Service Manual

Compact Stereo System

Model No. SC-HC58P

SC-HC58PC

Product Color: (K)...Black Type

COMPACT **disc** DIGITAL AUDIO

Wi Fi CERTIFIED

Wi-Fi PROTECTED SETUP

energy ENERGY STAR

Bluetooth®

Made for
iPod iPhone iPad

AirPlay

SC-HC58

Remote Control

⚠ 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.
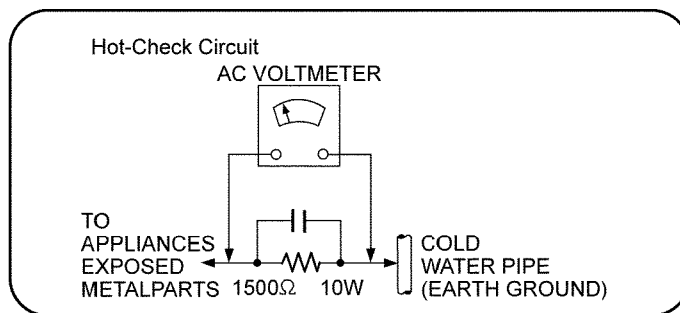
Figure. 1-1

1.2.   Before Repair and Adjustment

Disconnect AC power, discharge unit AC Capacitors (C1702, C1710, C1725, C1727, and C1728) 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 120V, at 60Hz in NO SIGNAL mode (at volume min in FM Tuner mode) should be ~200 mA.

1.3.   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.

1.4.   Caution For Fuse Replacement

CAUTION:
        Replace with the same type fuse:
        (Manufacturer: Skygate, Type: SCT, F1, T2A, 250V)

1.5. 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
⚠	50	RFKHHC58P-K	REAR CABINET ASS'Y	P
⚠	50	RFKHHC58PC-K	REAR CABINET ASS'Y	PC
⚠	64	RMV0410	SMPS INSULATOR SHEET C	
⚠	65	RMV0415	SMPS INSULATOR SHEET B	
⚠	68	RSC1197A	SMPS BRACKET	
⚠	69	RSC1198	SMPS SHIELD PLATE	
⚠	301	RAE5301Z-V	TRAVERSE UNIT	
⚠	A1	N2QAYC000082	REMOTE CONTROL	
⚠	A2	K2CB2CB00022	AC CORD	
⚠	A3	RQT9754-P	O/I BOOK (En)	
⚠	A3	RQT9755-C	O/I BOOK (Cf)	PC
⚠	C1702	F0CAF224A105	0.22uF	
⚠	C1710	F1BAF471A013	470pF	
⚠	C1725	F0CAF104A105	0.1uF	
⚠	C1727	F1BAF1020020	1000pF	
⚠	C1728	F1BAF1020020	1000pF	
⚠	F1	K5G202Y00006	FUSE	
⚠	L1702	G0B922G00002	LINE FILTER	
⚠	P1751	K2AB2B000007	AC INLET	
⚠	PC1702	B3PBA0000579	PHOTO COUPLER	
⚠	PCB5	REP4871BA	SMPS P.C.B.	(RTL)
⚠	R1724	ERJ12YJ105U	1M 1/2W	
⚠	R1726	ERJ12YJ105U	1M 1/2W	
⚠	T1700	G4DYZ0000071	TRANSFORMER	
⚠	Z1752	ERZV10V511CS	ZNR	(E.S.D)

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. Precaution of Laser Diode

> **CAUTION!**
> THIS PRODUCT UTILIZES A LASER.
> USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

Caution:

This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

Wavelength: 790 nm (CD)

Maximum output radiation power from pickup: 100 μW/VDE

Laser radiation from the pickup unit is safety level, but be sure the followings:

1. Do not disassemble the pickup unit, since radiation from exposed laser diode is dangerous.

2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.

3. Do not look at the focus lens using optical instruments.

4. Recommend not to look at pickup lens for a long time.
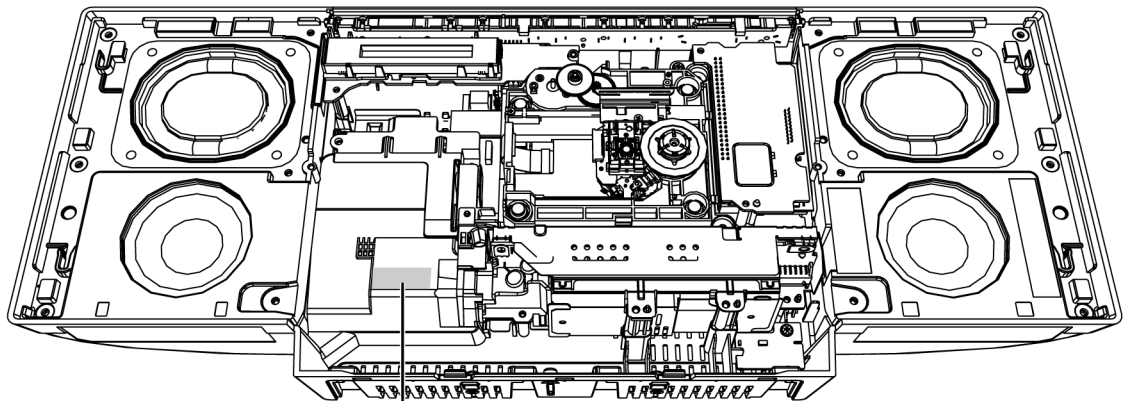
CAUTION - VISIBLE AND
INVISIBLE LASER RADIATION
WHEN OPEN AND
INTERLOCK DEFEATED.
DO NOT STARE INTO BEAM.
FDA 21CFR / CLASS II (IIa)

(Inside of product)
(For P only)
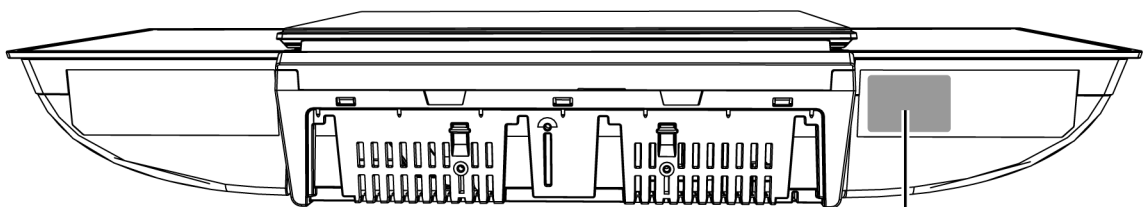
(Bottom View)

This device complies with Part 15
of the FCC Rules. Operation is
subject to the following two
conditions: (1) This device may not
cause harmful interference, and
(2) this device must accept any
interference received, including
interference that may cause
undesired operation.

2.3. Service caution based on Legal restrictions

2.3.1. 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%

2.4. Handling Precaution for Traverse Unit

The laser diode in the optical pickup unit may break down due to static electricity of clothes or human body. Special care must be taken avoid caution to electrostatic breakdown when servicing and handling the laser diode in the Traverse Unit.

2.4.1. Cautions to Be Taken in Handling the Optical Pickup Unit

The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

1. Do not give a considerable shock to the optical pickup unit as it has an extremely high-precise structure.
2. To prevent the laser diode from the electrostatic discharge damage, the flexible cable of the optical pickup unit removed should be short-circuited with a short pin or a clip.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the flexible cable.
4. The antistatic FPC is connected to the new optical pickup unit. After replacing the optical pickup unit and connecting the flexible cable, cut off the antistatic FPC.
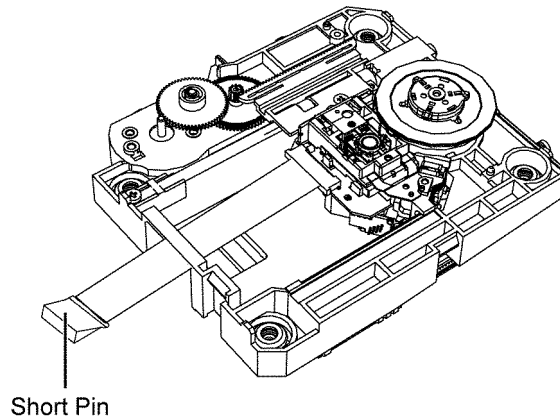
Short Pin

[Caution]
Ground the cable with a clip or a short pin.
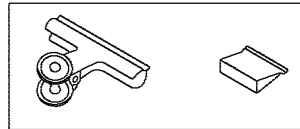
Clip or Short Pin

2.4.2. Grounding for electrostatic breakdown prevention

Some devices such as the CD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

2.4.2.1. Worktable grounding

1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

2.4.2.2. Human body grounding

1. Use the anti-static wrist strap to discharge the static electricity form your body.

Anti-static wrist strap

$1M\Omega$

Conductive material
(sheet) or iron sheet
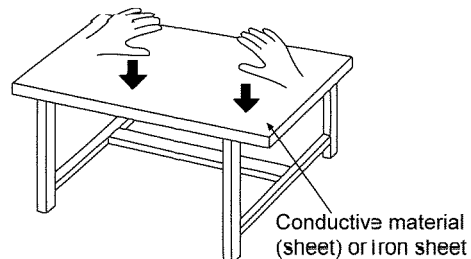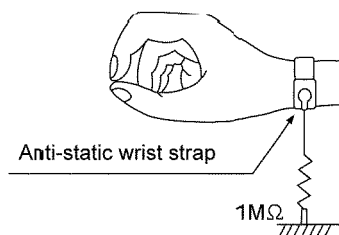
3 Service Navigation

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, (IC6002) (RFKWMHC58PM)

3.2.   AirPlay Operation

3.2.1.   Outline

This function is that the sound in iTunes on PC or iPhone/iPod touch (describe as iPhone) is output from main set speakers through wireless LAN. Selecting a song and or selecting speakers are done on iTunes or iPhone.

3.2.2.   Operation buttons

This function can be operated by main set, remote controller and Stereo Remote also.
- [PLAY MODE], [OK], [UP], [DOWN].
   - Repeat or Shuffle mode can be set.
- [PLAY/PAUSE], [STOP], [F.SKIP], [R.SKIP].
   - Playback control can be done by main set, remote controller and Stereo Remote.

3.2.3.   Switch Selector

- By playback requirement from iTunes or iPhone, it will change selector to AirPlay.
- It will not change selector to AirPlay by main set or remote control.
  (Because operation of song selection cannot be done from main set and need operations on iTunes or iPhone.)
- During power on, it will change selector to AirPlay by playback requirement not depending on selector.
  If CD or USB or iPod is playback condition, it stops playback and change selector to AirPlay.
- During power off and if NETWORK STANDBY setting is on, by playback requirement, it will power on and change selector to AirPlay. If NETWORK STANDBY setting is off, it will not respond for playback requirement.
- During AirPlay authentication, it inhibits to change selector. If press selector button during this time, it accepts the operation and shows "WAIT" on FL, after that it proceeds selector change.

3.2.4.   Multiple Speakers

- If the source is on iTunes, this song can be output from multiple speakers.
  However, only one song can be played at the same time.
- If the source is on iPhone, it can select only one speaker. (iPhone behavior)
- It cannot select to same speaker from more than 2 devices (iTunes/iPhone) at the same time. While the main unit being connected with device A, the main unit is received AirPlay from another device B, and then the unit will be connected device B.

3.2.5.   FL display (During AirPlay)

  1. During AirPlay selector, FL display is below always.

  - It will not show song title and album title and artist name, because the segment on display device is union jack type and it cannot show those titles correctly.

3.2.6. Volume control

- If change speaker volume on iTunes or iPhone side, main set volume will be changed.
  And if change volume on main set side, the volume level on iTunes or iPhone will be changed.
- If volume level is changed through AirPlay, main set will show the volume level on FL display. The volume display is same as the case of operation on main set.
- When change selector to AirPlay, if the volume level through AirPlay is different from volume level on main set, it will show volume level on FL display. The volume display is same as the case of operation on main set.
- If volume is changed by main set button or remote control during AirPlay, the volume level is reflected to iTunes or iPhone side. If main set is in muting condition, it releases muting by volume change through AirPlay. (same as operation on main set)
- If volume is changed by main set button or remote control during other than AirPlay, the volume level is not reflected to iTunes or iPhone side. (It cannot be linked)

3.2.7. LED related to AirPlay

Related to AirPlay, there are below 2 kind of LED.

Wireless LAN connection status (2 color LED)

- Depending on network condition and main set condition during connecting to network, it will control the LED as below.
- During power on, it will control the LED (lighting up/blinking) as below.
- During power off, it will turn the LED off. (including iPod charging and standby with Network Standby on)
- After cold start (no network setting), it will not light up both of colors. After it success to connect (SUCCESS display) by network connection (WPS push button, WPS pin code, manual setting), it will start to control LED as below. Once success to connect, it will continue controlling LED until cold start.

Condition	LED control
Connecting to network (Not depending on selector)	Blue : Solid
Not connection to network under AirPlay selector	Red : Blink (ON: 0.5s/OFF: 0.5s)
Not connection to network under other than AirPlay selector	Light off
Firmware error	Red: Fast blink (ON: 0.25s/OFF: 0.25s)
During WPS push button mode (until start connection process)	Blue : Slow blink (ON: 1s/OFF: 1s)
During WPS pin code mode (until start connection process)	Purple (Blue + Red) : Blink (ON: 0.5s/OFF: 0.5s)
During Net Setup mode (until start connection process)	Purple (Blue + Red) : Slow blink (ON: 1s/OFF: 1s)
Processing network connection	Blue : Blink (ON: 0.5s/OFF: 0.5s)

Connecting to network: Condition that connected to wireless LAN and allocated IP address.

3.2.8. Playback control

- Playback control for AirPlay can be done by main set, remote controller and Stereo Remote.
  Below is detail.
    - [PLAY/PAUSE] : Play, Pause operation.
    - [STOP] : Stop operation
    - [F.SKIP] : Forward skip operation
    - [R.SKIP] : Reverse skip operation

Actual behavior is depending on iOS and iTunes.

3.2.9. Repeat/Shuffle setting

- Repeat/Shuffle setting can be done by remote controller and Stereo Remote.
  When press [PLAY MODE] button, it shows as below on FL.
  If keep "REPEAT" or "SHUFFLE" display without any operation, it goes back to normal display.
    - [REPEAT] → [SHUFFLE] → [AirPlay] (normal display) stands for blank.

3.2.9.1. Repeat setting

- When press [OK] button during "REPEAT" display, it blinks "REPEAT" display and it becomes a condition can be change repeat mode. Under "REPEAT" blinking, leave for 20 seconds without any operation or press [OK], it goes back to normal display.
- When press [UP] or [DOWN] button during "REPEAT" blinking, it shows "REPEAT" (solid display) for 2 seconds and change repeat mode 1 step. (In case of iOS, repeat mode is changed as OFF → 1 REPEAT → ALL RPEAT.) The behavior when press [DOWN] becomes same as [UP] button.
  HC main set cannot get repeat setting on iPod, so it doesn't show repeat mode on FL and doesn't light on repeat icon.

3.2.9.2. Shuffle setting

- When press [OK] button during "SHUFFLE" display, it blinks "SHUFFLE" display and it becomes a condition can be change shuffle setting. Under "SHUFFLE" blinking, leave for 20 seconds without any operation or press [OK], it goes back to normal display.
- When press [UP] or [DOWN] button during "SHUFFLE" blinking, it shows "SHUFFLE" (solid display) for 2 seconds and change shuffle setting. (In case of iOS, shuffle mode is changed as OFF → ON.) The behavior when press [DOWN] becomes same as [UP] button.
  HC main set cannot get shuffle setting on iPod, so it doesn't show shuffle mode on FL and doesn't light on random icon.

3.3.   AirPlay Software update

Occasionally, Panasonic may release updated software for this unit that may add or improve the way a feature operates. These updates are available free of charge.

Preparation

● Turn the unit on.
● Connect this unit to the wireless network.
  – Make sure that the wireless network is connected to the Internet.
  – If "D.CONNECT" is set to "ON", change the setting to "OFF" and connect this unit to a wireless network that is connected to the Internet.

1   Press [SETUP] repeatedly to select "SW UPDATE" and then press [OK].

2   Press [▲, ▼] to select "UPDATE? Y" and then press [OK] to start the update.

DO NOT DISCONNECT the AC power supply cord while one of the following messages is displayed.

– "LINKING", "UPDATING" or "□□□%"
  (" □ " stands for a number.)
● During the update process, no other operations can be performed.

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3   When the update has finished successfully, "SUCCESS" is displayed.

4   Disconnect the AC power supply cord and reconnect it after 3 minutes.

● **Downloading will require several minutes. It may take longer or may not work properly depending on the connection environment.**

■ **Checking the software version**

1   Press [SETUP] repeatedly to select "SW VER." and then press [OK].
  ↳ The version of the installed software is displayed.
2   Press [OK] to exit.

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3.4. Easy connect (Docking)

3.4.1. Outline
• Use "Wi-Fi Network Login Sharing" protocol, send network setting information through iPod dock.

3.4.2. Operation buttons
• [Wi-Fi Connect] button on main set, and [OK] button on iPhone screen.
  To prevent a mistake of operation, long pressing for more than 3 seconds is needed to accept the operation.

3.4.3. Supported iPod model
• iPhone, iPod touch, iPad iOS version 5.0 or later

3.4.4. Operation procedure
• Operation procedure is following
    1. Connect iPhone to your Wi-Fi network.
    2. Connect the iPhone to dock connecter or USB jack on main set.
    3. Press and hold [Wi-Fi Connect] button on main set for more than 3 seconds.
       At this time, the set becomes Easy connect (dock) mode. "CONNECTING WI-FI" is scrolling on FL display.
       And pop-up message "Transfer Wi-Fi setting? [OK][CANCEL]" (studying message) is displayed on iPhone screen.
       * About the exact message on iPhone screen, refer to "01_05_Message_list.doc".
    4. Tap [OK] button on iPhone screen.
       If the set can detect OK operation on iPhone screen side, 'LINKING' is blinking on FL display. (ON: 0.5s, OFF: 0.5s).
       * If the set cannot detect OK operation on iPhone screen, it exits the setting mode after 120 and change back to same condition before pressing [Wi-Fi connect] button. While exiting the mode, " WAIT " is blinking on FL.
       If enter easy connect (dock) mode during initialization on AirPlay module, the indicator becomes as entering easy connect (dock) mode, but counter of time out starts after complete initialization.
       * If the set cannot detect Cancel operation on iPhone screen, it exits the setting mode and change back to same condition before pressing [Wi-Fi connect] button. While exiting the mode, " WAIT " is blinking on FL
    5. If success to connect, 'SUCCESS' is shown on FL display. If fail to connect, it shows 'FAIL' on FL display.
    6. Press [Wi-Fi Connect] button or [OK] on remote control to exit. It clear above FL display and change back to same condition before pressing [Wi-Fi Connect] button.
       And if user do some operations bring changing FL display, it clear above FL display and it will do corresponding to the operation.
       * Even though current is on above step 3 or 4, the process will be canceled by power off.
       * At above step 5 (showing "SUCCESS" or "FAIL"), it releases muting.

User operation will be as following.

HC58 FL display	Operation on HC58 side	Operation on iPhone side
[CD] Normal display	(Nil)	Connect iPhone to your Wi-Fi network.
[CD] Normal display	Connect the iPhone to dock connecter or USB jack on main set.	(Nil)
[CD] Normal display	Long press [Wi-Fi Connect]	(Nil)
[CONNECTION] scroll	(Nil) * If it can detect tapping OK button on iPhone screen, goes to next.	Tap [OK] on main set.
[LINKING] blink	(Nil) * Goes to next, if success to connect.	(Nil) * Goes to next, if success to connect.
[SUCCESS] Success to connect	Press [Wi-Fi Connect] or [OK]. * Any keys are available, if set condition will be changed.	(Nil)
[CD] Normal display	(Nil)	(Nil)

3.4.5. Condition to accept
• During power on, and iPod is connected either dock or USB, if long press [Wi-Fi Connect] for more than 3 seconds, it accepts this operation.
• It doesn't accept [Wi-Fi Connect] during power off. (including iPod charging and standby with network standby on.)
• It accepts [Wi-Fi Connect] operation not depending on selector.
• If press [Wi-Fi Connect] button during CD/iPod/USB playback or pause condition, CD/iPod/USB will stop and go to easy connect (dock) mode.
• If press [Wi-Fi Connect] in tuner/Bluetooth mode, mute the sound and goes to easy connect (dock) mode.
• If press [Wi-Fi Connect] during AirPlay playback condition, mute the sound and goes to easy connect (dock) mode.
• If press [Wi-Fi Connect] on the way of some setting, it exits the setting mode and goes to easy connect (dock) mode.
• If the iPhone is not connected to Wi-Fi network, FL show "SET WI-FI" and cancel the mode.
  However, iOS5.* or some of iOS6 will show "NOT SUPPORETD". (Behavior of iOS), (iOS5.1, iOS5.1.1, iOS6(beta), and so on)
• If the iPod is unsupported model, FL scroll "NOT SUPPORTED" 3 times and cancel the mode.

3.4.6. LED condition

• Depending on set condition or network condition, it controls 2-color LED as following.

Set condition	LED condition (sold/blink)
Not yet connected to network (factory reset condition)	Light off
During easy connect (dock) mode (until start connection process)	Light off
Processing network connection	Blue : Blink (ON: 0.5s/OFF: 0.5s)
Connecting to network	Blue : Solid

3.4.7. FL display

Set condition	FL display
During easy connect (dock) mode (until start connection process)	『CONNECTIN』 ↓ (scroll) 『ONNECTING』 ↓ (scroll) . . . ↓ (scroll) 『ING WI-FI』 ↓ (scroll) . . . ↓ (scroll) 『I 』 ↓ (scroll) ＊Repeat continuously from the beginning
No Wi-Fi sending data	『SET WI-FI』
Not supported	『NOT SUPPORTED』 Scroll 3 times
Processing network connection	LINKING blink
Success to connect	SUCCESS
Fail to connect	FAIL

4 Specifications

■ General

Power consumption	38 W
Power consumption in standby mode[*1]	Approx. 0.1 W
Power consumption in standby mode	
(With the iPod dock open)	Approx. 0.4 W
(With "NET STNBY" set to "ON")	Approx. 6.3 W
Power supply	AC 120 V, 60 Hz
Dimensions (W x H x D)	500 mm x 204 mm x 84 mm
	(19 11/16" x 8 1/32" x 3 5/16")
	(Depth without stand: 75 mm (3"))
Mass (weight)	Approx. 2.6 kg (5.7 lbs)
Operating temperature range	0 °C to +40 °C
	(+32 °F to +104 °F)
Operating humidity range	35% to 80 % RH
	(no condensation)

■ Amplifier Section
Output power:
RMS Output Power Stereo Mode

Front Ch (both ch driven)	20 W per channel (6 Ω),
	1 kHz, 10% THD
Total RMS Stereo mode power	40 W

FTC Output Power Stereo mode

Front Ch (both ch driven)	15 W per channel (6 Ω),
	20 Hz to 20 kHz, 1 % THD
Total FTC stereo mode power	30 W

■ Tuner section

Preset Memory	FM 30 stations
Frequency modulation (FM)	
Frequency range	87.9 MHz to 107.9 MHz
	(200 kHz step)
	87.5 MHz to 108.0 MHz
	(100 kHz step)
Antenna terminals	75 Ω (unbalanced)

■ Disc Section
Disc played [8 cm (3") or 12 cm (5")]

	CD, CD-R/RW (CD-DA)
Pick up	
Wavelength	790 nm (CD)
Audio output (Disc)	
Number of channels	2 ch (FL, FR)

■ Speaker System Section

Type	1 way, 1 speaker system
	(Passive Radiator)
Speaker unit(s)	
Full range	6.5 cm (2 1/2") Cone type x 1
	per channel
Passive Radiator	8 cm (3 1/8") x 2 per channel
Impedance	6 Ω

■ Terminal Section

"IPOD_DOCK" connection	DC OUT 5 V, 1.0 A MAX
"IPOD_PORT" connection	DC OUT 5 V, 2.1 A MAX
Phone jack	
Terminal	Stereo, Ø 3.5 mm (1/8") jack

■ Wi-Fi / AirPlay Section
Wi-Fi

WLAN Standards	IEEE802.11b/g
Frequency Band	2.4 GHz band
Security	WEP, WPA™, WPA2™
WPS version	Version 2.0 (WEP not support)

■ Bluetooth Section

Bluetooth® system specification	V 3.0
Wireless equipment classification	Class 2
Supported profiles	A2DP, AVRCP, GAVDP
Frequency band	2402 MHz to 2480 MHz
	(Adaptive Frequency Hopping)
Driving distance	10 m (33 ft) Line of sight

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

4.1. Others (Licenses)

Made for
iPod iPhone iPad

AirPlay

"Made for iPod", "Made for iPhone", and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

AirPlay, the AirPlay logo, iPad, iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

WiFi CERTIFIED   WI-FI PROTECTED SETUP

The Wi-Fi CERTIFIED Logo is a certification mark of the Wi-Fi Alliance.
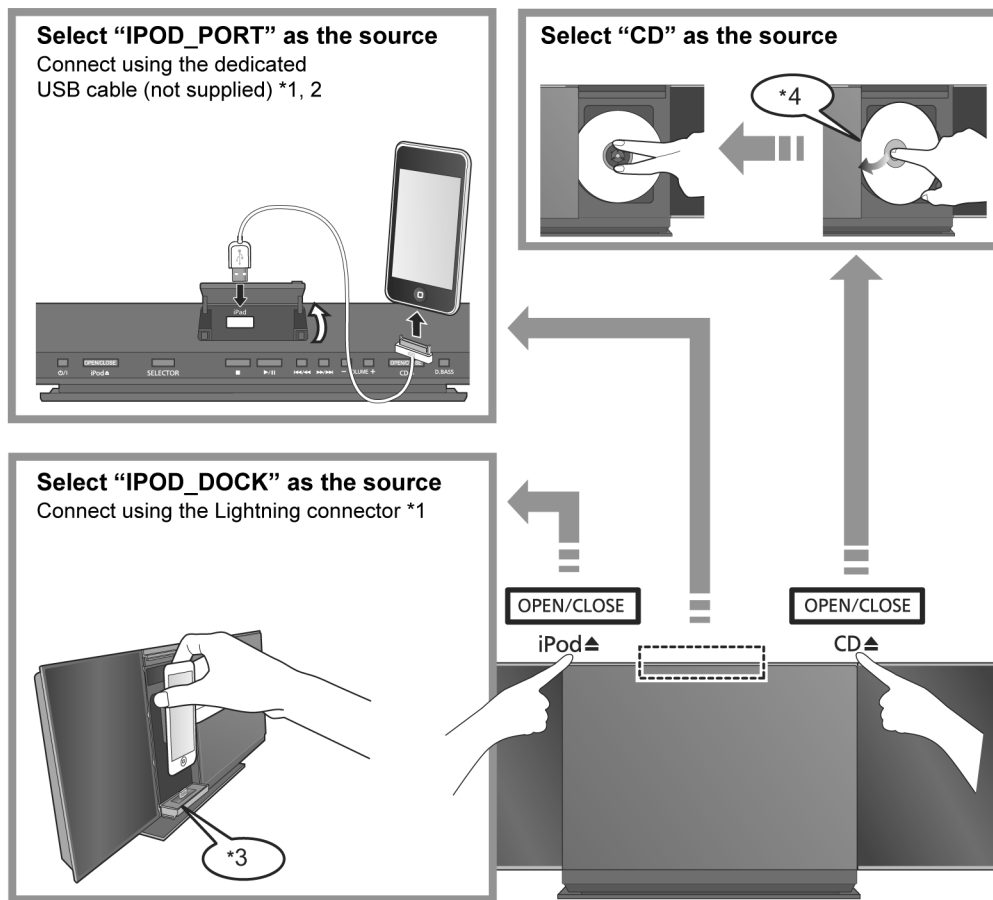The Wi-Fi Protected Setup Mark is a mark of the Wi-Fi Alliance.
"Wi-Fi", "Wi-Fi Protected Setup", "WPA" and "WPA2" are marks or registered marks of the Wi-Fi Alliance.

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5 General/Introduction

5.1. Inserting media

Select "IPOD_PORT" as the source
Connect using the dedicated
USB cable (not supplied) *1, 2

Select "CD" as the source

*4

Select "IPOD_DOCK" as the source
Connect using the Lightning connector *1

*3

OPEN/CLOSE

iPod⏏

OPEN/CLOSE

CD⏏

*1: Refer to "Playable media" for compatible models.
*2: When using the "IPOD_PORT" connection, do not connect the following models to this unit:
  – iPod classic®, iPod [4th (color display), and 5th (video) generation]
    Unexpected behavior may occur.
*3: When using the "IPOD_DOCK" connection:
  ● Be sure to remove the iPod/iPhone from its case.
  ● Do not push or pull the dock manually.
  ● Make sure that the iPod/iPhone is fully inserted and its back is resting against the cushion pad.
  ● Make sure to hold the dock when removing the iPod/iPhone.
*4: Make sure to tilt the disc so as not to touch the sliding door.

● Do not open the sliding door manually.
● Make sure that the unit does not fall when inserting or removing media.
● When moving this unit, be sure to remove all media and turn this unit to standby mode.

■ Charging an iPod/iPhone/iPad

Charging starts when an iPod*2/iPhone/iPad is connected to this unit.
● During standby mode, charging will not start from the "IPOD_PORT" connection, however it will start as usual from the "IPOD_DOCK" connection.
  – To charge from the "IPOD_PORT" connection, start the charging before turning this unit to standby mode.

📖

● Check the iPod/iPhone/iPad to see if the battery is fully charged. (Once fully recharged, additional recharging will not occur.)
● If this unit is switched to standby mode "IPOD CHARGING" is shown on the unit's display.

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5.2. Media playback operations

The following marks indicate the availability of the feature.

`CD` : CD audio in CD-DA format
`iPod` : Compatible iPod/iPhone/iPad
`AirPlay` : When connected to an AirPlay compatible device.
`Bluetooth` : Connected Bluetooth® device

Preparation

- Turn the unit on.
- Insert the media or connect the Bluetooth® / AirPlay compatible device.
- Press [CD], [iPod] or [🚀] to select the audio source.

Basic play
(`CD`, `iPod`, `AirPlay`, `Bluetooth`)

Play	Press [▶/❙❙].
Stop	Press [■].
Pause	Press [▶/❙❙]. Press again to restart play.
Skip	Press [❙◀◀/◀◀] or [▶▶/▶▶❙] to skip track.
Search (Except `AirPlay`)	During play or pause Press and hold [❙◀◀/◀◀] or [▶▶/▶▶❙]. ● `iPod` : Backwards search is only within the current track.

`CD` `Bluetooth` To display information

Press [DISPLAY] repeatedly.

📖

- To use this unit's remote control with a Bluetooth® device, the Bluetooth® device must support AVRCP (Audio Video Remote Control Profile).
  Depending on the device or the status of the device, some operations may not work.

`iPod` To navigate through the iPod/iPhone menu

- Open the Music App to use this feature with iPod touch/iPhone.
- [▲, ▼] : To navigate menu items.
- [OK] : To go to the next menu.
- [iPod MENU] : To return to the previous menu.

📖

- To view the operation, open the sliding door.
- The operation may vary among iPod/iPhone/iPad models.
- Depending on the model (e.g., iPod nano 7th generation, etc.) it may be necessary to select the album, artist, etc. on the iPod/iPhone/iPad.

Playback modes (`CD`, `AirPlay` *1)

Select the playback mode.

1 Press [PLAY MENU] to select "REPEAT" or "RANDOM" / "SHUFFLE".

2 Press [▲, ▼] to select the setting and then press [OK].

REPEAT

`CD`

OFF:	Select to cancel repeat playback.
1-TRACK:	Only plays the selected track. ● "1, ♪", "⟳" is displayed. (Skip to the desired track)
ALL:	All tracks are repeated. ● "⟳" is displayed.

`AirPlay`

Refer to the connected device to verify the selected setting.

`CD` RANDOM

ON:	Plays the contents randomly. ● "RND" is displayed. ● "RND" will not be displayed when "1-TRACK" is selected.
OFF:	Random playback is turned off.

`AirPlay` SHUFFLE

Refer to the connected device to verify the selected setting.

📖

- When using an iPod/iPhone/iPad or Bluetooth® device, use the setting on the device, if available.
- During random/shuffle play, you cannot skip to the previous track.
- `CD` :The mode is canceled when you open the sliding door for discs.
  `AirPlay` : The applied settings will remain until it is changed.

*1: `AirPlay` Perform the settings during playback.

Compatibility CD, iPod/iPhone/iPad, AirPlay, Bluetooth®

• For compatibility of CD, iPod/iPhone/iPad, AirPlay, Bluetooth® please refer to Operating Instructions.

5.3. AirPlay operations

With this feature you can wirelessly stream music from an iOS device (iPhone, iPod, iPad) or a Mac/PC to this unit's speakers.

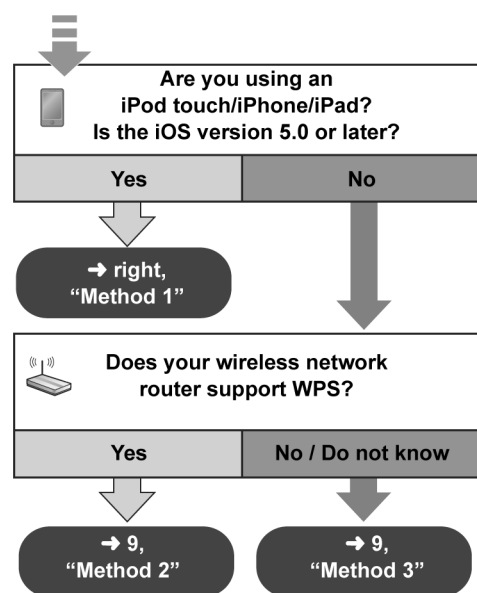To use this feature (AirPlay), this unit must join the same 2.4 GHz wireless network as the AirPlay compatible device .

● It is also possible to use AirPlay without a wireless network router. ("Directly streaming to this unit")
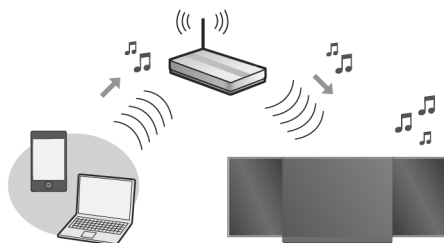
Preparation
● Place this unit close to the wireless network router.

1 Turn this unit on.

2 Follow the chart below to choose the network setting method.

Are you using an iPod touch/iPhone/iPad? Is the iOS version 5.0 or later?	
Yes	No

➜ right, "Method 1"

Does your wireless network router support WPS?	
Yes	No / Do not know

➜ 9, "Method 2" | ➜ 9, "Method 3"

● To cancel this setting in the middle, press [⏻] to turn off the unit.

*1: Depending on the network environment or the wireless network router settings, it may take more than 10 mins. to complete the settings.

Method 1
If you're using an iPod touch/iPhone/iPad. (iOS version 5.0 or later.)

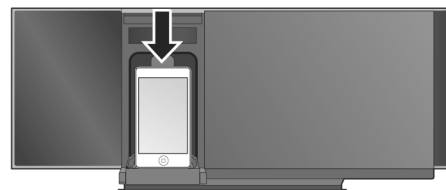With this method you will share the wireless network settings of your iPod touch/iPhone/iPad with this unit.
● The following explanations are based on an iPhone.

1 Connect the **iPhone** to your **home wireless network**.

2 Connect the **iPhone** to **this unit**.
Choose one of the following connections.
"IPOD_DOCK" connection compatible iPod touch/iPhone

iPod touch/iPhone/iPad with iOS 5.0 or later
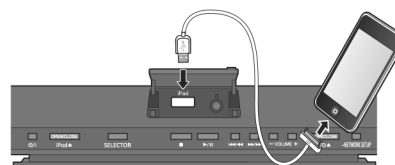
3 Unlock your iPhone and then press and hold **[– NETWORK SETUP]** on this unit for more than 3 seconds.
● If "NOT SUPPORTED" or "SET WI-FI" is displayed, check that the iPhone is connected to the wireless network and try again from step 1.

4 A message will pop-up on your iPhone. Allow the iPhone to share the wireless network settings.*1
↳ The Wi-Fi status indicator blinks.

5 The unit's settings are completed when "**SUCCESS**" is displayed and the Wi-Fi status indicator **stops blinking** and **lights in blue**.

If "FAIL" is displayed press [OK] and try the setting again. If "FAIL" is still displayed, try "Method 2" or "Method 3".
● If the iPhone was disconnected midway through, try again without disconnecting it.

6 Press [OK] on the remote control to exit the settings.

7 To use AirPlay, turn to page 11.

Compatibility devices (AirPlay)
• For compatibility of devices (AirPlay) please refer to Operating Instructions

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5.4. Bluetooth® operations

Pairing Bluetooth® devices

Preparation
- Turn on the Bluetooth® feature of the device and place the device near this unit.
- If this unit is already connected to a Bluetooth® device, disconnect it.

1 Press [ ] to select "BLUETOOTH".

- If "PAIRING" is indicated on the display, go to step 3.

2 Press [PLAY MENU] to select "NEW DEV." and then press [OK].
↳ "PAIRING" is indicated on the display.

3 Select "SC-HC58" from the Bluetooth® device's Bluetooth® menu.

4 Start play on the Bluetooth® device.

📖
- Refer to the operating instructions of the Bluetooth® device for details.
  If prompted for the passkey, input "0000".
- You can register up to 8 devices with this unit. If a 9th device is paired, the device that has not been used for the longest time will be replaced.

Connecting a paired Bluetooth® device

Preparation
- Turn on the Bluetooth® feature of the device and place the device near this unit.
- If this unit is already connected to a Bluetooth® device, disconnect it.

1 Press [ ] to select "BLUETOOTH".
↳ "READY" is indicated on the display.

2 Select "SC-HC58" from the Bluetooth® device's Bluetooth® menu.
↳ The name of the connected device is indicated on the display for 2 seconds.

3 Start play on the Bluetooth® device.

📖
- This unit can only be connected to one device at a time.
- When "BLUETOOTH" is selected as the source, this unit will automatically try and connect to the last connected Bluetooth® device. The Bluetooth® device will be disconnected if a different audio source (e.g., [CD]) is selected.

Bluetooth® transmission mode

You can change the transmission speed to prioritize transmission quality or sound quality.

Preparation
- Press [ ] to select "BLUETOOTH".
- If a Bluetooth® device is already connected, disconnect it.

1 Press [PLAY MENU] repeatedly to select "LINK MODE".

2 Press [▲, ▼] to select the mode and then press [OK].
MODE 1: Emphasis on connectivity
MODE 2: Emphasis on sound quality

📖
- The default setting is "MODE 1".

Bluetooth® input level

If the sound input level of the Bluetooth® transmission is too low, change the input level setting.

Preparation
- Connect a Bluetooth® device.

1 Press [PLAY MENU] repeatedly to select "INPUT LEVEL".

2 Press [▲, ▼] to select the level and then press [OK].
"LEVEL 0" ↔ "LEVEL +1" ↔ "LEVEL +2"

📖
- Select "LEVEL 0" if the sound is distorted.
- The default setting is "LEVEL 0".

Disconnecting a Bluetooth® device

1 While a Bluetooth® device is connected:
Press [PLAY MENU] to select "DISCONNECT?".

**2** Press [▲, ▼] to select "OK? YES" and then press [OK].

Compatibility Bluetooth®

- For compatibility of Bluetooth® please refer to Operating Instructions.

6 Location of Controls and Components

6.1. Main Unit & Remote Control Key Button Operations

1 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.

2 Select the audio source

On the remote control

[iPod] : "IPOD_DOCK" ↔ "IPOD_PORT"

[CD/RADIO] : "CD" ↔ "FM"

[🅱] : "BLUETOOTH"

On this unit:

"CD" → "FM" → "BLUETOOTH" → "IPOD_DOCK"
↑_____ "IPOD_PORT" ←_____⌐

3 Basic playback control buttons
4 Enter setup menu
5 Enter the iPod/iPhone menu /
Change displayed information
6 Open or close the sliding door
7 Adjust the volume (0 (min) to 50 (max))
8 Mute the sound

Mutes the sound. Press again to cancel.
"MUTE" is also canceled when the volume is adjusted or the unit is turned off.

9 Enter playback menu
10 Enter sound menu
11 Selection/OK
12 "IPOD_PORT" for iPod/iPhone/iPad
13 Headphone jack

Plug type: ⌀3.5 mm (1/8″) stereo

Recommended plug type: Straight Plug

- Listening at full volume for long periods may damage the user's ears.
- Excessive sound pressure from earphones and headphones can cause hearing loss.

14 Network setting button
15 Power on indicator
16 Wi-Fi® status indicator
17 Display
18 Sliding door
19 Remote control signal sensor

Distance:

Within approx. 7 m (23 ft) directly in front.

- To avoid interference, please do not put any objects in front of signal sensor.

Top view
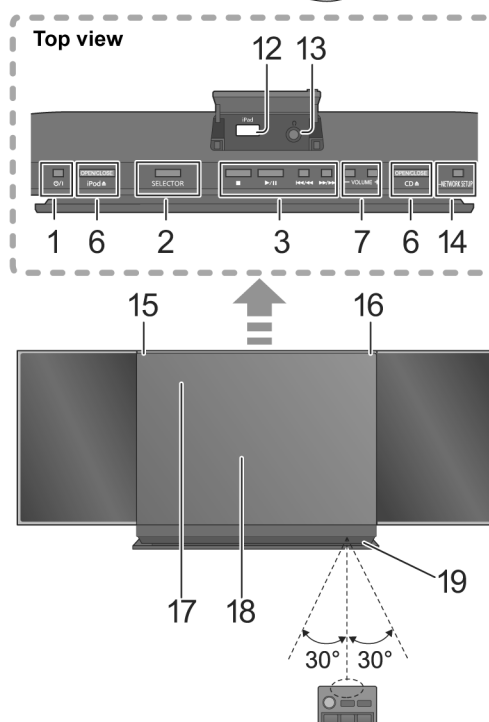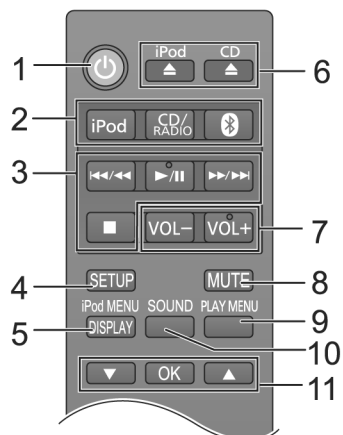
■ **Before using for the first time**

Remove the insulation sheet Ⓐ.
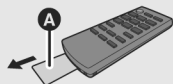
■ **To replace a button-type battery**

Battery type: CR2025 (Lithium battery)

① ②
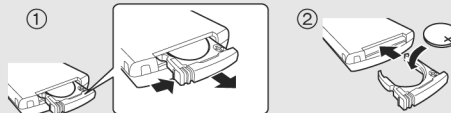
- Set the button-type battery with its (+) mark facing upward.
- Keep the button-type battery out of reach of children to prevent swallowing.

7   Installation Instructions

7.1.   Connections

1

Adhesive tape
(not supplied)

FM indoor antenna
(supplied)

2 **Connect the AC power supply cord after all other connections are completed.**

This unit consumes a small amount of AC power even when turned off.

- In the interest of power conservation, if you will not be using this unit for an extended
  period of time, unplug it from the household AC outlet.

To a household AC outlet

AC Power supply cord (supplied)

8 Service Mode

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

8.1.   Self Diagnostic Mode

Here is the procedures to enter into Self Diagnostic Mode.

Step 1 : Turn on the unit.

Step 2 : Select CD mode.

Step 3 : Press and hold [■] button for 2 seconds follow by [▶▶/▶▶|] on the unit.

Step 4 : The display show as follow.

```
SERVICE
```

To exit the Self Diagnostic Mode

    Use either one of the following methods to cancel the Self Diagnostic Mode.

 • Press the power button on the main unit or using the remote control.

 • Unplug the AC cord.

8.1.1.   Self Diagnostic Table 1

Item		FL display	Key operation
Mode name	**Description**		
Self Diagnostic Mode	To enter into self diagnostic checking	```SERVICE```	Step 1 : Select CD mode (Ensure no disc is inserted). Step 2 : Press and hold [■] follow by [▶▶/▶▶|] on main unit for 2 second .
Error code information	System will perform a check on any unusual/error code from the memory	Example: ``` F 26```	Step 1 : In self diagnostic mode, Press [STOP] on main unit. To exit, press [⏻/I] on main unit or remote control.
Delete Error code	To clear the stored in memory (EEPROM IC)	```CLEAR```	Step 1 : In self diagnostic mode, Press [0] on remote control. To exit, press [⏻/I] on main unit or remote control.

8.1.2. Self Diagnostic Table 2

Item		FL Display	Key Operation
Mode Name	**Description**		**Front Key**

Opecon version	opecon firmware version	(Display 1)
		
		`3AA  YYY`
		
		(Display 2)
		
		`SUM=`
		
		No Rom correction
			Press [DISPLAY] button on the remote control for next version display.
			
			To exit Service Mode, press [⏻/I] button on main unit or remote control.

LSI version	CD-LSI firmware version	(Display 1)
		
		`13C  YYY`
		
		(Display 2)
		
		`SUM`
			Press [DISPLAY] button on the remote control for next version display.
			
			To exit Service Mode, press [⏻/I] button on main unit or remote control.

Yamaha DSP	DSP firmware version	`DSP  XXYY` firmware mode firmware version number	Press [DISPLAY] button on the remote control for next version display. To exit Service Mode, press [⏻/I] button on main unit or remote control.

Bluetooth module	Bluetooth firmware version	(Display 1) BT version
		
		`BT  VXY`
		
		flash version
		flash sub version
		control version
		
		(Display 2) BT EEPROM Version
		
		`EP 0  XXYY`
		
		EEPROM version
		EEPROM sub version
			Press [DISPLAY] button on the remote control for next version display.
			
			To exit Service Mode, press [⏻/I] button on main unit or remote control.

Air Play module	Air Play firmware version	`ACO_  XXX`	Press [DISPLAY] button on the remote control for next version display. To exit Service Mode, press [⏻/I] button on main unit or remote control.

8.2. Self Diagnostic Function Error Code

8.2.1. CD Mechanism Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
CD H15	CD Open Abnormal	During operation POS_SW_R On fail to be detected within 4 sec. Error No. shall be clear by force or during cold start.	CD H15	Press [■] on main unit for next error.
CD H16	CD Closing Abnormal	During operation POS_SW_CEN On fail to be detected within 4 sec. Error No. shall be clear by force or during cold start.	CD H16	Press [■] on main unit for next error.
F26	Communication between CD servo LSI and micro-p abnormal.	During switch to CD function, if SENSE = "L" within failsafe time of 20ms.	F 26	Press [■] on main unit for next error.

8.2.2. Power Amp Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F61/F76	Power Amp IC output abnormal	During power-on, PDET1, PDET2 & MAINV_DET / TEMP_DET is "L" after 1 sec.	F 61 F 76	Press [■] on main unit for next error.
SMPS NG	Checking SMPS Type	SMPS type and REGION not match. The unit will shutdown.	SMPS NG	Press [■] on main unit for next error.

8.2.3. iPod Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
IPD H15	iPod Open Abnormal	During operation POS_SW_L On fail to be detected within 3 sec. Error No. shall be clear by force or during cold start.	IPD H15	Press [■] on main unit for next error.
IPD H16	iPod Closing Abnormal	During operation POS_SW_CEN On fail to be detected within 3 sec. Error No. shall be clear by force or during cold start.	IPD H16	Press [■] on main unit for next error.

8.2.4. Sliding Door Operation Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
ILLEGAL OPEN	Sliding Door Open/Close Abnormal Refer to 8.4 for more information	During Operation 1. Motor set to FREE RUN condition after 2 retry fail to detect any POS_SW. 2. Sliding Door Stop from neutral to iPod open and position sensor could not be detected.	ILLEGAL OPEN	Press [■] on main unit for next error.

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8.2.5. Air Play Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F27	Air Play Communication	Communication between Air Play module and micro-p abnormal	F 27	Press [■] on main unit for next error.

8.2.6. Bluetooth Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F70	Bluetooth Communication	Communication between module and micro-p abnormal	F 70	Press [■] on main unit for next error.

8.3. Doctor Mode Table

Note : To enter the Doctor Mode, please use HC35 remote control.
Here is the procedures to enter into Doctor Mode.

Step 1 : Turn on the unit.

Step 2 : Select CD mode.

Step 3 : Pressing and hold [■] on main unit then press [4] follow by [7] using the remote control.

Step 4 : The display show as follow.

```
NO DISC
```

To exit the Doctor mode
   Use either one of the following methods to cancel the Doctor mode.
 • Press the power button of the unit or using the remote control.
 • Unplug the AC cord.
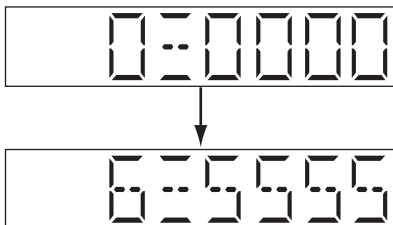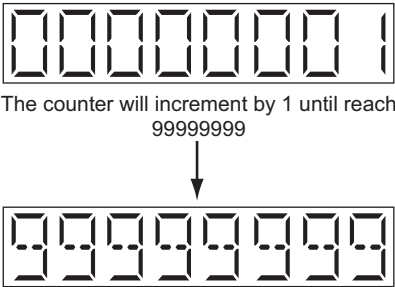
8.3.1. Doctor Mode Table 1

Item		FL Display	Key Operation
Mode Name	**Description**		**Front Key**

Doctor Mode	To enter into Doctor Mode for checking of various items and displaying EEPROM and firmware version.
	
	Note: The micro-processor version as shown is an example. It will be revise when there is an updates.
	
	FL Display sequence Display 1 → 2
		(Display 1)
		
		```3AA YYYY```
		
		Version Display (DEC) Check sum (HEX)
		
		Checksum : (Condition 1)
		
		```SUM```
		
		No Rom correction
		
		(Display 2)
		
		```NO DISC```
		
		The Checksum of EEPROM and firmware version will be display for 2 sec.
			In any mode:
			Press [■] button on main unit follow by [4] & then [7] on the remote control of HC35.
			
			To exit Doctor Mode, press [⏻/l] button on main unit or on the remote control of HC35.

8.3.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
FL Display Test	To check the FL segments display (All segments will light up)		In Doctor Mode: Press [1] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
Volume Setting	To check for preset volume setting Note : In tuner mode this function is not possible	VOL: 50 The [NO DISC] display will appear after 3s, NO DISC	In Doctor Mode: Press [7] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
		VOL: 35 The [NO DISC] display will appear after 3s, NO DISC	In Doctor Mode: Press [8] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
		VOL: 0 The [NO DISC] display will appear after 3s, NO DISC	In Doctor Mode: Press [9] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
Mecha Sliding Panel Reliability	To check the operation of sliding Panel. Sequence as follow : 1. CD Door set to CLOSE position. 2. CD Door move to the left (CD Open direction) and stop at LEFT position for 1 sec. 3. CD Door move to the right (CD Close direction) and stop at CLOSE position for 1 sec. 4. All the process above is considered as 1 cycle. Step (2) ~ (3) will repeat; Cycle Counter display increase every 1 cycle completed.	0:0000 ↓ 6:5555	In Doctor Mode: Press [≥10] follow by [2] & then [1] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.

8.3.3. Doctor Mode Table 3

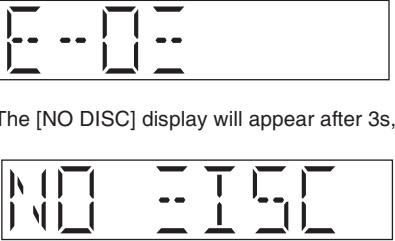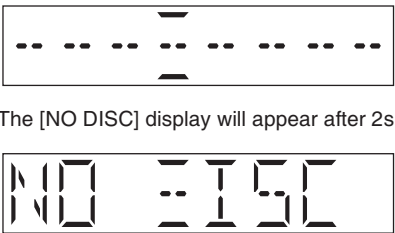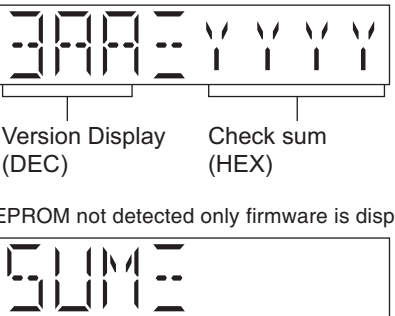| Item		FL Display	Key Operation
Mode Name	Description		Front Key

CD Traverse Test Mode	To check for the traverse unit operation. In this mode, the first & last track is access & read. (TOC). It fails when TOC is not completed by 10s or the traverse is out of focus. for more than 2s
	
	Refer to 8.3.6 for more information
		`00000001`
		
		The counter will increment by 1 until reach 99999999
		
		↓
		
		`99999999`
			In Doctor Mode:
			Press [≥10] follow by [1] & then [2] button on the remote control of HC35.
			To cancel, press [0] button on remote control. It returns Doctor Mode.
			
			To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.

CD Self-Adjusment Display	To display result of self adjustment for CD.	`E -0-`
		
		The [NO DISC] display will appear after 3s,
		
		`NO DISC`
			In Doctor Mode:
			Press [≥10] follow by [1] & then [4] button on the remote control of HC35.
			To cancel, press [0] button on remote control. It returns Doctor Mode.
			
			To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.

CD Combination Test	To check the open/close operation & inner outer disc access operation. 1. It fails when CD open/close is not completed by 4s. 2. The disc access fails in 10s. 3. The traverse is out of focus for more than 2s. Refer to 8.3.7 for more information	`00000001`	In Doctor Mode: Press [≥10] follow by [1] & then [5] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.
Cold Start	To activate cold start upon next power up. (Backup data are initialized)	(display) The [NO DISC] display will appear after 2s, `NO DISC`	In Doctor Mode: Press [SLEEP] button on remote control. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.

EEPROM Checksum	To check sum of EEPROM for a simplifield ROM correction.
	1. When EEPROM is not detected, the only micro-p's version shall be displayed without an EEPROM's check sum
		`3AAE YYYY`
		
		Version Display (DEC) Check sum (HEX)
		
		EEPROM not detected only firmware is display
		
		`SUME`
			In any mode:
			Press [■] button on main unit follow by [4] & then [7] on the remote control of HC35.
			
			To cancel, press [0] button on remote control. It returns Doctor Mode.
			
			To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.

8.3.4. Doctor Mode Table 4

Item		FL Display	Key Operation
Mode Name	**Description**		**Front Key**
Region Checking	To check Region setting of unit. Refer to 8.3.8 for the Region Setting destination	**REGION Y** Region Setting destination	In Doctor Mode: Press [≥10] follow by [1] & then [6] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
CD LSI 947 Version Check	To check CD LSI Version No. & checksum correction	**13C=YYYY** Year of sales Running version ROM type number The display will appear after 2s, **SUM=YYYY** Check sum display (HEX) The [NO DISC] display will appear after 2s, **NO DISC**	In Doctor Mode: Press [4] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
Yamaha DSP Version Check	To check DSP Firmware mode & Version No.	**DSP=XXYY** Firmware Version No Firmware Mode (00~FF) (00~FF) The [NO DISC] display will appear after 5s, **NO DISC**	In Doctor Mode: Press [6] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
Model setting	To check Model Setting.	**LSI=REGX** Model Setting	In Doctor Mode: Press [≥10] follow by [1] & then [8] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.
Air Play Version Check	To check Air Play Firmware Version.	**AC0=XXXX** Firmware Version No (0001~9999) The [NO DISC] display will appear after 5s, **NO DISC**	In Doctor Mode: Press [5] button on remote control. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press **[⏻/I]** button on main unit or on the remote control of HC35.

8.3.5.   Doctor Mode Table 5

Item		FL Display	Key Operation
Mode Name	Description	FL Display	Front Key
Forced Sound setting	To check for preset sound setting.	FL=T The display will appear after 2s, HE=VY The [NO DISC] display will appear after 2s, NO =ISC	In Doctor Mode: Press [SOUND] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.
		ON =.BAS The display will appear after 2s, OFF=D.BA The [NO DISC] display will appear after 2s, NO =ISC	In Doctor Mode: Press [D.BASS] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.
Clock Setting	To check for Clock setting	PM 1200	In Doctor Mode: Press [CLOCK/TIMER] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.
DAMP Safety Test	DSP Safety test setting Refer to 8.3.9 for the Model Setting	SAF=TY The [NO DISC] display will appear after 5s, NO =ISC	In Doctor Mode: Press [≥10] follow by [2] & then [3] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.
DAMP Aging Test	MAS-P4-016 power amplifier life test standard	D=XXYY	In Doctor Mode: Press [≥10] follow by [2] & then [4] button on the remote control of HC35. To cancel, press [0] button on remote control. It returns Doctor Mode. To exit Doctor Mode, press [⏻/I] button on main unit or on the remote control of HC35.

8.3.6. CD Traverse Test (For CD)

```
┌──────────────┐
│  First Track │
│    Access    │
└──────────────┘
        │
        ▼
┌──────────────┐
│  First Track │
│   Play 5 s   │
└──────────────┘
        │
        ▼
┌──────────────┐
│  Last Track  │
│    Access    │
└──────────────┘
        │
        ▼
┌──────────────┐        ┌──────────────┐
│  Last Track  │ ─────▶ │   Count Up   │
│   Play 5 s   │        └──────────────┘
└──────────────┘
```
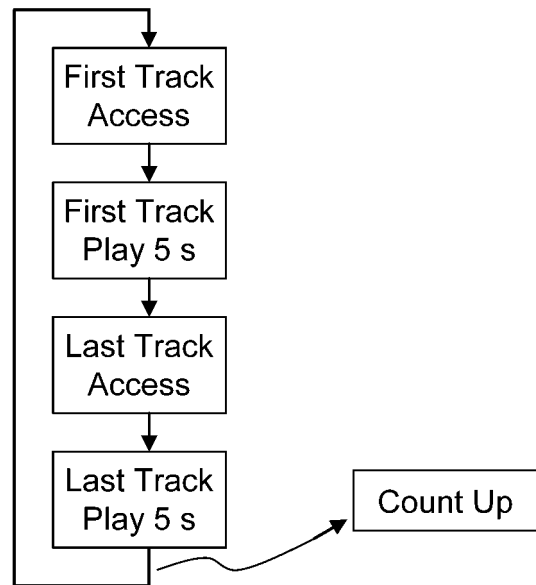
8.3.7. CD Combination Test (For CD)

```
┌──────────────┐
│  First Track │
│    Access    │
└──────────────┘
        │
        ▼
┌──────────────┐
│  First Track │
│  Play 10 s   │
└──────────────┘
        │
        ▼
┌──────────────┐
│  Last Track  │
│    Access    │
└──────────────┘
        │
        ▼                ┌──────────────┐
┌──────────────┐ ─────▶  │   Count Up   │
│  Last Track  │         └──────────────┘
│  Play 10 s   │
└──────────────┘
        │
        ▼
┌──────────────┐
│    OPEN      │
│  Operation   │
└──────────────┘
        │
        ▼
┌──────────────┐
│  OPEN wait   │
│   for 1 s    │
└──────────────┘
        │
        ▼
┌──────────────┐
│    CLOSE     │
│  Operation   │
└──────────────┘
```
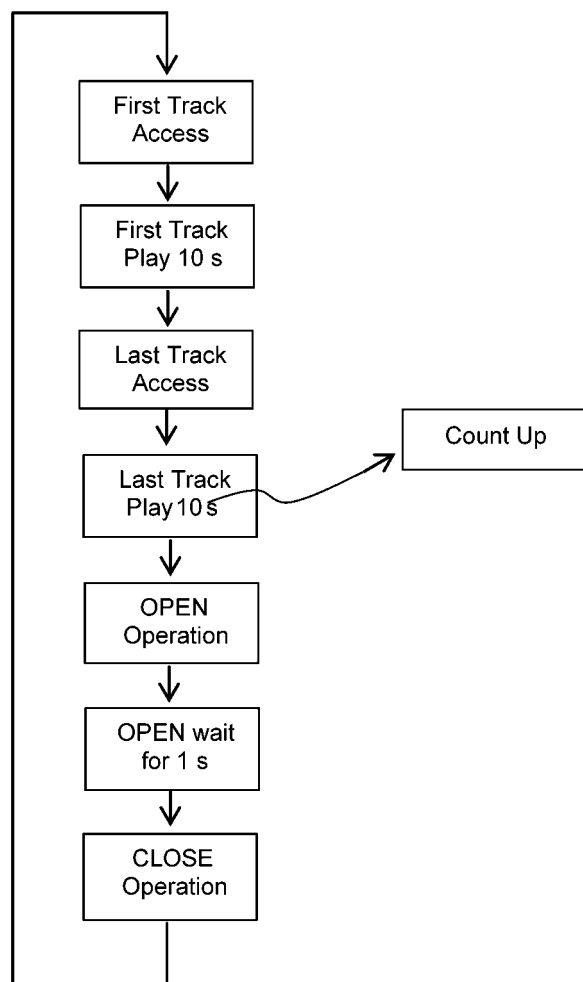
8.3.8. Region Check Table

Model	Region Setting	Series	Country	SMPS ID
HC58	S0	P	North America, Latin America	S1
	S1	Japan	Japan	S3
	S3	EG	Europe	S0
	S4	DBEB	Europe	S0
	S6	PU	Latin America	S0
	S7	GS	Middle East	S0
	S8	DBGN	Asia Oceania	S0

Note : Please refer to Section 16 (Printed Circuit Board Diagrams) for the SMPS P.C.B and Main P.C.B. part number.

8.3.9. Setting for Special Firm for Temperature Test

Controls		Microprocessor Access
S3D	Effect OFF	WRITE 4130 4000 0000
HE	Effect OFF	WRITE 4173 4000 0000
Helios	Effect OFF	WRITE 4042 4000 0000 WRITE 43F9 4000 0000
SV (Loudness)	Effect OFF	WRITE 4050 0000 4000
Limiter	Effect OFF	WRITE 408D 4000 0000 4000 0000 0000
CF	Effect OFF	WRITE 4069 0000 4000 0000 4000
PEQ	Effect OFF	WRITE 4042 4000 0000

Set off in the end of initial setting, and never turn on according to other setting

8.4. Sliding Door Operation

8.4.1. Basic Operation

1. The sliding open and close operation of the electric panel is done with [CD OPEN/CLOSE] key & [iPod OPEN/CLOSE] key on the main set or remote control.
2. The [CD OPEN/CLOSE] key & [iPod OPEN/CLOSE] key valid during standby condition.
3. When in iPod OPEN condition, the door does not move by pressing [CD OPEN/CLOSE] key.
   Note : Same behaviors during closing/opening.
4. When in CD OPEN condition, the door does not move by pressing [iPod OPEN/CLOSE] key.
   Note : Same behaviors during closing/opening.
5. During playback CD, open the door after stopping playback
6. If the door is pushed in the direction from CD open to neutral, the door is closed. It is equivalent to pressing [CD OPEN/CLOSE] key.
7. CD/iPod [OPEN/CLOSE] key is detected based on trigger up (key release) timing.

CD Open

in the middle of closing CD in the middle of opening CD

Neutral

in the middle of opening iPod in the middle of closing iPod

iPod Open
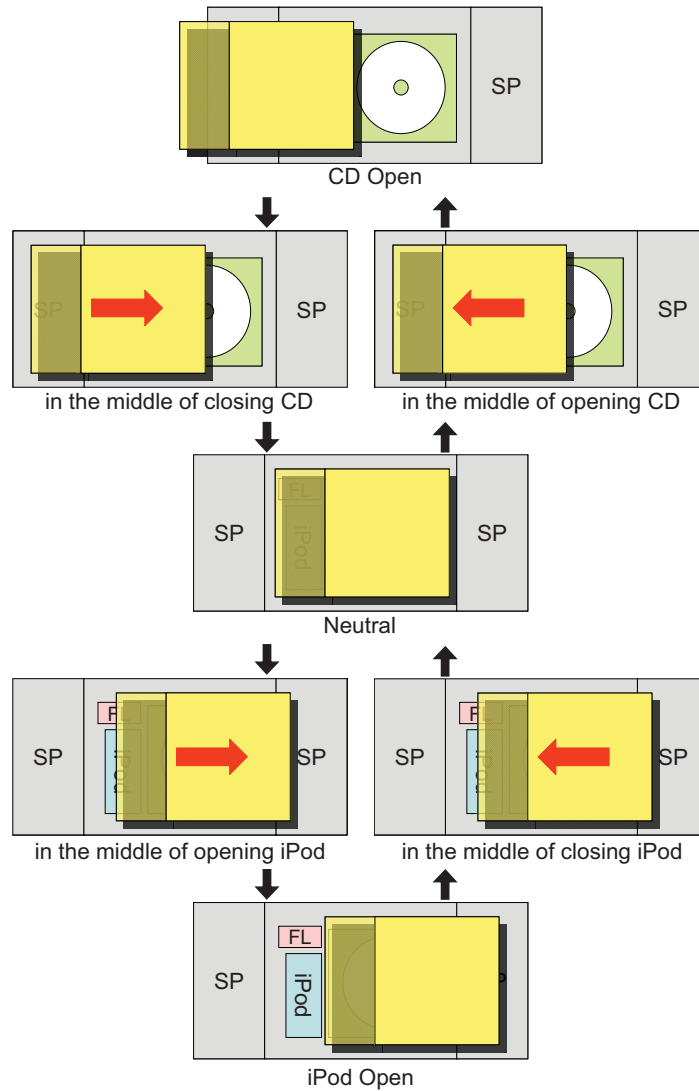
8.5. Wi-Fi trial demo mode

Note : For the sales purpose, customer can try AirPlay function by connecting customer's iPhone/iPod touch with HC directly. In this case, wireless router is not needed.

8.5.1. Operation on main set

Here is the procedures to enter into Wi-Fi trial demo mode.

Step 1 : Press and hold [POWER] and [NETWORK SETUP] buttons on main set for more than 2 seconds.

Step 2 : The set will power on with Wi-Fi trial demo mode.

The condition of demo mode is following.

8.5.1.1. Wireless setting on HC main set

• The set becomes wireless access point mode. SSID and password is below. [******] means last 3 bytes of Mac address. (hereafter, omit this explanation.)

SSID : [HC58 DIR ******]

Password : None

Stereo system name is below.

 [HC58 DIR ******]

The channel number of Wi-Fi is "Auto". (Common channel number for all destinations.)

8.5.1.2. Display on main set

• During demo mode, control 2 color LED as below.

Blink blue and red alternately.

→ Repeat (Blue : 0.5s → Light off : 0.5s → Red : 0.5s → Light off).

• During demo mode, it keep showing [HC58 DIR ******] on FL.

It shows [AIRPLAY] on FL until receive Mac address from AirPlay module.

Detail is below.

[HC58 DIR] (1 sec) → [C58 DIR *] (300ms) → [58 DIR **] (300ms) → ... → [******] (1 sec) → [*****] (300ms) → ... → [*   ] (300ms) → [   ] → (300ms) → repeat.

8.5.1.3. Exit from Wi-Fi Trial demo mode

• If continue no operation and no sound for 10 minutes, it disconnects and power off. At this time, it exits from demo mode.

• Exit demo mode by power off and AC cut.

• After exit from demo mode, it changes back network setting to previous one before enter demo mode.

• When power off from demo mode, the selector is changed to CD. However, if plug out AC code directly from demo mode, the selector becomes AirPlay because it cannot set to CD.

(It's trial function, so after exit from demo mode, the selector is returned to default.)

• If it has network setting and enter demo mode, it will affect to AirPlay function. When enter demo mode, it back up the network setting and when power off from demo mode, it change back the network setting. If plug out AC cord directly from demo mode, the network setting will be cleared because it cannot change back the network setting.

8.5.1.4. Limitation

• During demo mode, inhibit selector change. If selector change operation is done, it does not respond.

8.5.2. Operation on iPhone/iPod touch

After HC enter demo mode, operate followings.

1. Change Wi-Fi connection on iPhone to desired SSID of HC [HC58 DIR ******].
2. On the music playback display, click AirPlay icon and select desired stereo system name of HC [HC58 DIR ******] as output speaker.
3. Output the playing music on iPhone from HC speakers.

9 Troubleshooting Guide

9.1. Setting up to AirPlay

