PSG1703008CE

Service Manual

Compact Stereo System

Model No. SC-HC1000GM
SC-HC1000GS

Product Color: (K)...Black Type

SC-HC1000

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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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.

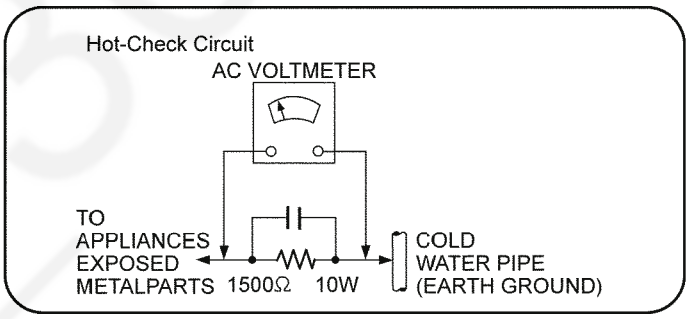

Figure. 1-1

1.2. Before Repair and Adjustment

Disconnect AC power to discharge AC Capacitors (C1702, C1710, C1725, C1727, and C1728) through a 10ohm, 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 110V to 240V, at 50/60Hz in NO SIGNAL mode (at volume minimum 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
⚠	32	TBMK4541F	NAMEPLATE	
⚠	301	RAE5308Z-V	TRAVERSE ASS'Y	(E.S.D)
⚠	A2	K2CP2YY00095	AC CORD	
⚠	A2	K2CQ2YY00153	AC CORD	
⚠	A3	TQBJ2036	O/I (En/Sp)	
⚠	PCB2	TNPA6399AH	MAIN P.C.B	

2 Warning

2.1. Prevention of Electro Static 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:

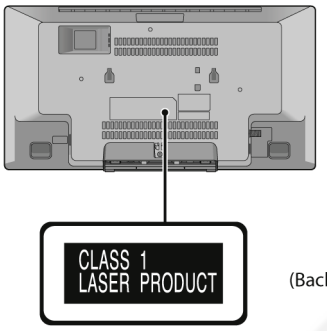
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.
Wavelength: 790 nm (CD)
Maximum output radiation power from pickup: 100 μW/VDE
Laser radiation from the pickup unit is safety level, but be sure the followings:

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.

ACHTUNG :

Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheitadg-estrahit.
Wellenlänge : 790nm (CD)
Maximale Strahlungsleistung der Lasereinheit :100 μW/VDE
Die Strahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlinse blicken.
4. Nicht über längere Zeit in die Fokussierlinse blicken.



(Back of product)

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%

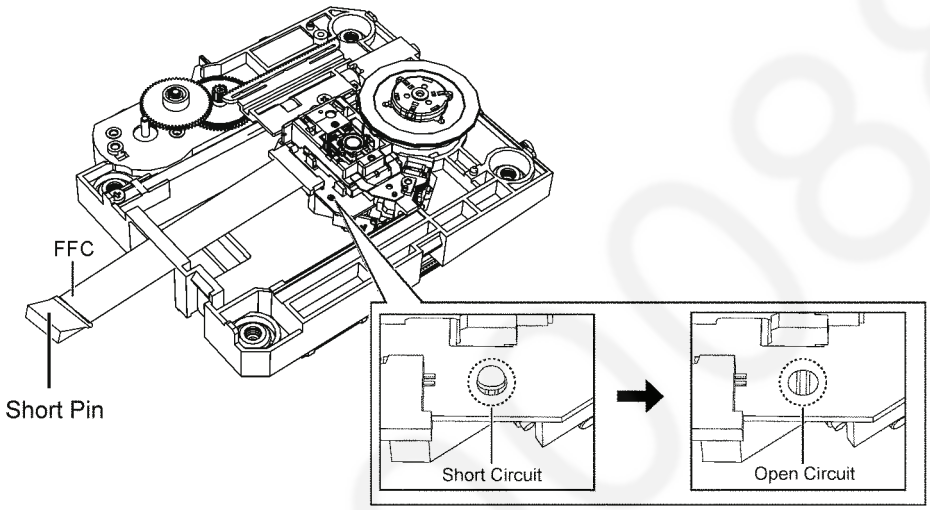
2.4. Handling Precaution for Traverse Unit

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.

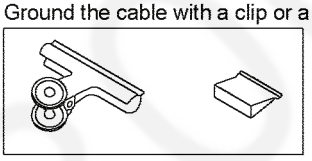
2.4.1. Cautions to Be Taken in Handling the Optical Pickup Unit

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.



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



Clip or Short Pin

2.4.2. Grounding for electrostatic breakdown prevention

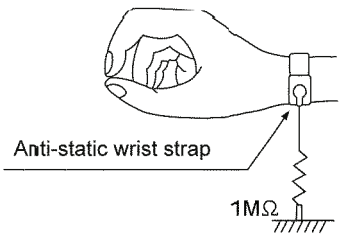
Some devices such as the CD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

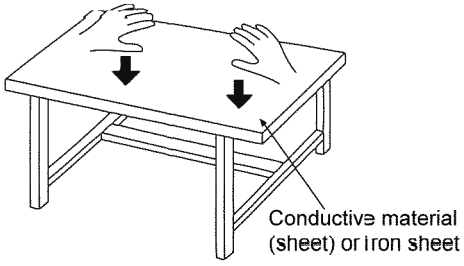
2.4.2.1. Worktable grounding

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.





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.

3.1.1. P.C.B. repair method

In case of P.C.B. repair, please refer as follow :

Detective P.C.B. / Parts	Repair method	Remarks
1) CD INTERFACE P.C.B.	Change by component	
2) MAIN P.C.B.	Change by P.C.B. exchange	
3) POSITION SWITCH P.C.B.	Change by component	
4) MOTOR P.C.B.	Change by component	
5) ETHERNET P.C.B.	Change by component	
6) PANEL P.C.B.	Change by component	
7) TACT SWITCH P.C.B.	Change by component	
8) TUNER P.C.B.	Change by component	
9) BLUETOOTH MODULE	Change by P.C.B. exchange	
10) ALLPLAY MODULE with Data	Change by P.C.B. exchange	
11) ALLPLAY ANTENNA P.C.B.	Change by P.C.B. exchange	

Table 3-1

3.1.2. Individual Part repair method (For Main P.C.B.)

Main P.C.B is replaced by PCB exchange. Additionally, below are list of ICs that can be replaced individually. Please see Table 3-2. For the location of the respective ICs, please refer to P.C.B. section.

Detective P.C.B. / Parts	Repair method	Remarks
1) IC1700	Change by component	Main P.C.B. (Side B)
2) IC1701	Change by component	Main P.C.B. (Side A)
3) IC1101	Change by component	Main P.C.B. (Side B)
4) IC1104	Change by component	Main P.C.B. (Side B)
5) IC1110	Change by component	Main P.C.B. (Side B)
6) IC1105	Change by component	Main P.C.B. (Side B)
7) IC1109	Change by component	Main P.C.B. (Side B)
8) IC1111	Change by component	Main P.C.B. (Side B)
9) IC1106	Change by component	Main P.C.B. (Side B)
10) IC1103	Change by component	Main P.C.B. (Side B)
11) IC6000	Change by component	Main P.C.B. (Side B)
12) IC2004	Change by component	Main P.C.B. (Side B)
13) IC8001	Change by component	Main P.C.B. (Side B)
14) IC400	Change by component	Main P.C.B. (Side B)

Table 3-2

3.2. Software / Firmware Update

Panasonic may release updated
firmware for this system that may add or improve the
way a feature operates.

You can also update the firmware from a pop-up
prompting you to do so on-screen within the app
"Panasonic Music Streaming" For details on
the app, refer to the site below.
http://panasonic.jp/support/global/cs/audio/app/
(This site is in English only.)

4 Specifications

■ GENERAL

Power consumption	25 W
Power consumption in standby mode	
(When "BLUETOOTH STANDBY" is "OFF")[*1, 2]	Approx. 0.2 W
(When "BLUETOOTH STANDBY" is "ON")[*1, 2]	Approx. 0.3 W
(When "NET STANDBY" is "ON")[*1]	Approx. 2 W
Power supply	AC 110 V to 240 V, 50/60 Hz
Dimensions (W x H x D)	420 mm x 225 mm x 102 mm
Mass	Approx. 2.5 kg
Operating temperature range	0°C to +40°C
Operating humidity range	35% to 80 % RH (no condensation)

■ AMPLIFIER SECTION

Output Power	
RMS Output Power	
Front Ch (both ch driven)	20 W per channel (8 Ω), 1 kHz, 10 % THD
Total RMS Power	40 W
PMPO output power	300 W

■ TUNER SECTION

Preset Memory	FM 30 stations
Frequency Modulation (FM)	
Frequency range	87.50 MHz to 108.00 MHz (50 kHz step)
Antenna terminals	75 Ω (unbalanced)

■ DISC SECTION

Disc played (8 cm or 12 cm)	
	CD, CD-R/RW (CD-DA, MP3[*3])
Pick up	
Wavelength	790 nm (CD)

■ SPEAKER SECTION

Speaker unit(s)	
Full Range	8 cm cone type x 2

■ TERMINAL SECTION

USB Port	
USB Port power	DC OUT 5 V, 1.5 A
USB Standard	USB 2.0 full speed
Media file format support	MP3[*3] (*.mp3)
Audio support format	
MP3[*3]	
Sampling frequency	32/44.1/48 kHz
Audio word size	16 bits
Channel count	2 ch
USB device file system	FAT12, FAT16, FAT32
Ethernet interface	LAN (10BASE-T/100BASE-TX)
AUX IN	Stereo, 3.5 mm jack

■ Bluetooth® SECTION

Version	Bluetooth® Ver.2.1+EDR
Class	Class 2
Supported Profiles	A2DP, AVRCP
Frequency band	2.4 GHz band FH-SS
Operation Distance	10 m Line of sight
Supported Codec	SBC

■ Wi-Fi SECTION

Wi-Fi	
WLAN Standard	IEEE802.11a/b/g/n
Frequency range	2.4 GHz band/5 GHz band
Security	WPA2™
WPS version	Version 2.0
Audio support format (AllPlay)	
MP3[*3]/AAC	
Sampling frequency	32/44.1/48 kHz
Audio word size	16 bits
Channel count	2 Ch
FLAC[*4]/ALAC/WAV	
Sampling frequency	32/44.1/48/88.2/96/176.4/192 kHz
Audio word size	16 bits/24 bits
Channel count	2 Ch

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

[*1] No device is connected to the USB port before turning to standby mode.

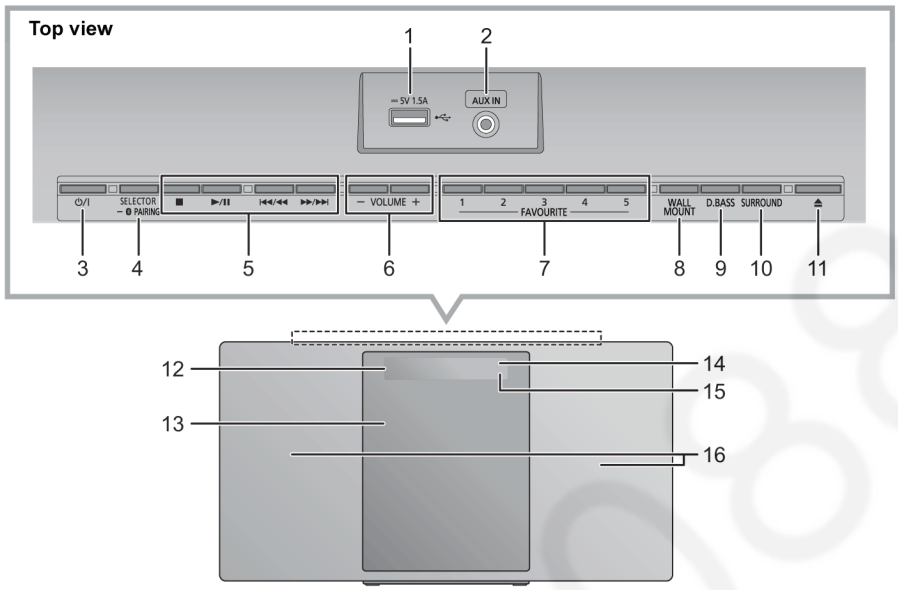
[*2] Network standby is inactive.

[*3] MPEG-1 Layer 3, MPEG-2 Layer 3

[*4] Uncompressed FLAC files may not operate correctly.

5 Location of Controls and Components

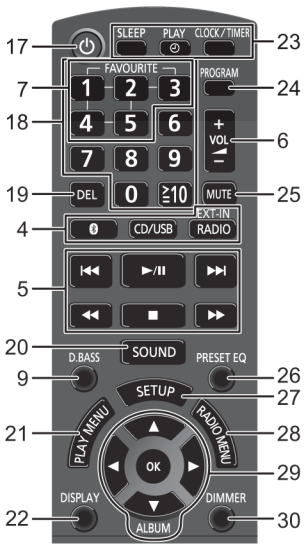
5.1. Main Unit Key Button Operations



1 USB port
2 AUX IN jack
3 **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.
4 Select the audio source
On this unit:
"CD" → "FM" → "AUX" → "USB" → "BLUETOOTH" → "NETWORK" → "CD"
- Press and hold to enter pairing mode or disconnect a Bluetooth® device.

On the remote control:
[ᛒ]: "BLUETOOTH"
[CD/USB]: "CD" ↔ "USB"
[RADIO, EXT-IN]: "FM" → "AUX" → "NETWORK" → "FM"
5 Basic playback control buttons
6 Adjust the volume (0 (min) to 50 (max))
7 FAVOURITE buttons for storing or selecting radio station ([1] to [5])
8 Set wall mount mode
9 Select D.BASS
10 Adjust surround
11 Open or close the sliding door
12 Display
13 Sliding door
14 Remote control signal sensor
Distance: Within approx. 7 m directly in front
Angle: Approx. 30° left and right
15 Network indicator
16 Speakers
These speakers do not have magnetic shielding. Do not place them near a TV, personal computer or other magnetic devices.

5.2. Remote Control Key Button Operations



17 Turn the unit on or off

18 Select number
- To select a 2-digit number
  Example: 16: [≧10] → [1] → [6]
- To select a 3-digit number
  Example: 124: [≧10] → [≧10] →[1] → [2]→ [4]

19 Delete a programmed track

20 Enter sound menu

21 Set the play menu item

22 Change the displayed information

23 Clock and timer operation

24 Set the programme function

25 Mute the sound
Press again to cancel. “MUTE” is also cancelled when the volume is adjusted or the unit is turned off.

26 Select preset EQ

27 Enter setup menu

28 Set the radio menu item

29 Selection/OK

30 Dim the display panel and indicator
Press again to cancel.

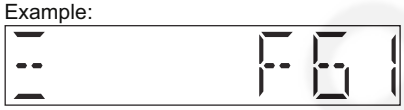
6 Service Mode

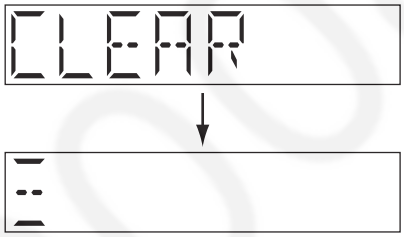
This unit is equipped with features of self diagnostic & service mode setting for checking the functions & reliability.

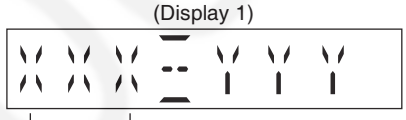
6.1. Service Mode Table

<table>
<tr><th colspan="2">Item</th><th rowspan="2">FL display</th><th rowspan="2">Key operation</th></tr>
<tr><th>Mode name</th><th>Description</th></tr>
<tr><td>Service Mode</td><td>To enter into Service Mode checking</td><td>  </td><td>Step 1 : Select CD mode
(Ensure no disc is inserted).

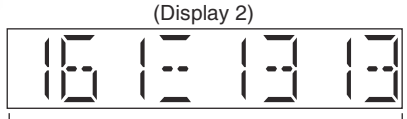
Step 2 : Press [■] on main unit for 2 seconds and press [SURROUND] on main unit for another 2 seconds.

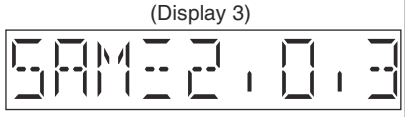
• To exit, press the [⏻/I] on the main unit or using the remote control.
• Unplug the AC cord.</td></tr>
<tr><td>Error code information</td><td>System will perform a check on any unusual/error code from the memory</td><td>Example:
  </td><td>Step 1 : Press [STOP] on main unit.

• To exit, press the [⏻/I] on the main unit or using the remote control.
• Unplug the AC cord.</td></tr>
<tr><td>Delete Error code</td><td>To clear the stored in memory (EEPROM IC)</td><td>  </td><td>Step 1 : Press and hold [OK] on remote control for more than 5 seconds.

• To exit, press the [⏻/I] on the main unit or using the remote control.
• Unplug the AC cord.</td></tr>
<tr><td>Software/Firmware Version display mode</td><td>To display model number & version
<table><tr><th>Model Number</th><th>Version display</th></tr><tr><td>HC1020 (EG/EB/GN) with DAB</td><td>7MA≡***_</td></tr><tr><td>HC1000 (JP) without DAB</td><td>7MB≡***_</td></tr><tr><td>HC402 (EG/EB/GN) with DAB</td><td>7AA≡***_</td></tr><tr><td>HC400 (EG/EE/GN/GS) without DAB</td><td>7AB≡***_</td></tr><tr><td>HC400 (JP) without DAB</td><td>7AC≡***_</td></tr><tr><td>HC1000 (GS) without DAB</td><td>7MC≡***_</td></tr><tr><td>HC1040 (EG) with DAB</td><td>7MD≡***_</td></tr></table></td><td>(Display 1)
 
Version display

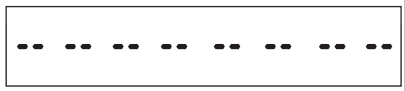
The Checksum of EEPROM and SDK firmware version will be display for 2 sec.

(Display 2)
 
SDK version

The ALLPLAY module version will be display and will scroll.
(Display 3)
 
ALLPLAY module version

(Display 4)
  </td><td>Press [DISPLAY] button on the remote control.

• To exit, press the [⏻/I] on the main unit or using the remote control.
• Unplug the AC cord.</td></tr>
<tr><td>Cold Start</td><td>To activate cold start upon next power up.
All setting is set to default value after AC out and in again.

(Backup data are initialized)</td><td>  </td><td>Press [SETUP] button on the remote control.

• To exit, press the [⏻/I] on the main unit or using the remote control.
• Unplug the AC cord.</td></tr>
</table>

6.2. Service Mode Error Code

6.2.1. CD Mechanism Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
CD H15	CD Open Abnormal	During normal operation, if "POS_SW_R (OPEN_SW)" is not detected within 4~5 sec, "CD H15" shall be memorized.		Press [■] on main unit for next error.
CD H16	CD Closing Abnormal	During closing operation, if "POS_SW_CEN (CLOSE_SW)" is not detected within 4~5 sec, "CD H16" shall be memorized.		Press [■] on main unit for next error.

6.2.2. Power Amp Error Code Table

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F61	D-AMP IC output abnormal	PDET2 (DC_DET_AMP)= L (NG). PDET2 (DC_DET_AMP) is checked by reading the input 2x20ms, F61 error code shall be memorized		Press [■] on main unit for next error.
F76	Power supply abnormal	PDET1 (DC_DET_PWR) = L (NG). PDET1 (DC_DET_PWR) is checked by reading the input 2x1ms, F76 error code shall be memorized.		Press [■] on main unit for next error.

6.2.3. Bluetooth Error Code Table

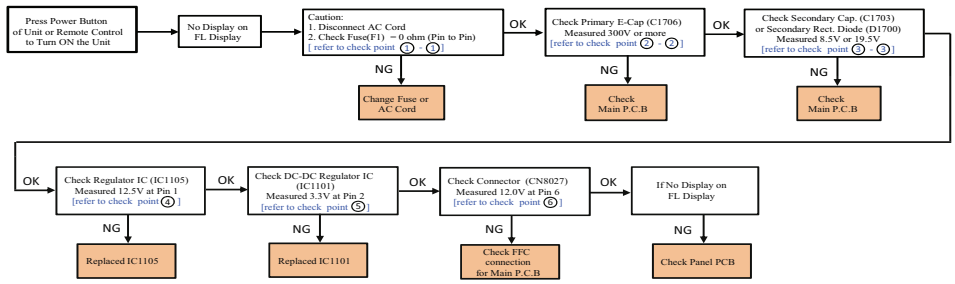
Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F703	Bluetooth Communication	Communication between Bluetooth module and micro-p abnormal		Press [■] on main unit for next error.
F77	Bluetooth Address Error	If there is no valid Bluetooth address stored in the EEPROM IC		Press [■] on main unit for next error.

6.2.4. AllPlay Error Code Table

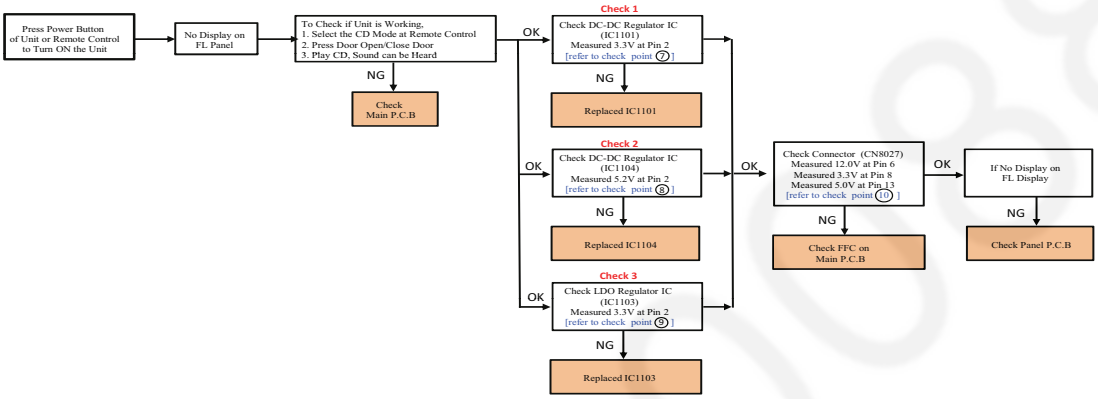
Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F704	AllPlay Communication	Communication between AllPlay module and micro-p abnormal		Press [■] on main unit for next error.

