PSG1302028CE

Service Manual

CD Stereo System

Model No. SA-AKX36PH
SA-AKX36PN

Product Color: (K)...Black Type

Please refer to the original service manual for:
- **CD Mechanism Unit , Order No. PSG1102001CE**
- **Speaker system SB-AKX36PN-K, Order No. PSG1302023CE**

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 Safety Precautions

1.1. General Guidelines

1. **IMPORTANT SAFETY NOTICE**
   There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.
2. An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.
3. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
4. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
5. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. Leakage Current Hot Check

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

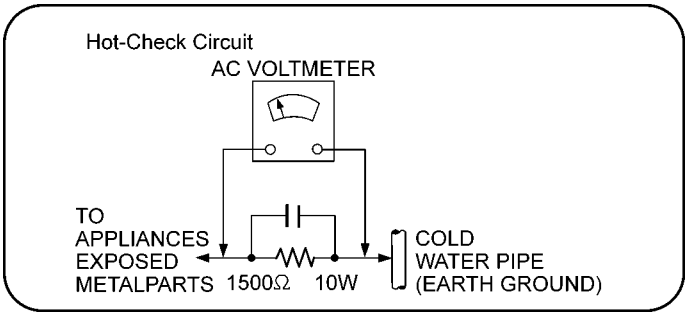

Figure 1-1

1.2. Before Use (For PH only)

Be sure to disconnect the mains cord before adjusting the voltage selector as shown in Figure 1-2
Use a minus(-) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used.
Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries, the correct voltage is already set.)

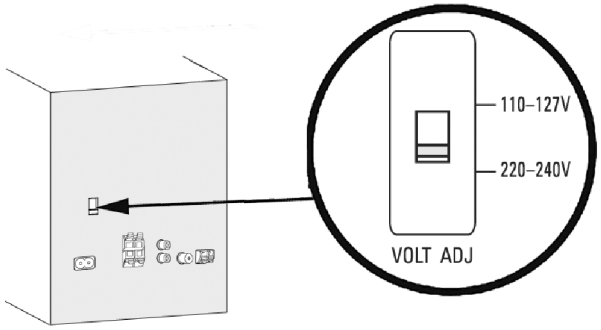

Figure 1-2

1.3. Before Repair and Adjustment

Caution:
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at AC 110~127 V / 220~240 V, 50/60 Hz in FM Tuner at volume minimum mode should be ~ 500 mA (PH).
Current consumption at AC 120 V, 60 Hz in FM Tuner at volume minimum mode should be ~ 500 mA (PN).

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. Power Supply using SMPS

This model uses SMPS Module to Power up the unit. Below is the part number of the SMPS Model.
N0AB3GL00001 (PN)
N0AD3GL00001 (PH)

1.5.1. For SA-AKX36PN

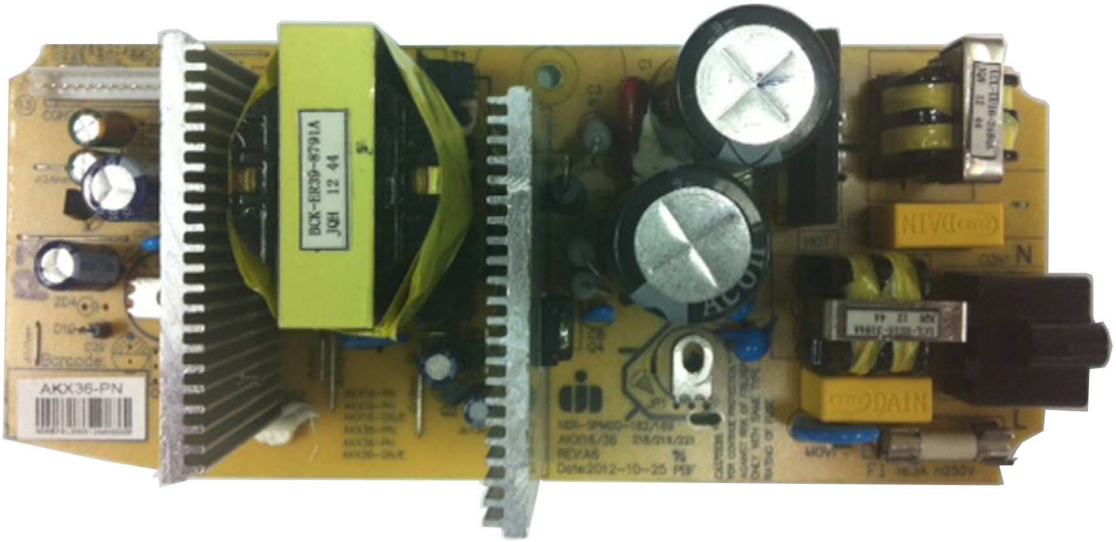

Figure 1-3

1.5.2. For SA-AKX36PH

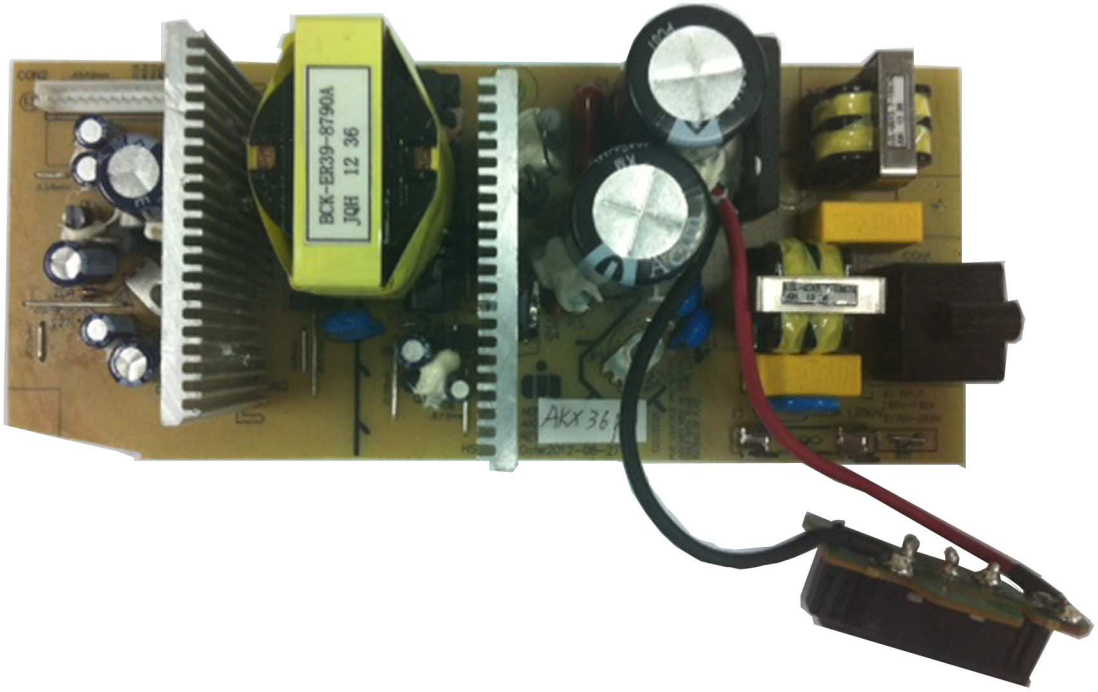

Figure 1-4

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.

Safety	Ref No.	Part No.	Part Name & Description	Remarks
⚠	16	RGR0443C-A1	REAR PANEL	PH
⚠	16	RGR0443D-A1	REAR PANEL	PN
⚠	17	RKM0713-K	TOP CABINET	
⚠	301	RAE1036Z-V	TRAVERSE ASS'Y	
⚠	A2	K2CB2CB00022	AC CORD	PN
⚠	A2	K2CQ2YY00119	AC CORD	PH
⚠	A3	RQT9796-M	O/I BOOK (Sp)	
⚠	PCB9	N0AB3GL00001	SMPS MODULE	PN
⚠	PCB10	N0AD3GL00001	SMPS MODULE	PH
⚠	T6000	G4DYA0000214	TRANSFORMER	

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices.

Examples of typical ES devices are IC (integrated circuits) and some field-effect transistors and semiconductor "chip" components.

The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION:
   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

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2.2. Precaution of Laser Diode

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

Caution:

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

1. Do not disassemble the pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

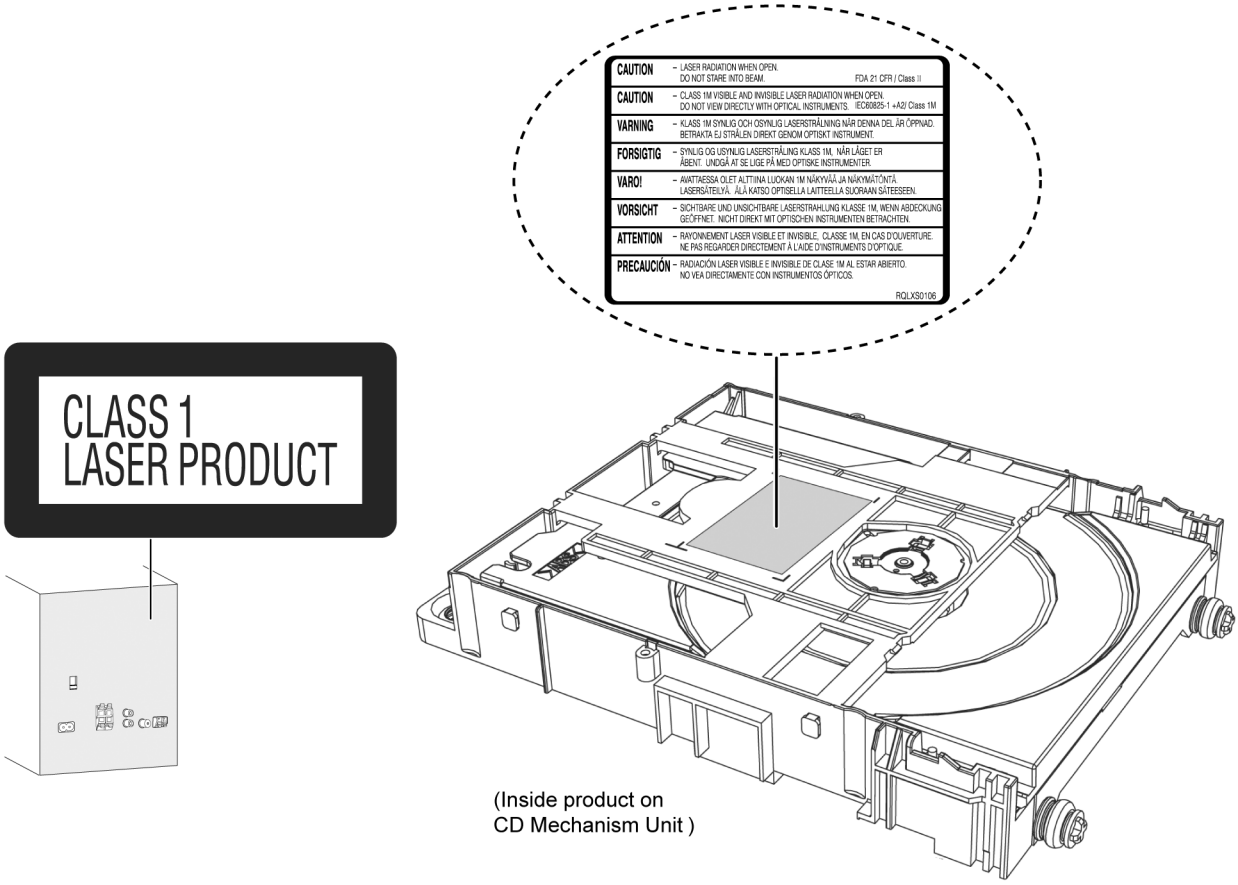


Figure 2-1

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.

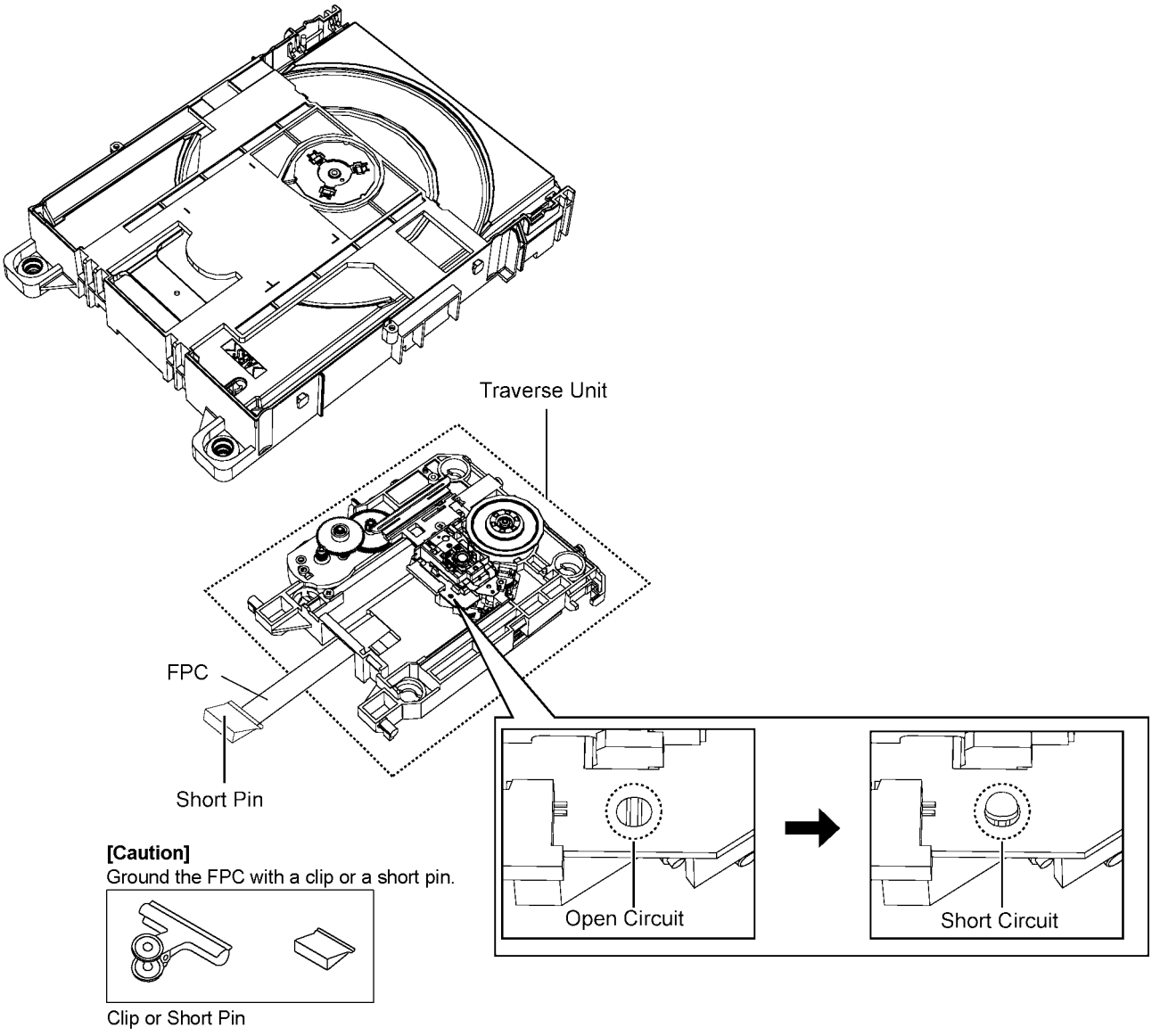


Figure 2-2

2.5. Grounding for electrostatic breakdown prevention

- As for parts that use optical pick-up (laser diode), the optical pick-up is destroyed by the static electricity of the working environment.
  Repair in the working environment that is grounded.

2.5.1. Worktable grounding

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

2.5.2. Human body grounding

- Use the anti-static wrist strap to discharge the static electricity form your body Figure 2-3

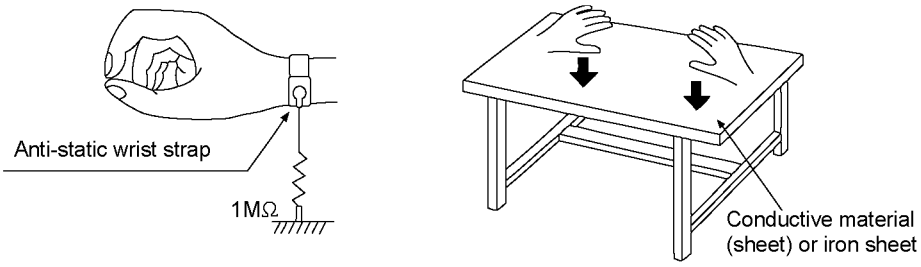


Figure 2-3

3 Service Navigation

3.1. Service Information

This service manual contains technical information which will allow service personnel's to understand and service this model. Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

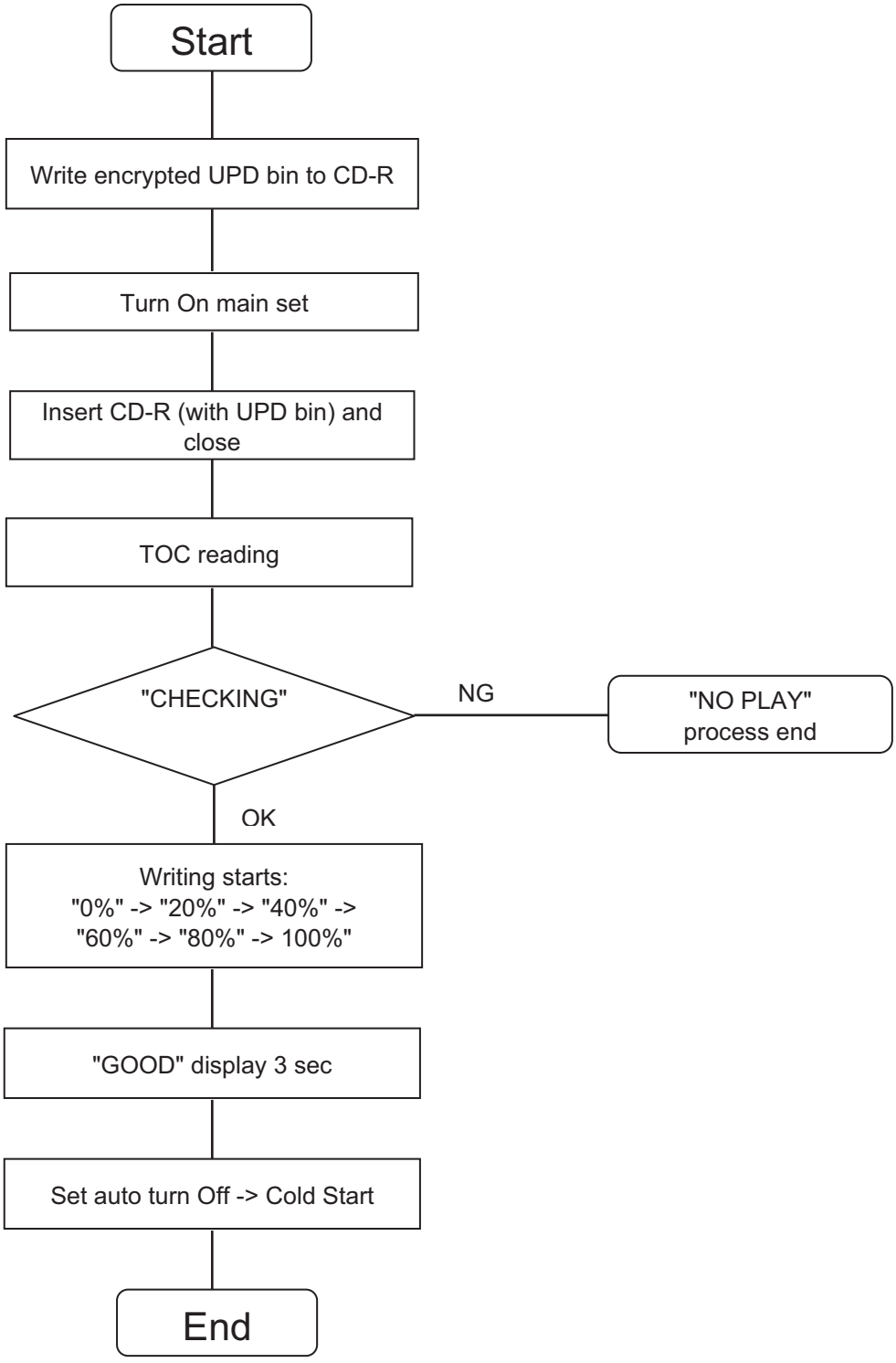
- **CD Mechanism Unit:**

1) This model uses CD Mechanism Unit.

- **Micro-processor:**

1) The following components are supplied as an assembled part.
   - Micro-processor IC, IC2006 (RFKWMAKX36LM)

3.2. Firmware Update Procedure



4 Specifications

■ **Amplifier section**

RMS output power stereo mode

Front Ch (both ch driven)	275 W per channel (3 Ω), 1 kHz, 30% THD
Total RMS stereo mode power	550 W (30% THD)

■ **Tuner, terminals section**

Preset memory	FM 30 stations AM 15 stations
Frequency modulation (FM)	
Frequency range	87.50 to 108.00 MHz (50 kHz step) (for PH) 87.5 to 108.0 MHz (100 kHz step) (for PN) 87.9 to 107.9 MHz (200 kHz step) (for PN)
Antenna terminals	75 Ω (unbalanced)
Amplitude modulation (AM)	
Frequency range	522 kHz to 1629 kHz (9 kHz step) (for PH) 520 kHz to 1630 kHz (10 kHz step) (for PH) 520 kHz to 1710 kHz (10 kHz step) (for PN)
Music port (front)	
Sensitivity	100 mV, 4.7 kΩ
Terminal	Stereo, 3.5 mm jack
Aux Input	RCA pin jack

■ **Disc section**

Discs played (8 cm or 12 cm)	CD, CD-R/RW(CD-DA, MP3*)
Pick up	
Wavelength	790 nm(CD)
Audio output	
Number of channels	2 ch (FL, FR)

FL = Front left channel
FR = Front right channel
*MPEG-1 Layer 3

■ **Internal memory section**

Memory	
Memory size	2 GB
Media file format support	MP3 (*.mp3)
Memory recording	
Bit rate	128 kbps
Memory recording speed	1x, 3x max (CD only)
Recording file format	MP3 (*.mp3)
Capacity of total songs recorded (use 128 kbps, approximately 1 song = 4 mins)	510 songs

■ **USB section**

USB port	
USB standard	USB 2.0 full speed
Media file format support	MP3 (*.mp3)
USB device file system	FAT12, FAT16, FAT32
USB port power	500 mA (max)
Bit rate	16 kbps to 320 kbps (playback)
USB recording	
Bit rate	128 kbps
USB recording speed	1x, 3x max (CD only)
Recording file format	MP3 (*.mp3)

■ **General**

Power supply	AC 110 to 127/220 to 240 V, 50/60 Hz (for PH) AC 120 V, 60 Hz (for PN)
Power consumption	73 W
Dimensions (W x H x D)	220 mm x 334 mm x 250 mm
Mass	3 kg
Operating temperature range	0 °C to +40 °C
Operating humidity range	35% to 80% RH (no condensation)
Power Consumption in standby mode	0.5 W (approximate)

Note:

1. Specifications are subject to change without notice. Mass and dimension are appropriate
2. Total harmonic distortion is measured by the digital spectrum analyzer.

■ System: SC-AKX36PH-K

Main Unit: SA-AKX36PH-K
Front Speakers: SB-AKX36PN-K

■ System: SC-AKX36PN-K

Main Unit: SA-AKX36PN-K
Front Speakers: SB-AKX36PN-K

5 General/Introduction

5.1. Media Information

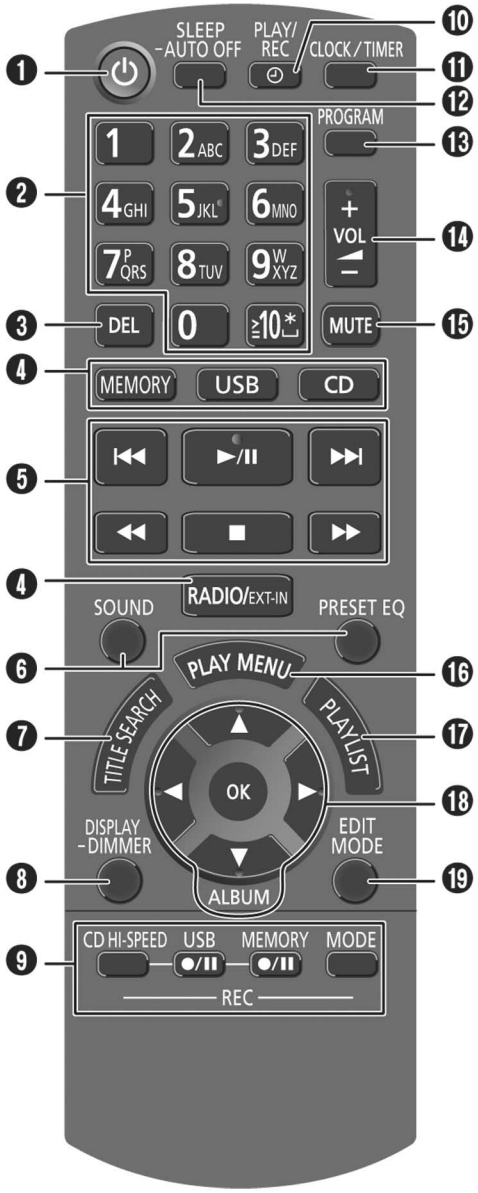
Note on disc

- This system can play CD-R/RW with CD-DA or MP3 format content.
- Some CD-R/RW cannot be played because of the condition of the recording.
- MP3 files are defined as tracks and folders are defined as albums.
- This system can access up to:
  – CD-DA: 99 tracks
  – MP3: 999 tracks, 255 albums and 20 sessions
- Disc must conform to ISO9660 level 1 or 2 (except for extended formats).
- Recordings will not necessarily be played in the order you recorded them.

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

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 Alphanumeric buttons
To select a 2-digit number
Example: 16: [≧10]→[1]→[6]
To set a character
Example: B: [2]→[2]

❸ Delete a programmed track
Delete a selected track in a playlist

❹ Select audio source

❺ Basic playback control

❻ Select the sound effects

❼ Start the title search for internal memory

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 Recording operation control

❿ Set the play timer and record timer

⓫ Set the clock and timer

⓬ Set the sleep timer
Automatically switch off the system
When you are in disc, USB or internal memory source, the auto off function switches off the system if you do not use the system for 30 minutes.
Press and hold the button to use this function.
To cancel, press and hold the button again.

⓭ Set the program function

⓮ Adjust the volume of the system

⓯ **Mute the sound of the system**
To cancel, press the button again.
"MUTE" is also canceled when you adjust the volume or when you switch off the system.

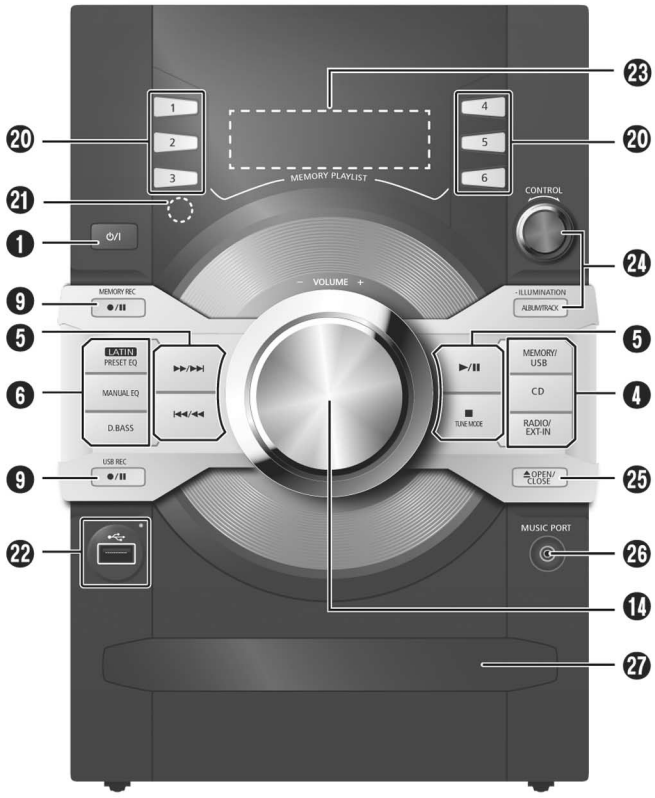
⓰ Set the play menu item

⓱ Internal memory playlist operation

⓲ Select the option

⓳ Set the edit mode for USB and internal memory

6.2. Main Unit 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.

❹ Select audio source

❺ Basic playback control

❻ Select the sound effects

❾ Recording operation control

⓮ Adjust the volume of the system

⓴ **Internal memory playlist direct buttons**
Press and hold to add a track to the corresponding playlist.
Press to select the playlist.
DJ effect direct buttons
Press [DJ] to switch on the DJ effect.
Press [1] to [6] to select the DJ effect.
To cancel, press the selected [1] to [6] again.

㉑ Remote control sensor
Distance: Within approximately 7 m
Angle: Approximately 20° up and down, 30° left and right

㉒ USB port (•⇠)
USB status indicator

㉓ Display panel

㉔ Browse playlist of the internal memory
Browse tracks or albums
CD
Turn [CONTROL] to browse the track.
Press [►/❚❚] to start playback from the selection.
MP3
Press [ALBUM/TRACK] to select album or track and then turn [CONTROL] to browse.
Press [►/❚❚] to start playback from the selection.

㉕ Open or close the disc tray

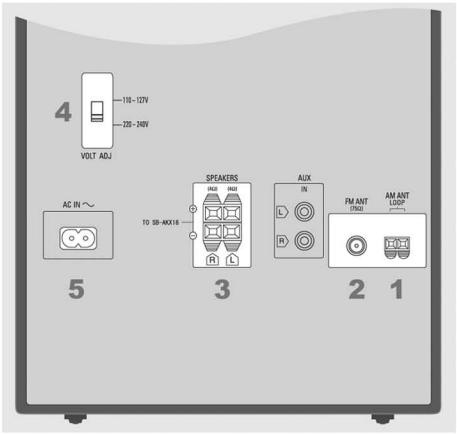
㉖ Music port jack

㉗ Disc tray

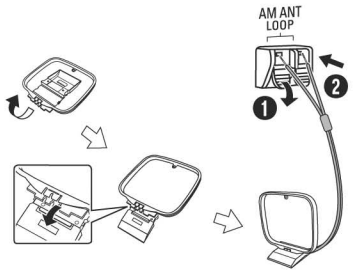
7 Installation Instructions

7.1. Speaker and A/C Connection

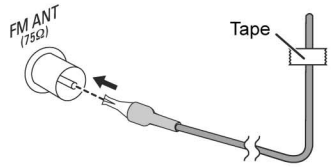
Connect the AC mains lead only after all the other connections have been made.



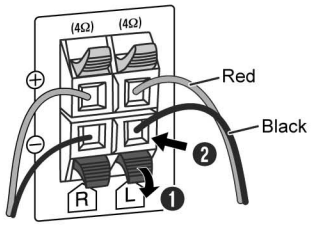
1 **Connect the AM loop antenna.**
Stand the antenna up on its base until it clicks.

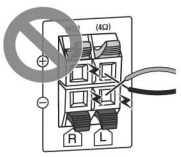


2 **Connect the FM indoor antenna.**
Place the antenna where reception is best.



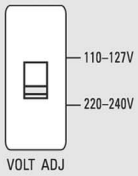
3 **Connect the speakers.**
Connect the speaker cables to the terminals of the same colour.





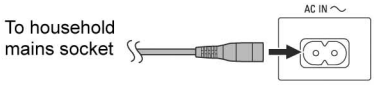
Be careful not to cross (short-circuit) or reverse the polarity of the speaker wires as doing so may damage the speakers.

4 **For South America (except Argentina and Brazil)**
Set the voltage.



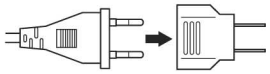
Use a flat-head screwdriver to set the voltage selector to the AC voltage in your area.

5 **Connect the AC mains lead.**



For PH only

If the power plug does not fit your socket, use the power plug adapter (supplied).



Conserving power
The system consumes approximately 0.4 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.

8 Service Mode

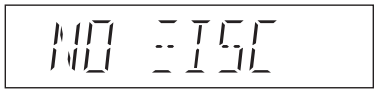
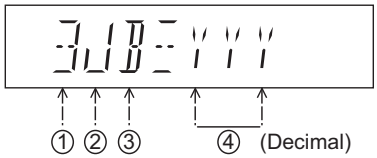
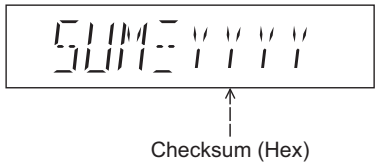
8.1. Cold-Start

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

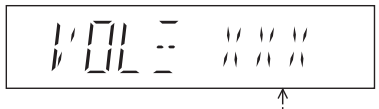
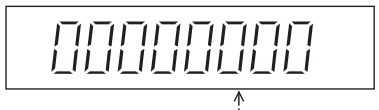
1. Unplug AC power cord
2. Press & hold [POWER] button
3. Plug AC power cord while [POWER] button being pressed
   FL Display will show “_ _ _ _ _ _ _ _”
4. Release [POWER] button

8.2. Doctor Mode Table

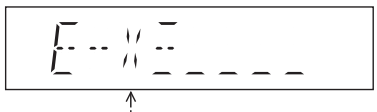
8.2.1. Doctor Mode Table 1

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.	(Display 1)  ① ② ③ ④ (Decimal) Version No. (001 ~ 999) → specific for each firmware (Display 2)  Checksum (Hex)	In CD mode: 1. Enter into Doctor Mode

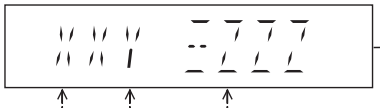
8.2.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Volume Setting Check	To check the volume setting of the main unit.	 Press [7]: VOL50 Press [8]: VOL35 Press [9]: VOL0 Volume	In Doctor Mode: 1. Press [7], [8], [9] button on the remote control.
FL Display Check	To check the FL segment display. All segments will light up while all LED blink at 0.5s intervals.		In Doctor mode: 1. Press [1] button on the remote control. 2. To cancel this mode, press [0] button on the remote control.
Traverse Test	To determine the traverse unit operation for inner & outer access track. In this mode,ensure the CD is in the main unit. Note: Refer to Section 8.3 Figure 8-2 for process flow	 The counter will increment by one. When reach 99999999 will change to 00000000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[1]→[2] button on the remote control. 2. To cancel this mode, press [0] button on the remote control.
Reliability Test (Combination)	To determine the traverse unit operation & open/close operation of the mechanism. In this mode,ensure the CD is in the main unit. Note: Refer to Section 8.3 Figure 8-3 for process flow	 The counter will increment by one. When reach 99999999 will change to 00000000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[1]→[5] button on the remote control. 2. To cancel this mode, press [0] button on the remote control.
Loading Test	To determine the open & close operation of the CD Mechanism Unit. In this mode, the tray will open & close automatically. Note: Refer to Section 8.3 Figure 8-1 for process flow	 The counter will increment by one. When reach 99999999 will change to 00000000 Cancellation Display 	In Doctor Mode: 1. Press [10]→[2]→[1] button on the remote control. 2. To cancel this mode, press [0] button on the 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
Test</td><td>To display result of
self-adjustment for CD.</td><td> 
Display of auto adjustment result

Reference table:
<table>
<tr><th>ERROR Code
Status
Condition</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/TAGC</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 the remote control.

To cancel this mode, press [0] button on the remote control.</td></tr>
<tr><td>CD LSI Version
Check</td><td>For checking CD LSI Version and checksum information.</td><td>(Display 1)
 
ROM Type
Version (Decimal)
Year Develop
after 2 sec
(Display 2)
 
Checksum (Hex)</td><td>In Doctor Mode:
1. Press [4] button on the remote control.