```
START
  │
  ▼
Are you using an iPod touch/iPhone/iPad?Is the iOS version 5.0 or later?
```

METHOD 1

- Connect the iPhone to your home wireless network.
- Connect the iPhone to the unit (product) by choosing either using iPod_Dock or iPod_Port mode.
- Unlock your iPhone and then press and hold [-NETWORK SETUP] on the unit for more then 3 seconds
- A message pop-up on your iPhone?
- If "NOT SUPPORTED" or SET WI-FI is displayed, check that the iPhone is connected to the wireless network and try again from step 1 of Method 1
- Allow the iPhone to share the wireless network settings. Is completed the unit will display "SUCCESS"
- Connected?
- Connection Completed

METHOD 2

- Does your wireless network router support WPS?
- Press and hold [-NETWORK SETUP] on the unit until WPS is displayed
- Press WPS button on wireless router
- Connected?
- Connection Completed

METHOD 3

- Setup unit to NET SETUP mode
- Press [SETUP] on the remote control repeatedly to select "NET SETUP" and then press [OK]. Display will show "SETTING"
- "00_Setup*********" shown on the iPhone Wi-Fi network
- Malfunction with mainset (AirPlay module)
- Connect to "00_Setup*********"
- Go to Safari and input http://192.168.1.12/ on the browser
- Select "Search wireless network"
- Access point appears?
- Back to previous screenm select Manual input
- Select access point and input PW.
- Input SSID, encryption method and PW.
- Fixed IP or Proxy setting needed?
- Select Advanced setting
- Input each items on advanced settings
- Click JOINT
- Connected?
- Connection Completed

Not Connected

- SSID for router & PW correct?
- Try again with correct SSID and PW
- Any devices to interfere frequency, such as microwave, etc?
- Turn off the device interfering frequency or place it in the distance
- Distance to router not too far?
- Try again near router
- Other devices can be connected to router?
- Malfunction with router
- Malfunction with mainset (AirPlay Module)

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10 Service Fixture & Tools

Prepare service tools before process service position.

Ref. No.	Service Tools		Remarks
SFT1	Main P.C.B. (CN6006) - CD Servo P.C.B. (CN7002)	REE1712 (30P FFC)	
SFT2	Main P.C.B. (CN1100) - SMPS P.C.B. (P1700)	REX1538 (7P Wire)	

11 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)**