7 Troubleshooting Guide

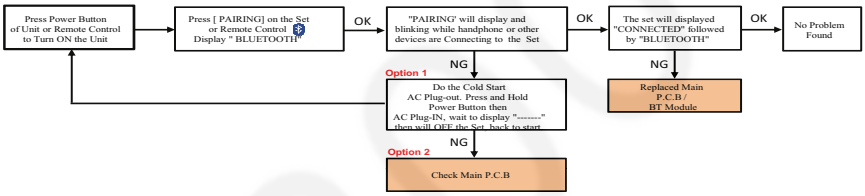
1. No Power



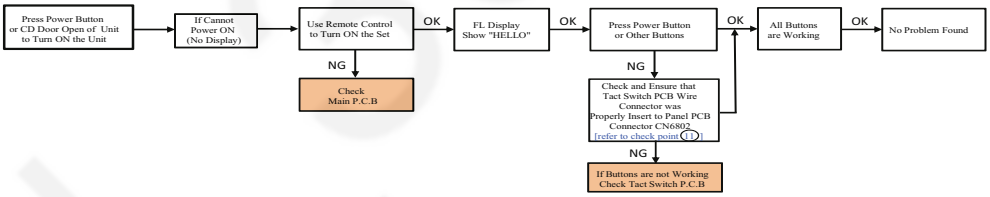
2. No FL Display



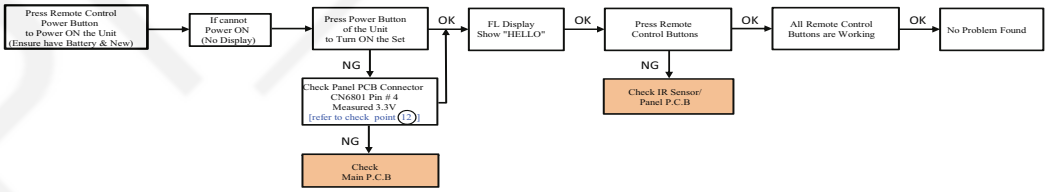
3. Bluetooth® Pairing Failure



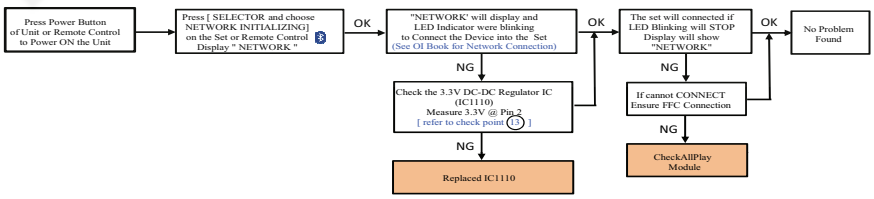
4. No Key Function



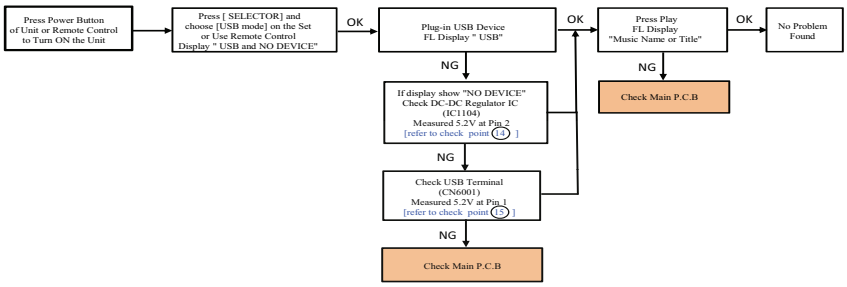
5. No Remote Control Function



6. AllPlay Connect Failure

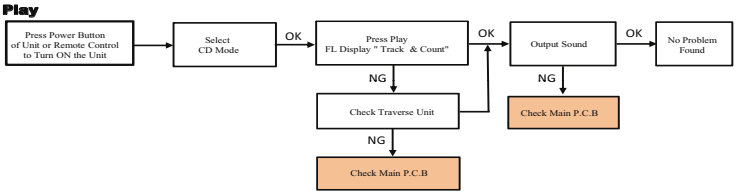


7. USB Device Cannot Detect

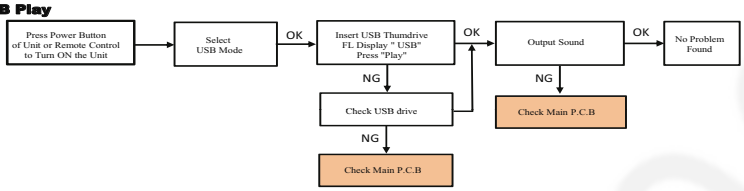


8. No Output Sound

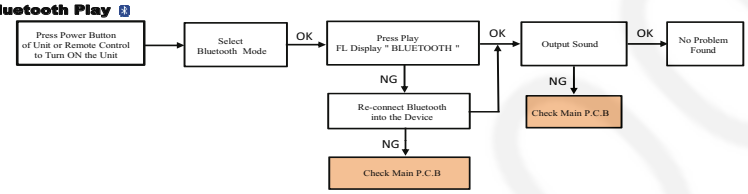
8.1. CD Play



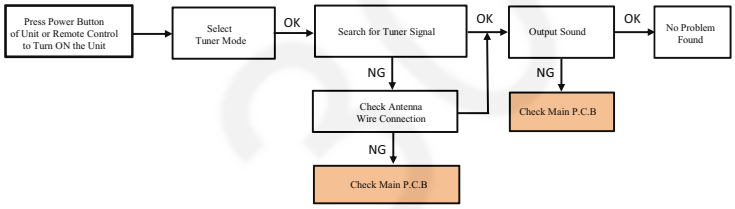
8.2. USB Play



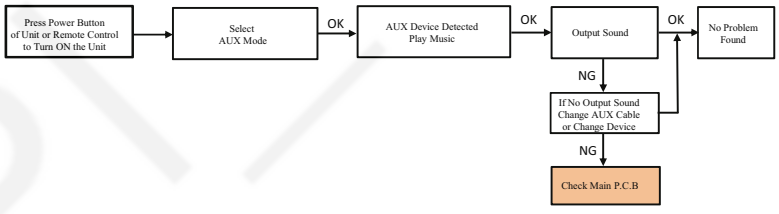
8.3. Bluetooth Play



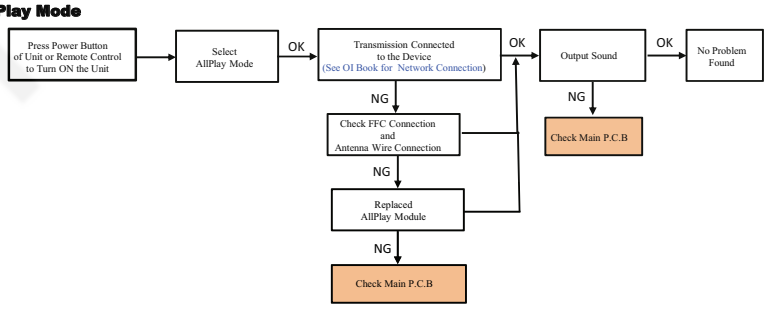
8.4. Tuner Mode



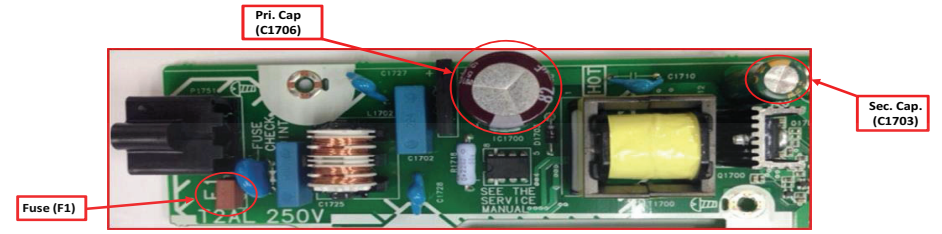
8.5. AUX Mode

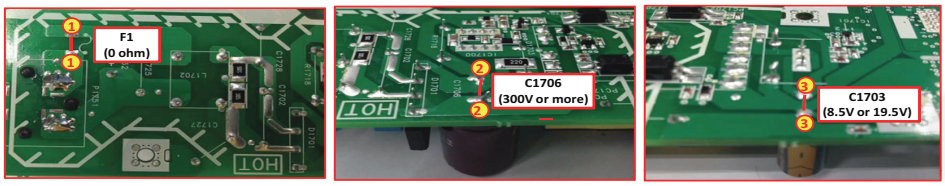


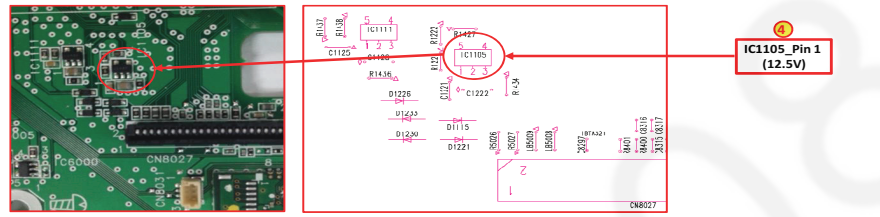
8.6. AllPlay Mode

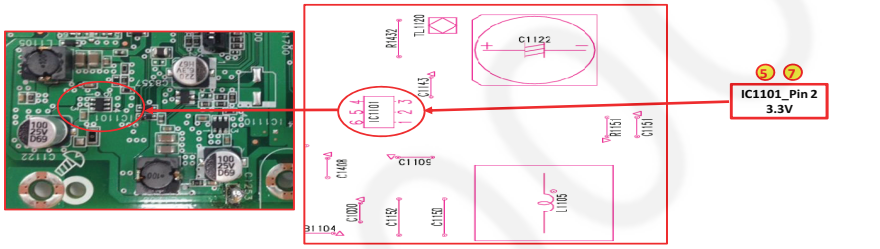


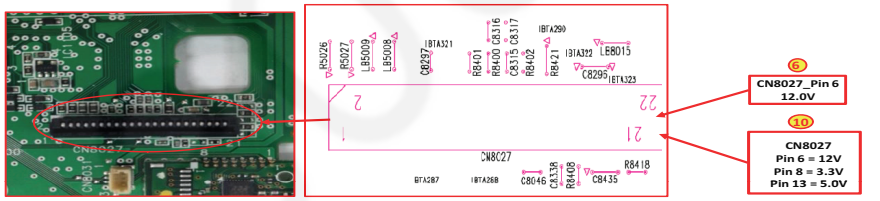
9. Check Point of Main P.C.B

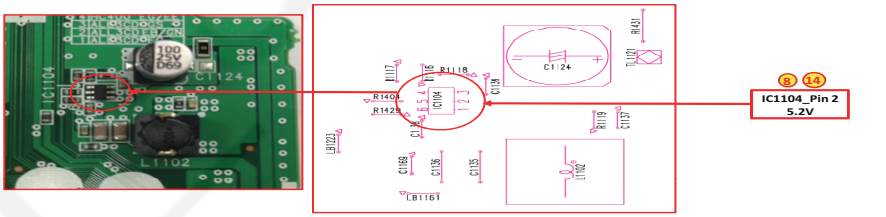


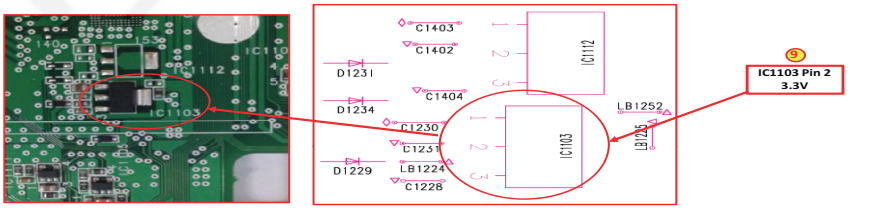


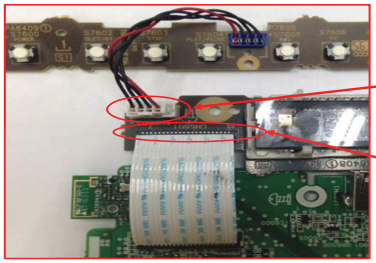






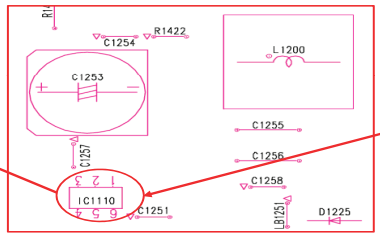




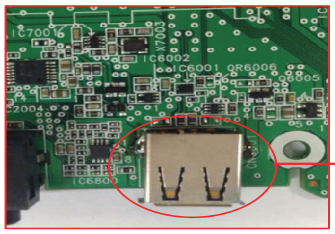


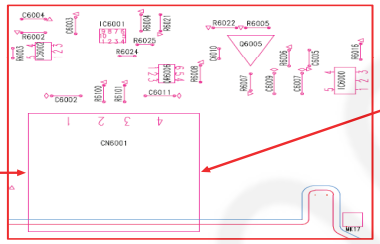
11 Check Wire Connectror is Properly Inserted to CN6903

12 CN6801_Pin 4 3.3V



13 IC1110_Pin 2 3.3V





15 CN6001_Pin 2 3.3V

8 Disassembly and Assembly Instructions

Caution Note:

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

- **Disassembly of Base Stand Assembly**
- **Disassembly of CD Door Ornament**
- **Disassembly of CD Door Base**
- **Disassembly of Net Frame Assembly**
- **Disassembly of Front Cabinet Assembly**
- **Disassembly of Gear Box Assembly**
- **Disassembly of Rack Top & CD Door Slider Top**
- **Disassembly of Door Shaft & CD Door Slider Bottom**
- **Disassembly of Position Switch P.C.B. & Timing Gear Unit**
- **Disassembly of Panel P.C.B.**
- **Disassembly of Tact Switch P.C.B.**
- **Disassembly of ALLPLAY Module with Data & ALLPLAY Antenna P.C.B.**
- **Disassembly of Ethernet P.C.B.**
- **Disassembly of CD Mechanism**
- **Disassembly of CD Interface P.C.B.**
- **Disassembly of Tuner P.C.B.**
- **Disassembly of Main P.C.B.**
- **Disassembly of Speaker Unit (SP1)**
- **Disassembly of Speaker Unit (SP2)**

8.1. Service Fixture & Tools

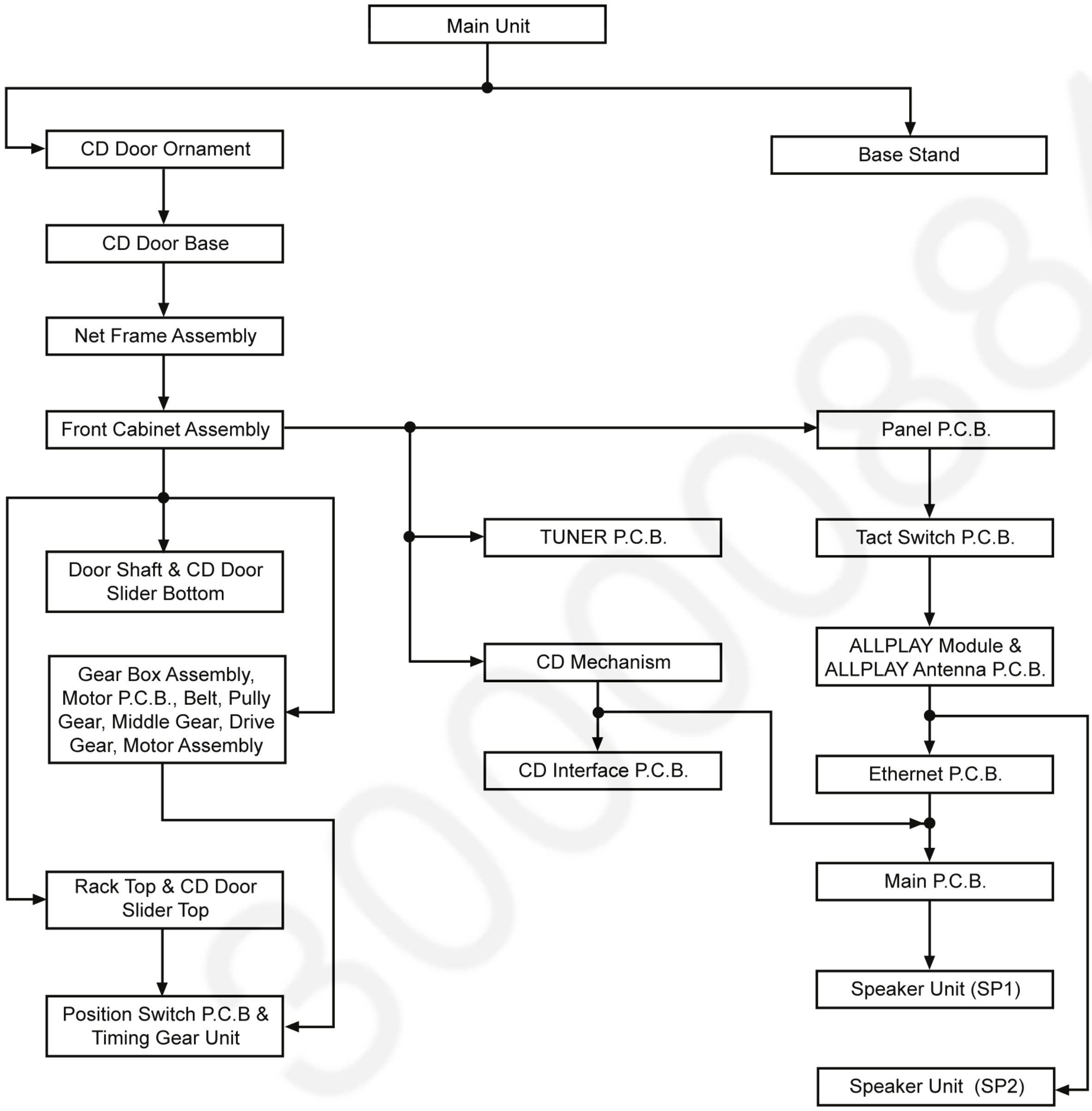
Prepare service tools before process service position.

Ref. No.	Service Tools		Remarks
SFT1	Main P.C.B. (P5003) - CD Interface P.C.B. (CN7002)	REE1978 (24P FFC)	

8.2. Disassembly flow chart

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

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



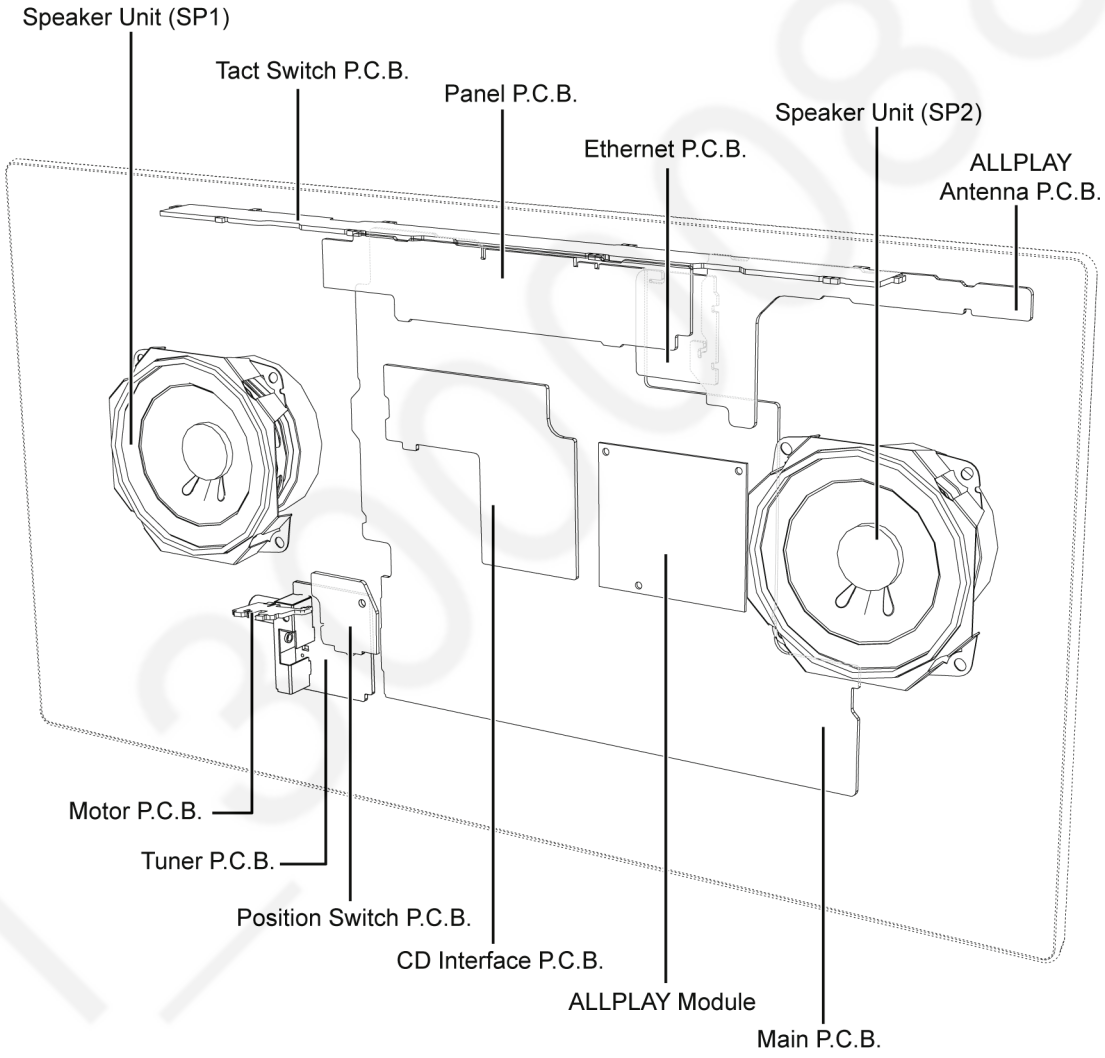
8.3. Types of Screws

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

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

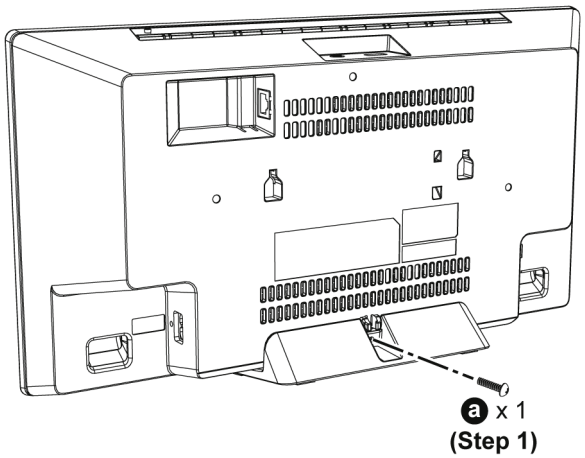
- ⓐ : XTB3+10JFJK
- ⓑ : VHD1224-1A
- ⓒ : RHD26046-L
- ⓓ : RHD26066
- ⓔ : RHD26043-1
- ⓕ : RHD20024-1
- ⓖ : XTN2+6GFJ
- ⓗ : XQN17+C28FJ
- ⓘ : XTW2+6SFJ

8.4. Main Parts Location Diagram

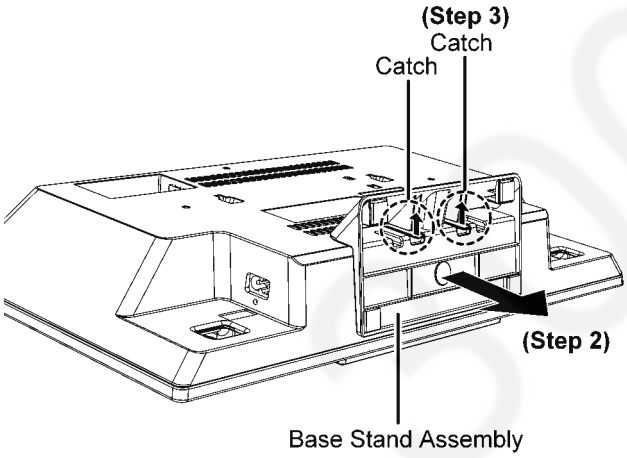


8.5. Disassembly of Base Stand Assembly

Step 1 : Remove screw.

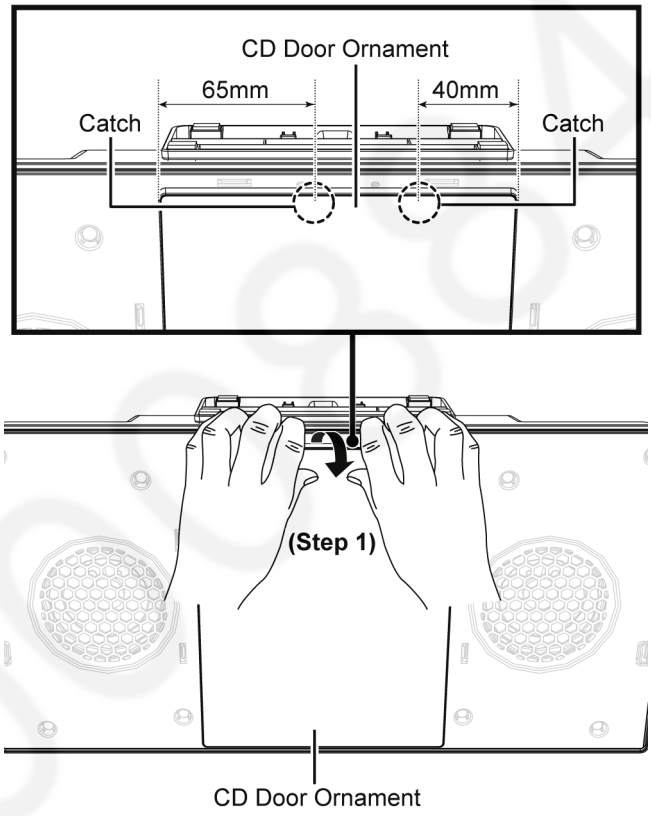


Step 2 : Release catches.
Step 3 : Remove Base Stand Assembly.

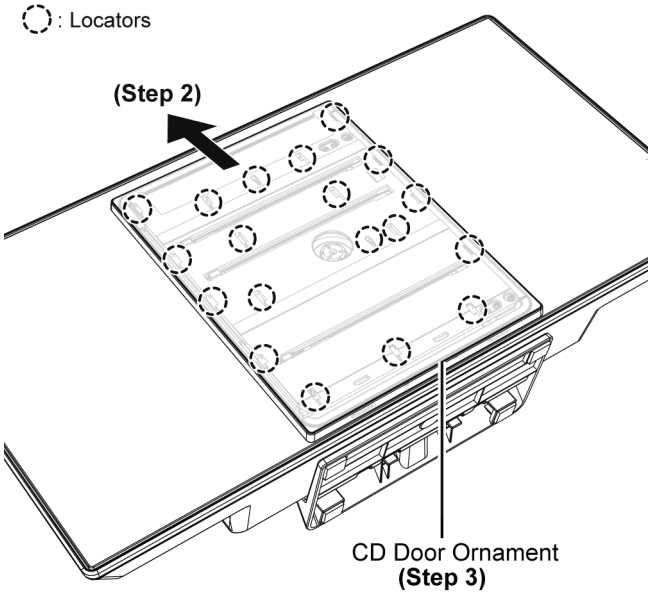


8.6. Disassembly of CD Door Ornament

Step 1 : Slightly lift up the CD Door Ornament to release catches.
Caution : Do not use strong force as it may damage the catches.



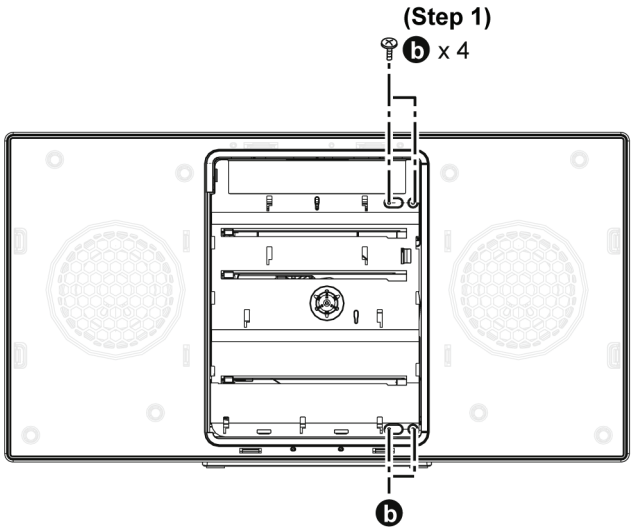
Step 2 : Push forward CD Door Ornament to release the locators.
Step 3 : Remove CD Door Ornament.



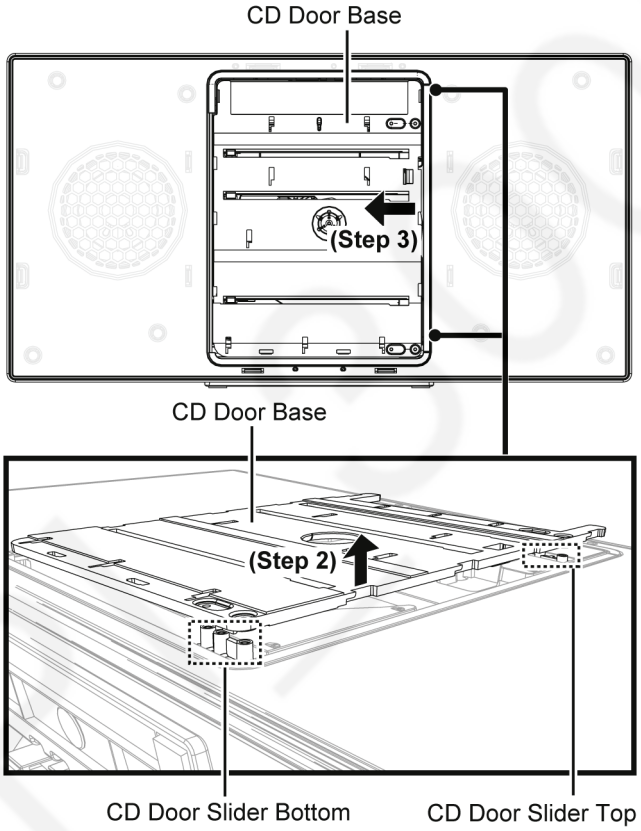
8.7. Disassembly of CD Door Base

• Refer to “Disassembly of CD Door Ornament”

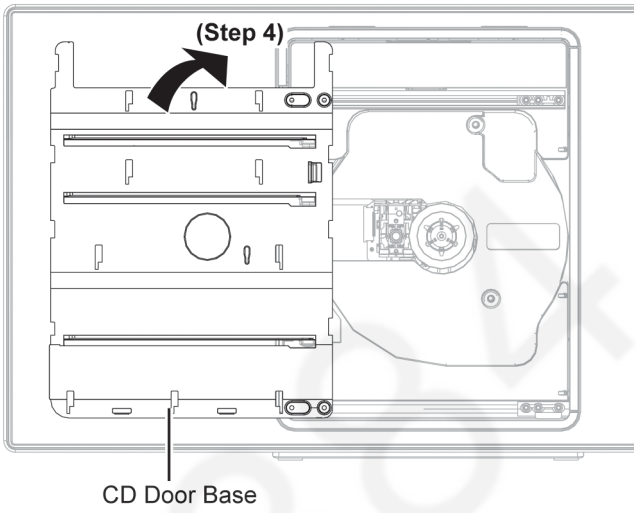
Step 1 : Remove 4 screws.



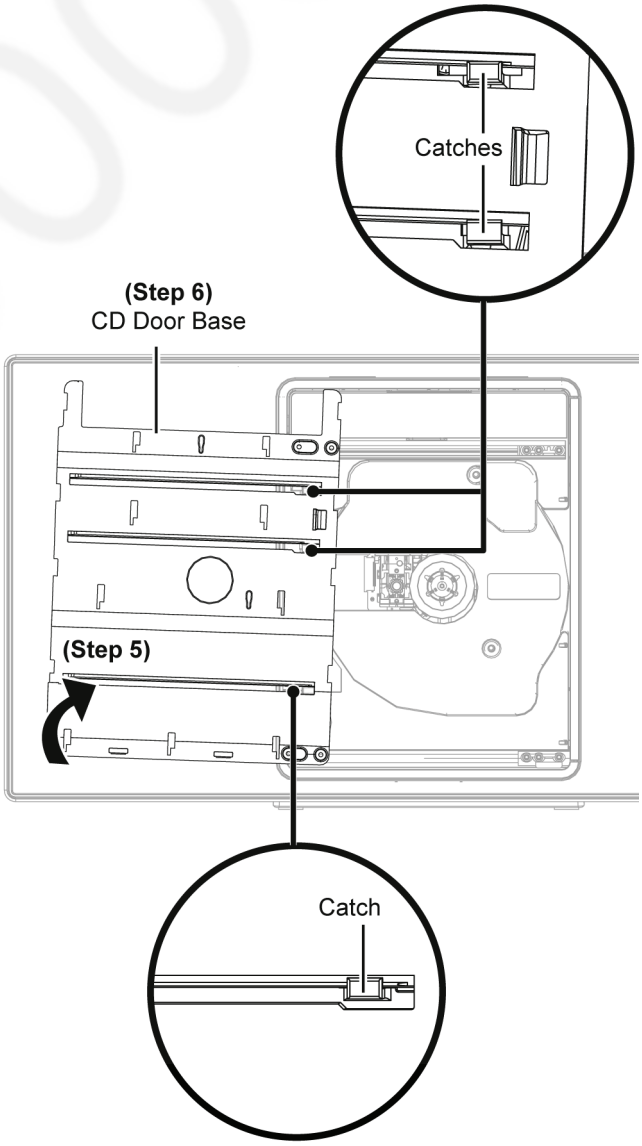
Step 2 : Slightly lift up CD Door Base.
Step 3 : Slide CD Door Base towards to the left.



Step 4 : Push CD Door Base as shown.



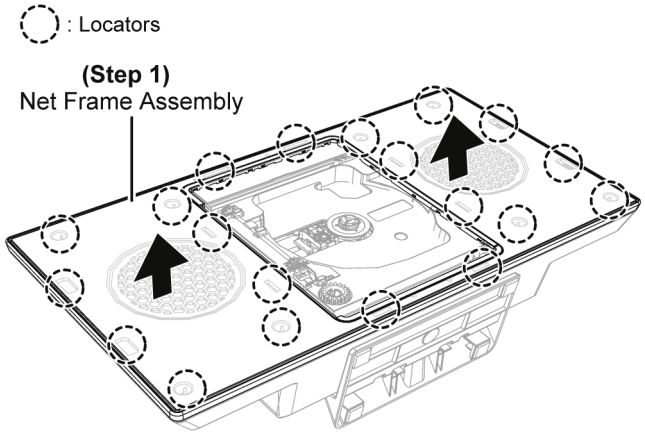
Step 5 : Slightly lift up CD Door Base to release catches.
Step 6 : Remove CD Door Base.



8.8. Disassembly of Net Frame Assembly

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”

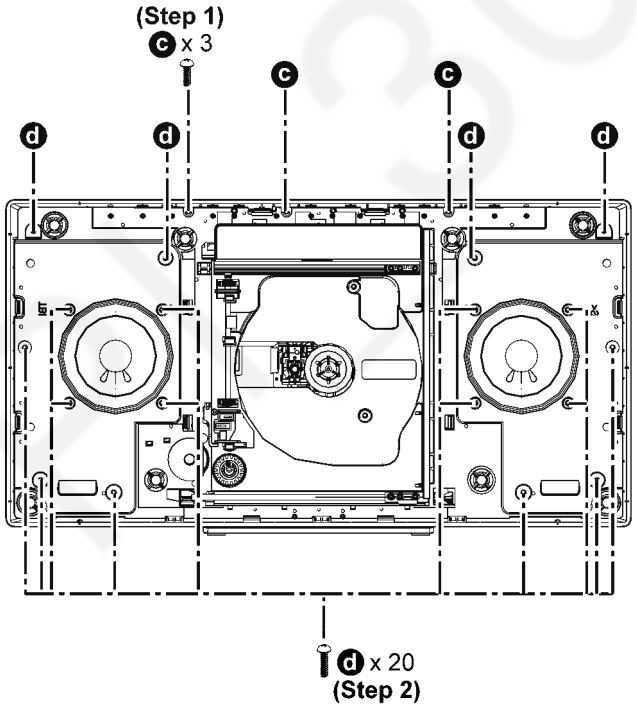
Step 1 : Release catches and remove Net Frame Assembly.
Caution : Do not use strong force as it may damage the Net Frame Assembly.