To cancel this mode, press [0] button on the remote control.</td></tr>
</table>

8.3. Reliability Test Mode (CD Mechanism Unit)

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

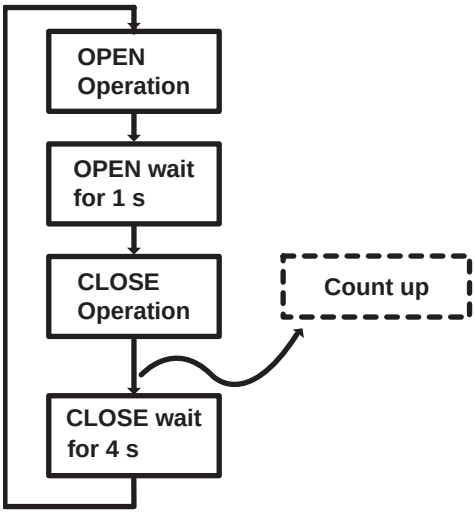


Fig. 1. Reliability Test (Loading)

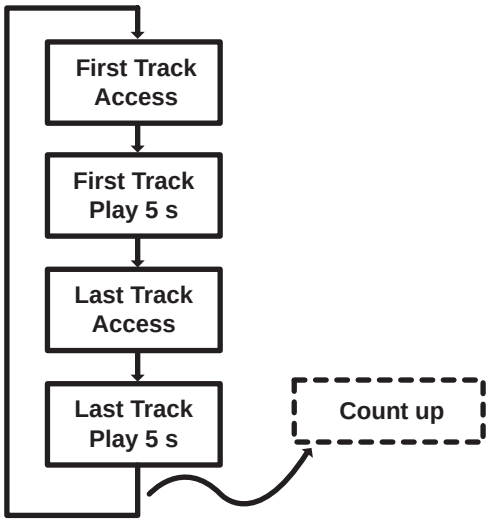


Fig. 2. Reliability Test (Traverse)

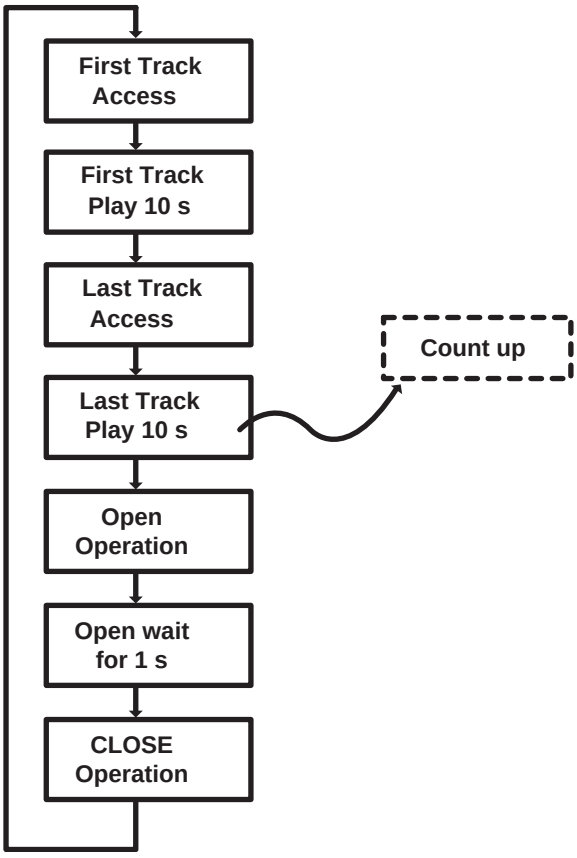
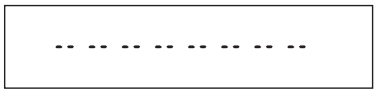


Fig. 3. Reliability Test (Combination)

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 [■] button 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.
Cold Start	To active cold start upon next AC power up when reset start is execute the next time.		In self diagnostic mode: 1. Press [3] button on the remote control.

8.5. Self-Diagnostic Error Code Table

Self-Diagnostic Function (Refer Section 8.4. 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)		

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

Error Code	Diagnostic Contents	Description of error	Automatic FL Display	Remarks
CD H15	CD Open Abnormal	During operation POS_SW_R On fail to be detected 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 demonstration lock mode

Here is the procedures to enter into the Sales demonstration lock mode.
Step 1: Turn on the unit.
Step 2: Select to any mode function.
Step 3: Press and hold [⏏OPEN/CLOSE] and [CD] keys for 5 sec or more.
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 of Sales demonstration lock mode

Step 1: Turn on the unit.
Step 2: Select to any mode function.
Step 3: Set volume to Vol 19.
Step 4: Press and hold [⏏OPEN/CLOSE] and [CD] keys for 5 sec or more.
The display will show upon entering into this mode for 2 sec..

9 Troubleshooting Guide

"Contents for this section is not available at time of issue"

10 Disassembly and Assembly Instructions

- **Illustration is based on SA-AKX36PH-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 Front Panel Unit
- Disassembly of Panel P.C.B., LED P.C.B. and Mic P.C.B.
- Disassembly of Remote Sensor P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of CD Lid
- Disassembly of Rear Panel
- Disassembly of Main P.C.B.
- Replacement of Digital Amplifier IC (IC6000)
- Disassembly of SMPS Module and Voltage Selector P.C.B.
- Disassembly of CD Mechanism Unit
- Disassembly of CD Interface P.C.B.
- Disassembly of Fan Unit

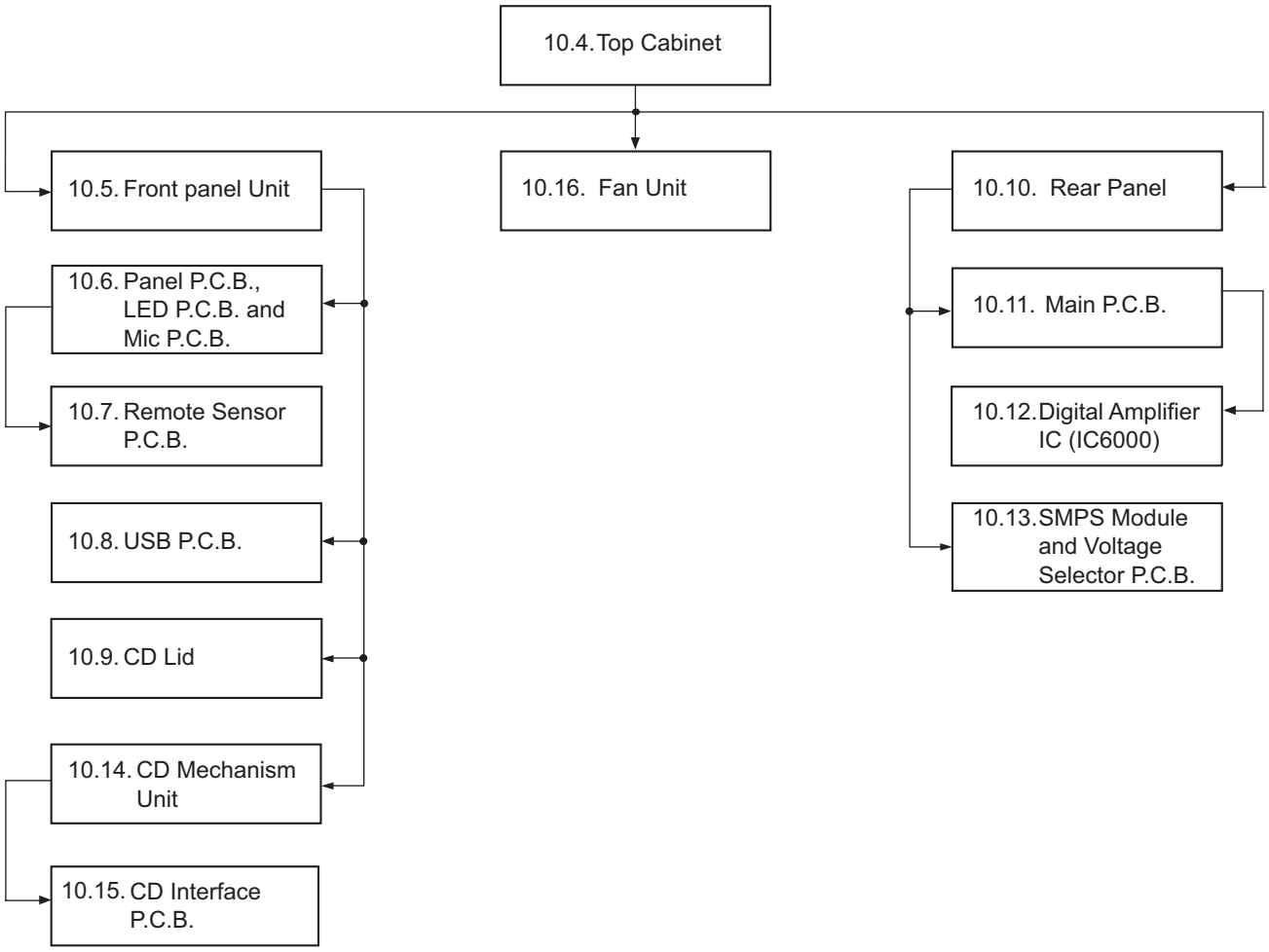
10.1. Screw Types

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

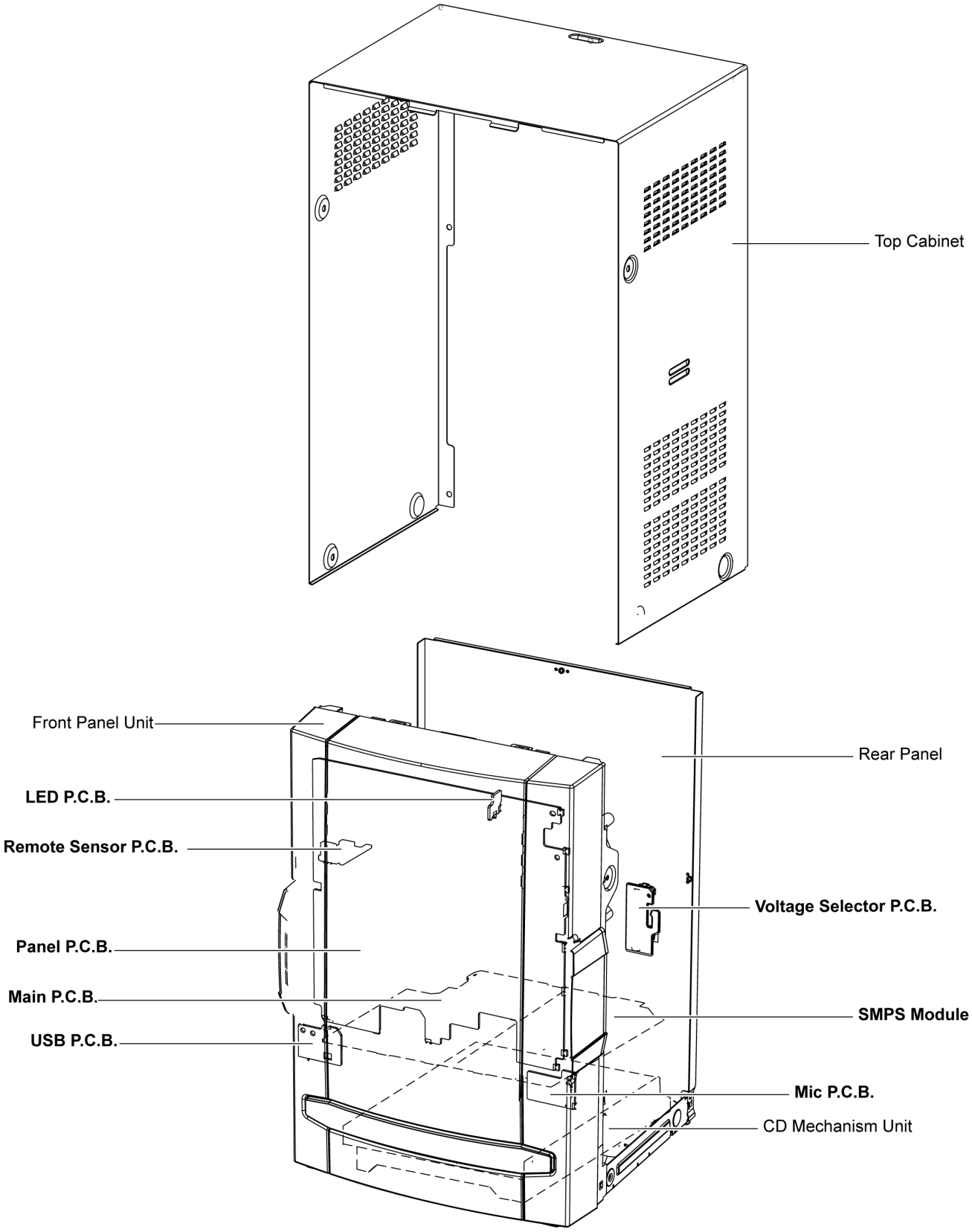
Below shown is part no. of different screw types used:

ⓐ :RHD30007-K2J
ⓑ :RHD30119-S
ⓒ :RHD26046-L
ⓓ :RHD30111-31
ⓔ :RHD26403-1
ⓕ :RHDX031008
ⓖ :XTN2+6GFJ

10.2. Disassembly Flow Chart

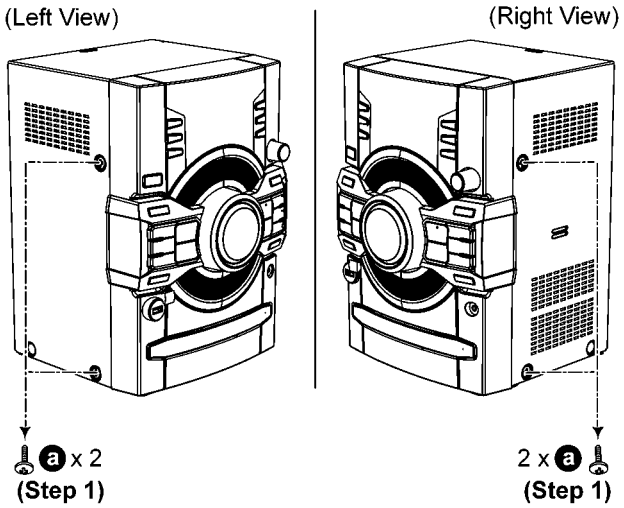


10.3. Main Components and P.C.B. Locations

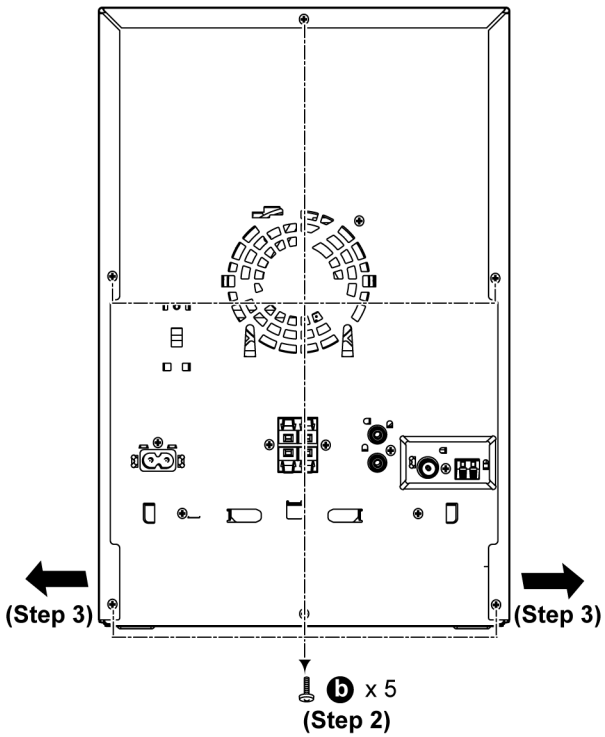


10.4. Disassembly of Top Cabinet

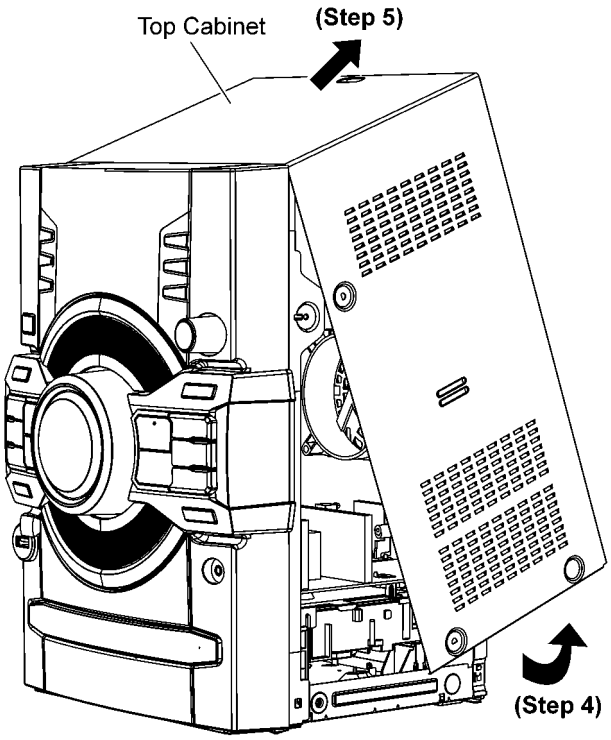
Step 1 Remove 2 screws on each side.



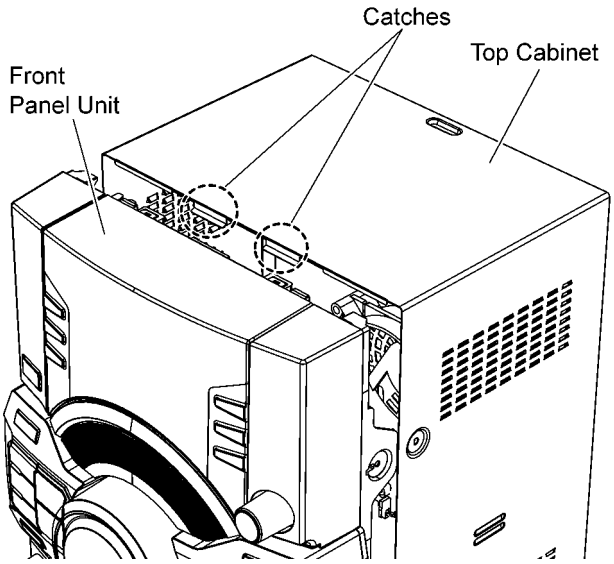
Step 2 Remove 5 screws.
Step 3 Slightly pull both side of Top Cabinet outwards as arrow shown.



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



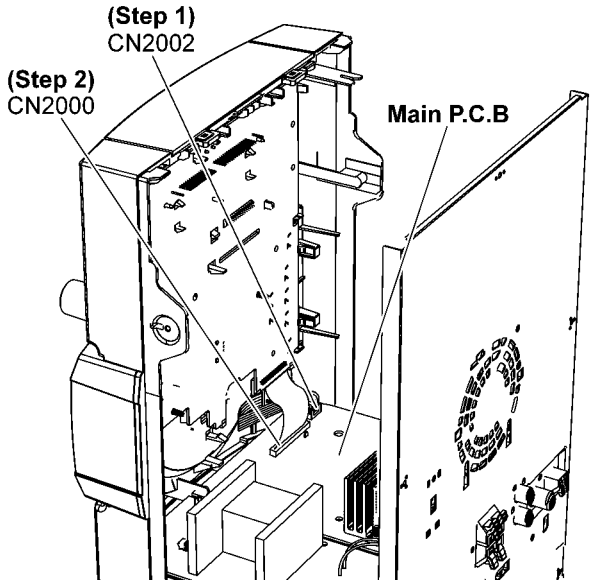
Caution: During assembling, ensure that the Top Cabinet catches are properly inserted into Front Panel Unit.



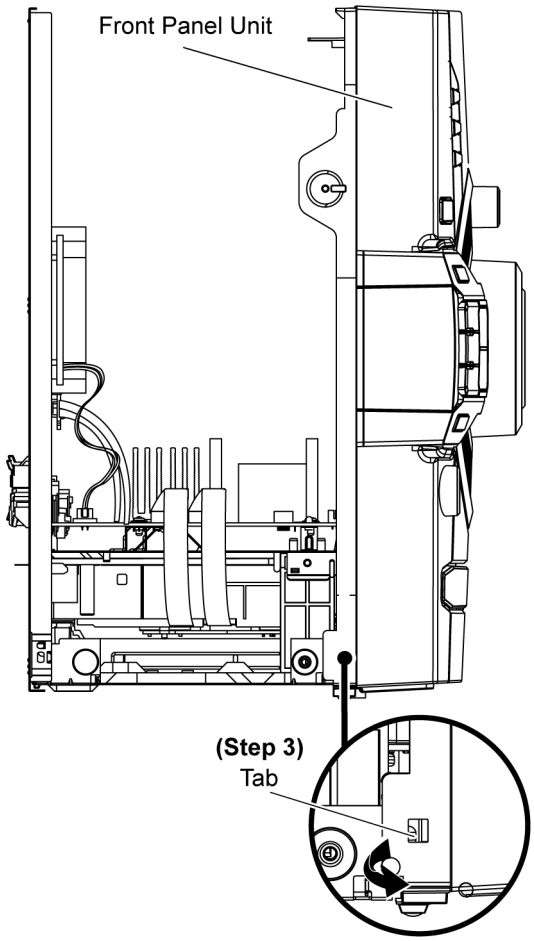
10.5. Disassembly of Front Panel Unit

- **Refer to “Disassembly of Top Cabinet”.**

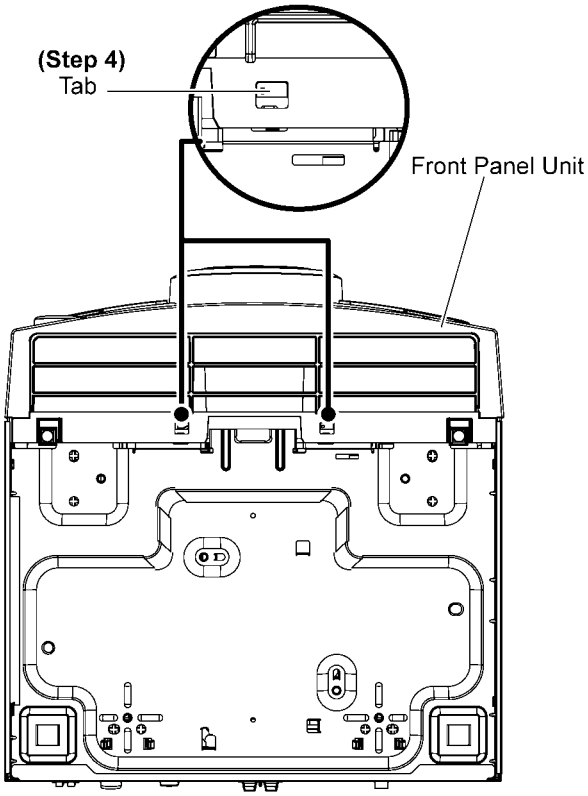
Step 1 Detach 5P Cable at the connector (CN2002) on Main P.C.B..
Step 2 Detach 30P FFC at the connector (CN2000) on Main P.C.B..



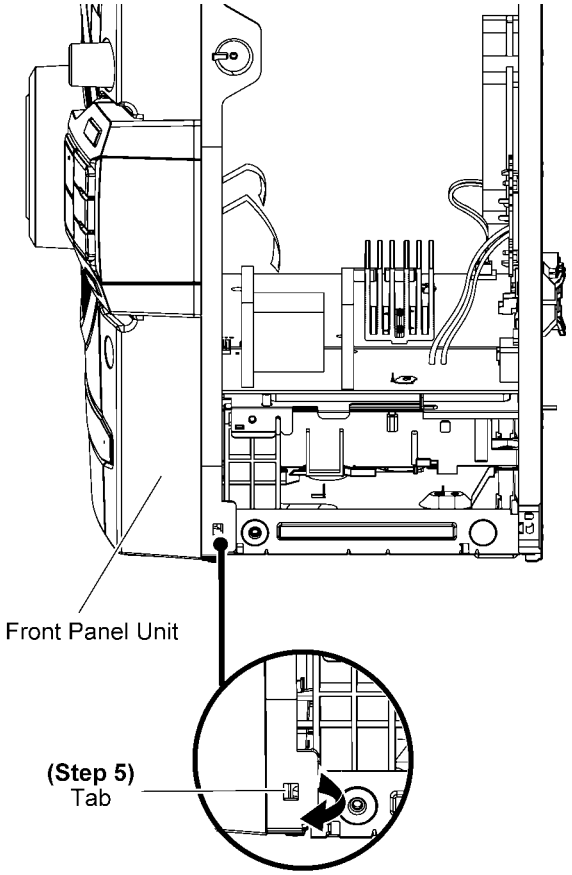
Step 3 Release tab at the left side of Front Panel Unit.



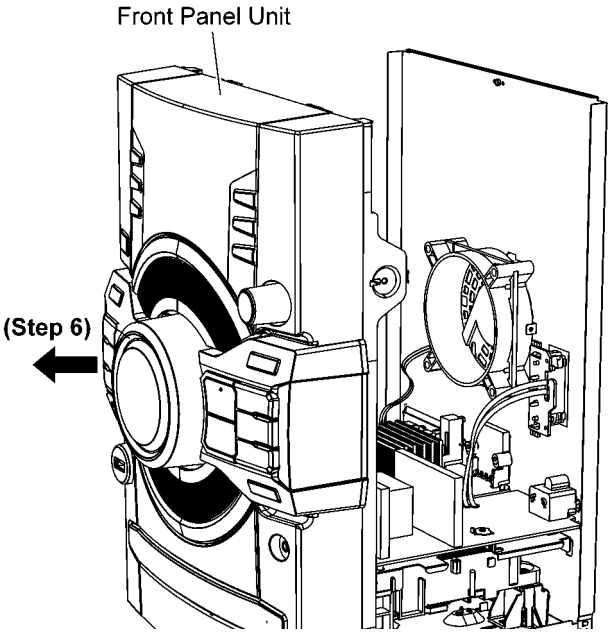
Step 4 Release tabs at bottom.



Step 5 Release tab at the right side of Front Panel Unit.



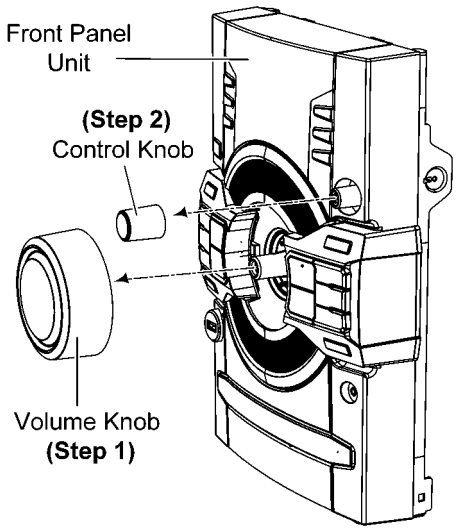
Step 6 Remove the Front Panel Unit as arrow shown.



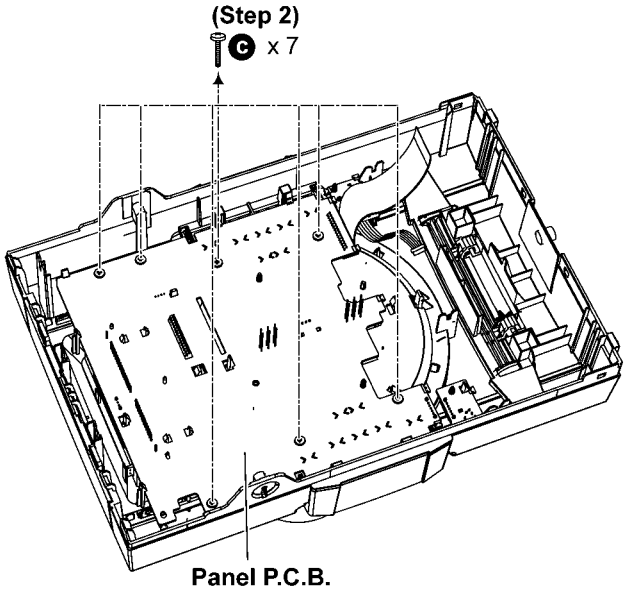
10.6. Disassembly of Panel P.C.B., LED P.C.B. and Mic P.C.B.

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

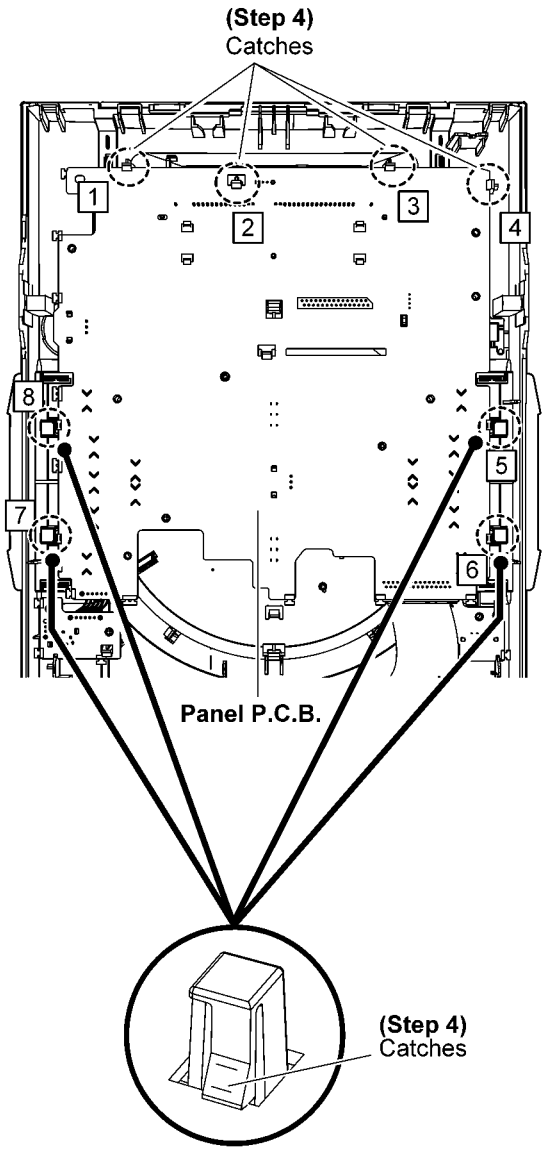
Step 1 Remove the Volume Knob.
Step 2 Remove the Control Knob.



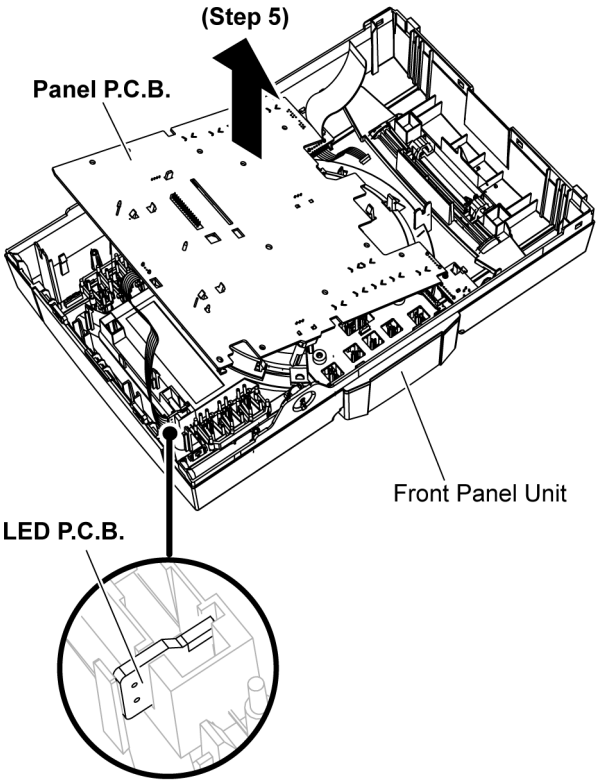
Step 3 Remove 7 screws.



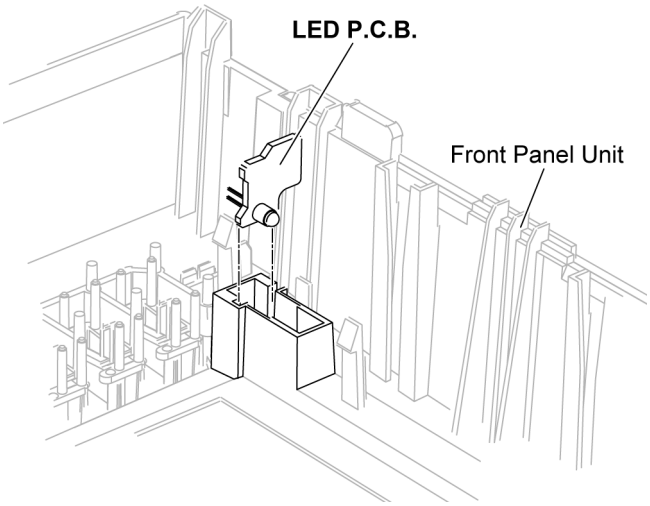
Step 4 Release catches by following the sequences (1-8).



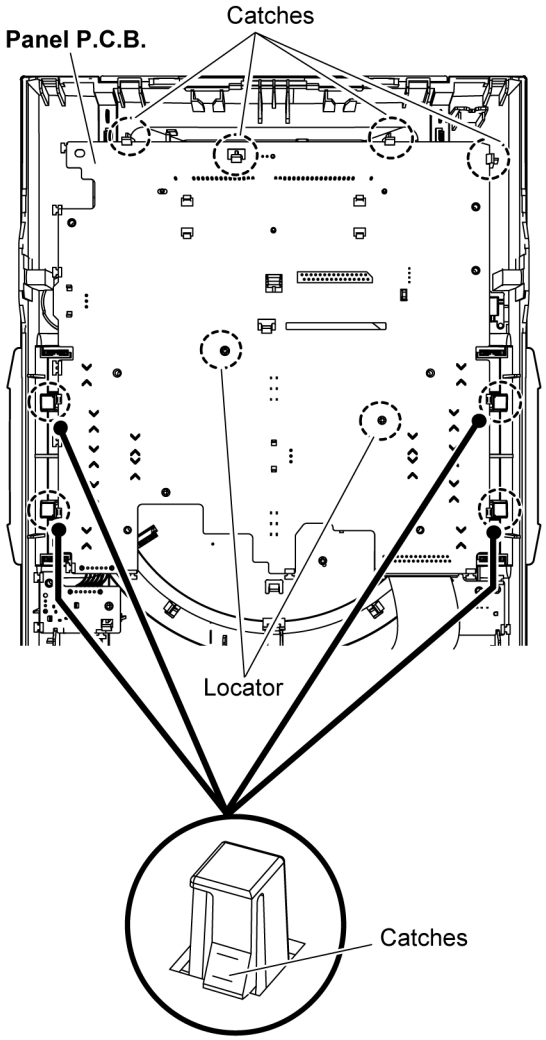
Step 5 Lift up the Panel P.C.B. and LED P.C.B. from Front Panel Unit.



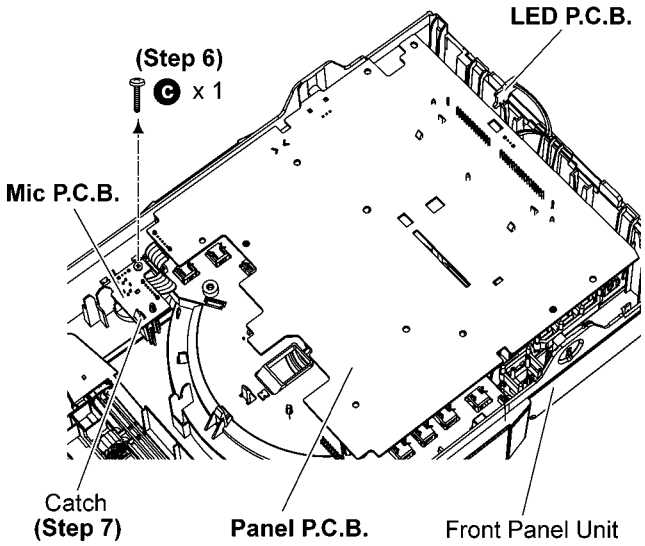
Caution: During assembling, ensure that LED P.C.B. is properly insert to Front Panel Unit.