```
CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK
```

- **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 Base Stand Assembly**
- **Replacement of Door Assembly**
- **Replacement of Front Ornament Unit (L) & (R)**
- **Disassembly of Front Panel Block**
- **Replacement of iPhone Block**
- **Disassembly of Interlock Switch P.C.B.**
- **Disassembly of Remote Sensor P.C.B.**
- **Replacement of Gear Box Assembly**
- **Disassembly of Motor P.C.B.**
- **Disassembly of Belt & Pulley Gear**
- **Disassembly of Motor Assembly**
- **Disassembly of Centering Spring & Centering Stopper**
- **Disassembly of Lever Spring, Trigger Lever & Driver Gear A**
- **Disassembly of SW Lever, Relay Gear & Driver Gear B**
- **Disassembly of Shutter & Shutter Spring**
- **Disassembly of Upper Guide Rail & Top Ornament**
- **Disassembly of Bottom Ornament**
- **Disassembly of Lower Guide Rail**
- **Disassembly of AirPlay Connect P.C.B. & AirPlay Module P.C.B.**
- **Disassembly of SMPS P.C.B.**
- **Replacement of Diode (D1700)**
- **Replacement of Switching Regulator IC (IC1700)**
- **Disassembly of Panel P.C.B. & Button Ornament Unit**
- **Disassembly of Button P.C.B.**
- **Disassembly of Button Ornament**
- **Disassembly of CD Mechanism**
- **Disassembly of CD Servo P.C.B.**
- **Disassembly of Jack Lid**
- **Disassembly of Main P.C.B.**
- **Disassembly of Front Speaker (SP1)**
- **Disassembly of Front Speaker (SP2)**
- **Disassembly of Passive Radiator Unit (SP3 & SP4)**

11.1. 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.
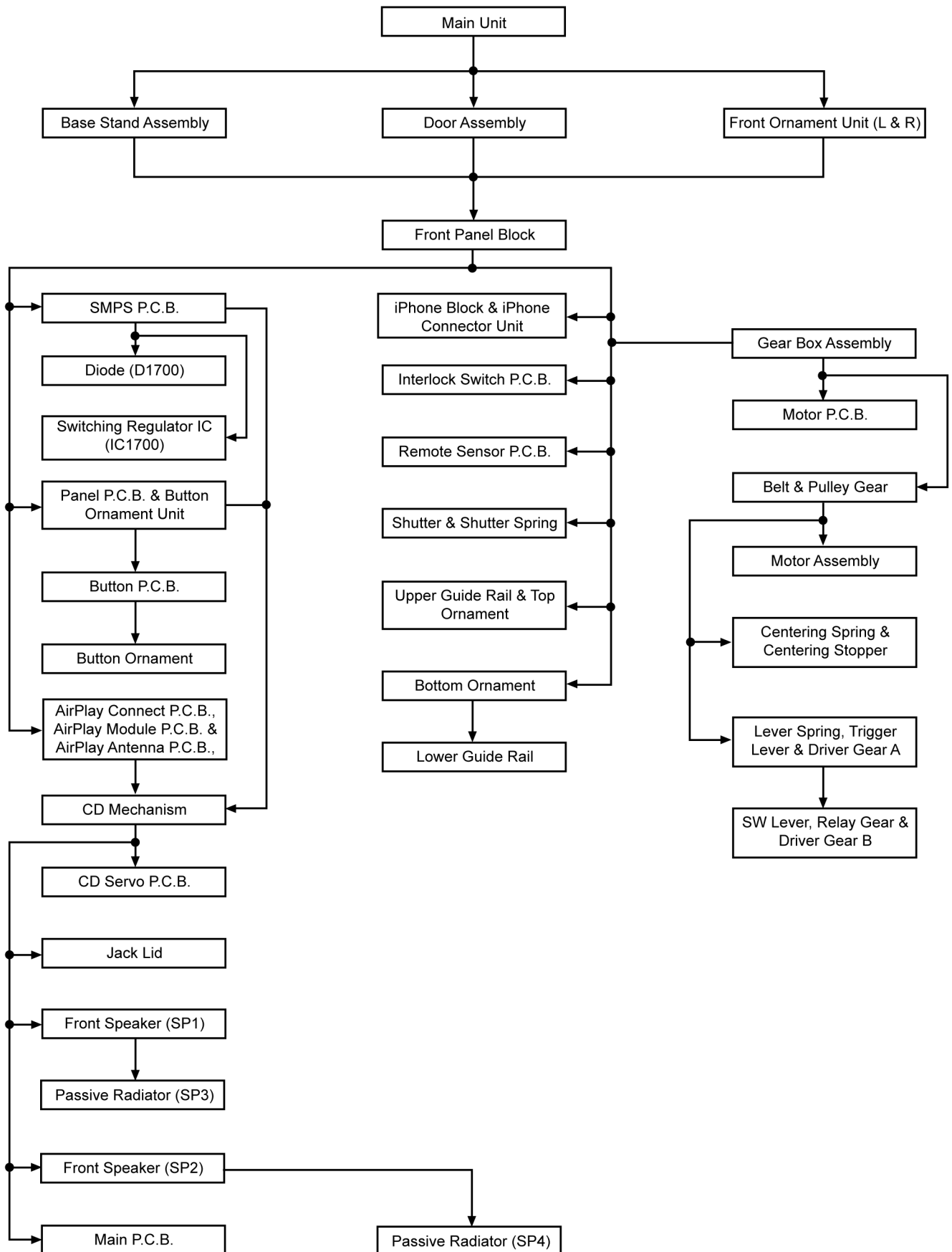
11.2. Types of Screws

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

ⓐ : RHD26046-K **ⓔ** : RHD26043-1 **ⓘ** : RHD20089

ⓑ : VHD1224-1A **ⓕ** : RHD30092-1

ⓒ : RHD26046 **ⓖ** : XTB3+8JFJ-J

ⓓ : XTB3+10JFJK **ⓗ** : XTN2+6GFJ

11.3. Main Parts Location Diagram

Passive Radiator (SP3)
Button P.C.B.
Interlock Switch P.C.B.
AirPlay Connect P.C.B.
Panel P.C.B.
CD Servo P.C.B.
AirPlay Module P.C.B.
Passive Radiator (SP4)
Front Speaker (SP1)
Main P.C.B.
iPhone Connector Unit
SMPS P.C.B.
Motor P.C.B.
Remote Sensor P.C.B.
AirPlay Antenna P.C.B.
Front Speaker (SP2)
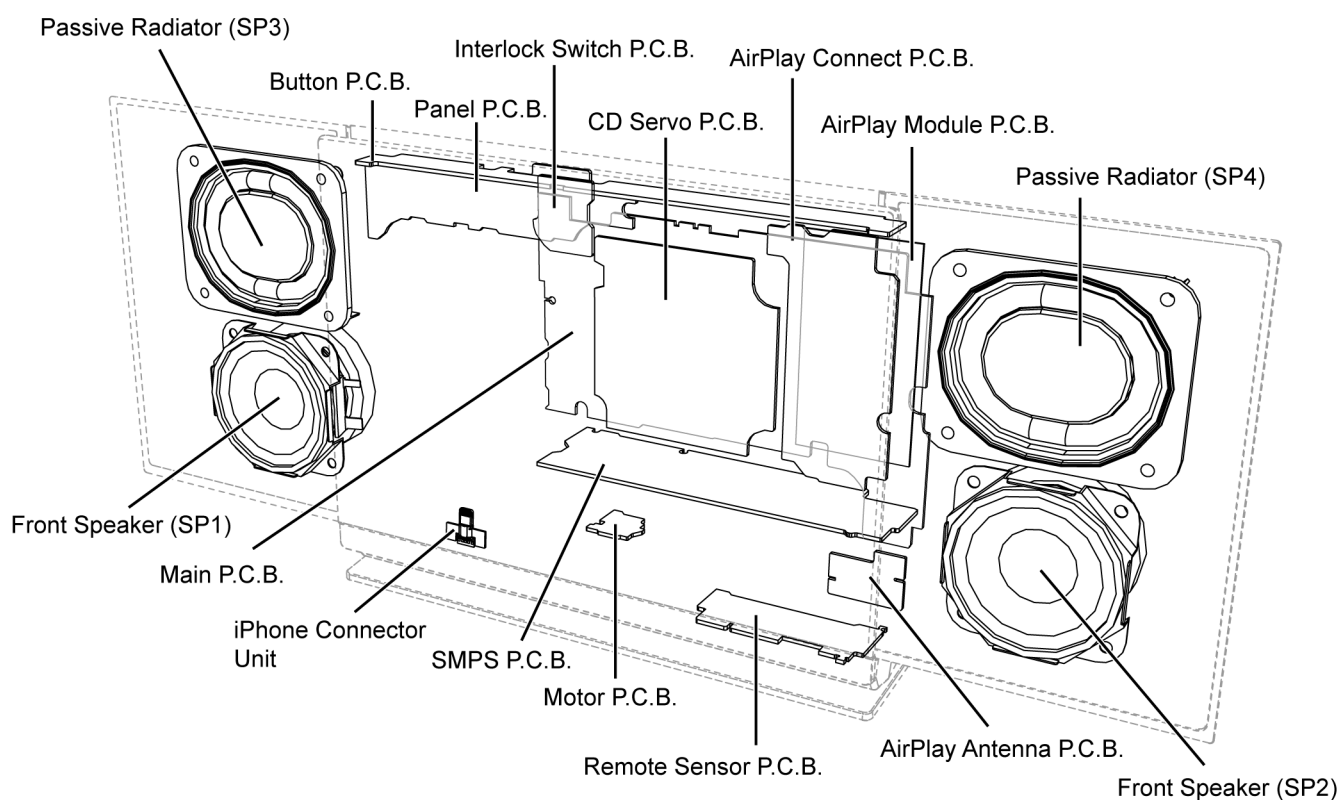
11.4. Disassembly of Base Stand Assembly

Step 1 : Remove 2 screws.

Caution : During assembling, ensure a "tack" Sound is heard when the Base Stand Assembly is fully catch onto the Rear Cabinet Assembly.

Base Stand Assembly

ⓐ

ⓐ x 2
(Step 1)

Base Stand Assembly

Catch   Catch   Catch   Catch

Base Stand Assembly

Step 2 : Remove the Base Stand Assembly.
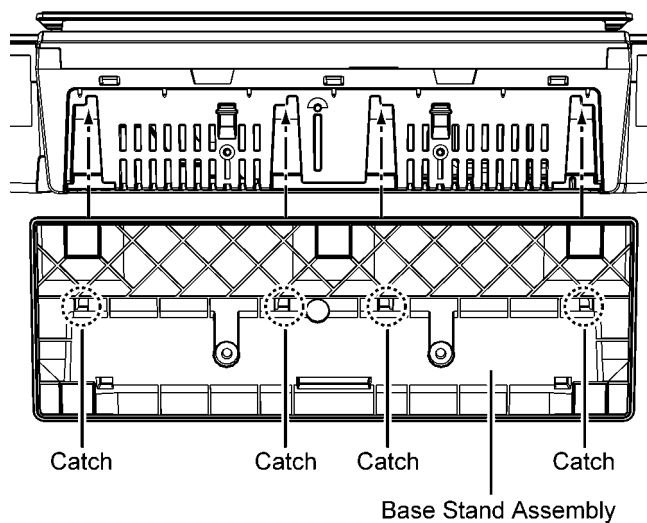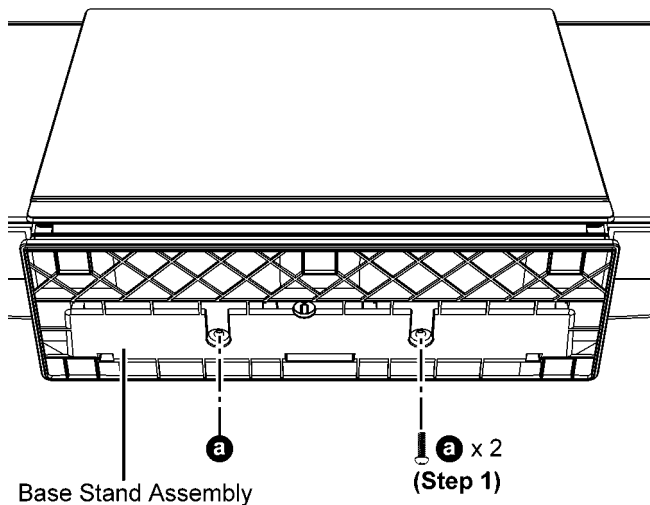
(Step 2)

Base Stand Assembly
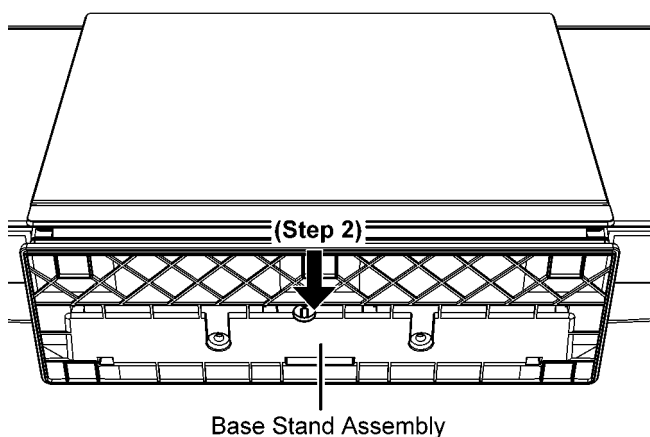
11.5. Replacement of Door Assembly

11.5.1. Disassembly of Door Assembly

Step 1 : Gently push the Door Assembly until it is fully open.
Caution : Do not use strong force during pushing of the Door Assembly.

(Step 1)
Door Assembly

Rear Cabinet
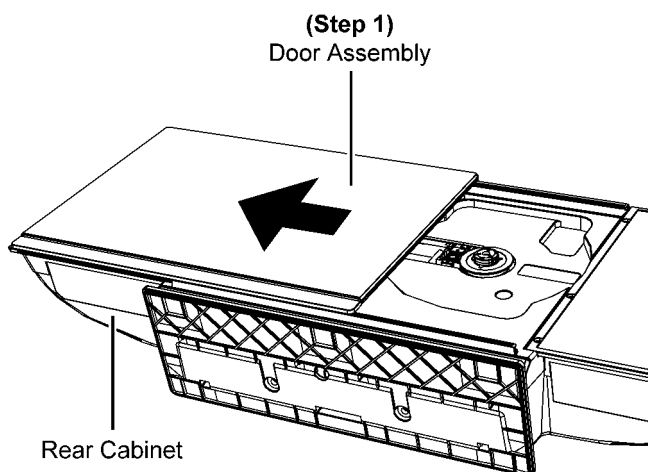
Step 2 : Lift up the Door Assembly as arrow shown in order of sequences (1) to (2).
Step 3 : Gently push the Door Assembly to remove it.
Caution : During disassembling, avoid touching the surface of the OPU lens.

(Step 3)
Door Assembly
(Step 2)
② ①

Lens
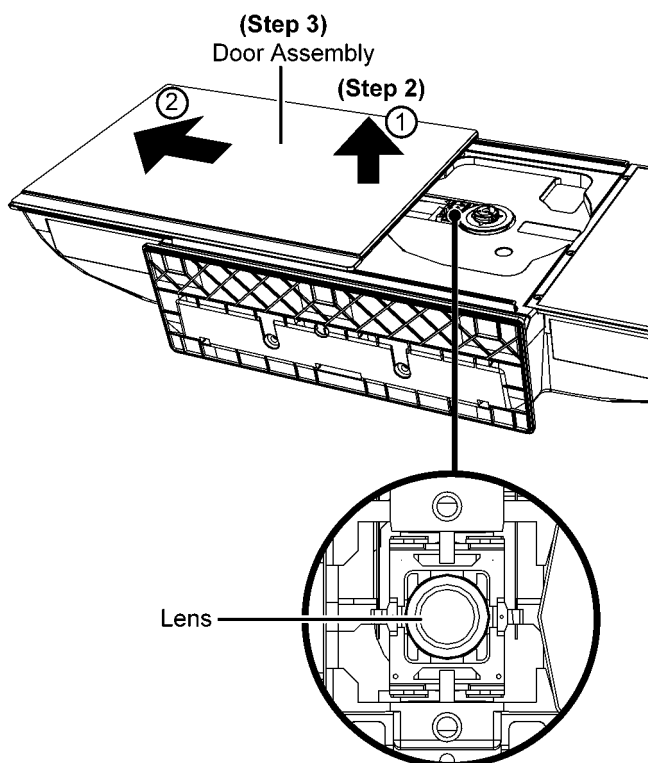
11.5.2. Assembly of Door Assembly

Step 1 : Align the Door Assembly with the (upper & lower guiding rib), guide reel (A & B) on the front panel.
Step 2 : Gently slide the Door Assembly to close it.
Caution : Avoid using strong force, ensure the Door Assembly move smoothly. Remove the Door Assembly & repeat step 1 & step 2 when it stops.

Guide Reel A
(Step 1)
Guiding Rib A

Front Panel

Door Assembly
(Step 2)

Guiding Rib B

Guide Reel B

44
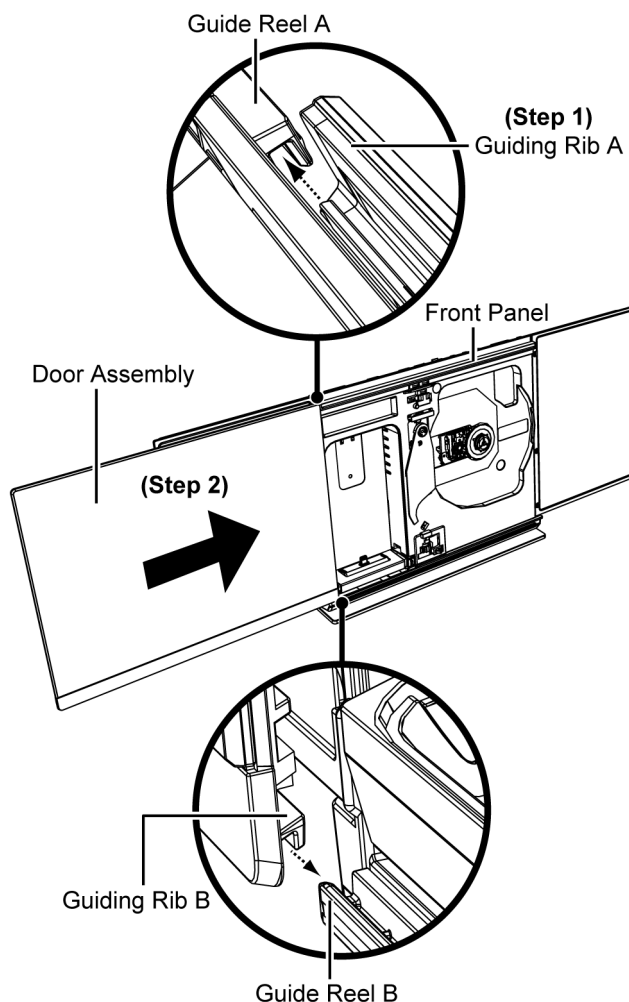
11.5.3. Disassembly of Idling Rack

• Refer to "Disassembly of Door Assembly"

Step 1 : Slide the Idling Rack until it come to a stop.

(Step 1)
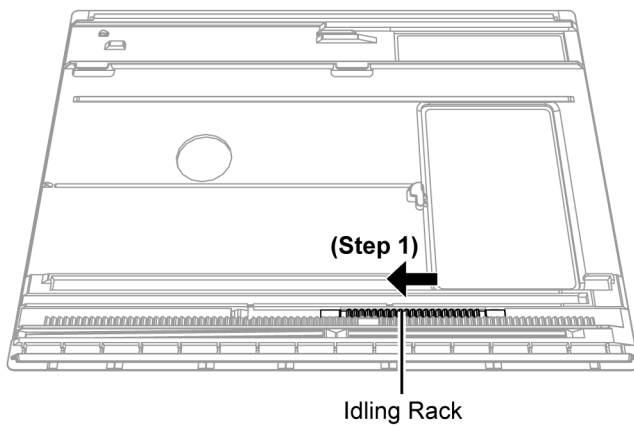
Idling Rack

Step 2 : Gently using a Screwdriver to lift up the Idling Rack.
Step 3 : Remove the Idling Rack as arrow shown.

(Step 3)

(Step 2)
Screwdriver
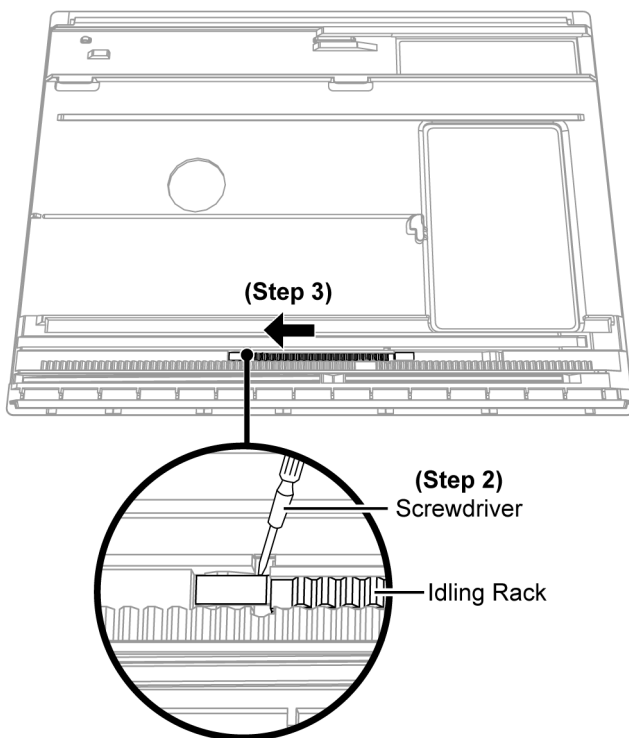
Idling Rack

Caution : During assembling, insert the Idling Rack & ensure it is fully catched to the Door Assembly.

Door Assembly

Idling Rack

LONG   RIB
OK

SHORT

NG

LONG

RIB
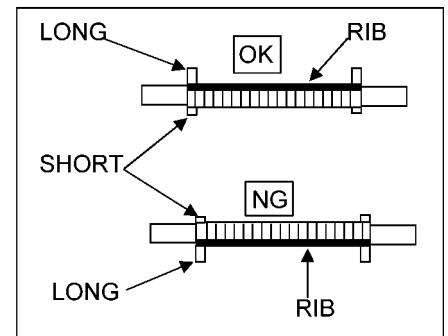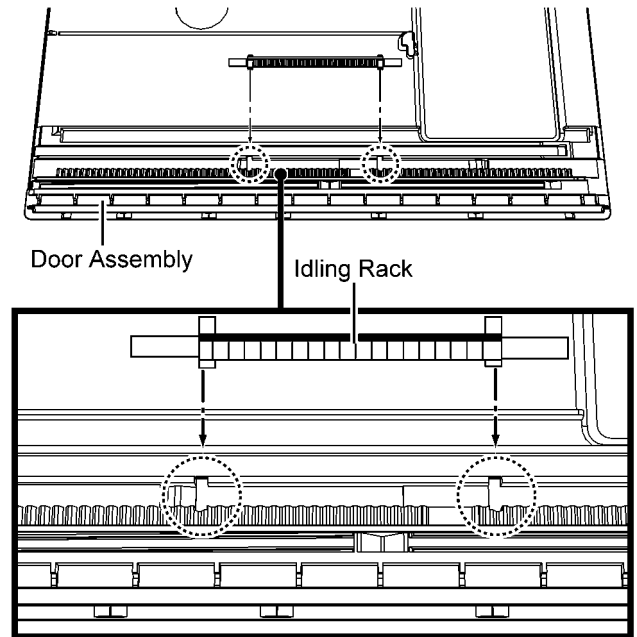
11.6. Replacement of Front Ornament Unit (L) & (R)

Note : Front Ornament Unit (L) & (R) have the same mechanical structure. For disassembling/assembly of Front Ornament Unit (R), repeat the (Step 1) to (Step 3) of 11.6.1./11.6.2. Below illustrated Front Ornament Unit (L)

• Refer to "Disassembly of Door Assembly"

11.6.1. Disassembly of Front Ornament Unit (L)

Step 1 : Remove 3 screws.
Step 2 : Push the Front Ornament Unit (L) upwards.

Front Ornament Unit (L)   **(Step 1)** 🔩 ● x 3

(Step 2)

Step 3 : Remove the Front Ornament Unit (L).
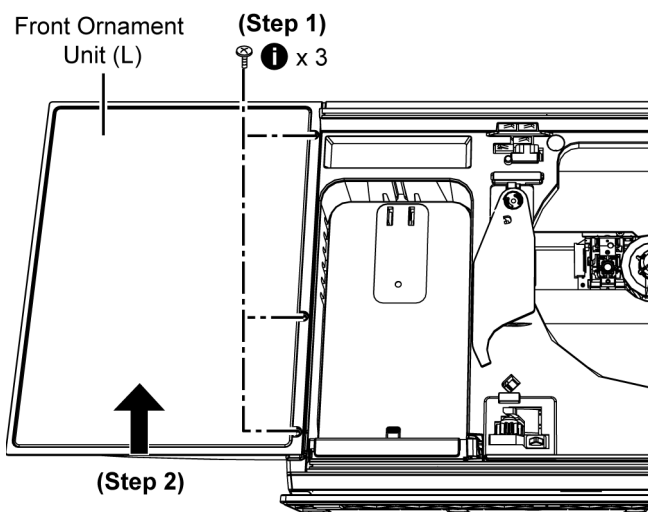
(Step 3)
Front Ornament Unit (L)
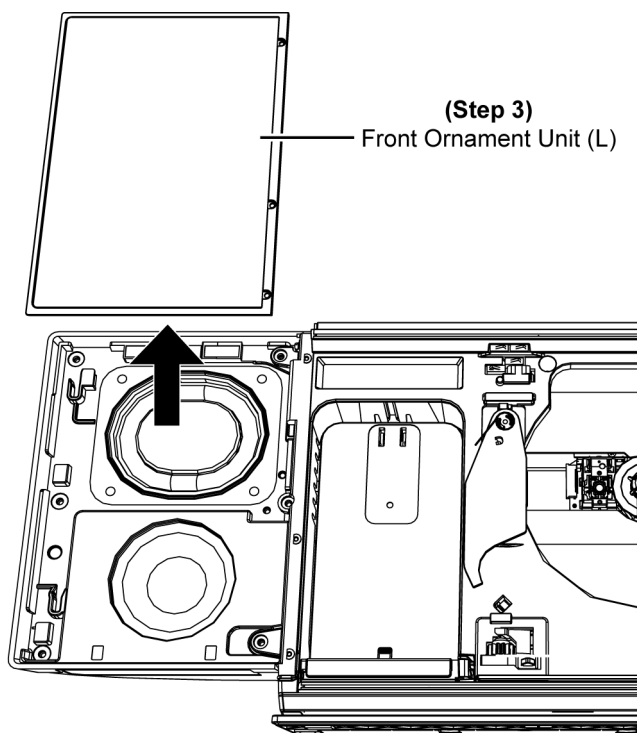
11.6.2. Assembly of Front Ornament Unit (L)

Step 1 : Place the Front Ornament Unit (L) into the Speaker Cabinet Assembly (L).
Caution : During assembling, ensure the Front Ornament Unit (L) is fully catched and inserted into the Speaker Cabinet Assembly (L).

(Step 1)
Front Ornament Unit (L)

Catch   Catch

Speaker Cabinet Assembly (L)
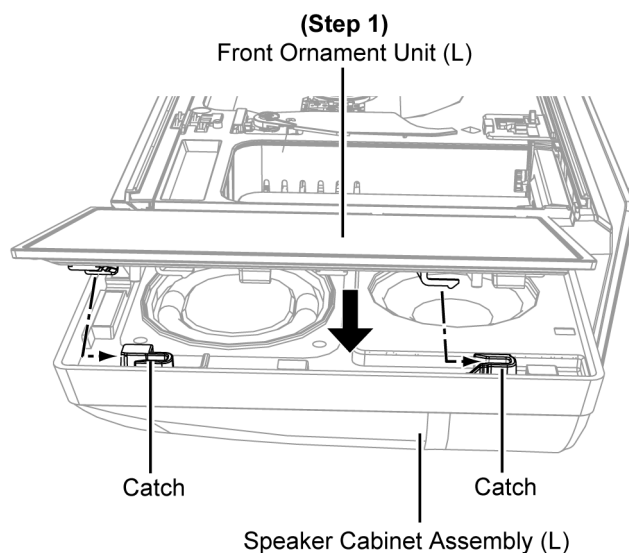
Step 2 : Align the Front Ornament Unit (L) into the Front Speaker Assembly (L) with the bottom end positioned at the dotted line.
Step 3 : Push down Front Ornament Unit (L) to fix it.
Caution : A "click" sound is heard when the Front Ornament Unit (L) is fully catched.

Front Ornament Unit (L)

(Step 3)

Ⓐ
(Step 2)

Step 4 : Fix 3 screws.
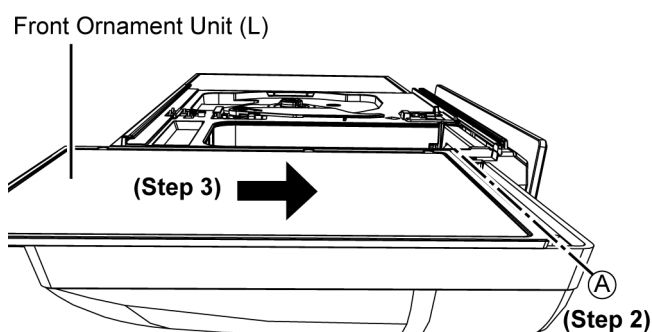
(Step 4)
⊗ 🔩❶ x 3

Front Ornament
Unit (L)
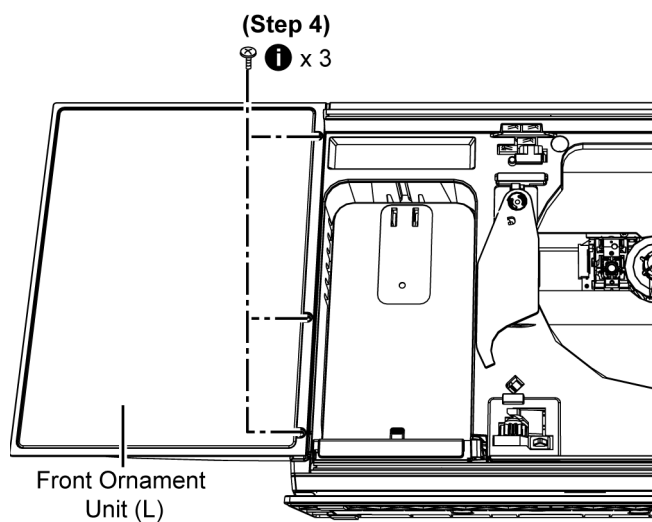
11.7. Disassembly of Front Panel Block

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"

Step 1 : Remove 8 screws.

(Step 1)
🔩ⓐ x 8

ⓐ

ⓐ

ⓐ   ⓐ

ⓐ   ⓐ   ⓐ ⓐ ⓐ
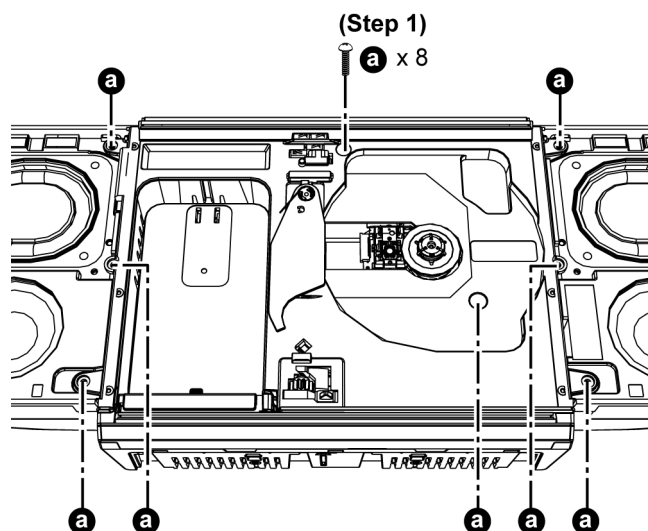
Step 2 : Release 3 catches on the Front Panel Block.

Front Panel Block

(Step 2)

Catches
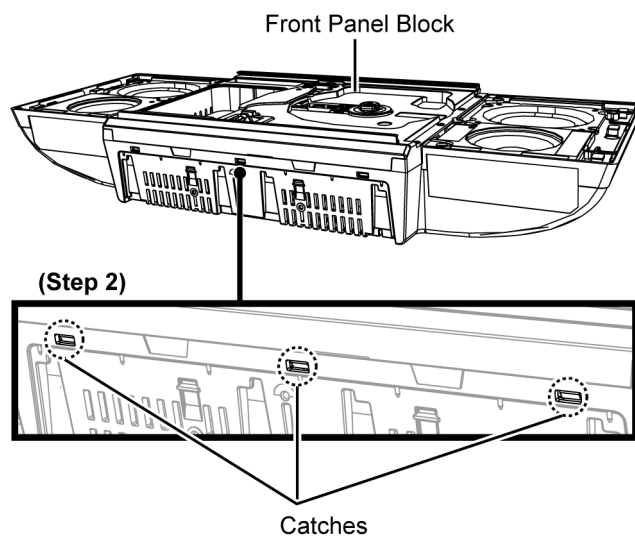
Step 3 : Slightly lift up the Front Panel Block.

Front Panel Block

(Step 3)
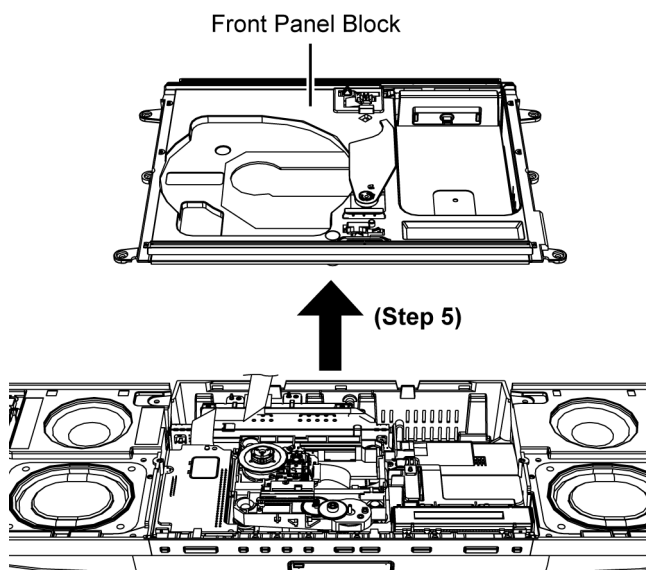
Step 4 : Detach 16P FFC at the connector (CN941) on the Remote Sensor P.C.B..

Front Panel Block

Remote Sensor P.C.B.

CN941
(Step 4)

Step 5 : Remove the Front Panel Block.

Front Panel Block

(Step 5)
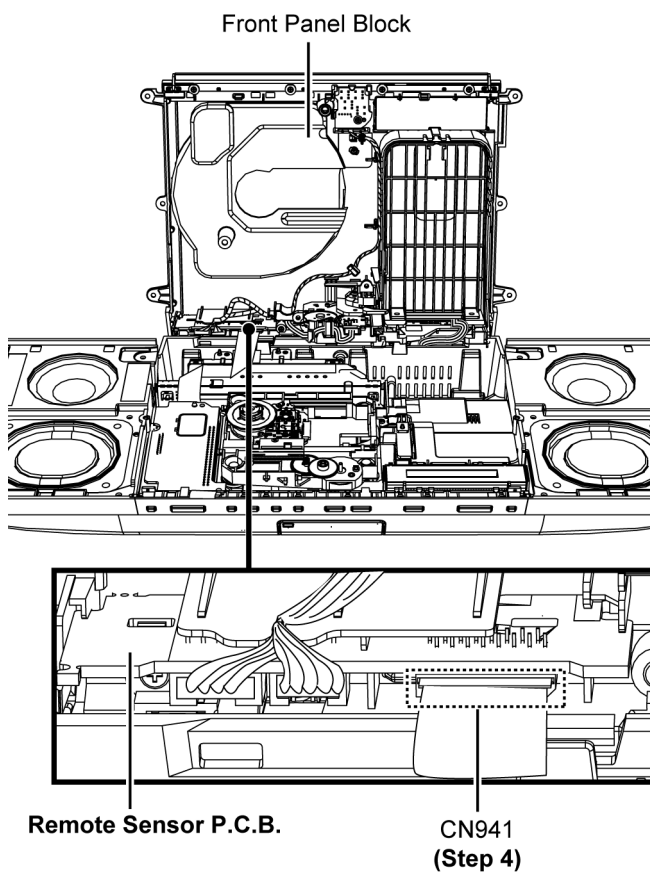
11.8.   Replacement of iPhone Block

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"

11.8.1.   Disassembly of iPhone Block

Step 1 : Slightly lift up and remove the Slide Guide Pin as shown.

Slide Guide Pin

(Step 1)
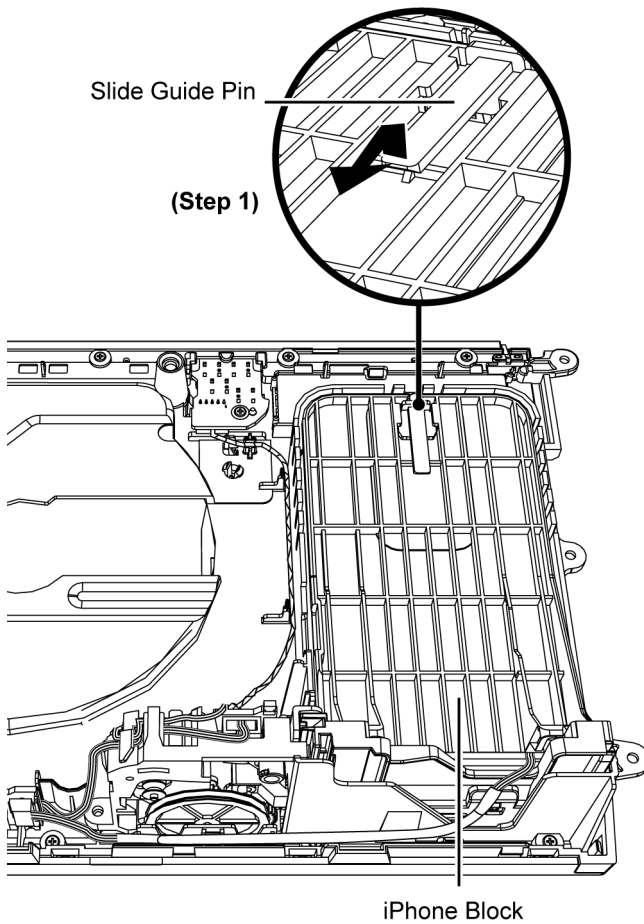
iPhone Block

Step 2 : Release the 5P Wire.

Step 3 : Detach 5P wire at the connector (P945) on the Remote Sensor P.C.B..

iPhone Block

P945
(Step 3)

5P Wire
(Step 2)
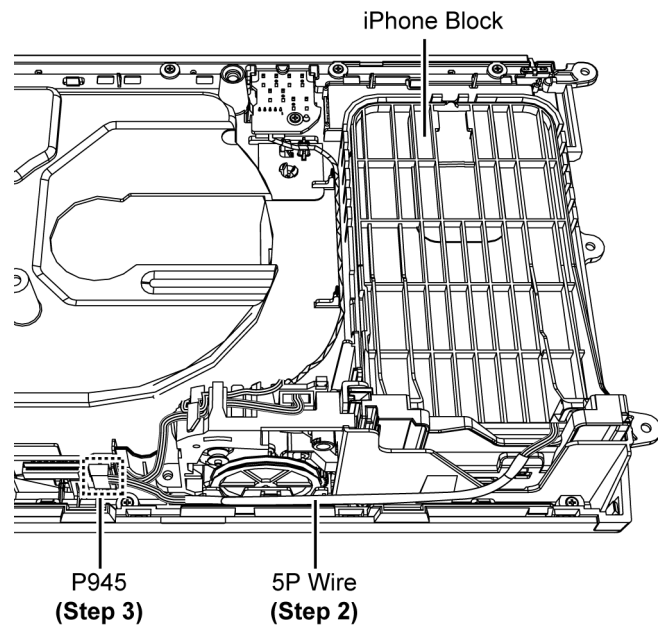
Step 4 : Push the iPhone Block forward until it come to a stop.

iPhone Block

(Step 4)
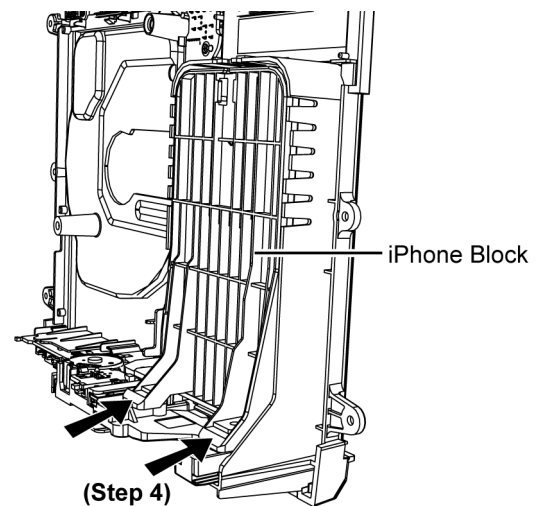
Step 5 : Slightly lift up the iPhone Block from Stopper area as shown and push forward.

iPhone Block

iPhone Block

Stopper
(Step 5)
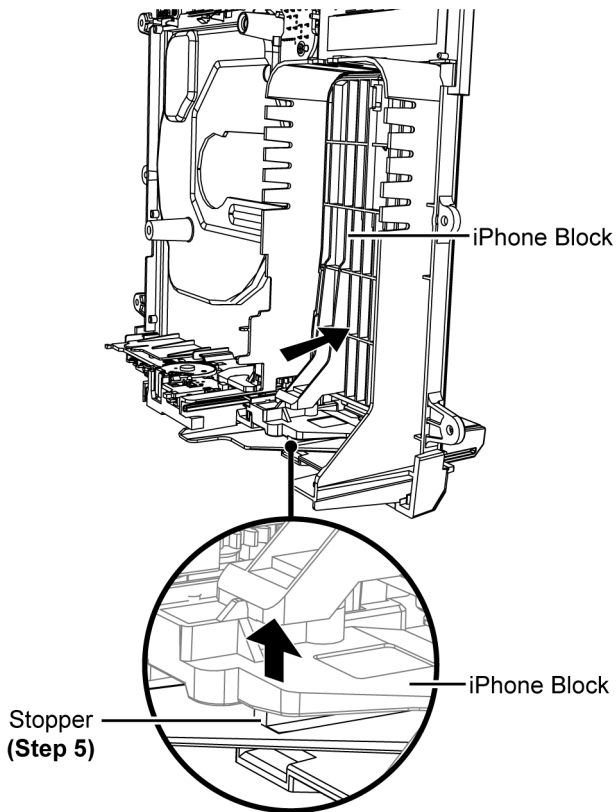
Step 6 : Remove the iPhone Block.

iPhone Block

(Step 6)
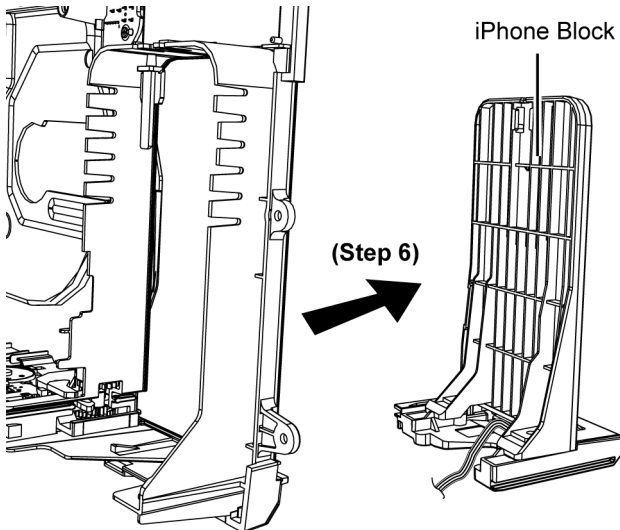
11.8.2. Assembly of iPhone Block

Step 1 : Align the iPhone Block with the guide on the Front Panel Assembly.
Step 2 : Gently push the iPhone Block until it is fully fixed.

iPhone Block

(Step 2)
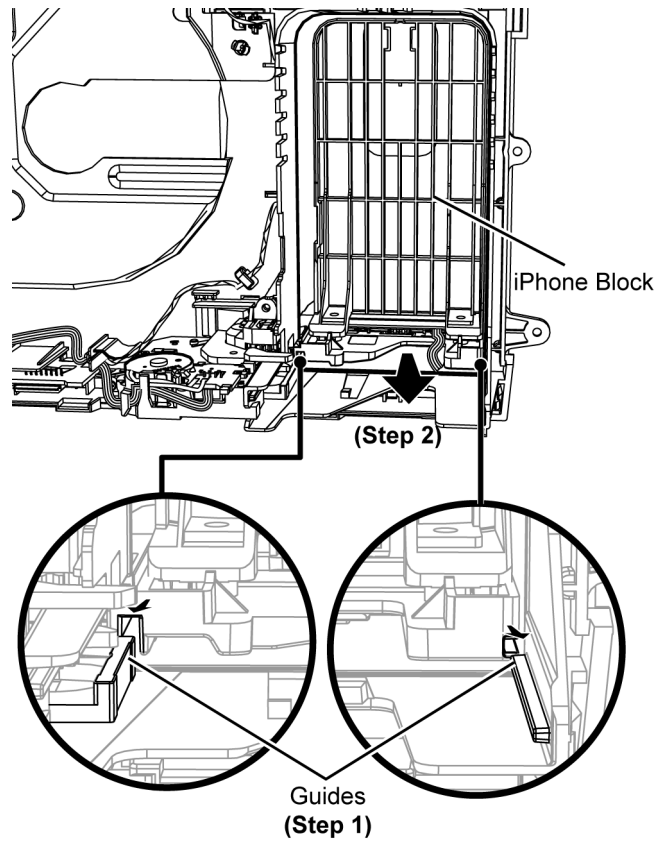
Guides
(Step 1)

Step 3 : Connect 5P wire at the connector (P945) on the Remote Sensor P.C.B..

Caution : During assembling, dressed the 5P wire into the ribs of the Front Panel Block.
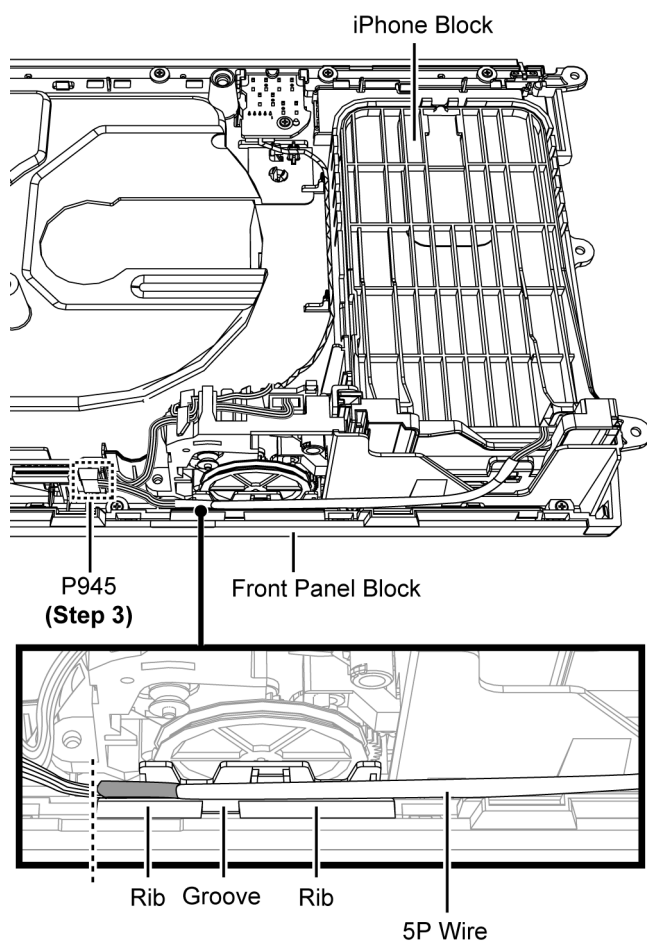
Step 4 : Gently push the Slide Guide Pin upwards. A "click" sound is heard when the Slide Guide Pin is fully catched.

iPhone Block

Slide Guide Pin

(Step 4)

P945
(Step 3)

Front Panel Block

Rib   Groove   Rib

5P Wire
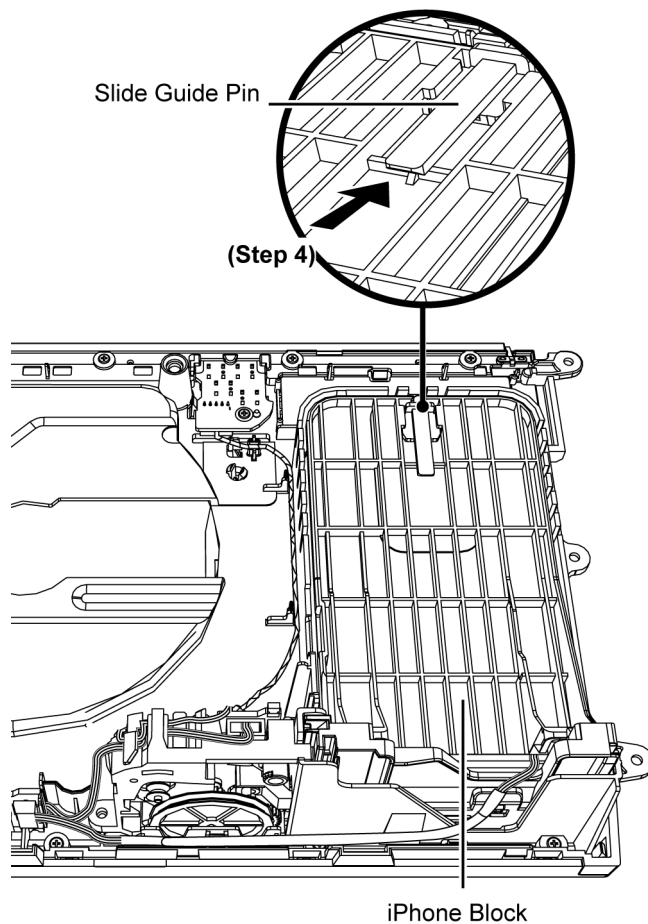
iPhone Block

11.8.3. Disassembly of iPhone Support

• Refer to "Disassembly of iPhone Block"

Step 1 : Remove 2 screws.

(Step 1)

C x 2   **C**
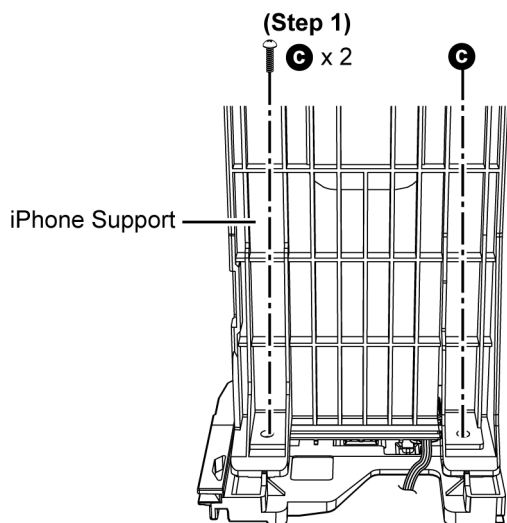
iPhone Support

Step 2 : Remove iPhone Support as shown.

iPhone Support

iPhone Base

(Step 2)
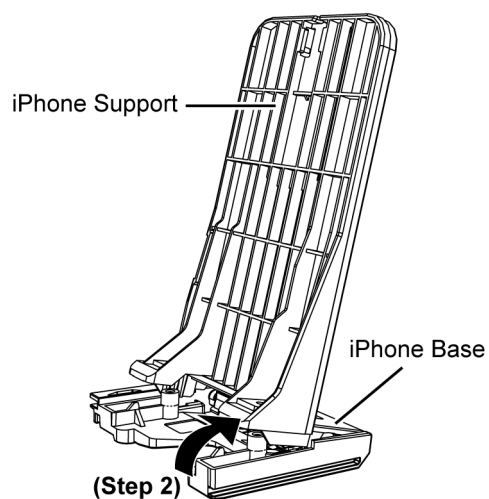
Caution : During assembling, ensure that the iPhone Support is properly catch & fix to the iPhone Base.

iPhone Support

iPhone Base

Catches
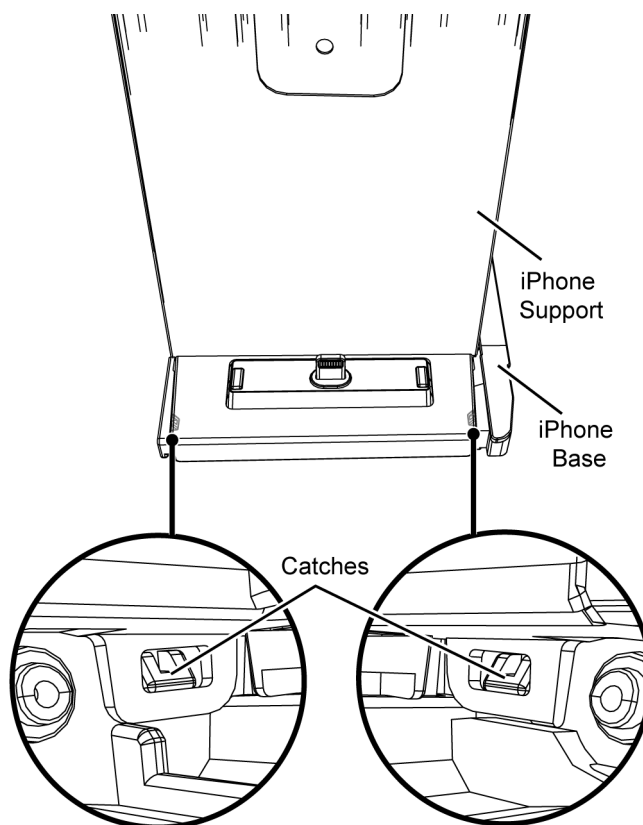
11.8.4. Disassembly of iPhone Base

• Refer to "Disassembly of iPhone Block"

• Refer to "Disassembly of iPhone Support"

Step 1 : Insert a flathead screwdriver below the iPhone Base as shown.

Step 2 : Push outwards and lift up the screwdriver to release the pivot of the iPhone Base.

11.8.5. Disassembly of iPhone Support Spring

• Refer to "Disassembly of iPhone Block"

• Refer to "Disassembly of iPhone Support"

• Refer to "Disassembly of iPhone Base"

Step 1 : Release the iPhone Support Spring as shown.

Caution : During assembling, ensure iPhone Support Spring is properly fix under the rib at iPhone Dock.

Step 3 : Lift up the iPhone Dock Unit.

Caution : During assembling, A "click" sound is heard when the iPhone Dock Unit is properly fixed.
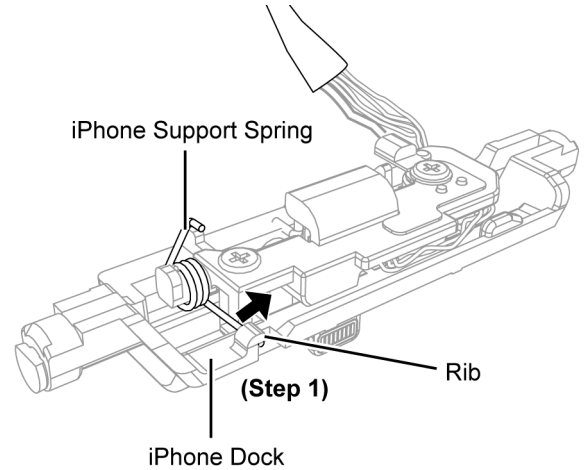
Step 2 : Remove the iPhone Support Spring as shown.

Caution : Keep the iPhone Support Spring in safe place and place them back during assembling.
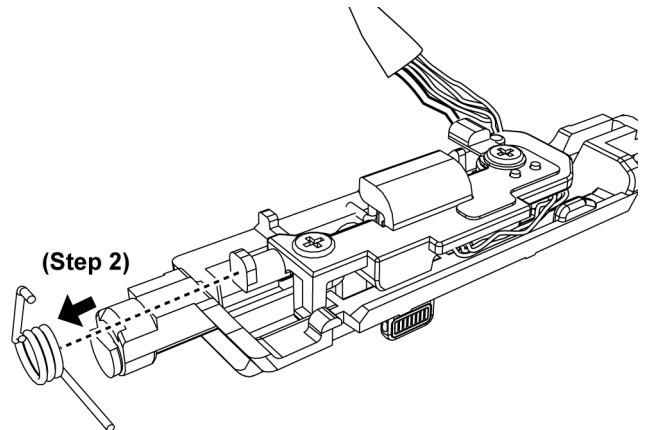
11.8.6. Disassembly of iPhone Dock

• Refer to "Disassembly of iPhone Block"
• Refer to "Disassembly of iPhone Support"
• Refer to "Disassembly of iPhone Base"
• Refer to "Disassembly of iPhone Support Spring"

Step 1 : Remove 2 screws.

(Step 1)

🔩 ➍ x 2   ➍

5P Wire

Connector Holder Unit
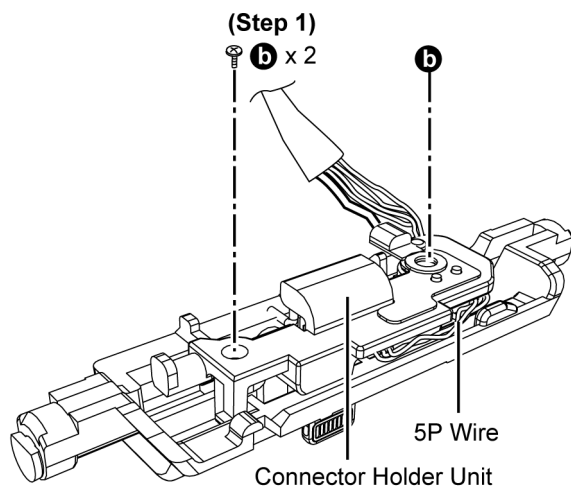
Step 2 : Lift up the Connector Holder Unit.

Connector Holder Unit

(Step 2)

iPhone Dock
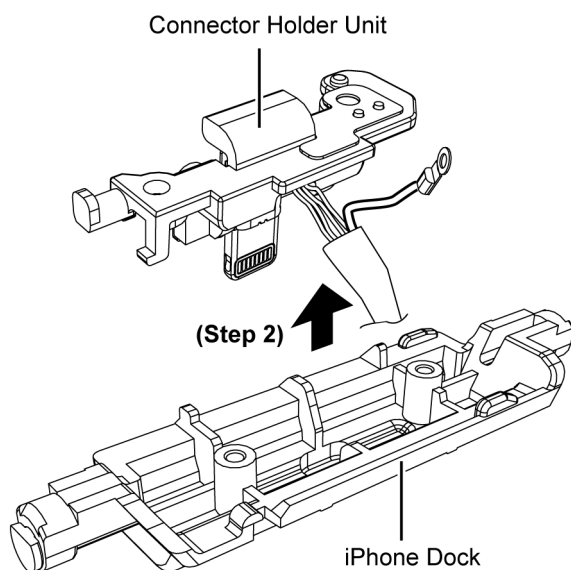
Caution 1 : Dress the 5P wire below Connector Holder Unit as shown.
Caution 2 : During assembling, ensure grounding wire fix correctly & Wire Lug must be straight.

Wire Lug

5P Wire

Connector Holder Unit

OK   Wire Lug   NG
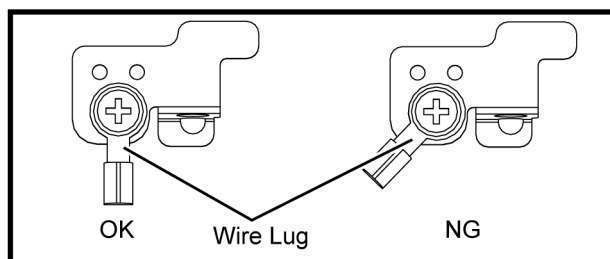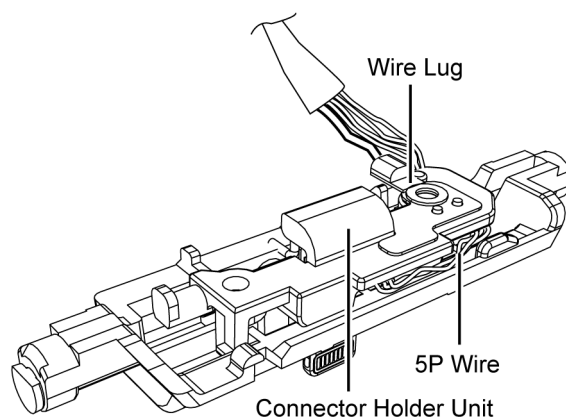
11.8.7. Disassembly of iPhone Connector Unit

• Refer to "Disassembly of iPhone Block"
• Refer to "Disassembly of iPhone Support"
• Refer to "Disassembly of iPhone Base"
• Refer to "Disassembly of iPhone Support Spring"
• Refer to "Disassembly of iPhone Dock"

Step 1 : Remove 2 screws.

(Step 1)
🔩 **b** x 2   **b**
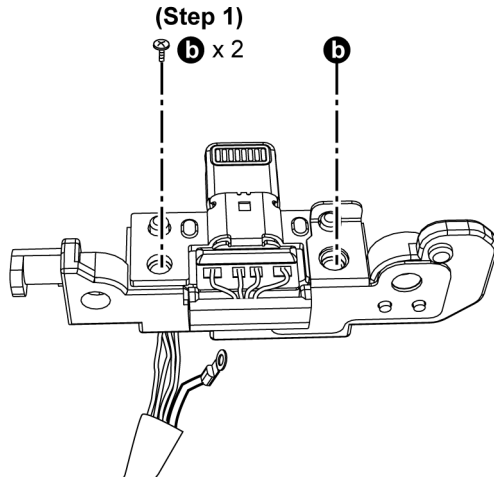
Step 2 : Remove the Shield Plate.

Shield Plate

(Step 2)
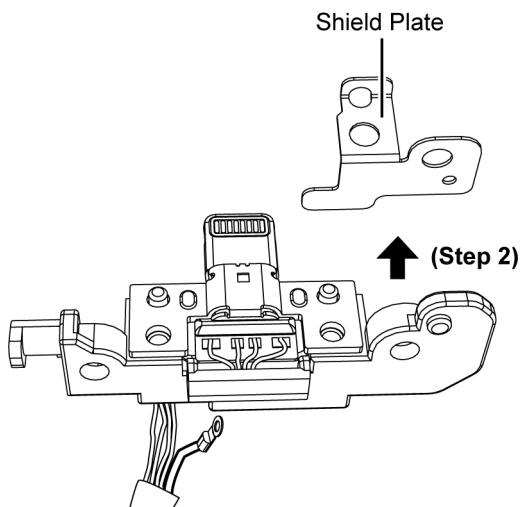
Step 3 : Remove the iPhone Connector Unit.
Caution : During assembling, ensure that the iPhone Connector Unit is properly seated onto the 2 locators.

iPhone Connector Unit

(Step 3)

Locators
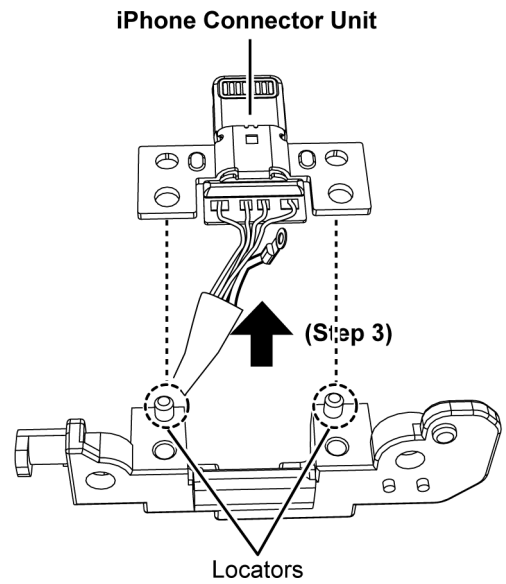
Caution : During assembling, ensure that the 4P wires face outwards as picture shown.

4 Pattern
OK

5 Pattern
OK
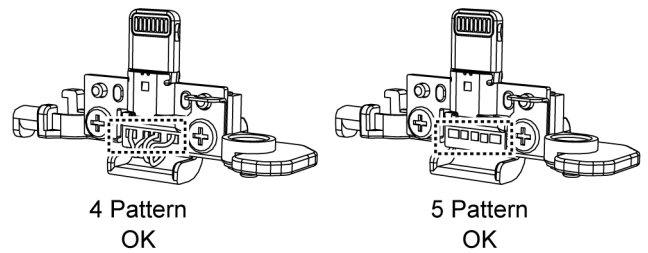
11.9. Disassembly of Interlock Switch P.C.B.

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"

Step 1 : Detach 5P wire at the connector (P941) on the Remote Sensor P.C.B..

Interlock Switch P.C.B.

P941
(Step 1)

Remote Sensor P.C.B.
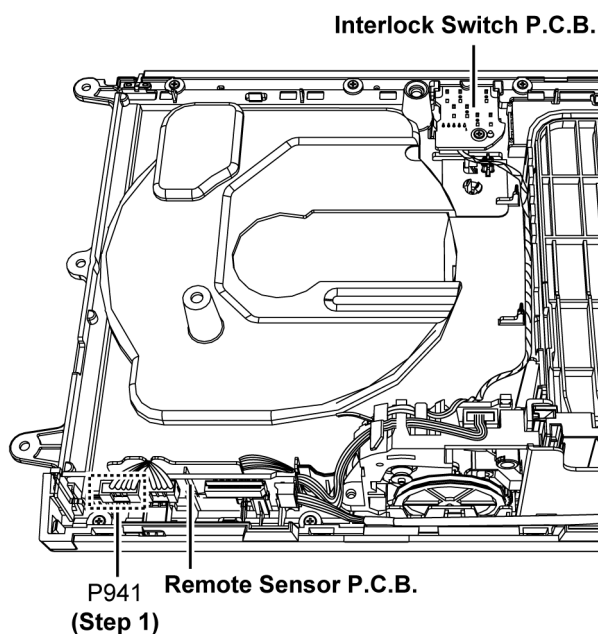
Step 2 : Release the 5P Wire from the slots.
Caution : During assembling, dressed the 5P wire into the slots of the Front Panel Block.

5P Wire

Slots
(Step 2)

Slots
(Step 2)
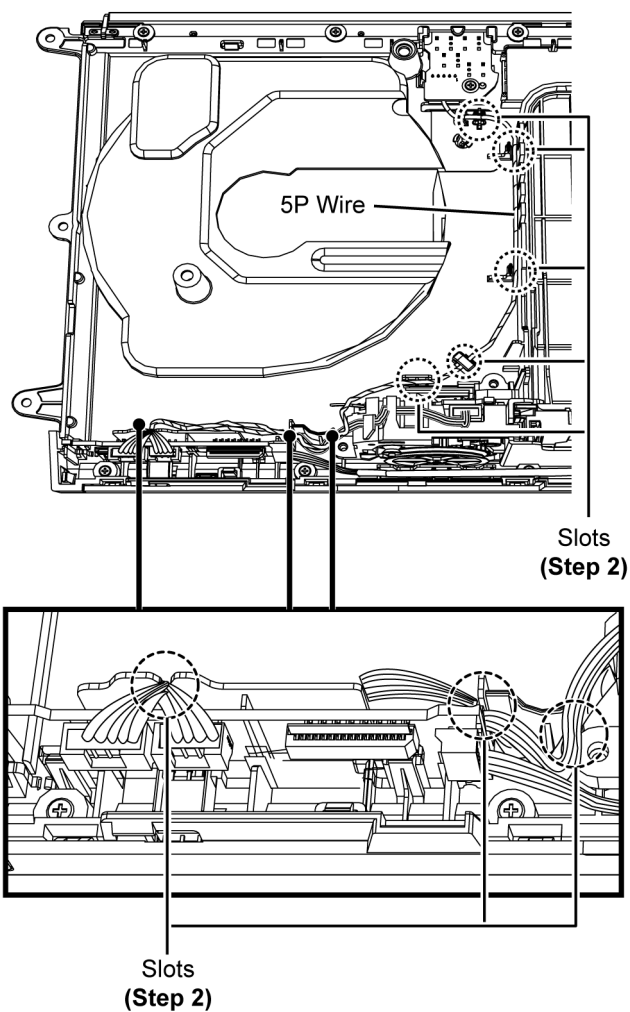
Step 3 : Remove 1 screw.
Step 4 : Release 1 catch.
Step 5 : Lift up the Interlock Switch P.C.B as shown.
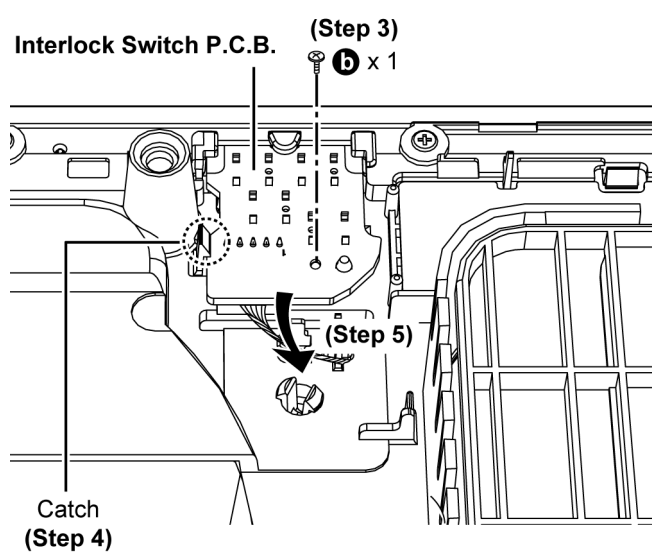
Step 6 : Remove the Interlock Switch P.C.B..

Interlock Switch P.C.B.

(Step 3)
🔩 **ⓑ** x 1

(Step 5)

Catch
(Step 4)

Interlock Switch P.C.B.

(Step 6)
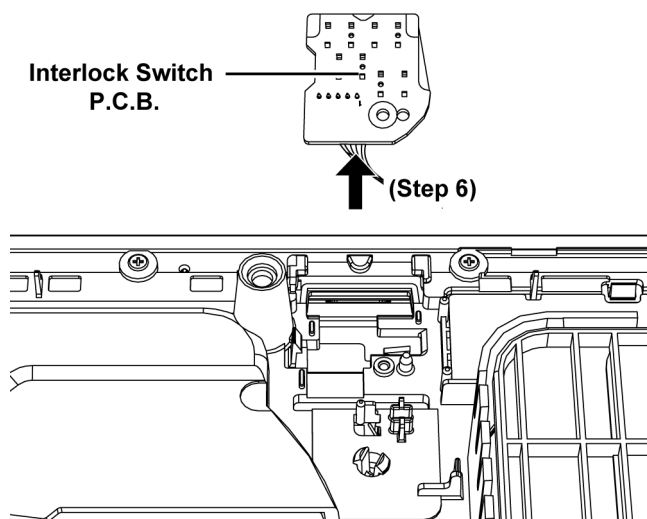
Caution : During assembling, place the Interlock Switch P.C.B. under the rib. Ensure the Interlock Switch P.C.B. is fully catched and properly seated on the locator.

Rib

Catch   Locator
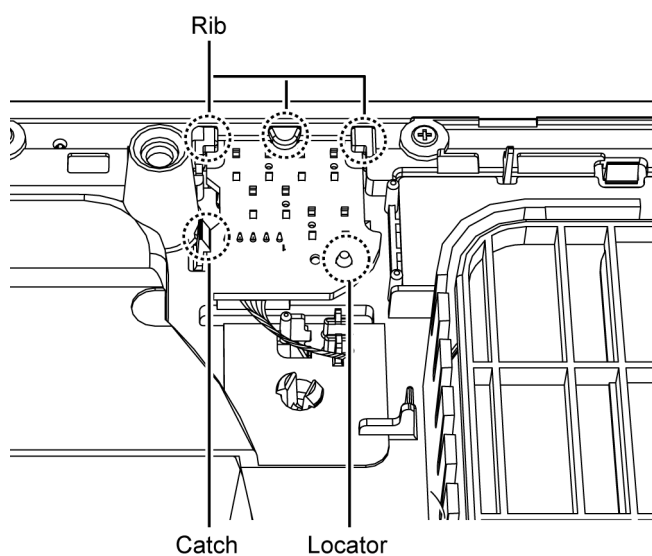
11.10. Disassembly of Remote Sensor P.C.B.

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"

Step 1 : Release the Wires from the slots.
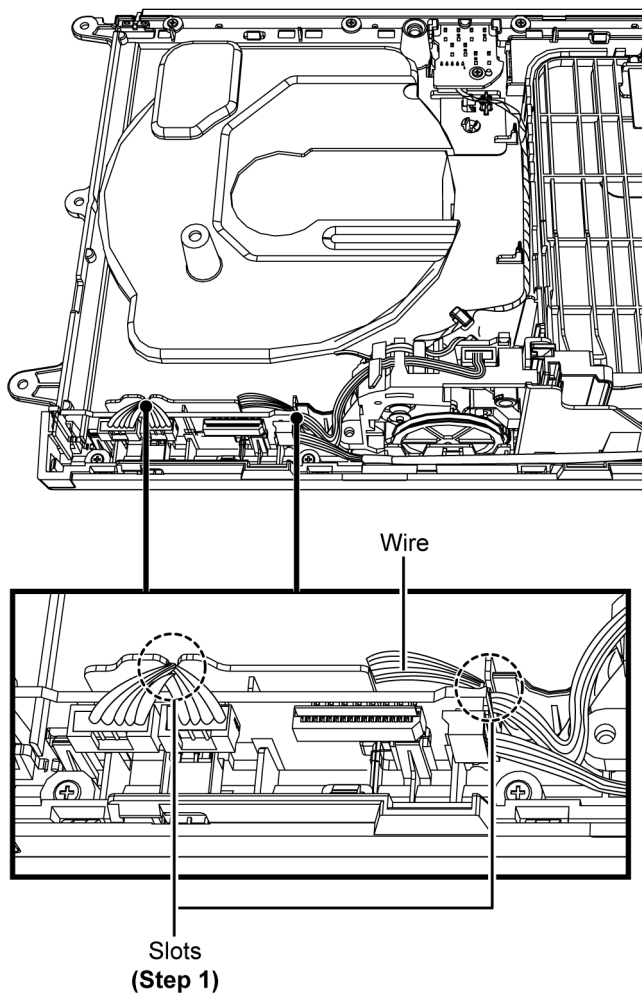
Step 2 : Detach 5P wire at the connector (P941) on the Remote Sensor P.C.B..

Step 3 : Detach 4P wire at the connector (P942) on the Remote Sensor P.C.B..

Step 4 : Detach 5P wire at the connector (P945) on the Remote Sensor P.C.B..

Wire

Slots
(Step 1)

P941   P942   P945
(Step 2)   (Step 3)   (Step 4)
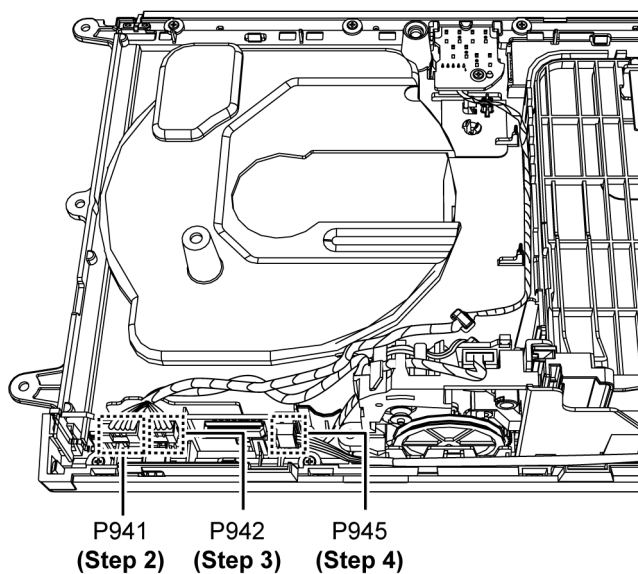
Caution : During assembling, dressed the 4P & 5P wires into the slots respectively.
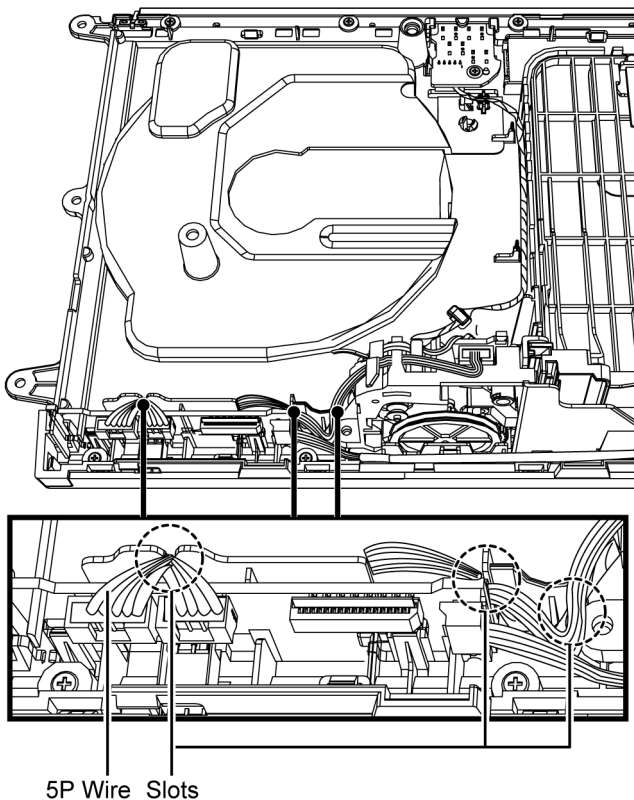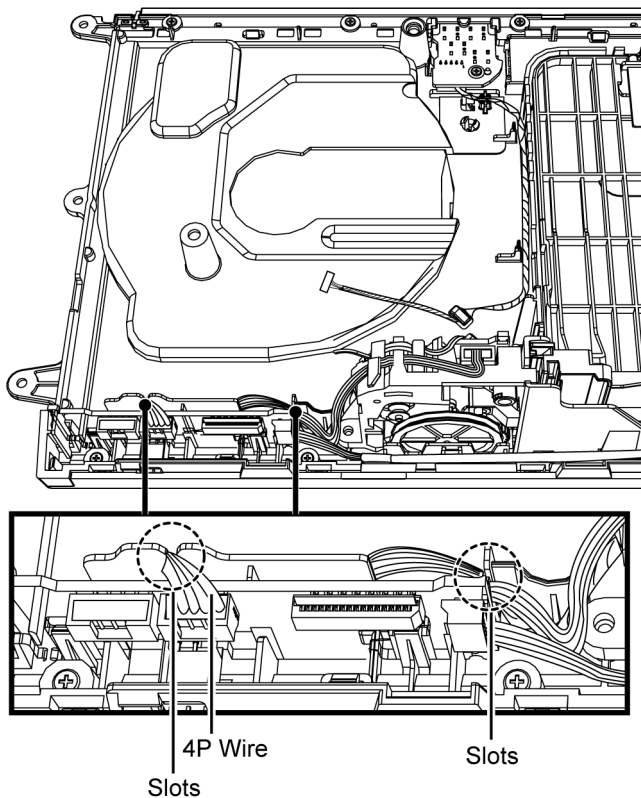
Step 4 : Use a Screwdriver to release 2 catches.
Step 5 : Lift up & remove the Remote Sensor P.C.B..

4P Wire

Slots

Slots

(Back View)

(Step 5)

Remote Sensor P.C.B.

Screwdriver

Catch

Catch

Screwdriver
(Step 4)

5P Wire   Slots
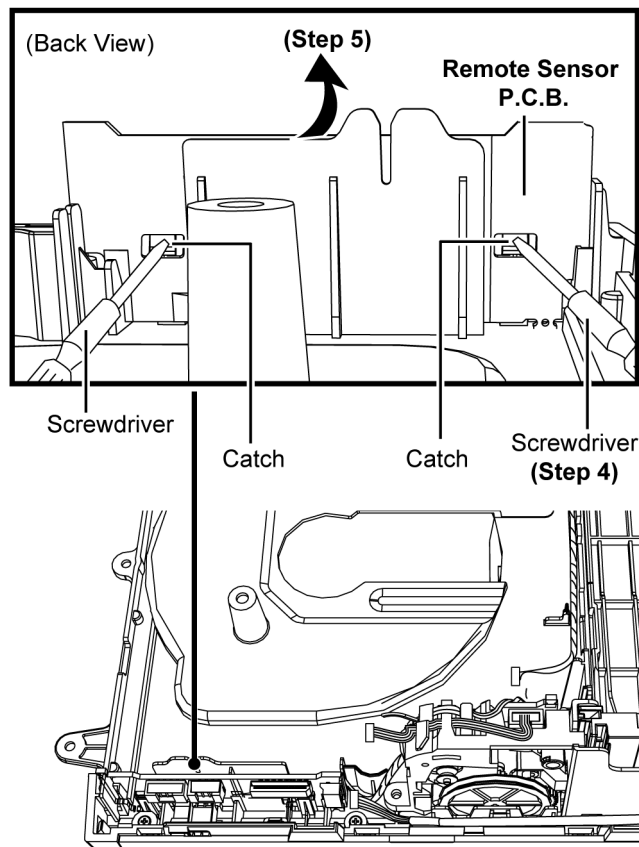
Caution : During assembling, align the Remote Sensor P.C.B. (with white masking) facing outwards & inserted into the Front Panel Block.
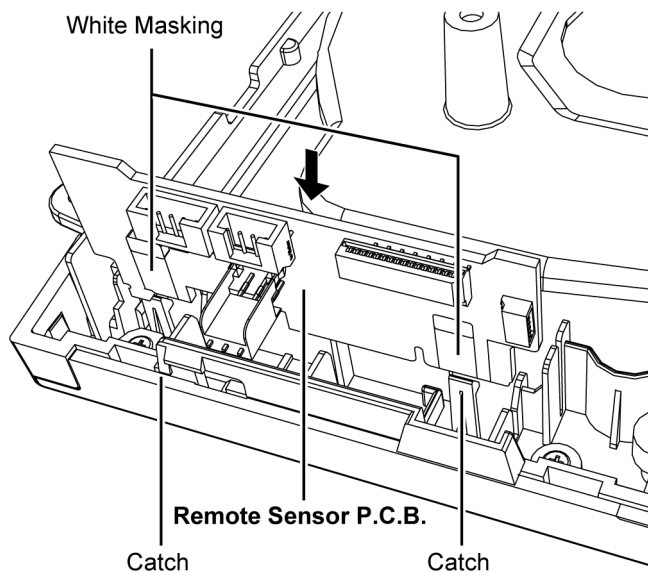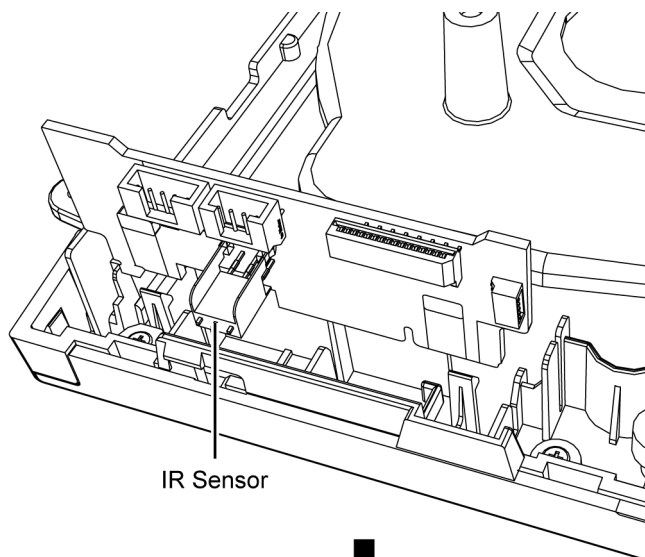
Caution : During assembling, ensure the Remote Sensor P.C.B. is seated properly and fully catched.

IR Sensor

White Masking

Remote Sensor P.C.B.

Catch   Catch

Catch

Catch

Remote Sensor P.C.B.
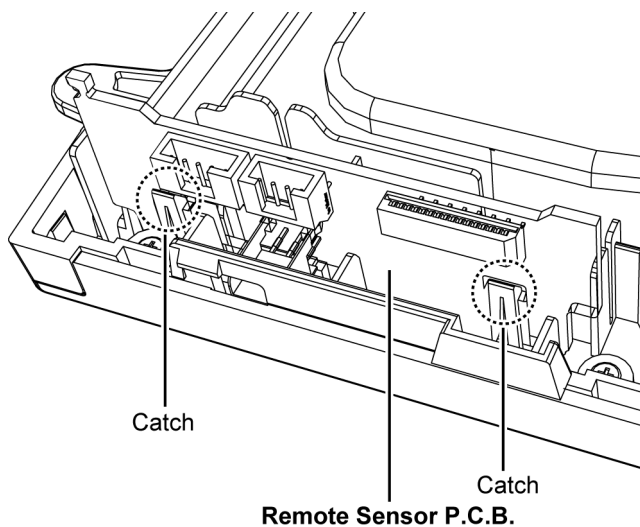
11.11. Replacement of Gear Box Assembly

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"
- Refer to "Disassembly of iPhone Block"

11.11.1. Disassembly of Gear Box Assembly

Step 1 : Remove 2 screws.

(Step 1)

C x 2   **C**
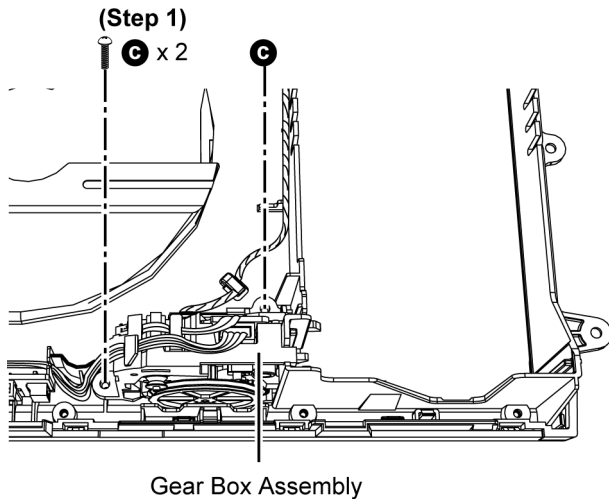
Gear Box Assembly

Step 2 : Release the 4P Wire from the slot.
Step 3 : Detach 4P wire at the connector (CN931) on the Motor P.C.B..
Caution : During assembling, dressed the 4P wire into the slot.

4P Wire

Slot   CN931
(Step 2)   **(Step 3)**
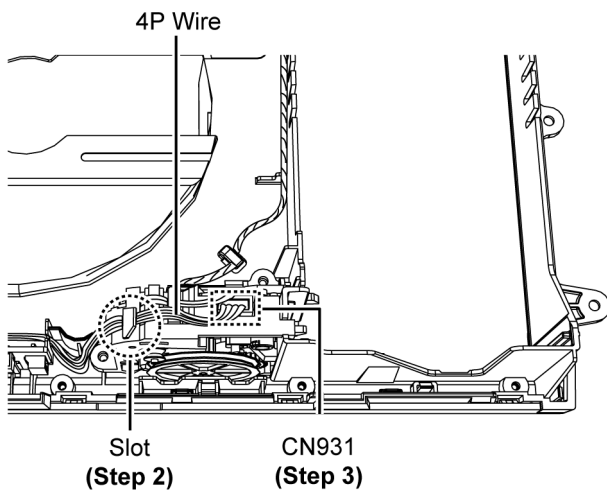
Step 4 : Remove the Gear Box Assembly as shown.

(Step 4)
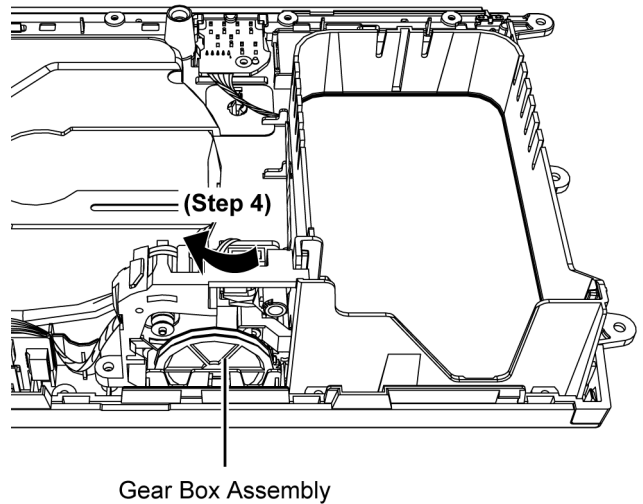
Gear Box Assembly

11.11.2. Assembly of Gear Box Assembly

Step 1 : Align the catch of the Gear Box Assembly with the guide on the Front Panel Block as shown.
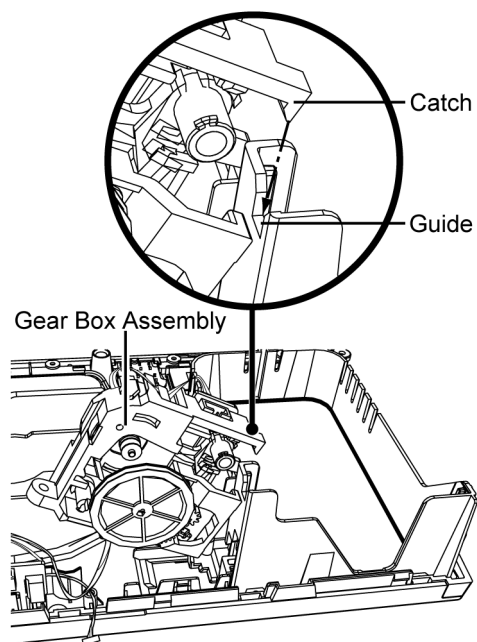
Step 2 : Slighly insert the Gear Box Assembly into the Front Panel Block as shown.
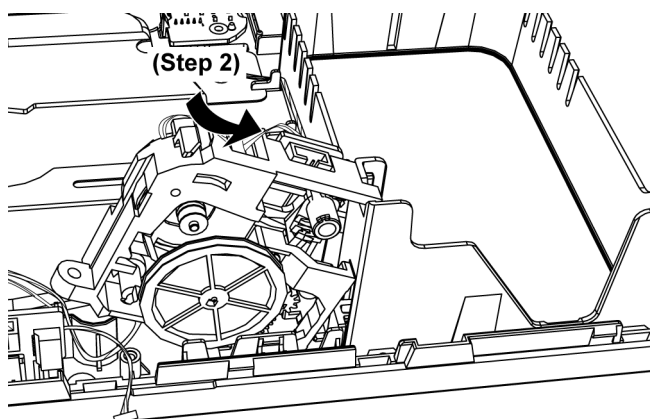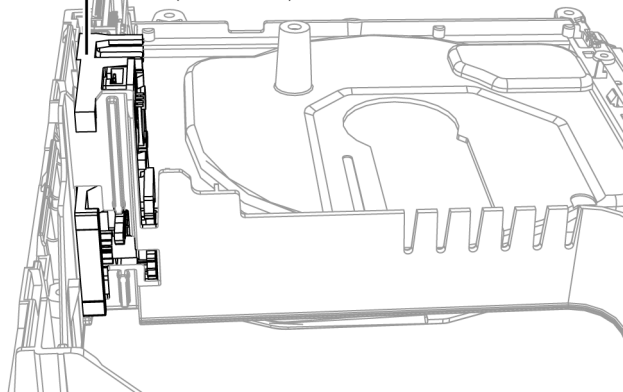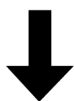
Step 3 : Connect 4P wire at the connector (CN931) on the Motor P.C.B..

Step 4 : Dress the 4P Wire into the slot.
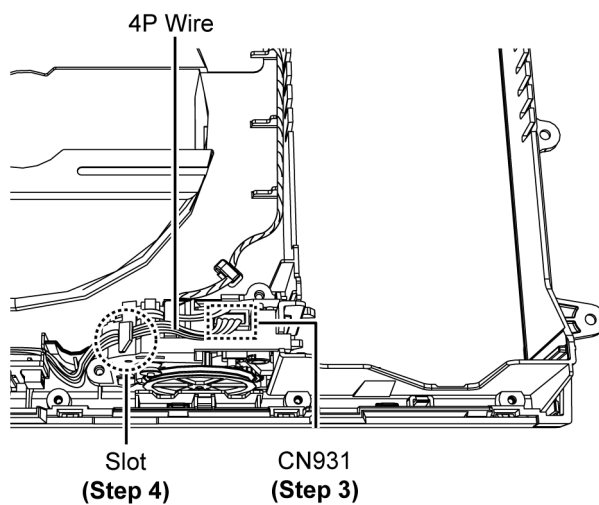
Step 5 : Fix 2 screws.
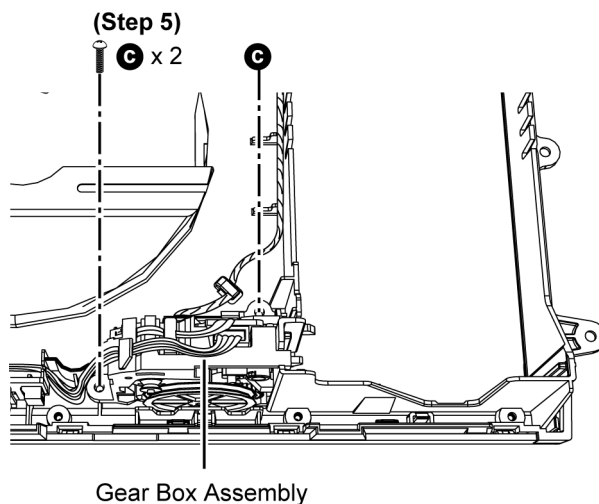
11.12. Disassembly of Motor P.C.B.

• Refer to "Disassembly of Gear Box Assembly"

Step 1 : Release 1 catch.
Step 2 : Remove the Motor P.C.B..

Catch
(Step 1)

(Step 2)
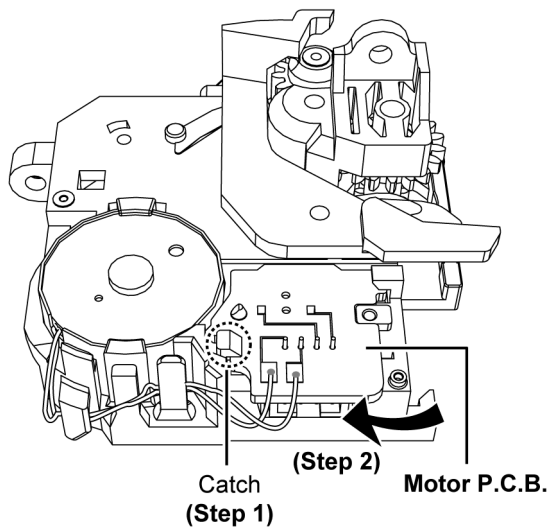
Motor P.C.B.

Caution 1 : During assembling, insert the Motor P.C.B. underneath the rib.
Caution 2 : During assembling, ensure the Motor P.C.B. is fully catched and seated on the locator.

Locator   Rib

Catch   **Motor P.C.B.**
(Step 1)
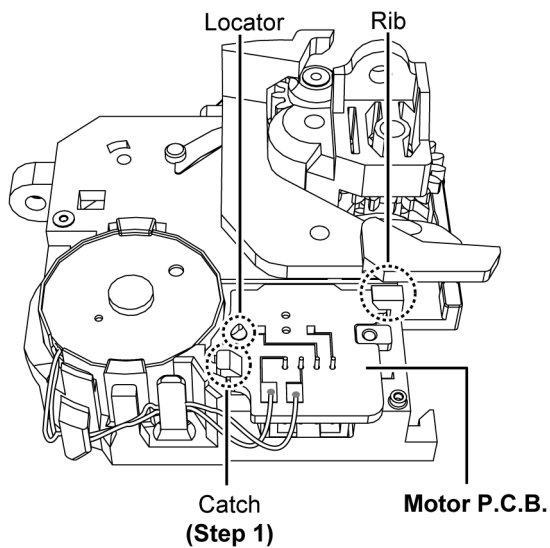
Step 3 : Release the 2P Wire from the slots.
Caution : During assembling, dressed the 2P wire into the slots.

Slots
(Step 3)   **Motor P.C.B.**
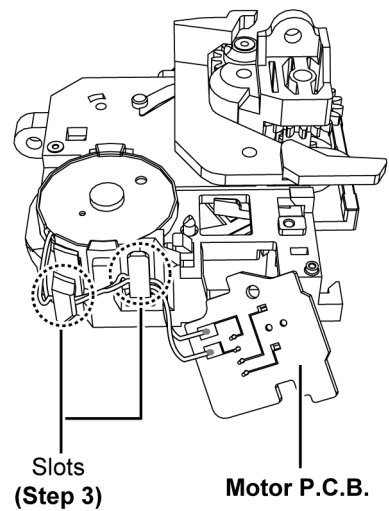
Step 4 : Desolder pins on the solder side of the Motor P.C.B. and remove the Motor P.C.B..

(Step 4)
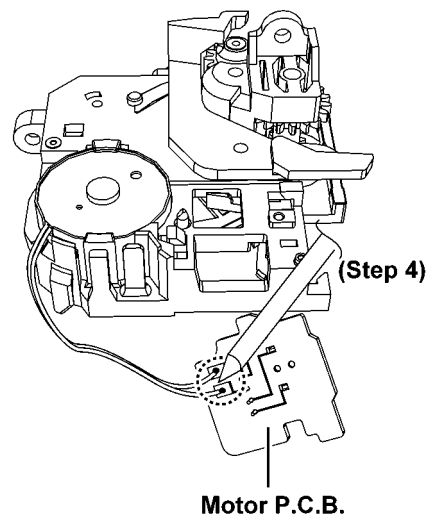
Motor P.C.B.

11.13. Disassembly of Belt & Pulley Gear

• Refer to "Disassembly of Gear Box Assembly"

Step 1 : Remove the Belt.

Belt
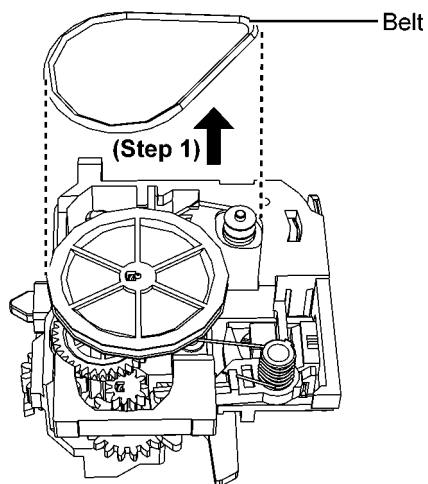
(Step 1)

Step 2 : Remove the Pulley Gear.

Pulley Gear
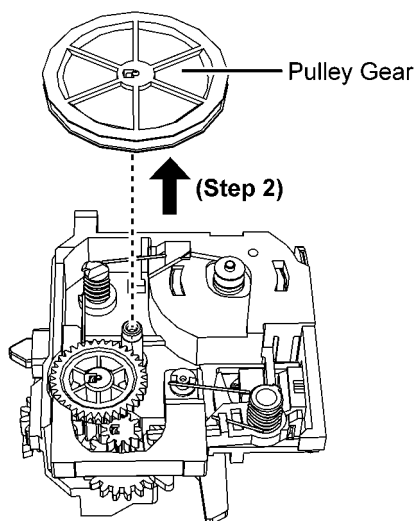
(Step 2)

11.14. Disassembly of Motor Assembly

• Refer to "Disassembly of Gear Box Assembly"
• Refer to "Disassembly of Motor P.C.B."
• Refer to (Step 1) of item 11.13.

Step 1 : Release 2 catches.

(Step 1)
Catches
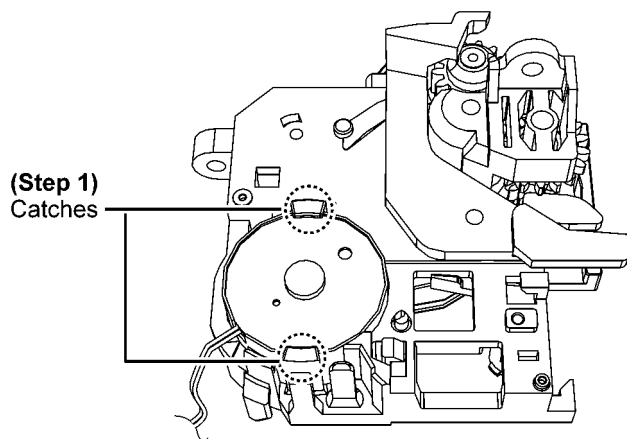
Step 2 : Remove the Motor Assembly.

Motor Assembly

(Step 2)
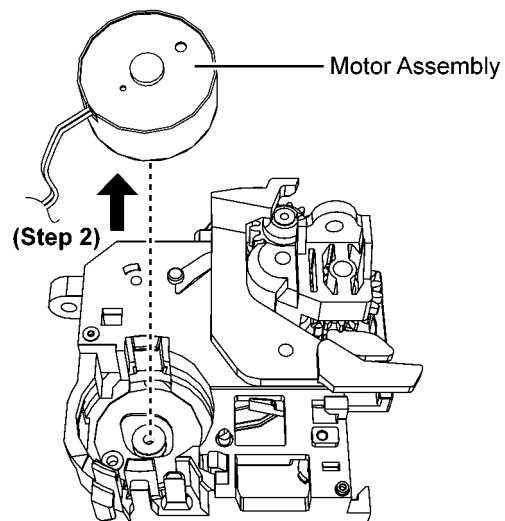
Caution 1 : During assembling, position & align the Motor wire with the indicated arrow on the Gear Box Assembly.
Caution 2 : During assembling, ensure the Motor Assembly is fully catched & seated properly.

Wire

Arrow   Catches
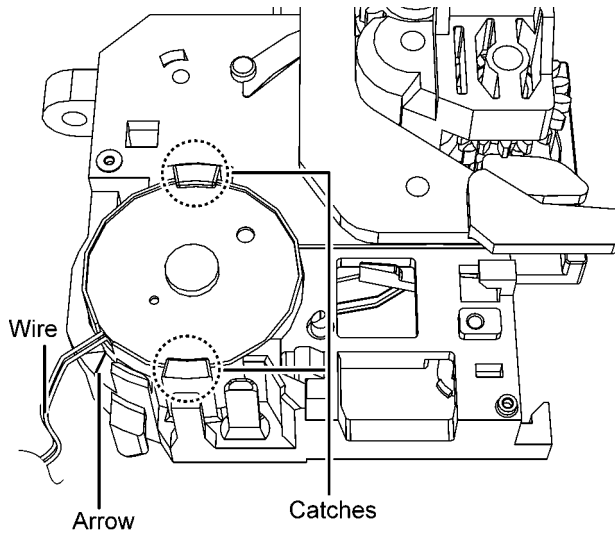
11.15. Disassembly of Centering Spring & Centering Stopper

• Refer to "Disassembly of Gear Box Assembly"
• Refer to "Disassembly of Belt & Pulley Gear"

Step 1 : Release the Centering Spring as shown.

(Step 1)
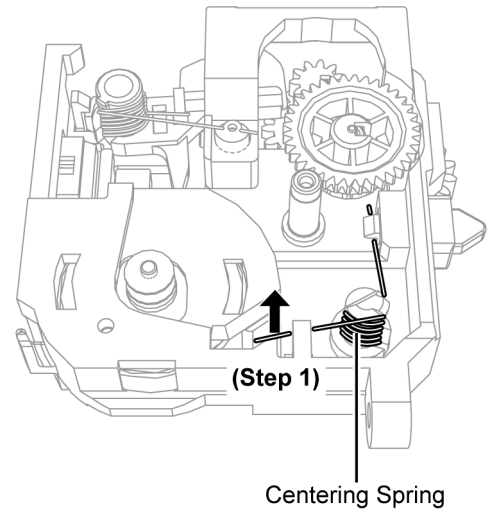
Centering Spring

Caution : During assembling, placed the Centering Spring underneath the rib of the Centering Stopper.

Centering Stopper

Centering Spring
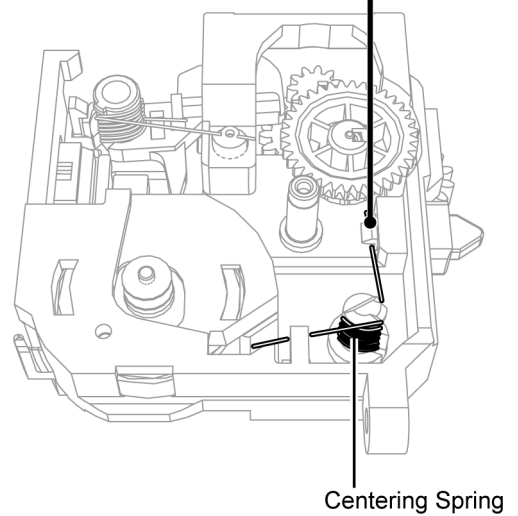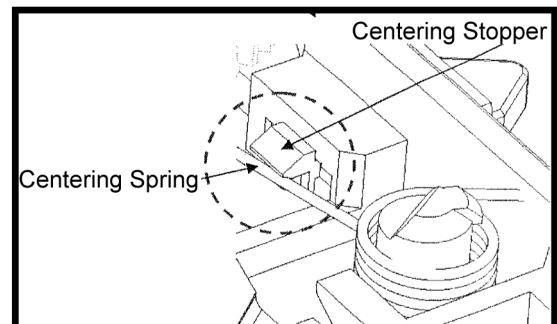
Centering Spring

Caution : During assembling, placed the Centering Spring underneath the hook of the gear box assembly.
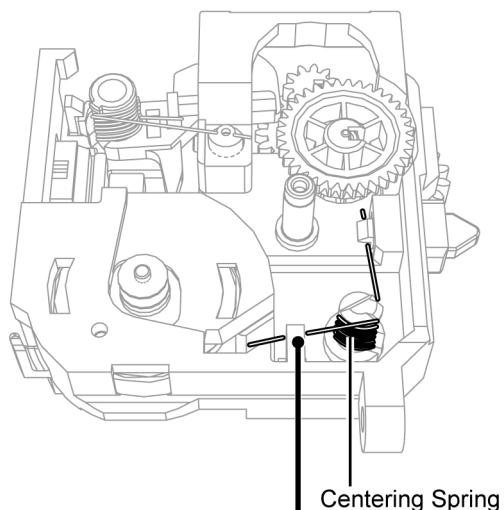
Centering Spring

Caution 2 :

Hook

Centering Spring

Step 2 : Remove the Centering Spring.
Caution : Keep the Centering Spring in safe place and place them back during assembling.

Centering Spring

(Step 2)
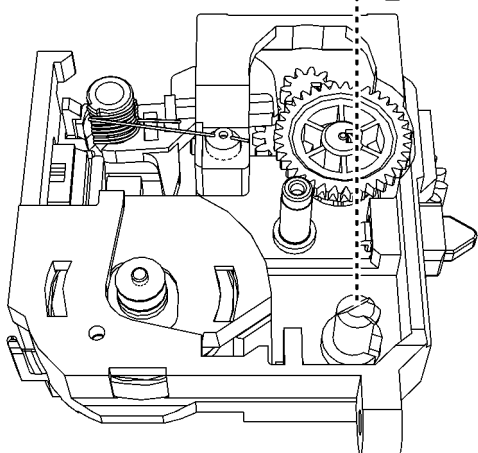
Step 3 : Press to release 1 catch as shown.

Screwdriver

(Step 3)
Catch
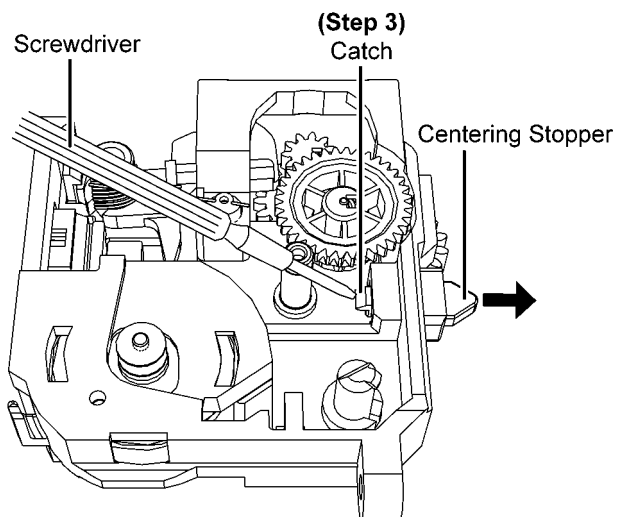
Centering Stopper

Step 4 : Remove the Centering Stopper.
Caution : During assembling, insert the Centering Stopper with flat surface facing upwards as shown below. A "click" sound will be heard when it its properly catched.

Centering Stopper

(Step 4)

OK	NG
Flat	Hole

66
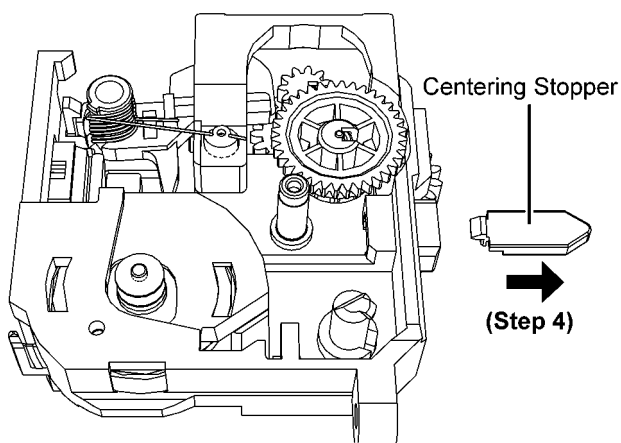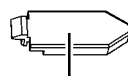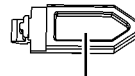
11.16. Disassembly of Lever Spring, Trigger Lever & Driver Gear A

- Refer to "Disassembly of Gear Box Assembly"
- Refer to "Disassembly of Belt & Pulley Gear"

Step 1 : Release the Lever Spring as shown.

(Step 1)
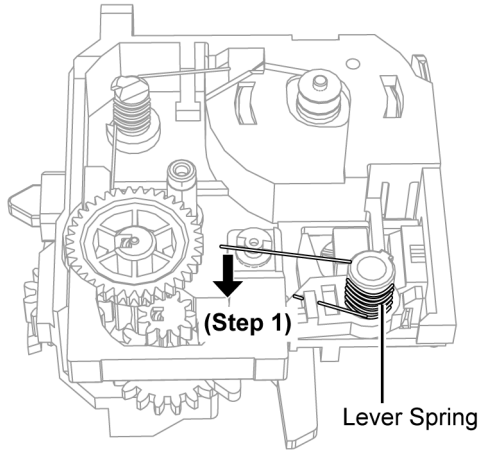
Lever Spring

Caution : During assembling, placed the Lever Spring underneath Trigger Lever Hook.

Trigger Lever Hook

Lever Spring
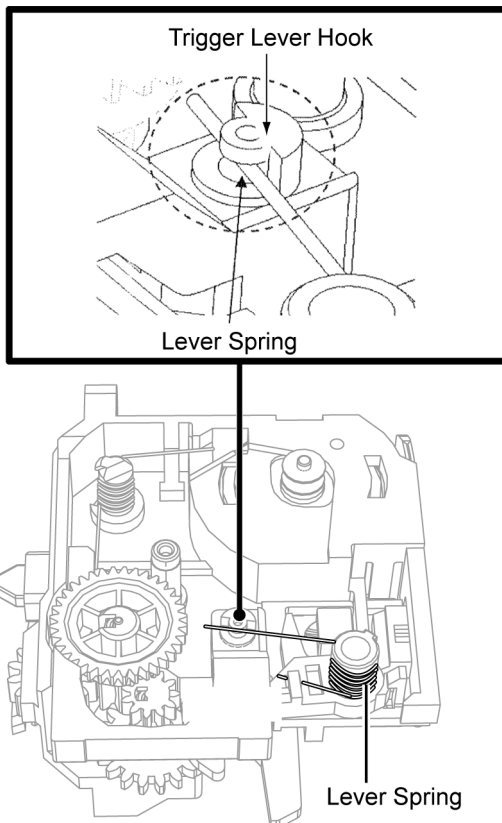
Lever Spring

Caution : During assembling, placed the Lever Spring underneath SW Lever Hook.

Lever Spring

SW Lever Hook
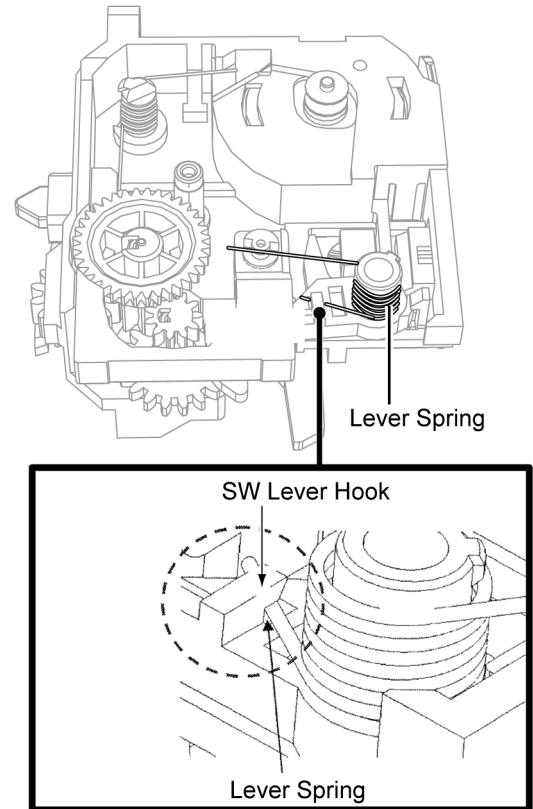
Lever Spring

Step 2 : Remove the Lever Spring.

Caution : Keep the Lever Spring in safe place and place them back during assembling.

Lever Spring

(Step 2)
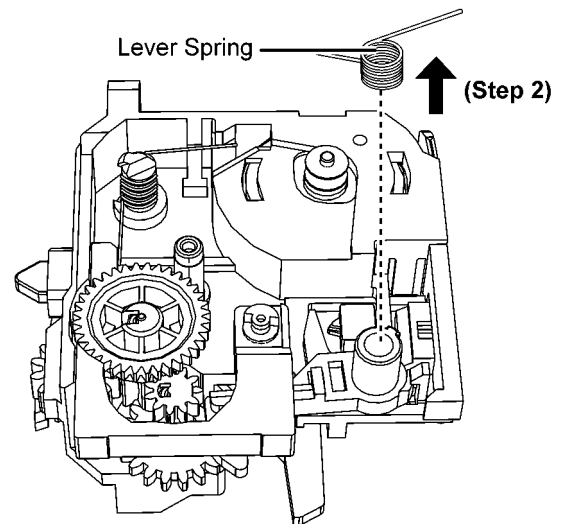
Step 3 : Upset the Gear Box Assembly.
Step 4 : Remove the Trigger Lever.

Trigger Lever

(Step 4)

Gear Box Assembly
(Step 3)
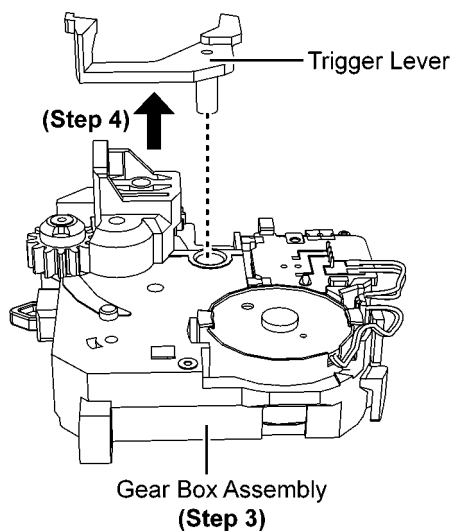
Step 5 : Remove the Driver Gear A.

Driver Gear A

(Step 5)
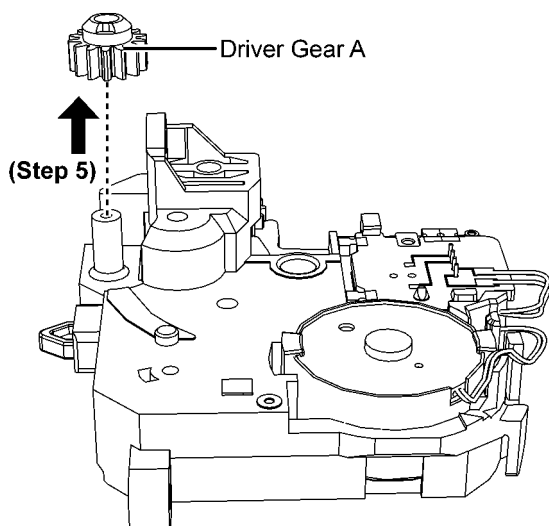
