

Service Manual

CD Stereo System

Model No. **SA-PM250EB**
SA-PM250EC
SA-PM250EE
SA-PM250EF
SA-PM250EG

Product Color: (S)...Silver Type

COMPACT
disc
DIGITAL AUDIO

Bluetooth®



Remote Control
SB-PM02

SA-PM250

SB-PM02

Notes: Please refer to the Original Service Manual for :

- CD Mechanism Unit (DLS6CE), Order No. PSG1206023AE
- Speaker system SB-PM02EG1-K, Order No. PSG1206013AE

⚠ 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 $\triangle$ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.
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 $1M\Omega$ and $5.2M\Omega$. When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. Leakage Current Hot Check

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

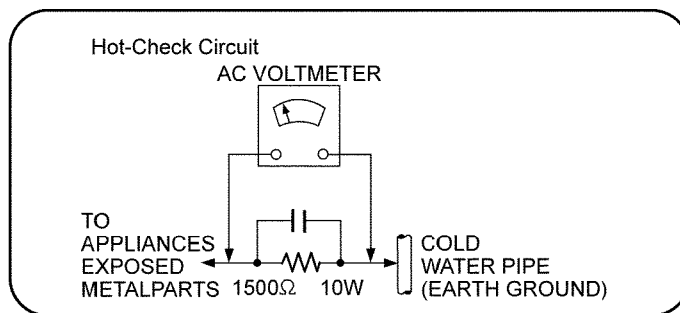


Figure. 1-1

1.2. Caution for AC Cord (For EB only)

(For the AC mains plug of three pins)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

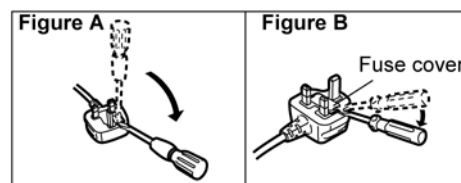
Before use

Remove the connector cover.

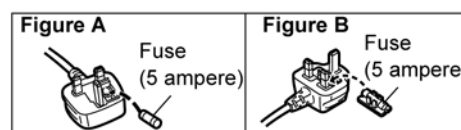
How to replace the fuse

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

1. Open the fuse cover with a screwdriver.



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



1.3. Before Repair and Adjustment

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 240V, at 50Hz in NO SIGNAL mode (at volume minimum in FM mode) should be ~200 mA.

1.4. Protection Circuitry

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

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

1.5. Caution For Fuse Replacement

CAUTION:

Replace with the same type fuse:

(Manufacturer: Skygate, Type: SCT, F1700, T2A, 250V)

1.6. Safety Part Information

Safety Parts List:

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

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

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
⚠	23	RGN3453-K	NAME PLATE	EC/EB/EF/EG
⚠	23	RGN3453A-K	NAME PLATE	EE
⚠	29	RMV0442	SMPS COVER SHEET	
⚠	301	RAE1028Z-V	TRAVERSE UNIT	
⚠	A2	K2CQ2YY00119	AC CORD	EC/EE/EF/EG
⚠	A2	K2CT2YY00097	AC CORD	EB
⚠	A3	RQT9926-B	O/I BOOK (En)	EB/EC
⚠	A3	RQT9927-D	O/I BOOK (Fge/Fr/lt/Du)	EG
⚠	A3	RQT9928-H	O/I BOOK (Fr)	EF
⚠	A3	RQT9929-E	O/I BOOK (Sw/Da/Sp/Cz/Po/Fi)	EC
⚠	A3	RQT9930-1R	O/I BOOK (Ru/Ur)	EE
⚠	PCB5	REP5070AA	SMPS P.C.B.	(RTL)
⚠	Z1752	D4EAY511A182	VARISTOR	
⚠	L1702	G0B922G00002	LINE FILTER	
⚠	T1700	G4DYZ0000077	TRANSFORMER	
⚠	PC1702	B3PBA0000579	PHOTO COUPLER	
⚠	F1700	K5G202Y00006	FUSE	
⚠	P1751	K2AA2B000011	AC INLET	
⚠	R1724	ERJ12YJ105U	1M 1/2W	
⚠	R1726	ERJ12YJ105U	1M 1/2W	
⚠	C1702	F0CAF224A105	0.22uF	
⚠	C1710	F1BAF471A013	470pF	
⚠	C1725	F0CAF104A105	0.1uF	
⚠	C1727	F1BAF1020020	1000pF	
⚠	C1728	F1BAF1020020	1000pF	

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 μ W/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 :

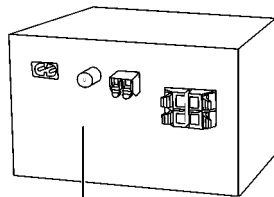
Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt.

Wellenlänge : 790nm (CD)

Maximale Strahlungsleistung der Lasereinheit :100 μ W/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 Lasereinheit 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%

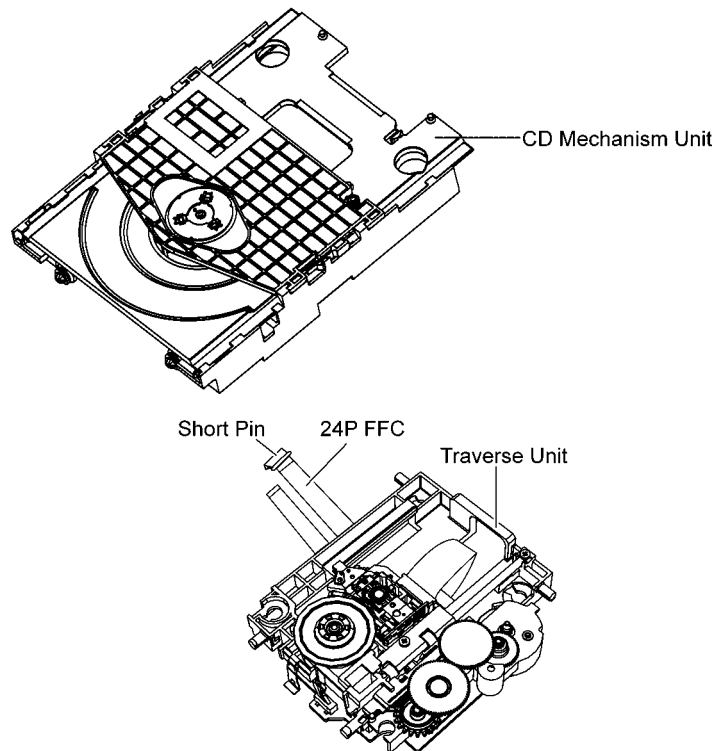
2.4. Handling Precaution for Traverse Unit

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

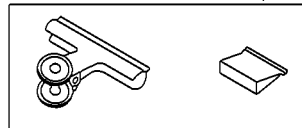
The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

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 FFC is connected to the new optical pickup unit. After replacing the optical pickup unit and connecting the flexible cable, cut off the antistatic FFC.



[Caution]

Ground the cable with a clip or a short pin.



Clip or Short Pin

2.4.2. Grounding for electrostatic breakdown prevention

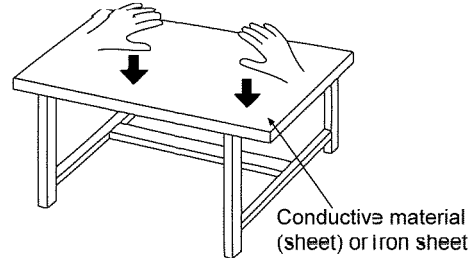
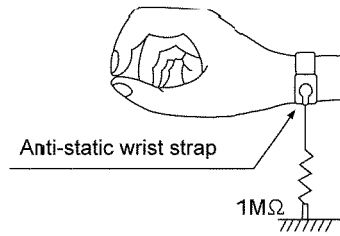
Some devices such as the CD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

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. Firmware update

- Software Update through USB

Steps:

1. Power On Set.
2. Go to USB selector.
3. Plug In USB (containing FW_IMAGE.BIN & FWUPDATE (disc image file)) or PM250.FRM file.
4. Display will show 'READING' (blink) → UPD 0% to 100%.
5. After Software Update complete, display will be show [SUCCESS].
6. Plug out USB.
7. AC out set.
8. Software Update Process Finish.

4 Specifications

■ System : SC-PM250EG-S

Speaker: SB-PM02EG1-K
Music center: SA-PM250EG-S
Speaker: SB-PM02EG1-K

■ Amplifier Section

RMS Output Power Stereo Mode

Front Ch (both ch driven)

10 W per channel (6 Ω), 1 kHz, 10% THD

Total RMS Stereo mode power

20 W

■ Tuner, Terminals Section

Preset Station

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*)

Pick up

Wavelength

790 nm (CD)

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

■ USB Section

USB port

USB Standard

USB 2.0 full speed

Media file format support

MP3 (*.mp3)

USB device file system

FAT 12, FAT 16, FAT 32

USB port power

DC OUT 5 V, 500 mA

■ Bluetooth Section

Version

Bluetooth® Ver. 2.1 + EDR

Class

Class 2

Supported profiles

A2DP, AVRCP

Operating Frequency

2.4 GHz band FH-SS

Operation distance

10 m Line of sight

■ Speaker Section

Speaker unit(s)

Full range

10 cm cone type x 1 per channel

Impedance

6 Ω

Dimensions (W x H x D)

139 mm x 224 mm x 136 mm

Mass

1.3 kg

■ General

Power supply

AC 220 to 240 V, 50 Hz

Power consumption

14 W

Dimensions (W x H x D)

184 mm x 123 mm x 228 mm

Mass

1.1 kg

Operating temperature range

0°C to +40°C

Operating humidity range

35% to 80% RH (no condensation)

Power consumption in standby mode:

(With "BLUETOOTH STANDBY"

0.2 W (approximate)

set to "OFF")

(With "BLUETOOTH STANDBY"

0.3 W (approximate)

set to "ON")

Note:

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

2. Total harmonic distortion is measured by the digital spectrum analyzer.

■ System : SC-PM250EB-S

Music center: SA-PM250EB-S

Speaker: SB-PM02EG1-K

■ System : SC-PM250EC-S

Music center: SA-PM250EC-S

Speaker: SB-PM02EG1-K

■ System : SC-PM250EE-S

Music center: SA-PM250EE-S

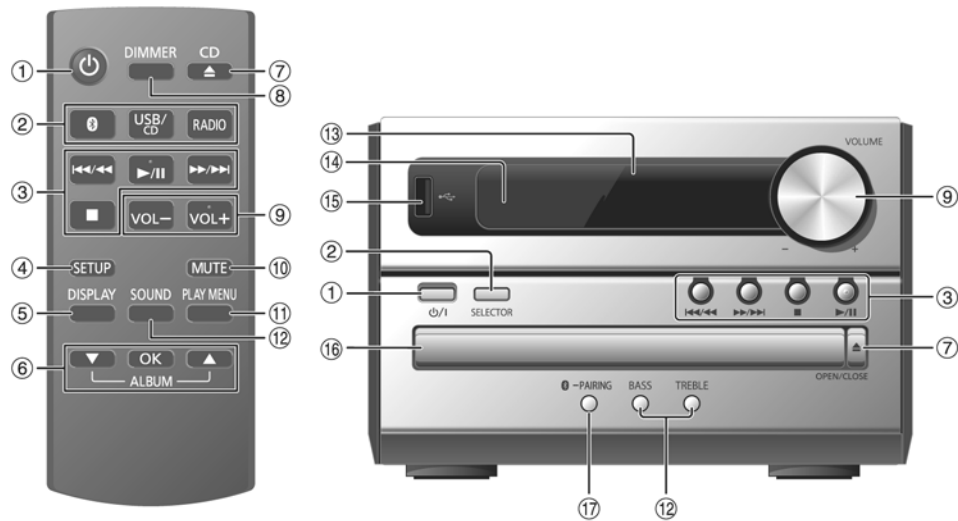
Speaker: SB-PM02EG1-K

■ System : SC-PM250EF-S

Music center: SA-PM250EF-S

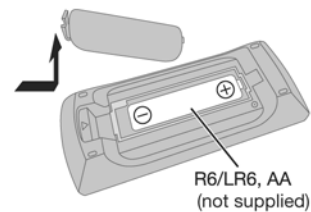
5 Location of Controls and Components

5.1. Main Unit & Remote Control Key Button Operations



- ① **Standby/on switch** [⏻], [⏻/⏺]
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ② **Select the audio source**
On the remote control:
Press the corresponding button to select the source.
On the main unit:
CD → BLUETOOTH → USB → FM
- ③ **Basic playback control**
- ④ **View the setup menu**
- ⑤ **View the content information**
- ⑥ **Select or confirm the option**
- ⑦ **Open or close the disc tray**
- ⑧ **Decrease the brightness of the display panel**
To cancel, press the button again.
- ⑨ **Adjust the volume level**
- ⑩ **Mute the sound**
To cancel, press the button again.
"MUTE" is also cancelled when you adjust the volume or when you switch off the system.
- ⑪ **View the play menu**
- ⑫ **Select the sound effects**
- ⑬ **Display panel**
- ⑭ **Remote control sensor**
Distance: Within approximately 7 m
Angle: Approximately 20° up and down, 30° left and right
- ⑮ **USB port** (⏻)
- ⑯ **Disc tray**
- ⑰ **Select "BLUETOOTH" as the audio source**
To start Bluetooth® pairing, press and hold the button.

Preparing the remote control



Use alkaline or manganese battery.

Install the battery so that the poles (+ and -) align with those in the remote control.

6 Service Mode

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

6.1. Self Diagnostic Table

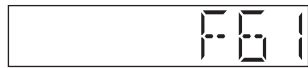
Item		FL display	Key operation				
Mode name	Description						
Self Diagnostic Mode	To enter into self diagnostic checking		Step 1 : Select CD mode (Ensure no disc is inserted). Step 2 : Press and hold [■] follow by [Ⓢ-PAIRING] on main unit for 2 second . • To exit, press the [⏻/⏻] on the main unit or using the remote control. • Unplug the AC cord.				
Error code information	System will perform a check on any unusual/error code from the memory	Example: 	Step 1 : In self diagnostic mode, Press [STOP] on main unit. • To exit, press the [⏻/⏻] on the main unit or using the remote control. • Unplug the AC cord.				
Delete Error code	To clear the stored in memory (EEPROM IC)		Step 1 : In self diagnosis mode, press and hold [OK] on remote control for more than 5 second. • To exit, press the [⏻/⏻] on the main unit or using the remote control. • Unplug the AC cord.				
Opecon version	To display model name & version <table border="1" data-bbox="325 1128 651 1202"><tr><td>Model Name</td><td>Version display</td></tr><tr><td>PM250</td><td>_4HA</td></tr></table>	Model Name	Version display	PM250	_4HA	(Display 1)  Version display (Display 2)  No Rom correction	Press [DISPLAY] button on the remote control. • To exit, press the [⏻/⏻] on the main unit or using the remote control. • Unplug the AC cord.
Model Name	Version display						
PM250	_4HA						
Cold Start	To activate cold start upon next power up. (Backup data are initialized)		Press [SETUP] button on the remote control. • To exit, press the [⏻/⏻] on the main unit or using the remote control. • Unplug the AC cord.				

6.2. Self Diagnostic Function 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.
F15	CD INNER SW cannot be detected	If cannot detect CD INNER SW, need to memory error log "F15".		Press [■] on main unit for next error.
F26	LSI Communication	Communication between CD servo LSI and micro-p abnormal (include iPod, USB)		Press [■] on main unit for next error.

6.2.2. Power Amp Error Code Table

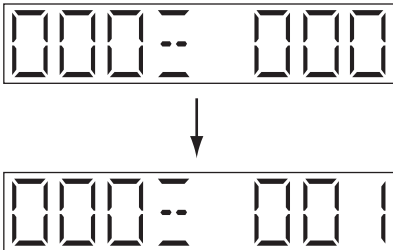
Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
F61	DAMP output abnormal	PDET2 (DC_DET_AMP)= L (NG). PDET2 (DC_DET_AMP) is checked by reading the input 2x20ms, F61 error code shall be memorized		Press [■] on main unit for next error.
F76	Power supply abnormal	PDET1 (DC_DET_PWR)= 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
F70	Bluetooth Communication	Communication between Bluetooth module and micro-p abnormal		Press [■] on main unit for next error.

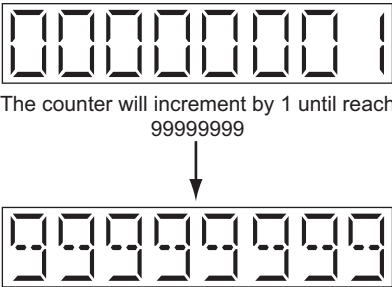
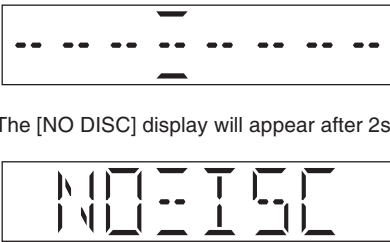
6.3. Doctor Mode Table 1

Note : To enter the Doctor Mode, please use HC35 remote control. (Part No : N2QAYB000641)

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 check sum and Opecon firmware version	(Display 1)  Opecon firmware version display	In any mode: Press [■] button on main unit follow by [4] & then [7] on the remote control of HC35. • To exit Doctor Mode, press [⏻] button on main unit or on the remote control of HC35. • Unplug the AC cord.				
	Note: The Opecon firmware version as shown is an example. It will be revised when there is updates.	(Display 2)  The Checksum of EEPROM and firmware version will be display for 2 sec.					
	FL Display sequence Display 1→2						
	<table><tr><td>Model Name</td><td>Version display</td></tr><tr><td>PM250</td><td>_4HA</td></tr></table>	Model Name	Version display	PM250	_4HA		
Model Name	Version display						
PM250	_4HA						
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 of HC35. [CANCEL] will be display and returns to Doctor Mode. • To exit Doctor Mode, press [⏻] button on main unit or on the remote control of HC35. • Unplug the AC cord.				
Mecha Sliding Panel Reliability	To check the operation of sliding Panel. Sequence as follow : 1. CD Open and stop at OPEN position for 1 sec. 2. CD Close and stop at CLOSE position for 4 sec. 3. All the process above is considered as 1 cycle. Cycle Counter display increase every 1 cycle completed.		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 of HC35. [CANCEL] will be display and returns to Doctor Mode. • To exit Doctor Mode, press [⏻] button on main unit or on the remote control of HC35. • Unplug the AC cord.				

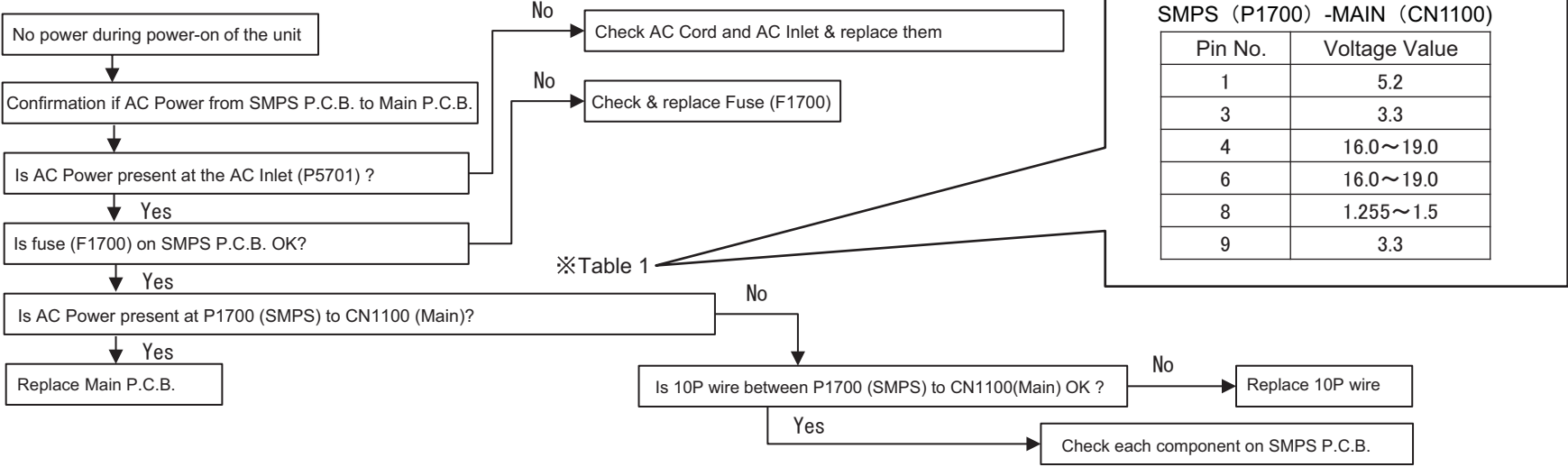
6.4. Doctor Mode Table 2

Note : To enter the Doctor Mode, please use HC35 remote control. (Part No : N2QAYB000641)

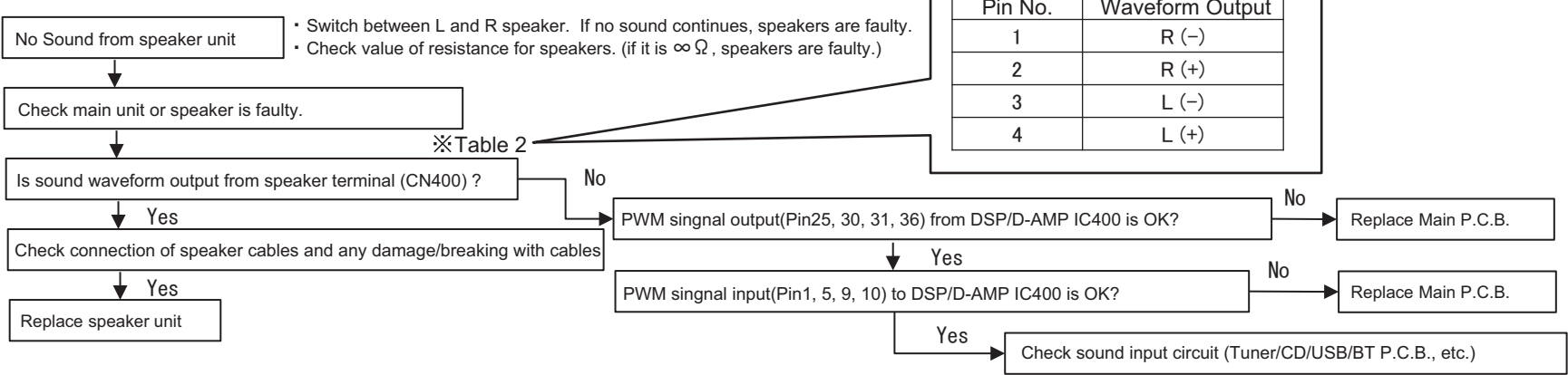
Item		FL Display	Key Operation
Mode Name	Description		Front Key
CD Traverse Test Mode	To check for the traverse unit operation. In this mode, the first & last track is access & read. (TOC). It fails when TOC is not completed by 10s or the traverse is out of focus. for more than 2s	 The counter will increment by 1 until reach 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 of HC35. [CANCEL] will be display and returns to Doctor Mode. - To exit Doctor Mode, press [ϕ/I] button on main unit or on the remote control of HC35. - Unplug the AC cord.
Cold Start	To activate cold start upon next power up. (Backup data are initialized)	 The [NO DISC] display will appear after 2s,	In Doctor Mode: Press [4] button on remote control. To cancel, press [0] button on remote control of HC35. [CANCEL] will be display and returns to Doctor Mode. - To exit Doctor Mode, press [ϕ/I] button on main unit or on the remote control of HC35. - Unplug the AC cord.

7 Troubleshooting Guide

① No Power



② No Sound to speaker unit (at times or all the times)



③ List of possible cause of failure by function ※ Table3

※ Table3 The P.C.B. that could be speculated as the cause of failure by a function

Item No.	Function	P.C.B.
1	Bluetooth	Bluetooth P.C.B./Main P.C.B.
3	USB	USB P.C.B.(Components)/Main P.C.B.
4	CD	CD Interface P.C.B.(Components)/Main P.C.B.
5	Tuner	Tuner P.C.B.(Components)/Main P.C.B.
6	Remote control	IR components/Panel P.C.B.(Components)/Main P.C.B.
7	Bass/Treble/Volume control	Button P.C.B.(Components)/Volume P.C.B.(Components)/Panel P.C.B.(Components)/Main P.C.B.
8	FL Display	Panel P.C.B.(Components)/Main P.C.B.
9	Switches	Button P.C.B.(Components)/Volume P.C.B.(Components)/Panel P.C.B.(Components)/Main P.C.B.
10	Speaker	Main P.C.B.

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 Top Cabinet Assembly
 - Disassembly of Bluetooth P.C.B.
 - Disassembly of Tuner P.C.B.
 - Disassembly of SMPS Unit
 - Disassembly of SMPS P.C.B.
 - Disassembly of Front Panel Assembly
 - Disassembly of Button P.C.B., Volume P.C.B. and Panel P.C.B.
 - Disassembly of CD Lid
 - Disassembly of Main P.C.B.
 - Disassembly of CD Mechanism Unit
 - Disassembly of CD Interface P.C.B.

8.1. Service Fixture & Tools

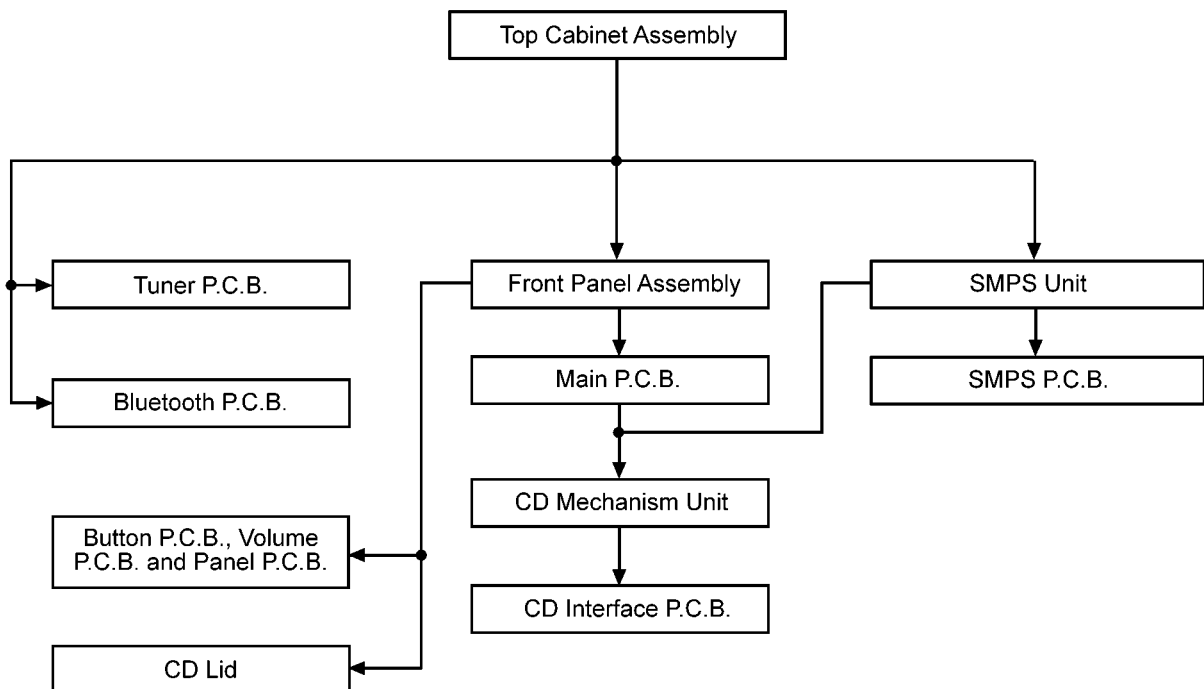
Prepare service tools before process service position.