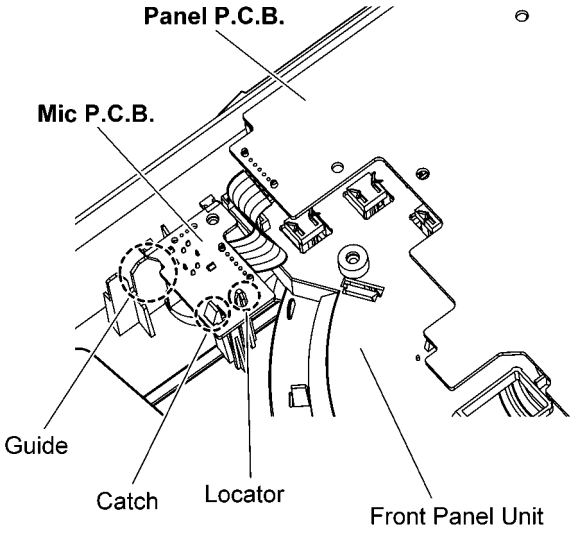
Caution: During assembling, ensure that Panel P.C.B. is seated properly through the located & fully catched.



Step 6 Remove 1 screw.
Step 7 Release 1 catch.
Step 8 Remove the Panel P.C.B., LED P.C.B. and Mic P.C.B..



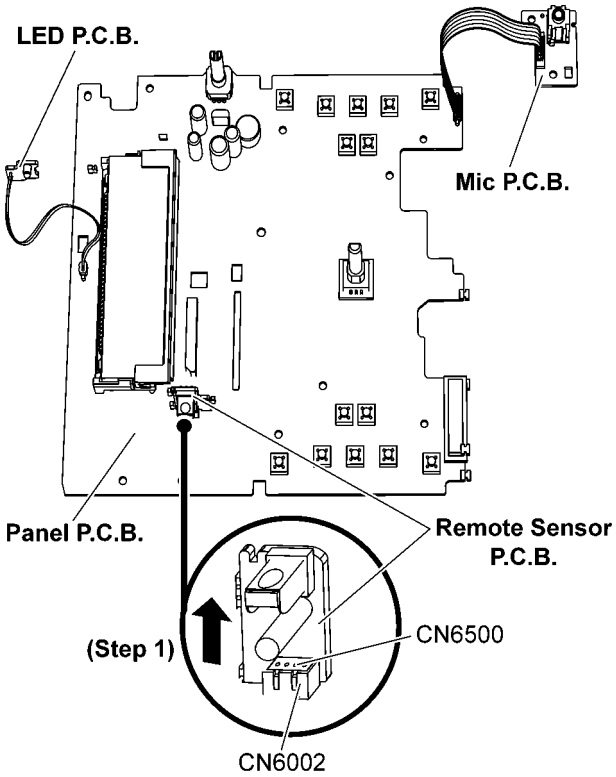
Caution: During assembling, ensure that Mic P.C.B. is seated properly through the located & fully catched.



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

- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**
- **Refer to "Disassembly of Panel P.C.B., LED P.C.B. and Mic P.C.B.".**

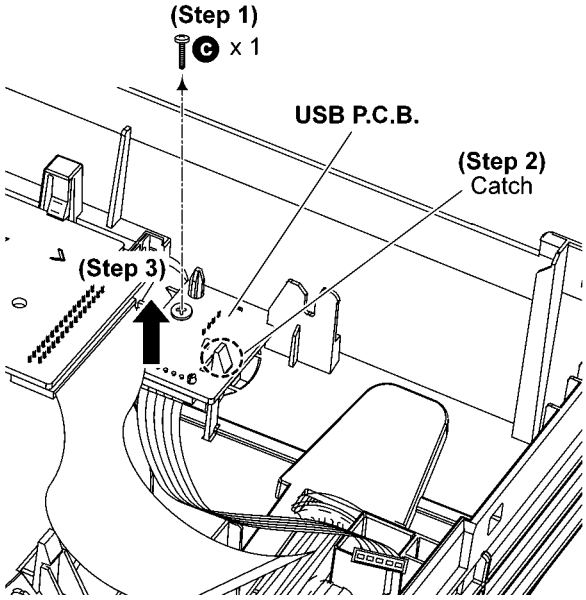
Step 1 Remove the Remote Sensor P.C.B..
Caution: During assembling, ensure that Remote Sensor P.C.B. is properly inserted & fully connected to Panel P.C.B..



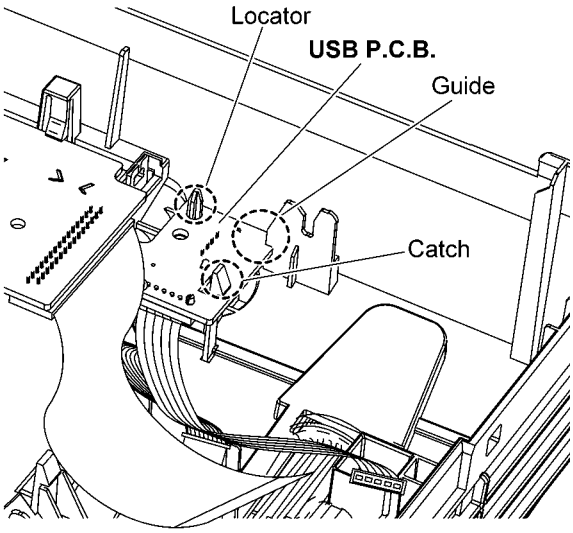
10.8. Disassembly of USB P.C.B.

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

Step 1 Remove 1 screw.
Step 2 Release 1 catch.
Step 3 Remove the USB P.C.B..



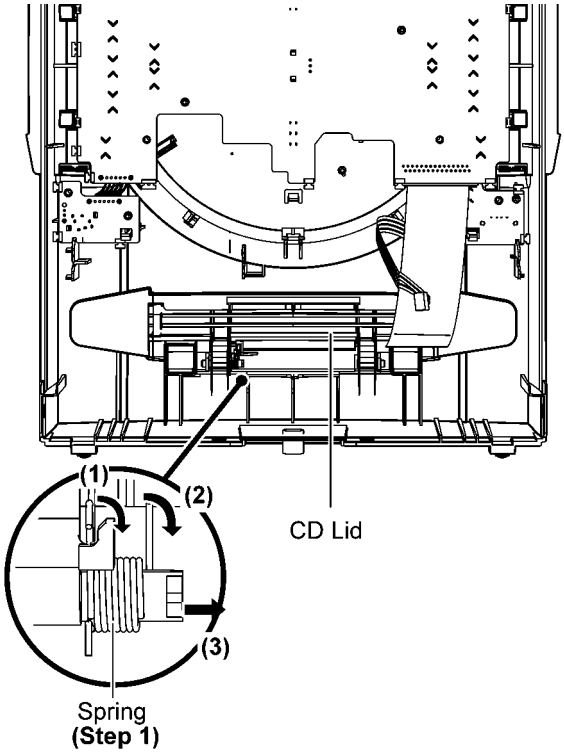
Caution: During assembling, ensure that USB P.C.B. is seated properly through the located & fully catched.



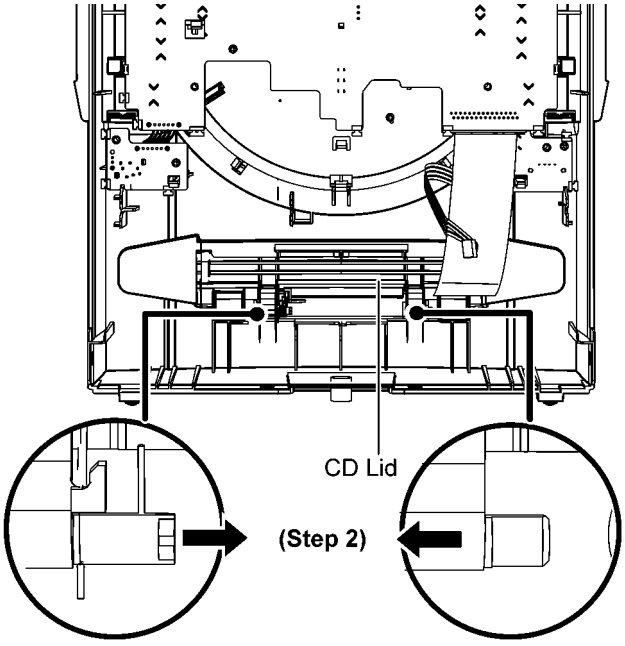
10.9. Disassembly of CD Lid

- **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.



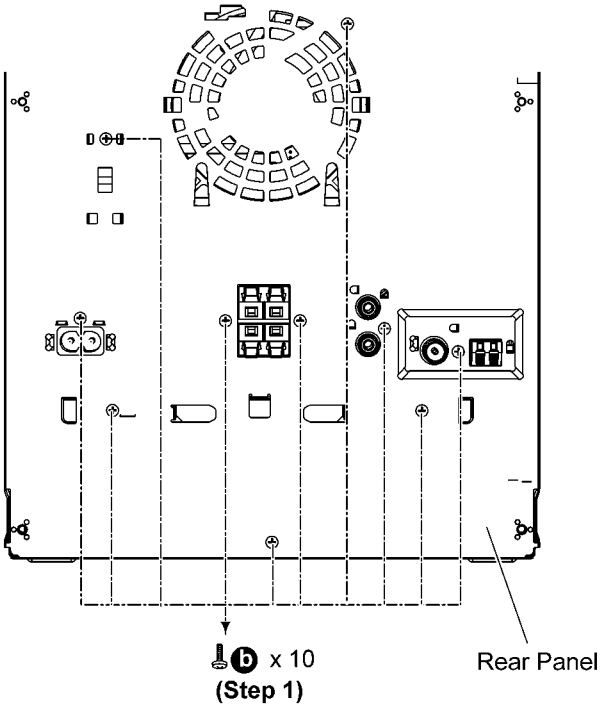
Step 2 Remove CD Lid as arrow shown.



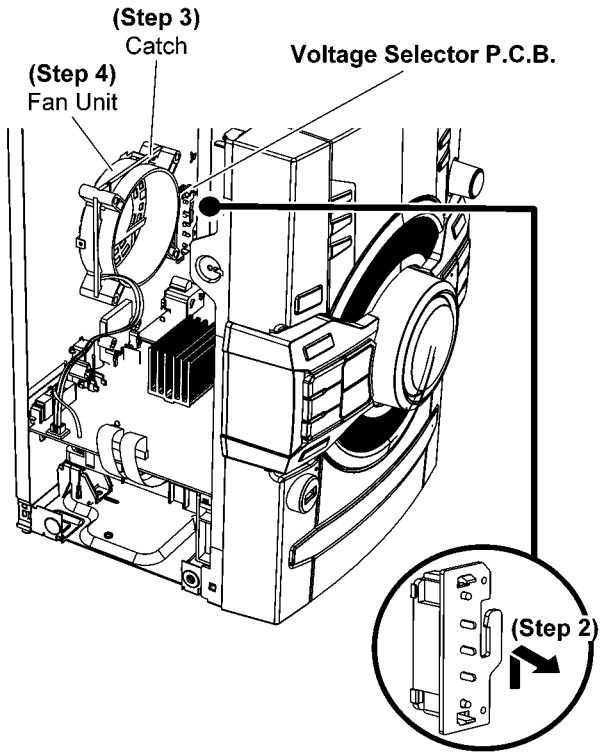
10.10. Disassembly of Rear Panel

- **Refer to “Disassembly of Top Cabinet”.**

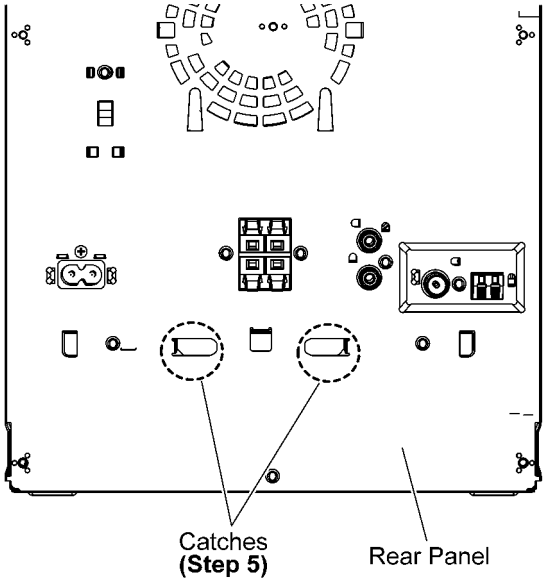
Step 1 Remove 10 screws.



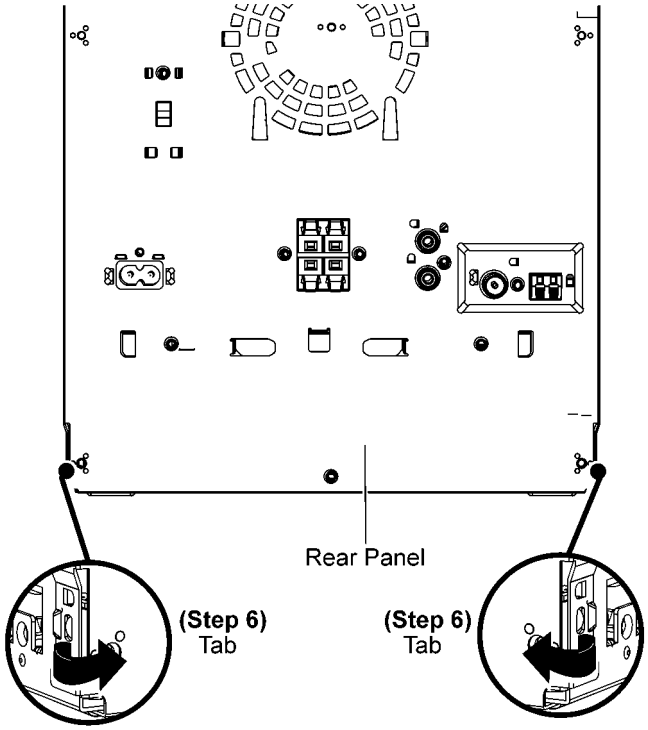
Step 2 Detach Voltage Selector P.C.B. from Rear Panel as arrow shown.
Step 3 Release 1 catch at the Fan Unit .
Step 4 Remove the Fan Unit .



Step 5 Lift up Inner Chassis Unit to release the catch between the Inner Chassis Unit and the Rear Panel.



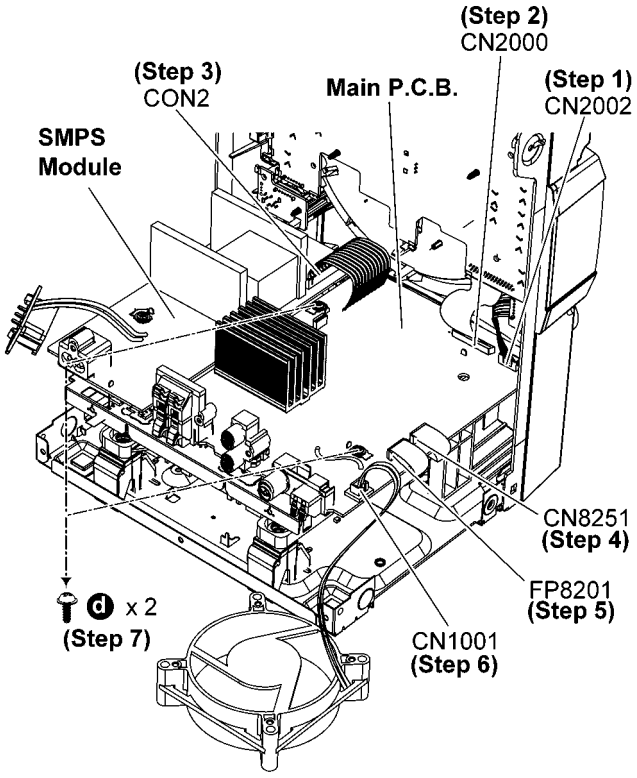
Step 6 Release 2 tabs.
Step 7 Remove Rear Panel.



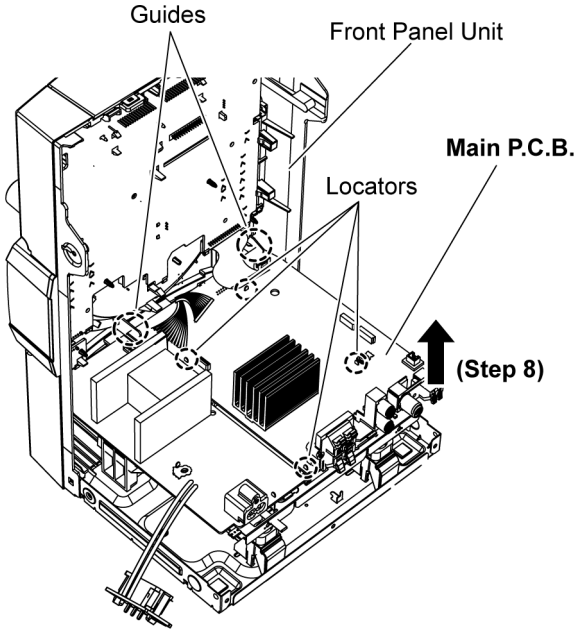
10.11. Disassembly of Main P.C.B.

- **Refer to “Disassembly of Top Cabinet”.**
- **Refer to “Disassembly of Rear Panel”.**

Step 1 Detach 5P Cable at the connector (CN2002) on Main P.C.B..
Step 2 Detach 30P FFC at the connector (CN2000) on Main P.C.B..
Step 3 Detach 13P Cable at the connector (CON2) on SMPS Module.
Step 4 Detach 10P FFC at the connector (CN8251) on Main P.C.B..
Step 5 Detach 24P FFC at the connector (FP8201) on Main P.C.B..
Step 6 Detach 2P Wire at the connector (CN1001) on Main P.C.B..
Step 7 Remove 2 screws.



Step 8 Remove the Main P.C.B..
Caution: During assembling, ensure that Main P.C.B. is seated properly through the located & fully guided.



10.12. Disassembly of Digital Amplifier IC (IC6000)

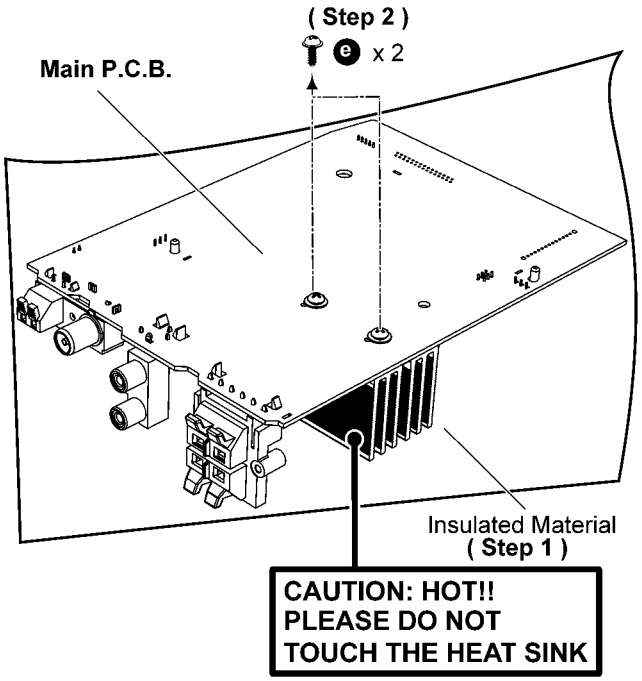
- **Refer to "Disassembly of Main P.C.B.".**

10.12.1. Disassembly of Digital Amplifier IC (IC6000)

Caution: Handle the Main P.C.B. with caution due to it's high temperature after prolonged use. Touching it may lead to injuries.

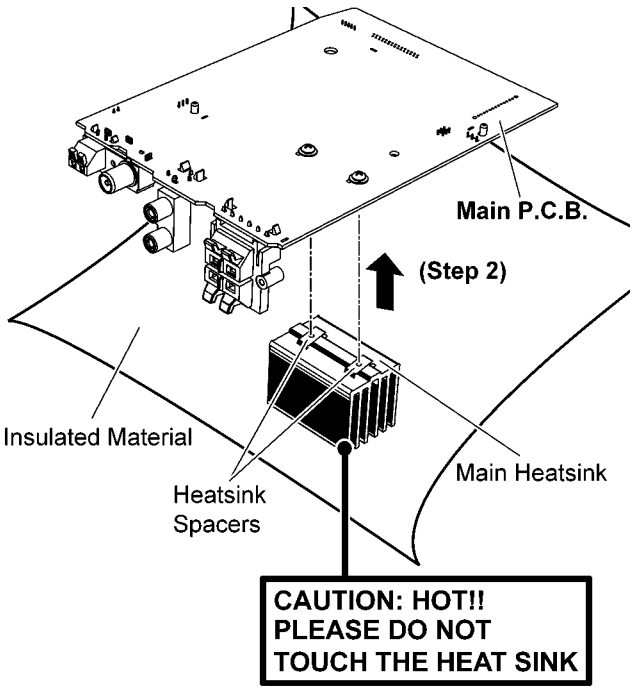
Step 1 Place the Main P.C.B. on an insulated material.

Step 2 Remove 2 screws.



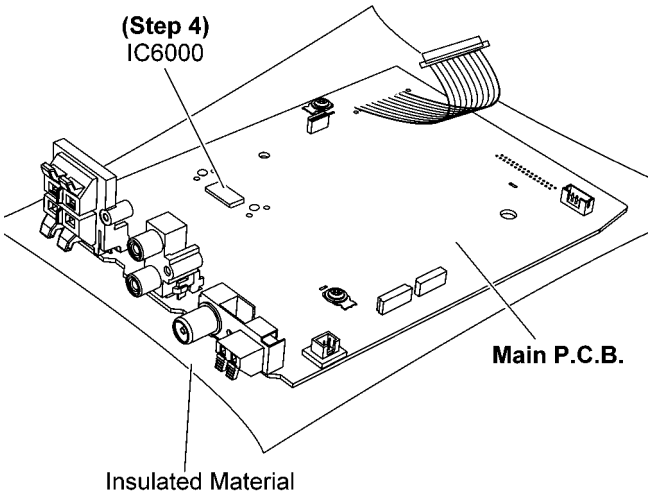
Step 3 Lift up the Main P.C.B. as arrow shown.

Caution: Keep the Heatsink Spacers in safe place. Avoid denting it, place it back during assembling.



Step 4 Desolder the pins of the Digital Amplifier IC (IC6000).

Step 5 Remove the Digital Amplifier IC (IC6000).

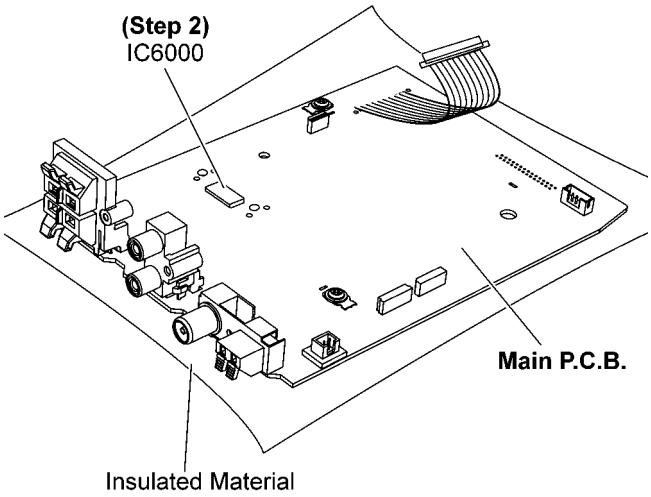


10.12.2. Assembly of Digital Amplifier IC (IC6000)

Step 1 Fix the Digital Amplifier IC (IC6000) onto the Main P.C.B..

Step 2 Solder the pins of the Digital Amplifier IC (IC6000).

Cautions: Ensure that the pins of the Digital Amplifier IC (IC6000) is positioned correctly on the Main P.C.B. before soldering.

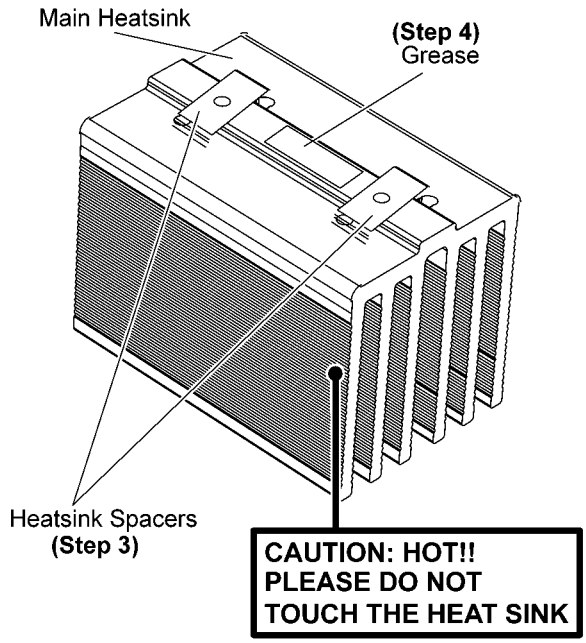


Step 3 Fix Heatsink spacers onto Main Heatsink..

Caotion: Ensure that the Heatsink Spacers are properly located and seated flatly onto Main Heatsink.

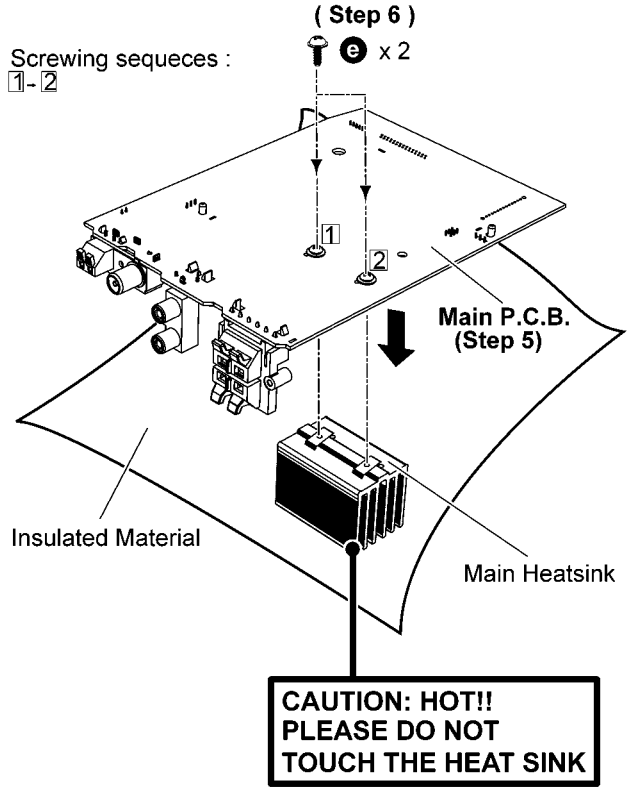
Step 4 Apply grease to the Main Heatsink as indicate in the diagram.

Caution: Ensure Grease thickness is about 0.2mm.



Step 5 Upset the Main P.C.B..

Step 6 Fix 2 screws.



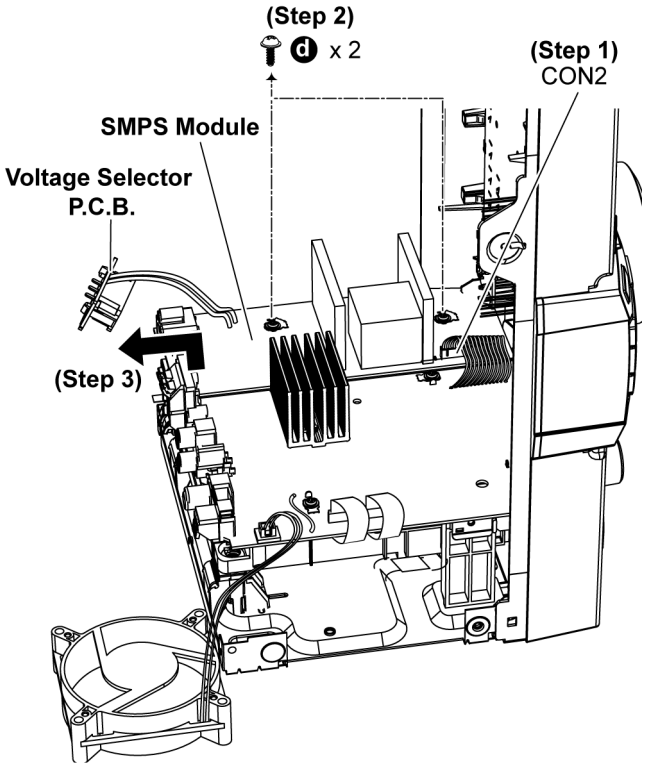
10.13. Disassembly of SMPS Module and Voltage Selector P.C.B.

- **Refer to "Disassembly of Top Cabinet.".**
- **Refer to "Disassembly of Rear Panel".**

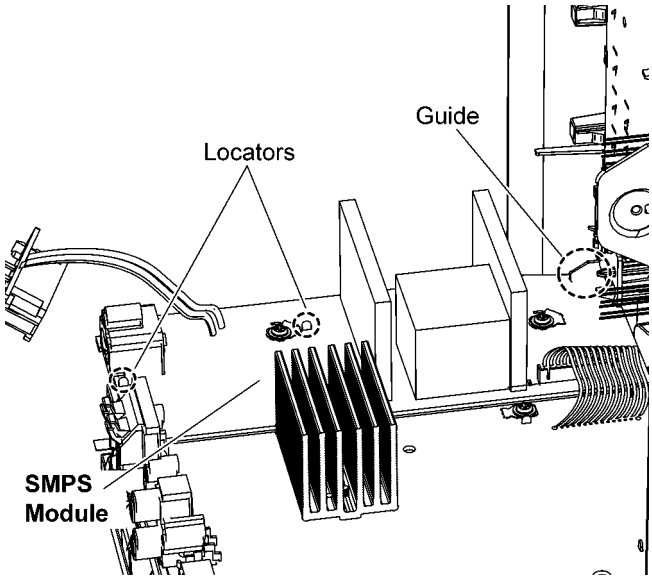
Step 1 Detach 13P Cable at a connector (CON2) on the SMPS Module.

Step 2 Remove 2 screws.

Step 3 Remove the SMPS Module and the Voltage Selector P.C.B..



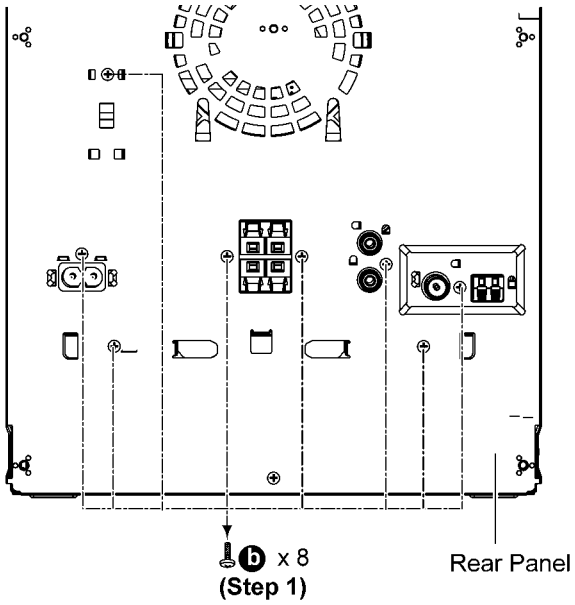
Caution: During assembling, ensure that SMPS Module is seated properly through the located & fully guided.



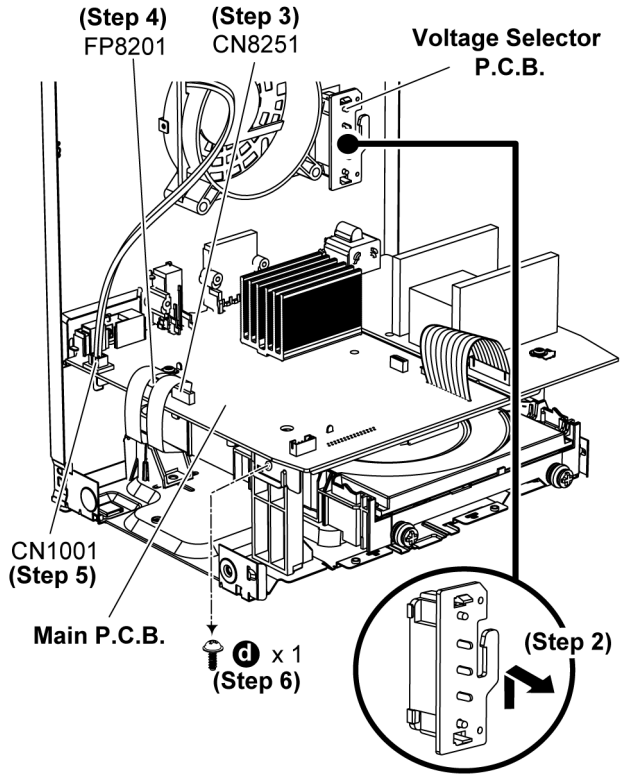
10.14. Disassembly of CD Mechanism Unit

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

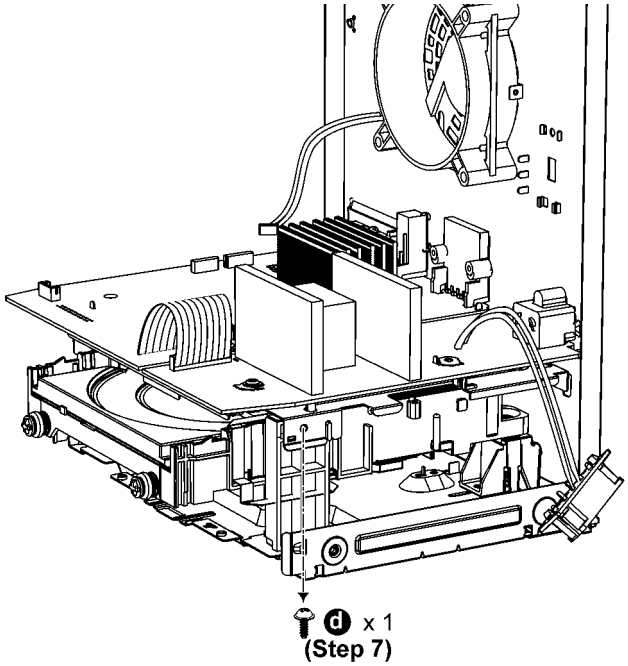
Step 1 Remove 8 screws.



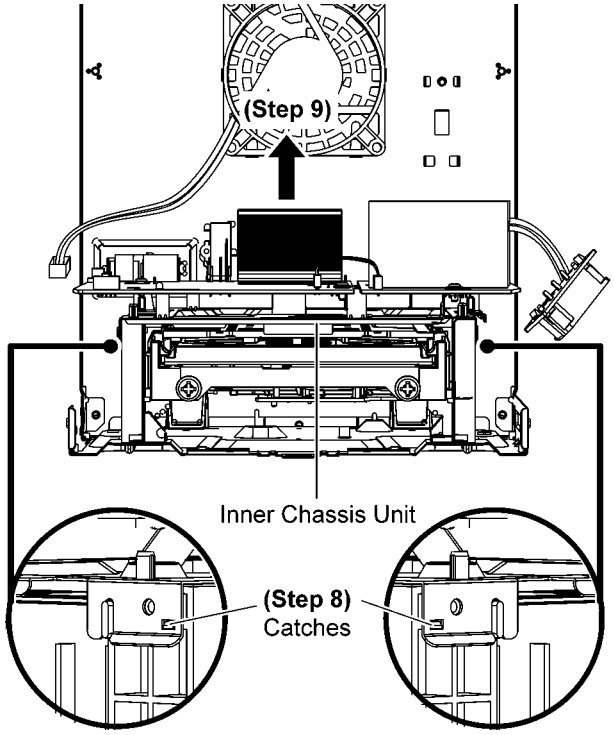
Step 2 Detach Voltage Selector P.C.B. from the Rear Panel.
Step 3 Detach 10P FFC at a connector (CN8251) on Main P.C.B..
Step 4 Detach 24P FFC at a connector (FP8201) on Main P.C.B..
Step 5 Detach 2P Wire at a connector (CN1001) on Main P.C.B..
Step 6 Remove 1 screw.