11.17. Disassembly of SW Lever, Relay Gear & Driver Gear B

• Refer to "Disassembly of Gear Box Assembly"
• Refer to "Disassembly of Belt & Pulley Gear"
• Refer to "Disassembly of Lever Spring, Trigger Lever & Driver Gear A"

Step 1 : Release 1 catch as shown.
Step 2 : Lift up the SW Lever as shown.

(Step 2)

(Step 1)
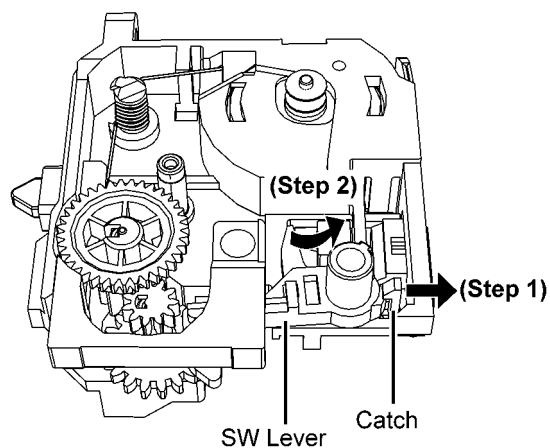
SW Lever   Catch

Step 3 : Remove the SW Lever.

SW Lever

(Step 3)
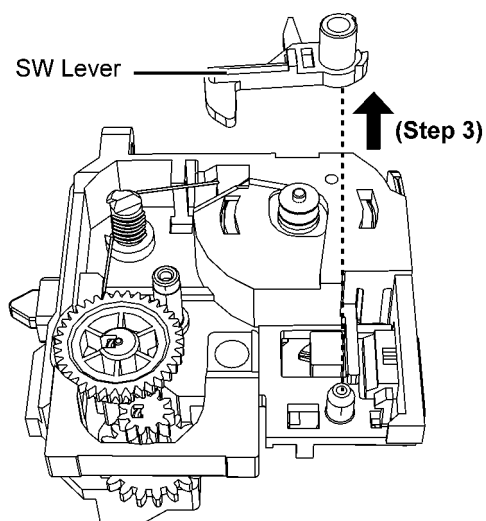
Caution : During assembling, a "click" sound could be heard when the SW Lever is fully catched.

SW Lever

SW Lever   Catch   **(Step 1)**

Step 5 : Remove the Driver Gear B.

Driver Gear B

(Step 5)
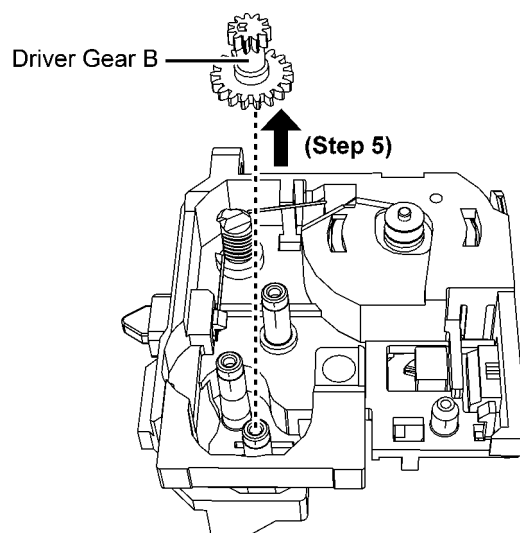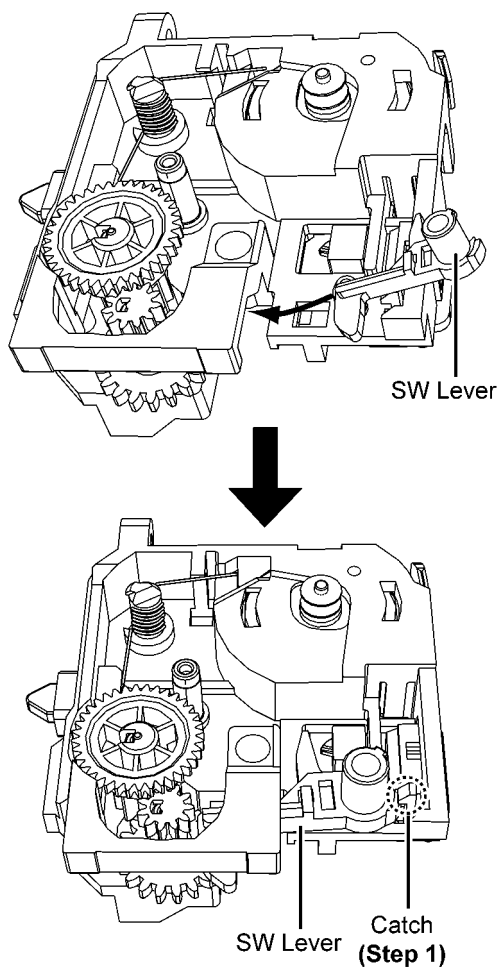
Step 4 : Remove the Relay Gear.

Relay Gear

(Step 4)
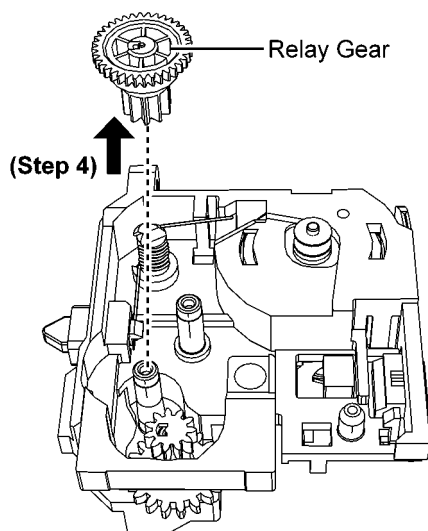
11.18. Disassembly of Shutter & Shutter Spring

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"

**Step 1 :** Press the catches inwards and push the Shutter downwards in order of sequences (1) to (2).

Caution : During assembling, ensure the Shutter is fully catched.

Catches
(Step 1)
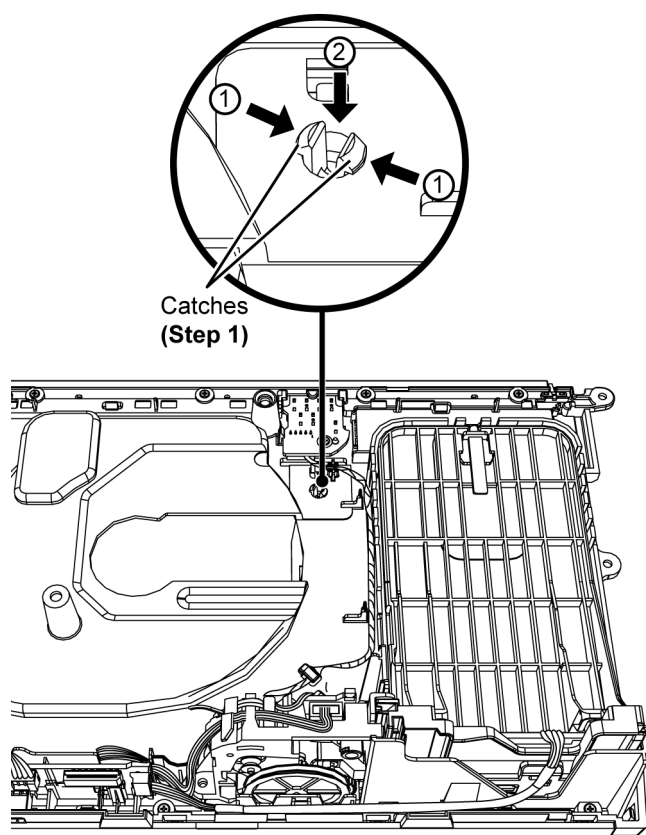
Step 2 : Upset the Front Panel Block.

Step 3 : Remove the Shutter & Shutter Spring.

Caution : Keep the Shutter Spring in safe place and place them back during assembling.

Shutter

Shutter Spring

(Step 3)

Front Panel Block
(Step 2)
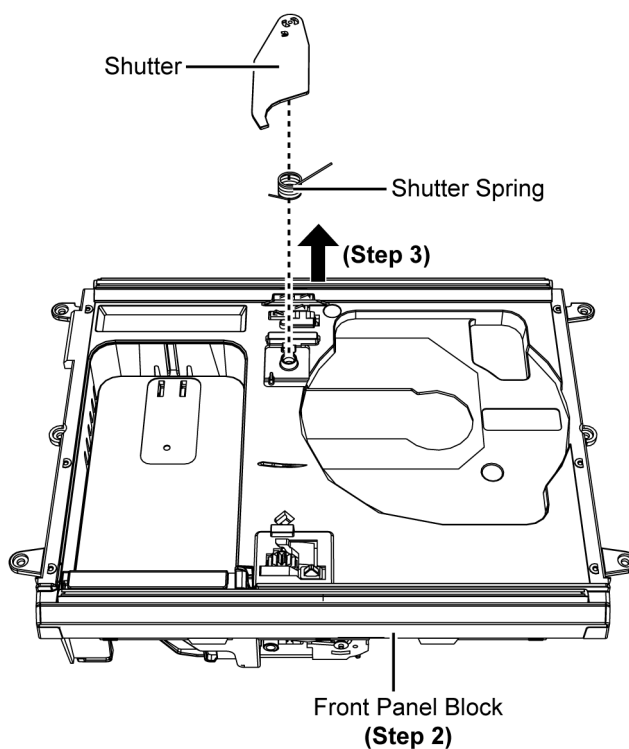
11.19. Disassembly of Upper Guide Rail & Top Ornament

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"

Step 1 : Lift up & remove the Lighting Pieces as show.
Caution : Keep the Lighting Pieces in safe place and place them back during assembling.

Lighting Piece
(Step 1)

Step 2 : Remove 4 screws.
Step 3 : Release 3 catches.
Caution : During assembling, ensure the Upper Guide Rail is fully catched to the Front Panel Block.

(Step 2)
ⓑ x 4

ⓑ   ⓑ   ⓑ

Catch
(Step 3)

Step 4 : Remove the Upper Guide Rail & the Top Ornament.

Upper Guide Rail

(Step 4)   Top Ornament

71
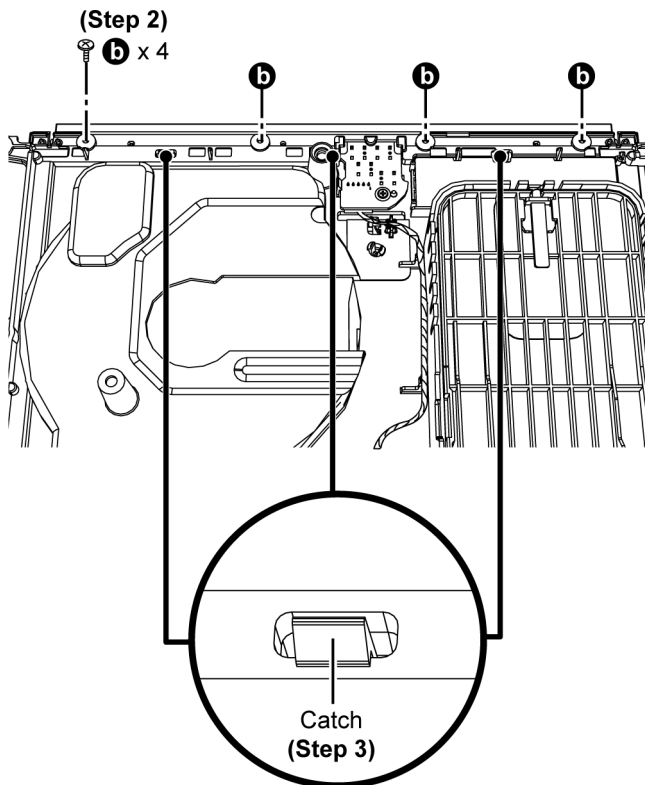
11.20. Disassembly of Bottom Ornament

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"

Step 1 : Release two catches & guide by sequence (1) to (6) as shown.

Caution : During assembling, ensure the Bottom Ornament is fully catched to the Front Panel Block.
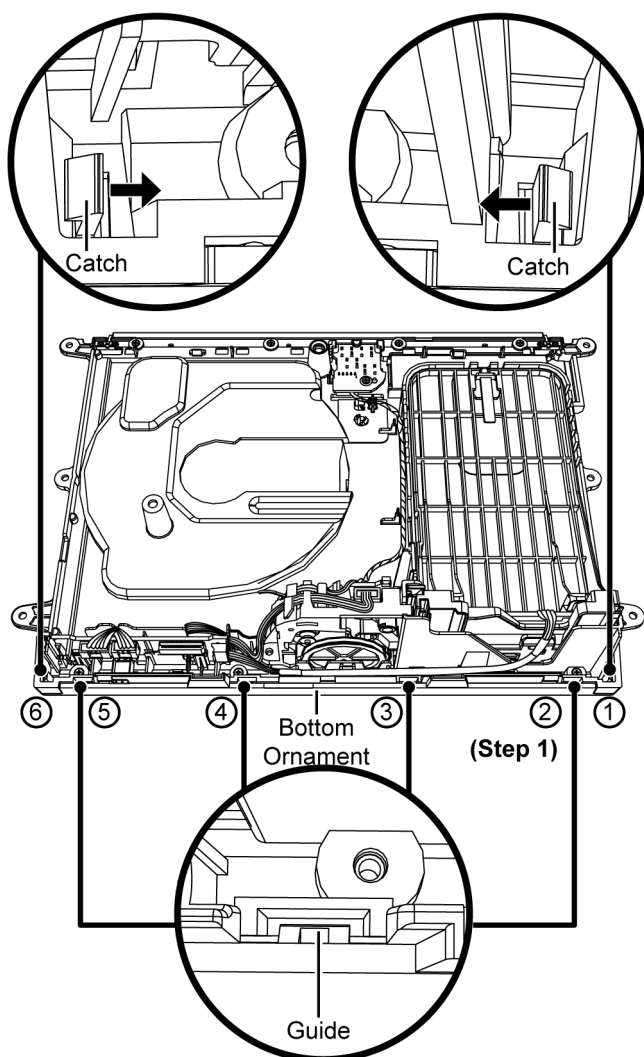
Step 2 : Remove the Bottom Ornament.

(Step 2)

Bottom Ornament

Catch

Catch

Bottom Ornament

(Step 1)

⑥ ⑤ ④ ③ ② ①

Guide

11.21. Disassembly of Lower Guide Rail

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"
• Refer to "Disassembly of Bottom Ornament"

Step 1 : Release the 5P Wire from the groove.
Caution : During assembling, dressed the 5P wire into the ribs of the Front Panel Block.

Rib   Groove   Rib   5P Wire
(Step 1)

Step 2 : Remove 4 screws.

(Step 2)
🔩 **ⓑ** x 4   ⓑ   ⓑ   ⓑ

Step 3 : Release 2 catches.
Caution : During assembling, ensure the Lower Guide Rail is fully catched to the Front Panel Block.

Catches
(Step 3)
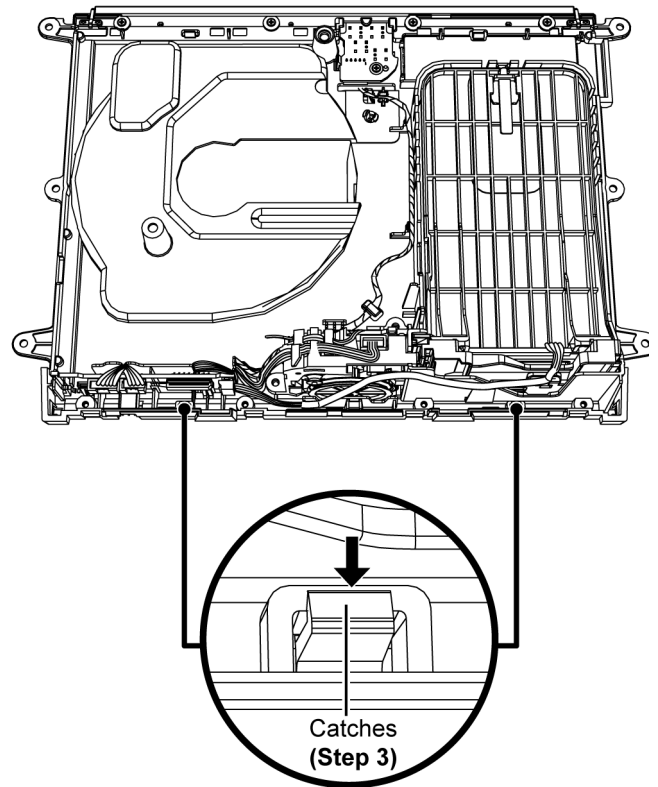
Step 4 : Remove the Lower Guide Rail.

(Step 4) ⬇

Lower Guide Rail
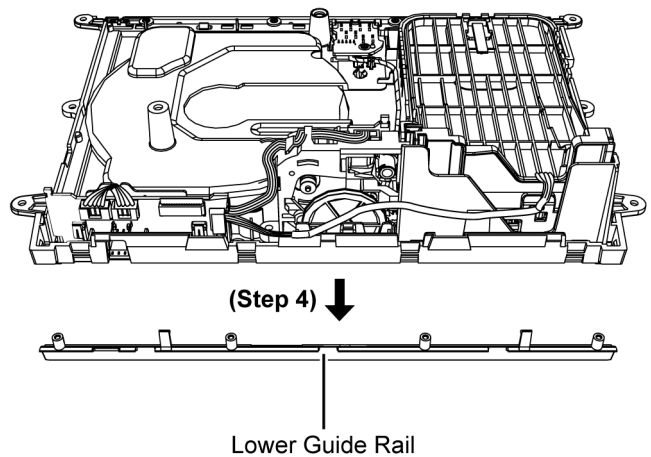
11.22. Disassembly of AirPlay Connect P.C.B. & AirPlay Module P.C.B.

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"

Step 1 : Remove 3 screws.
Step 2 : Slightly lift up AirPlay Module Unit.

(Step 1)
e x 3

(Step 2)

AirPlay Module Unit
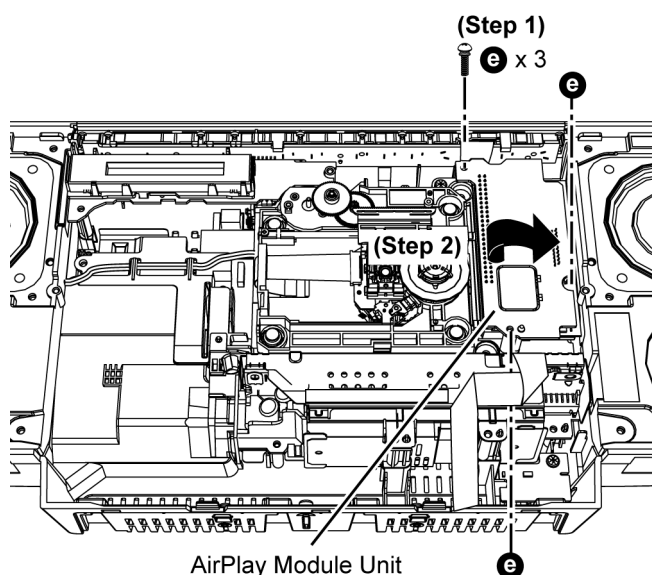
Step 3 : Detach 20P FFC at the connector (CN6004) on the Main P.C.B..

(Step 3)
CN6004

AirPlay Module Unit

Step 4 : Lift up the Himelon.
Caution : Replace the Himelon if they are torn during disassembling.
Step 5 : Detach the AirPlay Connector.

(Step 4)
Himelon
AirPlay Module Unit
(Step 5)
AirPlay Connector

Step 6 : Remove the AirPlay Module P.C.B..
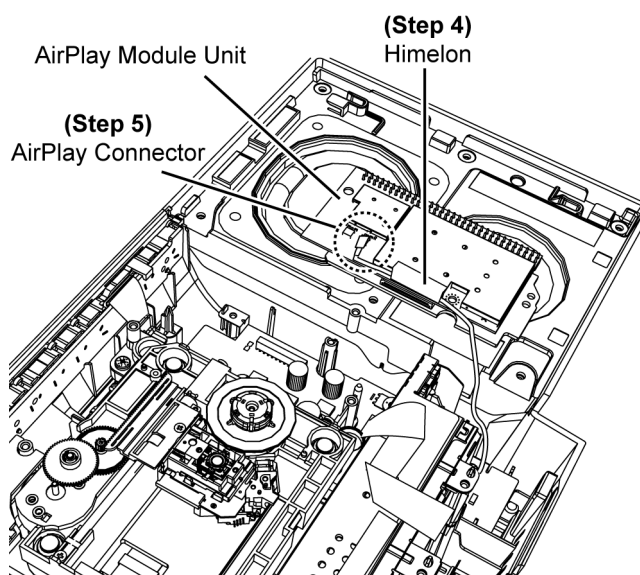
AirPlay Module P.C.B.

(Step 6)

AirPlay Connect P.C.B.
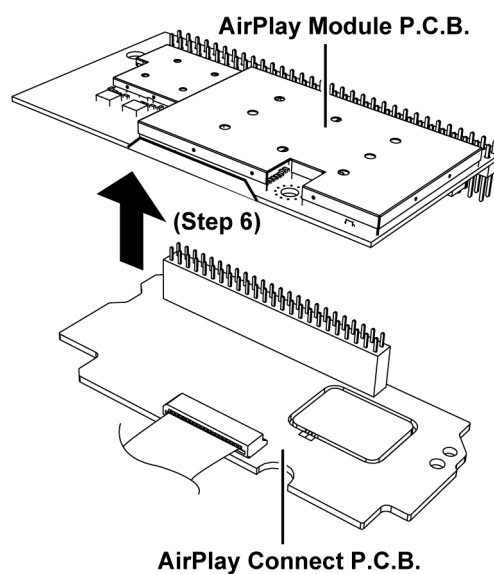
Caution : During assembling, Align the AirPlay Module P.C.B. and AirPlay Connect P.C.B. with the hole as a guide to fix it properly.

AirPlay Connect P.C.B.

AirPlay Module
P.C.B.
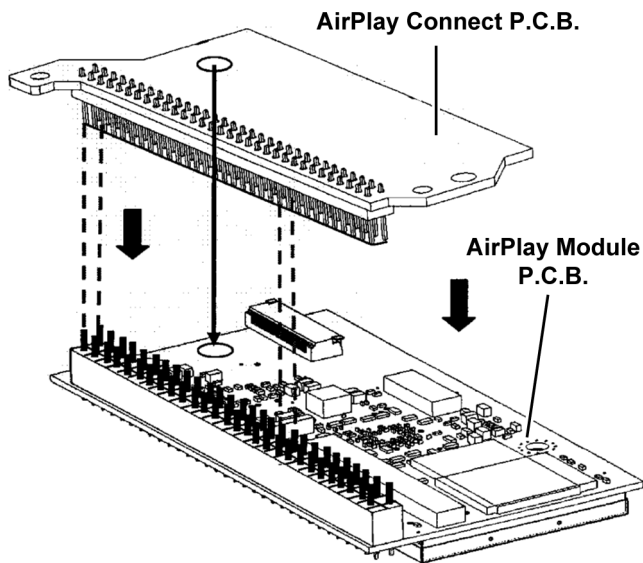
11.22.1. Disassembly of AirPlay Antenna P.C.B.

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"

Step 1 : Remove 1 screw.

Step 2 : Remove 1 screw and Ground Wire.

Caution : During assembling, ensure Ground wire is screw back to SMPS Bracket.

Step 3 : Release the AirPlay Antenna Wire from the slot.

Caution : During assembling, ensure that the AirPlay Antenna Wire is dressed into the slot.

Step 4 : Lift up the AirPlay Antenna P.C.B..

(Step 2)
🔩 **ⓔ** x 1

(Step 1)
🔩 **ⓔ** x 1

Slot
(Step 3)

AirPlay Antenna P.C.B.
(Step 4)

AirPlay Antenna Wire
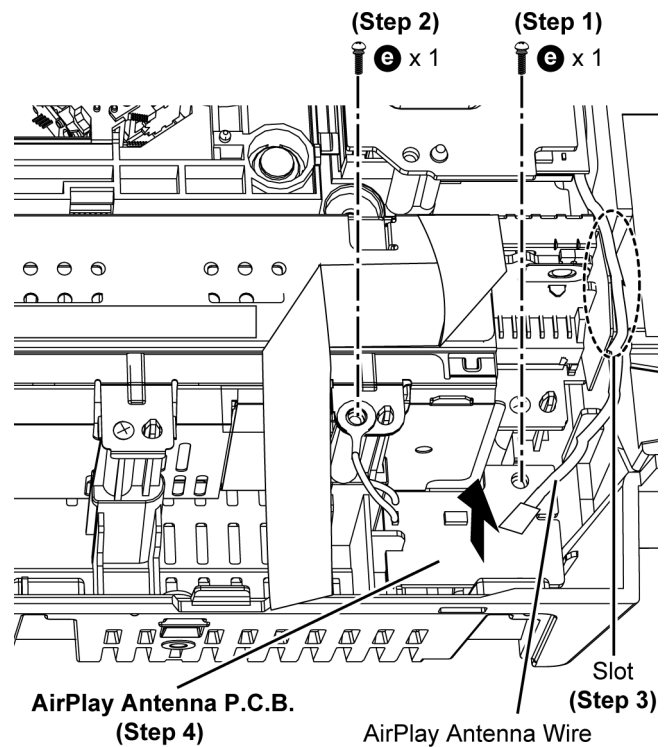
Step 5 : Detach the AirPlay Connector and remove the AirPlay Antenna P.C.B..

AirPlay Antenna P.C.B.

AirPlay Connector (Step 5)
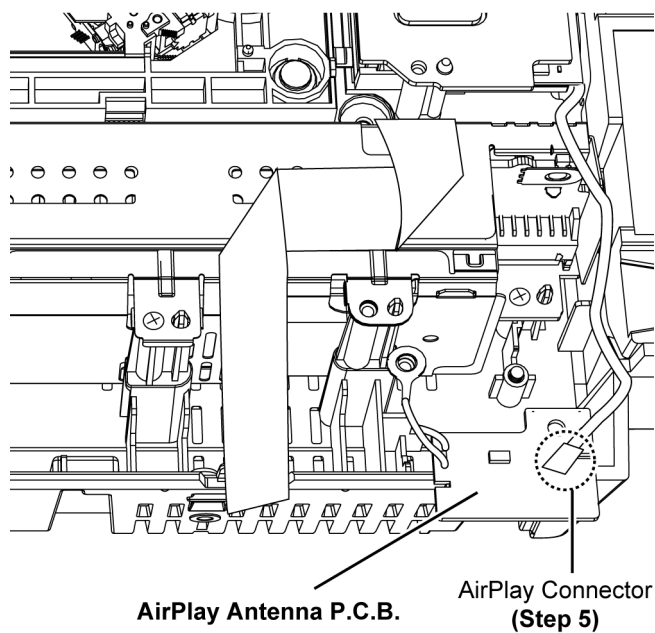
Caution : During assembling, ensure the AirPlay Antenna P.C.B. is properly seated onto the guide.

AirPlay Antenna P.C.B.

Guide
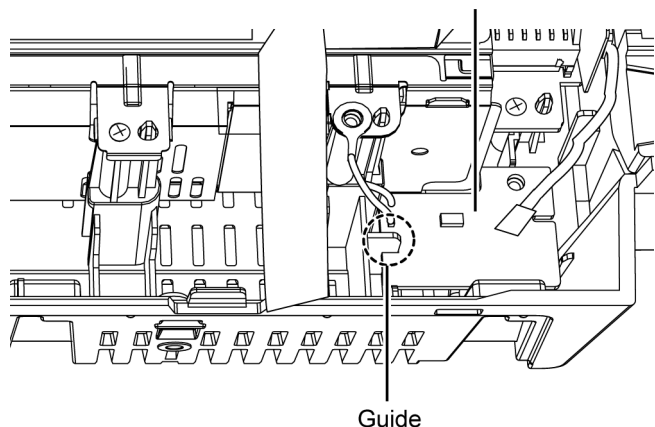
11.23. Disassembly of SMPS P.C.B.

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"

Step 1 : Remove 5 screws.
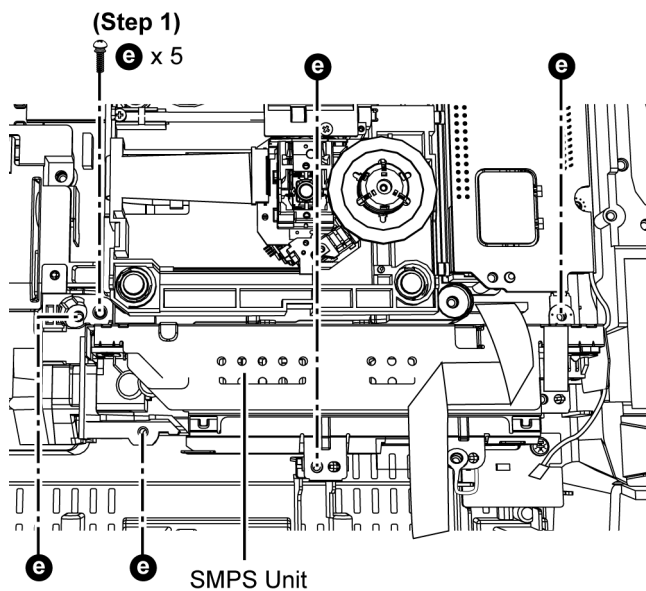
(Step 1)
e x 5

SMPS Unit

Step 2 : Remove 1 screw and Ground Wire.
Caution : During assembling, ensure Ground wire is screw back to SMPS Bracket.
Step 3 : Lift up the 16P FFC taped on SMPS Unit.
Caution : During assembling, replace with new double sided tape if torn.

(Step 2)
e x 1

SMPS Unit

16P FFC
(Step 3)
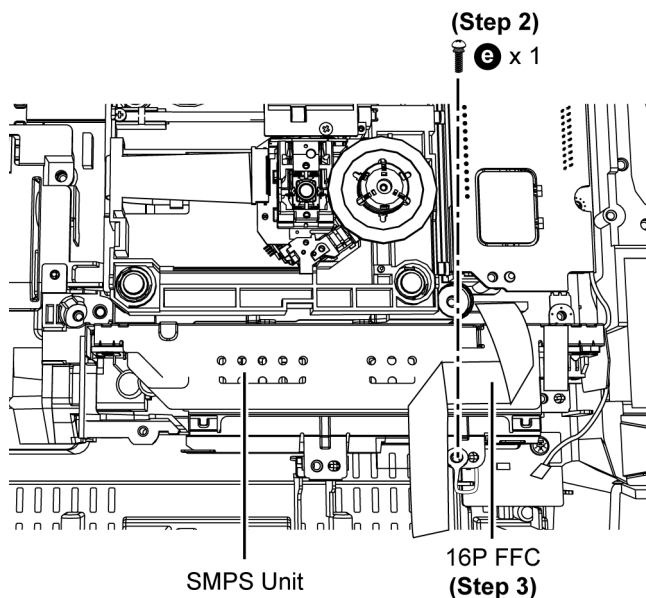
Step 4 : Gently lift up the SMPS Unit.

(Step 4)
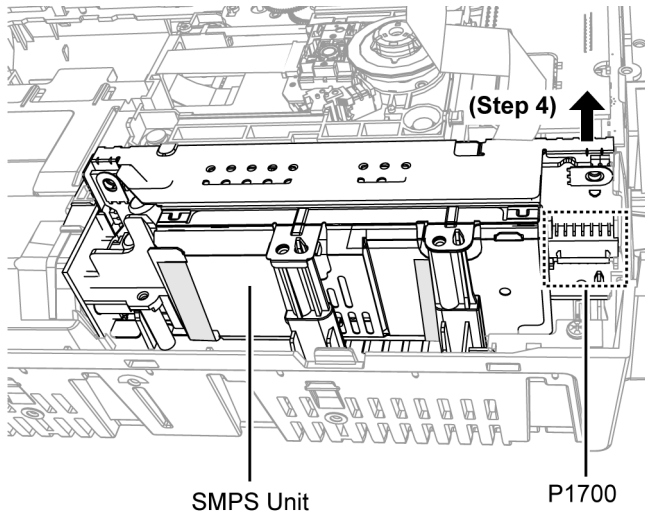
SMPS Unit

P1700

Caution : During assembling, align the SMPS Unit (between P1700 with CN1100). A "click" sound could be heard when the SMPS unit is attached properly to the Main P.C.B..

P1700

SMPS Unit

CN1100
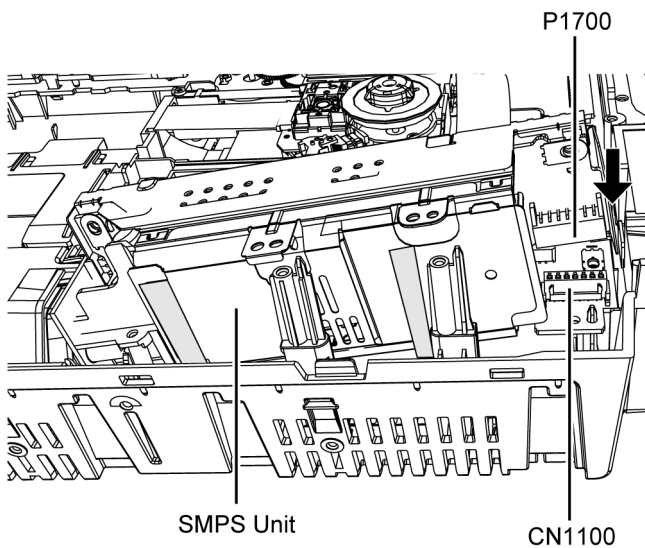
Step 5 : Remove the SMPS Unit.

SMPS Unit

(Step 5)
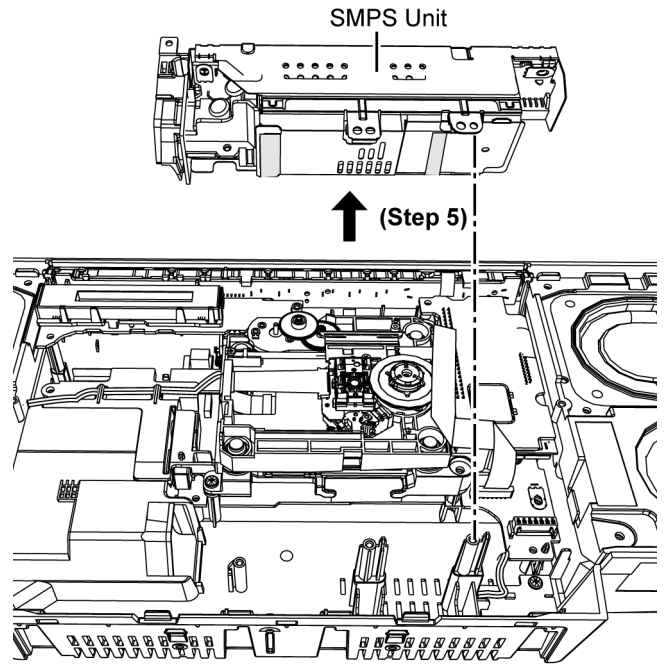
Step 6 : Remove 1 screw.
Step 7 : Upset the SMPS unit.

d x 1
(Step 6)
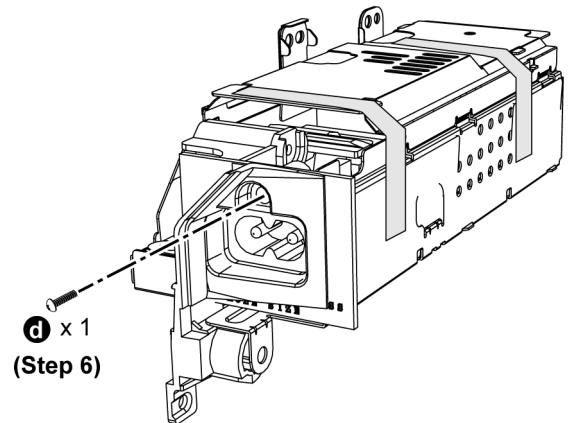
Step 8 : Insert a flathead screwdriver below the AC Inlet Holder.

Step 9 : Slightly lift up the screwdriver to release the catch.

AC Inlet Holder

(Step 8)
Screwdriver

(Step 9)
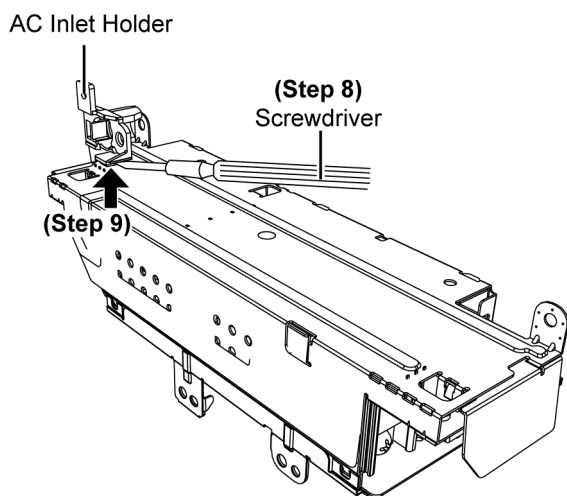
Step 10 : Remove AC Inlet Holder.

Caution : During assembling, ensure the AC Inlet Holder is fully catched to the SMPS Unit. A "click" sound will be heard when fully catched.

AC Inlet Holder

SMPS Unit
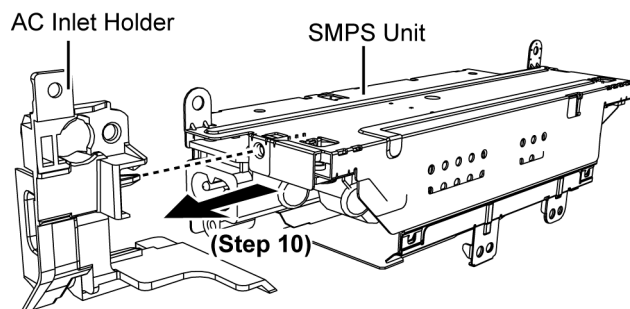
(Step 10)

Step 11 : Lift up the Himelons.

Caution : Replace the Himelons if they are torn during disassembling.

SMPS Unit

Himelon
(Step 11)

Himelon
(Step 11)
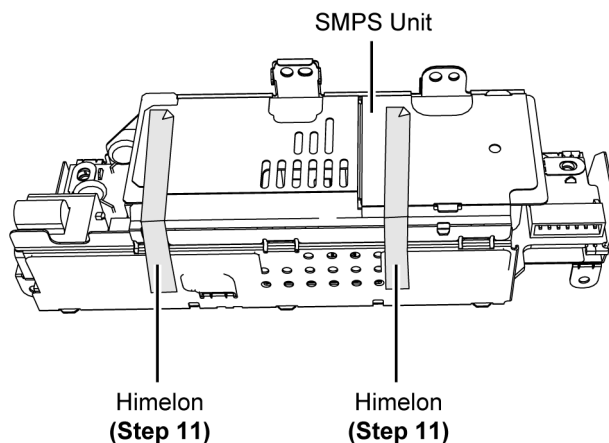
Step 12 : Press to release 2 catches using a screwdriver and gently push up the SMPS Shield Unit.

Caution : During assembling, ensure that the SMPS Shield Unit is catched properly to the SMPS bracket as shown.

SMPS Shield Unit

Screwdriver
(Step 12)

Catch

SMPS Shield	SMPS Shield
OK	**NG**
SMPS Bracket	SMPS Bracket
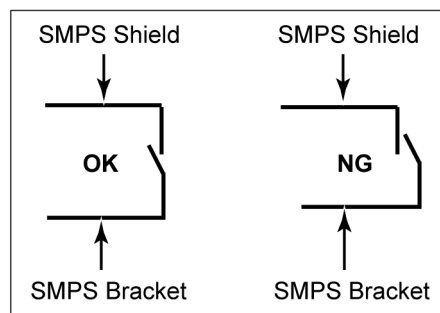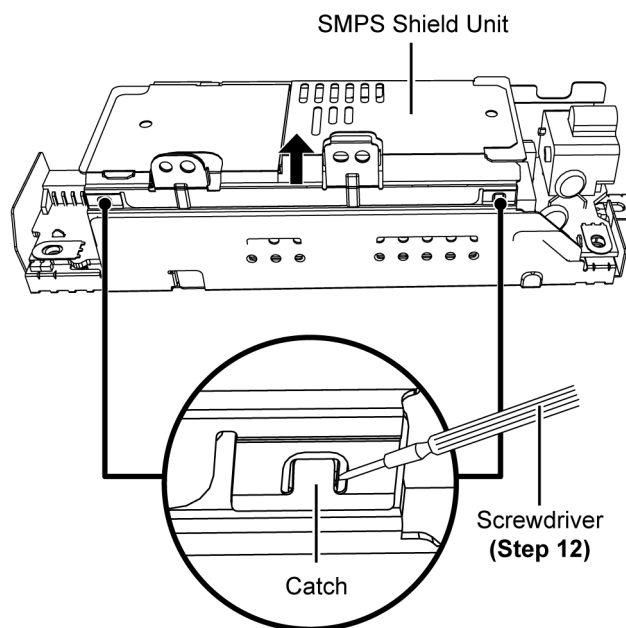
Step 13 : Gently push up the SMPS Shield Unit to release the catches.

Caution : During assembling, ensure that the SMPS Shield Unit is catched properly to the SMPS bracket as shown.

SMPS Shield Unit

(Step 13)

Catch

SMPS Shield

SMPS Shield

OK

NG

SMPS Bracket

SMPS Bracket
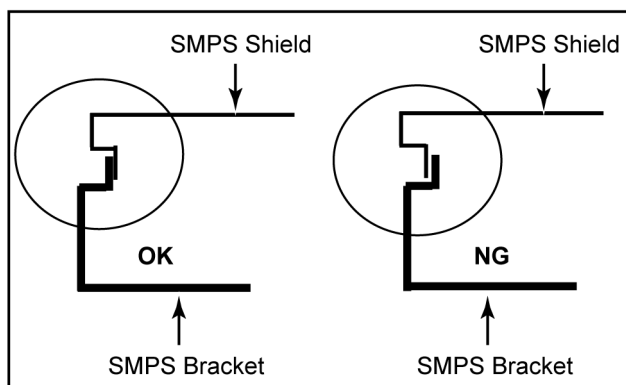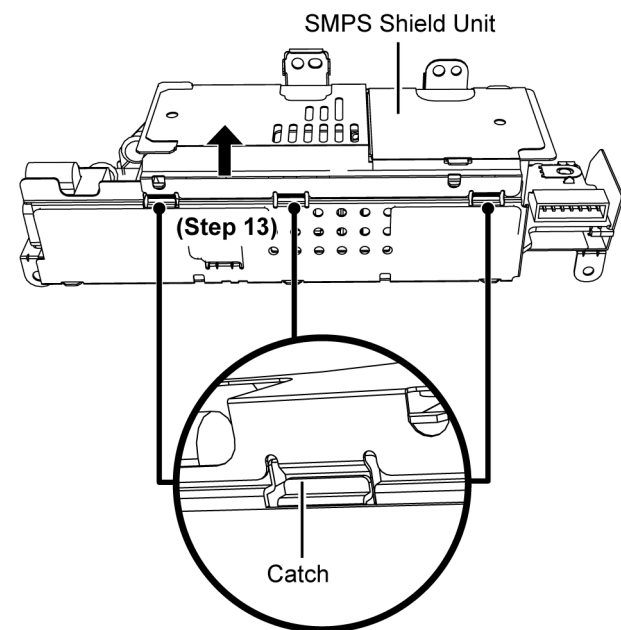
Step 14 : Remove the SMPS Shield Unit.

SMPS Shield Unit
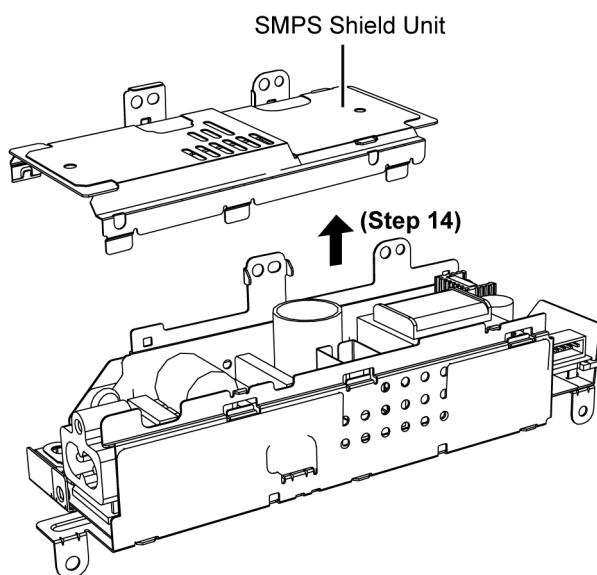
(Step 14)

Step 15 : Remove 3 screws.

(Step 15)

x 3
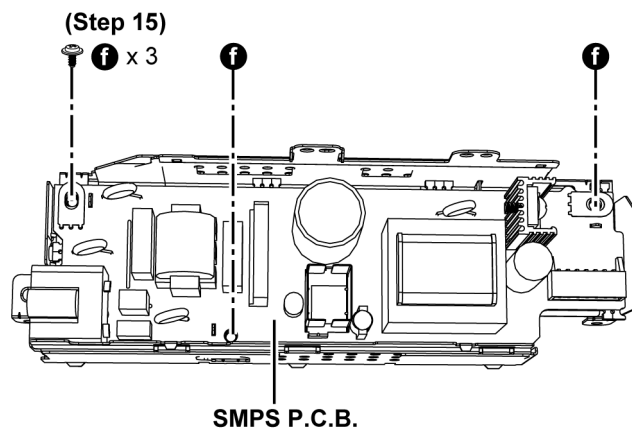
SMPS P.C.B.

Step 16 : Remove the SMPS P.C.B..

SMPS P.C.B.

(Step 16)

SMPS Bracket Unit
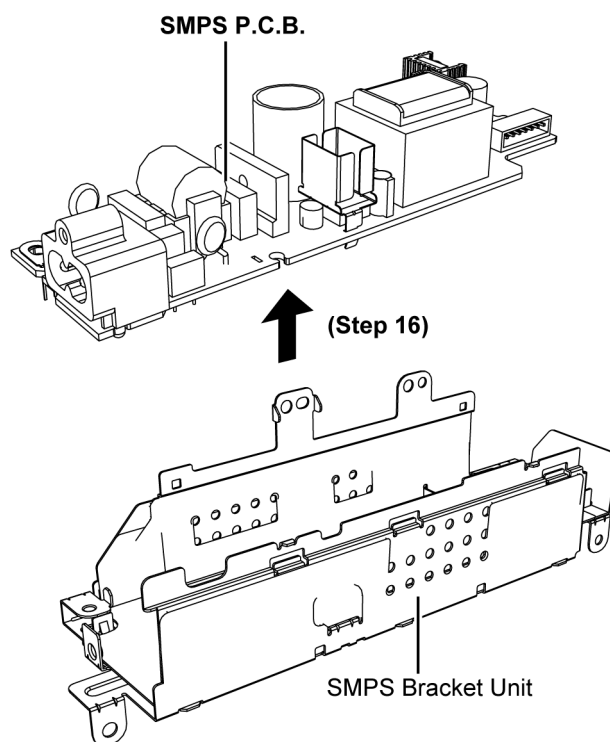
Caution: During assembling, ensure that the SMPS P.C.B. is properly seated on the locators.

Locator

SMPS P.C.B.

Locator

Locator
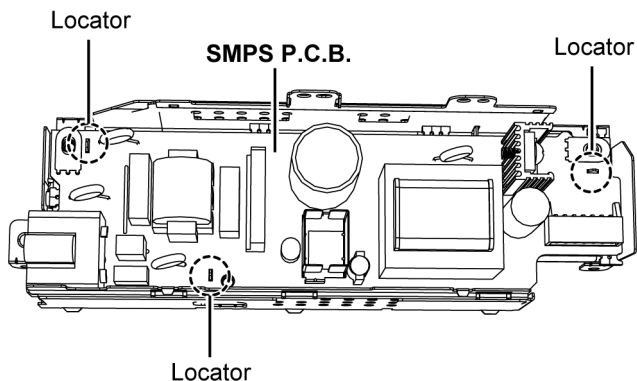
11.24. Replacement of Diode (D1700)

• Refer to "Disassembly of SMPS P.C.B."

11.24.1. Disassembly of Diode (D1700)

Caution : Avoid touching the heatsink unit and SMPS P.C.B., due to its high temperature after prolonged use. Touching it may lead to injuries.

Step 1 : Desolder pins of the Diode (D1700) on the solder side of SMPS P.C.B..

(Step 1)
(D1700)

SMPS P.C.B.

Step 2 : Remove 1 screw.

Heatsink unit

SMPS P.C.B.

g x 1
(Step 2)
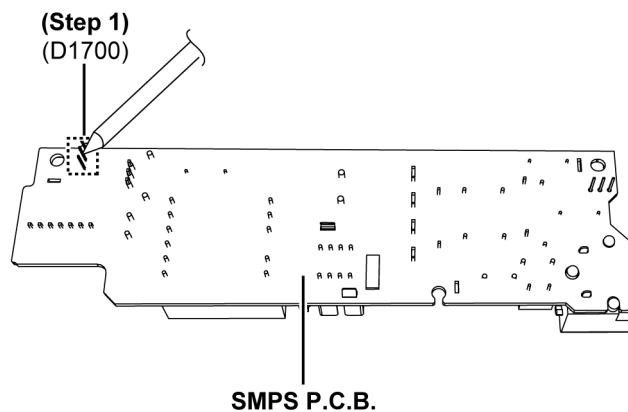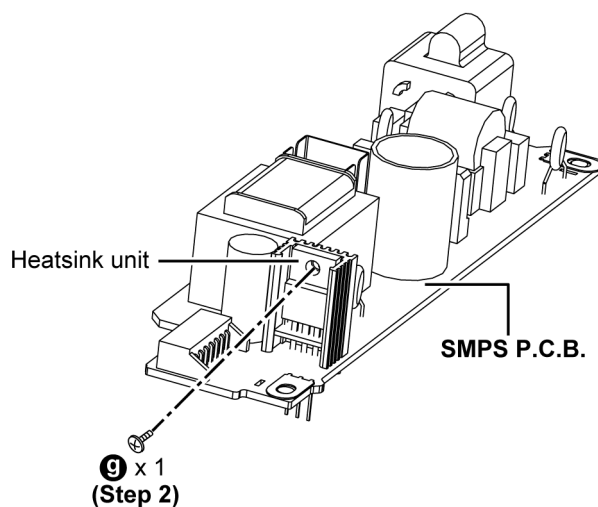
Step 3 : Remove the Diode (D1700).

Heatsink unit

SMPS P.C.B.
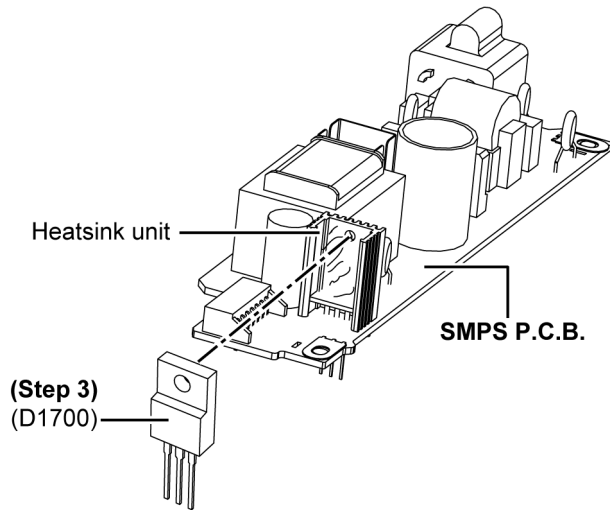
(Step 3)
(D1700)

11.24.2. Assembly of Diode (D1700)

Step 1 : Apply grease to the heatsink unit.
Step 2 : Fix the Diode (D1700) onto SMPS P.C.B..
Step 3 : Fix the Diode (D1700) onto the heatsink unit with 1 screw.
Caution : Ensure the Diode (D1700) is fixed properly to the heatsink.

(Step 1)
Grease

Heatsink unit

SMPS P.C.B.

(Step 3)
(D1700)

g x 1
(Step 3)
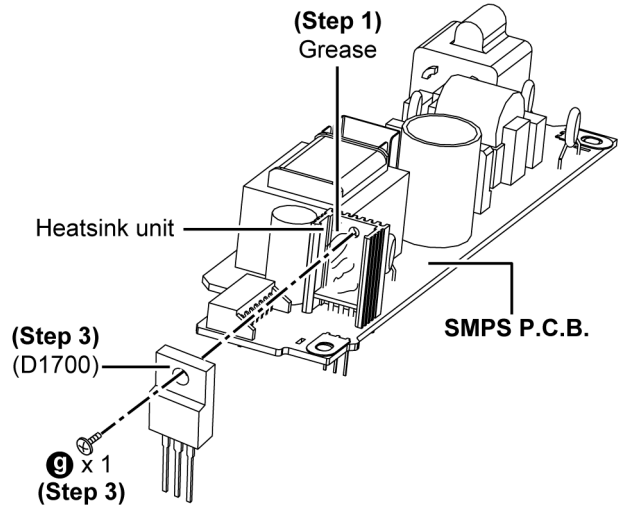
Step 4 : Solder pins of the Diode (D1700).
Caution : Ensure the Diode (D1700) is seated properly onto the SMPS P.C.B. before soldering.

(Step 4)
(D1700)
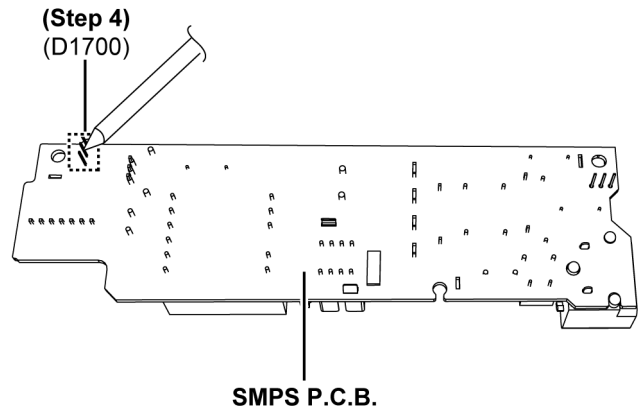
SMPS P.C.B.

11.25. Replacement of Switching Regulator IC (IC1700)

• Refer to "Disassembly of SMPS P.C.B."

11.25.1. Disassembly of Switching Regulator IC (IC1700)

Caution : Avoid touching the heatsink unit and SMPS P.C.B., due to its high temperature after prolonged use. Touching it may lead to injuries.
Step 1 : Desolder pins of the Heatsink Plate on the solder side of SMPS P.C.B..

SMPS P.C.B.

Heatsink Plate
(Step 1)
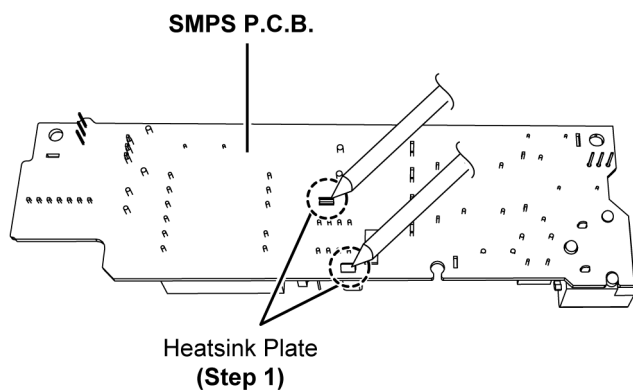
Step 2 : Remove the Heatsink Plate.

Heatsink Plate

(Step 2)
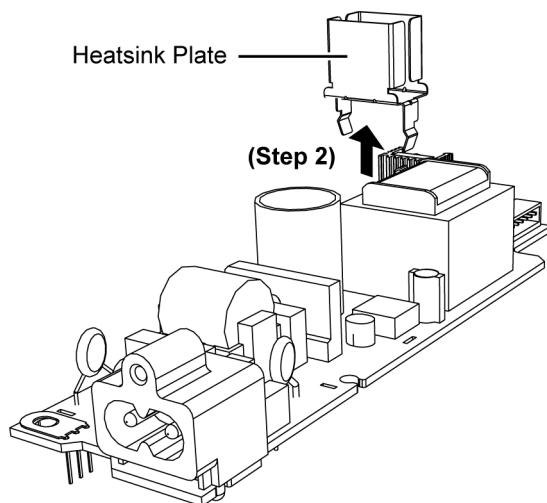
Step 3 : Desolder pins of the Switching Regulator IC (IC1700) on the solder side of SMPS P.C.B..

SMPS P.C.B.

(Step 3)
(IC1700)
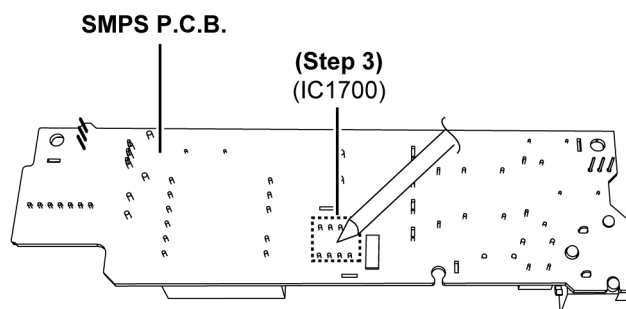
Step 4 : Remove the Switching Regulator IC (IC1700).

(IC1700)

(Step 4)
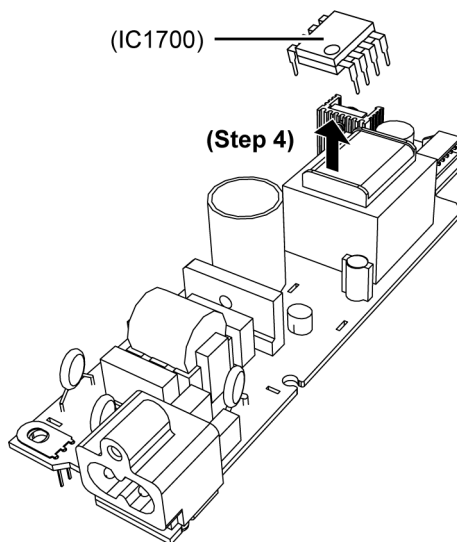
11.25.2. Assembly of Switching Regulator IC (IC1700)

Step 1 : Fix the Switching Regulator IC (IC1700) onto SMPS P.C.B..

(IC1700)

(Step 1)
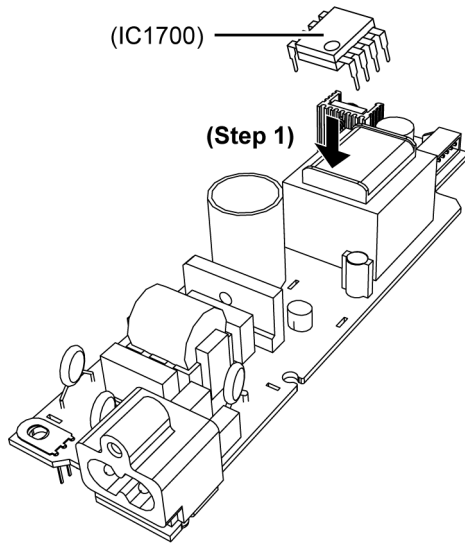
Step 2 : Solder pins of the Switching Regulator IC (IC1700).
Caution : Ensure the Switching Regulator IC (IC1700) is seated properly onto the SMPS P.C.B. before soldering.

SMPS P.C.B.

(Step 2)
(IC1700)
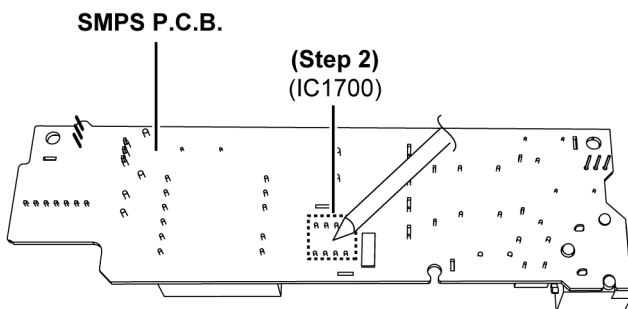
Step 3 : Fix the Heatsink Plate onto SMPS P.C.B..

Heatsink Plate

(Step 3)
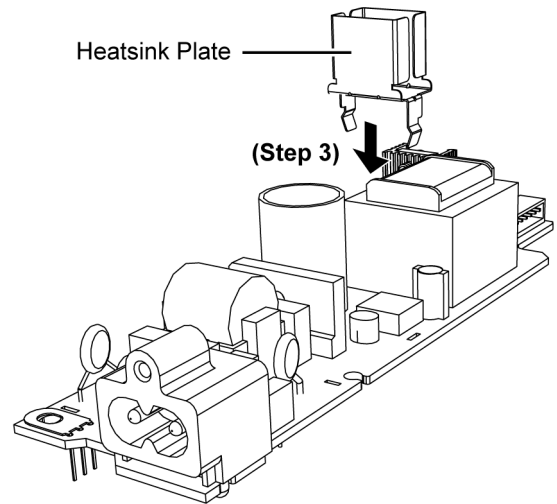
Step 4 : Solder pins of the Heatsink Plate.
Caution : Ensure the Heatsink Plate is seated properly onto the SMPS P.C.B. before soldering.

SMPS P.C.B.

Heatsink Plate
(Step 4)
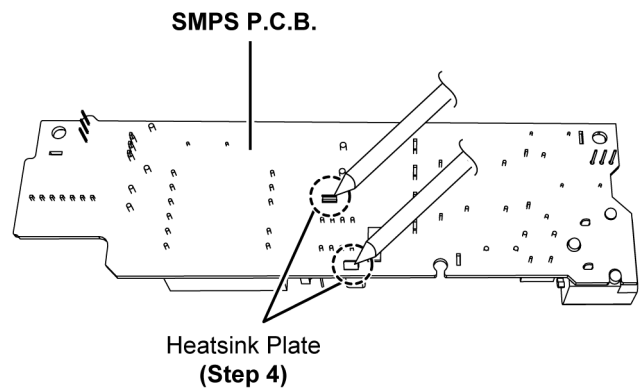
11.26. Disassembly of Panel P.C.B. & Button Ornament Unit

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"

Step 1 : Remove 1 screw.
Step 2 : Lift up the Panel P.C.B. together with Button Ornament Unit as shown.
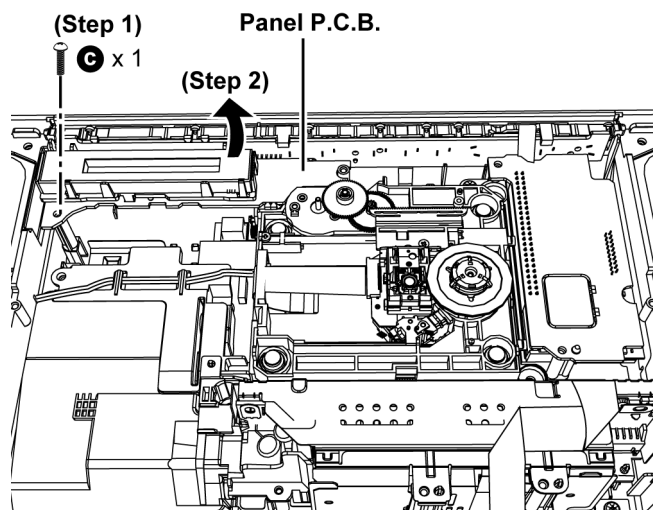
Step 3 : Detach 15P FFC at the connector (CN900) on the Button P.C.B..
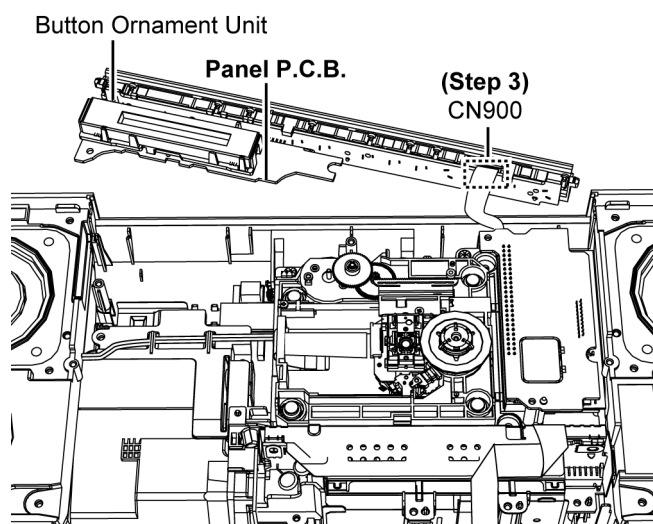
Step 4 : Detach the Panel P.C.B. from the Button Ornament unit.
Step 5 : Remove the Panel P.C.B..
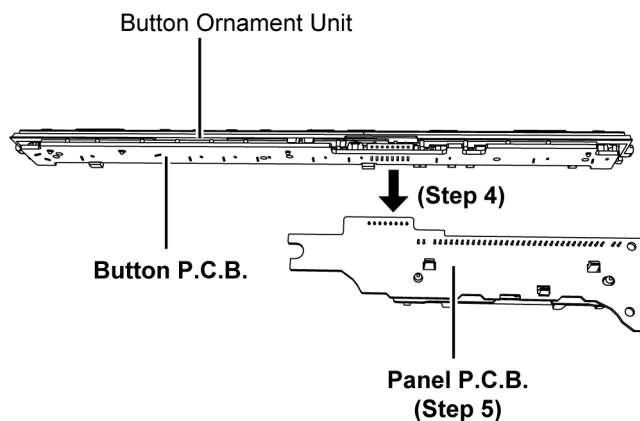
Caution : During assembling, A "click" sound could be heard when the Panel P.C.B. and the Button Ornament P.C.B. is properly connected.

84
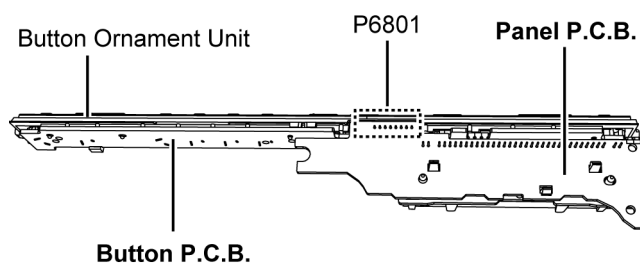
11.27. Disassembly of Button P.C.B.

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"
• Refer to "Disassembly of Panel P.C.B. & Button Ornament Unit"

Step 1 : Remove 3 screws.

(Step 1)

🅑 x 3
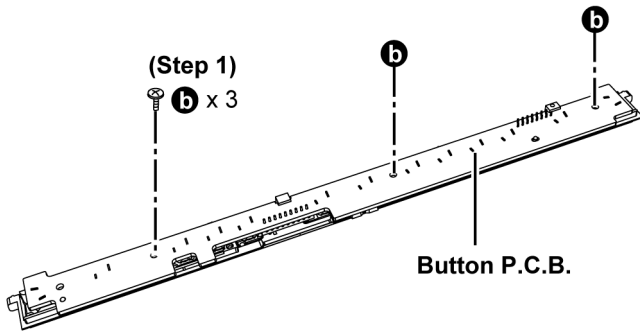
Button P.C.B.

Step 2 : Lift up the Button P.C.B. in order of sequences (1) to (2) as shown.

Button P.C.B.

① ② **(Step 2)**
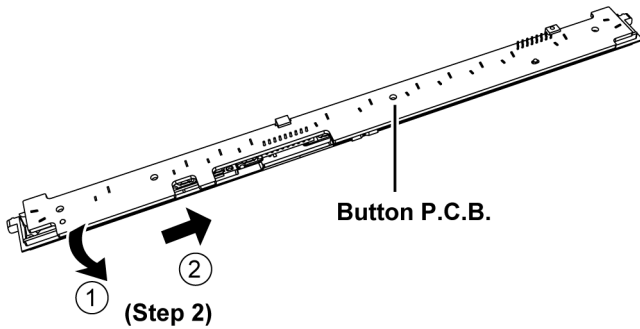
Step 3 : Remove the Button P.C.B..

Button P.C.B.

(Step 3)
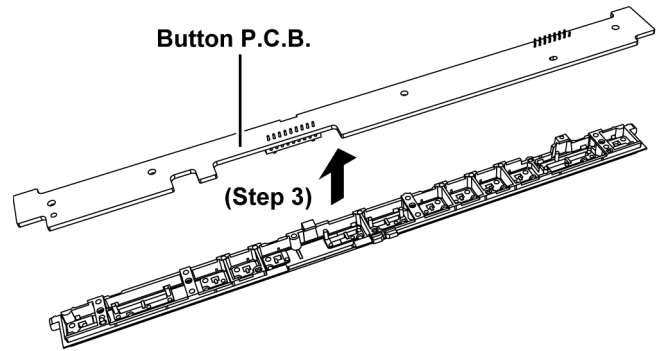
Caution: During assembling, ensure the Button P.C.B. is fully fix into rib and guide by sequence from 1 to 4.

Rib   Guide

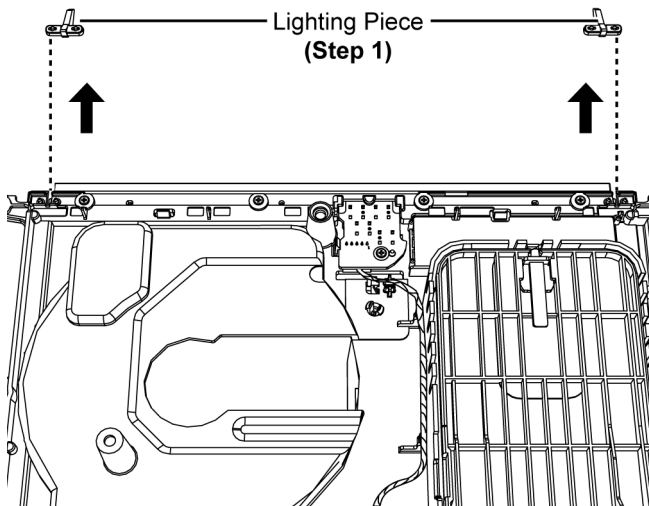1 2   3   4

Button P.C.B.

Rib   Guide
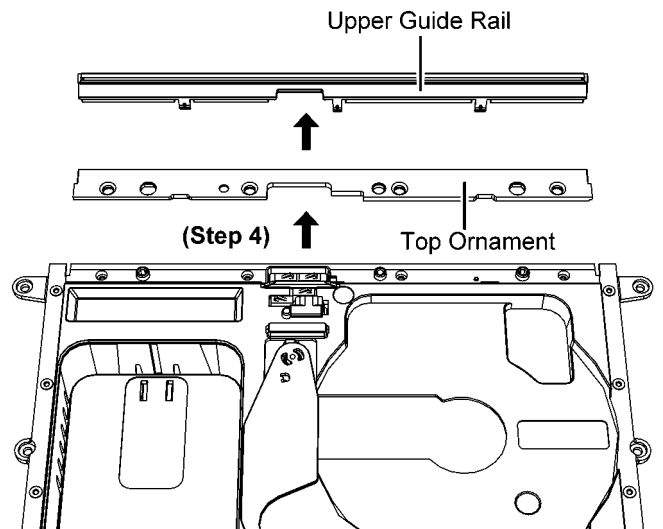
85
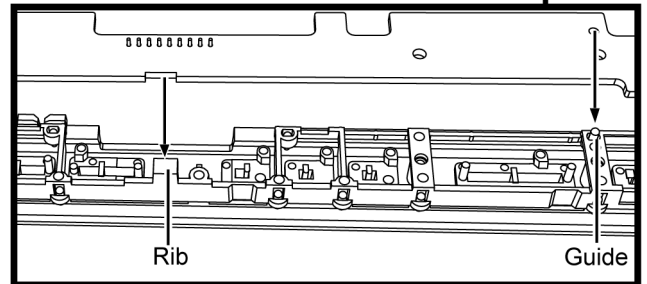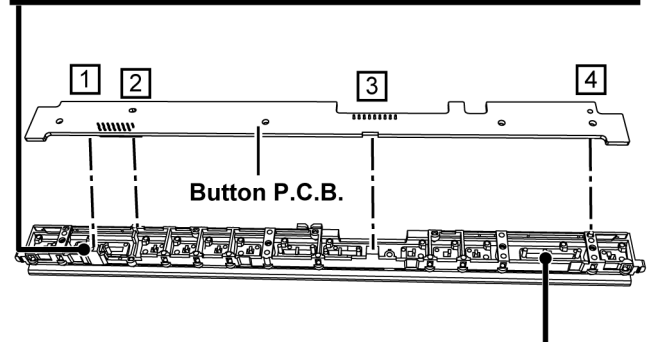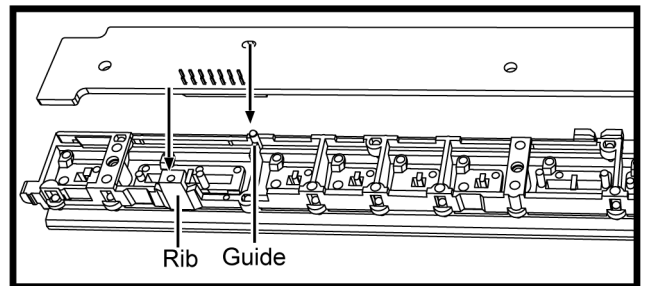
11.28. Disassembly of Button Ornament

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"
• Refer to "Disassembly of Panel P.C.B. & Button Ornament Unit"
• Refer to "Disassembly of Button P.C.B."

Step 1 : Lift up the Button Ornament in order of sequences (1) to (2) as shown.
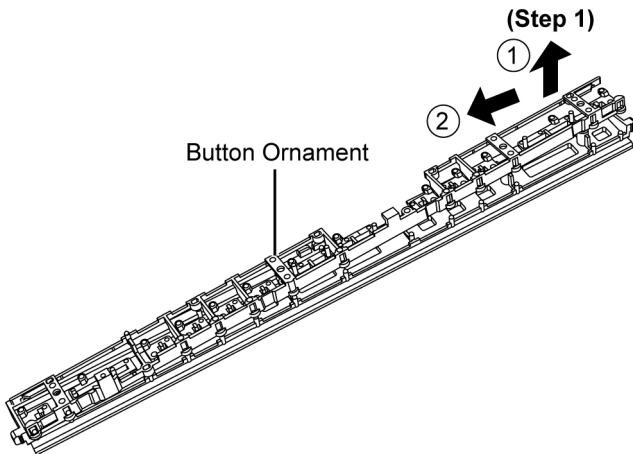
Step 2 : Remove the Button Ornament.
Caution : During assembling, align the holes of the button ornament with the guides of the Top Ornament & press together.
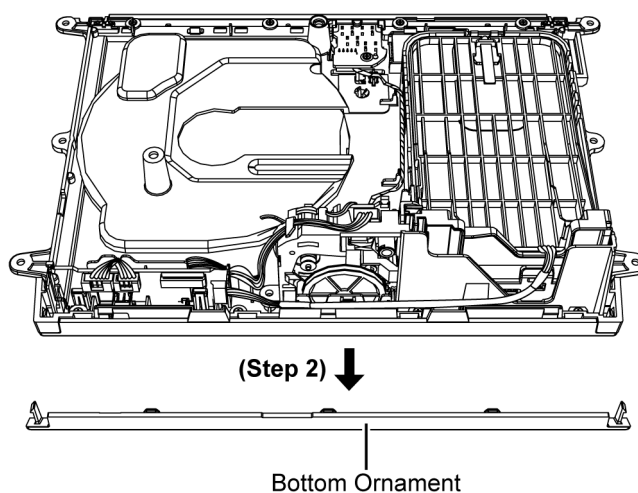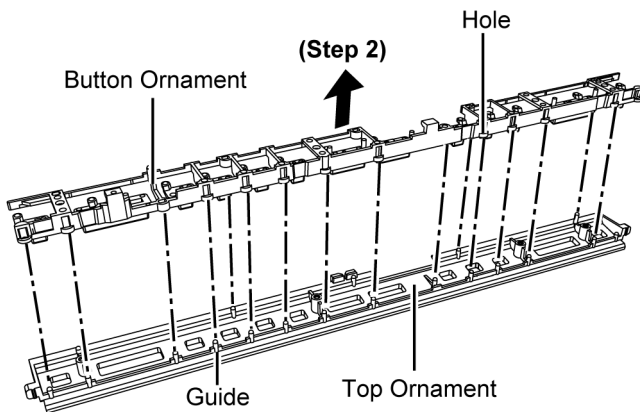

11.29. Disassembly of CD Mechanism

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"
• Refer to (Step 1) - (Step 5) of item 11.22.
• Refer to (Step 1) - (Step 5) of item 11.23.
• Refer to (Step 1) - (Step 3) of item 11.26.

Step 1 : Remove 2 screws.
Step 2 : Slightly lift up the CD Mechanism.
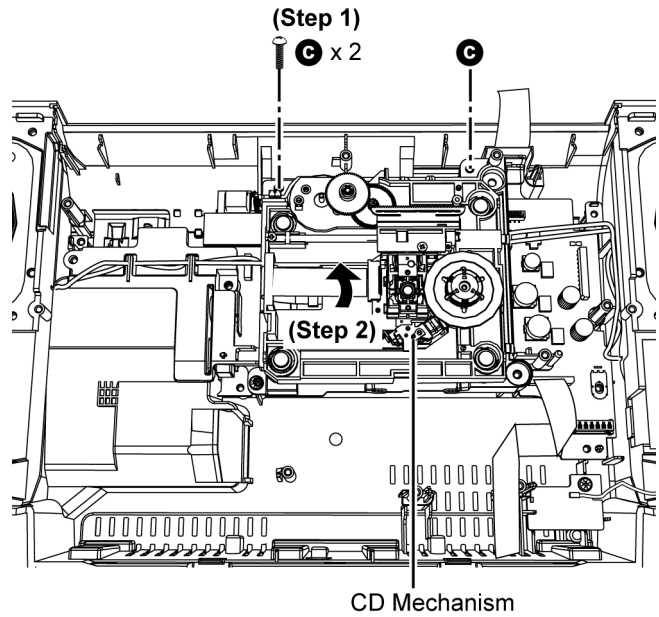
Step 3 : Detach 30P FFC at the connector (CN6006) on the Main P.C.B..
Caution : During assembling, ensure 30P FFC is fix inside the slot at middle chassis as shown.
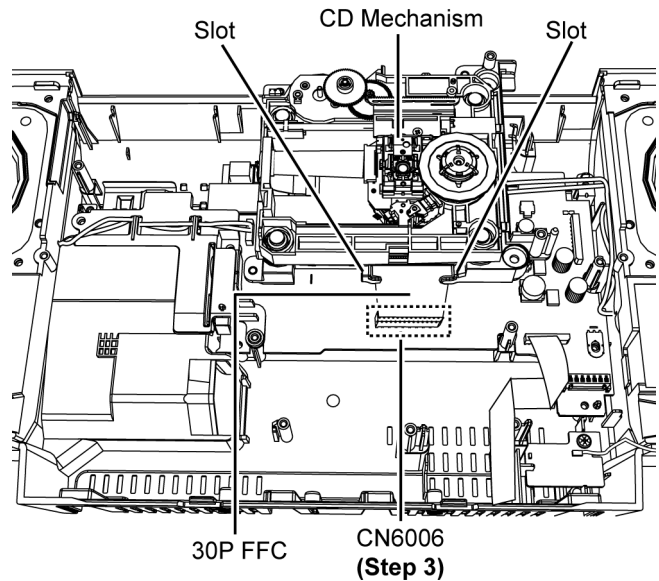
Caution : During assembling, hold the CD Mechanism as shown to fix 30P FFC to Main P.C.B..

Holding Area
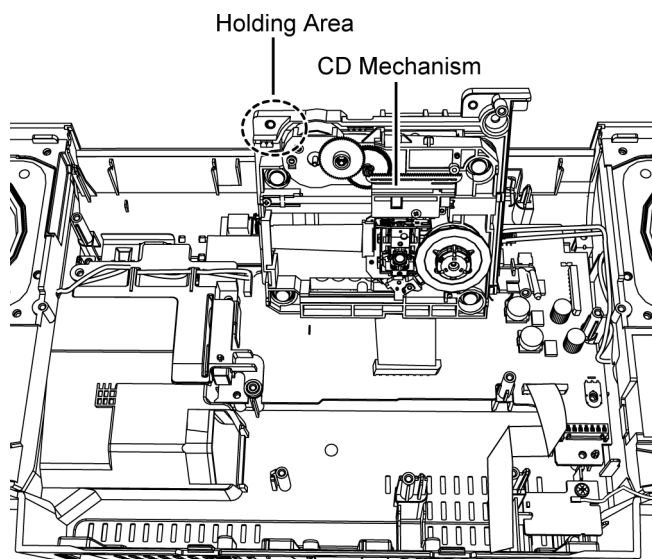
CD Mechanism

Step 4 : Remove the CD Mechanism.

CD Mechanism

(Step 4)
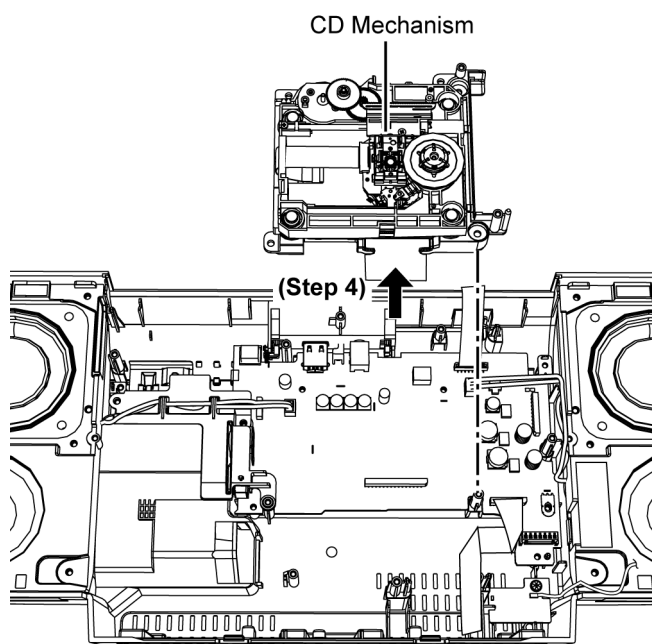
11.30. Disassembly of CD Servo P.C.B.

• Refer to "Disassembly of CD Mechanism"

Step 1 : Release catches and push down the fixed pins as arrow shown.

(Step 1)

(b)

Pin

(a)

(a)

Catches

Fix Pins

Fix Pins
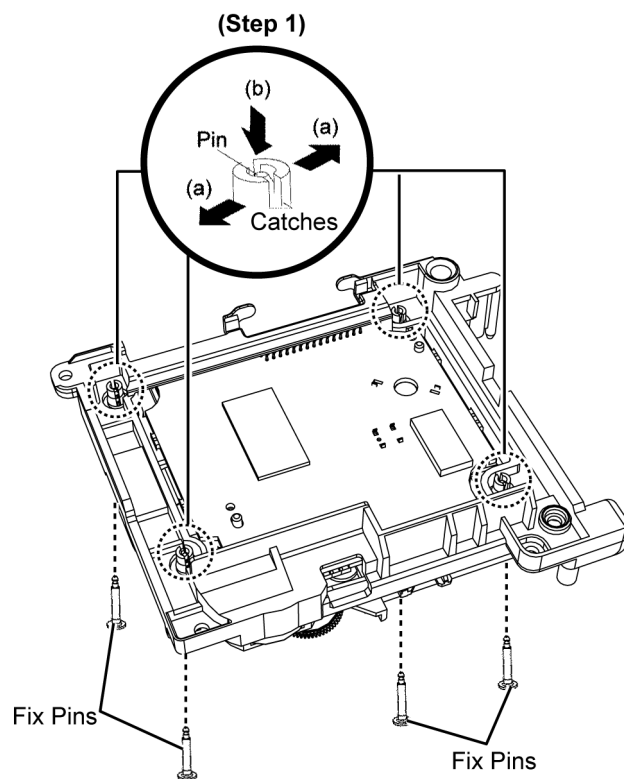
Step 2 : Lift up the Mecha Chassis & remove the Floating Springs.

Caution : Keep the Floating Springs in safe place and place them back during assembling.

Mecha Chassis

Floating Spring

Floating Spring

Floating Spring

Traverse Deck
(Step 2)
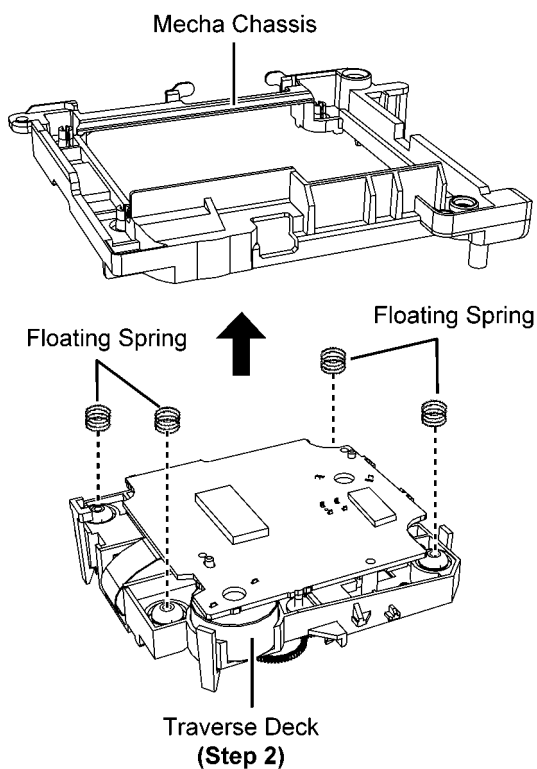
Step 3 : Remove 3 screws.

(Step 3)
ⓗ x 3

ⓗ

ⓗ

ⓗ
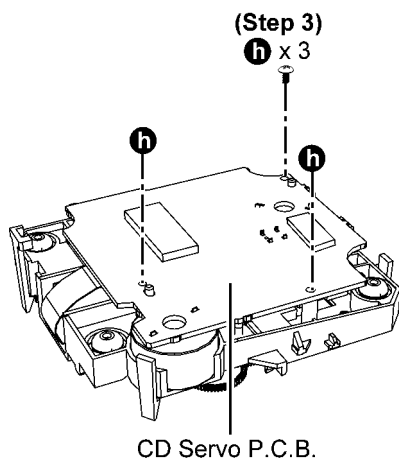
CD Servo P.C.B.

Step 4 : Desolder points on the solder side of the CD Servo P.C.B..

(Step 4)
Solder Points

CD Servo P.C.B.

Solder Points
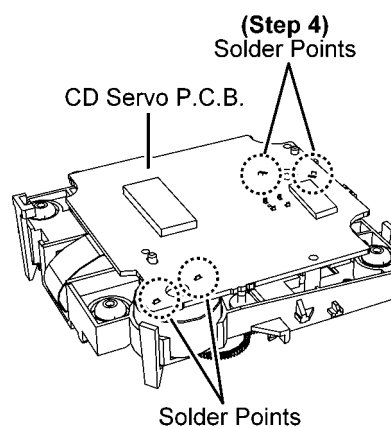
Step 5 : Upset the CD Servo P.C.B..

Step 6 : Lift up the Connector Cover.

Caution : Do not use strong force as it may damage the connector cover.

Step 7 : Detach 24P FFC at the connector (CN7001) from the CD Servo P.C.B..

Connector Cover

(Step 6)

(Step 5)

CN7001
(Step 7)
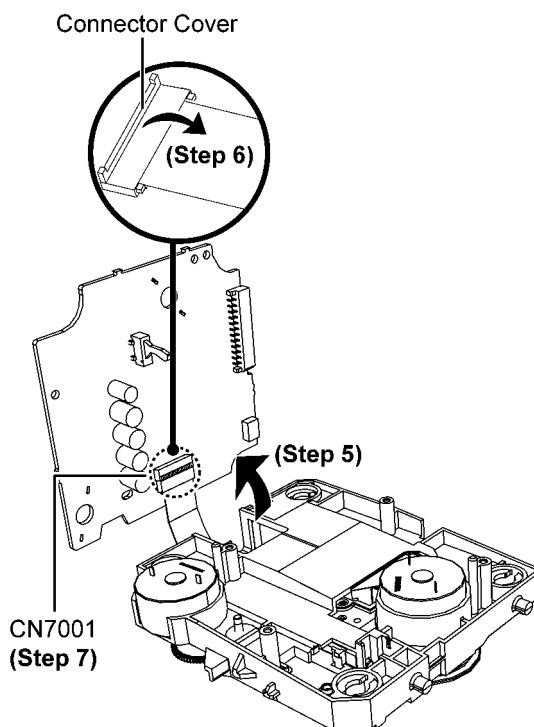
Step 8 : Attach short pin to the 24P FFC of the Traverse Assembly.
Step 9 : Remove the CD Servo P.C.B..

(Step 9)
CD Servo P.C.B.

(Step 8)
Short Pin

24P FFC

Traverse Assembly
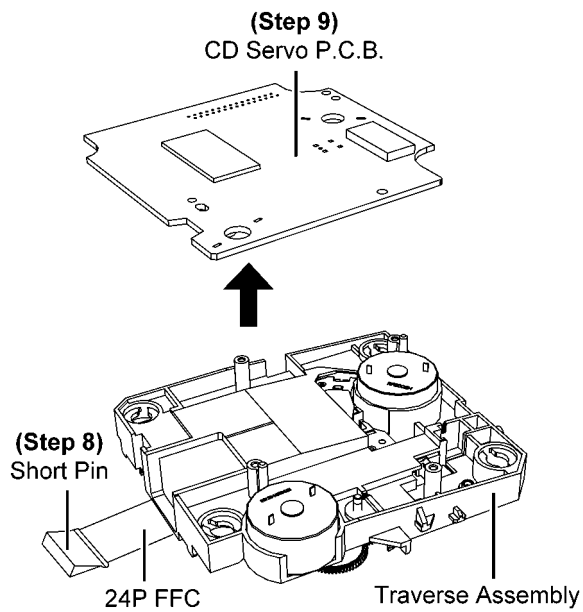
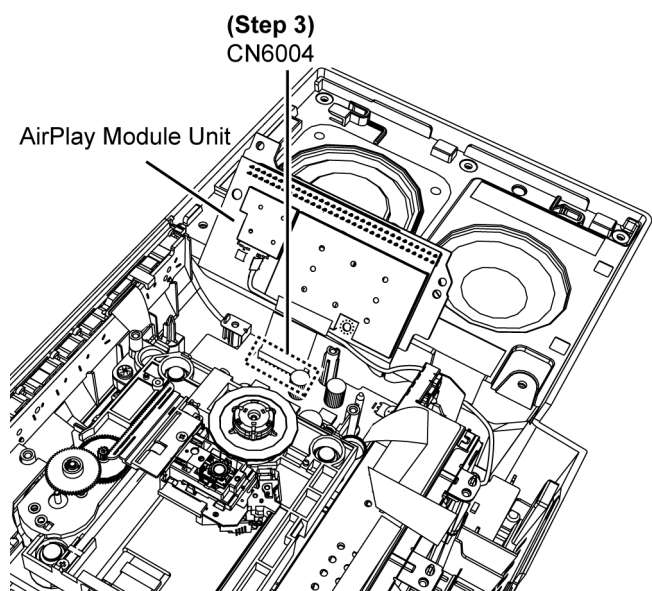# 11.31. Disassembly of Jack Lid

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"
- Refer to (Step 1) - (Step 5) of item 11.22.
- Refer to (Step 1) - (Step 5) of item 11.23.
- Refer to (Step 1) - (Step 3) of item 11.26.
- Refer to "Disassembly of CD Mechanism"

Step 1 : Release the Jack Lid Spring.
Caution : Keep the Jack Lid Spring in safe place and place them back during assembling.

(Step 1)
Jack Lid Spring
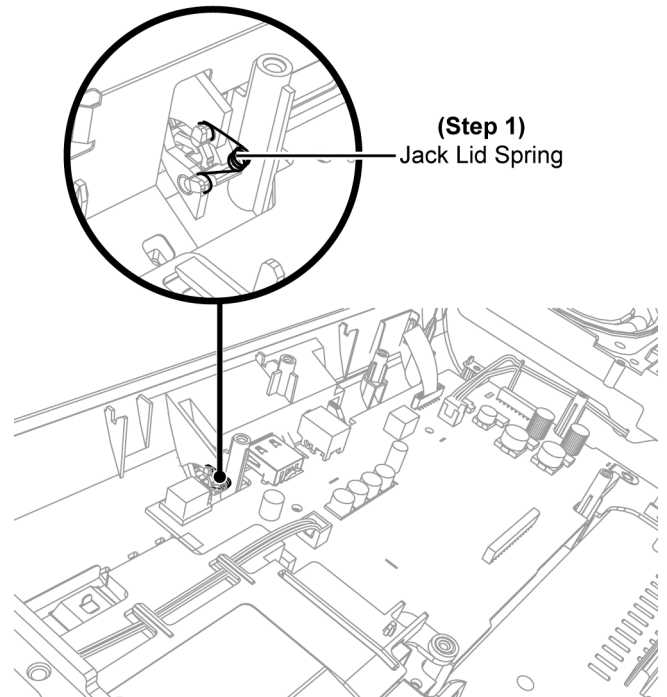
Step 2 : Press to open the Jack Lid.

(Step 2)
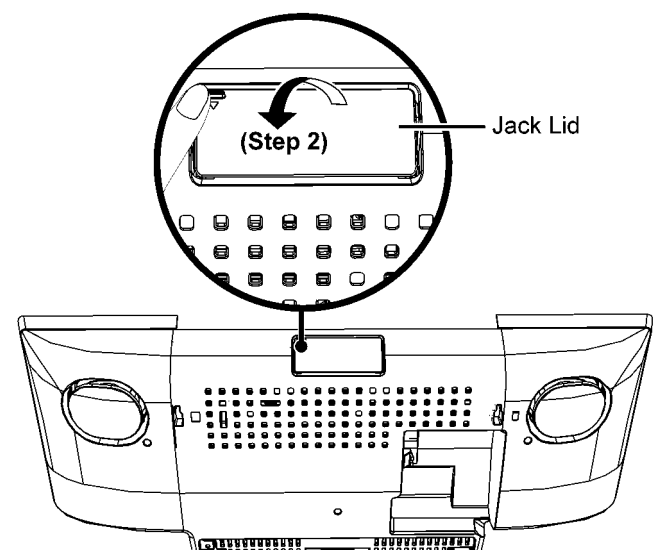
Jack Lid

Step 3 : Push the shaft of the Jack Lid inwards in the direction as shown.

(Step 3)
Guide
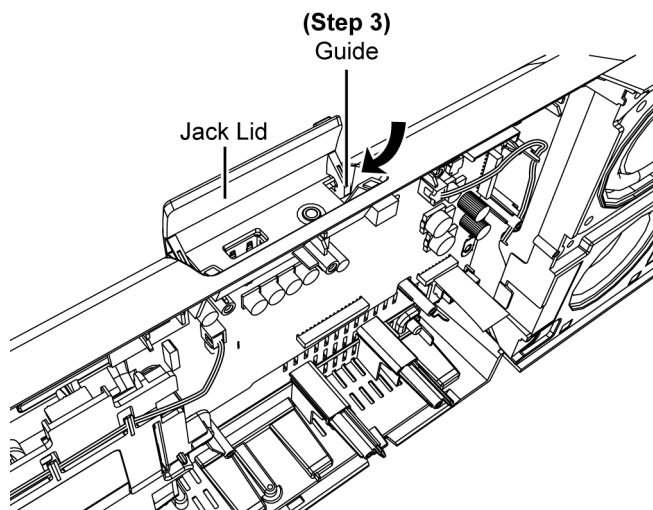
Jack Lid

Step 4 : Lift up to remove the Jack Lid in the direction as shown.

(Step 4)
Guide   Jack Lid
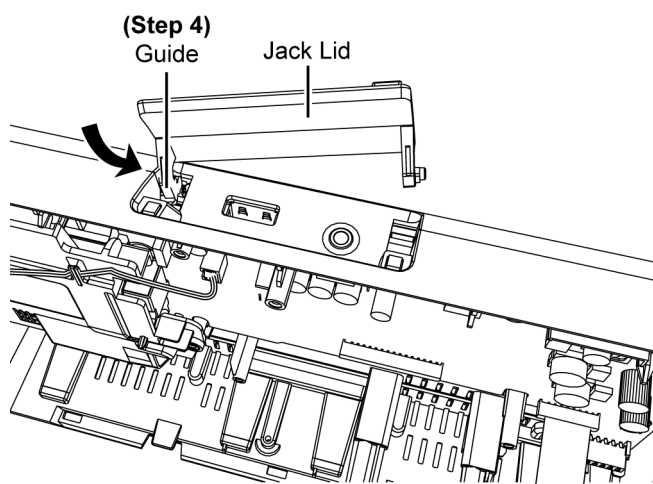
Caution : During assembling, insert the shaft of the Jack Lid into hole A, then press & push the shaft into hole B.

Hole

Guide

Hole

Guide

Jack Lid
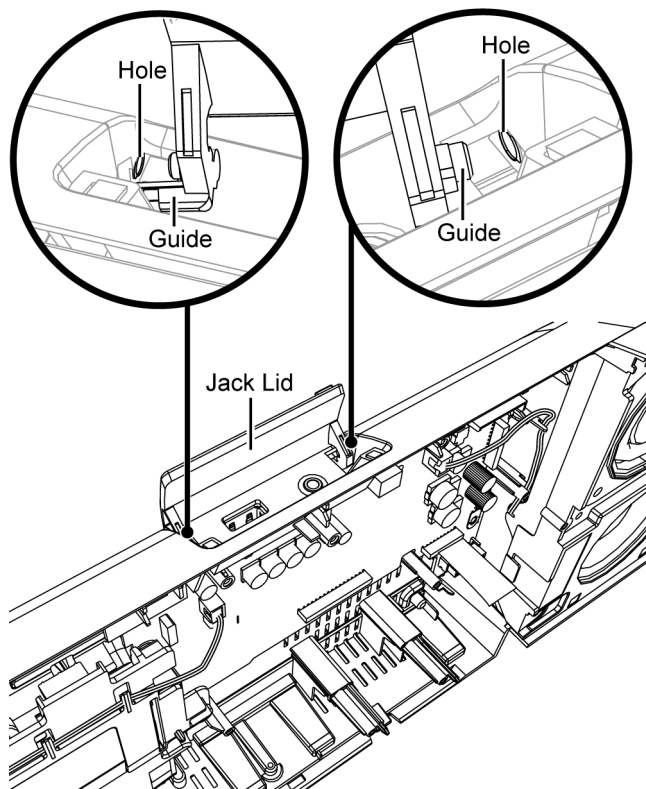
11.32. Disassembly of Main P.C.B.

• Refer to "Disassembly of Base Stand Assembly"
• Refer to "Disassembly of Door Assembly"
• Refer to "Disassembly of Front Ornament Unit"
• Refer to "Disassembly of Front Panel Block"
• Refer to (Step 1) - (Step 5) of item 11.22.
• Refer to (Step 1) - (Step 5) of item 11.23.
• Refer to (Step 1) - (Step 3) of item 11.26.
• Refer to "Disassembly of CD Mechanism"

Step 1 : Detach 2P wire at the connector (CN401) on the Main P.C.B..
Step 2 : Release the 2P wire from the slots.
Caution : During assembling, dressed the 2P wire into the slots.

(Step 1)
CN401

Slot   2P Wire   Slot
(Step 2)   **(Step 2)**
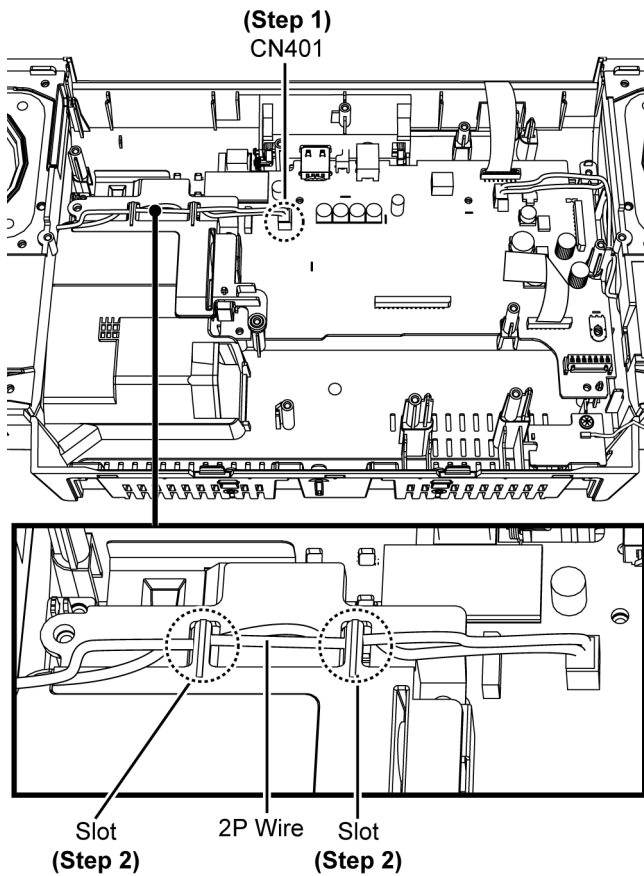
Step 3 : Remove 2 screws.

(Step 3)
e x 2   **e**
Tuner Holder
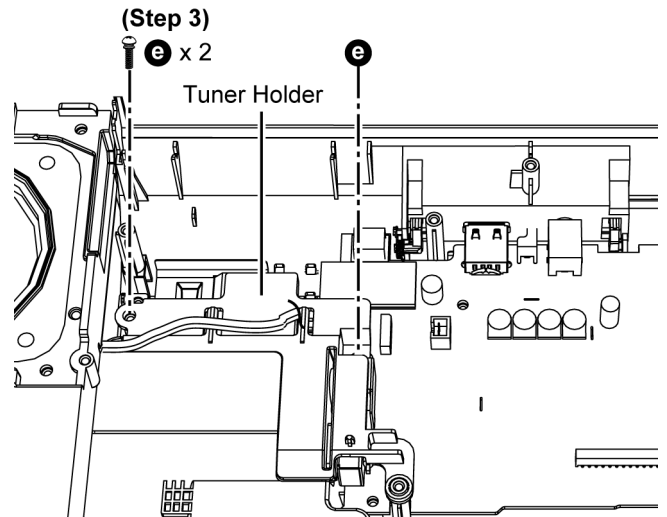
Step 4 : Remove the Tuner Holder.

Tuner Holder
(Step 4)
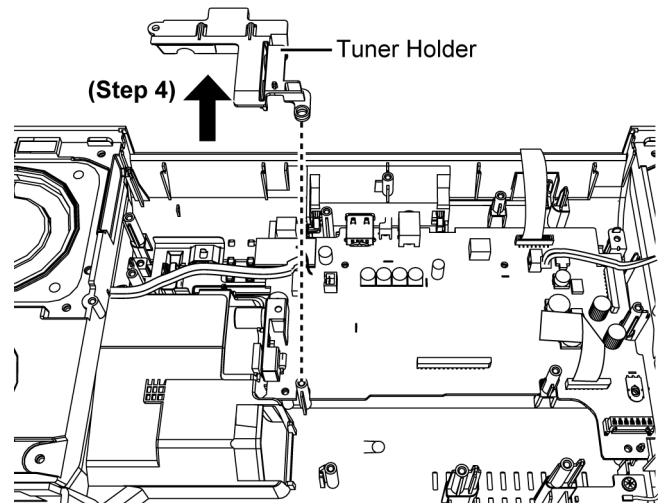
Step 5 : Detach 2P wire at the connector (CN400) on the Main P.C.B..

(Step 5)
CN400
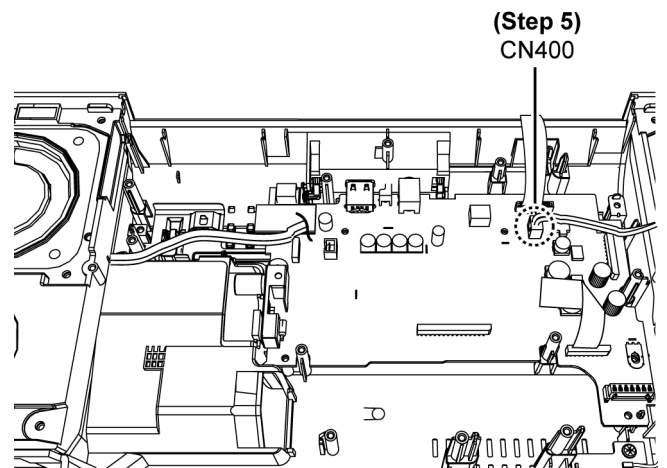
Step 6 : Remove 3 screws.
Step 7 : Slightly Lift up the Main P.C.B..

Main P.C.B.

e

e

(Step 7)

e x 3
(Step 6)
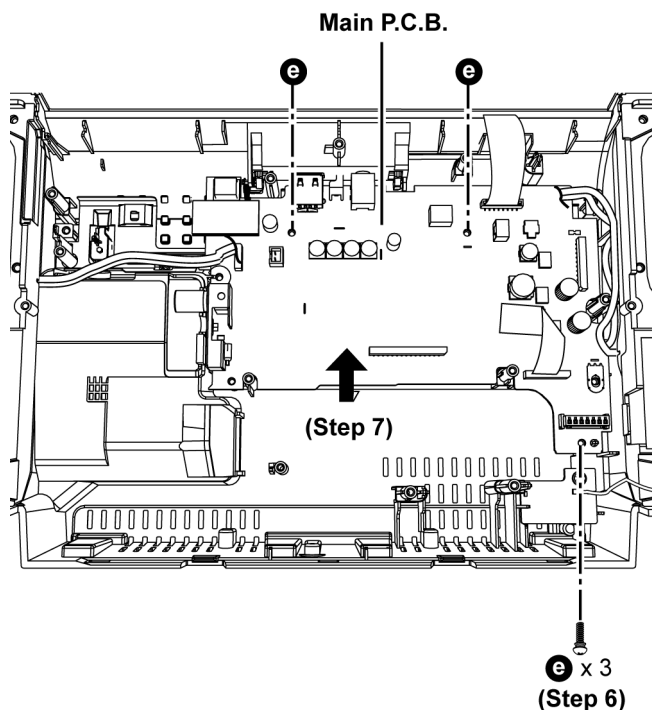
Step 8 : Remove the Main P.C.B. as shown.

Main P.C.B.

(Step 8)
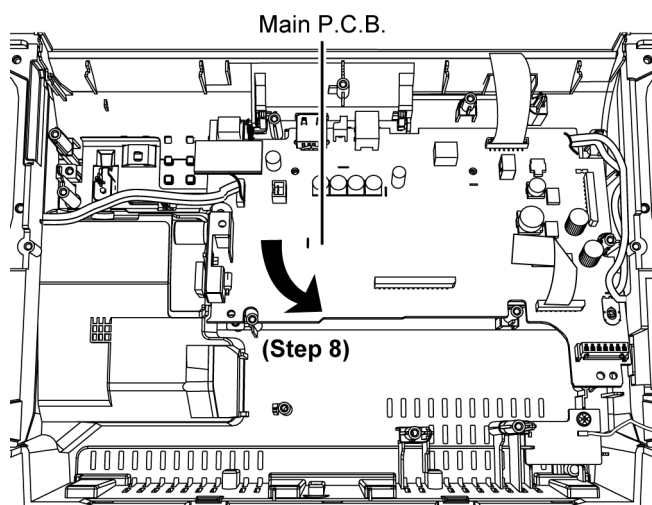
Caution 1 : During assembling, ensure the Headphone Jack (JK450) & iPad Jack (JK6000) are inserted into the holes of Rear Cabinet Assembly as shown.

Hole   Hole

Rear Cabinet
Assembly

(iPad Jack)
JK6000

(Headphone Jack)
JK450
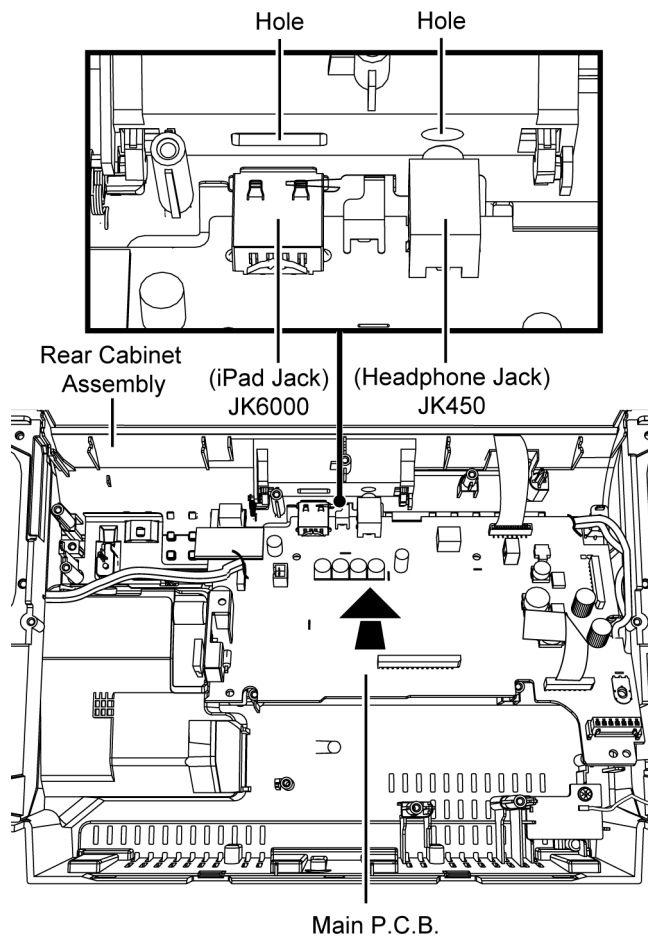
Main P.C.B.

Caution 2 : During assembling, align the Main P.C.B. with the locator & ensure it is properly seated.

Main P.C.B.

Locator
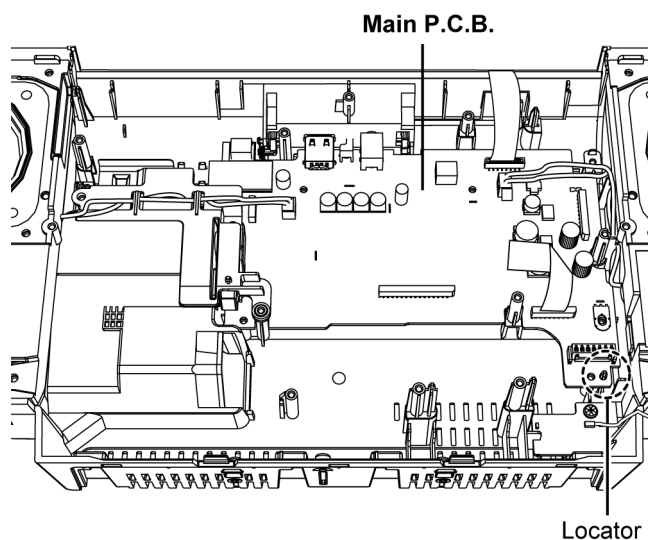
11.33. Disassembly of Front Speaker (SP1)

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"
- Refer to (Step 1) - (Step 5) of item 11.22.
- Refer to (Step 1) - (Step 5) of item 11.23.
- Refer to (Step 1) - (Step 3) of item 11.26.
- Refer to "Disassembly of CD Mechanism"

Step 1 : Detach 2P wire at the connector (CN401) on the Main P.C.B..

Step 2 : Release the 2P wire from the slots.

Caution : During assembling, dressed the 2P wire into the slots as shown.

(Step 1)
CN401

Slot
(Step 2)

2P Wire

Slot
(Step 2)
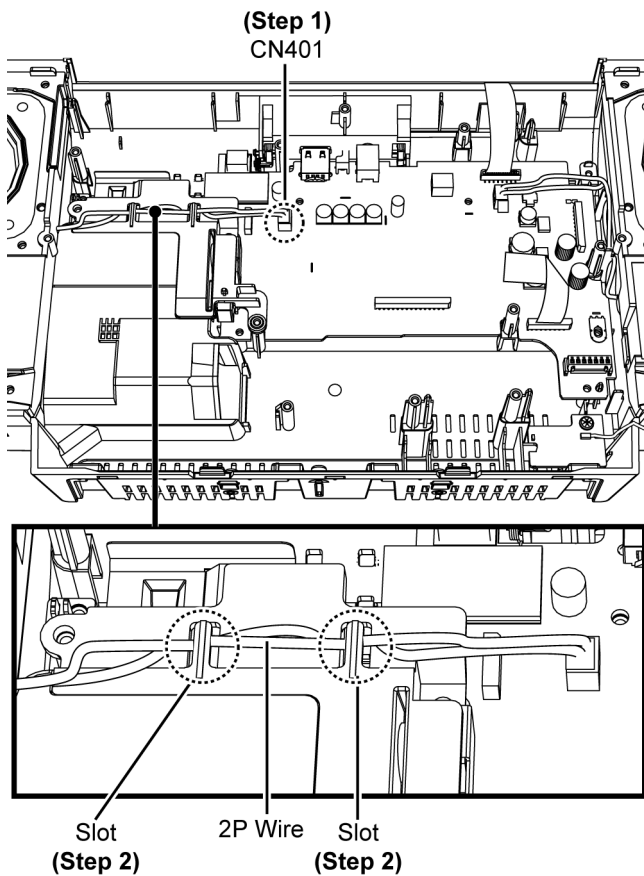
Step 3 : Remove 4 screws.

(Step 3)
ⓐ x 4
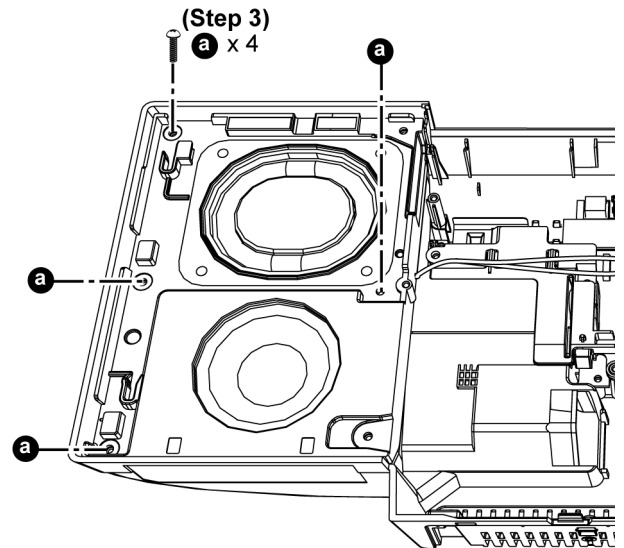
Step 4 : Lift up the Front Speaker Assembly (L) using a flat-head screw driver.

(Step 4)
Flathead Screw driver

Front Speaker Assembly (L)
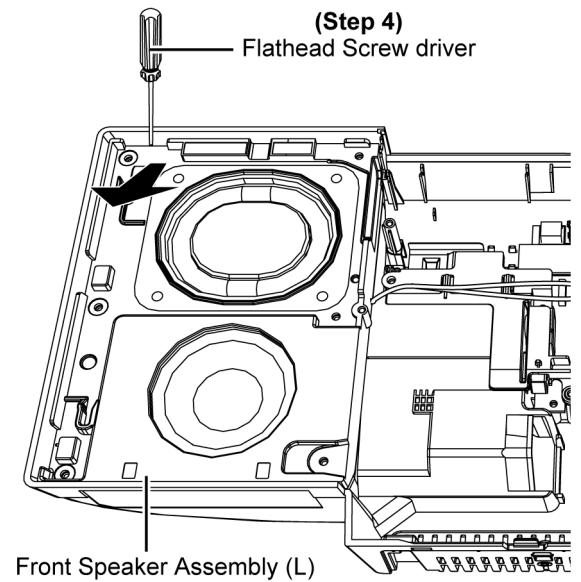
Step 5 : Desolder the (+) speaker wire and (-) speaker wire at the terminals on the Front Speaker (SP1).
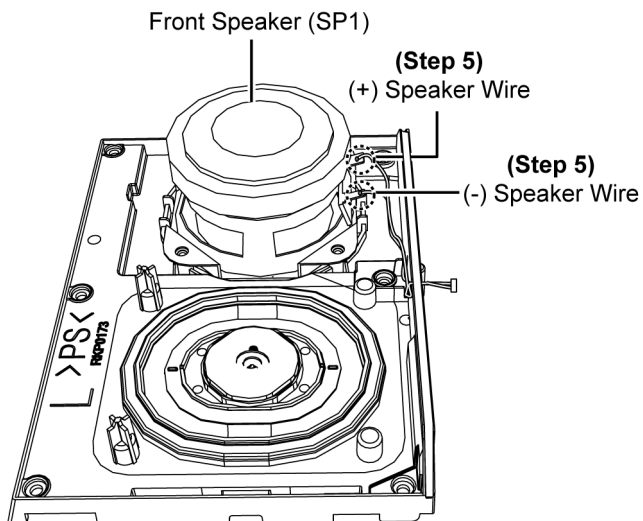
Step 7 : Remove the Front Speaker (SP1).
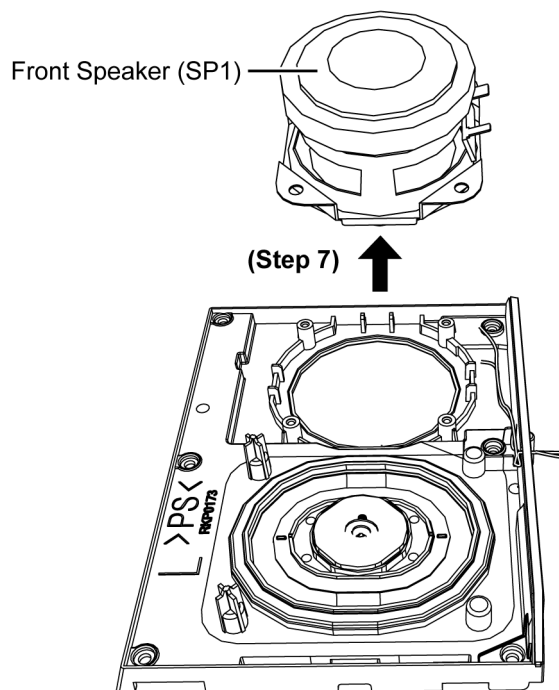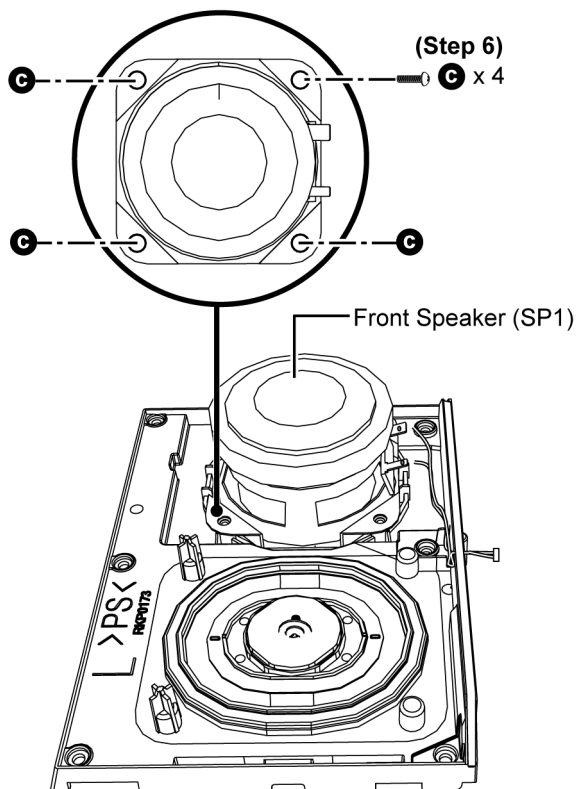
Front Speaker (SP1)

(Step 5)
(+) Speaker Wire

(Step 5)
(-) Speaker Wire

Front Speaker (SP1)

(Step 7)

Step 6 : Remove 4 screws.

(Step 6)
C x 4

Front Speaker (SP1)