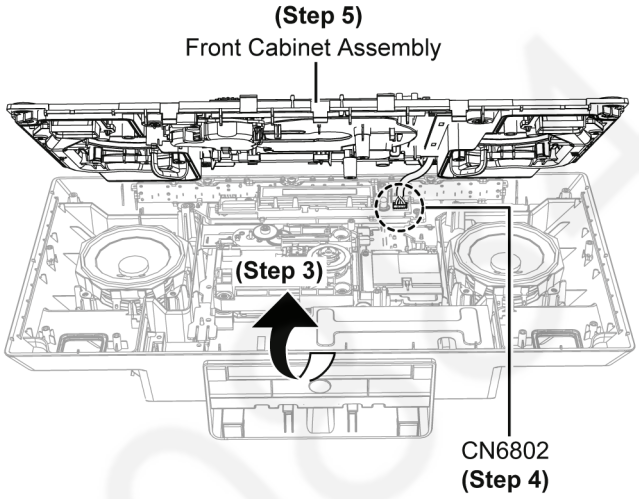
8.9. Disassembly of Front Cabinet Assembly

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”

Step 1 : Remove 3 screws.
Step 2 : Remove 20 screws.



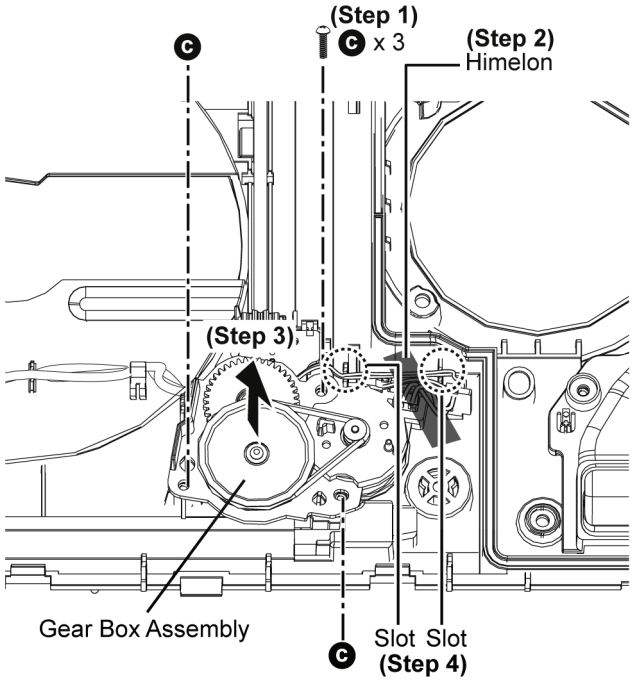
Step 3 : Slightly lift up the Front Cabinet Assembly as shown.
Caution : Do not use strong force during lifting up of the Front Cabinet Assembly.
Step 4 : Detach 5P Wires at the connector (CN6802) on Panel P.C.B.
Step 5 : Remove Front Cabinet Assembly.



8.10. Disassembly of Gear Box Assembly

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”

Step 1 : Remove 3 screws.
Step 2 : Lift up himelon.
Step 3 : Slightly lift up Gear Box Assembly.
Step 4 : Release 2P wire from the slots on Front Cabinet Assembly.
Caution : During assembling, dressed 2P wire properly into slots.

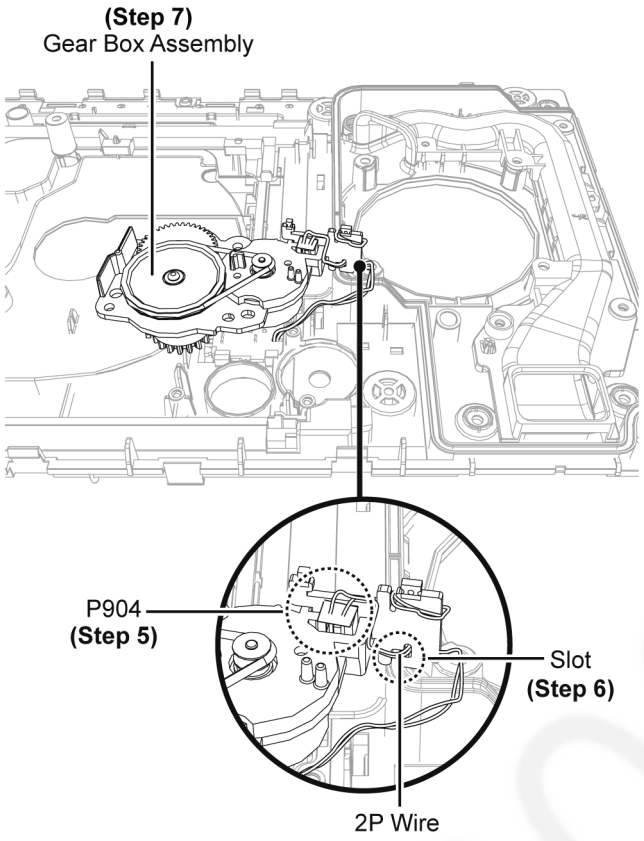


Step 5 : Detach 2P wire at connector (P904) on Motor P.C.B..

Step 6 : Release 2P wire from slot.

Caution : During assembling, dressed 2P wire properly into slots.

Step 7 : Remove Gear Box Assembly.

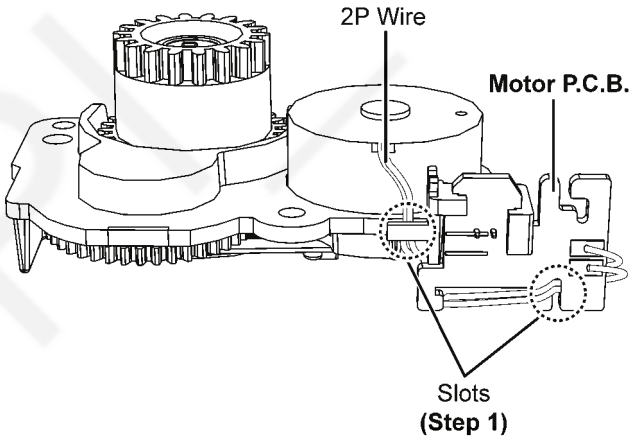


8.10.1. Disassembly of Motor P.C.B.

• Refer to “Disassembly of Gear Box Assembly”

Step 1 : Release the 2P wire from slots.

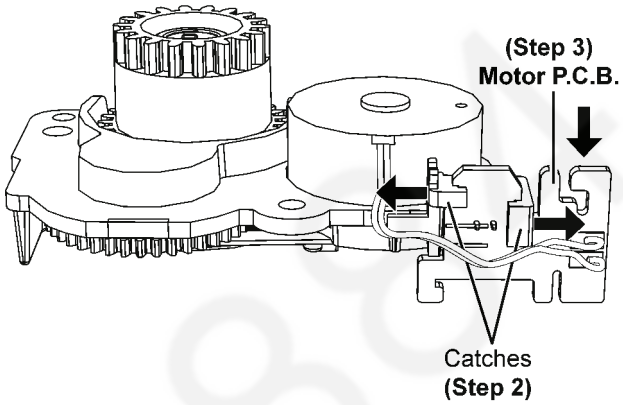
Caution : During assembling, dressed 2P Wire into slots.



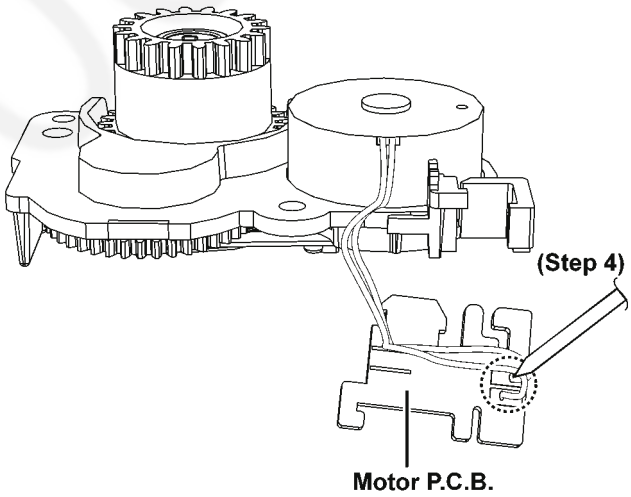
Step 2 : Release 2 catches.

Step 3 : Remove Motor P.C.B..

Caution : During assembling, insert Motor P.C.B. properly & ensure it is fully catched.



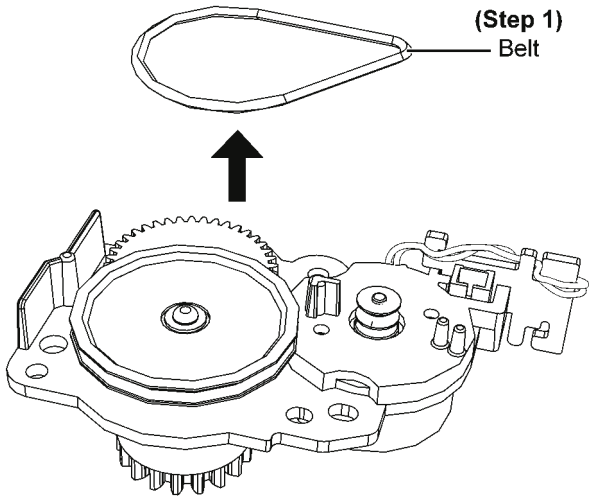
Step 4 : Desolder pins on solder side of Motor P.C.B. and remove Motor P.C.B..



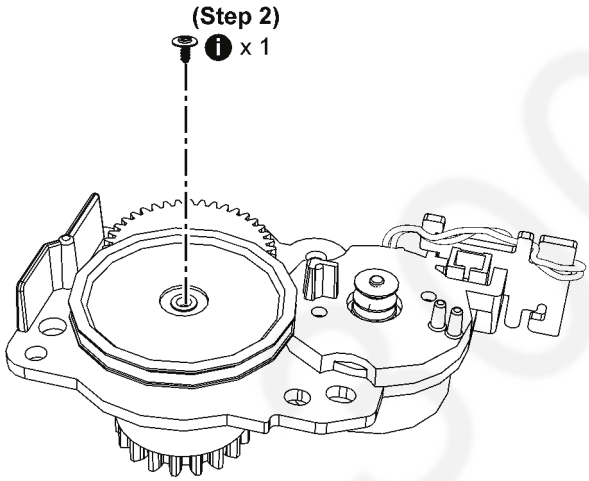
8.10.2. Disassembly of Belt, Pulley Gear, Middle Gear and Drive Gear

• Refer to “Disassembly of Gear Box Assembly”

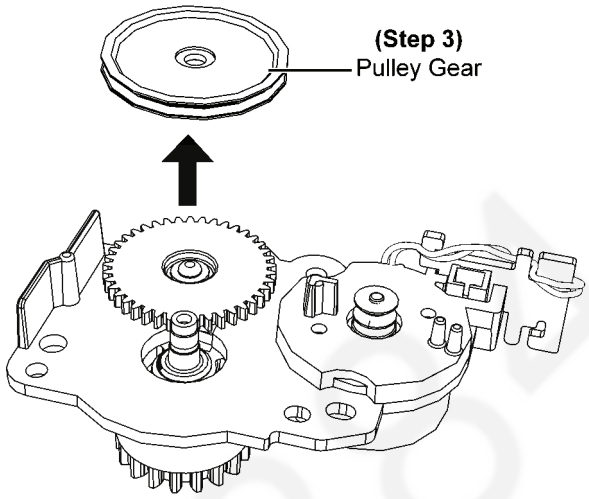
Step 1 : Remove Belt.



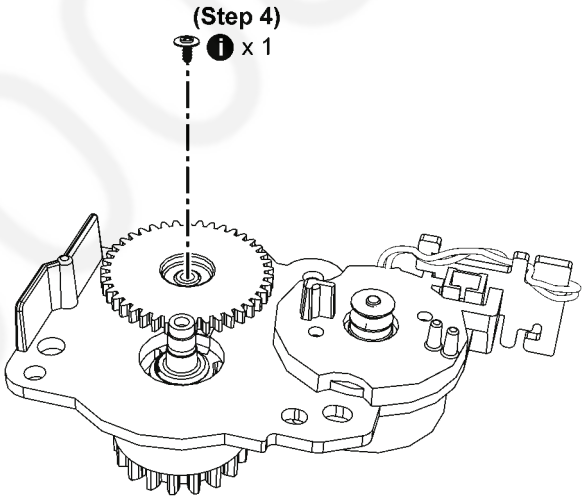
Step 2 : Remove screw.



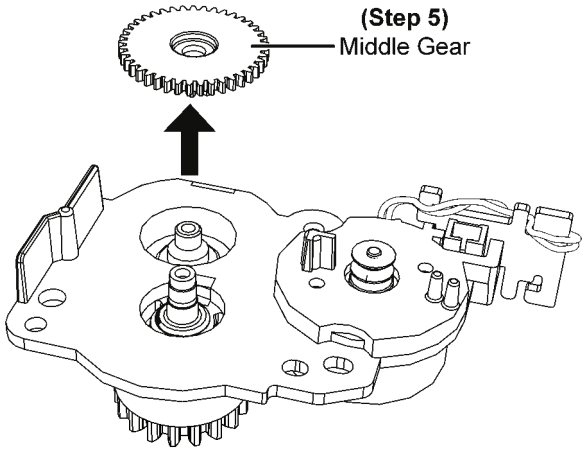
Step 3 : Remove Pulley Gear.



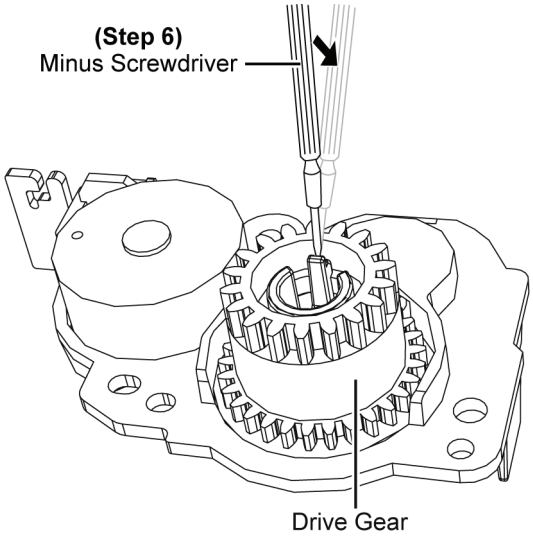
Step 4 : Remove screw.



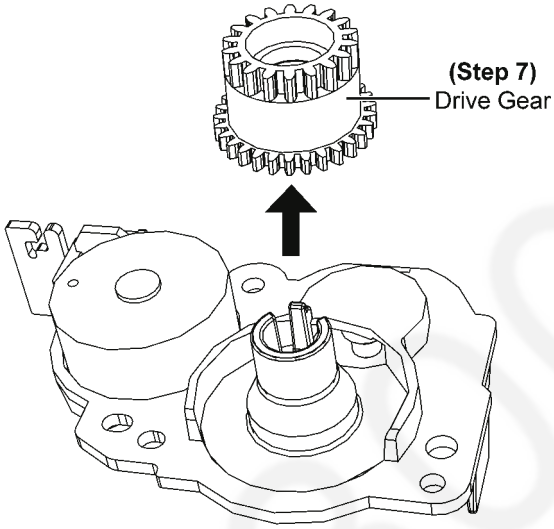
Step 5 : Remove Middle Gear.



Step 6 : Use minus screwdriver to release catch as shown.



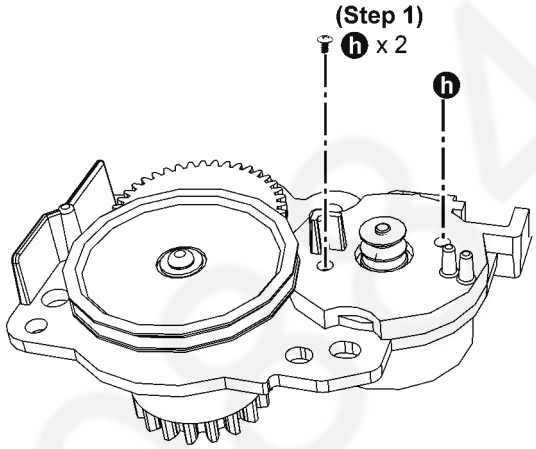
Step 7 : Remove Drive Gear.



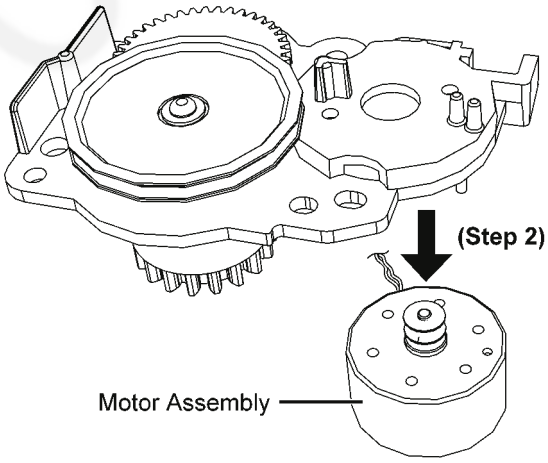
8.10.3. Disassembly of Motor Assembly

- Refer to “Disassembly of Gear Box Assembly”
- Refer to “Disassembly of Motor P.C.B.”
- Refer to (Step 1) of item 8.10.2.

Step 1 : Remove 2 screws.



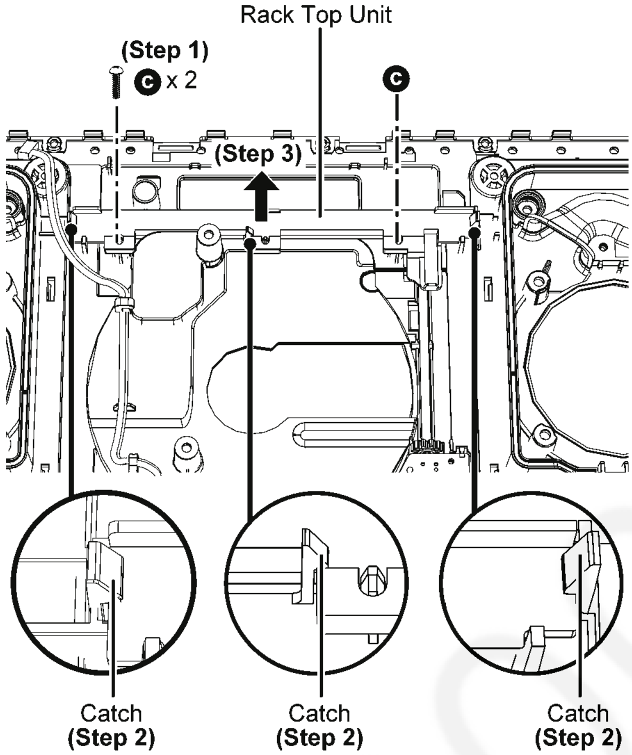
Step 2 : Remove Motor Assembly.



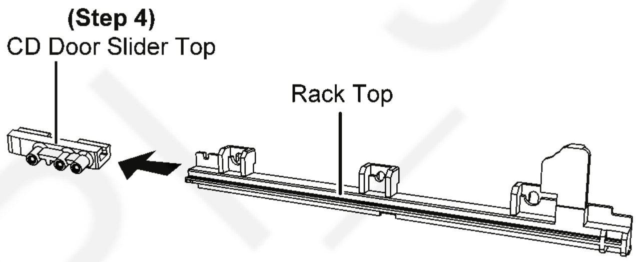
8.11. Disassembly of Rack Top & CD Door Slider Top

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”

Step 1 : Remove 2 screws.
Step 2 : Release catches.
Step 3 : Remove Rack Top Unit.



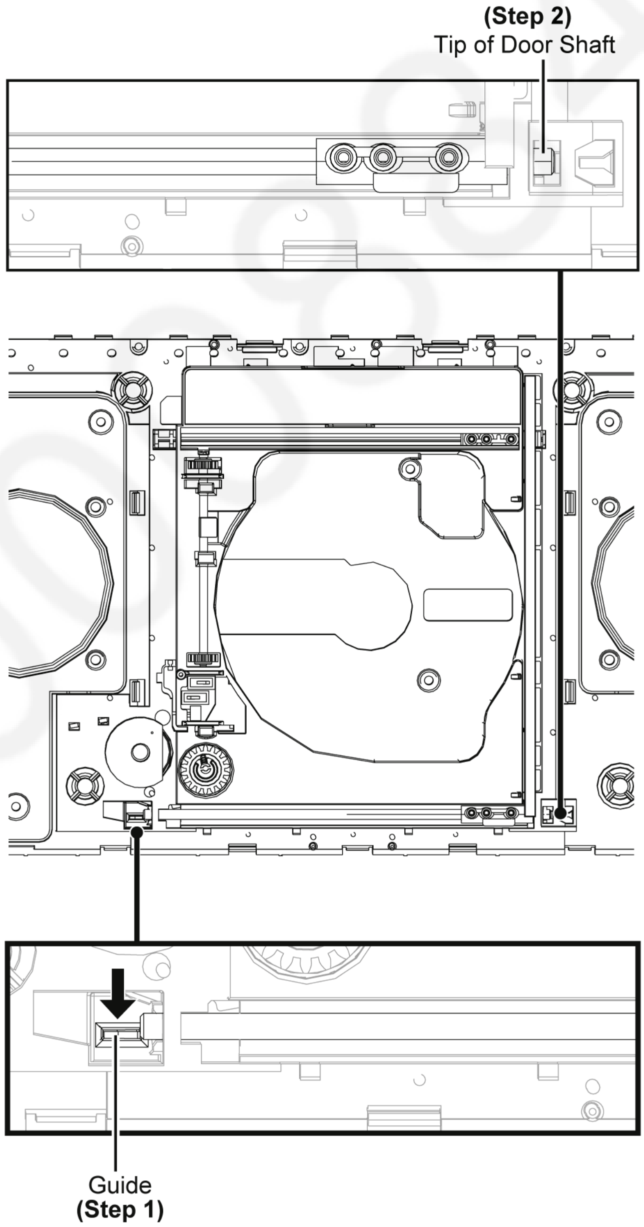
Step 4 : Remove CD Door Slider Top.



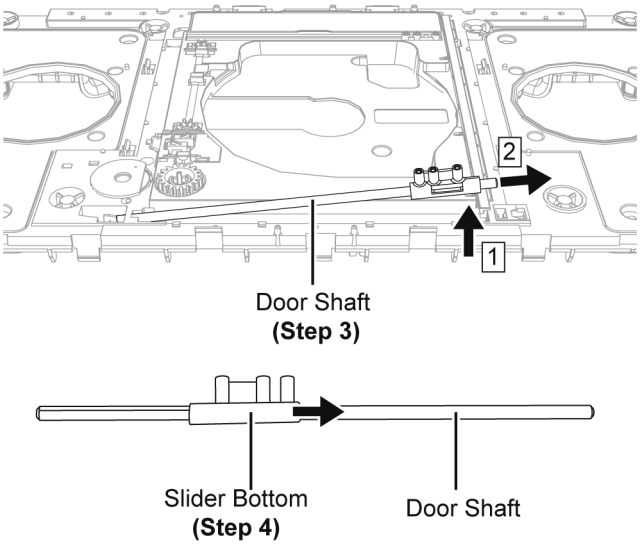
8.12. Disassembly of Door Shaft & CD Door Slider Bottom

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”

Step 1 : Lift up Guide.
Step 2 : Push tip of the Door Shaft inwards as arrow shown.



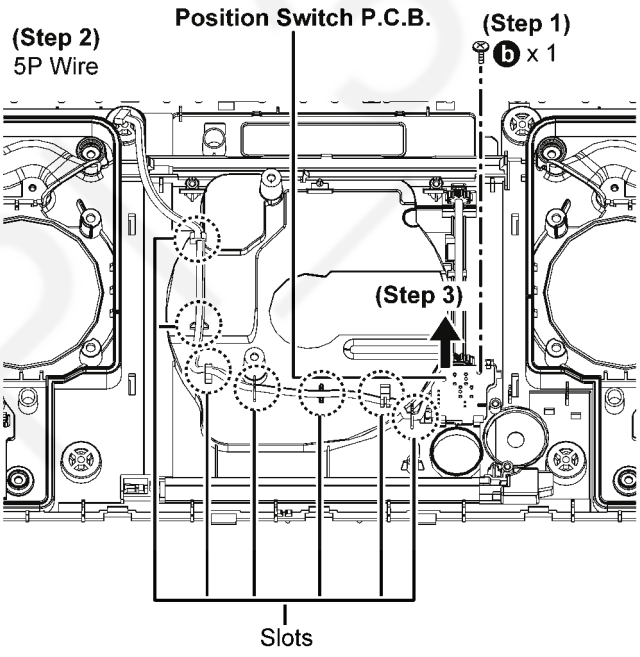
Step 3 : Lift up and remove Door Shaft in order of sequences (1) to (2).
Step 4 : Remove Slider Bottom.



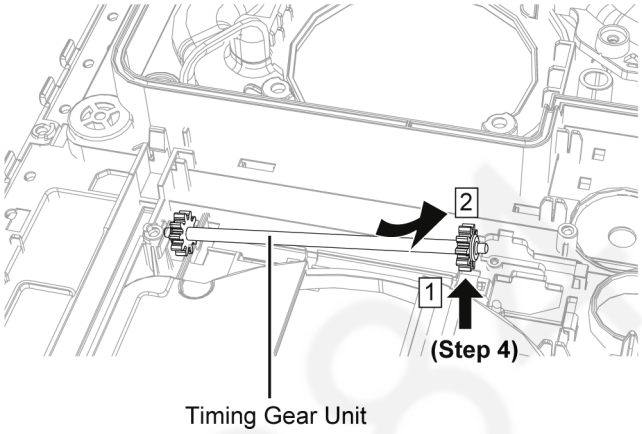
8.13. Disassembly of Position Switch P.C.B. & Timing Gear Unit

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”
- Refer to (Step 1) - (Step 3) of item 8.11.

Step 1 : Remove screw.
Step 2 : Release 5P Wire from slots.
Step 3 : Remove Position Switch P.C.B..



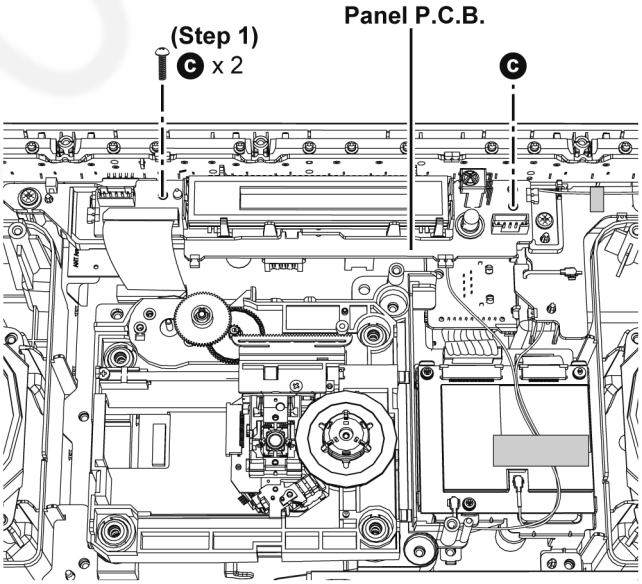
Step 4 : Remove Timing Gear Unit in order of sequences (1) to (2) as shown.



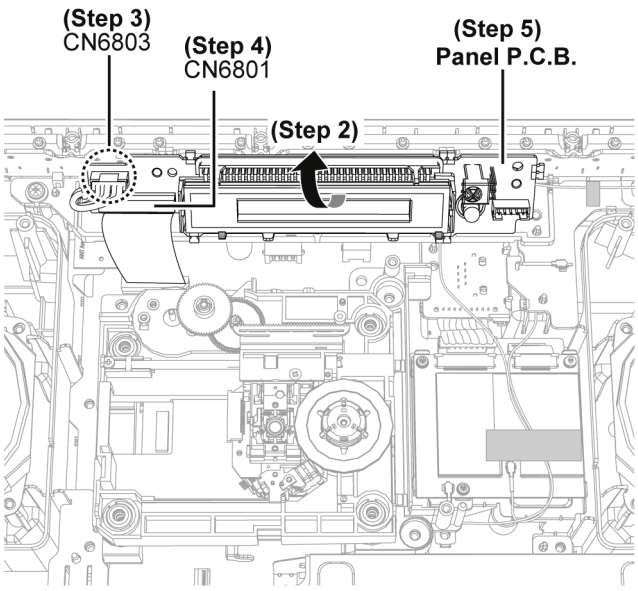
8.14. Disassembly of Panel P.C.B.

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”

Step 1 : Remove 2 screws.