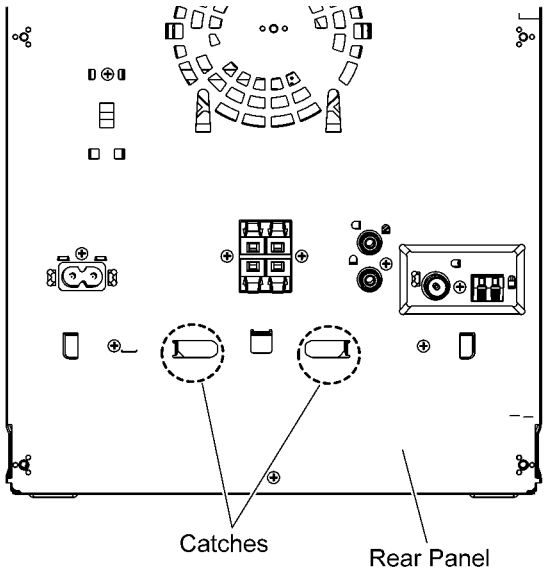
Step 7 Remove 1 screw.



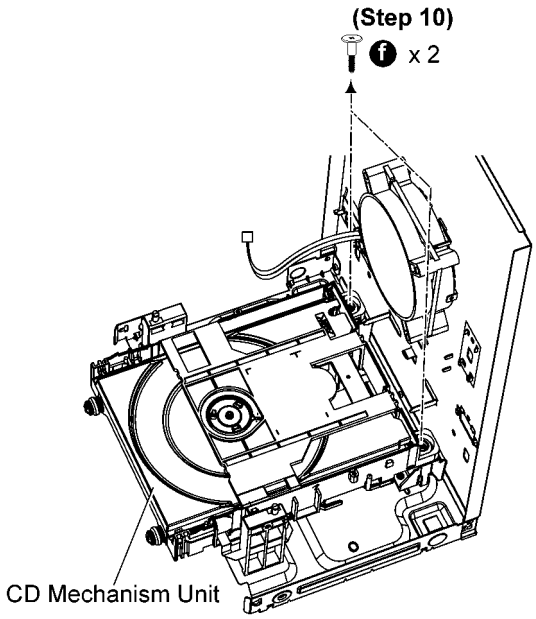
Step 8 Release 2 catches.
Step 9 Lift up and remove the Inner Chassis Unit.



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



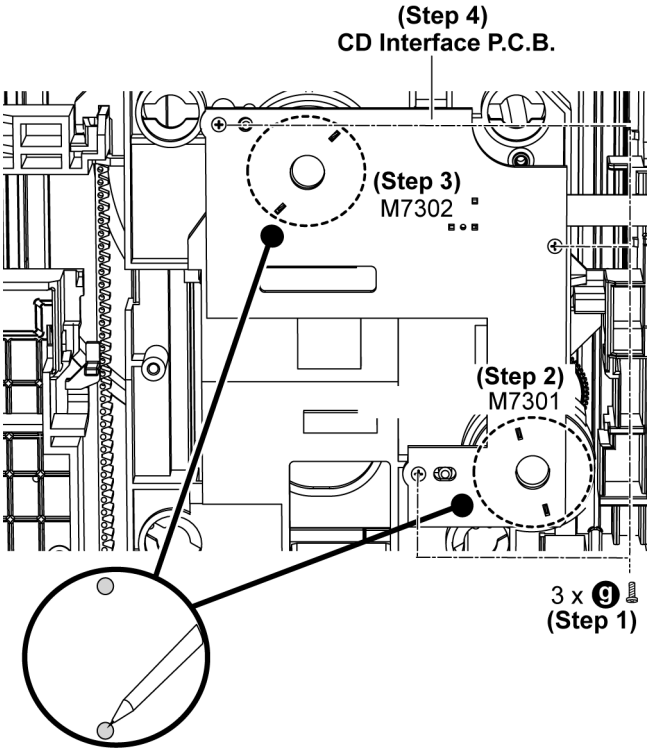
Step 10 Remove 2 screws.
Step 11 Remove the CD Mechanism Unit.



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

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

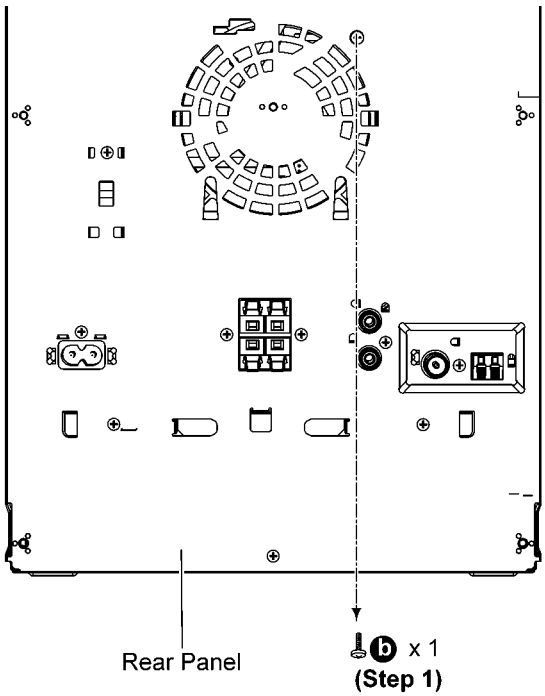
Step 1 Remove 3 screws.
Step 2 Desolder pins of the motor (M7301).
Step 3 Desolder pins of the motor (M7302).
Step 4 Remove the CD Interface P.C.B..



10.16. Disassembly of Fan Unit

- **Refer to “Disassembly of Top Cabinet”.**

Step 1 Remove 1 screw.

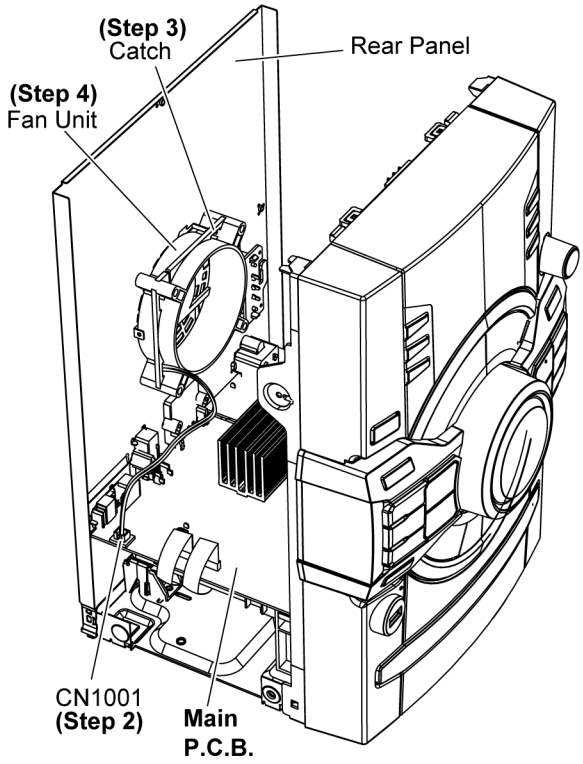


Step 2 Detach 2P Wire at a connector (CN1001) on the Main P.C.B..

Step 3 Release 1 catch.

Step 4 Remove the Fan Unit.

Caution: During assembling, ensure that Fan Unit is catched onto Rear Panel properly.

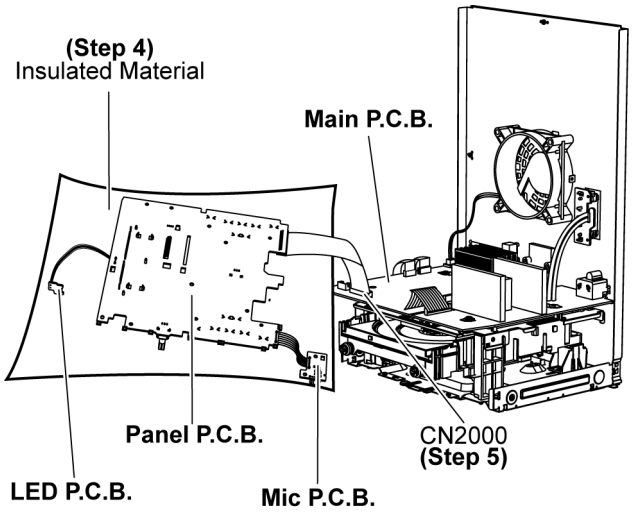


11 Service Position

Note: For description of the disassembly procedures, see the Section 10.

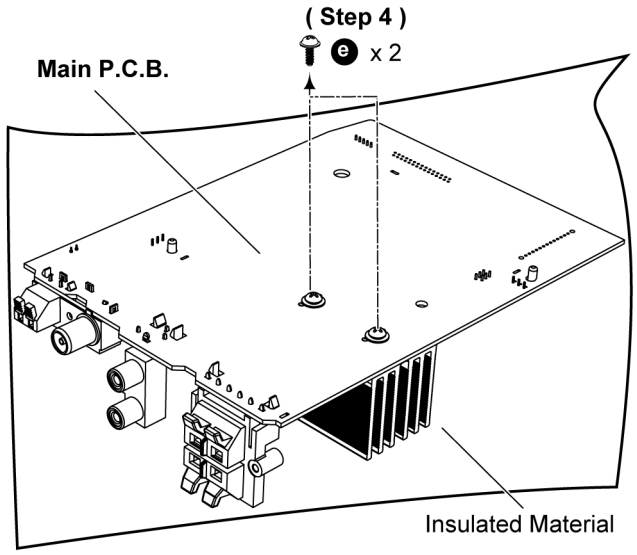
11.1. Checking of Panel P.C.B., LED P.C.B. and Mic P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove the Panel P.C.B., the LED P.C.B. and Mic P.C.B..
Step 4 Positioned the Panel P.C.B., the LED P.C.B. and Mic P.C.B. on the insulated material as shown.
Step 5 Attach 30P FFC at a connector (CN2000) on the Main P.C.B..
Step 6 Panel P.C.B., the LED P.C.B. and Mic P.C.B. can be checked at diagram shown.

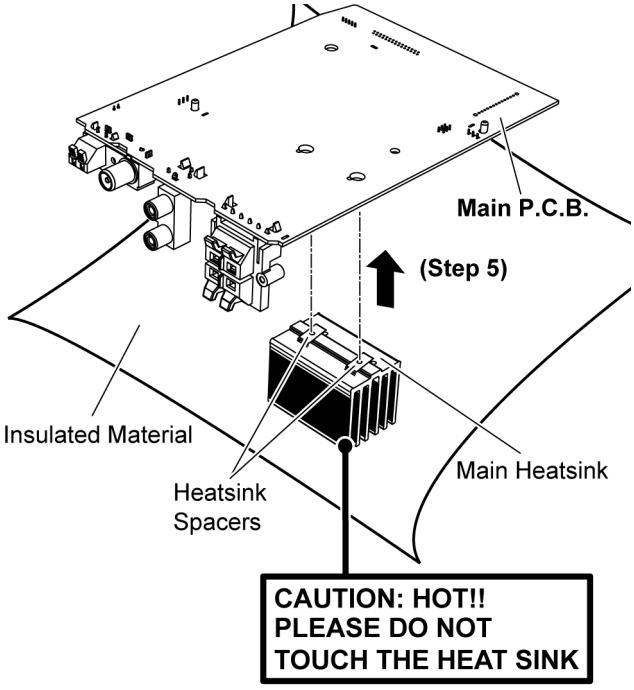


11.2. Checking of Main P.C.B. (Side B)

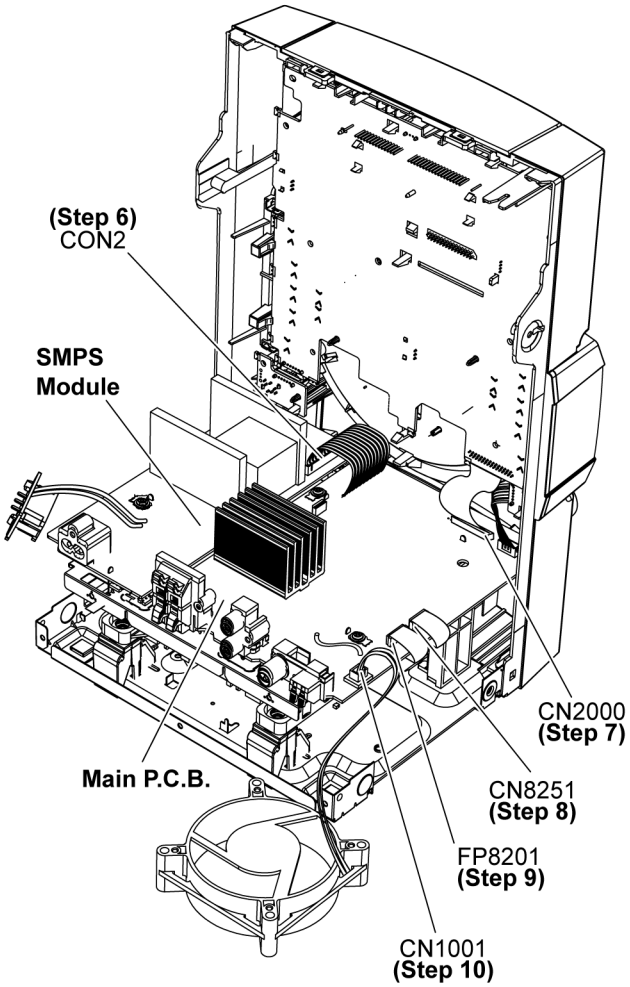
Step 1 Remove Top Cabinet.
Step 2 Remove Rear Panel.
Step 3 Remove Main P.C.B..
Step 4 Remove 2 screws.



Step 5 Lift up the Main P.C.B. as arrow shown.

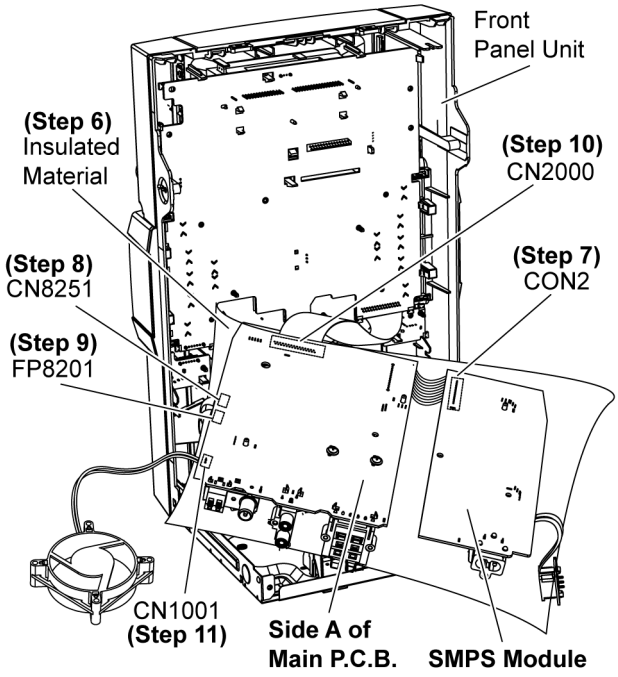


Step 6 Attach 13P Cable at a connector (CON2) on the SMPS Module.
Step 7 Attach 30P FFC at a connector (CN2000) on the Main P.C.B..
Step 8 Attach 10P FFC at a connector (CN8251) on the Main P.C.B..
Step 9 Attach 24P FFC at a connector (FP8201) on the Main P.C.B..
Step 10 Attach 2P FFC at a connector (CN1001) on the Main P.C.B..
Step 11 Side B Main P.C.B. can be checked at diagram shown.



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

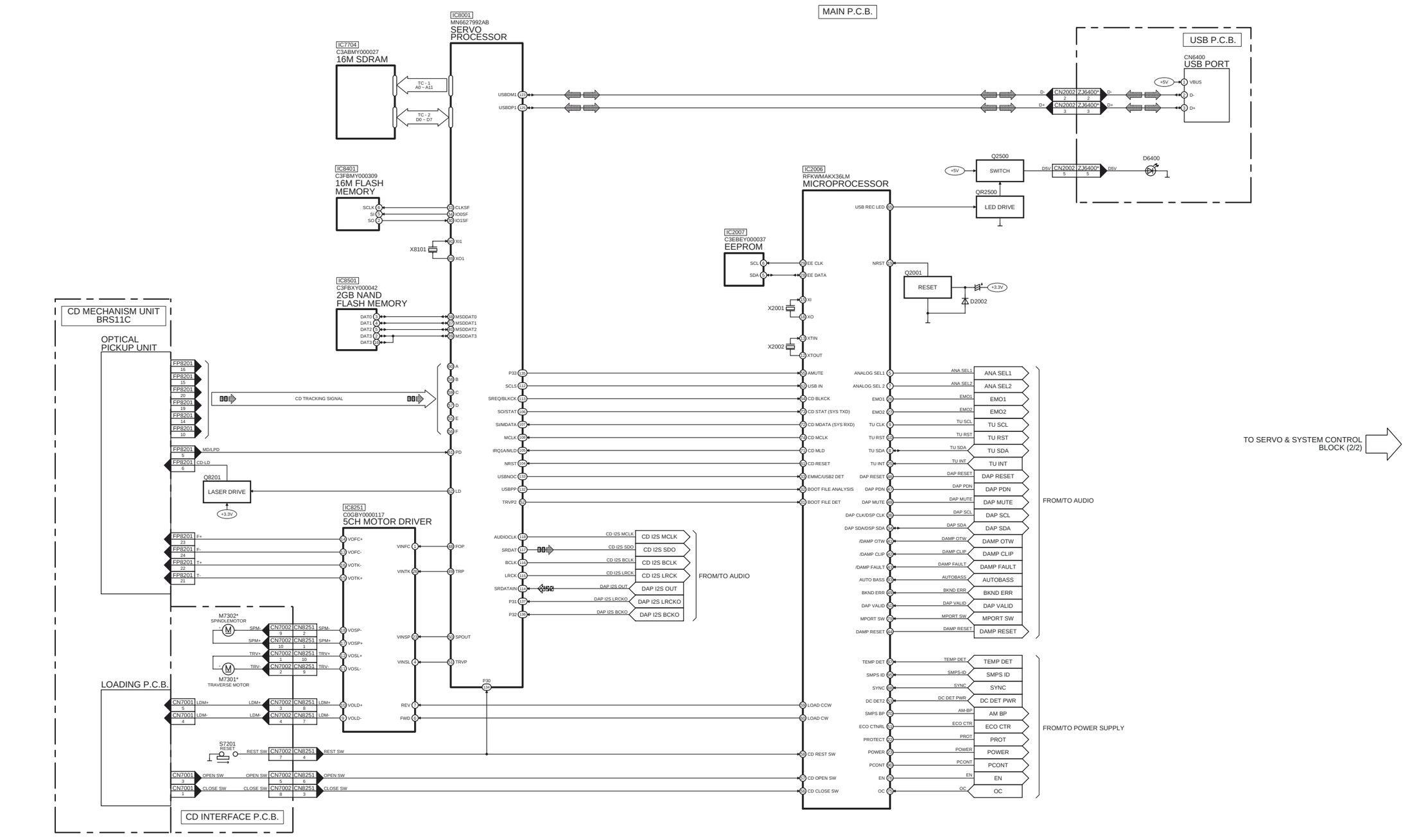
Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove Rear Panel.
Step 4 Remove Main P.C.B..
Step 5 Remove SMPS Module and Voltage Selector P.C.B..
Step 6 Positioned the Main P.C.B., SMPS Module and the Voltage Selector P.C.B. on the insulated material.
Step 7 Attach 13P Cable at a connector (CON2) on the SMPS Module.
Step 8 Attach 10P FFC at a connector (CN8251) on the Main P.C.B..
Step 9 Attach 24P FFC at a connector (FP8201) on the Main P.C.B..
Step 10 Attach 30P FFC at a connector (CN2000) on the Main P.C.B..
Step 11 Attach 2P FFC at a connector (CN1001) on the Main P.C.B..
Step 12 Side A Main P.C.B. can be checked at diagram shown.



12 Block Diagram

12.1. Servo & System Control

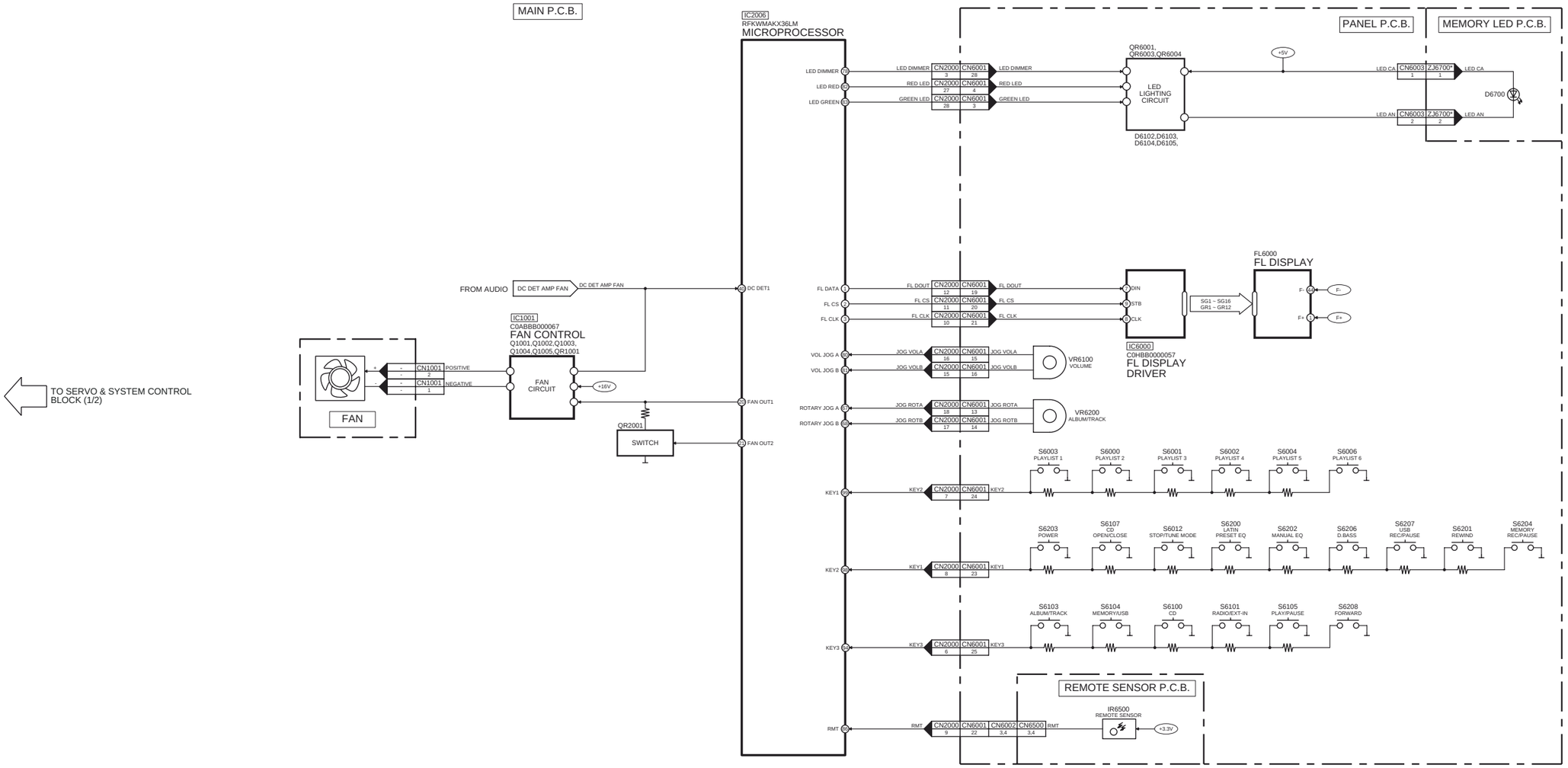
: CD AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX36PH/PN SERVO & SYSTEM CONTROL (1/2) BLOCK DIAGRAM

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



NOTE: “ * ” REF IS FOR INDICATION ONLY

SA-AKX36PH/PN SERVO & SYSTEM CONTROL (2/2) BLOCK DIAGRAM

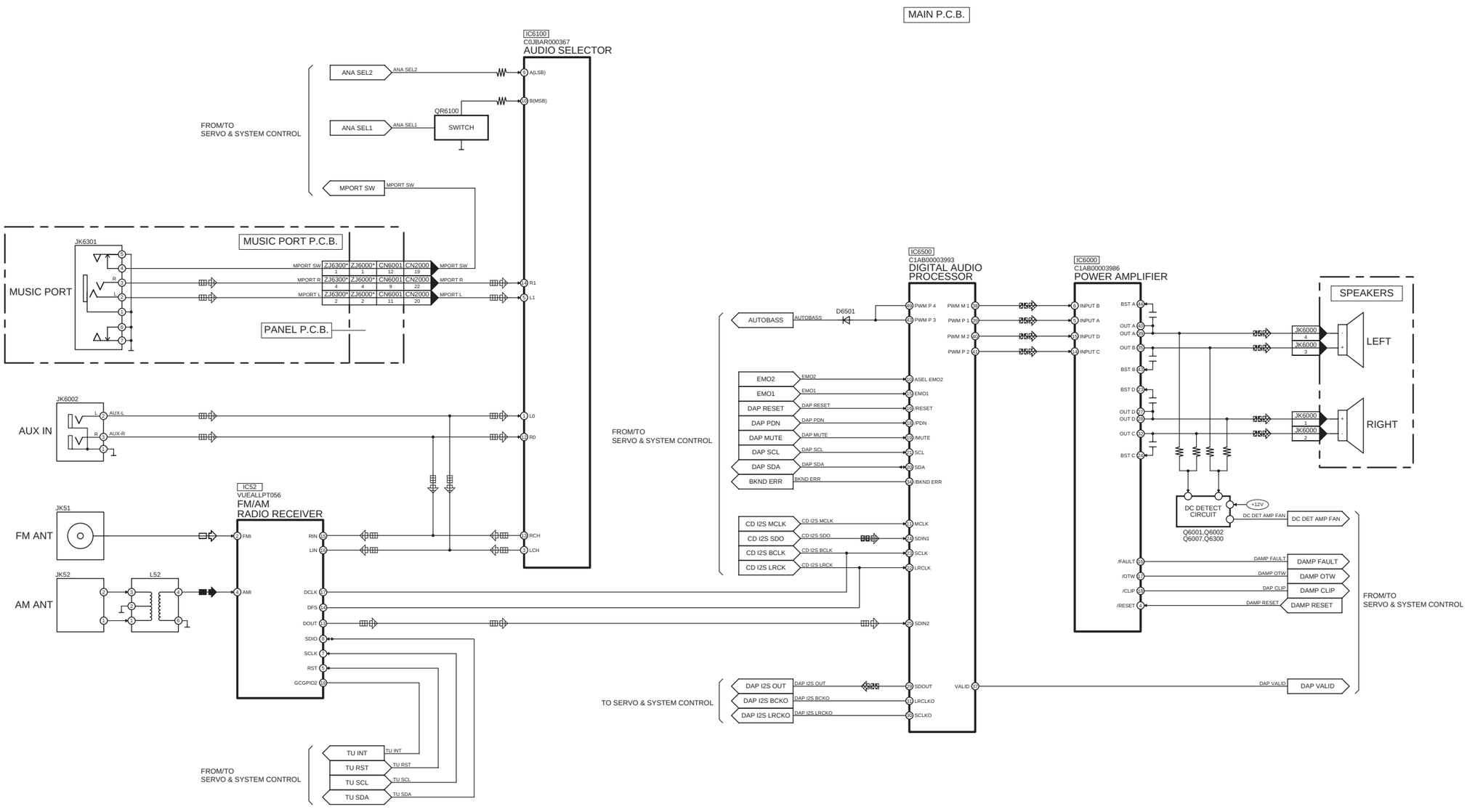
12.2. IC Terminal Chart

TC	IC7704 16M SDRAM		SIGNAL NAME	IC8001 SERVO PROCESSOR	
	PORT NAME	PIN NO		PIN NO	PORT NAME
1	A0	21	A0	14	A0
	A1	22	A1	15	A1
	A2	23	A2	16	A2
	A3	24	A3	17	A3
	A4	27	A4	20	A4
	A5	28	A5	21	A5
	A6	29	A6	22	A6
	A7	30	A7	23	A7
	A8	31	A8	24	A8
	A9	32	A9	25	A9
	A10	20	A10	13	A10
	BA0	19	A11	26	A11

TC	IC7704 16M SDRAM		SIGNAL NAME	IC8001 SERVO PROCESSOR	
	PORT NAME	PIN NO		PIN NO	PORT NAME
2	DQ0 / DQ15	2 / 49	D0	142	D0
	DQ1 / DQ14	3 / 48	D1	143	D1
	DQ2 / DQ13	5 / 46	D2	144	D2
	DQ3 / DQ12	6 / 45	D3	2	D3
	DQ4 / DQ11	8 / 43	D4	3	D4
	DQ5 / DQ10	9 / 42	D5	4	D5
	DQ6 / DQ9	11 / 40	D6	5	D6
	DQ7 / DQ8	12 / 39	D7	6	D7

12.3. Audio

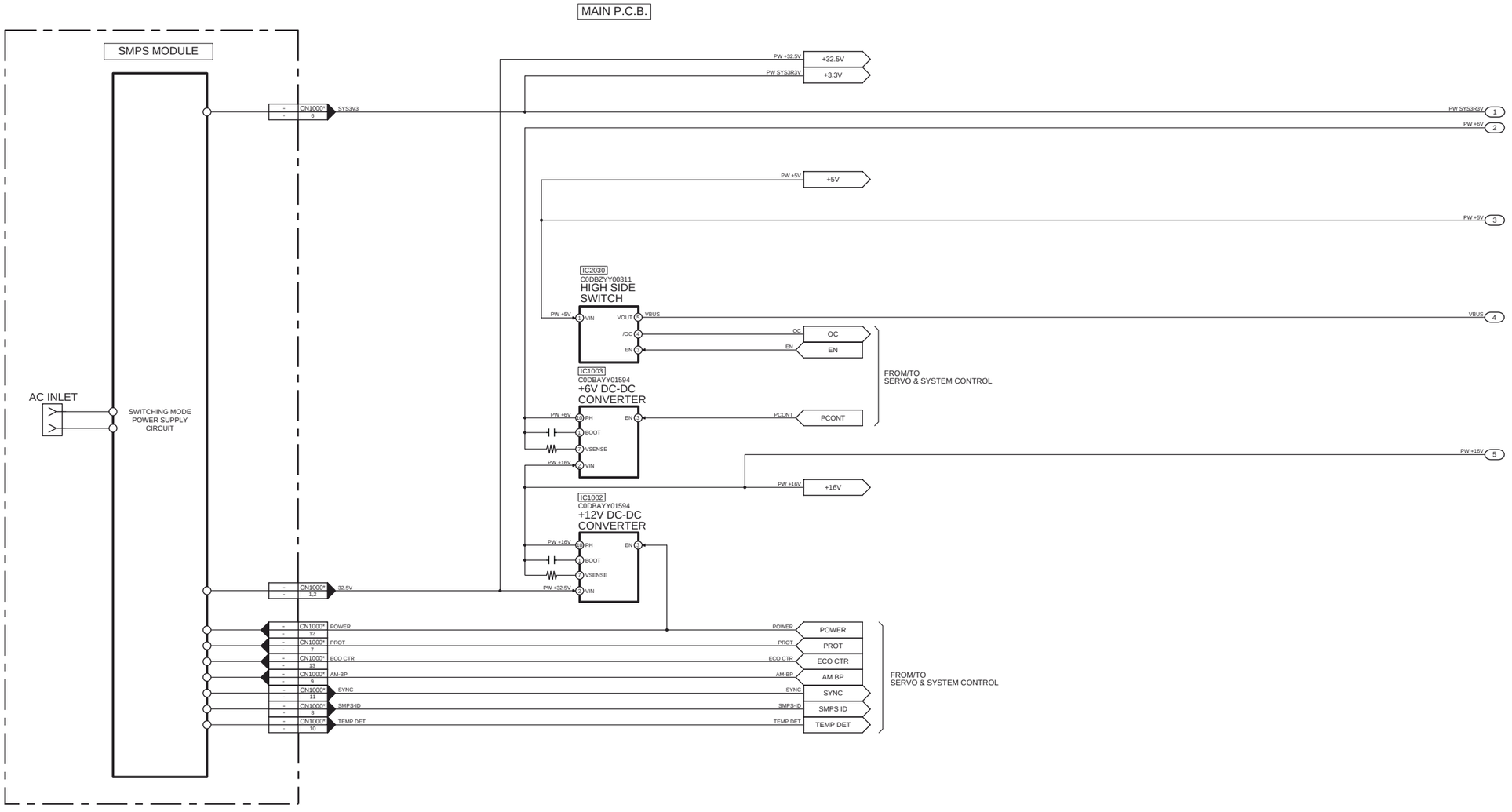
: CD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : AM SIGNAL LINE : FM SIGNAL LINE



NOTE: “ * ” REF IS FOR INDICATION ONLY

SA-AKX36PH/PN AUDIO BLOCK DIAGRAM

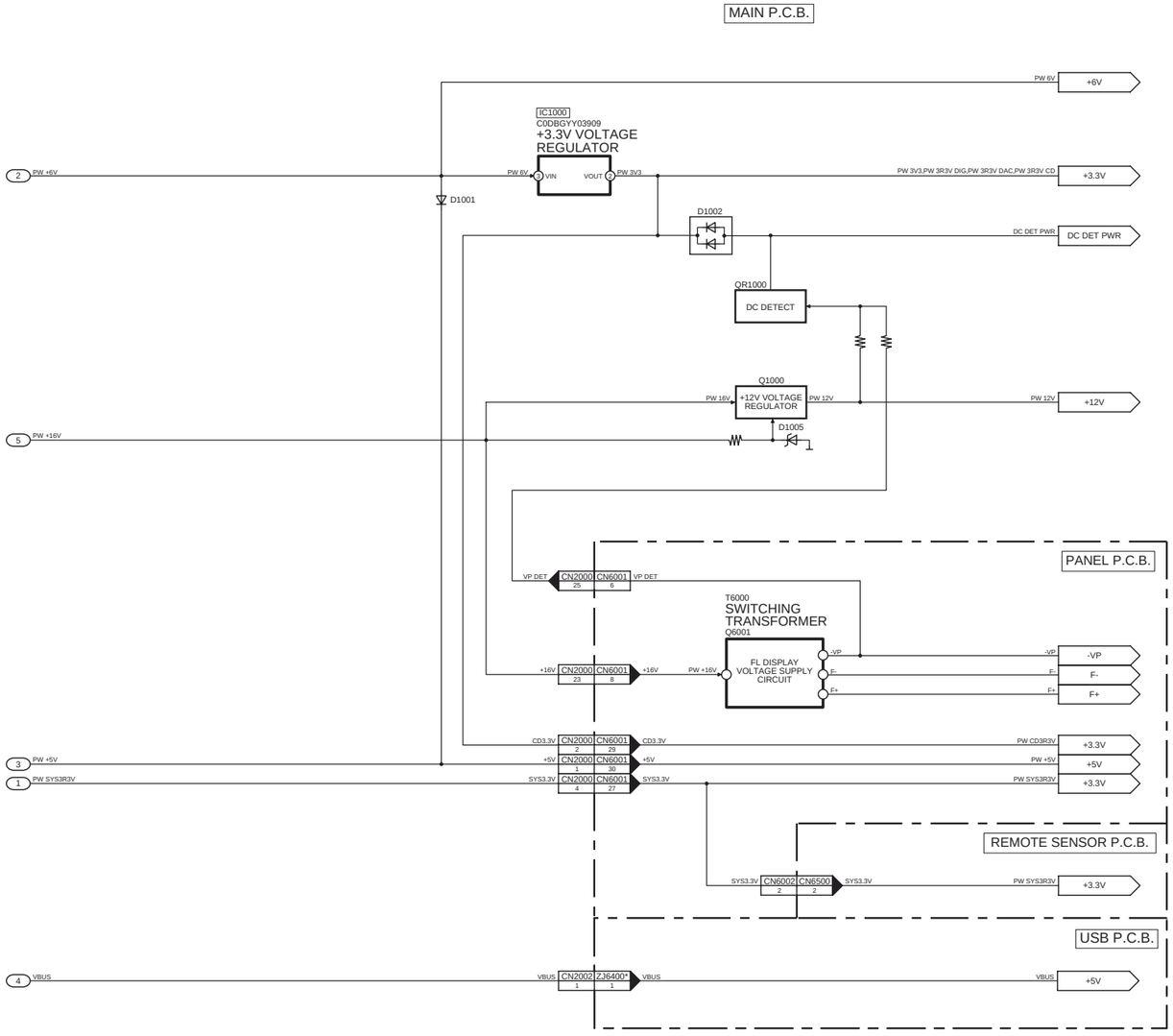
12.4. Power Supply



TO POWER SUPPLY BLOCK (2/2)

NOTE: “ * ” REF IS FOR INDICATION ONLY

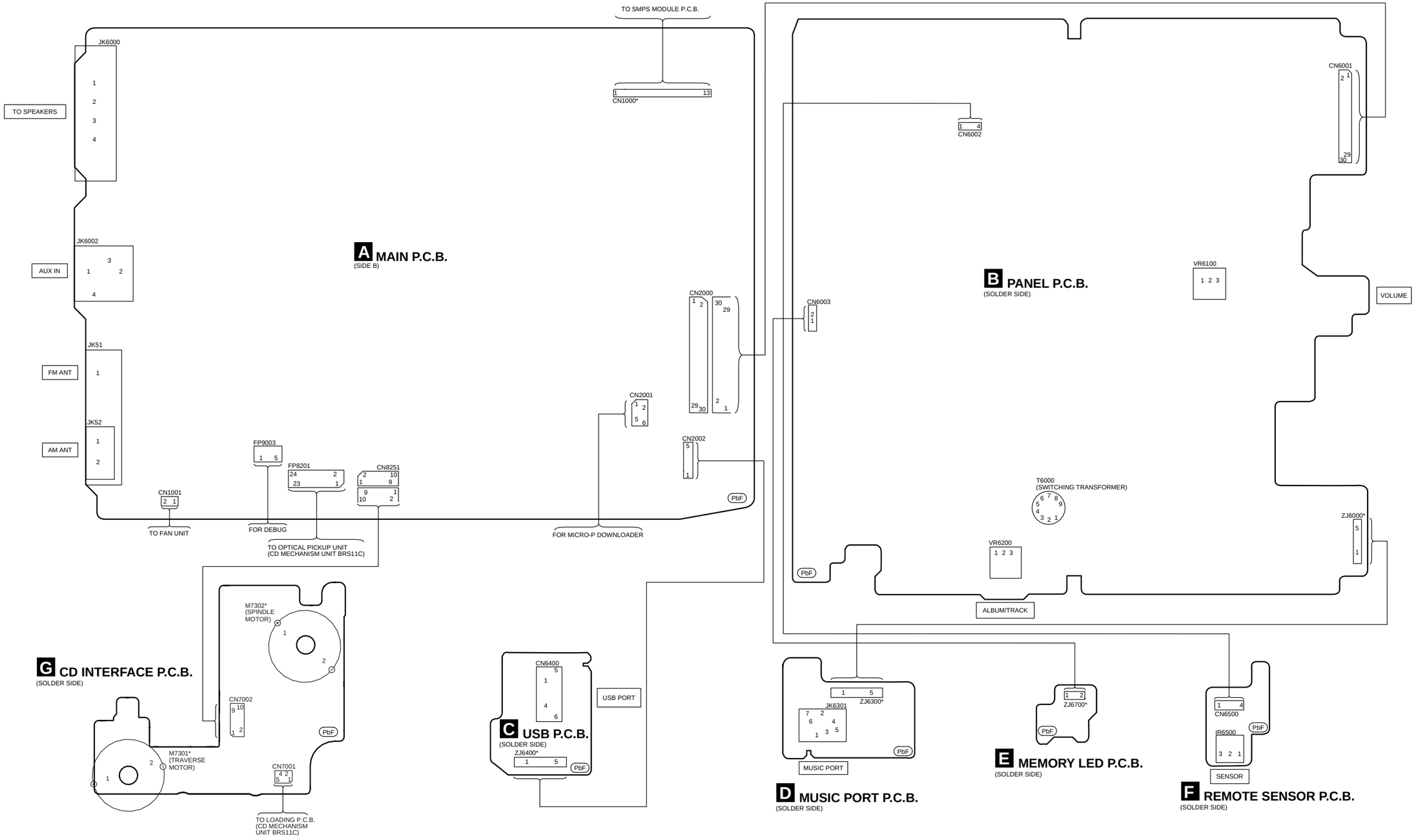
SA-AKX36PH/PN POWER SUPPLY (1/2) BLOCK DIAGRAM



NOTE: “ * ” REF IS FOR INDICATION ONLY

SA-AKX36PH/PN POWER SUPPLY (2/2) BLOCK DIAGRAM

13 Wiring Connection Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX36PH/PN WIRING CONNECTION DIAGRAM

14 Schematic Diagram

14.1. Schematic Diagram Notes

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

Notes:

S6000:	Playlist 2 switch.
S6001:	Playlist 3 switch.
S6002:	Playlist 4 switch.
S6003:	Playlist 1 switch.
S6004:	Playlist 5 switch.
S6006:	Playlist 6 switch.
S6012:	Stop (■) /Tune Mode switch.
S6100:	CD switch.
S6101:	Radio/EXT-IN switch.
S6103:	Album/Track switch.
S6104:	Memory/USB switch.
S6105:	Play/Pause (▶ / ▮▮) switch.
S6107:	CD Open switch.
S6200:	Latin/Preset EQ switch.
S6201:	Rewind (⏮ / ◀◀) switch.
S6202:	Manual EQ switch.
S6203:	Power (⏻/|) switch.
S6204:	Memory Rec switch.
S6206:	D.Bass switch.
S6207:	USB Rec switch.
S6208:	Forward (▶▶ / ⏭) switch.
S7201:	Reset switch.
VR6100:	Volume Jog.
VR6200:	Control 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.