Caution 1 : During assembling, ensure the speaker wires is soldered properly, check for dry joints.
Caution 2 : During assembling, dressed the speaker wires into the slots.

Soldering Terminal

Slot
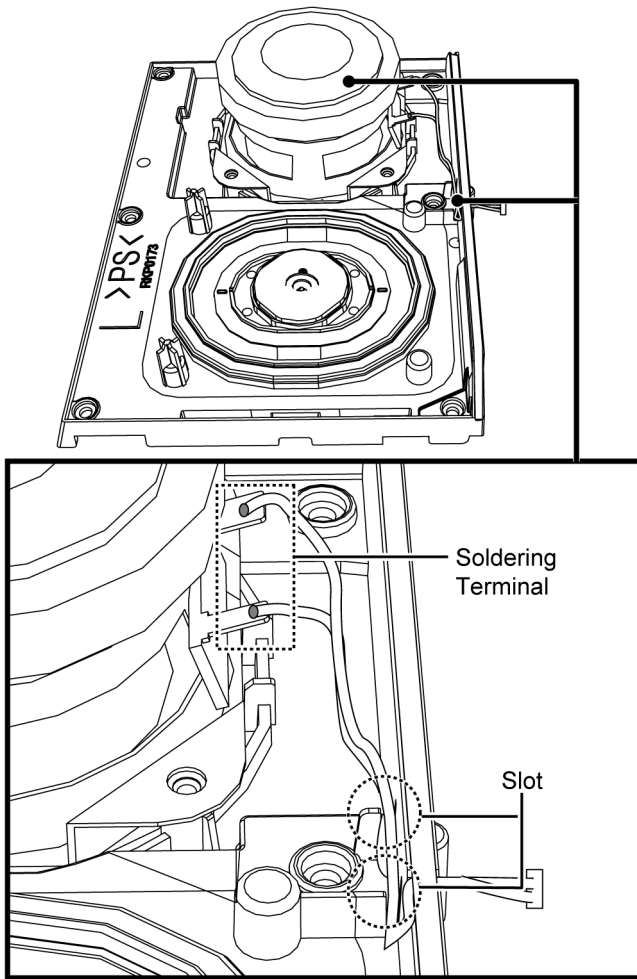
11.34. Disassembly of Front Speaker (SP2)

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"
- Refer to (Step 1) - (Step 5) of item 11.22.
- Refer to (Step 1) - (Step 5) of item 11.23.
- Refer to (Step 1) - (Step 3) of item 11.26.
- Refer to "Disassembly of CD Mechanism"

Step 1 : Detach 2P wire at the connector (CN400) on the Main P.C.B..

Main P.C.B.   **(Step 1)** CN400
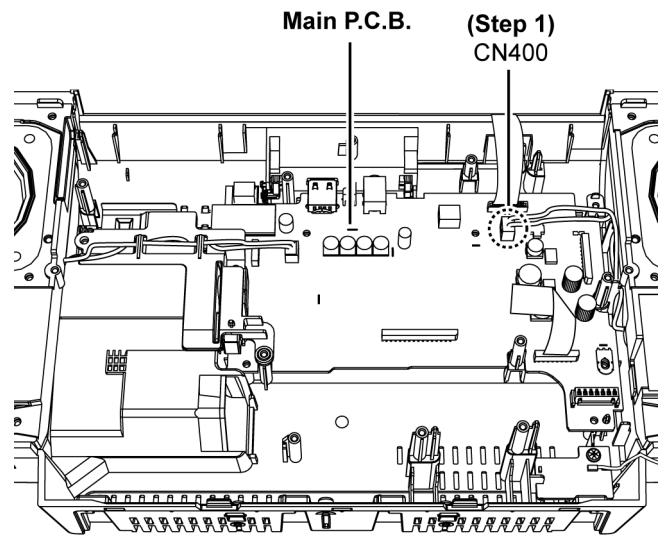
Step 2 : Remove 4 screws.

(Step 2)
a x 4
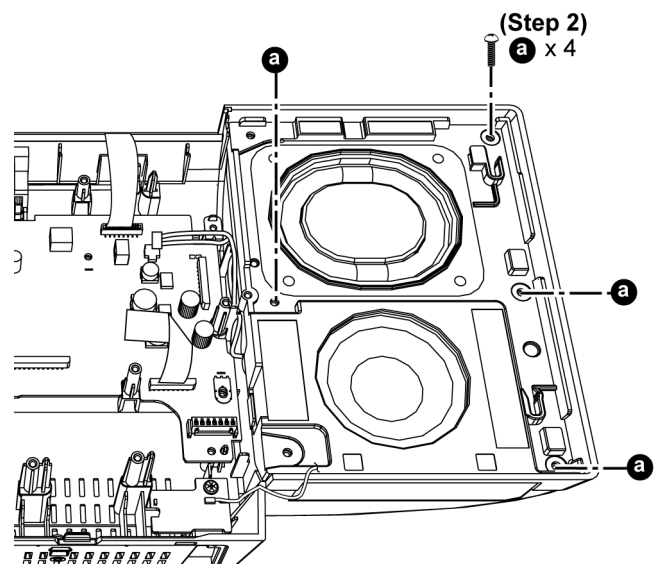
Step 3 : Lift up the Front Speaker Assembly (R) using a Flat-head screw driver.
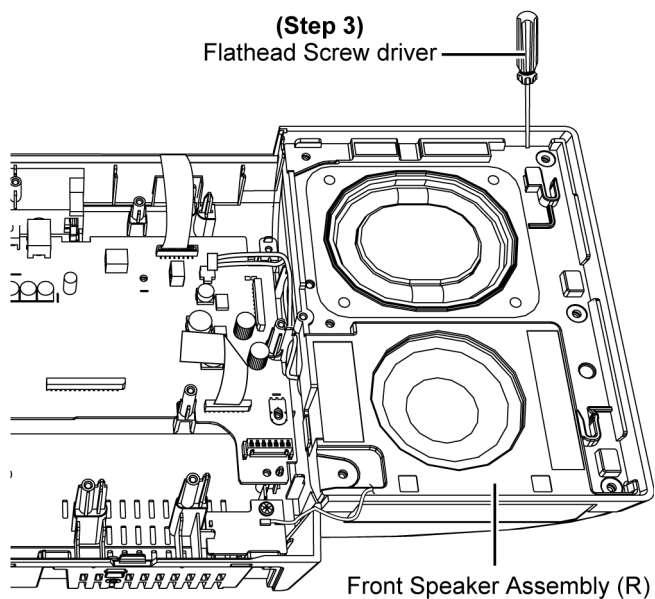
(Step 3)
Flathead Screw driver

Front Speaker Assembly (R)

Step 4 : Desolder the (+) speaker wire and (-) speaker wire at the terminals on the Front Speaker (SP2).

(Step 4)
(-) Speaker Wire

Front Speaker (SP2)

(Step 4)
(+) Speaker Wire

Step 5 : Remove 4 screws.
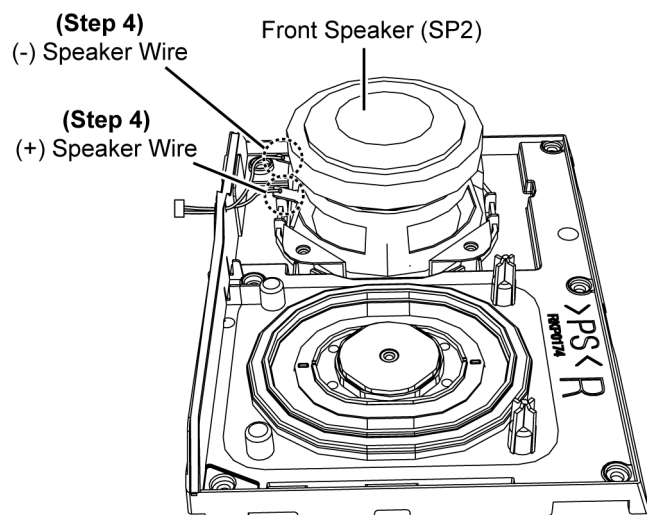
(Step 5)
Ⓒ x 4
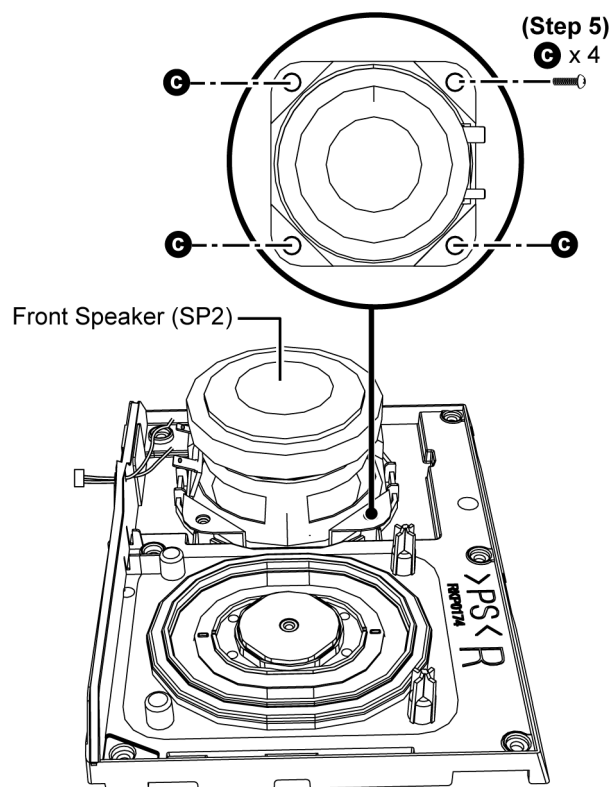
Front Speaker (SP2)

Step 6 : Remove Front Speaker (SP2).
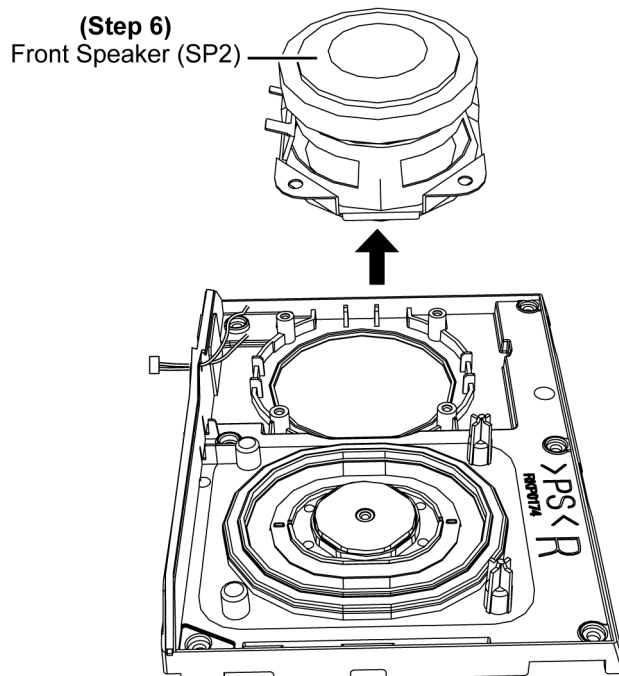
(Step 6)
Front Speaker (SP2)

Caution 1 : During assembling, ensure the speaker wires is soldered properly, check for dry joints.

Front Speaker (SP2)

Soldering Terminal
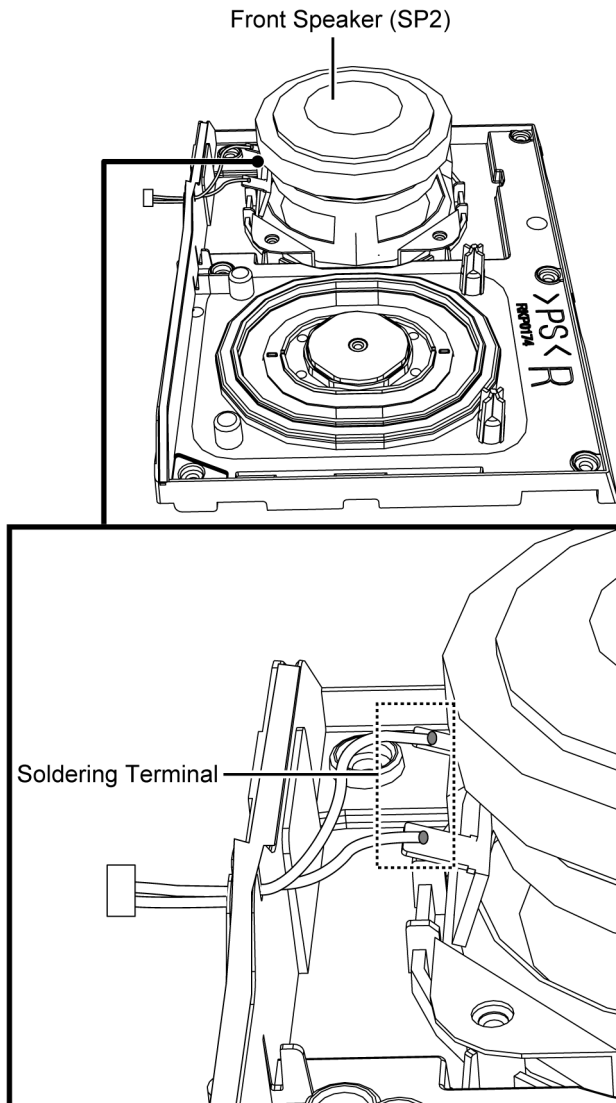
11.35. Disassembly of Passive Radiator Unit (SP3 & SP4)

Note : Passive Radiator Unit (SP3 & SP4) have the same mechanical structure. For disassembling of Passive Radiator Unit (SP4), repeat the (Step 1) to (step 3) of 11.34.
Below illustrated Passive Radiator Unit (SP3)

- Refer to "Disassembly of Base Stand Assembly"
- Refer to "Disassembly of Door Assembly"
- Refer to "Disassembly of Front Ornament Unit"
- Refer to "Disassembly of Front Panel Block"
- Refer to (Step 1) - (Step 5) of item 11.22.
- Refer to (Step 1) - (Step 5) of item 11.23.
- Refer to (Step 1) - (Step 3) of item 11.26.
- Refer to "Disassembly of CD Mechanism"
- Refer to (Step 1) - (Step 4) of item 11.33.

Step 1 : Remove 2 screws.
Step 2 : Slightly lift up the Passive Radiator Unit (SP3) as shown.
Caution : During assembling, ensure the Passive Radiator Unit (SP3) is seated under the guides of the cabinet as shown.

(Step 2) Guides Passive Radiator Unit (SP3) **(Step 1)** ⓒ x 2

ⓒ
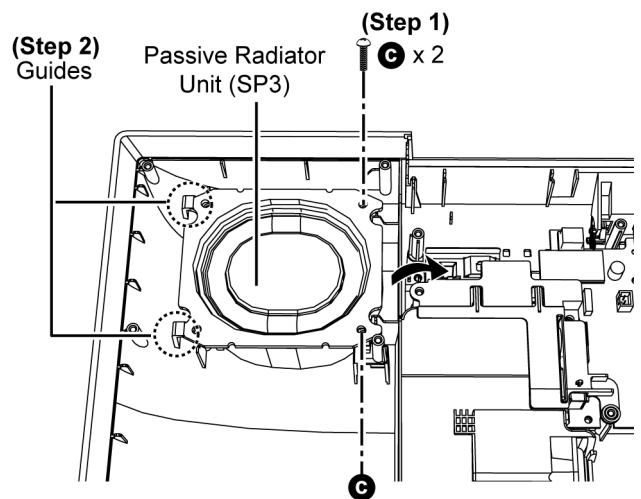
Step 3 : Remove the Passive Radiator Unit (SP3).

(Step 3) Passive Radiator Unit (SP3)
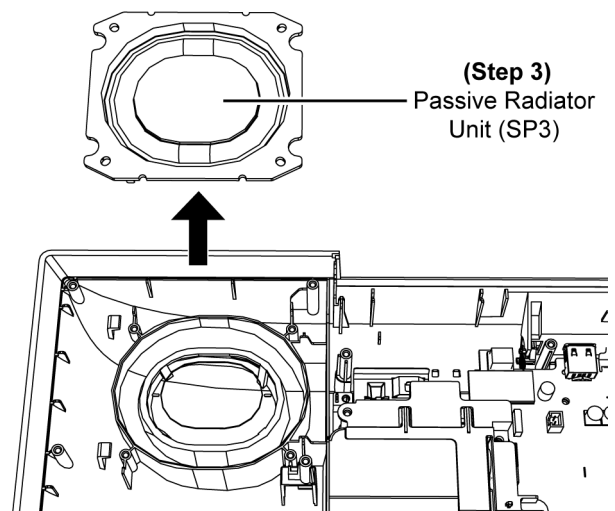
12 Service Position

Note: For description of the disassembly procedures, see the Section 11

12.1. Checking & Repairing of Air-Play Connect P.C.B.

Step 1 : Remove the Base Stand Assembly.

Step 2 : Remove the Door Assembly.

Step 3 : Remove the Front Ornament Unit.

Step 4 : Remove the Front Panel Block.

Step 5 : Use a tape to keep the centre switch (S643) pressed.
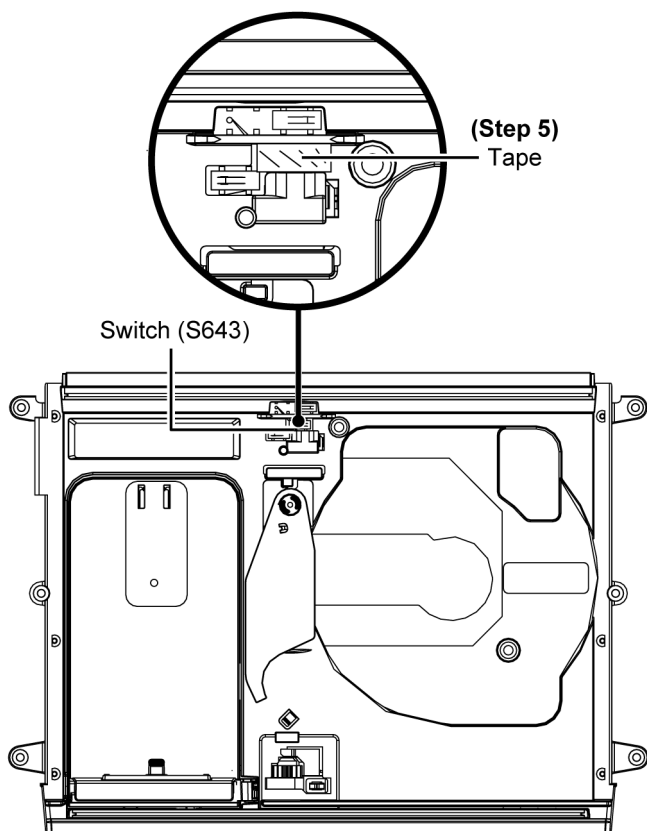
Step 6 : Place a Support Block to support the Front Panel Block as shown.
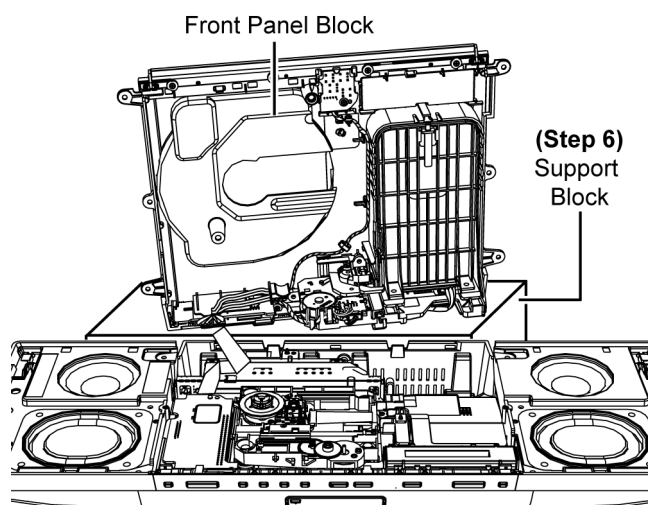
Step 7 : Connect 16P FFC at the connector (CN941) on Remote Sensor P.C.B..
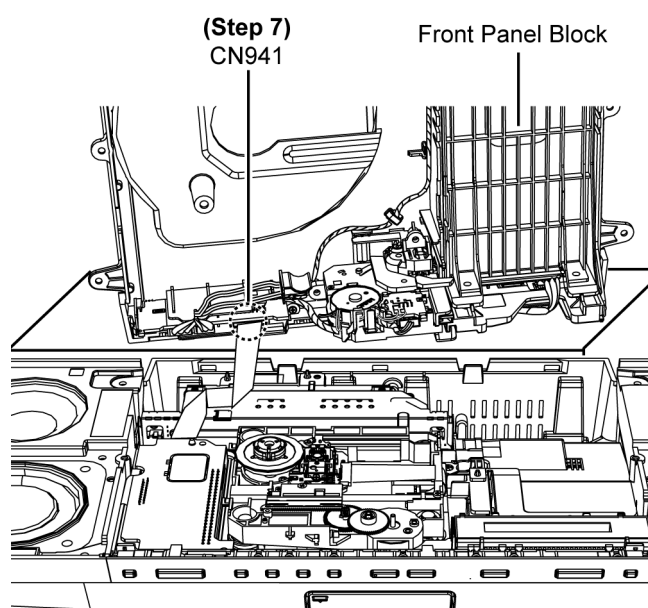
Step 8 : Check and repair the AirPlay Connect P.C.B. according to the diagram shown.

AirPlay Connect P.C.B.
(Step 8)
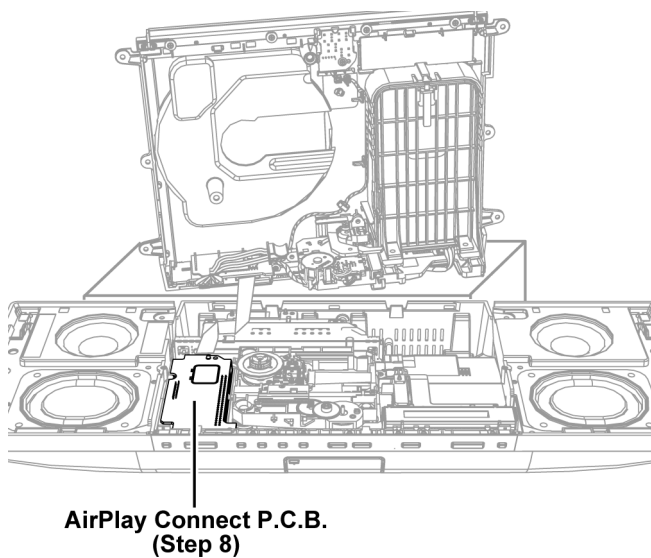
12.2. Checking & Repairing of SMPS P.C.B.

Step 1 : Remove the Base Stand Assembly.
Step 2 : Remove the Door Assembly.
Step 3 : Remove the Front Ornament Unit.
Step 4 : Remove the Front Panel Block.
Step 5 : Remove the SMPS P.C.B..
Step 6 : Use a tape to keep the centre switch (S643) pressed.
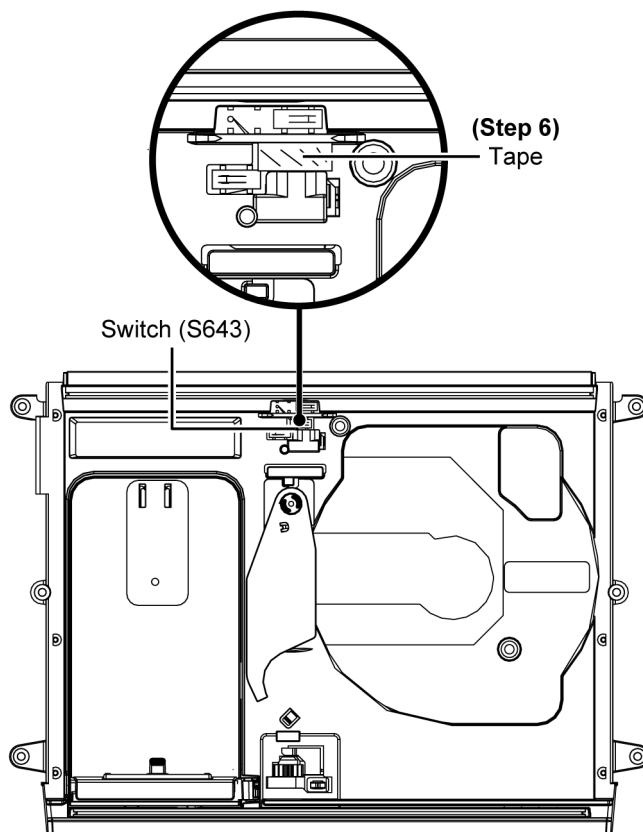
(Step 6)
Tape

Switch (S643)

Step 7 : Place a Support Block to support the Front Panel Block as shown.

Front Panel Block

(Step 7)
Support Block

Step 8 : Connect 16P FFC at the connector (CN941) on Remote Sensor P.C.B..

(Step 8)
CN941

Front Panel Block
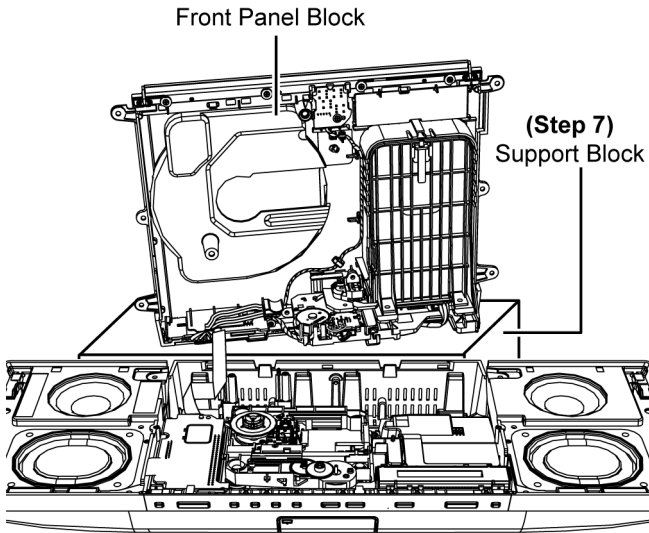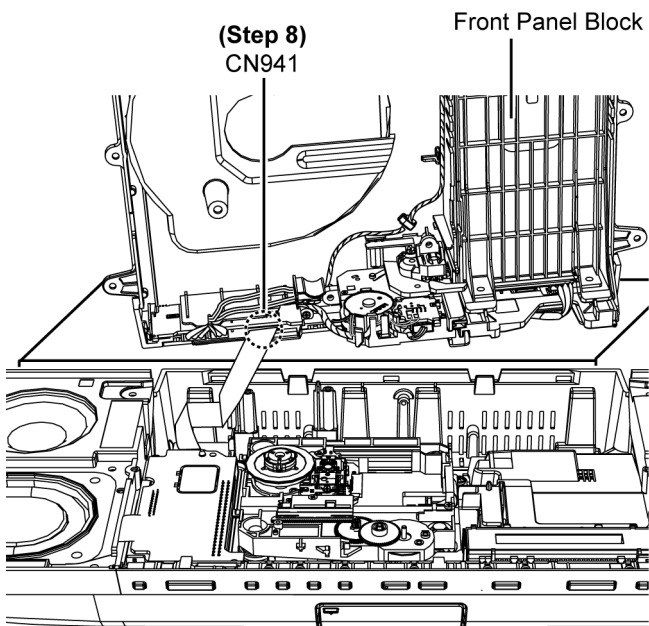
Step 9 : Place the SMPS P.C.B. on the Insulating Material.
Step 10 : Connect 7P extension cable (REX1538) from P1700 on the SMPS P.C.B. to CN1100 on the Main P.C.B..

(Step 10)
7P Extension Cable (REX1538)

SMPS P.C.B.

Insulating Material
(Step 9)
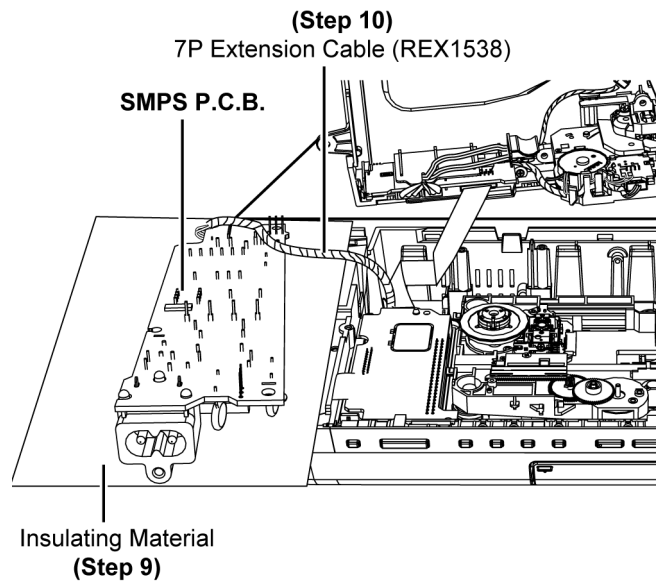
Step 11 : Check and repair the SMPS P.C.B. according to the diagram shown.

SMPS P.C.B.
(Step 11)
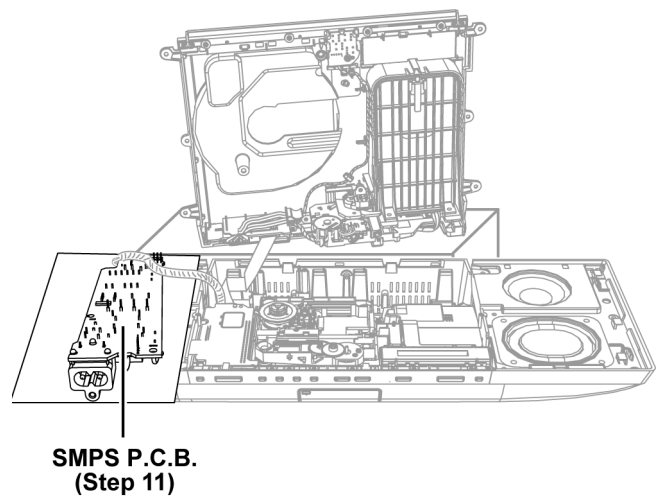
12.3. Checking & Repairing of Panel P.C.B.

Step 1 : Remove the Base Stand Assembly.
Step 2 : Remove the Door Assembly.
Step 3 : Remove the Front Ornament Unit.
Step 4 : Remove the Front Panel Block.
Step 5 : Remove 1 screw.
Step 6 : Lift up the Panel P.C.B. with Button Ornament Unit as shown.

(Step 5)
C x 1
(Step 6)
Panel P.C.B.

Step 7 : Place the Panel P.C.B. on the Support Block.
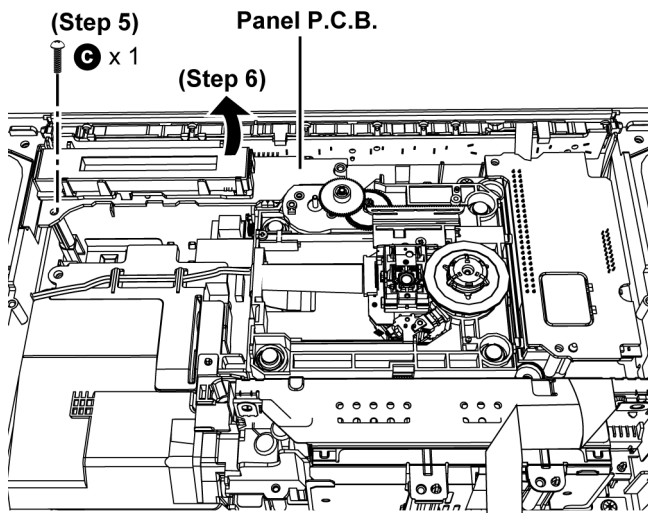
Support Block
(Step 7)
Panel P.C.B.
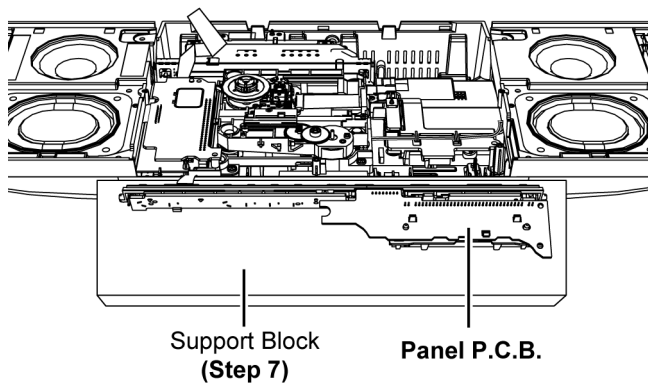
Step 8 : Use a tape to keep the centre switch (S643) pressed.

(Step 8)
Tape

Switch (S643)
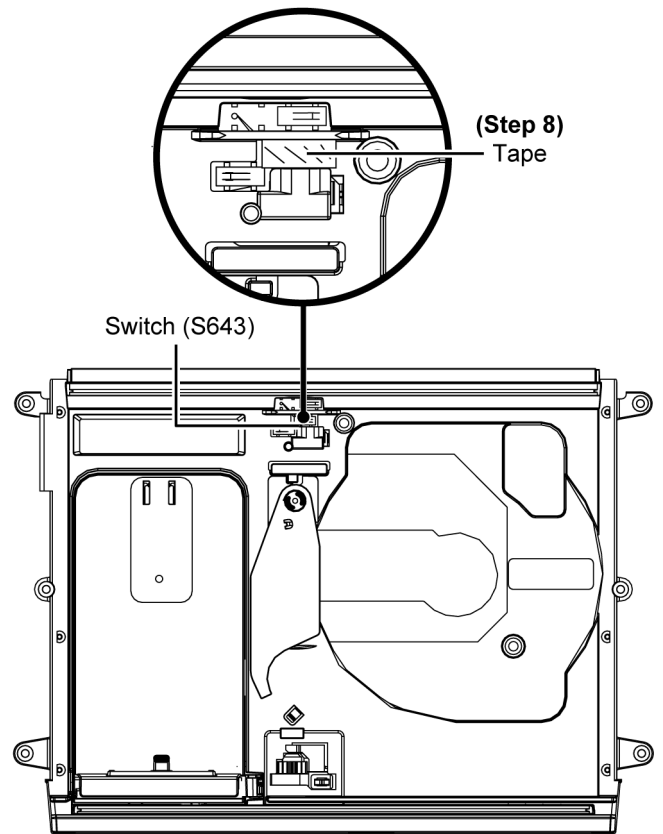
Step 9 : Place the Support Block to support the Front Panel Block as shown.
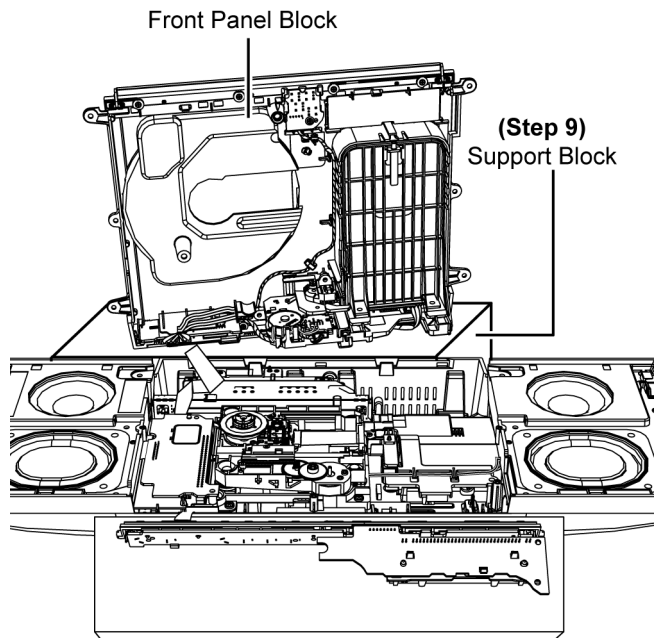
Front Panel Block

(Step 9)
Support Block

Step 10 : Connect 16P FFC at the connector (CN941) on Remote Sensor P.C.B..

(Step 10)
CN941

Front Panel Block
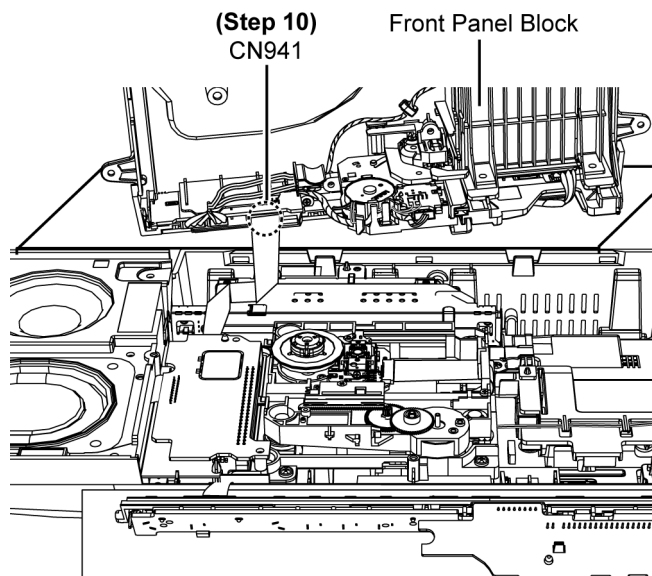
Step 11 : Check and repair the Panel P.C.B. according to the diagram shown.

Panel P.C.B.
(Step 11)
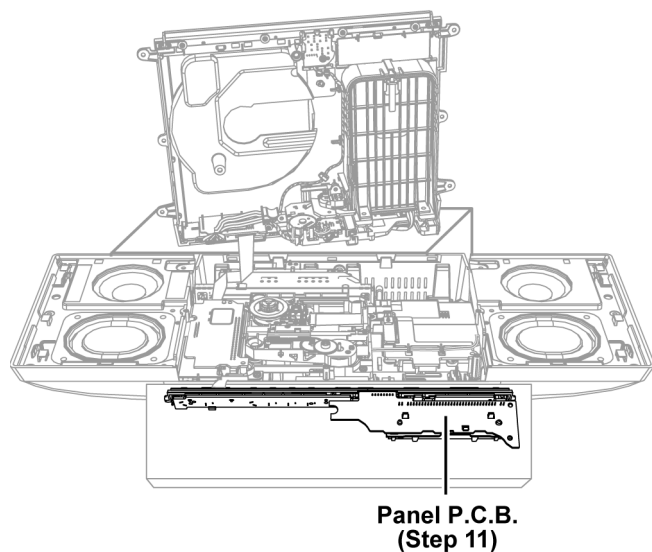
12.4. Checking & Repairing of CD Servo P.C.B.

Note : Insert CD before Checking CD Servo P.C.B.

Step 1 : Remove the Base Stand Assembly.
Step 2 : Remove the Door Assembly.
Step 3 : Remove the Front Ornament Unit.
Step 4 : Remove the Front Panel Block.
Step 5 : Remove the AirPlay Module Unit.
Step 6 : Remove the SMPS Unit.
Step 7 : Remove the Panel P.C.B. & Button Ornament Unit.
Step 8 : Remove the CD Mechanism.
Step 9 : Place the Panel P.C.B. on the Support Block.
Step 10 : Connect 15P FFC at the connector (CN900) on the Button P.C.B..

(Step 10)
CN900

Support Block
(Step 9)

Panel P.C.B. &
Button Ornament Unit
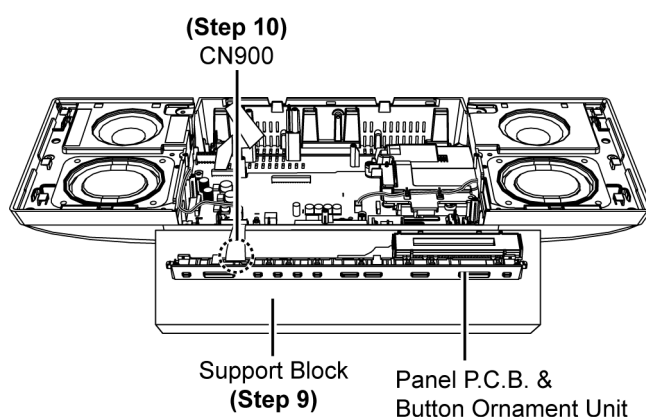
Step 11 : Place the SMPS Unit on the Insulating Material.
Step 12 : Connect 7P extension cable (REX1538) from P1700 on the SMPS P.C.B. to CN1100 on the Main P.C.B..

(Step 12)
7P Extension Cable (REX1538)

SMPS Unit

Insulating Material
(Step 11)
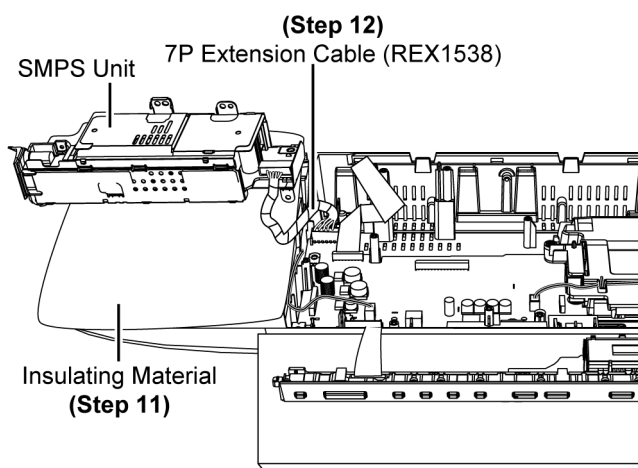
Step 13 : Use a tape to keep the centre switch (S643) pressed.

(Step 13)
Tape

Switch (S643)
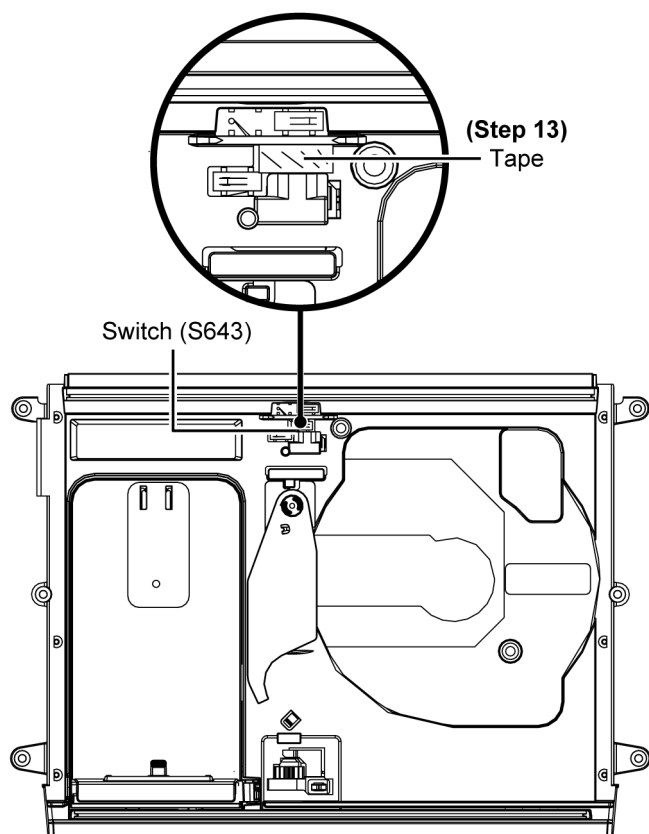
Step 15 : Connect 16P FFC at the connector (CN941) on Remote Sensor P.C.B..

(Step 15)
CN941
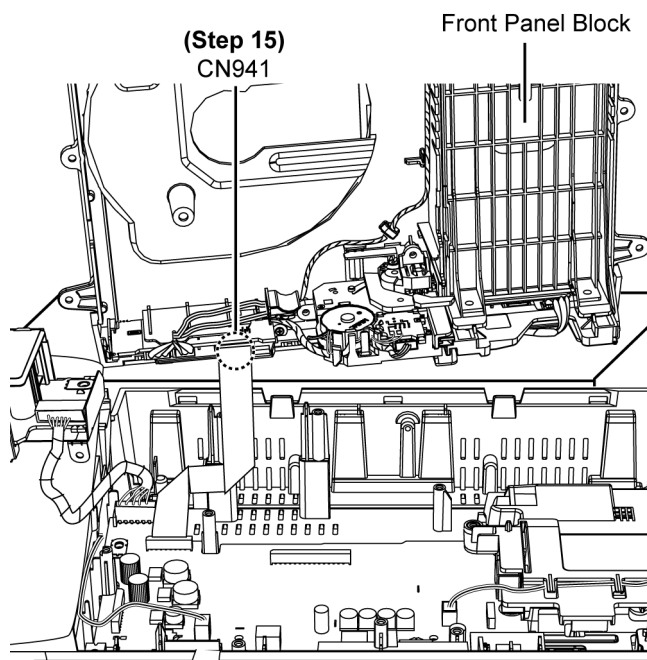
Front Panel Block

Step 14 : Place a Support Block to support the Front Panel Block as shown.

Front Panel Block

(Step 14)
Support Block

Step 16 : Place the CD Mechanism on the Insulating Material.

CD Mechanism

Insulating Material
(Step 16)

Step 17 : Connect 30P extension cable (REE1712) from CN6006 on the Main P.C.B. to CN7002 on the CD Servo P.C.B..
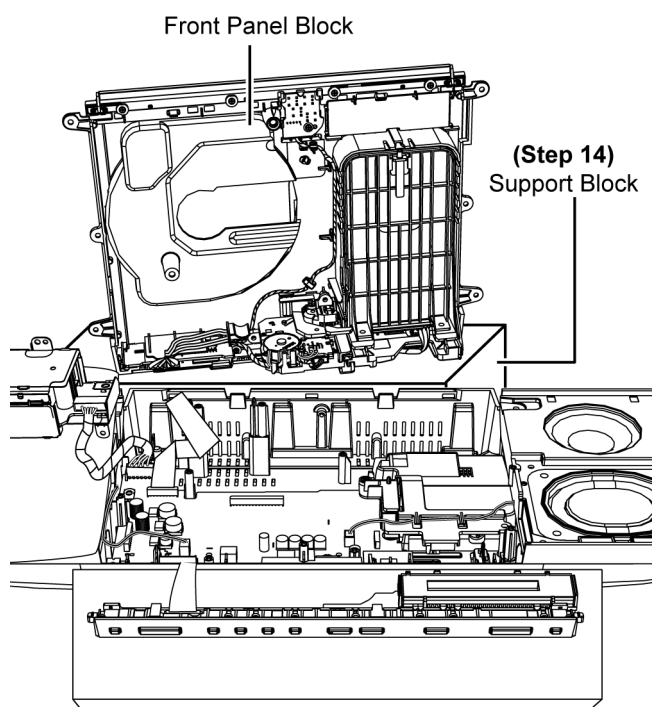
CD Mechanism

30P Extension Cable (REE1712)
(Step 17)
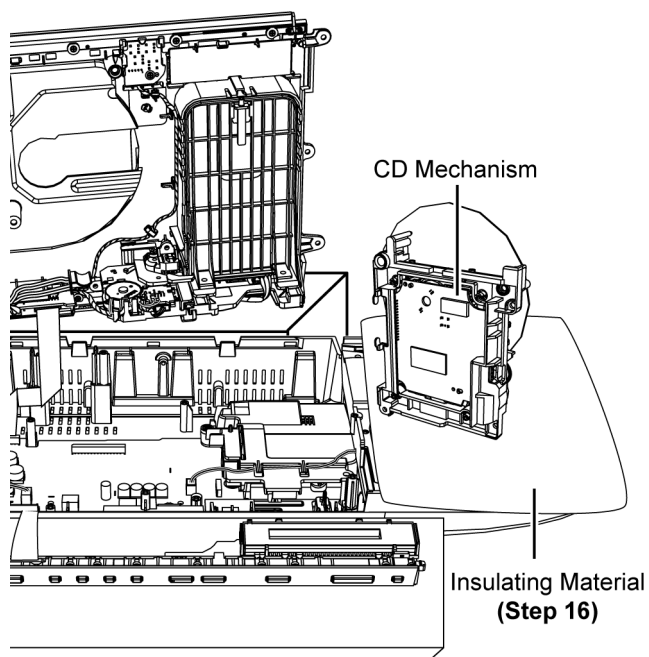
Step 18 : Check and repair the CD Servo P.C.B. according to the diagram shown.
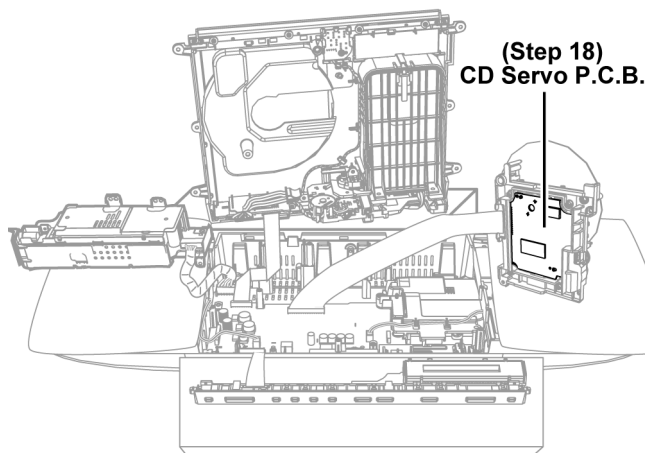
**(Step 18)
CD Servo P.C.B.**
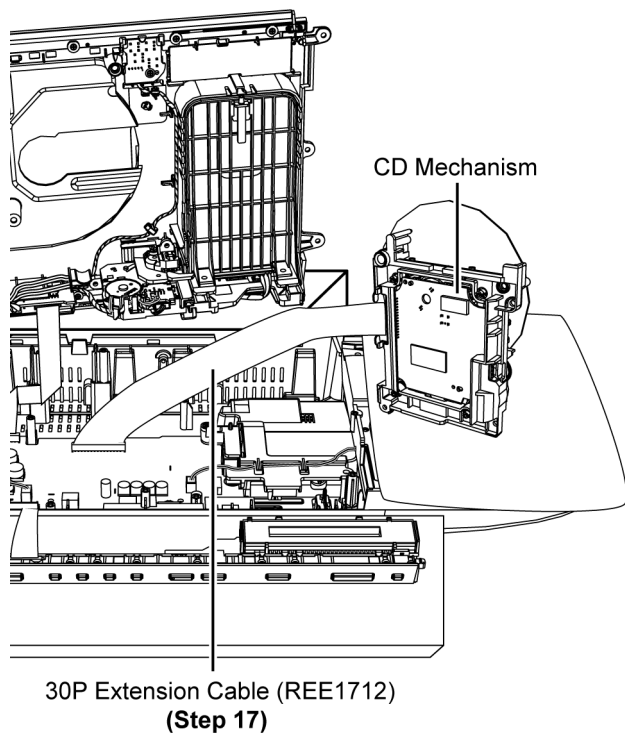
12.5. Checking & Repairing of Main P.C.B. (Side B)

• Refer to (Step 1) - (Step 17) of item 12.4.

Step 1 : Check and repair the Main P.C.B. (Side B) according to the diagram shown.

Main P.C.B. (Side B)
(Step 1)
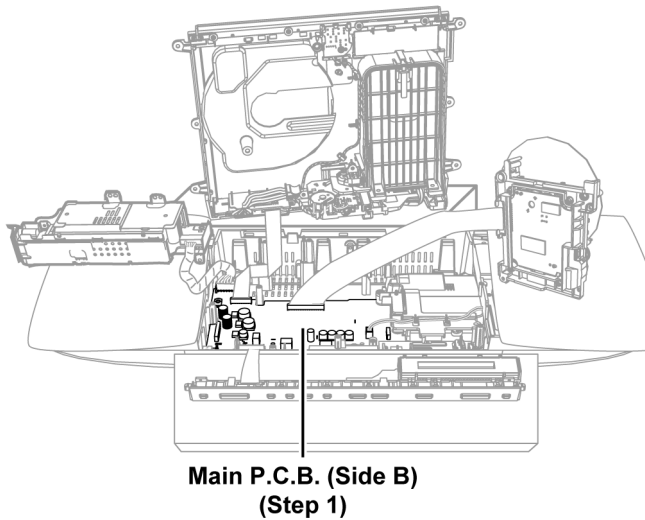
12.6. Checking & Repairing of Main P.C.B. (Side A)

Step 1 : Remove the Base Stand Assembly.
Step 2 : Remove the Door Assembly.
Step 3 : Remove the Front Ornament Unit.
Step 4 : Remove the Front Panel Block.
Step 5 : Remove the AirPlay Module Unit.
Step 6 : Remove the SMPS Unit.
Step 7 : Remove the Panel P.C.B. & Button Ornament Unit.
Step 8 : Remove the CD Mechanism.
Step 9 : Remove the Main P.C.B..
Step 10 : Place the Main P.C.B. (Side A) on the Insulating Material.

Main P.C.B. (Side A)

Insulating Material
(Step 10)
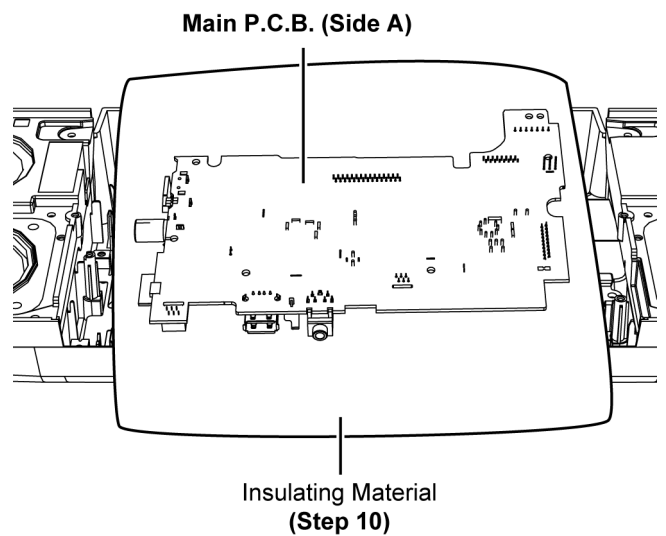
Step 11 : Connect 2P wire at the connector (CN401) on the Main P.C.B..
Step 12 : Connect 2P wire at the connector (CN400) on the Main P.C.B..

CN401   CN400
(Step 11)   **(Step 12)**
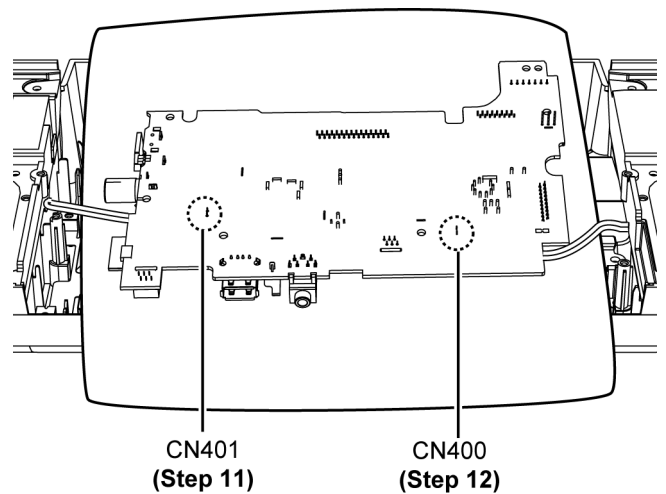
Step 13 : Connect 15P FFC at the connector (CN900) on the Button P.C.B..

Panel P.C.B. &
Button Ornament Unit

CN900
(Step 13)
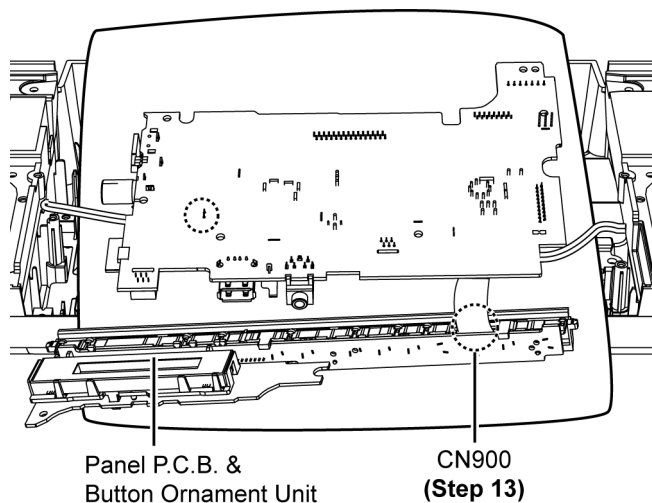
Step 14 : Place the SMPS Unit on the Insulating Material.
Step 15 : Connect 7P extension cable (REX1538) from P1700 on the SMPS P.C.B. to CN1100 on the Main P.C.B..

(Step 15)
7P Extension Cable
(REX1538)

CN1100

SMPS Unit

Insulating Material
(Step 14)
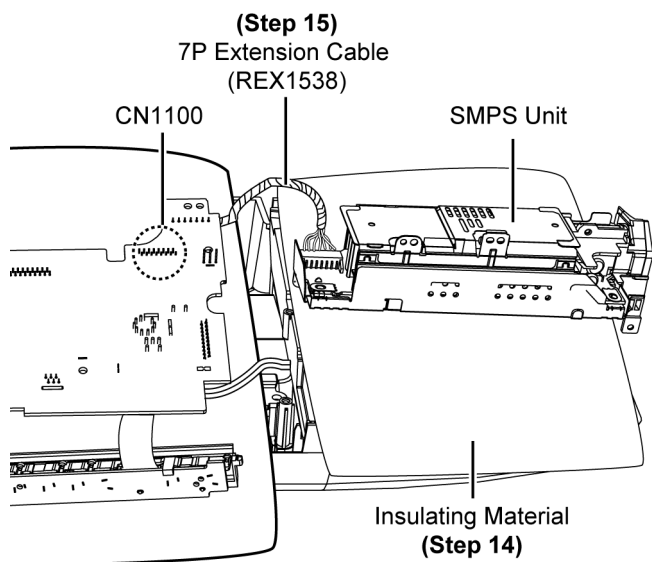
Step 16 : Place the CD Mechanism on the Insulating Material.
Step 17 : Connect 30P extension cable (REE1712) from CN6006 on the Main P.C.B. to CN7002 on the CD Servo P.C.B..

CD Mechanism

(Step 17)
30P Extension Cable (REE1712)

Insulating Material
(Step 16)

CN6006
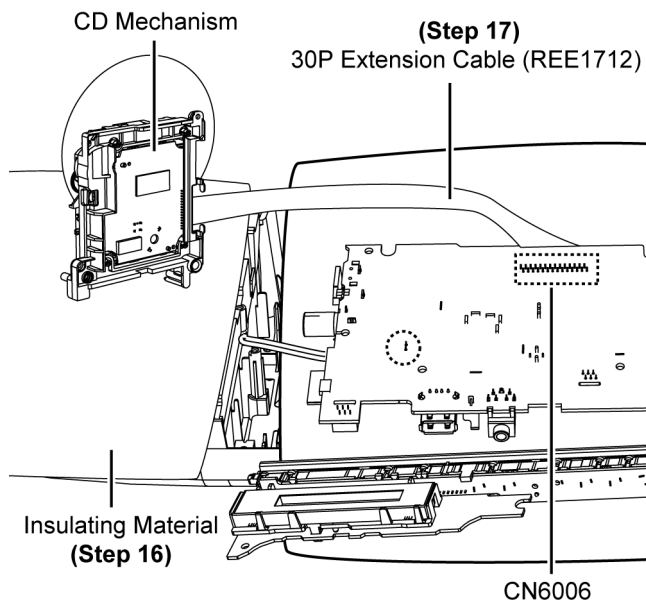
Step 18 : Use a tape to keep the centre switch (S643) pressed.

(Step 18)
Tape

Switch (S643)
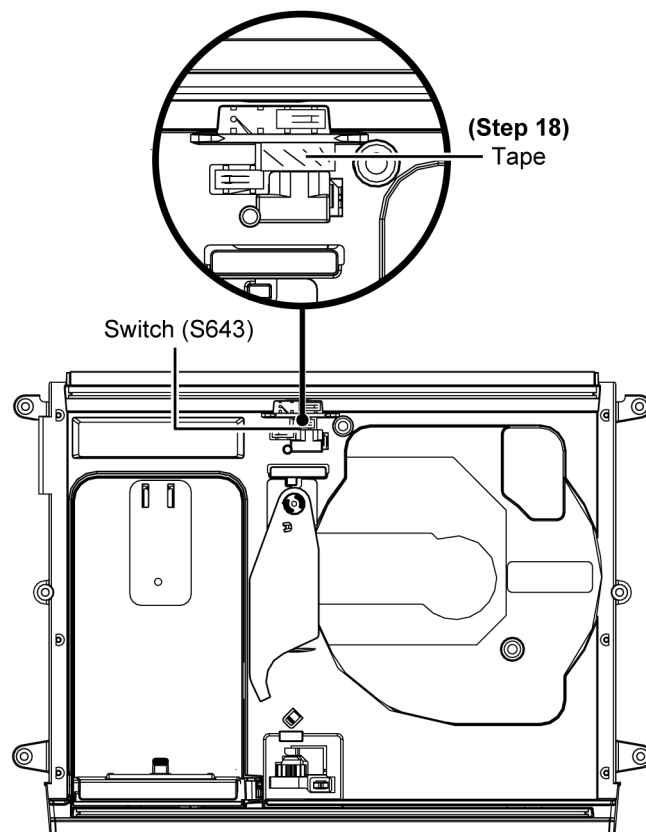
Step 19 : Place a Support Block to support the Front Panel Block as shown.

Step 20 : Connect 16P FFC at the connector (CN941) on Remote Sensor P.C.B..

Front Panel Block

(Step 19)
Support
Block

CN941
(Step 20)
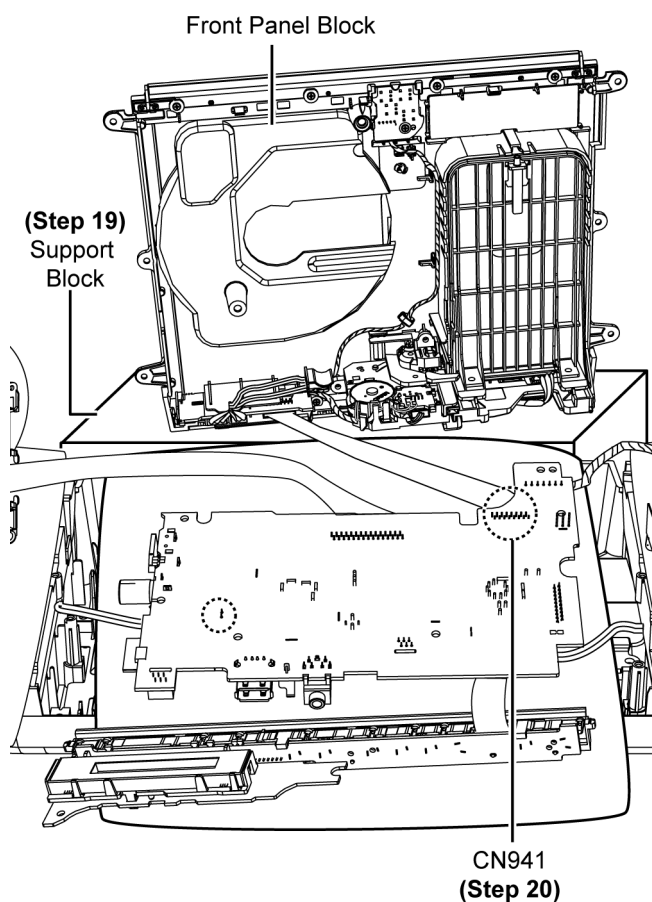
Step 21 : Check and repair the Main P.C.B. (Side A) according to the diagram shown..

Main P.C.B. (Side A)
(Step 21)
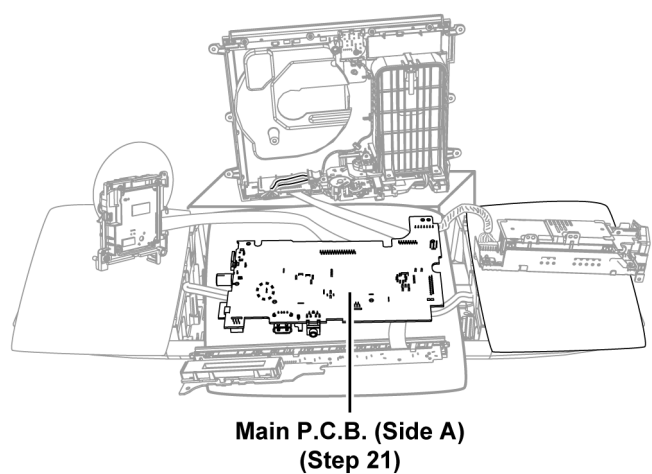
13 Block Diagram

13.1. SERVO & SYSTEM CONTROL (1/2) BLOCK DIAGRAM

▣▣▶ : CD AUDIO INPUT SIGNAL LINE   ▣▶ : USB/iPod/iPhone SIGNAL LINE

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC SERVO & SYSTEM CONTROL (1/2) BLOCK DIAGRAM

▭▭▷ : CD AUDIO INPUT SIGNAL LINE   ▭▷ : USB/iPod/iPhone SIGNAL LINE

MAIN P.C.B.

IC6002
RFKWMHC58PM
MICROPROCESSOR

BUTTON P.C.B.

S907
PLAY/PAUSE

S911
REWIND

S906
STOP

S912
FORWARD

S904
SELECTOR

S913
VOLUME-

S902
iPod
OPEN/CLOSE

S914
VOLUME+

S901
POWER

S910
WPS

S915
CD
OPEN/CLOSE

BT RST — BT RST — BT RST — PWR LED — BT LED | CN6007 9 | CN900 9 | BT LED — QR950 — LED DRIVE — D900 — +5.2V

BT MFB — BT MFB

Q7102
SWITCH — BT MFB

+3.3V

AP LED2 — AIR RED | CN6007 13 | CN900 13 | AIR RED — QR910 — LED DRIVE — D910 — +5.2V

AP CS — AP CS — AP CS

AP RST — AP RST — AP RST

AP CLK — AP CLK — AP CLK — AP LED1 — AIR BLUE | CN6007 14 | CN900 14 | AIR BLUE — QR911 — LED DRIVE

AP DIN — AP DIN — AP DIN

HP MUTE — HP MUTE — HPMUTE

TU RST — TU RST — TU RST

TU SCL — TU SCL — TU SCL — KEY2 | CN6007 12 | CN900 12 | KEY2

UART OUT — UART OUT — DAB RX/BT RX — KEY1 | CN6007 11 | CN900 11 | KEY1

DAMP SLEEP — DAMP SLEEP — DAMP SLEEP

DAMP MUTE — DAMP MUTE — DAMP MUTE

PANEL P.C.B.

DAMP RESET — DAMP RESET — DAMP RST

DAMP SCL — DAMP SCL — DAMP SCL

FL6801
FL DISPLAY
Q6801,Q6802

DAMP SDA — DAMP SDA — DAMP SDA

TU SDA — TU SDA — TU SDA

TU INT — TU INT — TU INT

DAMP ERR — DAMP ERR — DAMP ERR — FL DI | CN6007 6 | CN900 6 | P900 3 | P6801 3 | FL DI — FL DISPLAY CIRCUIT — +12V

PDET2 — PDET2 — PDET2 (D AMP) — FL CLK | CN6007 7 | CN900 7 | P900 2 | P6801 2 | FL CL — +5V

UART IN — UART IN — DAB TX/BT TX — FL CS | CN6007 8 | CN900 8 | P900 1 | P6801 1 | FL CE — +3.3V

BT MUTE — BT MUTE — BT MUTE

AP DOUT — AP DOUT — AP DOUT

AP IREQ — AP IREQ — AP IREQ

TO SERVO & SYSTEM CONTROL BLOCK (1/2)

FROM/TO AUDIO

SC-HC58P/PC SERVO & SYSTEM CONTROL (2/2) BLOCK DIAGRAM

13.3. IC TERMINAL CHART

TC	IC7704 16M SDRAM		SIGNAL NAME	IC7001 SERVO PROCESSOR	
	PORT NAME	PIN NO		PIN NO	PORT NAME
1	A0	21	A0	35	A0
	A1	22	A1	34	A1
	A2	23	A2	33	A2
	A3	24	A3	112	A3
	A4	27	A4	111	A4
	A5	28	A5	110	A5
	A6	29	A6	109	A6
	A7	30	A7	108	A7
	A8	31	A8	107	A8
	A9	32	A9	106	A9
	A10	20	A10	36	A10

TC	IC7704 16M SDRAM		SIGNAL NAME	IC7001 SERVO PROCESSOR	
	PORT NAME	PIN NO		PIN NO	PORT NAME
2	DQ0 / DQ15	2 / 49	D0	102	D0
	DQ1 / DQ14	3 / 48	D1	101	D1
	DQ2 / DQ13	5 / 46	D2	100	D2
	DQ3 / DQ12	6 / 45	D3	99	D3
	DQ4 / DQ11	8 / 43	D4	98	D4
	DQ5 / DQ10	9 / 42	D5	97	D5
	DQ6 / DQ9	11 / 40	D6	96	D6
	DQ7 / DQ8	12 / 39	D7	95	D7

SC-HC58P/PC IC TERMINAL CHART

13.4. AUDIO BLOCK DIAGRAM

▦▷ : CD AUDIO INPUT SIGNAL LINE   ▥▷ : TUNER/AirPlay AUDIO INPUT SIGNAL LINE   ▨▷ : AUDIO OUTPUT SIGNAL LINE   ▢▷ : FM SIGNAL LINE
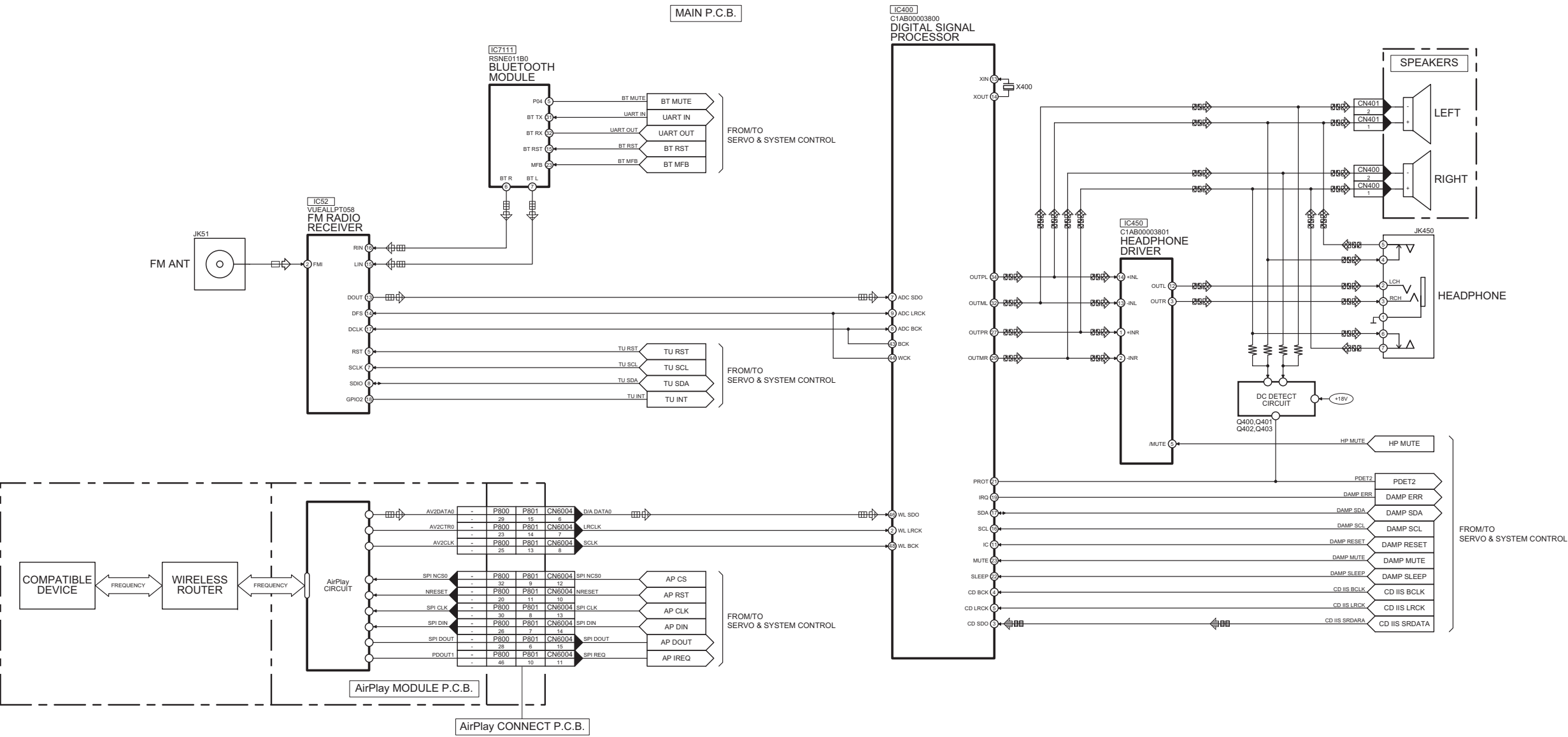
SC-HC58P/PC AUDIO BLOCK DIAGRAM

13.5. POWER SUPPLY (1/2) BLOCK DIAGRAM
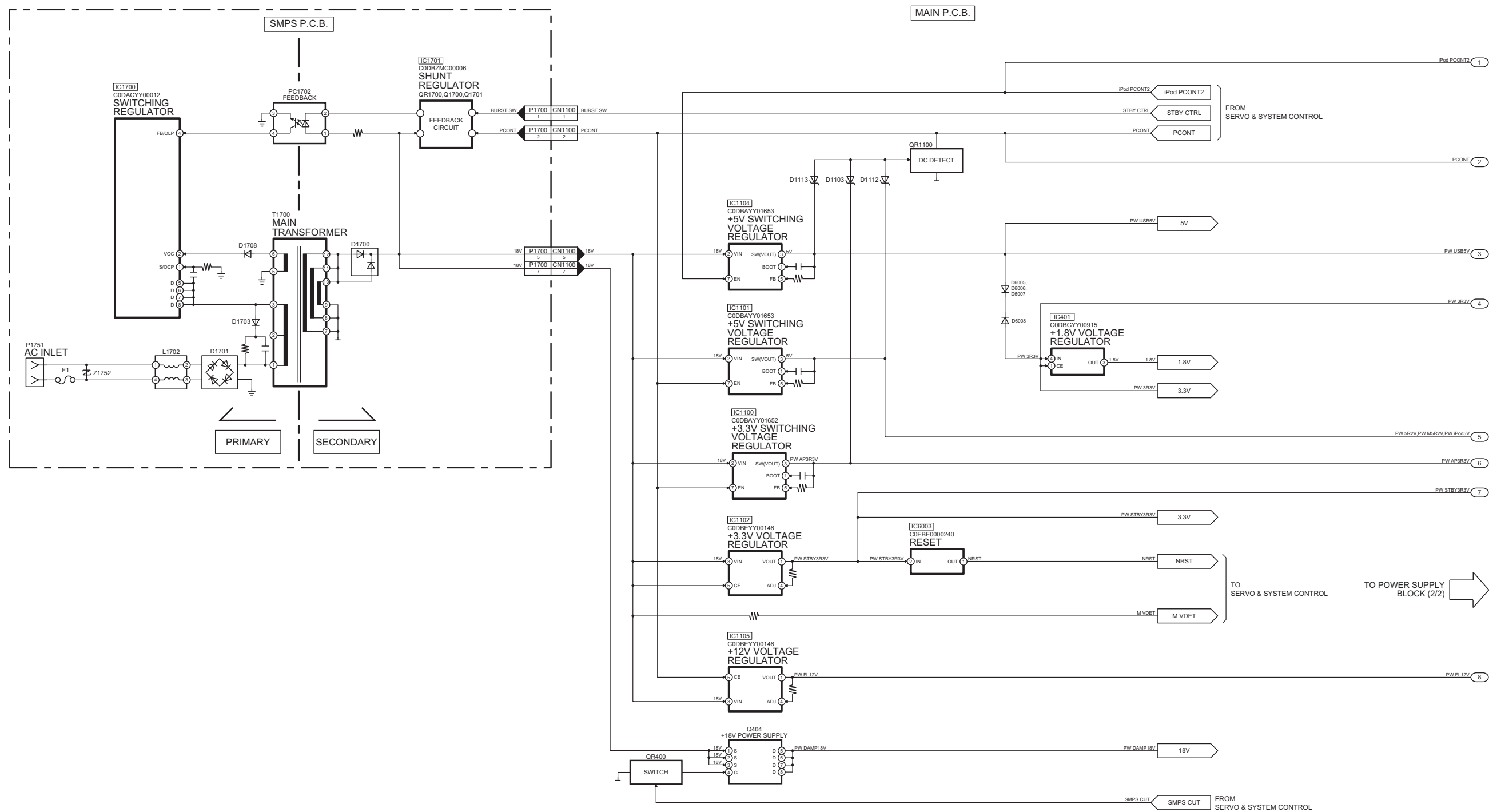
SC-HC58P/PC POWER SUPPLY (1/2) BLOCK DIAGRAM

13.6. POWER SUPPLY (2/2) BLOCK DIAGRAM

MAIN P.C.B.

IC6500
C0DBZYY00555
HIGH SIDE SWITCH

IC6006
C0DBZYY00610
USB SWITCH

IC6000
C0DBZYY00610
iPod SWITCH

iPhone CONNECTOR UNIT

REMOTE SENSOR P.C.B.

PANEL P.C.B.

BUTTON P.C.B.

CD SERVO P.C.B.

AirPlay CONNECT P.C.B.

AirPlay MODULE P.C.B.

IC3001
C0DBGYY01640
+1.2V VOLTAGE REGULATOR

IC2000
C0DBGYY01654
+1.9V VOLTAGE REGULATOR

TO POWER SUPPLY BLOCK (1/2)

FROM/TO SERVO & SYSTEM CONTROL

FROM SERVO & SYSTEM CONTROL

SC-HC58P/PC POWER SUPPLY (2/2) BLOCK DIAGRAM

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14 Wiring Connection Diagram

D PANEL P.C.B.
SOLDER SIDE
PbF
FL6801
37 1
P6801
1 8

G BUTTON P.C.B. (Side B)
SOLDER SIDE
PbF
P900
1 8
1 15 CN900

I AirPlay CONNECT P.C.B. (Side B)
SOLDER SIDE
PbF
19 1
20 2 P801
(TO AirPlay MODULE)
47 1
48 2 P800

(FOR FIRMWARE DOWNLOAD)
CN7031
(BLUETOOTH MODULE)

USB PORT
FOR iPod /
iPhone / iPad
JK6000

HEADPHONE
JK450

(FOR DEBUG)
CN6009

2 14
1 15 CN6007

CN400
4 1

CN6004
20 19
2 1

J AirPlay ANTENNA P.C.B. (Side B)
SOLDER SIDE

AirPlay ANTENNA
(TO SMPS CHASSIS GND)
2 1 P2*
P1
(AirPlay MODULE)
PbF

JK51
FM ANT

CN401
1 (TO LEFT SPEAKER)

(TO RIGHT SPEAKER)

B MAIN P.C.B. (Side B)
SOLDER SIDE

H SMPS P.C.B.
SOLDER SIDE
PbF

T1700
(MAIN TRANSFORMER)
P1700
7 1

P1751

AC IN ~
120V 60Hz

CN6006
29 1
30 2

CN6005
15 1
16 2

CN1100
1 7

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE
PLEASE DO NOT TOUCH THIS P.C.B

TO OPTICAL PICKUP UNIT
CN7001
1 24
M7302*
(TRAVERSE MOTOR)
M

CN7801
5 1
(FOR DEBUG)

CN7002
1 2
A CD SERVO P.C.B. (Side B)
SOLDER SIDE
29 30
M7301*
(SPINDLE MOTOR)
M
PbF

P941
5 1
IR941
P942
4 1
CN941
15 1
16 2
P945
5 1
(TO iPhone CONNECTOR UNIT)

SENSOR

C REMOTE SENSOR P.C.B. (Side B)
SOLDER SIDE
PbF

E INTERLOCK SWITCH P.C.B.
SOLDER SIDE
P641*
5 1
PbF

F MOTOR P.C.B.
SOLDER SIDE
PbF
4 1
CN931
TL931*
(BLACK)
TL932*
(RED)
M
LOADING MOTOR*

Note : " * " REF IS FOR INDICATION ONLY.

SC-HC58P/PC
WIRING CONNECTION DIAGRAM

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15 Schematic Diagram

15.1. Schematic Diagram Notes

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

Notes:

S641:	ABN switch.
S642:	RIGHT switch.
S643:	CENTRE switch.
S901:	POWER switch (⏻/I).
S902:	iPod OPEN/CLOSE switch (iPod ⏏).
S904:	SELECTOR switch.
S906:	STOP switch (■).
S907:	PLAY/PAUSE switch (▶/❚❚).
S910:	WPS switch.
S911:	REV SKIP switch (❙◀◀/◀◀).
S912:	FWD SKIP switch (▶▶/▶▶❙).
S913:	VOL- switch.
S914:	VOL+ switch.
S915:	CD OPEN/CLOSE switch(CD ⏏).
S931:	LEFT switch.
S7201:	RESET switch.

- 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:
  C1702, C1710, C1725, C1727, C1728

- **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
─────	: -B Signal Line
⊞⊟⇨	: CD Audio Input Signal Line
⊞⇨	: AirPlay/Bluetooth/Tuner Audio Input Signal Line
⊠⊠⇨	: Audio Output Signal Line
▨⇨	: iPod/iPhone/USB Signal Line
▢⇨	: FM 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.

Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

SCHEMATIC DIAGRAM - 1

A CD SERVO CIRCUIT

— : +B SIGNAL LINE   : CD AUDIO INPUT SIGNAL LINE   : USB SIGNAL LINE

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC
CD SERVO CIRCUIT
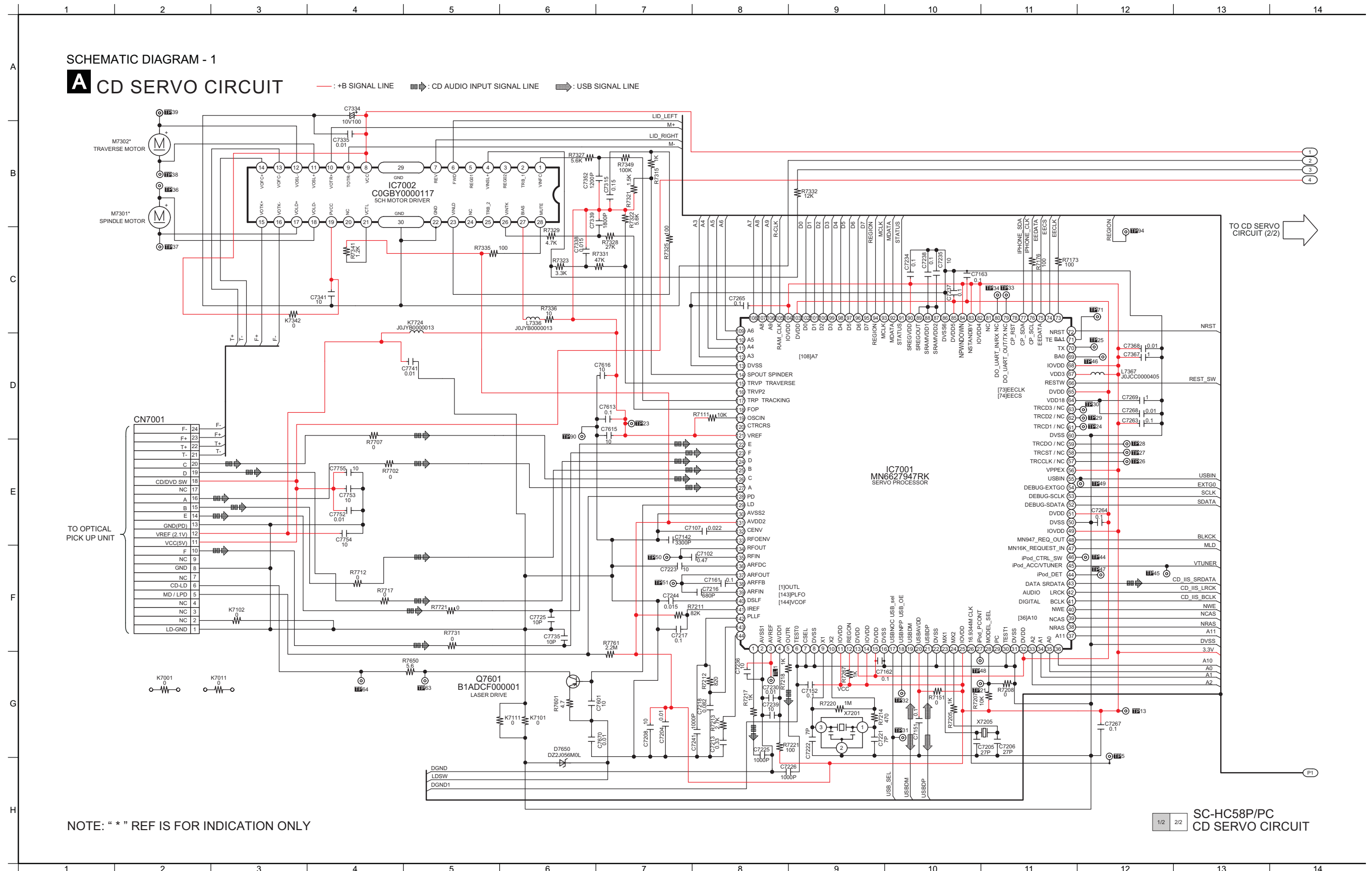
TO CD SERVO CIRCUIT (2/2)

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SCHEMATIC DIAGRAM - 2

A CD SERVO CIRCUIT   — : +B SIGNAL LINE   ▥▶ : CD AUDIO INPUT SIGNAL LINE   ▥▶ : USB SIGNAL LINE

TO CD SERVO
CIRCUIT (1/2)

IC7851
C3EBFY000029
EEPROM

IC7502
MFI337S3959
COPROCESSOR 2

CN7801
FOR DEBUG

OCD_SCL	5
OCD_SDA	4
STBY3.3V	3
NRST	2
VSS	1

IC7704
C3ABMY000027
16M SDRAM

CN7002

TO **B**
MAIN (MICON) CIRCUIT
(CN6006)
IN SCHEMATIC
DIAGRAM - 4

1	D+
2	D-
3	DGND
4	7.5V
5	OPEN_SW
6	TRV
7	RESET SW
8	CD_RESET/ RST
9	CD_SO/ STAT
10	CD_SREQ/ BLKCK
11	CD_MREQ/ MLD
12	CD_SI/ MDATA
13	CD_SCLK/ MCLK
14	USB_IN
15	LDSW
16	DGND
17	5V
18	5V
19	CD_IIS_SRDATA
20	CD_IIS_LRCK
21	CD_IIS_BCLK
22	DGND
23	3.3V
24	LID_LEFT
25	LID_RIGHT
26	M+
27	M-
28	I2S OFF
29	PGND
30	USB_SEL

1/2 2/2 SC-HC58P/PC
CD SERVO CIRCUIT

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SCHEMATIC DIAGRAM - 3

B MAIN (MICON) CIRCUIT

──── : +B SIGNAL LINE

▥▷ : CD AUDIO INPUT SIGNAL LINE

▨▷ : AUDIO OUTPUT SIGNAL LINE

▥▷ : AirPlay/TUNER AUDIO INPUT SIGNAL LINE

▨▷ : iPod/iPhone/USB SIGNAL LINE

USB PORT
FOR iPod / iPhone / iPad

HEADPHONE

JK6000

JK450

IC450
C1AB00003801
HEADPHONE DRIVER

CN401
LCH L0+ 1
LCH L0- 2

TO LEFT
SPEAKER

CN400
RCH L0+ 1
RCH L0- 2

TO RIGHT
SPEAKER

TO MAIN (MICON)
CIRCUIT (2/4)

CN6007

PW_5VLED	15	
AIR_BLUE	14	
AIR_RED	13	
KEY2	12	
KEY1	11	
DGND	10	
BT_LED	9	
FL_CE	8	
FL_CL	7	
FL_DI	6	
FL_GND	5	
D3.3V	4	
PW_FL12V	3	
DGND	2	
PW_5VFL+	1	

AP_LED1
AP_LED2
KEY2
KEY1
DGND
BT_LED
CLK_FL
FL_DI
FLGND
PW_D3R3V
PW_FL12V
PW_5R2V

TO **G**
BUTTON CIRCUIT
(CN900)
IN SCHEMATIC
DIAGRAM - 12

CN6004

20	GND	
19	+3.3V	
18	+3.3V	
17	GND	
16	GND	
15	SPI_DOUT	
14	SPI_DIN	
13	SPI_CLK	
12	SPI_NCS0	
11	SPI_REQ	
10	NRESET	
9	DGND	
8	SCLK	
7	LRCLK	
6	D/A DATA0	
5	DGND	
4	1.2V_ON	
3	1.9V_ON	
2	DGND	
1	DGND	

TO **I**
AirPlay CONNECT CIRCUIT
(P801)
IN SCHEMATIC
DIAGRAM - 14

MS: MAIN (SUPPLY) CIRCUIT: SCHEMATIC DIAGRAM - 7 ~ 8
MT: MAIN (TUNER) CIRCUIT: SCHEMATIC DIAGRAM - 9

TO MAIN (MICON)
CIRCUIT (3/4)

NOTE: " * " REF IS FOR INDICATION ONLY

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

SC-HC58P/PC
MAIN (MICON) CIRCUIT

SCHEMATIC DIAGRAM - 4

B MAIN (MICON) CIRCUIT

— : +B SIGNAL LINE
▭▷ : CD AUDIO INPUT SIGNAL LINE
▭▷ : AirPlay/TUNER AUDIO INPUT SIGNAL LINE
▨▷ : AUDIO OUTPUT SIGNAL LINE
▭▷ : iPod/iPhone/USB SIGNAL LINE

IC6001
C0JBAR000586
MULTIPLEXER

7 6 5 4 3 2 1
GND NC NC D- NC D+ S
IC6001
8 9 10 11 12 13 14
NC USBD- iPod- USBD+ iPod+ OE VCC

D6008 B0JCGD000016
D6005 DA2J10100L
D6006 ~ D6007 DA2J10100L
D6006 D6007

R6144 2.2K

Q6005 B1ABCF000176 SWITCH
Q6006 B1ADCF000001 SWITCH
Q6007 B1ADCF000001 SWITCH
Q6500 B1ABCF000176 SWITCH
Q6501 B1ADCF000001 SWITCH
Q6502 B1ADCF000001 SWITCH

R6009 51K
R6011 75K
R6005 4.7K
R6006 43K
R6001 51K
R6000 51K
R6143 5.6K
R6142 4.7K
R6141 4.7K
R6506 2.2K
R6500 43K
R6509 75K
R6505 47K
R6508 4.7K
R6507 5.6K

C6500 1K
C6502 6.3V220
IC6500 C0DBZYY00555 HIGH SIDE SWITCH

IC: /OC EN
GND IN
OUT THERMAL PAD
R6504 47K
C6503

TO MAIN (MICON) CIRCUIT (1/4)

MS: MAIN (SUPPLY) CIRCUIT: SCHEMATIC DIAGRAM - 7 ~ 8
MT: MAIN (TUNER) CIRCUIT: SCHEMATIC DIAGRAM - 9

TO MAIN (MICON) CIRCUIT (4/4)

I2S_OFF
LID_RIGHT
LID_LEFT
CLK_CD_BCK
CLK_CD_LRCK
CD_IIS_SDO
USB_IN
CLK_CD_SCLK
CD_SI
CD_M_REQ
CD_S_REQ
CD_SO