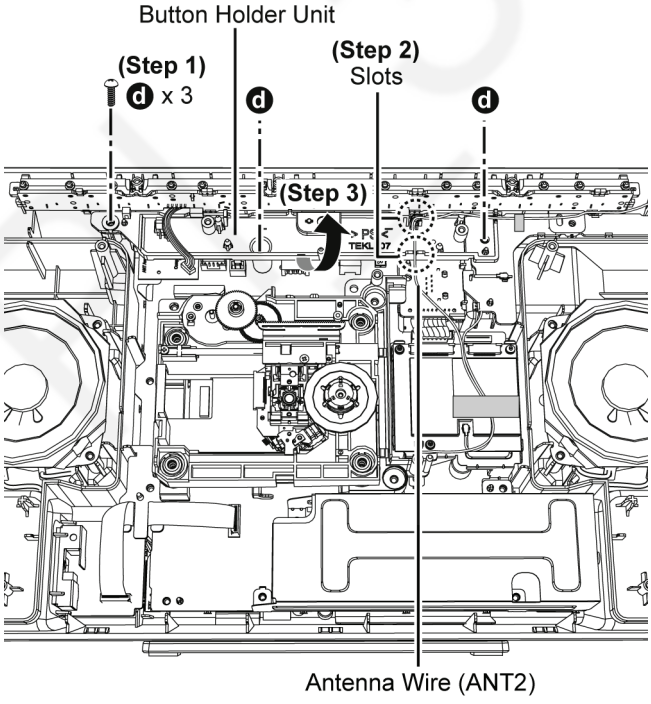
Step 2 : Lift up Panel P.C.B..
Step 3 : Detach 5P wire at the connector (CN6803) on the Panel P.C.B..
Step 4 : Detach 22P FFC at the connector (CN6801) on the Panel P.C.B..
Step 5 : Remove Panel P.C.B..



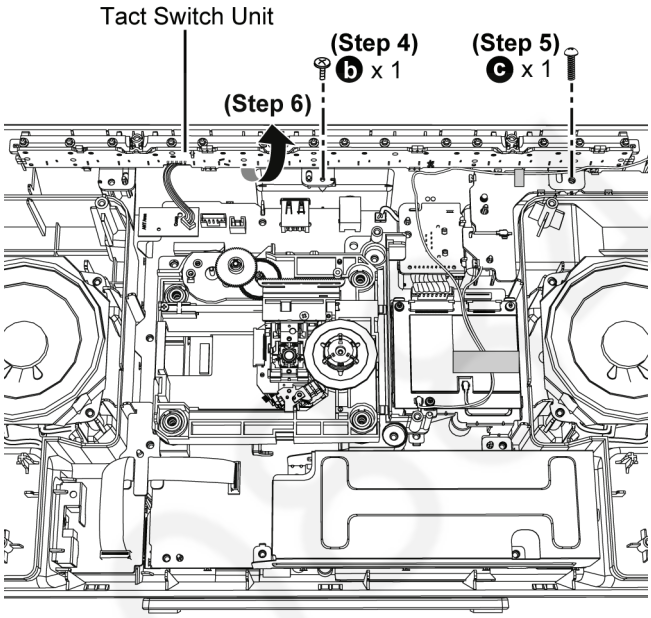
8.15. Disassembly of Tact Switch P.C.B.

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”
- Refer to “Disassembly of Panel P.C.B.”

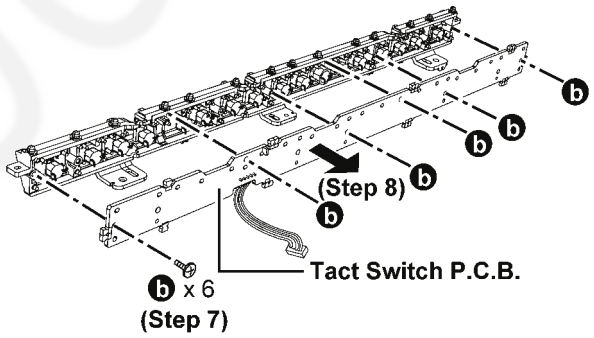
Step 1 : Remove 3 screws.
Step 2 : Detach Antenna Wire (ANT2) from slots.
Step 3 : Remove Button Holder.



Step 4 : Remove screw.
Step 5 : Remove screw.
Step 6 : Remove Tact Switch Unit.



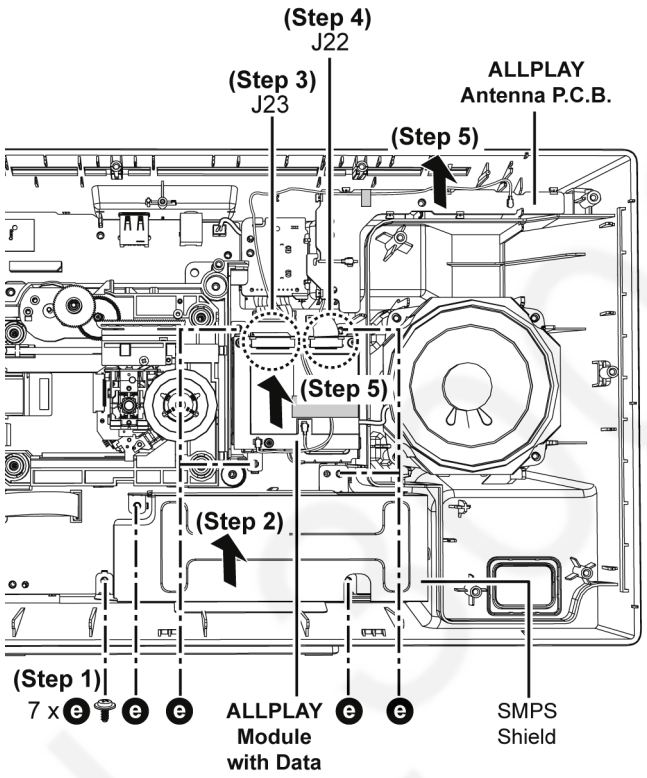
Step 7 : Remove 6 screws.
Step 8 : Remove Tact Switch P.C.B..



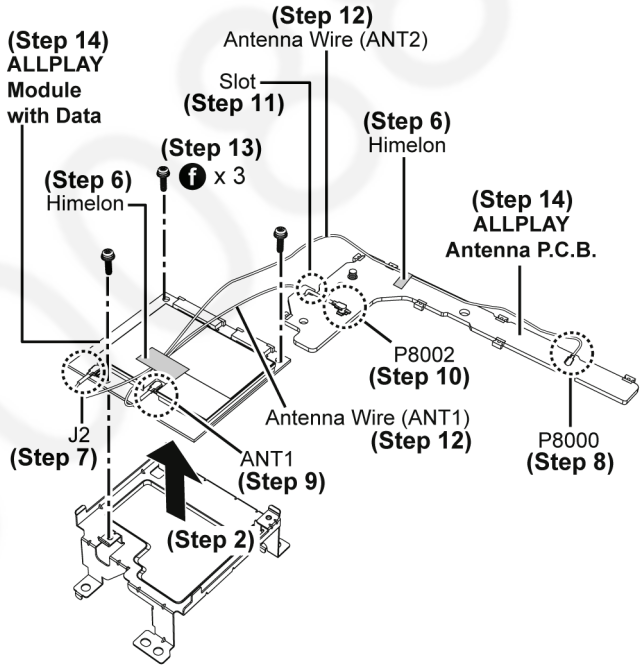
8.16. Disassembly of ALLPLAY Module with Data & ALLPLAY Antenna P.C.B.

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”
- Refer to “Disassembly of Panel P.C.B.”
- Refer to (Step 1) - (Step 6) of item 8.15.

Step 1 : Remove 7 screws.
Step 2 : Remove SMPS Shield.
Step 3 : Detach 30P FFC at connector (J23) on ALLPLAY Module with Data.
Step 4 : Detach 20P FFC at connector (J22) on ALLPLAY Module with Data.
Step 5 : Remove ALLPLAY Module with Data & ALLPLAY Antenna P.C.B..



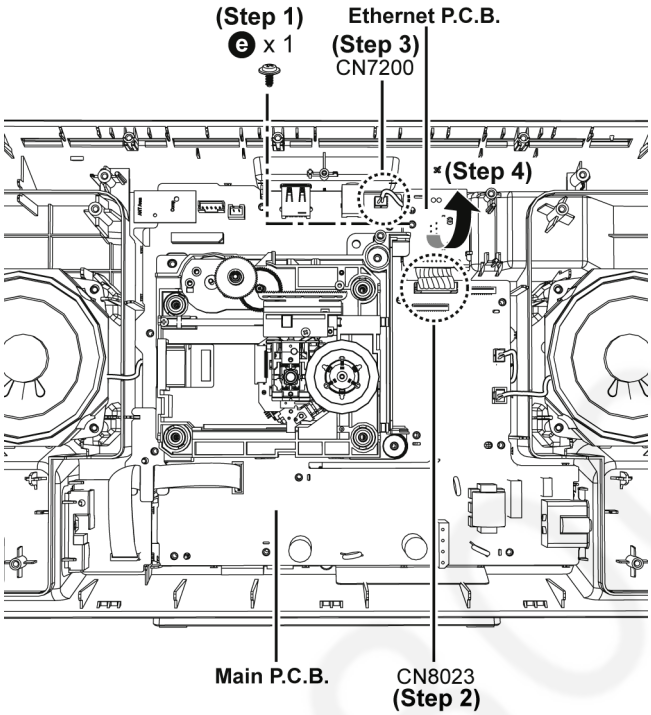
Step 6 : Lift up the himelons.
Step 7 : Detach Antenna Wire at connector (J2) on ALLPLAY Module with Data.
Step 8 : Detach Antenna Wire at connector (P8000) on ALLPLAY Antenna P.C.B..
Step 9 : Detach Antenna Wire at connector (ANT1) on ALLPLAY Module with Data.
Step 10 : Detach Antenna Wire at connector (P8002) on ALLPLAY Antenna P.C.B..
Step 11 : Release Antenna Wire (ANT1) from the slot.
Step 12 : Remove Antenna Wire (ANT1) and Antenna Wire (ANT2).
Step 13 : Remove 3 screws.
Step 14 : Remove ALLPLAY Module with Data and ALLPLAY Antenna P.C.B..



8.17. Disassembly of Ethernet P.C.B.

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”
- Refer to “Disassembly of Panel P.C.B.”
- Refer to (Step 1) - (Step 6) of item 8.15.
- Refer to (Step 1) - (Step 5) of item 8.16.

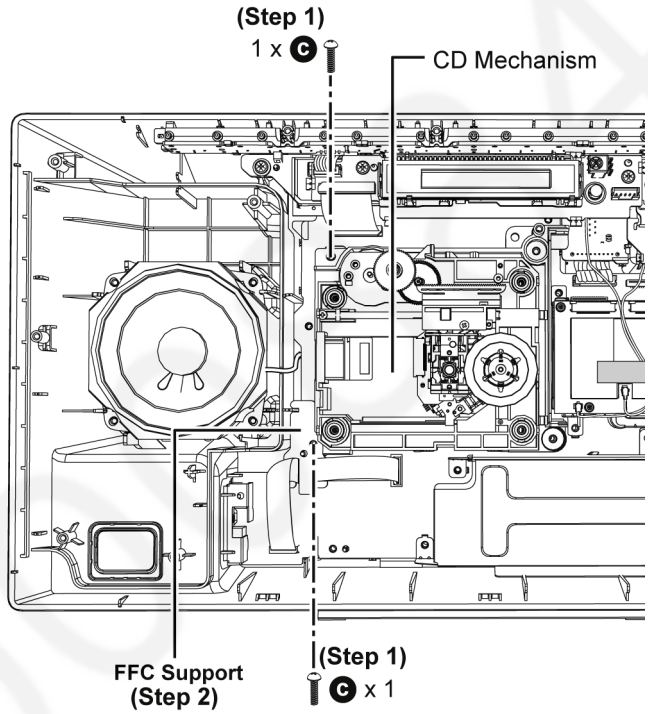
Step 1 : Remove screw.
Step 2 : Detach 9P Wire at connector (CN8023) on Main P.C.B..
Step 3 : Detach 2P Wire at connector (CN7200) on Main P.C.B..
Step 4 : Remove Ethernet P.C.B..



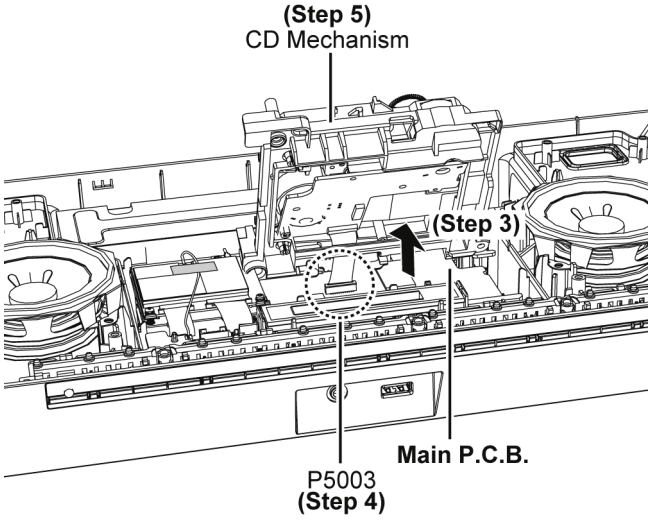
8.18. Disassembly of CD Mechanism

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”

Step 1 : Remove 2 screws.
Step 2 : Lift up FFC Support.



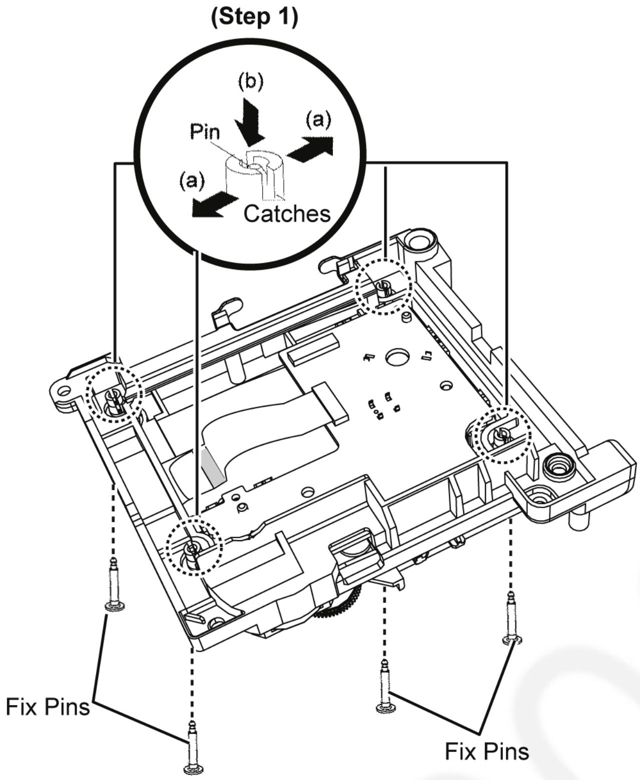
Step 3 : Lift up the CD Mechanism.
Step 4 : Detach 24P FFC at connector (P5003) on the Main P.C.B..
Step 5 : Remove CD Mechanism.



8.19. Disassembly of CD Interface P.C.B.

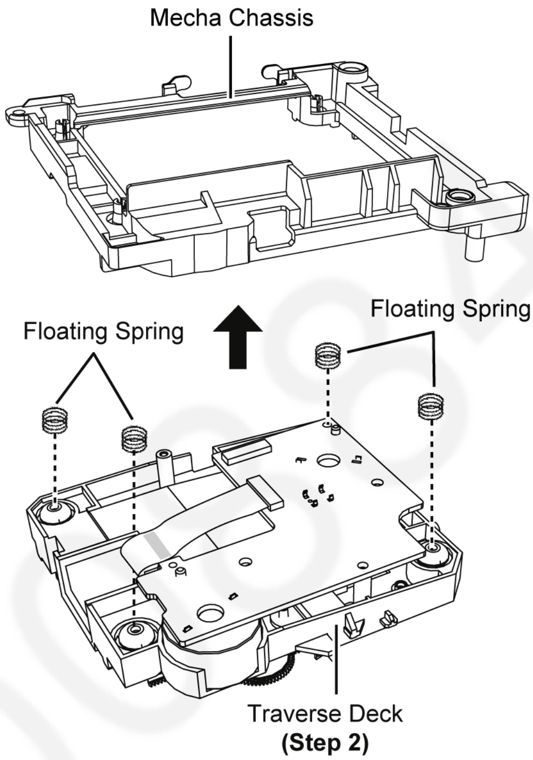
• Refer to “Disassembly of CD Mechanism”

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



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

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



Step 3 : Remove 2 screws.

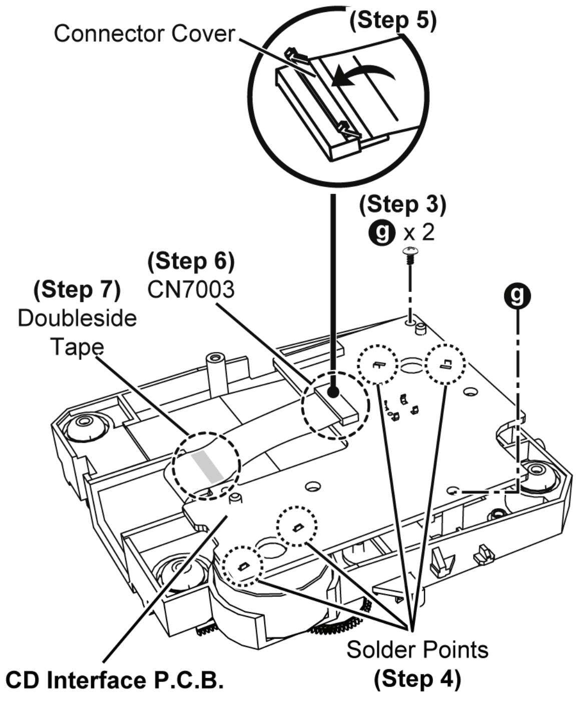
Step 4 : Desolder points on CD Interface P.C.B..

Step 5 : Lift up Connector Cover.

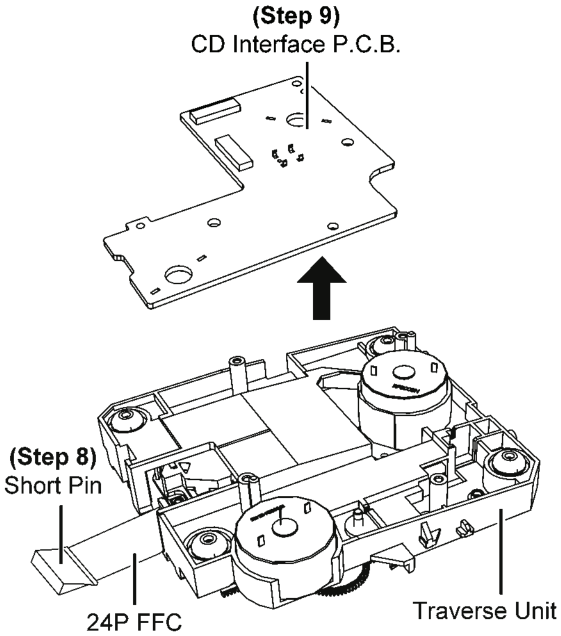
Caution : Do not use strong force as it may damage the connector cover

Step 6 : Detach 24P FFC at connector (CN7003) on CD Interface P.C.B..

Step 7 : Lift up 24P FFC from doubleside tape.



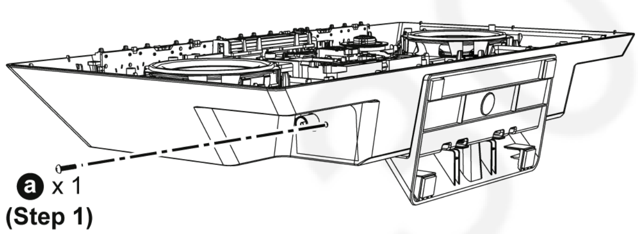
Step 8 : Attach short pin to 24P FFC of Traverse Unit.
Step 9 : Remove CD Interface P.C.B..



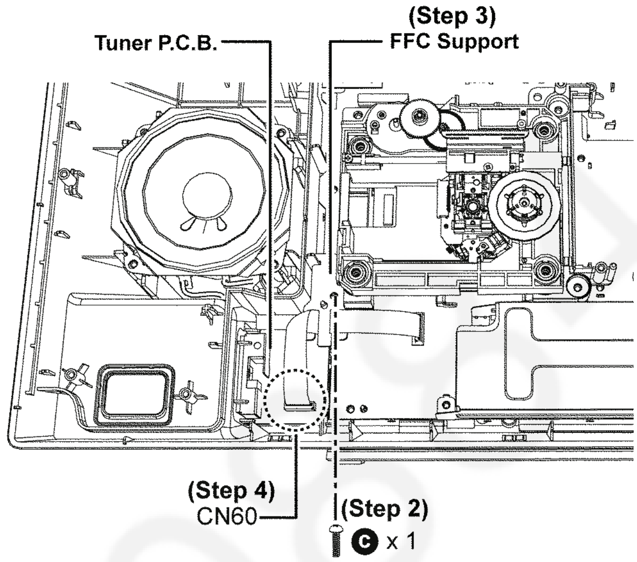
8.20. Disassembly of Tuner P.C.B.

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”

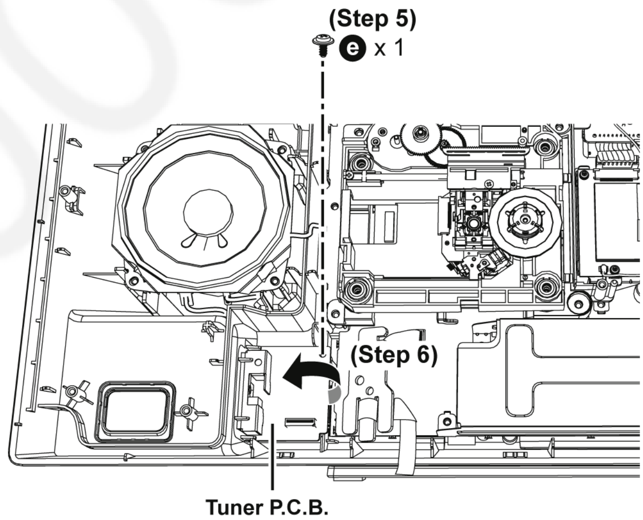
Step 1 : Remove screw.



Step 2 : Remove screw.
Step 3 : Lift up FFC Support.
Step 4 : Detach 10P FFC at connector (CN60) on Tuner P.C.B..



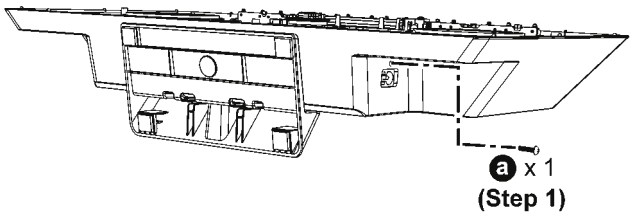
Step 5 : Remove screw.
Step 6 : Gently lift up and remove Tuner P.C.B..



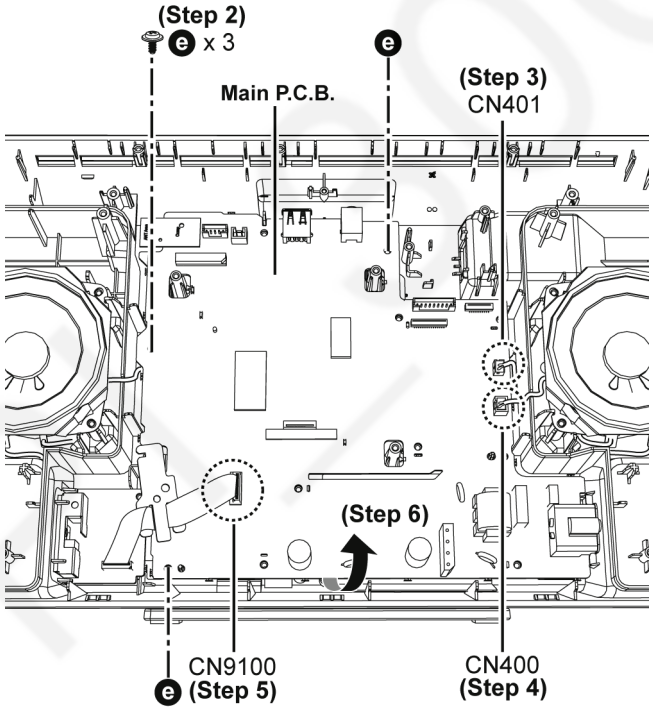
8.21. Disassembly of Main P.C.B.

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”
- Refer to “Disassembly of Panel P.C.B.”
- Refer to (Step 1) - (Step 6) of item 8.15.
- Refer to (Step 1) - (Step 5) of item 8.16.
- Refer to “Disassembly of Ethernet P.C.B.”
- Refer to “Disassembly of CD Mechanism”

Step 1 : Remove screw.



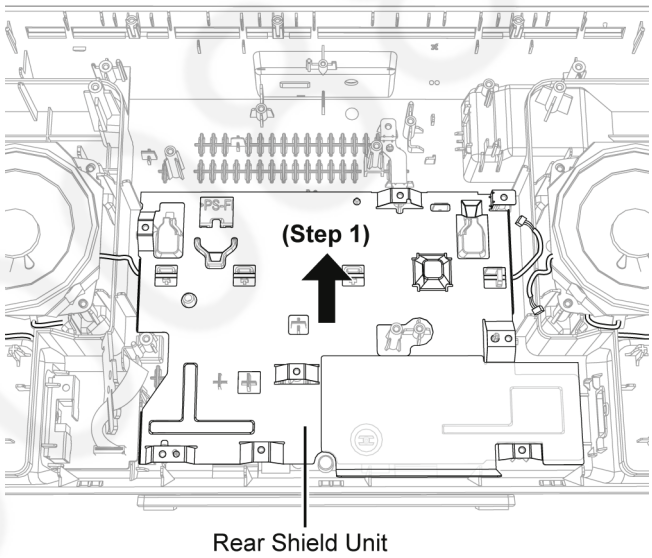
Step 2 : Remove 3 screws.
Step 3 : Detach 2P wires at connector (CN401) on the Main P.C.B..
Step 4 : Detach 2P wires at connector (CN400) on the Main P.C.B..
Step 5 : Detach 10P FFC at connector (CN9100) on the Main P.C.B..
Step 6 : Remove Main P.C.B. as shown.



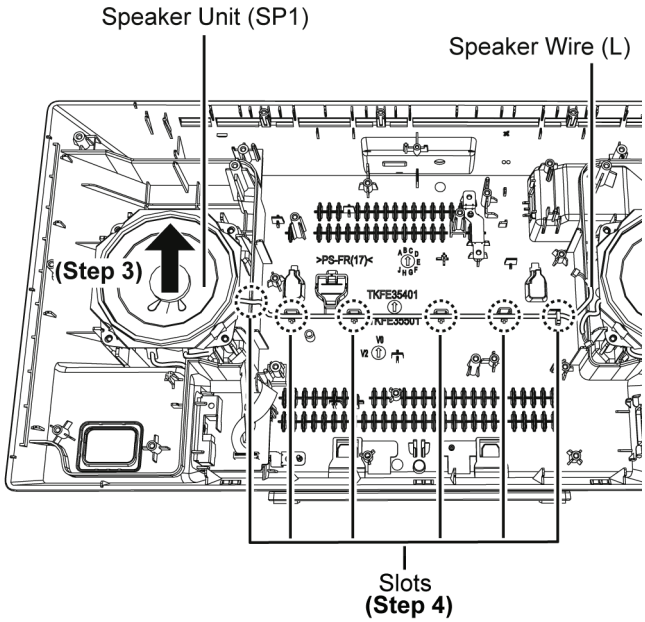
8.22. Disassembly of Speaker Unit (SP1)

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”
- Refer to “Disassembly of Panel P.C.B.”
- Refer to (Step 1) - (Step 6) of item 8.15.
- Refer to (Step 1) - (Step 5) of item 8.16.
- Refer to “Disassembly of Ethernet P.C.B.”
- Refer to “Disassembly of CD Mechanism”
- Refer to “Disassembly of Main P.C.B.”

Step 1 : Remove Rear Shield Unit.



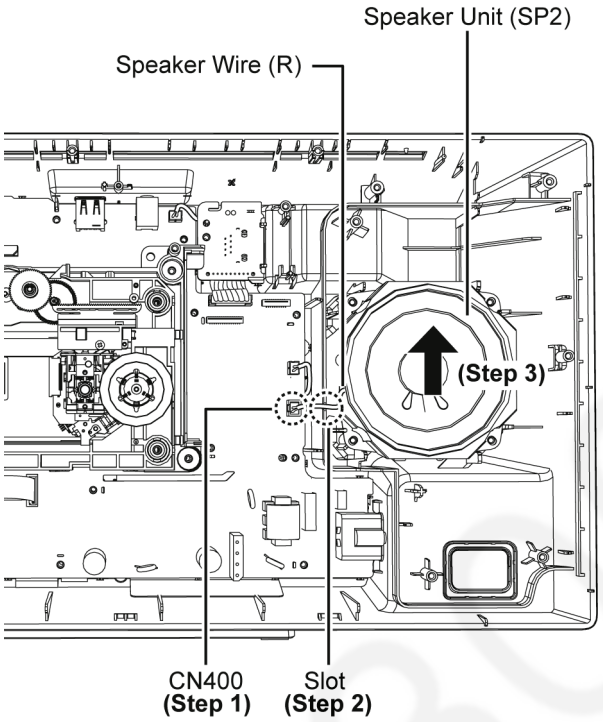
Step 2 : Release the 2P speaker wire (L) from the slots.
Step 3 : Remove Speaker Unit (SP1).



8.23. Disassembly of Speaker Unit (SP2)

- Refer to “Disassembly of CD Door Ornament”
- Refer to “Disassembly of CD Door Base”
- Refer to “Disassembly of Net Frame Assembly”
- Refer to “Disassembly of Front Cabinet Assembly”
- Refer to “Disassembly of Panel P.C.B.”
- Refer to (Step 1) - (Step 6) of item 8.15.
- Refer to (Step 1) - (Step 5) of item 8.16.

