PMX1206001CE

Service Manual

CD Stereo System

Model No. SA-AKX14LM-K

Product Color: (K)...Black Type

Please refer to the original service manual for:

- **CD Mechanism Unit (BRS1C), Order No. PSG1102001CE**
- **Speaker system SB-AKX14LM-K, Order No. PMX1206002CE**

⚠ 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.

Panasonic®

Please refer to the original service manual for:

- ☐ **CD Mechanism Unit (BRS1C), Order No. PSG1102001CE**
- ☒ **Speaker system SB-AKX14LM-K, Order No. PMX1206002CE**

Nota: El idioma original de este Manual de Servicio es en idioma inglés, sin embargo algunas notas aquí mencionadas serán escritas en español para mejor descripción para Centros de Servicio de México.

1 Safety Precautions

1.1. General Guidelines

1. 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.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, carry out 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 Ω and 5.2M Ω .
   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.
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.

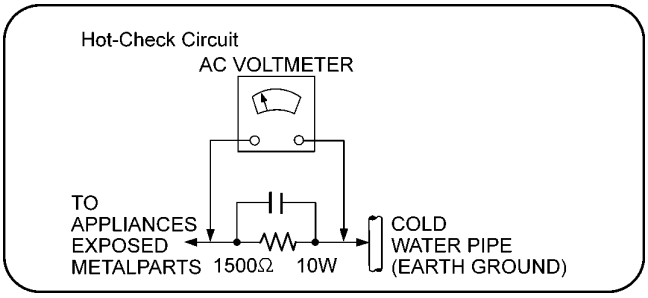


Figure 1

1.3. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such (C5700, C5701, C5703, C5708) through a 10 , 10 W 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 ~127 V ac /60 Hz in Power ON, FM Tuner, No Signal, volume minimal mode should be ~ 500 mA (PH).

Current consumption at 127 Vac, 60 Hz in Power ON, FM Tuner, No Signal, volume minimal mode should be ~ 500 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: LITTELFUSE, INC, Type: 233, F1, 8A, 125V)

1.6. Safety Parts 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.

Modelo: **SC-AKX14LM-K**

Nombre del componente	Numero de Parte	Seguridad
CABLE TOMACORRIENTE.	K2CB2YY00059	⚠
CONECTOR TOMACORRIENTE	K2AB2B000007	⚠
TRANSFORMADOR DE PODER	G4DYZ0000057	⚠
TRANSFORMADOR DE RESPALDO	ETS19AB2E6AG	⚠
FUSIBLE PRIMARIO	K5D802APA008	⚠
ZNR	ERZV05Z471CS	⚠
CAPACITOR DE AC	F1BAF1020020	⚠
CAPACITOR DE AC	F0CAF224A105	⚠
CAPACITOR DE AC	F0CAF104A105	⚠
CAPACITOR DE AC	F1BAF471A013	⚠
OPTOACOPLADOR	B3PBA0000579	⚠
PCB SMPS	RJB3568A-1	⚠
BOBINA PRIMARIO	G0B612H00004	⚠
GAB. MET. SIN DOBLAR	RKMX1011Z-KL	⚠
BRS1C CD UNIT	RD-DDL081-PX	⚠
REAR PANEL	RXTM0002E-A	⚠
INSTRUCTIVO	RQTM0187	⚠

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatic 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 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).

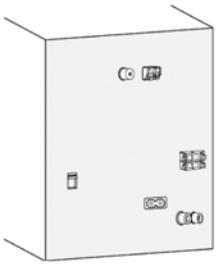
2.2. Precaution of Laser Diode

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.

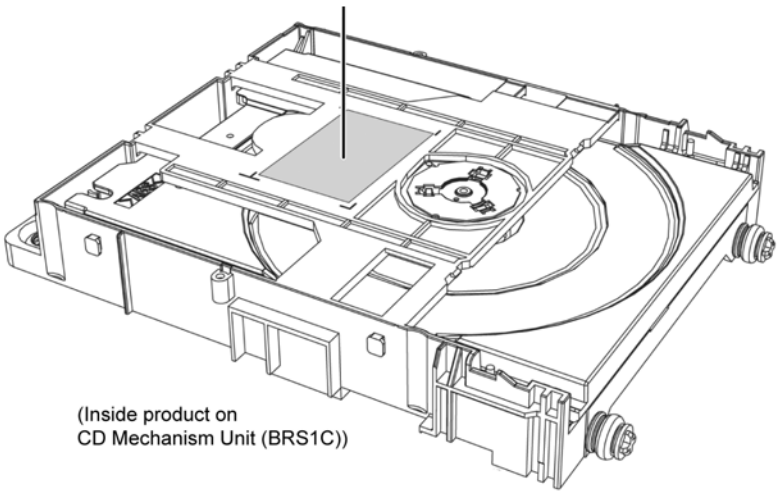
Caution:

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.



(Back of product)



(Inside product on
CD Mechanism Unit (BRS1C))

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 Precautions 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.

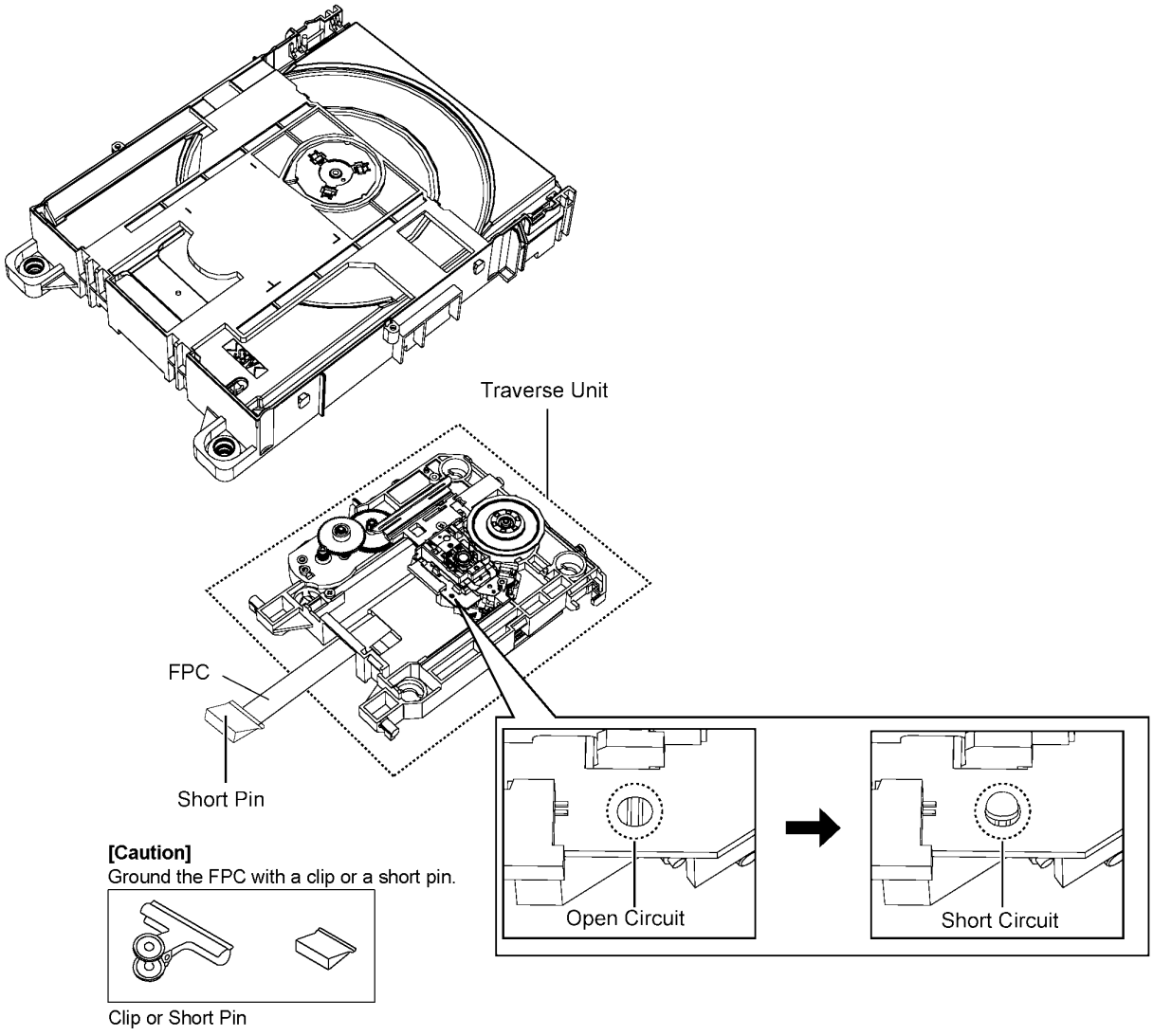


Figure A

2.4.2. Grounding for electrostatic breakdown prevention

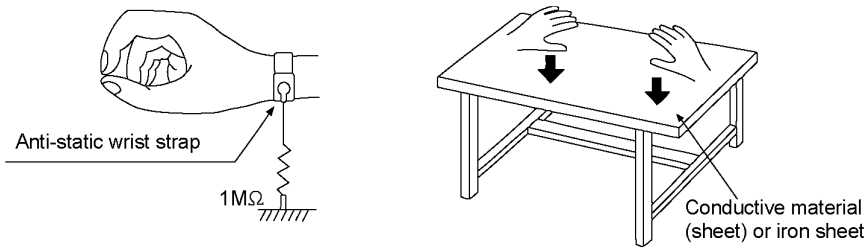
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

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.

- **CD Mechanism Unit (BRS1C):**

1) This model uses CD Mechanism Unit (BRS1C).

- **Micro-processor:**

1) The following components are supplied as an assembled part.
   - Micro-processor IC, IC2003 (*MN101EF16KXW) * Este material se encuentra sin programar, necesita ser programado.

- **Speaker System:**

1) This model uses Speaker System, SB-AKX14LM-K.

4 Specifications

Sección del amplificador

Potencia de salida RMS en modo estéreo

Canal frontal (ambos canales controlados)
125 W por canal (4 Ω), 1 kHz, 10% THD

Potencia total RMS del modo estéreo
250 W (10% THD)
320 W (máx.)

Potencia de salida PMPO 3600 W

Sección del sintonizador, terminales

Emisoras preconfiguradas 30 emisoras de FM
15 emisoras de AM

Frecuencia modulada (FM)

Gama de frecuencias
87,5 MHz a 108,0 MHz (en pasos de 100 kHz)
87,9 MHz a 107,9 MHz (en pasos de 200 kHz)

Terminales de la antena 75 Ω (desbalanceado)

Amplitud modulada (AM)

Gama de frecuencias
520 kHz a 1710 kHz (en pasos de 10 kHz)

Entrada AUX Clavija jack RCA

Sección de discos compactos

Discos reproducidos (8 cm o 12 cm)
CD, CD-R/RW (CD-DA, MP3※)

Lector

Longitud de onda 790 nm (CD)

Potencia de láser CLASS 1

Salida de audio (Disco)

Número de canales 2 canales (FL, FR)
FL = Canal frontal izquierdo
FR = Canal frontal derecho

※ MPEG-1 Layer 3

Sección de USB

Puerto USB

USB estándar USB 2,0 velocidad total

Compatibilidad con formato de archivos de medios
MP3 (*.mp3)

Sistema de archivo de dispositivo USB
FAT12, FAT16, FAT32

Energía puerto USB 500 mA (máx.)

Velocidad de bits 16 kbps a 320 kbps (reproducción)

Sección de bafles

Tipo Sistema de 2 bocinas de 2 vías (reflejo de sonidos graves)

Bocina(s)

Bocina para graves Tipo cónico de 16 cm

Bocina para agudos Tipo cónico de 6 cm

Impedancia 4 Ω

Presión acústica de salida 85 dB/W (1 m)

Gama de frecuencias 48 Hz a 22 kHz (–16 dB)
52 Hz a 20 kHz (–10 dB)

Dimensiones (An x Al x Prf) 200 mm x 334 mm x 193 mm

Peso 2,5 kg

Generalidades

Consumo de energía 58 W

Fuente de alimentación ~ 127 V, 60 Hz

Dimensiones (An x Al x Prf) 220 mm x 334 mm x 245 mm

Peso 2,8 kg

Gama de temperaturas de funcionamiento
0°C a +40°C

Gama de humedades de funcionamiento
35% a 80% humedad relativa (sin condensación)

Consumo de energía en modo normal

58Wh/día (considerando 1 hora de uso al día).

Consumo de energía en modo de espera

4,6Wh/día (considerando 23 horas en modo de espera al día).

Nota:

- Las especificaciones están sujetas a cambios sin previo aviso.
  El peso y las dimensiones son aproximados.
- La distorsión armónica total se mide con el analizador de espectro digital.

5 General/Introduction

5.1. Media Information

NOTE on MP3

- Files are treated as tracks and folders are treated as albums.
- This unit can access up to 999 tracks, 255 albums and 20 sessions.
- Disc must conform to ISO9660 level 1 or 2 (except for extended formats).
- To play in a certain order, prefix the folder and file names with 3-digits numbers in the order you want to play them.

Limitations on MP3 play

- If you have recorded MP3 on the same disc as CD-DA, only the format recorded in the first session can be played.
- Some MP3s may not be played due to the condition of the disc or recording.
- Recordings will not necessarily be played in the order you recorded them.

NOTE on CDs

- This unit can access up to 99 tracks.
- This unit can play MP3 files and CD-DA format audio CD-R/RW that have been finalized.
- It may not be able to play some CD-R/RW due to the condition of the recording.
- Do not use irregularly shaped disc.
- Do not use disc with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- Do not attach extra labels or stickers on the disc.
- Do not write anything on the disc.

NOTE on USB

Compatible devices

- USB mass storage devices that support bulk-only transfer.
- USB mass storage devices that support USB 2.0 full speed.

Supported format

- Folders are defined as album.
- Files are defined as track.
- Track must have the extension ".mp3" or ".MP3".
- CBI (Control/Bulk/Interrupt) is not supported.
- NTFS file system is not supported. (only FAT 12/16/32 file system is supported).
- Some files can fail to work because of the sector size.

Note:

- Maximum album: 255 albums (include albums without MP3 tracks).
- Maximum track: 2500 tracks
- Maximum track in one album: 999 tracks

6 Location of Controls and Components

6.1. Remote Control Key Button Operation

❶ **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.

❷ Numeric buttons [1 to 9, 0, ≧10]
To select a 2-digit number
Example: 16: [≧10] → [1] → [6]

❸ Delete a programmed track

❹ Select audio source

❺ Basic playback control

❻ Select the sound effects

❼ Auto preset the radio station

❽ View content information
Decrease the brightness of the display panel
Press and hold the button to use this function.
To cancel, press and hold the button again.

❾ Clock and timer operation

❿ Set the program function

⓫ Adjust the volume of the system

⓬ **Mute the sound of the system**
Press the button again to cancel.
"MUTE" is also canceled when you adjust the volume or when you switch off the system.

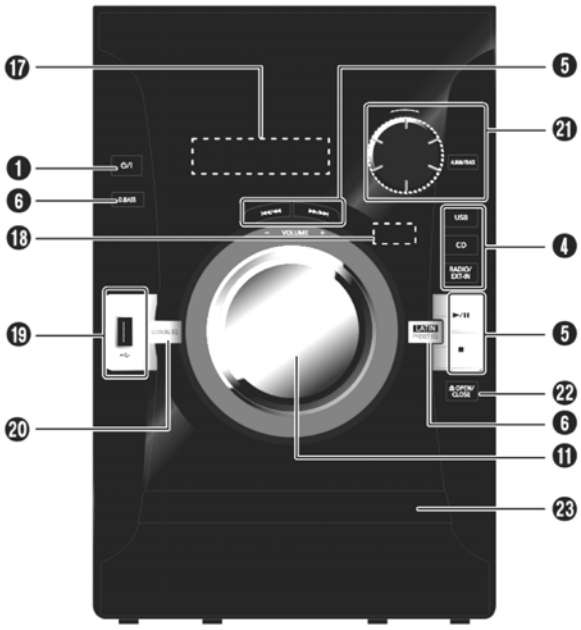
⓭ Set the play menu item

⓮ Set the radio menu item

⓯ Select the option

⓰ **Automatically switch off the system**
When you are in disc or USB source, the auto off function switches off the system if you do not use the system for 30 minutes.
To cancel, press the button again.

6.2. Main Unit Key Button Operation

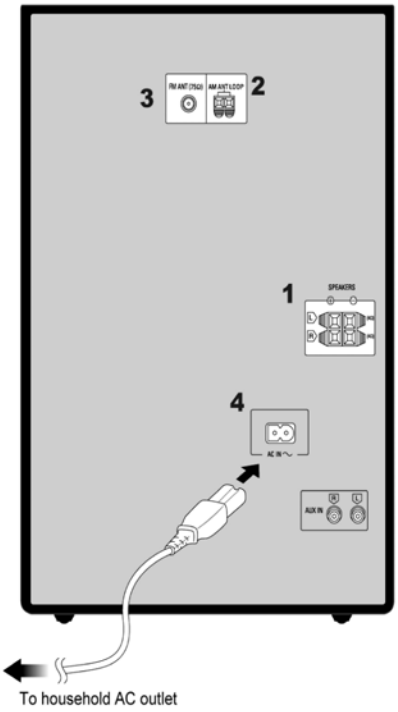


1. **Standby/on switch** [⏻], [⏻/I]
   Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
4. Select audio source
5. Basic playback control
6. Select the sound effects
11. Adjust the volume of the system
17. Display panel
18. Remote control sensor
19. USB port (⇐)
20. Select bass or treble effect
21. **Browse tracks or albums**
    CD
    Turn the knob to browse the track.
    Press [►/II] to start playback from the selection.
    MP3
    Press [ALBUM/TRACK] to select album or track and then turn the knob to browse.
    Press [►/II] to start playback from the selection.
22. Open or close the disc tray
23. Disc tray

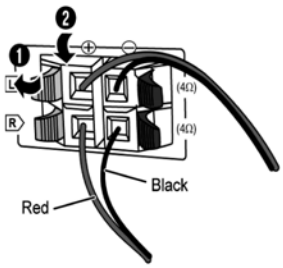
7 Installation Instructions

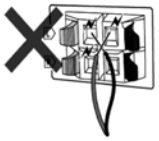
7.1. Speaker and A/C Connection

Conserving power
The system consumes approximately 0.2 W when it is in standby mode. Disconnect the power supply if you do not use the system.
Some settings will be lost after you disconnect the system. You have to set them again.



1 **Connect the speakers.**

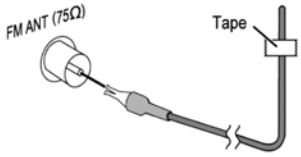




Be careful not to cross (short-circuit) or reverse the polarity of the speaker wires as doing so may damage the speakers.

2 **Connect the AM loop antenna.**
Stand the antenna up on its base until it clicks.

3 **Connect the FM indoor antenna.**
Place the antenna where reception is best.



4 **Connect the AC power supply cord.**

Use the supplied AC power supply cord with this system only.

Do not use an AC power supply cord from other equipment.

8 Service Mode

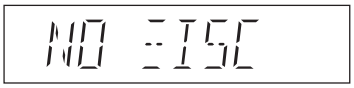
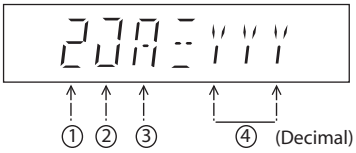
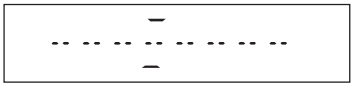
8.1. Cold-Start

Here is the procedure to carry out cold-start or initialize to shipping mode.

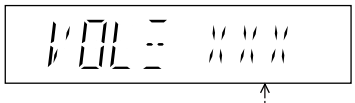
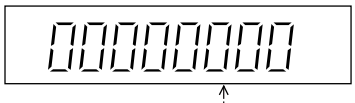
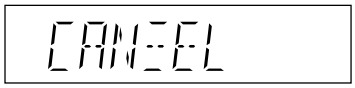
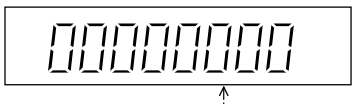
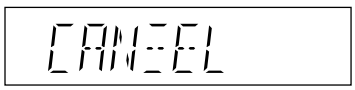
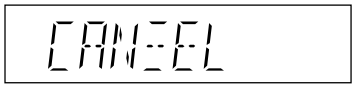
1. Unplug AC power cord
2. Press & hold [POWER] button
3. Plug AC power cord while [POWER] button being pressed
   FL Display will show "_ _ _ _ _ _ _ _"
4. Release [POWER] button

8.2. Doctor Mode Table

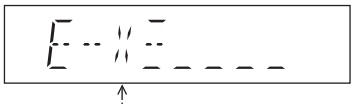
8.2.1. Doctor Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Doctor Mode	To enter into Doctor Mode		In CD Mode: 1. Press [■] button on main unit follow by [4] and [7] on remote control. 2. To exit, press [DELETE] button on remote control or, press [POWER, ⏻/I] button on Main Unit
EEPROM checksum check	Displaying of 1. Year Develop. 2. Model Type. 3. ROM Type. 4. Firmware Version.	 ① ② ③ ④ (Decimal) Version No. (001 ~ 999) → specific for each firmware	In CD mode: 1. Enter Doctor Mode
Cold Start	To active cold start upon next AC power up when reset start is execute the next time .		In Doctor Mode : 1. Press [SLEEP] button on remote control.

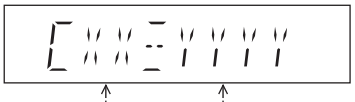
8.2.2. Doctor Mode Table 2

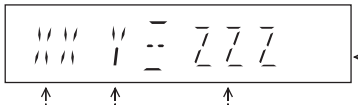
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Volume Setting Check	To check the volume setting of a main unit.	 Press [7]: VOL50 Press [8]: VOL35 Press [9]: VOL0 Volume	In Doctor Mode: 1. Press [7], [8], [9] button on remote control.
FL Display Check	To check the FL segment display All segment will light up while all LED blink at 0.5s,intervals.(if any)		In Doctor mode: 1. Press [1] button on remote control. 2. To cancel, press [0] on remote control.
BRS1C Reliability Test (Traverse)	To determine CD Mechanism BRS1C Access Inner & Outer disc operation. In this mode,ensure the CD is in the main unit. Note: Refer to Section 6.3 Fig 2. for process flow.	 The counter will increment by one. When reach 9999 will change to 0000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[1]→[2] button on remote control. 2. To cancel, press [0] on remote control.
BRS1C Reliability Test (Combination)	To determine CD Mechanism Unit (BRS1C) Open/Close & Access Inner & Outer Disc Operation. In this mode,ensure the CD is in the main unit. Note: Refer to Section 6.3 Fig 3. for process flow.	 The counter will increment by one. When reach 9999 will change to 0000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[1]→[5] button on remote control. 2. To cancel, press [0] on remote control.
BRS1C Reliability Test (Loading)	To determine CD Mechanism Unit (BRS1C) Open/Close operation. In this mode, the tray will open & close. Note: Refer to Section 6.3 Fig 1 for process flow.	 The counter will increment by one. When reach 9999 will change to 0000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[2]→[1] button on remote control. 2. To cancel, press [0] on remote control.

8.2.3. Doctor Mode Table 3

<table>
<tr><th colspan="2">Item</th><th rowspan="2">FL Display</th><th>Key Operation</th></tr>
<tr><th>Mode Name</th><th>Description</th><th>Front Key</th></tr>
<tr><td>CD
Self- Adjustment
(AJST)
Result Display</td><td>i. Function: To display result of self-adjustment for CD .
• This is used for servicing and analysis.</td><td> 
Display of auto adjustment result

Reference table:
<table>
<tr><th>Status \ ERROR Code</th><th>0</th><th>1</th><th>2</th><th>4</th><th>6</th><th>8</th><th>A</th><th>C</th><th>E</th><th>F</th></tr>
<tr><td>AOC1/AOC2</td><td>O</td><td>※</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>-</td></tr>
<tr><td>ABC2/ABC1</td><td>O</td><td>-</td><td>X</td><td>O</td><td>X</td><td>O</td><td>X</td><td>O</td><td>X</td><td>-</td></tr>
<tr><td>2nd AOC1</td><td>O</td><td>-</td><td>O</td><td>X</td><td>X</td><td>O</td><td>O</td><td>X</td><td>X</td><td>-</td></tr>
<tr><td>FAGC/T AGC</td><td>O</td><td>-</td><td>O</td><td>O</td><td>O</td><td>X</td><td>X</td><td>X</td><td>X</td><td>-</td></tr>
<tr><td>AGC2</td><td>O</td><td>-</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>△</td></tr>
</table>
O: OK ;
X: NG (In case that time out happens.)
※ Either one of FO AOC, TR AOC and FO coarse AGC is NG .
△: If the AGC is NG (ignore others).</td><td>In Doctor Mode:
1. Press [10]→[1]→[4] button on remote control .

2. To cancel, press [0] on remote control .</td></tr>
<tr><td>CD LSI
Version Check</td><td>For checking CD LSI Version and checksum information.</td><td> 
Version (Decimal) Checksum (Hex)

(Display 1)
 
ROM Version
after 2 sec
(Display 2)
 
Year Develop ROM Type Version (Decimal)</td><td>In Doctor Mode :
1. Press [4] button on remote control .

2. To cancel, press [0] on remote control .</td></tr>
</table>

8.3. Reliability Test Mode (CD Mechanism Unit (BRS1C))

Below is the process flow chart of the aging test for the CD Mechanism Unit (BRS1C).

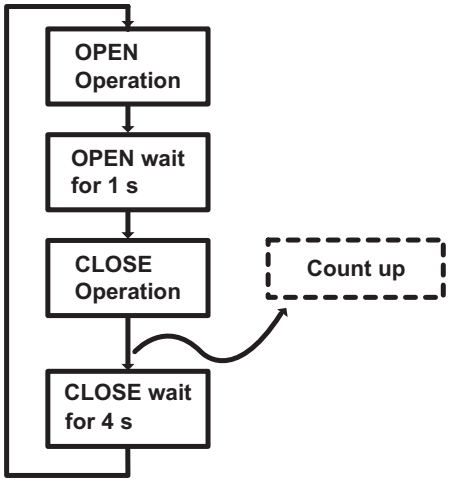


Fig. 1. Reliability Test (Loading)

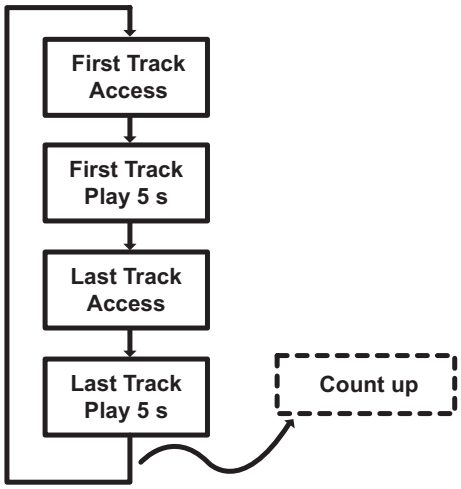


Fig. 2. Reliability Test (Traverse)

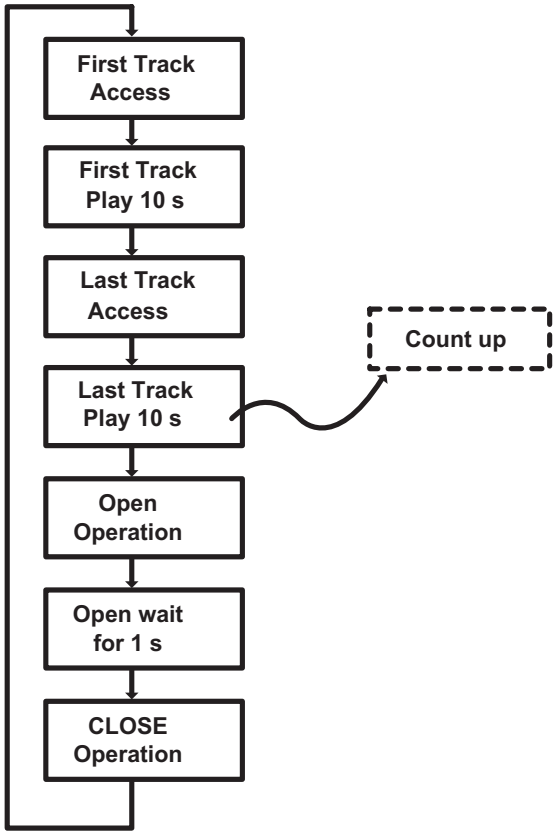


Fig. 3. Reliability Test (Combination)

8.4. Self-Diagnostic Mode

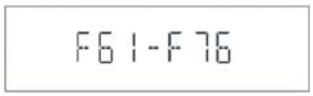
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Self Diagnostic Mode	To enter into self diagnostic checking		Step 1: Select CD mode (Ensure no disc is inserted). Step 2: Press & hold [■] follow by [▶▶/▶▶I] on main unit for 2 seconds.
Error code information	System will perform a check on any unusual/error code from the memory	Example: 	Step 1: In self diagnostic mode, Press [■] on main unit. To exit, press [⏻/I] on main unit or remote control.
Delete error code	To clear the stored in memory (EEPROM IC)		Step 1: In self diagnostic mode, Press [0] on remote control. To exit, press [⏻/I] on main unit or remote control.

8.5. Self-Diagnostic Error Code Table

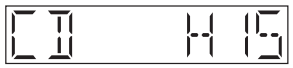
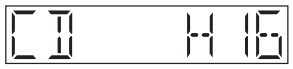
Self-Diagnostic Function (Refer Section 6.4. Self-Diagnostic Mode) provides information on any problems occurring for the unit and its respective components by displaying the error codes. These error code such as U**, H** and F** are stored in memory and held unless it is cleared.

The error code is automatically display after entering into self-diagnostic mode.

8.5.1. Power Supply Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F61	Power Amp IC output abnormal	Upon power on, PCONT=HIGH, DC_DET_AMP after checking LSI.		Press [■] on main unit for next error.
F76		DC_DET_PWR		
F61-76		Both DCDET (NG)		
F26		Communication between CD servo LSI and micro-P abnormal (iPod, Radio, USB)		

8.5.2. CD Mechanism Error Code Table (CD Mechanism Unit (BRS1C))

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

8.6. Sales Demonstration Lock Function

8.6.1. Entering into sales Demo Mode

Here is the procedures to enter into Sales Demonstration Lock.
Step 1: Turn on the unit.
Step 2: Select to any mode function.
Step 3: Press [⏏OPEN/CLOSE] key then [▶/❚❚] key at the same time,press and hold both [⏏OPEN/CLOSE] and [▶/❚❚] keys for 5 sec.
Step 4: The display will show upon entering into this mode for 2 sec..

Note: [⏏OPEN/CLOSE] button is invalid and the main unit displays “LOCKED” while the lock function mode is entered.

8.6.2. Cancellation

Step 1: Turn on the unit.
Step 2: Select to any mode function.
Step 3: Press [⏏OPEN/CLOSE] key then [▶/❚❚] key at the same time,press and hold both [⏏OPEN/CLOSE] and [▶/❚❚] keys for 5 sec.
Step 4: The display will show upon entering into this mode for 2 sec..

9 Troubleshooting Guide

9.1. Part Location

9.1.1. SMPS P.C.B.

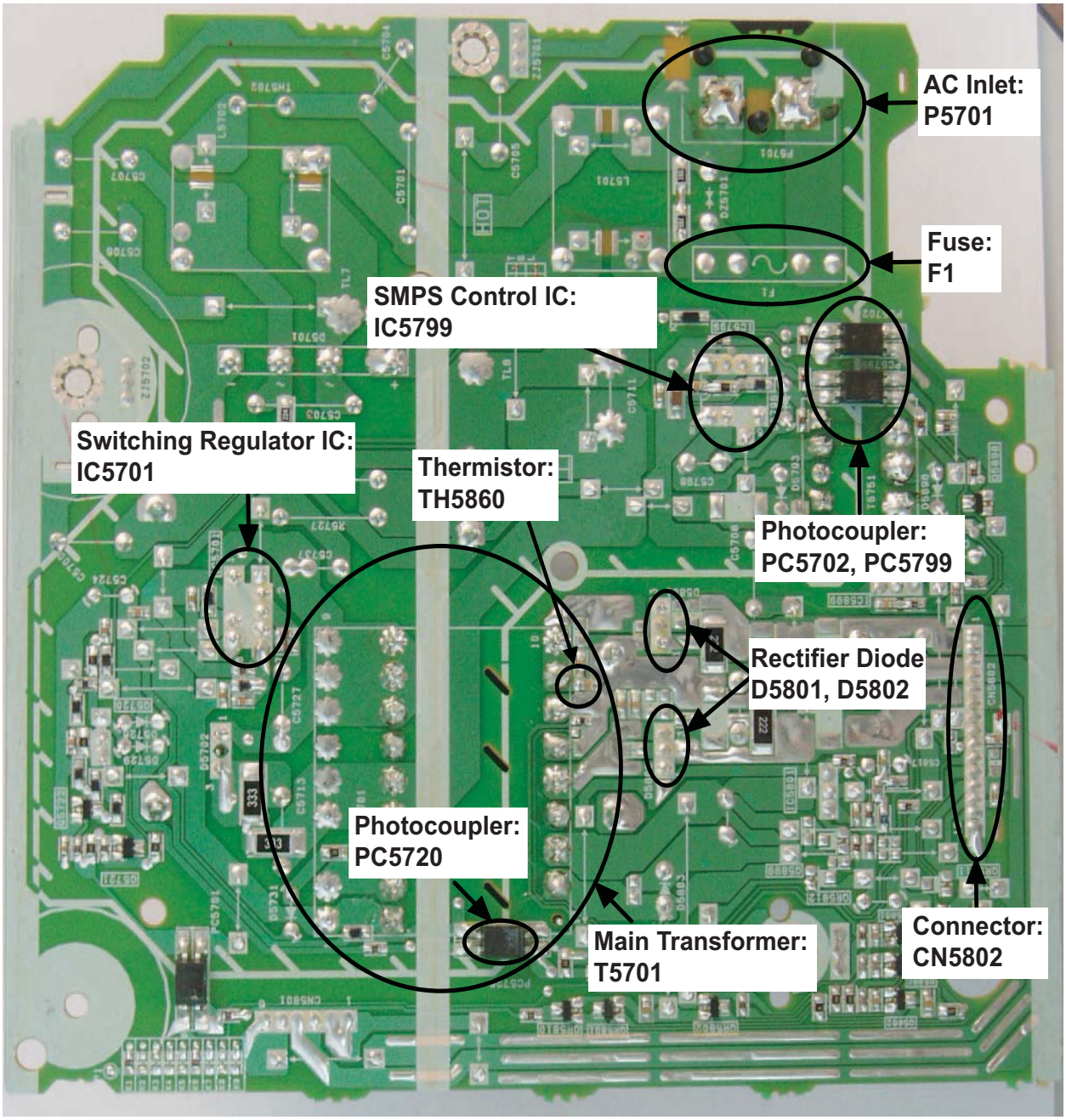


Fig. 1 SMPS P.C.B.

9.1.2. Main P.C.B.

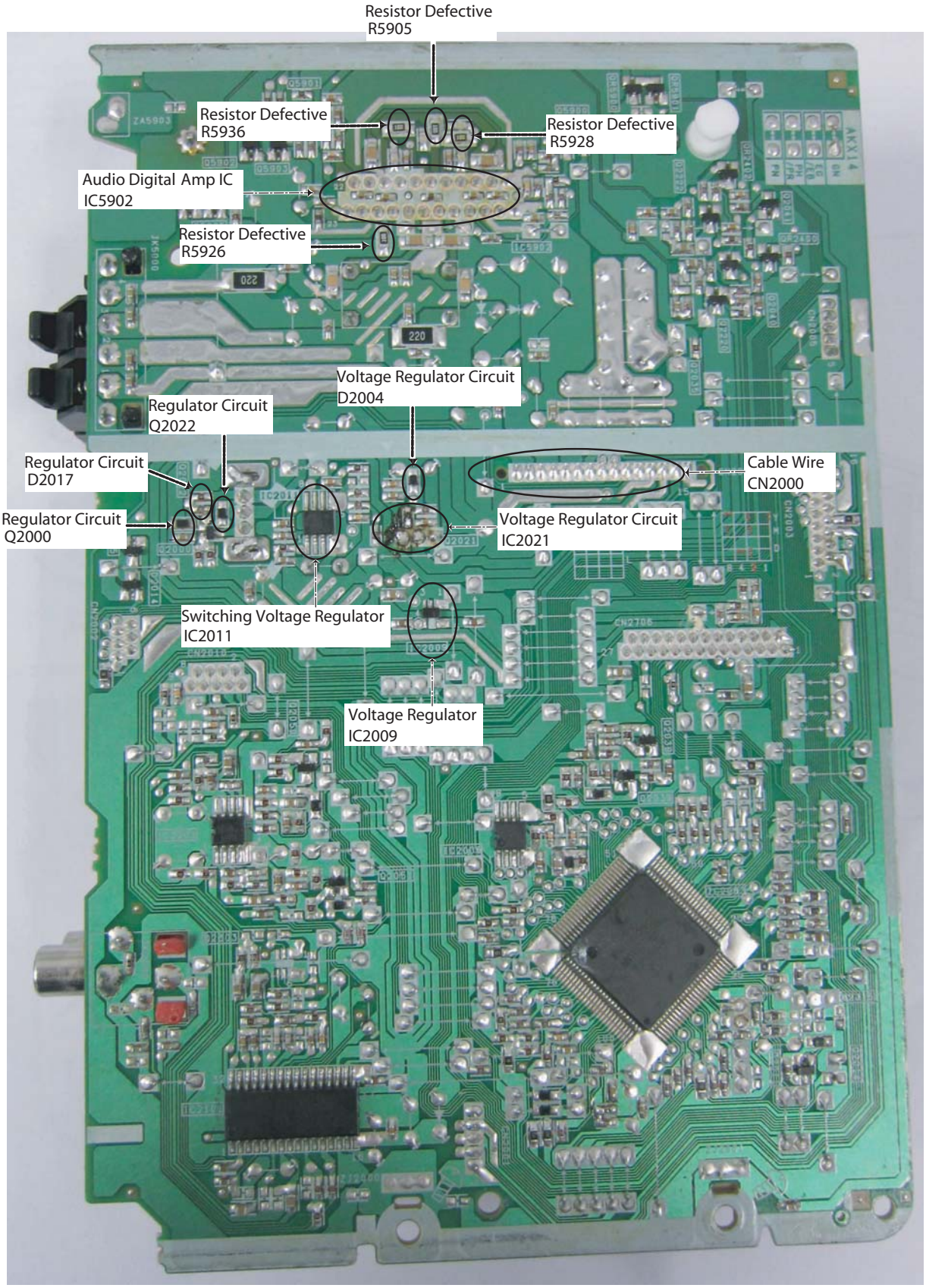


Fig. 2 Main P.C.B.

9.2. Troubleshooting Guide for F61 and/or F76

This section illustrates the checking procedures when upon detecting the error of “F61” and/or “F76” after power up of the unit. It is for purpose of troubleshooting and checking in SMPS & Main P.C.B.

Symptom		Checking Items		Possible Fault(s)	Remarks
Set cannot ON	1	AC Cord	1	AC Cord Faulty, Loose connection.	Refer to Section 9.1.1 Fig. 1. SMPS P.C.B.
	2	AC Inlet, P5701	2	P5701 solder crack, dry joint.	
	3	F use, F1	3	Fuse, F1 Open.	
	4	P hotocoupler	4	PC5702/PC5799 solder crack.	
		PC5702, PC5799		Dry joint, short circuit, open circuit.	
	5	S witching Regulator	5	IC5701 Faulty.	
		IC, IC5701			
	6	V oltage Regulator	6	Q2022 Faulty.	
		Transistor (Q2022)			
Set can ON then F6 1	1	S peaker Output	1	Faulty speaker unit, Loose connection, Short.	Refer to Section 9.1.2 Fig. 2. Main P.C.B.
	2	D-AMP circuit	2a	D-AMP IC, IC5902 defective.	
				(Check DC voltage at speaker terminals, 3V and above defective)	
			2b	DC Voltage ok but no sound, check DC Voltage at Pin 1.	
				5V ok condition, 2.5V or 0V defective.	
			2c	2a, 2b ok but no sound, check PWM waveform at Pin 10 and Pin 14 .	
				If no PWM, 4 resistors defective (R5905, R5926, R5936, R5928).	
Set can ON then F7 6	1	Main Transformer T5701	1a	Short circuit between Pin 14 and Pin 15.	Refer to Section 9.1.1 Fig. 1. SMPS P.C.B.
			1b	Short circuit between Pin 15 and Pin 16.	
			1c	Short circuit between Pin 16 and Pin 17.	
	2	DC-DC Circuit	2a	Check cable wire connection between cable wire CN2000.	Refer to Section 9.1.2 Fig. 2. Main P.C.B.
				(At Main P.C.B) & connector CN5802 (At SMPS P.C.B)	
			2b	(i) +5V Switching Voltage Regulator (IC2011).	
				(ii) +3.3V Voltage Regulator (IC2009).	
				(iii) +9V Voltage Regulator Circuit (Q2021, D2004).	
				(iv) CD +7.5V Regulator Circuit (Q2000, Q2022, D2017).	
	3	P hotocoupler	3	PC5720 solder crack,	Refer to Section 9.1.1 Fig. 1. SMPS P.C.B.
		PC5720		Dry joint, short circuit, open circuit.	
Set can ON working normally for some time then F7 6	1	R ecti•er Diode D580	1a	Improper contact between D5801 to Heatsink.	Refer to Section 9.2.1 Fig. 1. SMPS P.C.B.
		Recti•er Diode D5802		Improper contact between D5802 to Heatsink.	
	2	T hermistor TH5860	1b	Set trigger temperature protection.	

.3. D-Amp IC Operation & Control

D-AMP IC Operation & Control

1) D-AMP IC (C1AB0000497) was used for this model (AKX14).
2) Three control pins (signal send from micro-processor IC) were used to control the D-AMP IC operation such as muting, standby and normal operation. They are described as below: -

No	Pin no	Signal name	Function
1	4	F_HOP	Frequency Hop control.
2	6	MODE_DA	Digital Amp On/Off control.
3	3	MUTE_F	Digital Amp Muting control

Table 1: Digital AMP Pin Control.

Here is detailed description of the three control pins for the D-AMP IC

A) **MODE_DA** & **MUTE_F** were used to switch the D-AMP IC in the following muting status:

- L(Low/OFF): Standby / OFF
- H (High/ON): Operating or Mute

Below is the logic for the two pins used for the control of the D-AMP IC.

No	MODE_DA	MUTE_F	Digital AMP IC mode status
1	L	X	OFF (0V)
2	H	H	Mute (2.5V)
3	H	L	Operating(5V)

Table 2: Digital AMP IC Mode Status.

Note: Standby/OFF condition of D.AMP IC is available / activated only during the following event: Switching of Frequency Hoping, power off and start up (when the unit is undergoing the transition from standby to normal operation mode)

B) **F_HOP** is used to control the D-AMP operation to avoid interference with AM source by controlling the frequency source used. It will switch from one frequency to the other, depending on the tuned AM frequency.

For 9 KHz Step

AM Band Frequency	F_HOP	Switching Frequency
522 ~ 558	H	301
567 ~ 639	H	350
648 ~ 855	L	301
864 ~ 945	H	350
954 ~ 1152	L	301
1161 ~ 1242	H	350
1251 ~ 1449	L	301
1458 ~ 1539	H	350
1548 ~ 1629	L	301

Table 3: F_HOP Control during 9 kHz Step

For 10 KHz Step

AM Band Frequency	F_HOP	Switching Frequency
520 ~ 560	H	301
570 ~640	H	350
650 ~ 860	L	301
870 ~ 950	H	350
960 ~ 1160	L	301

1170 ~ 1250	H	350
1260 ~ 1450	L	301
1460 ~ 1540	H	350
1550 ~ 1710	L	301

Table 4: F_HOP Control during 10 kHz Step

Note: During activating, the 3 control pins namely MUTE_F, MUTE_A and MODE_DA must be used to cover the “Pop” sound cause by F-HOP switching.

10 Service Fixture & Tools

Prepare service tools before process service position.

Ref. No	Service Tools		Remarks
SFT1	Main P.C.B. (CN2000) - SMPS P.C.B. (CN5802)	REX1534(15P Cable Wire)	

11 Disassembly and Assembly Instructions

• Illustration is based on SA-AKX14PH-K.

