA065	330 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2312	D0GB102JA065	1K 1/10W	1	
	R2313	D0GB331JA065	330 1/10W	1	
	R2314	D0GB102JA065	1K 1/10W	1	
	R2400	D0GB331JA065	330 1/10W	1	
	R2401	D0GB331JA065	330 1/10W	1	
	R2402	D0GB331JA065	330 1/10W	1	
	R2403	D0GB102JA065	1K 1/10W	1	
	R2404	D0GB102JA065	1K 1/10W	1	
	R2405	D0GB102JA065	1K 1/10W	1	
	R2406	D0GB331JA065	330 1/10W	1	
	R2407	D0GB102JA065	1K 1/10W	1	
	R2408	D0GB331JA065	330 1/10W	1	
	R2409	D0GB102JA065	1K 1/10W	1	
	R4000	D0GAR00J0005	0 1/16W	1	
	R4002	D0GA104JA023	100K 1/16W	1	
	R4003	D0GAR00J0005	0 1/16W	1	
	R4005	D0GA104JA023	100K 1/16W	1	
	R4006	D0GA104JA023	100K 1/16W	1	
	R12421	D0GA222JA023	2.2K 1/16W	1	
			CAPACITORS		
	LB1217	F1H1H104B047	0.1uF 50V	1	
	C1000	F1H0J4750005	4.7uF 6.3V	1	
	C1001	F1G1A1040006	0.1uF 10V	1	
	C1003	F1G1A1040006	0.1uF 10V	1	
	C1004	F1G1A1040006	0.1uF 10V	1	
	C1005	F1G1A1040006	0.1uF 10V	1	
	C1006	F1G1A1040006	0.1uF 10V	1	
	C1007	F1H1H223B047	0.022uF 50V	1	
	C1008	F1G1C104A077	0.1uF 16V	1	
	C1009	F1G1H1020008	1000pF 50V	1	
	C1100	F1H1H473B055	0.047uF 50V	1	
	C1101	F1H1A225A025	2.2uF 10V	1	
	C1102	F1H1A225A025	2.2uF 10V	1	
	C1103	F1K1H105A138	1uF 50V	1	
	C1104	F1H1H104B047	0.1uF 50V	1	
	C1105	F1H1E105A153	1uF 25V	1	
	C1106	F1G1H3320004	3300pF 50V	1	
	C1107	F1H1E105A153	1uF 25V	1	
	C1108	F1K1E1060009	10uF 25V	1	
	C1109	F1K1E1060009	10uF 25V	1	
	C1110	F1K1A226A005	22uF 10V	1	
	C1111	F1H0J4750005	4.7uF 6.3V	1	
	C1112	F1J1E475A257	4.7uF 25V	1	
	C1113	F1H1H103B047	0.01uF 50V	1	
	C1114	F1J1A106A043	10uF 10V	1	
	C1115	F1J1A106A043	10uF 10V	1	
	C1116	F1J1A106A043	10uF 10V	1	
	C1117	F1H1H104B047	0.1uF 50V	1	
	C1118	F1G1H3320004	3300pF 50V	1	
	C1119	F1H1E105A153	1uF 25V	1	
	C1120	F1K1E1060009	10uF 25V	1	
	C1121	F1K1E1060009	10uF 25V	1	
	C1122	F1H1C105A008	1uF 16V	1	
	C1123	F2G1A101A060	100uF 10V	1	
	C1124	F1H1H102B047	1000pF 50V	1	
	C1125	F1H1H102B047	1000pF 50V	1	
	C1126	F1H1H102B047	1000pF 50V	1	
	C1142	F2G1A101A060	100uF 10V	1	
	C1143	F1H1H104B047	0.1uF 50V	1	
	C1200	F1J1A106A043	10uF 10V	1	
	C1201	F1J1A106A043	10uF 10V	1	
	C1202	F2G1A101A060	100uF 10V	1	
	C1203	F1H1H104B047	0.1uF 50V	1	
	C1204	F2G1A101A060	100uF 10V	1	
	C1205	F1H1H104B047	0.1uF 50V	1	
	C1206	F1H1E105A153	1uF 25V	1	
	C1207	F1H1H103B047	0.01uF 50V	1	
	C1208	F1G1H220A834	22pF 50V	1	