Step 1 : Detach 2P wires at connector (CN400) on the Main P.C.B..
Step 2 : Release the 2P speaker wire (R) from the slot.
Step 3 : Remove Speaker Unit (SP2).

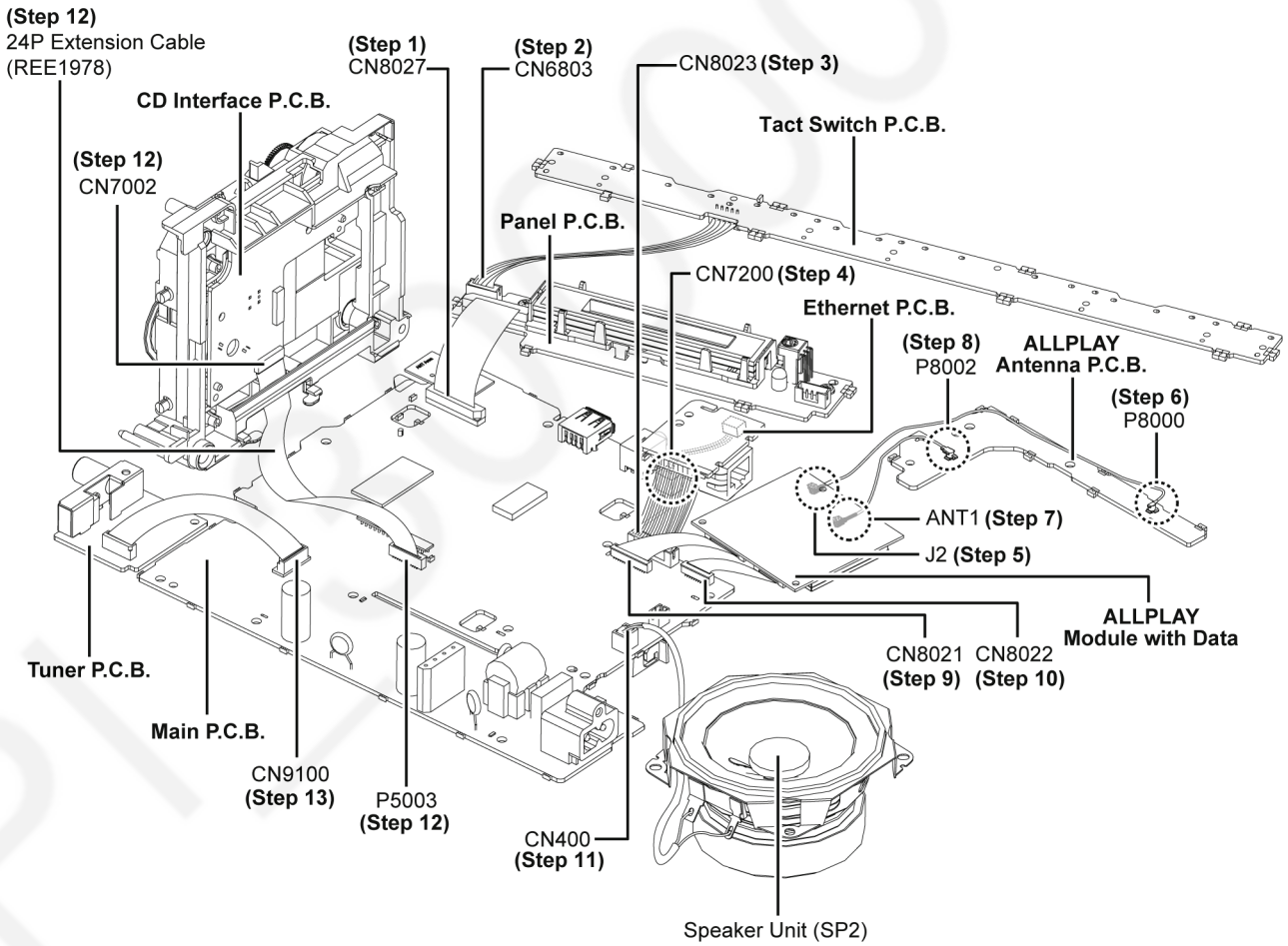


9 Service Position

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

9.1. Checking of Tact Switch, Panel, Ethernet, ALLPLAY Antenna, ALLPLAY Module with Data, Main and CD Interface P.C.B.

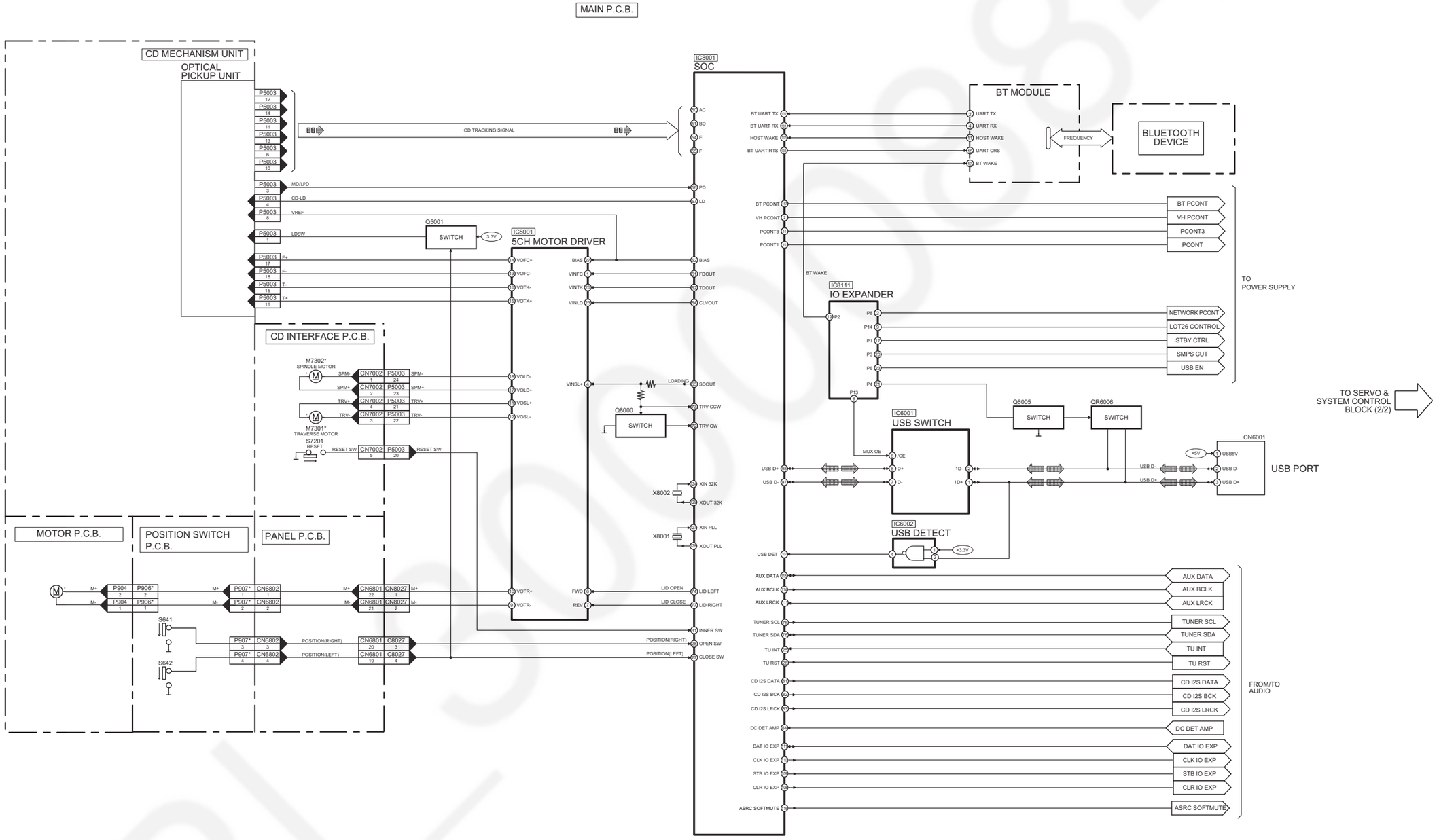
Step 1 : Connect 22P FFC at the connector (CN8027) on the Main P.C.B..
Step 2 : Connect 5P wire at the connector (CN6803) on the Panel P.C.B..
Step 3 : Connect 9P Wire at connector (CN8023) on Main P.C.B..
Step 4 : Connect 2P Wire at connector (CN7200) on Main P.C.B..
Step 5 : Connect Antenna Wire at connector (J2) on ALLPLAY Module with Data.
Step 6 : Connect Antenna Wire at connector (P8000) on ALLPLAY Antenna P.C.B..
Step 7 : Connect Antenna Wire at connector (ANT1) on ALLPLAY Module with Data.
Step 8 : Connect Antenna Wire at connector (P8002) on ALLPLAY Antenna P.C.B..
Step 9 : Connect 30P FFC at connector (CN8021) on Main P.C.B..
Step 10 : Connect 20P FFC at connector (CN8022) on Main P.C.B..
Step 11 : Connect 2P wires at connector (CN400) on the Main P.C.B..
Step 12 : Connect 24P extension cable (REE1978) from P5003 on Main P.C.B. to CN7002 on CD Interface P.C.B..
Step 13 : Connect 10P FFC at connector (CN9100) on the Main P.C.B..
Step 14 : Check Tact Switch, Panel, Ethernet, ALLPLAY Antenna, ALLPLAY Module with Data, Main and CD Interface P.C.B. according to the diagram shown.



10 Block Diagram

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

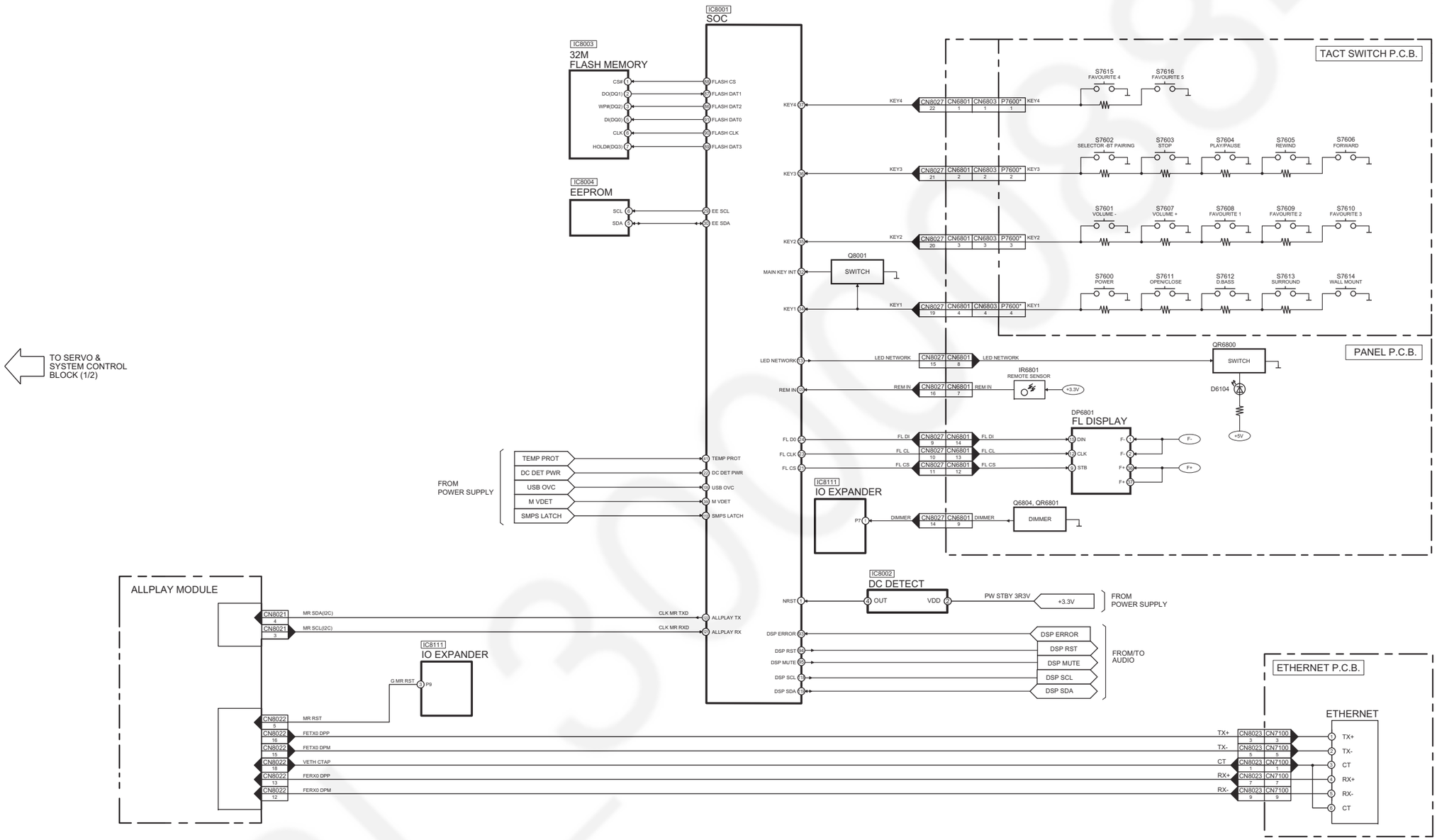
: CD SIGNAL LINE : USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC1000GM/GS SERVO & SYSTEM CONTROL (1/2) BLOCK DIAGRAM

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

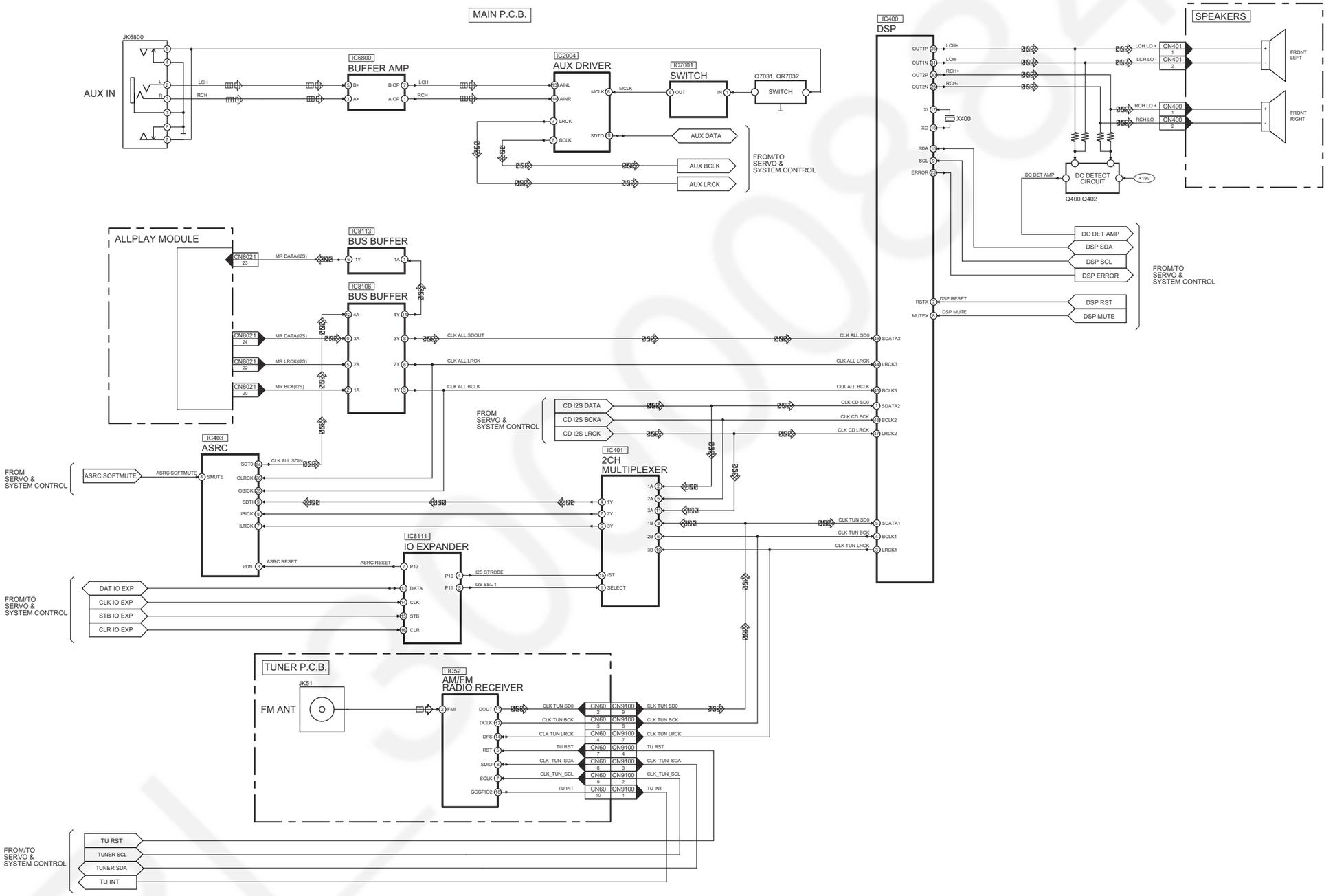


NOTE: “ * ” REF IS FOR INDICATION ONLY

SC-HC1000GM/GS SERVO & SYSTEM CONTROL (2/2) BLOCK DIAGRAM

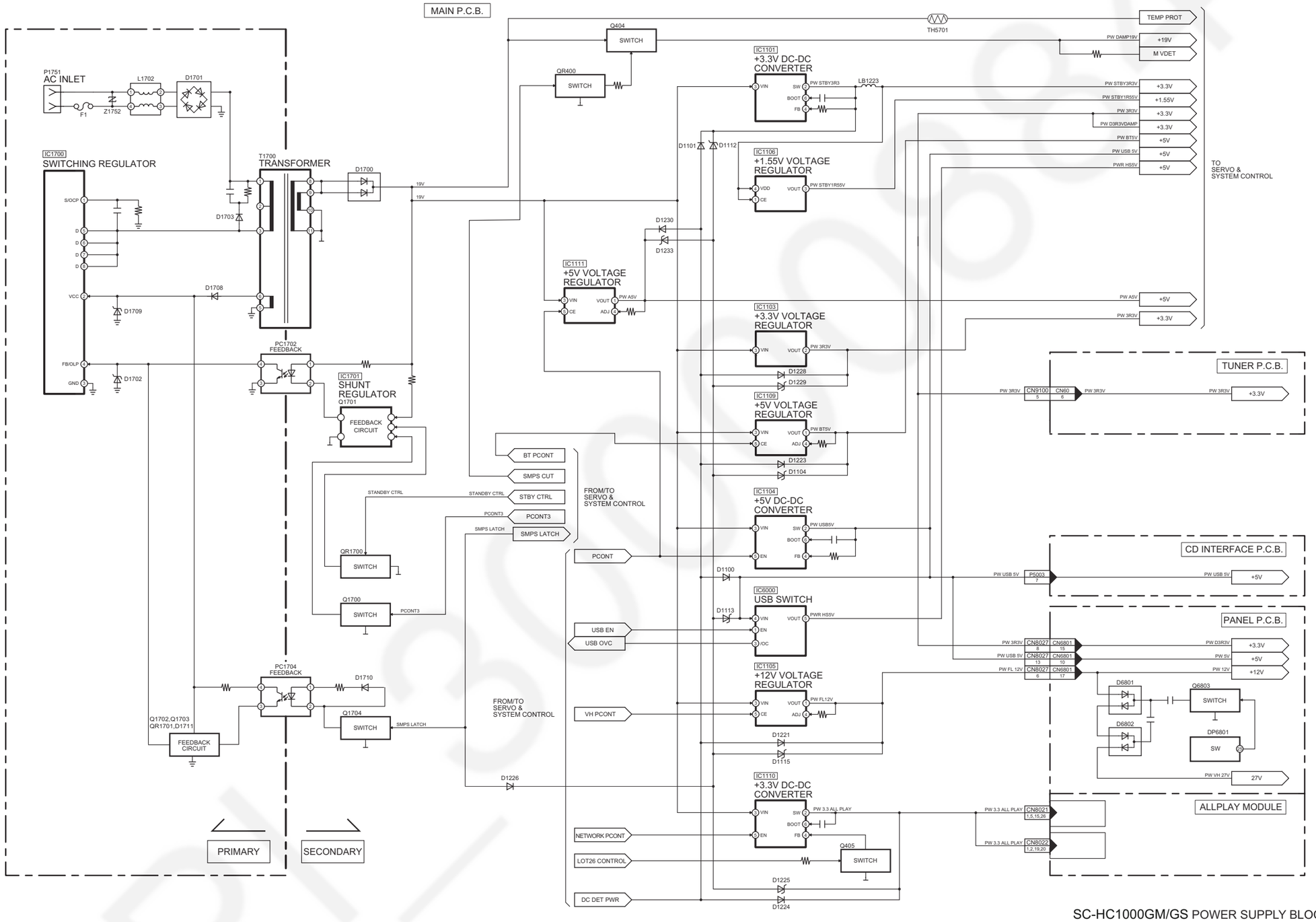
10.3. AUDIO BLOCK DIAGRAM

: CD SIGNAL LINE : TUNER/AUX SIGNAL LINE : AUDIO SIGNAL LINE : FM SIGNAL LINE



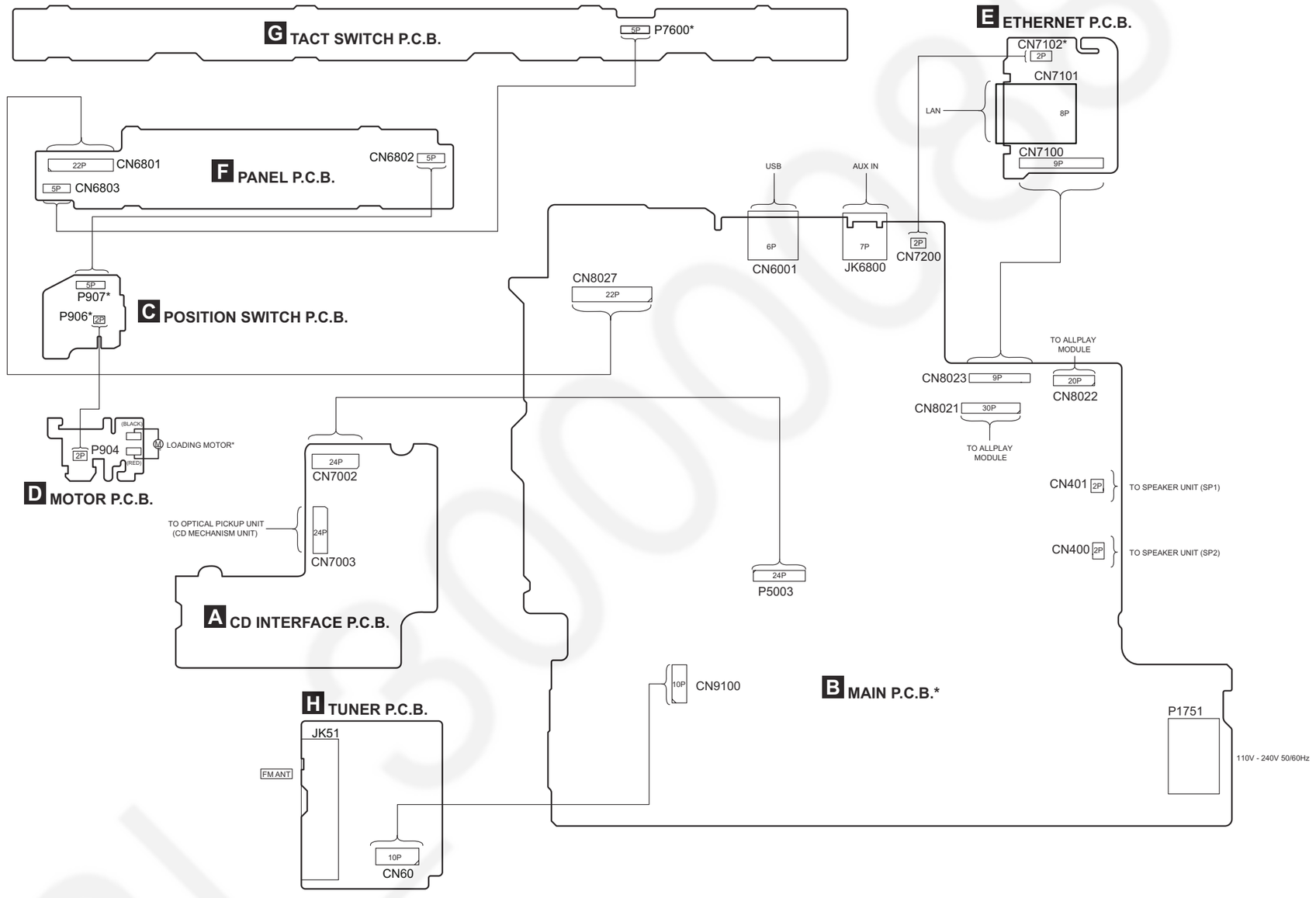
SC-HC1000GM/GS AUDIO BLOCK DIAGRAM

10.4. POWER SUPPLY BLOCK DIAGRAM



SC-HC1000GM/GS POWER SUPPLY BLOCK DIAGRAM

11 Wiring Connection Diagram



Note : “ * ” REF IS FOR INDICATION ONLY.