Caution Note:

- **This section describes the disassembly and/or assembly procedures for all major printed circuit boards & main components for the unit. (You may refer to the section of "Main components and P.C.B Locations" as described in the service manual)**
- **Before carrying out the disassembly process, please ensure all the safety precautions & procedures are followed.**
- **During the disassembly and/or assembly process, please handle with care as there may be chassis components with sharp edges.**
- **Avoid touching heatsinks due to its high temperature after prolong use. (See caution as described below)**

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

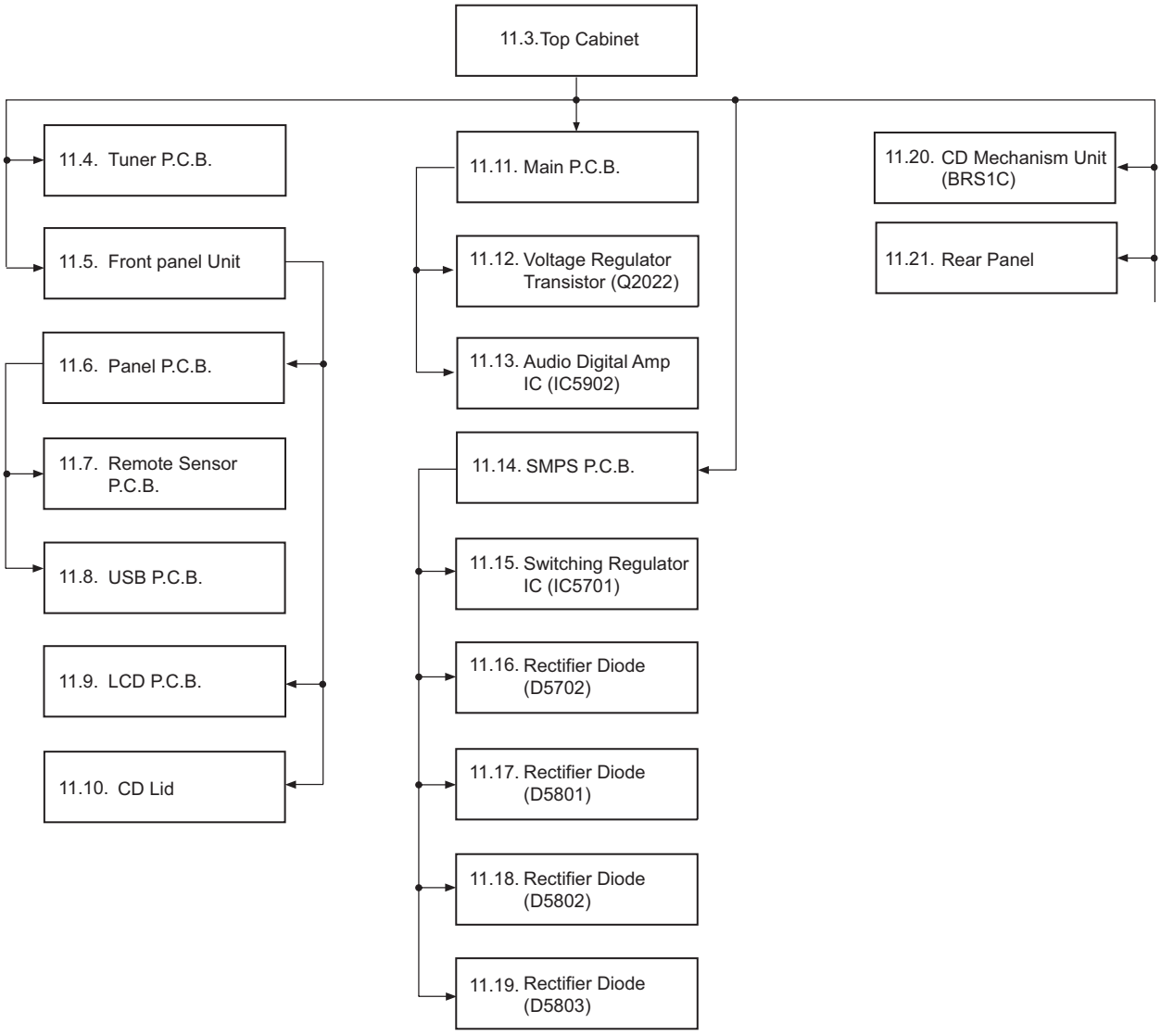
- **During disassembly and assembly, please ensure proper service tools, equipments or jigs is being used.**
- **During replacement of component parts, please refer to the section of "Replacement Parts List" as described in the service manual.**
- **Select items from the following indexes when disassembly or replacement are required.**
- Disassembly of Top Cabinet
- Disassembly of Tuner P.C.B.
- Disassembly of Front Panel Unit
- Disassembly of Panel P.C.B.
- Disassembly of Remote Sensor P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of LCD P.C.B.
- Disassembly of CD Lid
- Disassembly of Main P.C.B.
- Replacement of Voltage Regulator Transistor (Q2022)
- Replacement of Audio Digital Amp IC (IC5902)
- Disassembly of SMPS P.C.B.
- Replacement of Switching Regulator IC (IC5701)
- Replacement of Rectifier Diode (D5702)
- Replacement of Rectifier Diode (D5801)
- Replacement of Rectifier Diode (D5802)
- Replacement of Rectifier Diode (D5803)
- Disassembly of CD Mechanism Unit (BRS1C)
- Disassembly of Rear Panel

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

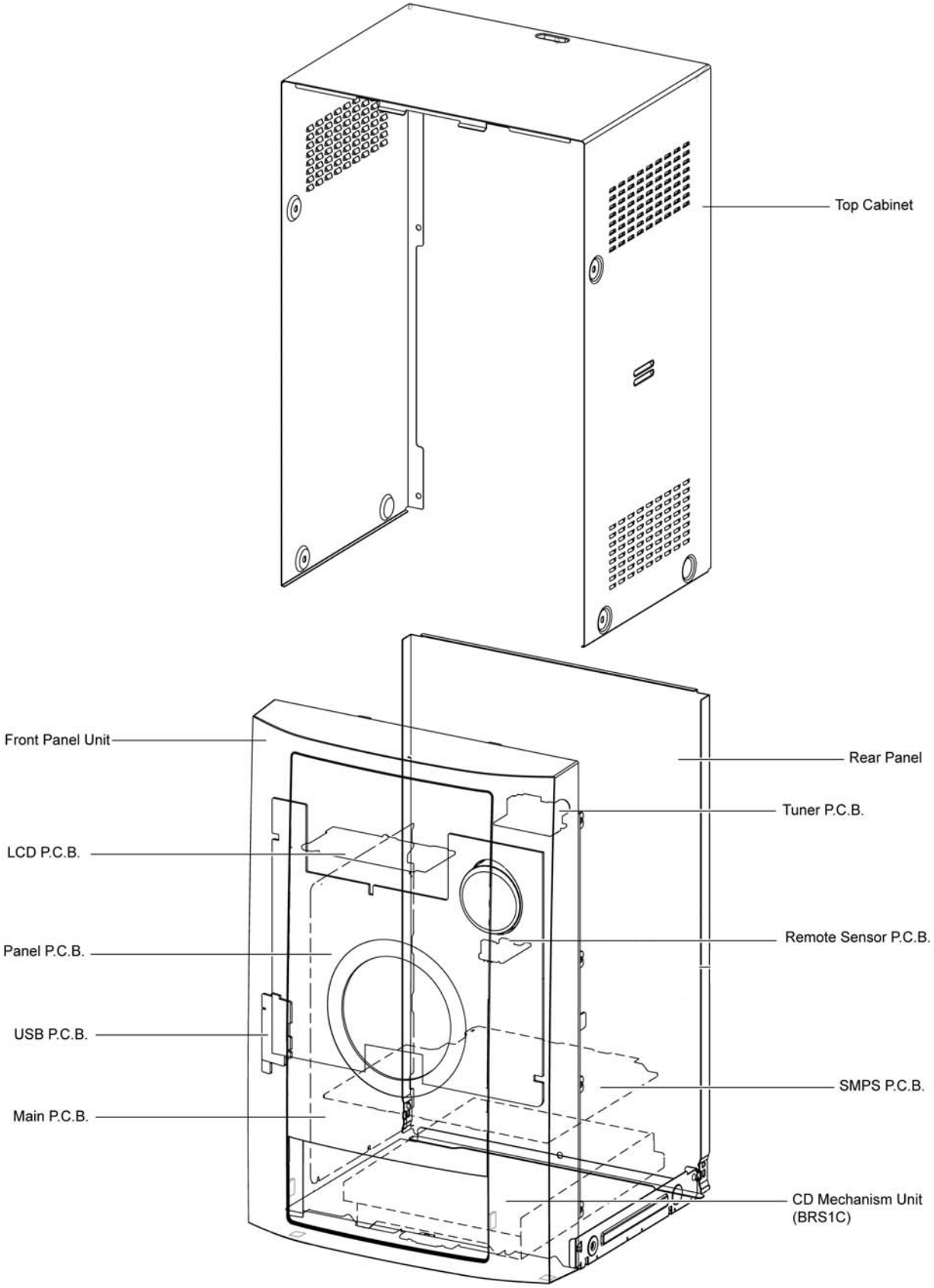
Below shown is part no. of different screw types used:

ⓐ :RHD30007-K2J
ⓑ :RHD30119-S
ⓒ :RHD26046
ⓓ :RHD30111-31
ⓔ :XTB3+10JFJ
ⓕ :RHDX30005-J
ⓖ :RHDX031008

11.1. Disassembly Flow Chart

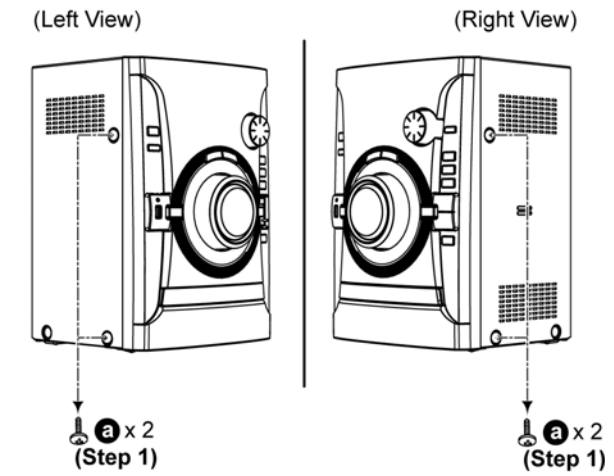


11.2. Main Components and P.C.B. Locations

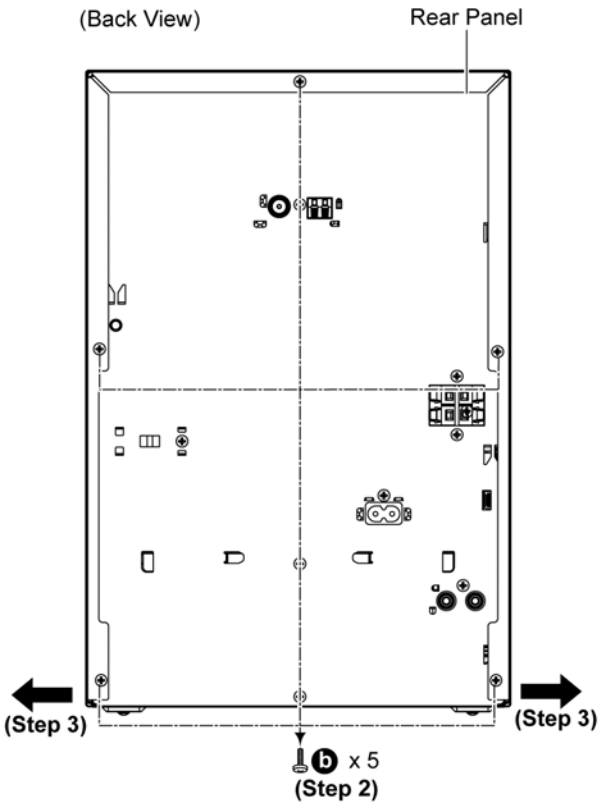


11.3. Disassembly of Top Cabinet

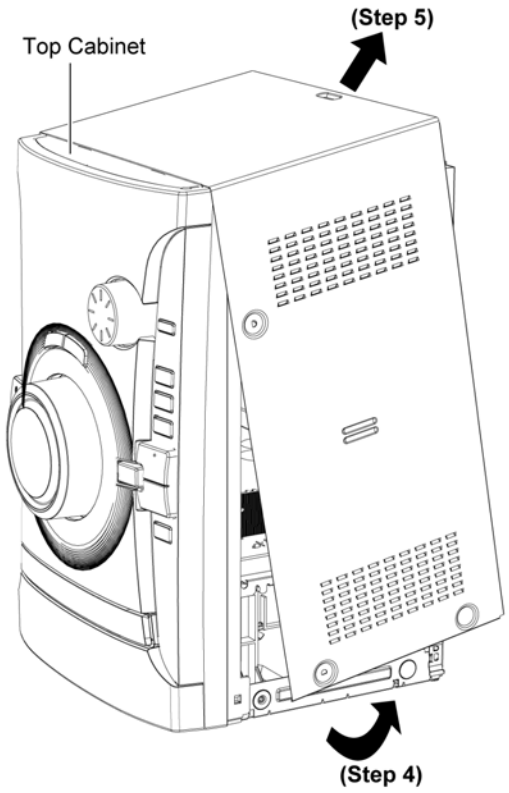
Step 1 Remove 2 screws on each side.



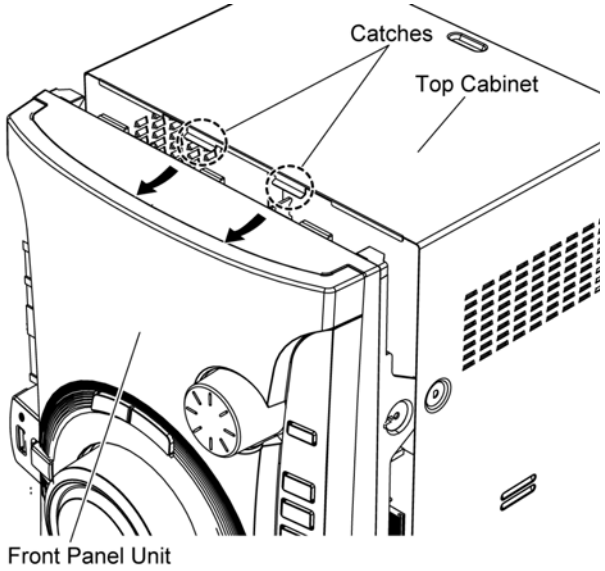
Step 2 Remove 5 screws.
Step 3 Slightly pull both side of Top Cabinet outwards as arrow shown.



Step 4 Slightly lift up both side of Top Cabinet in an outward direction as shown.
Step 5 Remove the Top Cabinet.



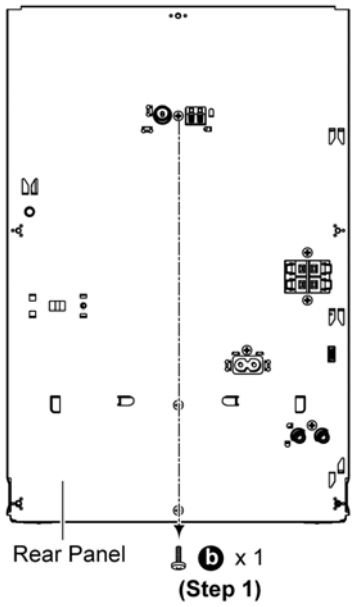
Caution: During assembling, ensure that the Top Cabinet catches are properly located into Front Panel Unit as shown.



11.4. Disassembly of Tuner P.C.B.

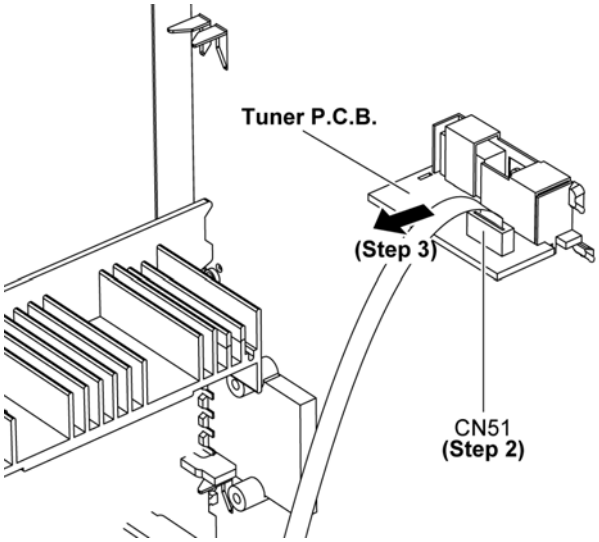
• **Refer to "Disassembly of Top Cabinet".**

Step 1 Remove 1 screw.



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

Step 3 Remove the Tuner P.C.B..

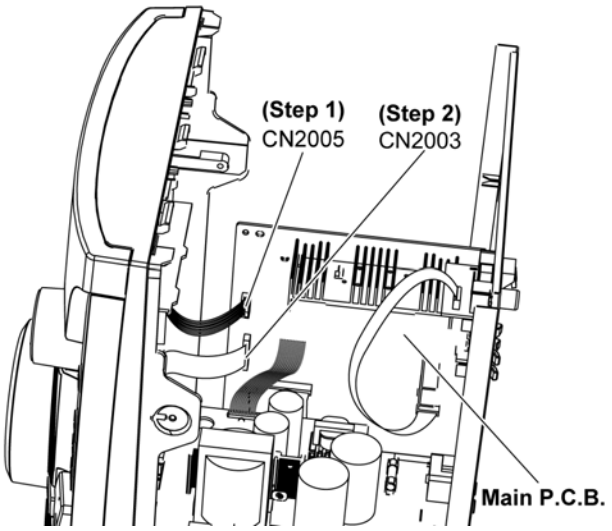


11.5. Disassembly of Front Panel Unit

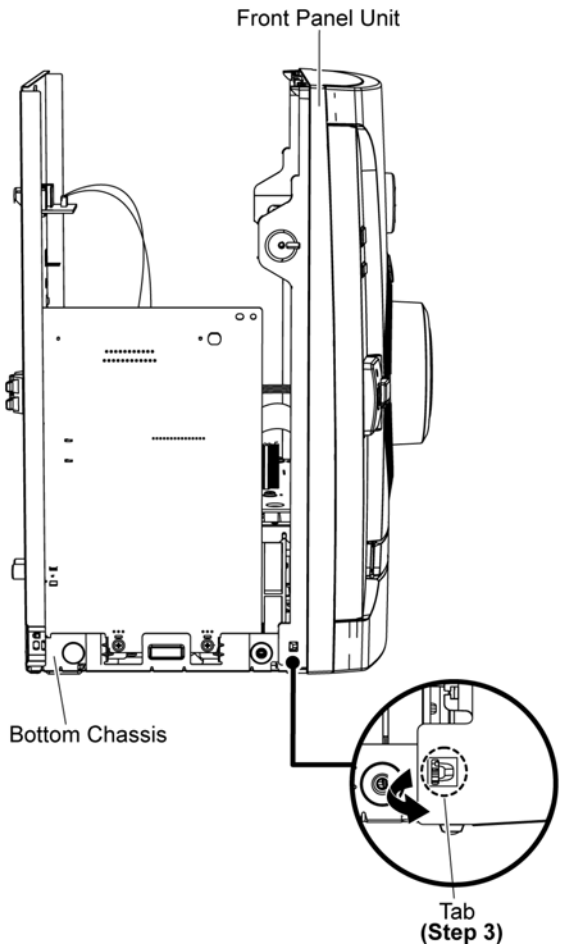
• **Refer to "Disassembly of Top Cabinet".**

Step 1 Detach 5P Cable Wire at the connector (CN2005) on Main P.C.B.

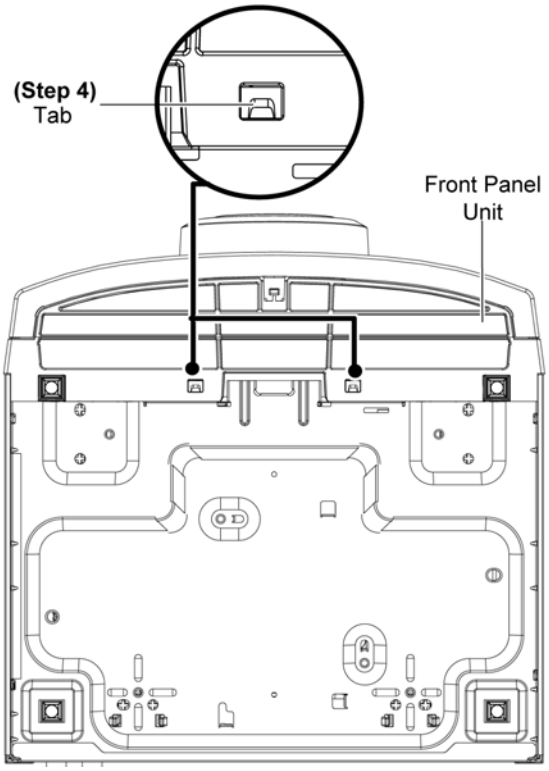
Step 2 Detach 17P FFC at the connector (CN2003) on Main P.C.B.



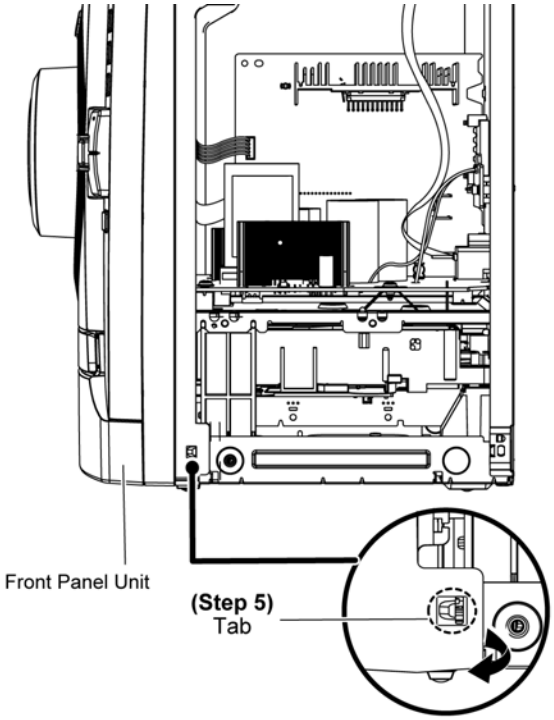
Step 3 Push inwards slightly at the Bottom Chassis as arrow shown and release tab at left side of Front Panel Unit.



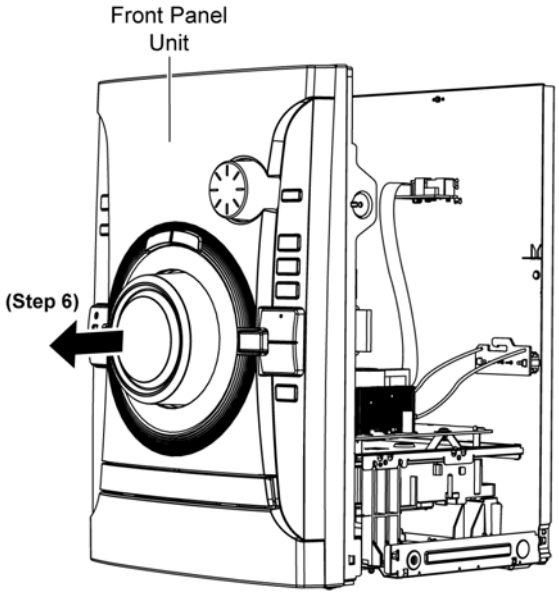
Step 4 Release tabs at bottom.



Step 5 Push inwards slightly at the Bottom Chassis and release tab at right side of Front Panel Unit.



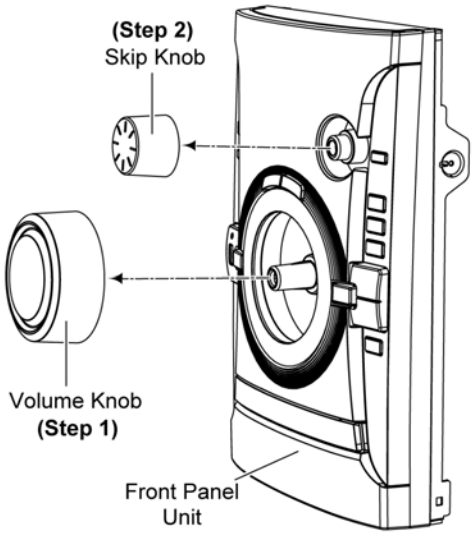
Step 6 Remove the Front Panel Unit



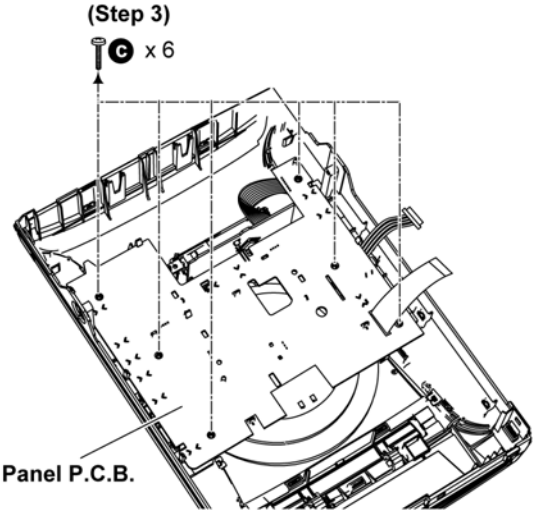
11.6. Disassembly of Panel P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

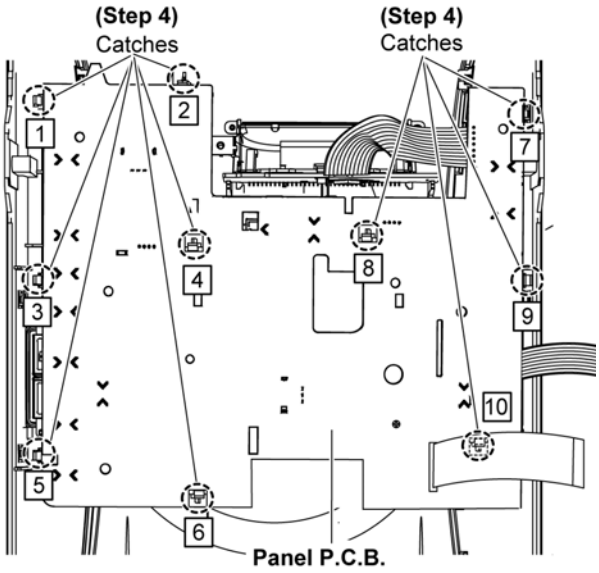
Step 1 Remove the Volume Knob.
Step 2 Remove the Skip Knob.



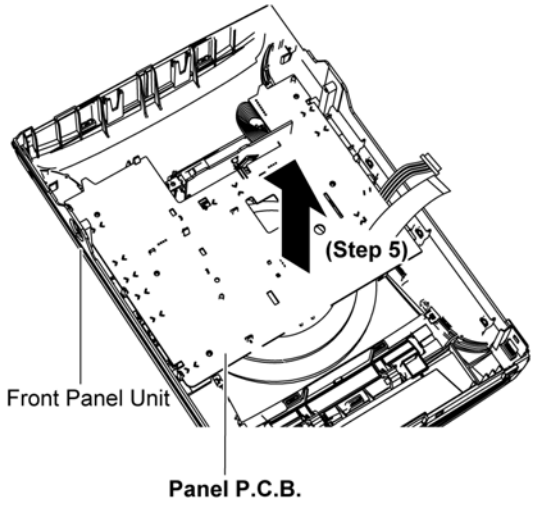
Step 3 Remove 6 screws.



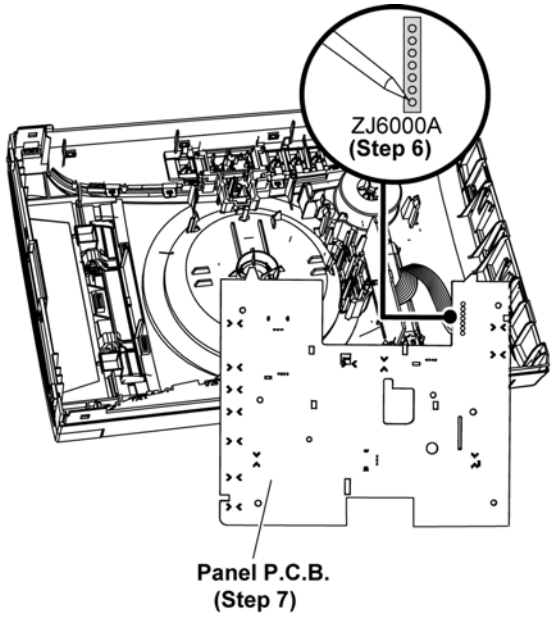
Step 4 Release catches by following the sequences (1-10).



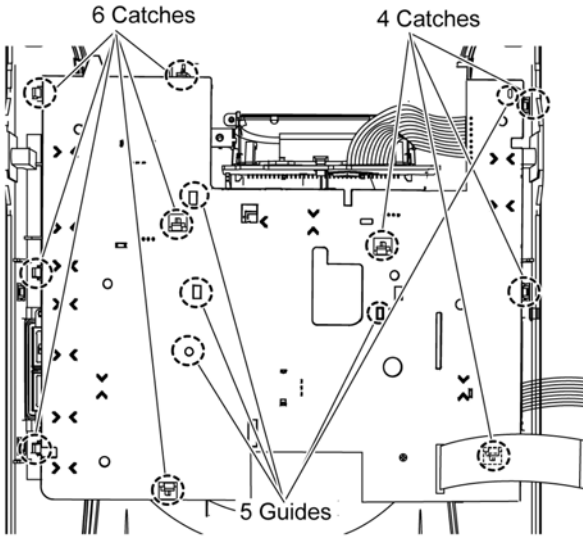
Step 5 Lift up to remove the Panel P.C.B. from Front Panel Unit.



Step 6 Desolder 7 pins at (ZJ600A) on Panel P.C.B..
Step 7 Remove the Panel P.C.B..



Caution: During assembling, ensure that Panel P.C.B. is seated properly through the guides & fully catched.

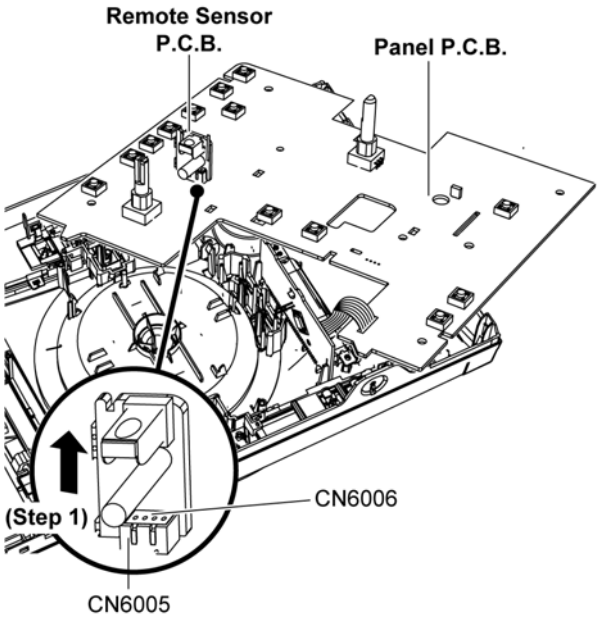


11.7. Disassembly of Remote Sensor P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**
- **Refer to (Step 1) to (Step 5) of item 11.6.**

Step 1 Remove the Remote Sensor P.C.B..

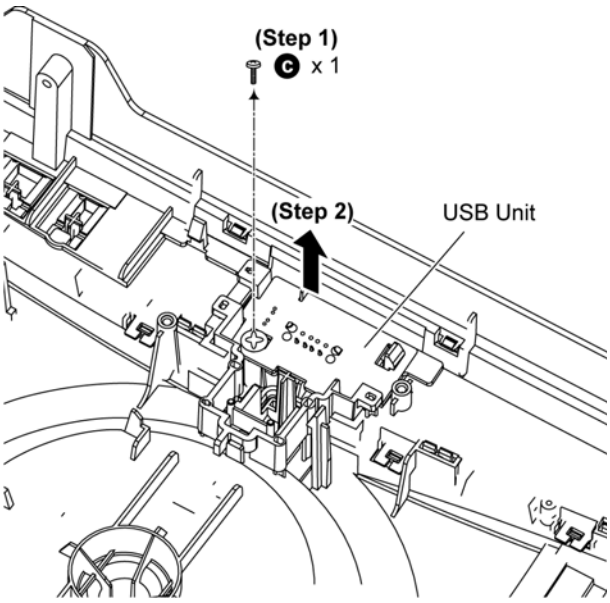
Caution: During assembling, ensure that Remote Sensor P.C.B. is properly inserted & fully connected to Panel P.C.B..



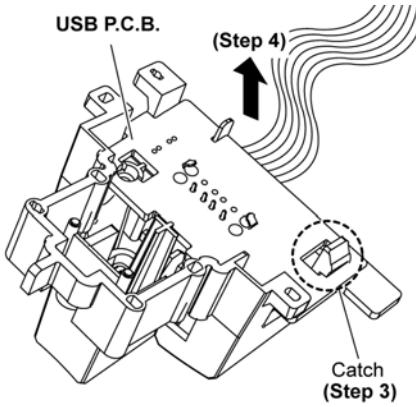
11.8. Disassembly of USB P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**
- **Refer to (Step1) to (Step5) of item 11.6.**

Step 1 Remove 1 screw.
Step 2 Remove the USB Unit.



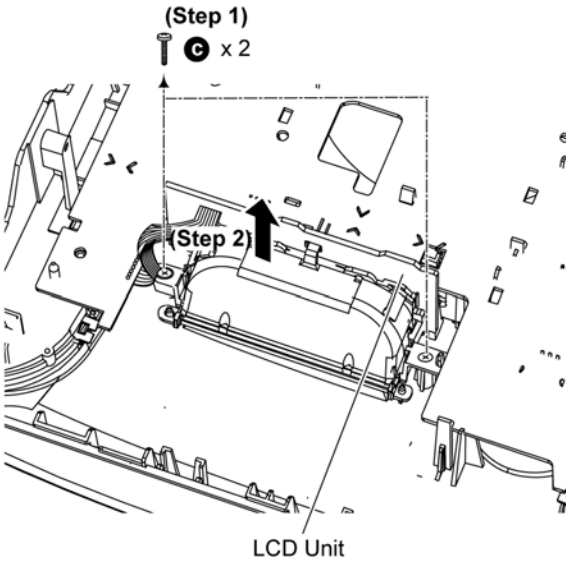
Step 3 Release 1 catch.
Step 4 Remove the USB P.C.B..



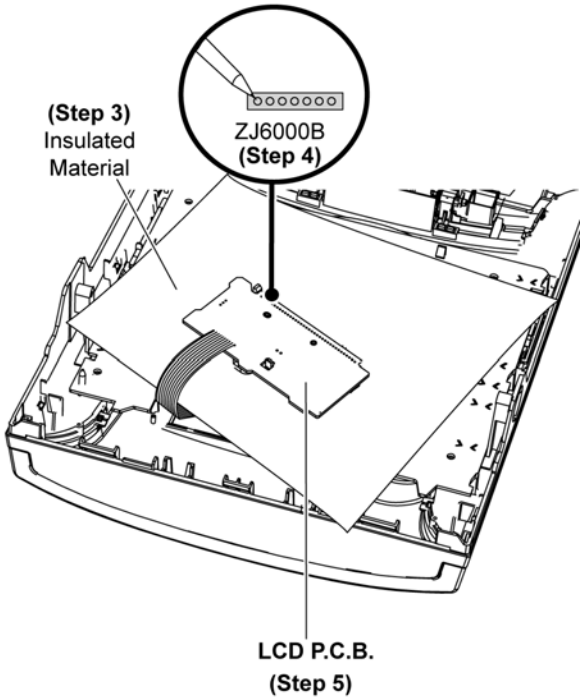
11.9. Disassembly of LCD P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

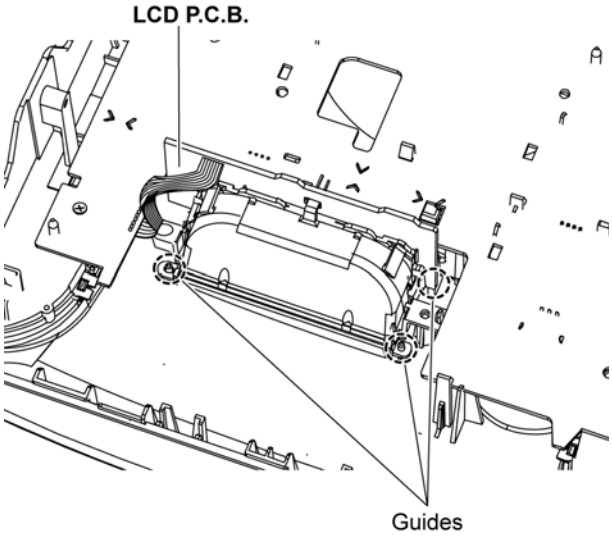
Step 1 Remove 2 screws.
Step 2 Lift up the LCD Unit.



Step 3 Place the LCD P.C.B. on an insulated material.
Step 4 Desolder 7 pins (ZJ6000B) on LCD P.C.B..
Step 5 Remove the LCD P.C.B..



Caution: During assembling, ensure that LCD Unit is properly located & seated onto the guides.

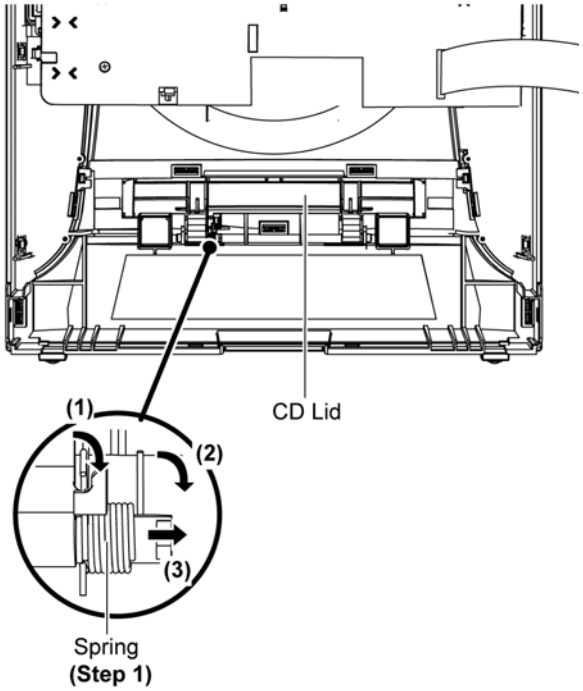


11.10. Disassembly of CD Lid

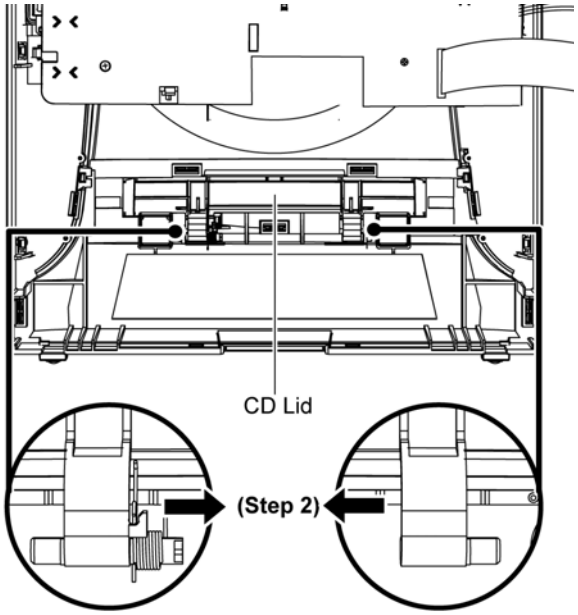
- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

Step 1 Remove the spring as arrow shown in order of sequence (1) to (3).

Caution: During assembling, ensure that the spring is assembly at correct position.



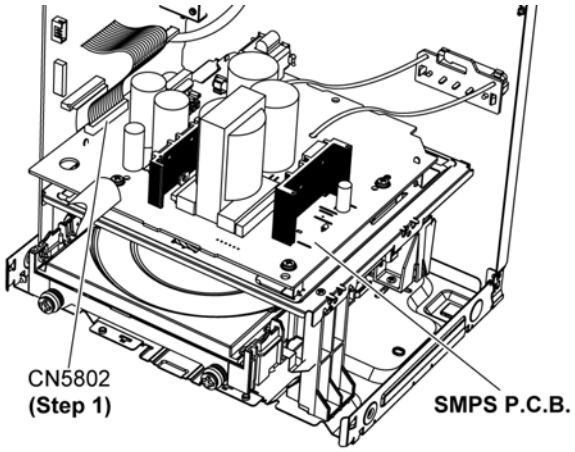
Step 2 Remove CD Lid as arrow shown.



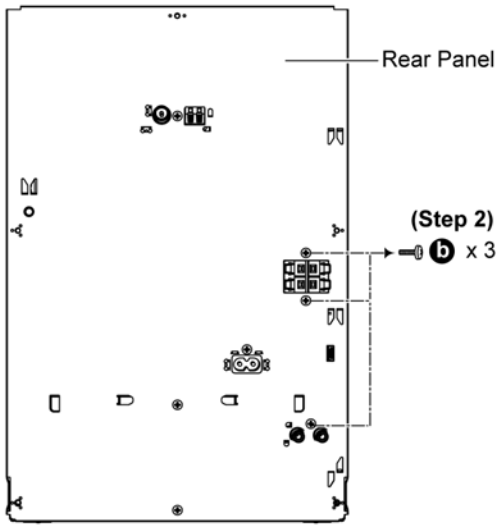
11.11. Disassembly of Main P.C.B.

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

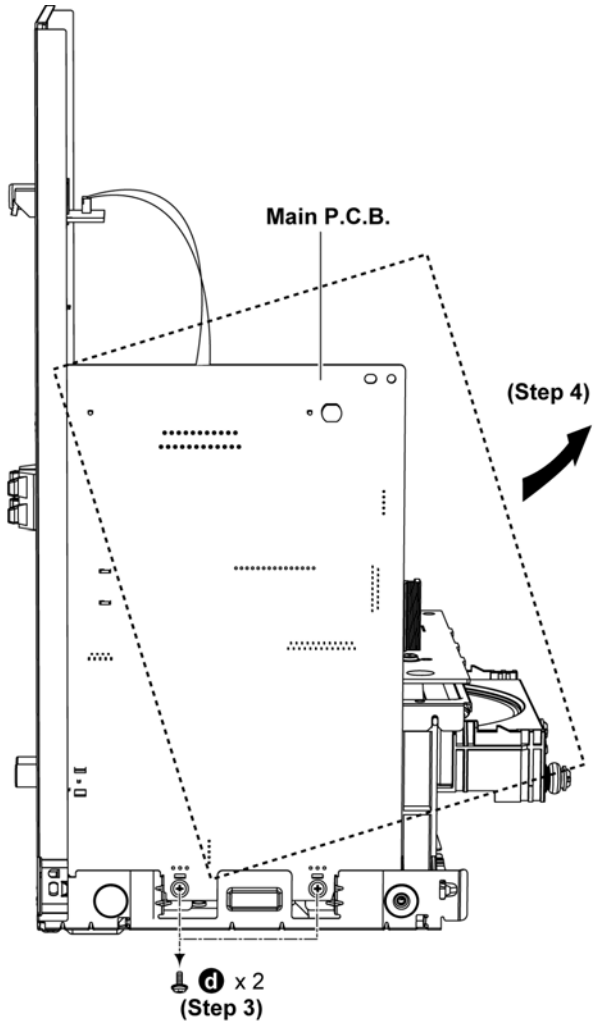
Step 1 Detach 15P Cable Wire at the connector (CN5802) on SMPS P.C.B..



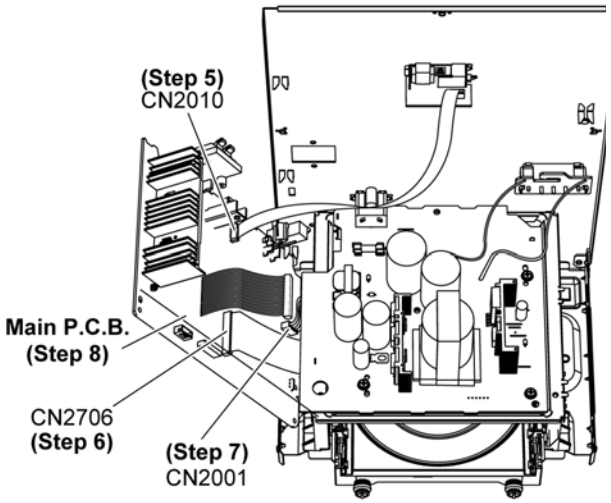
Step 2 Remove 3 screws.



