

Service Manual

CD Stereo System

Model No. **SA-AKX34PH**
SA-AKX34PN

Product Color: (K)...Black Type



Please refer to the original service manual for:

- CD Mechanism Unit (BRS11C), Order No. PSG1201019AE
- Speaker system SB-AKX34PN-K, Order No. PSG1202004CE

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. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, carry out the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1\text{M}\Omega$ and $5.2\text{M}\Omega$.

When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. Leakage Current Hot Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a $1.5\text{k}\Omega$, 10 watts resistor, in parallel with a $0.15\mu\text{F}$ capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
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.

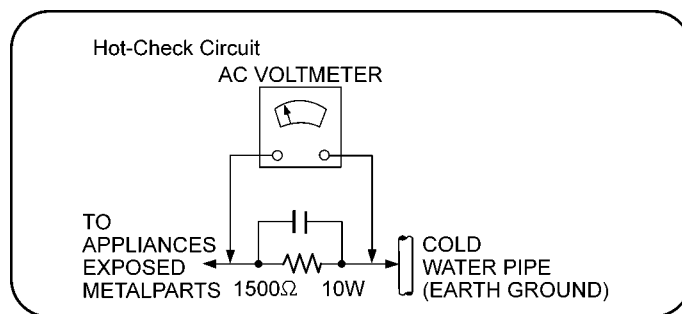


Figure 1

1.2. Before Use (For PH only)

Be sure to disconnect the mains cord before adjusting the voltage selector.

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. (If the power supply in your area is 110V ~ 127V or 220V ~ 240V, set to the "110V ~ 127V or 220V ~ 240V" position.)

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.)

1.3. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such (C5700, C5701, C5703, C5704 (For PH), C5705 (For PH), C5708) through a 10Ω , 10 W resistor to ground.

Caution:

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 110~127 V / 220~240 V, 50/60 Hz in Power ON, FM Tuner, No Signal, volume minimal mode should be ~ 600 mA (PH).

Current consumption at AC 120 V, 60 Hz in Power ON, FM Tuner, No Signal, volume minimal mode should be ~ 600 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. Caution For Fuse Replacement

CAUTION:

Replace with the same type fuse:
(Manufacturer: LITTELFUSE, INC, Type: 233, F1, 8A, 125V) (For PN only)

CAUTION:

Replace with the same type fuse:
(Manufacturer: HOLLYLAND, INC, Type: 50T, F1, 6.3A, 250V) (For PH only)

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
⚠	8	REX1536	1P RED WIRE (VOLTAGE SELECTOR-SMPS)	PH
⚠	9	REXX1122-J	1P BLACK WIRE (VOLTAGE SELECTOR-SMPS)	PH
⚠	20	RKMX1011-K1	TOP CABINET	
⚠	21	RGRX1008M-A	REAR PANEL	PN
⚠	21	RGRX1008N-A	REAR PANEL	PH
⚠	301	RAE1034Z-V	TRAVERSE ASS'Y	
⚠	A2	K2CB2YY00059	AC CORD	PN
⚠	A2	K2CQ2CA00007	AC CORD	PH
⚠	A3	RQT9617-M	O/I BOOK (Sp)	PN
⚠	A3	RQT9619-M	O/I BOOK (Sp)	PH
⚠	PCB9	REP4783F	SMPS P.C.B.	(RTL) PH
⚠	PCB9	REP4783DA	SMPS P.C.B.	(RTL) PN
⚠	PCB11	REP4783F	VOLTAGE SELECTOR P.C.B.	(RTL) PH
⚠	DZ5701	ERZV05Z471CS	ZNR	
⚠	S5701	K0ABCA000007	SW AC VOLTAGE SELECTOR	PH
⚠	L5706	G0B612H00002	LINE FILTER	PH
⚠	L5707	G0B612H00002	LINE FILTER	PN
⚠	T5701	G4DYZ0000051	MAIN TRANSFORMER	PH
⚠	T5701	G4DYZ0000060	MAIN TRANSFORMER	PN
⚠	T5751	ETS19AB2E6AG	SUB TRANSFORMER	
⚠	T6000	G4DYA0000214	SWITCHING TRANSFORMER	
⚠	PC5701	B3PBA0000503	PHOTO COUPLER	
⚠	PC5702	B3PBA0000503	PHOTO COUPLER	
⚠	PC5720	B3PBA0000503	PHOTO COUPLER	
⚠	PC5799	B3PBA0000503	PHOTO COUPLER	
⚠	F1	K5D632BK0007	FUSE	PH
⚠	F1	K5D802APA008	FUSE	PN
⚠	TH5000	D4CC11040013	THERMISTOR	
⚠	TH5702	D4CAA2R20001	THERMISTOR	
⚠	TH5860	D4CC11040013	THERMISTOR	
⚠	TH5861	D4CC11040013	THERMISTOR	PN
⚠	P5701	K2AA2B000011	AC INLET	PH
⚠	P5701	K2AB2B000007	AC INLET	PN
⚠	R5708	ERJ8GEYJ155V	1.5M 1/4W	
⚠	R5709	ERJ8GEYJ155V	1.5M 1/4W	
⚠	C5700	F1BAF471A013	470pF	
⚠	C5701	F0CAF104A105	0.1uF	
⚠	C5703	F0CAF224A105	0.22uF	
⚠	C5704	F1BAF471A013	470pF	PH
⚠	C5705	F1BAF471A013	470pF	PH
⚠	C5708	F1BAF1020020	1000pF	

2 Warning

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

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution:

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

2.2. Precaution of Laser Diode

CAUTION:

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

Caution:

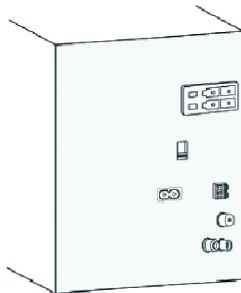
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

Wavelength: 790 nm (CD)

Maximum output radiation power from pickup: 100 μ W/VDE

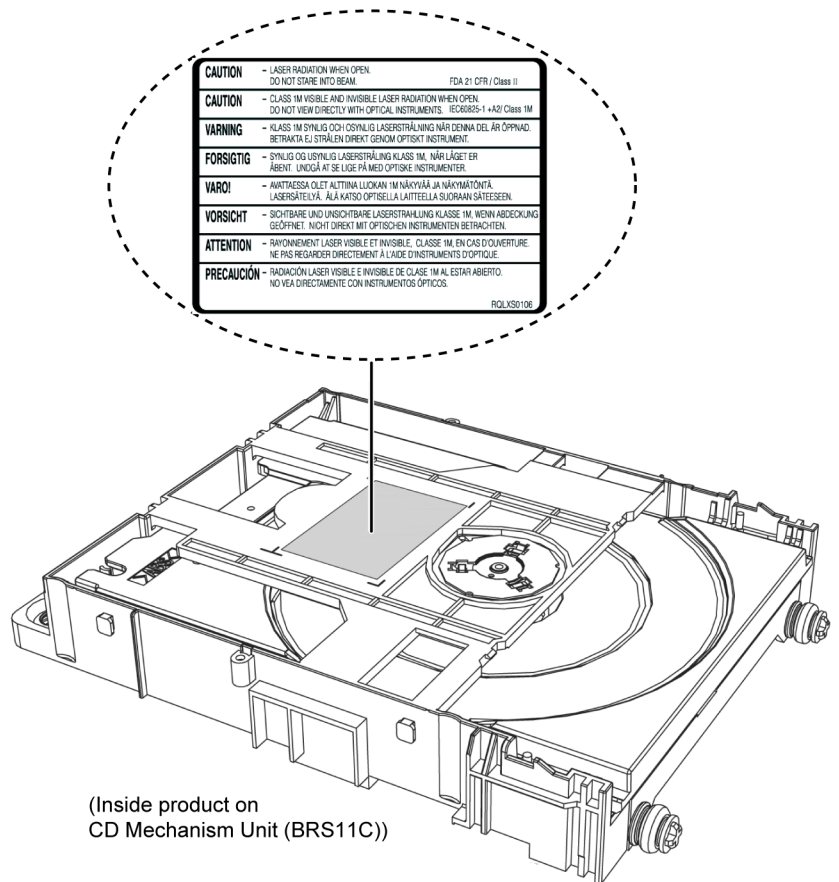
Laser radiation from the pickup unit is safety level, but be sure the followings:

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



(Back of product)

**CLASS 1
LASER PRODUCT**



CAUTION	- LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	FDA 21 CFR / Class II
CAUTION	- CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1 +A2/ Class 1M	
WARNING	- KLASSE 1M SYNLIS OCH OSYNLIS LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN DIREKT GENOM OPTISKA INSTRUMENT.	
FORSIGTIG	- SYNLIG OG USYNLIG LASERSTRÅLNING KLASSE 1M. TÄRPLÆSET ER ÅBENT. UNDGÅ AT SE UDGE PÅ MED OPTISKE INSTRUMENTER.	
VARO!	- AVANTTAESSA OLET ALTUURIN LUKKAN 1M NÄKYYVÄÄ JA NÄKYMÄTÖNTÄ LASERSTRÄLYÄ. ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAAN SÄTEESEEN.	
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG KLASSE 1M. WENN ABDECKUNG GEÖFFNET, NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.	
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE. CLASSE 1M. EN CAS D'OUVERTURE, NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE.	
PRECAUCIÓN	- RADIACIÓN LASER VISIBLE E INVISIBLE DE CLASE 1M AL ESTAR ABIERTO. NO VEA DIRECTAMENTE CON INSTRUMENTOS ÓPTICOS.	

RQLXS0108

2.3. Service caution based on Legal restrictions

2.3.1. General description about Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

Definition of PCB Lead Free Solder being used

The letter of "PbF" is printed either foil side or components side on the PCB using the lead free solder. (See right figure)	PbF
---	-----

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
(Definition: The letter of "PbF" is printed on the PCB using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
RFKZ03D01K----- (0.3mm 100g Reel)
RFKZ06D01K----- (0.6mm 100g Reel)
RFKZ10D01K----- (1.0mm 100g Reel)

Note

* Ingredient: tin (Sn), 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

2.4. Handling Precautions for Traverse Unit

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

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

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

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

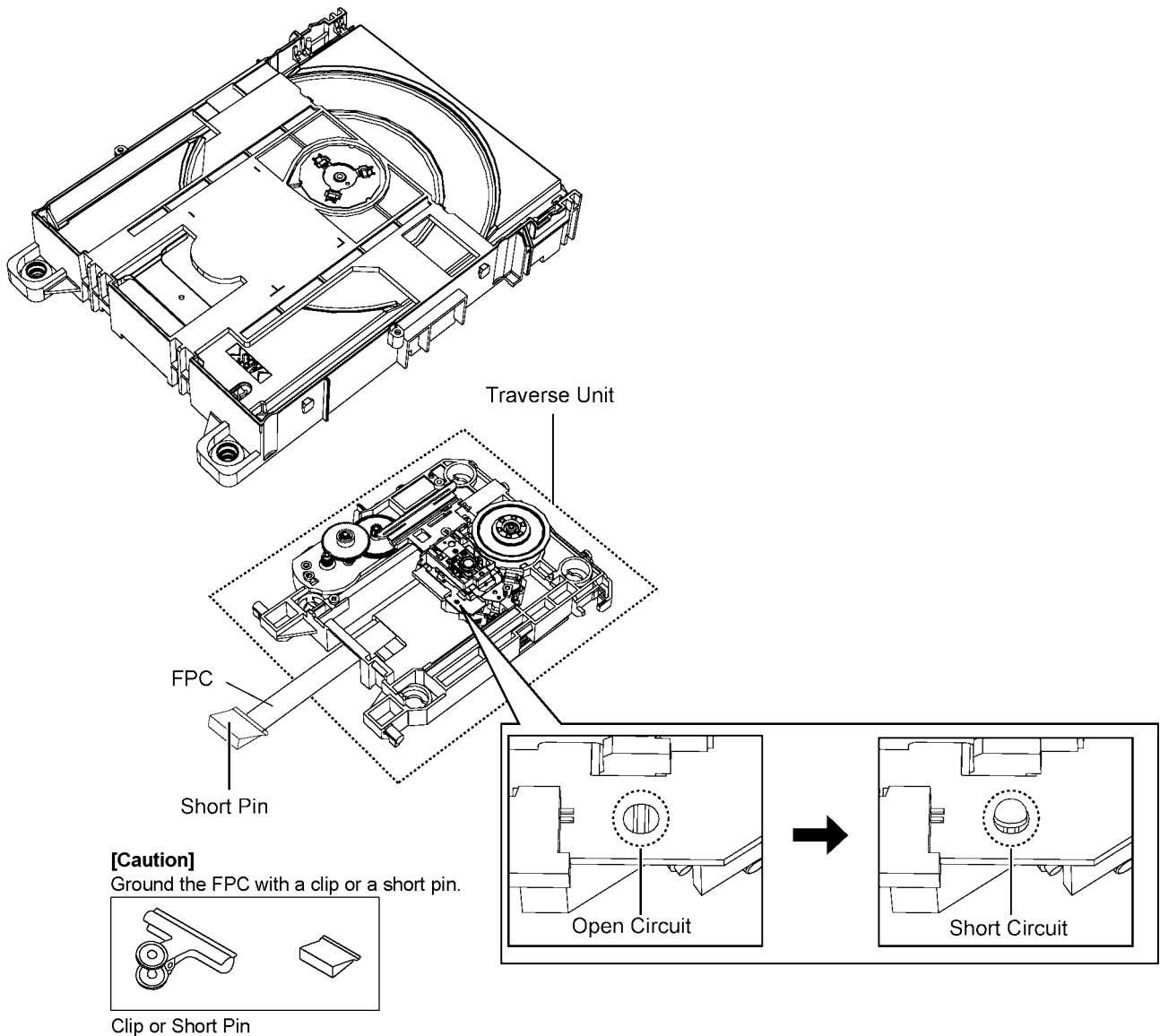


Figure A

2.4.2. Grounding for electrostatic breakdown prevention

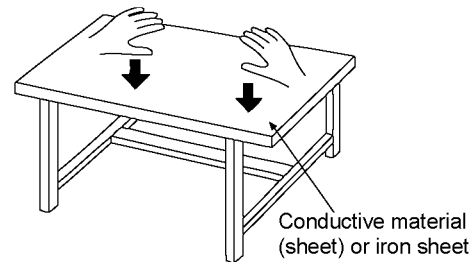
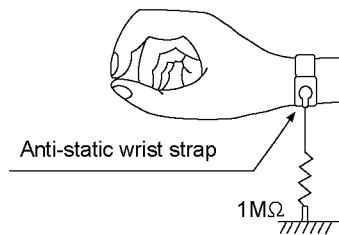
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

2.4.2.1. Worktable grounding

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

2.4.2.2. Human body grounding

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



3 Service Navigation

3.1. Service Information

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

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

- **CD Mechanism Unit (BRS11C):**

1) This model uses CD Mechanism Unit (BRS11C).

- **Micro-processor:**

1) The following components are supplied as an assembled part.
- Micro-processor IC, IC2003 (RFKWMAX34M0)

- **Speaker System:**

1) This model uses Speaker System, SB-AKX34PN-K.