SC-HC1000GM/GS
WIRING CONNECTION DIAGRAM

12 Schematic Diagram

12.1. Schematic Diagram Notes

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

Notes:

S641:	OPEN switch.
S642:	CLOSE switch.
S7600:	POWER switch (⏻/I).
S7601:	VOL- switch.
S7602:	SELECTOR -BT PAIRING switch ().
S7603:	STOP switch (■).
S7604:	PLAY/PAUSE switch (▶/❚❚).
S7605:	RWD SKIP switch (⏮/◀◀).
S7606:	FWD SKIP switch (▶▶/⏭).
S7607:	VOL+ switch.
S7608:	FAVOURITE 1 switch.
S7609:	FAVOURITE 2 switch.
S7610:	FAVOURITE 3 switch.
S7611:	OPEN/CLOSE switch(⏏).
S7612:	D.BASS switch.
S7613:	SURROUND switch.
S7614:	WALL MOUNT switch.
S7615:	FAVOURITE 4 switch.
S7616:	FAVOURITE 5 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

  : CD Signal Line

  :TUNER/AUX Signal Line

  : LAN 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

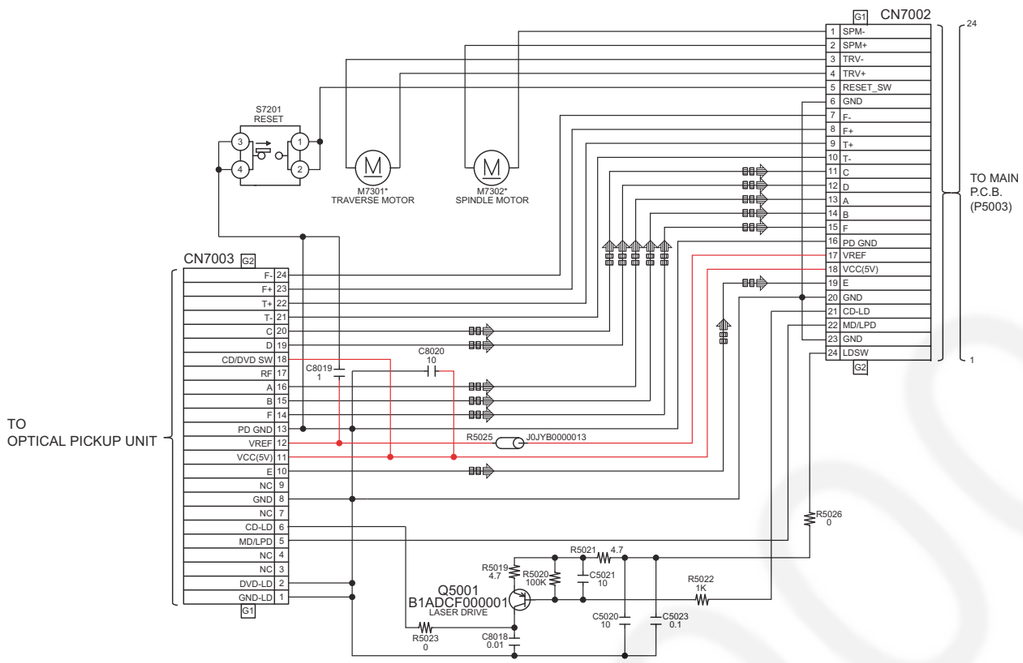
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

12.2. CD INTERFACE CIRCUIT

SCHEMATIC DIAGRAM - 1

A CD INTERFACE CIRCUIT

—— : +B SIGNAL LINE ▮▮▮▶ : CD SIGNAL LINE



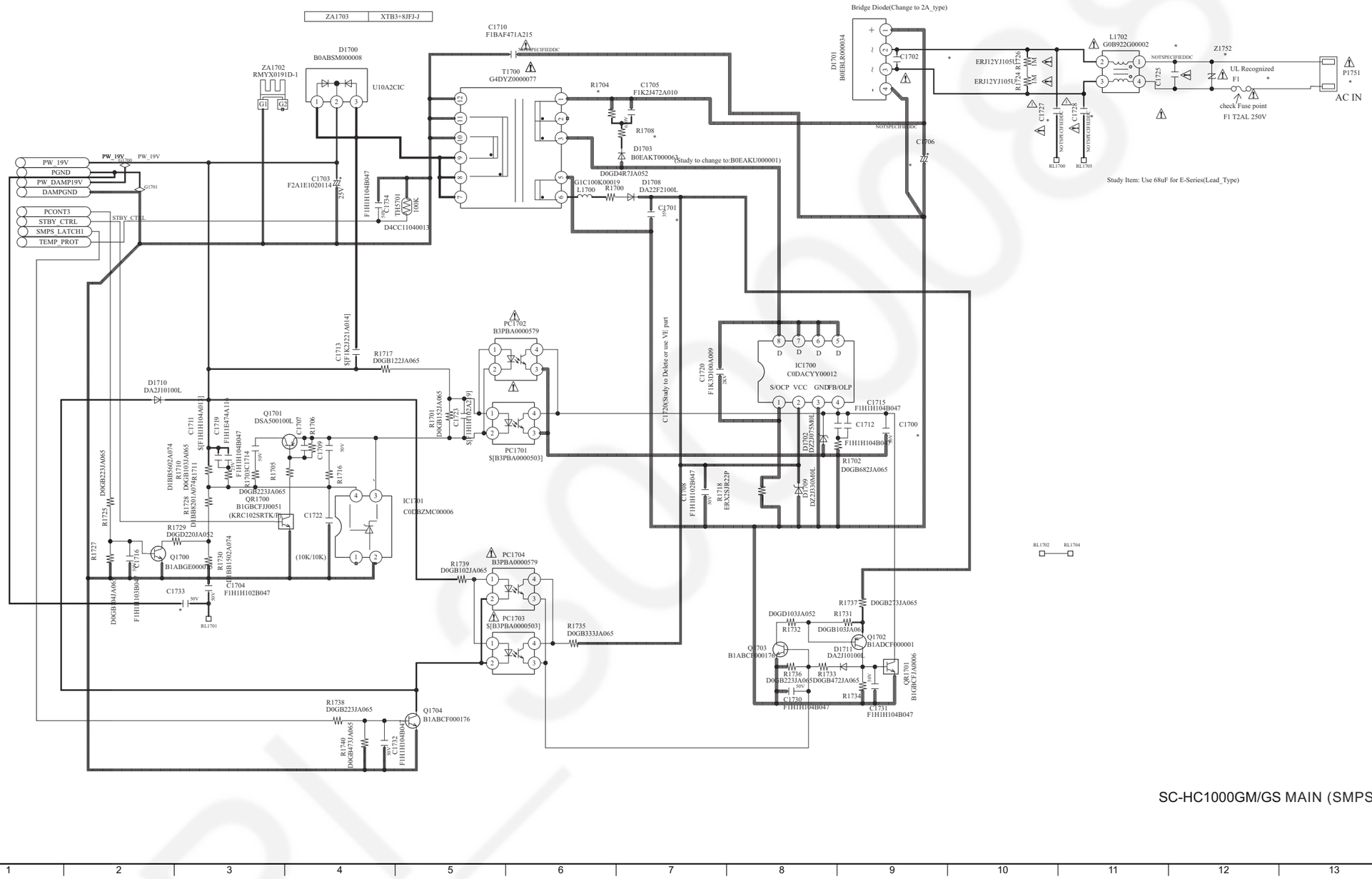
NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC1000GM/GS CD INTERFACE CIRCUIT