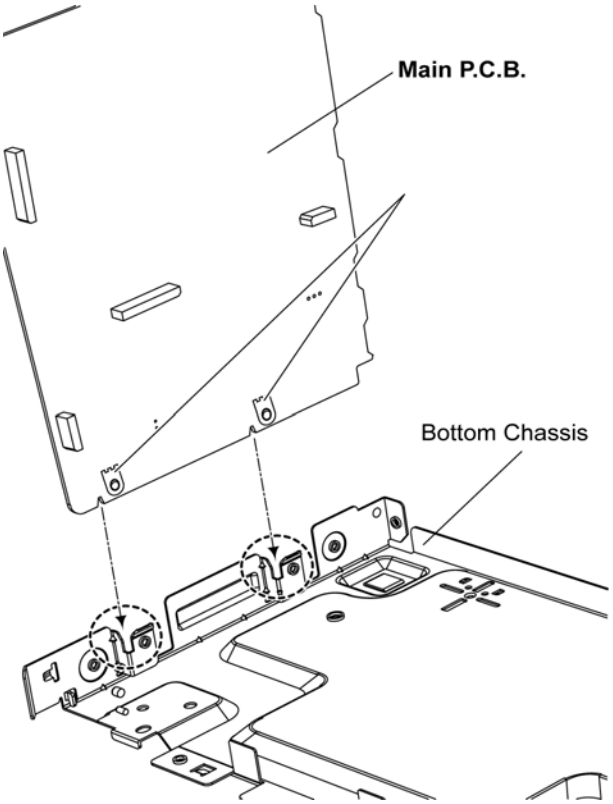
Step 3 Remove 2 screws.
Step 4 Detach Main P.C.B. from Rear Panel according to arrow shown.



Step 5 Detach 9P FFC at the connector (CN2010) on Main P.C.B..
Step 6 Detach 27P FFC at the connector (CN2706) on Main P.C.B..
Step 7 Detach 5P Wire (CN2001) in Main P.C.B..
Step 8 Remove Main P.C.B..



Caution: During assembling, ensure that earth plate is bended flat against the Main P.C.B. properly when inserted to locators.

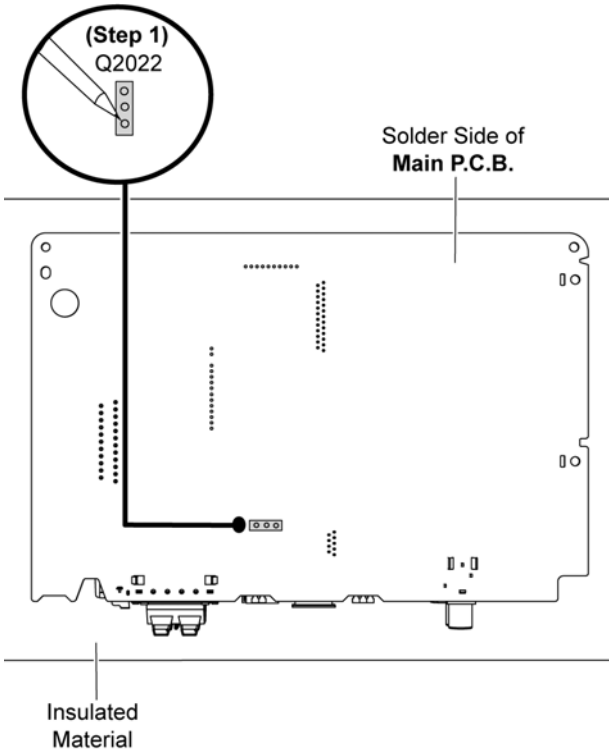


11.12. Replacement of Voltage Regulator Transistor (Q2022)

- **Refer to "Disassembly of Main P.C.B.".**

11.12.1. Disassembly of Voltage Regulator Transistor (Q2022)

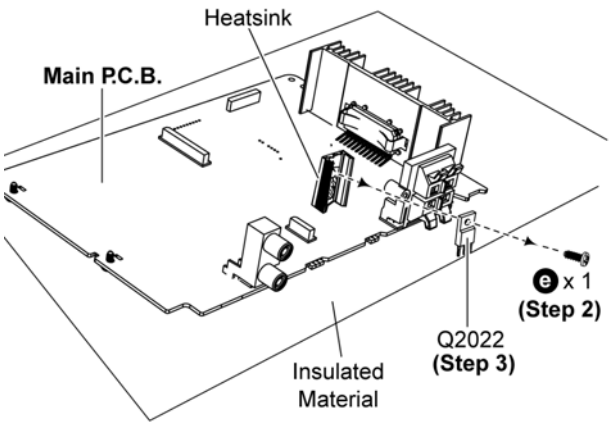
Step 1 Desolder pins of the Voltage Regulator Transistor (Q2022) on the solder side of Main P.C.B..



Step 2 Remove 1 screw.

Step 3 Remove the Voltage Regulator Transistor (Q2022) from the Main P.C.B..

Caution: Avoid touching the Heatsink due to its high temperature after prolong use. Touching it may lead to injuries.



11.12.2. Assembly of Voltage Regulator Transistor (Q2022)

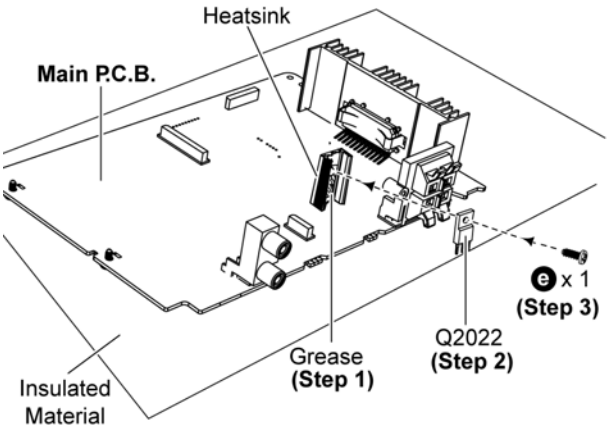
Step 1 Apply grease to the Heatsink.

Step 2 Fix the Voltage Regulator Transistor (Q2022) on Main P.C.B..

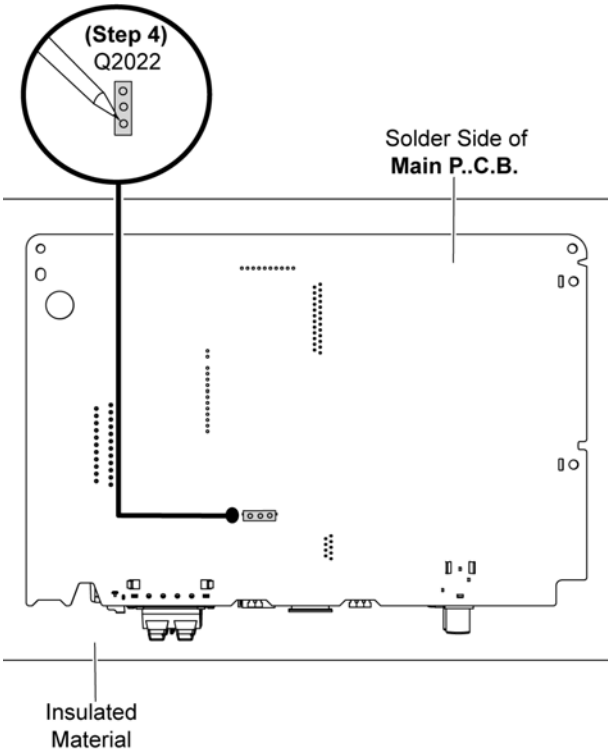
Caution: Ensure pins of the Voltage Regulator Transistor (Q2022) are properly seated on Main P.C.B..

Step 3 Screw the Voltage Regulator Transistor (Q2022) to the Heatsink.

Caution: Ensure the Voltage Regulator Transistor (Q2022) is tightly screwed to the Heatsink.



Step 4 Solder pins of the Voltage Regulator Transistor (Q2022) on the solder side of Main P.C.B..

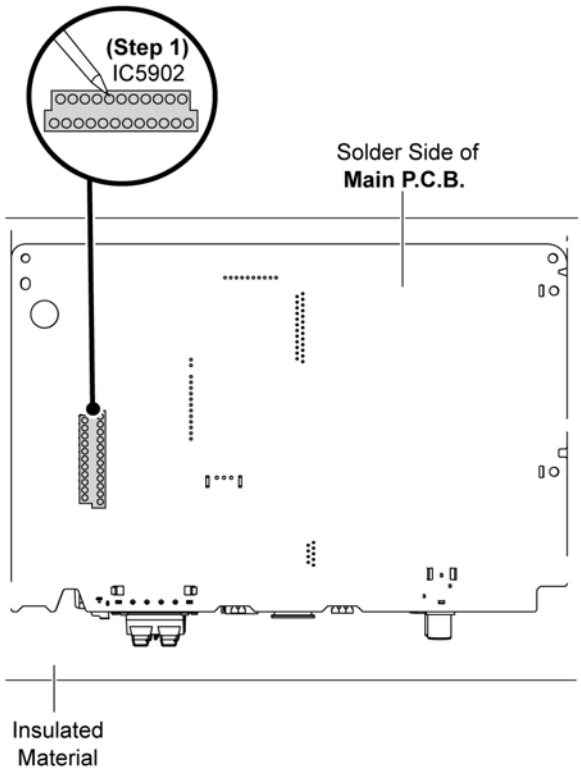


11.13. Replacement of Audio Digital Amp IC (IC5902)

- **Refer to "Disassembly of Main P.C.B.".**

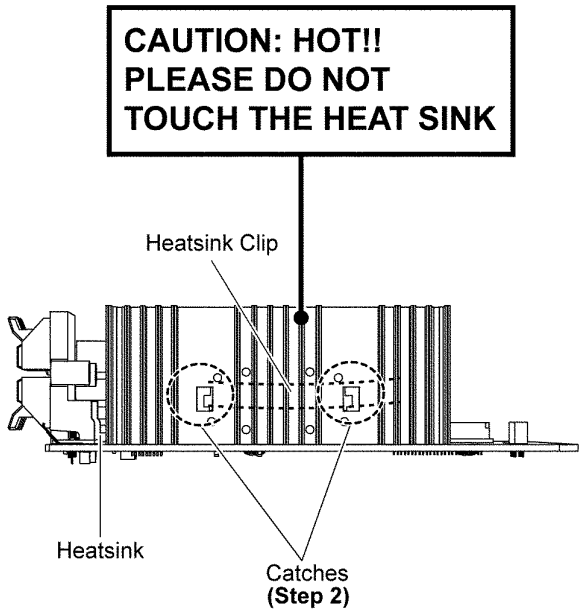
11.13.1. Disassembly of Audio Digital Amp IC (IC5902)

Step 1 Desolder pins of the Audio Digital Amp IC (IC5902) on the solder side of Main P.C.B..



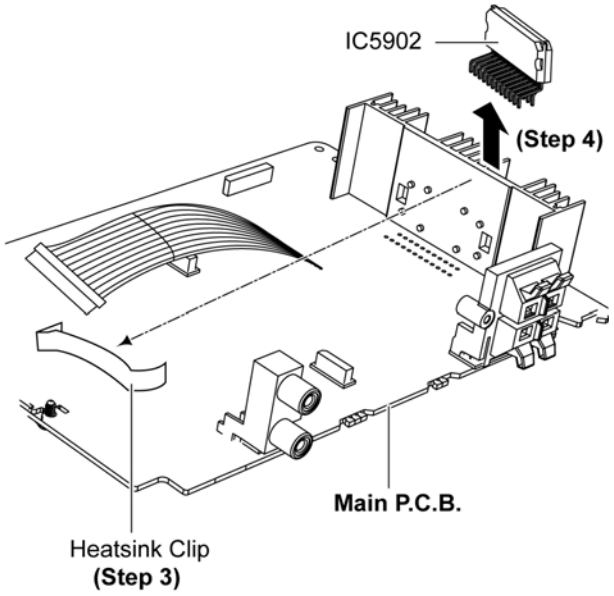
Step 2 Release 2 catches of Heatsink Clip.

Caution: During releasing of 2 catches, avoid touching the Heatsink, due to high temperature.



Step 3 Remove Heatsink Clip.

Step 4 Remove Audio Digital Amp IC (IC5902).



11.13.2. Assembly of Audio Digital Amp IC (IC5902)

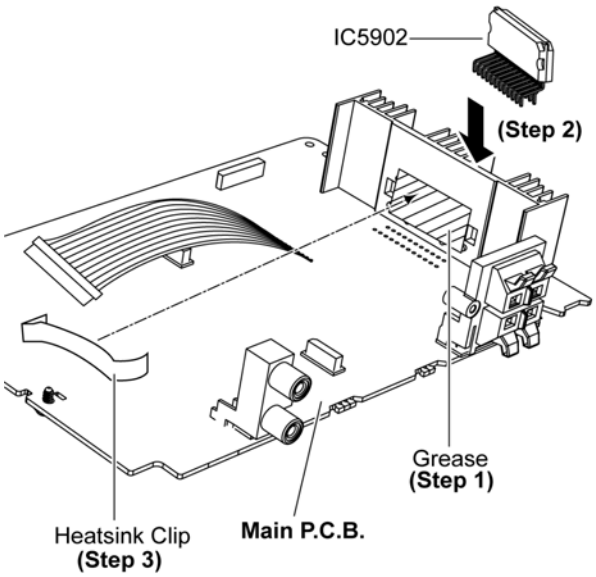
Step 1 Apply grease to the Heatsink.

Step 2 Fix the Audio Digital Amp IC (IC5902) on Main P.C.B.

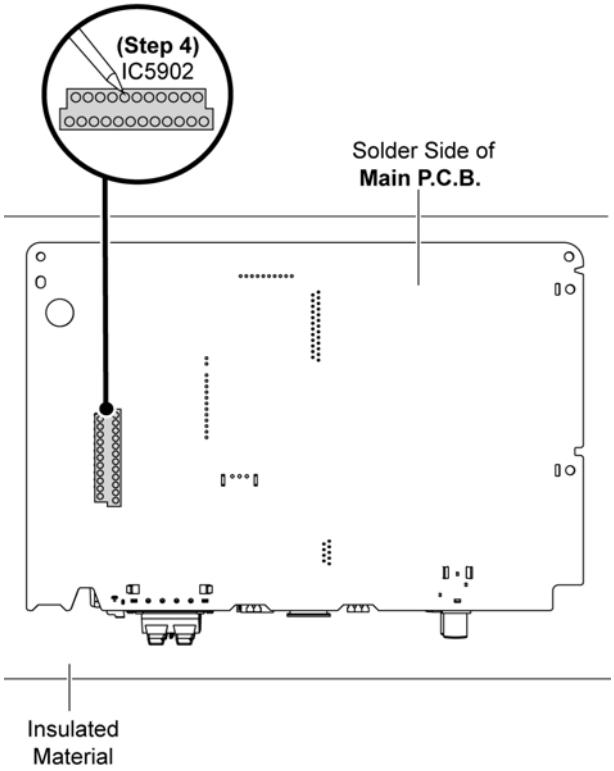
Caution: Ensure pins of the Audio Digital Amp IC (IC5902) are properly seated on Main P.C.B.

Step 3 Fix Heatsink Clip to the Heatsink.

Caution: During assembling, ensure that Heatsink Clip is catched onto Heatsink properly.



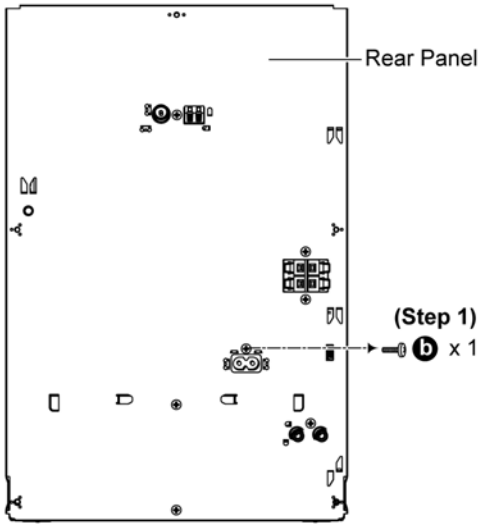
Step 4 Solder pins of the Audio Digital Amp IC (IC5902) on the solder side of Main P.C.B..



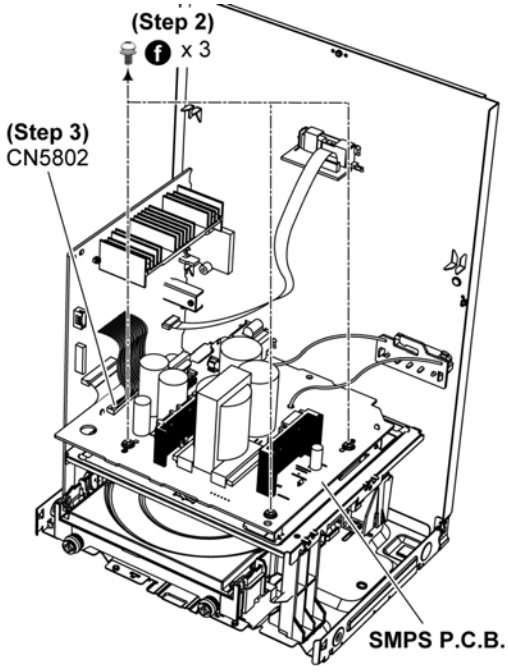
11.14. Disassembly of SMPS P.C.B.

- **Refer to "Disassembly of Top Cabinet.".**
- **Refer to "Disassembly of Front Panel Unit".**

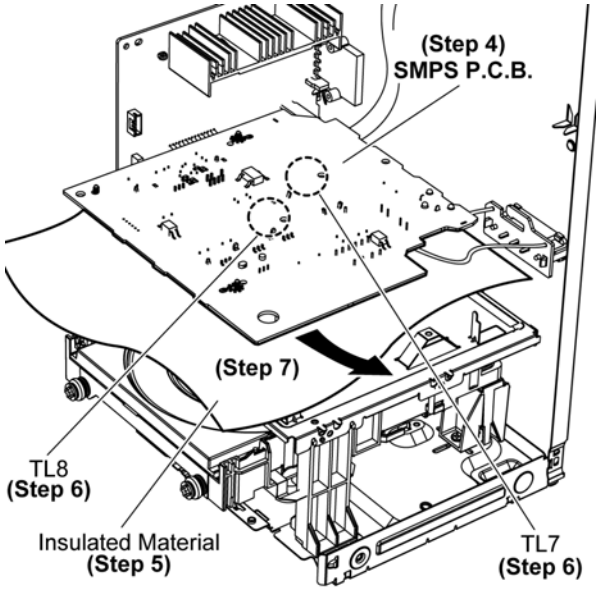
Step 1 Remove 1 screw.



Step 2 Remove 3 screws.
Step 3 Detach 15P Cable Wire at the connector (CN5802) on SMPS P.C.B..



Step 4 Flip the SMPS P.C.B. and position it according to diagram shown.
Step 5 Place SMPS P.C.B. on an insulated material.
Step 6 Desolder 2 Wire pins, TL7 (Black), TL8 (Red).
Step 7 Remove SMPS P.C.B..

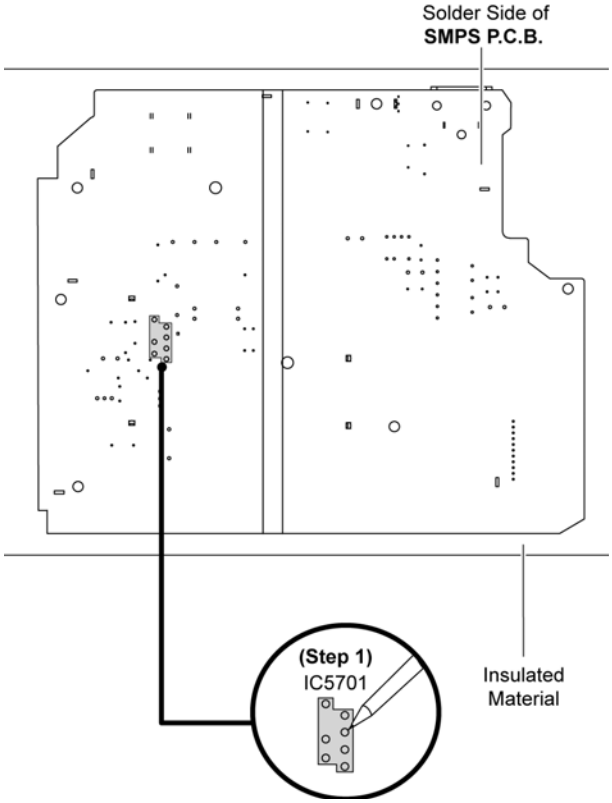


11.15. Replacement of Switching Regulator IC (IC5701)

- **Refer to "Disassembly of SMPS P.C.B.".**

11.15.1. Disassembly of Switching Regulator IC (IC5701)

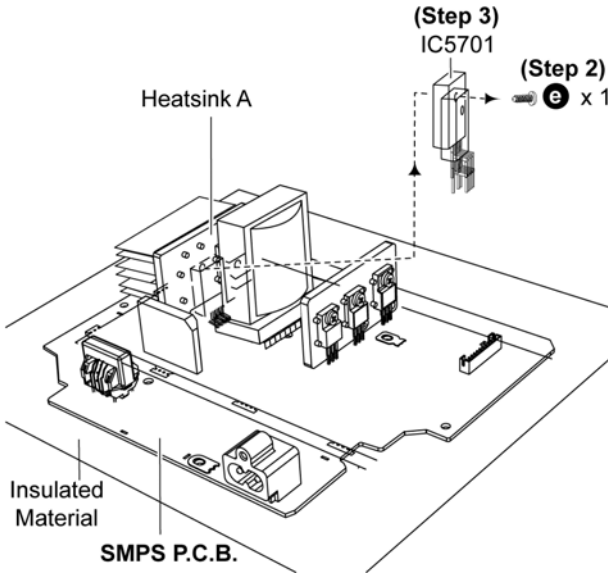
Step 1 Desolder pins of the Switching Regulator IC (IC5701) on the solder side of SMPS P.C.B..



Step 2 Remove 1 screw.

Step 3 Remove the Switching Regulator IC (IC5701).

Caution: Avoid touching the Heatsink A due to its high temperature after prolonged use. Touching it may lead to injuries.



11.15.2. Assembly of Switching Regulator IC (IC5701)

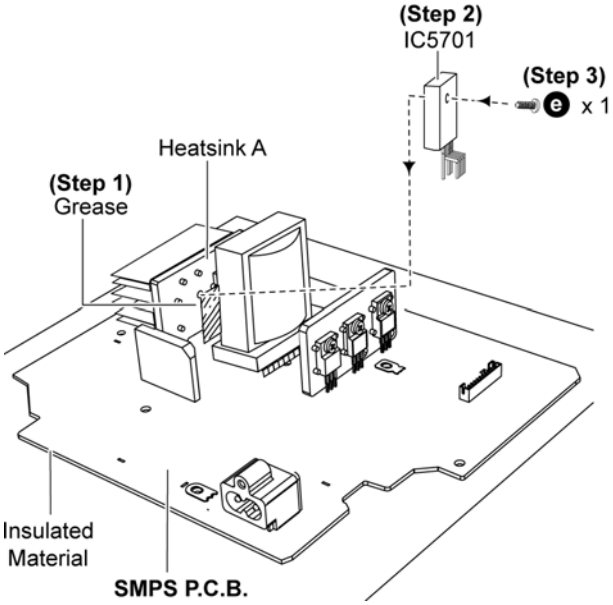
Step 1 Apply grease to the Heatsink A.

Step 2 Fix the Switching Regulator IC (IC5701) to the SMPS P.C.B..

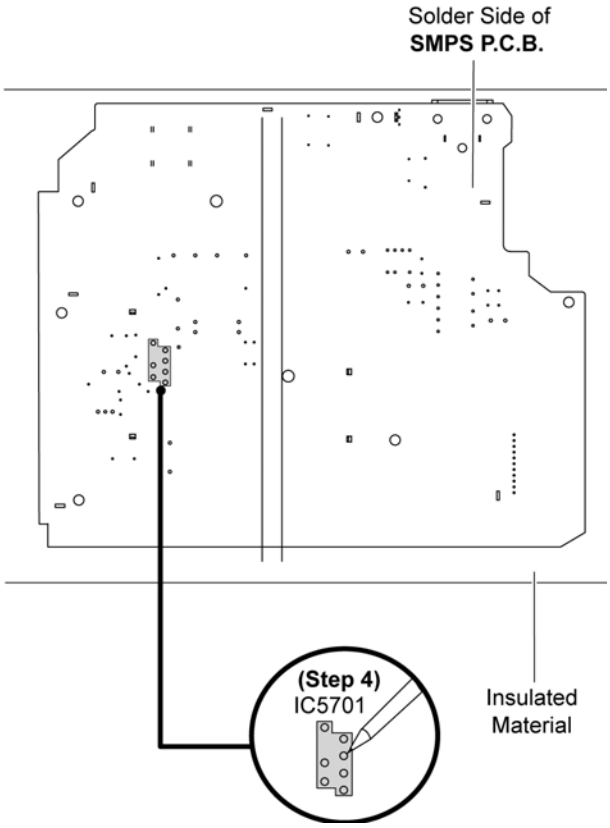
Caution: Ensure pins of the Switching Regulator IC (IC5701) are properly inserted and soldered on SMPS P.C.B..

Step 3 Screw the Switching Regulator IC (IC5701) to the Heatsink A.

Caution: Ensure the Switching Regulator IC (IC5701) is tightly screwed to the Heatsink A.



Step 4 Solder pins of the Switching Regulator IC (IC5701) on the solder side of SMPS P.C.B..

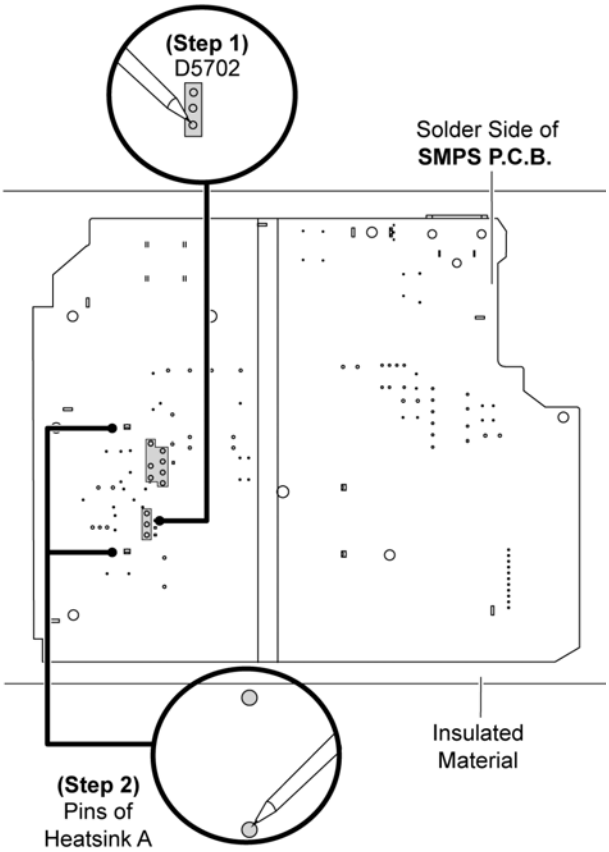


11.16. Replacement of Rectifier Diode (D5702)

- **Refer to "Disassembly of SMPS P.C.B.".**

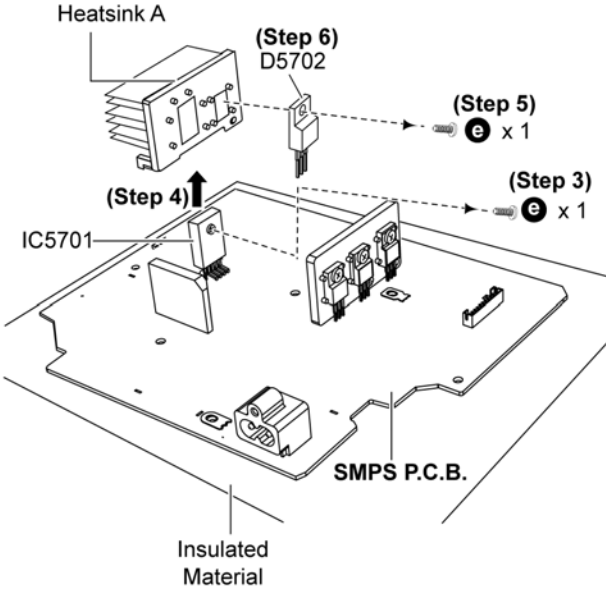
11.16.1. Disassembly of Rectifier Diode (D5702)

Step 1 Desolder pins of the Rectifier Diode (D5702) on the solder side of SMPS P.C.B.
Step 2 Desolder pins of the Heatsink A.



Step 3 Remove 1 screw at Switching Regulator IC (IC5701).
Step 4 Remove the Heatsink A with Rectifier Diode (D5702).
Step 5 Remove 1 screw.
Step 6 Remove the Rectifier Diode (D5702) from the Heatsink A.

Caution: Avoid touching the Heatsink A due to its high temperature after prolong use. Touching it may lead to injuries.



11.16.2. Assembly of Rectifier Diode (D5702)

Step 1 Apply grease to the Heatsink A.

Step 2 Screw the Rectifier Diode (D5702) to the Heatsink A.

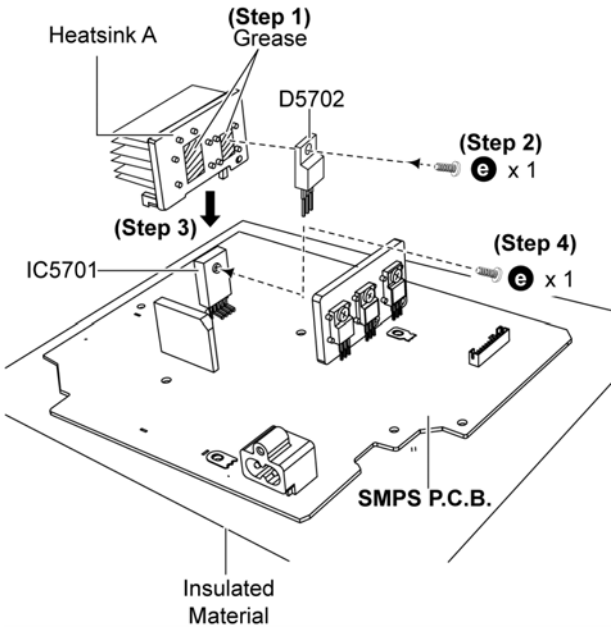
Caution: Ensure the Rectifier Diode (D5702) is tightly screwed to the Heatsink A.

Step 3 Fix the Heatsink A with Rectifier Diode (D5702) on SMPS P.C.B. in the direction of arrow.

Caution: Ensure the Heatsink A with Rectifier Diode (D5702) are properly seated on SMPS P.C.B.

Step 4 Screw the Switching Regulator IC (IC5701) to the Heatsink A.

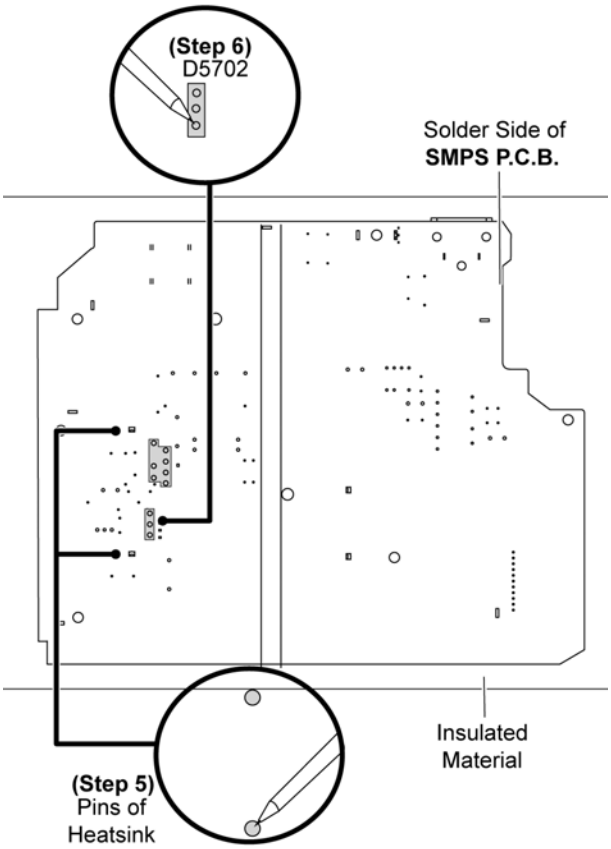
Caution: Ensure that Switching Regulator IC (IC5701) is tightly screwed to the Heatsink A.



Step 5 Solder pins of the Rectifier Diode (D5702) on the solder side of SMPS P.C.B..

Step 6 Solder pins of the Heatsink A on the solder side of SMPS P.C.B..

Caution: Ensure pins of the Rectifier Diode (D5702) are properly seated and soldered on SMPS P.C.B..

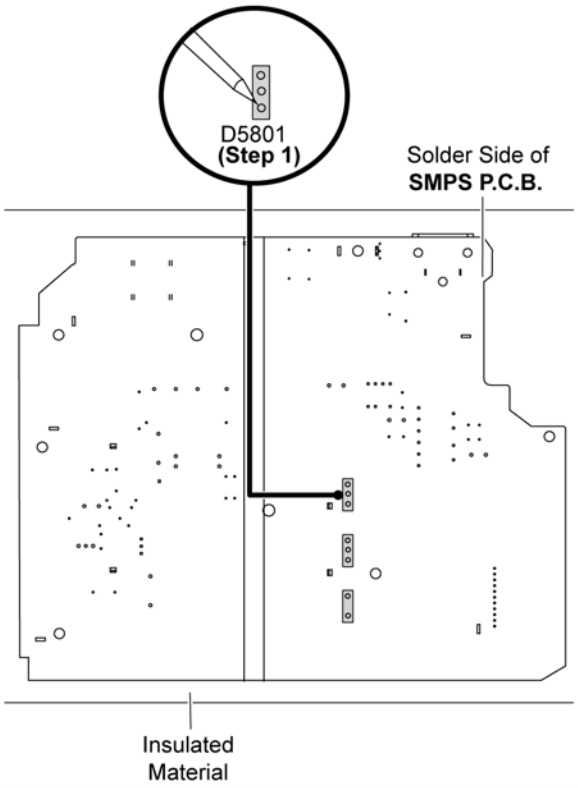


11.17. Replacement of Rectifier Diode (D5801)

- **Refer to "Disassembly of SMPS P.C.B.".**

11.17.1. Disassembly of Rectifier Diode (D5801)

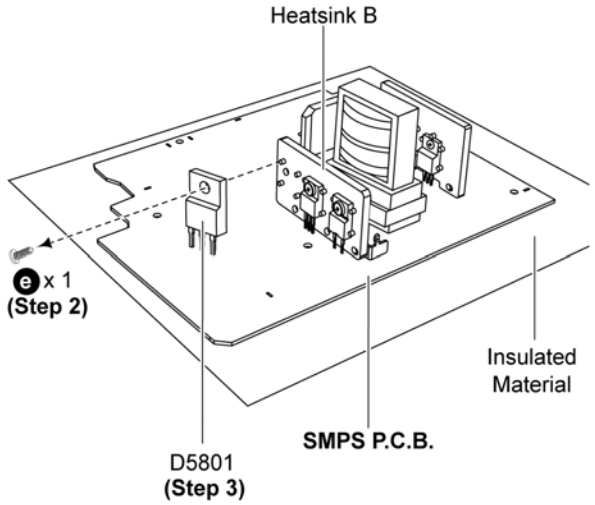
Step 1 Desolder pins of the Rectifier Diode (D5801) on the solder side of SMPS P.C.B.



Step 2 Remove 1 screw at Rectifier Diode (D5801).

Step 3 Remove the Rectifier Diode (D5801) from the SMPS P.C.B..

Caution: Avoid touching the Heatsink B due to its high temperature after prolonged use. Touching it may lead to injuries.



11.17.2. Assembly of Rectifier Diode (D5801)

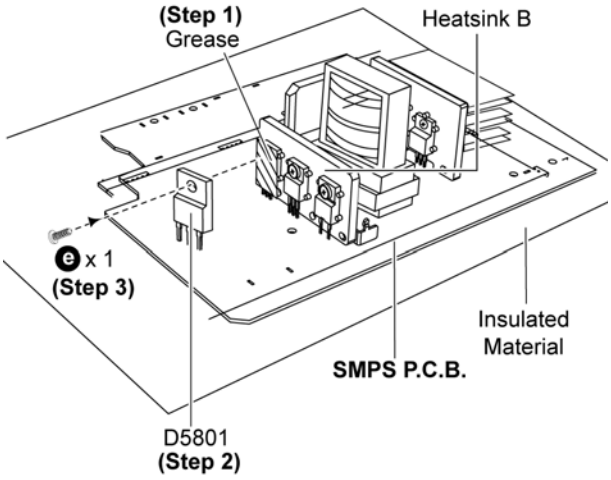
Step 1 Apply grease to the Heatsink B.

Step 2 Fix the Rectifier Diode (D5801) on SMPS P.C.B.

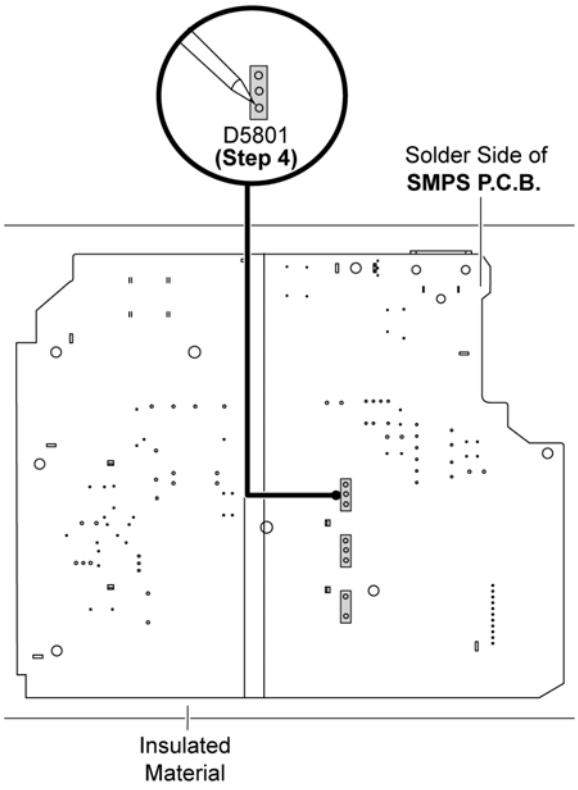
Caution: Ensure pins of the Rectifier Diode (D5801) is properly inserted on SMPS P.C.B.

Step 3 Screw the Rectifier Diode (D5801) to the Heatsink B.

Caution: Ensure the Rectifier Diode (D5801) is tightly screwed to the Heatsink B.



Step 4 Solder pins of the Rectifier Diode (D5801) on the solder side of SMPS P.C.B..

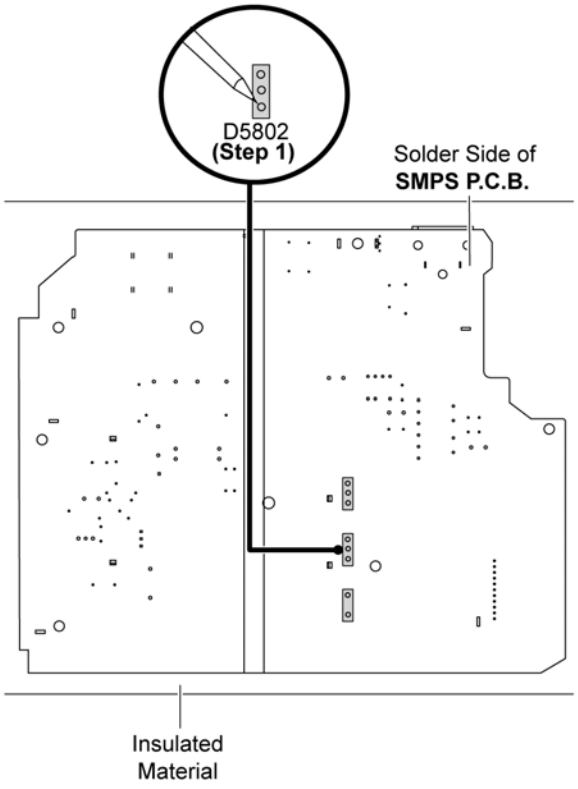


11.18. Replacement of Rectifier Diode (D5802)

- **Refer to "Disassembly of SMPS P.C.B.".**

11.18.1. Disassembly of Rectifier Diode (D5802)

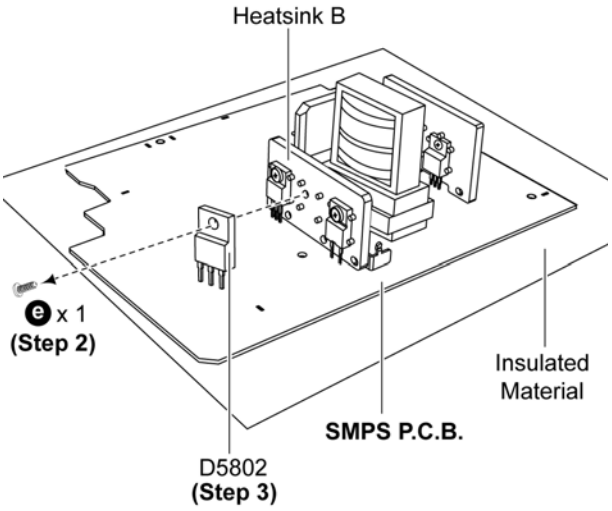
Step 1 Desolder pins of the Rectifier Diode (D5802) on the solder side of SMPS P.C.B.



Step 2 Remove 1 screw at Rectifier Diode (D5802).

Step 3 Remove the Rectifier Diode (D5802) from SMPS P.C.B..

Caution: Avoid touching the Heatsink B due to its high temperature after prolong use. Touching it may lead to injuries.



11.18.2. Assembly of Rectifier Diode (D5802)

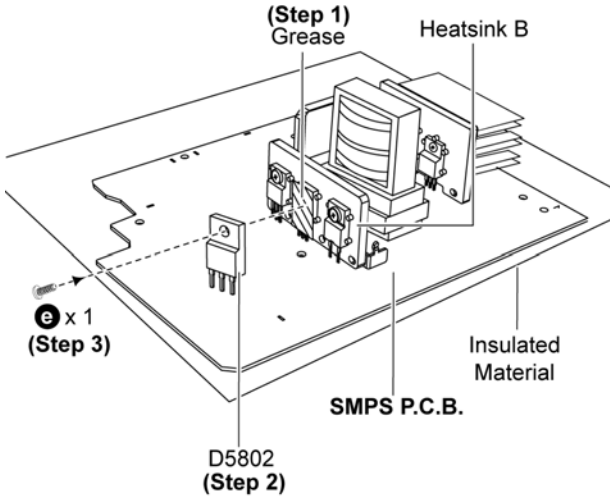
Step 1 Apply grease to the Heatsink B.

Step 2 Fix the Rectifier Diode (D5802) on SMPS P.C.B..

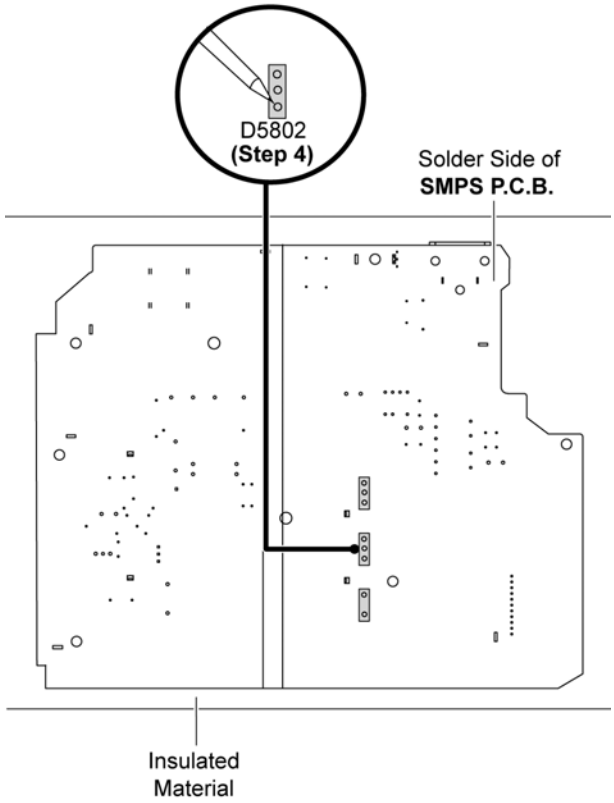
Caution: Ensure pins of the Rectifier Diode (D5802) is properly inserted on SMPS P.C.B.