CD_RESET
RESET_SW
CD_LOADING

R6059 1K
R6061 1K
L6006 J0JYC0000366
R6077 47K
R6080 1.5K
Q6004 B1ADCE000012 SWITCH
C6034 1000P
C6036 0.022
C6037 0.022
R6102 3.3K

D6040 ~ D6043 DA2J10100L
D6042 D6043
D6041
D6040
C6039 0.1

CN6006
1 USB_SEL
2 PGND
3 I2S OFF
4 M-
5 M+
6 LID_RIGHT
7 LID_LEFT
8 3.3V
9 DGND
10 CD_IIS_BCLK
11 CD_IIS_LRCK
12 CD_IIS_SRDATA
13 5V
14 5V
15 DGND
16 LDSW
17 USB_IN
18 CD_SCLK / MCLK
19 CD_SI / MDATA
20 CD_MREQ / MLD
21 CD_SREQ / BLKCK
22 CD_SO / STAT
23 CD RESET / RST
24 RESET SW
25 LOADING / NC
26 OPEN_SW / NC
27 5.5V
28 DGND
29 D-
30 D+

TO **A** CD SERVO CIRCUIT (CN7200) IN SCHEMATIC DIAGRAM - 2

DGND
PW_M5R2V
MOTORGND
PW_5R2V
PW_3R3V
iPod-
iPod+
PW_USB5V
iPod_PCONT_2
PCONT
DGND
PW_iPod5V
iPod_OVC
iPod_PCONT

C6040 10
LB1101 J0JBC0000134
C6033 0.1

Q6037 B1ADCE000012 POWER CONTROL
R6039 1K
R6037 47K
R6038 10K
R6041 100K
R6016 1K

IC6006 C0DBZYY00610 USB SWITCH
FLG IN
GND OUT
CTRL
C6006 0.1
C6008 0.1

IC6000 C0DBZYY00610 iPod SWITCH
FLG IN
GND OUT
CTRL
C6003 0.1
C6009 10

D6031 DA2J10100L
R6052 0
D6030 DA2J10100L

POS_SW_ABN
POS_SW_RIGHT
POS_SW_CENTRE
POS_SW_LEFT
PW_STBY3.3V
REM_IN
iPod_DET
iPod_GND

C6050 1000P
D6030 J0JYC0000196

CN6005
1 M+
2 M-
3 POS_SW_ABN
4 POSITION(RIGHT)
5 POSITION(CENTER)
6 POSITION(LEFT)
7 STBY3.3V
8 DGND
9 REM_IN
10 iPod_DET
11 iPod_5V
12 iPod_5V
13 iPod_GND
14 D-
15 iPod_GND
16 D+

TO **C** REMOTE SENSOR CIRCUIT (CN941) IN SCHEMATIC DIAGRAM - 10

1/4 2/4
3/4 4/4
SC-HC58P/PC
MAIN (MICON) CIRCUIT

SCHEMATIC DIAGRAM - 5

B MAIN (MICON) CIRCUIT

—— : +B SIGNAL LINE   ▥▷ : CD AUDIO INPUT SIGNAL LINE   ▥▷ : AirPlay/TUNER AUDIO INPUT SIGNAL LINE
▥▷ : AUDIO OUTPUT SIGNAL LINE   ▥ : iPod/iPhone/USB SIGNAL LINE
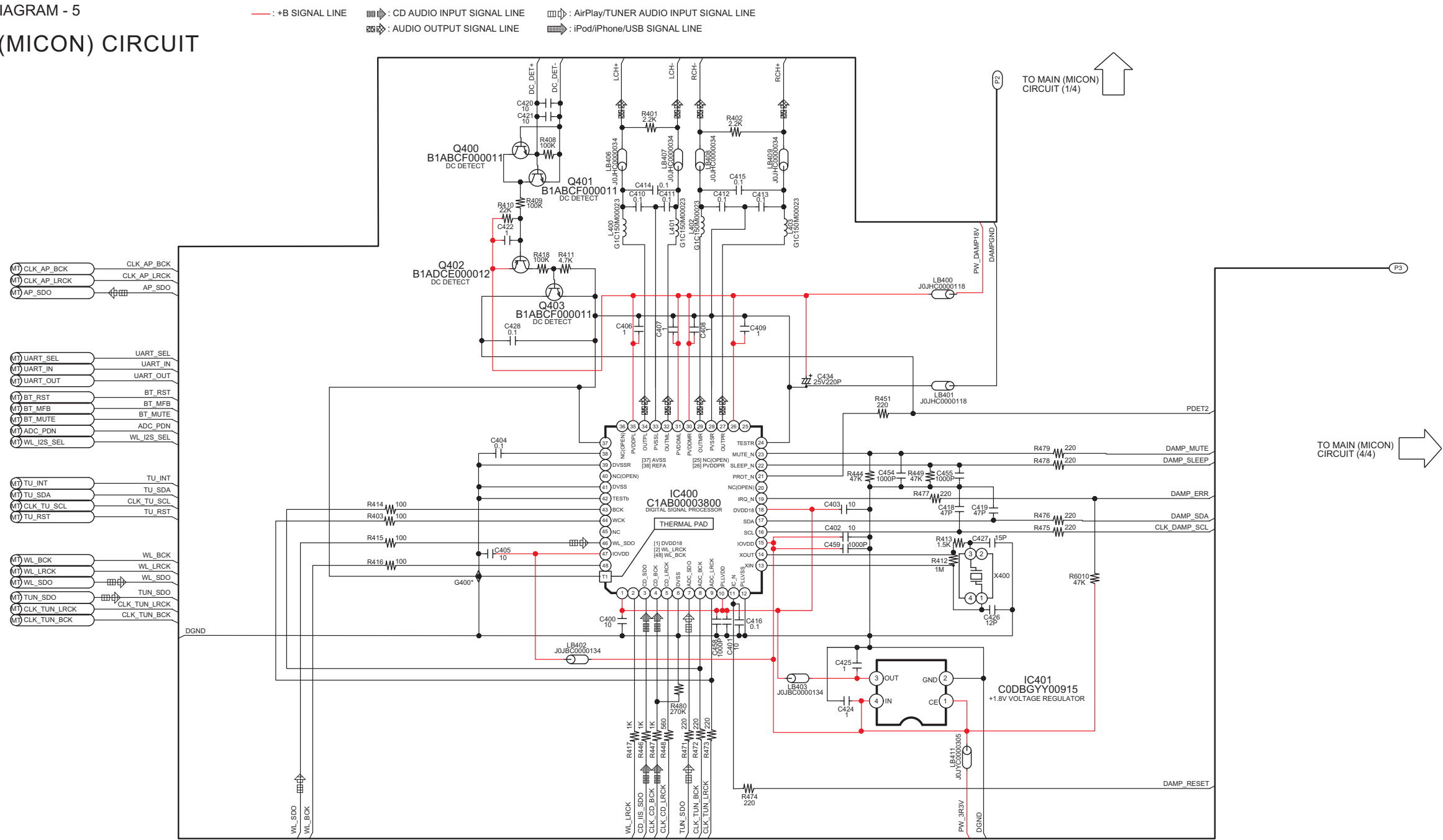
NOTE: " * " REF IS FOR INDICATION ONLY

MS: MAIN (SUPPLY) CIRCUIT: SCHEMATIC DIAGRAM - 7 ~ 8
MT: MAIN (TUNER) CIRCUIT: SCHEMATIC DIAGRAM - 9

| 1/4 | 2/4 | SC-HC58P/PC |
| 3/4 | 4/4 | MAIN (MICON) CIRCUIT |

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SCHEMATIC DIAGRAM - 6

B MAIN (MICON) CIRCUIT
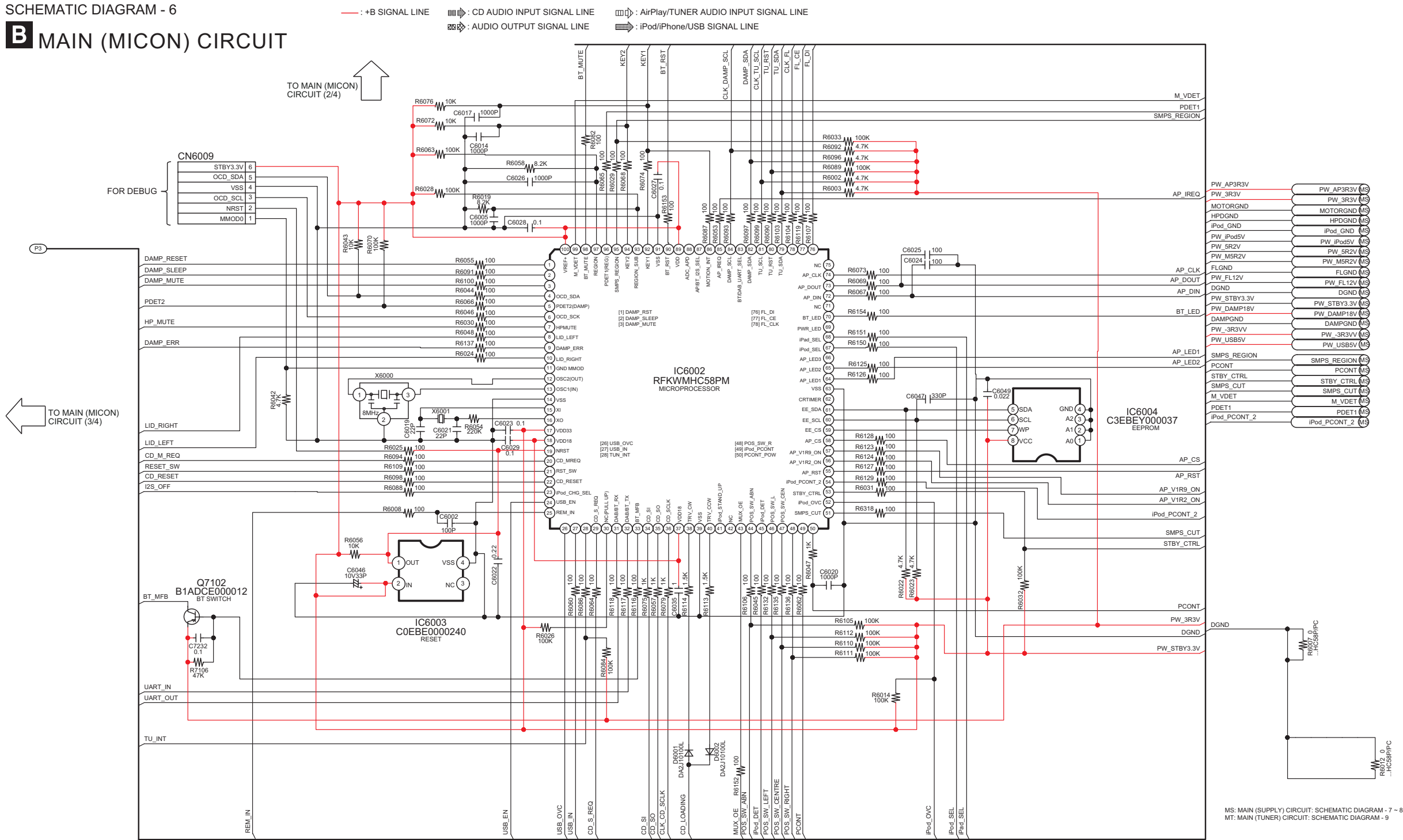
━━ : +B SIGNAL LINE
▥▷ : CD AUDIO INPUT SIGNAL LINE
▥▷ : AirPlay/TUNER AUDIO INPUT SIGNAL LINE
▨▷ : AUDIO OUTPUT SIGNAL LINE
▥▷ : iPod/iPhone/USB SIGNAL LINE

IC6002
RFKWMHC58PM
MICROPROCESSOR

IC6004
C3EBEY000037
EEPROM

IC6003
C0EBE0000240
RESET

Q7102
B1ADCE000012
BT SWITCH

CN6009
FOR DEBUG

MS: MAIN (SUPPLY) CIRCUIT: SCHEMATIC DIAGRAM - 7 ~ 8
MT: MAIN (TUNER) CIRCUIT: SCHEMATIC DIAGRAM - 9

NOTE: " * " REF IS FOR INDICATION ONLY

1/4	2/4	SC-HC58P/PC
3/4	4/4	MAIN (MICON) CIRCUIT

SCHEMATIC DIAGRAM - 7

B MAIN (SUPPLY) CIRCUIT ──── ; +B SIGNAL LINE

IC1105 C0DBEYY00146 +12V VOLTAGE REGULATOR

IC1102 C0DBEYY00146 +3.3V VOLTAGE REGULATOR

IC1104 C0DBAYY01653 USB +5V SWITCHING VOLTAGE REGULATOR

IC1101 C0DBAYY01653 iPod +5V SWITCHING VOLTAGE REGULATOR

TO MAIN (SUPPLY) CIRCUIT (2/2)

MM: MAIN (MICON) CIRCUIT: SCHEMATIC DIAGRAM - 3 ~ 6

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC
MAIN (SUPPLY) CIRCUIT

15.9. MAIN (SUPPLY) CIRCUIT (2/2)

SCHEMATIC DIAGRAM - 8

B MAIN (SUPPLY) CIRCUIT

TO MAIN (SUPPLY) CIRCUIT (1/2)

IC1100
C0DBAYY01652
AirPlay +3.3V SWITCHING VOLTAGE REGULATOR

LB1104
J0JGC0000063

R1167
0

PW_AP3R3V

R1106
0
C1126
0.01

L1101
G1C100MA0226

C1108
0.1

C1118
10

1	BOOT	SS	8
2	VIN	EN	7
3	SW/IVOUT	COMP	6
4	GND	FB	5

THERMAL PAD

C1153
10
C1106
10
C1107
22
R1131
100
C1117
1000P
R1111
6.8K

R1107
18K

C1129
330P
C1111
6800P

R1108
6.8K

D1115 DZ2J062M0L

G1101*

C1125
0.01

RL1100*

C1123
2200P

ZJ1100

D1112 DZ2J062M0L
D1113 DZ2J062M0L

CN1100

1	BURST SW
2	PCONT
3	REGION
4	18VGND
5	18V
6	18VGND
7	18V

TO **H**
SMPS CIRCUIT
(P1700)
IN SCHEMATIC
DIAGRAM - 13

D1101
DA2J10100L
D1100
DA2J10100L

D1103
DZ2J062M0L

QR1100
B1GBCFNN0038
PCONT

C1119
0.047

PDET1
M_VDET
IPOD_PCONT_2
SMPS_CUT
STBY_CTRL
PCONT
SMPS_REGION
PW_-3R3VV
PW_DAMP18V
DAMPGND

C1001
1000P
R1128
100K
R1127
470K

R453
27K

Q404
B1CHRC000047
+18V POWER SUPPLY

5		4
6		3
7		2
8		1

R419
100K
C417
1000P

QR400
B1GBCFNN0038
SWITCH

MM: MAIN (MICON) CIRCUIT: SCHEMATIC DIAGRAM - 3 ~ 6

1/2
2/2
SC-HC58P/PC
MAIN (SUPPLY) CIRCUIT

NOTE: " * " REF IS FOR INDICATION ONLY

SCHEMATIC DIAGRAM - 9

B MAIN (TUNER) CIRCUIT

── : +B SIGNAL LINE   ▭▷ : AirPlay/BLUETOOTH/TUNER AUDIO INPUT SIGNAL LINE   ▭▷ : FM SIGNAL LINE

CN7031
1	P20
2	EAN
3	BT_RX
4	BT_TX
5	DGND
6	P24

FOR FIRMWARE DOWNLOAD

IC7111
RSNE011B0
BLUETOOTH MODULE

IC52
VUEALLPT058
FM RADIO RECEIVER

JK51

FM ANT

MM: MAIN (MICON) CIRCUIT: SCHEMATIC DIAGRAM - 3 ~ 6

SC-HC58P/PC
MAIN (TUNER) CIRCUIT

15.11. REMOTE SENSOR CIRCUIT

SCHEMATIC DIAGRAM - 10

C REMOTE SENSOR CIRCUIT

— : +B SIGNAL LINE   ▦ : iPod/iPhone SIGNAL LINE

CN941

16	M+
15	M-
14	POS_SW_ABN
13	POSITION(RIGHT)
12	POSITION(CENTER)
11	POSITION(LEFT)
10	STDBY3.3V
9	DGND
8	REM_IN
7	iPod_DET
6	iPod_5V
5	iPod_5V
4	iPod_GND
3	D-
2	iPod_GND
1	D+

TO **B**
MAIN (MICON)
CIRCUIT (CN6005)
IN SCHEMATIC
DIAGRAM - 4

C941
1

R941
33

VCC
GND
VOUT

IR941
REMOTE SENSOR

R942
0

C945
0.1

R943
100K

R946
1.5K

IC943
C0JBAC000363
iPod DETECT

OUT Y   VCC
GND IN A IN B

R944
1K

P941

5	POS_SW_ABN
4	INTERLOCK_SW
3	POSITION(RIGHT)
2	POSITION(CENTER)
1	VREF-

TO **E**
INTERLOCK SWITCH
CIRCUIT (P641*)
IN SCHEMATIC
DIAGRAM - 11

P942

4	POSITION(LEFT)
3	VREF-
2	M+
1	M-

TO **F**
MOTOR CIRCUIT
(CN931)
IN SCHEMATIC
DIAGRAM - 11

L504
J0JHC0000046

C501
0.1

C502
0.1

L502
J0JYC0000348

P945

5	DGND
4	D+
3	D-
2	iPod_5V
1	DGND

TO iPhone CONNECTOR UNIT

SC-HC58P/PC
REMOTE SENSOR CIRCUIT

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SCHEMATIC DIAGRAM - 11

D PANEL CIRCUIT

—— : +B SIGNAL LINE

FL6801
A2BB00000186
LCD DISPLAY

P6801

TO **G**
BUTTON CIRCUIT
(P900)
IN SCHEMATIC
DIAGRAM - 12

E INTERLOCK SWITCH CIRCUIT

TO **C**
REMOTE SENSOR
CIRCUIT (P941)
IN SCHEMATIC
DIAGRAM - 10

P641*

S643 CENTER
S642 RIGHT
S641 ABN

F MOTOR CIRCUIT

TO **C**
REMOTE SENSOR
CIRCUIT (P942)
IN SCHEMATIC
DIAGRAM - 10

CN931

LOADING MOTOR*

S931 LEFT

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC
PANEL / INTERLOCK SWITCH / MOTOR CIRCUIT

15.13. BUTTON CIRCUIT

SCHEMATIC DIAGRAM - 12

G BUTTON CIRCUIT

⎯⎯ : +B SIGNAL LINE

SC-HC58P/PC
BUTTON CIRCUIT

SCHEMATIC DIAGRAM - 13

H SMPS CIRCUIT

— : +B SIGNAL LINE

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC SMPS CIRCUIT

SCHEMATIC DIAGRAM - 14

I AirPlay CONNECT CIRCUIT ── : +B SIGNAL LINE ▥▷ : AirPlay AUDIO INPUT SIGNAL LINE

J AirPlay ANTENNA CIRCUIT ▥▷ : AirPlay AUDIO INPUT SIGNAL LINE

IC2000
C0DBGYY01654
+1.9V VOLTAGE REGULATOR

D801
B0ECKM000008

IC3001
C0DBGYY01640
+1.2V VOLTAGE REGULATOR

TO AirPlay MODULE

P800

LB802, LB810,
LB812 ~ LB816
J0JHC0000046

LB801, LB803 ~ LB809,
LB811
J0JYC0000490

2	GND	GND	1
4	VIN(+3.3)	RXD0	3
6	VIN(+3.3)	TXD0	5
8	GND	GND	7
10	VIN(+1.9)	VIN(+1.2)	9
12	VIN(+1.9)	VIN(+1.2)	11
14	GND	GND	13
16	NWAIT	RXD1	15
18	NCS2	TXD1	17
20	NRESET	GND	19
22	3V3RTC	AV2CTR1	21
24	GND	AV2CTR0	23
26	SPI_DIN	AV2CLK	25
28	SPI_DOUT	AV2DATA2	27
30	SPI_CLK	AV2DATA0	29
32	SPI_NCS0	AV4DATA1	31
34	NCS3	AV4DATA0	33
36	GND	GND	35
38	SSMD7	USB_DIN	37
40	AV3CTR1	USB_DP	39
42	AV3CTR0	USBVBUSDRV	41
44	GND	USB_VBUS	43
46	PDOUT1	GND	45
48	PDOUT0	SSMD5	47

P801

1	GND
2	+3.3V
3	+3.3V
4	GND
5	GND
6	SPI_DOUT
7	SPI_DIN
8	SPI_CLK
9	SPI_NCS0
10	SPI_REQ
11	NRESET
12	DGND
13	SCLK
14	LRCLK
15	D/A DATA0
16	DGND
17	1.2V_ON
18	1.9V_ON
19	DGND
20	DGND

TO **B**
MAIN CIRCUIT
(CN6004)
IN SCHEMATIC
DIAGRAM - 3

LB801

LB803
LB804
LB805
LB806

LB807
LB808
LB809

LB816

LB813

LB811
J0JFC0000007

R800
47K

ANTENNA

P2*
| 1 | GND |
| 2 | GND |

TO SMPS CHASSIS GND

P1
1	GND
2	SIGNAL
3	GND

TO AirPlay MODULE

SC-HC58P/PC
AirPlay CONNECT / AirPlay ANTENNA CIRCUIT

16 Printed Circuit Board

16.1. CD SERVO P.C.B.

A CD SERVO P.C.B. (REP4781E)
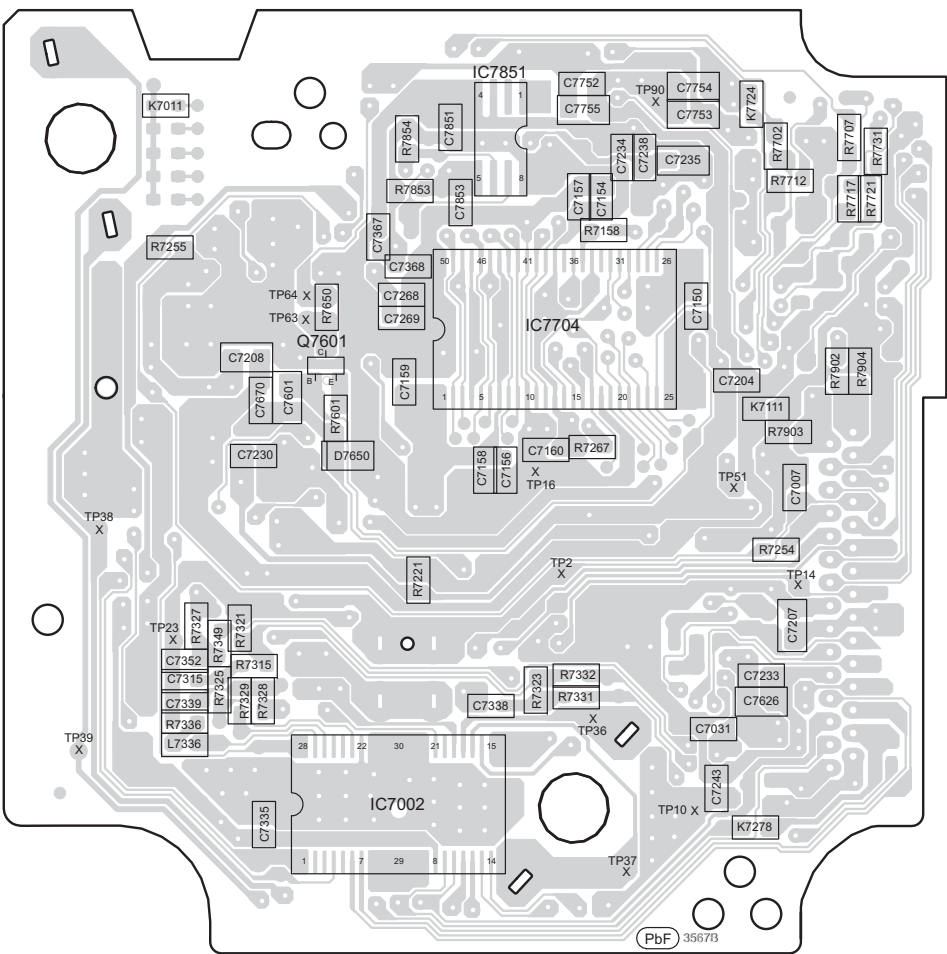
(SIDE A)
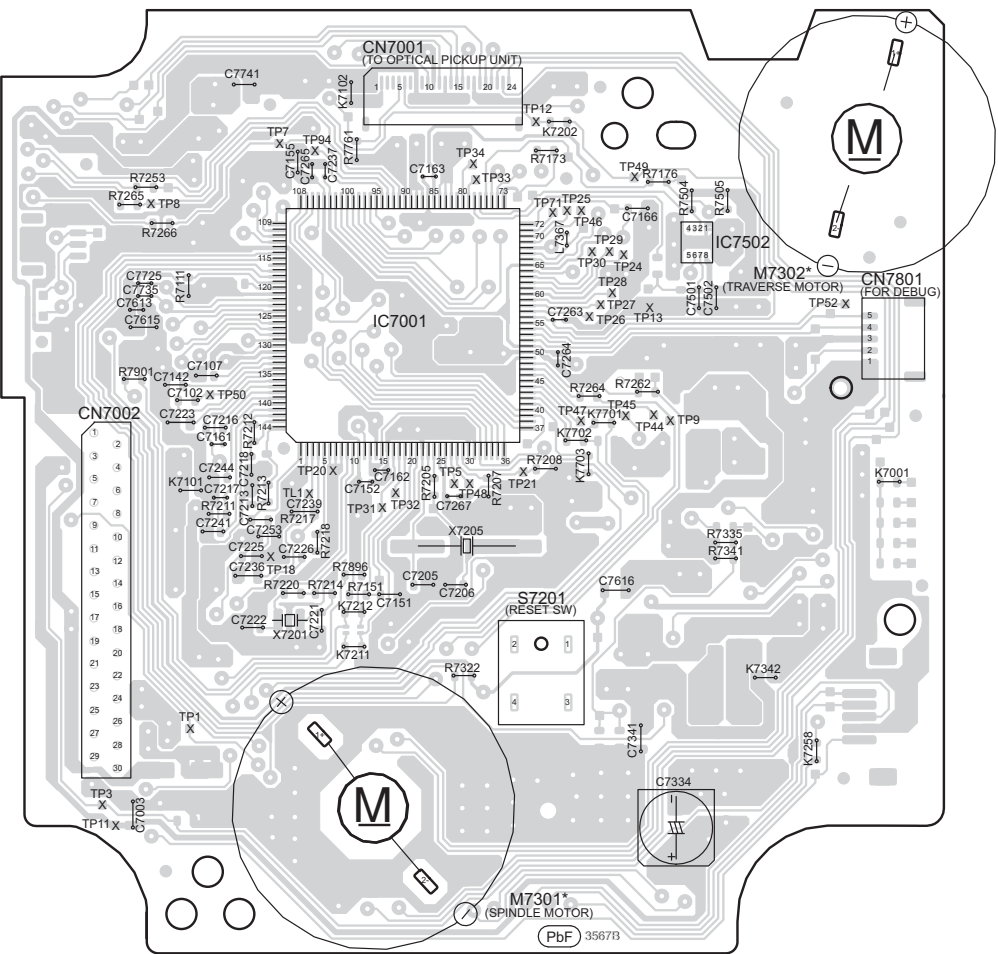
(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY

B MAIN P.C.B. (REP4870LA)

(SIDE A)

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC
MAIN P.C.B.

134

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

B MAIN P.C.B. (REP4870LA)

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC
MAIN P.C.B.

16.4. REMOTE SENSOR, PANEL, INTERLOCK SWITCH & MOTOR P.C.B.

C REMOTE SENSOR P.C.B. (REP4870LC)

R943 R945 C945
R942
IC943 R944
R941
C941
(SIDE A)
PbF 3613AC

P941 P942 CN941
(TO iPhone CONNECTOR UNIT) P945
IR941
L504
C501 L502
C502
SENSOR
(SIDE B)
PbF 3613AC

D PANEL P.C.B. (REP4871BB)

R6804 Q6801 W6802 C6804 C6805
R6806
C6802
R6801
D6806
C6801 R6802 R6803 D6802 D6801 D6804 D6803 R6813 R6814
C6812 R6805 R6811 R6810
C6807 Q6802 C6808 FL6801 R6812
W6801
C6814
C6813
LB6801 LB6802 LB6803 LB6804 LB6805
P6801
PbF 3614AB-1
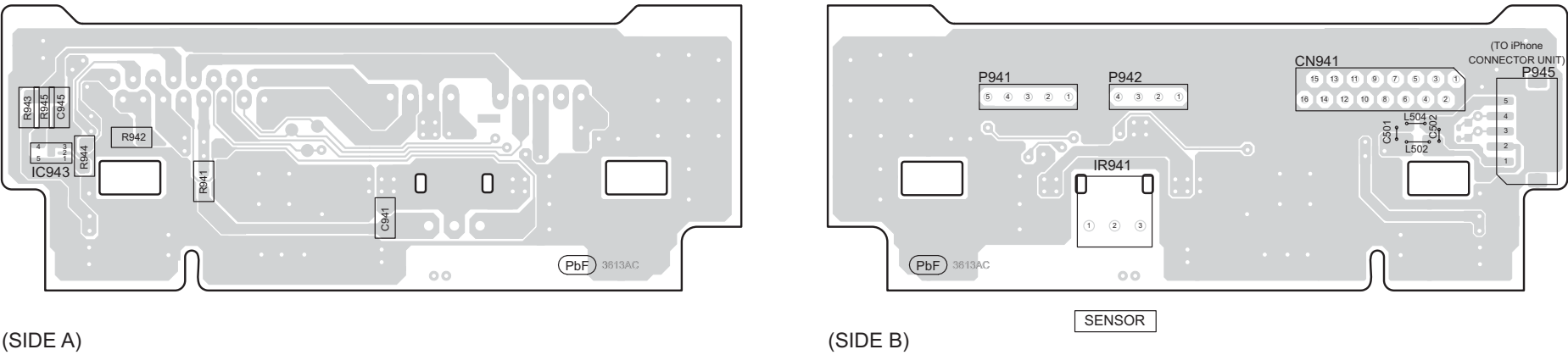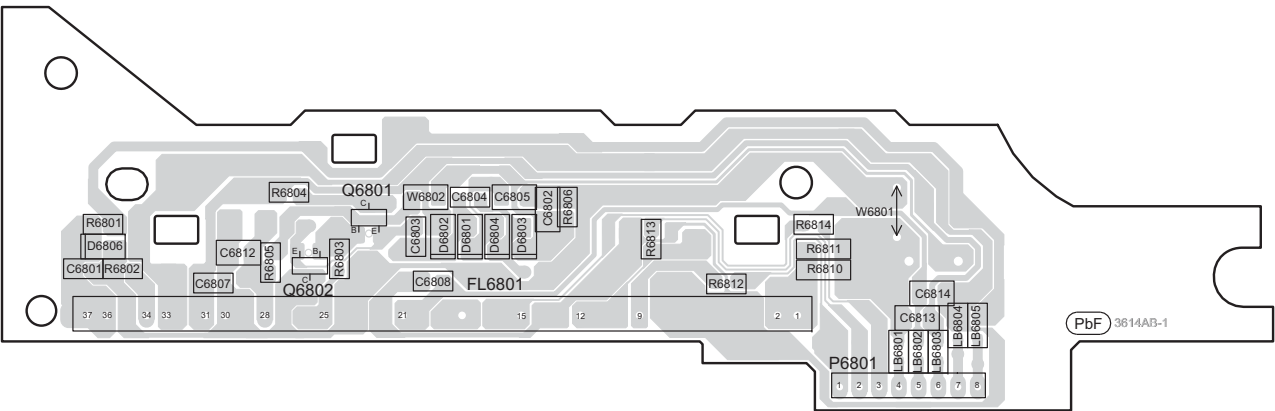
E INTERLOCK SWITCH P.C.B. (REP4871BC)

P641*
S641 (ABN)
S643 (CENTER)
S642 (RIGHT)
PbF 3614AC-1

F MOTOR P.C.B. (REP4871BD)

S931 (LEFT) PbF 3614AD-1
0
CN931
TL931* TL932*
(BLACK) (RED)
M
LOADING MOTOR*
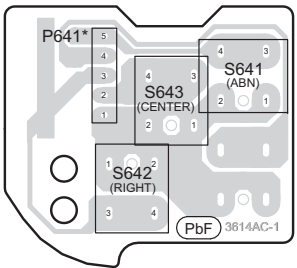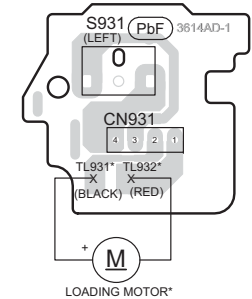
NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC
REMOTE SENSOR / PANEL / INTERLOCK SWITCH / MOTOR P.C.B.

16.5. BUTTON P.C.B.

G BUTTON P.C.B. (REP4904B)

(SIDE A)

(SIDE B)
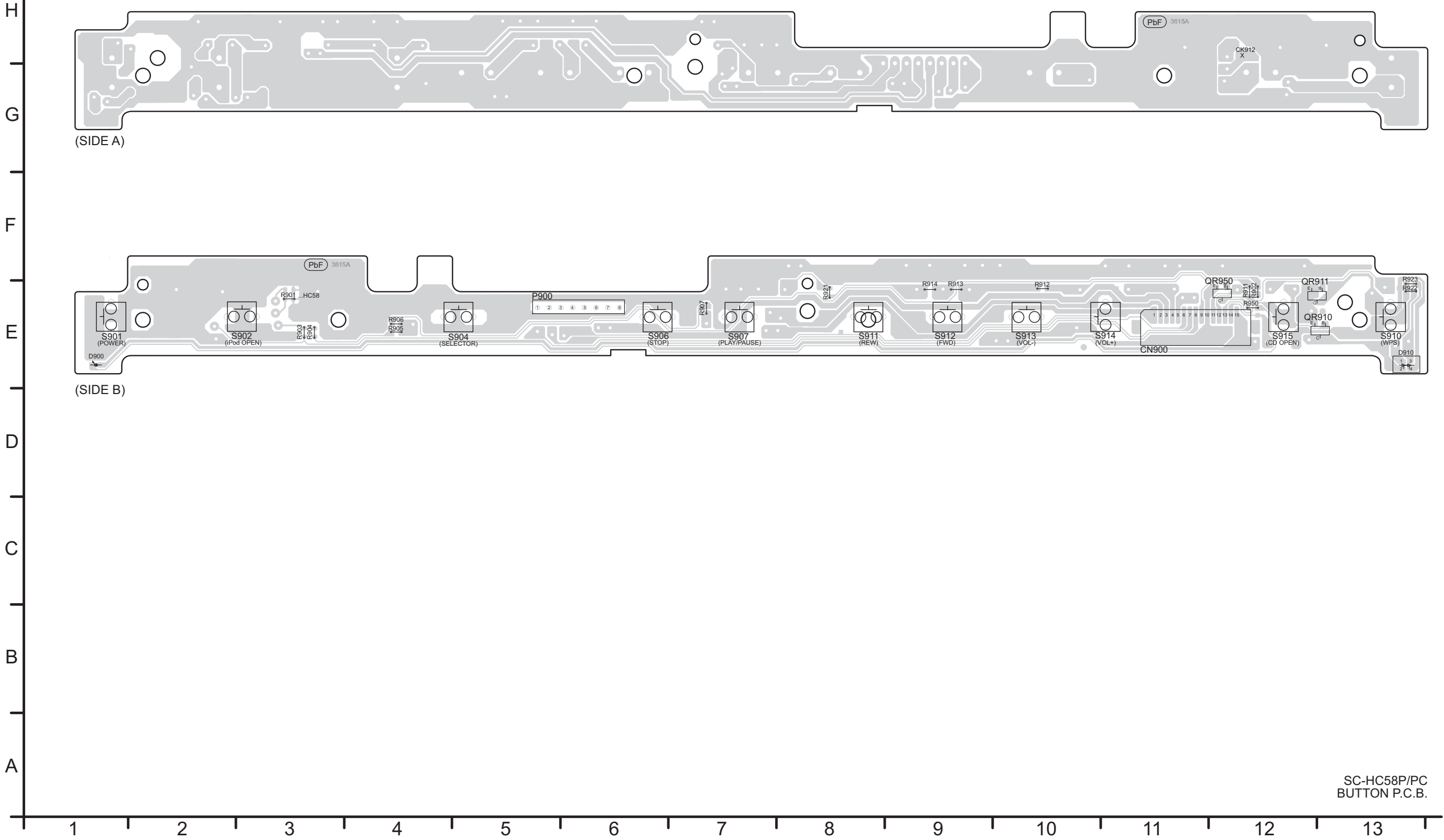
SC-HC58P/PC
BUTTON P.C.B.

16.6. SMPS, AirPlay CONNECTOR & AirPlay ANTENNA P.C.B.

H SMPS P.C.B. (REP4871BA)

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

AC IN
120V
60Hz

I AirPlay CONNECT P.C.B. (REP4911A)

(SIDE A)

(SIDE B)

J AirPlay ANTENNA P.C.B. (REP4870LE)

AirPlay ANTENNA

P1 (TO AirPlay MODULE)

P2*
(TO SMPS
CHASSIS GND)

(SIDE A)

(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC58P/PC
SMPS / AirPlay CONNECT / AirPlay ANTENNA P.C.B.

17 Appendix Information of Schematic Diagram

17.1. 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.

17.1.1. CD SERVO P.C.B. (1/2)

REF NO.	IC7001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.5	0	3.3	3.3	1.7	0	0	0	1.7	1.5	3.3	1.6	1.8	3.3	1.8	0	1.8	0	1.8	3.3

REF NO.	IC7001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.8	0	1.5	1.6	3.3	1.2	1.5	1.2	3.3	0	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2

REF NO.	IC7001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	3.3	3.3	3.3	0	2.1	0	3.3	3.3	3.3	0	3.3	3.3	3.3	0	3.3	3.3	1.2	1.2	1.5	0

REF NO.	IC7001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.2	1.5	1.7	1.8	3.3	1.5	3.3	3.3	1.8	1.2	1.2	3.3	1.5	1.8	1.5	1.5	1.5	1.5	1.2	1.2

REF NO.	IC7001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	3.3	3.3	3.3	3.3	0	3.3	3.3	3.3	1.8	3.3	3.3	3.3	0	1.5	1.5	1.5	1.5	1.5	1.5

REF NO.	IC7001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	1.5	1.5	3.3	3.3	3.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	3.3	3.3	0	1.5	1.5	2.1	2.1

REF NO.	IC7001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	2.1	1.5	1.5	1.5	1.5	1.2	1.5	1.8	1.8	0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3

REF NO.	IC7001																			
MODE	141	142	143	144																
CD PLAY	3.3	3.3	3.3	3.3																

REF NO.	IC7002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.6	0	0	1.6	0	3.3	3.2	7.5	0	0	3.9	3.9	2.7	2.5	2.8	2.5	1.1	3.8	5.1	0

REF NO.	IC7002																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	1.5	0	1.1	0	0	1.6	1.6	3.2	0	0										

REF NO.	IC7502																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	3.3	0	0	0	1.5	3.3	3.3												

REF NO.	IC7704																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	1.5	1.5	0	1.5	1.5	3.3	1.5	1.5	0	1.6	1.5	3.3	3.2	3.2	3.2	3.2	0	3.2	0

SC-HC58P/PC CD SERVO P.C.B.

17.1.2. CD SERVO P.C.B. (2/2)

REF NO.	IC7704																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	1.7	1.8	1.6	3.3	0	1.6	1.6	1.7	1.7	1.8	1.7	0	3.3	0	3.2	0	3.2	1.3	1.4

REF NO.	IC7704																			
MODE	41	42	43	44	45	46	47	48	49	50										
CD PLAY	0	1.3	1.3	3.3	1.3	1.3	0	1.3	1.3	0										

REF NO.	IC7851																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0	3.2	3.2	0	3.2												

REF NO.	Q7601																			
MODE	E	C	B																	
CD PLAY	3.0	2.0	2.3																	

SC-HC58P/PC CD SERVO P.C.B.

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

REF NO.	IC52																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TUNER	0	1.5	0	0.8	3.3	3.3	0	3.3	3.3	3.3	3.3	0	1.4	3.3	0	0	3.3	0	0	0

REF NO.	IC400																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.6	0	1.4	1.4	1.2	0	3.3	3.3	3.3	1.6	0	0	1.6	1.6	3.2	3.2	3.2	1.6	1.5	0
STANDBY	1.6	0	1.4	1.4	1.2	0	3.3	3.3	3.3	1.6	0	0	1.6	1.6	3.2	3.2	3.2	1.6	1.5	0

REF NO.	IC400																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.2	3.2	3.2	0	0	16.8	3.2	0	3.1	16.8	16.8	3.3	0	3.3	16.7	0	0	3.3	0	0
STANDBY	3.2	3.2	3.2	0	0	16.8	3.2	0	3.1	16.8	16.8	3.3	0	3.3	16.7	0	0	3.3	0	0

REF NO.	IC400																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	0	0	3.3	1.5	0	0	3.3	1.5												
STANDBY	0	0	3.3	1.5	0	0	3.3	1.5												

REF NO.	IC401																			
MODE	1	2	3	4																
CD PLAY	3.3	0	1.6	3.3																
STANDBY	3.3	0	1.6	3.3																

REF NO.	IC450																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	3.1	3.1	3.3	0	3.1	0	1.6	3.2	3.3	0	0	3.3	3.1	3.1						
STANDBY	3.1	3.1	3.3	0	3.1	0	1.6	3.2	3.3	0	0	3.3	3.1	3.1						

REF NO.	IC1100																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	18.0	3.3	0	3.3	0	0	0												
STANDBY	0	18.0	3.3	0	3.3	0	0	0												

REF NO.	IC1101																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	18.0	5.0	0	3.3	0	0	0												
STANDBY	0	18.0	5.0	0	3.3	0	0	0												

REF NO.	IC1102																			
MODE	1	2	3	4	5															
CD PLAY	3.3	0	18.0	3.3	18.0															
STANDBY	3.3	0	18.0	3.3	18.0															

REF NO.	IC1104																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	18.0	5.0	0	3.3	0	0	0												
STANDBY	0	18.0	5.0	0	3.3	0	0	0												

SC-HC58P/PC MAIN P.C.B.

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

REF NO.	IC1105																			
MODE	1	2	3	4	5															
CD PLAY	12.0	0	18.0	3.3	0															
STANDBY	12.0	0	18.0	3.3	0															

REF NO.	IC6000																			
MODE	1	2	3	4	5															
CD PLAY	0.2	0	3.3	5.0	4.8															
STANDBY	0.2	0	3.3	5.0	4.8															

REF NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	5.0	0	5.0	0	0	0	0	3.3	3.3	3.3	3.3	0	3.3						
STANDBY	0	5.0	0	5.0	0	0	0	0	3.3	3.3	3.3	3.3	0	3.3						

REF NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	3.3	3.3	3.3	3.3	0	3.3	0	3.3	0	0	1.3	1.6	0	1.7	1.7	3.3	1.8	3.3	3.3
STANDBY	3.3	3.3	3.3	3.3	3.3	0	3.3	0	3.3	0	0	1.3	1.6	0	1.7	1.7	3.3	1.8	3.3	3.3

REF NO.	IC6002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.3	3.3	0	0	3.3	3.3	3.3	3.3	3.3	0	3.3	1.3	0	3.3	3.3	3.3	1.8	1.8	0	0
STANDBY	3.3	3.3	0	0	3.3	3.3	3.3	3.3	3.3	0	3.3	1.3	0	3.3	3.3	3.3	1.8	1.8	0	0

REF NO.	IC6002																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	3.3	0	3.2	0	0	0	0	3.3	3.3	0	0	0	3.3	0	0	0	1.8	3.3
STANDBY	0	0	3.3	0	3.2	0	0	0	0	3.3	3.3	0	0	0	3.3	0	0	0	1.8	3.3

REF NO.	IC6002																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	3.3	0	0	1.8	1.9	0	3.3	3.3	0	1.8	0	3.3	3.3	3.3	0	0	1.2	0	3.3	3.3
STANDBY	3.3	0	0	1.8	1.9	0	3.3	3.3	0	1.8	0	3.3	3.3	3.3	0	0	1.2	0	3.3	3.3

REF NO.	IC6002																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.1	3.2	0	0	0	3.1	0	0	3.3	0	0	3.3	0	3.3	3.3	0	3.3	0.8	3.0	3.3
STANDBY	3.1	3.2	0	0	0	3.1	0	0	3.3	0	0	3.3	0	3.3	3.3	0	3.3	0.8	3.0	3.3

REF NO.	IC6003																			
MODE	1	2	3	4																
CD PLAY	3.3	3.3	0	0																
STANDBY	3.3	3.3	0	0																

REF NO.	IC6004																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0	3.3	3.3	1.8	3.3												
STANDBY	0	0	0	0	3.3	3.3	1.8	3.3												

SC-HC58P/PC MAIN P.C.B.

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

REF NO.	IC6006																	
MODE	1	2	3	4	5													
CD PLAY	0	0	0	5.0	5.0													
STANDBY	0	0	0	5.0	5.0													

REF NO.	IC6500																	
MODE	1	2	3	4	5	6												
CD PLAY	5.0	0	0	4.8	0	5.0												
STANDBY	5.0	0	0	4.8	0	5.0												

REF NO.	Q400				Q401				Q402				Q403					
MODE	E	C	B		E	C	B		E	C	B		E	C	B			
CD PLAY	3.7	4.5	3.7		3.7	3.7	4.5		16.5	0	4.5		0	3.2	0			
STANDBY	3.7	4.5	3.7		3.7	3.7	4.5		16.5	0	4.5		0	3.2	0			

REF NO.	Q404								Q6004			Q6005						
MODE	1	2	3	4	5	6	7	8	E	C	B	E	C	B				
CD PLAY	17.0	17.0	17.0	1.0	17.0	17.0	17.0	17.0	3.3	3.0	0	0	4.3	0				
STANDBY	17.0	17.0	17.0	1.0	17.0	17.0	17.0	17.0	3.3	3.0	0	0	4.4	0				

REF NO.	Q6006			Q6007			Q6037			Q6500			Q6501					
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B			
CD PLAY	5.0	3.3	4.0	5.0	3.3	4.0	0.2	0	3.3	0	4.4	0	5.0	3.3	4.0			
STANDBY	5.0	3.3	4.0	5.0	3.3	4.0	0.2	0	3.3	0	4.4	0	5.0	3.3	4.0			

REF NO.	Q6502			Q7102			QR400			QR1100								
MODE	E	C	B	E	C	B	E	C	B	E	C	B						
CD PLAY	5.0	3.3	4.0	3.3	0	3.0	-3.3	1.0	0	0	0	3.3						
STANDBY	5.0	3.3	4.0	3.3	0	3.0	-3.3	1.0	0	0	0	3.3						

SC-HC58P/PC MAIN P.C.B.

17.1.6. REMOTE SENSOR P.C.B.

REF NO.	IC943																	
MODE	1	2	3	4	5													
POWER ON	3.3	5.0	0	5.0	3.3													
STANDBY	3.3	5.0	0	5.0	3.3													

SC-HC58P/PC REMOTE SENSOR P.C.B.

17.1.7. PANEL P.C.B.

REF NO.	Q6801			Q6802														
MODE	E	C	B	E	C	B												
POWER ON	0.5	2.2	3.0	0.5	0	3.0												
STANDBY	0.5	2.2	3.0	0.5	0	3.0												

SC-HC58P/PC PANEL P.C.B.

17.1.8. BUTTON P.C.B.

REF NO.	QR910			QR911			QR950											
MODE	E	C	B	E	C	B	E	C	B									
POWER ON	0	2.8	1.8	0	2.8	1.9	0	5.0	1.8									
STANDBY	0	2.8	1.8	0	2.8	1.9	0	5.0	1.8									

SC-HC58P/PC BUTTON P.C.B.
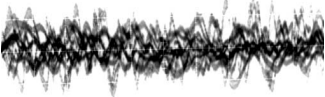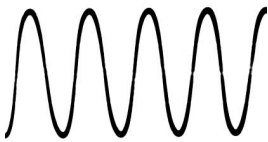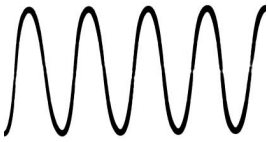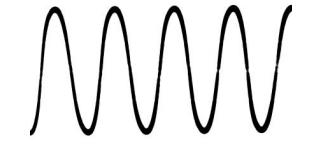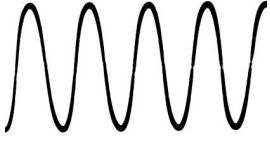
17.1.9. SMPS P.C.B.

REF NO.	IC1700																		
MODE	1	2	3	4	5	6	7	8											
POWER ON	3.0	20.2	0	2.0	1.0	1.0	1.0	1.0											
STANDBY	3.0	20.2	0	2.0	1.0	1.0	1.0	1.0											

REF NO.	IC1701																		
MODE	1	2	3	4															
POWER ON	0	0	2.5	18.0															
STANDBY	0	0	2.5	18.0															

REF NO.	Q1700				Q1701				QR1700										
MODE	E	C	B		E	C	B		E	C	B								
POWE ON	0	18.0	5.0		18.0	18.0	5.0		0	5.0	0								
STANDBY	0	18.0	5.0		18.0	18.0	5.0		0	5.0	0								

SC-HC58P/PC SMPS P.C.B.
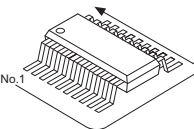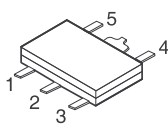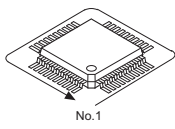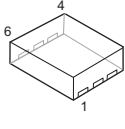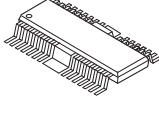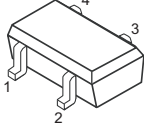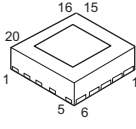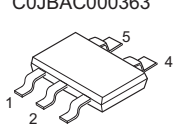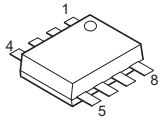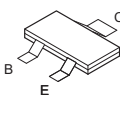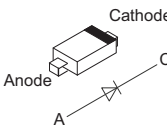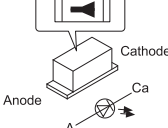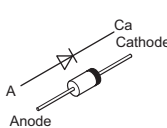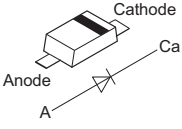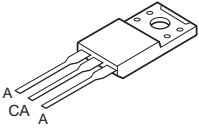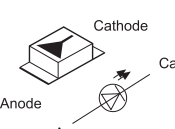
17.1.10. AirPlay CONNECT P.C.B.

REF NO.	IC2000																		
MODE	1	2	3	4	5														
POWER ON	1.9	0	0	3.3	1.9														
STANDBY	1.9	0	0	3.3	1.9														

REF NO.	IC3001																		
MODE	1	2	3	4	5														
POWER ON	1.2	0	0	2.5	1.2														
STANDBY	1.2	0	0	2.5	1.2														