12.3. MAIN (SMPS) CIRCUIT

SCHEMATIC DIAGRAM - 2

B MAIN (SMPS) CIRCUIT

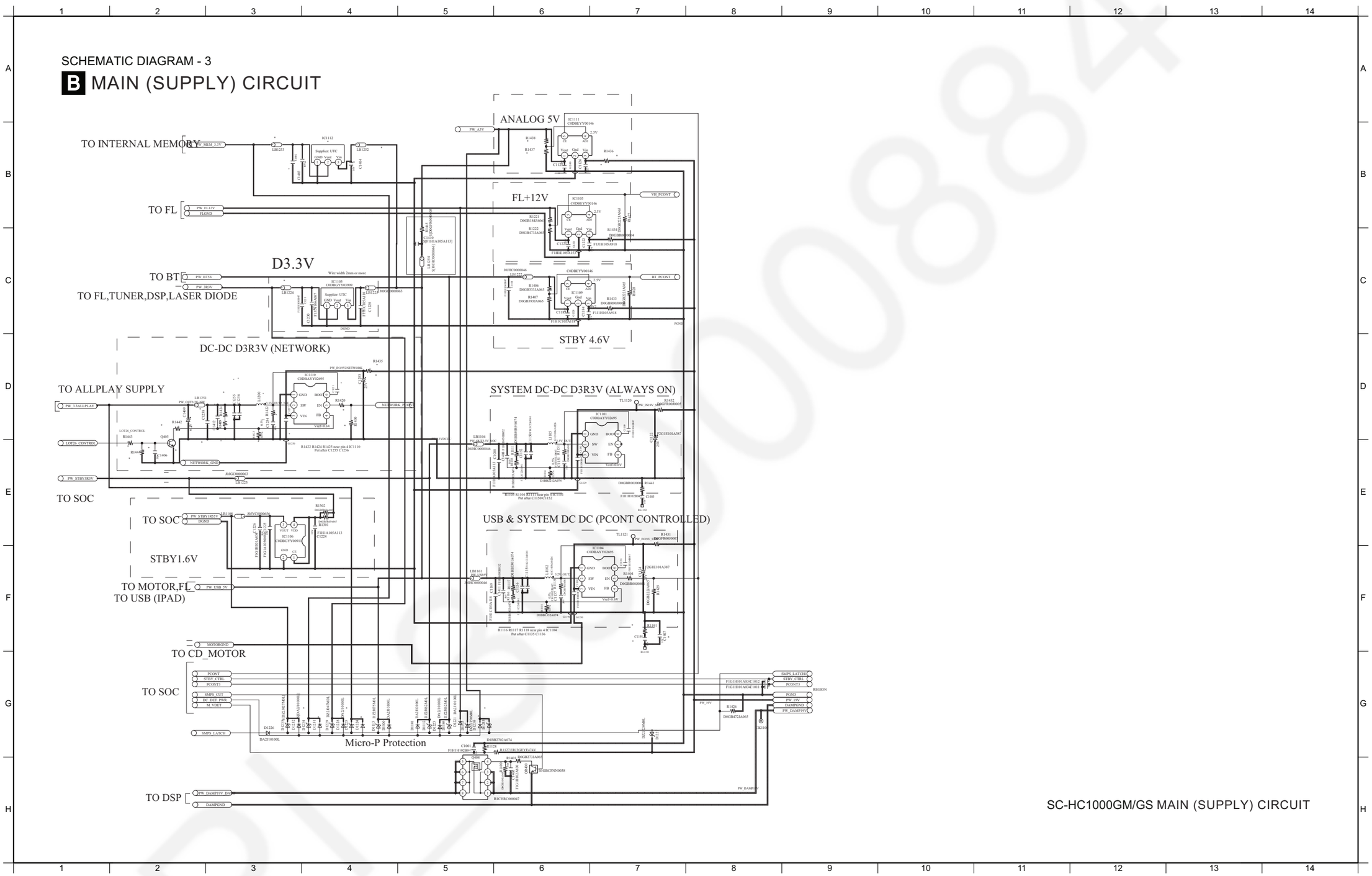


SC-HC1000GM/GS MAIN (SMPS) CIRCUIT

12.4. MAIN (SUPPLY) CIRCUIT

SCHEMATIC DIAGRAM - 3

B MAIN (SUPPLY) CIRCUIT

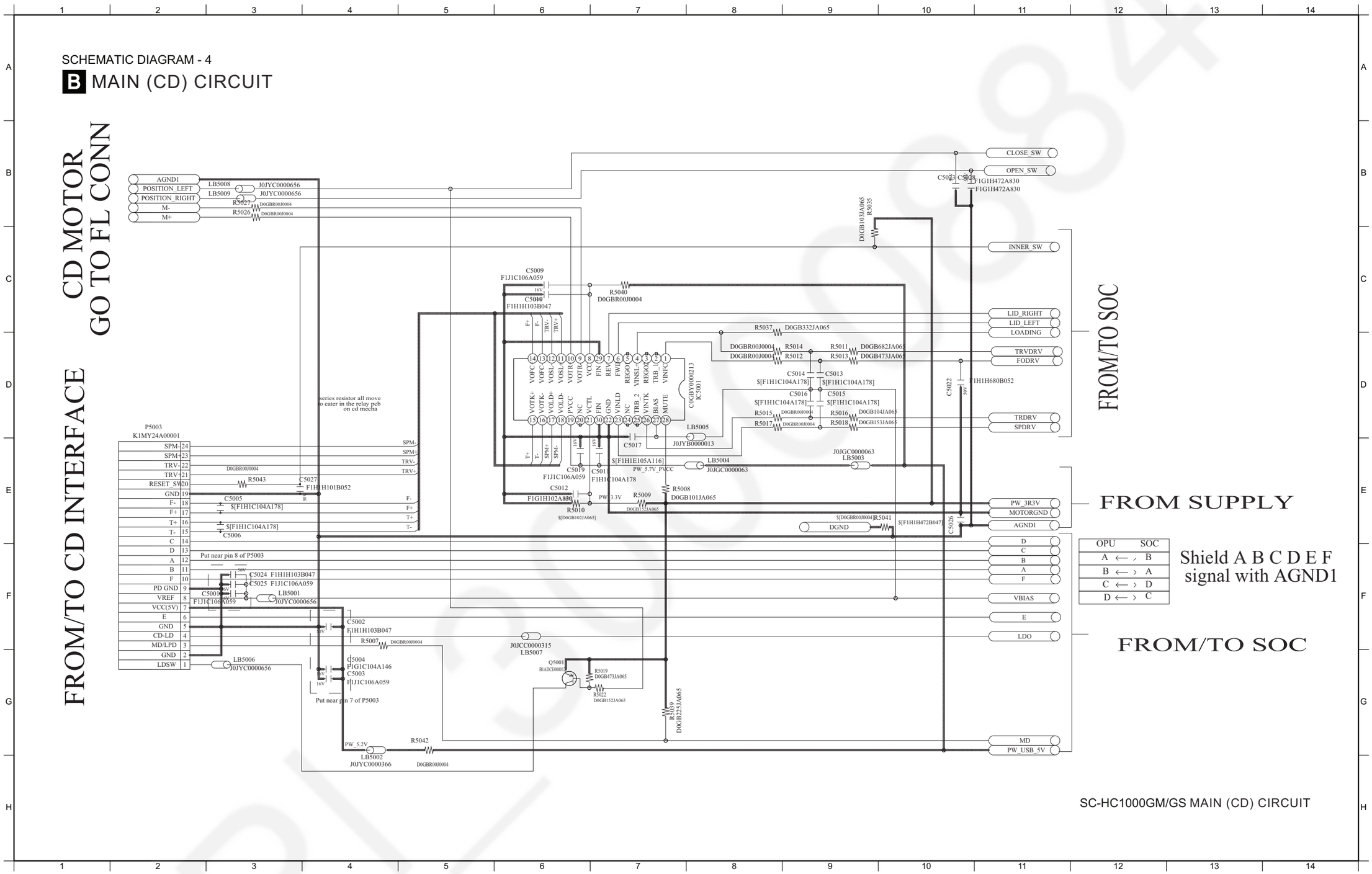


SC-HC1000GM/GS MAIN (SUPPLY) CIRCUIT

12.5. MAIN (CD) CIRCUIT

SCHEMATIC DIAGRAM - 4

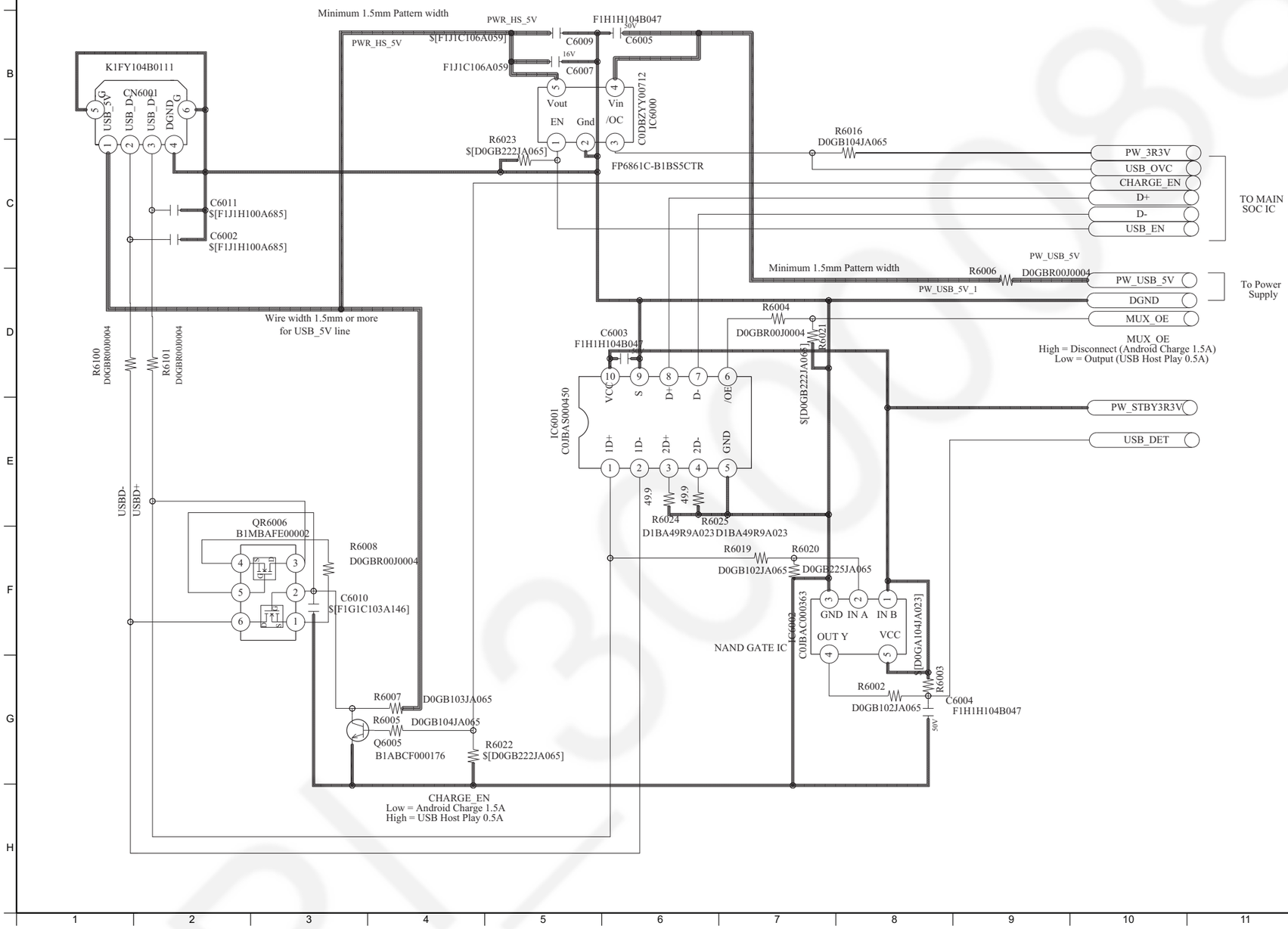
B MAIN (CD) CIRCUIT



12.6. MAIN (USB) CIRCUIT

SCHEMATIC DIAGRAM - 5

B MAIN (USB) CIRCUIT

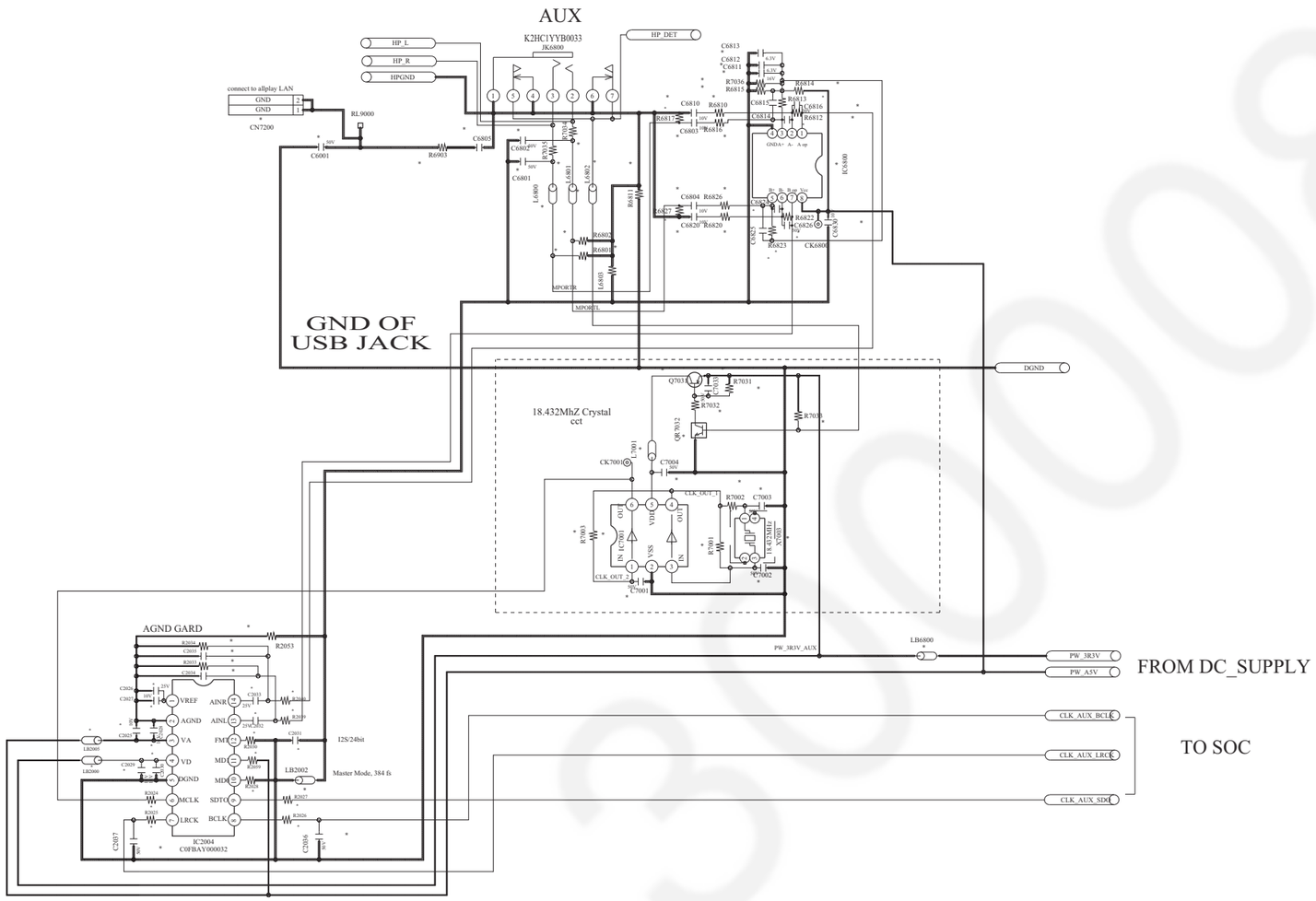


SC-HC1000GM/GS MAIN (USB) CIRCUIT

12.7. MAIN (AUX) CIRCUIT

SCHEMATIC DIAGRAM - 6

B MAIN (AUX) CIRCUIT

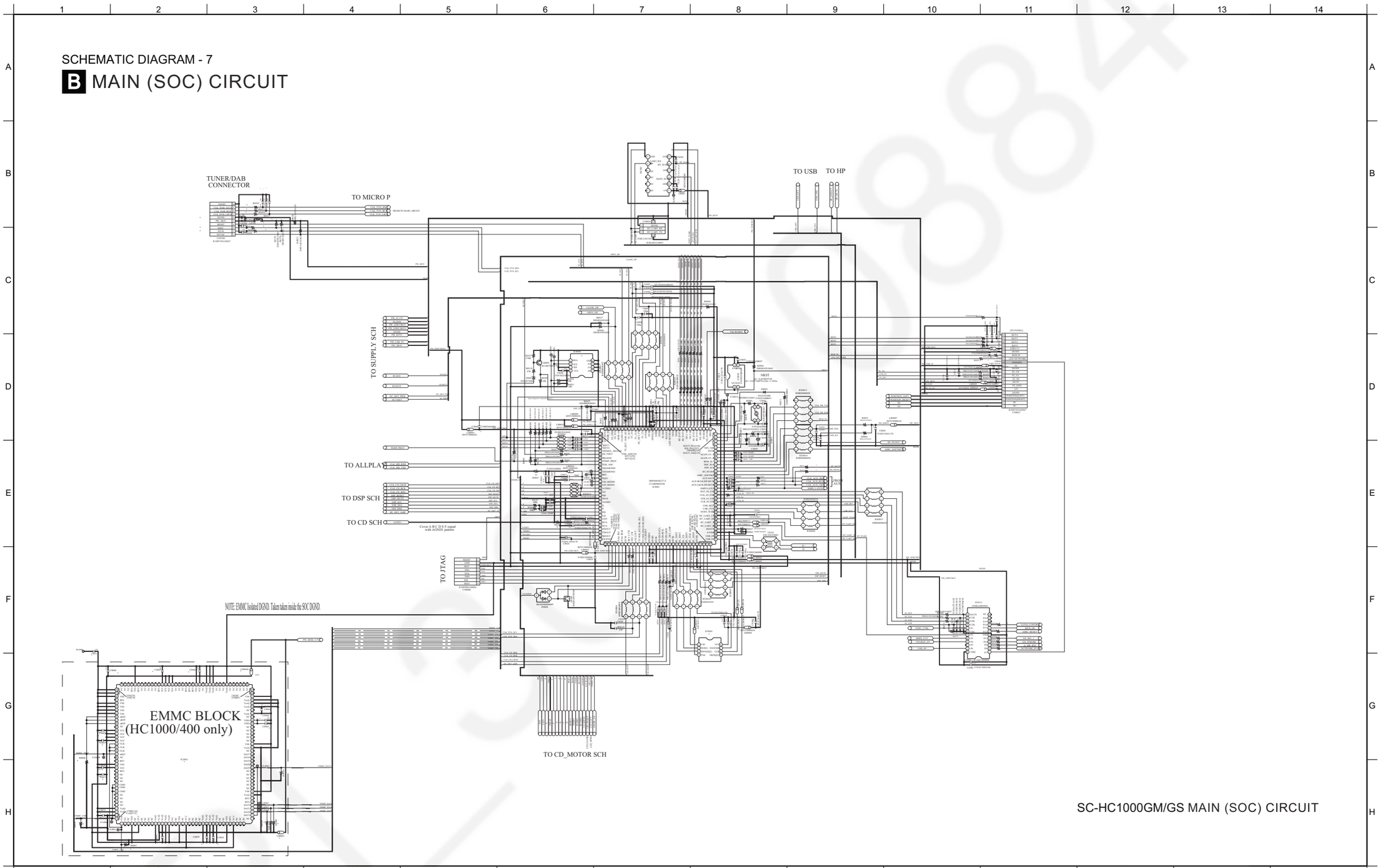


SC-HC1000GM/GS MAIN (AUX) CIRCUIT

12.8. MAIN (SOC) CIRCUIT

SCHEMATIC DIAGRAM - 7

B MAIN (SOC) CIRCUIT

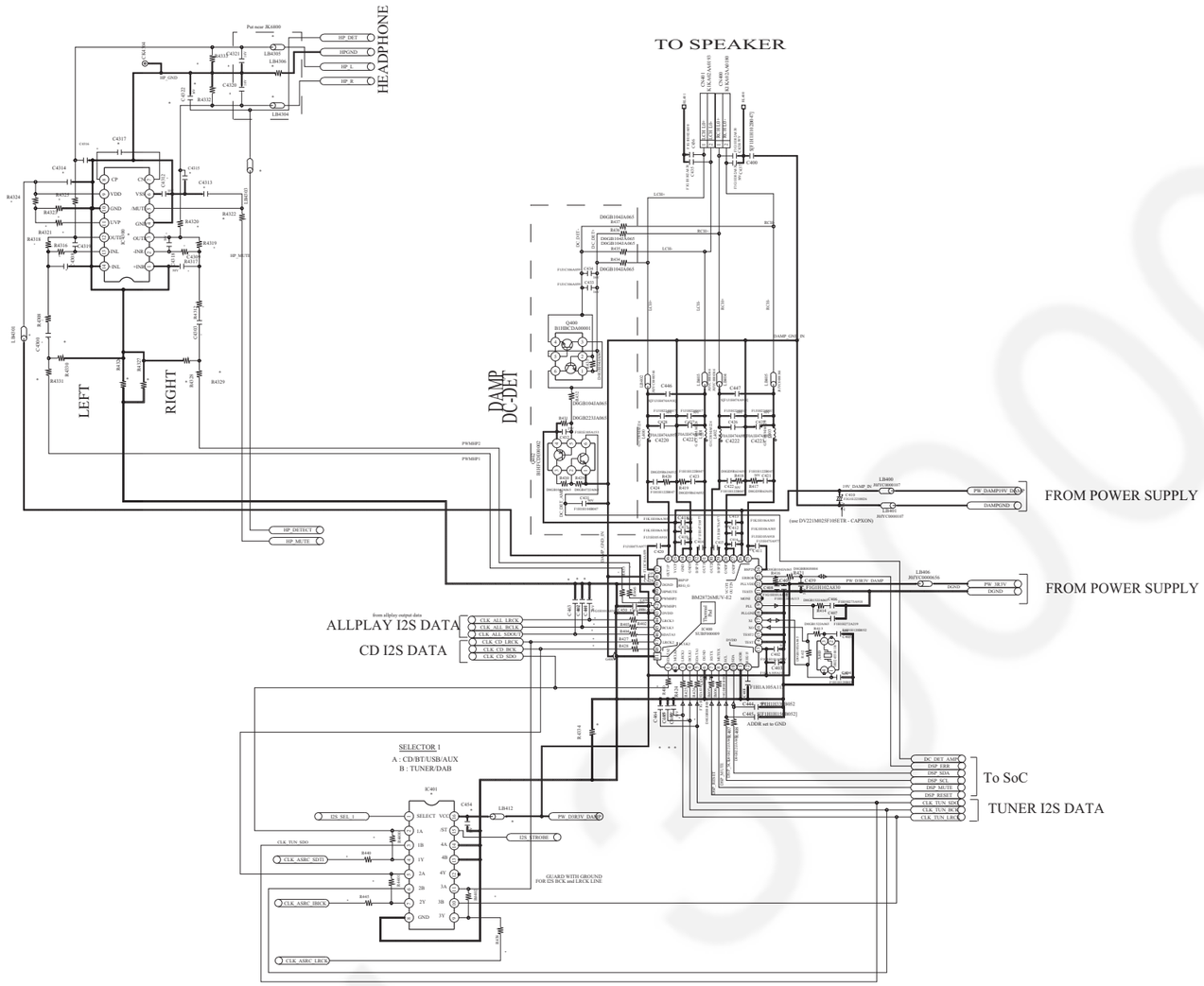


SC-HC1000GM/GS MAIN (SOC) CIRCUIT

12.9. MAIN (DAMP) CIRCUIT

SCHEMATIC DIAGRAM - 8

B MAIN (DAMP) CIRCUIT

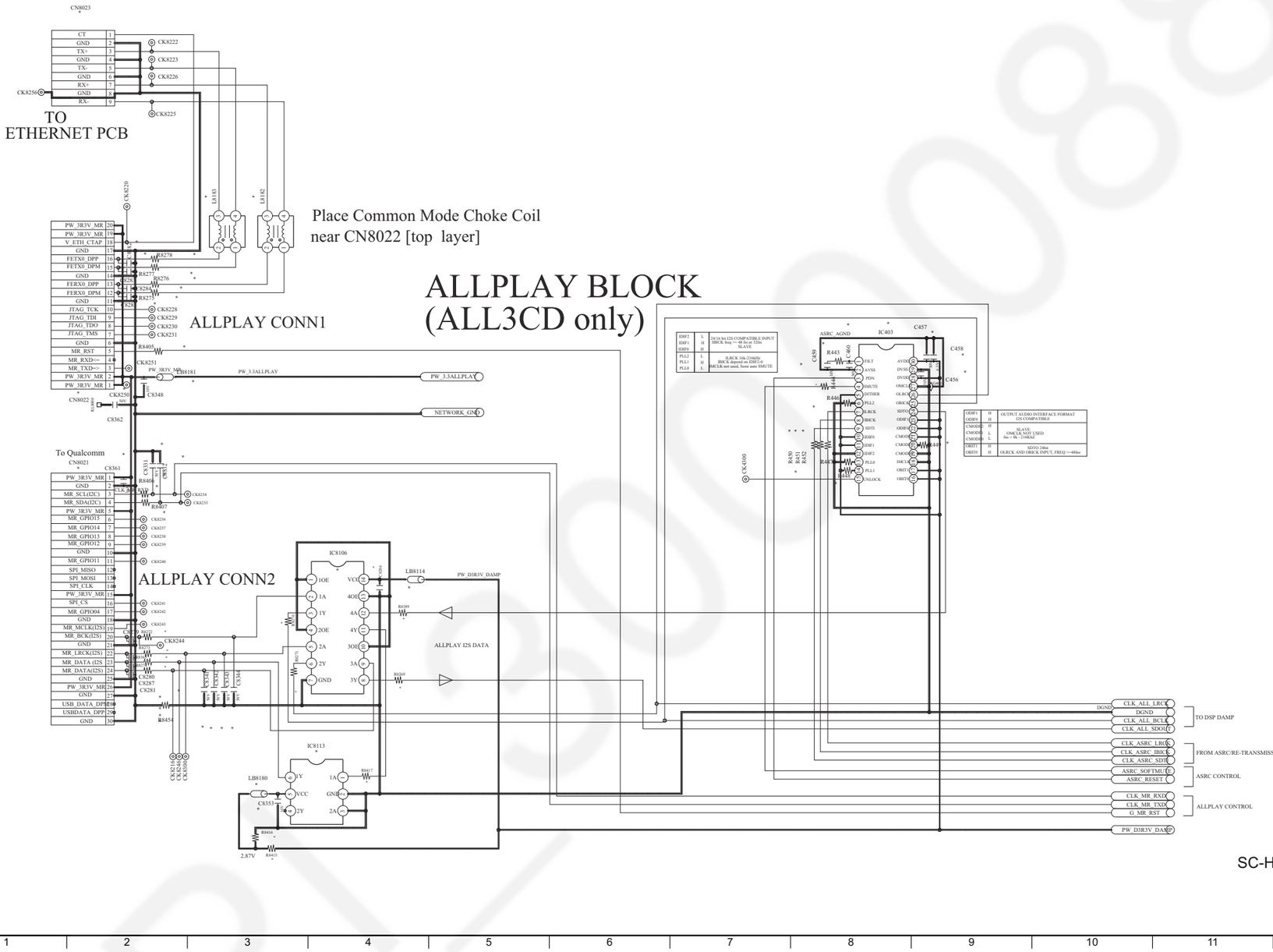


SC-HC1000GM/GS MAIN (DAMP) CIRCUIT

12.10. MAIN (ALLPLAY) CIRCUIT

SCHEMATIC DIAGRAM - 9

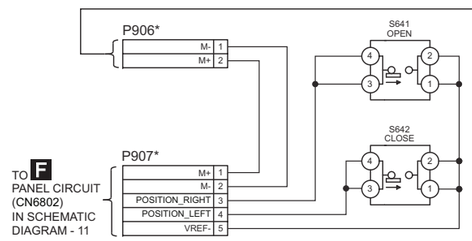
B MAIN (ALLPLAY) CIRCUIT



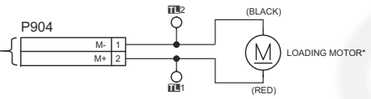
12.11. POSITION SWITCH, MOTOR, ETHERNET & TACT SWITCH CIRCUIT

SCHEMATIC DIAGRAM - 10

C POSITION SWITCH CIRCUIT

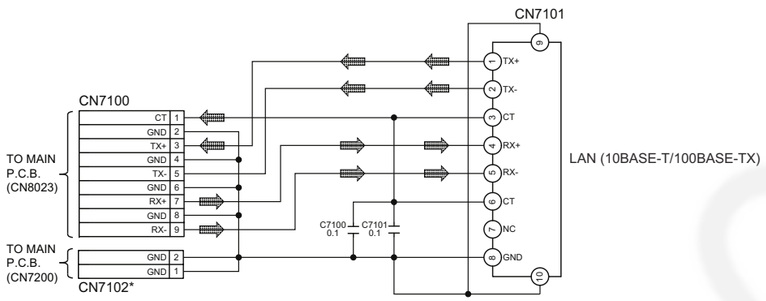


D MOTOR CIRCUIT

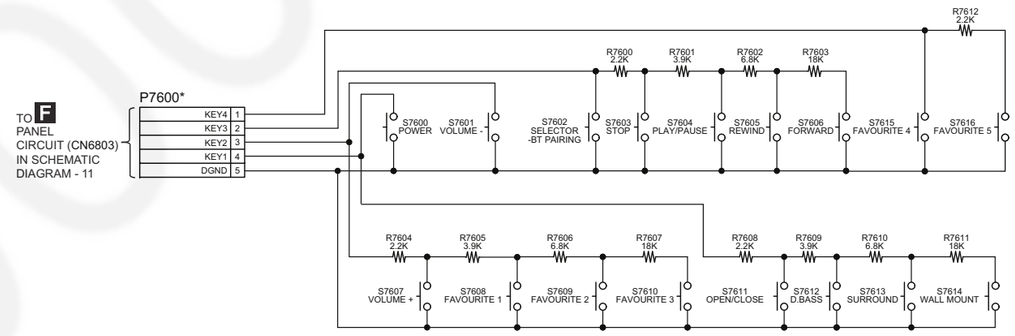


E ETHERNET CIRCUIT

: LAN SIGNAL LINE



G TACT SWITCH CIRCUIT



NOTE: " * " REF IS FOR INDICATION ONLY

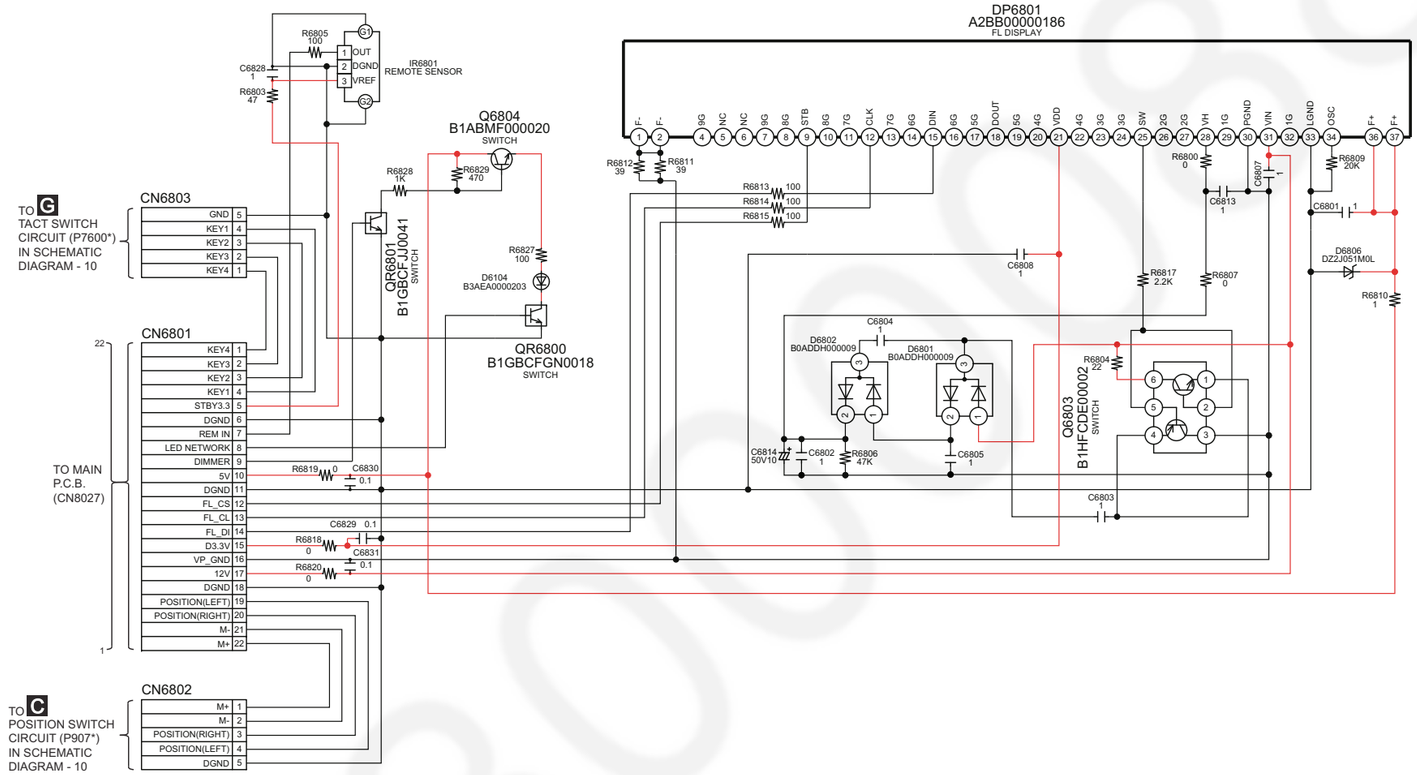
SC-HC1000GM/GS POSITION SWITCH / MOTOR / ETHERNET / TACT SWITCH CIRCUIT

12.12. PANEL CIRCUIT

SCHEMATIC DIAGRAM - 11

F PANEL CIRCUIT

—— : +B SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

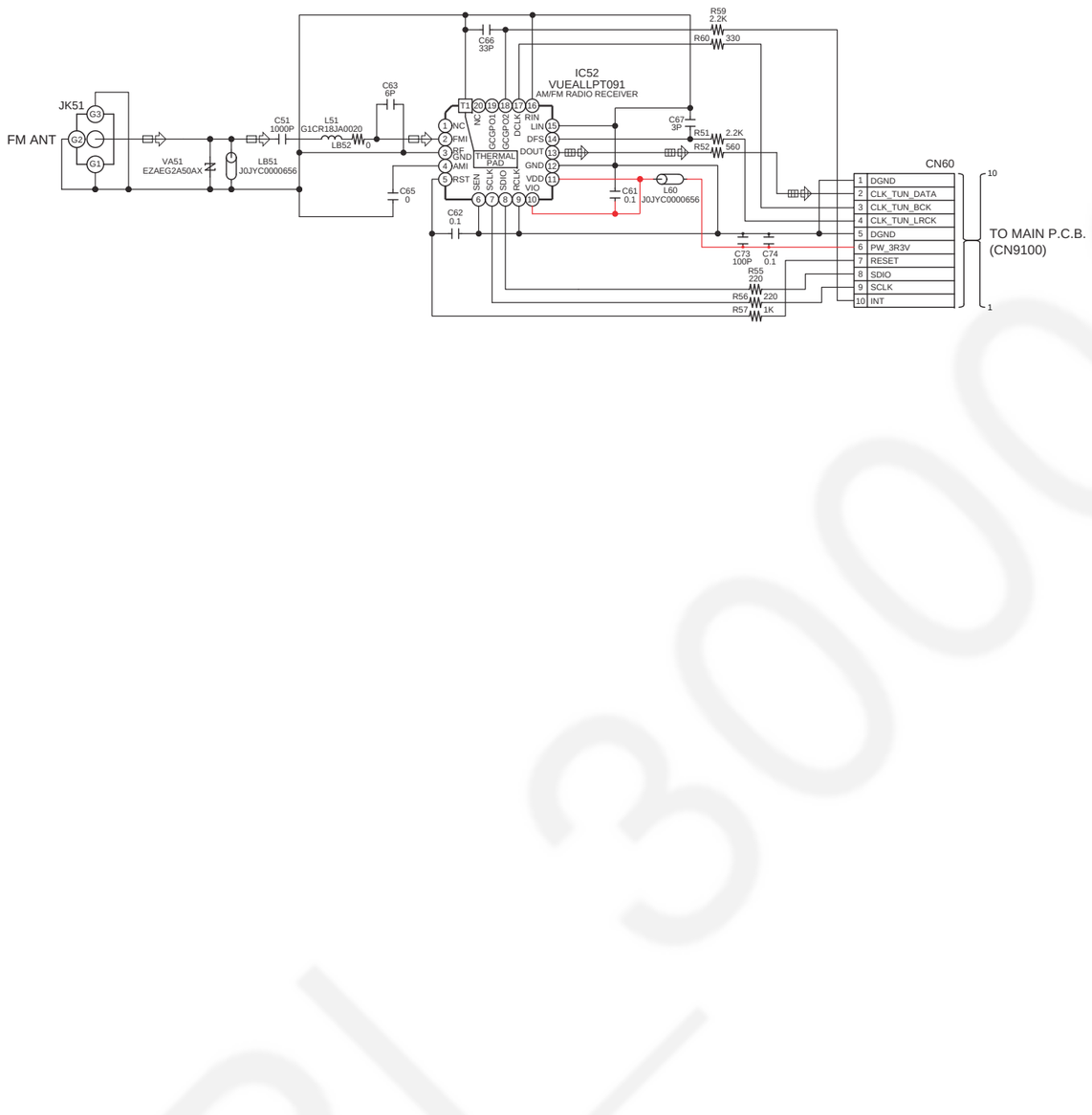
SC-HC1000GM/GS PANEL CIRCUIT

12.13. TUNER CIRCUIT

SCHEMATIC DIAGRAM - 12

H TUNER CIRCUIT

—— : +B SIGNAL LINE : TUNER/AUX SIGNAL LINE : FM SIGNAL LINE

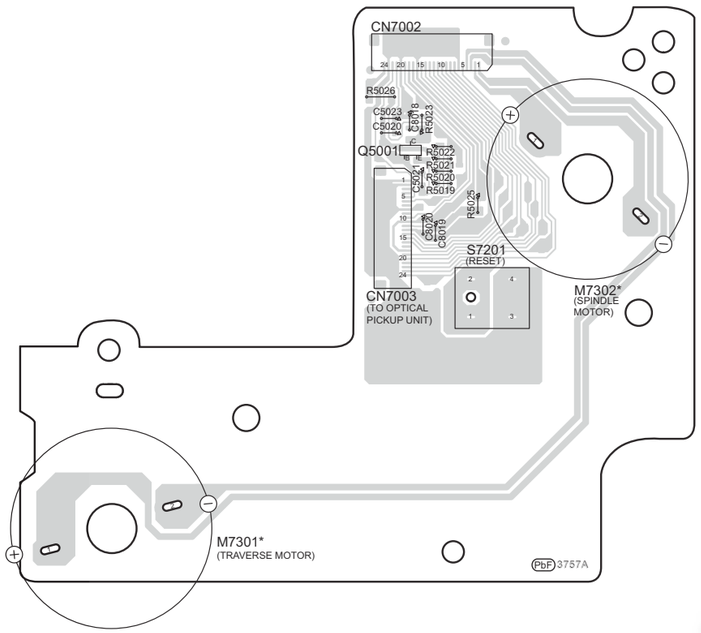


SC-HC1000GM/GS TUNER CIRCUIT

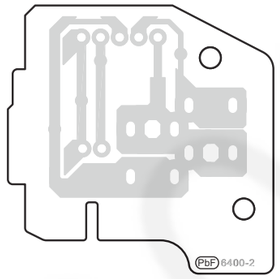
13 Printed Circuit Board

13.1. CD INTERFACE, POSITION SWITCH, MOTOR & ETHERNET P.C.B.

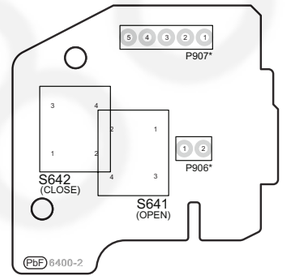
A CD INTERFACE P.C.B. (REP5057A)



C POSITION SWITCH P.C.B. (TNPA6400AH)

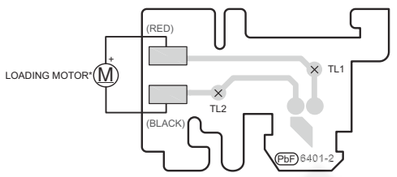


(SIDE A)

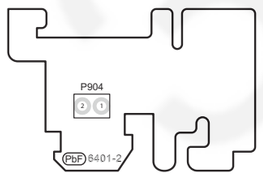


(SIDE B)

D MOTOR P.C.B. (TNPA6401AH)

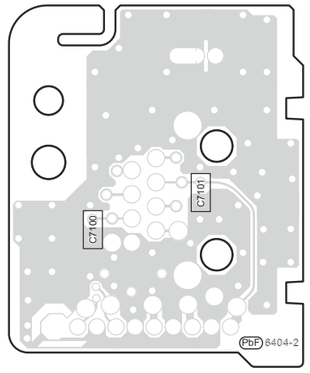


(SIDE A)

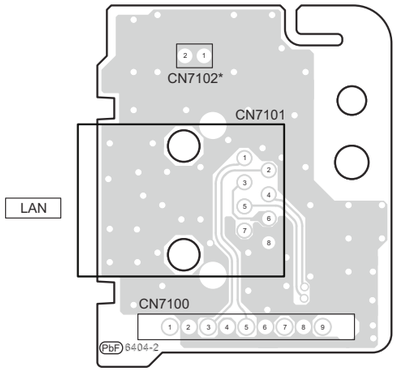


(SIDE B)

E ETHERNET P.C.B. (TNPA6404AH)



(SIDE A)



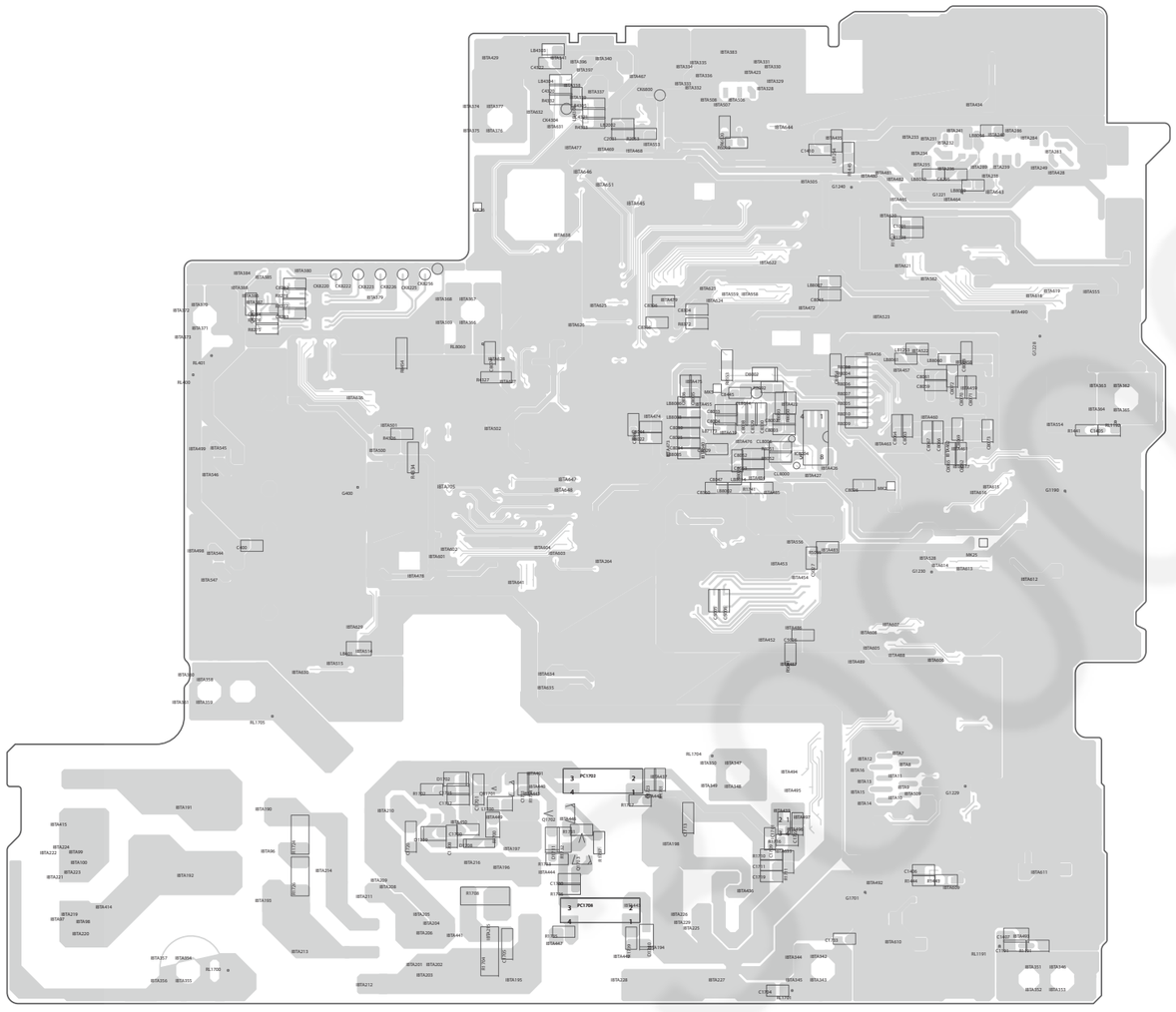
(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC1000GM/GS
CD INTERFACE / POSITION SWITCH / MOTOR / ETHERNET P.C.B.

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

B MAIN P.C.B. (TNPA6399AH)

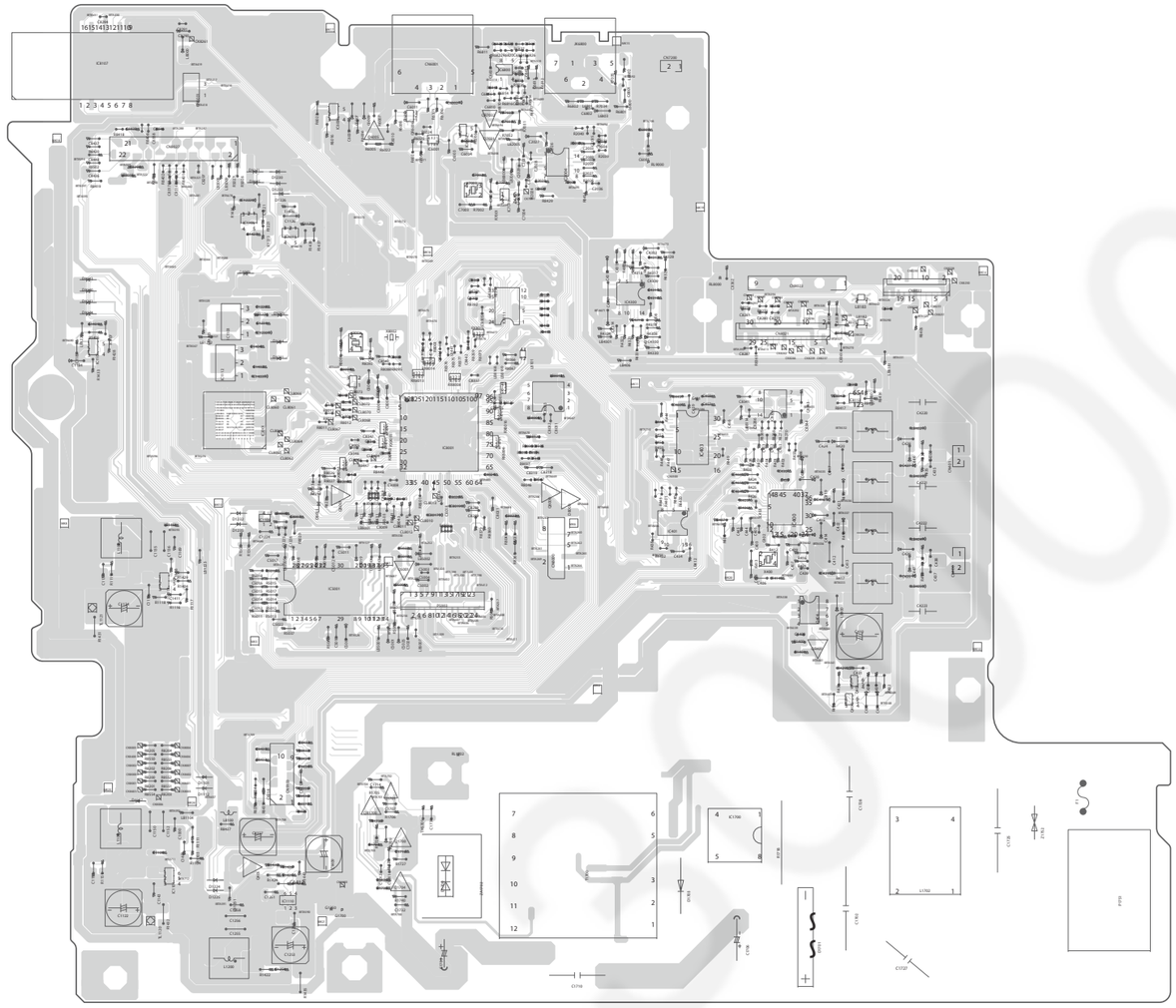


(SIDE A)

SC-HC1000GM/GS
MAIN P.C.B.

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

B MAIN P.C.B. (TNPA6399AH)

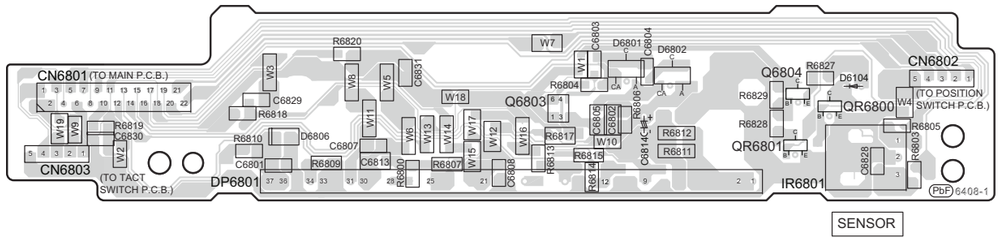


(SIDE B)

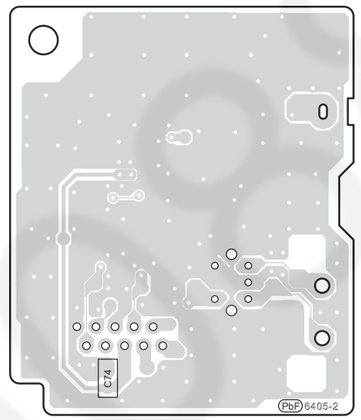
SC-HC1000GM/GS
MAIN P.C.B.

13.4. PANEL, TACT SWITCH & TUNER P.C.B.

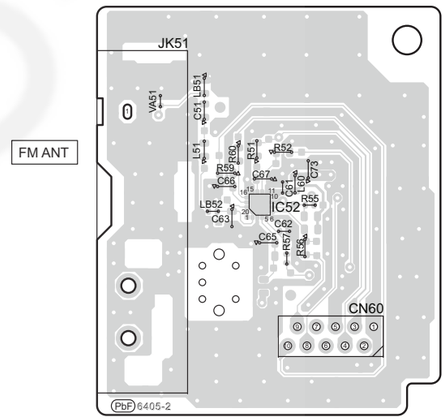
F PANEL P.C.B. (TNPA6408)



H TUNER P.C.B. (TNPA6405AH)

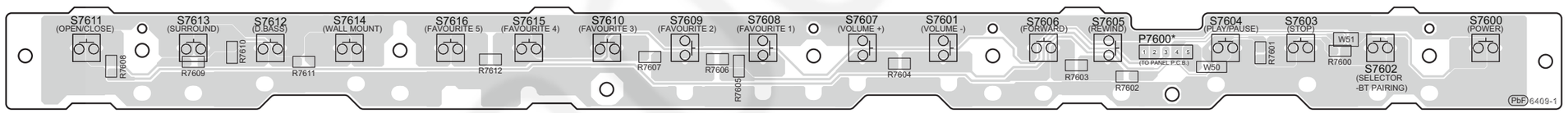


(SIDE A)



(SIDE B)

G TACT SWITCH P.C.B. (TNPA6409)



NOTE: " * " REF IS FOR INDICATION ONLY

SC-HC1000GM/GS
PANEL / TACT SWITCH / TUNER P.C.B.

14 Appendix Information of Schematic Diagram

14.1. Voltage Measurement

Note:

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

14.1.1. CD INTERFACE, PANEL P.C.B.

REF NO.	Q5001																			
MODE	B	C	E																	
POWER ON	2.8	1.9	2.1																	

SC-HC1000GM/GS CD INTERFACE P.C.B.

REF NO.	Q6804				QR6800				QR6801											
MODE	B	C	E		B	C	E		B	C	E									
POWER ON	0	5	5		0.6	0	0		0.6	0	0									

REF NO.	Q6803																			
MODE	1	2	3	4	5	6														
POWER ON	6.1	6.2	0	6.1	12	12														

SC-HC1000GM/GS PANEL P.C.B.

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

REF NO.	IC1101																			
MODE	1	2	3	4	5	6														
POWER ON	0	3.3	19.42	0.63	-	8.92														

REF NO.	IC1103																			
MODE	1	2	3																	
POWER ON	0	3.3	5																	

REF NO.	IC1104																			
MODE	1	2	3	4	5	6														
POWER ON	0	5	19	0.6	3.3	11.3														

REF NO.	IC1105																			
MODE	1	2	3	4	5															
POWER ON	12	0	19	2.5	3.3															

REF NO.	IC1106																			
MODE	1	2	3	4																
POWER ON	3.3	0	1.55	3.3																

REF NO.	IC1109																			
MODE	1	2	3	4	5															
POWER ON	3.3	0	19	1.8	3.3															

REF NO.	IC1110																			
MODE	1	2	3	4	5	6														
POWER ON	0	3.3	19	0.6	3.3	-														

SC-HC1000GM/GS MAIN P.C.B.