Step 3 Screw the Rectifier Diode (D5802) to the Heatsink B.

Caution: Ensure the Rectifier Diode (D5802) is tightly screwed to the Heatsink B.



Step 4 Solder pins of the Rectifier Diode (D5802) on the solder side of SMPS P.C.B..

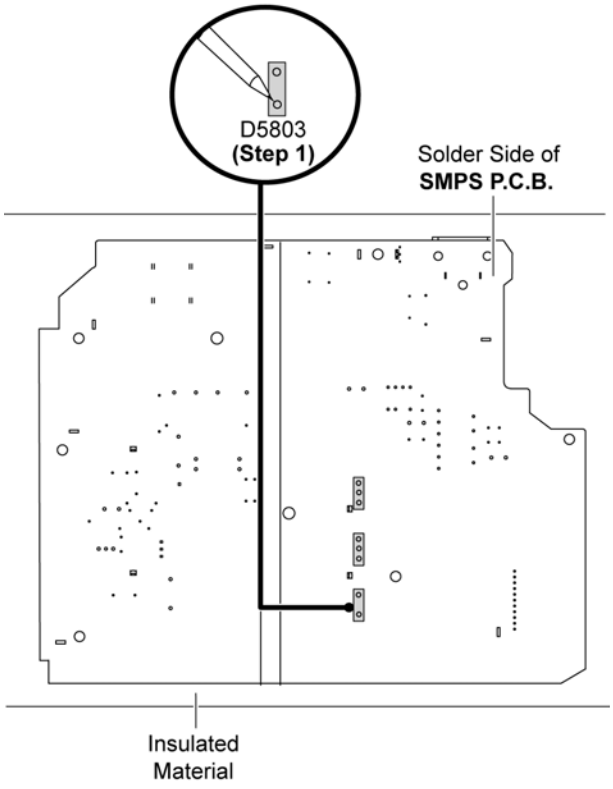


11.19. Replacement of Regulator Diode (D5803)

- **Refer to "Disassembly of SMPS P.C.B.".**

11.19.1. Disassembly of Rectifier Diode (D5803)

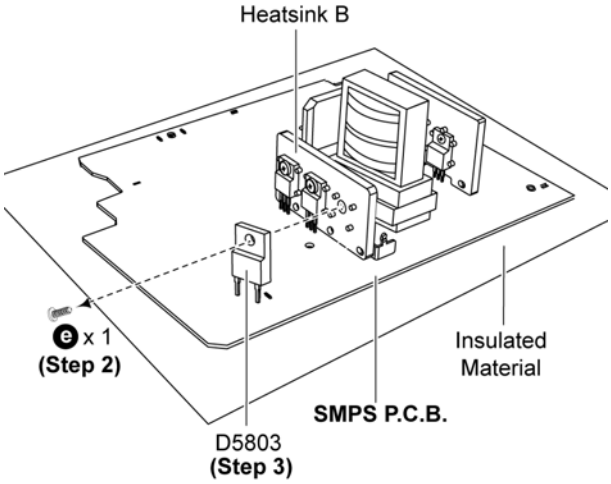
Step 1 Desolder pins of the Rectifier Diode (D5803) on the solder side of SMPS P.C.B.



Step 2 Remove 1 screw at Rectifier Diode (D5803).

Step 3 Remove the Rectifier Diode (D5803) from the SMPS P.C.B..

Caution: Avoid touching the Heatsink B due to its high temperature after prolonged use. Touching it may lead to injuries.



11.19.2. Assembly of Rectifier Diode (D5803)

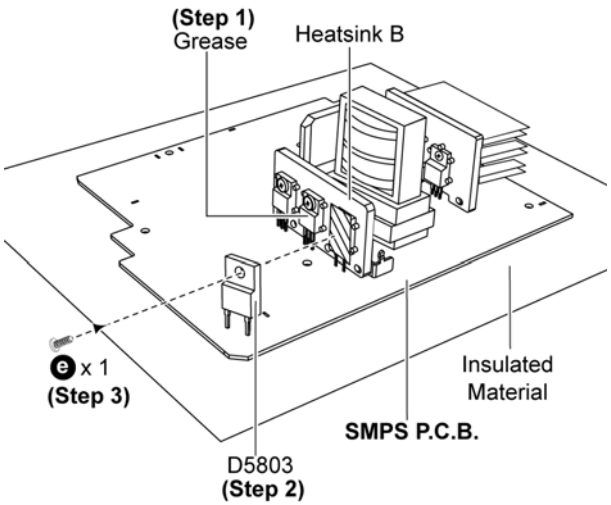
Step 1 Apply grease to the Heatsink B.

Step 2 Fix Rectifier Diode (D5803) on SMPS P.C.B.

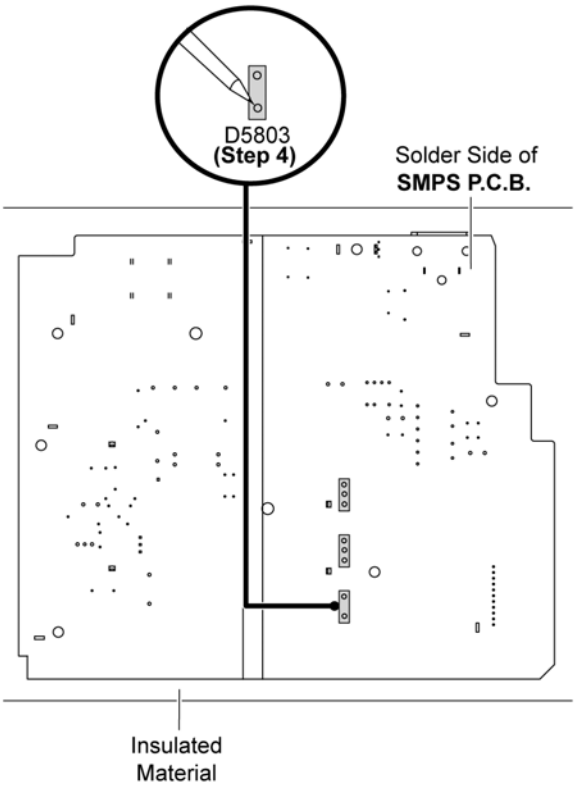
Caution: Ensure pins of the Rectifier Diode (D5803) are properly inserted on SMPS P.C.B.

Step 3 Screw the Rectifier diode (D5803) to the Heatsink B.

Caution: Ensure the Rectifier Diode (D5803) is tightly screwed to the Heatsink B.



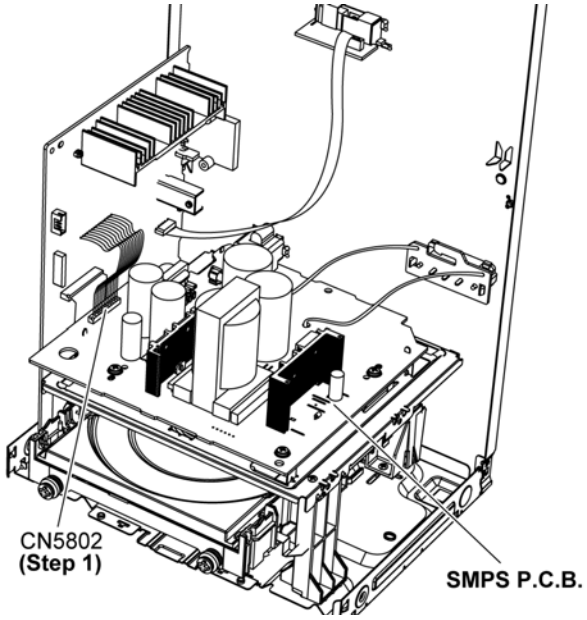
Step 4 Solder pins of the Rectifier Diode (D5803) on the solder side of SMPS P.C.B.



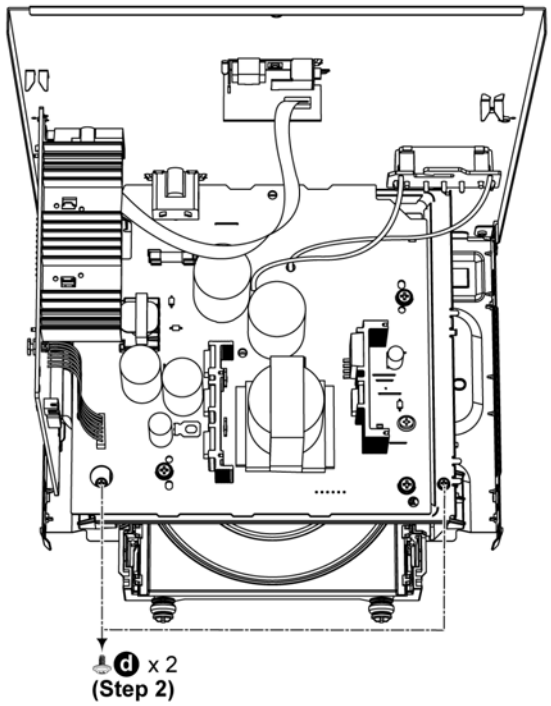
11.20. Disassembly of CD Mechanism Unit (BRS1C)

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

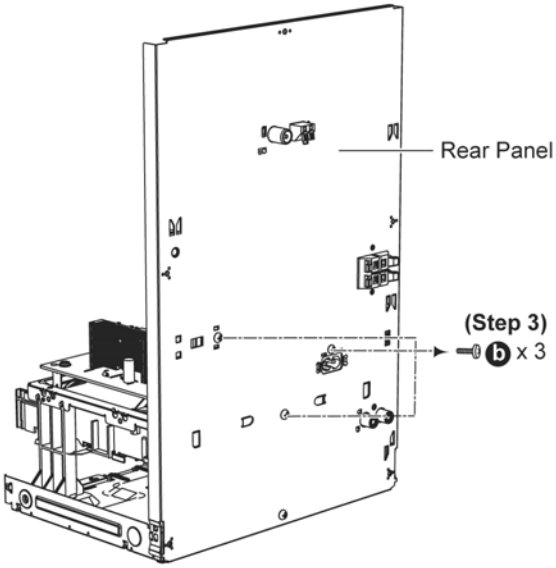
Step 1 Detach 15P Cable Wire at the connector (CN5802) on SMPS P.C.B..



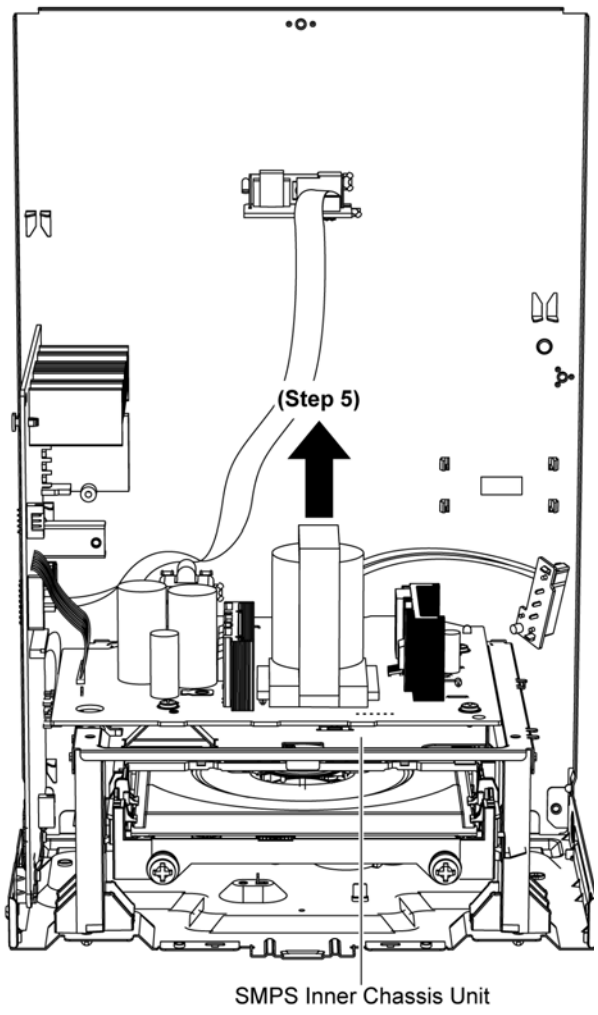
Step 2 Remove 2 screws.



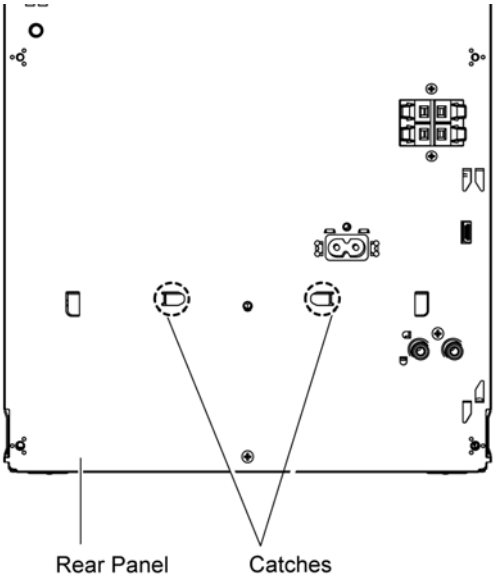
Step 3 Remove 3 screws.



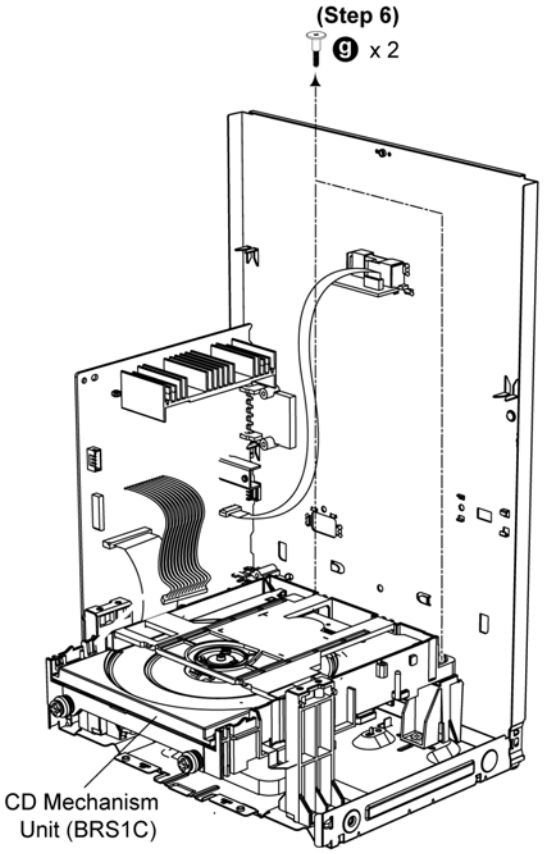
Step 5 Lift up and remove SMPS Inner Chassis Unit.



Caution: During assembling, ensure that SMPS Inner Chassis is catched onto Rear Panel properly.



Step 6 Remove 2 screws.

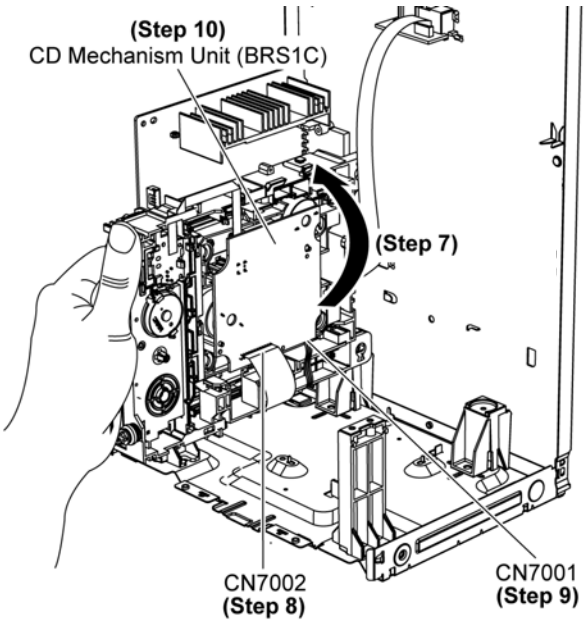


Step 7 Lift up & upset the CD Mechanism Unit (BRS1C) as shown.

Step 8 Detach 27P FFC at the connector (CN7002) on CD Servo P.C.B..

Step 9 Detach 5P Wire at the connector (CN7001) on CD Servo P.C.B..

Step 10 Remove CD Mechanism Unit (BRS1C).

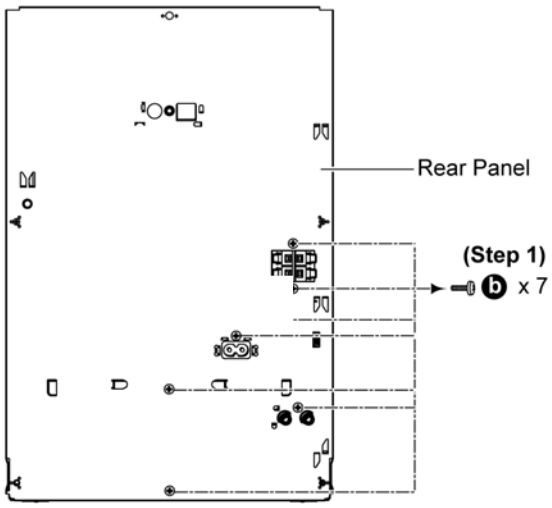


11.21. Disassembly of Rear Panel

- **Refer to “Disassembly of Top Cabinet”.**
- **Refer to “Disassembly of Tuner P.C.B.”.**

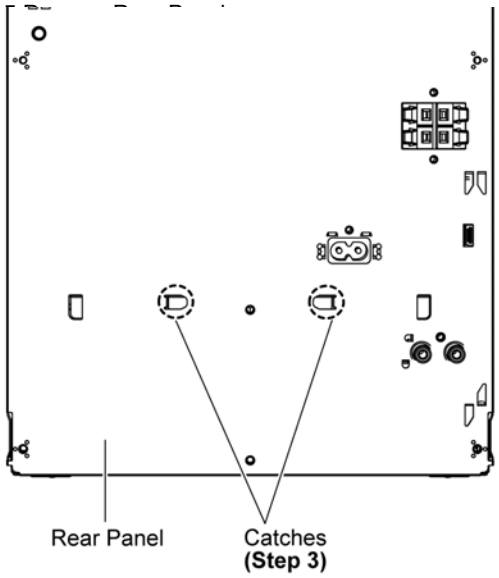
Step 1 Remove 6 screws.

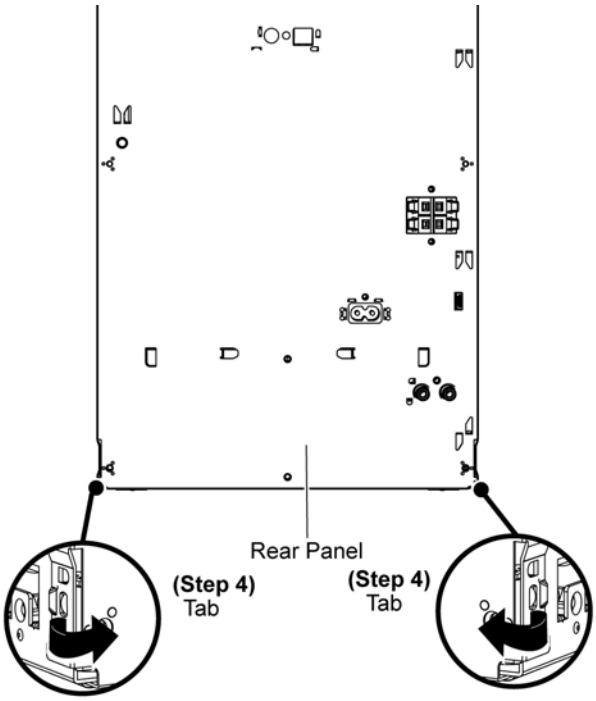
.



Step 4 Release 2 tabs.

S





12 Replacement of Traverse Unit

12.1. Disassembly of Traverse Unit

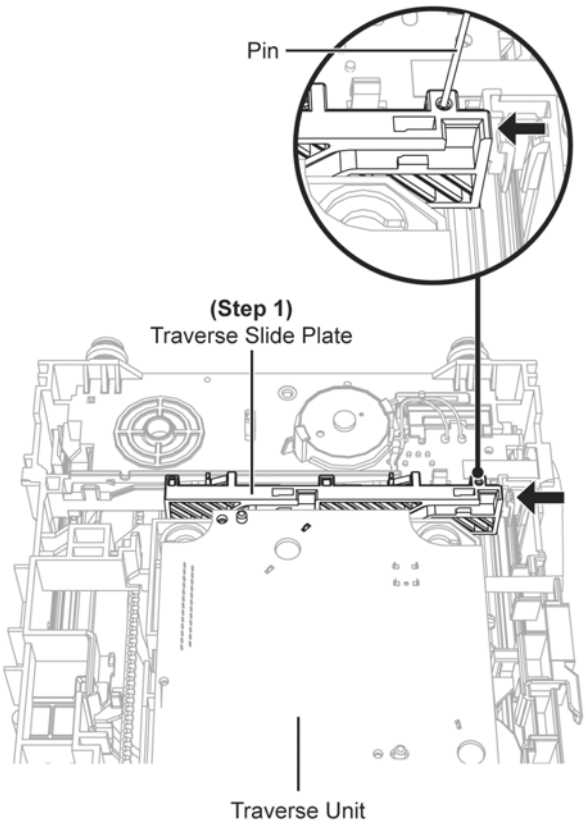
- **Refer to "Disassembly of CD Mechanism Unit (BRS1C)".**

Caution: Refer to "2.4 Handling Precaution for Traverse Unit" to prevent static damage to the Optical Pickup Unit.

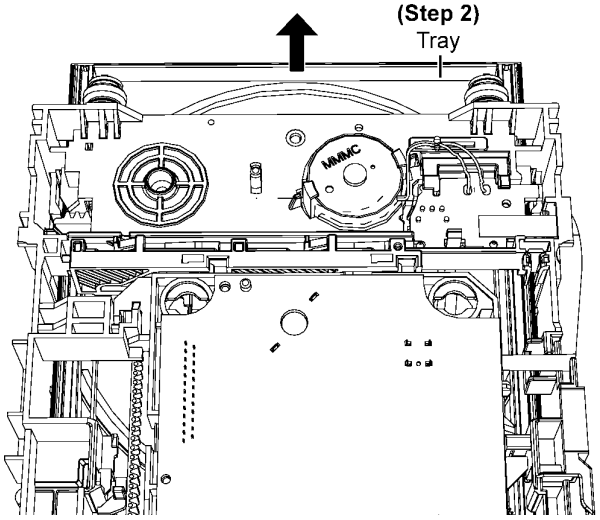
Note:

1. When the optical pickup unit is defective, the overall traverse unit needs replacement.
2. Please note that appropriate actions need to be taken to prevent static damage.
3. Ensure that the circuit is open before assembly BRS1 to the main set.

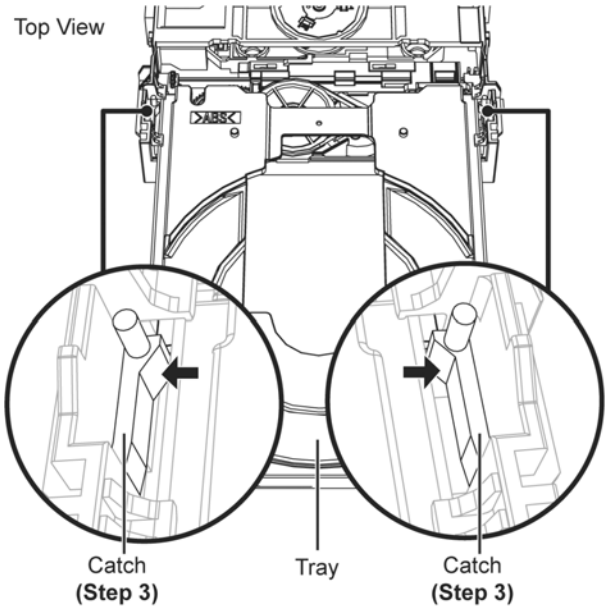
Step 1: Use a pin to slide the Traverse Slide Plate until it come to a stop.



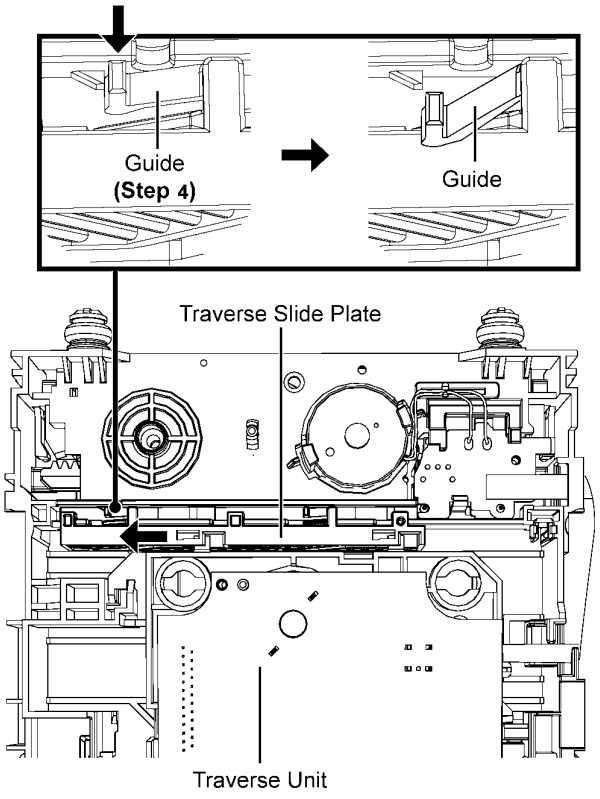
Step 2: Slide the tray out fully.



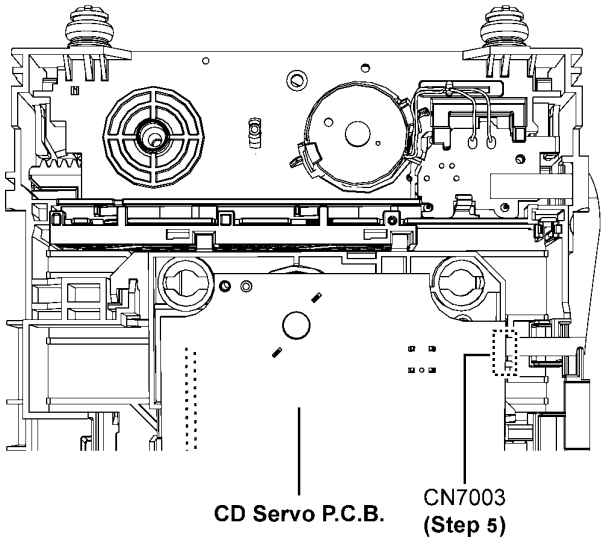
Step 3: Release the catches & remove the tray.



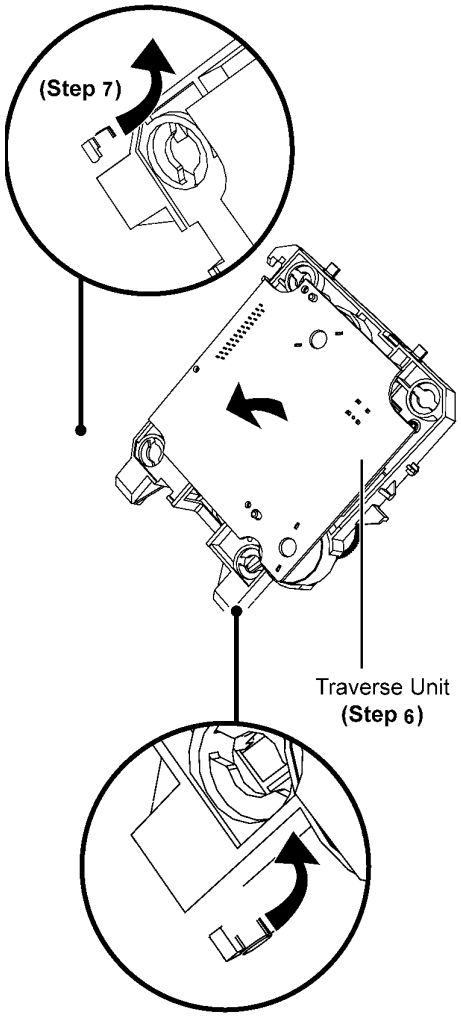
Step 4: Release the guide as shown & slide the Traverse Slide Plate to the end.



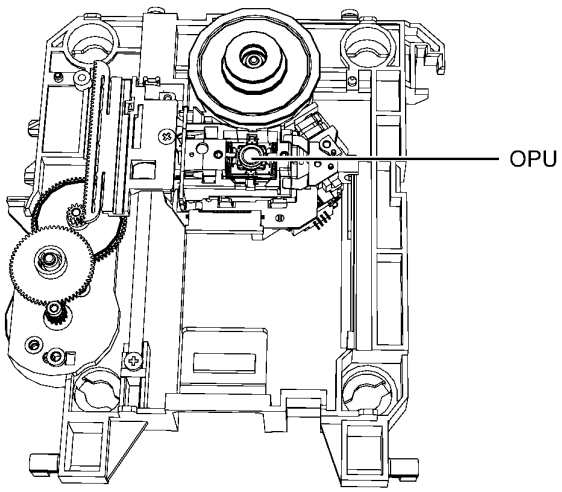
Step 5: Detach 5P FFC at the connector (CN7003) on CD Servo P.C.B..



Step 6: Lift the Traverse Unit by approximately 45°.
Step 7: Slide out the traverse unit as arrow shown.

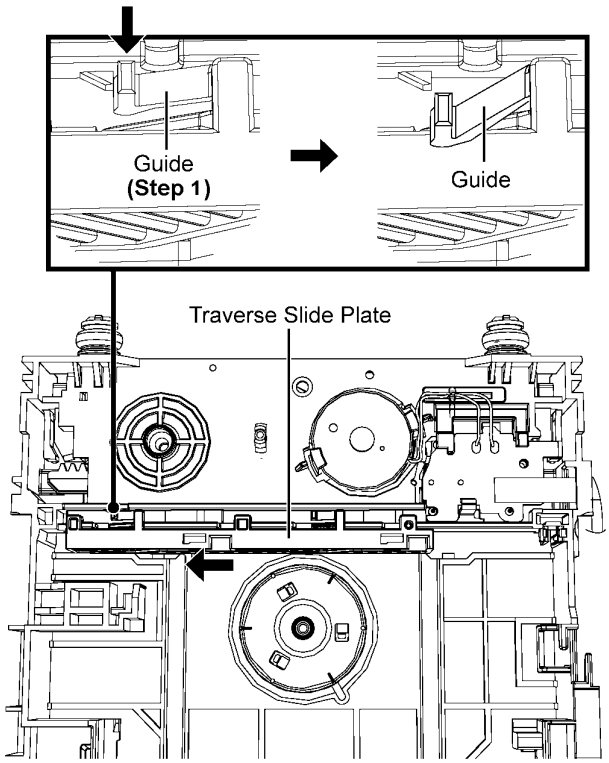


Caution: Avoid touching the surface of the Optical Pickup Unit.

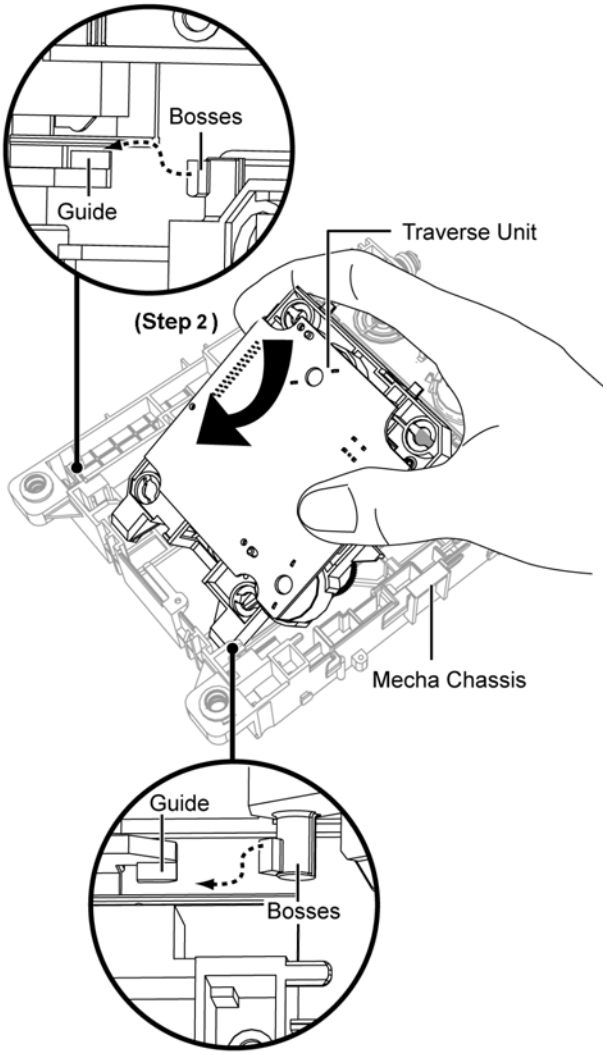


12.2. Assembly of Traverse Unit

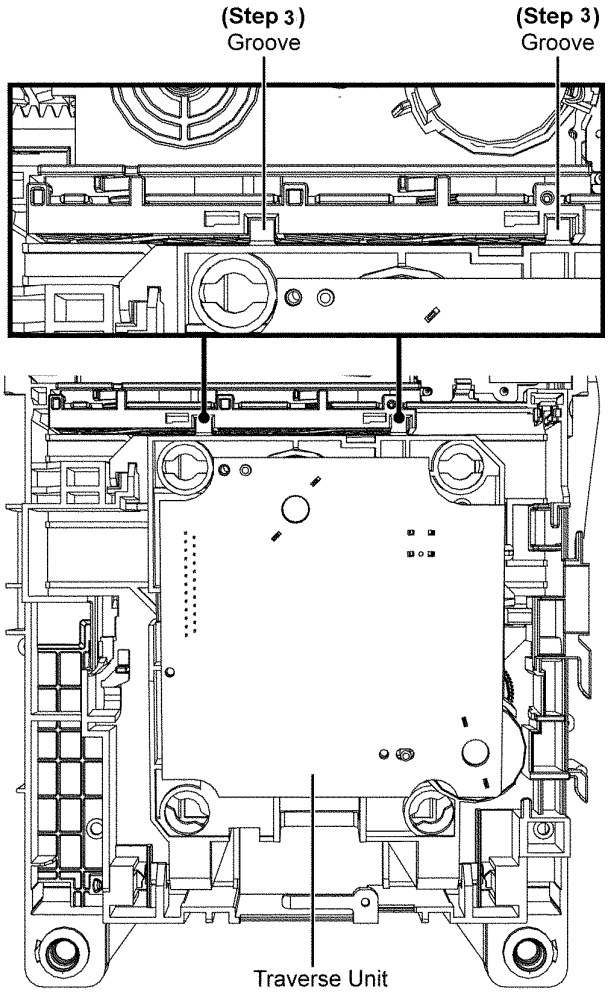
Step 1: Release the guide as shown & slide the Traverse Slide Plate to the end.



Step 2: Slot the Traverse Unit at approximately 45° into the mecha chassis as arrow shown.

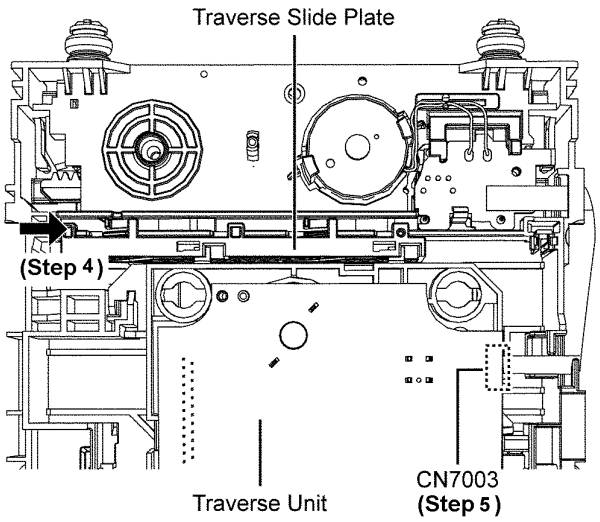


Step 3: Ensure the Traverse Unit seated properly onto the Groove.

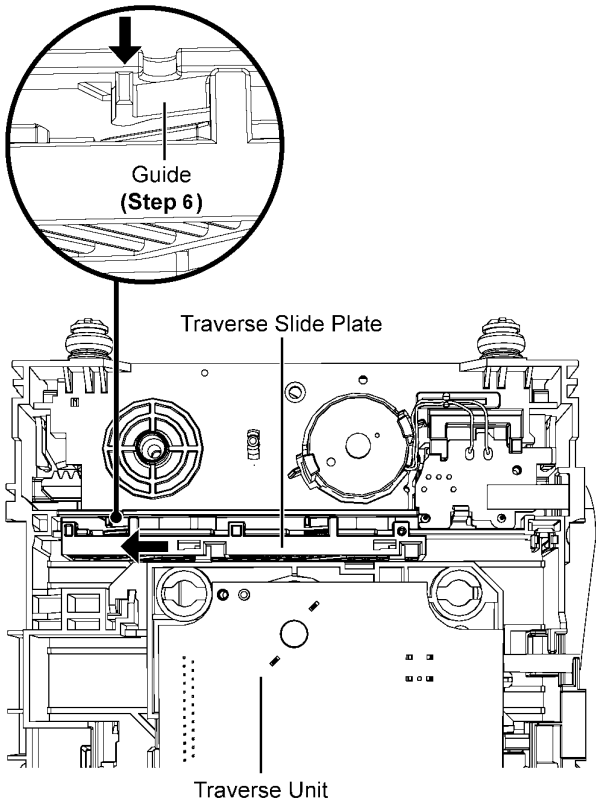


Step 4: Slide Traverse Slide Plate to lock the Traverse Unit as shown.

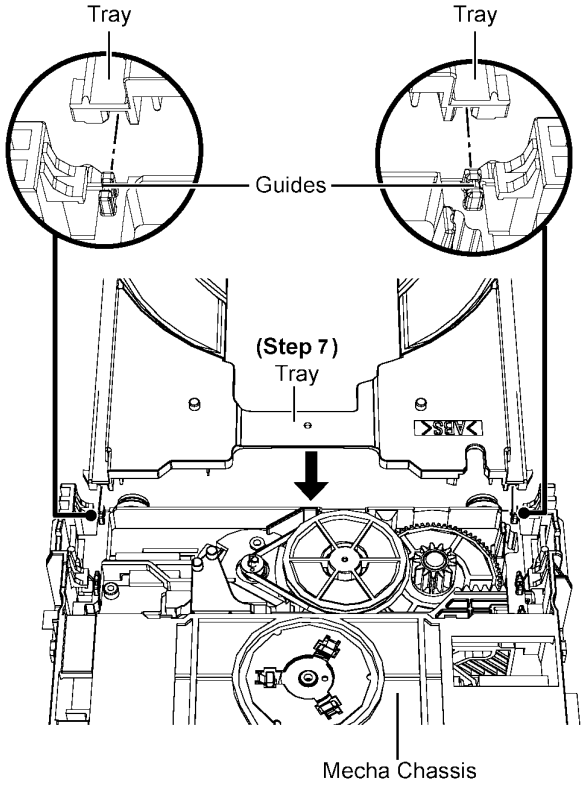
Step 5: Connect 5P FFC at the connector (CN7003) on CD Servo P.C.B..



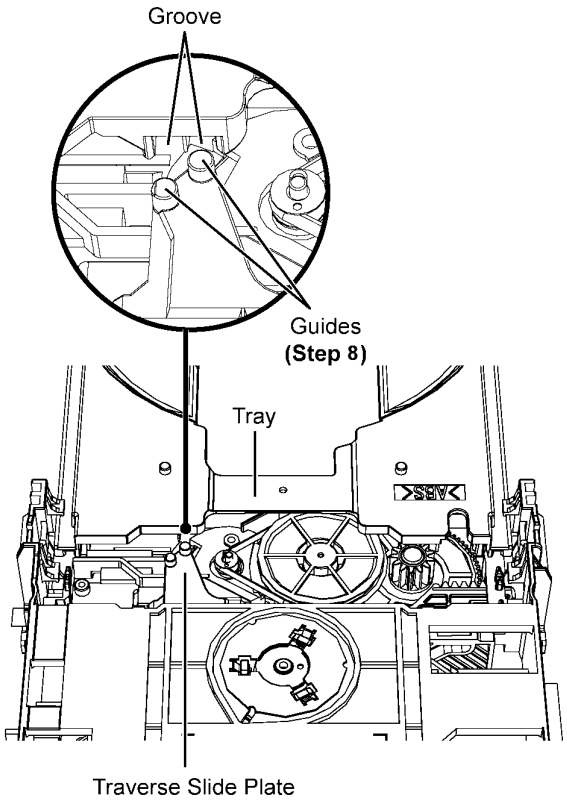
Step 6: Slide the Traverse Slide Plate unit it stop at the Guide.



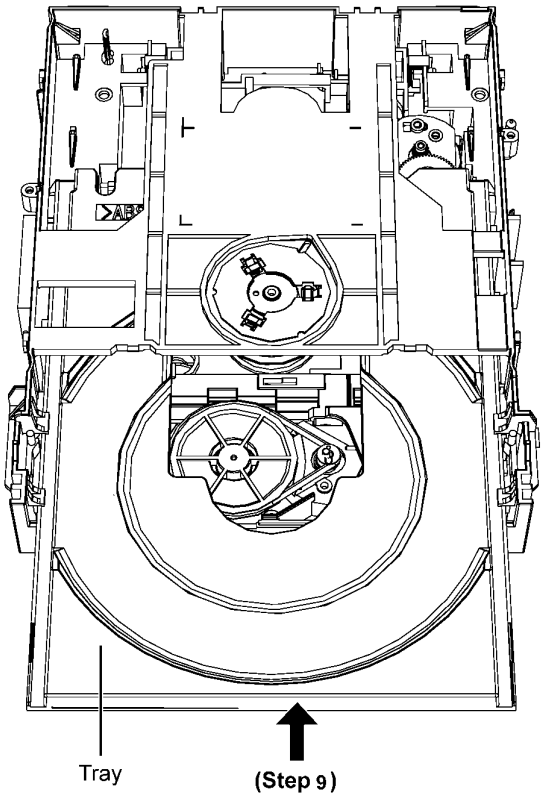
Step 7: Slot the Tray into the guides as Picture shown.



Step 8: Ensure the guides is align with the groove when sliding the tray in.



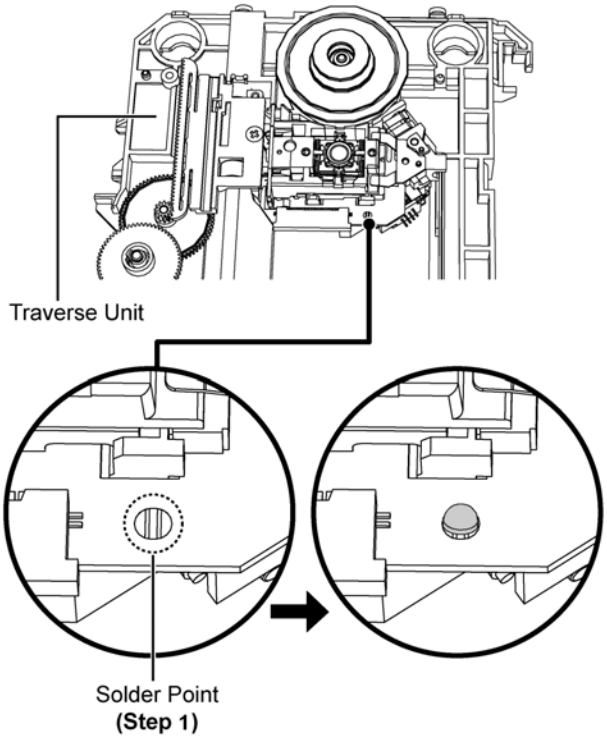
Step 9: Slide the tray in fully.