- **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

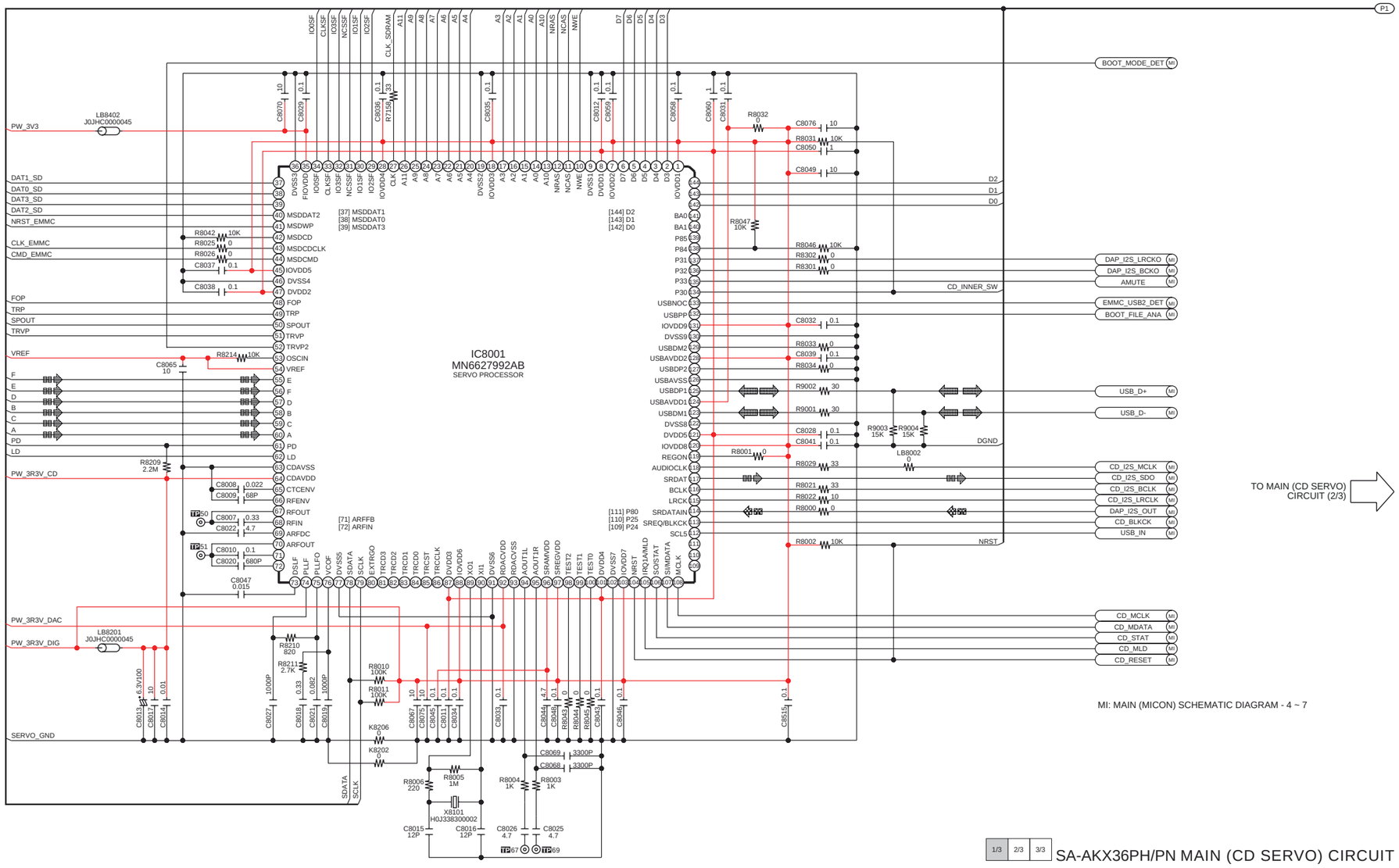
  : +B signal line
  : -B signal line
  : CD Audio input signal line
  : AUX/Tuner/Music Port Audio input signal line
  : Audio output signal line
  : USB signal line
  : AM signal line
  : FM signal line

14.2. MAIN (CD Servo/Micon/Damp) Circuit

SCHEMATIC DIAGRAM - 1

A MAIN (CD SERVO) CIRCUIT

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

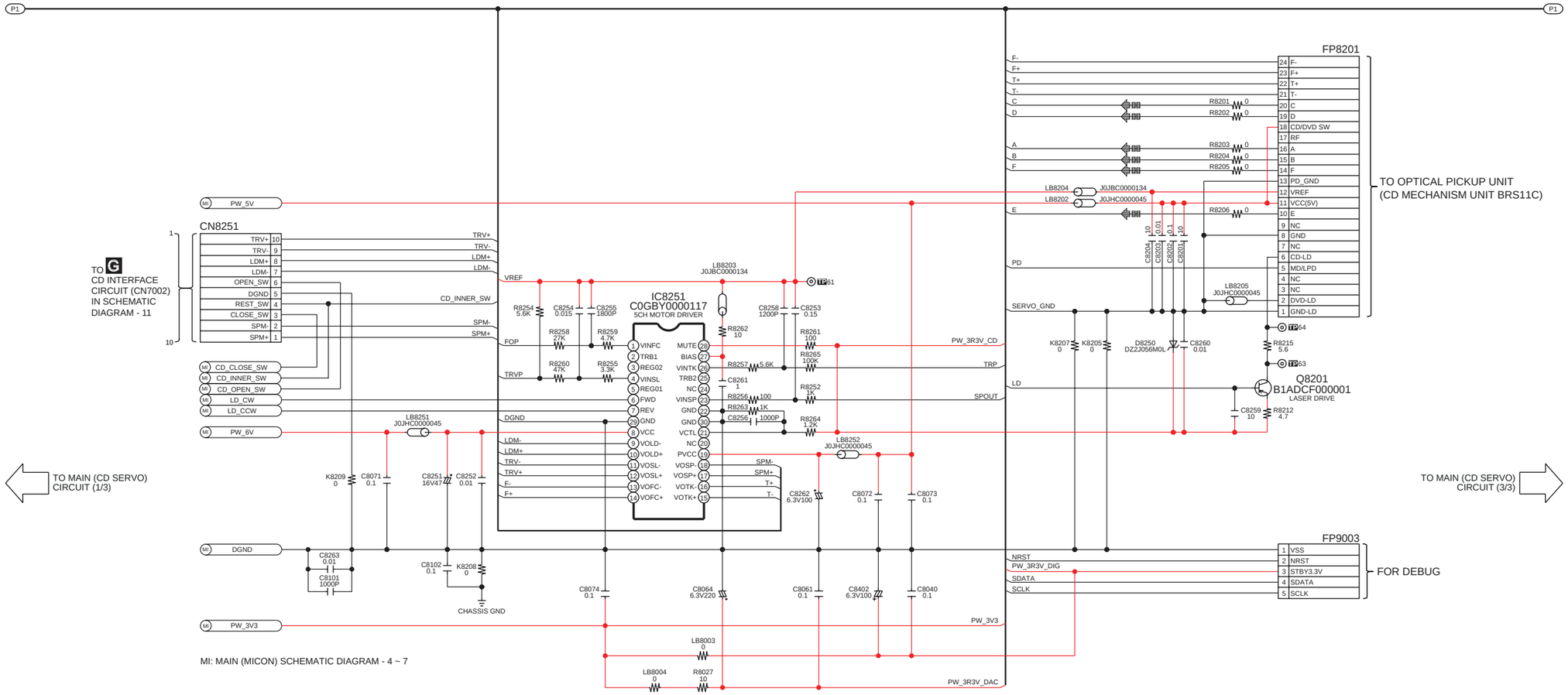


1/3 | 2/3 | 3/3 SA-AKX36PH/PN MAIN (CD SERVO) CIRCUIT

SCHEMATIC DIAGRAM - 2

A MAIN (CD SERVO) CIRCUIT

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

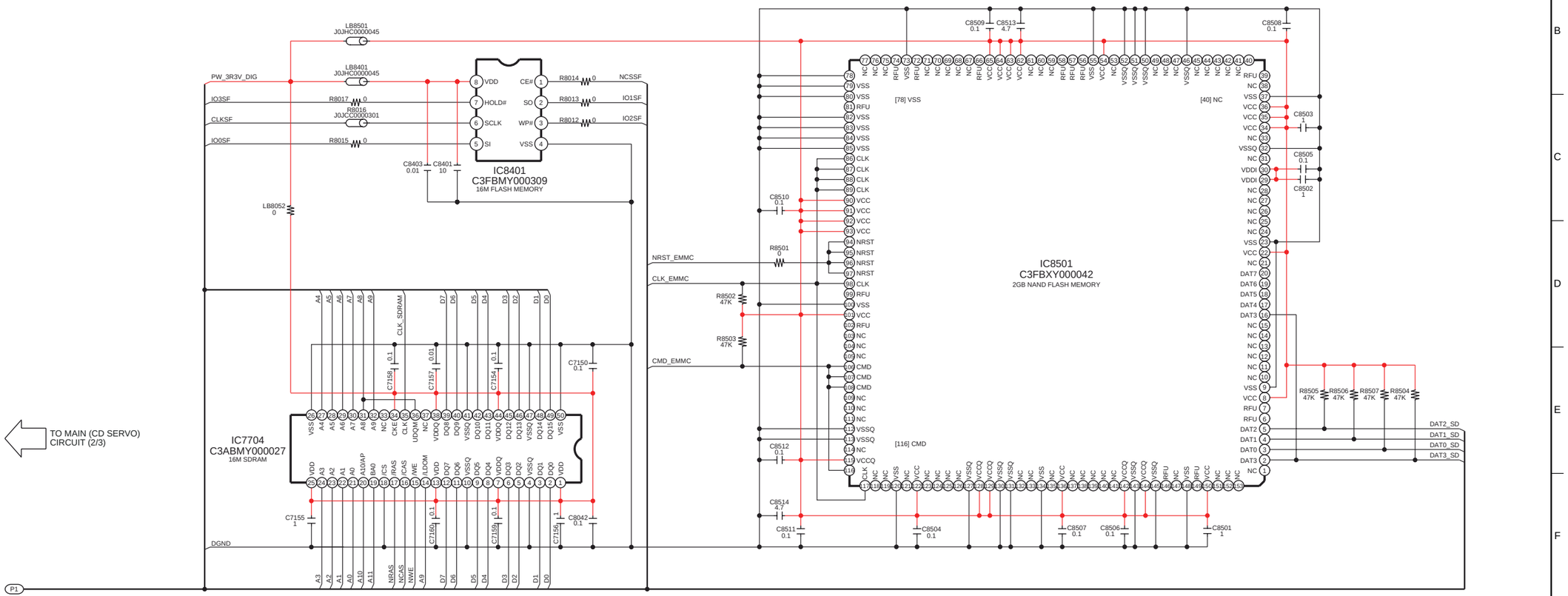


1/3 2/3 3/3 SA-AKX36PH/PN MAIN (CD SERVO) CIRCUIT

SCHEMATIC DIAGRAM - 3

A MAIN (CD SERVO) CIRCUIT

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

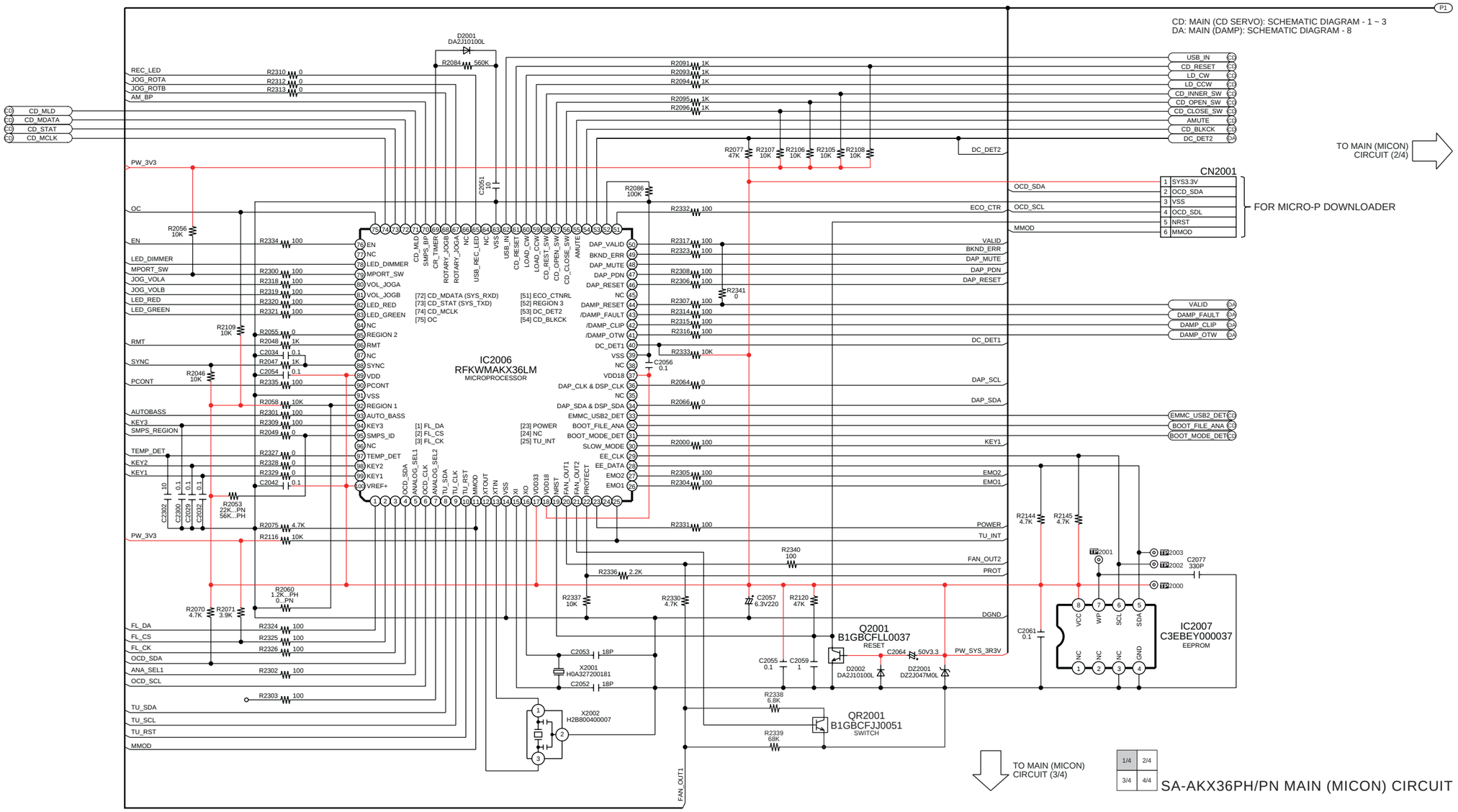


1/3 | 2/3 | 3/3 SA-AKX36PH/PN MAIN (CD SERVO) CIRCUIT

SCHEMATIC DIAGRAM - 4

A MAIN (MICON) CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: CD AUDIO INPUT SIGNAL LINE
: AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE
: AUDIO OUTPUT SIGNAL LINE
: AM SIGNAL LINE
: FM SIGNAL LINE
: USB SIGNAL LINE



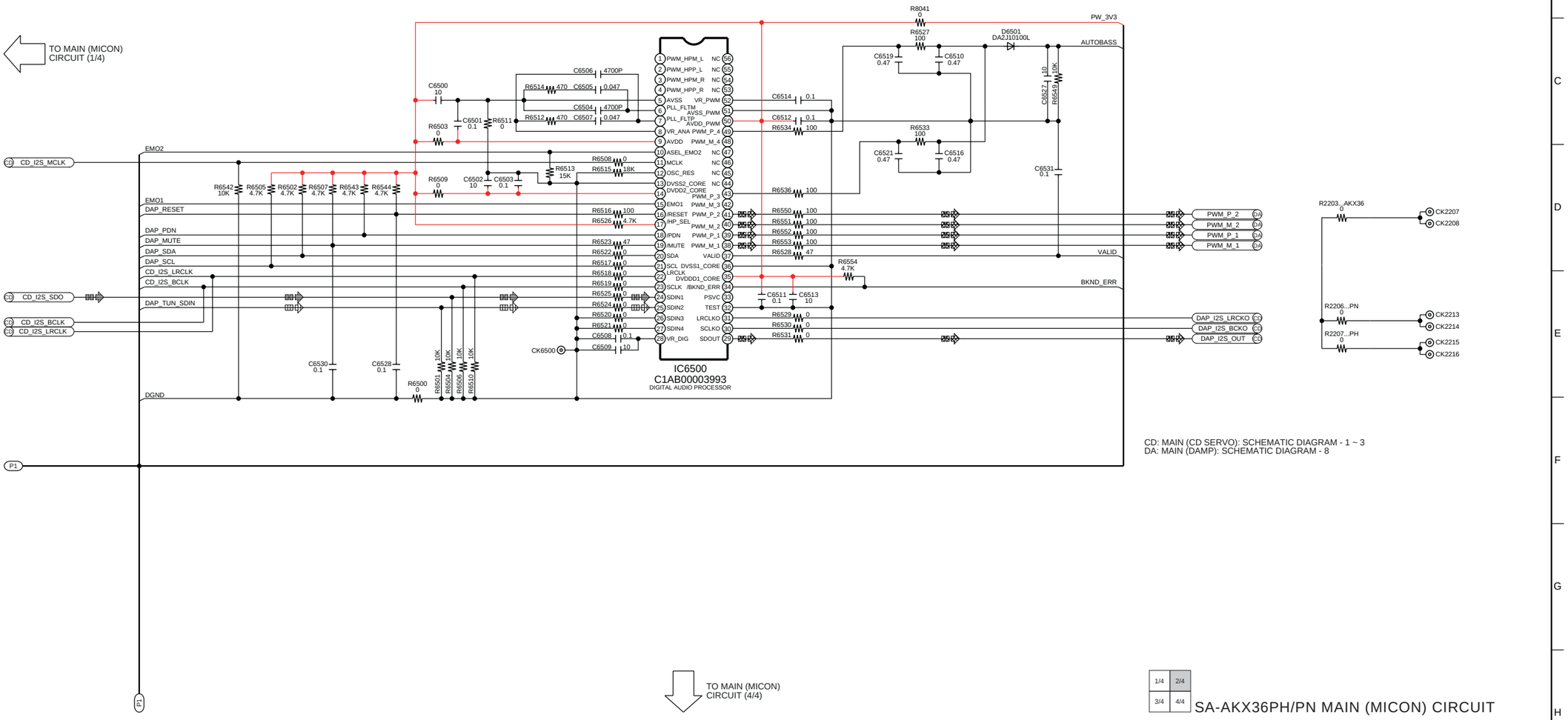
1/4 | 2/4 | 3/4 | 4/4

SA-AKX36PH/PN MAIN (MICON) CIRCUIT

SCHEMATIC DIAGRAM - 5

A MAIN (MICON) CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: CD AUDIO INPUT SIGNAL LINE
: AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE
: AUDIO OUTPUT SIGNAL LINE
: AM SIGNAL LINE
: FM SIGNAL LINE
: USB SIGNAL LINE



CD: MAIN (CD SERVO): SCHEMATIC DIAGRAM - 1 ~ 3
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 8

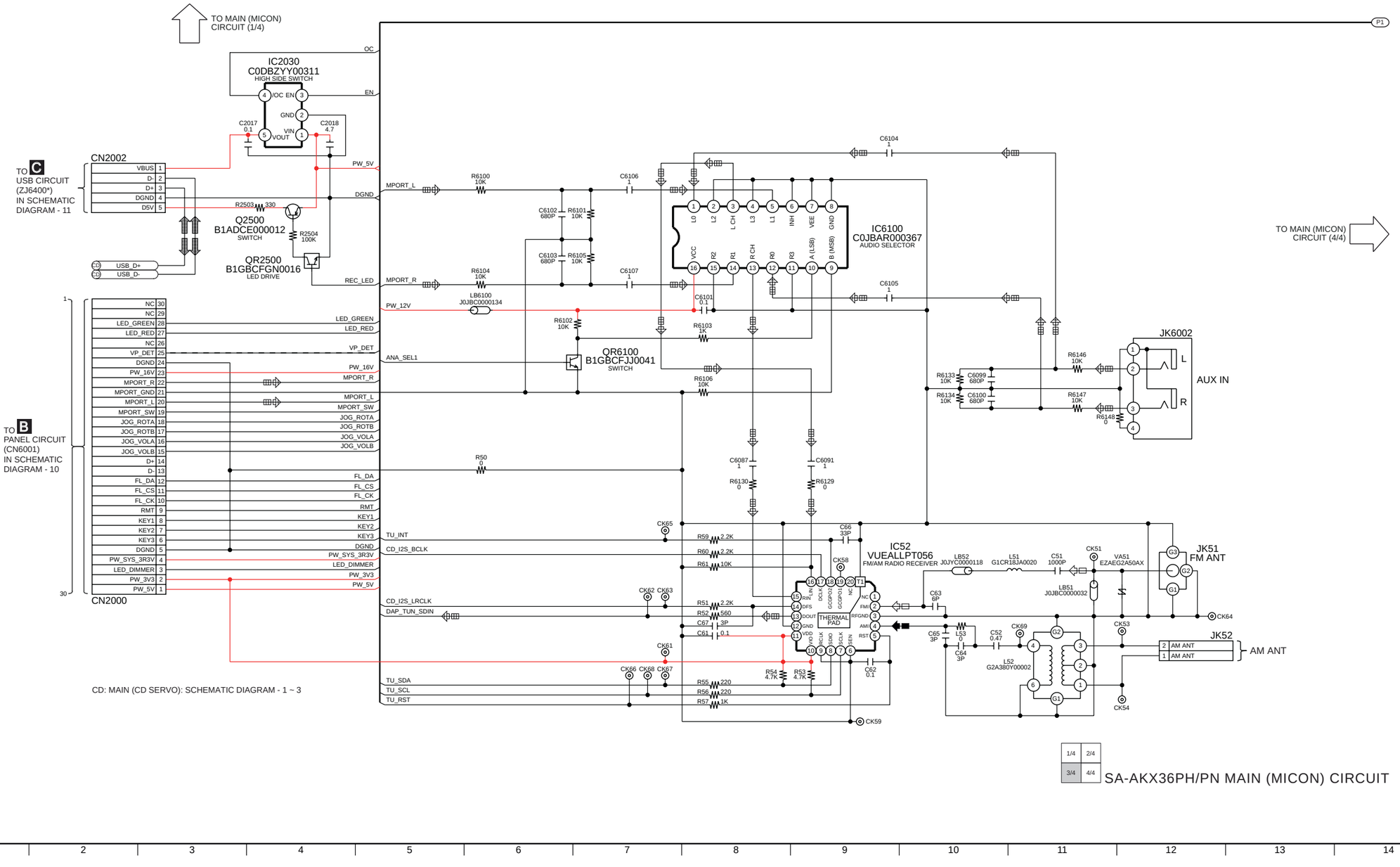
1/4	2/4
3/4	4/4

SA-AKX36PH/PN MAIN (MICON) CIRCUIT

SCHEMATIC DIAGRAM - 6

A MAIN (MICON) CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: CD AUDIO INPUT SIGNAL LINE
: AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE
: AUDIO OUTPUT SIGNAL LINE
: AM SIGNAL LINE
: FM SIGNAL LINE
: USB SIGNAL LINE



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

SA-AKX36PH/PN MAIN (MICON) CIRCUIT

SCHEMATIC DIAGRAM - 7

A MAIN (MICON) CIRCUIT

: +B SIGNAL LINE
: -B SIGNAL LINE
: CD AUDIO INPUT SIGNAL LINE
: AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE
: AUDIO OUTPUT SIGNAL LINE
: AM SIGNAL LINE
: FM SIGNAL LINE
: USB SIGNAL LINE

TO MAIN (MICON) CIRCUIT (2/4)

TO MAIN (MICON) CIRCUIT (3/4)

P1

PW_12V

PW_16V

PW_3V3

PW_6V

PW_5V

DGND

DC_DET1

DC_DET2

VP_DET

FAN_OUT1

FAN_OUT2

POWER

PCONT

ECO_CTR

SYNC

TEMP_DET

AM_BP

SMPS_REGION

PROT

PW_SYS_3R3V

CN1000*

13	ECO_CTR
12	POWER
11	SYNC
10	TEMP-DET
9	AM-BP
8	SMPS-ID
7	PROT
6	SYS3V3
5	NC
4	PWR_GND
3	PWR_GND
2	32.5V
1	32.5V

TO SMPS MODULE P.C.B.

32V5

PW_GND

R1025 0
R1029 10K
R1028 20K
C1026 6.3V470

QR1000 B1GBCFJJ0051 DC DETECT

D1002 B0ADDJ000032

Q1000 B1AAKD000012 +12V VOLTAGE REGULATOR

R1038 390

C1023 0.1

D1005 DZ2J130M0L

L1001 G1C100MA0291

R1007 68K
R1026 120K
R1027 10K
C1022 10
C1002 10
C1029 1000P
D1000 B0JCPG000030

C1005 0.1

IC1002 C0DBAYY01594 +12V DC-DC CONVERTER

10	PH	BOOT	1
9	GND	VIN	2
8	COMP	EN	3
7	VSENSE	SS/TR	4
6	PWRGD	RT/CLK	5

THERMAL PAD

T1

R1030 15K
C1004 3300P
R1031 56K
C1021 4.7
C1018 0.01
R1042 0
R1044 56K
R1036 0
R1017 0
R1002 0
R1001 0
R1003 0

R1032 0

D1001 B0EAKM000117

IC1000 C0DBGYY03909 +3.3V VOLTAGE REGULATOR

GND VOUT VIN

C1000 10
C1001 10

R1040 100K
R1039 10K
R1023 0

Q1001 B1ACKD000006 FAN DRIVE

QR1001 B1GBCFJJ0051 SWITCH

R1024 0

Q1004 B1ABCF000231 DC DETECT

L1000 G1C4R7MA0445

C1016 0.1

IC1003 C0DBAYY01594 +6V DC-DC CONVERTER

R1004 7.5K
R1005 56K
R1006 10K
C1008 10
C1009 10
C1030 1000P
D1000 B0JCPD000025
R1008 15K
C1015 3300P
R1016 56K
C1020 4.7
C1019 0.01
R1045 56K

Q1005 B1AAJC000019 FAN DRIVE

IC1001 C0ABBB000067 FAN CONTROL

1	A OUT	V+	8
2	A-IN	B OUT	7
3	A+IN	B-IN	6
4	GND	B+IN	5

R1020 680
R1021 56K
C1017 30.1
R1009 0
C1014 10
R1022 15K
C1027 0.1
C1028 0.1

R1010 270K
R1012 6.8K
C1006 6.3V100
C1007 1
Q1002 B1ABCF000231 FAN DRIVE
R1015 100
Q1003 B1ABCF000231 FAN DRIVE
R1018 470K
C1012 0.1
D1004 DA2J10100L
R1014 100K
C1011 6.3V220
R1019 27
R1011 82K
R1013 220
C1010 10

CN1001

2	POSITIVE
1	NEGATIVE

TO FAN UNIT

CD: MAIN (CD SERVO): SCHEMATIC DIAGRAM - 1 ~ 3
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 8