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

REF NO.	IC1111																			
MODE	1	2	3	4	5															
POWER ON	5	0	19	2.5	3.3															

REF NO.	IC1700																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	0	25.8	0	1.1	300	300	300	300												

REF NO.	IC1701																			
MODE	1	2	3	4																
POWER ON	-	0	17.3	2.5																

REF NO.	IC6000																			
MODE	1	2	3	4	5															
POWER ON	3.3	0	3.3	5	5															

REF NO.	IC2004																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
POWER ON	1.18	0	4.98	3.29	0	0.59	0	0	0	0	4.98	0	0.1	0.1						

REF NO.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER ON	3.3	3.16	3.29	0	1.67	1.66	0	1.66	1.67	1.65	3.29	0	3.28	3.27	3.15	0	3.29	1.61	0	0

REF NO.	IC8001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER ON	2.95	1.94	0.15	1.69	3.29	3.29	3.28	3.28	3.29	3.29	3.28	0.09	1.57	1.50	1.57	1.57	1.57	0.71	1.05	0.71

REF NO.	IC8001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
POWER ON	1.35	0	-	3.21	1.07	0.96	3.21	3.21	3.21	1.61	1.60	1.61	0	1.61	1.61	1.94	1.75	0.01	0.49	1.50

REF NO.	IC8001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
POWER ON	1.61	1.61	1.61	1.61	1.64	0	1.68	1.64	1.66	1.65	0	0	3.28	0	0.05	0.05	0	3.29	3.29	0

REF NO.	IC8001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
POWER ON	0.01	1.66	1.65	3.26	0	3.21	1.58	3.17	3.22	0.06	0.06	1.55	3.25	3.28	0	3.29	0	0	0	0

REF NO.	IC8001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
POWER ON	3.12	3.28	0	0	0	3.26	3.29	3.14	3.28	3.28	0	0.80	0	0	0	3.27	3.14	3.29	3.29	3.26

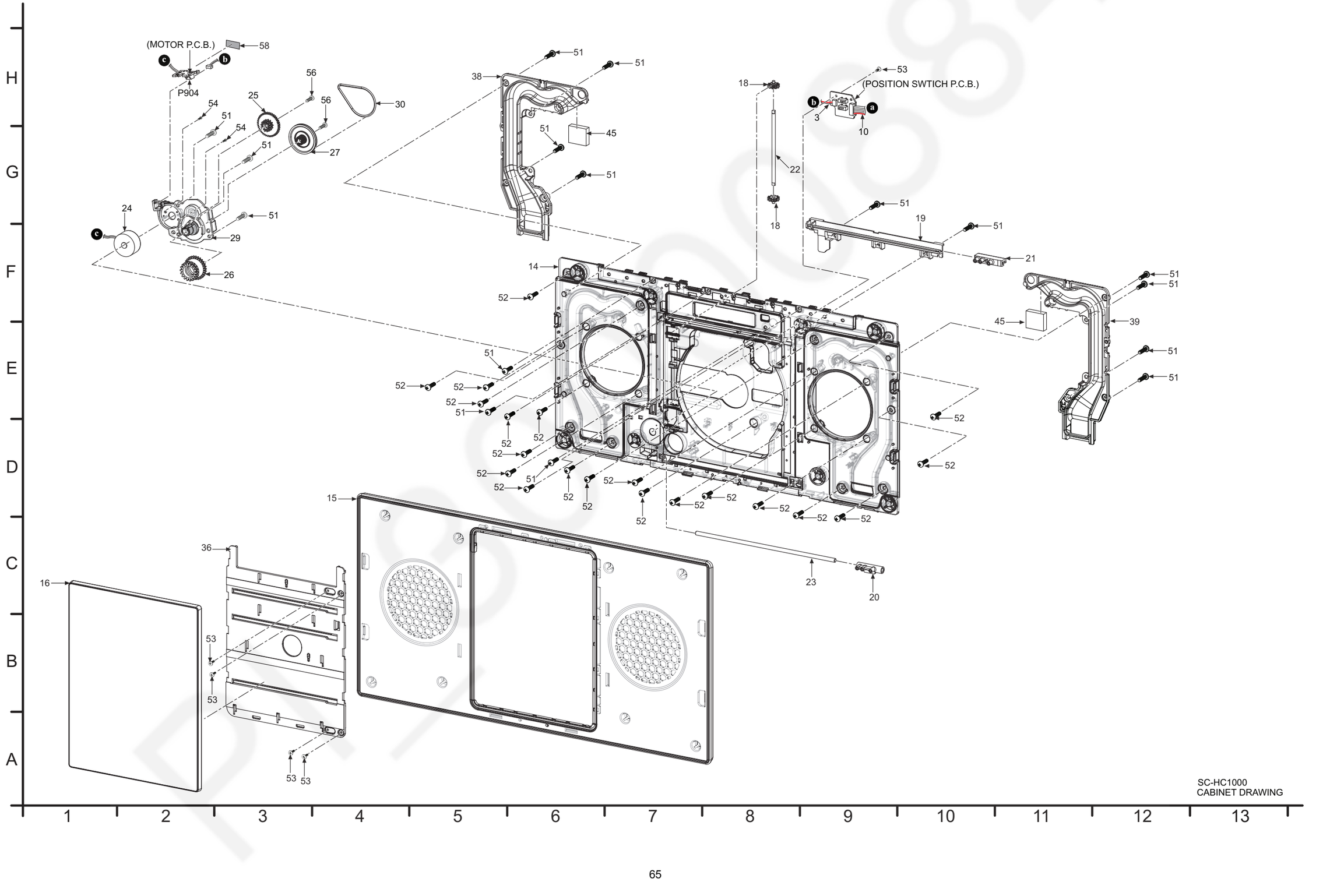
REF NO.	IC8001																			
MODE	121	122	123	124	125	126	127	128												
POWER ON	3.27	3.27	0	1.57	1.51	1.67	1.43	1.46												

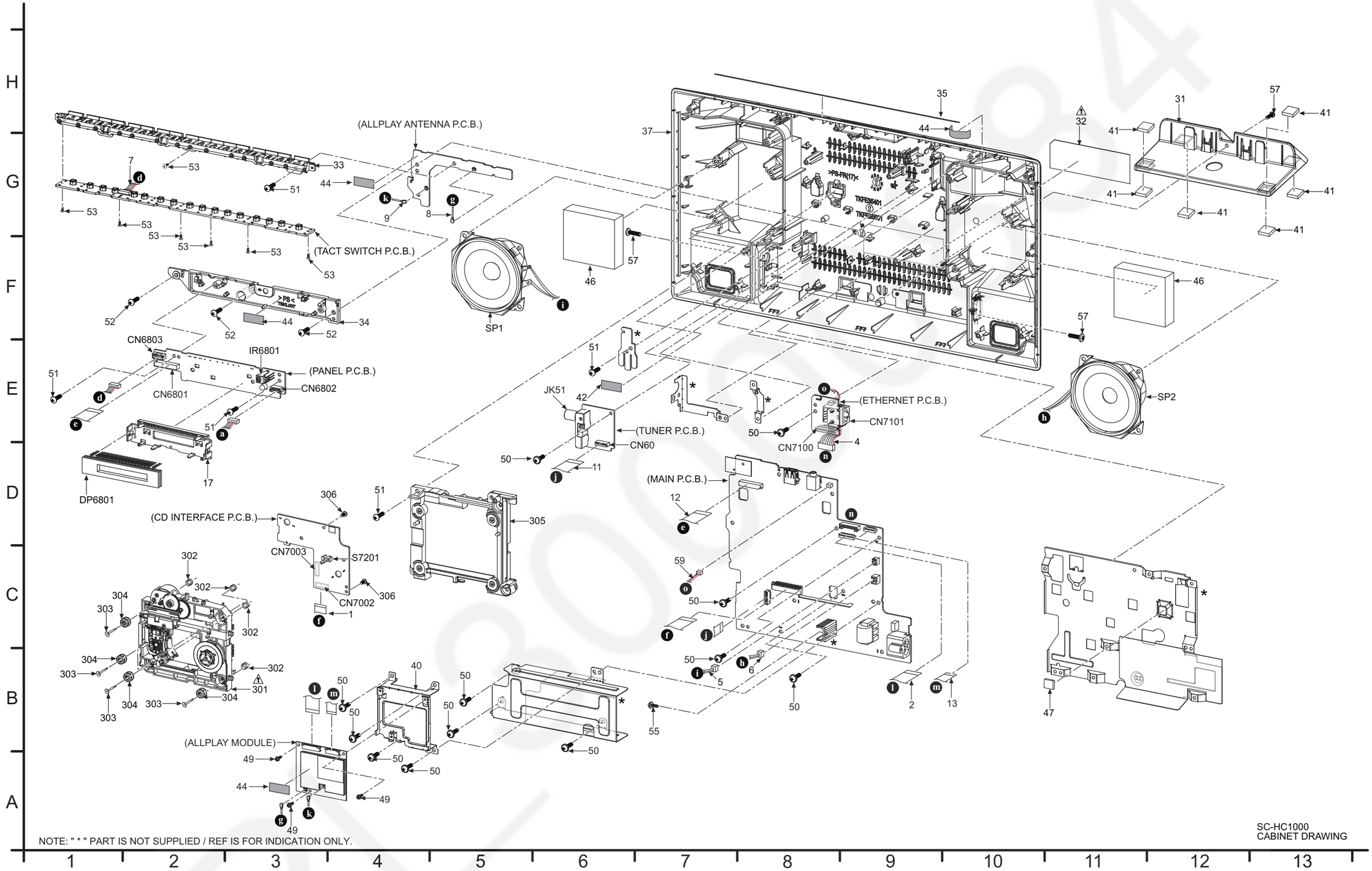
SC-HC1000GM/GS MAIN P.C.B.

15 Exploded View and Replacement Parts List

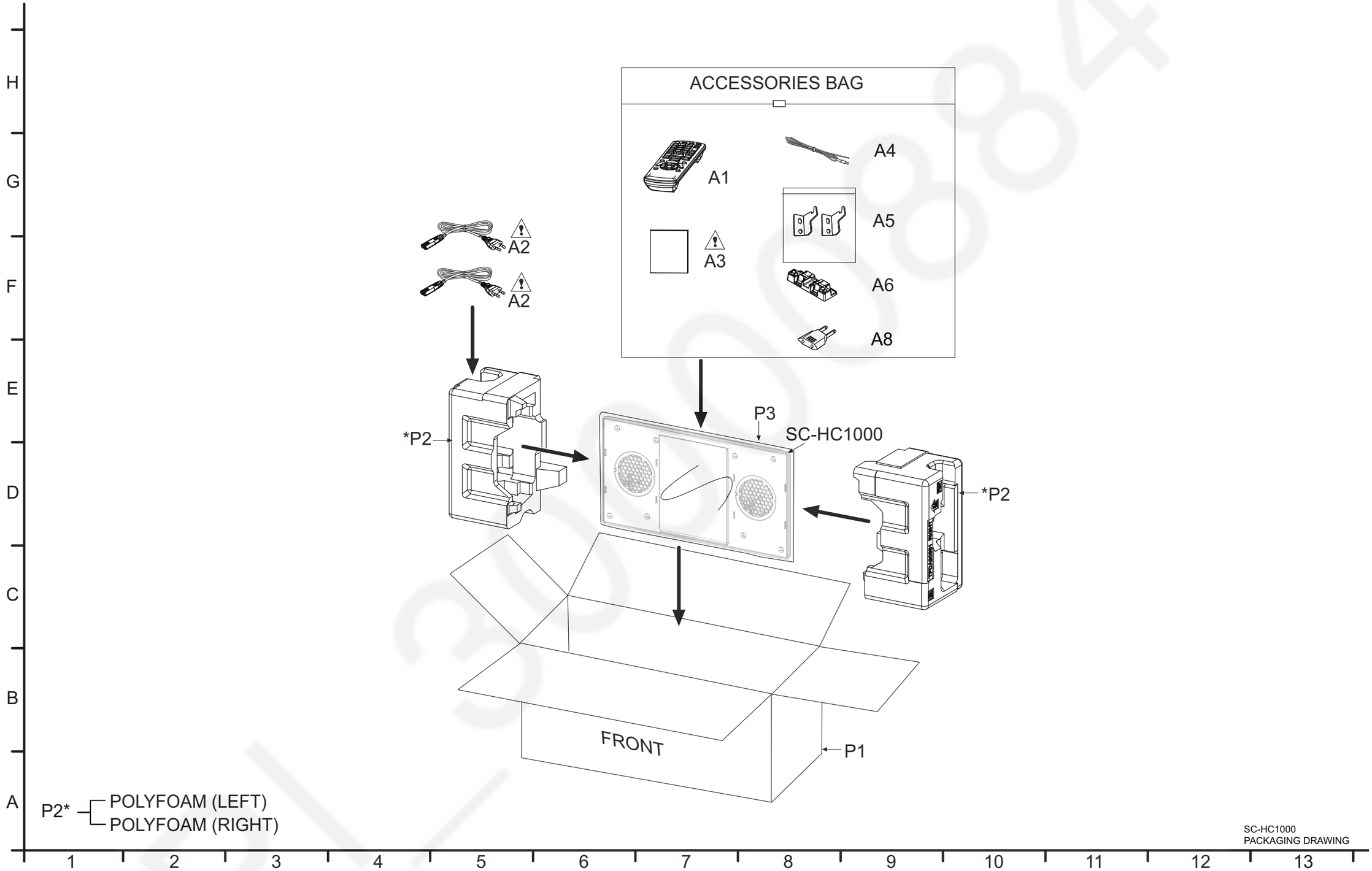
15.1. Exploded View and Mechanical replacement Parts List

15.1.1. Cabinet Parts Location




(ALLPLAY ANTENNA P.C.B.)
(TACT SWITCH P.C.B.)
SP1
CN6803
IR6801
(PANEL P.C.B.)
CN6801
CN6802
DP6801
JK51
(TUNER P.C.B.)
CN60
(ETHERNET P.C.B.)
CN7101
CN7100
SP2
(MAIN P.C.B.)
(CD INTERFACE P.C.B.)
CN7003
S7201
CN7002
(ALLPLAY MODULE)
NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.
SC-HC1000
CABINET DRAWING

15.1.2. Packaging



15.1.3. Mechanical Replacement Parts List

Important Safety Notice

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

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

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

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	REE2084	24P FFC (MECHA-MAIN)	1	
	2	REE2109	30P FFC (ALL-PLAY MODULE-MAIN)	1	
	3	REX1499	2P WIRE (MOTOR-POSITION SWITCH)	1	
	4	REX1846	9P WIRE (ETHER-NET-MAIN)	1	
	5	TNMX042	2P WIRE (SP1-MAIN)	1	
	6	TNMX043	2P WIRE (SP2-MAIN)	1	
	7	TNMX044	5P WIRE (TACT SWITCH -PANEL)	1	
	8	TNMX045	1P ANTENNA WIRE	1	
	9	TNMX046	1P ANTENNA WIRE	1	
	10	TNMX047	5P WIRE (POSI-TION SWITCH -PANEL)	1	
	11	TXJ0100001	10P FFC (TUNER-MAIN)	1	
	12	TXJ0220001	22P FFC (PANEL-MAIN)	1	
	13	TZH3QKZ014	20P FFC (ALL-PLAY MODULE-MAIN)	1	
	14	RFKGHC1020EG	FRONT PANEL ASS'Y	1	
	15	TYL0024	NET FRAME ASS'Y	1	
	16	TYL0030	DOOR ASS'Y	1	
	17	RMN1049-1	FL HOLDER	1	
	18	RDGX1008	TIMING GEAR	2	
	19	RMKX1039-K2	RACK TOP	1	
	20	RMQX1026-K	CD DOOR SLIDER BOTTOM	1	
	21	RMQX1027-K	CD DOOR SLIDER TOP	1	
	22	RMU0101	TIMING GEAR SHAFT	1	
	23	RMUX1002	CD DOOR SHAFT	1	
	24	RFKPHC1020EG	MOTOR ASS'Y	1	
	25	RDGX1014	MIDDLE GEAR	1	
	26	RDGX1015	DRIVE GEAR	1	
	27	RDGX1016	PULLEY GEAR	1	
	29	RMKX1026-1	GEAR BASE	1	
	30	VMG1720	BELT	1	
	31	TBLB35501	BASE STAND	1	
⚠	32	TBMK4541F	NAMEPLATE	1	
	33	RFKNC1020EGK	BUTTON ASS'Y	1	
	34	TEKL007	BUTTON HOLDER	1	
	35	TKKC54741	BUTTON ORNAMENT	1	
	36	TKPB68601	DOOR BASE	1	
	37	TKFE35402E	REAR CABINET	1	
	38	TBB002K	PORT COVER L	1	
	39	TBB003K	PORT COVER R	1	
	40	TEKK002	ALL BRACKET	1	
	41	RKAX0028-K	LEG CUSHION	6	
	42	RMF0794	HIMELON	1	
	44	RMFX1037	HIMELON	4	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	45	TMKJ019	ACOUSTIC ABSORBER	2	
	46	RMFX0091	ACOUSTIC ABSORBER	2	
	47	RSC1097	D-AMP HEAT ABSORBER	1	
	49	RHD20024-1	SCREW	3	
	50	RHD26043-1	SCREW	12	
	51	RHD26046-L	SCREW	21	
	52	RHD26066	SCREW	23	
	53	VHD1224-1A	SCREW	12	
	54	XQN17+C28FJ	SCREW	2	
	55	XTB3+8JFJ-J	SCREW	1	
	56	XTW2+6SFJ	SCREW	2	
	57	XTB3+10JFJK	SCREW	3	
	58	RMF0681	EPT SEALER	1	
	59	TNMX052	2P WIRE (ETHER-NET-MAIN)	1	
			SPEAKERS		
	SP1	L0AA08A00052	SPEAKER UNIT	1	
	SP2	L0AA08A00052	SPEAKER UNIT	1	
			TRAVERSE DECK		
⚠	301	RAE5308Z-V	TRAVERSE ASS'Y	1	(E.S.D)
	302	RME0109-1	FLOATING SPRING	4	
	303	RMS0757-1	FIX PIN	4	
	304	RMG0730-G	FLOATING RUBBER	4	
	305	TEKK006	MIDDLE CHASSIS	1	
	306	XTN2+6GFJ	SCREW	2	
			PACKING MATERI-ALS		
	P1	TPCD70101A	PACKING CASE	1	
	P2	TPH0059-A	POLYFOAM	1	
	P3	RPFX0262-1	MIRAMAT BAG	1	
			ACCESSORIES		
	A1	N2QAYB001139	REMOTE CONTROL	1	
⚠	A2	K2CP2YY00095	AC CORD	1	
⚠	A2	K2CQ2YY00153	AC CORD	1	
⚠	A3	TQBJ2036	O/I (En/Sp)	1	
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	TPBGA001	WALL MOUNT BRACKET UNIT	1	
	A6	TPBDA004	SAFETY HOLDER	1	
	A8	K2DAYYY00002	AC PLUG ADAPTOR	1	

15.2. Electrical Replacement Parts List

Important Safety Notice

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

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- 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 CIRCUIT BOARDS		
	PCB1	REP5057A	CD INTERFACE P.C.B	1	(RTL)
			CAPACITORS		
	C5020	F1H0J1060006	10uF 6.3V	1	
	C5021	F1H0J1060006	10uF 6.3V	1	
	C5023	F1H1H104B047	0.1uF 50V	1	
	C8018	F1H1H103B047	0.01uF 50V	1	
	C8019	F1H1A105A113	1uF 10V	1	
	C8020	F1H0J1060006	10uF 6.3V	1	
			CONNECTORS		
	CN7002	K1MY24B00006	24P CONNECTOR	1	
	CN7003	K1MY24B00006	24P CONNECTOR	1	
			TRANSISTORS		
	Q5001	B1ADCF000001	TRANSISTOR	1	
			RESISTORS		
	R5019	D0GB4R7JA065	4.7 1/10W	1	
	R5020	D0GB104JA065	100K 1/10W	1	
	R5021	D0GB4R7JA065	4.7 1/10W	1	
	R5022	D0GB102JA065	1K 1/10W	1	
	R5023	D0GBR00J0004	0 1/10W	1	
	R5025	J0JYB0000013	INDUCTOR	1	
	R5026	D0GFR00J0005	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			SWITCHES		
	S7201	K0L1BA000158	SW	1	
			PRINTED CIRCUIT BOARDS		
⚠	PCB2	TNPA6399AH	MAIN P.C.B	1	
			INTEGRATED CIRCUITS		
	IC400	SUBF000009	IC	1	(E.S.D)
	IC1101	C0DBAYY02695	IC	1	(E.S.D)
	IC1103	C0DBGYY03909	IC	1	(E.S.D)
	IC1104	C0DBAYY02695	IC	1	(E.S.D)
	IC1105	C0DBEYY00146	IC	1	(E.S.D)
	IC1106	C0DBGYY00911	IC	1	(E.S.D)
	IC1109	C0DBEYY00146	IC	1	(E.S.D)
	IC1110	C0DBAYY02695	IC	1	(E.S.D)
	IC1111	C0DBEYY00146	IC	1	(E.S.D)
	IC1700	C0DACYY00012	IC	1	(E.S.D)
	IC1701	C0DBZMC00006	IC	1	(E.S.D)
	IC2004	C0FBAY000032	IC	1	(E.S.D)
	IC6000	C0DBZYY00712	IC	1	(E.S.D)
	IC8001	C1AB00004188	IC	1	(E.S.D)
			PRINTED CIRCUIT BOARDS		
	PCB3	TNPA6400AH	POSITION SWITCH P.C.B	1	(RTL)
			SWITCHES		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	S641	K0L1BA000166	SW	1	
	S642	K0L1BA000166	SW	1	
			PRINTED CIRCUIT BOARDS		
	PCB4	TNPA6401AH	MOTOR P.C.B	1	(RTL)
			CONNECTORS		
	P904	K1KA02BA0061	2P CONNECTOR	1	
			PRINTED CIRCUIT BOARDS		
	PCB5	TNPA6402AH	ALLPLAY ANTENNA P.C.B	1	
			PRINTED CIRCUIT BOARDS		
	PCB6	TNPA6404AH	ETHERNET P.C.B	1	(RTL)
			CAPACITORS		
	C7100	F1H1H104B047	0.1uF 50V	1	
	C7101	F1H1H104B047	0.1uF 50V	1	
			CONNECTORS		
	CN7100	K1YA09000001	9P WIRE HOLDER	1	
	CN7101	K2LC108B0113	CONNECTOR	1	
			PRINTED CIRCUIT BOARDS		
	PCB7	TNPA6408	PANEL P.C.B	1	(RTL)
			CAPACITORS		
	C6801	F1H1H105B027	1uF 50V	1	
	C6802	F1J1H105A918	1uF 50V	1	
	C6803	F1H1H105B027	1uF 50V	1	
	C6804	F1H1H105B027	1uF 50V	1	
	C6805	F1J1H105A918	1uF 50V	1	
	C6807	F1H1E105A153	1uF 25V	1	
	C6808	F1H1E105A153	1uF 25V	1	
	C6813	F1J1H105A918	1uF 50V	1	
	C6814	F2A1H100C122	10uF 50V	1	
	C6828	F1H1H105B027	1uF 50V	1	
	C6829	F1H1H104B047	0.1uF 50V	1	
	C6830	F1H1H104B047	0.1uF 50V	1	
	C6831	F1H1H104B047	0.1uF 50V	1	
			CONNECTORS		
	CN6801	K1MY22AA0267	22P CONNECTOR	1	
	CN6802	K1KA05AA0193	5P CONNECTOR	1	
	CN6803	K1KA05AA0193	5P CONNECTOR	1	
			DIODES		
	D6104	B3AEA0000203	DIODE	1	
	D6801	B0ADDH000009	DIODE	1	
	D6802	B0ADDH000009	DIODE	1	
	D6806	DZ2J051M0L	DIODE	1	
			FL DISPLAY		
	DP6801	A2BB00000186	FL DISPLAY	1	
			REMOTE SENSOR		
	IR6801	B3RAD0000226	REMOTE SENSOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			TRANSISTORS		
	Q6803	B1HFCDE00002	TRANSISTOR	1	
	Q6804	B1ABMF000020	TRANSISTOR	1	
	QR6800	B1GBCFGN0018	TRANSISTOR	1	
	QR6801	B1GBCFJJ0041	TRANSISTOR	1	
			RESISTORS		
	R6800	D0GBR00J0004	0 1/10W	1	
	R6803	D0GB470JA065	47 1/10W	1	
	R6804	D0GB220JA065	22 1/10W	1	
	R6805	D0GB101JA065	100 1/10W	1	
	R6806	D0GB473JA065	47K 1/10W	1	
	R6807	D0GBR00J0004	0 1/10W	1	
	R6809	D0GB203JA065	20K 1/10W	1	
	R6810	D0GB1R0JA065	1.0 1/10W	1	
	R6811	D0GF390JA048	39 1/4W	1	
	R6812	D0GF390JA048	39 1/4W	1	
	R6813	D0GB101JA065	100 1/10W	1	
	R6814	D0GB101JA065	100 1/10W	1	
	R6815	D0GB101JA065	100 1/10W	1	
	R6817	D0GD222JA052	2.2K 1/8W	1	
	R6818	D0GBR00J0004	0 1/10W	1	
	R6819	D0GBR00J0004	0 1/10W	1	
	R6820	D0GBR00J0004	0 1/10W	1	
	R6827	D0GB101JA065	100 1/10W	1	
	R6828	D0GB102JA065	1K 1/10W	1	
	R6829	D0GB471JA065	470 1/10W	1	
	W1	D0GBR00J0004	0 1/10W	1	
	W10	D0GBR00J0004	0 1/10W	1	
	W11	D0GFR00J0005	0 1/4W	1	
	W12	D0GDR00J0004	0 1/8W	1	
	W13	D0GFR00J0005	0 1/4W	1	
	W14	D0GFR00J0005	0 1/4W	1	
	W15	D0GDR00J0004	0 1/8W	1	
	W16	D0GFR00J0005	0 1/4W	1	
	W17	D0GDR00J0004	0 1/8W	1	
	W18	D0GBR00J0004	0 1/10W	1	
	W19	D0GDR00J0004	0 1/8W	1	
	W2	D0GBR00J0004	0 1/10W	1	
	W3	D0GFR00J0005	0 1/4W	1	
	W4	D0GDR00J0004	0 1/8W	1	
	W5	D0GFR00J0005	0 1/4W	1	
	W6	D0GFR00J0005	0 1/4W	1	
	W7	D0GDR00J0004	0 1/8W	1	
	W8	D0GFR00J0005	0 1/4W	1	
	W9	D0GBR00J0004	0 1/10W	1	
			PRINTED CIRCUIT BOARDS		
	PCB8	TNPA6409	TACT SWITCH P.C.B	1	(RTL)
			RESISTORS		
	R7600	D0GB222JA065	2.2K 1/10W	1	
	R7601	D0GB392JA065	3.9K 1/10W	1	
	R7602	D0GB682JA065	6.8K 1/10W	1	
	R7603	D0GB183JA065	18K 1/10W	1	
	R7604	D0GB222JA065	2.2K 1/10W	1	
	R7605	D0GB392JA065	3.9K 1/10W	1	
	R7606	D0GB682JA065	6.8K 1/10W	1	
	R7607	D0GB183JA065	18K 1/10W	1	
	R7608	D0GB222JA065	2.2K 1/10W	1	
	R7609	D0GB392JA065	3.9K 1/10W	1	
	R7610	D0GB682JA065	6.8K 1/10W	1	
	R7611	D0GB183JA065	18K 1/10W	1	
	R7612	D0GB222JA065	2.2K 1/10W	1	
	W50	D0GFR00J0005	0 1/4W	1	
	W51	D0GDR00J0004	0 1/8W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			SWITCHES		
	S7600	EVQ11G04M	SW	1	
	S7601	EVQ11G04M	SW	1	
	S7602	EVQ11G04M	SW	1	
	S7603	EVQ11G04M	SW	1	
	S7604	EVQ11G04M	SW	1	
	S7605	EVQ11G04M	SW	1	
	S7606	EVQ11G04M	SW	1	
	S7607	EVQ11G04M	SW	1	
	S7608	EVQ11G04M	SW	1	
	S7609	EVQ11G04M	SW	1	
	S7610	EVQ11G04M	SW	1	
	S7611	EVQ11G04M	SW	1	
	S7612	EVQ11G04M	SW	1	
	S7613	EVQ11G04M	SW	1	
	S7614	EVQ11G04M	SW	1	
	S7615	EVQ11G04M	SW	1	
	S7616	EVQ11G04M	SW	1	
			PRINTED CIRCUIT BOARDS		
	PCB9	TNPA6405AH	TUNER P.C.B	1	(RTL)
			INTEGRATED CIR-CUITS		
	IC52	VUEALLPT091	IC	1	(E.S.D)
			CAPACITORS		
	C51	F1H1H102B047	1000pF 50V	1	
	C61	F1G1C104A146	0.1uF 16V	1	
	C62	F1G1C104A146	0.1uF 16V	1	
	C63	F1H1H6R0B050	6pF 50V	1	
	C65	D0GBR00J0004	0 1/10W	1	
	C66	F1H1H330B052	33pF 50V	1	
	C67	F1H1H3R0B050	3pF 50V	1	
	C73	F1H1H101B052	100pF 50V	1	
	C74	F1H1H104B047	0.1uF 50V	1	
			CONNECTORS		
	CN60	K1MY10AA0267	10P CONNECTOR	1	
			JACKS		
	JK51	K4ZZ02000103	JK	1	
			INDUCTORS		
	L51	G1CR18JA0020	INDUCTOR	1	
	L60	J0JYC0000656	INDUCTOR	1	
	LB51	J0JYC0000656	INDUCTOR	1	
	LB52	D0GAR00J0005	0 1/16W	1	
			RESISTORS		
	R51	D0GB222JA065	2.2K 1/10W	1	
	R52	D0GB561JA065	560 1/10W	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	D0GB331JA065	330 1/10W	1	
			ESD SUPRESSOR		
	VA51	EZAEG2A50AX	ESD SUPRESSOR	1	
			PRINTED CIRCUIT BOARDS		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	PCB10	RFKZHC1000GS	ALLPLAY MODULE WITH DATA	1	
			SERVICE FIXTURE AND TOOLS		
	SFT1	REE1978	24P FFC (MAIN-CD INTERFACE)	1	

IPSG1704