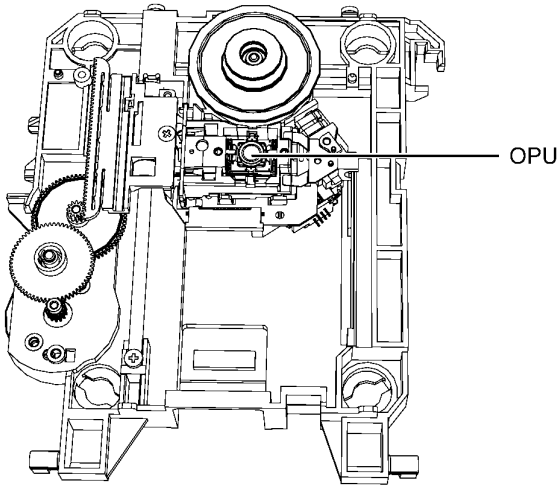
12.3. Disassembly of CD Servo P.C.B.

- **Refer to "Disassembly of CD Mechanism Unit (BRS1C)".**
- **Refer to "Replacement of Traverse Unit".**

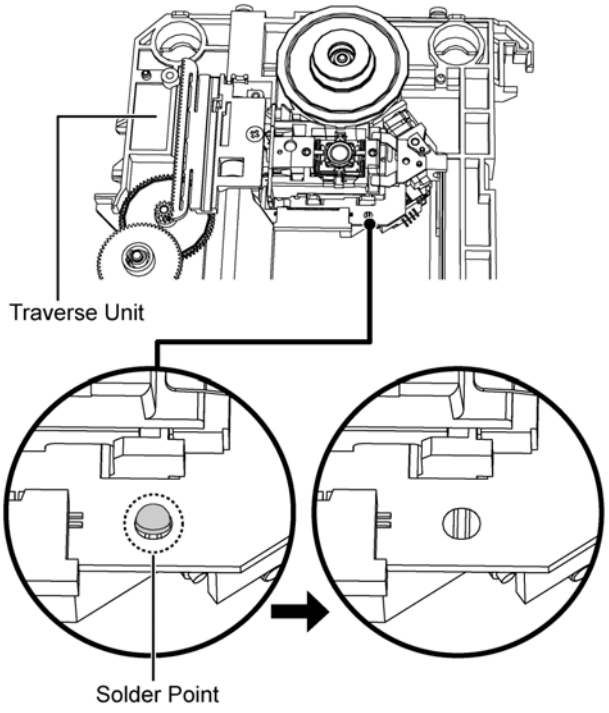
Caution: It is required to short the circuit.
Step 1: Solder the 3 solder points.



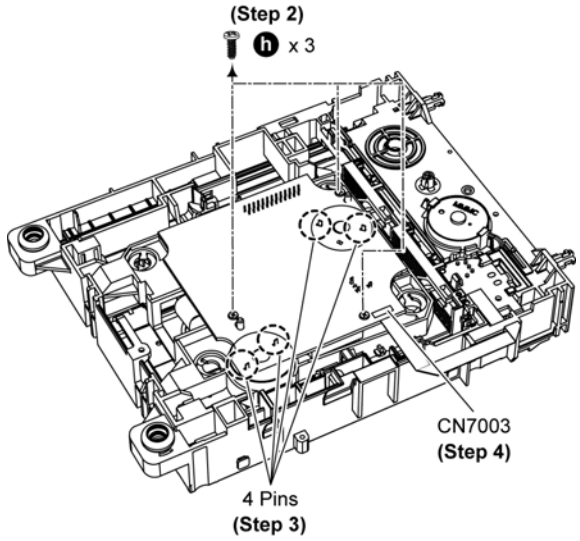
Caution 1: Avoid touching the surface of the Traverse Unit.



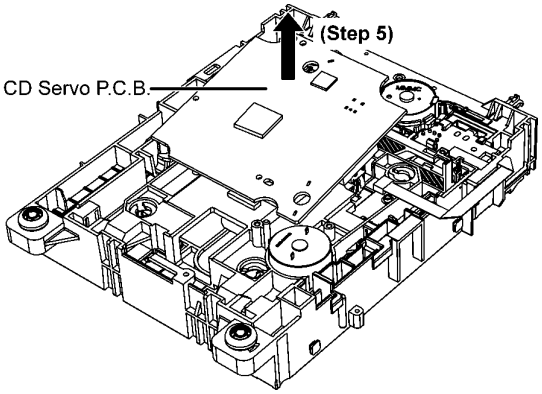
Caution 2: During assembling, desolder the solder points.



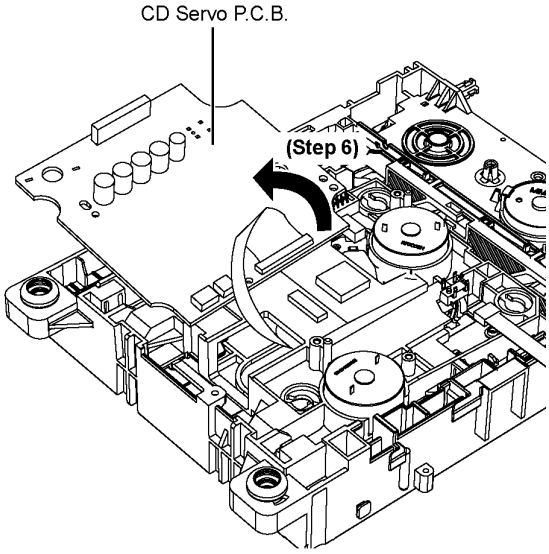
Step 2 Remove 3 screws.
Step 3 Desolder 4 pins.
Step 4 Detach 5P FFC at the connector (CN7003) on CD Servo P.C.B..



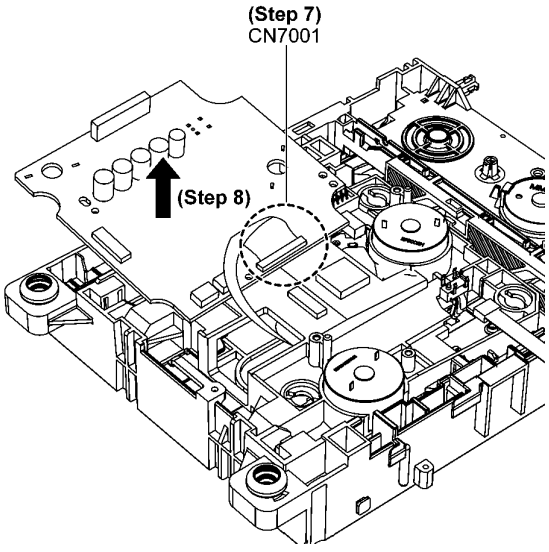
Step 5 Slightly lift up the CD Servo P.C.B.



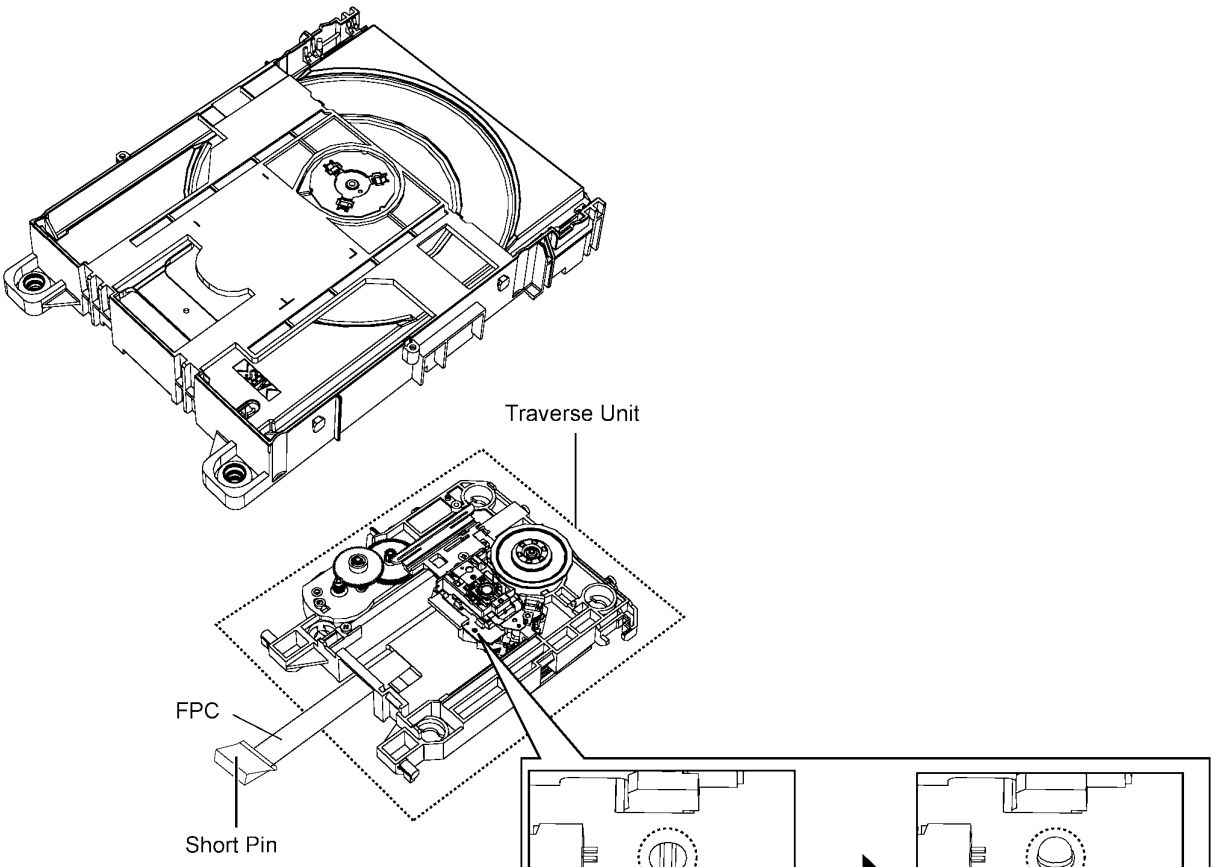
Step 6 Flip the CD Servo P.C.B.



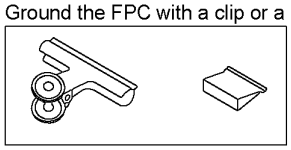
Step 7 Detach 24P FPC at the connector (CN7001) on CD Servo P.C.B.
Step 8 Remove CD Servo P.C.B..



Step 9 Ground the 24P FFC with a short pin.



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



Clip or Short Pin

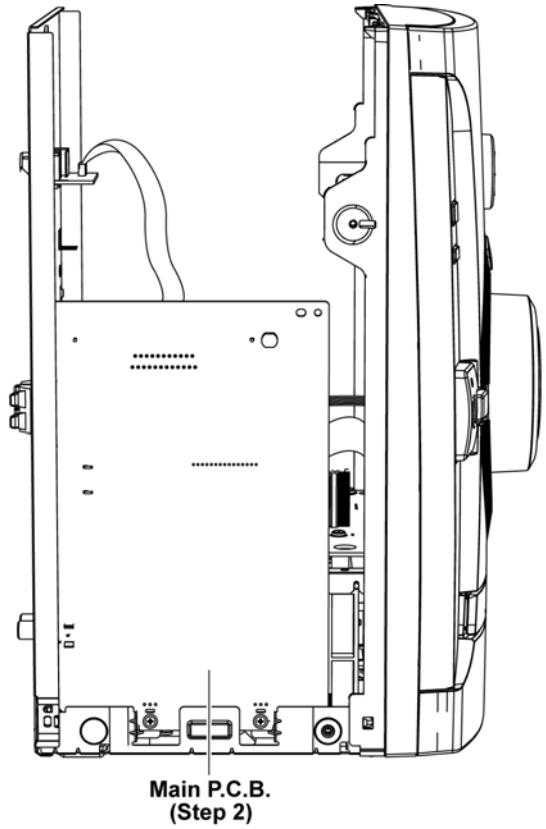
Figure A

13 Service Position

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

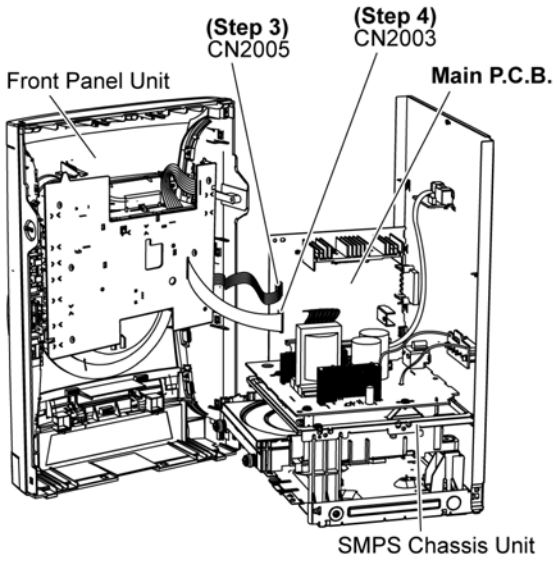
13.1. Checking and Repairing of Main P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Main P.C.B. can be checked & repaired at its original position.



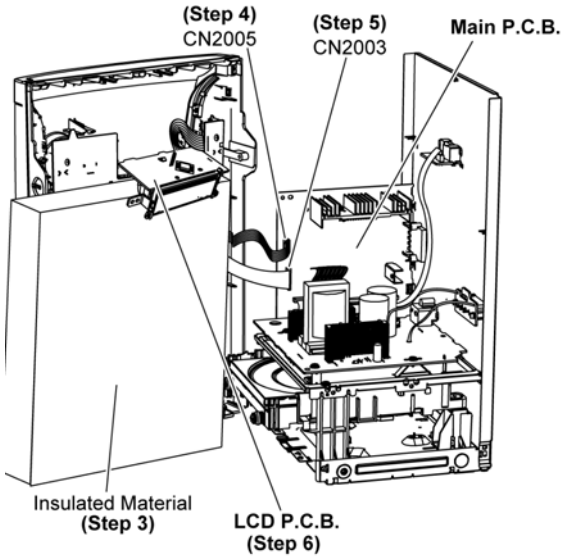
13.2. Checking and Repairing of Panel P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Attach 5P Cable Wire to the connector (CN2005) on Main P.C.B..
Step 4 Attach 17P FFC to the connector (CN2003) on Main P.C.B..
Step 5 Panel P.C.B. can be checked and repaired as diagram shown.



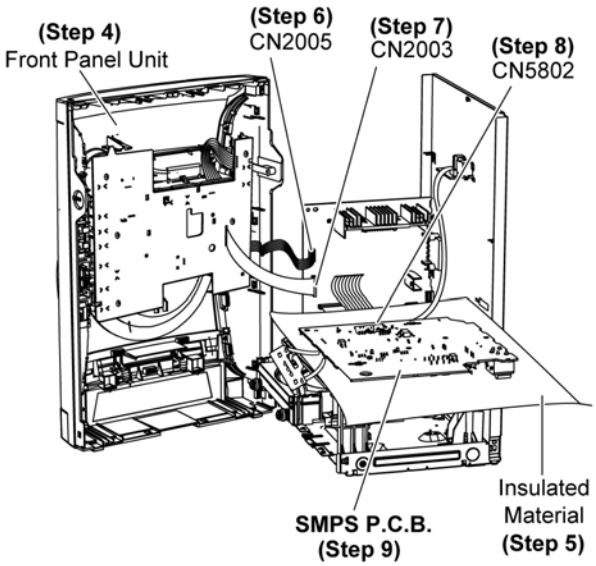
13.3. Checking and Repairing of LCD P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Position LCD Unit on the insulated material as shown.
Step 4 Attach 5P Cable Wire to the connector (CN2005) on Main P.C.B..
Step 5 Attach 17P FFC to the connector (CN2003) on Main P.C.B..
Step 6 LCD P.C.B. can be checked and repaired as diagram shown.



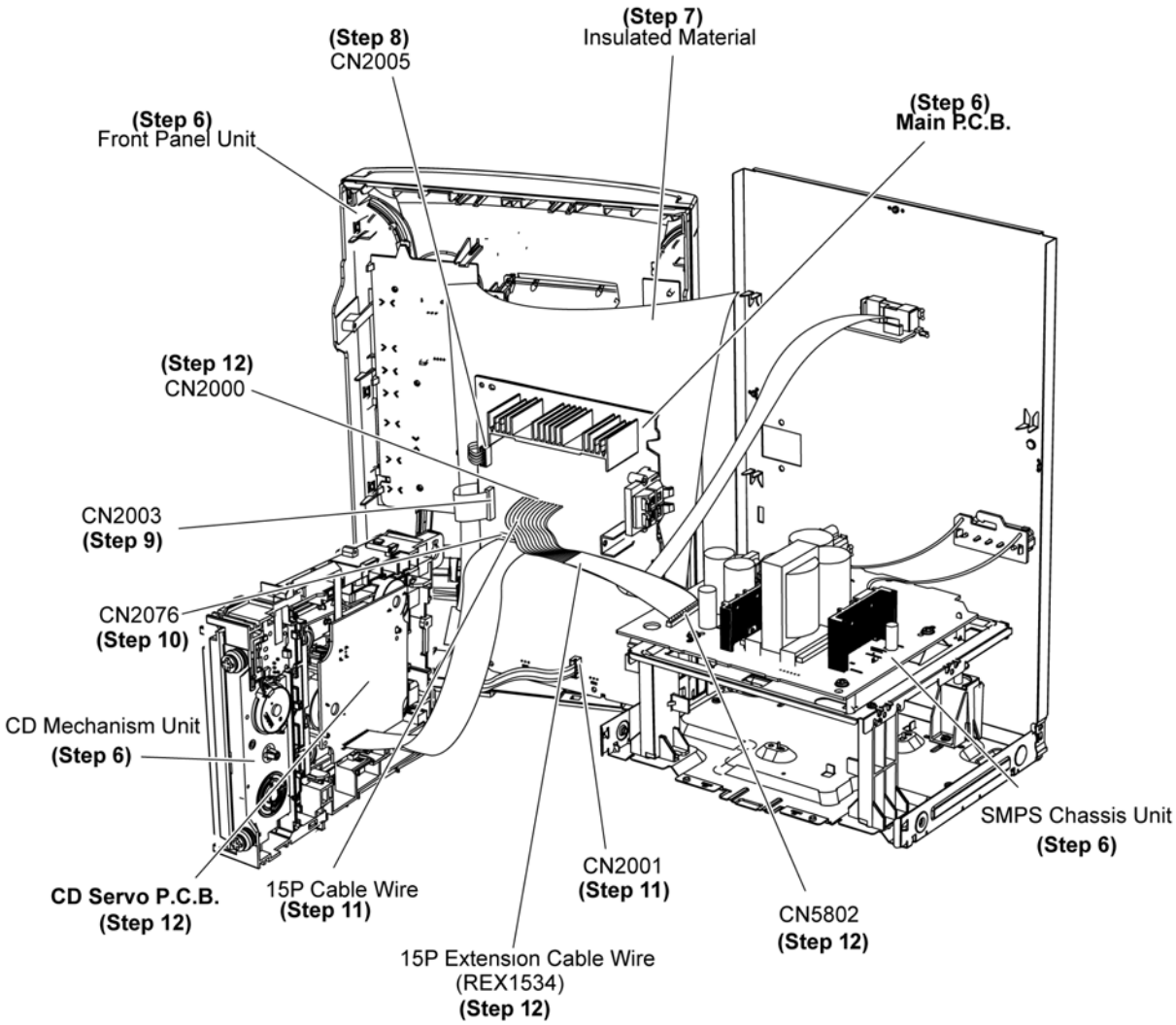
13.4. Checking and Repairing of SMPS P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove SMPS P.C.B..
Step 4 Position Front Panel Unit as diagram shown.
Step 5 Position SMPS P.C.B. on the insulated material.
Step 6 Attach 5P Cable Wire to the connector (CN2005) on Main P.C.B..
Step 7 Attach 17P FFC to the connector (CN2003) on Main P.C.B..
Step 8 Attach 15P Cable Wire to the connector (CN5802) on SMPS P.C.B..
Step 9 SMPS P.C.B. can be checked and repaired as diagram shown.



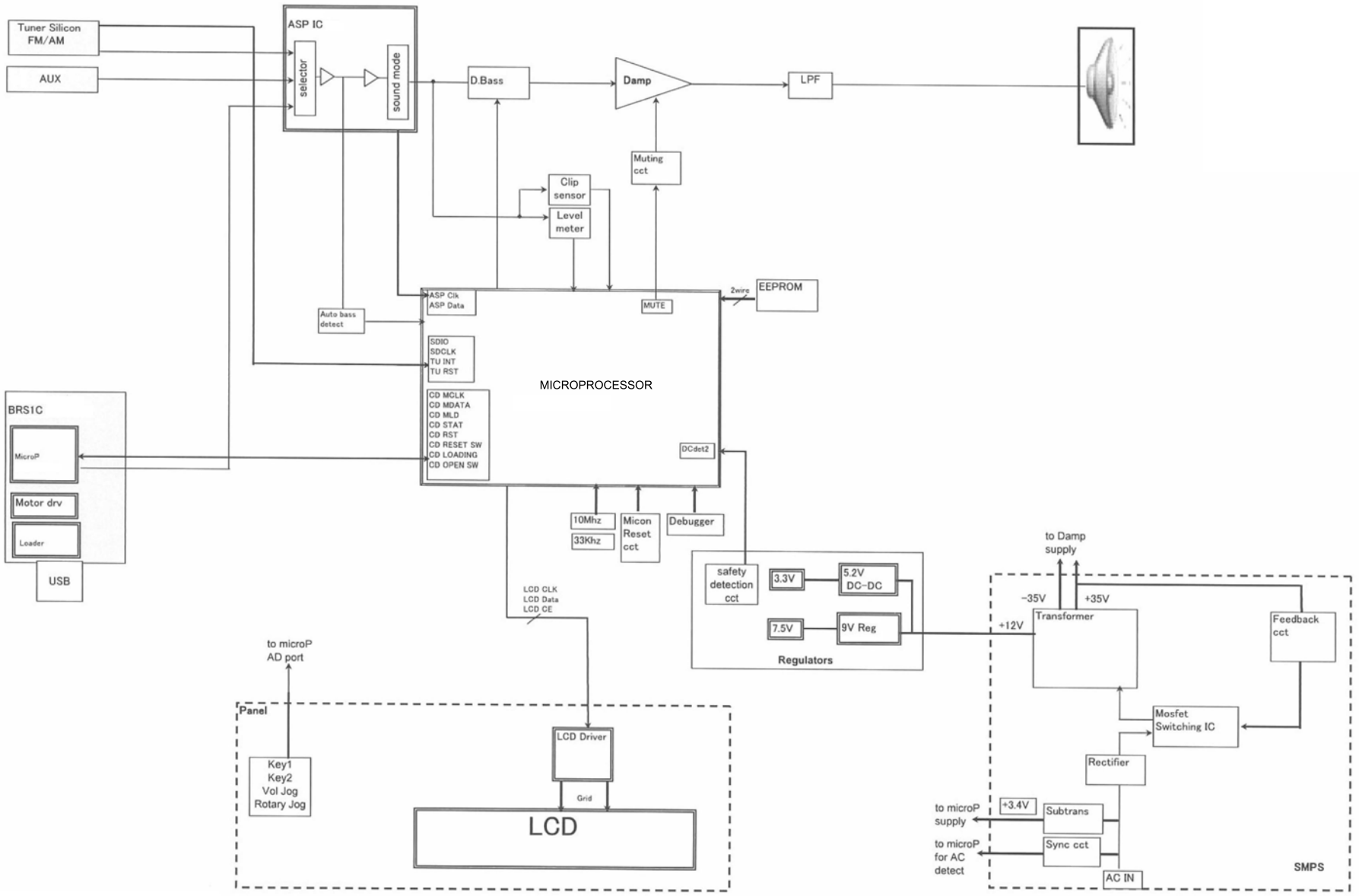
13.5. Checking and Repairing of CD Servo P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove SMPS Chassis Unit.
Step 4 Remove CD Mechanism Unit (BRS1C).
Step 5 Remove Main P.C.B..
Step 6 Position Front Panel Unit, SMPS Chassis Unit, CD Mechanism Unit (BRS1C), Main P.C.B as diagram shown.
Step7 Position Main P.C.B. on the insulated material.
Step 8 Attach 5P Cable Wire to the connector (CN2005) on Main P.C.B..
Step9 Attach 17P FFC to the connector (CN2003) on Main P.C.B..
Step 10 Attach 27P FFC to the connector (CN2706) on Main P.C.B..
Step 11 Attach 5P Witre to the connector (CN2001) on Main P.C.B..
Step 12 Extend the Cable Wire with extension Cable Wire (REX1534)(15P Cable Wire) from CN2000 on Main Unit to CN5802 on SMPS Chassis Unit.
Step 13 CD Servo P.C.B. can be checked and repaired as diagram shown.

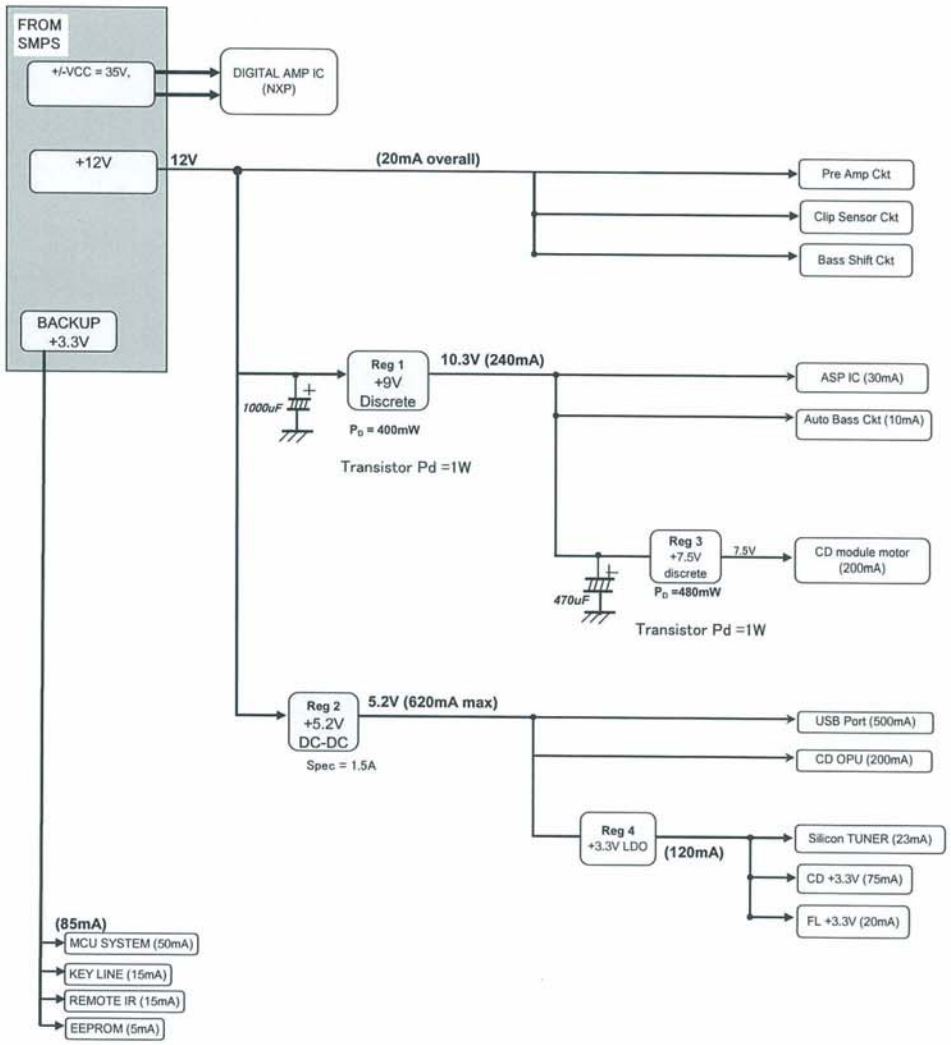


14 Simplified Block Diagram

14.1. Overall Simplified Block Diagram

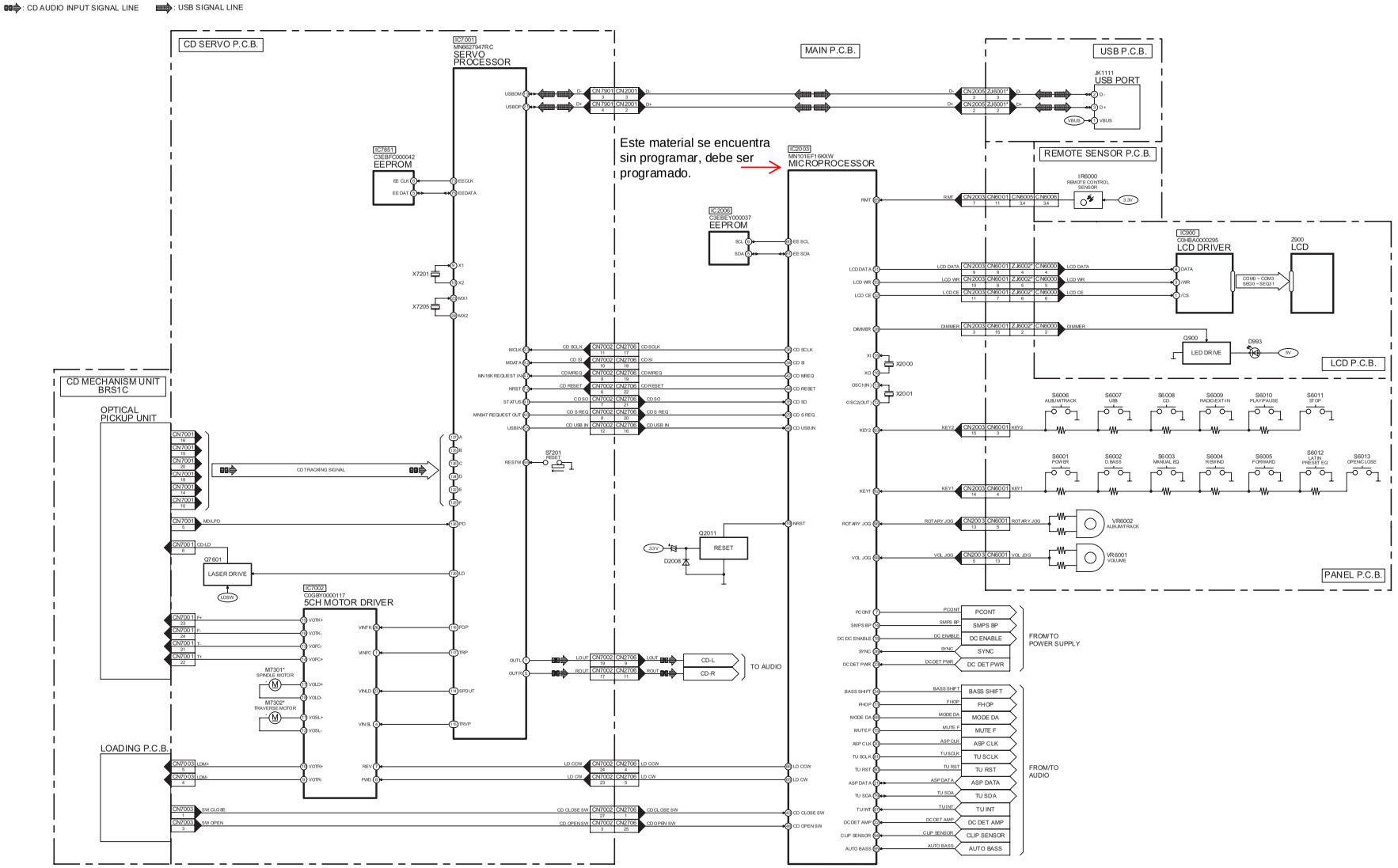


14.2. Power Block Diagram



15 Block Diagram

15.1. Servo & System Control

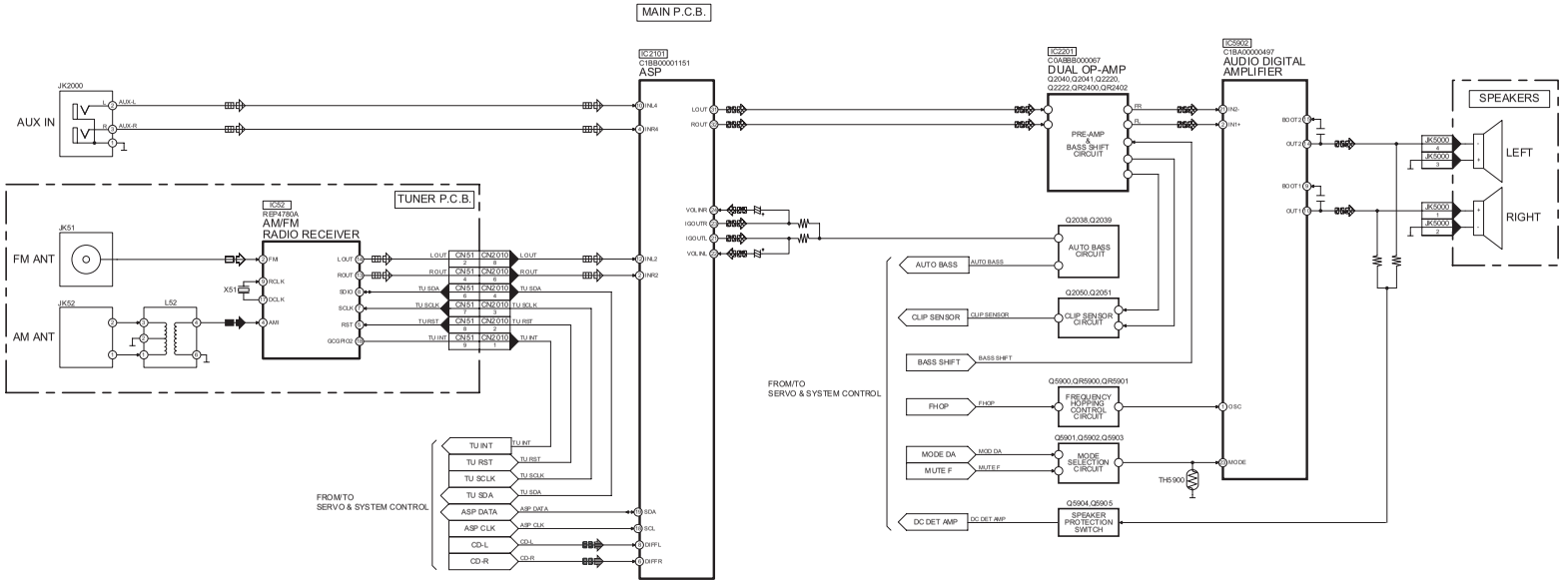


NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX14 SERVO & SYSTEM CONTROL BLOCK DIAGRAM

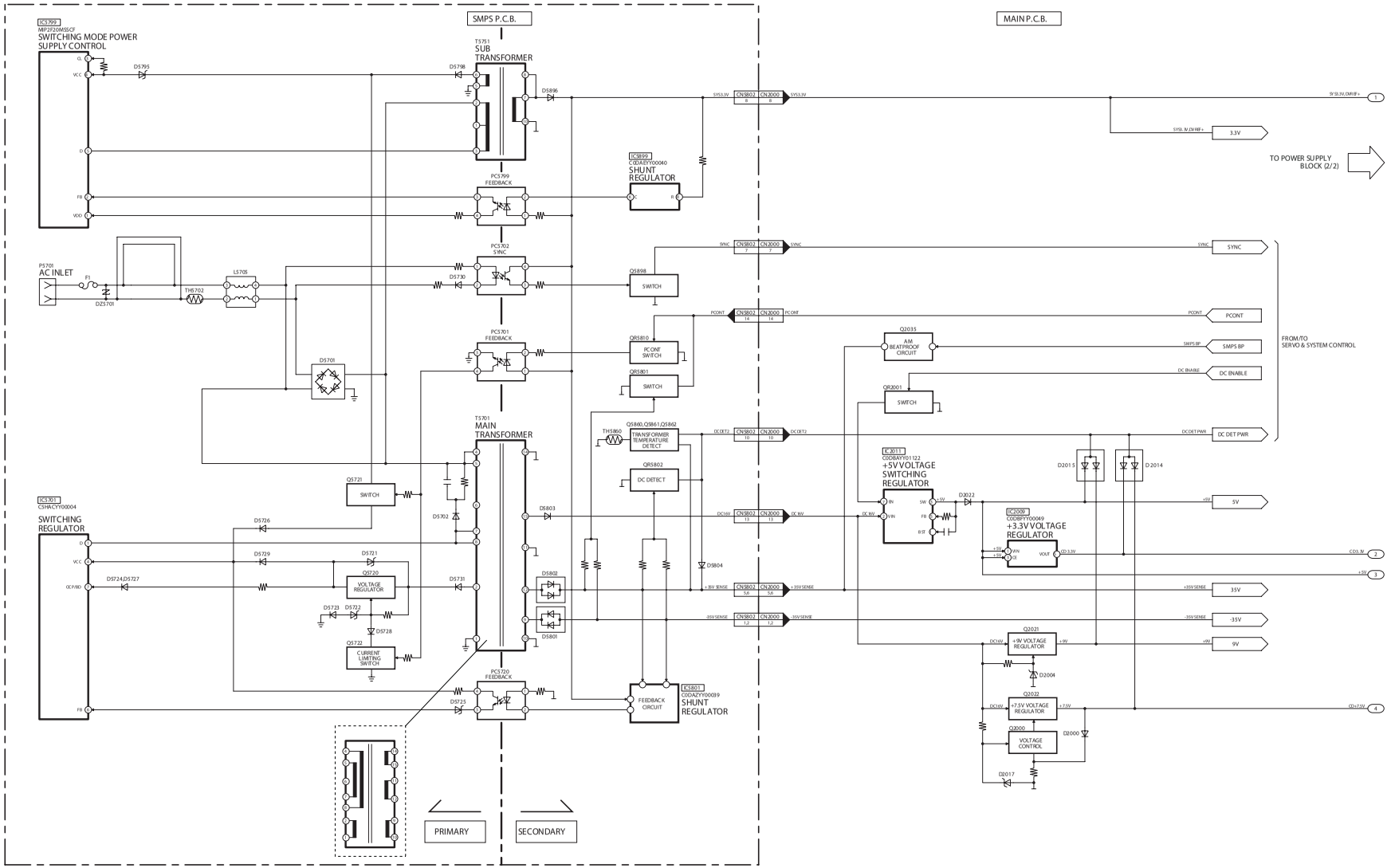
15.2. Audio

: CD AUDIO INPUT SIGNAL LINE : AUX/TUNER AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : AM SIGNAL LINE : FM SIGNAL LINE



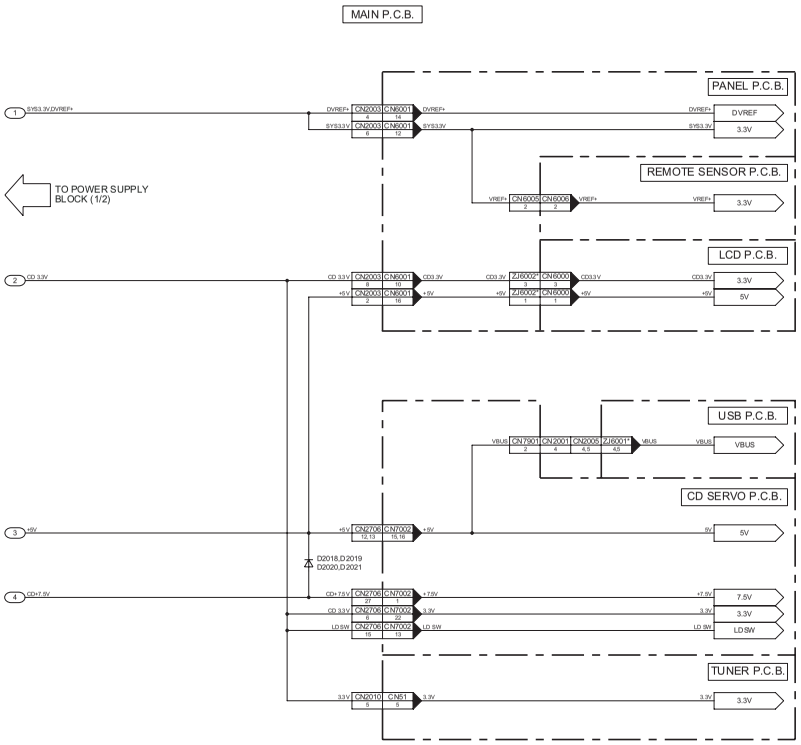
SA-AKX14 AUDIO BLOCK DIAGRAM

15.3. Power Supply



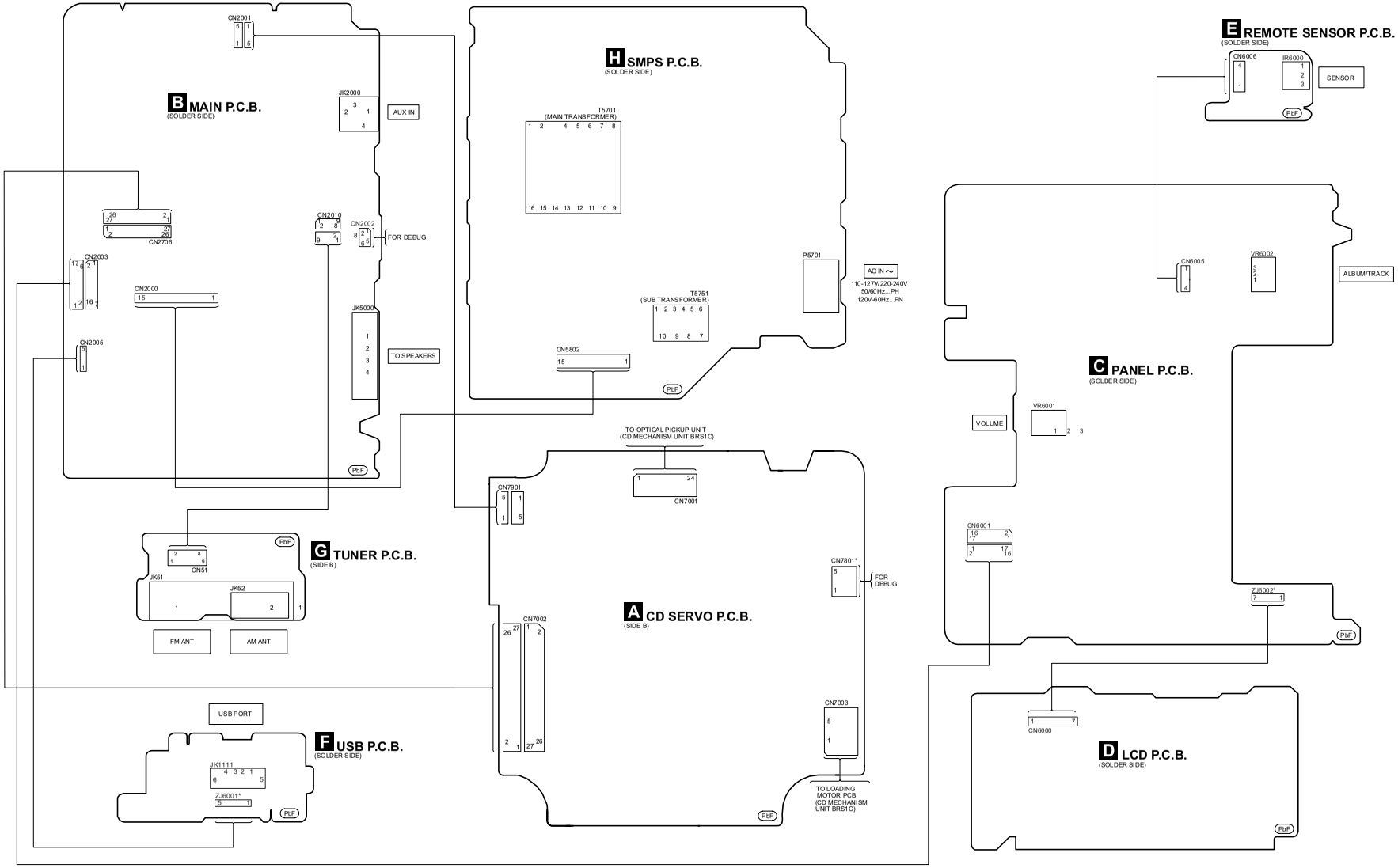
NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX14 POWER SUPPLY (1/2) BLOCK DIAGRAM



SA-AKX14 POWER SUPPLY (2/2) BLOCK DIAGRAM

16 Wiring Connection Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX14 WIRING CONNECTION DIAGRAM

17 Schematic Diagram

17.1. Schematic Diagram Notes

- **This schematic diagram may be modified at any time with the development of new technology.**

Notes:

S5701: Voltage ADJ switch (For PH only).
S6001: Power switch (⏻/|).
S6002: D.BASS switch.
S6003: Manual EQ switch.
S6004: Rewind (|◀◀ / ◀◀) switch.
S6005: Forward (▶▶ / ▶▶|) switch.
S6006: Album/Track switch.
S6007: USB switch.
S6008: CD switch.
S6009: Radio/EXT-IN switch.
S6010: Play/Pause (▶ / ▮▮) switch.
S6011: Stop (■) switch.
S6012: Latin Preset EQ switch.
S6013: Open/Close switch (⏏).
S7201: Reset switch.
VR6001: Volume Jog.
VR6002: Album/Track Jog.