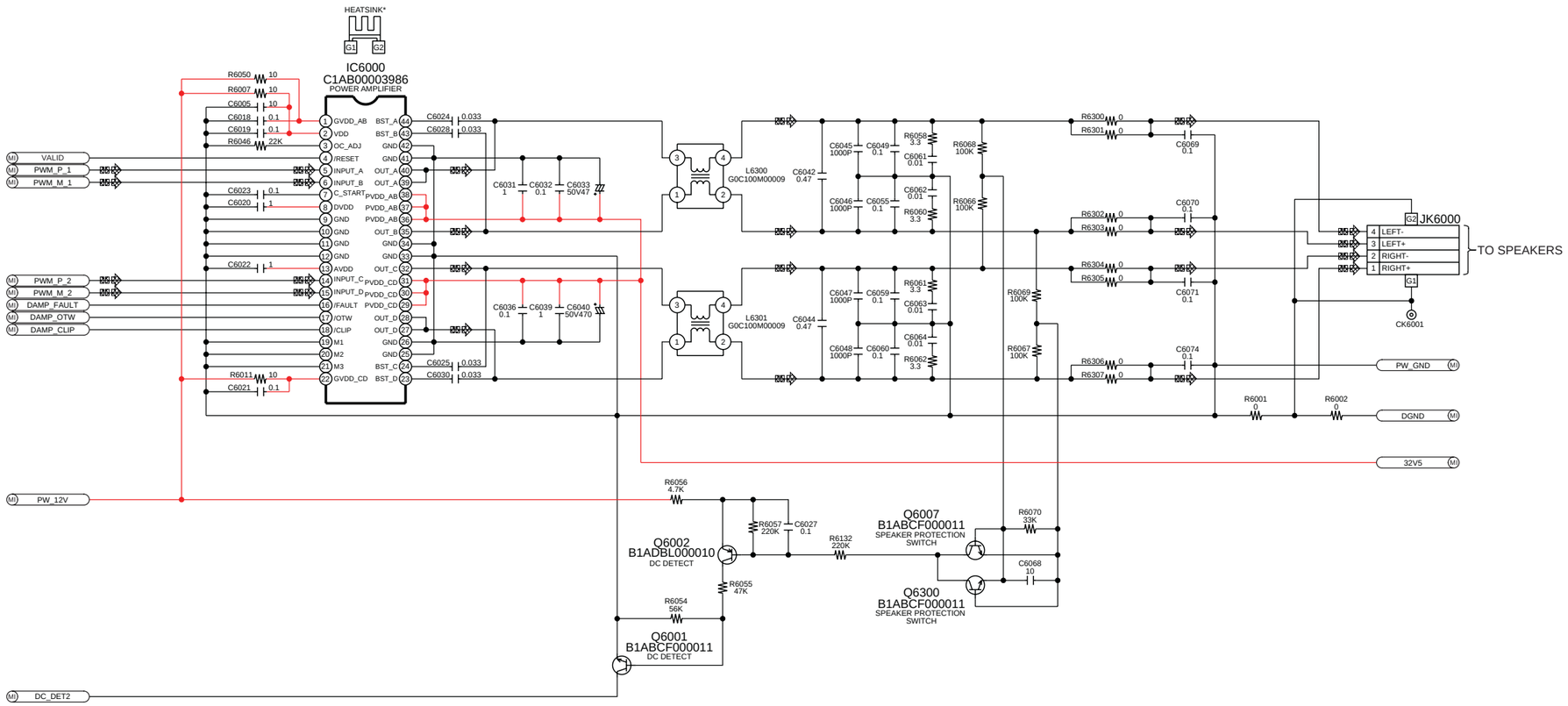
1/4	2/4
3/4	4/4

SA-AKX36PH/PN MAIN (MICON) CIRCUIT

SCHEMATIC DIAGRAM - 8

A MAIN (DAMP) CIRCUIT

—— : +B SIGNAL LINE ▨ : AUDIO OUTPUT SIGNAL LINE

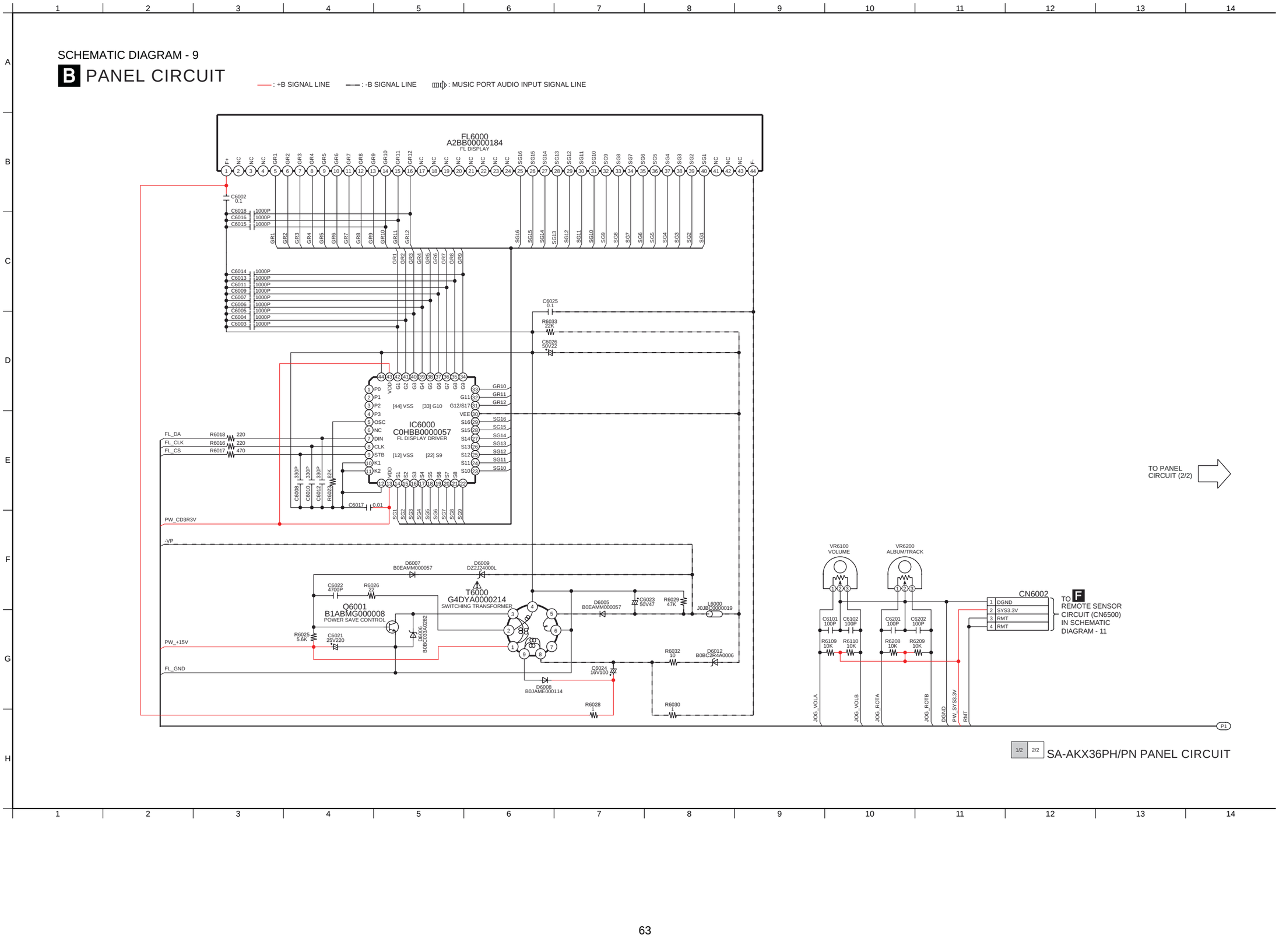


MI: MAIN (MICON) SCHEMATIC DIAGRAM - 4 ~ 7

NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX36PH/PN MAIN (DAMP) CIRCUIT

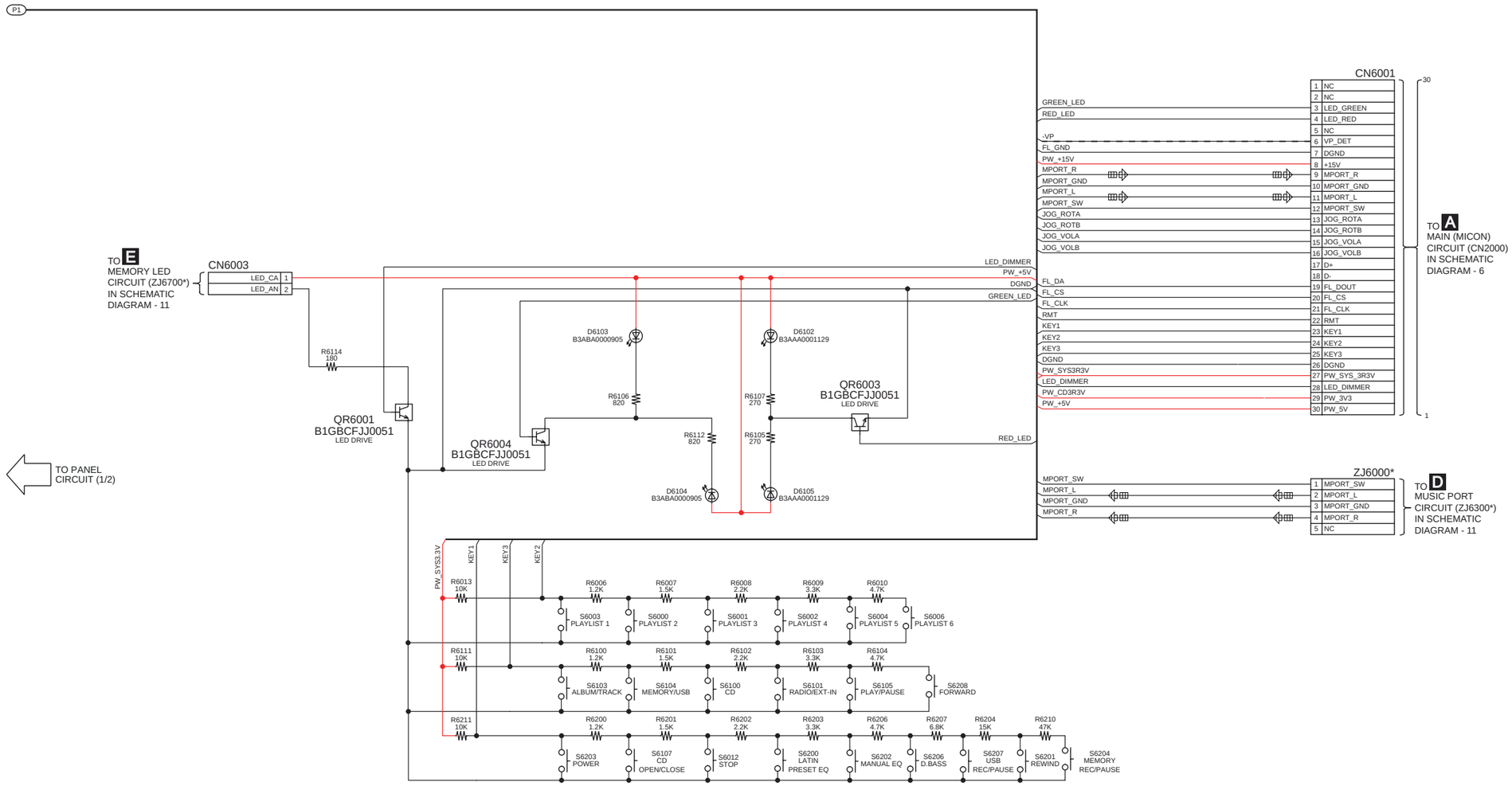
14.3. Panel Circuit



SCHEMATIC DIAGRAM - 10

B PANEL CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : MUSIC PORT AUDIO INPUT SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

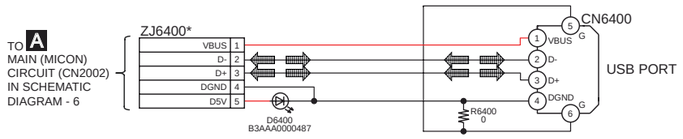
1/2 2/2 SA-AKX36PH/PN PANEL CIRCUIT

14.4. USB, Music Port, Memory LED, Remote Sensor & CD Interface Circuit

SCHEMATIC DIAGRAM - 11

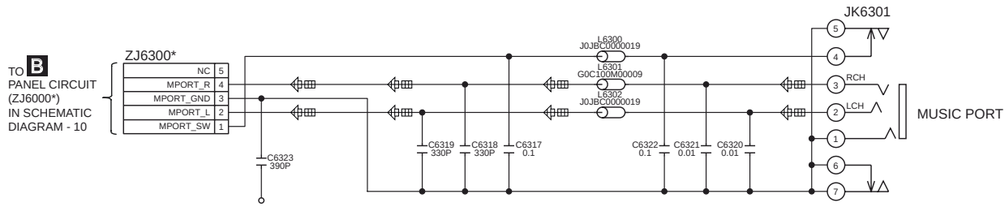
C USB CIRCUIT

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



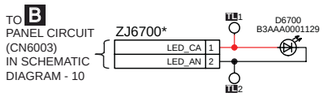
D MUSIC PORT CIRCUIT

⇨ : MUSIC PORT AUDIO INPUT SIGNAL LINE

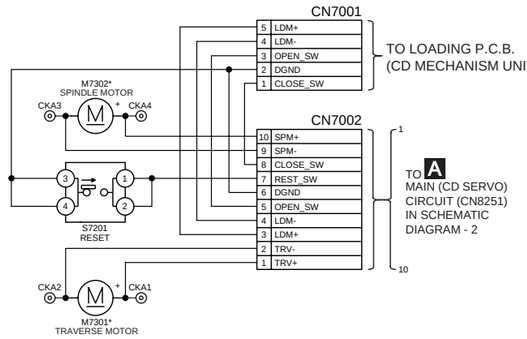


E MEMORY LED CIRCUIT

—— : +B SIGNAL LINE

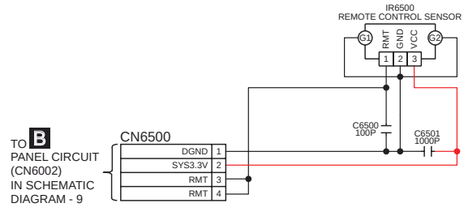


G CD INTERFACE CIRCUIT



F REMOTE SENSOR CIRCUIT

—— : +B SIGNAL LINE



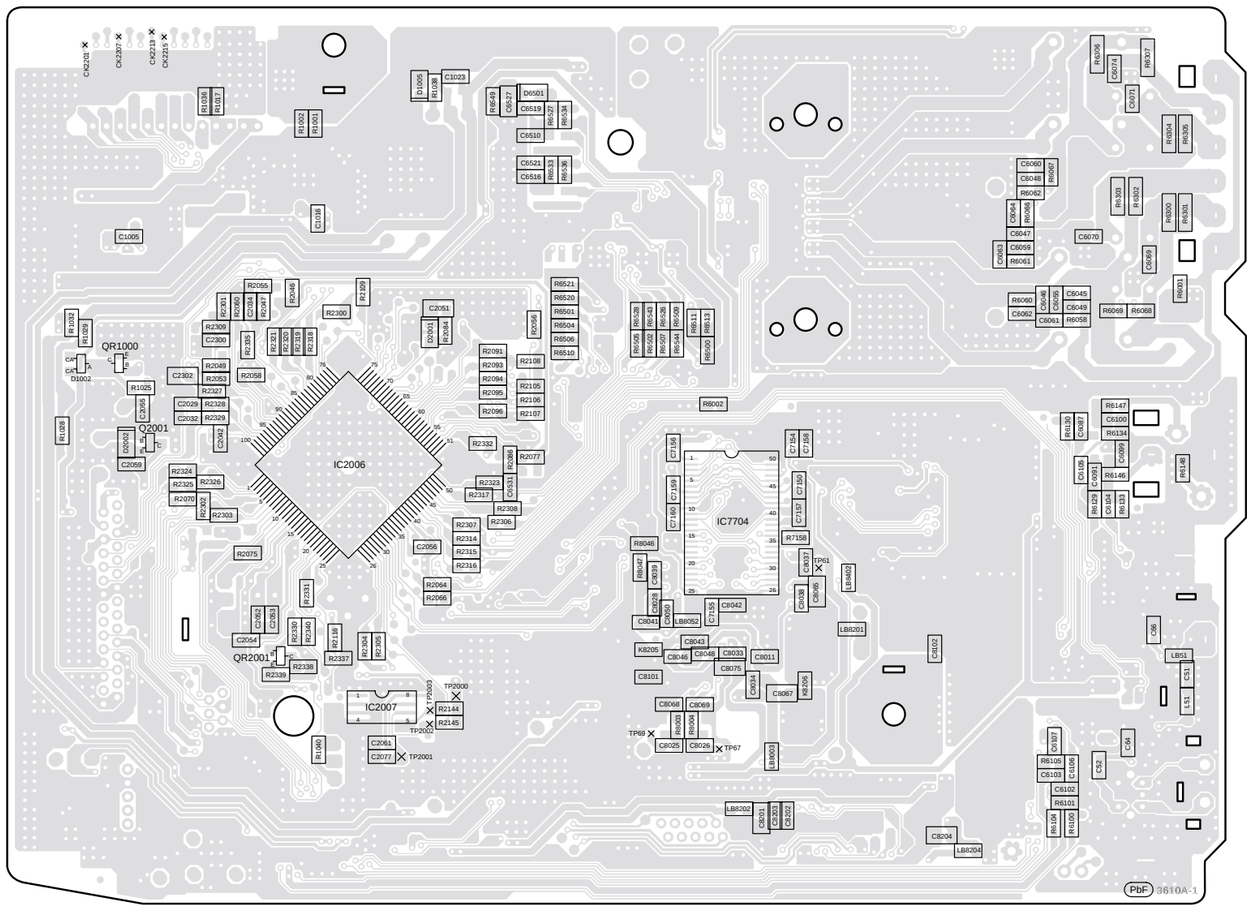
NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX36PH/PN USB / MUSIC PORT / MEMORY LED / REMOTE SENSOR / CD INTERFACE CIRCUIT

15 Printed Circuit Board

15.1. Main P.C.B.

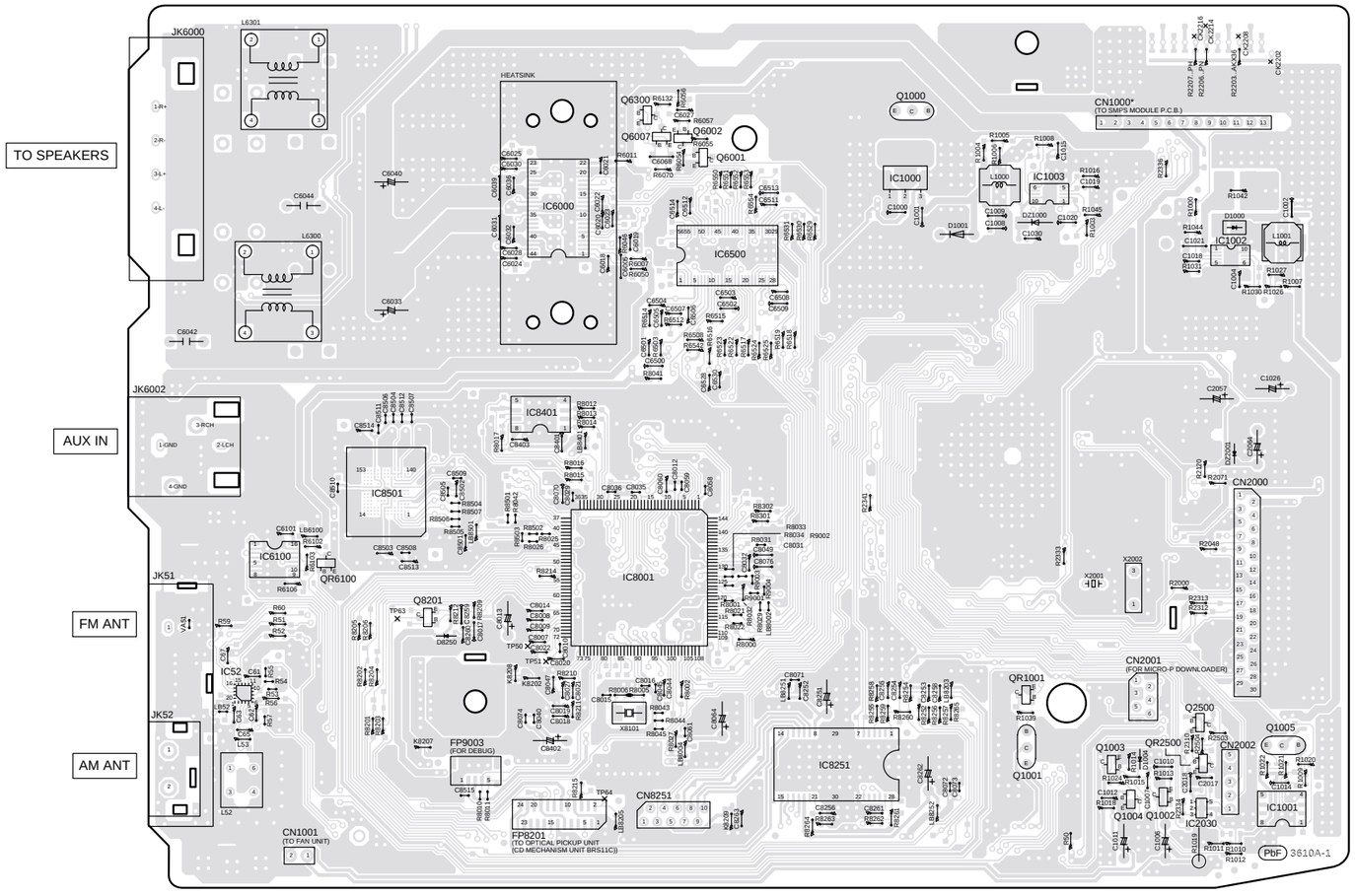
A MAIN P.C.B. (REP4902G...PH)
(REP4902F...PN)



(SIDE A)

SA-AKX36PH/PN
MAIN P.C.B.

A MAIN P.C.B. (REP4902G...PH)
(REP4902F...PN)



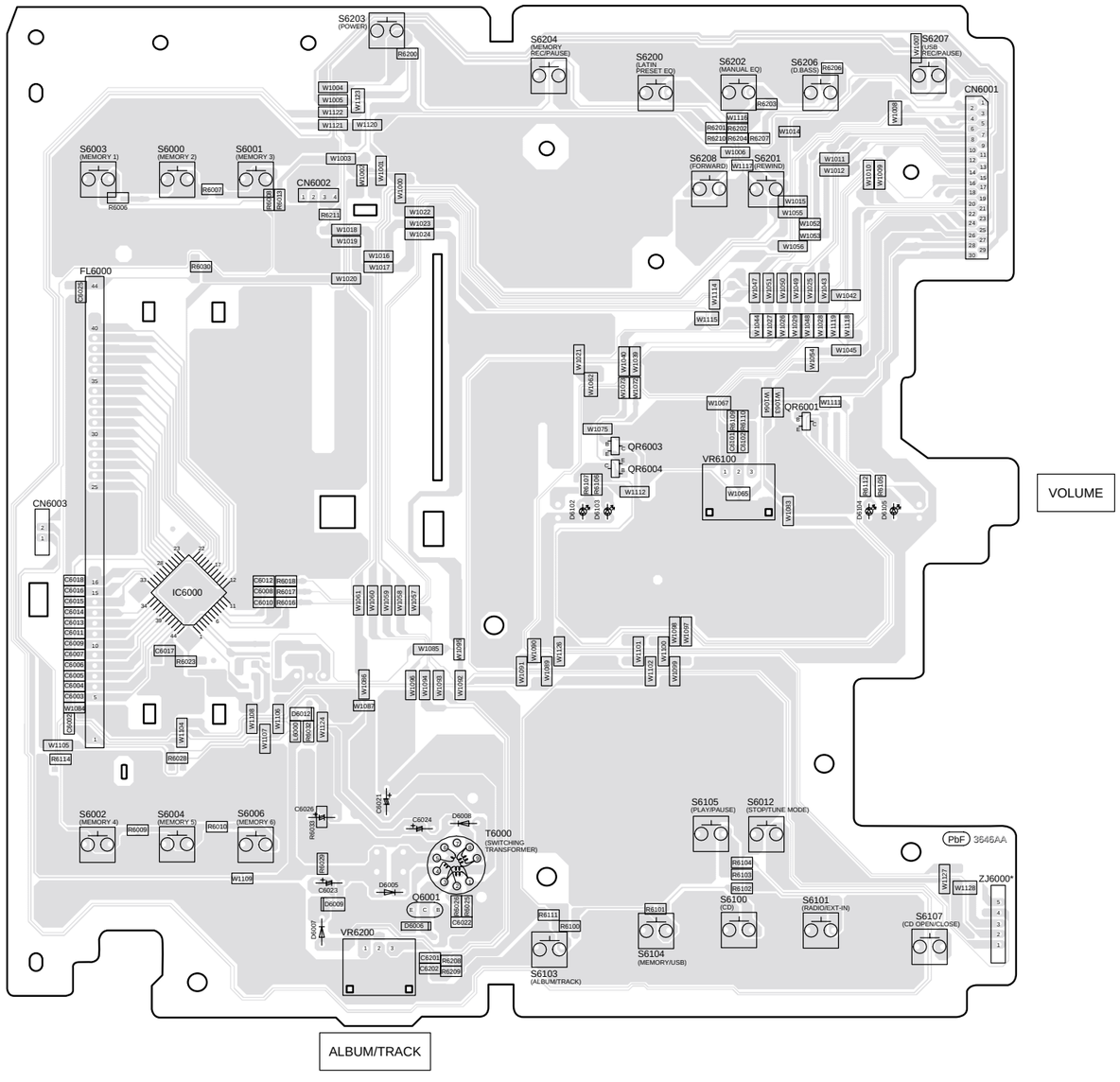
(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY.

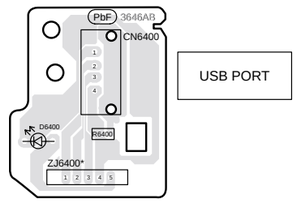
SA-AKX36PH/PN
MAIN P.C.B.

15.2. Panel, USB, Music Port & Memory LED P.C.B.

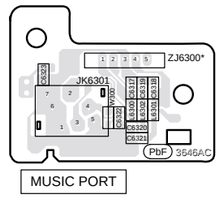
B PANEL P.C.B. (REP4884CA)



C USB P.C.B. (REP4884CB)



D MUSIC PORT P.C.B. (REP4884CA)



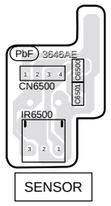
E MEMORY LED P.C.B. (REP4884CA)

NOTE: " * " REF IS FOR INDICATION ONLY

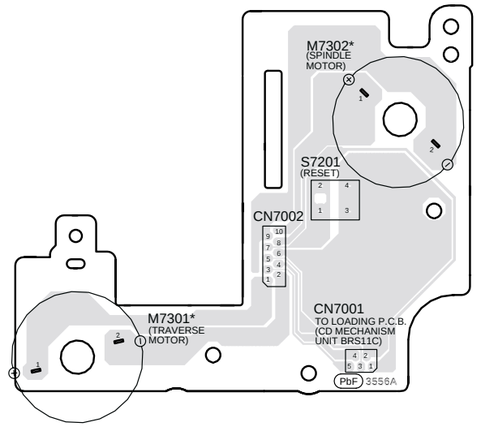
SA-AKX36PH/PN
PANEL / USB / MUSIC PORT / MEMORY LED P.C.B.

15.3. Remote Sensor & CD Interface P.C.B.

F REMOTE SENSOR P.C.B. (REP4884CE)



G CD INTERFACE P.C.B. (REP4945A)



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX36PH/PN
REMOTE SENSOR / CD INTERFACE P.C.B.

16 Appendix Information of Schematic Diagram

16.1. 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.

16.1.1. Main P.C.B. (1/5)

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	3.0	3.3	0	3.3	3.3	0	1.4	0.3	0	0	3.3	0	0	0

REF NO.	IC1000																			
MODE	1	2	3																	
POWER ON	0	3.2	5.8																	
STANDBY	0	3.0	5.4																	

REF NO.	IC1001																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	7.0	0	3.3	0	0	0	0	16.0												
STANDBY	7.0	0	3.3	0	0	0	0	16.0												

REF NO.	IC1002																			
MODE	1	2	3	4	5	6	7	8	9	10										
POWER ON	18.6	32.2	3.3	2.2	0.5	0	0.8	0.7	0	12.4										
STANDBY	18.5	32.2	3.3	2.2	0.5	0	0.8	0.7	0	12.4										

REF NO.	IC1003																			
MODE	1	2	3	4	5	6	7	8	9	10										
CD PLAY	12.0	16.0	3.3	2.2	0.5	0	0.8	0.8	0	6.0										
STANDBY	12.0	16.0	3.3	2.2	0.5	0	0.8	0.8	0	6.0										

REF NO.	IC2006																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.2	3.2	3.2	0	1.0	0	0	3.3	3.0	0	0	1.5	1.5	0	1.0	1.7	3.3	1.8	3.3	3.3
STANDBY	3.2	3.2	3.2	0	1.0	0	0	3.3	3.0	0	0	1.5	1.5	0	1.0	1.7	3.3	1.8	3.3	3.3

REF NO.	IC2006																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.3	3.3	3.3	0	3.3	3.3	0	0	0	3.3	0	0	0	3.3	0	3.3	1.8	0	0	3.3
STANDBY	3.3	3.3	3.3	0	3.3	3.3	0	0	0	3.3	0	0	0	3.3	0	3.3	1.8	0	0	3.3

REF NO.	IC2006																			
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	3.3	0	3.2	3.2	3.2	3.2	2.8	0	0	3.2	3.2	0	3.3	3.3	3.3	0	0
STANDBY	3.3	3.3	3.3	3.3	0	3.2	3.2	3.2	3.2	2.8	0	0	3.2	3.2	0	3.3	3.3	3.3	0	0

REF NO.	IC2006																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	3.3	3.3	0	0	0	0	0.9	1.0	3.3	0	3.2	3.2	3.3	3.2	3.3	3.3	0	3.2	1.1	3.3
STANDBY	3.3	3.3	0	0	0	0	0.9	1.0	3.3	0	3.2	3.2	3.3	3.2	3.3	3.3	0	3.2	1.1	3.3

REF NO.	IC2006																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.3	0	0	0	0	0	0	1.6	3.3	3.3	0	0.3	0.6	0	1.6	0	2.0	3.3	3.3	3.3
STANDBY	3.3	0	0	0	0	0	0	1.6	3.3	3.3	0	0.3	0.6	0	1.6	0	2.0	3.3	3.3	3.3

SA-AKX36PH/PN MAIN P.C.B.

16.1.2. Main P.C.B. (2/5)

REF NO.	IC2007																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0	0	0	0	3.3												
STANDBY	0	0	0	0	0	0	0	3.3												

REF NO.	IC2030																			
MODE	1	2	3	4	5															
CD PLAY	5.2	0	3.3	3.3	5.2															
STANDBY	5.2	0	3.3	3.3	5.2															

REF NO.	IC6000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	12.1	12.2	1.2	2.5	1.6	1.6	2.7	3.2	0	0	0	0	7.6	1.6	1.6	3.2	3.2	3.2	0	0
STANDBY	12.1	12.2	1.2	2.5	1.6	1.6	2.7	3.2	0	0	0	0	7.6	1.6	1.6	3.2	3.2	3.2	0	0

REF NO.	IC6000																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	12.1	27.9	27.0	0	0	16.4	16.4	32.0	32.0	32.0	16.4	0	0	16.4	32.0	32.0	32.0	16.3	16.4
STANDBY	0	12.1	27.9	27.0	0	0	16.4	16.4	32.0	32.0	32.0	16.4	0	0	16.4	32.0	32.0	32.0	16.3	16.4

REF NO.	IC6000																			
MODE	41	42	43	44																
CD PLAY	0	0	27.0	27.0																
STANDBY	0	0	27.0	27.0																

REF NO.	IC6100																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	0.8	0	1.0	0	1.2	0	0	0	0	0.7	0	0.8	1.0	1.2	0	12.0				
STANDBY	0.8	0	1.0	0	1.2	0	0	0	0	0.7	0	0.8	1.0	1.2	0	12.0				

REF NO.	IC6500																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	0	0.6	1.1	1.7	3.2	0	1.0	1.0	0	3.2	3.2	3.2	3.2	3.2	3.2	3.2
STANDBY	0	0	0	0	0	0.6	1.1	1.8	3.3	0	1.0	1.0	0	3.3	3.3	3.3	3.3	3.3	3.3	3.3

REF NO.	IC6500																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.2	1.6	1.5	0.8	1.5	0	0	1.8	1.8	1.7	1.7	0	0	3.2	3.2	0	3.3	1.7	1.6	1.6
STANDBY	3.3	1.6	1.5	0.8	1.5	0	0	1.8	1.8	1.7	1.7	0	0	3.3	3.3	0	3.3	1.6	1.7	1.7

REF NO.	IC6500																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56				
CD PLAY	1.6	1.6	1.5	0	0	0	0	1.6	1.6	3.3	0	1.8	0	0	0	0				
STANDBY	1.6	1.6	1.6	0	0	0	0	1.6	1.6	3.3	0	1.8	0	0	0	0				

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

SA-AKX36PH/PN MAIN P.C.B.

16.1.3. Main P.C.B. (3/5)

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

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

REF NO.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.2	1.3	1.1	1.2	1.2	1.3	3.2	1.2	0	3.2	3.2	3.2	0	0	0	0	0	3.2	0	0
STANDBY	3.2	1.3	1.1	1.2	1.2	1.3	3.2	1.2	0	3.2	3.2	3.2	0	0	0	0	0	3.2	0	0

REF NO.	IC8001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	3.2	3.2	1.3	3.2	3.2	3.2	3.2	3.2	0.6	3.0	3.2	0	1.2	1.2	1.2	0.8
STANDBY	0	0	0	0	3.2	3.2	1.3	3.2	3.2	3.2	3.2	3.2	0.6	3.0	3.2	0	1.2	1.2	1.2	0.8

REF NO.	IC8001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	1.0	0.8	0.8	3.2	0	1.2	1.7	1.7	1.5	0	1.5	1.6	3.3	1.6	1.6	1.9	0	1.7	1.7
STANDBY	0	1.0	0.8	0.8	3.2	0	1.2	1.7	1.7	1.5	0	1.5	1.6	3.3	1.6	1.6	1.9	0	1.7	1.7

REF NO.	IC8001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.7	0.2	0	3.3	3.2	3.2	0	1.0	0	1.0	1.2	1.6	1.6	1.4	1.4	0.4	0	3.3	3.3	0
STANDBY	1.7	0.2	0	3.3	3.2	3.2	0	1.0	0	1.0	1.2	1.6	1.6	1.4	1.4	0.4	0	3.3	3.3	0

REF NO.	IC8001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	0	0	0	0	0	1.2	3.3	1.2	1.2	0	3.3	3.3	0	1.6	1.6	3.3	0	0	0
STANDBY	0	0	0	0	0	0	1.2	3.3	1.2	1.2	0	3.3	3.3	0	1.6	1.6	3.3	0	0	0

REF NO.	IC8001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	1.2	0	3.2	3.1	3.0	3.2	3.1	3.1	0	0	0	3.2	3.1	3.0	1.6	1.4	0.8	1.0	3.2	3.2
STANDBY	1.2	0	3.2	3.1	3.0	3.2	3.1	3.1	0	0	0	3.2	3.1	3.0	1.6	1.4	0.8	1.0	3.2	3.2

REF NO.	IC8001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	1.2	0	3.0	3.2	3.0	0	0	3.2	0	0	3.2	0	0	3.2	0	1.6	1.6	1.6	0	0
STANDBY	1.2	0	0	3.2	0	0	0	3.2	0	0	3.2	0	0	3.2	0	1.6	1.6	1.6	0	0

REF NO.	IC8001																			
MODE	141	142	143	144																
CD PLAY	0	1.0	1.1	1.1																
STANDBY	0	1.0	1.1	1.1																

SA-AKX36PH/PN MAIN P.C.B.

16.1.4. Main P.C.B. (4/5)

REF NO.	IC8251																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	0	0	1.6	0	3.0	3.0	5.8	0	0	3.0	3.0	2.5	2.7	2.6	2.7	2.4	2.8	5.0	0
STANDBY	1.7	0	0	1.6	0	3.1	3.0	5.8	0	0	3.0	3.0	2.7	2.7	2.6	2.7	2.7	2.7	5.0	0

REF NO.	IC8251																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	1.5	0	1.6	0	0	1.7	1.7	3.3	0	0										
STANDBY	1.0	0	1.7	0	0	1.7	1.7	3.3	0	0										

REF NO.	IC8401																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	2.1	2.6	3.3	0	3.0	0.6	3.3	3.3												
STANDBY	2.4	2.6	3.3	0	3.2	0.5	3.3	3.3												

REF NO.	IC8501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	1.0	1.2	1.2	1.2	0	0	3.3	0	0	0	0	0	0	0	1.2	0	0	0	0
STANDBY	0	1.0	1.2	1.2	1.2	0	0	3.3	0	0	0	0	0	0	0	1.2	0	0	0	0

REF NO.	IC8501																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	3.3	0	0	0	0	0	0	0	0	0	0	0	3.3	3.3	3.3	0	0	0	0
STANDBY	0	3.3	0	0	0	0	0	0	0	0	0	0	0	3.3	3.3	3.3	0	0	0	0

REF NO.	IC8501																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	3.3	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	3.3	0	0	0	0	0	0

REF NO.	IC8501																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	3.3	3.3	3.3	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	3.3	3.3	3.3	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REF NO.	IC8501																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	0	0	0	0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0	0	0	0	3.3	0	0
STANDBY	0	0	0	0	0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0	0	0	0	3.3	0	0

REF NO.	IC8501																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	3.3	0	0	0	0	3.3	3.3	3.3	0	0	0	0	0	0	3.3	3.3	3.3	0	0	0
STANDBY	3.3	0	0	0	0	3.3	3.3	3.3	0	0	0	0	0	0	3.3	3.3	3.3	0	0	0

REF NO.	IC8501																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	0	3.3	0	0	0	0	0	3.3	3.3	0	0	0	0	0	0	3.3	0	0	0	0
STANDBY	0	3.3	0	0	0	0	0	3.3	3.3	0	0	0	0	0	0	3.3	0	0	0	0

SA-AKX36PH/PN MAIN P.C.B.

16.1.5. Main P.C.B. (5/5)

REF NO.	IC8501																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153							
CD PLAY	0	3.3	0	3.3	0	0	0	0	0	3.3	0	0	0							
STANDBY	0	3.3	0	3.3	0	0	0	0	0	3.3	0	0	0							

REF NO.	Q1000				Q1001				Q1002				Q1003				Q1004			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	12.4	12.4	12.0		16.0	16.0	12.0		0	7.0	7.0		0	3.3	7.0		0	3.3	0	
STANDBY	12.4	12.4	12.0		16.0	16.0	12.0		0	7.0	7.0		0	3.3	7.0		0	3.3	0	

REF NO.	Q1005				Q2001				Q2500				Q6001				Q6002			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	3.3	16.0	7.0		0	0	3.3		5.0	3.3	5.0		0	3.3	0		12.6	0	14.0	
STANDBY	3.3	16.0	7.0		0	0	3.3		5.0	3.3	5.0		0	3.3	0		12.2	0	13.6	

REF NO.	Q6007				Q6300				Q8201				QR1000				QR1001			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	15.7	15.3	16.1		16.2	15.8	16.2		3.0	2.1	2.3		0	3.2	12.0		0	0	3.3	
STANDBY	16.2	15.8	16.2		16.0	16.0	16.0		3.2	2.1	3.2		0	3.2	12.0		0	0	3.3	

REF NO.	QR2001				QR2500				QR6100											
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	0	0.5	3.3		0	5.0	0		0	2.8	0									
STANDBY	0	0.5	3.3		0	5.0	0		0	2.8	0									

SA-AKX36PH/PN MAIN P.C.B.