Ref no.	Service Tools		Remarks
SFT1	Panel P.C.B. (CN900) - Main P.C.B. (CN112)	REEX1203 (13P 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. Type of screws

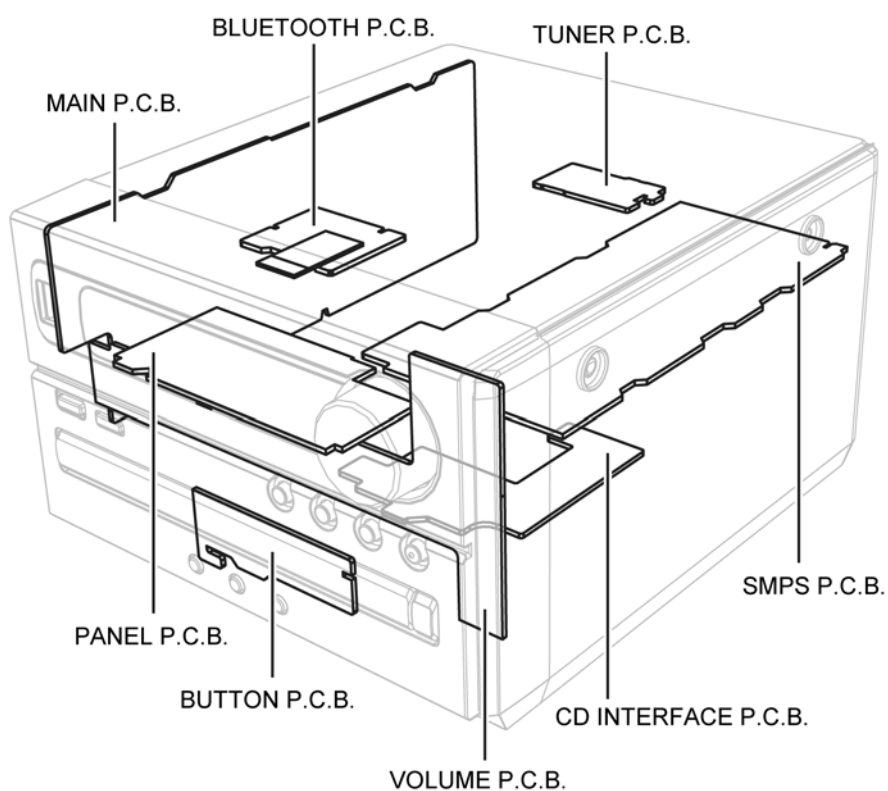
CAUTION NOTE:

Please use original screw and at correct locations.

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

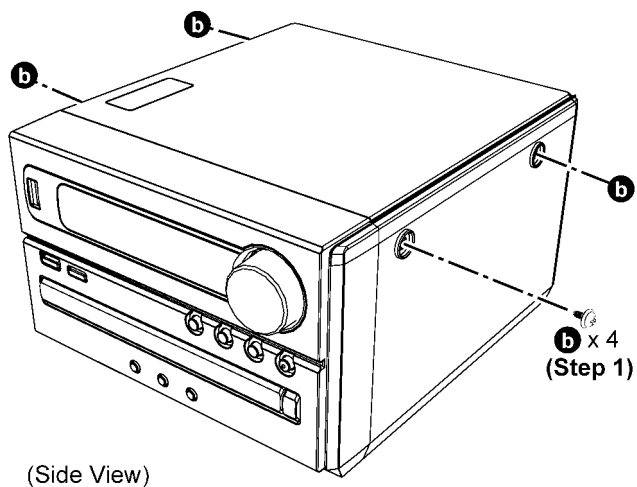
- | | |
|------------------------|-----------------------|
| a : XTB3+10JFJ | e : RHD26046-L |
| b : XTW3+10SFJK | f : RHDX031008 |
| c : VHD1224-1A | g : XTN2+6GFJ |
| d : RHD26043-1 | h : RHD30092-1 |

8.4. Main Parts Location Diagram

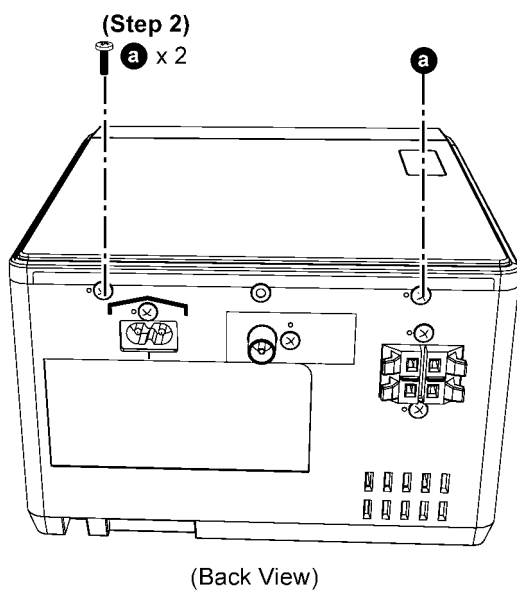


8.5. Disassembly of Top Cabinet Assembly

Step 1 : Remove 4 screws.

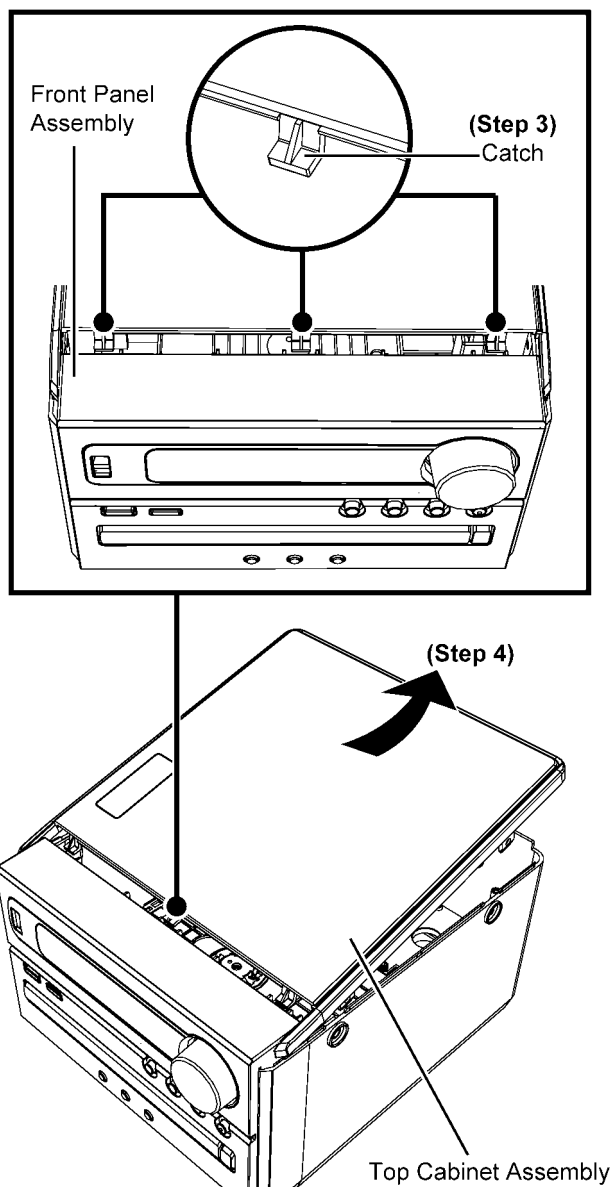


Step 2 : Remove 2 screws.



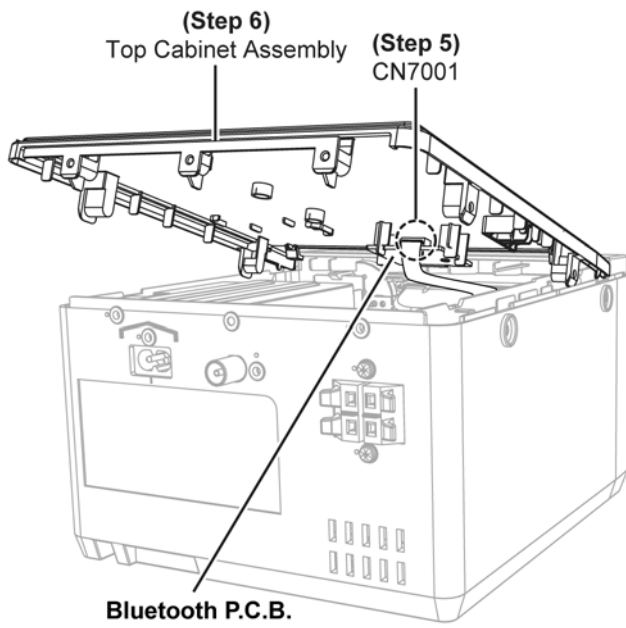
Step 3 : Release catches.

Step 4 : Lift up Top Cabinet Assembly.



Step 5 : Detach 9P FFC at connector (CN7001) on Bluetooth P.C.B..

Step 6 : Remove Top Cabinet Assembly.

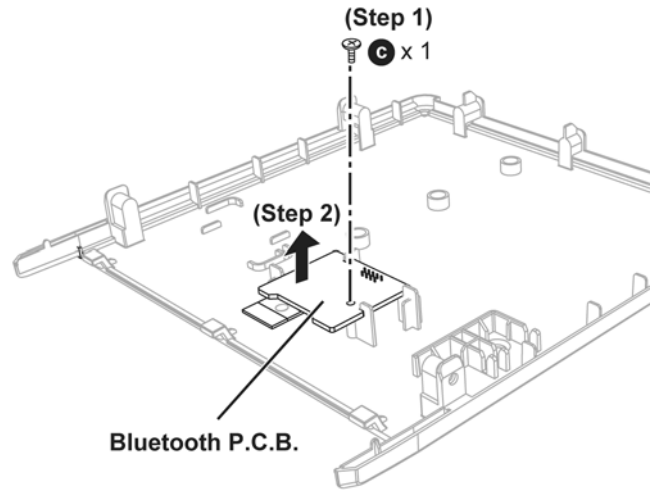


8.6. Disassembly of Bluetooth P.C.B.

- Refer to “Disassembly of Top Cabinet Assembly”

Step 1 : Remove 1 screw.

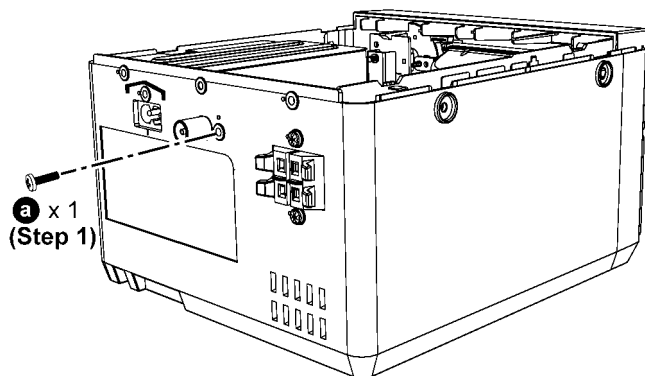
Step 2 : Remove Bluetooth P.C.B..



8.7. Disassembly of Tuner P.C.B.

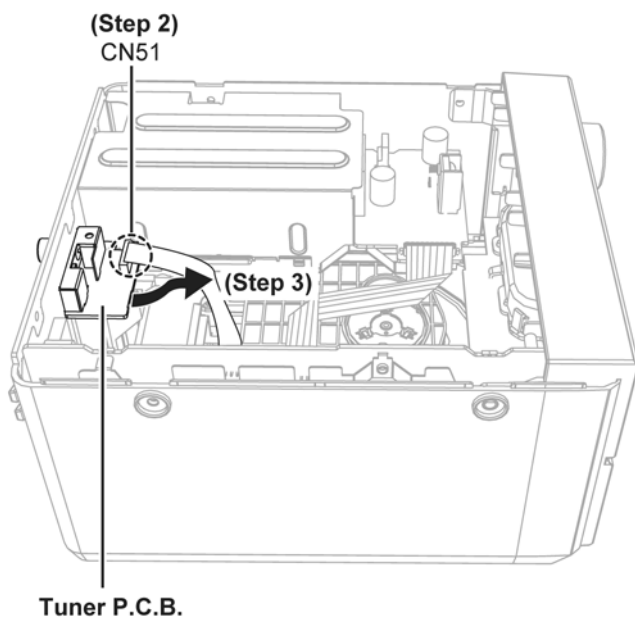
- Refer to "Disassembly of Top Cabinet Assembly"

Step 1 : Remove 1 screw.



Step 2 : Detach 9P FFC at connector (CN51) on Tuner P.C.B..

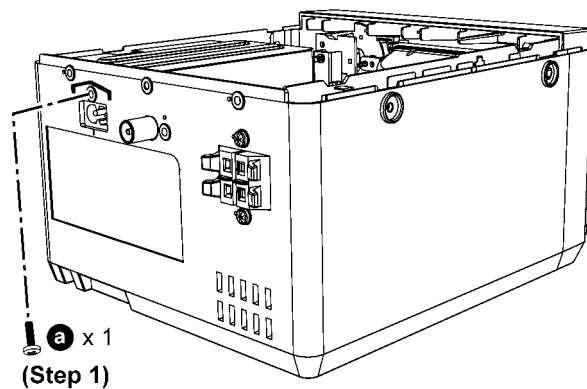
Step 3 : Lift up and remove Tuner P.C.B..



8.8. Disassembly of SMPS Unit

- Refer to "Disassembly of Top Cabinet Assembly"

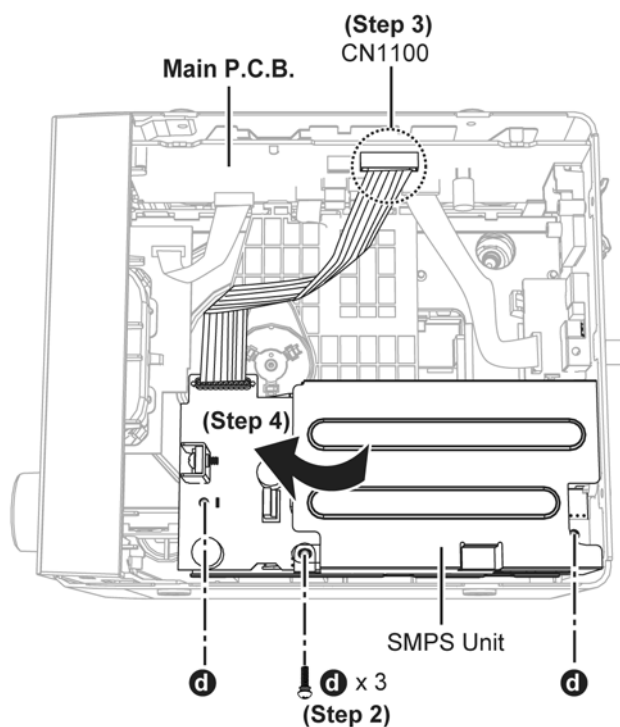
Step 1 : Remove 1 screw.



Step 2 : Remove 3 screws.

Step 3 : Detach 10P cable at connector (CN1100) on Main P.C.B..

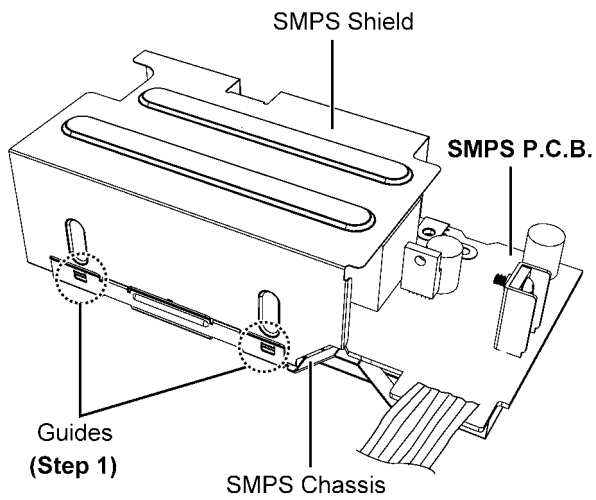
Step 4 : Remove SMPS Unit.



8.9. Disassembly of SMPS P.C.B.

- Refer to “Disassembly of SMPS Unit”

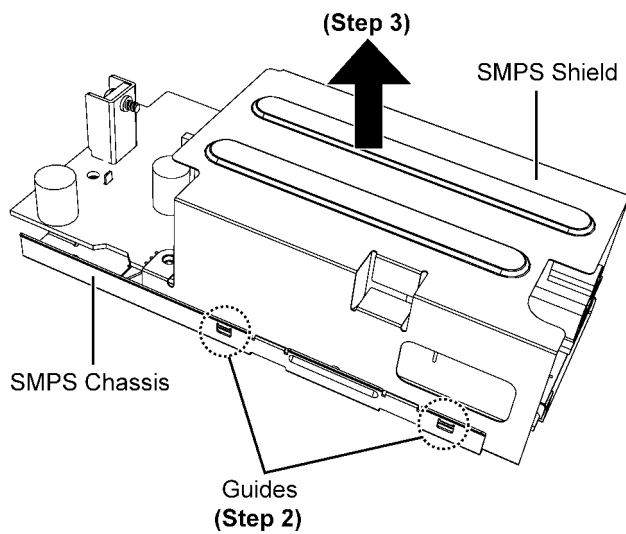
Step 1 : Release guides.



Step 2 : Release guides.

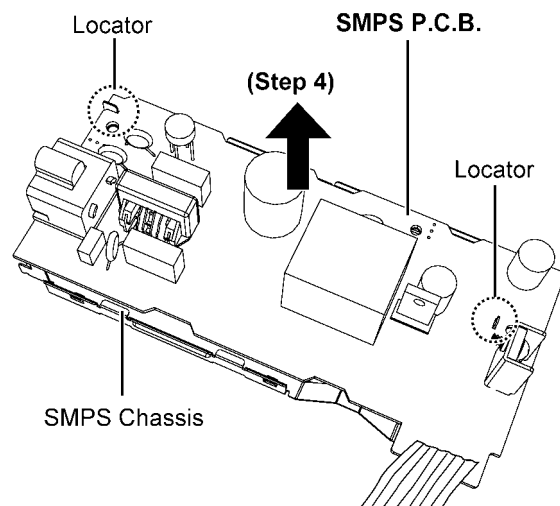
Step 3 : Remove SMPS Shield.

Caution : During assembling, ensure that the SMPS Shield is fully caught inside the SMPS Chassis.



Step 4 : Remove SMPS P.C.B..

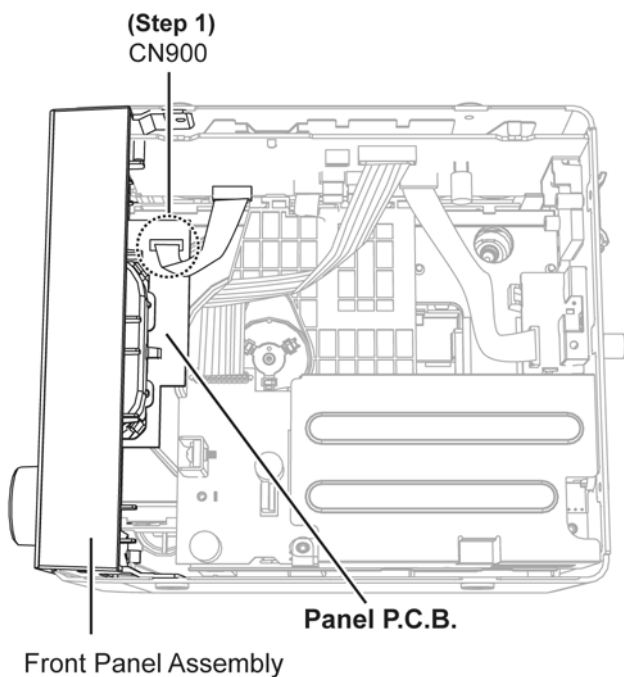
Caution : During assembling, ensure that the SMPS P.C.B. is properly seated onto the locators.



8.10. Disassembly of Front Panel Assembly

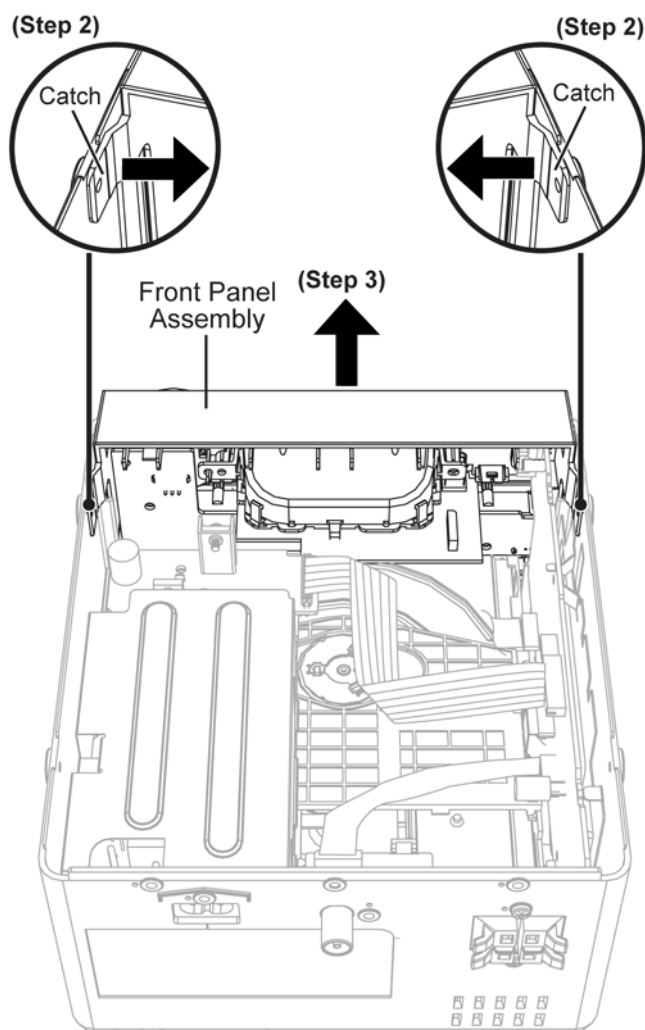
- Refer to "Disassembly of Top Cabinet Assembly"

Step 1 : Detach 13P FFC at connector (CN900) on Panel P.C.B..



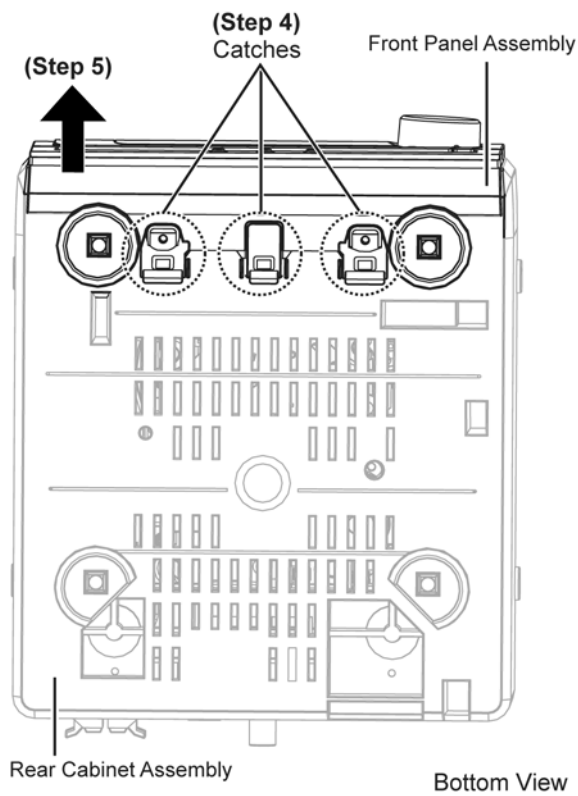
Step 2 : Slightly push inwards to release catches.

Step 3 : Slightly push outwards Front Panel Assembly as arrow shown.



Step 4 : Release catches at the bottom of Rear Cabinet Assembly.

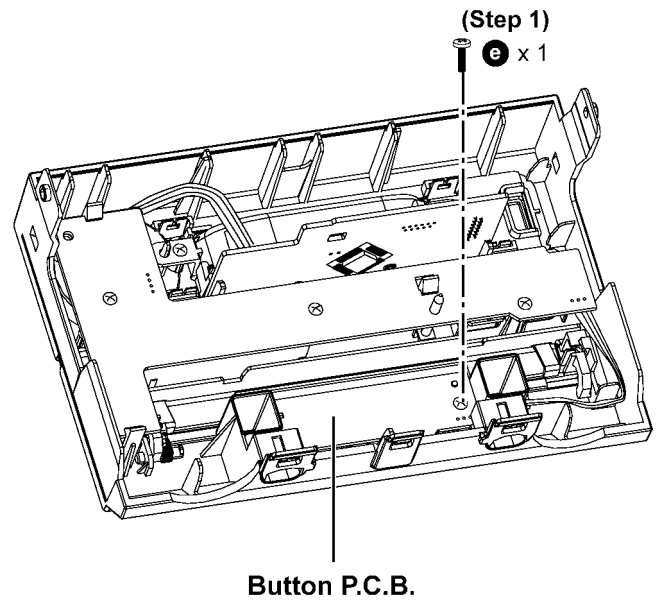
Step 5 : Remove Front Panel Assembly.