- 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:
  C5700, C5701, C5703, C5704 (For PH), C5705 (For PH), C5708

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

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

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

- *****

  REF IS FOR INDICATION ONLY.

- Voltage and signal line

  : +B signal line
  : -B signal line
  : CD Audio input signal line
  : AUX/Tuner Audio input signal line
  : Audio output signal line
  : USB signal line
  : AM signal line
  : FM signal line

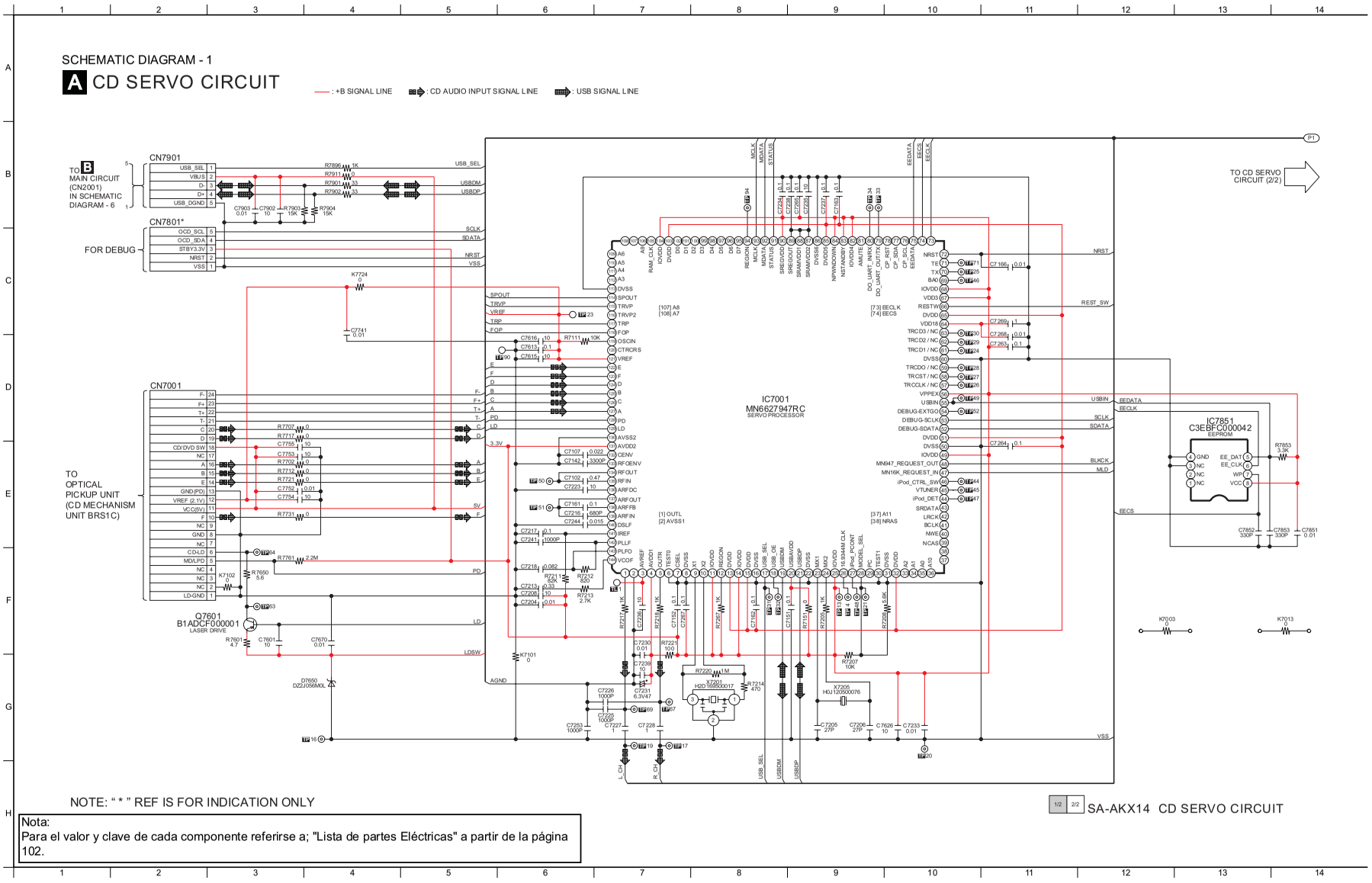
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 8A 125V FUSE

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 againts fire harzard, replace with the same type fuse. fro rating, refer to the marking adjacent to the symbol.

7.2. CD Servo Circuit

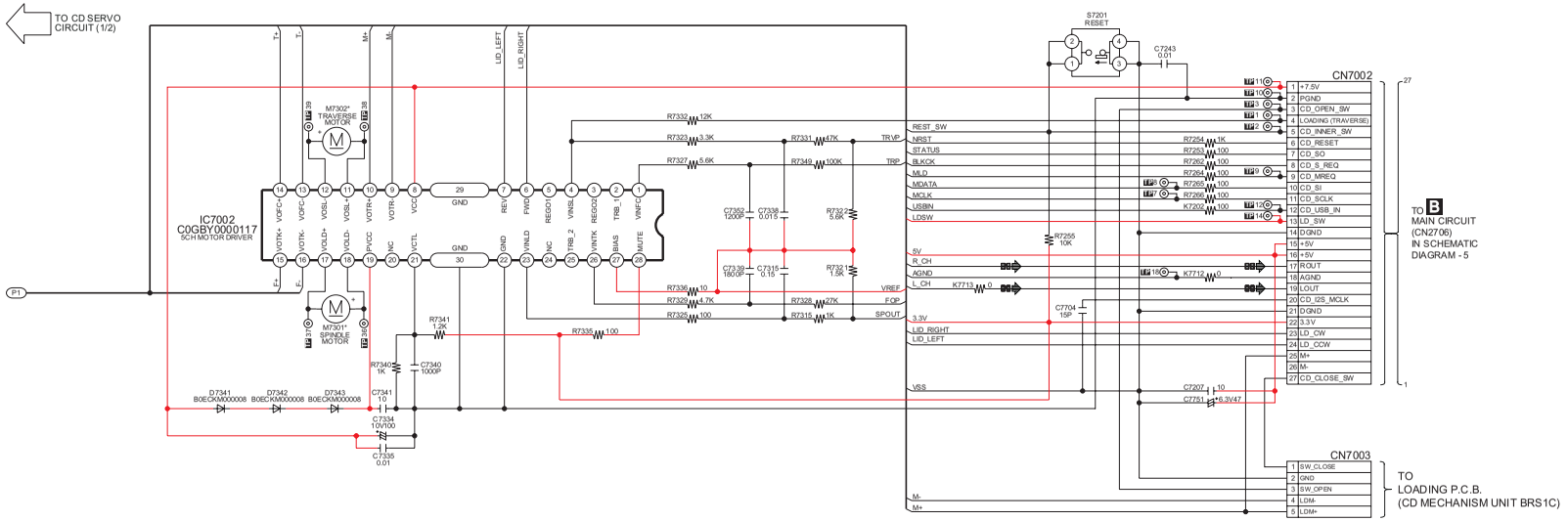


Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

SCHEMATIC DIAGRAM - 2

A CD SERVO CIRCUIT

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

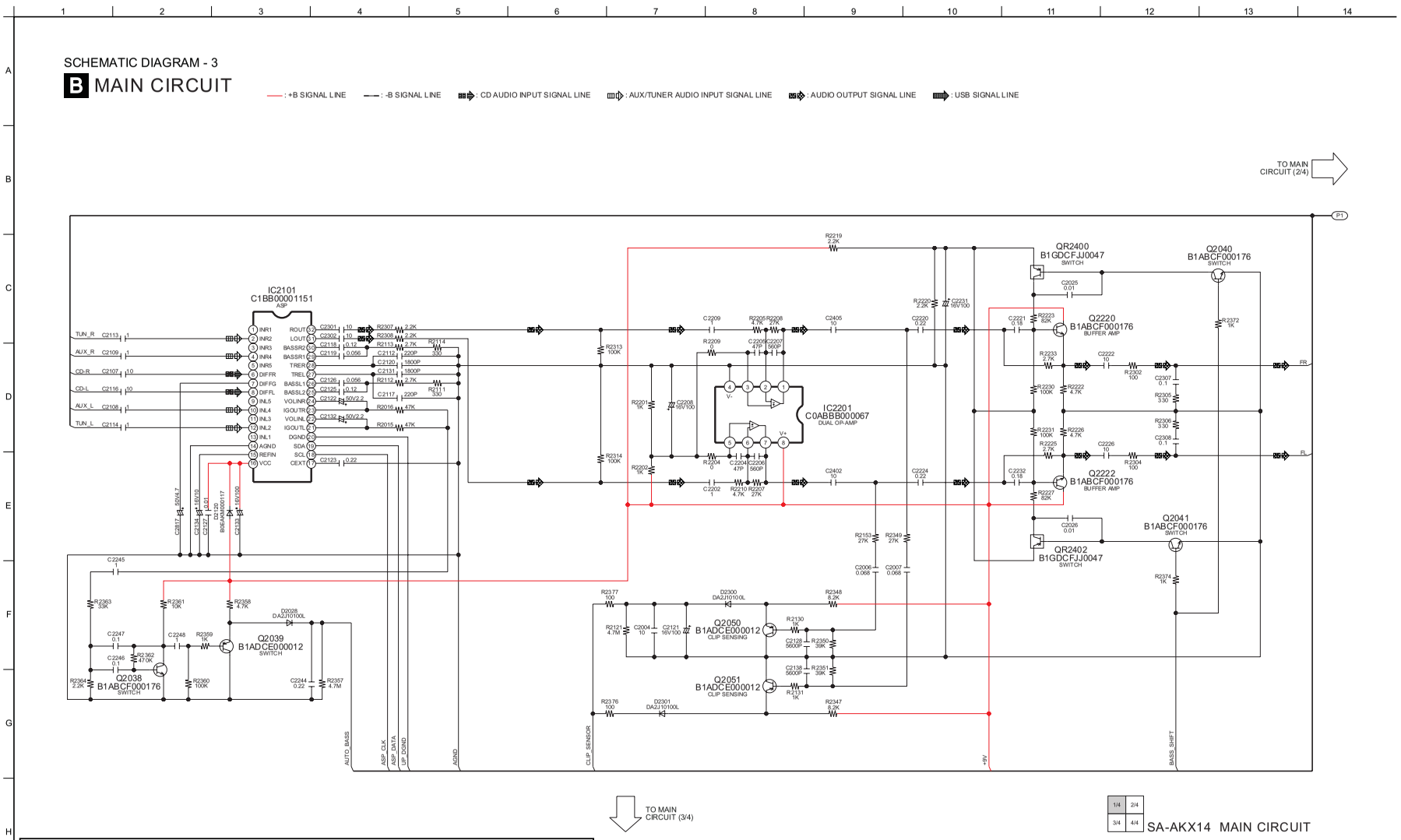


NOTE: " * " REF IS FOR INDICATION ONLY

Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

1/2 2/2 SA-AKX14 CD SERVO CIRCUIT

17.3. Main Circuit

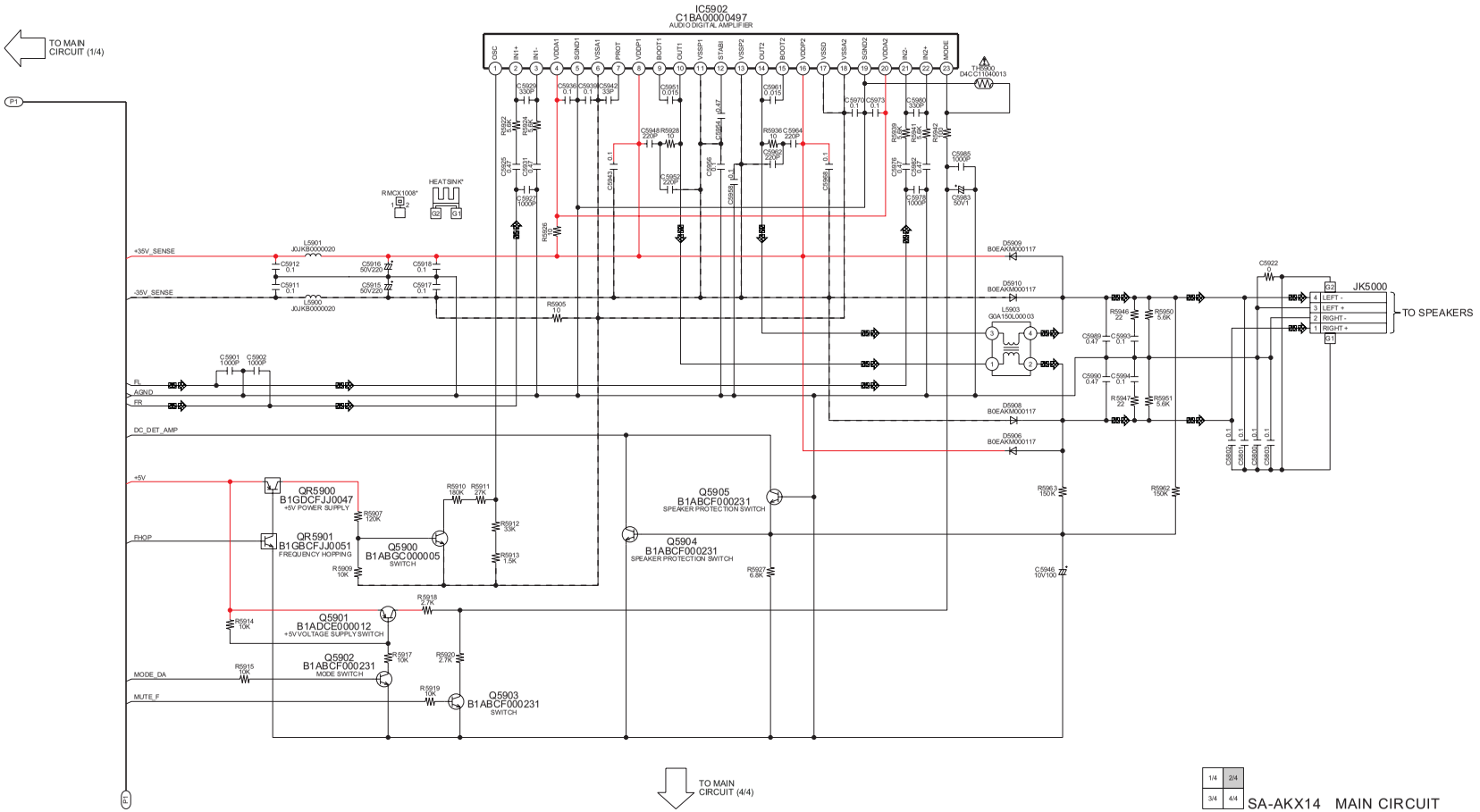


Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

SCHEMATIC DIAGRAM - 4

B MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : CD AUDIO INPUT SIGNAL LINE : AUX/TUNER AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

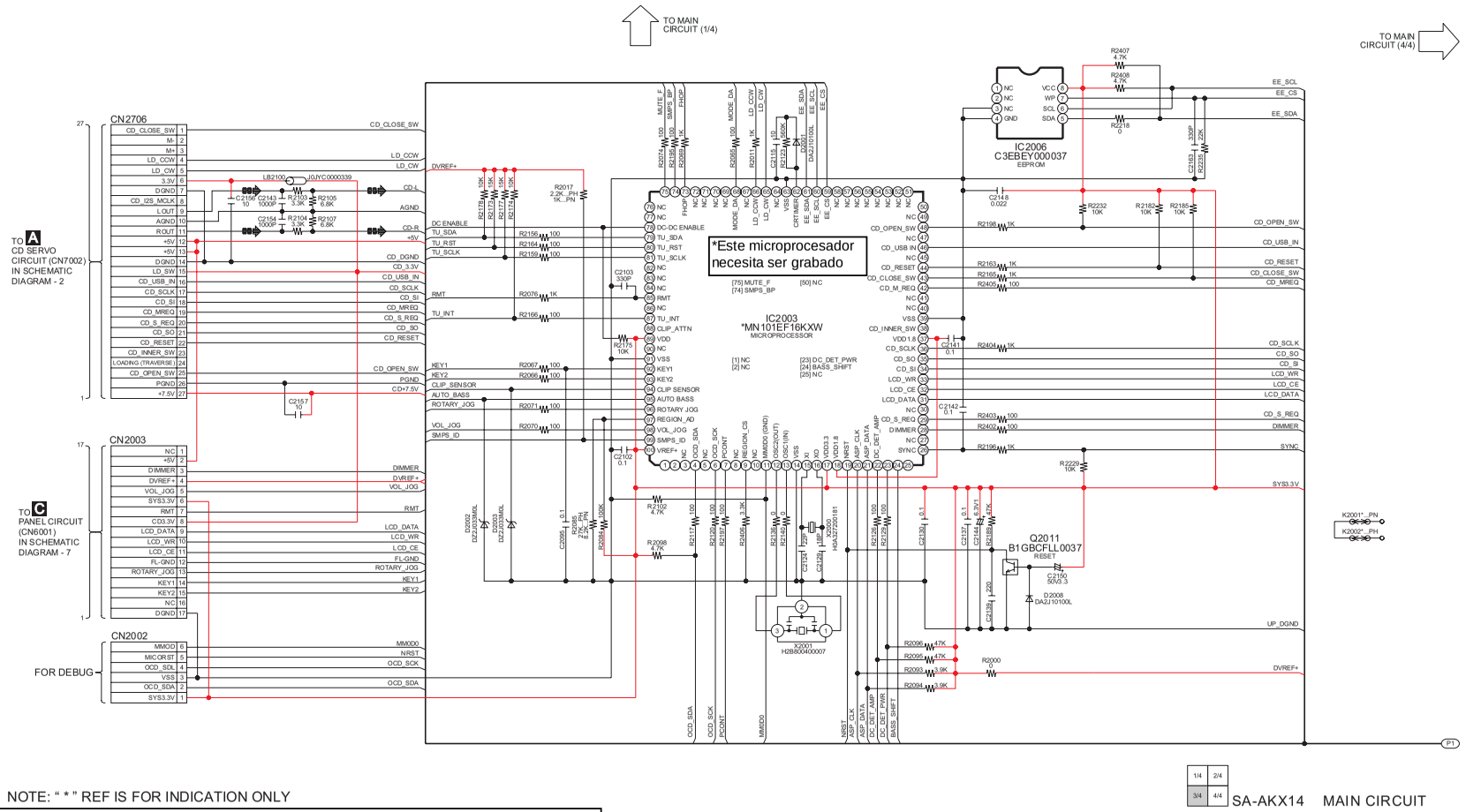
1/4 2/4 3/4 4/4

SA-AKX14 MAIN CIRCUIT

SCHEMATIC DIAGRAM - 5

B MAIN CIRCUIT

—— : +B SIGNAL LINE —— : -B SIGNAL LINE : CD AUDIO INPUT SIGNAL LINE : AUX/TUNER AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



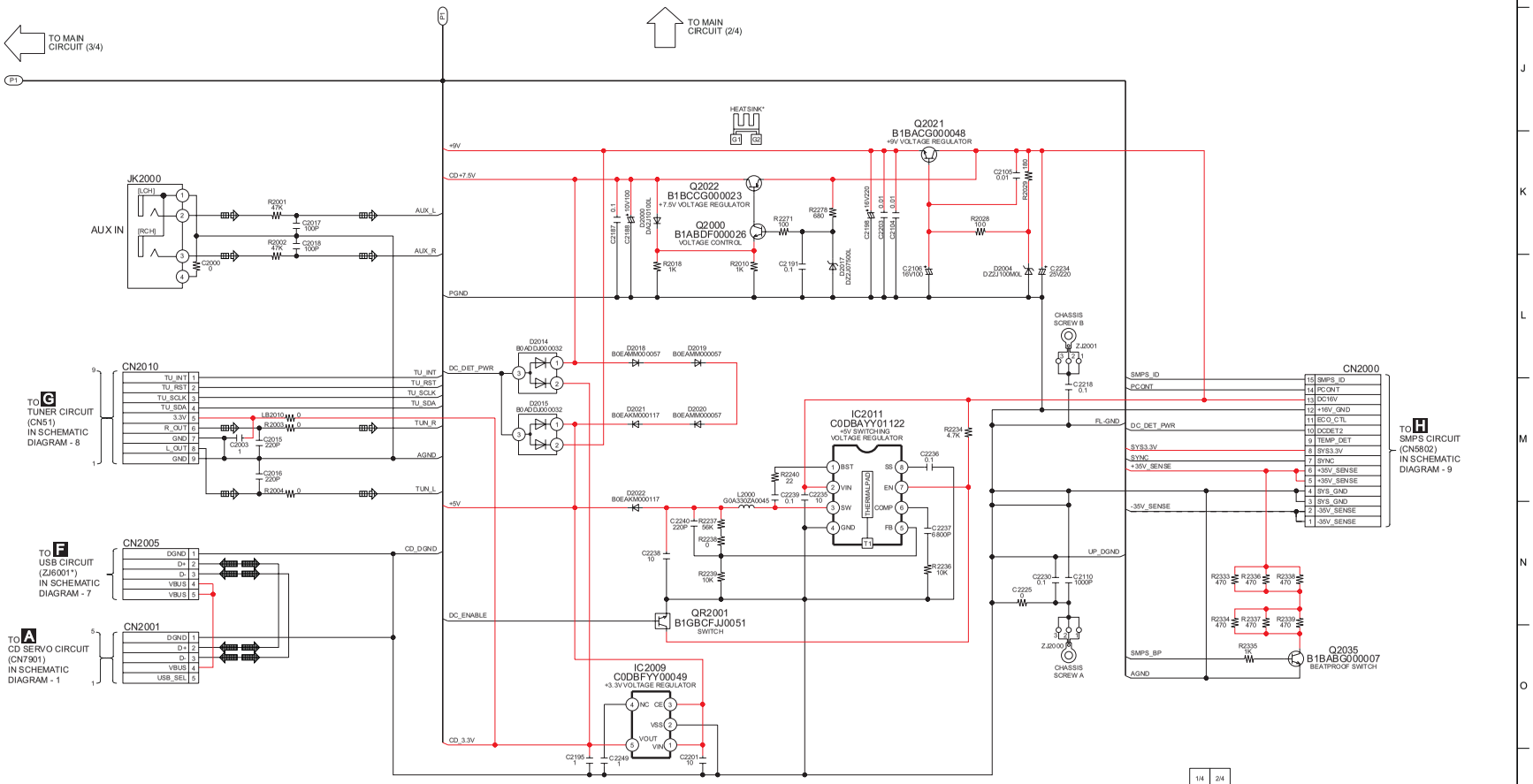
NOTE: " * " REF IS FOR INDICATION ONLY

Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

SCHEMATIC DIAGRAM - 6

B MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : CD AUDIO INPUT SIGNAL LINE : AUX/TUNER AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

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

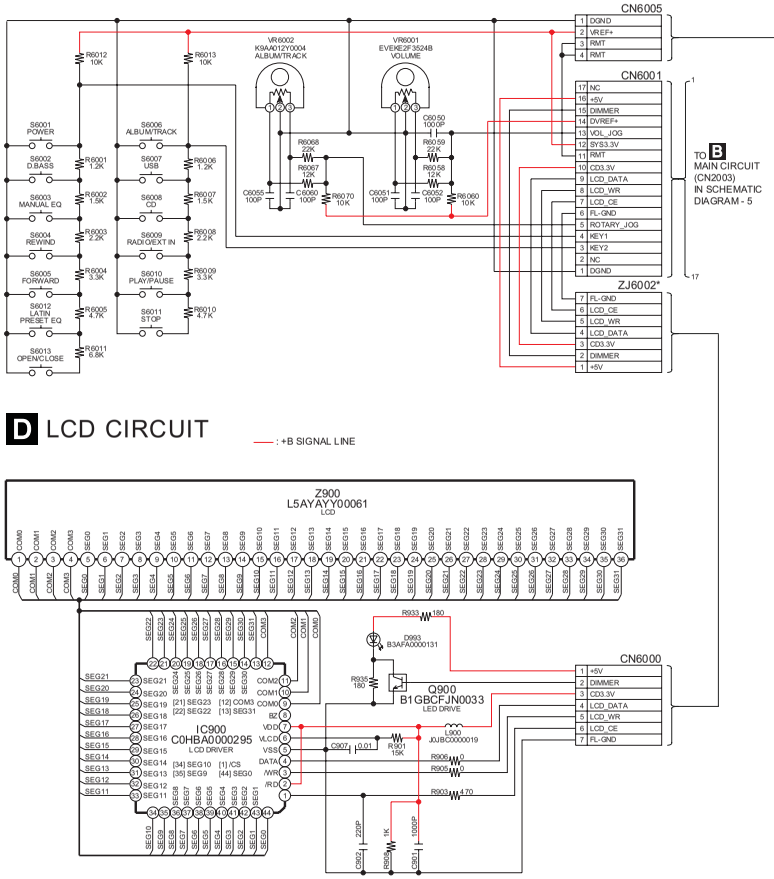
SA-AKX14 MAIN CIRCUIT

17.4. Panel, LCD, Remote Sensor & USB Circuit

SCHEMATIC DIAGRAM - 7

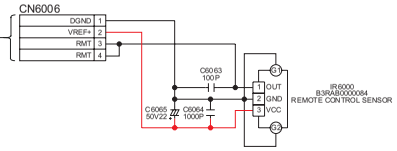
C PANEL CIRCUIT

—— : +B SIGNAL LINE



E REMOTE SENSOR CIRCUIT

—— : +B SIGNAL LINE

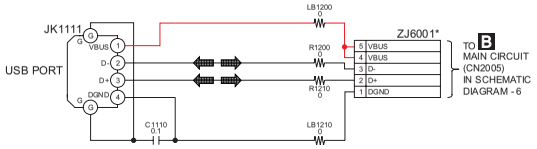


D LCD CIRCUIT

—— : +B SIGNAL LINE

F USB CIRCUIT

—— : +B SIGNAL LINE ⇨ : USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

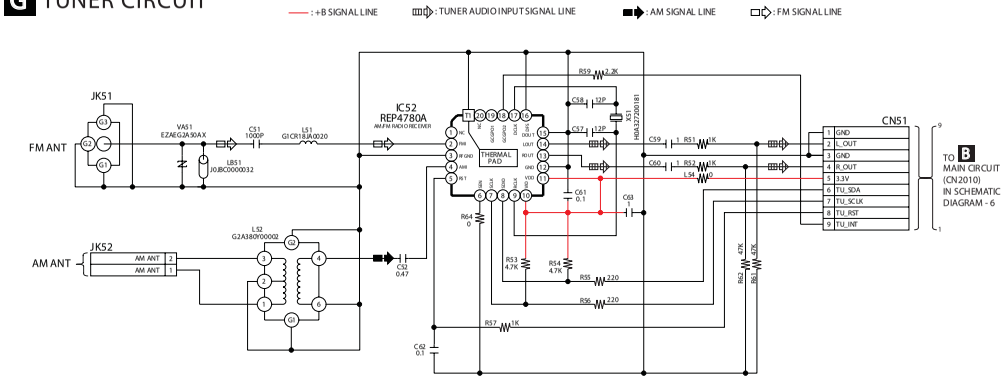
Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

SA-AKX14 PANEL / LCD / REMOTE SENSOR / USB CIRCUIT

17.5. Tuner

SCHEMATIC DIAGRAM - 8

G TUNER CIRCUIT

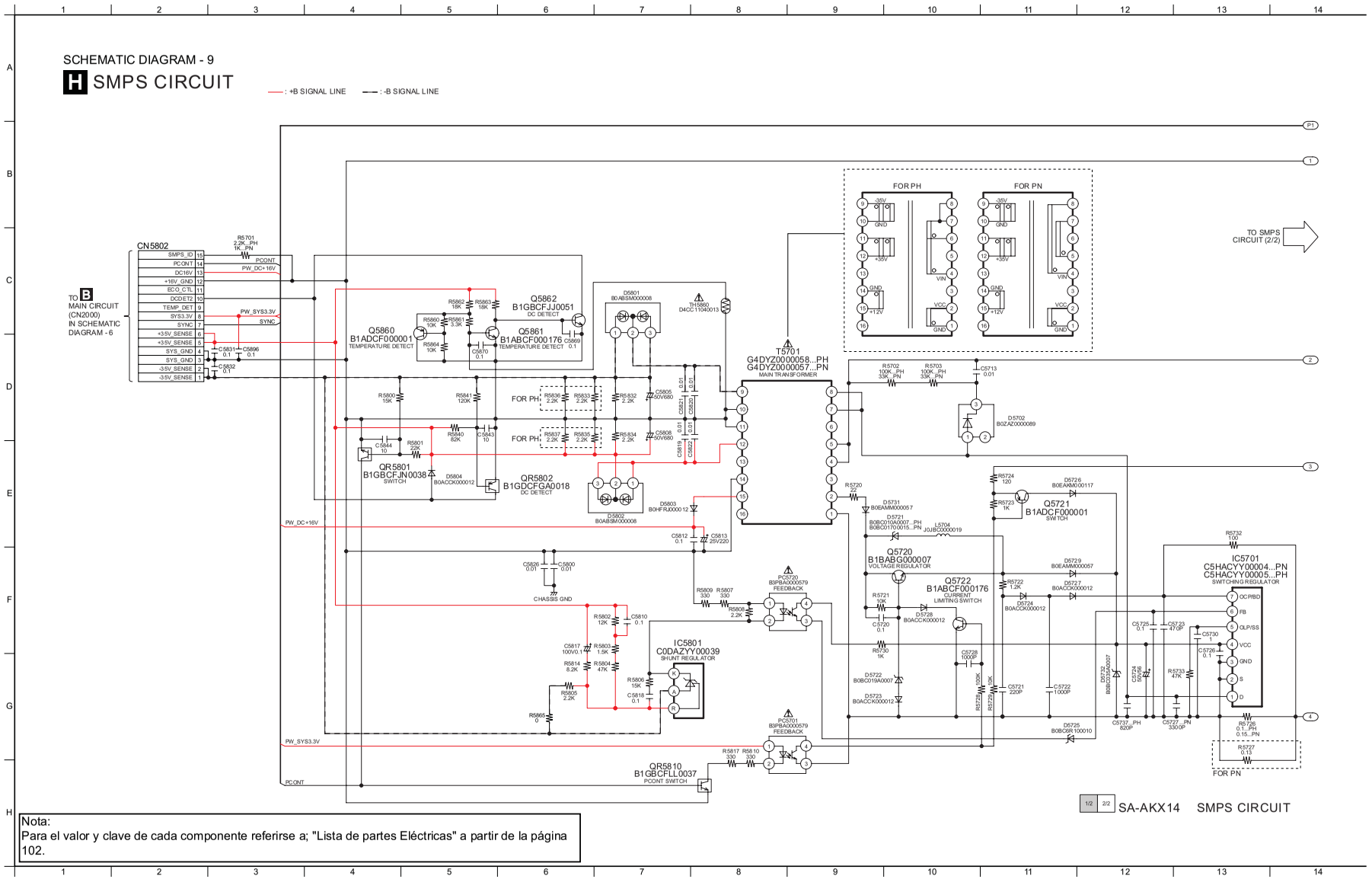


NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX14 TUNER

Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

17.6. SMPS Circuit

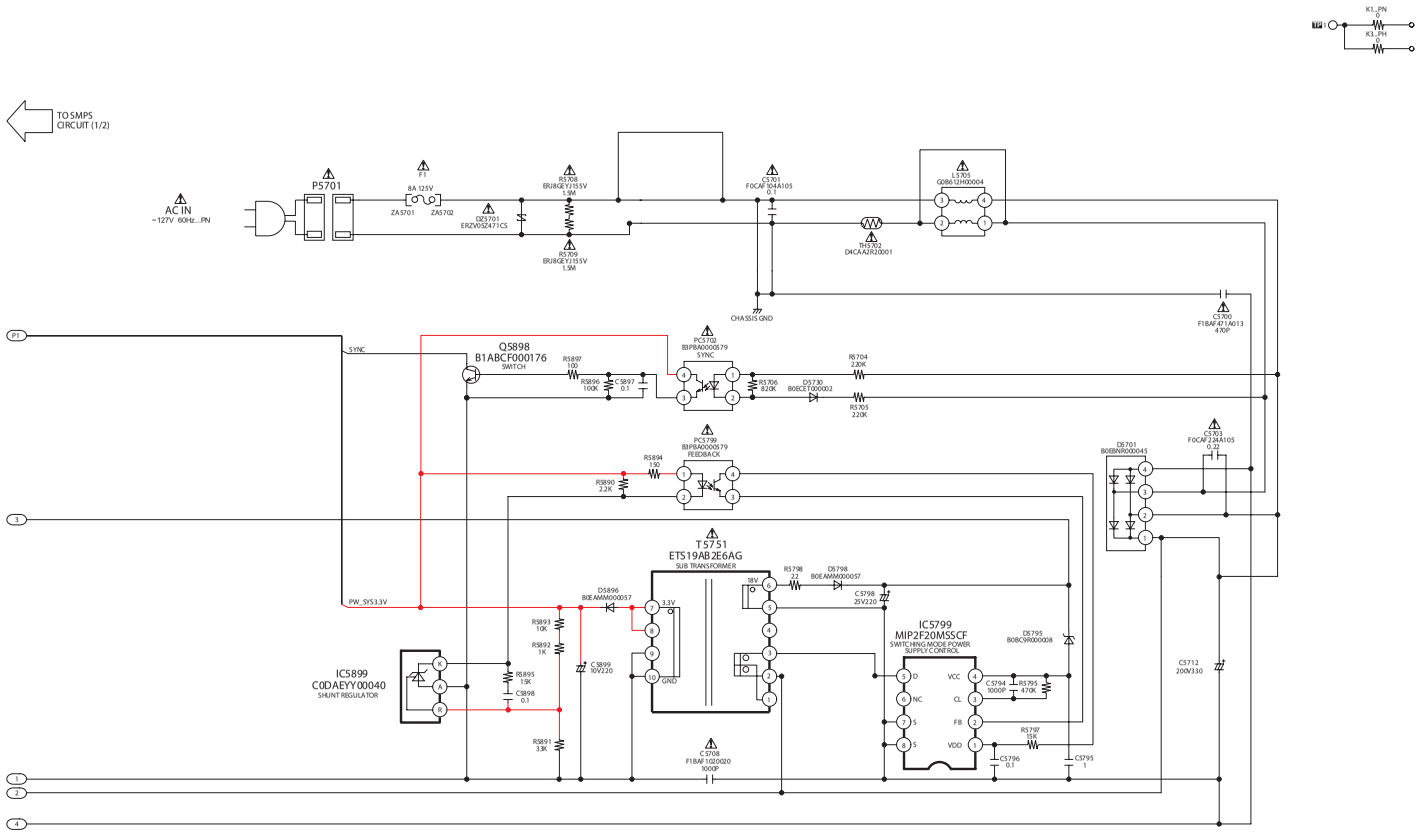


Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

SCHEMATIC DIAGRAM - 10

H SMPS CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

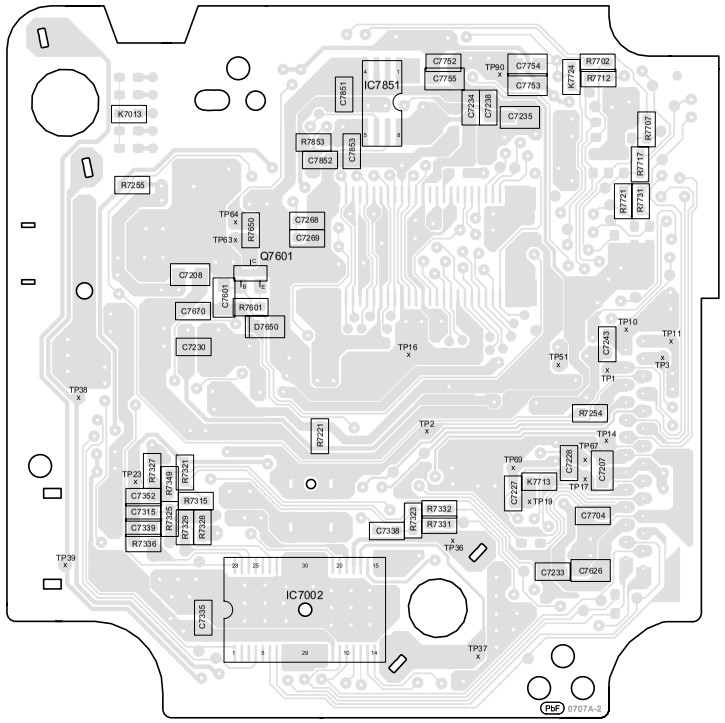
Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

1/2 2/2 SA-AKX14 SMPS CIRCUIT

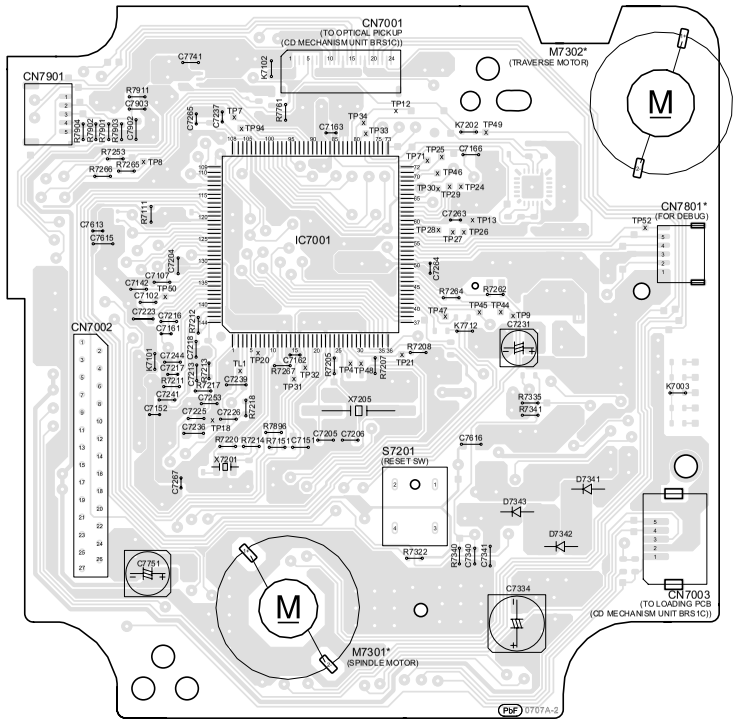
18 Printed Circuit Board

18.1. CD Servo P.C.B.

A CD SERVO P.C.B. (REPX0918C)



(SIDE A)



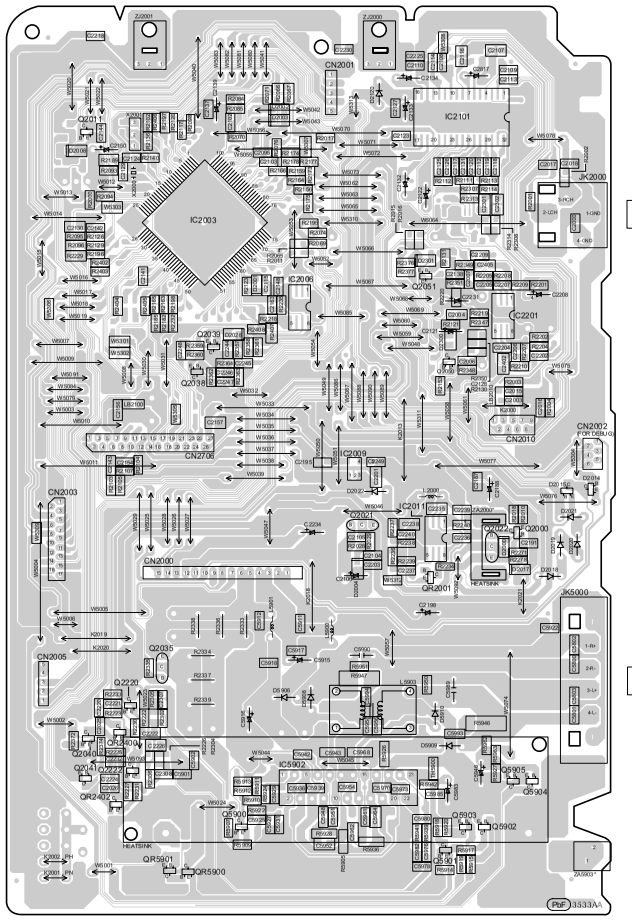
(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX14
CD SERVO P.C.B.

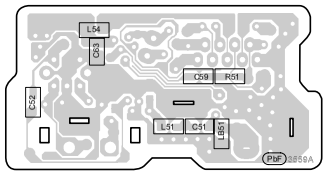
18.2. Main & Tuner P.C.B.

B MAIN P.C.B. (REPM12X141A)

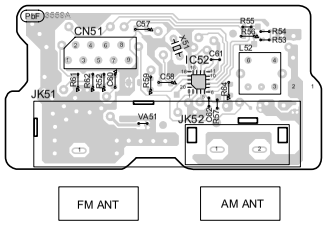


NOTE: " * " REF IS FOR INDICATION ONLY.

G TUNER P.C.B. (REPM12X141A)



(SIDE A)

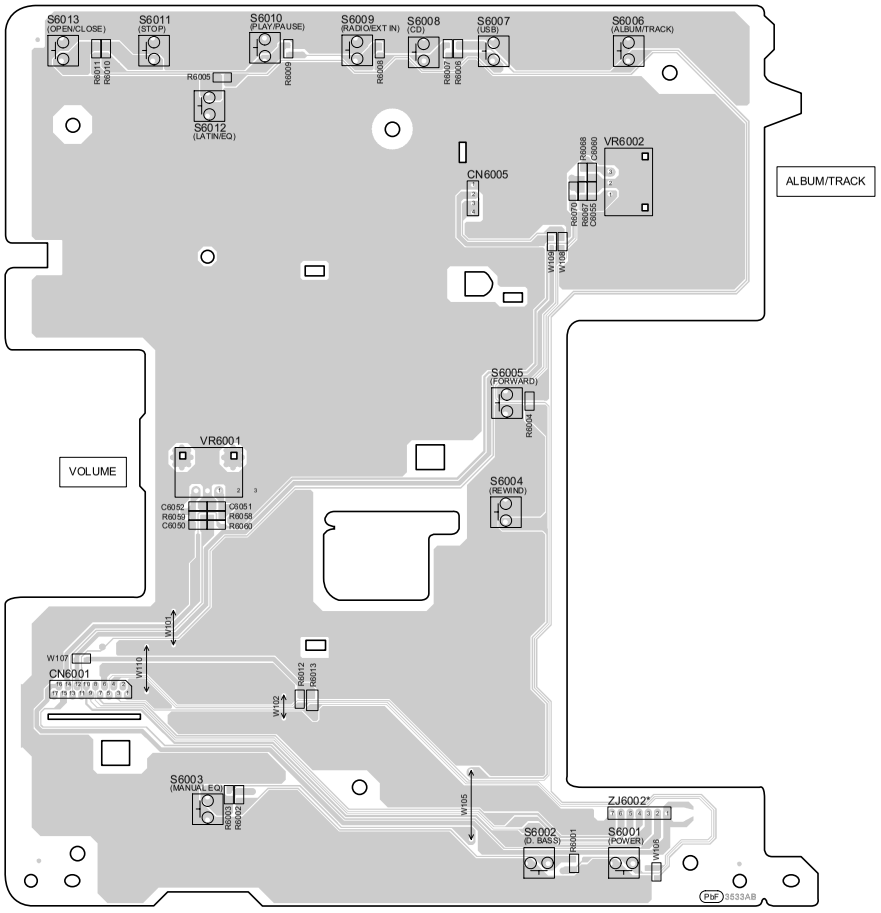


(SIDE B)

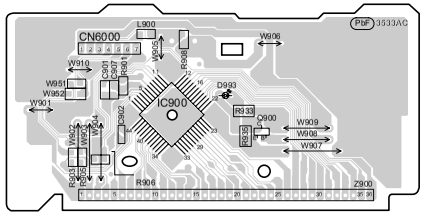
SA-AKX14
MAIN / TUNER P.C.B.