16.1.6. Panel P.C.B.

REF NO.	IC6000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	1.9	0	0	0	0.7	0	0	0	3.3	-16.1	-14.1	-21.5	-21.5	-19.7	-21.5	-17.8
STANDBY	0	0	0	0	1.9	0	0	0	0.7	0	0	0	3.3	-16.1	-14.1	-21.5	-21.5	-19.7	-21.5	-17.8

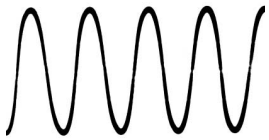
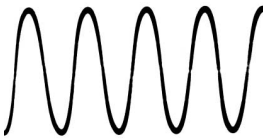
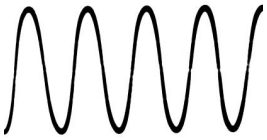
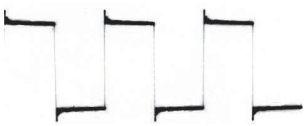
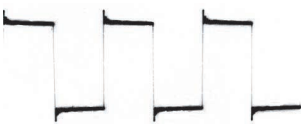
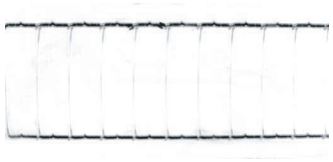
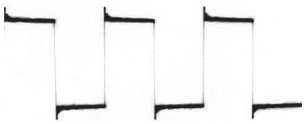
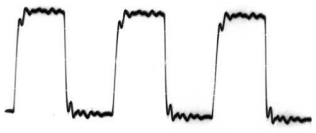
REF NO.	IC6000																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-19.5	-21.5	-23.4	-21.5	-15.9	-19.6	-17.8	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5
STANDBY	-19.5	-21.5	-23.4	-21.5	-15.9	-19.6	-17.8	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5	-21.5

REF NO.	IC6000																			
MODE	41	42	43	44																
CD PLAY	-21.6	-21.9	3.3	0																
STANDBY	-21.6	-21.9	3.3	0																

REF NO.	Q6001				QR6001				QR6003				QR6004							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	0	15.1	0		0	3.3	1.0		0	3.3	3.3		0	0	3.3					
STANDBY	0	15.1	0		0	3.3	1.0		0	3.3	3.3		0	0	3.3					

SA-AKX36PH/PN PANEL P.C.B.

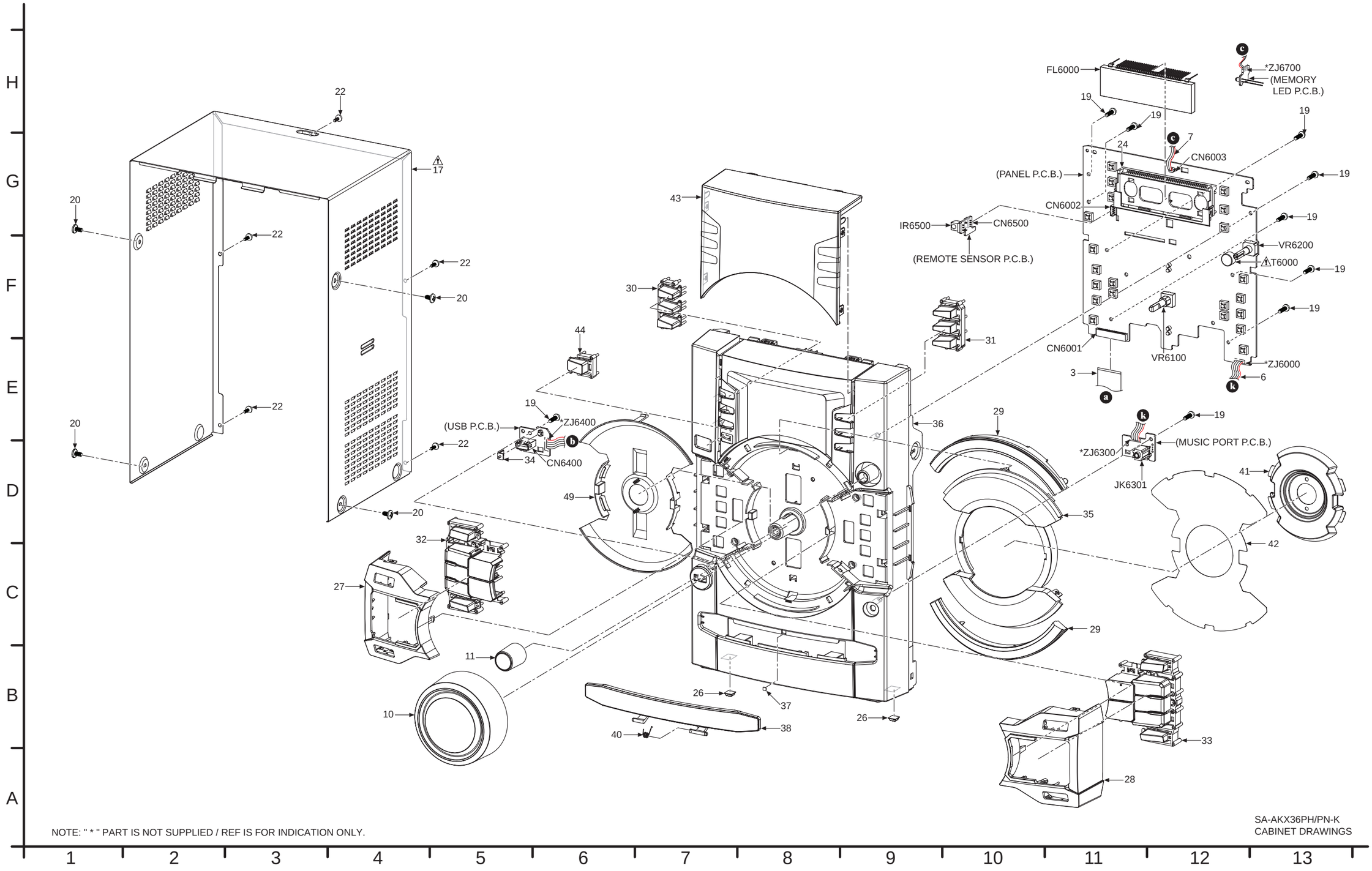
16.1.7. Waveform Table

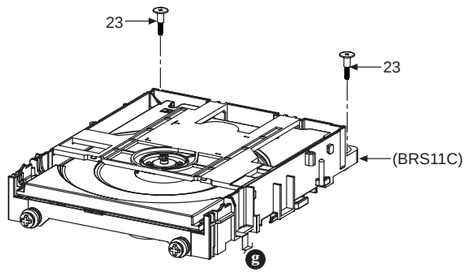
WF No. IC2006-12 (PLAY)  4Vp-p(50nsec/div)	WF No. IC2006-13 (PLAY)  3.2Vp-p(50nsec/div)	WF No. IC2006-15 (PLAY)  1.8Vp-p(10usec/div)	WF No. IC2006-16 (PLAY)  2.8Vp-p(10usec/div)
WF No. IC6000-5,6,14,15 (PLAY)  2.4Vp-p(1usec/div)	WF No. IC6000-27,28,32,35,39,40 (PLAY)  32Vp-p(1usec/div)	WF No. IC6500-24 (PLAY)  3.4Vp-p(500nsec/div)	WF No. IC6500-25 (PLAY)  3.2Vp-p(10usec/div)
WF No. IC6500-38,39,40,41 (PLAY)  2.4Vp-p(1usec/div)	WF No. IC8001-89,90 (PLAY)  2.5Vp-p(200usec/div)	WF No. IC8001-117 (PLAY)  3.4Vp-p(100nsec/div)	

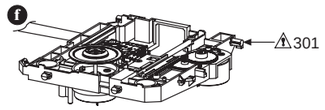
17 Exploded View and Replacement Parts List

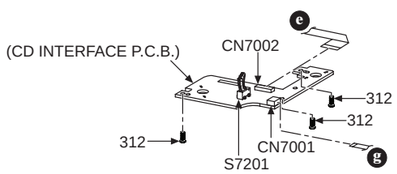
17.1. Exploded View and Mechanical replacement Part List

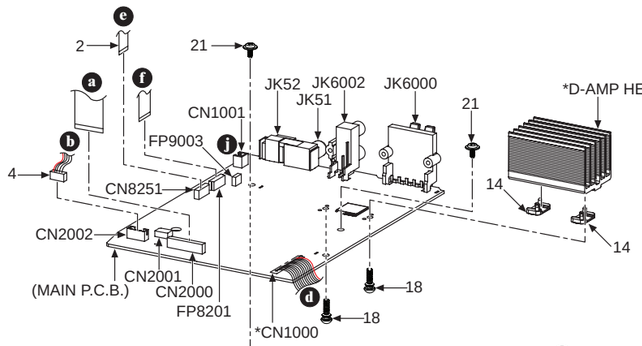
17.1.1. Cabinet Parts Location

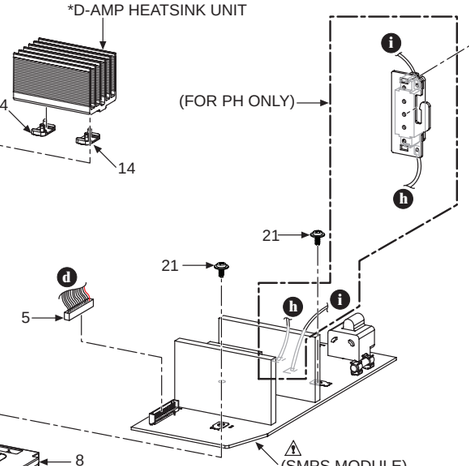


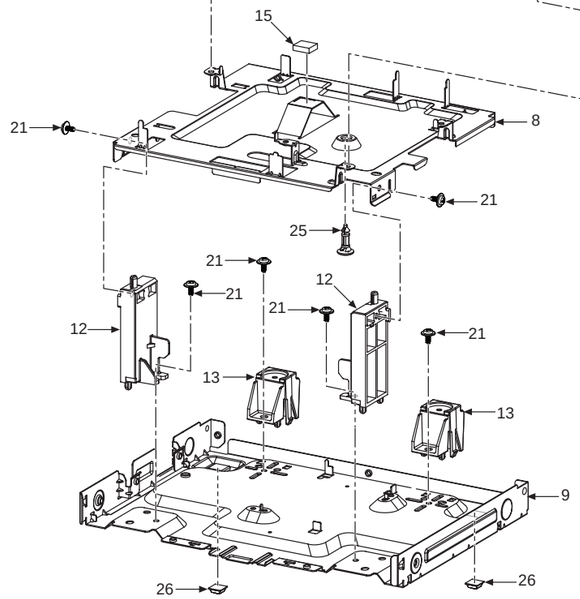


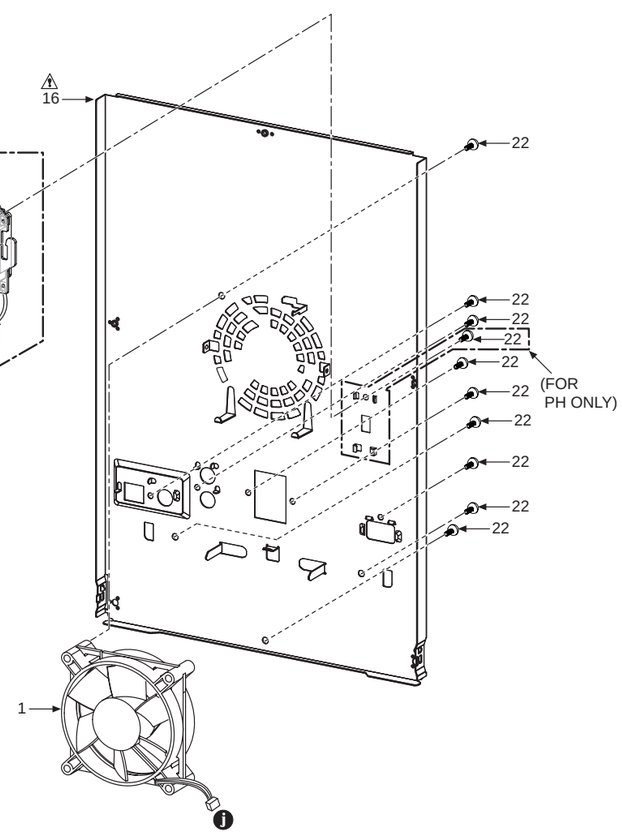








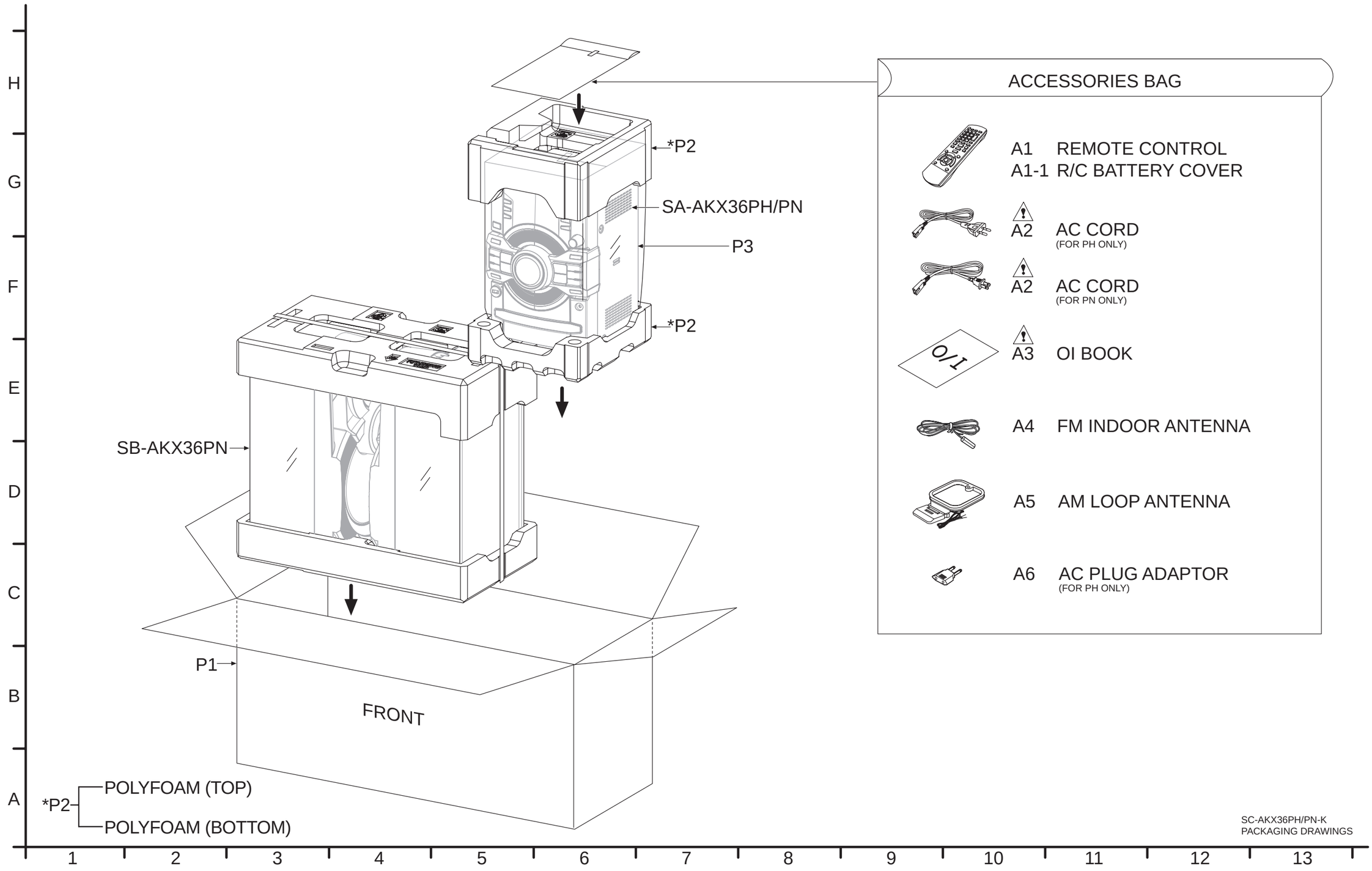




NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.

SA-AKX36PH/PN-K
CABINET DRAWINGS

17.1.2. Packaging



17.1.3. 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 PAVCJM unless indicated likewise.
- Reference for O/I book languages are as follows:

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	L6FALEFH0030	FAN UNIT	1	
	2	REE1730	10P FFC (MAIN-CD INTERFACE)	1	
	3	REE1734	30P FFC (MAIN-PANEL)	1	
	4	REX1472	5P CABLE WIRE (USB-MAIN)	1	
	5	REX1561	13P CABLE WIRE (SMPS-MAIN)	1	
	6	REX1587	5P CABLE WIRE (MUSIC PORT-PANEL)	1	
	7	REX1594	2P CABLE WIRE (MEMORY LED-PANEL)	1	
	8	RMK0837	INNER CHASSIS	1	
	9	RMKX1031A-1	BOTTOM CHASSIS	1	
	10	RGW0428-S1	VOLUME KNOB	1	
	11	RGW0435-K	SKIP KNOB	1	
	12	RMA2442	CHASSIS SUPPORT	2	
	13	RMQ2134	MECHA HOLDER	2	
	14	RMZX1022	HEATSINK SPACER	2	
	15	RSC1228	THERMAL PAD	1	
⚠	16	RGR0443C-A1	REAR PANEL	1	PH
⚠	16	RGR0443D-A1	REAR PANEL	1	PN
⚠	17	RKM0713-K1	TOP CABINET	1	
	18	RHD26043-1	SCREW	2	
	19	RHD26046-L	SCREW	9	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	20	RHD30007-K2J	SCREW	4	
	21	RHD30111-31	SCREW	10	
	22	RHD30119-S	SCREW	14	PN
	22	RHD30119-S	SCREW	15	PH
	23	RHDX031008	SCREW	2	
	24	RMNV0079-1	FL HOLDER	1	
	25	RMNX0298	PCB SPACER	1	
	26	RKAX0042-K	LEG CUSHION	4	
	27	RGK2479-S	LEFT FUNCTION ORNAMENT	1	
	28	RGK2480-S	RIGHT FUNCTION ORNAMENT	1	
	29	RGK2449-K	RING ORNAMENT TOP/BOTTOM	2	
	30	RGU2851-S	LEFT PLAYLIST BUTTON	1	
	31	RGU2852-S	RIGHT PLAYLIST BUTTON	1	
	32	RGU2882-S	LEFT FUNCTION BUTTON	1	
	33	RGU2883-S	RIGHT FUNCTION BUTTON	1	
	34	RGL0785-Q	USB REC LIGHT PCS	1	
	35	RKW1027-Q	CENTER ORNAMENT	1	
	36	RFKGAKX36LK	FRONT PANEL ASS'Y	1	
	37	RMGX0033A-K	CD LID CUSHION	1	
	38	RGK2438-K	CD LID	1	
	40	RMB0930	CD LID SPRING	1	
	41	RGQ0741-W	VOULME LIGHT DIFFUSER	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	42	RGQ0744-W	VOLUME LIGHT SHEET	1	
	43	RKW1025-Q	FL WINDOW	1	
	44	RGU2848-K	POWER BUTTON	1	
			TRAVERSE DECK		
⚠	301	RAE1036Z-V	TRAVERSE ASS'Y	1	
	312	XTN2+6GFJ	SCREW	3	
			PACKING MATERI-ALS		
	P1	RPG0C35	PACKING CASE	1	PN
	P1	RPG0C36	PACKING CASE	1	PH
	P2	RPN2489	POLYFOAM	1	
	P3	RPFX0198-1	MIRAMAT	1	
			ACCESSORIES		
	A1	N2QAYB000850	REMOTE CONTROL	1	
	A1-1	RKK-PM500EBK	R/C BATTERY COVER	1	
⚠	A2	K2CB2CB00022	AC CORD	1	PN
⚠	A2	K2CQ2YY00119	AC CORD	1	PH
⚠	A3	RQT9796-M	O/I BOOK (Sp)	1	
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	N1DYYYY00011	AM LOOP ANTENNA	1	
	A6	K2DAYYY00002	AC PLUG ADAPTOR	1	PH

17.2. 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 PAVCJM unless indicated likewise.
- Parts mentioned [SPG] in the Remarks column are supplied by JAPAN.

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PRINTED CIRCUIT BOARDS		
	PCB1	REP4902G	MAIN P.C.B.	1	(RTL) PH
	PCB2	REP4902F	MAIN P.C.B.	1	(RTL) PN
	PCB3	REP4884CA	PANEL P.C.B.	1	(RTL)
	PCB4	REP4884CB	USB P.C.B.	1	(RTL)
	PCB5	REP4884CA	MUSIC PORT P.C.B.	1	(RTL)
	PCB6	REP4884CA	MEMORY LED P.C.B.	1	(RTL)
	PCB7	REP4884CE	REMOTE SENSOR P.C.B.	1	(RTL)
	PCB8	REP4945A	CD INTERFACE P.C.B.	1	(RTL)
⚠	PCB9	N0AB3GL00001	SMPS MODULE	1	PN
⚠	PCB10	N0AD3GL00001	SMPS MODULE	1	PH
			INTEGRATED CIRCUITS		
	IC52	VUEALLPT056	IC	1	(E.S.D) [SPG]
	IC1000	C0DBGYY03909	IC	1	(E.S.D)
	IC1001	C0ABBB000067	IC	1	(E.S.D)
	IC1002	C0DBAYY01594	IC	1	(E.S.D)
	IC1003	C0DBAYY01594	IC	1	(E.S.D)
	IC2006	RFKWMAKX36LM	IC	1	(E.S.D), JIGS & ADJ
	IC2007	C3EBEY000037	IC	1	(E.S.D)
	IC2030	C0DBZYY00311	IC	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC6000	C0HBB0000057	IC	1	(E.S.D)
	IC6000	C1AB00003986	IC	1	(E.S.D)
	IC6100	C0JBAR000367	IC	1	(E.S.D)
	IC6500	C1AB00003993	IC	1	(E.S.D)
	IC7704	C3ABMY000027	IC	1	(E.S.D)
	IC8001	MN6627992AB	IC	1	(E.S.D)
	IC8251	C0GBY0000117	IC	1	(E.S.D)
	IC8401	C3FBMY000309	IC	1	(E.S.D)
	IC8501	C3FBXY000042	IC	1	(E.S.D)
			TRANSISTORS		
	Q1000	B1AAKD000012	TRANSISTOR	1	(E.S.D)
	Q1001	B1ACKD000006	TRANSISTOR	1	(E.S.D)
	Q1002	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q1003	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q1004	B1ABCF000231	TRANSISTOR	1	(E.S.D)
	Q1005	B1AAJC000019	TRANSISTOR	1	(E.S.D)
	Q2001	B1GBCFLL0037	TRANSISTOR	1	(E.S.D)
	Q2500	B1ADCE000012	TRANSISTOR	1	(E.S.D)
	Q6001	B1ABCF000011	TRANSISTOR	1	(E.S.D)
	Q6001	B1ABMG000008	TRANSISTOR	1	(E.S.D)
	Q6002	B1ADBL000010	TRANSISTOR	1	(E.S.D)
	Q6007	B1ABCF000011	TRANSISTOR	1	(E.S.D)
	Q6300	B1ABCF000011	TRANSISTOR	1	(E.S.D)
	Q8201	B1ADCF000001	TRANSISTOR	1	(E.S.D)
	QR1000	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR1001	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR2001	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR2500	B1GBCFGN0016	TRANSISTOR	1	(E.S.D)
	QR6001	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR6003	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR6004	B1GBCFJJ0051	TRANSISTOR	1	(E.S.D)
	QR6100	B1GBCFJJ0041	TRANSISTOR	1	(E.S.D)