SC-HC58P/PC AirPlay CONNECT P.C.B.

17.1.11. Waveform Chart

WF No. IC52-2,13 (TUNER) 0.1Vp-p(200usec/div)	WF No. IC400-13 (PLAY) 2Vp-p(20nsec/div)	WF No. IC400-14 (PLAY) 2.2Vp-p(20nsec/div)	WF No. IC450-3 (PLAY) 1.4Vp-p(5usec/div)
WF No. IC450-12 (PLAY) 2.8Vp-p(5usec/div)	WF No. IC6002-12 (PLAY) 3.8Vp-p(50nsec/div)	WF No. IC6002-13 (PLAY) 3Vp-p(50nsec/div)	WF No. IC6002-15 (PLAY) 1.1Vp-p(10usec/div)
WF No. IC6002-16 (PLAY) 2.1Vp-p(10usec/div)			

17.2. Illustration of IC's, Transistors and Diodes

C0DBAYY01653 (8P) C0EBE0000240 (4P) C3ABMY000027 (50P) C3EBEY000037 (8P) C3EBFY000029 (8P) C0DBZMC00006 (4P) C0JBAR000586 (14P) C0DBAYY01652 (8P) C1AB00003801 (14P	C0DBGYY01640 C0DBGYY01654	MN6627947RK (144P) RFKWMHC58PM (100P)	C0DBZYY00555	C0GBY0000117 (30P)
MFI337S3959	C0DBGYY00915	C0DACYY00012	VUEALLPT058	C1AB00003800 (48P)	C0DBEYY00146 C0DBZYY00610 C0JBAC000363
B1CHRC000047		B1ADCF000001 B1GBCFJN0038 B1ADCE000012 B1ABCF000011 B1ABGC000001 DSA500100L B1GBCFJJ0051 B1GBCFNN0038 B1ABCF000176	B0ECKM000008	B3AAB0000501	B0EAKU000002
B0JCGD000016 DZ2J056M0L DZ2J062M0L DZ2J051M0L DZ2J075M0L DZ2J330M0L DA2J10100L		DA22F2100L	B0ABSM000008	B0EBLR000033	B3AKB0000024

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17.3. Terminal Function of IC's

17.3.1. IC6002 (RFKWMHC58PM) MICRO PROCESSOR IC

Pin No.	Mark	I/O	Function
1	DAMP_RST	O	DAMP RESET
2	DAMP_SLEEP	O	DAMP SLEEP MODE
3	DAMP_MUTE	O	DAMP MUTING
4	OCD_SDA	O	OCD SERIAL DATA
5	PDET2 (D_AMP)	I	D-AMP WARNING / ERROR DETECT (ACTIVE LOW= ERROR)
6	OCD_SCK	O	OCD SERIAL DATA CLOCK
7	HPMUTE	O	HEADPHONE MUTING
8	LID_LEFT	O	SLIDING DOOR OPEN.CLOSE CONTROL LEFT
9	DAMP_ERR	I	DAMP ERROR
10	LID_RIGHT	O	SLIDING DOOR OPEN.CLOSE CONTROL RIGHT
11	GND_MMOD	-	GROUND
12	OSC2(OUT)	O	OSCILLATOR OUTPUT
13	OSC1(IN)	I	OSCILLATOR INPUT
14	VSS	-	GROUND
15	XI	O	OSCILLATOR OUTPUT
16	XO	O	OSCILLATOR INPUT
17	VDD33	-	+3.3 VOLTAGE SUPPLY
18	VDD18	-	+1.8 VOLTAGE SUPPLY
19	NRST	I	ACTIVE LOW RESET
20	CD_MREQ	O	CD MICRO-PROCESSOR INTER-RUPT REQUEST
21	REST_SW	I	RESET SWITCH
22	CD_RESET	O	CD RESET
23	iPod_CHG_SEL	I	iPod CHANGE SELECTION
24	USB_EN	O	USB ENABLE
25	REM_IN	I	REMOTE CONTROL INPUT
26	USB_OVC	I	USB OVERCURRENT
27	USB_IN	I	USB IN
28	TUN_INT	I	TUNER INTERRUPT
29	CD_S_REQ	I	CD STATUS REQUEST
30	NC	I	NO CONNECTION
31	BT_RX	O	BT_RECEIVE
32	BT_TX	I	BT_TRANSMIT
33	BT_MFB	-	TRIGGER FOR BT MODULE RESET ACTIVE "L"
34	CD_SI	O	CD SERIAL INPUT
35	CD_SO	I	CD SERIAL OUTPUT
36	CD_SCLK	O	CD SERIAL CLOCK
37	VDD18	-	+1.8 VOLTAGE SUPPLY
38	CD_CW	O	TRAVERSE MOTOR CLOCKWISE
39	VSS	-	GROUND
40	CD_CCW	O	TRAVERSE MOTOR COUNTER-CLOCKWISE
41	NC	O	NO CONNECTION
42	NC	-	NO CONNECTION
43	MUX_OE	O	iPod OVERCURRENT PROTEC-TION
44	POS_SW_ABN	O	POSTION SWITCH ABNORMAL DETECT
45	iPod_DET	I	iPod DETECT
46	POS_SW_L	I	SLIDING DOOR POSITION DETECT (L)
47	POS_SW_CEN	I	SLIDING DOOR POSITION DETECT ©
48	POS_SW_R	I	SLIDING DOOR POSITION DETECT ®
49	iPod_PCONT	O	iPod POWER CONTROL
50	PCONT_POW	O	POWER CONTROL
51	SMPS_CUT	O	SMPS CUTOFF
52	IPOD_OVC	I	NO CONNECTION

Pin No.	Mark	I/O	Function
53	STBY_CTRL	O	STANDBY CONTROL
54	IPOD_PCONT2	I	IPOD PCONT
55	AP_RESET	O	AirPlay RESET
56	AP_V1R2_ON	-	NO CONNECTION
57	AP_V1R9_ON	O	NO CONNECTION
58	AP_CS	O	AirPlay CHIP SELECT
59	NC	O	NO CONNECTION
60	EE_SCL	O	EEPROM SERIAL CLOCK
61	EE_SDA	I/O	EEPROM SERIAL DATA
62	CRTIMER	-	NO CONNECTION
63	VSS	-	GROUND
64	AP_LED1	O	AirPlay LED DRIVE
65	AP_LED2	O	AirPlay LED DRIVE
66	AP_LED3	O	AirPlay LED DRIVE
67	iPod_SEL	O	iPod SELECT
68	iPad_SEL	-	iPad SELECT
69	NC	O	NO CONNECTION
70	BT_LED	O	BT LED DRIVE
71	NC	-	NO CONNECTION
72	AP_DIN	O	AirPlay DATA IN
73	AP_DOUT	O	AirPlay DATA OUT
74	AP_CLK	O	AirPlay CLOCK
75	APD_OUT (TEST ONLY)	O	AUTO POWER DOWN DETECT
76	FL_DI	O	FL DISPLAY DATA INPUT
77	FL_CE	O	FL DISPLAY CHIP SELECT
78	FL_CLK	O	FL DISPLAY CLOCK
79	TU_SDA	I/O	TUNER SERIAL DATA
80	TU_RST	O	TUNER RESET
81	TU_SCL	O	TUNER SERIAL CLOCK
82	DAMP_SDA	I/O	DAMP SERIAL DATA
83	UART_SEL	O	UART SELECT ENABLE
84	DAMP_SCL	O	DAMP SERIAL CLOCK
85	AP_IREQ	O	AIRPLAU INTERUPT REQUEST
86	NC	-	NO CONNECTION
87	I2S_SEL (Select AP/BT)	O	NO CONNECTION
88	ADC_APD	O	NO CONNECTION
89	VDD	-	VOLTAGE SUPPLY
90	BT_RST	O	BT_RESET
91	VSS	-	GROUND
92	KEY1	I	KEY INPUT 1
93	REGION_SUB	I	REGION SETTING
94	KEY2	I	KEY INPUT 2
95	SMPS_REG	I	SMPS TYPE DETECTION
96	PDET1 (REG)	I	REGULATOR POWER RISE DETECT
97	REGION	I	TUNER REGION SETTING
98	BT_MUTE	I	BT_MUTE
99	M_VDET	I	SMPS POWER DETECT / POWER DROP DETECTION
100	VREF+	-	VOLTAGE SUPPLY

18 Exploded View and Replacement Parts List

18.1. Exploded View and Mechanical replacement Parts List

18.1.1. Cabinet Parts Location

NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.

SC-HC58P/PC-K
CABINET DRAWINGS

SC-HC58P/PC-K
CABINET DRAWINGS

NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.

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18.1.2. Packaging

ACCESSORIES BAG

⚠ A1   REMOTE CONTROL
A1-1   R/C BATTERY COVER

⚠ A2   AC CORD

⚠ A3   O/I BOOK

A4   FM INDOOR ANTENNA

WALL BRACKET ASS'Y

A5   SAFETY HOLDER

A6 X 2   WALL MOUNT BRACKET

A7   SCREW

*P2

P3

SC-HC58P/PC

*P2

FRONT   P1

P2* ⌐ POLYFOAM (LEFT)
     ⌐ POLYFOAM (RIGHT)

SC-HC58P/PC-K
PACKAGING DRAWINGS

H
G
F
E
D
C
B
A

1   2   3   4   5   6   7   8   9   10   11   12   13

18.1.3. 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	REE1665	30P FFC (MAIN-CD SERVO)	1	
	2	REE1727	15P FFC (BUTTON-MAIN)	1	
	3	RXQ2193	20P FFC (REMOTE SENSOR-MAIN)	1	
	4	REE1729	20P FFC (AIR-PLAY-MAIN)	1	
	5	REX1517	4P CABLE WIRE (MOTOR-REMOTE SENSOR)	1	
	6	REX1564	2P CABLE WIRE (SP L-MAIN)	1	
	7	REX1565	2P CABLE WIRE (SP R-MAIN)	1	
	8	RXQ2184	iPhone CONNECTOR UNIT	1	
	9	REX1617	1P WIRE (SMPS SHIELD-AirPlay ANTENNA)	1	
	10	REX1592	5P CABLE WIRE (INTERLOCK SWITCH-REMOTE SENSOR)	1	
	11	RDG0655	DRIVE GEAR A	1	
	12	RDG0656	DRIVE GEAR B	1	
	13	RDG0657	RELAY GEAR	1	
	14	RDG0658-1	PULLEY GEAR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	15	RMM0309	CENTERING STOPPER	1	
	16	RMM0311	TRIGGER LEVER	1	
	17	RMN1049	FL HOLDER	1	
	18	RMM0310	SW LEVER	1	
	19	RGQ0735-R	FL FILTER	1	
	20	RYQ1179-K	FRONT ORNAMENT UNIT L	1	
	21	RYQ1180-K	FRONT ORNAMENT UNIT R	1	
	22	RFKPHC37P-K	MOTOR ASS'Y	1	
	23	XTB3+8JFJ-J	SCREW	1	
	24	RYP1853-K	DOOR UNIT	1	
	24-1	RDP0120-1	IDLING RACK	1	
	25	REX1605	AIRPLAY ANTENNA WIRE	1	
	26	RYP1844C-K	BUTTON ORNAMENT UNIT	1	
	27	RGK2501-K	IPHONE SUPPORT	1	
	28	RGK2502-K1	IPHONE DOCK	1	
	29	RGL0763-Q	LIGHTING PIECE	2	
	30	RGP1519-K	UPPER GUIDE RAIL	1	
	31	RGP1520-K	LOWER GUIDE RAIL	1	
	32	RGQ0646-K	SHUTTER	1	
	33	RGQ0648-K1	SLIDE GUIDE PIN	1	
	34	RGQ0649A-K	JACK LID	1	
	35	RYQ0903-K	BASE STAND UNIT	1	
	35-1	RKAX0028-K	LEG FELT	4	
	36	RGP1638-K	FRONT CABINET	1	
	37	RGQ0726-K	AC INLET HOLDER	1	
	38	RGQ0727A-K1	TUNER HOLDER	1	
	39	RGQ0734-K	I-POD BASE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	40	RGQ0756-K	CONNECTOR HOLDER	1	
	41	RMB0967	IPHONE SUPPORT SPRING	1	
	42	RMQ1921	IPOD CUSHION	1	
	43	RHD20089	SCREW	6	
	44	RHD26043-1	SCREW	15	
	45	RHD26046	SCREW	21	
	46	RHD26046-K	SCREW	18	
	47	RHD30092-1	SCREW	3	
	48	RKW0980-1Q	TOP ORNAMENT	1	
	49	RKW0981-K	BOTTOM ORNAMENT	1	
⚠	50	RFKHHC58P-K	REAR CABINET ASS'Y	1	P
⚠	50	RFKHHC58PC-K	REAR CABINET ASS'Y	1	PC
	51	RMB0938	SHUTTER SPRING	1	
	52	RMB0959	LID SPRING	1	
	53	RME0489	CENTERING SPRING	1	
	54	RME0490	LEVER SPRING	1	
	57	RMG0877-K	LID CUSHION	4	
	60	RMR2047-K1	MOTOR BASE	1	
	61	RMGX0033	CUSHION RUBBER	2	
	62	RMQ2009	EPT SEALER (FOR PASSIVE RADIA-TOR)	2	
	63	RMQ2089	HIMELON	1	
⚠	64	RMV0410	SMPS INSULATOR SHEET C	1	
⚠	65	RMV0415	SMPS INSULATOR SHEET B	1	
	66	RSC1097	D-AMP HEAT ABSORBER	2	
	67	RSC1196	BACK SHIELD	1	
⚠	68	RSC1197A	SMPS BRACKET	1	
⚠	69	RSC1198	SMPS SHIELD PLATE	1	
	70	RSC1232	IPHONE GROUND PLATE	1	
	71	RYP1800-K	SPK CABINET L ASS'Y	1	
	72	RYP1801-K	SPK CABINET R ASS'Y	1	
	73	VHD1224-1A	SCREW	16	
	74	VMG1720	BELT	1	
	75	XTB3+10JFJK	SCREW	1	
	76	RMFX1028	HIMELON	2	
	77	RMQ2144	EPT SEALER BAR-RIER	2	
	78	RMQ2153	EPT SEALER BAR-RIER	2	
	80	RMY0433	HEATSINK PLATE	1	
			SPEAKERS		
	SP1	EAS65P144E	SPEAKER	1	
	SP2	EAS65P144E	SPEAKER	1	
	SP3	RXX0323	PASSIVE RADIA-TOR ASS'Y	1	
	SP4	RXX0323	PASSIVE RADIA-TOR ASS'Y	1	
			TRAVERSE DECK		
⚠	301	RAE5301Z-V	TRAVERSE UNIT	1	
	302	RME0109-1	FLOATING SPRING	4	
	303	RMS0757-1	FIX PIN	4	
	304	RMG0730-G	FLOATING RUBBER	4	
	305	RMQ2020-1J	MIDDLE CHASSIS	1	
	306	XTN2+6GFJ	SCREW	3	
			PACKING MATERI-ALS		
	P1	RPG0C86	PACKING CASE	1	P
	P1	RPG0C87	PACKING CASE	1	PC
	P2	RPN2511	POLYFOAM	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	P3	RPFX0262-1	MIRAMAT	1	
			ACCESSORIES		
⚠	A1	N2QAYC000082	REMOTE CONTROL	1	
	A1-1	RKK-HC57P-K	R/C BATTERY COVER	1	
⚠	A2	K2CB2CB00022	AC CORD	1	
⚠	A3	RQT9754-P	O/I BOOK (En)	1	
⚠	A3	RQT9755-C	O/I BOOK (Cf)	1	PC
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	RGQ0660-K	SAFETY HOLDER	1	
	A6	RMQX1082-S	WALL MOUNT BRACKET	2	
	A7	XTB3+8JFJK-J	SCREW	1	

18.2. Electrical Replacement Parts List

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.
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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".
- 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.
- Parts mentioned [SPG] in the Remarks column are supplied by JAPAN.

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PRINTED CIRCUITS BOARDS		
	PCB1	REP4781E	CD SERVO P.C.B.	1	(RTL)
	PCB2	REP4870LA	MAIN P.C.B.	1	(RTL)
	PCB3	REP4870LC	REMOTE SENSOR P.C.B.	1	(RTL)
	PCB4	REP4871BB	PANEL P.C.B.	1	(RTL)
	PCB5	REP4871BC	INTERLOCK SWITCH P.C.B.	1	(RTL)
	PCB6	REP4871BD	MOTOR P.C.B.	1	(RTL)
	PCB7	REP4904B	BUTTON P.C.B.	1	(RTL)
⚠	PCB8	REP4871BA	SMPS P.C.B.	1	(RTL)
	PCB9	RSNE011B0	BLUETOOTH MODULE	1	JIGS & ADJ
	PCB10	REP4911A	AIRPLAY CONNECTOR P.C.B	1	(RTL)
	PCB11	REP4870LE	AirPlay ANTENNA P.C.B.	1	(RTL)
			INTEGRATED CIRCUITS		
	IC52	VUEALLPT058	IC	1	(E.S.D) [SPG] JIGS & ADJ
	IC400	C1AB00003800	IC	1	(E.S.D)
	IC401	C0DBGYY00915	IC	1	(E.S.D)
	IC450	C1AB00003801	IC	1	(E.S.D)
	IC943	C0JBAC000363	IC	1	(E.S.D)
	IC1100	C0DBAYY01652	IC	1	(E.S.D)
	IC1101	C0DBAYY01653	IC	1	(E.S.D)
	IC1102	C0DBEYY00146	IC	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC1104	C0DBAYY01653	IC	1	(E.S.D)
	IC1105	C0DBEYY00146	IC	1	(E.S.D)
	IC1700	C0DACYY00012	IC	1	(E.S.D)
	IC1701	C0DBZMC00006	IC	1	(E.S.D)
	IC2000	C0DBGYY01654	IC	1	(E.S.D)
	IC3001	C0DBGYY01640	IC	1	(E.S.D)
	IC6000	C0DBZYY00610	IC	1	(E.S.D)
	IC6001	C0JBAR000586	IC	1	(E.S.D)
	IC6002	RFKWMHC58PM	IC	1	(E.S.D)
	IC6003	C0EBE0000240	IC	1	(E.S.D)
	IC6004	C3EBEY000037	IC	1	(E.S.D)
	IC6006	C0DBZYY00610	IC	1	(E.S.D)
	IC6500	C0DBZYY00555	IC	1	(E.S.D)
	IC7001	MN6627947RK	IC	1	(E.S.D)
	IC7002	C0GBY0000117	IC	1	(E.S.D)
	IC7111	RSNE011B0	BLUETOOTH MODULE	1	JIGS & ADJ
	IC7502	MFI337S3959	IC	1	(E.S.D)
	IC7704	C3ABMY000027	IC	1	(E.S.D)
	IC7851	C3EBFY000029	IC	1	(E.S.D)
			TRANSISTORS		
	Q400	B1ABCF000011	TRANSISTOR	1	(E.S.D)
	Q401	B1ABCF000011	TRANSISTOR	1	(E.S.D)
	Q402	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q403	B1ABCF000011	TRANSISTOR	1	(E.S.D)
	Q404	B1CHRC000047	TRANSISTOR	1	(E.S.D)
	Q1700	B1ABGC000001	TRANSISTOR	1	(E.S.D)
	Q1701	DSA500100L	TRANSISTOR	1	(E.S.D)
	Q6004	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q6005	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q6006	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	Q6007	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	Q6037	B1ADCE000012	TRANSISTOR	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Q6500	B1ABCF000176	TRANSISTOR	1	(E.S.D)
	Q6501	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	Q6502	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	Q6801	B1ABCF000011	TRANSISTOR	1	(E.S.D)
	Q6802	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q7102	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q7601	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	QR400	B1GBCFNN0038	TRANSISTOR	1	(E.S.D)
	QR910	B1GBCFJN0038	TRANSISTOR	1	(E.S.D)
	QR911	B1GBCFJN0038	TRANSISTOR	1	(E.S.D)
	QR950	B1GBCFJN0038	TRANSISTOR	1	(E.S.D)
	QR1100	B1GBCFNN0038	TRANSISTOR	1	(E.S.D)
	QR1700	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
			DIODES		
	D801	B0ECKM000008	DIODE	1	(E.S.D)
	D900	B3AAB0000501	DIODE	1	(E.S.D)
	D910	B3AKB0000024	DIODE	1	(E.S.D)
	D1100	DA2J10100L	DIODE	1	(E.S.D)
	D1101	DA2J10100L	DIODE	1	(E.S.D)
	D1103	DZ2J062M0L	DIODE	1	(E.S.D)
	D1112	DZ2J062M0L	DIODE	1	(E.S.D)
	D1113	DZ2J062M0L	DIODE	1	(E.S.D)
	D1114	DZ2J062M0L	DIODE	1	(E.S.D)
	D1115	DZ2J062M0L	DIODE	1	(E.S.D)
	D1162	DZ2J062M0L	DIODE	1	(E.S.D)
	D1700	B0ABSM000008	DIODE	1	(E.S.D)
	D1701	B0EBLR000033	DIODE	1	(E.S.D)
	D1702	DZ2J075M0L	DIODE	1	(E.S.D)
	D1703	B0EAKU000002	DIODE	1	(E.S.D)
	D1708	DA22F2100L	DIODE	1	(E.S.D)
	D1709	DZ2J330M0L	DIODE	1	(E.S.D)
	D6001	DA2J10100L	DIODE	1	(E.S.D)
	D6002	DA2J10100L	DIODE	1	(E.S.D)
	D6003	DA2J10100L	DIODE	1	(E.S.D)
	D6004	DA2J10100L	DIODE	1	(E.S.D)
	D6005	DA2J10100L	DIODE	1	(E.S.D)
	D6006	DA2J10100L	DIODE	1	(E.S.D)
	D6007	DA2J10100L	DIODE	1	(E.S.D)
	D6008	B0JCGD000016	DIODE	1	(E.S.D)
	D6030	DA2J10100L	DIODE	1	(E.S.D)
	D6031	DA2J10100L	DIODE	1	(E.S.D)
	D6040	DA2J10100L	DIODE	1	(E.S.D)
	D6041	DA2J10100L	DIODE	1	(E.S.D)
	D6042	DA2J10100L	DIODE	1	(E.S.D)
	D6043	DA2J10100L	DIODE	1	(E.S.D)
	D6801	DA2J10100L	DIODE	1	(E.S.D)
	D6802	DA2J10100L	DIODE	1	(E.S.D)
	D6803	DA2J10100L	DIODE	1	(E.S.D)
	D6804	DA2J10100L	DIODE	1	(E.S.D)
	D6806	DZ2J051M0L	DIODE	1	(E.S.D)
	D7111	B0JCGD000016	DIODE	1	(E.S.D)
	D7112	DA2J10100L	DIODE	1	(E.S.D)
	D7650	DZ2J056M0L	DIODE	1	(E.S.D)
⚠	Z1752	ERZV10V511CS	ZNR	1	(E.S.D)
			VARISTOR		
	VA51	EZAEG2A50AX	VARISTOR	1	
			SWITCHES		
	S641	K0L1BA000078	SW ABN	1	
	S642	K0L1BA000078	SW RIGHT	1	
	S643	K0L1BA000078	SW CENTER	1	
	S901	EVQ11G04M	SW POWER	1	
	S902	EVQ11G04M	SW iPod OP/CL	1	
	S904	EVQ11G04M	SW MULTI FN	1	
	S906	EVQ11G04M	SW STOP	1	
	S907	EVQ11G04M	SW PLAY/PAUSE	1	
	S910	EVQ11G04M	SW NET	1	
	S911	EVQ11G04M	SW REV	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	S912	EVQ11G04M	SW FWD	1	
	S913	EVQ11G04M	SW VOL -	1	
	S914	EVQ11G04M	SW VOL +	1	
	S915	EVQ11G04M	SW CD OPEN	1	
	S931	K0C111A00010	SW LEFT	1	
	S7201	K0L1BA000158	SW RESET	1	
			CONNECTORS		
	CN400	K1KA02AA0180	2P CONNECTOR	1	
	CN401	K1KA02AA0180	2P CONNECTOR	1	
	CN900	K1MN15B00121	15P CONNECTOR	1	
	CN931	K1KA04BA0061	4P CONNECTOR	1	
	CN941	K1MN16BA0005	16P CONNECTOR	1	
	CN1100	K1KB07A00028	7P CONNECTOR	1	
	CN6004	K1MN20A00013	20P CONNECTOR	1	
	CN6005	K1MY16AA0267	16P CONNECTOR	1	
	CN6006	K1MN30A00019	30P CONNECTOR	1	
	CN6007	K1MN15AA0046	15P CONNECTOR	1	
	CN6009	K1MN06C00005	6P CONNECTOR	1	
	CN7001	K1MN24BA0197	24P CONNECTOR	1	
	CN7002	K1MN30A00046	30P CONNECTOR	1	
	CN7031	K1MN06C00005	6P CONNECTOR	1	
	CN7801	K1KA05BA0014	5P CONNECTOR	1	
	JK6000	K1FY104B0078	USB CONNECTOR	1	
	P800	K3ZZ04800002	AirPlay CONNECTOR	1	
	P801	K1MN20B00019	20P CONNECTOR	1	
	P900	K1KB08B00041	8P CONNECTOR	1	
	P941	K1KA05BA0061	5P CONNECTOR	1	
	P942	K1KA04BA0061	4P CONNECTOR	1	
	P945	K1KA05BA0047	5P CONNECTOR	1	
	P1700	K1KA07BA0063	7P CONNECTOR	1	
	P6801	K1KA08AA0031	8P CONNECTOR	1	
			COILS AND INDUCTORS		
	K7724	J0JYB0000013	INDUCTOR	1	
	L51	G1CR18JA0020	INDUCTOR	1	
	L60	J0JYC0000196	INDUCTOR	1	
	L400	G1C150M00023	INDUCTOR	1	
	L401	G1C150M00023	INDUCTOR	1	
	L402	G1C150M00023	INDUCTOR	1	
	L403	G1C150M00023	INDUCTOR	1	
	L502	J0JYC0000348	INDUCTOR	1	
	L504	J0JHC0000046	INDUCTOR	1	
	L1101	G1C100MA0226	INDUCTOR	1	
	L1102	G1C100MA0226	INDUCTOR	1	
	L1105	G1C100MA0226	INDUCTOR	1	
	L1700	G1C100K00019	INDUCTOR	1	
⚠	L1702	G0B922G00002	LINE FILTER	1	
	L6006	J0JYC0000366	INDUCTOR	1	
	L7231	J0JYC0000305	INDUCTOR	1	
	L7336	J0JYB0000013	INDUCTOR	1	
	L7367	J0JCC0000405	INDUCTOR	1	
	LB51	J0JBC0000134	INDUCTOR	1	
	LB61	J0JHC0000118	INDUCTOR	1	
	LB400	J0JHC0000118	INDUCTOR	1	
	LB401	J0JHC0000118	INDUCTOR	1	
	LB402	J0JBC0000134	INDUCTOR	1	
	LB403	J0JBC0000134	INDUCTOR	1	
	LB404	J0JGC0000063	INDUCTOR	1	
	LB406	J0JHC0000034	INDUCTOR	1	
	LB407	J0JHC0000034	INDUCTOR	1	
	LB408	J0JHC0000034	INDUCTOR	1	
	LB409	J0JHC0000034	INDUCTOR	1	
	LB411	J0JYC0000305	INDUCTOR	1	
	LB450	J0JYC0000196	INDUCTOR	1	
	LB451	J0JYC0000196	INDUCTOR	1	
	LB452	J0JYC0000305	INDUCTOR	1	
	LB801	J0JYC0000490	INDUCTOR	1	
	LB802	J0JHC0000046	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB803	J0JYC0000490	INDUCTOR	1	
	LB804	J0JYC0000490	INDUCTOR	1	
	LB805	J0JYC0000490	INDUCTOR	1	
	LB806	J0JYC0000490	INDUCTOR	1	
	LB807	J0JYC0000490	INDUCTOR	1	
	LB808	J0JYC0000490	INDUCTOR	1	
	LB809	J0JYC0000490	INDUCTOR	1	
	LB810	J0JHC0000046	INDUCTOR	1	
	LB811	J0JYC0000490	INDUCTOR	1	
	LB812	J0JHC0000046	INDUCTOR	1	
	LB813	J0JHC0000046	INDUCTOR	1	
	LB814	J0JHC0000046	INDUCTOR	1	
	LB815	J0JHC0000046	INDUCTOR	1	
	LB816	J0JHC0000046	INDUCTOR	1	
	LB1101	J0JBC0000134	INDUCTOR	1	
	LB1103	J0JHC0000046	INDUCTOR	1	
	LB1104	J0JGC0000063	INDUCTOR	1	
	LB1105	J0JGC0000063	INDUCTOR	1	
	LB1106	J0JGC0000063	INDUCTOR	1	
	LB1107	J0JGC0000063	INDUCTOR	1	
	LB1161	J0JHC0000046	INDUCTOR	1	
	LB1162	J0JHC0000118	INDUCTOR	1	
	LB1221	J0JGC0000063	INDUCTOR	1	
	LB6000	J0JHC0000046	INDUCTOR	1	
	LB6001	J0JHC0000118	INDUCTOR	1	
	LB6002	J0JHC0000118	INDUCTOR	1	
	LB6003	J0JHC0000118	INDUCTOR	1	
	LB6030	J0JYC0000196	INDUCTOR	1	
	LB6802	J0JHC0000118	INDUCTOR	1	
	LB6803	J0JHC0000118	INDUCTOR	1	
	LB6805	J0JHC0000118	INDUCTOR	1	
	LB7031	D0GBR00J0004	0 1/10W	1	
	LB7033	J0JBC0000134	INDUCTOR	1	
	LB7034	J0JBC0000134	INDUCTOR	1	
			TRANSFORMER		
⚠	T1700	G4DYZ0000071	TRANSFORMER	1	
			REMOTE SENSOR		
	IR941	B3RAB0000110	REMOTE SENSOR	1	
			PHOTO COUPLER		
⚠	PC1702	B3PBA0000579	PHOTO COUPLER	1	
			TERMINALS		
	ZJ1100	K4CZ01000027	TERMINAL	1	
	ZJ1701	K4CZ01000027	TERMINAL	1	
	ZJ1702	K4CZ01000027	TERMINAL	1	
			OSCILLATORS		
	X400	H0J245500110	OSCILLATOR	1	
	X6000	H2B800400007	OSCILLATOR	1	
	X6001	H0A327200181	OSCILLATOR	1	
	X7201	H2D169500017	OSCILLATOR	1	
	X7205	H0J120500076	OSCILLATOR	1	
			LCD DISPLAY		
	FL6801	A2BB00000186	LCD DISPLAY	1	
			FUSE		
⚠	F1	K5G202Y00006	FUSE	1	
			JACKS		
	JK51	K4ZZ02000103	JK FM ANTENNA	1	
	JK450	K2HC1YYB0033	JK HEADPHONE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	P1	K1QZA1AD0014	RF CONNECTOR	1	
⚠	P1751	K2AB2B000007	AC INLET	1	
			CHIP JUMPERS		
	K401	D0GBR00J0004	0 1/10W	1	
	K7001	D0GBR00J0004	0 1/10W	1	
	K7011	D0GBR00J0004	0 1/10W	1	
	K7101	D0GBR00J0004	0 1/10W	1	
	K7102	D0GBR00J0004	0 1/10W	1	
	K7111	D0GBR00J0004	0 1/10W	1	
	K7211	D0GBR00J0004	0 1/10W	1	
	K7212	D0GBR00J0004	0 1/10W	1	
	K7258	D0GBR00J0004	0 1/10W	1	
	K7278	D0GBR00J0004	0 1/10W	1	
	K7342	D0GBR00J0004	0 1/10W	1	
	LB52	D0GAR00J0005	0 1/16W	1	
	LB6004	D0GBR00J0004	0 1/10W	1	
	LB6801	D0GBR00J0004	0 1/10W	1	
	LB6804	D0GBR00J0004	0 1/10W	1	
	LB7032	D0GBR00J0004	0 1/10W	1	
	R443	D0GBR00J0004	0 1/10W	1	
	W6802	D0GDR00JA017	0 1/8W	1	
			RESISTORS		
	K7202	D0GB101JA065	100 1/10W	1	
	K7701	D0GB271JA065	270 1/10W	1	
	K7702	D0GB271JA065	270 1/10W	1	
	K7703	D0GB271JA065	270 1/10W	1	
	R51	D0GB222JA065	2.2K 1/10W	1	
	R52	D0GB561JA065	560 1/10W	1	
	R53	D0GA472JA023	4.7K 1/16W	1	
	R54	D0GA472JA023	4.7K 1/16W	1	
	R55	D0GA221JA023	220 1/16W	1	
	R56	D0GB221JA065	220 1/10W	1	
	R57	D0GA102JA023	1K 1/16W	1	
	R59	D0GB222JA065	2.2K 1/10W	1	
	R60	D0GB222JA065	2.2K 1/10W	1	
	R401	D0GB222JA065	2.2K 1/10W	1	
	R402	D0GB222JA065	2.2K 1/10W	1	
	R403	D0GB101JA065	100 1/10W	1	
	R404	D0GB104JA065	100K 1/10W	1	
	R405	D0GB104JA065	100K 1/10W	1	
	R406	D0GB104JA065	100K 1/10W	1	
	R407	D0GB104JA065	100K 1/10W	1	
	R408	D0GB104JA065	100K 1/10W	1	
	R409	D0GB104JA065	100K 1/10W	1	
	R410	D0GB223JA065	22K 1/10W	1	
	R411	D0GB472JA065	4.7K 1/10W	1	
	R412	D0GB105JA065	1M 1/10W	1	
	R413	D0GB152JA065	1.5K 1/10W	1	
	R414	D0GB101JA065	100 1/10W	1	
	R415	D0GB101JA065	100 1/10W	1	
	R416	D0GB101JA065	100 1/10W	1	