18.3. Panel, LCD, Remote Sensor & USB P.C.B.

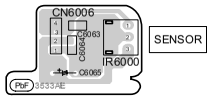
C PANEL P.C.B. (REPM12X141A)



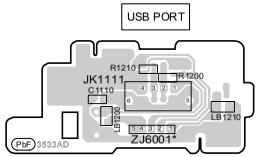
D LCD P.C.B. (REPM12X141A)



E REMOTE SENSOR P.C.B. (REPM12X141A)



F USB P.C.B. (REPM12X141A)



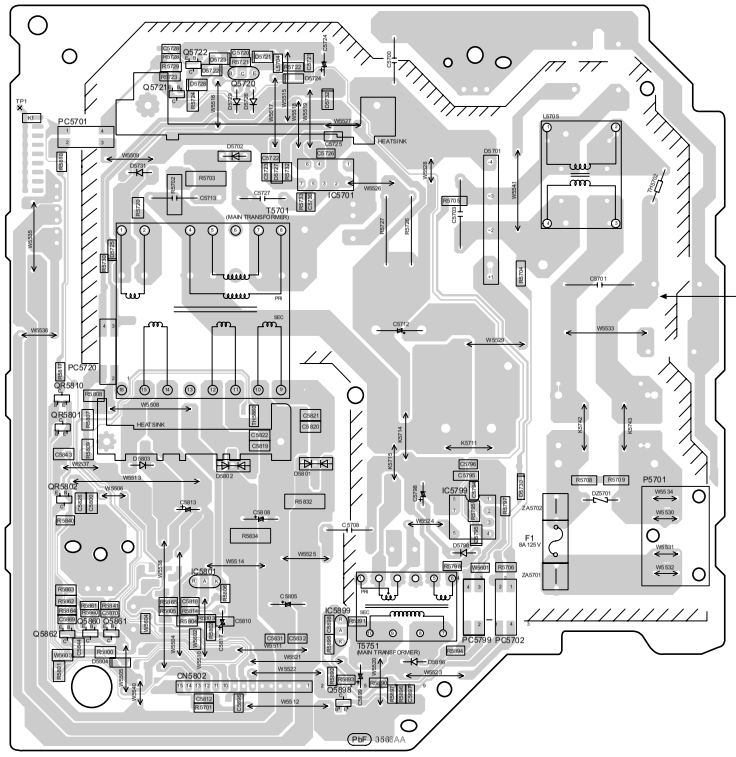
NOTE: " * " REF IS FOR INDICATION ONLY.

Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

SA-AKX14
PANEL / LCD / REMOTE SENSOR / USB P.C.B.

18.5. SMPS P.C.B.

H SMPS P.C.B. (REPM12X140A)



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

AC IN ~
120V 60Hz

Nota:
Para el valor y clave de cada componente referirse a; "Lista de partes Eléctricas" a partir de la página 102.

SA-AKX14PH/PN
SMPS P.C.B.

19 Appendix Information of Schematic Diagram

19.1. Voltage & Waveform Chart

Note:

- Indication Voltage Values are in 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 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.

19.1.1. CD Servo P.C.B.

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

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

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

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

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

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

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

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

REF NO.	IC7002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.6	0	0	1.6	3.3	3.3	3.2	7.5	2.0	2.0	3.9	3.9	2.7	2.5	2.8	2.5	1.1	3.8	5.1	0

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

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

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

SA-AKX14 CD SERVO P.C.B.

19.2. Main P.C.B. (1/2)

REF NO.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER ON	0	0	0	3.4	0	1.2	3.3	0	0	0	0	1.6	1.6	0	1.1	1.8	3.3	1.8	3.3	3.4
STANDBY	0	0	0	3.4	0	1.2	3.3	0	0	0	0	1.6	1.6	0	0	1.8	3.3	1.8	3.3	3.4

REF NO.	IC2003																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER ON	3.3	3.3	3.3	2.8	0	1.7	0	3.3	1.1	0	3.3	0	3.3	3.3	3.3	3.3	1.8	3.3	0	3.3
STANDBY	3.3	3.3	3.3	2.8	0	1.7	0	3.3	1.1	0	3.3	0	3.3	3.3	3.3	3.3	2.0	3.3	0	3.3

REF NO.	IC2003																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
POWER ON	3.3	0	0	3.3	0	3.3	0	3.4	0	0	0	0	0	0	0	0	0	0	0	3.4
STANDBY	3.3	3.3	0	3.3	0	3.3	0	3.4	0	0	0	0	0	0	0	0	0	0	0	3.4

REF NO.	IC2003																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
POWER ON	3.4	3.3	0	0	3.3	3.3	0	3.3	0	0	0	0	0	0	0	0	0	0	1.2	3.3
STANDBY	3.4	3.3	0	0	3.3	3.3	0	3.3	0	0	0	0	0	0	3.3	0	0	0	1.2	3.3

REF NO.	IC2003																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
POWER ON	1.2	0	0	0	3.3	0	3.3	0	3.4	0	0	3.4	3.4	0.5	1.0	1.8	1.4	2.3	0.7	3.4
STANDBY	1.2	0	0	0	3.3	0	3.3	0	3.4	0	0	3.4	3.4	0.5	1.0	1.8	1.4	1.5	0.7	3.4

REF NO.	IC2006																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0	3.3	3.3	0	3.4												
STANDBY	0	0	0	0	3.3	3.3	0	3.4												

REF NO.	IC2009																			
MODE	1	2	3	4	5															
POWER ON	4.9	0	5.2	0	3.1															
STANDBY	4.9	0	5.2	0	3.1															

REF NO.	IC2011																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	9.7	12.9	5.2	0	0.5	1.6	12.9	2.7												
STANDBY	9.7	12.9	5.2	0	0.5	1.6	12.9	2.7												

REF NO.	IC2101																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	4.5	0	4.5	0	4.5	4.5	4.5	0	4.5	0	4.5	0	0	4.5	9	0	3.3	3.4	0
STANDBY	0	4.3	0	4.5	0	4.5	4.5	4.5	0	4.5	0	4.5	0	0	4.5	9	0	3.3	3.4	0

REF NO.	IC2101																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
CD PLAY	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5								
STANDBY	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5								

SA-AKX14 MAIN P.C.B.

19.3. Main P.C.B. (2/2)

REF NO.	IC2201																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	4.8	4.8	4.8	0	4.8	4.8	4.8	9.7												
STANDBY	4.9	4.9	4.9	0	4.9	4.9	4.9	9.8												

REF NO.	IC5902																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	-11.0	0	0	34.5	0	-32.9	-24.6	35.6	0	0	-34.0	-31.0	-34.0	0	9.0	34.6	-34.0	-34.0	0	34.0
STANDBY	-11.0	0	0	34.5	0	-32.9	-24.6	35.6	0	0	-34.0	-31.0	-34.0	0	9.0	34.6	-34.0	-34.0	0	34.0

REF NO.	IC5902																			
MODE	21	22	23																	
CD PLAY	0	0	5.0																	
STANDBY	0	0	2.3																	

REF NO.	Q2000				Q2011				Q2021				Q2022				Q2035			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	7.0	7.0	7.7		0	3.3	0		9.7	16.0	10.3		16.0	7.9	7.0		0	34.5	0	
STANDBY	7.0	7.0	7.7		0	3.3	0		9.7	16.0	10.3		16.0	7.9	7.0		0	34.5	0	

REF NO.	Q2038				Q2039				Q2040				Q2041				Q2050			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	1.7	0.6		1.4	0	0.8		0	0	0.7		0	0	0.7		0.8	0	0.2	
STANDBY	0	1.7	0.6		1.4	0	0.8		0	0	0.7		0	0	0.7		0.8	0	0.2	

REF NO.	Q2051				Q2220				Q2222				Q5900				Q5901			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.8	0	0		0	9.7	3.4		3.4	9.7	3.9		-34.0	-27.9	-34.0		5.2	5.2	4.6	
STANDBY	0.8	0	0		0	9.7	3.4		3.4	9.7	3.9		-34.0	-27.9	-34.0		5.2	5.2	4.6	

REF NO.	Q5902				Q5903				Q5904				Q5905				QR2001			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0.7		0	3.4	0		0	3.3	0		0	3.3	0		5.0	12.0	0	
STANDBY	0	0	0.7		0	0	0.7		0	3.3	0		0	3.3	0		5.0	12.0	0	

REF NO.	QR2400				QR2402				QR5900				QR5901							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	4.1	4.1	4.1		4.1	4.1	0		5.2	0	5.2		0	5.2	0					
STANDBY	4.1	4.1	0		4.1	4.1	0		5.2	0	5.2		0	5.2	0					

SA-AKX14 MAIN P.C.B.

19.4. LCD 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 ON	3.3	3.2	3.3	3.3	0	2.9	3.3	0	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
STANDBY	3.3	3.2	3.3	3.3	0	2.9	3.3	0	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4

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 ON	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
STANDBY	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4

REF NO.	IC900																			
MODE	41	42	43	44																
POWER ON	1.4	1.4	1.4	1.4																
STANDBY	1.4	1.4	1.4	1.4																

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

SA-AKX14 LCD P.C.B.

19.5. Tuner P.C.B.

REF NO.	IC52																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TUNER	0	1.5	0	3.0	0	0	0	3.3	3.3	3.3	3.3	0	1.4	0.3	0	0	3.3	0	0	0

SA-AKX14 TUNER P.C.B.

19.6. SMPS P.C.B.

REF NO.	IC5701																			
MODE	1	2	3	4	5	6	7													
POWER ON	164.8	0	0	19.1	0	1.4	0.5													
STANDBY	164.8	0	0	19.1	0	1.4	0.5													

REF NO.	IC5799																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	5.9	1.0	2.3	11.0	164.2	0	0	0												
STANDBY	5.9	1.0	2.3	11.0	164.2	0	0	0												

REF NO.	IC5801																			
MODE	A	K	R																	
POWER ON	2.4	2.0	-30.0																	
STANDBY	2.4	2.0	-30.0																	

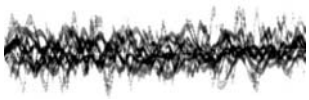
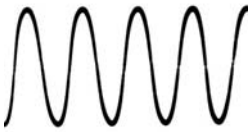
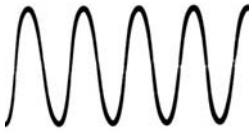
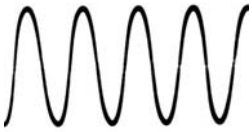
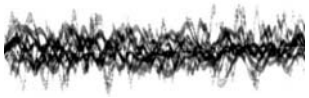
REF NO.	IC5899																			
MODE	A	K	R																	
POWER ON	1.2	0	0																	
STANDBY	1.2	0	0																	

REF NO.	Q5720				Q5721				Q5722				Q5860				Q5861			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	7.3	8.5	7.6		19.7	19.7	19.0		0	19.6	0		0	35.2	0		1.3	0	0.7	
STANDBY	7.4	8.6	7.7		19.7	19.7	19.0		0	19.6	0		0	35.2	0		1.3	0	0.7	

REF NO.	Q5862				Q5898				QR5801				QR5802				QR5810			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	0	0	0.7		0	3.3	0		0	3.1	0		0	3.3	6.6		0	0	3.1	
STANDBY	0	3.3	0		0	3.3	0		0	3.1	0		0	3.3	6.6		0	0	3.1	

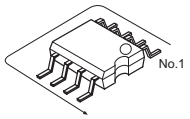
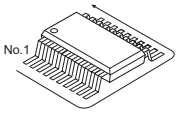
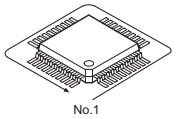
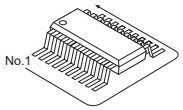
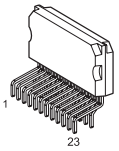
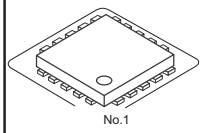
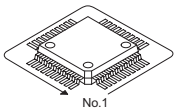
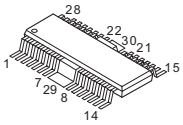
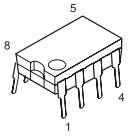
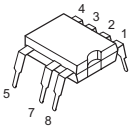
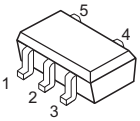
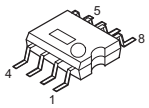
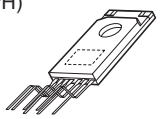
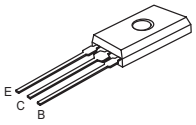
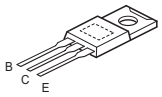
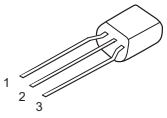
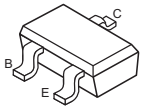
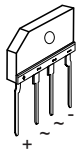
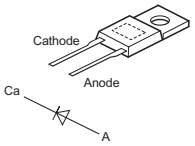
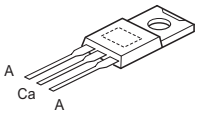
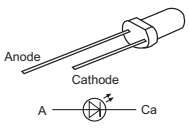
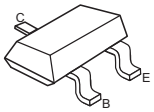
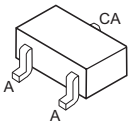
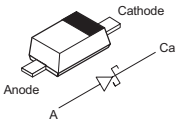
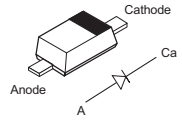
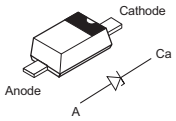
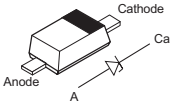
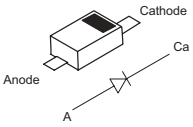
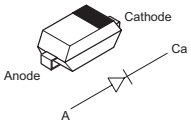
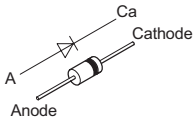
SA-AKX14 SMPS P.C.B.

19.7. Waveform Table

WF No. IC52-2,13,14 (PLAY)  0.1Vp-p(200usec/div)	WF No. IC52-9,17 (PLAY)  0.2Vp-p(100usec/div)	WF No. IC2003-12 (PLAY)  4Vp-p(500usec/div)	WF No. IC2003-13 (PLAY)  3.2Vp-p(100usec/div)
WF No. IC2003-15 (PLAY)  0.4Vp-p(200usec/div)	WF No. IC2003-16 (PLAY)  2.95Vp-p(10usec/div)	WF No. IC2101-2,12 (PLAY)  0.1Vp-p(200usec/div)	WF No. IC2101-6,8 (PLAY)  1.4Vp-p(100usec/div)
WF No. IC2101-31,32 (PLAY)  3.6Vp-p(200usec/div)	WF No. IC5902-2 (PLAY)  1.4Vp-p(1msec/div)	WF No. IC5902-10,14 (PLAY)  100Vp-p(1usec/div)	WF No. IC5902-21 (PLAY)  1.5Vp-p(500usec/div)

19.8. Illustration of ICs, Transistor and Diode

*Este material se encuentra sin programar, debe ser programado.

C0ABBB000067 (8P) 	C1BB00001151 (32P) 	C0HBA0000295 (44P) 	C0DBAYY01122 (8P) 	C1BA00000497 (23P) 	REP4780A (20P) 
* MN101EF16KXM (100P) 	C0GBY0000117 	C3EBEY000037 (8P) 	MIP2F20MSSCF (8P) 	C0DBFYY00049 	C3EBFC000042 
C5HACYY00004 (7P) (PN) C5HACYY00005 (7P) (PH) 	B1BABG000007 	B1BACG000048 B1BCCG000023 	C0DAZYY00039 C0DAEYY00040 	B1ABGC000005 B1ADCE000012 B1ADCF000001 	B1ABCF000176 B1ABDF000026 B1GBCFJJ0051 B1GBCFJN0033 B1GBCFLL0037 B1GDCFGA0018 B1GDCFJJ0047
B0EBNR000045 	B0HFRJ000012 B0ZAZ0000089 	B0ABSM000008 	B3AFA0000131 	B0ADDJ000032 B1ABCF000231 	B1GBCFJN0038 
DZ2J033M0L DZ2J07500L DZ2J100M0L 	B0ACCK000012 DA2J10100L 	B0BC010A0007 (PH) B0BC01700015 (PN) B0BC019A0007 B0BC035A0007 B0BC6R100010 B0BC9R000008 	B0BC5R6A0266 	
B0ECET000002 	B0ECKM000008 	 B0EAKM000117 B0EAMM000057 B0HAMP000094 (PH)			

19.9. Terminal Function of ICs

19.9.1. IC2003 (*MN101EF16KXW): IC MICRO-PROCESSOR

* Este material no se encuentra programado, se debe programar.

Pin No.	Terminal Name	I/O	Function
1	NC	-	No Connection
2	NC	-	No Connection
3	NC	-	No Connection
4	OCD_SDA	I/O	OCD Serial data
5	NC	-	No Connection
6	OCD_SCK	I/O	OC Serial Clock
7	PCONT	O	Power Control
8	NC	-	No Connection
9	REGION_CS	O	Region chip select
10	NC	-	No Connection
11	MM0D0 (GND)	-	Ground
12	OSC2(OUT)	O	Oscillator Output
13	OSC1(IN)	I	Oscillator Input
14	VSS	-	Ground
15	XI	I	Oscillator Input
16	XO	O	Oscillator Output
17	VDD3.3	-	+3.3 Voltage Supply
18	VDD1.8	-	+1.8 Voltage Supply
19	NRST	I	Reset Input (Active L)
20	ASP_CLK	O	ASP Clock
21	ASP_DATA	I/O	ASP data
22	DC_DET_AMP	I	DC Detect (D-AMP IC Failure Detection)
23	DC_DET_PWR	I	DC DETECT (Power Supply Failure Detection)
24	BASS_SHIFT	O	Bass Level Meter Adjustment
25	NC	-	No Connection
26	SYNC	I	AC Failure Detection Input
27	NC	-	No Connection
28	DIMMER	O	LCD Display Brightness
29	CD_S_REQ	I	CD status request
30	BASS_SHIFT	-	No Connection
31	LCD_DATA	O	LCD data output
32	LCD_CE	O	LCD chip enable
33	LCD_WR	O	LCD write
34	CD_SI	O	CD Serial data input
35	CD_SO	I	CD Serial data output
36	CD_SCLK	O	CD Serial Clock
37	VDD18	-	+1.8V Voltage supply
38	CD_INNER_SW	I/O	CD Inner switch detection
39	VSS	-	Ground
40	NC	-	No Connection
41	NC	-	No Connection
42	CD_M_REQ	O	CD Mode Request
43	CD_CLOSE_SW	I	CD Close Switch Detection
44	CD_RESET	I/O	CD Reset
45	NC	-	No Connection
46	CD_USB IN	I	CD USB Input
47	NC	-	No Connection
48	CD_OPEN_SW	I	CD Open Switch Detection
49	NC	-	No Connection
50	NC	-	No Connection
51	NC	-	No Connection
52	NC	-	No Connection
53	NC	-	No Connection
54	NC	-	No Connection
55	NC	-	No Connection
56	NC	-	No Connection
57	NC	-	No Connection
58	NC	-	No Connection
59	EE_CS	O	EEPROM IC Chip select
60	EE_SCL	O	EEPROM IC Serial clock
61	EE_SDA	I/O	EEPROM IC Serial data
62	CRTIMER	I/O	CR Timer
63	VSS	-	Ground
64	NC	-	No Connection
65	LD_CW	O	Loading Motor Turning Clock-wise (Tray Open)
66	LD_CCW	O	Loading Motor Turning Counter-Clockwise (Tray Close)
67	NC	-	No Connection
68	MODE_DA	O	Digital Amp On/Off control.
69	NC	-	No Connection
70	NC	-	No Connection
71	NC	-	No Connection
72	NC	-	No Connection
73	FHOP	O	Frequency Hop control
74	SMPS_BP	O	SMPS Breatproof
75	MUTE_F	O	Digital Amp Muting control
76	NC	-	No Connection
77	NC	-	No Connection
78	DC-DC ENABLE	O	DC-DC Converter
79	TU_SDA	I/O	Tuner serial data
80	TU_RST	O	Tuner reset
81	TU_SCLK	O	Tuner serial clock
82	NC	-	No Connection
83	NC	-	No Connection
84	NC	-	No Connection
85	RMT	I	Remote control serial data
86	NC	-	No Connection
87	TU_INT	I	Tuner Interrupt request
88	CLIP ATTN	O	Clipping attenuation
89	VDD	-	Voltage supply
90	NC	-	No Connection
91	VSS	-	Ground
92	KEY1	I	Key 1 Input
93	KEY2	I	Key 2 Input
94	CLIP SENSOR	I	Clipping sensor (Volume & ASP Bass control)
95	AUTO BASS	I	Auto Bass setting adjustment
96	ROTARY JOG	I	Rotary jog for browse operation (Album & Track)
97	REGION_AD	I	Region setting
98	VOL_JOG	I	Volume Level Adjustment
99	SMPS_ID	I/O	SMPS Type Detection
100	VREF+	-	Voltage Supply

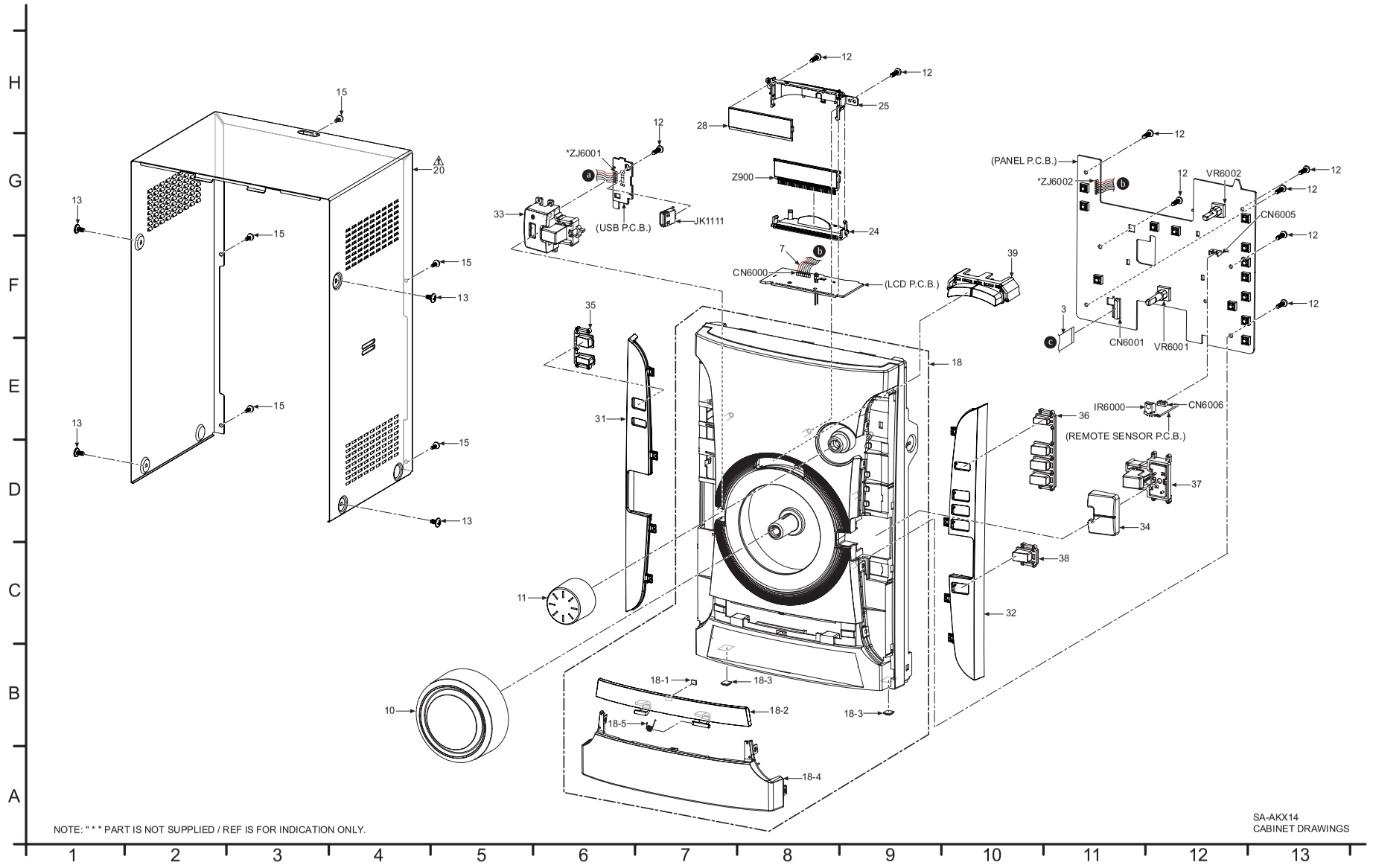
19.9.2. IC900(C0HBA0000295): IC FL Driver

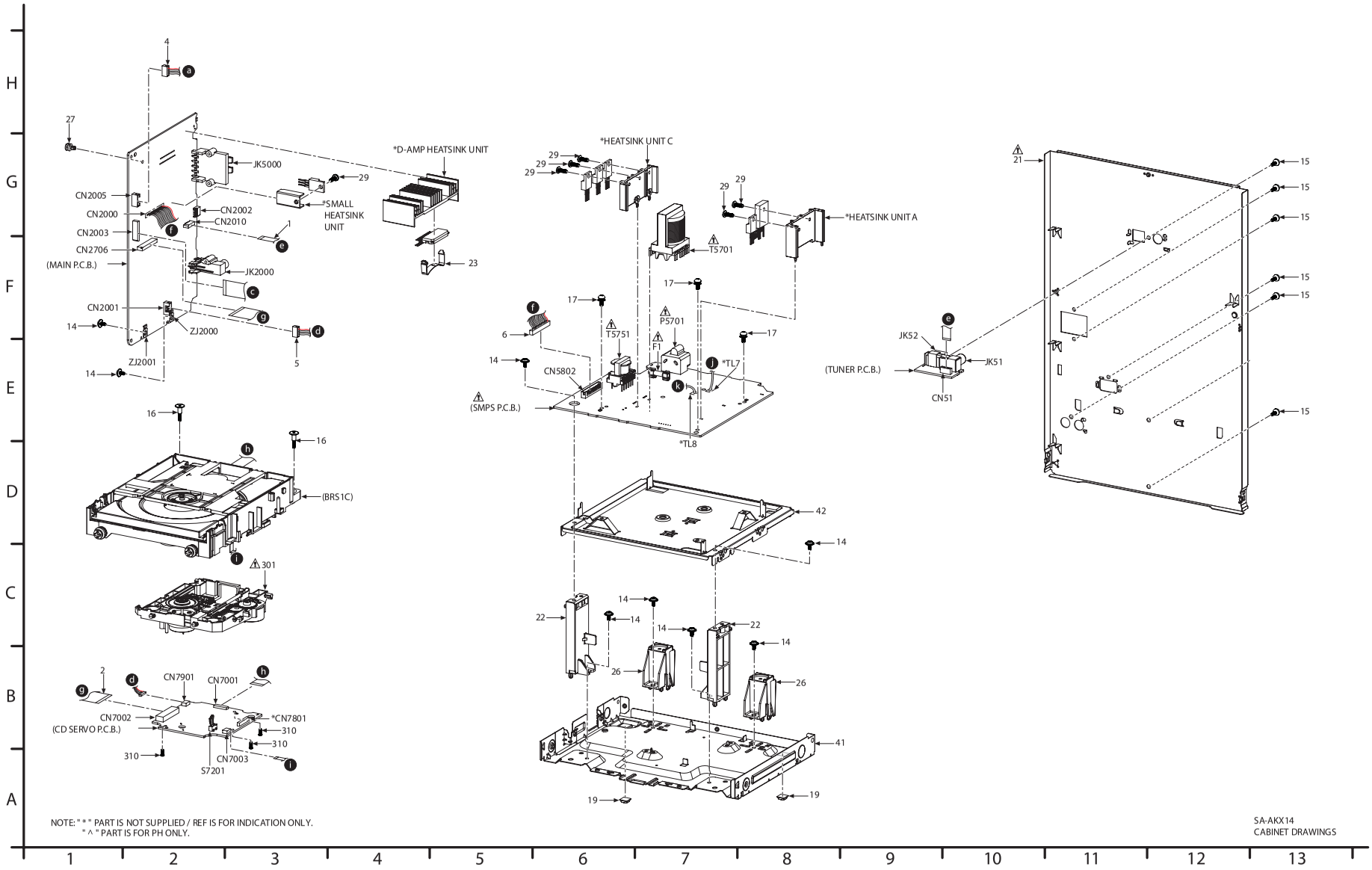
Pin No.	Terminal Name	I/O	Function
1	/CS	I	Chip Selection Input
2	/RD	I	Read Clock Input
3	/WR	I	Write Clock Input
4	DATA	I/O	Serial Data Input
5	VSS	I	Negative Power Supply
6	VLCD	I	LCD Power Input
7	VDD	I	Positive Power Supply
8	BZ	O	Tone Frequency Output Pair
9	COM0	O	Common Output 0
10	COM1	O	Common Output 1
11	COM2	O	Common Output 2
12	COM3	O	Common Output 3
13	SEG31	O	Segment Output 31
14	SEG30	O	Segment Output 30
15	SEG29	O	Segment Output 29
16	SEG28	O	Segment Output 28
17	SEG27	O	Segment Output 27
18	SEG26	O	Segment Output 26
19	SEG25	O	Segment Output 25
20	SEG24	O	Segment Output 24
21	SEG23	O	Segment Output 23
22	SEG22	O	Segment Output 22
23	SEG21	O	Segment Output 21
24	SEG20	O	Segment Output 20
25	SEG19	O	Segment Output 19
26	SEG18	O	Segment Output 18
27	SEG17	O	Segment Output 17
28	SEG16	O	Segment Output 16
29	SEG15	O	Segment Output 15
30	SEG14	O	Segment Output 14
31	SEG13	O	Segment Output 13
32	SEG12	O	Segment Output 12
33	SEG11	O	Segment Output 11
34	SEG10	O	Segment Output 10
35	SEG9	O	Segment Output 9
36	SEG8	O	Segment Output 8
37	SEG7	O	Segment Output 7
38	SEG6	O	Segment Output 6
39	SEG5	O	Segment Output 5
40	SEG4	O	Segment Output 4
41	SEG3	O	Segment Output 3
42	SEG2	O	Segment Output 2
43	SEG1	O	Segment Output 1
44	SEG0	O	Segment Output 0

20 Exploded View and Replacement Parts List

20.1. Exploded View and Mechanical replacement Part List

20.1.1. Cabinet Parts Location

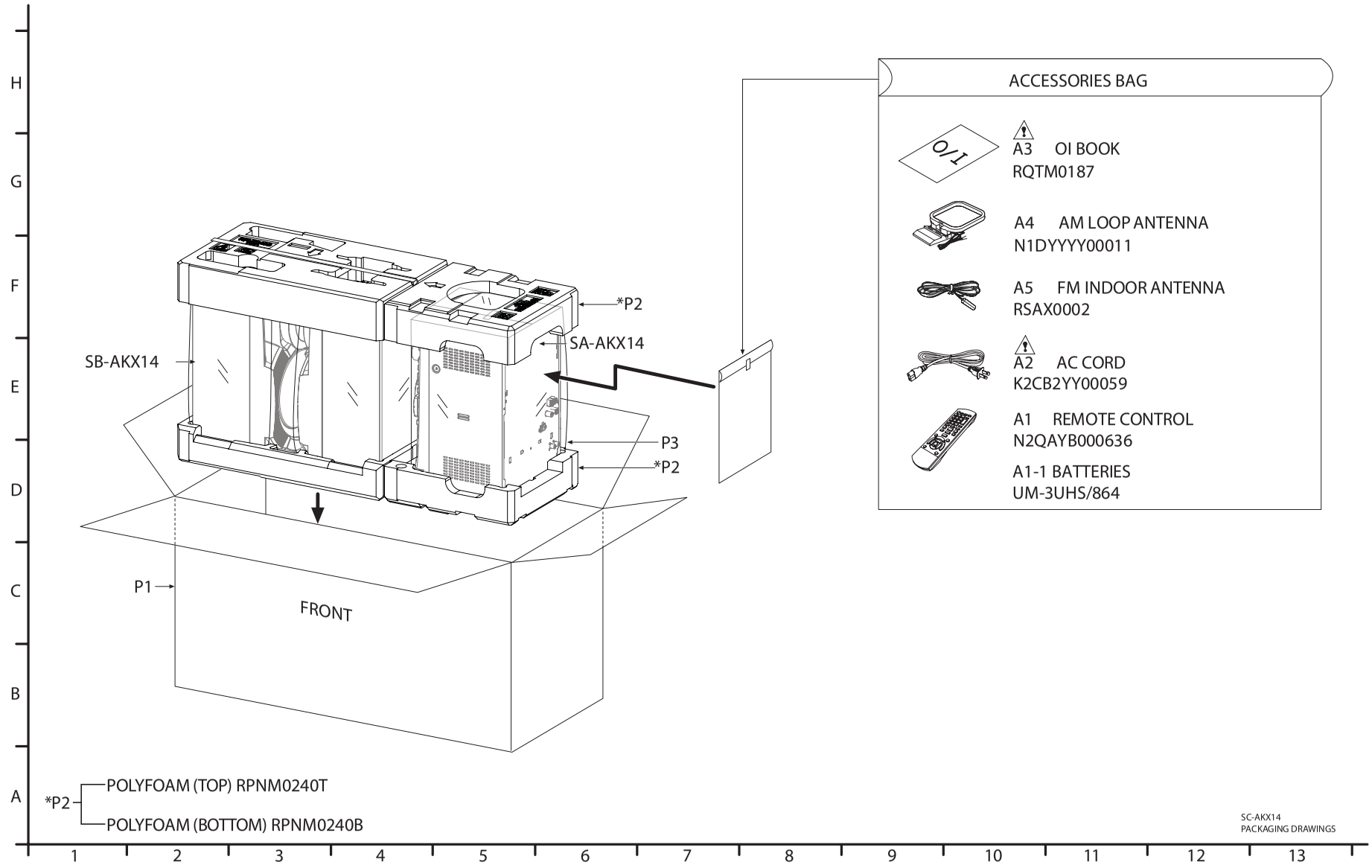




NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.
" ^ " PART IS FOR PH ONLY.

SA-AKX14
CABINET DRAWINGS

20.1.2. Packaging



20.1.3. Mechanical Replacement Part 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 PAVCSG unless indicated likewise.
- Parts mentioned [SPG] in the Remarks column are supplied by PAVC-CSG.
- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	S:	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		

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	REE1693	9P FFC (TUNER-MAIN)	1	
	2	REEX1259	27P FFC (MAIN-CD SERVO)	1	
	3	REEX1263	17P FFC (MAIN-PANEL)	1	
	4	REX1472	5P CABLE WIRE (USB-MAIN)	1	
	5	REX1473	5P CABLE WIRE (CD SERVO-MAIN)	1	
	6	REX1534	15P CABLE WIRE (MAIN-SMPS)	1	
	7	REX1535	7P CABLE WIRE (PANEL-LCD)	1	
	10	RGW0428-S1	VOLUME KNOB	1	
	11	RGW0429-K	SKIP KNOB	1	
	12	RHD26046	SCREW	9	
	13	RHD30007-K2J	SCREW	4	
	14	RHD30111-31	SCREW	8	
	15	RHD30119-S	SCREW	12	
	16	RHDX031008	SCREW	2	
	17	RHDX30005-J	SCREW	3	
	18	RYPM0307	FRONT PANEL ASS'Y	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	18-1	RMGX0033A-K	CD LID CUSHION	1	
	18-2	RGK2307-KL	CD LID	1	
	18-3	RKAX0042-K	LEG CUSHION	2	
	18-4	RKW0984-KL	UNDER WINDOW	1	
	18-5	RMB0930	CD LID SPRING	1	
	19	RKAX0042-K	LEG CUSHION	2	
⚠	20	RKMX1011Z-KL	TOP CABINET	1	
⚠	21	RXTM0002E-A	REAR PANEL	1	
	22	RMAX1007	CHASSIS SUPPORT	2	
	23	RMCX0035	HEAT SINK CLIP	1	
	24	RMNX1011-W2	LCD HOLDER BASE	1	
	25	RMNX1012A-W2	LCD HOLDER COVER	1	
	26	RMQX1088	MECHA SUPPORT	2	
	27	RMX0444	PCB SPACER	1	
	28	RMXX1008-2	LCD DIFFUSER SHEET	1	
	29	XTB3+10JFJ	SCREW	6	
	31	RGK2308-KL	SIDE ORNAMENT L	1	
	32	RGK2309-KL	SIDE ORNAMENT R	1	
	33	RGK2325-SL	USB ORNAMENT	1	
	34	RGK2328-SL	PLAY BUTTON ORNAMENT	1	
	35	RGU2761-KL	POWER BUTTON	1	
	36	RGU2762-KL	FUNCTION BUTTON	1	
	37	RGU2763-SL	PUSH/PLAY BUTTON	1	
	38	RGU2765-KL	CD OPEN CLOSE BUTTON	1	
	39	RGU2792-KL	SKIP BUTTON	1	
	41	RMKX1031A-1	BOTTOM CHASSIS	1	
	42	RMKX1037-2	INNER CHASSIS	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			TRAVERSE DECK		
⚠		RD-DDL081-PX	BRS1C CD UNIT	1	
⚠	301	RAEX1033Z-V	TRAVERSE ASS'Y	1	
	310	XTN2+6GFJ	SCREW	3	
			PACKING MATERI-ALS		
	P1	RPGM0271-1	PACKING CASE	1	
	P2	RPNM0240T/B	POLYFOAM	1	
	P3	RPFX0198	MIRAMAT SHEET	1	
			ACCESSORIES		
	A1	N2QAYB000636	REMOTE CONTROL	1	
⚠	A2	K2CB2YY00059	AC CORD	1	
⚠	A3	RQTM0187	O/I BOOK	1	
	A4	N1DYYY00010	AM LOOP ANTENNA	1	
	A5	RSAX0002	FM INDOOR ANTENNA	1	

20.2. Electrical Replacement Part 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 PAVCSG unless indicated likewise.
- Parts mentioned [SPG] in the Remarks column are supplied by PAVC-CSG.

Safety	Ref. no	Part No.	Part Name & Description
⚠		K5D802APA008	FUSIBLE
		RAIM12X140A	CONJUNTO SMPS AKX14 **para uso de CS**
		REPM12X140A	CONJUNTO MANUAL SMPS AKX14
⚠	C5700	F1BAF471A013	CHIP CAPACITOR
⚠	C5701	F0CAF104A105	CAPACITOR
⚠	C5703	F0CAF224A105	CAPACITOR
⚠	C5708	F1BAF1020020	CAPACITOR
	C5712	F2B2D3310024	E-CAP
	C5713	F0C2J1030007	CAPACITOR
	CN5802	K1KA15AA0194	CONECTOR 12 PIN
	D5701	B0EBNR000045	Puente de Diodos
	D5702	B0ZAZ0000089	DIODO
	D5801	B0ABSM000008	DIODO
	D5802	B0ABSM000008	DIODO
	D5803	B0HFRJ000012	DIODE
	IC5701	C5HACYY00004	CIRCUITO INTEGRADO
	IC5799	MIP2F20MSSCF	Intelligent power device
⚠	L5705	G0B612H00004	COMMON-MODE LINE CHOKE COILS
⚠	P5701	K2AB2B000007	AC INLET
	R5726	ERX2SZJR15P	RESISTENCIA
	R5727	ERX2SZJR13P	RESISTENCIA
⚠	T5701	G4DYZ0000057	SWITCHING TRANSFORMERS
⚠	T5751	ETS19AB2E6AG	Backup Switching Transformer
	TH5702	D4CAA2R20001	Termistor
	C5720	F1H1H104A013	CHIP CAPACITOR
	C5721	F1H1H2210001	CHIP CAPACITOR
	C5722	F1H1H102A219	CHIP CAPACITOR
	C5723	F1H1H471A219	CHIP CAPACITOR
	C5725	F1H1H104A013	CHIP CAPACITOR
	C5726	F1H1H104A013	CHIP CAPACITOR
	C5728	F1H1H102A219	CHIP CAPACITOR
	C5730	F1H1E105A116	CHIP CAPACITOR
	C5794	F1H1H102A219	CHIP CAPACITOR
	C5795	F1K1H105A149	CHIP CAPACITOR
	C5796	F1H1H104A013	CHIP CAPACITOR
	C5800	F1J2E1030004	CHIP CAPACITOR
	C5810	F1H1H104A013	CHIP CAPACITOR
	C5812	F1H1H104A013	CHIP CAPACITOR
	C5818	F1H1H104A013	CHIP CAPACITOR
	C5819	F1J2E1030004	CHIP CAPACITOR
	C5820	F1J2E1030004	CHIP CAPACITOR
	C5821	F1J2E1030004	CHIP CAPACITOR
	C5822	F1J2E1030004	CHIP CAPACITOR
	C5826	F1J2E1030004	CHIP CAPACITOR
	C5831	F1H1H104A013	CHIP CAPACITOR
	C5832	F1H1H104A013	CHIP CAPACITOR
	C5843	F1J1A106A043	CHIP CAPACITOR
	C5844	F1J1A106A043	CHIP CAPACITOR
	C5869	F1H1H104A013	CHIP CAPACITOR
	C5870	F1H1H104A013	CHIP CAPACITOR
	C5896	F1H1H104A013	CHIP CAPACITOR
	C5897	F1H1H103A219	CHIP CAPACITOR
	C5898	F1H1H104A013	CHIP CAPACITOR
	D5722	B0BC019A0007	DIODE
	D5723	B0ACCK000012	DIODE
	D5724	B0ACCK000012	DIODE
	D5725	B0BC6R100010	DIODO
	D5727	B0ACCK000012	DIODE
	D5728	B0ACCK000012	DIODE
	D5732	B0BC035A0007	DIODE
	D5795	B0BC9R000008	DIODO
	K1	ERJ3GEY0R00V	CHIP JUMPER
	L5704	J0JBC0000019	CHIP INDUCTOR
	Q5721	B1ADCF000001	TRANSISTOR
	Q5722	B1ABCF000176	TRANSISTOR
	Q5860	B1ADCF000001	TRANSISTOR
	Q5861	B1ABCF000176	TRANSISTOR
	Q5862	B1GBCFJJ0051	TRANSISTOR
	Q5898	B1ABCF000176	TRANSISTOR
	QR5801	B1GBCFJN0038	CHIP TRANSISTOR
⚠	PCB	RJB3568A-1	PRINTED CIRCUIT BOARD (SMPS LOW / MID PC
	K11	Z-W6NL	ALAMBRE JUMPER
	K5711	Z-W6NL	ALAMBRE JUMPER
	K5714	Z-W6NL	ALAMBRE JUMPER
	K5715	Z-W6NL	ALAMBRE JUMPER
	K5742	Z-W6NL	ALAMBRE JUMPER
	K5743	Z-W6NL	ALAMBRE JUMPER
	W5504	Z-W6NL	ALAMBRE JUMPER
	W5505	Z-W6NL	ALAMBRE JUMPER
	W5506	Z-W6NL	ALAMBRE JUMPER
	W5508	Z-W6NL	ALAMBRE JUMPER
	W5509	Z-W6NL	ALAMBRE JUMPER
	W5510	Z-W6NL	ALAMBRE JUMPER
	W5511	Z-W6NL	ALAMBRE JUMPER
	W5512	Z-W6NL	ALAMBRE JUMPER
	W5513	Z-W6NL	ALAMBRE JUMPER
	W5514	Z-W6NL	ALAMBRE JUMPER
	W5515	Z-W6NL	ALAMBRE JUMPER
	W5516	Z-W6NL	ALAMBRE JUMPER