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			DIODES		
	D1000	B0JCPG000030	DIODE	1	(E.S.D)
	D1001	B0EAKM000117	DIODE	1	(E.S.D)
	D1002	B0ADDJ000032	DIODE	1	(E.S.D)
	D1004	DA2J10100L	DIODE	1	(E.S.D)
	D1005	DZ2J130M0L	DIODE	1	(E.S.D)
	D2001	DA2J10100L	DIODE	1	(E.S.D)
	D2002	DA2J10100L	DIODE	1	(E.S.D)
	D6005	B0EAMM000057	DIODE	1	(E.S.D)
	D6006	B0BC033A0282	DIODE	1	(E.S.D)
	D6007	B0EAMM000057	DIODE	1	(E.S.D)
	D6008	B0JAME000114	DIODE	1	(E.S.D)
	D6009	DZ2J24000L	DIODE	1	(E.S.D)
	D6012	B0BC2R4A0006	DIODE	1	(E.S.D)
	D6102	B3AAA0001129	DIODE	1	(E.S.D)
	D6103	B3ABA0000905	DIODE	1	(E.S.D)
	D6104	B3ABA0000905	DIODE	1	(E.S.D)
	D6105	B3AAA0001129	DIODE	1	(E.S.D)
	D6400	B3AAA0000487	DIODE	1	(E.S.D)
	D6501	DA2J10100L	DIODE	1	(E.S.D)
	D6700	B3AAA0001129	DIODE	1	(E.S.D)
	D8250	DZ2J056M0L	DIODE	1	(E.S.D)
	DZ1000	B0JCPD000025	DIODE	1	(E.S.D)
	DZ2001	DZ2J047M0L	DIODE	1	(E.S.D)
			VARIABLE RESIS-TORS		
	VR6100	EVEKE2F3524B	VOLUME JOG	1	
	VR6200	K9AA012Y0012	CONTROL JOG	1	
			VARISTORS		
	VA51	EZAEG2A50AX	ESD SUPRESSOR	1	
			SWITCHES		
	S6000	EVQ21405RJ	SW MEMORY 2	1	
	S6001	EVQ21405RJ	SW MEMORY 3	1	
	S6002	EVQ21405RJ	SW MEMORY 4	1	
	S6003	EVQ21405RJ	SW MEMORY 1	1	
	S6004	EVQ21405RJ	SW MEMORY 5	1	
	S6006	EVQ21405RJ	SW MEMORY 6	1	
	S6012	EVQ21405RJ	SW STOP	1	
	S6100	EVQ21405RJ	SW CD	1	
	S6101	EVQ21405RJ	SW RADIO/EXT-IN	1	
	S6103	EVQ21405RJ	SW ALBUM/TRACK	1	
	S6104	EVQ21405RJ	SW MEMORY/USB	1	
	S6105	EVQ21405RJ	SW PLAY/PAUSE	1	
	S6107	EVQ21405RJ	SW CD OPEN	1	
	S6200	EVQ21405RJ	SW LATIN/PRESET EQ	1	
	S6201	EVQ21405RJ	SW REWIND	1	
	S6202	EVQ21405RJ	SW MANUAL EQ	1	
	S6203	EVQ21405RJ	SW POWER	1	
	S6204	EVQ21405RJ	SW MEMORY REC	1	
	S6206	EVQ21405RJ	SW D.BASS	1	
	S6207	EVQ21405RJ	SW USB REC	1	
	S6208	EVQ21405RJ	SW FORWARD	1	
	S7201	K0L1BA000158	SW RESET	1	
			CONNECTORS		
	CN1001	K1KA02AA0186	2P CONNECTOR	1	
	CN2000	K1MY30AA0124	30P CONNECTOR	1	
	CN2001	K1MY06B00012	6P CONNECTOR	1	
	CN2002	K1KA05AA0193	5P CONNECTOR	1	
	CN6001	K1MN30B00046	30P CONNECTOR	1	
	CN6002	K1KA04A00553	4P CONNECTOR	1	
	CN6003	K1YZ02000015	2P WIRE HOLDER	1	
	CN6400	K1FY104A0034	USB CONNECTOR	1	
	CN6500	K1KB04B00043	4P CONNECTOR	1	
	CN7001	K1MY05BA0539	5P CONNECTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	CN7002	K1MY10B00016	10P CONNECTOR	1	
	CN8251	K1MY10AA0124	10P CONNECTOR	1	
	FP8201	K1MY24A00001	24P CONNECTOR	1	
	FP9003	K1KA05AA0051	5P CONNECTOR	1	
			COILS AND INDUC-TORS		
	L51	G1CR18JA0020	INDUCTOR	1	
	L52	G2A380Y00002	ANTENNA COIL	1	
	L1000	G1C4R7MA0445	INDUCTOR	1	
	L1001	G1C100MA0291	INDUCTOR	1	
	L6000	J0JBC0000019	INDUCTOR	1	
	L6300	G0C100M00009	INDUCTOR	1	
	L6300	J0JBC0000019	INDUCTOR	1	
	L6301	G0C100M00009	INDUCTOR	1	
	L6301	J0JBC0000019	INDUCTOR	1	
	L6302	J0JBC0000019	INDUCTOR	1	
	LB51	J0JBC0000032	INDUCTOR	1	
	LB52	J0JYC0000118	INDUCTOR	1	
	LB6100	J0JBC0000134	INDUCTOR	1	
	LB8202	J0JHC0000045	INDUCTOR	1	
	LB8205	J0JHC0000045	INDUCTOR	1	
	LB8501	J0JHC0000045	INDUCTOR	1	
	R8016	J0JCC0000301	INDUCTOR	1	
			TRANSFORMER		
⚠	T6000	G4DYA0000214	TRANSFORMER	1	
			OSCILLATORS		
	X2001	H0A327200181	OSCILLATOR	1	
	X2002	H2B800400007	OSCILLATOR	1	
	X8101	H0J338300002	OSCILLATOR	1	
			REMOTE SENSOR		
	IR6500	B3RAB0000110	REMOTE SENSOR	1	
			LCD DISPLAY		
	FL6000	A2BB00000184	LCD DISPLAY	1	
			JACKS		
	JK51	K4ZZ02000103	JK FM ANT	1	
	JK52	K4AC02B00042	JK AM ANT	1	
	JK6000	K4AC04B00030	JK SPEAKER	1	
	JK6002	K2HA2YYA0009	JK AUX IN	1	
	JK6301	K2HC103A0031	JK MUSIC PORT	1	
			CHIP JUMPERS		
	K8202	D0GBR00J0004	0 1/10W	1	
	K8205	D0GBR00J0004	0 1/10W	1	
	K8206	D0GBR00J0004	0 1/10W	1	
	K8207	D0GBR00J0004	0 1/10W	1	
	K8209	D0GBR00J0004	0 1/10W	1	
	L53	D0GBR00J0004	0 1/10W	1	
	LB8002	D0GAR00J0005	0 1/16W	1	
	LB8003	D0GBR00J0004	0 1/10W	1	
	LB8004	D0GBR00J0004	0 1/10W	1	
	LB8052	D0GBR00J0004	0 1/10W	1	
	LB8201	D0GBR00J0004	0 1/10W	1	
	LB8203	D0GBR00J0004	0 1/10W	1	
	LB8204	D0GBR00J0004	0 1/10W	1	
	LB8251	D0GBR00J0004	0 1/10W	1	
	LB8252	D0GBR00J0004	0 1/10W	1	
	LB8401	D0GBR00J0004	0 1/10W	1	
	LB8402	D0GBR00J0004	0 1/10W	1	
	W300	D0GBR00JA008	0 1/10W	1	
	W1000	D0GFR00JA017	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W1001	D0GFR00JA017	0 1/4W	1	
	W1002	D0GBR00JA008	0 1/10W	1	
	W1003	D0GFR00JA017	0 1/4W	1	
	W1004	D0GFR00JA017	0 1/4W	1	
	W1005	D0GFR00JA017	0 1/4W	1	
	W1006	D0GFR00JA017	0 1/4W	1	
	W1007	D0GFR00JA017	0 1/4W	1	
	W1008	D0GDR00JA017	0 1/8W	1	
	W1009	D0GFR00JA017	0 1/4W	1	
	W1010	D0GFR00JA017	0 1/4W	1	
	W1011	D0GFR00JA017	0 1/4W	1	
	W1012	D0GFR00JA017	0 1/4W	1	
	W1014	D0GBR00JA008	0 1/10W	1	
	W1015	D0GFR00JA017	0 1/4W	1	
	W1016	D0GFR00JA017	0 1/4W	1	
	W1017	D0GFR00JA017	0 1/4W	1	
	W1018	D0GFR00JA017	0 1/4W	1	
	W1019	D0GFR00JA017	0 1/4W	1	
	W1020	D0GFR00JA017	0 1/4W	1	
	W1021	D0GFR00JA017	0 1/4W	1	
	W1022	D0GFR00JA017	0 1/4W	1	
	W1023	D0GFR00JA017	0 1/4W	1	
	W1024	D0GFR00JA017	0 1/4W	1	
	W1025	D0GFR00JA017	0 1/4W	1	
	W1026	D0GDR00JA017	0 1/8W	1	
	W1027	D0GDR00JA017	0 1/8W	1	
	W1028	D0GDR00JA017	0 1/8W	1	
	W1029	D0GDR00JA017	0 1/8W	1	
	W1039	D0GFR00JA017	0 1/4W	1	
	W1040	D0GFR00JA017	0 1/4W	1	
	W1042	D0GFR00JA017	0 1/4W	1	
	W1043	D0GFR00JA017	0 1/4W	1	
	W1044	D0GDR00JA017	0 1/8W	1	
	W1045	D0GFR00JA017	0 1/4W	1	
	W1047	D0GFR00JA017	0 1/4W	1	
	W1048	D0GDR00JA017	0 1/8W	1	
	W1049	D0GFR00JA017	0 1/4W	1	
	W1050	D0GFR00JA017	0 1/4W	1	
	W1051	D0GFR00JA017	0 1/4W	1	
	W1052	D0GBR00JA008	0 1/10W	1	
	W1053	D0GBR00JA008	0 1/10W	1	
	W1054	D0GDR00JA017	0 1/8W	1	
	W1055	D0GFR00JA017	0 1/4W	1	
	W1056	D0GFR00JA017	0 1/4W	1	
	W1057	D0GFR00JA017	0 1/4W	1	
	W1058	D0GFR00JA017	0 1/4W	1	
	W1059	D0GFR00JA017	0 1/4W	1	
	W1060	D0GFR00JA017	0 1/4W	1	
	W1061	D0GFR00JA017	0 1/4W	1	
	W1062	D0GDR00JA017	0 1/8W	1	
	W1063	D0GFR00JA017	0 1/4W	1	
	W1064	D0GFR00JA017	0 1/4W	1	
	W1065	D0GDR00JA017	0 1/8W	1	
	W1067	D0GDR00JA017	0 1/8W	1	
	W1072	D0GBR00JA008	0 1/10W	1	
	W1073	D0GBR00JA008	0 1/10W	1	
	W1075	D0GFR00JA017	0 1/4W	1	
	W1083	D0GFR00JA017	0 1/4W	1	
	W1084	D0GBR00JA008	0 1/10W	1	
	W1085	D0GFR00JA017	0 1/4W	1	
	W1086	D0GFR00JA017	0 1/4W	1	
	W1087	D0GBR00JA008	0 1/10W	1	
	W1089	D0GFR00JA017	0 1/4W	1	
	W1090	D0GDR00JA017	0 1/8W	1	
	W1091	D0GFR00JA017	0 1/4W	1	
	W1092	D0GFR00JA017	0 1/4W	1	
	W1093	D0GFR00JA017	0 1/4W	1	
	W1094	D0GFR00JA017	0 1/4W	1	
	W1095	D0GBR00JA008	0 1/10W	1	
	W1096	D0GFR00JA017	0 1/4W	1	
	W1097	D0GFR00JA017	0 1/4W	1	
	W1098	D0GFR00JA017	0 1/4W	1	
	W1099	D0GFR00JA017	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W1100	D0GFR00JA017	0 1/4W	1	
	W1101	D0GFR00JA017	0 1/4W	1	
	W1102	D0GFR00JA017	0 1/4W	1	
	W1104	D0GFR00JA017	0 1/4W	1	
	W1105	D0GFR00JA017	0 1/4W	1	
	W1106	D0GFR00JA017	0 1/4W	1	
	W1107	D0GFR00JA017	0 1/4W	1	
	W1108	D0GFR00JA017	0 1/4W	1	
	W1109	D0GBR00JA008	0 1/10W	1	
	W1111	D0GBR00JA008	0 1/10W	1	
	W1112	D0GFR00JA017	0 1/4W	1	
	W1114	D0GFR00JA017	0 1/4W	1	
	W1115	D0GDR00JA017	0 1/8W	1	
	W1116	D0GBR00JA008	0 1/10W	1	
	W1117	D0GBR00JA008	0 1/10W	1	
	W1118	D0GDR00JA017	0 1/8W	1	
	W1119	D0GDR00JA017	0 1/8W	1	
	W1120	D0GFR00JA017	0 1/4W	1	
	W1121	D0GFR00JA017	0 1/4W	1	
	W1122	D0GFR00JA017	0 1/4W	1	
	W1123	D0GDR00JA017	0 1/8W	1	
	W1124	D0GFR00JA017	0 1/4W	1	
	W1126	D0GFR00JA017	0 1/4W	1	
	W1127	D0GFR00JA017	0 1/4W	1	
	W1128	D0GDR00JA017	0 1/8W	1	
			RESISTORS		
	K8208	F1H1H104B047	0.1uF 50V	1	
	R50	D0GBR00J0004	0 1/10W	1	
	R51	D0GB222JA065	2.2K 1/10W	1	
	R52	D0GB561JA065	560 1/10W	1	
	R53	D0GA472JA023	4.7K 1/16W	1	
	R54	D0GA472JA023	4.7K 1/16W	1	
	R55	D0GA221JA023	220 1/16W	1	
	R56	D0GB221JA065	220 1/10W	1	
	R57	D0GA102JA023	1K 1/16W	1	
	R59	D0GB222JA065	2.2K 1/10W	1	
	R60	D0GB222JA065	2.2K 1/10W	1	
	R1000	D0GBR00J0004	0 1/10W	1	
	R1001	D0GBR00J0004	0 1/10W	1	
	R1002	D0GBR00J0004	0 1/10W	1	
	R1003	D0GBR00J0004	0 1/10W	1	
	R1004	ERJ3RBD752V	7.5K 1/16W	1	
	R1005	D1BB5602A074	56K 1/10W	1	
	R1006	D1BB1002A074	10K 1/10W	1	
	R1007	D0GB683JA065	68K 1/10W	1	
	R1008	D0GB153JA065	15K 1/10W	1	
	R1009	D0GBR00J0004	0 1/10W	1	
	R1010	D0GB274JA065	270K 1/10W	1	
	R1011	D0GB823JA065	82K 1/10W	1	
	R1012	D0GB682JA065	6.8K 1/10W	1	
	R1013	D0GB221JA065	220 1/10W	1	
	R1014	D0GB104JA065	100K 1/10W	1	
	R1015	D0GB101JA065	100 1/10W	1	
	R1016	D0GB563JA065	56K 1/10W	1	
	R1017	D0GBR00J0004	0 1/10W	1	
	R1018	D0GB474JA065	470K 1/10W	1	
	R1019	D0AF270JA039	27 1/4W	1	
	R1020	D0GB681JA065	680 1/10W	1	
	R1021	D0GB563JA065	56K 1/10W	1	
	R1022	D0GB153JA065	15K 1/10W	1	
	R1024	D0GBR00J0004	0 1/10W	1	
	R1025	D0GBR00J0004	0 1/10W	1	
	R1026	D0GB124JA065	120K 1/10W	1	
	R1027	D1BB1002A074	10K 1/10W	1	
	R1028	D0GB203JA065	20K 1/10W	1	
	R1029	D0GB103JA065	10K 1/10W	1	
	R1030	D0GB153JA065	15K 1/10W	1	
	R1031	D0GB563JA065	56K 1/10W	1	
	R1032	D0GBR00J0004	0 1/10W	1	
	R1036	D0GBR00J0004	0 1/10W	1	
	R1038	D0GB391JA065	390 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R1039	D0GB103JA065	10K 1/10W	1	
	R1040	D0GB104JA065	100K 1/10W	1	
	R1042	D0GBR00J0004	0 1/10W	1	
	R1044	D0GB563JA065	56K 1/10W	1	
	R1045	D0GB563JA065	56K 1/10W	1	
	R2000	D0GB101JA065	100 1/10W	1	
	R2046	D0GB103JA065	10K 1/10W	1	
	R2047	D0GB102JA065	1K 1/10W	1	
	R2048	D0GB102JA065	1K 1/10W	1	
	R2049	D0GBR00J0004	0 1/10W	1	
	R2053	D0GB223JA065	22K 1/10W	1	PN
	R2053	D0GB563JA065	56K 1/10W	1	PH
	R2055	D0GBR00J0004	0 1/10W	1	
	R2056	D0GB103JA065	10K 1/10W	1	
	R2058	D0GB103JA065	10K 1/10W	1	
	R2060	D0GB122JA065	1.2K 1/10W	1	PH
	R2060	D0GBR00J0004	0 1/10W	1	PN
	R2064	D0GBR00J0004	0 1/10W	1	
	R2066	D0GBR00J0004	0 1/10W	1	
	R2070	D0GB472JA065	4.7K 1/10W	1	
	R2071	D0GB392JA065	3.9K 1/10W	1	
	R2075	D0GB472JA065	4.7K 1/10W	1	
	R2077	D0GB473JA065	47K 1/10W	1	
	R2084	D0GB564JA065	560K 1/10W	1	
	R2086	D0GB104JA065	100K 1/10W	1	
	R2091	D0GB102JA065	1K 1/10W	1	
	R2093	D0GB102JA065	1K 1/10W	1	
	R2094	D0GB102JA065	1K 1/10W	1	
	R2095	D0GB102JA065	1K 1/10W	1	
	R2096	D0GB102JA065	1K 1/10W	1	
	R2105	D0GB103JA065	10K 1/10W	1	
	R2106	D0GB103JA065	10K 1/10W	1	
	R2107	D0GB103JA065	10K 1/10W	1	
	R2108	D0GB103JA065	10K 1/10W	1	
	R2109	D0GB103JA065	10K 1/10W	1	
	R2116	D0GB103JA065	10K 1/10W	1	
	R2120	D0GB473JA065	47K 1/10W	1	
	R2144	D0GB472JA065	4.7K 1/10W	1	
	R2145	D0GB472JA065	4.7K 1/10W	1	
	R2203	D0GBR00J0004	0 1/10W	1	
	R2206	D0GBR00J0004	0 1/10W	1	PN
	R2207	D0GBR00J0004	0 1/10W	1	PH
	R2300	D0GB101JA065	100 1/10W	1	
	R2301	D0GB101JA065	100 1/10W	1	
	R2302	D0GB101JA065	100 1/10W	1	
	R2303	D0GB101JA065	100 1/10W	1	
	R2304	D0GB101JA065	100 1/10W	1	
	R2305	D0GB101JA065	100 1/10W	1	
	R2306	D0GB101JA065	100 1/10W	1	
	R2307	D0GB101JA065	100 1/10W	1	
	R2308	D0GB101JA065	100 1/10W	1	
	R2309	D0GB101JA065	100 1/10W	1	
	R2310	D0GBR00J0004	0 1/10W	1	
	R2312	D0GBR00J0004	0 1/10W	1	
	R2313	D0GBR00J0004	0 1/10W	1	
	R2314	D0GB101JA065	100 1/10W	1	
	R2315	D0GB101JA065	100 1/10W	1	
	R2316	D0GB101JA065	100 1/10W	1	
	R2317	D0GB101JA065	100 1/10W	1	
	R2318	D0GB101JA065	100 1/10W	1	
	R2319	D0GB101JA065	100 1/10W	1	
	R2320	D0GB101JA065	100 1/10W	1	
	R2321	D0GB101JA065	100 1/10W	1	
	R2323	D0GB101JA065	100 1/10W	1	
	R2324	D0GB101JA065	100 1/10W	1	
	R2325	D0GB101JA065	100 1/10W	1	
	R2326	D0GB101JA065	100 1/10W	1	
	R2327	D0GBR00J0004	0 1/10W	1	
	R2328	D0GBR00J0004	0 1/10W	1	
	R2329	D0GBR00J0004	0 1/10W	1	
	R2330	D0GB472JA065	4.7K 1/10W	1	
	R2331	D0GB101JA065	100 1/10W	1	
	R2332	D0GB101JA065	100 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2333	D0GB103JA065	10K 1/10W	1	
	R2334	D0GB101JA065	100 1/10W	1	
	R2335	D0GB101JA065	100 1/10W	1	
	R2336	D0GB223JA065	22K 1/10W	1	
	R2337	D0GB103JA065	10K 1/10W	1	
	R2338	D0GB682JA065	6.8K 1/10W	1	
	R2339	D0GB683JA065	68K 1/10W	1	
	R2340	D0GB101JA065	100 1/10W	1	
	R2341	D0GBR00J0004	0 1/10W	1	
	R2503	D0GB331JA065	330 1/10W	1	
	R2504	D0GB104JA065	100K 1/10W	1	
	R6001	D0GBR00J0004	0 1/10W	1	
	R6002	D0GBR00J0004	0 1/10W	1	
	R6006	D0GB122JA065	1.2K 1/10W	1	
	R6007	D0GB100JA065	10 1/10W	1	
	R6007	D0GB152JA065	1.5K 1/10W	1	
	R6008	D0GB222JA065	2.2K 1/10W	1	
	R6009	D0GB332JA065	3.3K 1/10W	1	
	R6010	D0GB472JA065	4.7K 1/10W	1	
	R6011	D0GB100JA065	10 1/10W	1	
	R6013	D0GB103JA065	10K 1/10W	1	
	R6016	D0GB221JA065	220 1/10W	1	
	R6017	D0GB471JA065	470 1/10W	1	
	R6018	D0GB221JA065	220 1/10W	1	
	R6023	D0GB823JA065	82K 1/10W	1	
	R6025	D0GB562JA065	5.6K 1/10W	1	
	R6026	D0GB220JA065	22 1/10W	1	
	R6028	D0GB1R0JA065	1 1/10W	1	
	R6029	D0GB473JA065	47K 1/10W	1	
	R6030	D0GB1R0JA065	1 1/10W	1	
	R6032	D0GB100JA065	10 1/10W	1	
	R6033	D0GB223JA065	22K 1/10W	1	
	R6046	D0GB223JA065	22K 1/10W	1	
	R6050	D0GB100JA065	10 1/10W	1	
	R6054	D0GB563JA065	56K 1/10W	1	
	R6055	D0GB473JA065	47K 1/10W	1	
	R6056	D0GB472JA065	4.7K 1/10W	1	
	R6057	D0GB224JA065	220K 1/10W	1	
	R6058	D0GB3R3JA065	3.3 1/10W	1	
	R6060	D0GB3R3JA065	3.3 1/10W	1	
	R6061	D0GB3R3JA065	3.3 1/10W	1	
	R6062	D0GB3R3JA065	3.3 1/10W	1	
	R6066	D0GB104JA065	100K 1/10W	1	
	R6067	D0GB104JA065	100K 1/10W	1	
	R6068	D0GB104JA065	100K 1/10W	1	
	R6069	D0GB104JA065	100K 1/10W	1	
	R6070	D0GB333JA065	33K 1/10W	1	
	R6100	D0GB103JA065	10K 1/10W	1	
	R6100	D0GB122JA065	1.2K 1/10W	1	
	R6101	D0GB103JA065	10K 1/10W	1	
	R6101	D0GB152JA065	1.5K 1/10W	1	
	R6102	D0GB103JA065	10K 1/10W	1	
	R6102	D0GB222JA065	2.2K 1/10W	1	
	R6103	D0GB102JA065	1K 1/10W	1	
	R6103	D0GB332JA065	3.3K 1/10W	1	
	R6104	D0GB103JA065	10K 1/10W	1	
	R6104	D0GB472JA065	4.7K 1/10W	1	
	R6105	D0GB103JA065	10K 1/10W	1	
	R6105	D0GB271JA065	270 1/10W	1	
	R6106	D0GB103JA065	10K 1/10W	1	
	R6106	D0GB821JA065	820 1/10W	1	
	R6107	D0GB271JA065	270 1/10W	1	
	R6109	D0GB103JA065	10K 1/10W	1	
	R6110	D0GB103JA065	10K 1/10W	1	
	R6111	D0GB103JA065	10K 1/10W	1	
	R6112	D0GB821JA065	820 1/10W	1	
	R6114	D0GB181JA065	180 1/10W	1	
	R6129	D0GBR00J0004	0 1/10W	1	
	R6130	D0GBR00J0004	0 1/10W	1	
	R6132	D0GB224JA065	220K 1/10W	1	
	R6133	D0GB103JA065	10K 1/10W	1	
	R6134	D0GB103JA065	10K 1/10W	1	
	R6146	D0GB103JA065	10K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R6147	D0GB103JA065	10K 1/10W	1	
	R6148	D0GBR00J0004	0 1/10W	1	
	R6200	D0GB122JA065	1.2K 1/10W	1	
	R6201	D0GB152JA065	1.5K 1/10W	1	
	R6202	D0GB222JA065	2.2K 1/10W	1	
	R6203	D0GB332JA065	3.3K 1/10W	1	
	R6204	D0GB153JA065	15K 1/10W	1	
	R6206	D0GB472JA065	4.7K 1/10W	1	
	R6207	D0GB682JA065	6.8K 1/10W	1	
	R6208	D0GB103JA065	10K 1/10W	1	
	R6209	D0GB103JA065	10K 1/10W	1	
	R6210	D0GB473JA065	47K 1/10W	1	
	R6211	D0GB103JA065	10K 1/10W	1	
	R6300	D0GFR00J0005	0 1/4W	1	
	R6301	D0GFR00J0005	0 1/4W	1	
	R6302	D0GFR00J0005	0 1/4W	1	
	R6303	D0GFR00J0005	0 1/4W	1	
	R6304	D0GFR00J0005	0 1/4W	1	
	R6305	D0GFR00J0005	0 1/4W	1	
	R6306	D0GFR00J0005	0 1/4W	1	
	R6307	D0GFR00J0005	0 1/4W	1	
	R6400	D0GBR00J0004	0 1/10W	1	
	R6500	D0GBR00J0004	0 1/10W	1	
	R6501	D0GB103JA065	10K 1/10W	1	
	R6502	D0GB472JA065	4.7K 1/10W	1	
	R6503	D0GBR00J0004	0 1/10W	1	
	R6504	D0GB103JA065	10K 1/10W	1	
	R6505	D0GB472JA065	4.7K 1/10W	1	
	R6506	D0GB103JA065	10K 1/10W	1	
	R6507	D0GB472JA065	4.7K 1/10W	1	
	R6508	D0GBR00J0004	0 1/10W	1	
	R6509	D0GBR00J0004	0 1/10W	1	
	R6510	D0GB103JA065	10K 1/10W	1	
	R6511	D0GBR00J0004	0 1/10W	1	
	R6512	D0GB471JA065	470 1/10W	1	
	R6513	D0GB153JA065	15K 1/10W	1	
	R6514	D0GB471JA065	470 1/10W	1	
	R6515	D0GB183JA065	18K 1/10W	1	
	R6516	D0GB101JA065	100 1/10W	1	
	R6517	D0GBR00J0004	0 1/10W	1	
	R6518	D0GBR00J0004	0 1/10W	1	
	R6519	D0GBR00J0004	0 1/10W	1	
	R6520	D0GBR00J0004	0 1/10W	1	
	R6521	D0GBR00J0004	0 1/10W	1	
	R6522	D0GBR00J0004	0 1/10W	1	
	R6523	D0GB470JA065	47 1/10W	1	
	R6524	D0GBR00J0004	0 1/10W	1	
	R6525	D0GBR00J0004	0 1/10W	1	
	R6526	D0GB472JA065	4.7K 1/10W	1	
	R6527	D0GB101JA065	100 1/10W	1	
	R6528	D0GB470JA065	47 1/10W	1	
	R6529	D0GBR00J0004	0 1/10W	1	
	R6530	D0GBR00J0004	0 1/10W	1	
	R6531	D0GBR00J0004	0 1/10W	1	
	R6533	D0GB101JA065	100 1/10W	1	
	R6534	D0GB101JA065	100 1/10W	1	
	R6536	D0GB101JA065	100 1/10W	1	
	R6542	D0GB103JA065	10K 1/10W	1	
	R6543	D0GB472JA065	4.7K 1/10W	1	
	R6544	D0GB472JA065	4.7K 1/10W	1	
	R6549	D0GB103JA065	10K 1/10W	1	
	R6550	D0GB101JA065	100 1/10W	1	
	R6551	D0GB101JA065	100 1/10W	1	
	R6552	D0GB101JA065	100 1/10W	1	
	R6553	D0GB101JA065	100 1/10W	1	
	R6554	D0GB472JA065	4.7K 1/10W	1	
	R7158	D0GB330JA065	33 1/10W	1	
	R8000	D0GBR00J0004	0 1/10W	1	
	R8001	D0GAR00J0005	0 1/16W	1	
	R8002	D0GB103JA065	10K 1/10W	1	
	R8003	D0GB102JA065	1K 1/10W	1	
	R8004	D0GB102JA065	1K 1/10W	1	
	R8005	D0GB105JA065	1M 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R8006	D0GB221JA065	220 1/10W	1	
	R8010	D0GA104JA023	100K 1/16W	1	
	R8011	D0GA104JA023	100K 1/16W	1	
	R8012	D0GBR00J0004	0 1/10W	1	
	R8013	D0GBR00J0004	0 1/10W	1	
	R8014	D0GBR00J0004	0 1/10W	1	
	R8015	D0GBR00J0004	0 1/10W	1	
	R8017	D0GBR00J0004	0 1/10W	1	
	R8021	D0GA330JA023	33 1/16W	1	
	R8022	D0GA100JA023	10 1/16W	1	
	R8025	D0GAR00J0005	0 1/16W	1	
	R8026	D0GAR00J0005	0 1/16W	1	
	R8027	D0GB100JA065	10 1/10W	1	
	R8029	D0GA330JA023	33 1/16W	1	
	R8031	D0GA103JA023	10K 1/16W	1	
	R8032	D0GBR00J0004	0 1/10W	1	
	R8033	D0GAR00J0005	0 1/16W	1	
	R8034	D0GAR00J0005	0 1/16W	1	
	R8041	D0GBR00J0004	0 1/10W	1	
	R8042	D0GA103JA023	10K 1/16W	1	
	R8043	D0GAR00J0005	0 1/16W	1	
	R8044	D0GAR00J0005	0 1/16W	1	
	R8045	D0GAR00J0005	0 1/16W	1	
	R8046	D0GB103JA065	10K 1/10W	1	
	R8047	D0GB103JA065	10K 1/10W	1	
	R8201	D0GBR00J0004	0 1/10W	1	
	R8202	D0GBR00J0004	0 1/10W	1	
	R8203	D0GBR00J0004	0 1/10W	1	
	R8204	D0GBR00J0004	0 1/10W	1	
	R8205	D0GBR00J0004	0 1/10W	1	
	R8206	D0GBR00J0004	0 1/10W	1	
	R8209	D0GB225JA065	2.2M 1/10W	1	
	R8210	D0GB821JA065	820 1/10W	1	
	R8211	D0GB272JA065	2.7K 1/10W	1	
	R8212	D0GB4R7JA065	4.7 1/10W	1	
	R8214	D0GB103JA065	10K 1/10W	1	
	R8215	D0GB5R6JA065	5.6 1/10W	1	
	R8252	D0GB102JA065	1K 1/10W	1	
	R8254	D0GB562JA065	5.6K 1/10W	1	
	R8255	D0GB332JA065	3.3K 1/10W	1	
	R8256	D0GB101JA065	100 1/10W	1	
	R8257	D0GB562JA065	5.6K 1/10W	1	
	R8258	D0GB273JA065	27K 1/10W	1	
	R8259	D0GB472JA065	4.7K 1/10W	1	
	R8260	D0GB473JA065	47K 1/10W	1	
	R8261	D0GB101JA065	100 1/10W	1	
	R8262	D0GB100JA065	10 1/10W	1	
	R8263	D0GB102JA065	1K 1/10W	1	
	R8264	D0GB122JA065	1.2K 1/10W	1	
	R8265	D0GB104JA065	100K 1/10W	1	
	R8301	D0GBR00J0004	0 1/10W	1	
	R8302	D0GBR00J0004	0 1/10W	1	
	R8501	D0GAR00J0005	0 1/16W	1	
	R8502	D0GA473JA023	47K 1/16W	1	
	R8503	D0GA473JA023	47K 1/16W	1	
	R8504	D0GA473JA023	47K 1/16W	1	
	R8505	D0GA473JA023	47K 1/16W	1	
	R8506	D0GA473JA023	47K 1/16W	1	
	R8507	D0GA473JA023	47K 1/16W	1	
	R9001	ERJ2RKD300X	30 1/16W	1	
	R9002	ERJ2RKD300X	30 1/16W	1	
	R9003	D0GA153JA023	15K 1/16W	1	
	R9004	D0GA153JA023	15K 1/16W	1	
			CAPACITORS		
	C51	F1H1H102B047	1000pF 50V	1	
	C52	F1H1A474A107	0.47uF 10V	1	
	C61	F1H1H104B047	0.1uF 50V	1	
	C62	F1H1H104B047	0.1uF 50V	1	
	C63	F1H1H6R0B050	6pF 50V	1	
	C64	F1H1H3R0B050	3pF 50V	1	
	C65	F1H1H3R0B050	3pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C66	F1H1H330A889	33pF 50V	1	
	C67	F1H1H3R0B050	3pF 50V	1	
	C1000	F1J1A106A043	10uF 10V	1	
	C1001	F1J1A106A043	10uF 10V	1	
	C1002	F1J1E1060001	10uF 25V	1	
	C1004	F1H1H332B047	3300pF 50V	1	
	C1005	F1H1H104B047	0.1uF 50V	1	
	C1006	F2A0J101A208	100uF 6.3V	1	
	C1007	F1H1E105A153	1uF 25V	1	
	C1008	F1J1A106A043	10uF 10V	1	
	C1009	F1J1A106A043	10uF 10V	1	
	C1010	F1J1A106A043	10uF 10V	1	
	C1011	F2A0J221A016	220uF 6.3V	1	
	C1012	F1H1H104B047	0.1uF 50V	1	
	C1014	F1J1A106A043	10uF 10V	1	
	C1015	F1H1H332B047	3300pF 50V	1	
	C1016	F1H1H104B047	0.1uF 50V	1	
	C1018	F1H1H103B047	0.01uF 50V	1	
	C1019	F1H1H103B047	0.01uF 50V	1	
	C1020	F1J1E475A257	4.7uF 25V	1	
	C1021	F1K1H475A256	4.7uF 50V	1	
	C1023	F1H1H104B047	0.1uF 50V	1	
	C1026	F2A0J471B035	470uF 6.3V	1	
	C1030	F1H1H102B047	1000pF 50V	1	
	C2017	F1H1C104A178	0.1uF 16V	1	
	C2018	F1J1A4750002	4.7uF 10V	1	
	C2029	F1H1H104B047	0.1uF 50V	1	
	C2032	F1H1H104B047	0.1uF 50V	1	
	C2034	F1H1H104B047	0.1uF 50V	1	
	C2042	F1H1H104B047	0.1uF 50V	1	
	C2051	F1J1A106A043	10uF 10V	1	
	C2052	F1H1H180B052	18pF 50V	1	
	C2053	F1H1H180B052	18pF 50V	1	
	C2054	F1H1H104B047	0.1uF 50V	1	
	C2055	F1H1H104B047	0.1uF 50V	1	
	C2056	F1H1H104B047	0.1uF 50V	1	
	C2057	F2A0J221A016	220uF 6.3V	1	
	C2059	F1H1E105A153	1uF 25V	1	
	C2061	F1H1H104B047	0.1uF 50V	1	
	C2064	F2A1H3R3A213	3.3uF 50V	1	
	C2077	F1H1H331A885	330pF 50V	1	
	C2300	F1H1H104B047	0.1uF 50V	1	
	C2302	F1J1A106A043	10uF 10V	1	
	C6002	F1H1H104B047	0.1uF 50V	1	
	C6003	F1H1H102B047	1000pF 50V	1	
	C6004	F1H1H102B047	1000pF 50V	1	
	C6005	F1H1H102B047	1000pF 50V	1	
	C6005	F1K1E1060001	10uF 25V	1	
	C6006	F1H1H102B047	1000pF 50V	1	
	C6007	F1H1H102B047	1000pF 50V	1	
	C6008	F1H1H331B052	330pF 50V	1	
	C6009	F1H1H102B047	1000pF 50V	1	
	C6010	F1H1H331B052	330pF 50V	1	
	C6011	F1H1H102A219	1000pF 50V	1	
	C6012	F1H1H331B052	330pF 50V	1	
	C6013	F1H1H102B047	1000pF 50V	1	
	C6014	F1H1H102B047	1000pF 50V	1	
	C6015	F1H1H102B047	1000pF 50V	1	
	C6016	F1H1H102B047	1000pF 50V	1	
	C6017	F1H1H103A219	0.01uF 50V	1	
	C6018	F1H1H102B047	1000pF 50V	1	
	C6018	F1H1H104B047	0.1uF 50V	1	
	C6019	F1H1H104B047	0.1uF 50V	1	
	C6020	F1H1E105A153	1uF 25V	1	
	C6021	F1H1H104B047	0.1uF 50V	1	
	C6021	F2A1E221B422	220uF 25V	1	
	C6022	F1H1E105A153	1uF 25V	1	
	C6022	F1H1H472A219	4700pF 50V	1	
	C6023	F1H1H104B047	0.1uF 50V	1	
	C6023	F2A1H470B412	47uF 50V	1	
	C6024	F1H1H333B055	0.033uF 50V	1	
	C6024	F2A1C101A115	100uF 16V	1	
	C6025	F1H1H104B047	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C6025	F1H1H333B055	0.033uF 50V	1	
	C6026	F2A1H220B411	22uF 50V	1	
	C6027	F1H1H104B047	0.1uF 50V	1	
	C6028	F1H1H333B055	0.033uF 50V	1	
	C6030	F1H1H333B055	0.033uF 50V	1	
	C6031	F1K1H105A138	1uF 50V	1	
	C6032	F1H1H104B047	0.1uF 50V	1	
	C6033	F2A1H4710072	470uF 50V	1	
	C6036	F1H1H104B047	0.1uF 50V	1	
	C6039	F1K1H105A138	1uF 50V	1	
	C6040	F2A1H4710072	470uF 50V	1	
	C6042	ECQV1H474JL3	0.47uF 50V	1	
	C6044	ECQV1H474JL3	0.47uF 50V	1	
	C6045	F1H1H102B047	1000pF 50V	1	
	C6046	F1H1H102B047	1000pF 50V	1	
	C6047	F1H1H102B047	1000pF 50V	1	
	C6048	F1H1H102B047	1000pF 50V	1	
	C6049	F1H1H104B047	0.1uF 50V	1	
	C6055	F1H1H104B047	0.1uF 50V	1	
	C6059	F1H1H104B047	0.1uF 50V	1	
	C6060	F1H1H104B047	0.1uF 50V	1	
	C6061	F1H1H103B047	0.01uF 50V	1	
	C6062	F1H1H103B047	0.01uF 50V	1	
	C6063	F1H1H103B047	0.01uF 50V	1	
	C6064	F1H1H103B047	0.01uF 50V	1	
	C6068	F1K1E1060001	10uF 25V	1	
	C6069	F1H1H104B047	0.1uF 50V	1	
	C6070	F1H1H104B047	0.1uF 50V	1	
	C6071	F1H1H104B047	0.1uF 50V	1	
	C6074	F1H1H104B047	0.1uF 50V	1	
	C6087	F1H1A105A062	1uF 10V	1	
	C6091	F1H1A105A062	1uF 10V	1	
	C6099	F1H1H681A889	680pF 50V	1	
	C6100	F1H1H681A889	680pF 50V	1	
	C6101	F1H1H101B052	100pF 50V	1	
	C6101	F1H1H104B047	0.1uF 50V	1	
	C6102	F1H1H101B052	100pF 50V	1	
	C6102	F1H1H681A889	680pF 50V	1	
	C6103	F1H1H681A889	680pF 50V	1	
	C6104	F1H1A105A062	1uF 10V	1	
	C6105	F1H1A105A062	1uF 10V	1	
	C6106	F1H1A105A062	1uF 10V	1	
	C6107	F1H1A105A062	1uF 10V	1	
	C6201	F1H1H101B052	100pF 50V	1	
	C6202	F1H1H101B052	100pF 50V	1	
	C6317	F1H1H104B047	0.1uF 50V	1	
	C6318	F1H1H331B052	330pF 50V	1	
	C6319	F1H1H331B052	330pF 50V	1	
	C6320	F1H1H103B047	0.01uF 50V	1	
	C6321	F1H1H103B047	0.01uF 50V	1	
	C6322	F1H1H104B047	0.1uF 50V	1	
	C6323	F1H1H391A889	390pF 50V	1	
	C6500	F1H1H101B052	100pF 50V	1	
	C6500	F1J1A106A043	10uF 10V	1	
	C6501	F1H1H102A219	1000pF 50V	1	
	C6501	F1H1H104B047	0.1uF 50V	1	
	C6502	F1J1A106A043	10uF 10V	1	
	C6503	F1H1H104B047	0.1uF 50V	1	
	C6504	F1H1H472A219	4700pF 50V	1	
	C6505	F1H1C473A088	0.047uF 16V	1	
	C6506	F1H1H472A219	4700pF 50V	1	
	C6507	F1H1C473A088	0.047uF 16V	1	
	C6508	F1H1H104B047	0.1uF 50V	1	
	C6509	F1J1A106A043	10uF 10V	1	
	C6510	F1H1E474A116	0.47uF 25V	1	
	C6511	F1H1H104B047	0.1uF 50V	1	
	C6512	F1H1H104B047	0.1uF 50V	1	
	C6513	F1J1A106A043	10uF 10V	1	
	C6514	F1H1H104B047	0.1uF 50V	1	
	C6516	F1H1E474A116	0.47uF 25V	1	
	C6519	F1H1E474A116	0.47uF 25V	1	
	C6521	F1H1E474A116	0.47uF 25V	1	
	C6527	F1J1A106A043	10uF 10V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C6528	F1H1H104B047	0.1uF 50V	1	
	C6530	F1H1H104B047	0.1uF 50V	1	
	C6531	F1H1H104B047	0.1uF 50V	1	
	C7150	F1H1H104B047	0.1uF 50V	1	
	C7154	F1H1H104B047	0.1uF 50V	1	
	C7155	F1H1A105A062	1uF 10V	1	
	C7156	F1H1A105A062	1uF 10V	1	
	C7157	F1H1H103B047	0.01uF 50V	1	
	C7158	F1H1H104B047	0.1uF 50V	1	
	C7159	F1H1H104B047	0.1uF 50V	1	
	C7160	F1H1H104B047	0.1uF 50V	1	
	C8007	F1H1A334A107	0.33uF 10V	1	
	C8008	F1H1H223B047	0.022uF 50V	1	
	C8009	F1H1H680A831	68pF 50V	1	
	C8010	F1G1A1040006	0.1uF 10V	1	
	C8011	F1H1H104B047	0.1uF 50V	1	
	C8012	F1G1A1040006	0.1uF 10V	1	
	C8013	F2A0J101A208	100uF 6.3V	1	
	C8014	F1H1H103B047	0.01uF 50V	1	
	C8015	F1G1H120A565	12pF 50V	1	
	C8016	F1G1H120A565	12pF 50V	1	
	C8017	F1J1A106A043	10uF 10V	1	
	C8018	F1H1A334A107	0.33uF 10V	1	
	C8019	F1H1H102B047	1000pF 50V	1	
	C8020	F1H1H681B047	680pF 50V	1	
	C8021	F1H1C823A178	0.082uF 16V	1	
	C8022	F1H0J4750005	4.7uF 6.3V	1	
	C8025	F1H0J4750005	4.7uF 6.3V	1	
	C8026	F1H0J4750005	4.7uF 6.3V	1	
	C8027	F1H1H102B047	1000pF 50V	1	
	C8028	F1H1H104B047	0.1uF 50V	1	
	C8029	F1G1A1040006	0.1uF 10V	1	
	C8031	F1G1A1040006	0.1uF 10V	1	
	C8032	F1H1H104B047	0.1uF 50V	1	
	C8033	F1H1H104B047	0.1uF 50V	1	
	C8034	F1H1H104B047	0.1uF 50V	1	
	C8035	F1G1A1040006	0.1uF 10V	1	
	C8036	F1G1A1040006	0.1uF 10V	1	
	C8037	F1H1H104B047	0.1uF 50V	1	
	C8038	F1H1H104B047	0.1uF 50V	1	
	C8039	F1H1H104B047	0.1uF 50V	1	
	C8040	F1G1A1040006	0.1uF 10V	1	
	C8041	F1H1H104B047	0.1uF 50V	1	
	C8042	F1H1H104B047	0.1uF 50V	1	
	C8043	F1H1H104B047	0.1uF 50V	1	
	C8044	F1H0J4750005	4.7uF 6.3V	1	
	C8045	F1G1A1040006	0.1uF 10V	1	
	C8046	F1H1H104B047	0.1uF 50V	1	
	C8047	F1H1H153B047	0.015uF 50V	1	
	C8048	F1H1H104B047	0.1uF 50V	1	
	C8049	F1J1A106A043	10uF 10V	1	
	C8050	F1H1A105A062	1uF 10V	1	
	C8058	F1G1A1040006	0.1uF 10V	1	
	C8059	F1G1A1040006	0.1uF 10V	1	
	C8060	F1H1A105A062	1uF 10V	1	
	C8061	F1G1A1040006	0.1uF 10V	1	
	C8064	F2A0J221A016	220uF 6.3V	1	
	C8065	F1J1A106A043	10uF 10V	1	
	C8067	F1J1A106A043	10uF 10V	1	
	C8068	F1H1H332B047	3300pF 50V	1	
	C8069	F1H1H332B047	3300pF 50V	1	
	C8070	F1J1A106A043	10uF 10V	1	
	C8071	F1G1A1040006	0.1uF 10V	1	
	C8072	F1G1A1040006	0.1uF 10V	1	
	C8073	F1G1A1040006	0.1uF 10V	1	
	C8074	F1G1A1040006	0.1uF 10V	1	
	C8075	F1J1A106A043	10uF 10V	1	
	C8076	F1J1A106A043	10uF 10V	1	
	C8101	F1H1H102B047	1000pF 50V	1	
	C8102	F1H1H104B047	0.1uF 50V	1	
	C8201	F1J1A106A043	10uF 10V	1	
	C8202	F1H1H104B047	0.1uF 50V	1	
	C8203	F1H1H103B047	0.01uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C8204	F1J1A106A043	10uF 10V	1	
	C8251	F2A1C470B455	47uF 16V	1	
	C8252	F1H1H103B047	0.01uF 50V	1	
	C8253	F1H1A154A107	0.15uF 10V	1	
	C8254	F1H1H153B047	0.015uF 50V	1	
	C8255	F1H1H182B047	1800pF 50V	1	
	C8256	F1H1H102B047	1000pF 50V	1	
	C8258	F1H1H122B047	1200pF 50V	1	
	C8259	F1J1A106A043	10uF 10V	1	
	C8260	F1H1H103B047	0.01uF 50V	1	
	C8261	F1H1A105A062	1uF 10V	1	
	C8262	F2A0J101A208	100uF 6.3V	1	
	C8263	F1H1H103B047	0.01uF 50V	1	
	C8401	F1J1A106A043	10uF 10V	1	
	C8402	F2A0J101A208	100uF 6.3V	1	
	C8403	F1H1H103B047	0.01uF 50V	1	
	C8501	F1H1A105A025	1uF 10V	1	
	C8502	F1H1A105A025	1uF 10V	1	
	C8503	F1H1A105A025	1uF 10V	1	
	C8504	F1G1A1040006	0.1uF 10V	1	
	C8505	F1G1A1040006	0.1uF 10V	1	
	C8506	F1G1A1040006	0.1uF 10V	1	
	C8507	F1G1A1040006	0.1uF 10V	1	
	C8508	F1G1A1040006	0.1uF 10V	1	
	C8509	F1G1A1040006	0.1uF 10V	1	
	C8510	F1G1A1040006	0.1uF 10V	1	
	C8511	F1G1A1040006	0.1uF 10V	1	
	C8512	F1G1A1040006	0.1uF 10V	1	
	C8513	F1H0J4750005	4.7uF 6.3V	1	
	C8514	F1H0J4750005	4.7uF 6.3V	1	
	C8515	F1G1A1040006	0.1uF 10V	1	