8.11. Disassembly of Button P.C.B., Volume P.C.B. and Panel P.C.B.

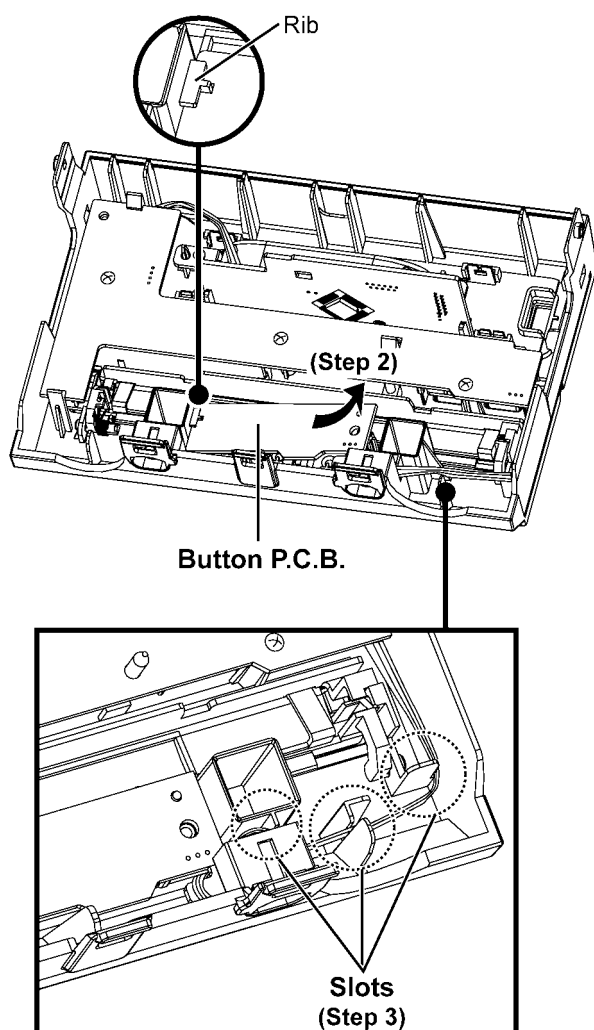
- Refer to "Disassembly of Top Cabinet Assembly"
- Refer to "Disassembly of Front Panel Assembly"

Step 1 : Remove 1 screw.

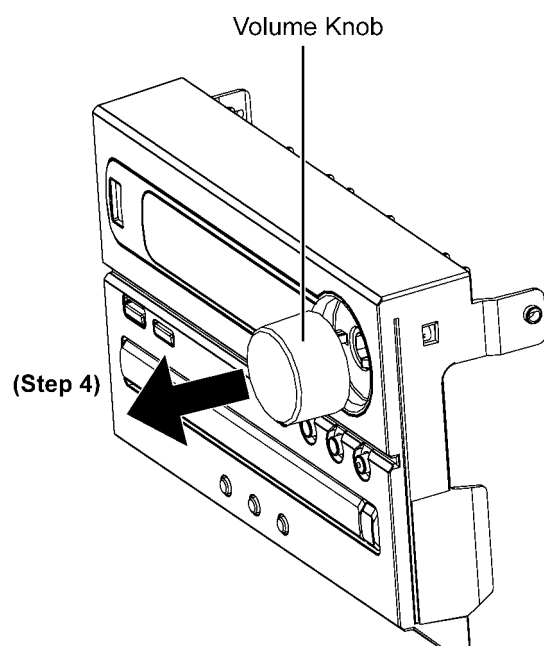


Step 2 : Slightly lift up and remove Button P.C.B..

Step 3 : Release 3P cable from slots.



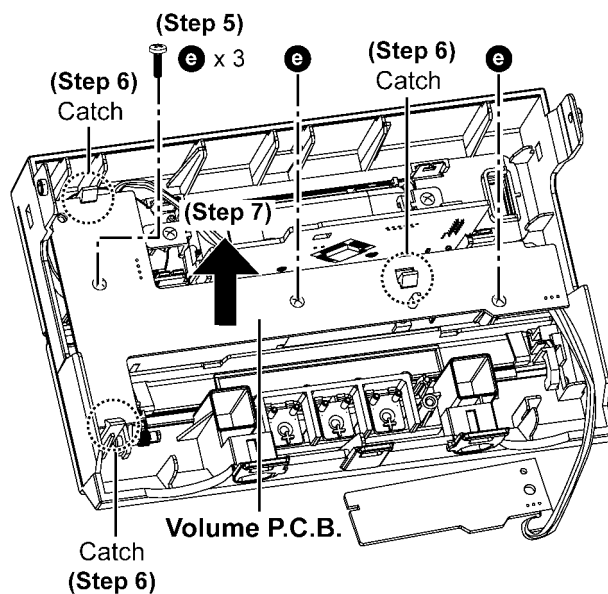
Step 4 : Remove Volume Knob.



Step 5 : Remove 3 screws.

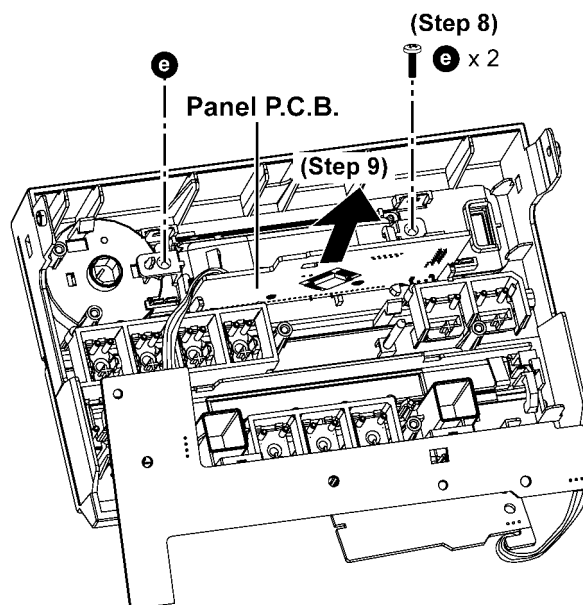
Step 6 : Release catches.

Step 7 : Remove Volume P.C.B..



Step 8 : Remove 2 screws.

Step 9 : Remove Panel P.C.B..

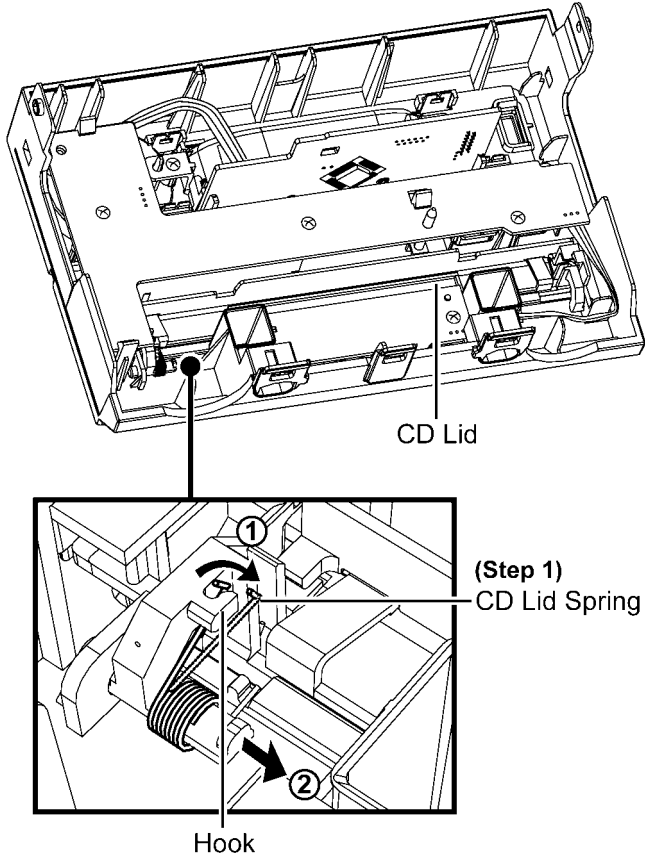


8.12. Disassembly of CD Lid

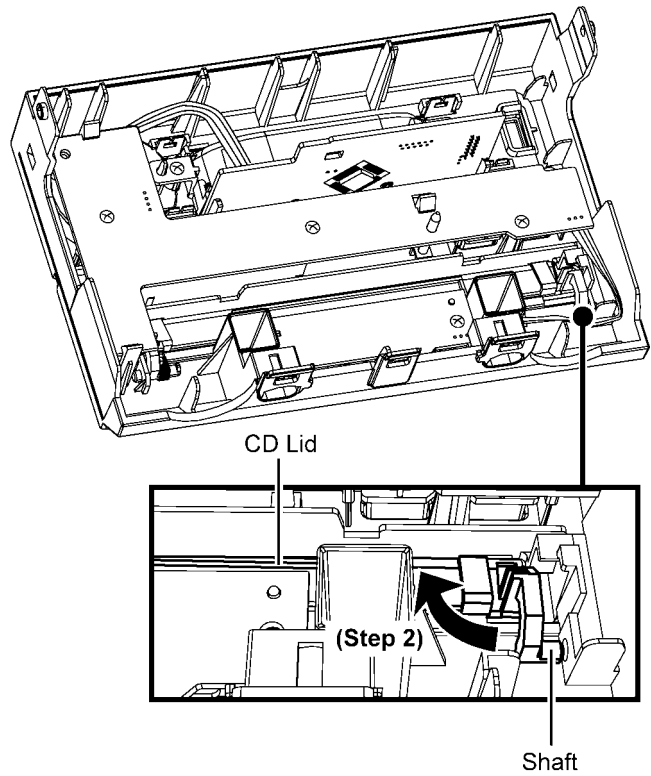
- Refer to “Disassembly of Top Cabinet Assembly”
- Refer to “Disassembly of Front Panel Assembly”

Step 1 : Lift up and remove CD Lid Spring as arrow shown in order.

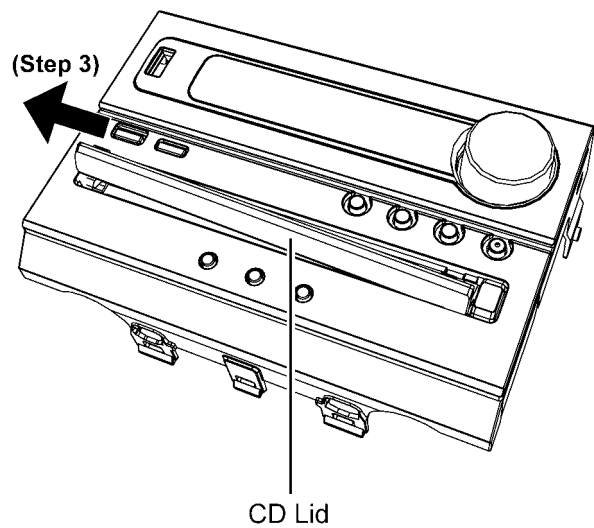
Caution : Keep the CD Lid Spring in a safe place and place it back during assembling.



Step 2 : Push the shaft (R) of the CD Lid inward.



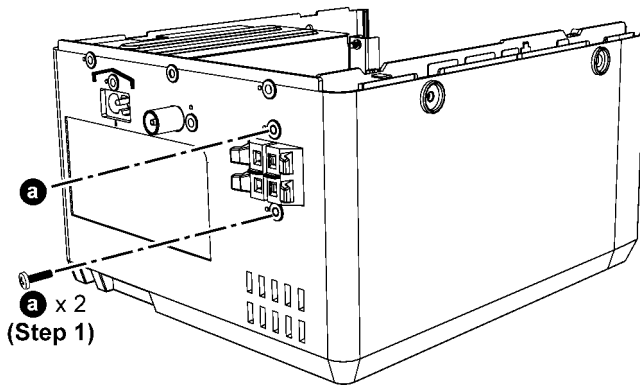
Step 3 : Remove CD Lid.



8.13. Disassembly of Main P.C.B.

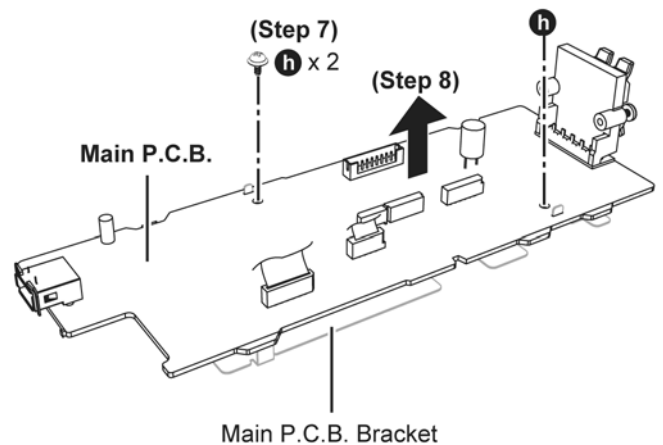
- Refer to "Disassembly of Top Cabinet Assembly"
- Refer to "Disassembly of Front Panel Assembly"

Step 1 : Remove 2 screws.



Step 7 : Remove 2 screws.

Step 8 : Remove Main P.C.B..



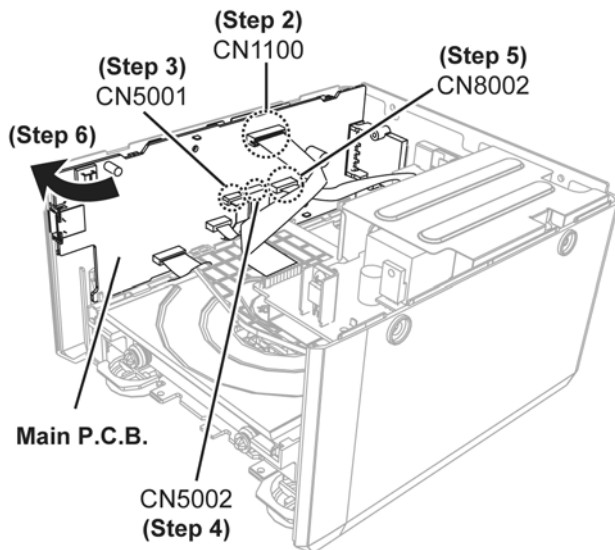
Step 2 : Detach 10P cable at connector (CN1100) on Main P.C.B..

Step 3 : Detach 7P FFC at connector (CN5001) on Main P.C.B..

Step 4 : Detach 24P FFC at connector (CN5002) on Main P.C.B..

Step 5 : Detach 9P FFC at connector (CN8002) on Main P.C.B..

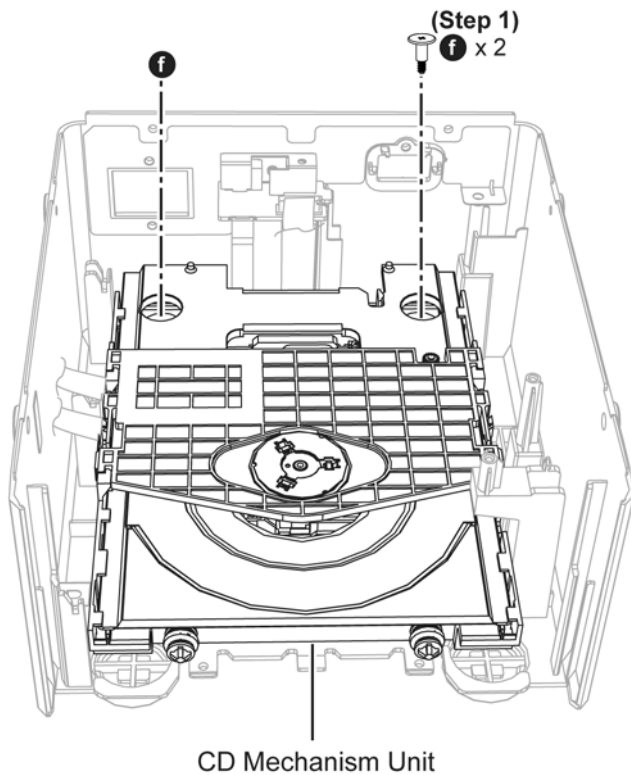
Step 6 : Lift up and remove Main P.C.B..



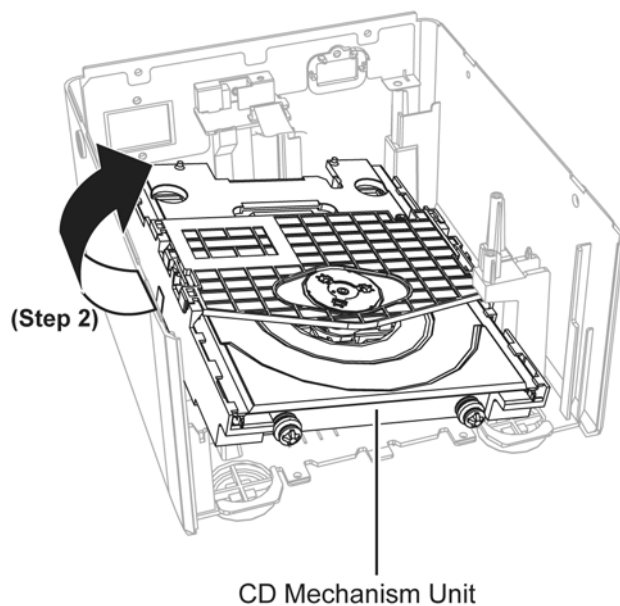
8.14. Disassembly of CD Mechanism Unit

- Refer to “Disassembly of Top Cabinet Assembly”
- Refer to “Disassembly of SMPS Unit”
- Refer to “Disassembly of Front Panel Assembly”
- Refer to “Disassembly of Main P.C.B.”

Step 1 : Remove 2 screws.



Step 2 : Remove CD Mechanism Unit.



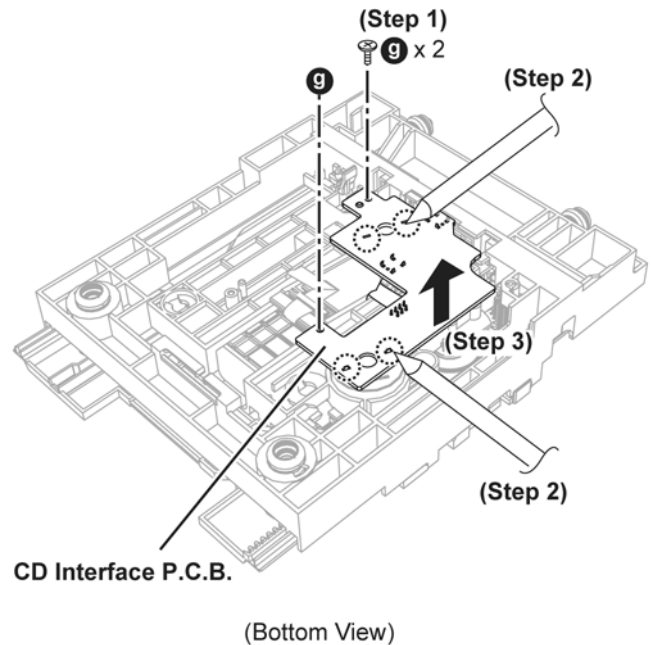
8.15. Disassembly of CD Interface P.C.B.

- Refer to “Disassembly of CD Mechanism Unit”

Step 1 : Remove 2 screws.

Step 2 : Desolder pins on CD Interface P.C.B..

Step 3 : Remove CD Interface P.C.B..

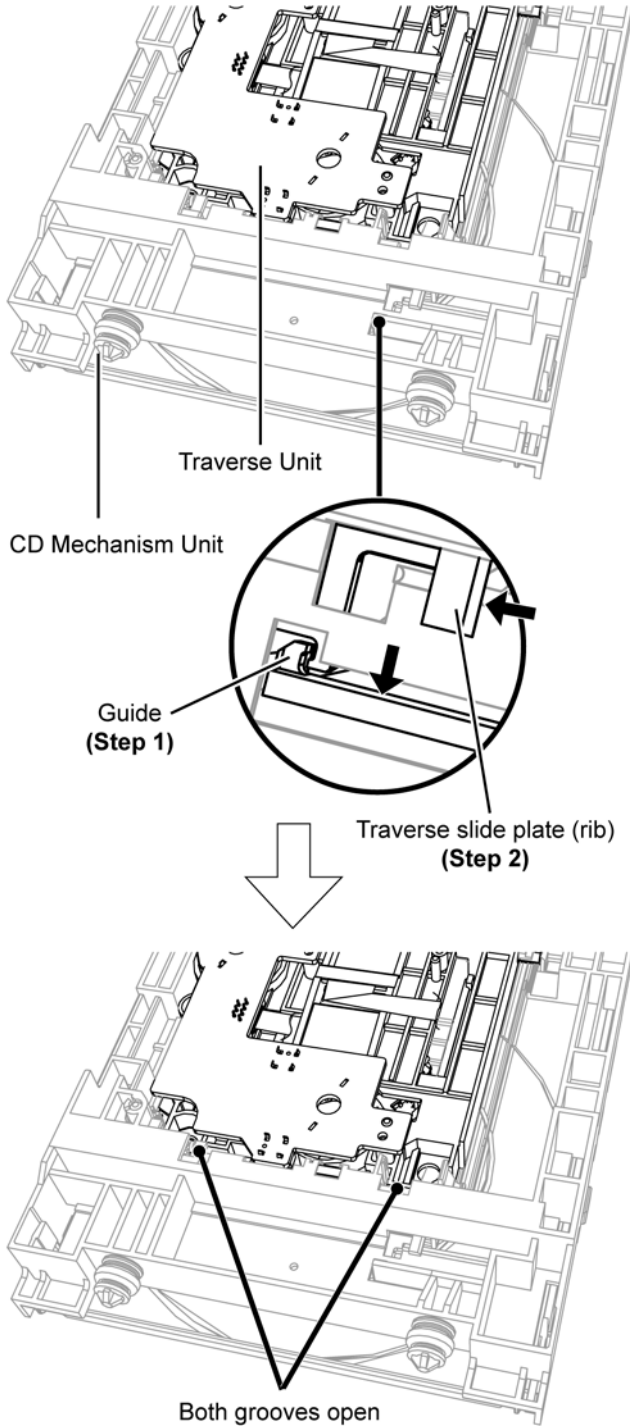


9 Disassembly and Assembly of Traverse Unit

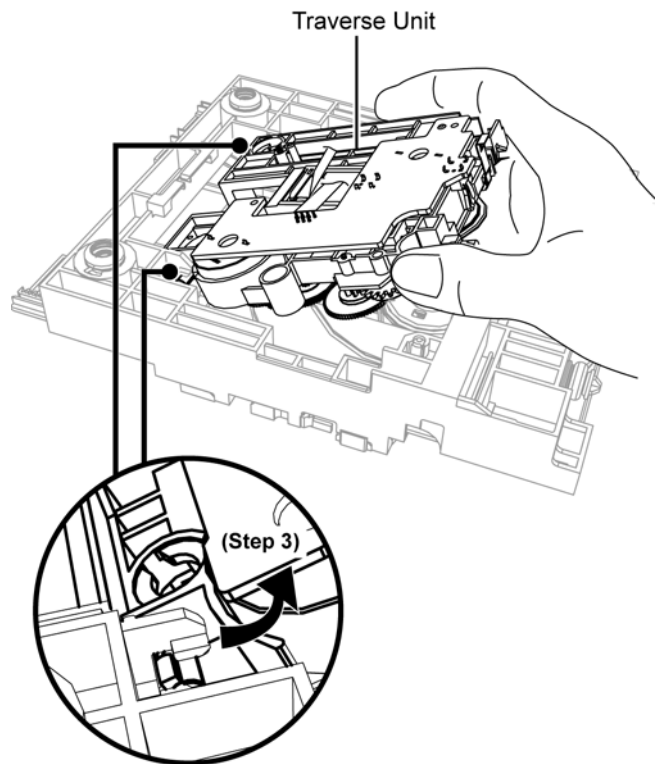
9.1. Disassembling Procedures

Step 1 : Release guide.

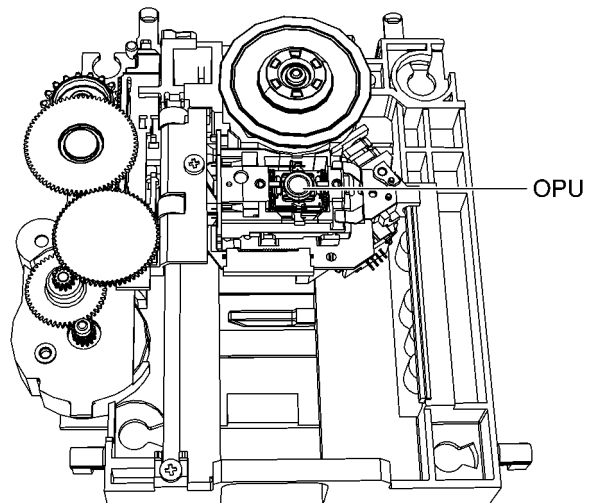
Step 2 : Push traverse slide plate (rib), ensure both grooves are opened.



Step 3 : Remove traverse unit as arrow shown.

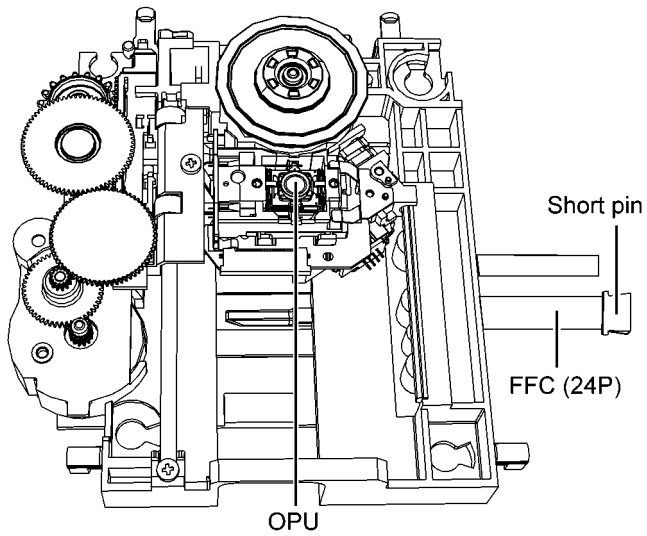


Caution : Avoid touching the surface of the traverse unit.



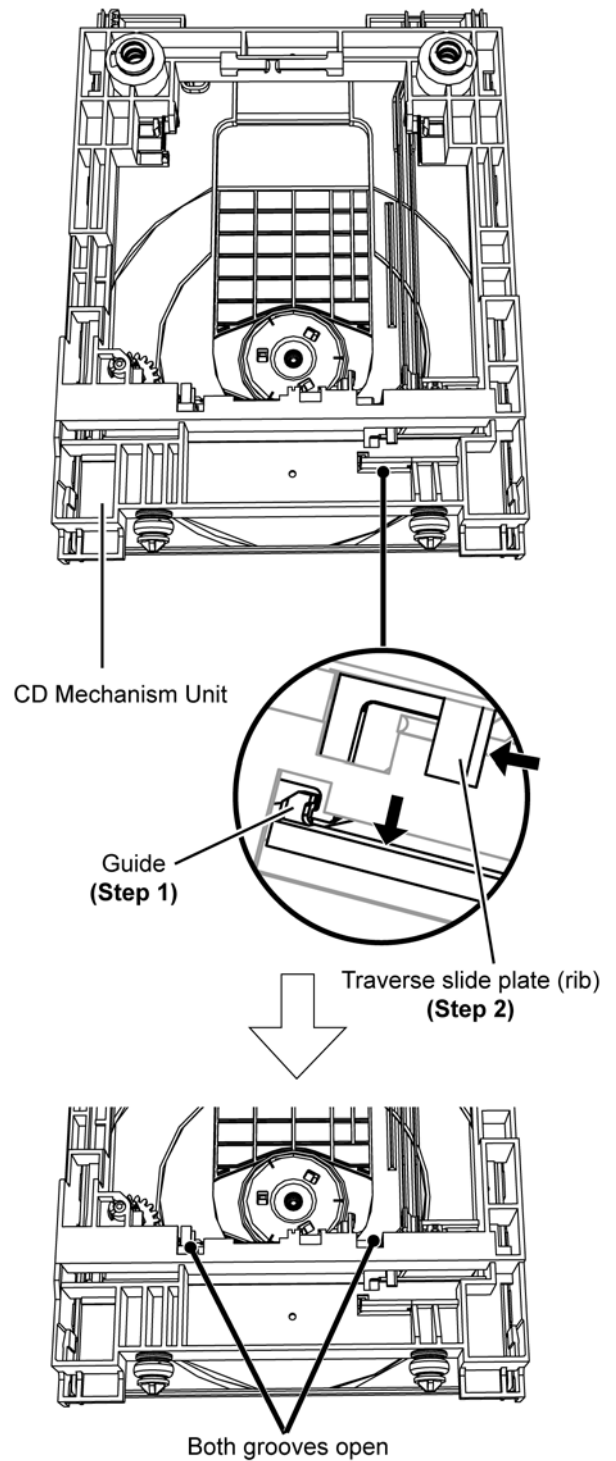
9.2. Assembling Procedures

Caution : Removal of the short pin is necessary for replacement of new traverse unit.