	C1209	F1J1A106A043	10uF 10V	1	
	C1210	F1J0J106A020	10uF 6.3V	1	
	C1211	F1G1H221A834	220pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C1212	F2G1A4700004	47uF 10V	1	
	C1213	F1J0J106A020	10uF 6.3V	1	
	C1214	D0GBR00J0004	0 1/10W	1	
	C1215	F1G1H221A834	220pF 50V	1	
	C1216	F1H1E105A153	1uF 25V	1	
	C1217	F1G1C1030008	0.01uF 16V	1	
	C1218	F1G1C1030008	0.01uF 16V	1	
	C1219	F1H1E105A153	1uF 25V	1	
	C1220	F1H1E105A153	1uF 25V	1	
	C1221	F1H1H102B047	1000pF 50V	1	
	C1222	F1H1C104A178	0.1uF 16V	1	
	C1223	F1J1A106A043	10uF 10V	1	
	C1224	F1J1A106A043	10uF 10V	1	
	C1225	F1J1A106A043	10uF 10V	1	
	C1226	F1H1H104B047	0.1uF 50V	1	
	C1227	F1H1H103B047	0.01uF 50V	1	
	C1228	F1G1H220A834	22pF 50V	1	
	C1229	F1G1H220A834	22pF 50V	1	
	C1234	F1H1E105A153	1uF 25V	1	
	C1235	F1H1E105A153	1uF 25V	1	
	C1236	F1H1E105A153	1uF 25V	1	
	C1237	F1H1E105A153	1uF 25V	1	
	C1238	F1H1H103B047	0.01uF 50V	1	
	C1239	F1H1H103B047	0.01uF 50V	1	
	C1240	F1G1H4700003	47pF 50V	1	
	C1241	F1G1H4700003	47pF 50V	1	
	C1242	F1G1H220A834	22pF 50V	1	
	C1243	F1G1H220A834	22pF 50V	1	
	C1244	F1H1H103B047	0.01uF 50V	1	
	C1245	F1H1E105A153	1uF 25V	1	
	C1246	F1H1E105A153	1uF 25V	1	
	C1247	F1H1E105A153	1uF 25V	1	
	C1248	F1H1E105A153	1uF 25V	1	
	C1249	F2G1C471A081	470uF 16V	1	
	C1251	F1J1A106A043	10uF 10V	1	
	C1252	F1H1C104A178	0.1uF 16V	1	
	C1253	F1J1A106A043	10uF 10V	1	
	C1254	F1K1E1060009	10uF 25V	1	
	C1255	F1K1E1060009	10uF 25V	1	
	C1256	F1G1C104A077	0.1uF 16V	1	
	C1400	F1K1E1060009	10uF 25V	1	
	C1401	F1K1E1060009	10uF 25V	1	
	C1402	F1G1E102A086	1000pF 25V	1	
	C1403	F1H1E105A153	1uF 25V	1	
	C1404	F1H1E105A153	1uF 25V	1	
	C1405	F1H1H104B047	0.1uF 50V	1	
	C1406	F1H1H104B047	0.1uF 50V	1	
	C1407	F1H1E105A153	1uF 25V	1	
	C1408	F1H1H104B047	0.1uF 50V	1	
	C1409	F1H1E105A153	1uF 25V	1	
	C1410	F1H1E105A153	1uF 25V	1	
	C1411	F1H1H102B047	1000pF 50V	1	
	C1412	F1H1H102B047	1000pF 50V	1	
	C1421	F1H1H103B047	0.01uF 50V	1	
	C1426	F1H1H102B047	1000pF 50V	1	
	C1427	F1H1H102B047	1000pF 50V	1	
	C1428	F1J1A106A043	10uF 10V	1	
	C1429	F1J1A106A043	10uF 10V	1	
	C1430	F1G0J1050009	1uF 6.3V	1	
	C1431	F1G0J1050009	1uF 6.3V	1	
	C1432	F1G1H4700003	47pF 50V	1	
	C1433	F1G1H4700003	47pF 50V	1	
	C1434	F1G1H120A789	12pF 50V	1	
	C1435	F1G1H150A541	15pF 50V	1	
	C1436	F1G1E102A086	1000pF 25V	1	
	C1437	F1G1E102A086	1000pF 25V	1	