4 Specifications

■ Amplifier section

RMS output power stereo mode

Front Ch (both ch driven)	190 W per channel (4Ω), 1 kHz, 10% THD
	250 W per channel (4Ω), 1 kHz, 30% THD
Total RMS stereo mode power	380 W (10% THD)
	500 W (30% THD)

PMPO Output Power	5500 W
-------------------	--------

■ Tuner, terminals section

Preset station

FM 30 stations
AM 15 stations

Frequency modulation (FM)

Frequency range	87.50 to 108.00 MHz (50 kHz step)
Antenna terminals	75 Ω (unbalanced)

Amplitude modulation (AM)

Frequency range	522 kHz to 1629 kHz (9 kHz step)
-----------------	-------------------------------------

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)
Laser power	CLASS 1

Audio output (disc)

Number of channels	2 ch (FL, FR)
FL = Front left channel	
FR = Front right channel	
*MPEG-1 Layer 3	

■ 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)

■ 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

■ General

Power consumption	77 W
Power Consumption in standby mode	0.3 W (approximate)
Power supply	AC 110 to 127/220 to 240 V, 50/60 Hz (for PH) AC 120 V, 60 Hz (for PN)
Dimensions (W x H x D)	220 mm x 334 mm x 245 mm
Mass	3 kg
Operating temperature range	0 °C to +40 °C
Operating humidity range	35% to 80% RH (no condensation)

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-AKX34PH-K

Main Unit: SA-AKX34PH-K
Front Speakers: SB-AKX34PN-K

■ System: SC-AKX34PN-K

Main Unit: SA-AKX34PN-K
Front Speakers: SB-AKX34PN-K

5 General/Introduction

5.1. Media Information

NOTE on MP3

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

Limitations on MP3 play

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

NOTE on USB

Compatible devices

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

Supported format

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

NOTE on CDs

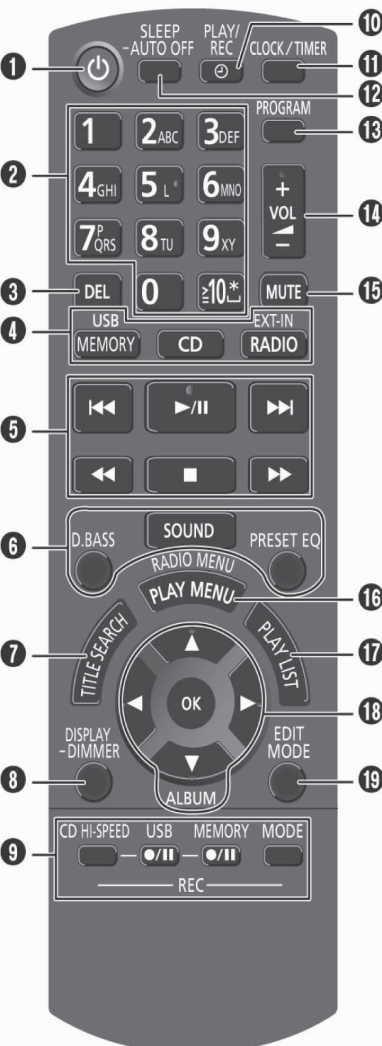
- This unit can access up to 99 tracks.
- This unit can play MP3 files and CD-DA format audio CD-R/RW that have been finalized.
- It may not be able to play some CD-R/RW due to the condition of the recording.
- Do not use irregularly shaped disc.
- Do not use disc with labels and stickers that are coming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

Note:

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

6 Location of Controls and Components

6.1. Remote Control Key Button Operation



1 Standby/on switch [⏻], [⏻/⏶]
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

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

3 Delete a programmed track
Delete a selected track in a playlist

4 Select audio source

5 Basic playback control

6 Select the sound effects

7 Start the title search for internal memory

8 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.

9 Recording operation control

10 Set the play timer and record timer

11 Set the clock and timer

12 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.

13 Set the program function

14 Adjust the volume of the system

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

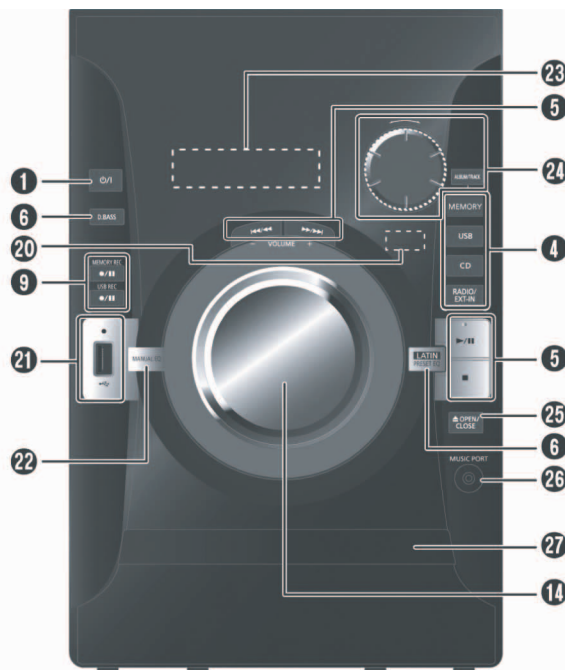
16 Set the play menu item
Set the radio menu item

17 Make playlist for internal memory

18 Select the option

19 Set the edit mode for USB or internal memory

6.2. Main Unit Key Button Operation



- 1 Standby/on switch** [⏻], [⏻/⏹]
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- 4** Select audio source
- 5** Basic playback control
- 6** Select the sound effects
- 9** Recording operation control
- 14** Adjust the volume of the system
- 20** Remote control sensor
- 21** USB port (🔌)
USB recording indicator
- 22** Select the bass, mid or treble effect
- 23** Display panel
- 24 Browse tracks or albums**
CD
Turn the knob to browse the track.
Press [▶/⏸] to start playback from the selection.
MP3
Press [ALBUM/TRACK] to select album or track and then turn the knob to browse.
Press [▶/⏸] to start playback from the selection.
- 25** Open or close the disc tray
- 26** Music port jack
- 27** Disc tray

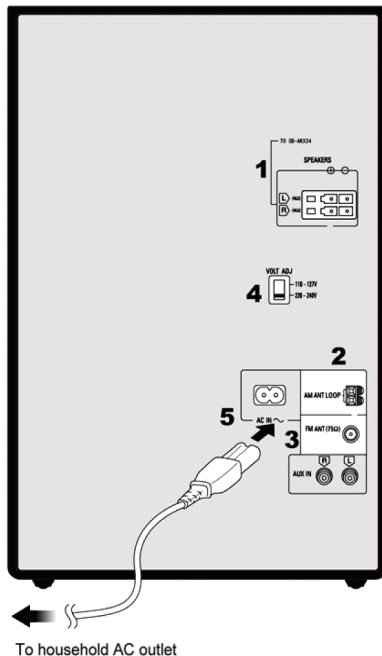
7 Installation Instructions

7.1. Speaker and A/C Connection

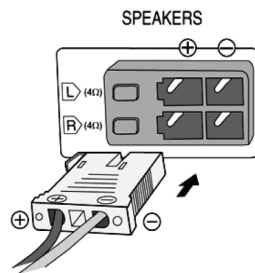
Making the connections

Conserving power

The system consumes approximately 0.3 W when it is in standby mode. Disconnect the power supply if you do not use the system.
Some settings will be lost after you disconnect the system. You have to set them again.

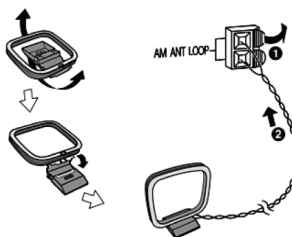


1 Connect the speakers.



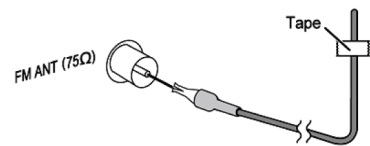
2 Connect the AM loop antenna.

Stand the antenna up on its base until it clicks.



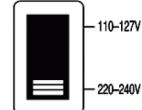
3 Connect the FM indoor antenna.

Place the antenna where reception is best.



4 Set the voltage.

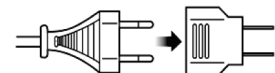
VOLT ADJ



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

5 Connect the AC power supply cord.

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



Use the supplied AC power supply cord with this system only.
Do not use an AC power supply cord from other equipment.

8 Service Mode

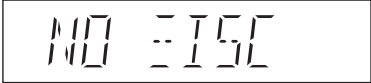
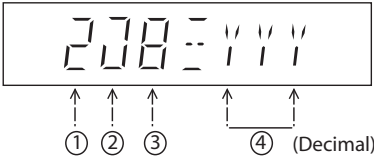
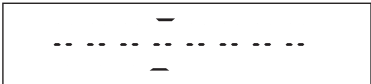
8.1. Cold-Start

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

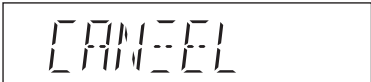
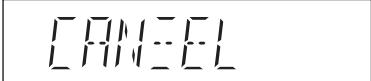
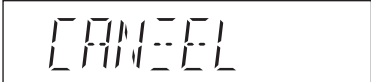
1. Unplug AC power cord
2. Press & hold [POWER] button
3. Plug AC power cord while [POWER] button being pressed
FL Display will show “-----”
4. Release [POWER] button

8.2. Doctor Mode Table

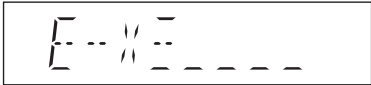
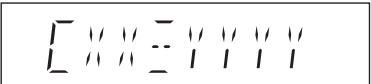
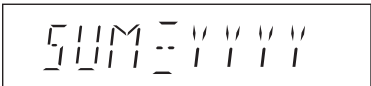
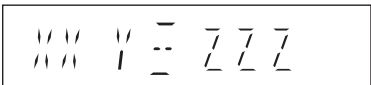
8.2.1. Doctor Mode Table 1

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

8.2.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Volume Setting Check	To check the volume setting of a main unit.	 Press [7]: VOL50 Press [8]: VOL35 Press [9]: VOL0	In Doctor Mode : 1. Press [7], [8], [9] button on remote control.
FL Display Check	To check the FL segment display All segment will light up while all LED blink at 0.5s, intervals.(if any)		In Doctor mode : 1. Press [1] button on remote control. 2. To cancel, press [0] on remote control.
BRS11C Reliability Test (Traverse)	To determine CD Mechanism BRS11C Access Inner & Outer disc operation. In this mode,ensure the CD is in the main unit. Note: Refer to Section 8.3 Fig 2. for process flow .	 The counter will increment by one . When reach 9999 will change to 0000 Cancellation Display 	In Doctor Mode : 1. Press [10]→[1]→[2] button on remote control. 2. To cancel, press [0] on remote control.
BRS11C Reliability Test (Combination)	To determine CD Mechanism Unit (BRS11C) Open/Close & Access Inner & Outer Disc Operation. In this mode,ensure the CD is in the main unit. Note: Refer to Section 8.3 Fig 3. for process flow .	 The counter will increment by one . When reach 9999 will change to 0000 Cancellation Display 	In Doctor Mode : 1. Press [10]→[1]→[5] button on remote control. 2. To cancel, press [0] on remote control.
BRS11C Reliability Test (Loading)	To determine CD Mechanism Unit (BRS11C) Open/Close operation. In this mode, the tray will open & close. Note: Refer to Section 8.3 Fig 1 for process flow .	 The counter will increment by one . When reach 9999 will change to 0000 Cancellation Display 	In Doctor Mode : 1. Press [10]→[2]→[1] button on remote control. 2. To cancel, press [0] on remote control.

8.2.3. Doctor Mode Table 3

Item		FL Display	Key Operation																																																																		
Mode Name	Description		Front Key																																																																		
CD Self- Adjustment (AJST) Result Display	i. Function: To display result of self-adjustment for CD . • This is used for servicing and analysis.	 ↑ 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/T AGC</td><td>O</td><td>-</td><td>O</td><td>O</td><td>O</td><td>X</td><td>X</td><td>X</td><td>X</td><td>-</td></tr><tr><td>AGC2</td><td>O</td><td>-</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>O</td><td>△</td></tr></table> O: OK ; X: NG (In case that time out happens.) ※ Either one of FO AOC, TR AOC and FO coarse AGC is NG . △: If the AGC is NG (ignore others).	ERROR Code Status Condition	0	1	2	4	6	8	A	C	E	F	AOC1/AOC2	O	※	O	O	O	O	O	O	O	-	ABC2/ABC1	O	-	X	O	X	O	X	O	X	-	2 nd AOC1	O	-	O	X	X	O	O	X	X	-	FAGC/T AGC	O	-	O	O	O	X	X	X	X	-	AGC2	O	-	O	O	O	O	O	O	O	△	In Doctor Mode: 1. Press [10]→[1]→[4] button on remote control . 2.To cancel, press [0] on remote control .
ERROR Code Status Condition	0	1	2	4	6	8	A	C	E	F																																																											
AOC1/AOC2	O	※	O	O	O	O	O	O	O	-																																																											
ABC2/ABC1	O	-	X	O	X	O	X	O	X	-																																																											
2 nd AOC1	O	-	O	X	X	O	O	X	X	-																																																											
FAGC/T AGC	O	-	O	O	O	X	X	X	X	-																																																											
AGC2	O	-	O	O	O	O	O	O	O	△																																																											
CD LSI Ve r s i o n Check	For checking CD LSI Version and checksum information.	 Version (Decimal) C hecksum (Hex) (Display 1)  ↑ ROM Version (Display 2)  ↑ ↑ ↑ Year Develop ROM Type Version (Decimal) after 2 sec	In Doctor Mode : 1. Press [4] button on remote control . 2.To cancel, press [0] on remote control .																																																																		

8.3. Reliability Test Mode (CD Mechanism Unit (BRS11C))

Below is the process flow chart of the aging test for the CD Mechanism Unit (BRS11C).

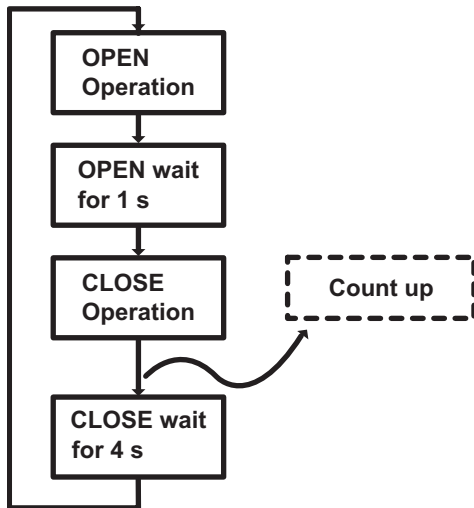


Fig. 1. Reliability Test (Loading)

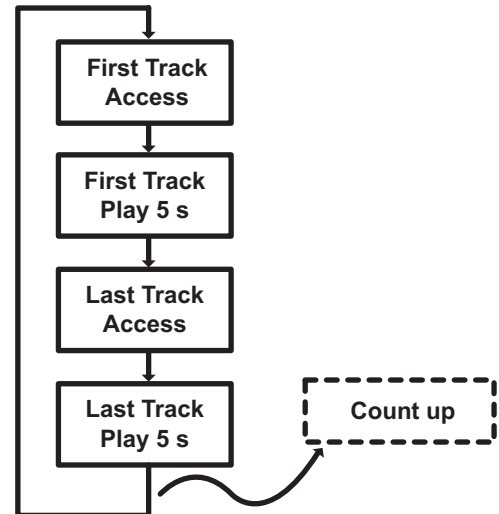


Fig. 2. Reliability Test (Traverse)

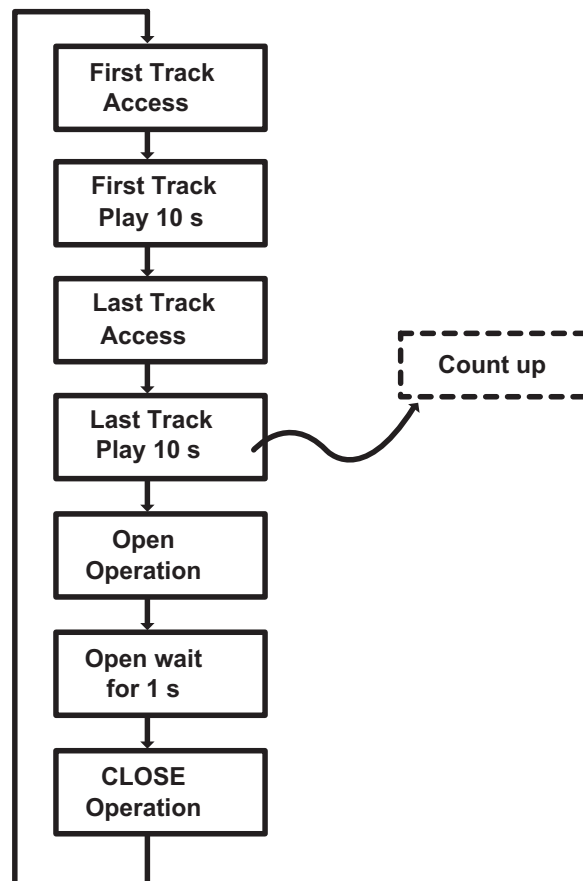


Fig. 3. Reliability Test (Combination)

8.4. Self-Diagnostic Mode

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

8.5. Self-Diagnostic Error Code Table

Self-Diagnostic Function (Refer Section 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 DCDT (NG)		
F26		Communication between CD servo LSI and micro-P abnormal (iPod, Radio, USB)		

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

Error Code	Diagnostic Contents	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 Demo Mode

Here is the procedures to enter into Sales Demonstration Lock.