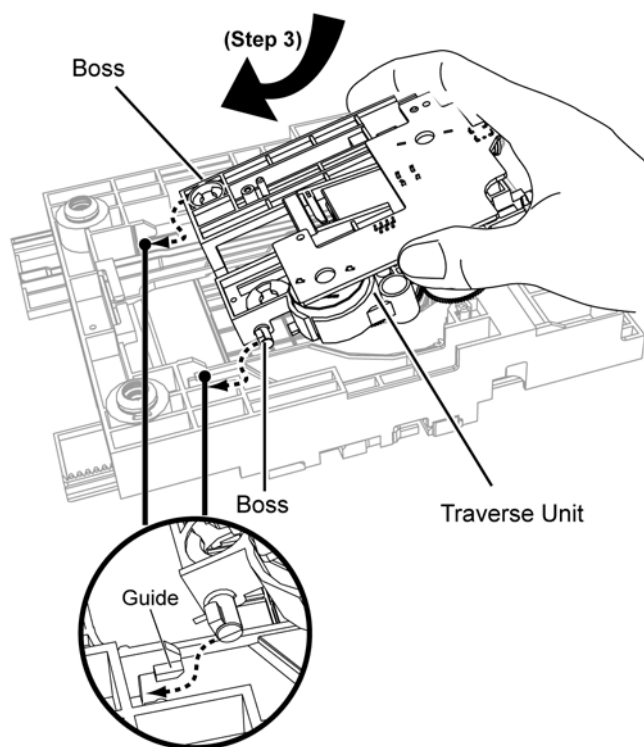
Step 1 : Release guide.

Step 2 : Push the traverse slide plate (rib), ensure both grooves are opened.



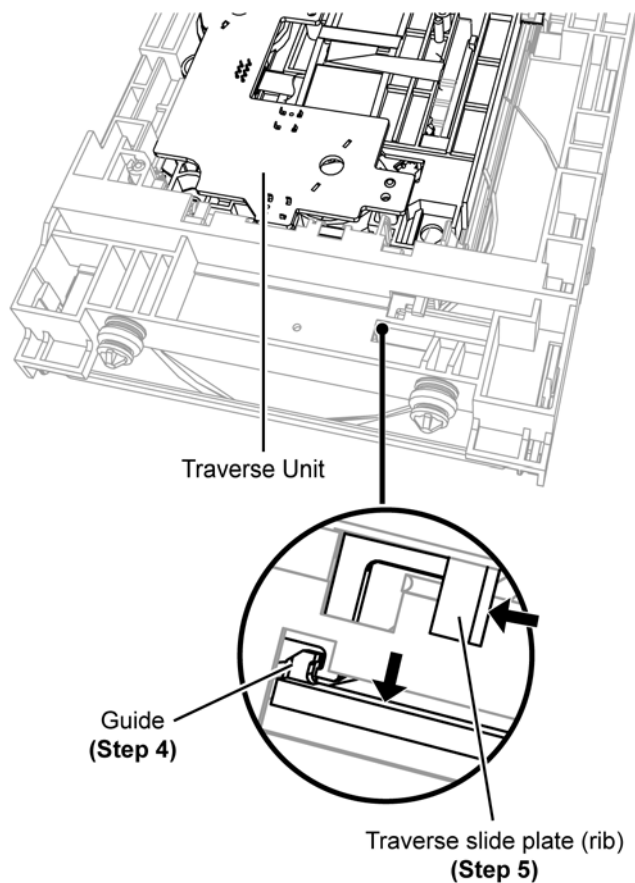
Step 3 : Insert Traverse Unit at approximately 45° as arrow shown.

Caution : Ensure that the bosses fix exactly onto the guides.



Step 4 : Release guide.

Step 5 : Push traverse slide plate (rib) to lock the traverse unit.



10 Service Position

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

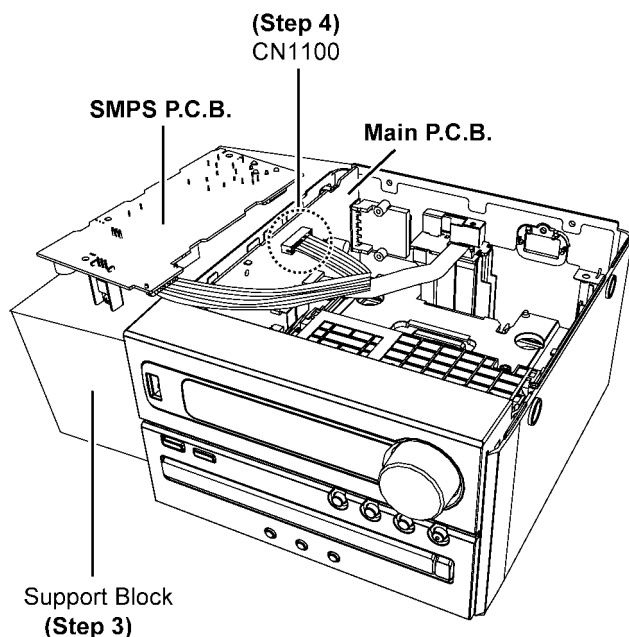
10.1. Checking of SMPS P.C.B.

Step 1 : Remove Top Cabinet Assembly.

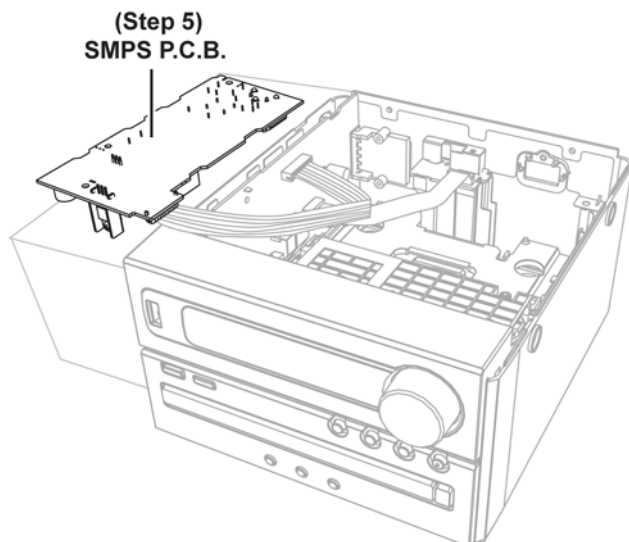
Step 2 : Remove SMPS P.C.B..

Step 3 : Place SMPS P.C.B. on the Support Block.

Step 4 : Connect 10P wire at connector (CN1100) on Main P.C.B..



Step 5 : Check SMPS P.C.B. according to the diagram shown.



10.2. Checking of Panel P.C.B.

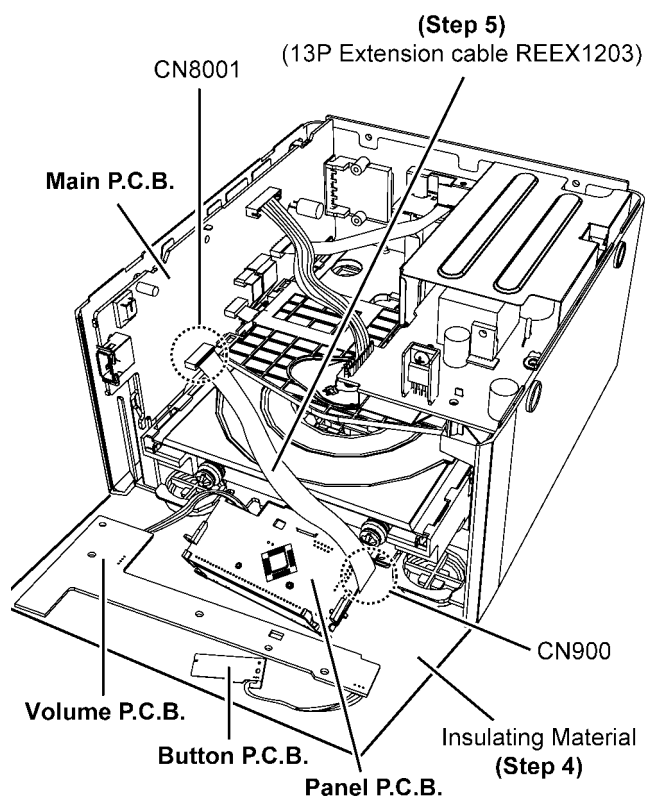
Step 1 : Remove Top Cabinet Assembly.

Step 2 : Remove Front Panel Assembly.

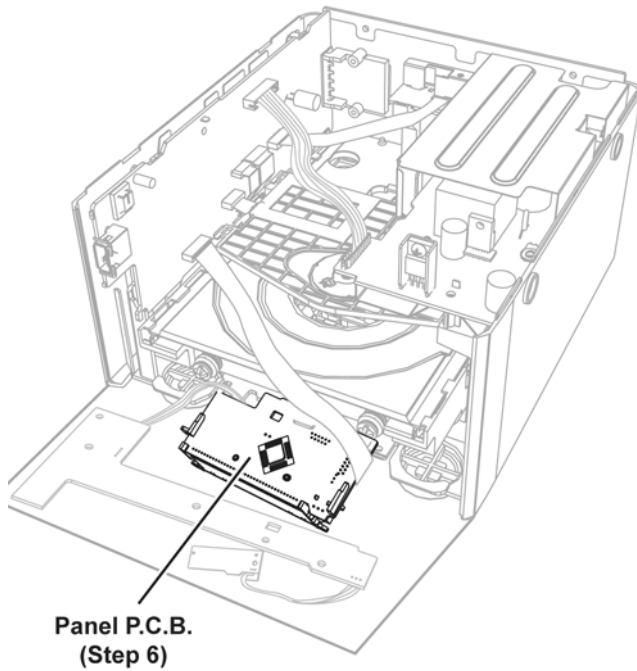
Step 3 : Remove Button P.C.B., Volume P.C.B. and Panel P.C.B..

Step 4 : Place Button P.C.B., Volume P.C.B. and Panel P.C.B. on insulating material.

Step 5 : Connect 13P extension cable (REEX1203) from CN8001 on Main P.C.B. to CN900 on Panel P.C.B..



Step 6 : Check Panel P.C.B. according to the diagram shown.



10.3. Checking of CD Interface P.C.B.

Note : Insert CD before checking CD Interface P.C.B.

Step 1 : Remove Top Cabinet Assembly.

Step 2 : Remove SMPS Unit.

Step 3 : Remove Front Panel Assembly.

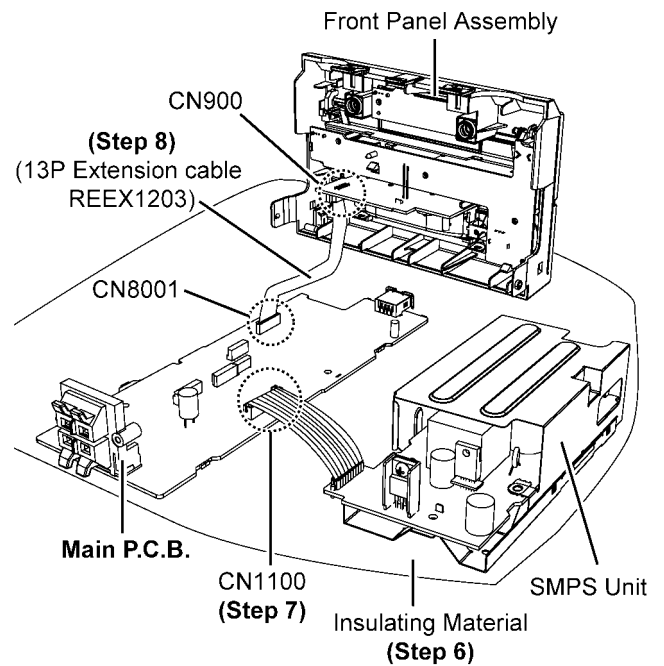
Step 4 : Remove Main P.C.B..

Step 5 : Remove CD Mechanism Unit.

Step 6 : Place Main P.C.B., Front Panel Assembly and SMPS Unit on insulating material.

Step 7 : Connect 10P wire at connector (CN1100) on Main P.C.B..

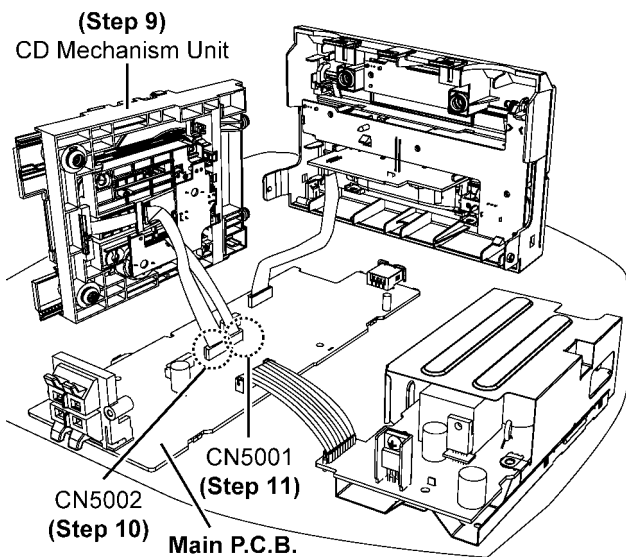
Step 8 : Connect 13P extension cable (REEX1203) from CN8001 on Main P.C.B. to CN900 on Panel P.C.B.



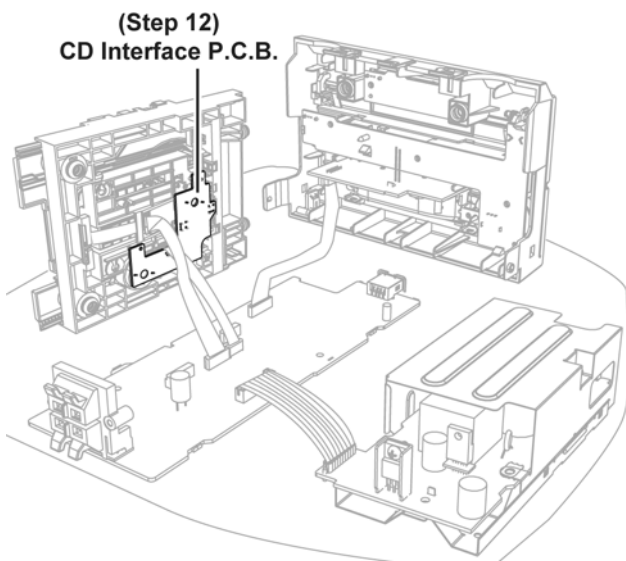
Step 9 : Place CD Mechanism Unit as shown.

Step 10 : Connect 24P FFC at connector (CN5002) on Main P.C.B..

Step 11 : Connect 7P FFC at connector (CN5001) on Main P.C.B..



Step 12 : Check CD Interface P.C.B. according to the diagram shown.



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

Step 1 : Remove Top Cabinet Assembly.

Step 2 : Remove SMPS Unit.

Step 3 : Remove Front Panel Assembly.

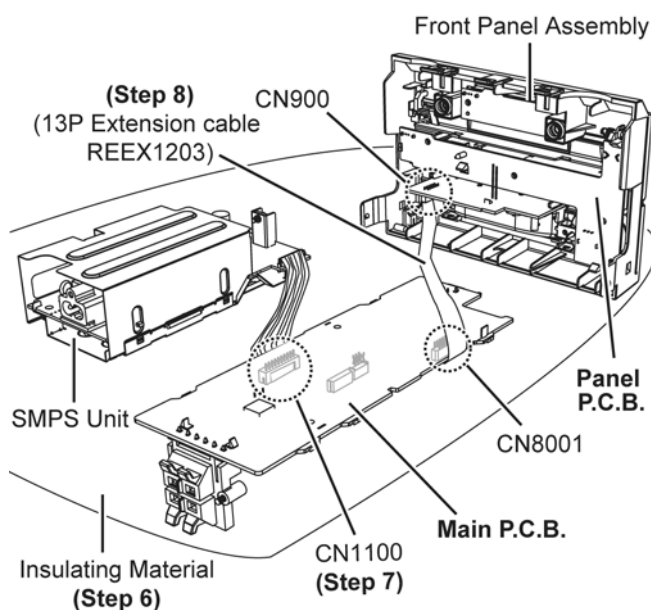
Step 4 : Remove Main P.C.B..

Step 5 : Remove CD Mechanism Unit.

Step 6 : Place Main P.C.B., Front Panel Assembly and SMPS Unit on insulating material.

Step 7 : Connect 10P wire at connector (CN1100) on Main P.C.B..

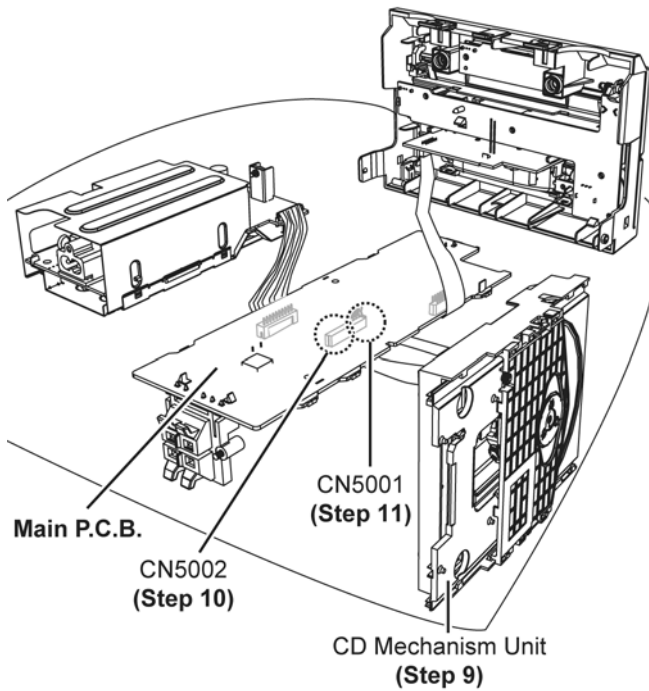
Step 8 : Connect 13P extension cable (REEX1203) from CN8001 on Main P.C.B. to CN900 on Panel P.C.B.



Step 9 : Place CD Mechanism Unit as shown.

Step 10 : Connect 24P FFC at connector (CN5002) on Main P.C.B..

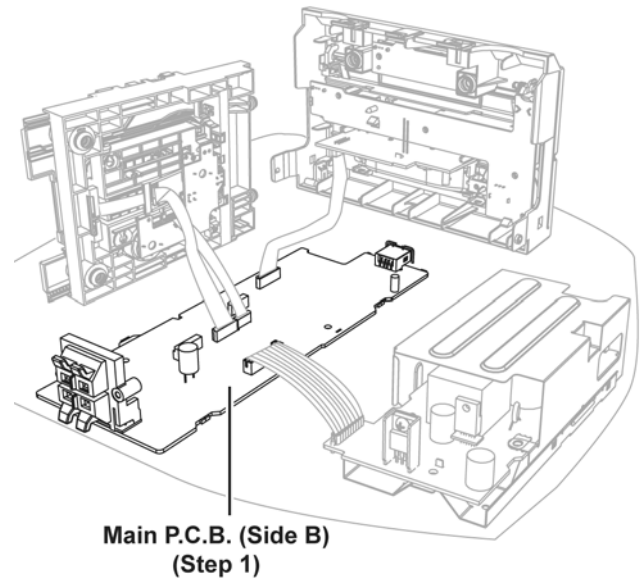
Step 11 : Connect 7P FFC at connector (CN5001) on Main P.C.B..



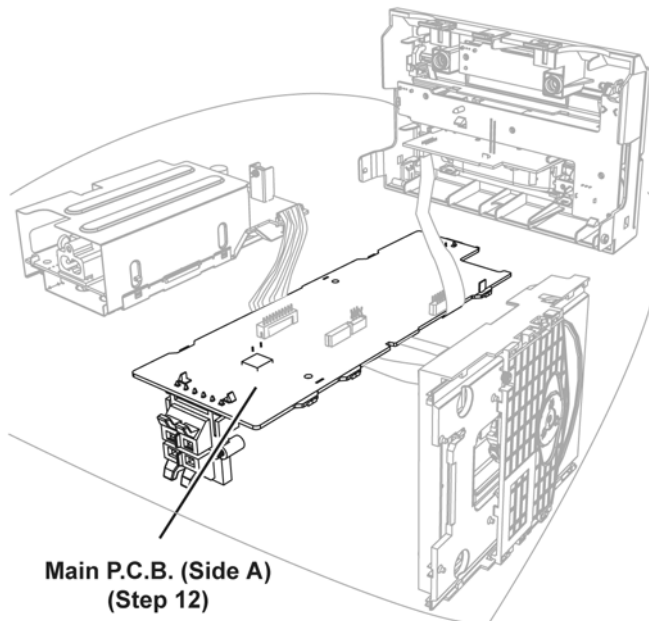
10.5. Checking of Main P.C.B. (Side B)

- Refer to (Step 1) - (Step 11) of item 10.3.

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



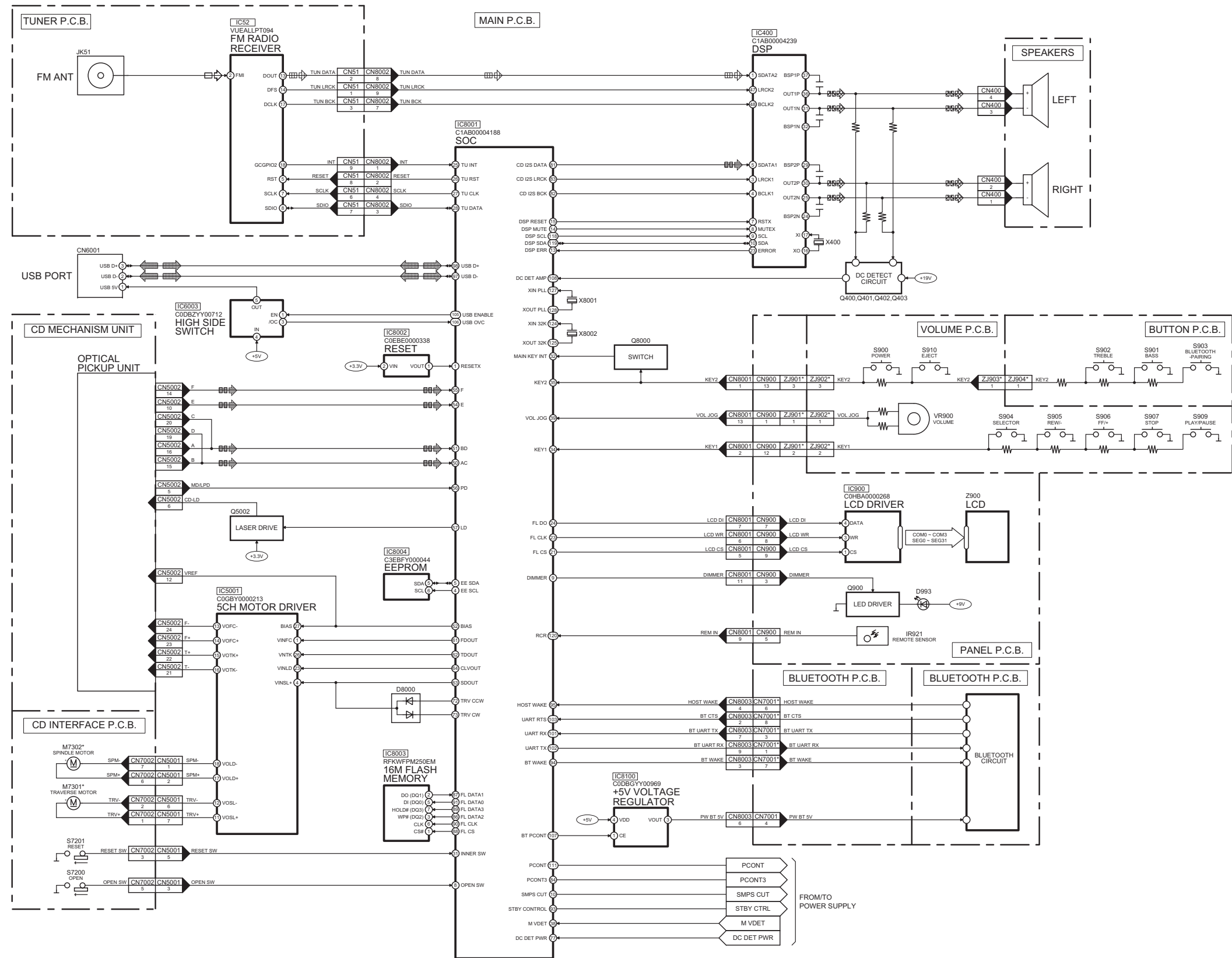
Step 12 : Check Main P.C.B. (Side A) according to the diagram shown.