	QR5802	B1GDCFGA0018	TRANSISTOR
	QR5810	B1GBCFLL0037	CHIP TRANSISTOR
	R5702	D0GZ333JA012	CHIP RESISTOR
	R5703	D0GZ333JA012	CHIP RESISTOR
	R5704	ERJ8GEYJ224V	CHIP RESISTOR
	R5705	ERJ8GEYJ224V	CHIP RESISTOR
	R5706	ERJ6GEYJ824V	RESISTENCIA CHIP
	R5708	ERJ8GEYJ155V	CHIP RESISTOR
	R5709	ERJ8GEYJ155V	CHIP RESISTOR
	R5720	ERJ6GEYJ220V	R.CHIP
	R5721	ERJ6GEYJ103V	R.CHIP
	R5722	ERJ6GEYJ122V	R.CHIP
	R5723	ERJ3GEYJ102V	CHIP RESISTOR
	R5724	ERJ6GEYJ121V	R.CHIP
	R5728	ERJ3GEYJ104V	CHIP RESISTOR
	R5729	ERJ6GEYJ103V	R.CHIP
	R5730	ERJ3GEYJ102V	CHIP RESISTOR
	R5732	ERJ3GEYJ101V	CHIP RESISTOR
	R5733	ERJ3GEYJ473V	RESISTENCIA CHIP PEL∃CULA
	R5795	ERJ6GEYJ474V	R.CHIP
	R5797	ERJ3GEYJ153V	RESISTENCIA CHIP PEL∃CULA
	R5798	ERJ3GEYJ220V	RESISTENCIA CHIP
	R5800	ERJ6GEYJ153V	R.CHIP
	R5801	ERJ6GEYJ223V	R.CHIP
	R5802	ERJ3RBD123V	CHIP RESISTOR
	R5803	ERJ3RBD152V	CHIP RESISTOR
	R5804	D1BD4702A077	CHIP RESISTOR
	R5805	ERJ3RBD222V	PRESICION CHIP RESISTOR
	R5806	ERJ3GEYJ153V	RESISTENCIA CHIP PEL∃CULA
	R5807	ERJ6GEYJ331V	R.CHIP
	R5808	ERJ6GEYJ222V	R.CHIP
	R5809	ERJ6GEYJ331V	R.CHIP
	R5810	ERJ3GEYJ331V	RESISTENCIA CHIP PEL∃CULA
	R5814	ERJ3GEYJ822V	RESISTENCIA CHIP PEL∃CULA
	R5817	ERJ3GEYJ331V	RESISTENCIA CHIP PEL∃CULA
	R5832	D0GZ222JA012	CHIP RESISTOR
	R5834	D0GZ222JA012	CHIP RESISTOR
	R5840	ERJ3GEYJ823V	CHIP RESISTOR
	R5841	ERJ3GEYJ124V	CHIP RESISTOR
	R5860	ERJ3GEYF103V	CHIP RESISTOR
	R5861	ERJ3GEYF332V	CHIP RESISTOR
	R5862	ERJ6GEYJ183V	R.CHIP
	R5863	ERJ6GEYJ183V	R.CHIP
	R5864	ERJ3GEYF103V	CHIP RESISTOR
	R5865	ERJ3GEY0R00V	CHIP JUMPER
	R5890	ERJ3GEYJ222V	CHIP RESISTOR
	R5891	ERJ3RBD333V	CHIP RESISTOR
	R5892	ERJ3RBD102V	CHIP RESISTOR
	R5893	ERJ3RBD103V	RESISTENCIA CHIP PEL∃CULA
	R5894	ERJ3GEYJ151V	RESISTENCIA CHIP PEL∃CULA
	R5895	ERJ3GEYJ153V	RESISTENCIA CHIP PEL∃CULA
	R5896	ERJ3GEYJ104V	CHIP RESISTOR
	R5897	ERJ3GEYJ101V	CHIP RESISTOR
	TH5860	D4CC11040013	CHIP TERMISTOR
	W5601	ERJ3GEY0R00V	CHIP JUMPER
	W5602	ERJ6GEY0R00V	CHIP JUMPER
	W5603	ERJ6GEY0R00V	CHIP JUMPER
	W5604	ERJ3GEY0R00V	CHIP JUMPER
	C5724	F2A1H5600009	CHIP CAPACITOR
	C5798	F2A1E221B422	CAPACITOR
	C5813	F2A1E221B422	CAPACITOR
	C5817	F2A2AR100002	CAPACITOR
	C5899	F2A1A221B161	CAPACITOR
	D5726	B0EAKM000117	DIODO
	D5729	B0EAMM000057	DIODO
	D5731	B0EAMM000057	DIODO
	D5798	B0EAMM000057	DIODO
	D5896	B0EAMM000057	DIODO
	IC5801	C0DAZYY00039	ICS FOR POWER SUPPLY
	IC5899	C0DAEYY00040	ICs For Power Supply •
	Q5720	B1BABG000007	TRANSISTOR
	ZA5701	K3GE1ZZ00001	PORTAFUSIBLE
	ZA5702	K3GE1ZZ00001	PORTAFUSIBLE
	IR6000	B3RAB0000084	SENSOR PARA CONTRO REMOTO
	C2000	D0GBR00JA008	CHIP JUMPER
	C2003	F1H0J1050012	CHIP CAPACITOR
	C2004	F1J1A106A043	CHIP CAPACITOR
	C2006	F1H1C683A087	CHIP CAPACITOR
	C2007	F1H1C683A087	CHIP CAPACITOR
	C2015	F1H1H2210001	CHIP CAPACITOR
	C2016	F1H1H2210001	CHIP CAPACITOR
	C2017	F1H1H101A230	CHIP CAPACITOR
	C2018	F1H1H101A230	CHIP CAPACITOR
	C2025	F1H1H103A219	CHIP CAPACITOR
	C2026	F1H1H103A219	CHIP CAPACITOR
	C2095	F1H1H104A013	CHIP CAPACITOR
	C2102	F1H1H104A013	CHIP CAPACITOR
	C2103	F1H1H331A013	CHIP CAPACITOR
	C2104	F1H1H103A219	CHIP CAPACITOR
	C2105	F1H1H103A219	CHIP CAPACITOR
	C2107	F1J1A106A043	CHIP CAPACITOR
	C2108	F1H0J1050012	CHIP CAPACITOR
	C2109	F1H0J1050012	CHIP CAPACITOR

	W5517	Z-W6NL	ALAMBRE JUMPER
	W5518	Z-W6NL	ALAMBRE JUMPER
	W5519	Z-W6NL	ALAMBRE JUMPER
	W5520	Z-W6NL	ALAMBRE JUMPER
	W5521	Z-W6NL	ALAMBRE JUMPER
	W5522	Z-W6NL	ALAMBRE JUMPER
	W5523	Z-W6NL	ALAMBRE JUMPER
	W5524	Z-W6NL	ALAMBRE JUMPER
	W5525	Z-W6NL	ALAMBRE JUMPER
	W5526	Z-W6NL	ALAMBRE JUMPER
	W5527	Z-W6NL	ALAMBRE JUMPER
	W5528	Z-W6NL	ALAMBRE JUMPER
	W5529	Z-W6NL	ALAMBRE JUMPER
	W5530	Z-W6NL	ALAMBRE JUMPER
	W5531	Z-W6NL	ALAMBRE JUMPER
	W5532	Z-W6NL	ALAMBRE JUMPER
	W5533	Z-W6NL	ALAMBRE JUMPER
	W5534	Z-W6NL	ALAMBRE JUMPER
	W5535	Z-W6NL	ALAMBRE JUMPER
	W5536	Z-W6NL	ALAMBRE JUMPER
	W5537	Z-W6NL	ALAMBRE JUMPER
	W5538	Z-W6NL	ALAMBRE JUMPER
	W5540	Z-W6NL	ALAMBRE JUMPER
	W5541	Z-W6NL	ALAMBRE JUMPER
	D5804	B0ACCK000012	DIODE
	D5721	B0BC01700015	DIODO
	R5701	ERJ3RBD1001V	CHIP RESISTOR
⚠	PC5701	B3PBA0000579	OPTO ACOPLADOR
⚠	PC5702	B3PBA0000579	OPTO ACOPLADOR
⚠	PC5720	B3PBA0000579	OPTO ACOPLADOR
⚠	PC5799	B3PBA0000579	OPTO ACOPLADOR
	D5730	B0ECET000006	SWITCHING DIODES
	C5805	F2A1H6810027	E-CAP
	C5808	F2A1H6810027	E-CAP
	C5727	F1B3A3320013	E-CAP
⚠	DZ5701	ERZV05Z471CS	VARISTORS
		RAIM12X141A	CONJUNTO D-AMP/ MAIN/PANEL/ USB **para uso CS**
		REPM12X141A	CONJUNTO MANUAL D-AMP/ MAIN/PANEL/ USB
	CN2001	K1KA05AA0193	Conector
	CN2003	K1MY17AA0124	CONECTOR 17 PIN
	CN2005	K1KA05AA0193	Conector
	CN2010	K1MY09AA0124	CONECTOR 09 PIN
	CN2706	K1MY27AA0124	CONECTOR 27 PIN
	IC5902	C1BA00000497	D-AMP IC
	JK2000	K2HA204B0153	2 PIN RCA JACK
	JK5000	K4AC04B00030	2CH SPEAKER JACK
	L2000	G0A330ZA0045	coil
	L5903	G0A150L00003	BOBINA
	X2000	H0A327200181	Crystal Oscillator •
	Z900	L5AYAYY00061	Simple matrix liquid crystal panels
	ZH001	RMNX1011-W2	LDC HOLDER BASE
	JK1111	K1FY104A0007	USB TYPE A RECEPTACLE PCB 180 CONECTOR
	ZJ6001	REX1472	5P FLAT WIRE USB TO MAIN PCB

	C2113	F1H0J1050012	CHIP CAPACITOR
	C2114	F1H0J1050012	CHIP CAPACITOR
	C2115	F1J1A106A043	CHIP CAPACITOR
	C2116	F1J1A106A043	CHIP CAPACITOR
	C2123	F1H1A224A007	CHIP CAPACITOR
	C2127	F1H1H103A219	CHIP CAPACITOR
	C2128	F1H1H562A219	CHIP CAPACITOR
	C2130	F1J1H104A459	CHIP CAPACITOR
	C2137	F1H1H104A013	CHIP CAPACITOR
	C2138	F1H1H562A219	CHIP CAPACITOR
	C2141	F1H1H104A013	CHIP CAPACITOR
	C2142	F1H1H104A013	CHIP CAPACITOR
	C2143	F1H1H102A219	CHIP CAPACITOR
	C2144	F1H0J1050012	CHIP CAPACITOR
	C2148	F1H1H223A219	CHIP CAPACITOR
	C2154	F1H1H102A219	CHIP CAPACITOR
	C2156	F1J1A106A043	CHIP CAPACITOR
	C2157	F1J1A106A043	CHIP CAPACITOR
	C2163	F1H1H331A013	CHIP CAPACITOR
	C2187	F1H1H104A013	CHIP CAPACITOR
	C2191	F1H1H104A013	CHIP CAPACITOR
	C2195	F1H0J1050012	CHIP CAPACITOR
	C2201	F1J1A106A043	CHIP CAPACITOR
	C2202	F1H0J1050012	CHIP CAPACITOR
	C2203	F1H1H103A219	CHIP CAPACITOR
	C2204	F1H1H470A004	CHIP CAPACITOR
	C2205	F1H1H470A004	CHIP CAPACITOR
	C2209	F1H0J1050012	CHIP CAPACITOR
	C2218	F1H1H104A013	CHIP CAPACITOR
	C2221	F1H1A184A012	CHIP CAPACITOR
	C2222	F1J1A106A043	CHIP CAPACITOR
	C2226	F1J1A106A043	CHIP CAPACITOR
	C2232	F1H1A184A012	CHIP CAPACITOR
	C2236	F1H1H104A013	CHIP CAPACITOR
	C2237	F1H1H682A219	CAPACITOR
	C2239	F1H1H104A013	CHIP CAPACITOR
	C2240	F1H1H2210001	CHIP CAPACITOR
	C2244	F1H1A224A007	CHIP CAPACITOR
	C2245	F1H0J1050012	CHIP CAPACITOR
	C2246	F1H1H104A013	CHIP CAPACITOR
	C2247	F1H1H104A013	CHIP CAPACITOR
	C2248	F1H0J1050012	CHIP CAPACITOR
	C2249	F1H0J1050012	CHIP CAPACITOR
	C2301	F1J1A106A043	CHIP CAPACITOR
	C2302	F1J1A106A043	CHIP CAPACITOR
	C2402	F1J1A106A043	CHIP CAPACITOR
	C2405	F1J1A106A043	CHIP CAPACITOR
	C5800	F1H1H104A013	CHIP CAPACITOR
	C5801	F1H1H104A013	CHIP CAPACITOR
	C5802	F1H1H104A013	CHIP CAPACITOR
	C5803	F1H1H104A013	CHIP CAPACITOR
	C5901	F1H1H102A219	CHIP CAPACITOR
	C5902	F1H1H102A219	CHIP CAPACITOR

	C5911	F1H1H104A013	CHIP CAPACITOR
	C5912	F1H1H104A013	CHIP CAPACITOR
	C5917	F1H1H104A013	CHIP CAPACITOR
	C5918	F1H1H104A013	CHIP CAPACITOR
	C5922	D0GBR00JA008	CHIP JUMPER
	C5925	F1H1A474A001	CHIP CAPACITOR
	C5927	F1H1H102A219	CHIP CAPACITOR
	C5929	F1H1H331A013	CHIP CAPACITOR
	C5931	F1H1A474A001	CHIP CAPACITOR
	C5936	F1H1H104A013	CHIP CAPACITOR
	C5939	F1H1H104A013	CHIP CAPACITOR
	C5942	F1H1H330A230	CHIP CAPACITOR
	C5943	F1K2A1040007	CHIP CAPACITOR
	C5948	F1J2A221A030	CHIP CAPACITOR
	C5951	F1H1H153A219	CHIP CAPACITOR
	C5952	F1J2A221A030	CHIP CAPACITOR
	C5954	F1H1C474A140	CHIP CAPACITOR
	C5956	F1H1H104A013	CHIP CAPACITOR
	C5958	F1H1H104A013	CHIP CAPACITOR
	C5961	F1H1H153A219	CHIP CAPACITOR
	C5962	F1J2A221A030	CHIP CAPACITOR
	C5964	F1J2A221A030	CHIP CAPACITOR
	C5968	F1K2A1040007	CHIP CAPACITOR
	C5970	F1H1H104A013	CHIP CAPACITOR
	C5973	F1H1H104A013	CHIP CAPACITOR
	C5976	F1H1A474A001	CHIP CAPACITOR
	C5978	F1H1H102A219	CHIP CAPACITOR
	C5980	F1H1H331A013	CHIP CAPACITOR
	C5982	F1H1A474A001	CHIP CAPACITOR
	C5985	F1H1H102A219	CHIP CAPACITOR
	C5993	F1H1H104A013	CHIP CAPACITOR
	C5994	F1H1H104A013	CHIP CAPACITOR
	D2000	DA2J10100L	DIODE
	D2001	DA2J10100L	DIODE
	D2002	DZ2J033M0L	DIODO
	D2003	DZ2J033M0L	DIODO
	D2004	DZ2J100M0L	Voltage regulation diodes
	D2008	DA2J10100L	DIODE
	D2014	B0ADDJ000032	SWITCHING DIODES
	D2015	B0ADDJ000032	SWITCHING DIODES
	D2028	DA2J10100L	DIODE
	D2300	DA2J10100L	DIODE

	R2004	ERJ3GEY0R00V	CHIP JUMPER
	R2010	ERJ3GEYJ102V	CHIP RESISTOR
	R2011	ERJ3GEYJ102V	CHIP RESISTOR
	R2015	ERJ3GEYJ473V	RESISTENCIA CHIP PELÍCULA
	R2016	ERJ3GEYJ473V	RESISTENCIA CHIP PELÍCULA
	R2018	ERJ3GEYJ102V	CHIP RESISTOR
	R2028	ERJ3GEYJ101V	CHIP RESISTOR
	R2029	ERJ3GEYJ181V	RESISTENCIA
	R2065	ERJ3GEYJ101V	CHIP RESISTOR
	R2066	D0GD101JA017	CHIP RESISTOR
	R2067	D0GD101JA017	CHIP RESISTOR
	R2069	ERJ3GEYJ102V	CHIP RESISTOR
	R2070	ERJ3GEYJ101V	CHIP RESISTOR
	R2071	ERJ3GEYJ101V	CHIP RESISTOR
	R2074	ERJ3GEYJ101V	CHIP RESISTOR
	R2076	ERJ3GEYJ102V	CHIP RESISTOR
	R2084	ERJ3GEYJ104V	CHIP RESISTOR
	R2085	D0GB822JA008	CHIP RESISTOR
	R2093	ERJ3GEYJ392V	RESISTENCIA CHIP PELÍCULA
	R2094	ERJ3GEYJ392V	RESISTENCIA CHIP PELÍCULA
	R2095	ERJ3GEYJ473V	RESISTENCIA CHIP PELÍCULA
	R2096	D0GD473JA017	CHIP RESISTOR
	R2098	ERJ3GEYJ472V	RESISTENCIA CHIP PELÍCULA
	R2102	ERJ3GEYJ472V	RESISTENCIA CHIP PELÍCULA
	R2103	ERJ3GEYJ332V	CHIP RESISTOR
	R2104	ERJ3GEYJ332V	CHIP RESISTOR
	R2105	ERJ3GEYJ682V	CHIP RESISTOR
	R2107	ERJ3GEYJ682V	CHIP RESISTOR
	R2111	ERJ3GEYJ331V	RESISTENCIA CHIP PELÍCULA
	R2114	ERJ3GEYJ331V	RESISTENCIA CHIP PELÍCULA
	R2117	ERJ3GEYJ101V	CHIP RESISTOR
	R2120	ERJ3GEYJ101V	CHIP RESISTOR
	R2121	ERJ3GEYJ475V	RESISTENCIA CHIP PELÍCULA
	R2123	ERJ3GEYJ564V	CHIP RESISTOR
	R2126	ERJ3GEYJ101V	CHIP RESISTOR
	R2129	ERJ3GEYJ101V	CHIP RESISTOR
	R2130	ERJ3GEYJ102V	CHIP RESISTOR
	R2131	ERJ3GEYJ102V	CHIP RESISTOR
	R2136	ERJ3GEY0R00V	CHIP JUMPER
	R2140	ERJ3GEY0R00V	CHIP JUMPER
	R2153	ERJ3GEYJ273V	RESISTENCIA CHIP PELÍCULA
	R2156	ERJ3GEYJ101V	CHIP RESISTOR

	D2301	DA2J10100L	DIODE
	IC2003	MN101EF16KXW	IC MICROP VE este material debe ser grabado.
	IC2006	C3BBEY000037	IC EEPROM
	IC2009	C0DBFYY00049	ICs For Power Supply •
	IC2011	C0DBAYY01122	ICS FOR POWER SUPPLY
	IC2101	C1BB00001151	ASP
	IC2201	C0ABBB000067	CIRCUITO INTEGRADO
	LB2010	D0GBR00JA008	CHIP JUMPER
	LB2100	J0JYC0000339	CHIP COIL •
	Q2011	B1GBCFLL0037	CHIP TRANSISTOR
	Q2038	B1ABCF000176	TRANSISTOR
	Q2039	B1ADCE000012	TRANSISTOR
	Q2040	B1ABCF000176	TRANSISTOR
	Q2041	B1ABCF000176	TRANSISTOR
	Q2050	B1ADCE000012	TRANSISTOR
	Q2051	B1ADCE000012	TRANSISTOR
	Q2220	B1ABCF000176	TRANSISTOR
	Q2222	B1ABCF000176	TRANSISTOR
	Q5900	B1ABGC000005	TRANSISTOR
	Q5901	B1ADCE000012	TRANSISTOR
	Q5902	B1ABCF000231	DIODE
	Q5903	B1ABCF000231	DIODE
	Q5904	B1ABCF000231	DIODE
	Q5905	B1ABCF000231	DIODE
	QR2400	B1GDCFJJ0047	TRANSISTOR
	QR2402	B1GDCFJJ0047	TRANSISTOR
	QR5900	B1GDCFJJ0047	TRANSISTOR
	QR5901	B1GBCFJJ0051	TRANSISTOR
	R2000	ERJ3GEY0R00V	CHIP JUMPER
	R2001	ERJ3GEYJ473V	RESISTENCIA CHIP PEL∃CULA
	R2002	ERJ3GEYJ473V	RESISTENCIA CHIP PEL∃CULA
	R2003	ERJ3GEY0R00V	CHIP JUMPER

	R2239	ERJ3RBD103V	RESISTENCIA CHIP PEL∃CULA
	R2240	ERJ3GEYJ220V	RESISTENCIA CHIP
	R2271	ERJ3GEYJ101V	CHIP RESISTOR
	R2278	ERJ3GEYJ681V	RESISTENCIA
	R2302	ERJ3GEYJ101V	CHIP RESISTOR
	R2304	ERJ3GEYJ101V	CHIP RESISTOR
	R2305	ERJ3GEYJ331V	RESISTENCIA CHIP PEL∃CULA
	R2306	ERJ3GEYJ331V	RESISTENCIA CHIP PEL∃CULA
	R2313	ERJ3GEYJ104V	CHIP RESISTOR
	R2314	ERJ3GEYJ104V	CHIP RESISTOR
	R2335	ERJ3GEYJ102V	CHIP RESISTOR
	R2347	ERJ3GEYJ822V	RESISTENCIA CHIP PEL∃CULA
	R2348	ERJ3GEYJ822V	RESISTENCIA CHIP PEL∃CULA
	R2349	ERJ3GEYJ273V	RESISTENCIA CHIP PEL∃CULA
	R2357	ERJ3GEYJ475V	RESISTENCIA CHIP PEL∃CULA
	R2358	ERJ3GEYJ472V	RESISTENCIA CHIP PEL∃CULA
	R2359	ERJ3GEYJ102V	CHIP RESISTOR
	R2360	ERJ3GEYJ104V	CHIP RESISTOR
	R2361	ERJ3GEYJ103V	CHIP RESISTOR
	R2362	ERJ3GEYJ474V	RESISTENCIA CHIP PEL∃CULA
	R2363	ERJ3GEYJ333V	RESITENCIA CHIP
	R2364	ERJ3GEYJ222V	CHIP RESISTOR
	R2372	ERJ3GEYJ102V	CHIP RESISTOR
	R2374	ERJ3GEYJ102V	CHIP RESISTOR
	R2376	ERJ3GEYJ101V	CHIP RESISTOR
	R2377	ERJ3GEYJ101V	CHIP RESISTOR
	R2402	ERJ3GEYJ101V	CHIP RESISTOR
	R2403	ERJ3GEYJ101V	CHIP RESISTOR
	R2404	ERJ3GEYJ102V	CHIP RESISTOR
	R2405	ERJ3GEYJ101V	CHIP RESISTOR
	R2406	ERJ3GEYJ332V	CHIP RESISTOR
	R5905	ERJ8GEYJ100V	CHIP RESISTOR
	R5907	ERJ3GEYJ124V	CHIP RESISTOR
	R5909	ERJ3GEYJ103V	CHIP RESISTOR
	R5910	ERJ3GEYJ184V	CHIP RESISTOR
	R5911	ERJ3RBD273V	CHIP RESISTOR
	R5912	ERJ3RBD333V	CHIP RESISTOR
	R5913	ERJ3RBD152V	CHIP RESISTOR
	R5914	ERJ3GEYJ103V	CHIP RESISTOR
	R5915	ERJ3GEYJ103V	CHIP RESISTOR
	R5917	ERJ3GEYJ103V	CHIP RESISTOR
	R5918	ERJ3RBD272V	CHIP RESISTOR
	R5919	ERJ3GEYJ103V	CHIP RESISTOR
	R5920	ERJ3RBD272V	CHIP RESISTOR
	R5922	ERJ3GEYJ562V	CHIP RESISTOR
	R5924	ERJ3GEYJ562V	CHIP RESISTOR
	R5926	ERJ8GEYJ100V	CHIP RESISTOR
	R5927	ERJ3GEYJ682V	CHIP RESISTOR
	R5928	ERJ8GEYJ100V	CHIP RESISTOR
	R5936	ERJ8GEYJ100V	CHIP RESISTOR
	R5939	ERJ3GEYJ562V	CHIP RESISTOR
	R5941	ERJ3GEYJ562V	CHIP RESISTOR
	R5942	ERJ3GEYJ101V	CHIP RESISTOR
	R5946	ERJ1TYJ220U	CHIP RESISTOR

	R2159	ERJ3GEYJ101V	CHIP RESISTOR
	R2163	ERJ3GEYJ102V	CHIP RESISTOR
	R2164	ERJ3GEYJ101V	CHIP RESISTOR
	R2165	ERJ3GEYJ102V	CHIP RESISTOR
	R2166	ERJ3GEYJ101V	CHIP RESISTOR
	R2173	ERJ3GEYJ153V	RESISTENCIA CHIP PEL∃CULA
	R2174	ERJ3GEYJ103V	CHIP RESISTOR
	R2177	ERJ3GEYJ153V	RESISTENCIA CHIP PEL∃CULA
	R2178	ERJ3GEYJ103V	CHIP RESISTOR
	R2182	ERJ3GEYJ103V	CHIP RESISTOR
	R2185	ERJ3GEYJ103V	CHIP RESISTOR
	R2189	D0GD473JA017	CHIP RESISTOR
	R2196	ERJ3GEYJ102V	CHIP RESISTOR
	R2197	D0GD101JA017	CHIP RESISTOR
	R2198	ERJ3GEYJ102V	CHIP RESISTOR
	R2201	ERJ3GEYJ102V	CHIP RESISTOR
	R2202	ERJ3GEYJ102V	CHIP RESISTOR
	R2204	ERJ3GEY0R00V	CHIP JUMPER
	R2205	ERJ3GEYJ472V	RESISTENCIA CHIP PEL∃CULA
	R2209	ERJ3GEY0R00V	CHIP JUMPER
	R2210	ERJ3GEYJ472V	RESISTENCIA CHIP PEL∃CULA
	R2219	ERJ3GEYJ222V	CHIP RESISTOR
	R2220	ERJ3GEYJ222V	CHIP RESISTOR
	R2222	ERJ3GEYJ472V	RESISTENCIA CHIP PEL∃CULA
	R2225	ERJ3GEYJ272V	RESISTENCIA CHIP PEL∃CULA
	R2226	ERJ3GEYJ472V	RESISTENCIA CHIP PEL∃CULA
	R2229	D0GD103JA017	CHIP RESISTOR
	R2230	ERJ3GEYJ104V	CHIP RESISTOR
	R2231	ERJ3GEYJ104V	CHIP RESISTOR
	R2232	ERJ3GEYJ103V	CHIP RESISTOR
	R2233	ERJ3GEYJ272V	RESISTENCIA CHIP PEL∃CULA
	R2235	D0GB223JA008	CHIP RESISTOR
	R2236	ERJ3GEYJ103V	CHIP RESISTOR
	R6005	ERJ3GEYJ472V	RESISTENCIA CHIP PEL∃CULA
	R6006	ERJ3GEYJ122V	RESISTENCIA CHIP PEL∃CULA
	R6007	ERJ3GEYJ152V	RESISTENCIA CHIP PEL∃CULA
	R6008	ERJ3GEYJ222V	CHIP RESISTOR
	R6009	ERJ3GEYJ332V	CHIP RESISTOR
	R6010	ERJ3GEYJ472V	RESISTENCIA CHIP PEL∃CULA
	R6011	ERJ3GEYJ682V	CHIP RESISTOR
	R6012	ERJ3GEYJ103V	CHIP RESISTOR
	R6013	D0GD103JA017	CHIP RESISTOR
	R6058	ERJ3GEYJ123V	RESISTENCIA CHIP PEL∃CULA
	R6059	ERJ3GEYJ223V	RESISTENCIA CHIP PEL∃CULA
	R6060	ERJ3GEYJ103V	CHIP RESISTOR
	R6067	ERJ3GEYJ123V	RESISTENCIA CHIP PEL∃CULA
	R6068	ERJ3GEYJ223V	RESISTENCIA CHIP PEL∃CULA
	R6070	ERJ3GEYJ103V	CHIP RESISTOR
	W106	ERJ3GEY0R00V	CHIP JUMPER
	W107	ERJ3GEY0R00V	CHIP JUMPER
	W108	ERJ3GEY0R00V	CHIP JUMPER
	W109	ERJ3GEY0R00V	CHIP JUMPER
	C901	F1H1H102A219	CHIP CAPACITOR
	C902	F1H1H221A748	CHIP CAPACITOR
	C907	F1H1H103A219	CHIP CAPACITOR
	IC900	C0HBA0000295	LCD driver IC
	L900	J0JBC0000019	CHIP INDUCTOR
	Q900	B1GBCFJN0033	TRANSISTOR
	R901	D0GB153JA008	CHIP RESISTENCIA
	R903	D0GB471JA008	CHIP RESISTOR
	R905	D0GBR00JA008	CHIP JUMPER
	R906	D0GBR00JA008	CHIP JUMPER
	R908	D0GB102JA008	CHIP RESISTOR
	R933	D0GD181JA017	CHIP RESISTOR
	R935	D0GD181JA017	CHIP RESISTOR
	W951	ERJ3GEY0R00V	CHIP JUMPER
	W952	ERJ6GEY0R00V	CHIP JUMPER
	C1110	F1H1H104A013	CHIP CAPACITOR
	LB1200	D0GDR00JA017	CHIP JUMPER
	LB1210	D0GDR00JA017	CHIP JUMPER
	R1200	D0GBR00JA008	CHIP JUMPER
	R1210	D0GBR00JA008	CHIP JUMPER
	C6063	F1H1H101A230	CHIP CAPACITOR
	C6064	F1H1H102A219	CHIP CAPACITOR
	C2106	F2A1C101A208	CAPACITOR ELECTROLITICO
	C2122	F2A1H2R20063	CAPACITOR
	C2132	F2A1H2R20063	CAPACITOR
	C2134	F2A1C100A234	ELECTROLYTIC CAPACITOR
	C2139	F2A1C221A019	CAPACITOR
	C2150	F2A1H3R3A213	CAPACITOR ELECTROLITICO
	C2188	F2A1A101A184	capacitor electrolitico
	C2208	F2A1C101A208	CAPACITOR ELECTROLITICO
	C2231	F2A1C101A208	CAPACITOR ELECTROLITICO
	C2817	F2A1H4R7A213	CAPACITOR ELECTROLITICO
	C5915	F2A1H221B436	CAPACITOR
	C5916	F2A1H221B436	CAPACITOR

	R5947	ERJ1TYJ220U	CHIP RESISTOR
	R5950	ERJ3GEYJ562V	CHIP RESISTOR
	R5951	ERJ3GEYJ562V	CHIP RESISTOR
	TH5900	D4CC11040013	CHIP TERMISTOR
	W5301	ERJ6GEY0R00V	CHIP JUMPER
	W5302	ERJ6GEY0R00V	CHIP JUMPER
	W5303	ERJ6GEY0R00V	CHIP JUMPER
	W5305	ERJ3GEY0R00V	CHIP JUMPER
	W5306	ERJ3GEY0R00V	CHIP JUMPER
	W5307	ERJ6GEY0R00V	CHIP JUMPER
	W5308	ERJ3GEY0R00V	CHIP JUMPER
	W5309	ERJ6GEY0R00V	CHIP JUMPER
	C6050	F1H1H102A219	CHIP CAPACITOR
	C6051	F1H1H101A230	CHIP CAPACITOR
	C6052	F1H1H101A230	CHIP CAPACITOR
	C6055	F1H1H101A230	CHIP CAPACITOR
	C6060	F1H1H101A230	CHIP CAPACITOR
	R6001	ERJ3GEYJ122V	RESISTENCIA CHIP PEL³CULA
	R6002	ERJ3GEYJ152V	RESISTENCIA CHIP PEL³CULA
	R6003	ERJ3GEYJ222V	CHIP RESISTOR
	R6004	ERJ3GEYJ332V	CHIP RESISTOR
	S6008	EVQ21405RJ	TACK SWITCH
	S6009	EVQ21405RJ	TACK SWITCH
	S6010	EVQ21405RJ	TACK SWITCH
	S6011	EVQ21405RJ	TACK SWITCH
	S6012	EVQ21405RJ	TACK SWITCH
	S6013	EVQ21405RJ	TACK SWITCH
	C6065	F2A1H220B411	CAPACITOR
	PCB	RJB3533A	PRINTED CIRCUIT BOARD (MAIN)
	K2000	Z-W6NL	ALAMBRE JUMPER
	K2001	Z-W6NL	ALAMBRE JUMPER
	K2013	Z-W6NL	ALAMBRE JUMPER
	K2018	Z-W6NL	ALAMBRE JUMPER
	K2019	Z-W6NL	ALAMBRE JUMPER
	K2020	Z-W6NL	ALAMBRE JUMPER
	K2021	Z-W6NL	ALAMBRE JUMPER
	W5001	Z-W6NL	ALAMBRE JUMPER
	W5002	Z-W6NL	ALAMBRE JUMPER
	W5003	Z-W6NL	ALAMBRE JUMPER
	W5004	Z-W6NL	ALAMBRE JUMPER
	W5005	Z-W6NL	ALAMBRE JUMPER
	W5006	Z-W6NL	ALAMBRE JUMPER
	W5007	Z-W6NL	ALAMBRE JUMPER
	W5008	Z-W6NL	ALAMBRE JUMPER
	W5009	Z-W6NL	ALAMBRE JUMPER
	W5010	Z-W6NL	ALAMBRE JUMPER
	W5011	Z-W6NL	ALAMBRE JUMPER
	W5012	Z-W6NL	ALAMBRE JUMPER
	W5013	Z-W6NL	ALAMBRE JUMPER
	W5014	Z-W6NL	ALAMBRE JUMPER
	W5015	Z-W6NL	ALAMBRE JUMPER
	W5016	Z-W6NL	ALAMBRE JUMPER
	W5017	Z-W6NL	ALAMBRE JUMPER
	W5018	Z-W6NL	ALAMBRE JUMPER
	W5019	Z-W6NL	ALAMBRE JUMPER
	W5020	Z-W6NL	ALAMBRE JUMPER
	W5021	Z-W6NL	ALAMBRE JUMPER
	W5022	Z-W6NL	ALAMBRE JUMPER
	W5023	Z-W6NL	ALAMBRE JUMPER
	W5024	Z-W6NL	ALAMBRE JUMPER
	W5025	Z-W6NL	ALAMBRE JUMPER
	W5026	Z-W6NL	ALAMBRE JUMPER
	W5027	Z-W6NL	ALAMBRE JUMPER
	W5028	Z-W6NL	ALAMBRE JUMPER
	W5029	Z-W6NL	ALAMBRE JUMPER
	W5030	Z-W6NL	ALAMBRE JUMPER
	W5031	Z-W6NL	ALAMBRE JUMPER
	W5032	Z-W6NL	ALAMBRE JUMPER
	W5033	Z-W6NL	ALAMBRE JUMPER
	W5034	Z-W6NL	ALAMBRE JUMPER
	W5035	Z-W6NL	ALAMBRE JUMPER
	W5036	Z-W6NL	ALAMBRE JUMPER
	W5037	Z-W6NL	ALAMBRE JUMPER
	W5038	Z-W6NL	ALAMBRE JUMPER
	W5039	Z-W6NL	ALAMBRE JUMPER
	W5040	Z-W6NL	ALAMBRE JUMPER
	W5041	Z-W6NL	ALAMBRE JUMPER
	W5042	Z-W6NL	ALAMBRE JUMPER
	W5043	Z-W6NL	ALAMBRE JUMPER
	W5044	Z-W6NL	ALAMBRE JUMPER
	W5045	Z-W6NL	ALAMBRE JUMPER
	W5046	Z-W6NL	ALAMBRE JUMPER
	W5047	Z-W6NL	ALAMBRE JUMPER
	W5048	Z-W6NL	ALAMBRE JUMPER
	W5049	Z-W6NL	ALAMBRE JUMPER
	W5050	Z-W6NL	ALAMBRE JUMPER
	W5051	Z-W6NL	ALAMBRE JUMPER
	W5052	Z-W6NL	ALAMBRE JUMPER
	W5053	Z-W6NL	ALAMBRE JUMPER
	W5054	Z-W6NL	ALAMBRE JUMPER
	W5055	Z-W6NL	ALAMBRE JUMPER
	W5056	Z-W6NL	ALAMBRE JUMPER
	W5057	Z-W6NL	ALAMBRE JUMPER
	W5058	Z-W6NL	ALAMBRE JUMPER

	C5946	F2A1A101A184	capacitor electrolitico
	C5983	F2A1H1R0A213	CAPACITOR ELECTROLITICO
	C5989	ECQV1H474JL3	CAPACITOR
	C5990	ECQV1H474JL3	CAPACITOR
	L5900	J0JKB0000020	EMIBEADCORER
	Q2035	B1BABG000007	TRANSISTOR
	R2333	ERG2SJ471E	METAL OXIDE FILM RESISTOR
	R2334	ERG2SJ471E	METAL OXIDE FILM RESISTOR
	R2336	ERG2SJ471E	METAL OXIDE FILM RESISTOR
	R2337	ERG2SJ471E	METAL OXIDE FILM RESISTOR
	R2338	ERG2SJ471E	METAL OXIDE FILM RESISTOR
	R2339	ERG2SJ471E	METAL OXIDE FILM RESISTOR
	X2001	H2B800400007	8MHz Crystal Oscillator •
	ZJ2001	K9ZZ00001279	TERMINAL DE TIERRA
	S6001	EVQ21405RJ	TACK SWITCH
	S6002	EVQ21405RJ	TACK SWITCH
	S6003	EVQ21405RJ	TACK SWITCH
	S6004	EVQ21405RJ	TACK SWITCH
	S6005	EVQ21405RJ	TACK SWITCH
	S6006	EVQ21405RJ	TACK SWITCH
	S6007	EVQ21405RJ	TACK SWITCH
	W5059	Z-W6NL	ALAMBRE JUMPER
	W5060	Z-W6NL	ALAMBRE JUMPER
	W5061	Z-W6NL	ALAMBRE JUMPER
	W5062	Z-W6NL	ALAMBRE JUMPER
	W5063	Z-W6NL	ALAMBRE JUMPER
	W5064	Z-W6NL	ALAMBRE JUMPER
	W5065	Z-W6NL	ALAMBRE JUMPER
	W5066	Z-W6NL	ALAMBRE JUMPER
	W5067	Z-W6NL	ALAMBRE JUMPER
	W5068	Z-W6NL	ALAMBRE JUMPER
	W5069	Z-W6NL	ALAMBRE JUMPER
	W5070	Z-W6NL	ALAMBRE JUMPER
	W5071	Z-W6NL	ALAMBRE JUMPER
	W5072	Z-W6NL	ALAMBRE JUMPER
	W5073	Z-W6NL	ALAMBRE JUMPER
	W5074	Z-W6NL	ALAMBRE JUMPER
	W5075	Z-W6NL	ALAMBRE JUMPER
	W5076	Z-W6NL	ALAMBRE JUMPER
	W5077	Z-W6NL	ALAMBRE JUMPER
	W5078	Z-W6NL	ALAMBRE JUMPER
	W5079	Z-W6NL	ALAMBRE JUMPER
	W5080	Z-W6NL	ALAMBRE JUMPER
	W5081	Z-W6NL	ALAMBRE JUMPER
	W5082	Z-W6NL	ALAMBRE JUMPER
	W5083	Z-W6NL	ALAMBRE JUMPER
	W5084	Z-W6NL	ALAMBRE JUMPER
	W5085	Z-W6NL	ALAMBRE JUMPER
	W5086	Z-W6NL	ALAMBRE JUMPER
	W5087	Z-W6NL	ALAMBRE JUMPER
	W5088	Z-W6NL	ALAMBRE JUMPER
	W5089	Z-W6NL	ALAMBRE JUMPER
	W5090	Z-W6NL	ALAMBRE JUMPER
	W5091	Z-W6NL	ALAMBRE JUMPER
	W5092	Z-W6NL	ALAMBRE JUMPER
	W5093	Z-W6NL	ALAMBRE JUMPER
	W901	Z-W6NL	ALAMBRE JUMPER
	W902	Z-W6NL	ALAMBRE JUMPER
	W903	Z-W6NL	ALAMBRE JUMPER
	W904	Z-W6NL	ALAMBRE JUMPER
	W905	Z-W6NL	ALAMBRE JUMPER
	W906	Z-W6NL	ALAMBRE JUMPER
	W907	Z-W6NL	ALAMBRE JUMPER
	W908	Z-W6NL	ALAMBRE JUMPER
	W909	Z-W6NL	ALAMBRE JUMPER
	W910	Z-W6NL	ALAMBRE JUMPER
	W101	Z-W6NL	ALAMBRE JUMPER
	W102	Z-W6NL	ALAMBRE JUMPER
	W105	Z-W6NL	ALAMBRE JUMPER
	W110	Z-W6NL	ALAMBRE JUMPER
	W5310	Z-W6NL	ALAMBRE JUMPER
	W5311	Z-W6NL	ALAMBRE JUMPER
	W5304	Z-W6NL	ALAMBRE JUMPER
	W5313	Z-W6NL	ALAMBRE JUMPER
	L5901	J0JKB0000020	EMIBEADCORER
	D2020	B0EAMM000057	DIODO
	ZJ2000	K9ZZ00001279	TERMINAL DE TIERRA
	C2133	F2A1C101A208	CAPACITOR ELECTROLITICO
	C2198	F2A1C221A019	CAPACITOR
	C2234	F2A1E221B422	CAPACITOR
	D2021	B0EAKM000117	DIODO
	D2022	B0EAKM000117	DIODO
	D2120	B0EAKM000117	DIODO
	D5906	B0EAKM000117	DIODO
	D5908	B0EAKM000117	DIODO
	D5909	B0EAKM000117	DIODO
	D5910	B0EAKM000117	DIODO
	D2018	B0EAMM000057	DIODO
	C2121	F2A1C101A208	CAPACITOR ELECTROLITICO
	D2019	B0EAMM000057	DIODO
	Q2000	B1ABDF000026	Transistors
	C2110	F1H1H102A219	CHIP CAPACITOR
	C2124	F1H1H220A230	CHIP CAPACITOR
	C2129	F1H1H180A230	CHIP CAPACITOR
	C2225	D0GBR00JA008	CHIP JUMPER
	C2230	F1H1H104A013	CHIP CAPACITOR

	C2235	F1J1C106A059	CHIP CAPACITOR
	C2238	F1J1A106A043	CHIP CAPACITOR
	D2017	DZ2J07500L	DIODO
	QR2001	B1GBCFJJ0051	TRANSISTOR
	R2017	ERJ3RBD1001V	CHIP RESISTOR
	R2175	ERJ3GEYJ103V	CHIP RESISTOR
	R2195	D0GB101JA008	CHIP RESISTOR
	R2218	ERJ3GEY0R00V	CHIP JUMPER
	R2223	ERJ3GEYJ823V	CHIP RESISTOR
	R2227	ERJ3GEYJ823V	CHIP RESISTOR
	R2234	ERJ3GEYJ472V	RESISTENCIA CHIP PEL³CULA
	R2350	ERJ3GEYJ393V	RESISTENCIA CHIP PEL³CULA
	R2351	ERJ3GEYJ393V	RESISTENCIA CHIP PEL³CULA
	R2407	D0GD472JA017	CHIP RESISTOR
	R2408	ERJ3GEYJ472V	RESISTENCIA CHIP PEL³CULA
	W5312	ERJ3GEY0R00V	CHIP JUMPER
	C2112	F1H1H2210001	CHIP CAPACITOR
	C2117	F1H1H2210001	CHIP CAPACITOR
	C2120	F1H1H182A219	CAPACITOR
	C2131	F1H1H182A219	CAPACITOR
	R2237	ERJ3RBD563V	CHIP RESISTOR
	R2238	D0GBR00JA008	CHIP JUMPER
	R5962	ERJ3GEYJ154V	RESISTENCIA CHIP PEL³CULA
	R5963	ERJ3GEYJ154V	RESISTENCIA CHIP PEL³CULA
	C2206	F1H1H151A792	opt
	C2207	F1H1H151A792	CHIP CAPACITOR
	C2118	F1H1A224A007	CHIP CAPACITOR
	C2125	F1H1A224A007	CHIP CAPACITOR
	C2119	F1H1A224A007	CHIP CAPACITOR
	C2126	F1H1A224A007	CHIP CAPACITOR
	R2307	D0GB822JA008	CHIP RESISTOR
	R2308	D0GB822JA008	CHIP RESISTOR
	C2220	F1H1A184A012	CHIP CAPACITOR
	C2224	F1H1A184A012	CHIP CAPACITOR
	C2307	F1H1H103A219	CHIP CAPACITOR
	C2308	F1H1H103A219	CHIP CAPACITOR
	R2207	D0GB473JA008	lHIP RESISTOR
	R2208	D0GB473JA008	lHIP RESISTOR
	R2113	ERJ3GEY0R00V	CHIP JUMPER
	R2112	ERJ3GEY0R00V	CHIP JUMPER
	Q2021	B1BACG000048	TRANSISTOR
	Q2022	B1BCCG000023	Transistors
	CN6005	K1KA04A00553	CONECTOR 4 PINES MACHO
	CN6006	K1KB04B00043	CONECTOR 4 PINES EMBRA
	ZA2001	XTB3+10JFJ	TORNILLO
	ZJ2002	REX1534	15 P WIRE MAIN TO SMPS
	ZJ6002	REX1535	7P FLAT WIRE (PANEL PCB TO LCD PCB)
	CN2000	K1YZ15000001	CONECTOR
	CN6000	K1KA07AA0193	JACK
		RMR2053-KL	DIFFUSER CAP