Step 1: Turn on the unit.

Step 2: Select to any mode function.

Step 3: Press [▲OPEN/CLOSE] key then [▶/■] key at the same time, press and hold both [▲OPEN/CLOSE] and [▶/■] keys for 5 sec.

Step 4: The display will show upon entering into this mode for 2 sec..



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

8.6.2. Cancellation

Step 1: Turn on the unit.

Step 2: Select to any mode function.

Step 3: Press [▲OPEN/CLOSE] key then [▶/■] key at the same time, press and hold both [▲OPEN/CLOSE] and [▶/■] keys for 5 sec.

Step 4: The display will show upon entering into this mode for 2 sec..



9.1.1. SMPS P.C.B.



9.1.2. Main P.C.B. (Front side)

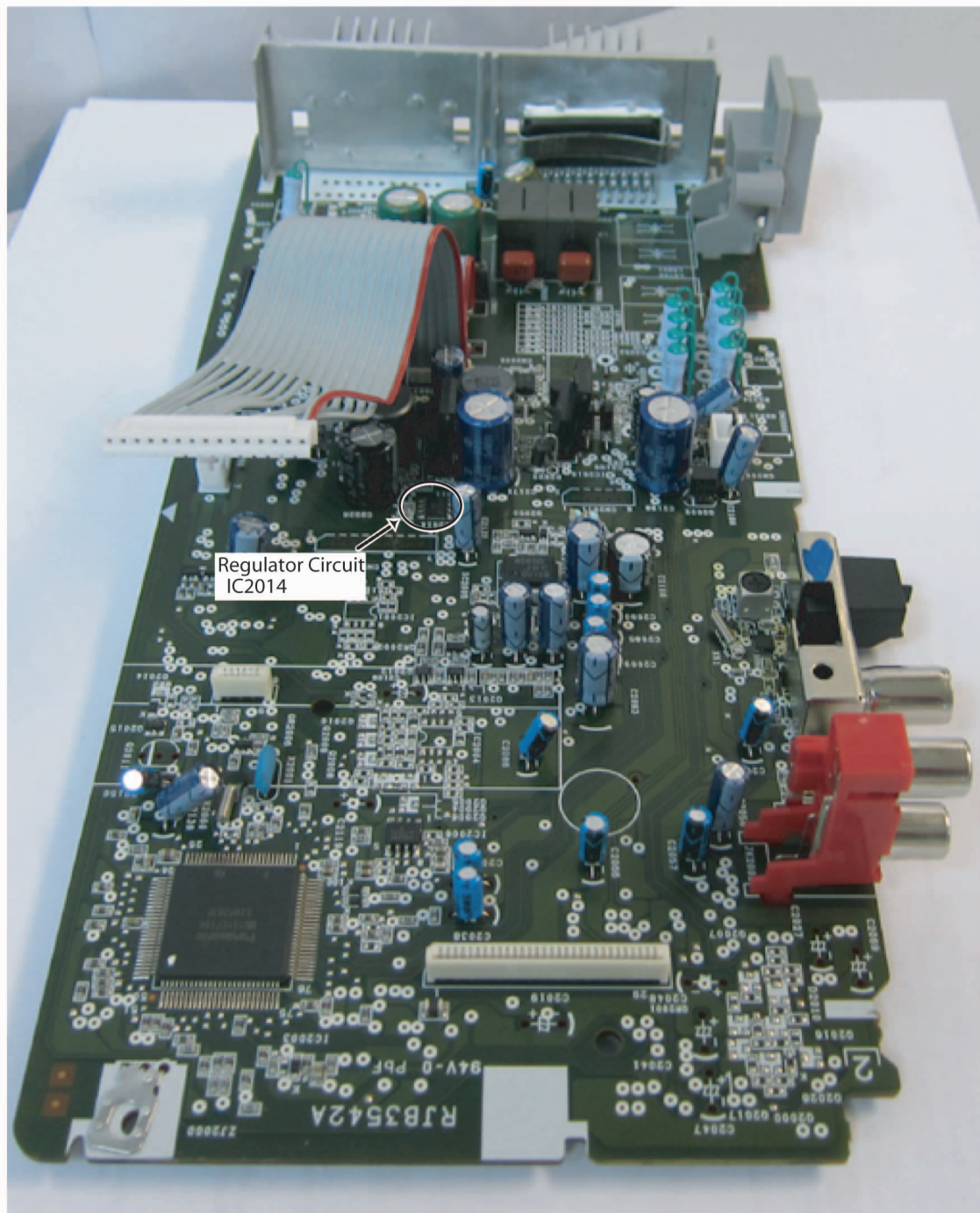


Fig. 2 Main P.C.B.

9.1.3. Main P.C.B. (Back Side)

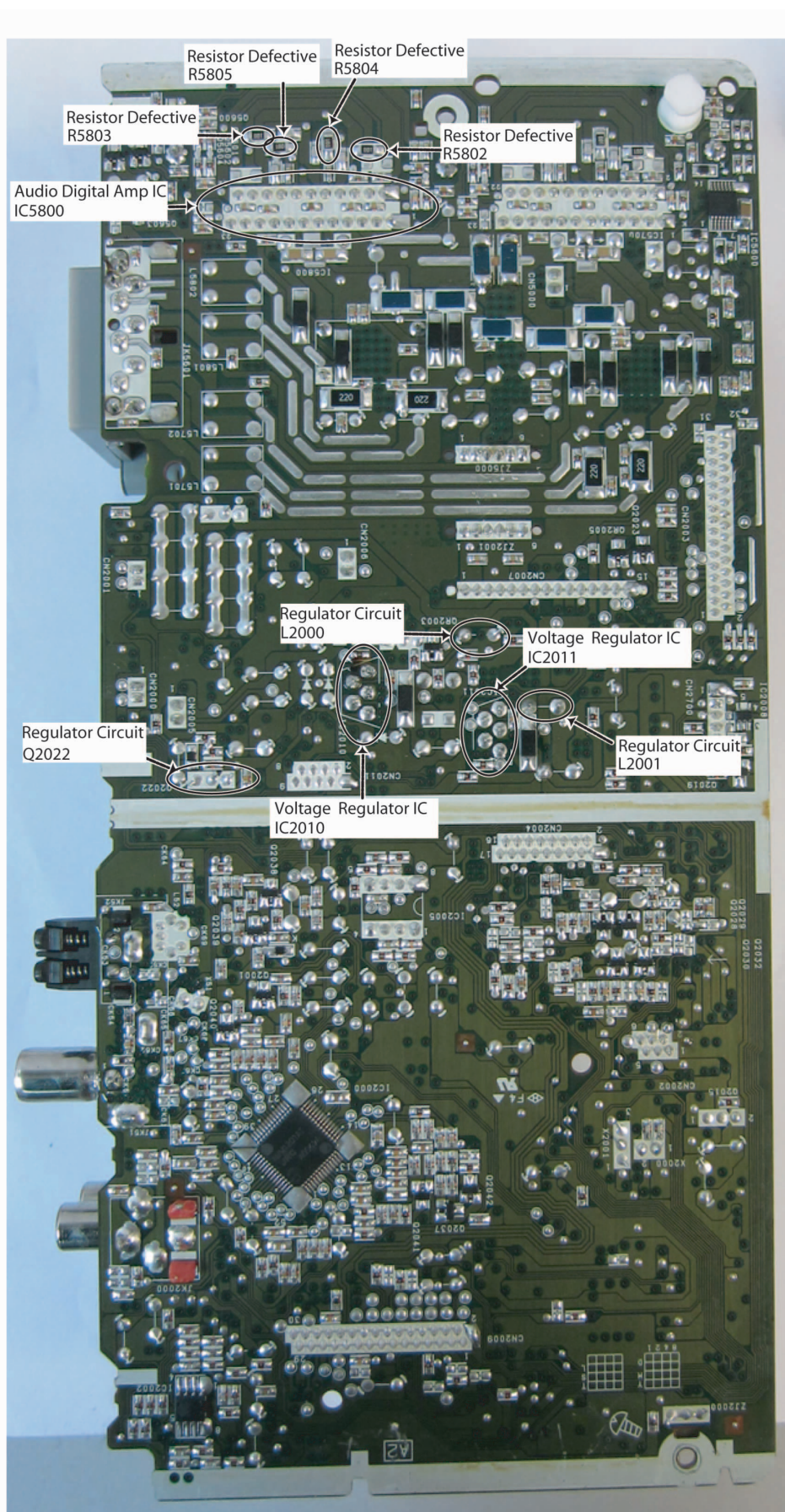


Fig. 3 Main P.C.B.

9.2. Troubleshooting Guide for F61 and/or F76

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

Symptom		Checking Items		Possible Fault(s)	Remarks
Set cannot ON	1	AC Cord	1	AC Cord Faulty, Loose connection	Refer to Section 9.1.1 Fig. 1. SMPS P.C.B.
	2	AC Inlet, P5701	2	P5701 solder crack, dry joint .	
	3	Fuse, F1	3	Fuse, F1 Open .	
	4	Photocoupler PC5702, PC5799	4	PC5702/PC5799 solder crack. Dry joint, short circuit, open circuit.	
	5	Switching Regulator IC, IC5701	5	IC5701 Faulty .	
	6	Sub Transformer (T5751)	6a	T5751 Faulty.	
			6b	Switching Mode Power Supply Control IC (IC5799) faulty.	
			6c	D5798 faulty.	
Set can ON then F61	1	Speaker Output	1	Faulty speaker unit, Loose connection, Short .	Refer to Section 9.1.2 Fig. 2. Main P.C.B.
	2	D-AMP circuit	2a	D-AMP IC, IC5800 defective. (Check DC voltage at speaker terminals, 3V and above defective)	
			2b	DC Voltage ok but no sound, check DC Voltage at Pin 1. 5V ok condition, 2.5V or 0V defective.	
			2c	2a, 2b ok but no sound, check PWM waveform at Pin 10 and Pin 14 . If no PWM, 4 resistors defective (R5802, R5803, R5804, R5805).	
Set can ON then F76	1	Main Transformer T5701	1a	Short circuit between Pin 11 and Pin 12 .	Refer to Section 9.1.1 Fig. 1. SMPS P.C.B.
			1b	Short circuit between Pin 13 and Pin 14 .	
			1c	Short circuit between Pin 16 and Pin 17 .	
	2	Regulator Circuits	2a	IC2010 faulty (No +9V output).	Refer to Section 9.1.2 Fig. 2. and Fig.3. Main P.C.B.
			2b	L2000 Open.	
			2c	Q2022 faulty (No +5V output).	
			2d	IC2014 faulty (No +3.3V output).	
			2e	IC2011 faulty (No +5V output).	
			2f	L2001 Open.	
	3	Photocoupler PC5720	3	PC5720 solder crack, Dry joint, short circuit, open circuit.	Refer to Section 9.1.1 Fig. 1. SMPS P.C.B.
Set can ON working normally for some time then F76	1	Rectifier Diode D5801	1a	Improper contact between D5801 to Heatsink .	Refer to Section 9.1.1 Fig. 1. SMPS P.C.B.
		Rectifier Diode D5802		Improper contact between D5802 to Heatsink .	
	2	Thermistor TH5860, TH5861	1b	Set trigger temperature protection .	

9.3. D-Amp IC Operation & Control

D-AMP IC Operation & Control

- 1) D-AMP IC (C1AB0000497) was used for this model (AKX34).
- 2) Three control pins (signal send from micro-processor IC) were used to control the D-AMP IC operation such as muting, standby and normal operation. They are described as below: -

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

Table 1: Digital AMP Pin Control.

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

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

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

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

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

Table 2: Digital AMP IC Mode Status.

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

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

For 9 KHz Step

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

Table 3: F_HOP Control during 9 kHz Step

For 10 KHz Step

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

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

Table 4: F HOP Control during 10 kHz Step

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

10 Service Fixture & Tools

Prepare service tools before process service position.

Ref. No	Service Tools		Remarks
SFT1	Main P.C.B. (CN2007) - SMPS P.C.B. (CN5802)	REX1527(15P Cable Wire)	

11 Disassembly and Assembly Instructions

- Illustration is based on SA-AKX34PH-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.
- Disassembly of Memory LED P.C.B.
- Disassembly of Remote Sensor P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of Music Port P.C.B.
- Disassembly of CD Lid
- Disassembly of Main P.C.B.
- Replacement of Voltage Regulator (IC2010)
- Replacement of Voltage Regulator (IC2011)
- Replacement of Audio Digital Amp IC (IC5800)
- Disassembly of SMPS P.C.B.
- Replacement of Switching Regulator IC (IC5701)
- Replacement of Rectifier Diode (D5702)
- Replacement of Rectifier Diode (D5801)
- Replacement of Rectifier Diode (D5802)
- Replacement of Rectifier Diode (D5803)
- Disassembly of CD Mechanism Unit (BRS11C)
- Disassembly of CD Interface P.C.B.
- Disassembly of CD Servo P.C.B.
- Disassembly of Rear Panel
- Disassembly of Voltage Selector P.C.B.

CAUTION NOTE:

Please use original screw and at correct locations.