11 Block Diagram

11.1. SYSTEM CONTROL & AUDIO BLOCK DIAGRAM

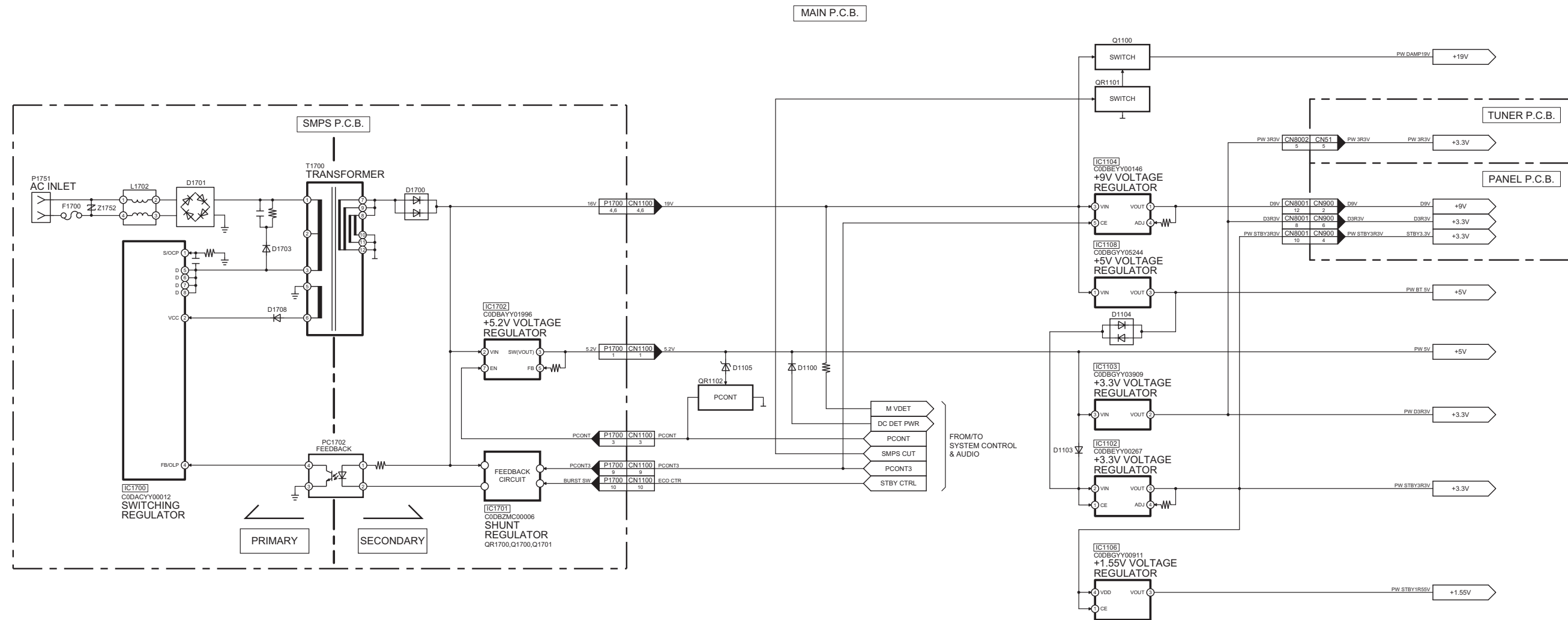
: CD AUDIO INPUT SIGNAL LINE
 : TUNER AUDIO INPUT SIGNAL LINE
 : AUDIO OUTPUT SIGNAL LINE
 : FM SIGNAL LINE
 : USB SIGNAL LINE



NOTE: “*” REF IS FOR INDICATION ONLY

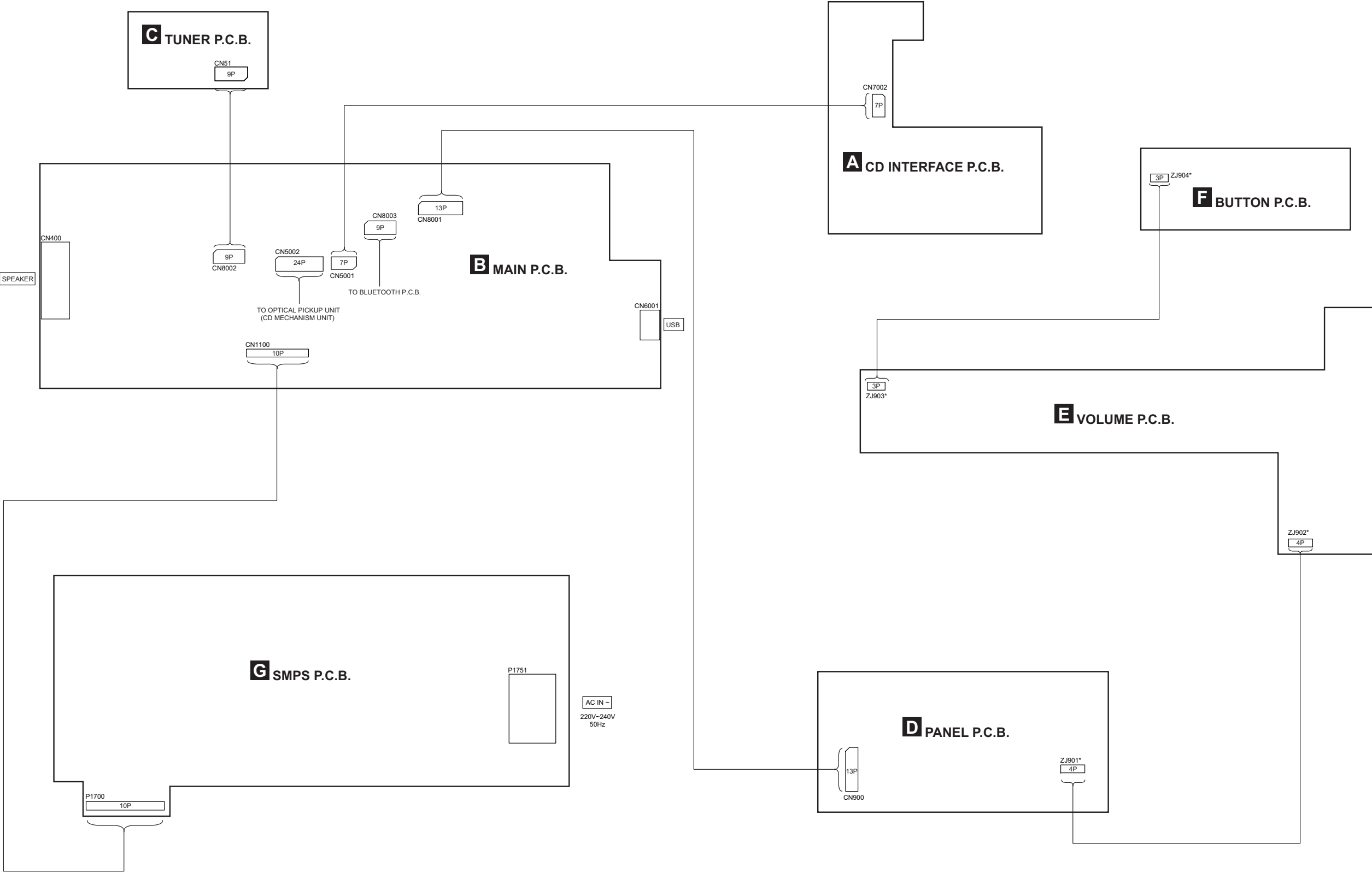
SA-PM250EB/EC/EE/EF/EG SYSTEM CONTROL & AUDIO BLOCK DIAGRAM

11.2. POWER SUPPLY BLOCK DIAGRAM



SA-PM250EB/EC/EE/EF/EG POWER SUPPLY BLOCK DIAGRAM

12 Wiring Connection Diagram



Note : “ * ” REF IS FOR INDICATION ONLY.

SA-PM250EB/EC/EE/EF/EG
WIRING CONNECTION DIAGRAM

13 Schematic Diagram

13.1. Schematic Diagram Notes

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

Notes:

S900:	POWER switch ().
S901:	BASS switch.
S902:	TREBLE switch.
S903:	BT PAIRING switch ().
S904:	SELECTOR switch.
S905:	REW / - switch ().
S906:	FF / + switch ().
S907:	STOP switch ().
S909:	PLAY/PAUSE switch ().
S910:	EJECT switch ().
S7200:	OPEN 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 μ F, unless otherwise noted. F=Farads, pF=pico-Farad.

• Coil

Unit of inductance is H, unless otherwise noted.

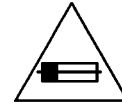
• *

REF IS FOR INDICATION ONLY.

• Voltage and signal line

	: +B Signal Line
	: CD Audio Input Signal Line
	: Tuner Audio Input Signal Line
	: Audio Output Signal Line
	: USB Signal Line
	: FM Signal Line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1700, T2A, 250V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

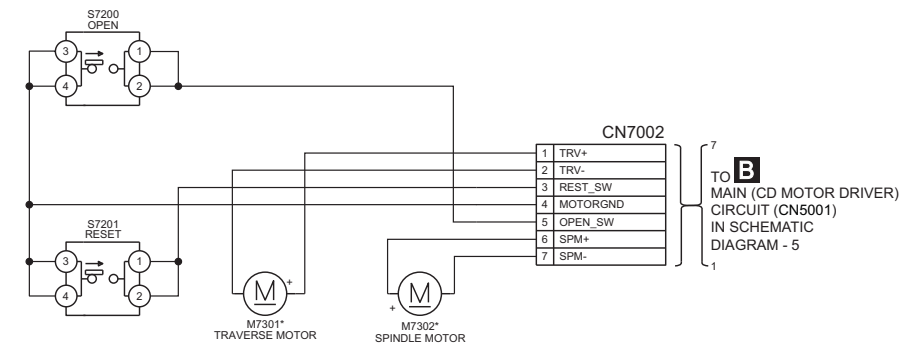


These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

13.2. CD INTERFACE & MAIN (MICON) CIRCUIT (1/2)

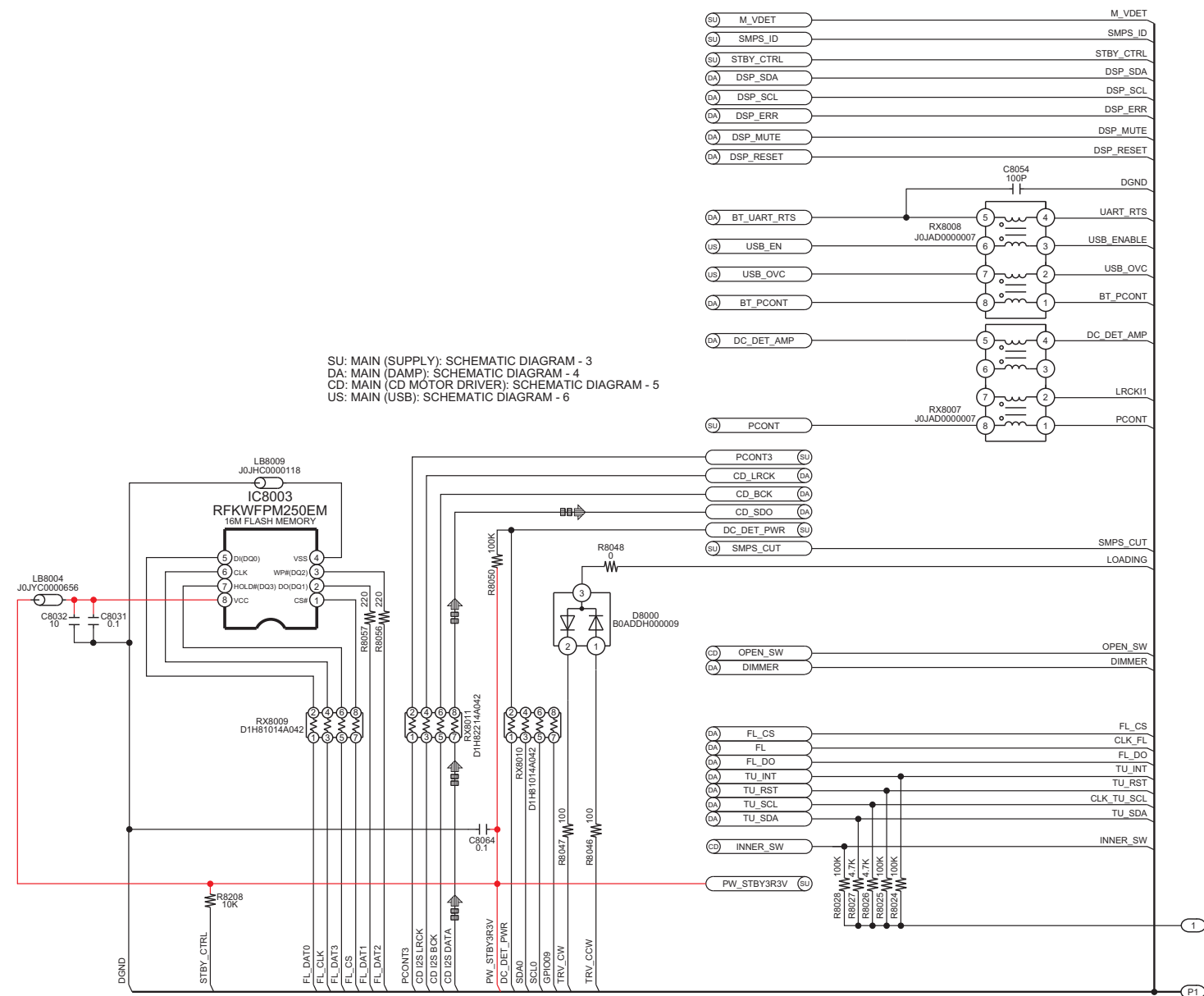
SCHEMATIC DIAGRAM - 1

A CD INTERFACE CIRCUIT



B MAIN (MICON) CIRCUIT

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



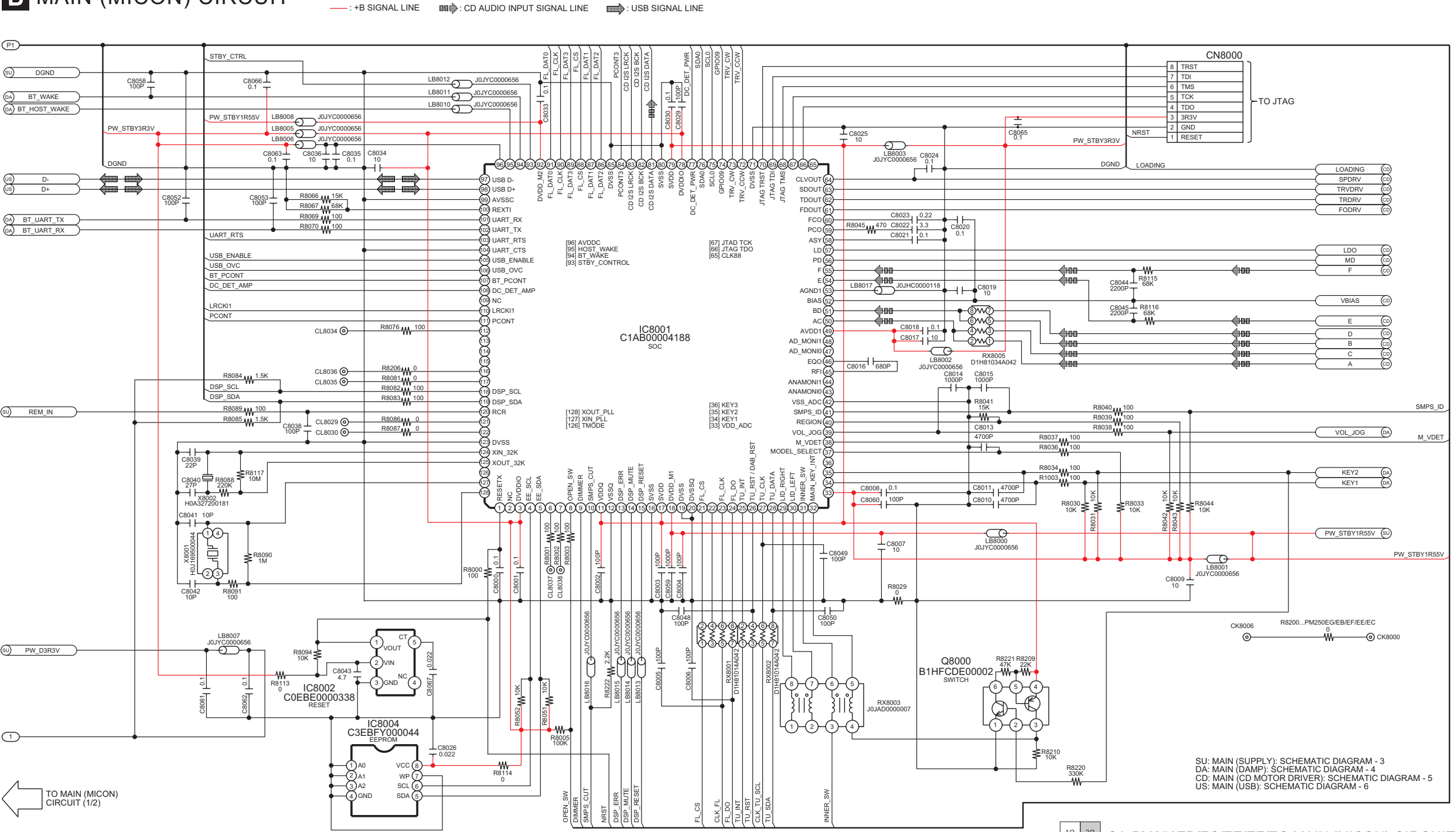
TO MAIN (MICON)
CIRCUIT (2/2) 

NOTE: " * " REF IS FOR INDICATION ONLY

1/2 2/2 SA-PM250EB/EC/EE/EF/EG CD INTERFACE / MAIN (MICON) CIRCUIT

13.3. MAIN (MICON) CIRCUIT (2/2)

SCHEMATIC DIAGRAM - 2
B MAIN (MICON) CIRCUIT



NOTE: “*” REF IS FOR INDICATION ONLY

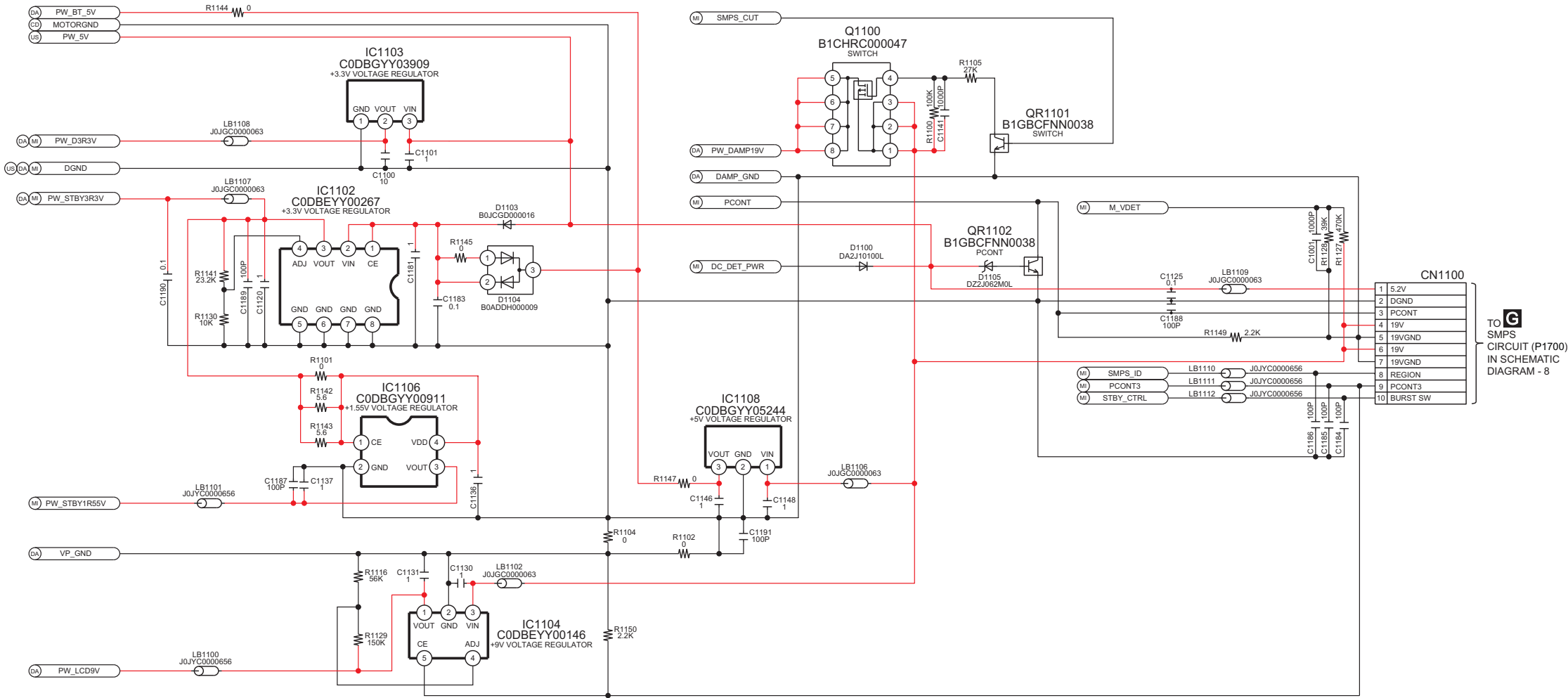
1/2 2/2 SA-PM250EB/EC/EE/EF/EG MAIN (MICON) CIRCUIT

13.4. MAIN (SUPPLY) CIRCUIT

SCHEMATIC DIAGRAM - 3

B MAIN (SUPPLY) CIRCUIT

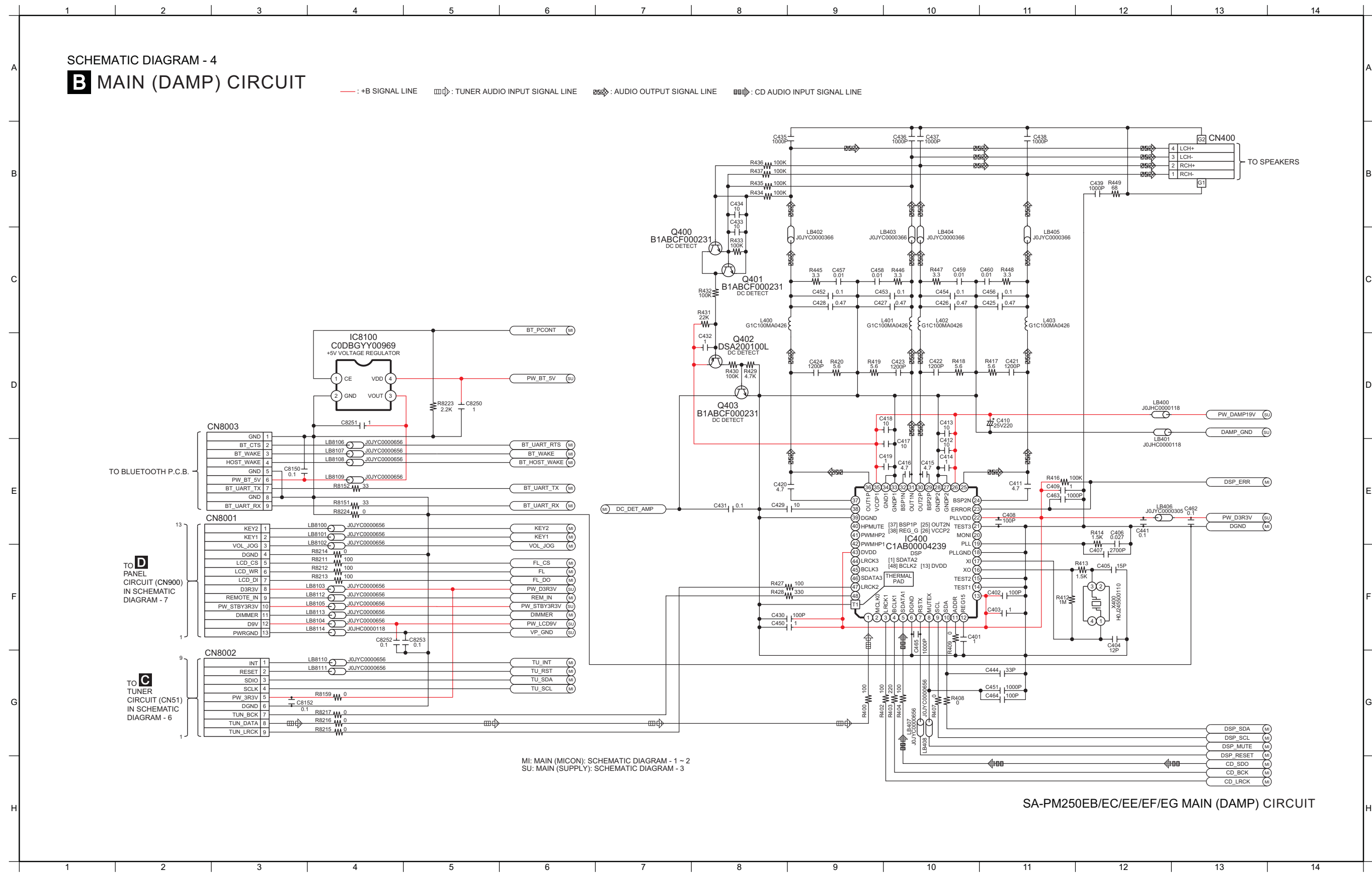
— : +B SIGNAL LINE



MI: MAIN (MICON); SCHEMATIC DIAGRAM - 1 ~ 2
DA: MAIN (DAMP); SCHEMATIC DIAGRAM - 4
CD: MAIN (CD MOTOR DRIVER); SCHEMATIC DIAGRAM - 5
US: MAIN (USB); SCHEMATIC DIAGRAM - 6