	C1438	F1H0J1060012	10uF 6.3V	1	
	C1439	F1G1H1020008	1000pF 50V	1	
	C1440	F1H0J1060012	10uF 6.3V	1	
	C1441	F1G1A1040006	0.1uF 10V	1	
	C1442	F1H1E105A153	1uF 25V	1	
	C1443	F1H0J1060012	10uF 6.3V	1	
	C1444	F1H1H102B047	1000pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C1445	F1H1E105A153	1uF 25V	1	
	C1446	F1H1E105A153	1uF 25V	1	
	C1447	F1H1H102B047	1000pF 50V	1	
	C1448	F1H1H102B047	1000pF 50V	1	
	C1449	F1H1E105A153	1uF 25V	1	
	C1450	F1H1H104B047	0.1uF 50V	1	
	C1451	F1H0J1060012	10uF 6.3V	1	
	C1452	F1H1E105A153	1uF 25V	1	
	C1453	F1H0J1060012	10uF 6.3V	1	
	C1454	F1H1H104B047	0.1uF 50V	1	
	C1455	F1H1H104B047	0.1uF 50V	1	
	C1456	F1H1H104B047	0.1uF 50V	1	
	C1457	F1H1H104B047	0.1uF 50V	1	
	C1458	F1H1H104B047	0.1uF 50V	1	
	C1459	F1H1H102B047	1000pF 50V	1	
	C1460	F1H1H102B047	1000pF 50V	1	
	C1466	F1H1H104B047	0.1uF 50V	1	
	C1467	F1H1E105A153	1uF 25V	1	
	C1468	F1H1H102B047	1000pF 50V	1	
	C1469	F1J1A106A043	10uF 10V	1	
	C1470	F1J1A106A043	10uF 10V	1	
	C1471	F1H1H104B047	0.1uF 50V	1	
	C1472	F1H1E105A153	1uF 25V	1	
	C1473	F1H1H102B047	1000pF 50V	1	
	C1700	F1H1H102A831	1000pF 50V	1	
	C1701	F2A1H100A454	10uF 50V	1	
	C1702	F1H1H221B052	220pF 50V	1	
	C1703	F2A1C222A260	2200uF 16V	1	
	C1704	F1B3D221A011	220pF 2000V	1	
	C1705	F1K2J272A014	2700pF 630V	1	
	C1706	F2B2D1010003	100uF 200V	1	GT
	C1706	F2B2G8200010	82uF 400V	1	EE/GS/GSX
⚠	C1707	F1BAF1020020	1000pF	1	GT
⚠	C1707	F1BAF221A013	220pF	1	EE/GS/GSX
	C1708	F1H1H102B047	1000pF 50V	1	
	C1709	F1H1H103B047	0.01uF 50V	1	
⚠	C1710	F1BAF1020020	1000pF	1	
⚠	C1712	F1BAF1020020	1000pF	1	GT
⚠	C1712	F1BAF221A013	220pF	1	EE/GS/GSX
	C1713	F1K2J471A014	470pF 630V	1	
	C1715	F1J1H1050004	1uF 50V	1	
⚠	C1716	F0CAF104A105	0.1uF	1	
	C1717	F1J1C106A059	10uF 16V	1	
	C1718	F1H1A105A036	1uF 10V	1	
	C1720	F1H1H472B047	4700pF 50V	1	
	C1721	F1H1C104A178	0.1uF 16V	1	
	C1724	F1H1A105A036	1uF 10V	1	
⚠	C1725	F0CAF104A105	0.1uF	1	
	C1726	F1H1H472B047	4700pF 50V	1	
	C1727	F1H1H103B047	0.01uF 50V	1	
	C1728	F1H1C104A178	0.1uF 16V	1	
	C4001	F1G1H390A541	39pF 50V	1	
	C4002	F1G1H330A541	33pF 50V	1	
	C4003	F1G1H561A541	560pF 50V	1	
	C4004	F1G1A1040006	0.1uF 10V	1	
	C4005	F1G1A1040006	0.1uF 10V	1	
	C4006	F1G1A1040006	0.1uF 10V	1	
	R1235	F1H1H102B047	1000pF 50V	1	

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