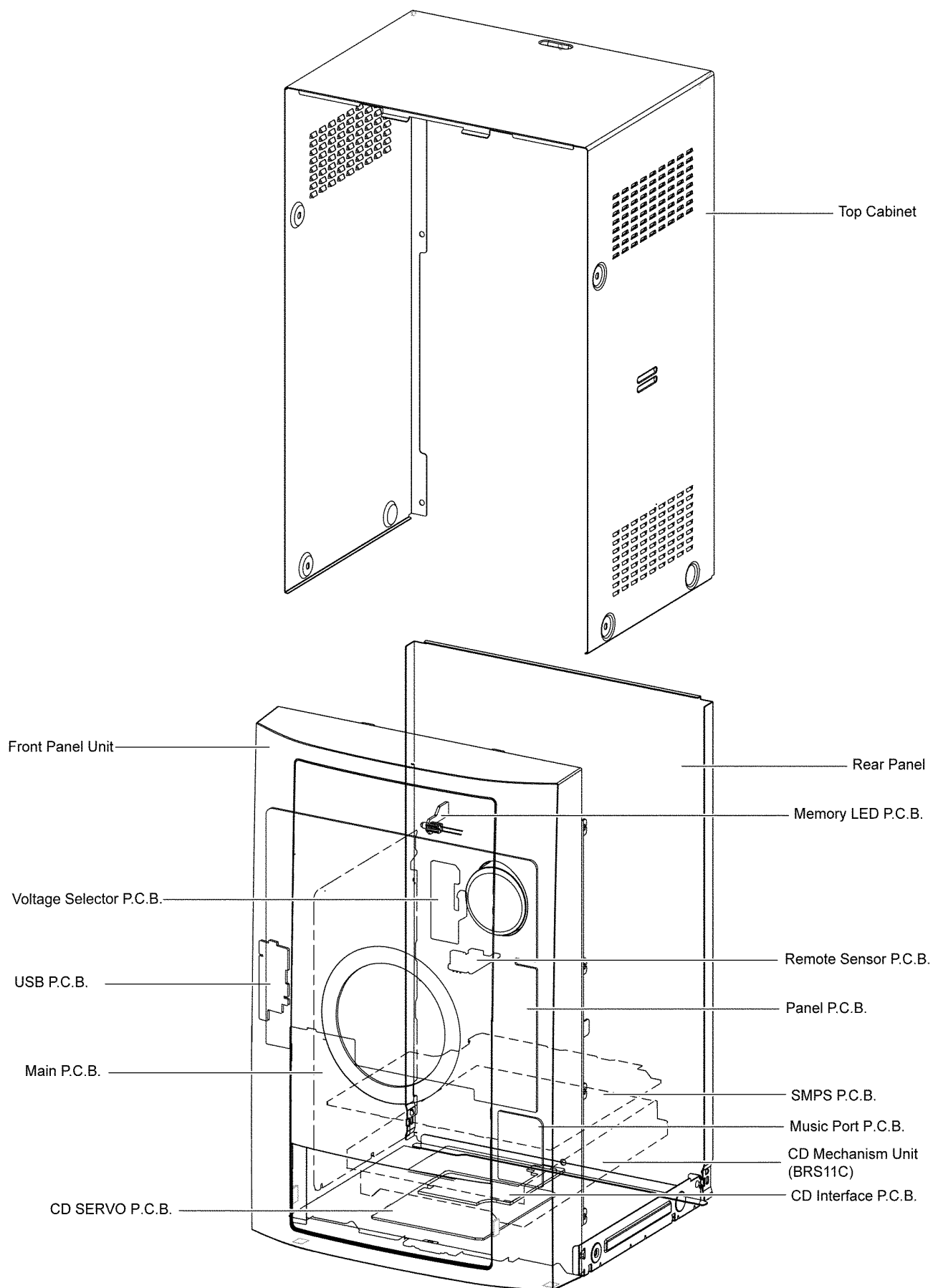
Below shown is part no. of different screw types used:

- | | |
|------------------------|-----------------------|
| a :RHD30007-K2J | e :XTB3+10JFJ |
| b :RHD30119-S | f :RHDX30005-J |
| c :RHD26046-L | g :RHDX031008 |
| d :RHD30111-31 | h :XTN2+6GFJ |

11.1. Disassembly Flow Chart



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

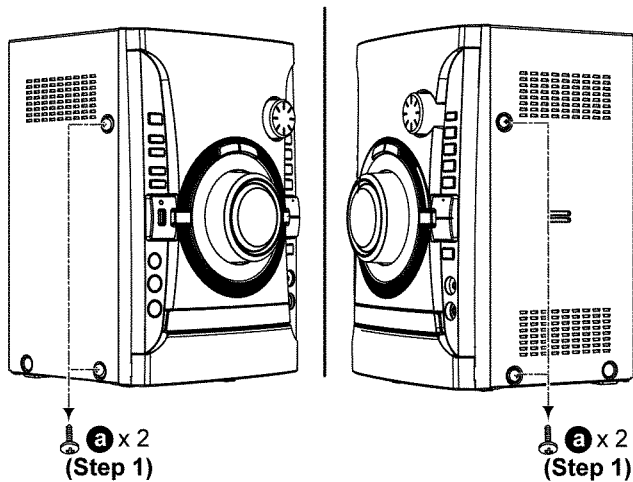


11.3. Disassembly of Top Cabinet

Step 1 Remove 2 screws on each side.

(Left View)

(Right View)

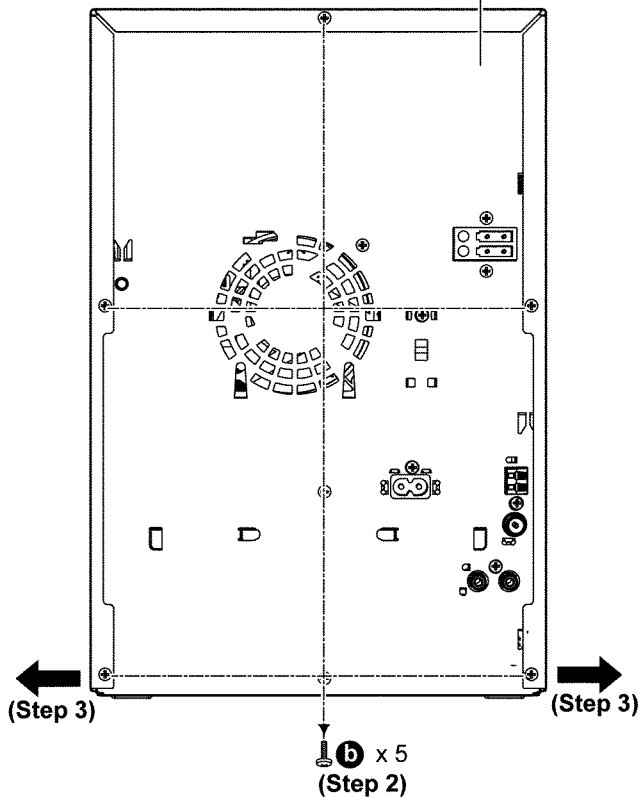


Step 2 Remove 5 screws.

Step 3 Slightly pull both side of the Top Cabinet outwards as arrow shown.

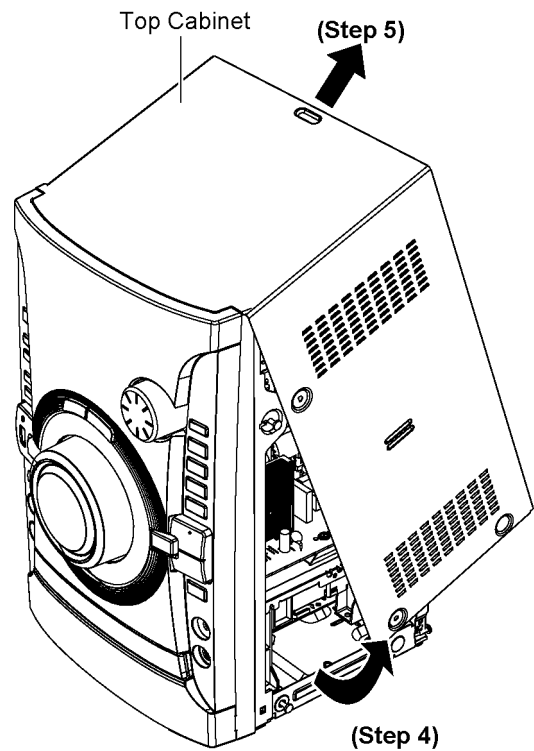
(Back View)

Rear Panel

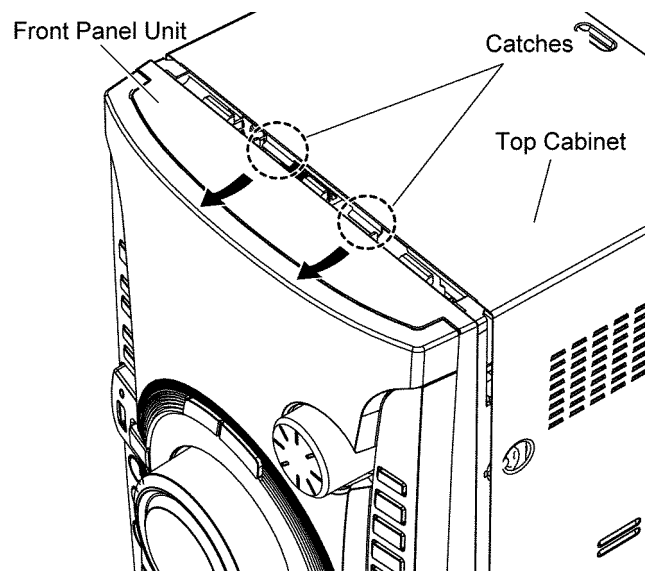


Step 4 Slightly lift up both side of the Top Cabinet in an outward direction as shown.

Step 5 Remove the Top Cabinet.



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

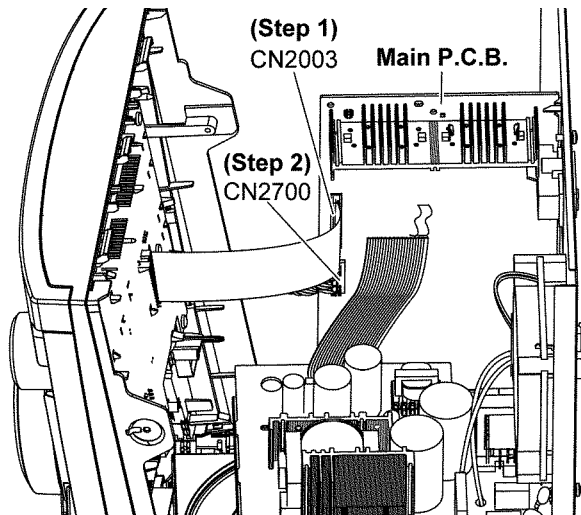


11.4. Disassembly of Front Panel Unit

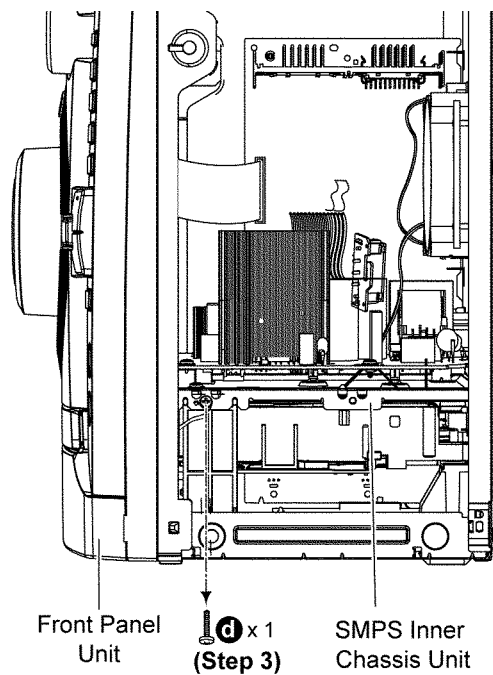
• Refer to “Disassembly of Top Cabinet”.

Step 1 Detach 27P FFC at the connector (CN2003) on the Main P.C.B.

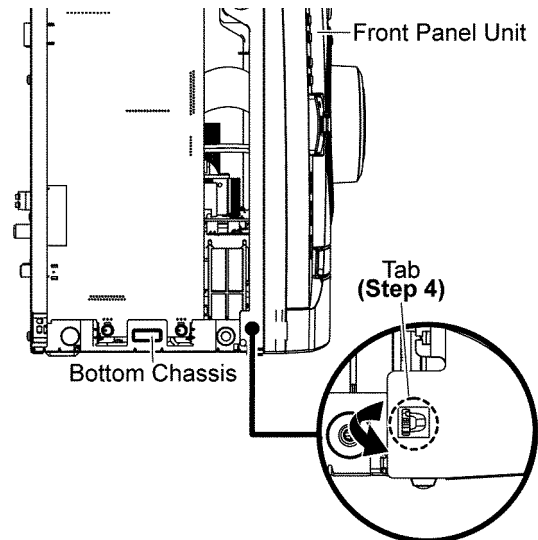
Step 2 Detach 5P Cable Wire at the connector (CN2700) on the Main P.C.B.



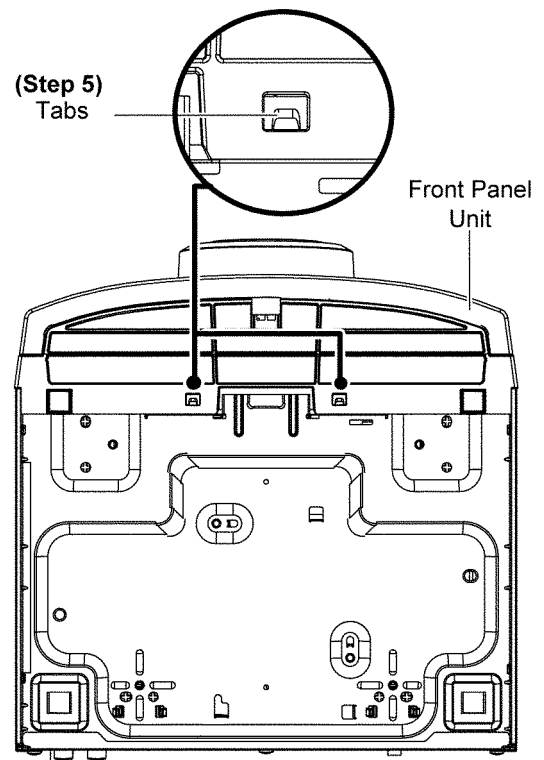
Step 3 Remove 1 screw at the SMPS Inner Chassis Unit.



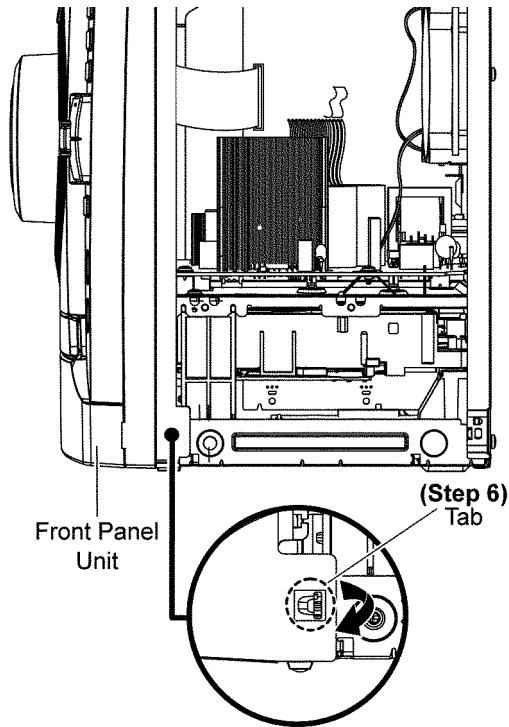
Step 4 Push inwards slightly at the Bottom Chassis as arrow shown and release tab at left side of Front Panel Unit.



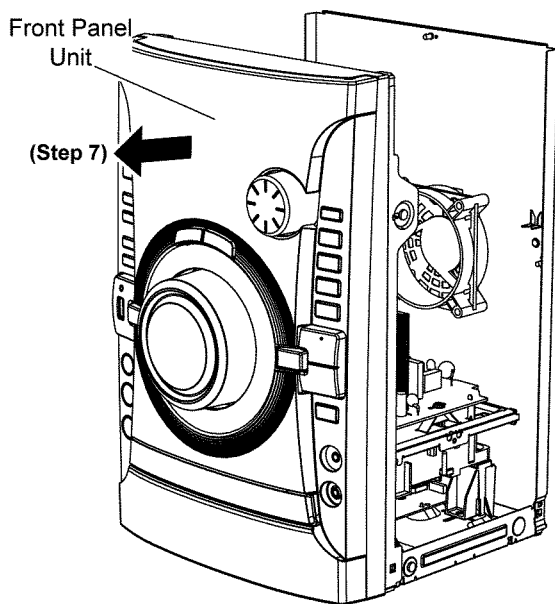
Step 5 Release tabs at bottom of the unit.



Step 6 Push inwards slightly at the Bottom Chassis and release tab at right side of Front Panel Unit.