SA-PM250EB/EC/EE/EF/EG MAIN (SUPPLY) CIRCUIT

13.5. MAIN (DAMP) CIRCUIT



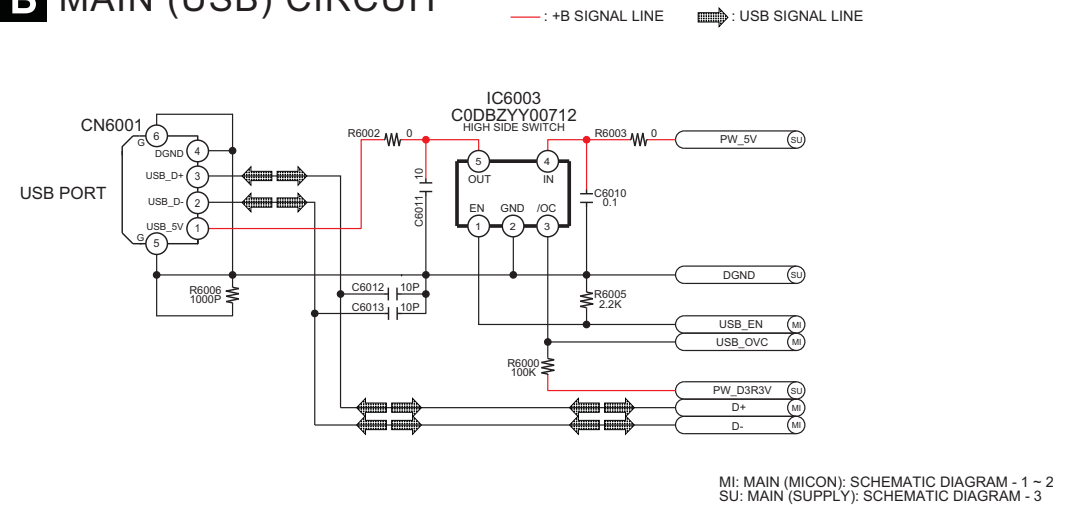
SCHEMATIC DIAGRAM - 5

B MAIN (CD MOTOR DRIVER) CIRCUIT

— +B SIGNAL LINE : CD AUDIO INPUT SIGNAL LINE

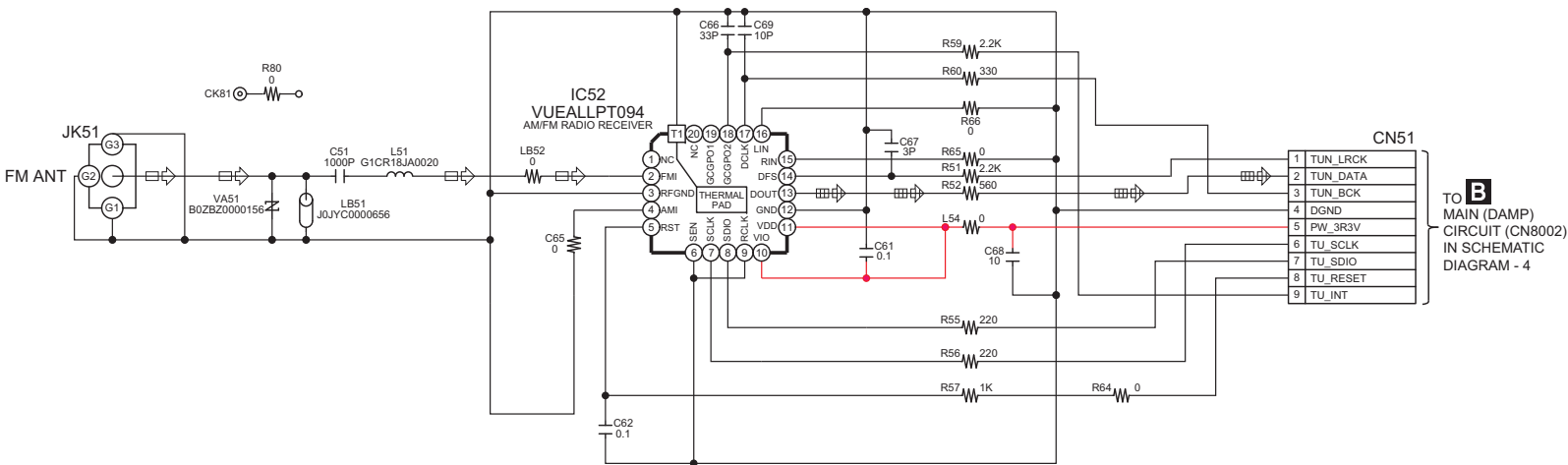
13.7. MAIN (USB) & TUNER CIRCUIT

SCHEMATIC DIAGRAM - 6
B MAIN (USB) CIRCUIT



C TUNER CIRCUIT

— : +B SIGNAL LINE ⇨ : TUNER AUDIO INPUT SIGNAL LINE ⇨ : FM SIGNAL LINE



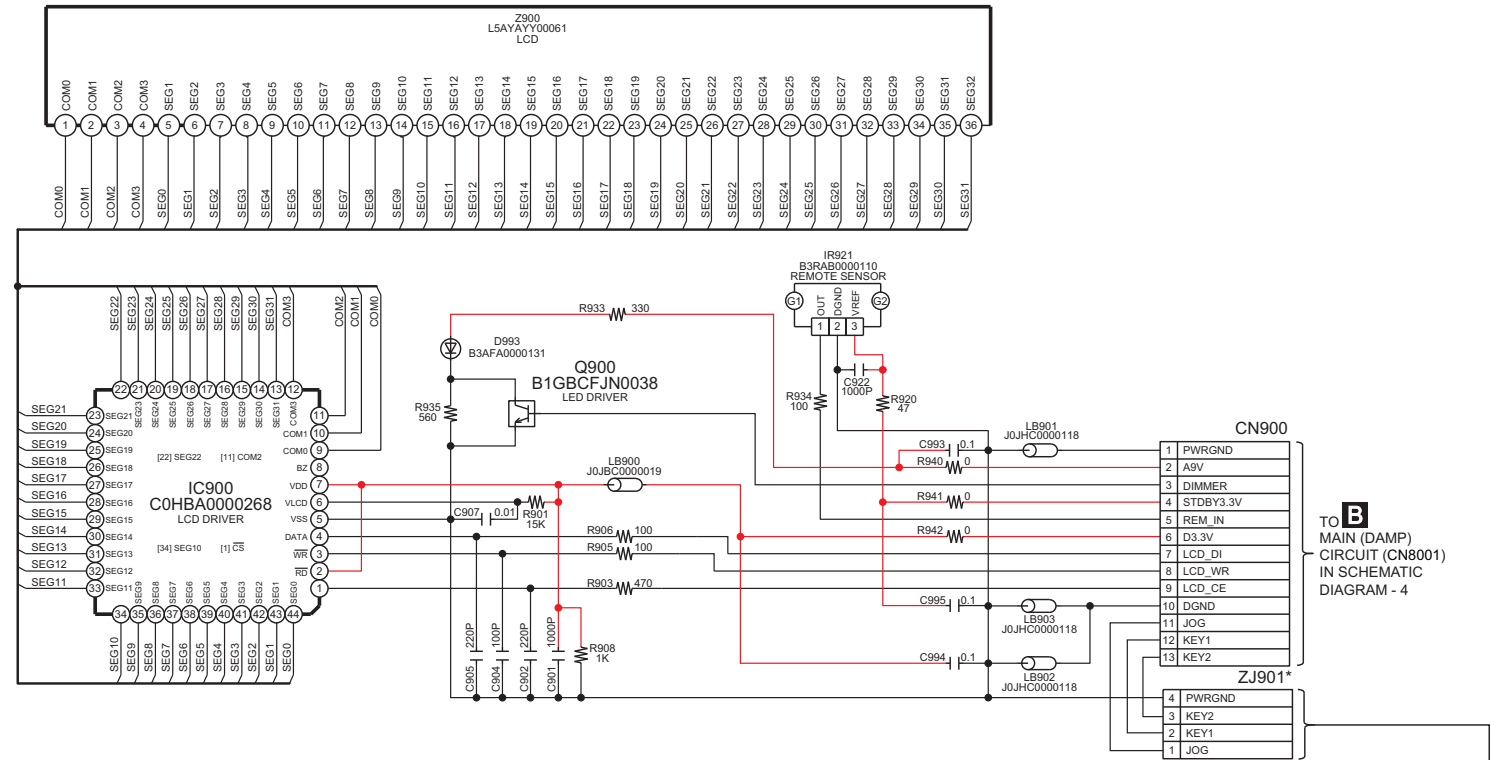
NOTE: “ * ” REF IS FOR INDICATION ONLY

SA-PM250EB/EC/EE/EF/EG MAIN (USB) / TUNER CIRCUIT

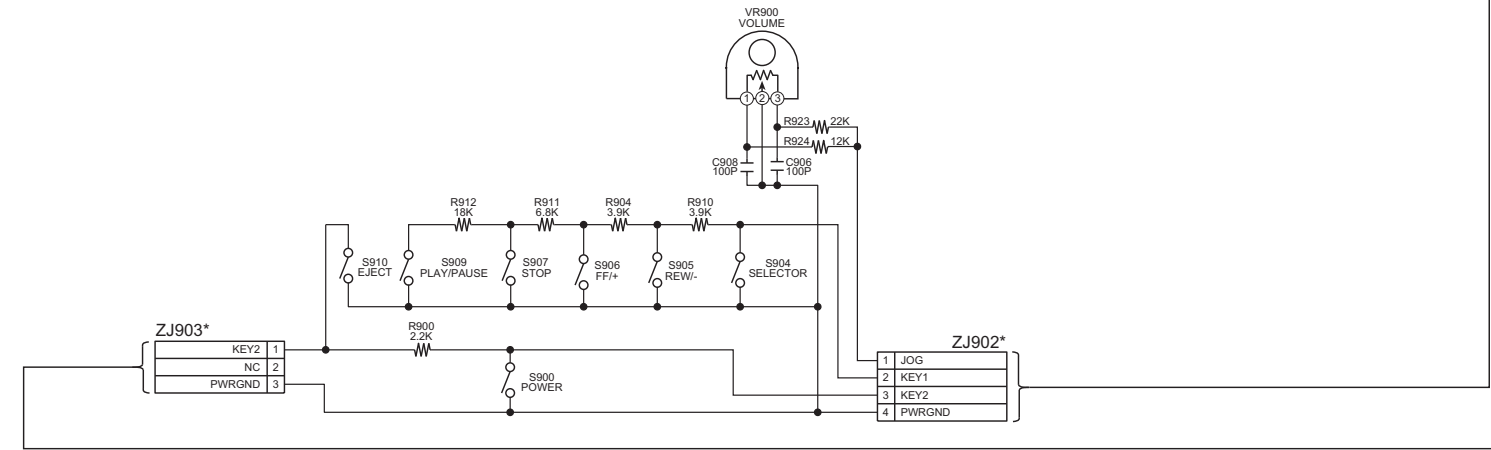
13.8. PANEL, VOLUME & BUTTON CIRCUIT

SCHEMATIC DIAGRAM - 7

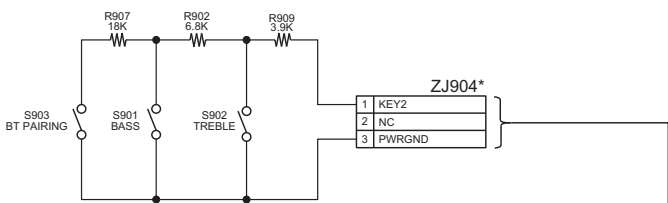
D PANEL CIRCUIT



E VOLUME CIRCUIT



F BUTTON CIRCUIT

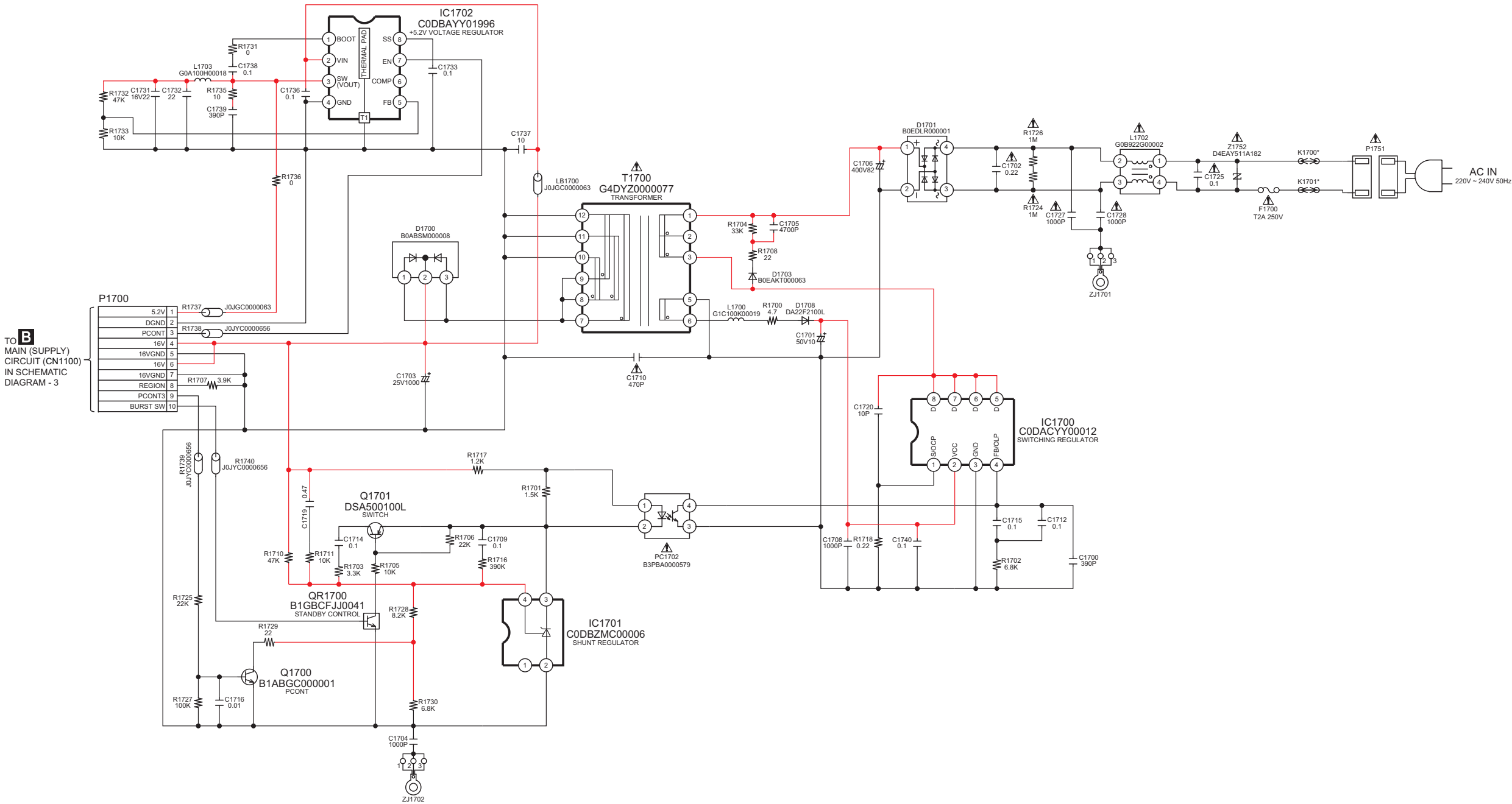


SA-PM250EB/EC/EE/EF/EG PANEL / VOLUME / BUTTON CIRCUIT

13.9. SMPS CIRCUIT

SCHEMATIC DIAGRAM - 8
G SMPS CIRCUIT

— : +B SIGNAL LINE



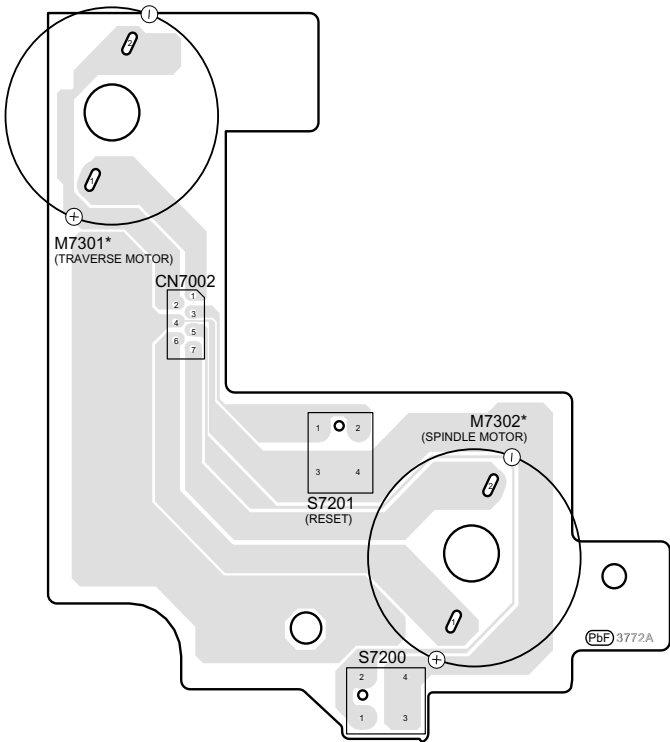
NOTE: “ * ” REF IS FOR INDICATION ONLY

SA-PM250EB/EC/EE/EF/EG SMPS CIRCUIT

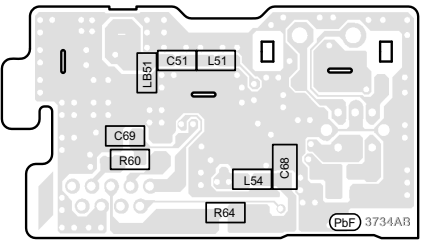
14 Printed Circuit Board

14.1. CD INTERFACE & TUNER P.C.B.

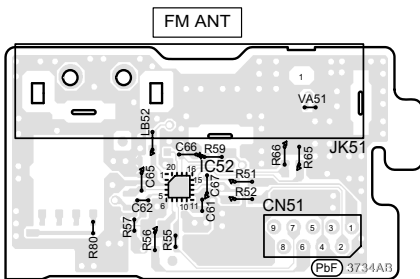
A CD INTERFACE P.C.B. (REP5071A)



C TUNER P.C.B. (REP5069AB)



(SIDE A)



(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY

SA-PM250EG/EC/EF/EB/EE
CD INTERFACE / TUNER P.C.B.

A vertical scale with labels A, B, C, D, E, F, G, H from bottom to top.

NOTE: " * " REF IS FOR INDICATION ONLY

A horizontal number line with tick marks at every integer from 1 to 13. The numbers 1 through 13 are labeled below the line.

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

B MAIN P.C.B. (REP5069AA)

SPEAKER

USB

(SIDE B)

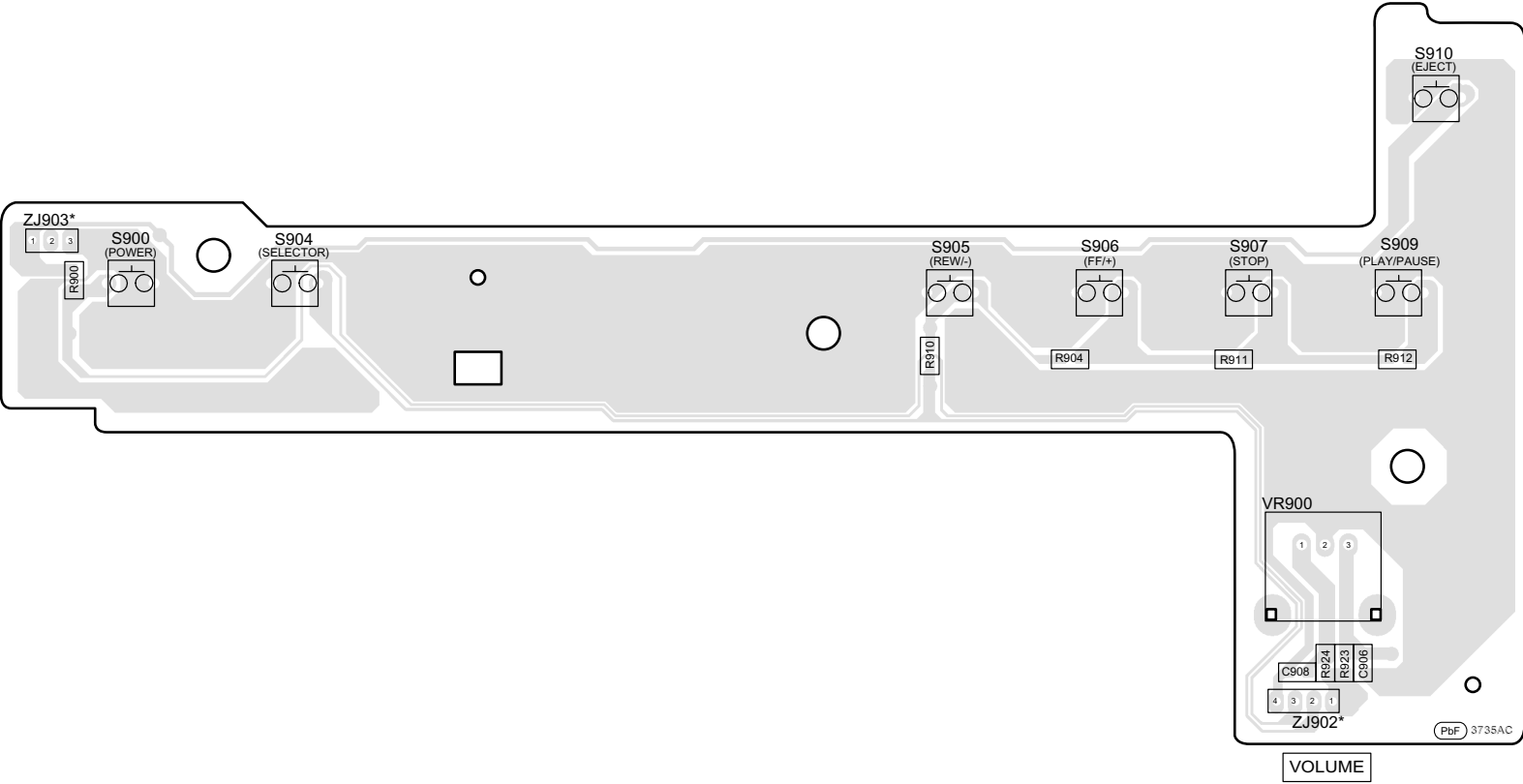
NOTE: " * " REF IS FOR INDICATION ONLY

SA-PM250EG/EC/EF/EB/EE
MAIN P.C.B.

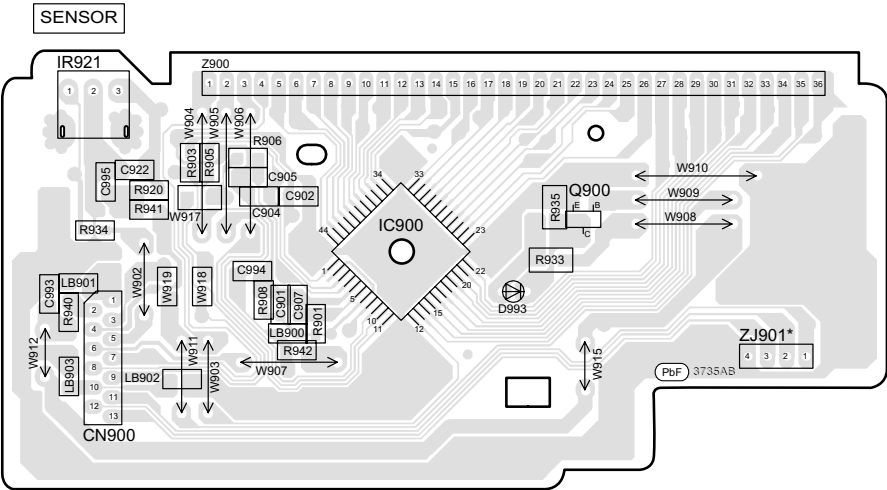
14.4. PANEL, VOLUME & BUTTON P.C.B.

H
G
F
E
D
C
B
A

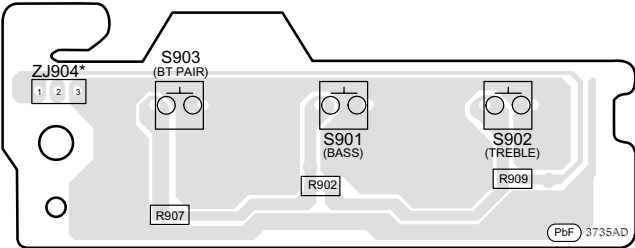
E VOLUME P.C.B. (REP5070AB)



D PANEL P.C.B. (REP5070AB)



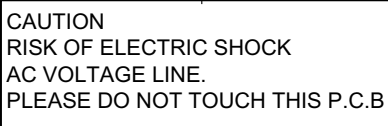
F BUTTON P.C.B. (REP5070AB)



NOTE: " * " REF IS FOR INDICATION ONLY

SA-PM250EG/EC/EF/EB/EE
PANEL / VOLUME / BUTTON P.C.B.

A vertical scale with labels A, B, C, D, E, F, G, H from bottom to top, with horizontal tick marks.



NOTE: " * " REF IS FOR INDICATION ONLY

SA-PM250EG/EC/EF/EB/EE
SMPS P.C.B.

15 Voltage and Waveform Measurement

15.1. 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.

15.1.1. Main P.C.B. (1/3)

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	3.3	0	1.7	1.7	0.9	0	3.3	3.3	3.3	3.3	0	1.5	3.3	0	0	1.4	1.4	0	1.1	3.3
STANDBY	3.3	0	1.7	1.7	0.9	0	3.3	3.3	3.3	3.3	0	1.5	3.3	0	0	1.4	1.4	0	1.1	3.3
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	0	3.3	3.3	13.3	8.4	16.7	0	0	13.3	8.4	8.4	13.3	0	0	16.7	8.4	13.3	5.6	0	0
STANDBY	0	3.3	3.3	13.3	8.4	16.7	0	0	13.3	8.4	8.4	13.3	0	0	16.7	8.4	13.3	5.6	0	0
REF NO.	IC400																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	0	0	3.3	3.3	3.3	3.3	1.7	1.7												
STANDBY	0	0	3.3	3.3	3.3	3.3	1.7	1.7												
REF NO.	IC1102																			
MODE	1	2	3	4	5	6	7	8												
POWER	5	5	3.3	1	0	0	0	0												
STANDBY	5	5	3.3	1	0	0	0	0												
REF NO.	IC1103																			
MODE	1	2	3																	
POWER	0	3.3	5.3																	
STANDBY	0	3.3	5.3																	
REF NO.	IC1104																			
MODE	1	2	3	4	5															
POWER	9.3	0	16.7	2.5	2.9															
STANDBY	9.3	0	16.7	2.5	2.9															
REF NO.	IC1106																			
MODE	1	2	3	4																
POWER	3	0	1.6	3																
STANDBY	3	0	1.6	3																
REF NO.	IC1108																			
MODE	1	2	3																	
POWER	16.7	0	5.0																	
STANDBY	16.7	0	5.0																	
REF NO.	IC5001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	5.2	2.9	1.7	2.9	0	0	5.3	0	0	2.8	2.6	2.5	2.8	2.7	2.6	3.2	2.1	5.2	2.9
STANDBY	1.7	5.2	2.9	1.7	2.9	0	0	5.3	0	0	2.8	2.6	2.5	2.8	2.7	2.6	3.2	2.1	5.2	2.9
REF NO.	IC5001																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	1.5	0	1.8	5.2	5.2	1.7	1.7	3.3	0	0										
STANDBY	1.5	0	1.8	5.2	5.2	1.7	1.7	3.3	0	0										

SA-PM250EG/EC/EF/EB/EE MAIN P.C.B.