	R417	D0GB101JA065	100 1/10W	1	
	R418	D0GB104JA065	100K 1/10W	1	
	R419	D0GB104JA065	100K 1/10W	1	
	R420	D0GB223JA065	22K 1/10W	1	
	R421	D0GB153JA065	15K 1/10W	1	
	R422	D0GB223JA065	22K 1/10W	1	
	R423	D0GB153JA065	15K 1/10W	1	
	R424	D0GB223JA065	22K 1/10W	1	
	R425	D0GB222JA065	2.2K 1/10W	1	
	R426	D0GB223JA065	22K 1/10W	1	
	R427	D0GB222JA065	2.2K 1/10W	1	
	R428	D0GB222JA065	2.2K 1/10W	1	
	R429	D0GB222JA065	2.2K 1/10W	1	
	R430	D0GB153JA065	15K 1/10W	1	
	R431	D0GB153JA065	15K 1/10W	1	
	R432	D0GB333JA065	33K 1/10W	1	
⚠	R433	D0GB333JA065	33K 1/10W	1	
	R434	D0GB333JA065	33K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R435	D0GB333JA065	33K 1/10W	1	
	R436	D0GB101JA065	100 1/10W	1	
	R437	D0GB101JA065	100 1/10W	1	
	R438	D0GB473JA065	47K 1/10W	1	
	R439	D0GB473JA065	47K 1/10W	1	
	R440	D0GB473JA065	47K 1/10W	1	
	R441	D0GB473JA065	47K 1/10W	1	
	R444	D0GB473JA065	47K 1/10W	1	
	R446	D0GB102JA065	1K 1/10W	1	
	R447	D0GB102JA065	1K 1/10W	1	
	R448	D0GB561JA065	560 1/10W	1	
	R449	D0GB473JA065	47K 1/10W	1	
	R451	D0GB221JA065	220 1/10W	1	
	R452	D0GB102JA065	1K 1/10W	1	
	R453	D0GB273JA065	27K 1/10W	1	
	R471	D0GB221JA065	220 1/10W	1	
	R472	D0GB221JA065	220 1/10W	1	
	R473	D0GB221JA065	220 1/10W	1	
	R474	D0GB221JA065	220 1/10W	1	
	R475	D0GB221JA065	220 1/10W	1	
	R476	D0GB221JA065	220 1/10W	1	
	R477	D0GB221JA065	220 1/10W	1	
	R478	D0GB221JA065	220 1/10W	1	
	R479	D0GB221JA065	220 1/10W	1	
	R480	D0GB274JA065	270K 1/10W	1	
	R800	D0GB473JA065	47K 1/10W	1	
	R901	D0GBR00J0004	0 1/10W	1	
	R902	D0GB122JA065	1.2K 1/10W	1	
	R903	D0GB122JA065	1.2K 1/10W	1	
	R904	D0GB222JA065	2.2K 1/10W	1	
	R905	D0GB332JA065	3.3K 1/10W	1	
	R906	D0GB472JA065	4.7K 1/10W	1	
	R907	D0GB752JA065	7.5K 1/10W	1	
	R911	D0GB122JA065	1.2K 1/10W	1	
	R912	D0GB122JA065	1.2K 1/10W	1	
	R913	D0GB222JA065	2.2K 1/10W	1	
	R914	D0GB332JA065	3.3K 1/10W	1	
	R921	D0GB472JA065	4.7K 1/10W	1	
	R922	D0GB561JA065	560 1/10W	1	
	R923	D0GB391JA065	390 1/10W	1	
	R941	D0GB330JA065	33 1/10W	1	
	R942	D0GBR00J0004	0 1/10W	1	
	R943	D0GB104JA065	100K 1/10W	1	
	R944	D0GB102JA065	1K 1/10W	1	
	R945	D0GB152JA065	1.5K 1/10W	1	
	R950	D0GB182JA065	1.8K 1/10W	1	
	R1102	D0GBR00J0004	0 1/10W	1	
	R1103	ERJ3RBD4642V	46.4K 1/16W	1	
	R1104	D1BB1002A074	10K 1/10W	1	
	R1106	D0GBR00J0004	0 1/10W	1	
	R1107	D0HB183ZA002	18K 1/16W	1	
	R1108	D1BB6801A074	6.8K 1/10W	1	
	R1110	D0GFR00J0005	0 1/4W	1	
	R1111	D0GB682JA065	6.8K 1/10W	1	
	R1112	D0GB682JA065	6.8K 1/10W	1	
	R1114	D0GB100JA065	10 1/10W	1	
	R1116	ERJ3RBD4642V	46.4K 1/16W	1	
	R1118	D1BB1002A074	10K 1/10W	1	
	R1119	D0GB101JA065	100 1/10W	1	
	R1123	D0GFR00J0005	0 1/4W	1	
	R1124	D0GB682JA065	6.8K 1/10W	1	
	R1127	ERJ3GEYF474V	470K 1/10W	1	
	R1128	D1BB1003A074	100K 1/10W	1	
	R1129	D1BB1003A074	100K 1/10W	1	
	R1130	D1BB3302A074	33K 1/10W	1	
	R1131	D0GB100JA065	10 1/10W	1	
	R1167	D0GBR00J0004	0 1/10W	1	
	R1221	D0GB184JA065	180K 1/10W	1	
	R1222	D0GB473JA065	47K 1/10W	1	
	R1700	D0GD4R7JA052	4.7 1/8W	1	
	R1701	D0GB152JA065	1.5K 1/10W	1	
	R1702	D0GB682JA065	6.8K 1/10W	1	
	R1703	D0GB332JA065	3.3K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R1704	ERJ1TYJ333U	33K 1W	1	
	R1705	D0GB103JA065	10K 1/10W	1	
	R1706	D0GB223JA065	22K 1/10W	1	
	R1707	D0GB563JA065	56K 1/10W	1	
	R1708	ERJ1TYJ220U	22 1W	1	
	R1709	D0GB101JA065	100 1/10W	1	
	R1710	D1BB4702A074	47K 1/10W	1	
	R1711	D0GB103JA065	10K 1/10W	1	
	R1716	D0GB394JA065	390K 1/10W	1	
	R1717	D0GB122JA065	1.2K 1/10W	1	
	R1719	ERJ1TRQJR22U	0.22 1W	1	
⚠	R1724	ERJ12YJ105U	1M 1/2W	1	
	R1725	D0GB223JA065	22K 1/10W	1	
⚠	R1726	ERJ12YJ105U	1M 1/2W	1	
	R1727	D0GB104JA065	100K 1/10W	1	
	R1728	D1BB8201A074	8.2K 1/10W	1	
	R1729	D0GD220JA017	22 1/8W	1	
	R1730	D1BB6801A074	6.8K 1/10W	1	
	R6000	D1BB5102A073	51K 1/10W	1	
	R6001	D1BB5102A073	51K 1/10W	1	
	R6002	D0GB472JA065	4.7K 1/10W	1	
	R6003	D0GB472JA065	4.7K 1/10W	1	
	R6005	D1BB5102A073	51K 1/10W	1	
	R6006	D1BB4302A073	43K 1/10W	1	
	R6007	D0GBR00J0004	0 1/10W	1	
	R6008	D0GB101JA065	100 1/10W	1	
	R6009	D1BB5102A073	51K 1/10W	1	
	R6010	D0GB473JA065	47K 1/10W	1	
	R6011	D1BB7502A073	75K 1/10W	1	
	R6012	D0GBR00J0004	0 1/10W	1	
	R6014	D0GB104JA065	100K 1/10W	1	
	R6016	D0GB102JA065	1K 1/10W	1	
	R6019	D0GB822JA065	8.2K 1/10W	1	
	R6022	D0GB472JA065	4.7K 1/10W	1	
	R6023	D0GB472JA065	4.7K 1/10W	1	
	R6024	D0GB101JA065	100 1/10W	1	
	R6025	D0GB101JA065	100 1/10W	1	
	R6026	D0GB104JA065	100K 1/10W	1	
	R6028	D0GB104JA065	100K 1/10W	1	
	R6029	D0GB101JA065	100 1/10W	1	
	R6030	D0GB101JA065	100 1/10W	1	
	R6031	D0GB101JA065	100 1/10W	1	
	R6032	D0GB104JA065	100K 1/10W	1	
	R6033	D0GB104JA065	100K 1/10W	1	
	R6035	D0GB101JA065	100 1/10W	1	
	R6036	D0GB101JA065	100 1/10W	1	
	R6037	D0GB473JA065	47K 1/10W	1	
	R6038	D0GB103JA065	10K 1/10W	1	
	R6039	D0GB102JA065	1K 1/10W	1	
	R6041	D0GB104JA065	100K 1/10W	1	
	R6042	D0GB472JA065	4.7K 1/10W	1	
	R6043	D0GB103JA065	10K 1/10W	1	
	R6044	D0GB101JA065	100 1/10W	1	
	R6045	D0GB101JA065	100 1/10W	1	
	R6046	D0GB101JA065	100 1/10W	1	
	R6047	D0GB102JA065	1K 1/10W	1	
	R6048	D0GB101JA065	100 1/10W	1	
	R6052	D0GBR00J0004	0 1/10W	1	
	R6053	D0GB101JA065	100 1/10W	1	
	R6054	D0GB224JA065	220K 1/10W	1	
	R6055	D0GB101JA065	100 1/10W	1	
	R6056	D0GB103JA065	10K 1/10W	1	
	R6057	D0GB102JA065	1K 1/10W	1	
	R6058	D0GB822JA065	8.2K 1/10W	1	
	R6059	D0GB102JA065	1K 1/10W	1	
	R6060	D0GB101JA065	100 1/10W	1	
	R6061	D0GB102JA065	1K 1/10W	1	
	R6062	D0GB101JA065	100 1/10W	1	
	R6063	D0GB104JA065	100K 1/10W	1	
	R6064	D0GB101JA065	100 1/10W	1	
	R6065	D0GB101JA065	100 1/10W	1	
	R6066	D0GB101JA065	100 1/10W	1	
	R6067	D0GB101JA065	100 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks	Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R6068	D0GB101JA065	100 1/10W	1			R6802	D0GB473JA065	47K 1/10W	1	
	R6069	D0GB101JA065	100 1/10W	1			R6803	D0GB100JA065	10 1/10W	1	
	R6070	D0GB104JA065	100K 1/10W	1			R6804	D0GB220JA065	22 1/10W	1	
	R6072	D0GB103JA065	10K 1/10W	1			R6805	D0GB470JA065	47 1/10W	1	
	R6073	D0GB101JA065	100 1/10W	1			R6806	D0GB473JA065	47K 1/10W	1	
	R6074	D0GB101JA065	100 1/10W	1			R6810	D0GF390JA048	39 1/4W	1	
	R6075	D0GB102JA065	1K 1/10W	1			R6811	D0GF390JA048	39 1/4W	1	
	R6076	D0GB103JA065	10K 1/10W	1			R6812	D0GBR00J0004	0 1/10W	1	
	R6077	D0GB473JA065	47K 1/10W	1			R6813	D0GBR00J0004	0 1/10W	1	
	R6079	D0GB102JA065	1K 1/10W	1			R6814	D0GBR00J0004	0 1/10W	1	
	R6080	D0GB152JA065	1.5K 1/10W	1			R7010	D0GBR00J0004	0 1/10W	1	
	R6082	D0GB101JA065	100 1/10W	1			R7012	D0GBR00J0004	0 1/10W	1	
	R6084	D0GB104JA065	100K 1/10W	1			R7014	D0GBR00J0004	0 1/10W	1	
	R6086	D0GB101JA065	100 1/10W	1			R7015	D0GBR00J0004	0 1/10W	1	
	R6087	D0GB101JA065	100 1/10W	1			R7018	D0GBR00J0004	0 1/10W	1	
	R6088	D0GB101JA065	100 1/10W	1			R7033	D0GB103JA065	10K 1/10W	1	
	R6089	D0GB104JA065	100K 1/10W	1			R7034	D0GB103JA065	10K 1/10W	1	
	R6090	D0GB101JA065	100 1/10W	1			R7102	D0GBR00J0004	0 1/10W	1	
	R6091	D0GB101JA065	100 1/10W	1			R7103	D0GBR00J0004	0 1/10W	1	
	R6092	D0GB472JA065	4.7K 1/10W	1			R7104	D0GB474JA065	470K 1/10W	1	
	R6093	D0GB101JA065	100 1/10W	1			R7106	D0GA473JA023	47K 1/16W	1	
	R6094	D0GB101JA065	100 1/10W	1			R7111	D0GB103JA065	10K 1/10W	1	
	R6096	D0GB472JA065	4.7K 1/10W	1			R7111	D0GDR00J0004	0 1/8W	1	
	R6097	D0GB101JA065	100 1/10W	1			R7151	D0GBR00J0004	0 1/10W	1	
	R6098	D0GB101JA065	100 1/10W	1			R7158	D0GB330JA065	33 1/10W	1	
	R6099	D0GB101JA065	100 1/10W	1			R7173	D0GB101JA065	100 1/10W	1	
	R6100	D0GB101JA065	100 1/10W	1			R7176	D0GB101JA065	100 1/10W	1	
	R6102	D0GB332JA065	3.3K 1/10W	1			R7205	D0GB102JA065	1K 1/10W	1	
	R6103	D0GB101JA065	100 1/10W	1			R7207	D0GB103JA065	10K 1/10W	1	
	R6104	D0GB101JA065	100 1/10W	1			R7208	D0GBR00J0004	0 1/10W	1	
	R6105	D0GB104JA065	100K 1/10W	1			R7211	D0GB823JA065	82K 1/10W	1	
	R6106	D0GB101JA065	100 1/10W	1			R7212	D0GB821JA065	820 1/10W	1	
	R6107	D0GB101JA065	100 1/10W	1			R7213	D0GB272JA065	2.7K 1/10W	1	
	R6109	D0GB101JA065	100 1/10W	1			R7214	D0GB471JA065	470 1/10W	1	
	R6110	D0GB104JA065	100K 1/10W	1			R7217	D0GB102JA065	1K 1/10W	1	
	R6111	D0GB104JA065	100K 1/10W	1			R7218	D0GB102JA065	1K 1/10W	1	
	R6112	D0GB104JA065	100K 1/10W	1			R7220	D0GB105JA065	1M 1/10W	1	
	R6113	D0GB152JA065	1.5K 1/10W	1			R7221	D0GB101JA065	100 1/10W	1	
	R6114	D0GB152JA065	1.5K 1/10W	1			R7253	D0GB101JA065	100 1/10W	1	
	R6116	D0GB101JA065	100 1/10W	1			R7254	D0GB102JA065	1K 1/10W	1	
	R6117	D0GB101JA065	100 1/10W	1			R7255	D0GB103JA065	10K 1/10W	1	
	R6118	D0GB101JA065	100 1/10W	1			R7262	D0GB101JA065	100 1/10W	1	
	R6119	D0GB101JA065	100 1/10W	1			R7264	D0GB101JA065	100 1/10W	1	
	R6123	D0GB101JA065	100 1/10W	1			R7265	D0GB101JA065	100 1/10W	1	
	R6124	D0GB101JA065	100 1/10W	1			R7266	D0GB101JA065	100 1/10W	1	
	R6125	D0GB101JA065	100 1/10W	1			R7267	D0GB102JA065	1K 1/10W	1	
	R6126	D0GB101JA065	100 1/10W	1			R7315	D0GB102JA065	1K 1/10W	1	
	R6127	D0GB101JA065	100 1/10W	1			R7321	D0GB152JA065	1.5K 1/10W	1	
	R6128	D0GB101JA065	100 1/10W	1			R7322	D0GB562JA065	5.6K 1/10W	1	
	R6129	D0GB101JA065	100 1/10W	1			R7323	D0GB332JA065	3.3K 1/10W	1	
	R6132	D0GB101JA065	100 1/10W	1			R7325	D0GB101JA065	100 1/10W	1	
	R6135	D0GB101JA065	100 1/10W	1			R7327	D0GB562JA065	5.6K 1/10W	1	
	R6136	D0GB101JA065	100 1/10W	1			R7328	D0GB273JA065	27K 1/10W	1	
	R6137	D0GB101JA065	100 1/10W	1			R7329	D0GB472JA065	4.7K 1/10W	1	
	R6141	D0GB472JA065	4.7K 1/10W	1			R7331	D0GB473JA065	47K 1/10W	1	
	R6142	D0GB472JA065	4.7K 1/10W	1			R7332	D0GB123JA065	12K 1/10W	1	
	R6143	D0GB562JA065	5.6K 1/10W	1			R7335	D0GB101JA065	100 1/10W	1	
	R6144	D0GB222JA065	2.2K 1/10W	1			R7336	D0GB100JA065	10 1/10W	1	
	R6148	D0GB101JA065	100 1/10W	1			R7341	D0GB122JA065	1.2K 1/10W	1	
	R6150	D0GB101JA065	100 1/10W	1			R7349	D0GB104JA065	100K 1/10W	1	
	R6151	D0GB101JA065	100 1/10W	1			R7504	D0GB222JA065	2.2K 1/10W	1	
	R6152	D0GB101JA065	100 1/10W	1			R7505	D0GB222JA065	2.2K 1/10W	1	
	R6153	D0GB101JA065	100 1/10W	1			R7601	D0GB4R7JA065	4.7 1/10W	1	
	R6154	D0GB101JA065	100 1/10W	1			R7650	D0GB5R6JA065	5.6 1/10W	1	
	R6318	D0GB101JA065	100 1/10W	1			R7702	D0GBR00J0004	0 1/10W	1	
	R6500	D1BB4302A073	43K 1/10W	1			R7707	D0GBR00J0004	0 1/10W	1	
	R6504	D0GB473JA065	47K 1/10W	1			R7712	D0GBR00J0004	0 1/10W	1	
	R6505	D0GB472JA065	4.7K 1/10W	1			R7717	D0GBR00J0004	0 1/10W	1	
	R6506	D0GB222JA065	2.2K 1/10W	1			R7721	D0GBR00J0004	0 1/10W	1	
	R6507	D0GB562JA065	5.6K 1/10W	1			R7731	D0GBR00J0004	0 1/10W	1	
	R6508	D0GB472JA065	4.7K 1/10W	1			R7761	D0GB225JA065	2.2M 1/10W	1	
	R6509	D1BB7502A073	75K 1/10W	1			R7853	D0GB332JA065	3.3K 1/10W	1	
	R6801	D0GB1R0JA065	1 1/10W	1			R7854	D0GB332JA065	3.3K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R7896	D0GB102JA065	1K 1/10W	1	
	R7901	D0GB330JA065	33 1/10W	1	
	R7902	D0GB330JA065	33 1/10W	1	
	R7903	D0GB223JA065	22K 1/10W	1	
	R7904	D0GB223JA065	22K 1/10W	1	
			CAPACITORS		
	C51	F1H1H102B047	1000pF 50V	1	
	C61	F1G1C104A077	0.1uF 16V	1	
	C62	F1G1C104A077	0.1uF 16V	1	
	C65	D0GBR00J0004	0 1/10W	1	
	C66	F1H1H330A230	33pF 50V	1	
	C67	F1H1H3R0A508	3pF 50V	1	
	C68	F1J1A106A043	10uF 10V	1	
	C69	F1J1A106A043	10uF 10V	1	
	C70	F1H1H101B052	100pF 50V	1	
	C71	F1H1H101B052	100pF 50V	1	
	C400	F1H0J1060006	10uF 6.3V	1	
	C401	F1H0J1060006	10uF 6.3V	1	
	C402	F1H0J1060006	10uF 6.3V	1	
	C403	F1H0J1060006	10uF 6.3V	1	
	C404	F1H1A105A036	1uF 10V	1	
	C405	F1H0J1060006	10uF 6.3V	1	
	C406	F1J1E105A287	1uF 25V	1	
	C407	F1J1E105A287	1uF 25V	1	
	C408	F1J1E105A287	1uF 25V	1	
	C409	F1J1E105A287	1uF 25V	1	
	C410	F1H1H104B047	0.1uF 50V	1	
	C411	F1H1H104B047	0.1uF 50V	1	
	C412	F1H1H104B047	0.1uF 50V	1	
	C413	F1H1H104B047	0.1uF 50V	1	
	C414	F1J1H104A717	0.1uF 50V	1	
	C415	F1J1H104A717	0.1uF 50V	1	
	C416	F1H1H104B047	0.1uF 50V	1	
	C417	F1H1H102B047	1000pF 50V	1	
	C418	F1H1H4700006	47pF 50V	1	
	C419	F1H1H4700006	47pF 50V	1	
	C420	F1J1A106A043	10uF 10V	1	
	C421	F1J1A106A043	10uF 10V	1	
	C422	F1H1A105A036	1uF 10V	1	
	C424	F1H1A105A036	1uF 10V	1	
	C425	F1H1A105A036	1uF 10V	1	
	C426	F1H1H120A889	12pF 50V	1	
	C427	F1H1H150A889	15pF 50V	1	
	C428	F1H1H104B047	0.1uF 50V	1	
	C429	F1H1H103B047	0.01uF 50V	1	
	C430	F1J1E105A287	1uF 25V	1	
	C431	F1J1E105A287	1uF 25V	1	
	C432	F1J1E105A287	1uF 25V	1	
	C433	F1J1E105A287	1uF 25V	1	
	C434	F2A1E2210093	220uF 25V	1	
	C435	F1H1H102B047	1000pF 50V	1	
	C436	F1H1H102B047	1000pF 50V	1	
	C437	F1H1H102B047	1000pF 50V	1	
	C438	F1H1H102B047	1000pF 50V	1	
	C439	F1H1A105A036	1uF 10V	1	
	C440	F1H1A105A036	1uF 10V	1	
	C441	F1H1H181B052	180pF 50V	1	
	C442	F1H1H680A831	68pF 50V	1	
	C443	F1H1H680A831	68pF 50V	1	
	C444	F1H1H680A831	68pF 50V	1	
	C445	F1H1H181B052	180pF 50V	1	
	C446	F1H1H102A885	1000pF 50V	1	
	C447	F1H1E223A161	0.022uF 25V	1	
	C448	F1H1E223A161	0.022uF 25V	1	
	C449	F1H1H103B047	0.01uF 50V	1	
	C450	F1H1H680A831	68pF 50V	1	
	C451	F1H1H680A831	68pF 50V	1	
	C452	F1H1H680A831	68pF 50V	1	
	C453	F1H1A105A036	1uF 10V	1	
	C454	F1H1H102B047	1000pF 50V	1	
	C455	F1H1H102B047	1000pF 50V	1	
	C458	F1H1H102B047	1000pF 50V	1	
	C459	F1H1H102B047	1000pF 50V	1	
	C501	F1G1C104A077	0.1uF 16V	1	
	C502	F1G1C104A077	0.1uF 16V	1	
	C941	F1H1A105A036	1uF 10V	1	
	C945	F1H1H104B047	0.1uF 50V	1	
	C1000	F1H1A105A036	1uF 10V	1	
	C1001	F1H1H102B047	1000pF 50V	1	
	C1104	F1K1C2260001	22uF 16V	1	
	C1106	F1J1A106A043	10uF 10V	1	
	C1107	F1K1C2260001	22uF 16V	1	
	C1108	F1H1H104A783	0.1uF 50V	1	
	C1109	F1G1C1030008	0.01uF 16V	1	
	C1110	F1J1H1020015	1000pF 50V	1	
	C1111	F1H1H682B047	6800pF 50V	1	
	C1113	F1H1H104B047	0.1uF 50V	1	
	C1115	F1H1H682B047	6800pF 50V	1	
	C1117	F1H1H102A885	1000pF 50V	1	
	C1118	F1K1E1060001	10uF 25V	1	
	C1119	F1H1H473A220	0.047uF 50V	1	
	C1120	F1H0J4750004	4.7uF 6.3V	1	
	C1121	F2A1E2210093	220uF 25V	1	
	C1122	F1J1E4750002	4.7uF 25V	1	
	C1123	F1H1H222A219	2200pF 50V	1	
	C1125	F1H1H103B047	0.01uF 50V	1	
	C1126	F1G1C1030008	0.01uF 16V	1	
	C1129	F1H1H331A885	330pF 50V	1	
	C1133	F1H1H102B047	1000pF 50V	1	
	C1135	F1J1A106A043	10uF 10V	1	
	C1136	F1K1C2260001	22uF 16V	1	
	C1138	F1G1C1030008	0.01uF 16V	1	
	C1139	F1J1H1020015	1000pF 50V	1	
	C1140	F1H1H104B047	0.1uF 50V	1	
	C1141	F1H1H682B047	6800pF 50V	1	
	C1144	F2A1E2210093	220uF 25V	1	
	C1150	F1J1A106A043	10uF 10V	1	
	C1151	F1J1A106A043	10uF 10V	1	
	C1152	F1J1A106A043	10uF 10V	1	
	C1153	F1J1A106A043	10uF 10V	1	
	C1169	F1H1A105A036	1uF 10V	1	
	C1221	F1H1C105A118	1uF 16V	1	
	C1222	F1J1E105A287	1uF 25V	1	
	C1700	F1H1H221A748	220pF 50V	1	
	C1701	F1K1V106A010	10uF 35V	1	
⚠	C1702	F0CAF224A105	0.22uF	1	
	C1703	F2A1E1020114	1000uF 25V	1	
	C1704	F1H1H102B047	1000pF 50V	1	
	C1705	F1K2J472A010	4700pF 630V	1	
	C1706	F2A2D820A404	82uF 200V	1	
	C1708	F1H1H102B047	1000pF 50V	1	
	C1709	F1H1H104B047	0.1uF 50V	1	
⚠	C1710	F1BAF471A013	470pF	1	
	C1712	F1H1H104B047	0.1uF 50V	1	
	C1713	F1K2J221A014	220pF 630V	1	
	C1714	F1H1H104B047	0.1uF 50V	1	
	C1715	F1H1H104B047	0.1uF 50V	1	
	C1716	F1H1H103B047	0.01uF 50V	1	
	C1719	F1H1E474A116	0.47uF 25V	1	
	C1720	F1K3D100A009	10pF 2000V	1	
⚠	C1725	F0CAF104A105	0.1uF	1	
	C1726	F1H1H391A889	390pF 50V	1	
⚠	C1727	F1BAF1020020	1000pF	1	
⚠	C1728	F1BAF1020020	1000pF	1	
	C2000	F1H1A105A062	1uF 10V	1	
	C2001	F1J1A106A041	10uF 10V	1	
	C3000	F1H1A105A062	1uF 10V	1	
	C3001	F1J1A106A041	10uF 10V	1	
	C6000	F1H1H104B047	0.1uF 50V	1	
	C6002	F1H1H101B052	100pF 50V	1	
	C6003	F1G1A1040006	0.1uF 10V	1	
	C6004	F1H1H102B047	1000pF 50V	1	
	C6005	F1H1H102B047	1000pF 50V	1	
	C6006	F1G1A1040006	0.1uF 10V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C6007	F1H1H104B047	0.1uF 50V	1	
	C6008	F1G1A1040006	0.1uF 10V	1	
	C6009	F1J1A106A043	10uF 10V	1	
	C6012	F1H1H104B047	0.1uF 50V	1	
	C6014	F1H1H102B047	1000pF 50V	1	
	C6017	F1H1H102B047	1000pF 50V	1	
	C6019	F1H1H220A889	22pF 50V	1	
	C6020	F1H1H102B047	1000pF 50V	1	
	C6021	F1H1H220A889	22pF 50V	1	
	C6022	F1H1A224A107	0.22uF 10V	1	
	C6023	F1H1H104B047	0.1uF 50V	1	
	C6024	F1H1H101B052	100pF 50V	1	
	C6025	F1H1H101B052	100pF 50V	1	
	C6026	F1H1H102B047	1000pF 50V	1	
	C6027	F1H1H104B047	0.1uF 50V	1	
	C6028	F1H1H104B047	0.1uF 50V	1	
	C6029	F1H1H104B047	0.1uF 50V	1	
	C6033	F1H1H104B047	0.1uF 50V	1	
	C6034	F1H1H102B047	1000pF 50V	1	
	C6035	F1H1A105A036	1uF 10V	1	
	C6036	F1H1H223B047	0.022uF 50V	1	
	C6037	F1H1H223B047	0.022uF 50V	1	
	C6039	F1H1H104B047	0.1uF 50V	1	
	C6040	F1J1A106A043	10uF 10V	1	
	C6046	F2A1A330A010	33uF 10V	1	
	C6047	F1H1H331A885	330pF 50V	1	
	C6049	F1H1H223B047	0.022uF 50V	1	
	C6050	F1H1H102B047	1000pF 50V	1	
	C6500	D0GB102JA065	1K 1/10W	1	
	C6501	F1H1H104B047	0.1uF 50V	1	
	C6502	F2G0J2210020	220uF 6.3V	1	
	C6503	F1H1A105A036	1uF 10V	1	
	C6801	F1H1A105A062	1uF 10V	1	
	C6802	F1J1V1050001	1uF 35V	1	
	C6803	F1H1E105A153	1uF 25V	1	
	C6804	F1H1E105A153	1uF 25V	1	
	C6805	F1J1E105A287	1uF 25V	1	
	C6807	F1H1E105A153	1uF 25V	1	
	C6808	F1H1E105A153	1uF 25V	1	
	C6812	F1J1V1050001	1uF 35V	1	
	C6813	F1J1E105A287	1uF 25V	1	
	C6814	F1J1E105A287	1uF 25V	1	
	C7003	F1J1H101A619	100pF 50V	1	
	C7007	F1H1H101A889	100pF 50V	1	
	C7031	F1H1H101A889	100pF 50V	1	
	C7035	F1J1A106A043	10uF 10V	1	
	C7102	F1H1A474A107	0.47uF 10V	1	
	C7107	F1H1H223B047	0.022uF 50V	1	
	C7142	F1H1H332B047	3300pF 50V	1	
	C7150	F1H1C104A120	0.1uF 16V	1	
	C7151	F1H1C104A120	0.1uF 16V	1	
	C7152	F1G1A1040006	0.1uF 10V	1	
	C7154	F1H1C104A120	0.1uF 16V	1	
	C7155	F1H1A105A113	1uF 10V	1	
	C7156	F1H1A105A113	1uF 10V	1	
	C7157	F1H1H103B047	0.01uF 50V	1	
	C7158	F1H1C104A120	0.1uF 16V	1	
	C7159	F1H1C104A120	0.1uF 16V	1	
	C7160	F1H1C104A120	0.1uF 16V	1	
	C7161	F1G1A1040006	0.1uF 10V	1	
	C7162	F1G1A1040006	0.1uF 10V	1	
	C7163	F1G1A1040006	0.1uF 10V	1	
	C7166	F1H1H103B047	0.01uF 50V	1	
	C7204	F1H1H103B047	0.01uF 50V	1	
	C7205	F1H1H270B052	27pF 50V	1	
	C7206	F1H1H270B052	27pF 50V	1	
	C7207	F1J1A106A041	10uF 10V	1	
	C7208	F1J1A106A041	10uF 10V	1	
	C7213	F1H1A334A028	0.33uF 10V	1	
	C7216	F1H1H681A885	680pF 50V	1	
	C7217	F1G1A1040006	0.1uF 10V	1	
	C7218	F1H1C823A178	0.082uF 16V	1	
	C7221	F1H1H7R0A503	7.0pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C7222	F1H1H7R0A503	7.0pF 50V	1	
	C7223	F1J1A106A041	10uF 10V	1	
	C7225	F1H1H102B047	1000pF 50V	1	
	C7226	F1H1H102B047	1000pF 50V	1	
	C7230	F1H1H103B047	0.01uF 50V	1	
	C7231	F1H1H104B047	0.1uF 50V	1	
	C7232	F1G1A1040006	0.1uF 10V	1	
	C7233	F1H1H103B047	0.01uF 50V	1	
	C7234	F1H1C104A120	0.1uF 16V	1	
	C7235	F1J1A106A041	10uF 10V	1	
	C7236	F1J1A106A041	10uF 10V	1	
	C7237	F1G1A1040006	0.1uF 10V	1	
	C7238	F1H1C104A120	0.1uF 16V	1	
	C7239	F1J1A106A041	10uF 10V	1	
	C7241	F1H1H102B047	1000pF 50V	1	
	C7243	D0GBR00J0004	0 1/10W	1	
	C7244	F1H1H153B047	0.015uF 50V	1	
	C7253	D0GBR00J0004	0 1/10W	1	
	C7263	F1G1A1040006	0.1uF 10V	1	
	C7264	F1G1A1040006	0.1uF 10V	1	
	C7265	F1G1A1040006	0.1uF 10V	1	
	C7267	F1G1A1040006	0.1uF 10V	1	
	C7268	F1H1H103B047	0.01uF 50V	1	
	C7269	F1H1A105A113	1uF 10V	1	
	C7315	F1H1A154A107	0.15uF 10V	1	
	C7334	F2G1A101A019	100uF 10V	1	
	C7335	F1H1H103B047	0.01uF 50V	1	
	C7338	F1H1H153B047	0.015uF 50V	1	
	C7339	F1H1H182A219	1800pF 50V	1	
	C7341	F1J1A106A041	10uF 10V	1	
	C7352	F1H1H122B047	1200pF 50V	1	
	C7367	F1H1A105A113	1uF 10V	1	
	C7368	F1H1H103B047	0.01uF 50V	1	
	C7501	D0GBR00J0004	0 1/10W	1	
	C7502	F1H1H103B047	0.01uF 50V	1	
	C7601	F1J1A106A041	10uF 10V	1	
	C7613	F1G1A1040006	0.1uF 10V	1	
	C7615	F1J1A106A041	10uF 10V	1	
	C7616	F1J1A106A041	10uF 10V	1	
	C7626	F1J1A106A041	10uF 10V	1	
	C7670	F1H1H103B047	0.01uF 50V	1	
	C7725	F1G1H100A565	10pF 50V	1	
	C7735	F1G1H100A565	10pF 50V	1	
	C7741	F1H1H103B047	0.01uF 50V	1	
	C7752	F1H1H103B047	0.01uF 50V	1	
	C7753	F1J1A106A041	10uF 10V	1	
	C7754	F1J1A106A041	10uF 10V	1	
	C7755	F1J1A106A041	10uF 10V	1	
	C7851	F1H1H103B047	0.01uF 50V	1	
	C7853	F1H1H101A889	100pF 50V	1	
	C11371	F1H1H102B047	1000pF 50V	1	
			SERVICE FIXTURE AND TOOLS		
	SFT1	REE1712	30P FFC (MAIN - CD SERVO)	1	
	SFT2	REX1538	7P WIRE (MAIN - SMPS)	1	

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