Step 7 Remove the Front Panel Unit

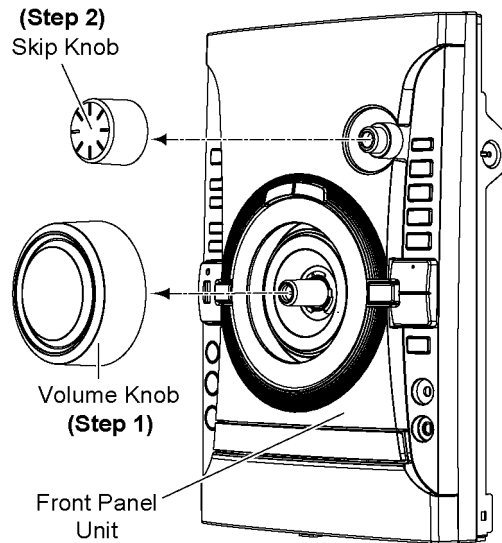


11.5. Disassembly of Panel P.C.B.

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

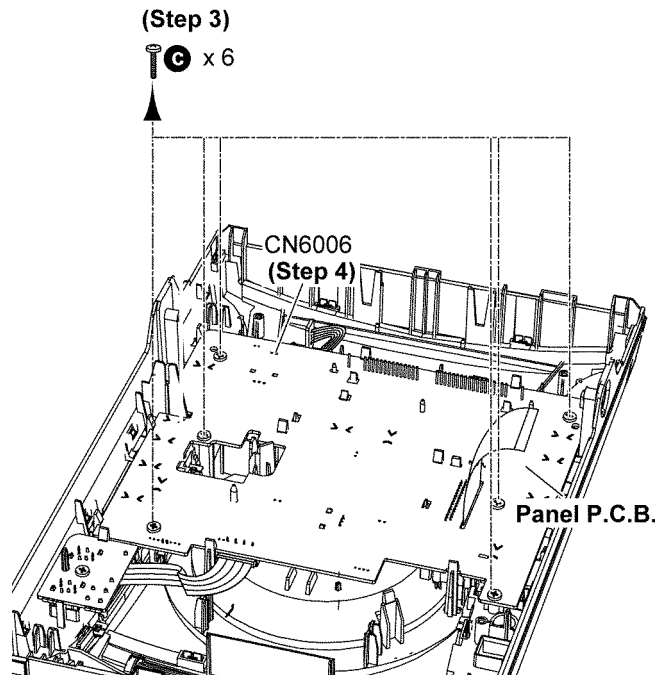
Step 1 Remove the Volume Knob.

Step 2 Remove the Skip Knob.

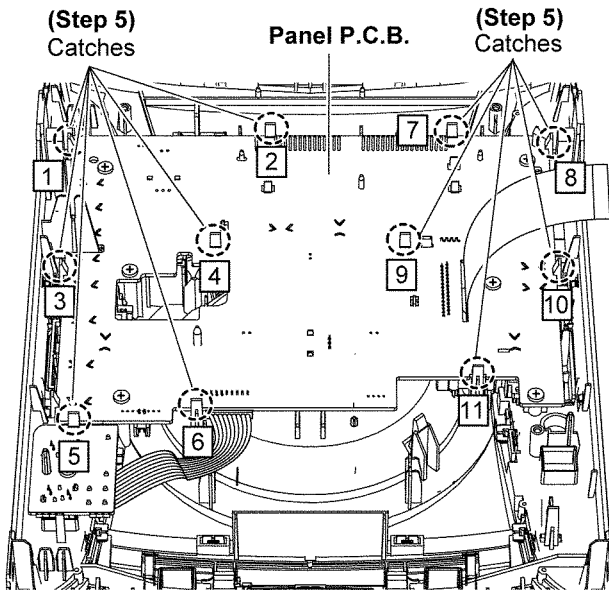


Step 3 Remove 6 screws.

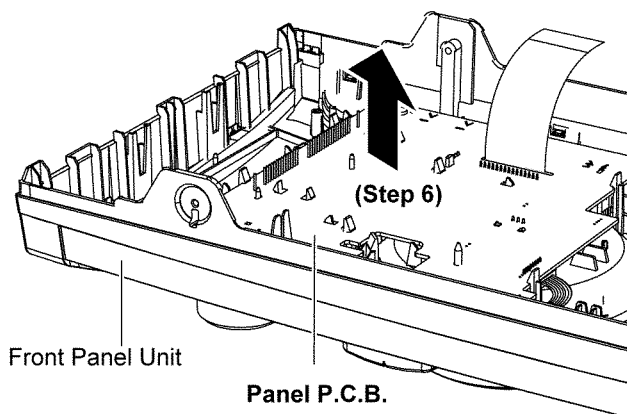
Step 4 Detach 2P Cable Wire at the connector (CN6006) on Panel P.C.B..



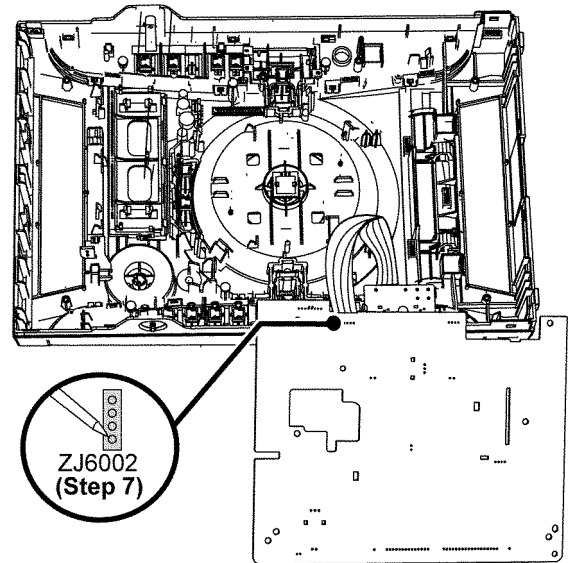
Step 5 Release catches by following the sequences (1-11).



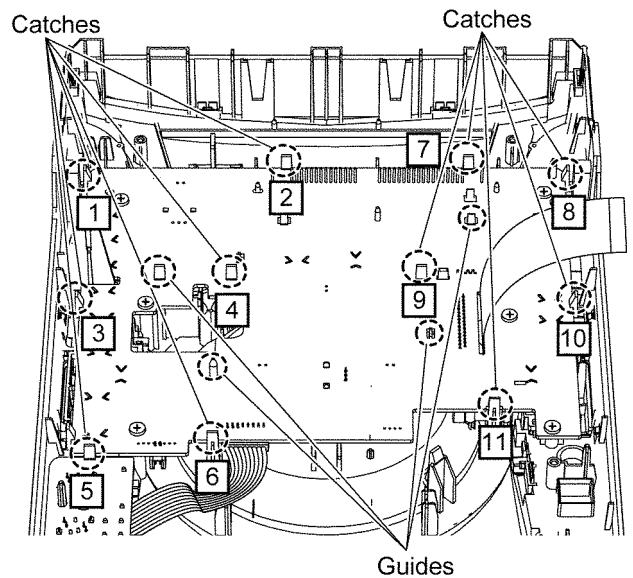
Step 6 Lift up to remove the Panel P.C.B..



Step 7 Desolder 4P Cable Wire at the connector (ZJ6002) on Panel P.C.B..



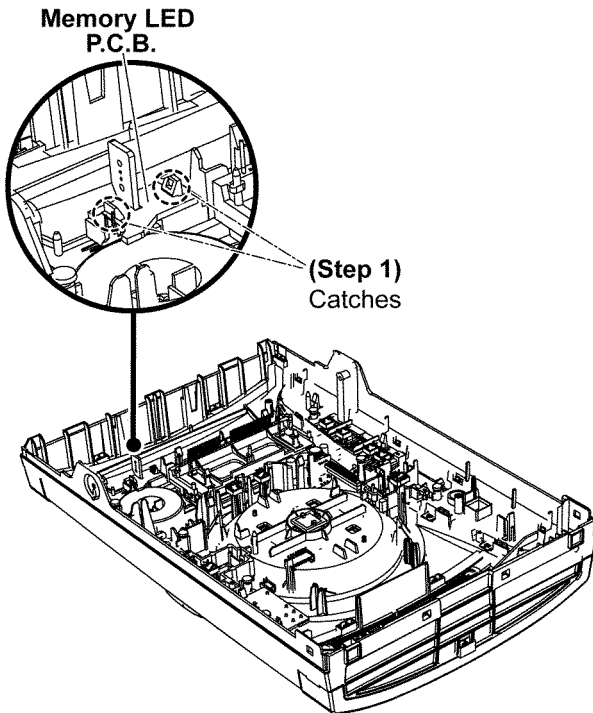
Caution: During assembling, ensure that Panel P.C.B. is seated properly through the guides & fully caught.



11.6. Disassembly of Memory LED P.C.B.

- Refer to "Disassembly of Top Cabinet".
- Refer to "Disassembly of Front Panel Unit".
- Refer to "Disassembly of Panel P.C.B.".

Step 1 Release 2 catches.

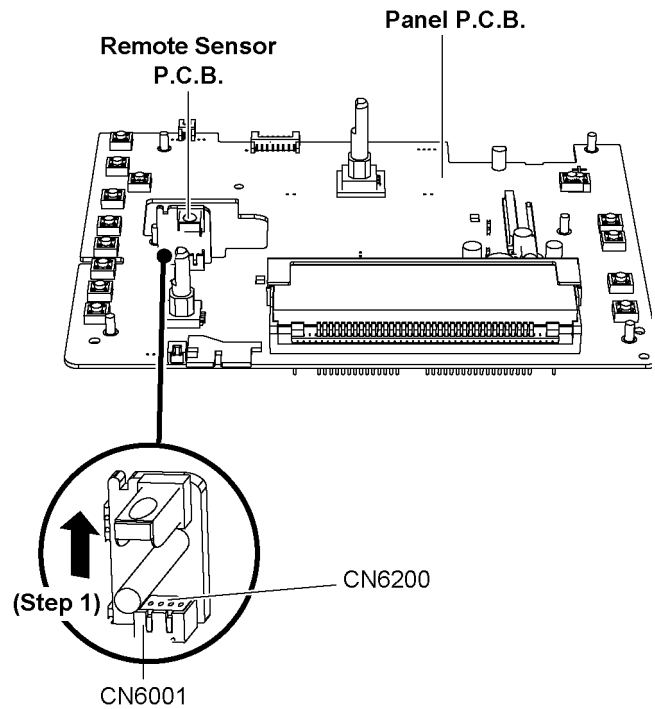


11.7. Disassembly of Remote Sensor P.C.B.

- Refer to "Disassembly of Top Cabinet".
- Refer to "Disassembly of Front Panel Unit".
- Refer to "Disassembly of Panel P.C.B.".

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

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

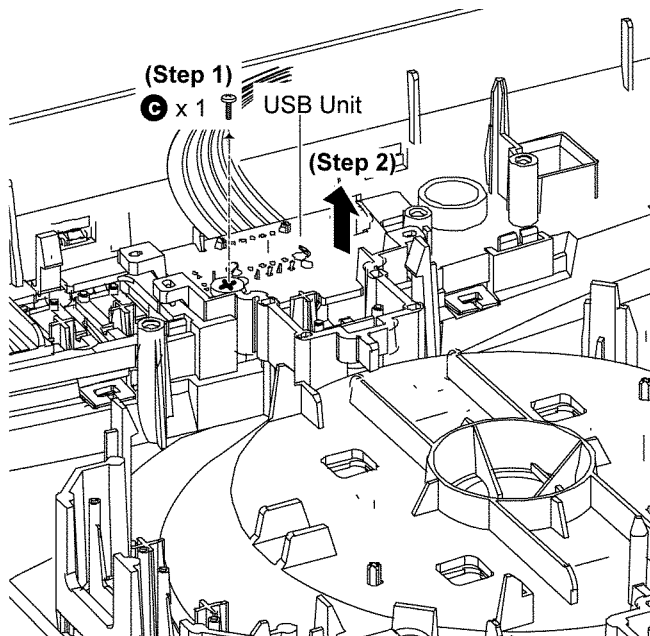


11.8. Disassembly of USB P.C.B.

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

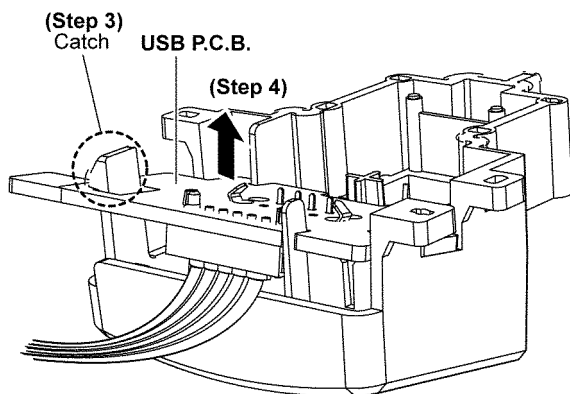
Step 1 Remove 1 screw.

Step 2 Remove the USB Unit.



Step 3 Release 1 catch.

Step 4 Remove the USB P.C.B..



11.9. Disassembly of Music Port P.C.B.

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

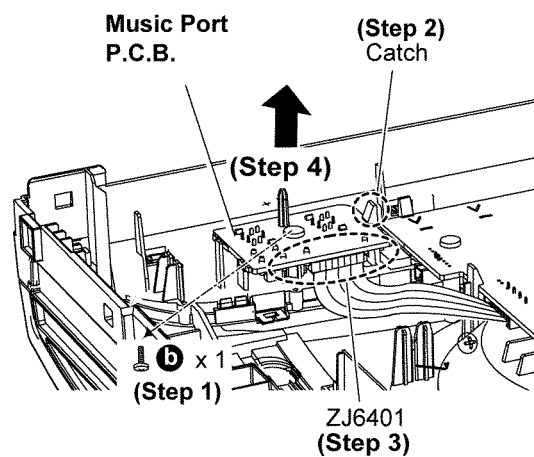
Step 1 Remove 1 screw.

Step 2 Release 1 catch.

Step 3 Desolder 8P Cable Wire at ZJ6401 on Panel P.C.B..

Step 4 Remove the Music Port P.C.B..

Caution: During assembling, ensure that Music Port P.C.B. is properly located & fully caught onto Front Panel.

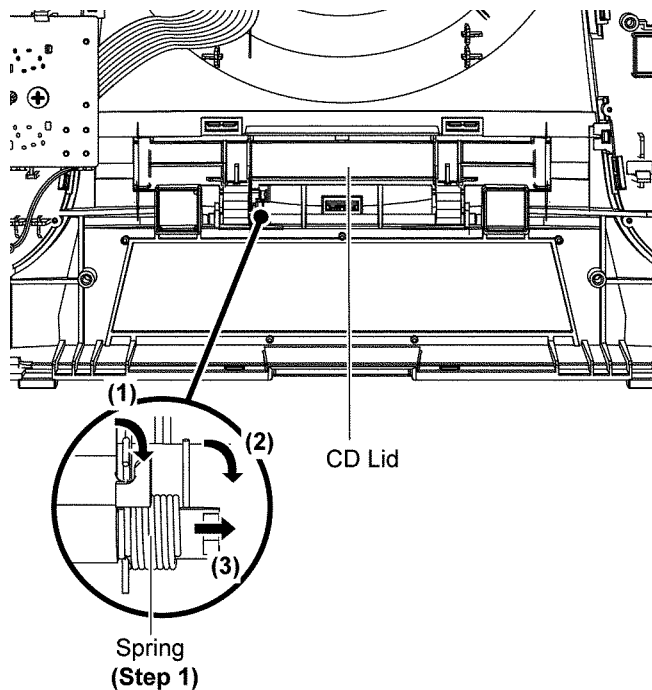


11.10. Disassembly of CD Lid

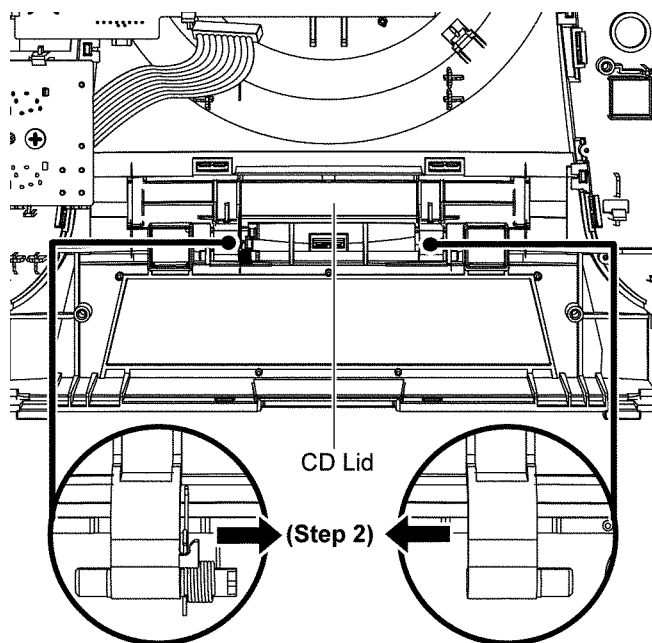
- Refer to "Disassembly of Top Cabinet".
- Refer to "Disassembly of Front Panel Unit".