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

REF NO.	IC6003																			
MODE	1	2	3	4	5															
USB PLAY	3.2	0	3.3	5.3	5.3															
STANDBY	3.2	0	3.3	5.3	5.3															
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	3.3	0	3.3	3.3	3.3	0	3.3	3.3	3.3	3.2	3.3	0	3.3	3.3	3.3	0	3.3	1.6	0	0
STANDBY	3.3	0	3.3	3.3	3.3	0	3.3	3.3	3.3	3.2	3.3	0	3.3	3.3	3.3	0	3.3	1.6	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	2.7	0	0	3.2	3.3	3.3	3.3	3.3	0	0	3.3	3.3	1.6	1.6	1.5	0.9	1.6	1.3	0.7	1.2
STANDBY	2.7	0	0	3.2	3.3	3.3	3.3	3.3	0	0	3.3	3.3	1.6	1.6	1.5	0.9	1.6	1.3	0.7	1.2
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	0.4	0	1.7	1.7	1.7	2	0	0	3.3	1.8	1.8	1.7	0	1.7	1.7	0.2	2.1	1.7	1.7	1.7
STANDBY	0.4	0	1.7	1.7	1.7	2	0	0	3.3	1.8	1.8	1.7	0	1.7	1.7	0.2	2.1	1.7	1.7	1.7
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	1.8	1.7	1.7	2.1	1.7	0	1.7	1.7	1.7	1.7	0	0	3.3	0	0	0	3.2	3.3	3.3	0
STANDBY	1.8	1.7	1.7	2.1	1.7	0	1.7	1.7	1.7	1.7	0	0	3.3	0	0	0	3.2	3.3	3.3	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	0.8	1.7	1.7	3.2	0	3.3	1.7	3.3	3.3	0	0	1.6	0	3.3	1.5	3.3	0	0	0	0
STANDBY	0.8	1.7	1.7	3.2	0	3.3	1.7	3.3	3.3	0	0	1.6	0	3.3	1.5	3.3	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	1.7	3.3	0	0	3.2	3.3	3.2	3.3	0	0	3.2	3.3	0	0	0	0	0	3.3	3.3	3.3
STANDBY	1.7	3.3	0	0	3.2	3.3	3.2	3.3	0	0	3.2	3.3	0	0	0	0	0	3.3	3.3	3.3
REF NO.	IC8001																			
MODE	121	122	123	124	125	126	127	128												
POWER	0	0	0	1.7	1.5	1.9	1.4	1.4												
STANDBY	0	0	0	1.7	1.5	1.9	1.4	1.4												
REF NO.	IC8002																			
MODE	1	2	3	4	5															
POWER	3.3	3.3	0	0	1.8															
STANDBY	3.3	3.3	0	0	1.8															
REF NO.	IC8003																			
MODE	1	2	3	4	5	6	7	8												
POWER	3.3	1.7	3.3	0	0	0	3.3	3.3												
STANDBY	3.3	1.7	3.3	0	0	0	3.3	3.3												
REF NO.	IC8004																			
MODE	1	2	3	4	5	6	7	8												
POWER	0	0	0	0	3.3	3.3	0	3.3												
STANDBY																				
REF NO.	IC8100																			
MODE	1	2	3	4																
POWER	3.1	0	4.6	5																
STANDBY	3.1	0	4.6	5																

SA-PM250EG/EC/EF/EB/EE MAIN P.C.B.

15.1.3. MAIN P.C.B. (3/3), Panel P.C.B. & SMPS P.C.B.

REF NO.	Q1100									Q400				Q401				Q402		
MODE	1	2	3	4	5	6	7	8		E	C	B		E	C	B		E	C	B
POWER	19.0	19.0	19.0	3.6	19.0	19.0	19.0	19.0		8.4	16.5	8.4		8.4	16.5	8.4		16.7	0	16.6
STANDBY	19.0	19.0	19.0	3.6	19.0	19.0	19.0	19.0		8.4	16.5	8.4		8.4	16.5	8.4		16.7	0	16.6

REF NO.	Q403				Q5002				Q8000							QR1101				
MODE	E	C	B		E	C	B		1	2	3	4	5	6		E	C	B		
POWER	0	3.3	0		2.9	1.9	2.2		0	0.5	3.3	3.3	2.7	0		0	0	3.2		
STANDBY	0	3.3	0		2.9	1.9	2.2		0	0.5	3.3	3.3	2.7	0		0	0	3.2		

REF NO.	QR1102																			
MODE	E	C	B																	
POWER	0	3.2	0																	
STANDBY	0	3.2	0																	

SA-PM250EG/EC/EF/EB/EE MAIN P.C.B.

REF NO.	IC900																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER	2.7	3.3	0	3.2	0	2.9	3.3	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
STANDBY	2.7	3.3	0	3.2	0	2.9	3.3	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

REF NO.	IC900																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
STANDBY	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

REF NO.	IC900																			
MODE	41	42	43	44																
POWER	1.5	1.5	1.5	1.5																
STANDBY	1.5	1.5	1.5	1.5																

REF NO.	Q900																			
MODE	E	C	B																	
POWER	0	0.1	3.3																	
STANDBY	0	0.1	3.3																	

SA-PM250EG/EC/EF/EB/EE PANEL P.C.B.

REF NO.	IC1700																			
MODE	1	2	3	4	5	6	7	8												
POWER	0	22.3	0	1.1	320	320	320	320												
STANDBY	0	22.3	0	1.1	320	320	320	320												

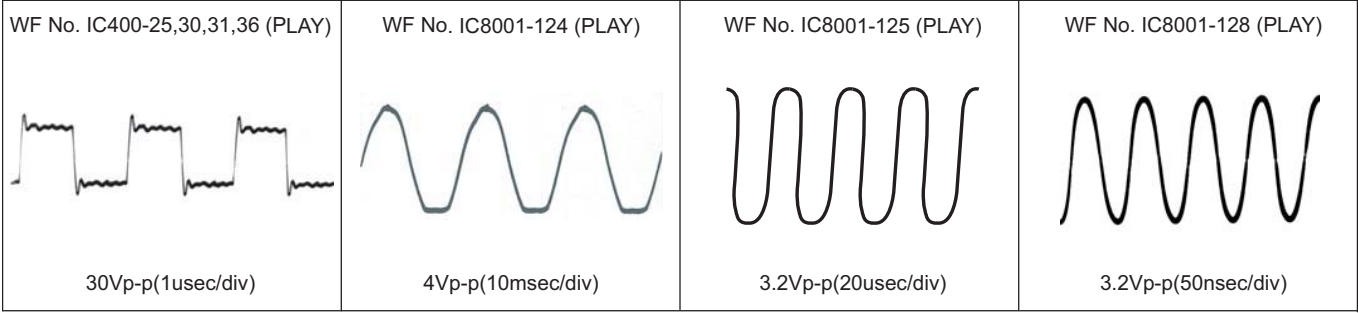
REF NO.	IC1701																			
MODE	1	2	3	4																
POWER	0	0	14.6	2.5																
STANDBY	0	0	14.6	2.5																

REF NO.	IC1702																			
MODE	1	2	3	4	5	6	7	8												
POWER	10.5	16.7	5.3	0	0.9	0	3.2	0												
STANDBY	10.5	16.7	5.3	0	0.9	0	3.2	0												

REF NO.	Q1700				Q1701				QR1700											
MODE	E	C	B		E	C	B		E	C	B									
POWER	0	0	0.6		14.6	0	14.7		0	14.5	0									
STANDBY	0	0	0.6		14.6	0	14.7		0	14.5	0									

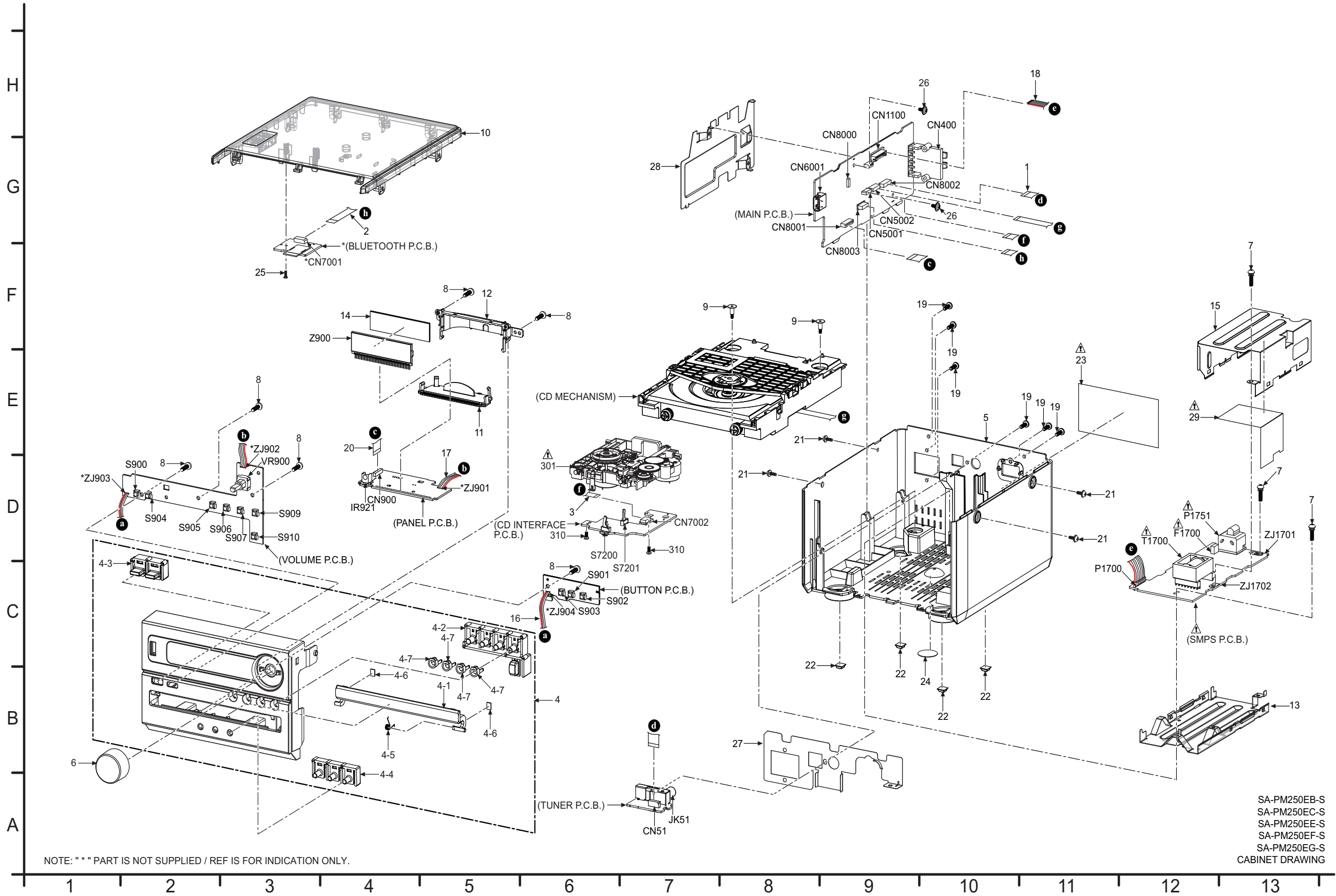
SA-PM250EG/EC/EF/EB/EE SMPS P.C.B.

15.2. Waveform Chart

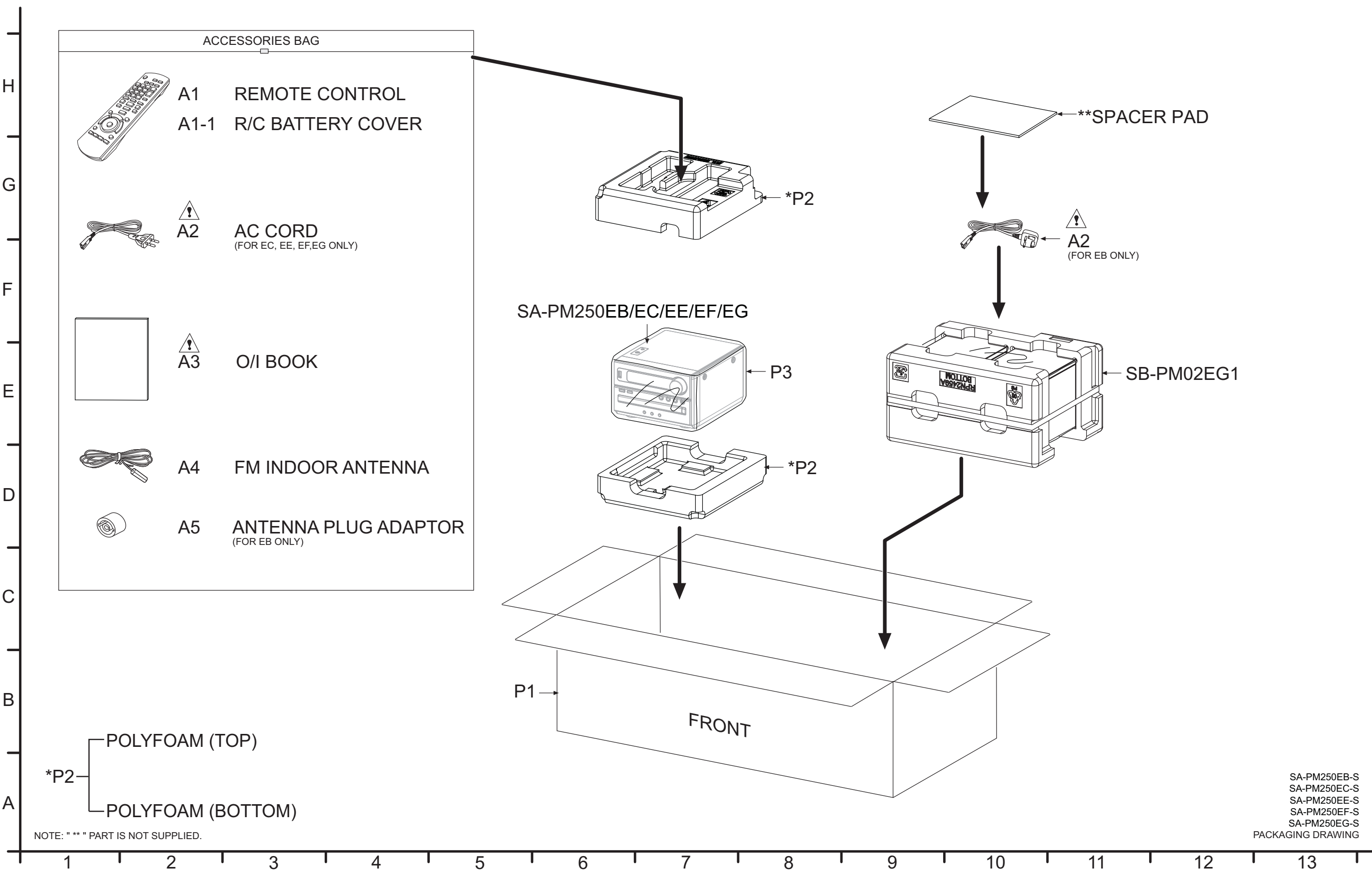


16 Exploded View and Replacement Parts List

16.1. Cabinet Parts Location



16.2. Packaging



16.3. 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	REE1947	9P FFC (TUNER - MAIN)	1	
	2	REE1948	9P FFC (BLUE-TOOTH - PANEL)	1	
	3	REE1949	7P FFC (CD INTERFACE - MAIN)	1	
	4	RYP1985-S1	FRONT PANEL ASS'Y	1	
	4-1	RGKX0450-3S	CD LID	1	
	4-2	RGUX1023-2S1	FUNCTION BUTTON	1	
	4-3	RGUX1024-2S	POWER BUTTON	1	
	4-4	RGUX1025-2S	BASS BUTTON	1	
	4-5	RMBX0073	CD LID SPRING	1	
	4-6	RMGX0033	CUSHION RUBBER	2	
	4-7	RGKX1043-K1	BUTTON ORNAMENT	4	
	5	RKQX1015C-K2	REAR CABINET	1	
	6	RGWV0047-S	VOLUME KNOB	1	
	7	RHD26043-1	SCREW	3	
	8	RHD26046-L	SCREW	6	
	9	RHDX031008	SCREW	2	
	10	RKMX1005D-K3	TOP CABINET	1	
	11	RMNX1011-W2	LCD HOLDER BASE	1	
	12	RMNX1012A-W2	LCD HOLDER COVER	1	
	13	RMKX1020-3	SMPS CHASSIS	1	
	14	RMXX1008-2	LCD DIFFUSER SHEET	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	15	RSCX1040-2	SMPS SHIELD	1	
	16	RWJ1A03113XX	3P WIRE (BASS BUTTON-FUNCTION BUTTON)	1	
	17	RWJ1A04075XX	4P WIRE (PANEL-FUNCTION BUTTON)	1	
	18	REX1726-1	10P WIRE (SMPS - MAIN)	1	
	19	XTB3+10JFJ	SCREW	6	
	20	REE1950	13P FFC (MAIN - LCD)	1	
	21	XTW3+10SFJK	SCREW	4	
	22	RKAX0042-K	LEG CUSHION	4	
⚠	23	RGN3453-K	NAME PLATE	1	EC/EB/EF/EG
⚠	23	RGN3453A-K	NAME PLATE	1	EE
	24	RMQX1069-K	BOTTOM COVER SHEET	1	
	25	VHD1224-1A	SCREW	1	
	26	RHD30092-1	SCREW	2	
	27	RSC1281	REAR SHIELD	1	
	28	RSC1282	MAIN PCB SHIELD	1	
⚠	29	RMV0442	SMPS COVER SHEET	1	
			TRAVERSE DECK		
⚠	301	RAE1028Z-V	TRAVERSE UNIT	1	
	310	XTN2+6GFJ	SCREW	2	
			PACKING MATERIALS		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	P1	RP60L46	PACKING CASE	1	EB
	P1	RP60L47	PACKING CASE	1	EG
	P1	RP60L48	PACKING CASE	1	EF
	P1	RP60L49	PACKING CASE	1	EC
	P1	RP60L50	PACKING CASE	1	EE
	P2	RPNX1070	POLYFOAM	1	
	P3	RPFX1039-1	MIRAMAT SHEET	1	
			ACCESSORIES		
	A1	N2QAYB000984	REMOTE CONTROL	1	
	A1-1	RKK-AKX18PHK	R/C BATTERY COVER	1	
⚠	A2	K2CQ2YY00119	AC CORD	1	EC/EE/EF/EG
⚠	A2	K2CT2YY00097	AC CORD	1	EB
⚠	A3	RQT9926-B	O/I BOOK (En)	1	EB/EC
⚠	A3	RQT9927-D	O/I BOOK (Fge/Fr/It/Du)	1	EG
⚠	A3	RQT9928-H	O/I BOOK (Fr)	1	EF
⚠	A3	RQT9929-E	O/I BOOK (Sw/Da/Sp/Cz/Po/Fi)	1	EC
⚠	A3	RQT9930-1R	O/I BOOK (Ru/Ur)	1	EE
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	K1YZ02000013	ANTENNA PLUG ADAPTOR	1	EB