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

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



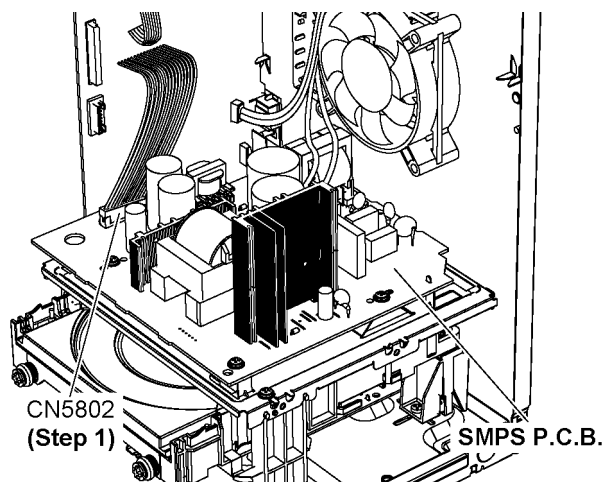
Step 2 Remove the CD Lid as arrow shown.



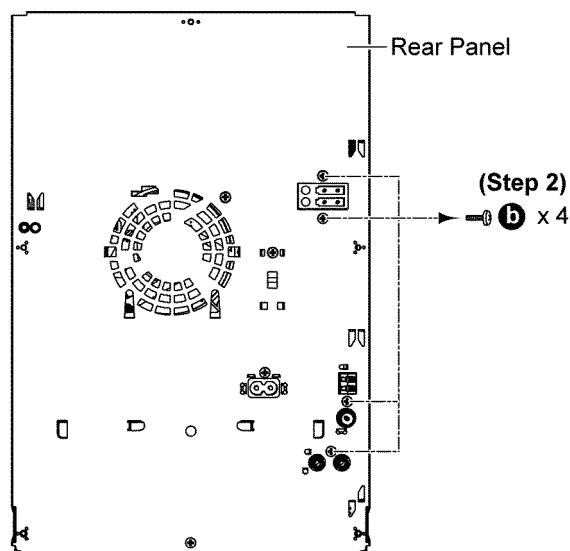
11.11. Disassembly of Main P.C.B.

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

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

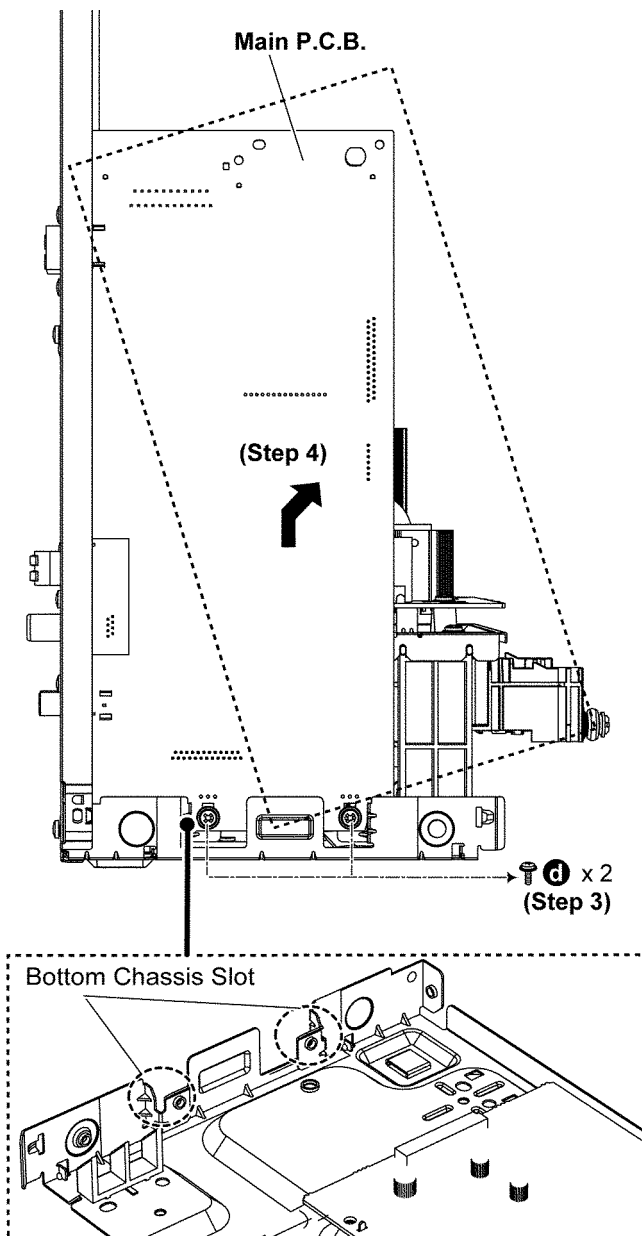


Step 2 Remove 4 screws.

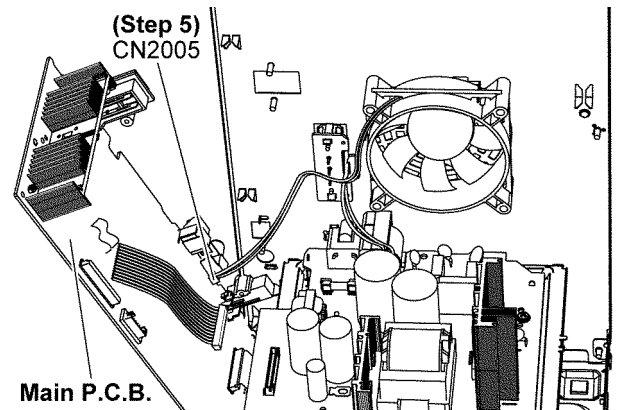


Step 3 Remove 2 screws.

Step 4 Slightly lift up the Main P.C.B. from Bottom Chassis slot according to arrow shown.

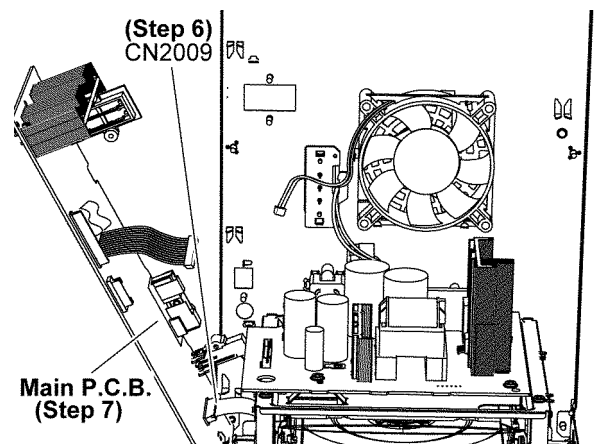


Step 5 Detach 2P Wire at the connector (CN2005) on the Main P.C.B..

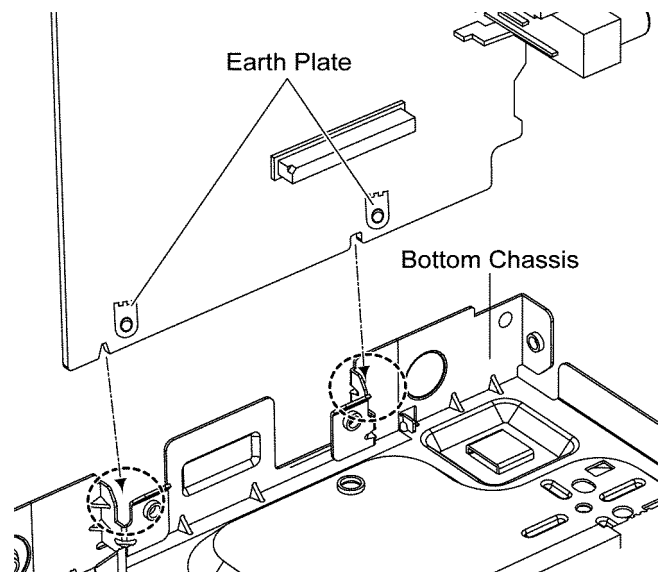


Step 6 Detach 30P FFC at the connector (CN2009) on Main P.C.B..

Step 7 Remove Main P.C.B..



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

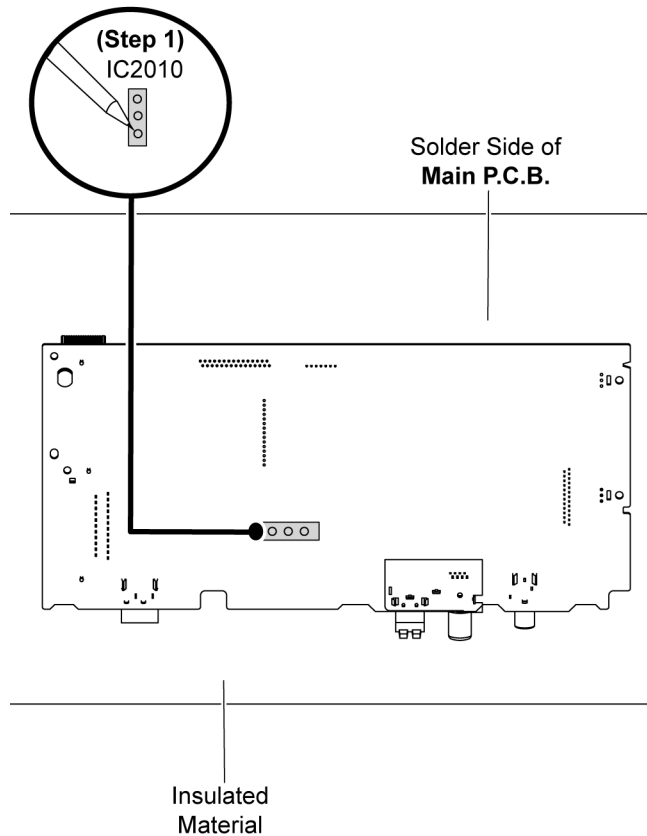


11.12. Replacement of Voltage Regulator IC (IC2010)

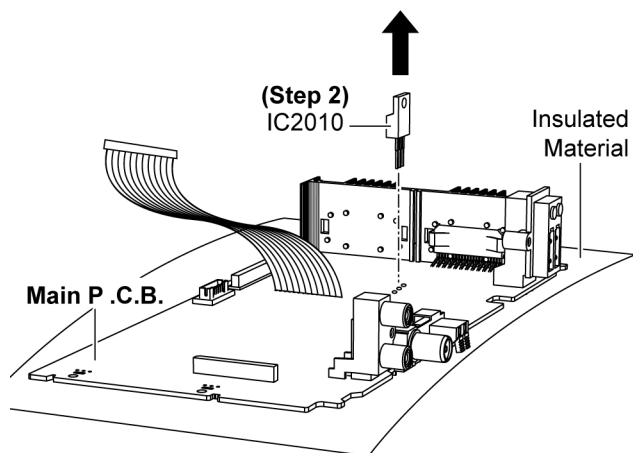
- Refer to “Disassembly of Main P.C.B.”.

11.12.1. Disassembly of Voltage Regulator IC (IC2010)

Step 1 Desolder pins of the Voltage Regulator IC (IC2010) on the solder side of the Main P.C.B..



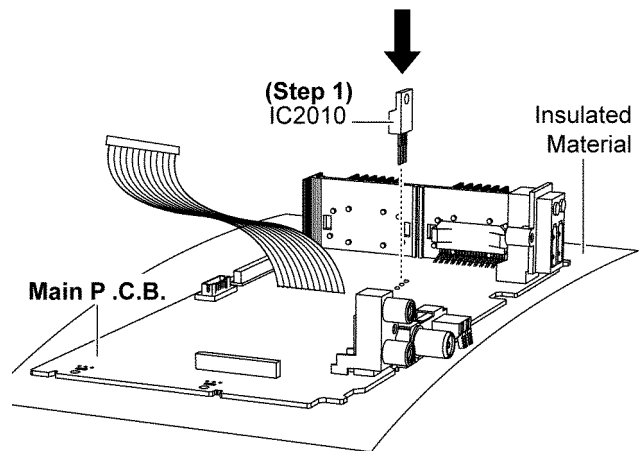
Step 2 Remove the Voltage Regulator IC (IC2010) from the Main P.C.B..



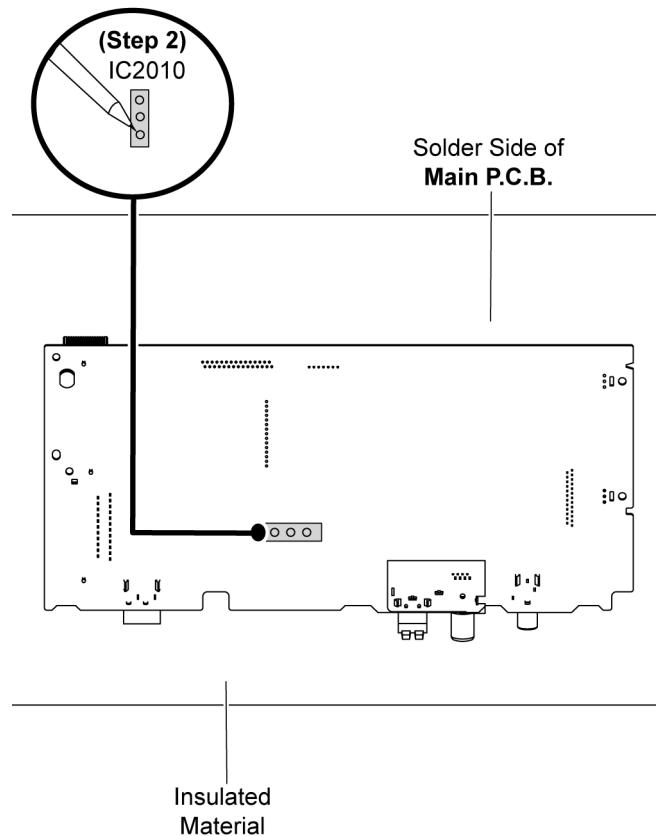
11.12.2. Assembly of Voltage Regulator IC (IC2010)

Step 1 Fix the Voltage Regulator IC (IC2010) on Main P.C.B..

Caution: Ensure pins of the Voltage Regulator IC (IC2010) are properly seated on Main P.C.B..



Step 2 Solder pins of the Voltage Regulator IC (IC2010) on the solder side of Main P.C.B..

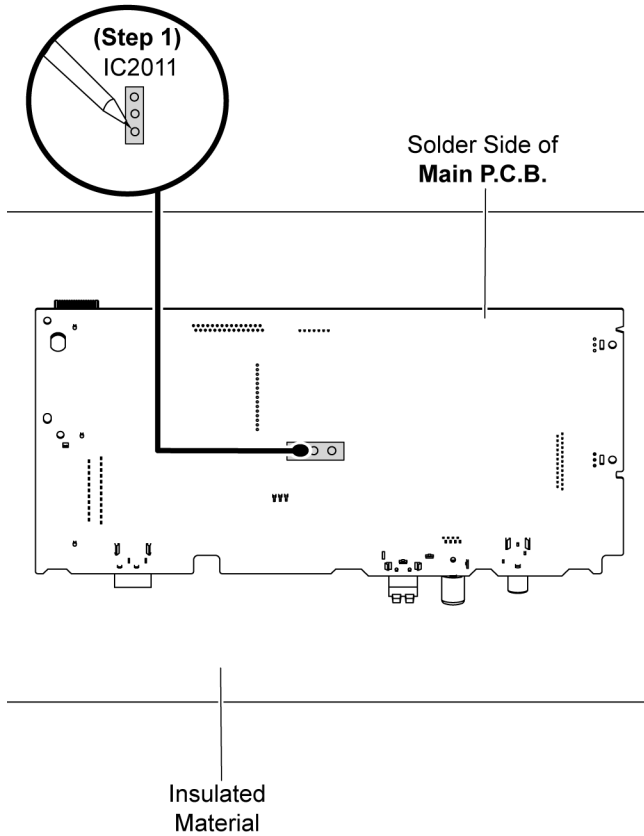


11.13. Replacement of Voltage Regulator IC (IC2011)

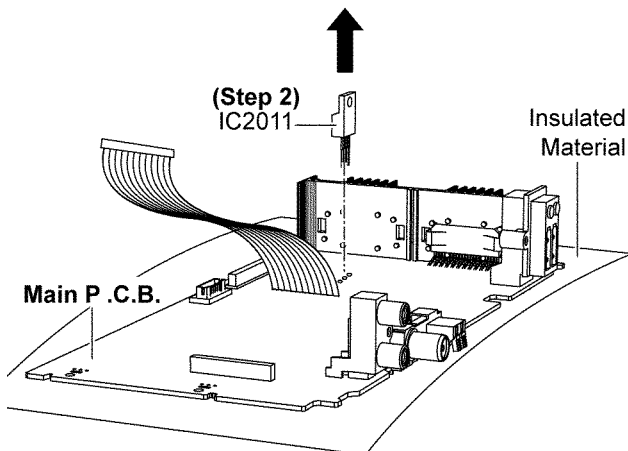
• Refer to “Disassembly of Main P.C.B.”.

11.13.1. Disassembly of Voltage Regulator IC (IC2011)

Step 1 Desolder pins of the Voltage Regulator IC (IC2011) on the solder side of the Main P.C.B..



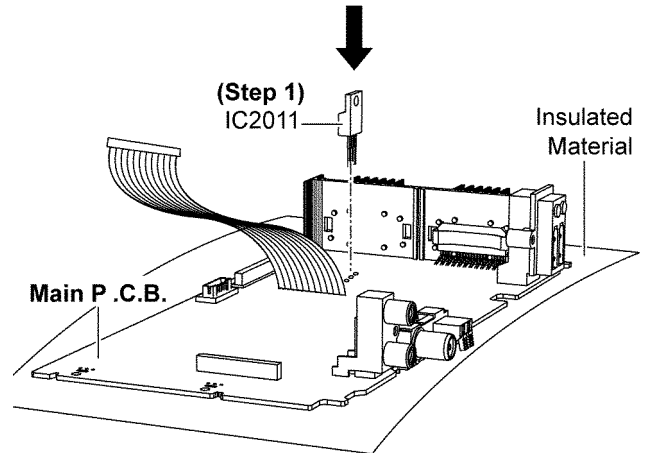
Step 2 Remove the Voltage Regulator IC (IC2011) from the Main P.C.B..



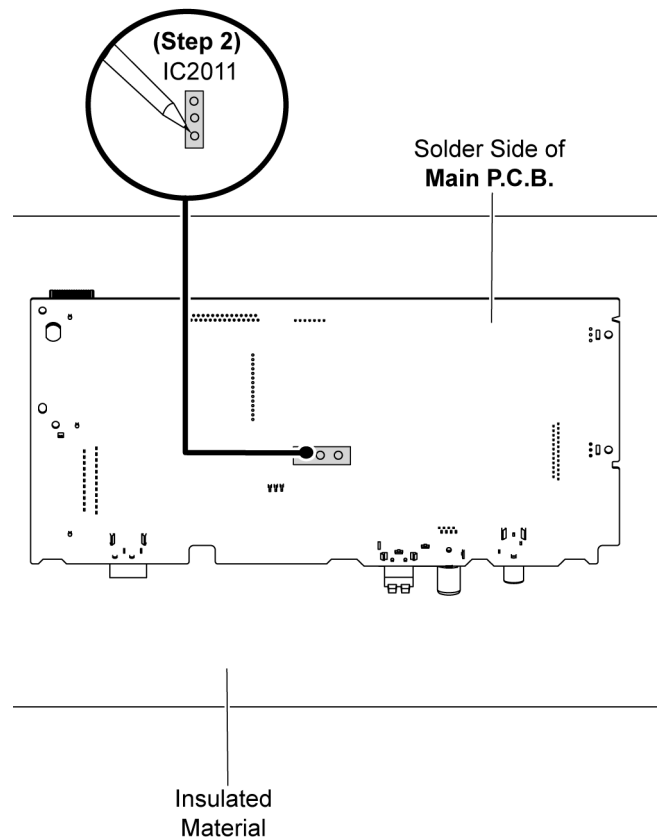
11.13.2. Assembly of Voltage Regulator IC (IC2011)

Step 1 Fix the Voltage Regulator IC (IC2011) on the Main P.C.B..

Caution: Ensure pins of the Voltage Regulator IC (IC2011) are properly seated on the Main P.C.B..



Step 2 Solder pins of the Voltage Regulator IC (IC2011) on the solder side of the Main P.C.B..

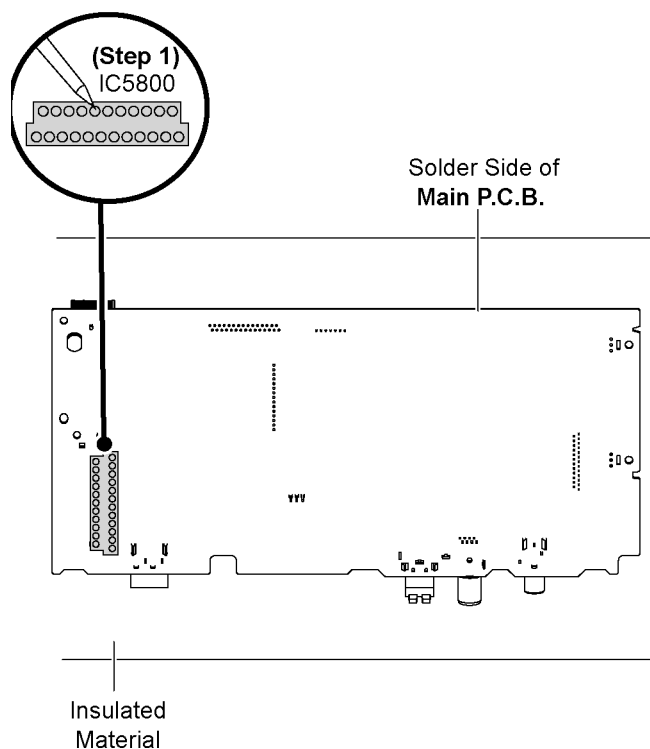


11.14. Replacement of Audio Digital Amp IC (IC5800)

• Refer to “Disassembly of Main P.C.B.”.

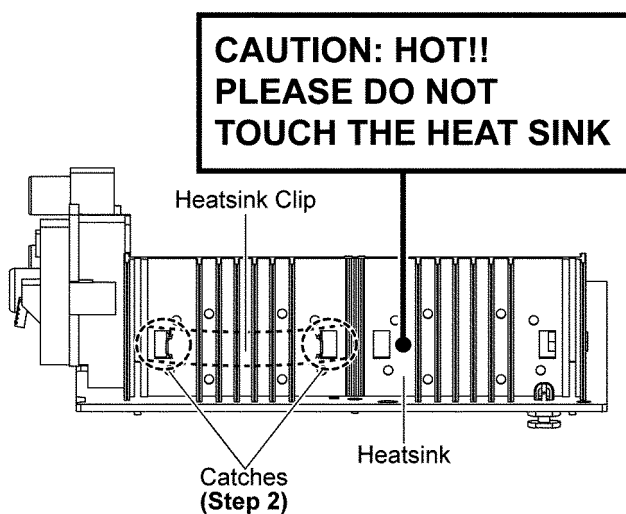
11.14.1. Disassembly of Audio Digital Amp IC (IC5800)

Step 1 Desolder pins of the Audio Digital Amp IC (IC5800) on the solder side of the Main P.C.B..



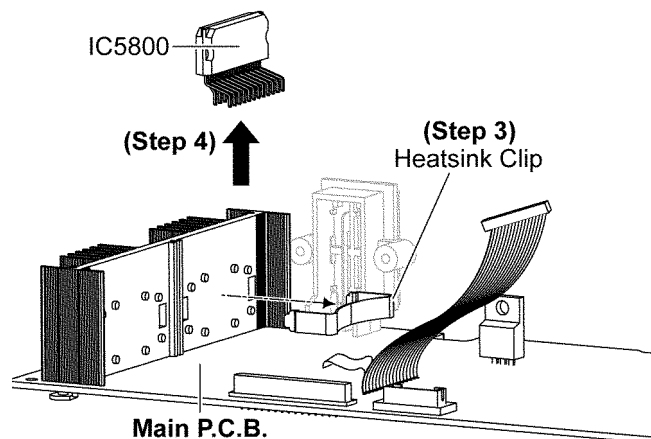
Step 2 Release 2 catches of Heatsink Clip.

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



Step 3 Remove the Heatsink Clip.

Step 4 Remove the Audio Digital Amp IC (IC5800).



11.14.2. Assembly of Audio Digital Amp IC (IC5800)

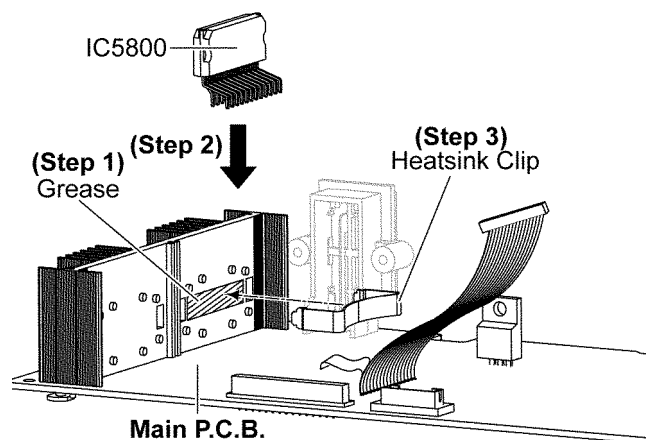
Step 1 Apply grease to the Heatsink.

Step 2 Fix the Audio Digital Amp IC (IC5800) on the Main P.C.B.

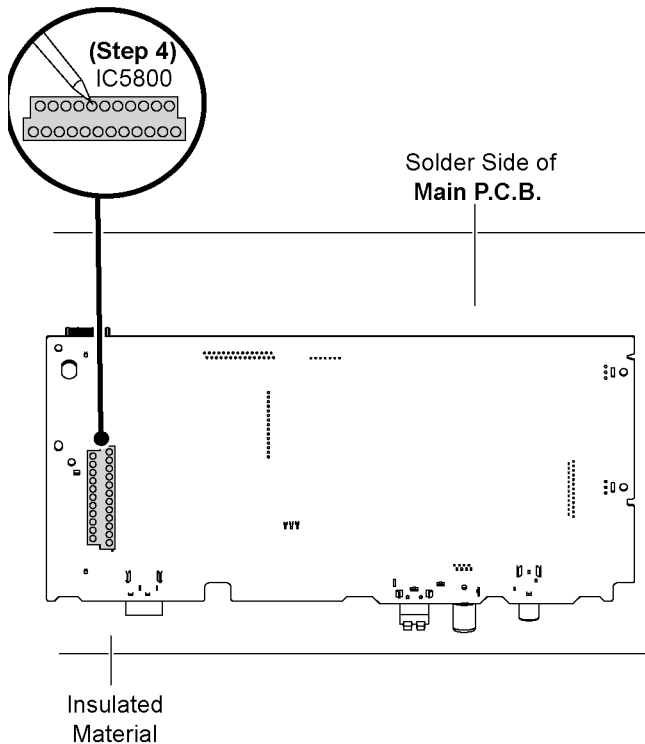
Caution: Ensure pins of the Audio Digital Amp IC (IC5800) are properly seated on the Main P.C.B.

Step 3 Fix Heatsink Clip to the Heatsink.

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



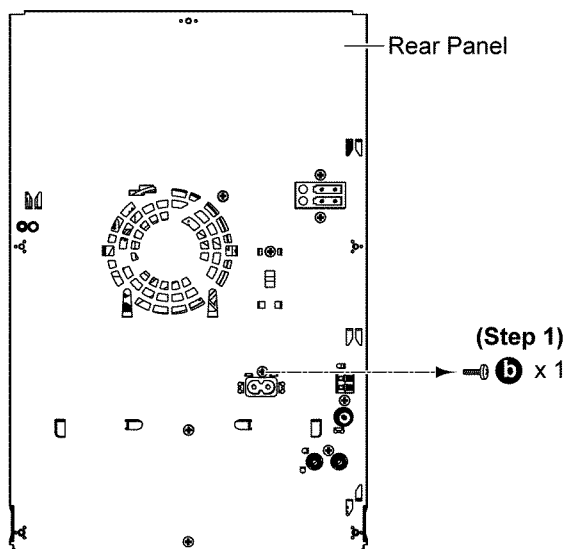
Step 4 Solder pins of the Audio Digital Amp IC (IC5800) on the solder side of the Main P.C.B..



11.15. Disassembly of SMPS P.C.B.

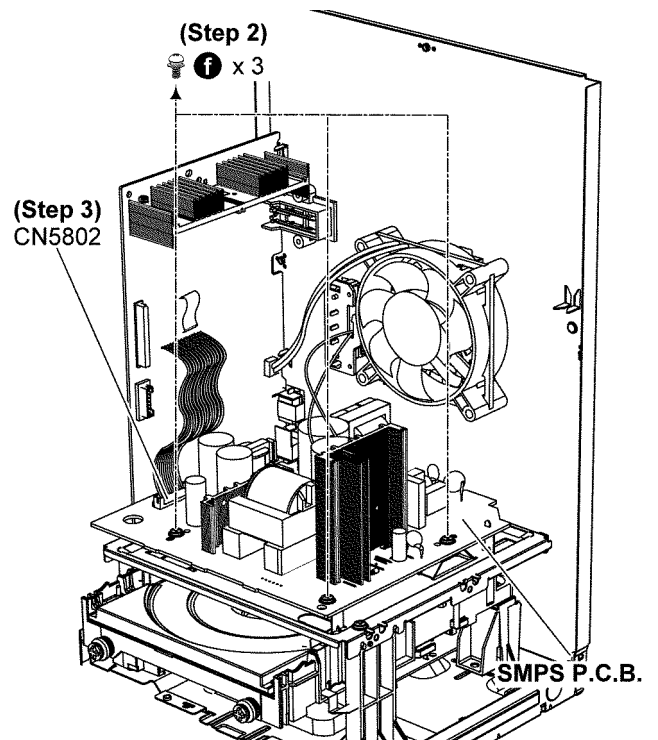
- Refer to "Disassembly of Top Cabinet."
- Refer to "Disassembly of Front Panel Unit".

Step 1 Remove 1 screw.



Step 2 Remove 3 screws.