16.4. Electrical Replacement Parts List

Important Safety Notice

Components identified by Δ 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 CIRCUITS BOARDS		
	PCB1	REP5071A	CD INTERFACE P.C.B.	1	(RTL)
	PCB2	REP5069AA	MAIN P.C.B.	1	(RTL)
	PCB3	REP5069AB	TUNER P.C.B.	1	(RTL)
	PCB4	REP5069AC	BLUETOOTH P.C.B.	1	
Δ	PCB5	REP5070AA	SMPS P.C.B.	1	(RTL)
	PCB6	REP5070AB	PANEL P.C.B.	1	(RTL)
	PCB7	REP5070AB	VOLUME P.C.B.	1	(RTL)
	PCB8	REP5070AB	BUTTON P.C.B.	1	(RTL)
			INTEGRATED CIRCUITS		
	IC52	VUEALLPT094	IC	1	(E.S.D)
	IC400	C1AB00004239	IC	1	(E.S.D)
	IC900	C0HBA0000268	IC	1	(E.S.D)
	IC1102	C0DBEY00267	IC	1	(E.S.D)
	IC1103	C0DBGY03909	IC	1	(E.S.D)
	IC1104	C0DBEY00146	IC	1	(E.S.D)
	IC1106	C0DBGY00911	IC	1	(E.S.D)
	IC1108	C0DBGY05244	IC	1	(E.S.D)
	IC1700	C0DACY00012	IC	1	(E.S.D)
	IC1701	C0DBZMC00006	IC	1	(E.S.D)
	IC1702	C0DBAY01996	IC	1	(E.S.D)
	IC5001	C0GBY0000213	IC	1	(E.S.D)
	IC6003	C0DBZY00712	IC	1	(E.S.D)
	IC8001	C1AB00004188	IC	1	(E.S.D)
	IC8002	C0EBE0000338	IC	1	(E.S.D)
	IC8003	RFKWFP250EM	IC	1	(E.S.D)
	IC8004	C3EBFY000044	IC	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC8100	C0DBGY00969	IC	1	(E.S.D)
			TRANSISTORS		
	Q400	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q401	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q402	DSA200100L	TRANSISTOR	1	(E.S.D)
	Q403	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q900	B1GBCFJN0038	TRANSISTOR	1	(E.S.D)
	Q1100	B1CHRC000047	TRANSISTOR	1	(E.S.D)
	Q1700	B1ABGC000001	TRANSISTOR	1	(E.S.D)
	Q1701	DSA500100L	TRANSISTOR	1	(E.S.D)
	Q5002	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	Q8000	B1HFCDE00002	TRANSISTOR	1	(E.S.D)
	QR1101	B1GBCFNN0038	TRANSISTOR	1	(E.S.D)
	QR1102	B1GBCFNN0038	TRANSISTOR	1	(E.S.D)
	QR1700	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)
			DIODES		
	D993	B3AFA0000131	DIODE	1	(E.S.D)
	D1100	DA2J10100L	DIODE	1	(E.S.D)
	D1103	B0JCGD000016	DIODE	1	(E.S.D)
	D1104	B0ADDH000009	DIODE	1	(E.S.D)
	D1105	DZ2J062M0L	DIODE	1	(E.S.D)
	D1700	B0ABSM000008	DIODE	1	(E.S.D)
	D1701	B0EDLR000001	DIODE	1	(E.S.D)
	D1703	B0EAKT000063	DIODE	1	(E.S.D)
	D1708	DA22F2100L	DIODE	1	(E.S.D)
	D8000	B0ADDH000009	DIODE	1	(E.S.D)
	VA51	B0ZBZ0000156	DIODE	1	
			VARIABLE RESISTOR		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	Z1752	D4EAY511A182	VARISTOR	1	
			SWITCHES		
	S900	EVQ21405RJ	SW POWER	1	
	S901	EVQ21405RJ	SW BASS	1	
	S902	EVQ21405RJ	SW TREBLE	1	
	S903	EVQ21405RJ	SW BT PAIRING	1	
	S904	EVQ21405RJ	SW SELECTOR	1	
	S905	EVQ21405RJ	SW REW / -	1	
	S906	EVQ21405RJ	SW FF / +	1	
	S907	EVQ21405RJ	SW STOP	1	
	S909	EVQ21405RJ	SW PLAY/PAUSE	1	
	S910	EVQ21405RJ	SW EJECT	1	
	S7200	K0L1BA000158	SW OPEN	1	
	S7201	K0L1BA000158	SW RESET	1	
			CONNECTORS		
	CN51	K1MY09AA0266	9P CONNECTOR	1	
	CN400	K4AC04B00030	JK SPEAKER	1	
	CN900	K1MY13AA0267	13P CONNECTOR	1	
	CN1100	K1MP10A00003	10P CONNECTOR	1	
	CN5001	K1MY07AA0266	7P CONNECTOR	1	
	CN5002	K1MY24A00001	24P CONNECTOR	1	
	CN6001	K1FY104B0078	USB CONNECTOR	1	
	CN7002	K1MY07BA0565	7P CONNECTOR	1	
	CN8000	K1MN08AA0046	8P CONNECTOR	1	
	CN8001	K1MY13AA0267	13P CONNECTOR	1	
	CN8002	K1MY09AA0266	9P CONNECTOR	1	
	CN8003	K1MY09AA0266	9P CONNECTOR	1	
			COILS AND INDUC-TORS		
	L51	G1CR18JA0020	INDUCTOR	1	
	L400	G1C100MA0426	INDUCTOR	1	
	L401	G1C100MA0426	INDUCTOR	1	
	L402	G1C100MA0426	INDUCTOR	1	
	L403	G1C100MA0426	INDUCTOR	1	
	L1700	G1C100K00019	INDUCTOR	1	
⚠	L1702	G0B922G00002	LINE FILTER	1	
	L1703	G0A100H00018	CHOKE COIL	1	
	LB51	J0JYC0000656	INDUCTOR	1	
	LB400	J0JHC0000118	INDUCTOR	1	
	LB401	J0JHC0000118	INDUCTOR	1	
	LB402	J0JYC0000366	INDUCTOR	1	
	LB403	J0JYC0000366	INDUCTOR	1	
	LB404	J0JYC0000366	INDUCTOR	1	
	LB405	J0JYC0000366	INDUCTOR	1	
	LB406	J0JYC0000305	INDUCTOR	1	
	LB407	J0JYC0000656	INDUCTOR	1	
	LB408	J0JYC0000656	INDUCTOR	1	
	LB900	J0JBC0000019	INDUCTOR	1	
	LB901	J0JHC0000118	INDUCTOR	1	
	LB902	J0JHC0000118	INDUCTOR	1	
	LB903	J0JHC0000118	INDUCTOR	1	
	LB1100	J0JYC0000656	INDUCTOR	1	
	LB1101	J0JYC0000656	INDUCTOR	1	
	LB1102	J0JGC0000063	INDUCTOR	1	
	LB1106	J0JGC0000063	INDUCTOR	1	
	LB1107	J0JGC0000063	INDUCTOR	1	
	LB1108	J0JGC0000063	INDUCTOR	1	
	LB1109	J0JGC0000063	INDUCTOR	1	
	LB1110	J0JYC0000656	INDUCTOR	1	
	LB1111	J0JYC0000656	INDUCTOR	1	
	LB1112	J0JYC0000656	INDUCTOR	1	
	LB1700	J0JGC0000063	INDUCTOR	1	
	LB5001	J0JYC0000656	INDUCTOR	1	
	LB5002	J0JYC0000656	INDUCTOR	1	
	LB5003	J0JGC0000063	INDUCTOR	1	
	LB5004	J0JGC0000063	INDUCTOR	1	
	LB5005	J0JYC0000656	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	LB5006	J0JYC0000656	INDUCTOR	1	
	LB5007	J0JYC0000656	INDUCTOR	1	
	LB5008	J0JYC0000656	INDUCTOR	1	
	LB5009	J0JYC0000656	INDUCTOR	1	
	LB5010	J0JYC0000656	INDUCTOR	1	
	LB8000	J0JYC0000656	INDUCTOR	1	
	LB8001	J0JYC0000656	INDUCTOR	1	
	LB8002	J0JYC0000656	INDUCTOR	1	
	LB8003	J0JYC0000656	INDUCTOR	1	
	LB8004	J0JYC0000656	INDUCTOR	1	
	LB8005	J0JYC0000656	INDUCTOR	1	
	LB8006	J0JYC0000656	INDUCTOR	1	
	LB8007	J0JYC0000656	INDUCTOR	1	
	LB8008	J0JYC0000656	INDUCTOR	1	
	LB8009	J0JHC0000118	INDUCTOR	1	
	LB8010	J0JYC0000656	INDUCTOR	1	
	LB8011	J0JYC0000656	INDUCTOR	1	
	LB8012	J0JYC0000656	INDUCTOR	1	
	LB8013	J0JYC0000656	INDUCTOR	1	
	LB8014	J0JYC0000656	INDUCTOR	1	
	LB8015	J0JYC0000656	INDUCTOR	1	
	LB8016	J0JYC0000656	INDUCTOR	1	
	LB8017	J0JHC0000118	INDUCTOR	1	
	LB8100	J0JYC0000656	INDUCTOR	1	
	LB8101	J0JYC0000656	INDUCTOR	1	
	LB8102	J0JYC0000656	INDUCTOR	1	
	LB8103	J0JYC0000656	INDUCTOR	1	
	LB8104	J0JYC0000656	INDUCTOR	1	
	LB8105	J0JYC0000656	INDUCTOR	1	
	LB8106	J0JYC0000656	INDUCTOR	1	
	LB8107	J0JYC0000656	INDUCTOR	1	
	LB8108	J0JYC0000656	INDUCTOR	1	
	LB8109	J0JYC0000656	INDUCTOR	1	
	LB8110	J0JYC0000656	INDUCTOR	1	
	LB8111	J0JYC0000656	INDUCTOR	1	
	LB8112	J0JYC0000656	INDUCTOR	1	
	LB8113	J0JYC0000656	INDUCTOR	1	
	LB8114	J0JHC0000118	INDUCTOR	1	
	R1737	J0JGC0000063	INDUCTOR	1	
	R1738	J0JYC0000656	INDUCTOR	1	
	R1739	J0JYC0000656	INDUCTOR	1	
	R1740	J0JYC0000656	INDUCTOR	1	
	RX8003	J0JAD0000007	INDUCTOR	1	
	RX8007	J0JAD0000007	INDUCTOR	1	
	RX8008	J0JAD0000007	INDUCTOR	1	
			TRANSFORMER		
⚠	T1700	G4DYZ0000077	TRANSFORMER	1	
			PHOTO COUPLER		
⚠	PC1702	B3PBA0000579	PHOTO COUPLER	1	
			TERMINALS		
	ZJ1701	K4CZ01000027	TERMINAL	1	
	ZJ1702	K4CZ01000027	TERMINAL	1	
			OSCILLATORS		
	X400	H0J245500110	OSCILLATOR	1	
	X8001	H0J169500044	OSCILLATOR	1	
	X8002	H0A327200181	OSCILLATOR	1	
			REMOTE CONTROL SENSOR		
	IR921	B3RAB0000110	REMOTE CONTROL SENSOR	1	
			FL DISPLAY		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Z900	L5AYAY000061	LCD DISPLAY	1	
			FUSE		
△	F1700	K5G202Y00006	FUSE	1	
			VOLUME JOG		
	VR900	EVEKE2F2524B	VOLUME JOG	1	
			CABLE HOLDER		
	P1700	K1YZ10000001	10P CABLE HOLDER	1	
			JACKS		
	JK51	K4ZZ02000103	JK FM ANT	1	
△	P1751	K2AA2B000011	AC INLET	1	
			CHIP JUMPERS		
	L54	D0GBR00J0004	0 1/10W	1	
	LB52	D0GBR00J0004	0 1/10W	1	
	W1	D0GBR00J0008	0 1/10W	1	
	W917	D0GDR00JA017	0 1/8W	1	
	W918	D0GBR00JA008	0 1/10W	1	
	W919	D0GBR00JA008	0 1/10W	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	
	R64	D0GBR00J0004	0 1/10W	1	
	R65	D0GBR00J0004	0 1/10W	1	
	R66	D0GBR00J0004	0 1/10W	1	
	R80	D0GAR00J0005	0 1/16W	1	
	R400	D0GB101JA065	100 1/10W	1	
	R402	D0GB101JA065	100 1/10W	1	
	R403	D0GB221JA065	220 1/10W	1	
	R404	D0GB101JA065	100 1/10W	1	
	R407	D0GBR00J0004	0 1/10W	1	
	R408	D0GBR00J0004	0 1/10W	1	
	R409	D0GBR00J0004	0 1/10W	1	
	R412	D0GB105JA065	1M 1/10W	1	
	R413	D0GB152JA065	1.5K 1/10W	1	
	R414	D0GB152JA065	1.5K 1/10W	1	
	R416	D0GB104JA065	100K 1/10W	1	
	R417	D0GB5R6JA052	5.6 1/8W	1	
	R418	D0GB5R6JA052	5.6 1/8W	1	
	R419	D0GB5R6JA052	5.6 1/8W	1	
	R420	D0GB5R6JA052	5.6 1/8W	1	
	R427	D0GB101JA065	100 1/10W	1	
	R428	D0GB331JA065	330 1/10W	1	
	R429	D0GB472JA065	4.7K 1/10W	1	
	R430	D0GB104JA065	100K 1/10W	1	
	R431	D0GB223JA065	22K 1/10W	1	
	R432	D0GB104JA065	100K 1/10W	1	
	R433	D0GB104JA065	100K 1/10W	1	
	R434	D0GB104JA065	100K 1/10W	1	
	R435	D0GB104JA065	100K 1/10W	1	
	R436	D0GB104JA065	100K 1/10W	1	
	R437	D0GB104JA065	100K 1/10W	1	
	R445	D0GB3R3JA065	3.3 1/10W	1	
	R446	D0GB3R3JA065	3.3 1/10W	1	
	R447	D0GB3R3JA065	3.3 1/10W	1	
	R448	D0GB3R3JA065	3.3 1/10W	1	
	R449	D0GB680JA065	68 1/10W	1	
	R900	D0GB222JA065	2.2K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R901	D0GB153JA065	15K 1/10W	1	
	R902	D0GB682JA065	6.8K 1/10W	1	
	R903	D0GB471JA065	470 1/10W	1	
	R904	D0GB392JA065	3.9K 1/10W	1	
	R905	D0GB101JA065	100 1/10W	1	
	R906	D0GB101JA065	100 1/10W	1	
	R907	D0GB183JA065	18K 1/10W	1	
	R908	D0GB102JA065	1K 1/10W	1	
	R909	D0GB392JA065	3.9K 1/10W	1	
	R910	D0GB392JA065	3.9K 1/10W	1	
	R911	D0GB682JA065	6.8K 1/10W	1	
	R912	D0GB183JA065	18K 1/10W	1	
	R920	D0GB470JA065	47 1/10W	1	
	R923	D0GB223JA065	22K 1/10W	1	
	R924	D0GB123JA065	12K 1/10W	1	
	R933	D0GD331JA052	330 1/8W	1	
	R934	D0GB101JA065	100 1/10W	1	
	R935	D0GD561JA052	560 1/8W	1	
	R940	D0GBR00J0004	0 1/10W	1	
	R941	D0GBR00J0004	0 1/10W	1	
	R942	D0GBR00J0004	0 1/10W	1	
	R1003	D0GA101JA023	100 1/16W	1	
	R1100	D0GB104JA065	100K 1/10W	1	
	R1101	D0GBR00J0004	0 1/10W	1	
	R1102	D0GBR00J0004	0 1/10W	1	
	R1104	D0GBR00J0004	0 1/10W	1	
	R1105	D0GB273JA065	27K 1/10W	1	
	R1116	D0GB563JA065	56K 1/10W	1	
	R1127	ERJ3GEYF474V	470K 1/10W	1	
	R1128	D1BB3902A074	39K 1/10W	1	
	R1129	D0GB154JA065	150K 1/10W	1	
	R1130	D1BB1002A074	10K 1/10W	1	
	R1141	D1BB2322A074	23.2K 1/10W	1	
	R1142	D0GB5R6JA065	5.6 1/10W	1	
	R1143	D0GB5R6JA065	5.6 1/10W	1	
	R1144	D0GBR00J0004	0 1/10W	1	
	R1145	D0GBR00J0004	0 1/10W	1	
	R1147	D0GBR00J0004	0 1/10W	1	
	R1149	D0GB222JA065	2.2K 1/10W	1	
	R1150	D0GB222JA065	2.2K 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	
	R1704	ERJ1TYJ333U	33K 1W	1	
	R1705	D0GB103JA065	10K 1/10W	1	
	R1706	D0GB223JA065	22K 1/10W	1	
	R1707	D0GB392JA065	3.9K 1/10W	1	
	R1708	ERJ1TYJ220U	22 1W	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	
	R1718	ERX2SJR22P	0.22 2W	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	D0GD220JA052	22 1/8W	1	
	R1730	D1BB6801A074	6.8K 1/10W	1	
	R1731	D0GBR00J0004	0 1/10W	1	
	R1732	D1BB4702A074	47K 1/10W	1	
	R1733	D1BB1002A074	10K 1/10W	1	
	R1735	D0GB100JA065	10 1/10W	1	
	R1736	D0GDR00J0004	0 1/8W	1	
	R5007	D0GAR00J0005	0 1/16W	1	
	R5008	D0GB101JA065	100 1/10W	1	
	R5009	D0GB122JA065	1.2K 1/10W	1	
	R5010	D0GB102JA065	1K 1/10W	1	
	R5011	D0GB682JA065	6.8K 1/10W	1	
	R5012	D0GAR00J0005	0 1/16W	1	
	R5013	D0GB473JA065	47K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5014	D0GAR00J0005	0 1/16W	1	
	R5015	D0GAR00J0005	0 1/16W	1	
	R5016	D0GA104JA023	100K 1/16W	1	
	R5017	D0GAR00J0005	0 1/16W	1	
	R5018	D0GB153JA065	15K 1/10W	1	
	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	
	R5030	D0GBR00J0004	0 1/10W	1	
	R5031	D0GBR00J0004	0 1/10W	1	
	R5032	D0GBR00J0004	0 1/10W	1	
	R5033	D0GBR00J0004	0 1/10W	1	
	R5036	D0GAR00J0005	0 1/16W	1	
	R5037	D0GB332JA065	3.3K 1/10W	1	
	R5038	D0GB225JA065	2.2M 1/10W	1	
	R5043	D0GBR00J0004	0 1/10W	1	
	R5044	D0GBR00J0004	0 1/10W	1	
	R5045	D0GBR00J0004	0 1/10W	1	
	R6000	D0GB104JA065	100K 1/10W	1	
	R6002	D0GBR00J0004	0 1/10W	1	
	R6003	D0GBR00J0004	0 1/10W	1	
	R6005	D0GB222JA065	2.2K 1/10W	1	
	R6006	F1H1H102B047	1000pF 50V	1	
	R8000	D0GB101JA065	100 1/10W	1	
	R8001	D0GA101JA023	100 1/16W	1	
	R8002	D0GA101JA023	100 1/16W	1	
	R8003	D0GA101JA023	100 1/16W	1	
	R8005	D0GB104JA065	100K 1/10W	1	
	R8024	D0GA104JA023	100K 1/16W	1	
	R8025	D0GA104JA023	100K 1/16W	1	
	R8026	D0GB472JA065	4.7K 1/10W	1	
	R8027	D0GB472JA065	4.7K 1/10W	1	
	R8028	D0GA104JA023	100K 1/16W	1	
	R8029	D0GBR00J0004	0 1/10W	1	
	R8030	D0GA103JA023	10K 1/16W	1	
	R8031	D0GA103JA023	10K 1/16W	1	
	R8033	D0GB103JA065	10K 1/10W	1	
	R8034	D0GA101JA023	100 1/16W	1	
	R8036	D0GA101JA023	100 1/16W	1	
	R8037	D0GA101JA023	100 1/16W	1	
	R8038	D0GA101JA023	100 1/16W	1	
	R8039	D0GA101JA023	100 1/16W	1	
	R8040	D0GA101JA023	100 1/16W	1	
	R8041	D0GB153JA065	15K 1/10W	1	
	R8042	D0GB103JA065	10K 1/10W	1	
	R8043	D0GB103JA065	10K 1/10W	1	
	R8044	D0GB103JA065	10K 1/10W	1	
	R8045	D0GB471JA065	470 1/10W	1	
	R8046	D0GA101JA023	100 1/16W	1	
	R8047	D0GA101JA023	100 1/16W	1	
	R8048	D0GBR00J0004	0 1/10W	1	
	R8050	D0GB104JA065	100K 1/10W	1	
	R8051	D0GB103JA065	10K 1/10W	1	
	R8052	D0GB103JA065	10K 1/10W	1	
	R8056	D0GA221JA023	220 1/16W	1	
	R8057	D0GA221JA023	220 1/16W	1	
	R8066	D0GB153JA065	15K 1/10W	1	
	R8067	D0GB683JA065	68K 1/10W	1	
	R8069	D0GA101JA023	100 1/16W	1	
	R8070	D0GA101JA023	100 1/16W	1	
	R8076	D0GA101JA023	100 1/16W	1	
	R8081	D0GAR00J0005	0 1/16W	1	
	R8082	D0GA101JA023	100 1/16W	1	
	R8083	D0GA101JA023	100 1/16W	1	
	R8084	D0GB152JA065	1.5K 1/10W	1	
	R8085	D0GB152JA065	1.5K 1/10W	1	
	R8086	D0GAR00J0005	0 1/16W	1	
	R8087	D0GAR00J0005	0 1/16W	1	
	R8088	D0GB224JA065	220K 1/10W	1	
	R8089	D0GA101JA023	100 1/16W	1	
	R8090	D0GB105JA065	1M 1/10W	1	
	R8091	D0GA101JA023	100 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R8094	D0GB102JA065	1K 1/10W	1	
	R8113	D0GBR00J0004	0 1/10W	1	
	R8114	D0GBR00J0004	0 1/10W	1	
	R8115	D0GB683JA065	68K 1/10W	1	
	R8116	D0GB683JA065	68K 1/10W	1	
	R8117	D0GB106JA065	10M 1/10W	1	
	R8151	D0GB330JA065	33 1/10W	1	
	R8152	D0GB330JA065	33 1/10W	1	
	R8159	D0GBR00J0004	0 1/10W	1	
	R8200	D0GBR00J0004	0 1/10W	1	
	R8206	D0GAR00J0005	0 1/16W	1	
	R8208	D0GB103JA065	10K 1/10W	1	
	R8209	D0GB223JA065	22K 1/10W	1	
	R8210	D0GB103JA065	10K 1/10W	1	
	R8211	D0GB101JA065	100 1/10W	1	
	R8212	D0GB101JA065	100 1/10W	1	
	R8213	D0GB101JA065	100 1/10W	1	
	R8214	D0GBR00J0004	0 1/10W	1	
	R8215	D0GBR00J0004	0 1/10W	1	
	R8216	D0GBR00J0004	0 1/10W	1	
	R8217	D0GBR00J0004	0 1/10W	1	
	R8220	D0GB334JA065	330K 1/10W	1	
	R8221	D0GB473JA065	47K 1/10W	1	
	R8222	D0GB222JA065	2.2K 1/10W	1	
	R8223	D0GB222JA065	2.2K 1/10W	1	
	R8224	D0GBR00J0004	0 1/10W	1	
			RESISTOR NET- WORKS		
	RX8001	D1H81014A042	RESISTOR NETWORK	1	
	RX8002	D1H81014A042	RESISTOR NETWORK	1	
	RX8005	D1H81034A042	RESISTOR NETWORK	1	
	RX8009	D1H81014A042	RESISTOR NETWORK	1	
	RX8010	D1H81014A042	RESISTOR NETWORK	1	
	RX8011	D1H82214A042	RESISTOR NETWORK	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	F1H1H330B052	33pF 50V	1	
	C67	F1H1H3R0B050	3pF 50V	1	
	C68	F1J1A106A043	10uF 10V	1	
	C69	F1H1H100B051	10pF 50V	1	
	C401	F1H1A105A113	1uF 10V	1	
	C402	F1H1H101B052	100pF 50V	1	
	C403	F1H1A105A113	1uF 10V	1	
	C404	F1H1H120B052	12pF 50V	1	
	C405	F1H1H150B052	15pF 50V	1	
	C406	F1H1H273A918	0.027uF 50V	1	
	C407	F1H1H272A219	2700pF 50V	1	
	C408	F1H1H101B052	100pF 50V	1	
	C409	F1H1A105A113	1uF 10V	1	
	C410	F2G1E2210026	220uF 25V	1	
	C411	F1J1E475A257	4.7uF 25V	1	
	C412	F1K1E1060009	10uF 25V	1	
	C413	F1K1E1060009	10uF 25V	1	
	C414	F1J1E105A287	1uF 25V	1	
	C415	F1J1E475A257	4.7uF 25V	1	
	C416	F1J1E475A257	4.7uF 25V	1	
	C417	F1K1E1060009	10uF 25V	1	
	C418	F1K1E1060009	10uF 25V	1	
	C419	F1J1E105A287	1uF 25V	1	
	C420	F1J1E475A257	4.7uF 25V	1	
	C421	F1H1H122B047	1200pF 50V	1	
	C422	F1H1H122B047	1200pF 50V	1	
	C423	F1H1H122B047	1200pF 50V	1	
	C424	F1H1H122B047	1200pF 50V	1	
	C425	F1J1H474A918	0.47uF 50V	1	
	C426	F1J1H474A918	0.47uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C427	F1J1H474A918	0.47uF 50V	1	
	C428	F1J1H474A918	0.47uF 50V	1	
	C429	F1J1A106A043	10uF 10V	1	
	C430	F1H1H101B052	100pF 50V	1	
	C431	F1H1H104B047	0.1uF 50V	1	
	C432	F1H1A105A036	1uF 10V	1	
	C433	F1J1A106A043	10uF 10V	1	
	C434	F1J1A106A043	10uF 10V	1	
	C435	F1H1H102B047	1000pF 50V	1	
	C436	F1H1H102B047	1000pF 50V	1	
	C437	F1H1H102B047	1000pF 50V	1	
	C438	F1H1H102B047	1000pF 50V	1	
	C439	F1H1H102B047	1000pF 50V	1	
	C441	F1H1H104B047	0.1uF 50V	1	
	C444	F1H1H330B052	33pF 50V	1	
	C450	F1H1A105A113	1uF 10V	1	
	C451	F1H1H102B047	1000pF 50V	1	
	C452	F1J1H104A902	0.1uF 50V	1	
	C453	F1J1H104A902	0.1uF 50V	1	
	C454	F1J1H104A902	0.1uF 50V	1	
	C456	F1J1H104A902	0.1uF 50V	1	
	C457	F1H1H103B047	0.01uF 50V	1	
	C458	F1H1H103B047	0.01uF 50V	1	
	C459	F1H1H103B047	0.01uF 50V	1	
	C460	F1H1H103B047	0.01uF 50V	1	
	C462	F1H1H104B047	0.1uF 50V	1	
	C463	F1G1H102A834	1000pF 50V	1	
	C464	F1H1H101B052	100pF 50V	1	
	C465	F1H1H102B047	1000pF 50V	1	
	C901	F1H1H102B047	1000pF 50V	1	
	C902	F1H1H221B047	220pF 50V	1	
	C904	F1H1H101B052	100pF 50V	1	
	C905	F1H1H221B047	220pF 50V	1	
	C906	F1H1H101B052	100pF 50V	1	
	C907	F1H1H103B047	0.01uF 50V	1	
	C908	F1H1H101B052	100pF 50V	1	
	C922	F1H1H102B047	1000pF 50V	1	
	C993	F1H1H104B047	0.1uF 50V	1	
	C994	F1H1H104B047	0.1uF 50V	1	
	C995	F1H1H104B047	0.1uF 50V	1	
	C1001	F1H1H102B047	1000pF 50V	1	
	C1100	F1J1A106A043	10uF 10V	1	
	C1101	F1H1A105A113	1uF 10V	1	
	C1120	F1H1C105A118	1uF 16V	1	
	C1125	F1H1H104B047	0.1uF 50V	1	
	C1130	F1J1E105A287	1uF 25V	1	
	C1131	F1H1E105A153	1uF 25V	1	
	C1136	F1H1A105A113	1uF 10V	1	
	C1137	F1H1A105A113	1uF 10V	1	
	C1141	F1H1H102B047	1000pF 50V	1	
	C1146	F1H1A105A113	1uF 10V	1	
	C1148	F1J1E105A287	1uF 25V	1	
	C1181	F1J1E105A287	1uF 25V	1	
	C1183	F1H1H104B047	0.1uF 50V	1	
	C1184	F1H1H101B052	100pF 50V	1	
	C1185	F1H1H101B052	100pF 50V	1	
	C1186	F1H1H101B052	100pF 50V	1	
	C1187	F1H1H101B052	100pF 50V	1	
	C1188	F1H1H101B052	100pF 50V	1	
	C1189	F1H1H101B052	100pF 50V	1	
	C1190	F1H1H104B047	0.1uF 50V	1	
	C1191	F1H1H101B052	100pF 50V	1	
	C1700	F1H1H391A219	390pF 50V	1	
	C1701	F2A1H100A454	10uF 50V	1	
⚠	C1702	F0CAF224A105	0.22uF	1	
	C1703	F2A1E1020114	1000uF 25V	1	
	C1704	F1H1H102B047	1000pF 50V	1	
	C1705	F1K2J472A010	4700pF 630V	1	
	C1706	F2A2G820A354	82uF 400V	1	
	C1708	F1H1H102B047	1000pF 50V	1	
	C1709	F1H1H104B047	0.1uF 50V	1	
⚠	C1710	F1BAF471A013	470pF	1	
	C1712	F1H1H104B047	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	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	F1A3D100A009	10pF 2000V	1	
⚠	C1725	F0CAF104A105	0.1uF	1	
⚠	C1727	F1BAF1020020	1000pF	1	
⚠	C1728	F1BAF1020020	1000pF	1	
	C1731	F1K1C2260001	22uF 16V	1	
	C1732	F1K1C2260001	22uF 16V	1	
	C1733	F1H1H104B047	0.1uF 50V	1	
	C1736	F1H1H104B047	0.1uF 50V	1	
	C1737	F1K1E1060009	10uF 25V	1	
	C1738	F1H1H104B047	0.1uF 50V	1	
	C1739	F1H1H391A219	390pF 50V	1	
	C1740	F1H1H104B047	0.1uF 50V	1	
	C5001	F1J1A106A043	10uF 10V	1	
	C5002	F1H1H103B047	0.01uF 50V	1	
	C5009	F1J1A106A043	10uF 10V	1	
	C5010	F1H1H103B047	0.01uF 50V	1	
	C5011	F1H1C104A178	0.1uF 16V	1	
	C5012	F1H1H102B047	1000pF 50V	1	
	C5018	F1H1H103B047	0.01uF 50V	1	
	C5019	F1J1A106A043	10uF 10V	1	
	C5020	F1H1C104A178	0.1uF 16V	1	
	C5021	F1H1C104A178	0.1uF 16V	1	
	C5022	F1G1H472A571	4700pF 50V	1	
	C5024	F1H1H680B052	68pF 50V	1	
	C5025	F1J1A106A043	10uF 10V	1	
	C5026	F1H1H103B047	0.01uF 50V	1	
	C5027	F1J1A106A043	10uF 10V	1	
	C5028	F1H1C104A178	0.1uF 16V	1	
	C5029	F1H1C104A178	0.1uF 16V	1	
	C5031	F1H1H104B047	0.1uF 50V	1	
	C5032	F1H1H104B047	0.1uF 50V	1	
	C6010	F1H1H104B047	0.1uF 50V	1	
	C6011	F1J1A106A043	10uF 10V	1	
	C6012	F1H1H100B051	10pF 50V	1	
	C6013	F1H1H100B051	10pF 50V	1	
	C8000	F1H1C104A178	0.1uF 16V	1	
	C8001	F1H1C104A178	0.1uF 16V	1	
	C8002	F1H1H101B052	100pF 50V	1	
	C8003	F1H1H101B052	100pF 50V	1	
	C8004	F1H1H101B052	100pF 50V	1	
	C8005	F1H1H101B052	100pF 50V	1	
	C8006	F1H1H101B052	100pF 50V	1	
	C8007	F1H0J1060006	10uF 6.3V	1	
	C8008	F1G1C104A077	0.1uF 16V	1	
	C8009	F1H0J1060006	10uF 6.3V	1	
	C8010	F1G1H472A571	4700pF 50V	1	
	C8011	F1H1H472B047	4700pF 50V	1	
	C8013	F1H1H472B047	4700pF 50V	1	
	C8014	F1H1H102B047	1000pF 50V	1	
	C8015	F1H1H102B047	1000pF 50V	1	
	C8016	F1H1H681B052	680pF 50V	1	
	C8017	F1J1A106A043	10uF 10V	1	
	C8018	F1H1C104A178	0.1uF 16V	1	
	C8019	F1J1A106A043	10uF 10V	1	
	C8020	F1H1C104A178	0.1uF 16V	1	
	C8021	F1H1C104A178	0.1uF 16V	1	
	C8022	F1H1A335A083	3.3uF 10V	1	
	C8023	F1H1C224A178	0.22uF 16V	1	
	C8024	F1H1C104A178	0.1uF 16V	1	
	C8025	F1H0J1060006	10uF 6.3V	1	
	C8026	F1H1H223B047	0.022uF 50V	1	
	C8029	F1H1H101B052	100pF 50V	1	
	C8030	F1H1C104A178	0.1uF 16V	1	
	C8031	F1H1C104A178	0.1uF 16V	1	
	C8032	F1H0J1060006	10uF 6.3V	1	
	C8033	F1H1C104A178	0.1uF 16V	1	
	C8034	F1H0J1060006	10uF 6.3V	1	
	C8035	F1H1C104A178	0.1uF 16V	1	
	C8036	F1H0J1060006	10uF 6.3V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C8038	F1H1H101B052	100pF 50V	1	
	C8039	F1H1H220B052	22pF 50V	1	
	C8040	F1H1H270B052	27pF 50V	1	
	C8041	F1H1H100B051	10pF 50V	1	
	C8042	F1H1H100B051	10pF 50V	1	
	C8043	F1H0J4750005	4.7uF 6.3V	1	
	C8044	F1H1H222B047	2200pF 50V	1	
	C8045	F1H1H222B047	2200pF 50V	1	
	C8048	F1G1H101A834	100pF 50V	1	
	C8049	F1G1H101A834	100pF 50V	1	
	C8050	F1G1H101A834	100pF 50V	1	
	C8052	F1G1H101A834	100pF 50V	1	
	C8053	F1G1H101A834	100pF 50V	1	
	C8054	F1G1H101A834	100pF 50V	1	
	C8058	F1G1H101A834	100pF 50V	1	
	C8059	F1G1H102A834	1000pF 50V	1	
	C8060	F1G1H101A834	100pF 50V	1	
	C8061	F1H1H104B047	0.1uF 50V	1	
	C8062	F1H1H104B047	0.1uF 50V	1	
	C8063	F1H1H104B047	0.1uF 50V	1	
	C8064	F1H1H104B047	0.1uF 50V	1	
	C8065	F1H1H104B047	0.1uF 50V	1	
	C8066	F1H1H104B047	0.1uF 50V	1	
	C8067	F1H1C2240011	0.22uF 16V	1	
	C8150	F1H1H104B047	0.1uF 50V	1	
	C8152	F1H1H104B047	0.1uF 50V	1	
	C8250	F1H1A105A113	1uF 10V	1	
	C8251	F1H1A105A113	1uF 10V	1	
	C8252	F1H1H104B047	0.1uF 50V	1	
	C8253	F1H1H104B047	0.1uF 50V	1	
			SERVICE FIXTURE & TOOLS		
	SFT1	REEX1203	13P FFC (Main to Panel)	1	

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