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

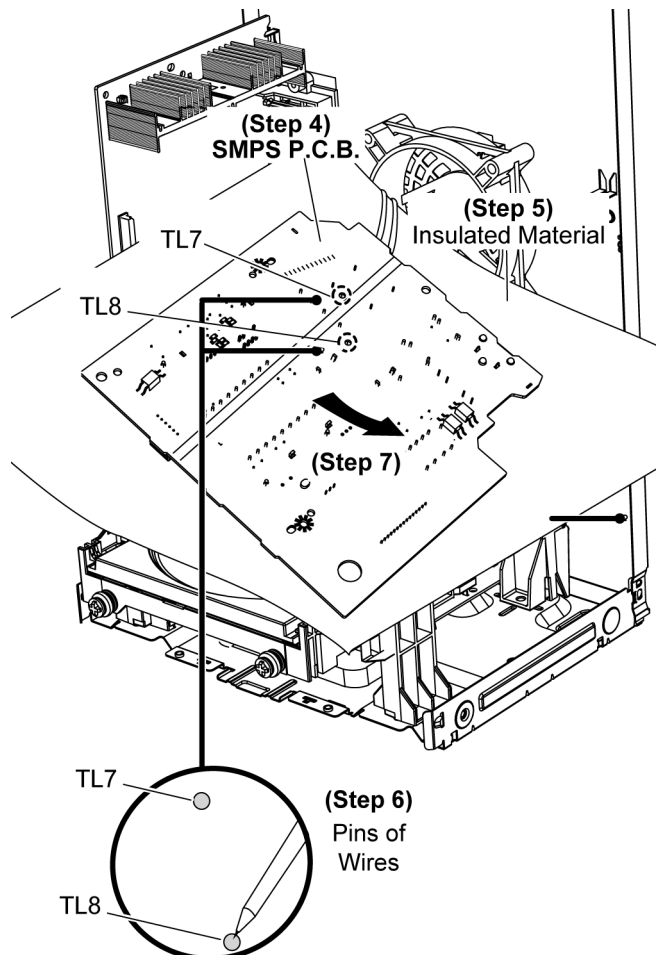


Step 4 Flip the SMPS P.C.B. and position it according to diagram shown.

Step 5 Place the SMPS P.C.B. on an insulated material.

Step 6 Desolder Black Wire (TL7) and Red Wire TL8 (Red).

Step 7 Remove the SMPS P.C.B..

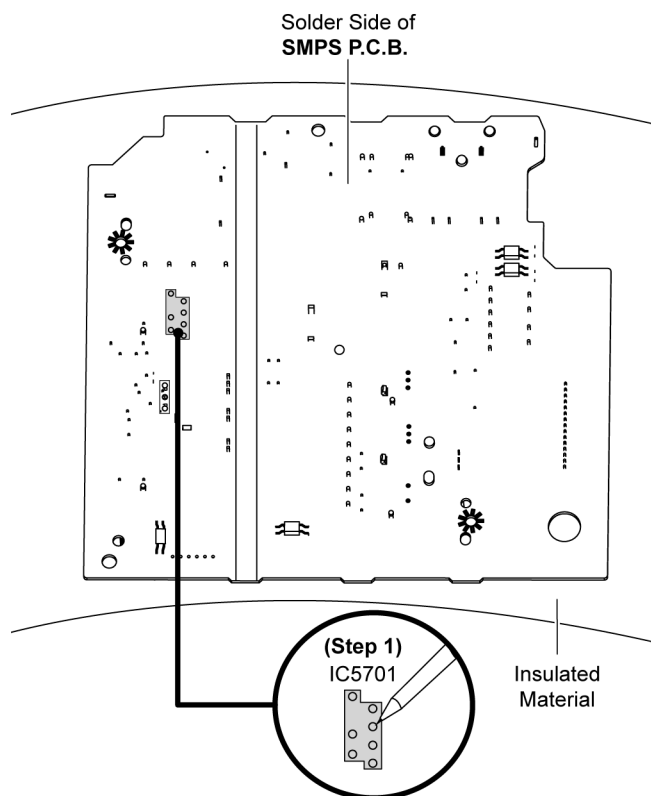


11.16. Replacement of Switching Regulator IC (IC5701)

• Refer to “Disassembly of SMPS P.C.B.”.

11.16.1. Disassembly of Switching Regulator IC (IC5701)

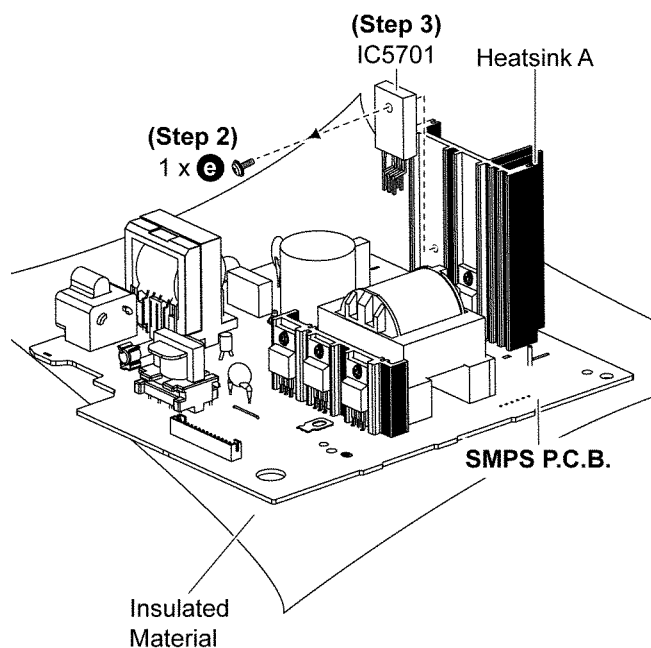
Step 1 Desolder pins of the Switching Regulator IC (IC5701) on the solder side of the SMPS P.C.B..



Step 2 Remove 1 screw.

Step 3 Remove the Switching Regulator IC (IC5701).

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



11.16.2. Assembly of Switching Regulator IC (IC5701)

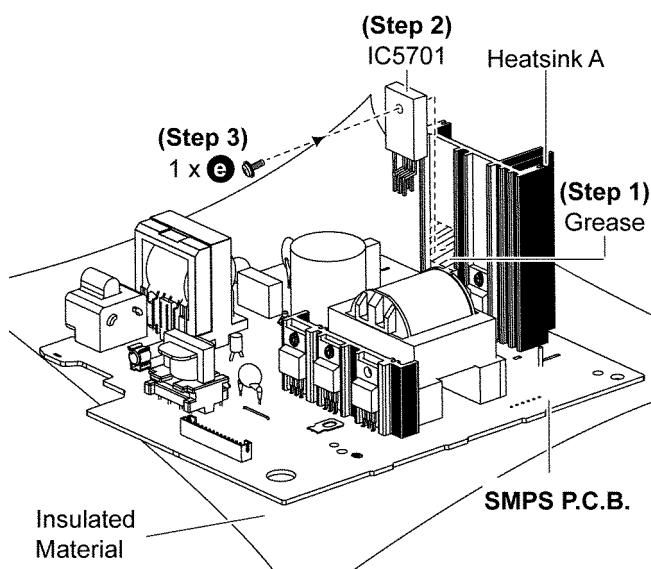
Step 1 Apply grease to the Heatsink A.

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

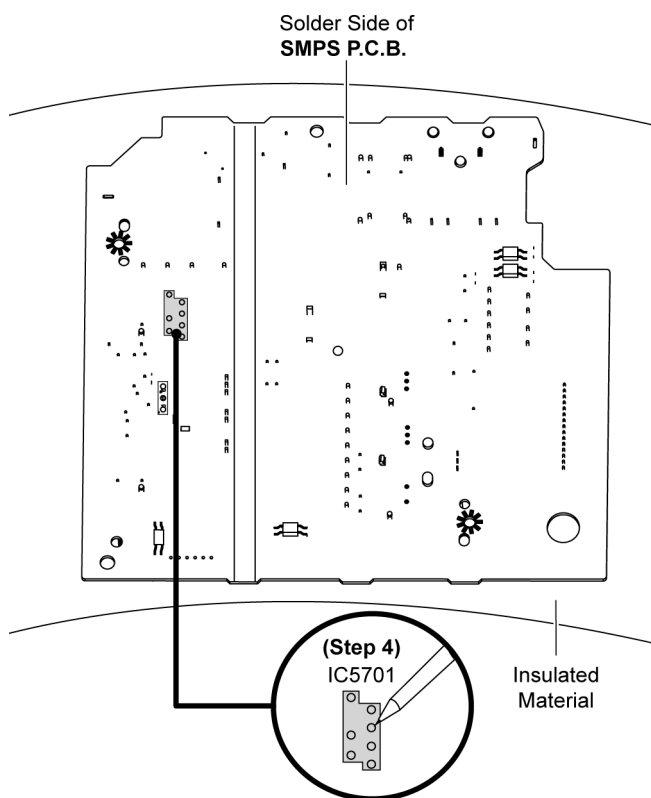
Caution: Ensure pins of the Switching Regulator IC (IC5701) are properly inserted on SMPS P.C.B..

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

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



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



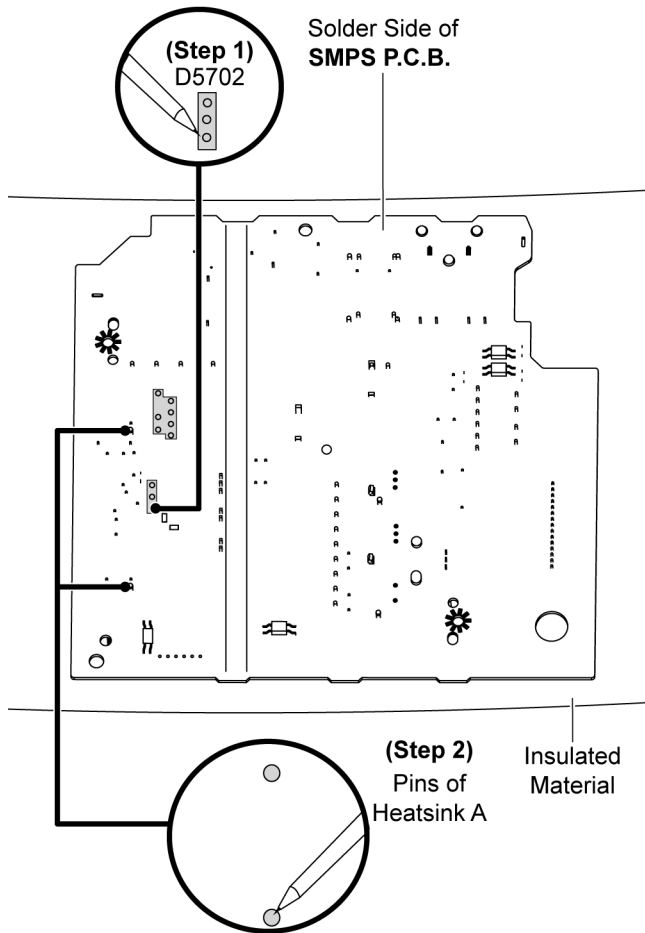
11.17. Replacement of Rectifier Diode (D5702)

• Refer to “Disassembly of SMPS P.C.B.”.

11.17.1. Disassembly of Rectifier Diode (D5702)

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

Step 2 Desolder pins of the Heatsink A.



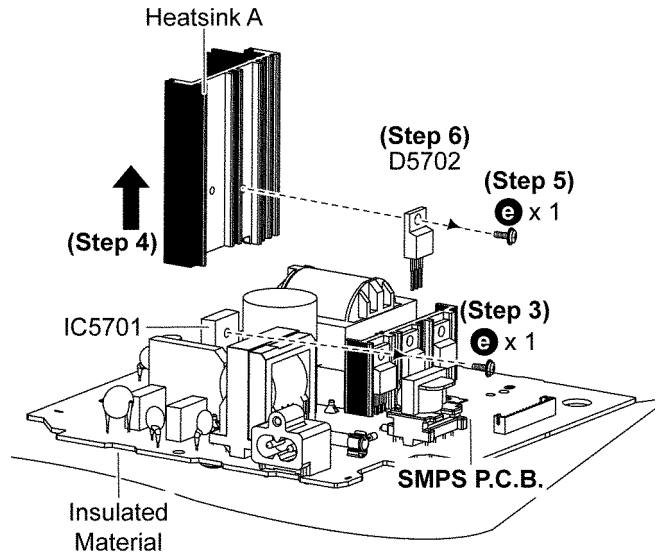
Step 3 Remove 1 screw at Switching Regulator IC (IC5701).

Step 4 Remove the Heatsink A with Rectifier Diode (D5702).

Step 5 Remove 1 screw.

Step 6 Remove the Rectifier Diode (D5702) from the Heatsink A.

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



11.17.2. Assembly of Rectifier Diode (D5702)

Step 1 Apply grease to the Heatsink A.

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

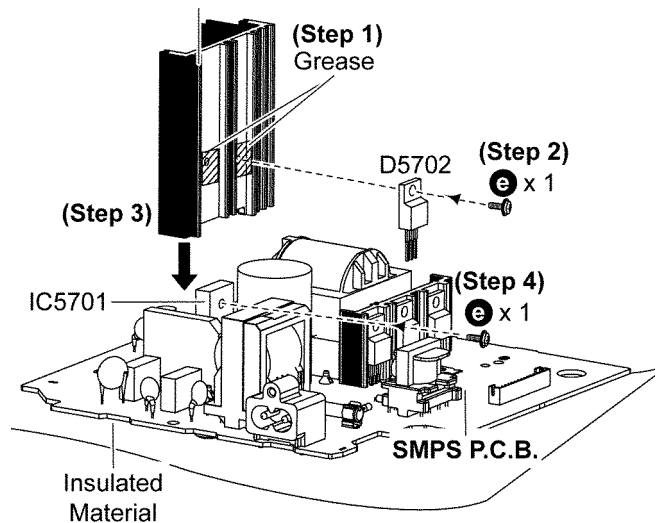
Caution: Ensure the Rectifier Diode (D5702) is tightly screwed to the Heatsink A.

Step 3 Fix the Heatsink A with Rectifier Diode (D5702) on the SMPS P.C.B. as shown.

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

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

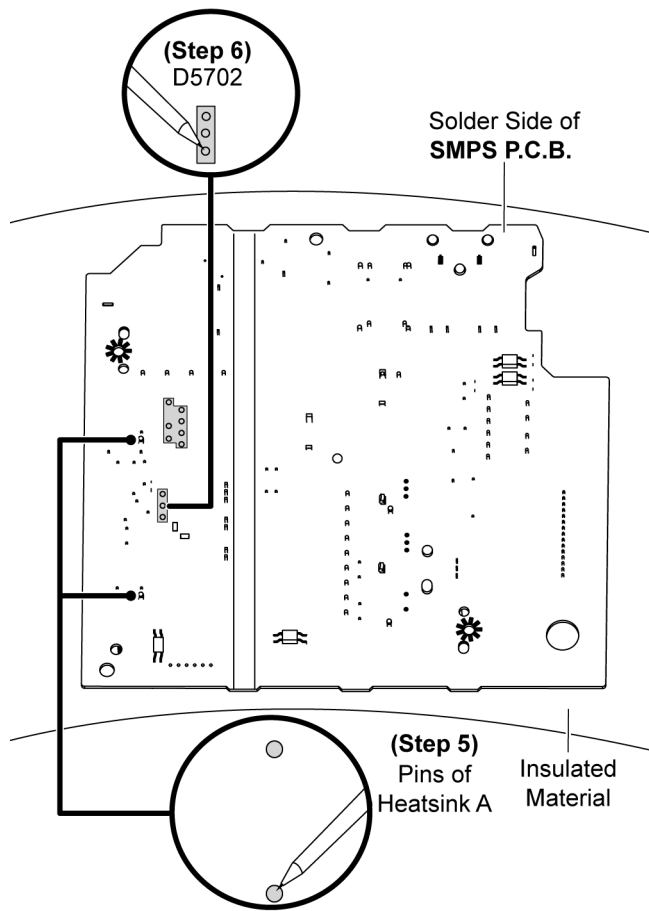
Caution: Ensure that the Switching Regulator IC (IC5701) is tightly screwed to the Heatsink A.



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

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

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



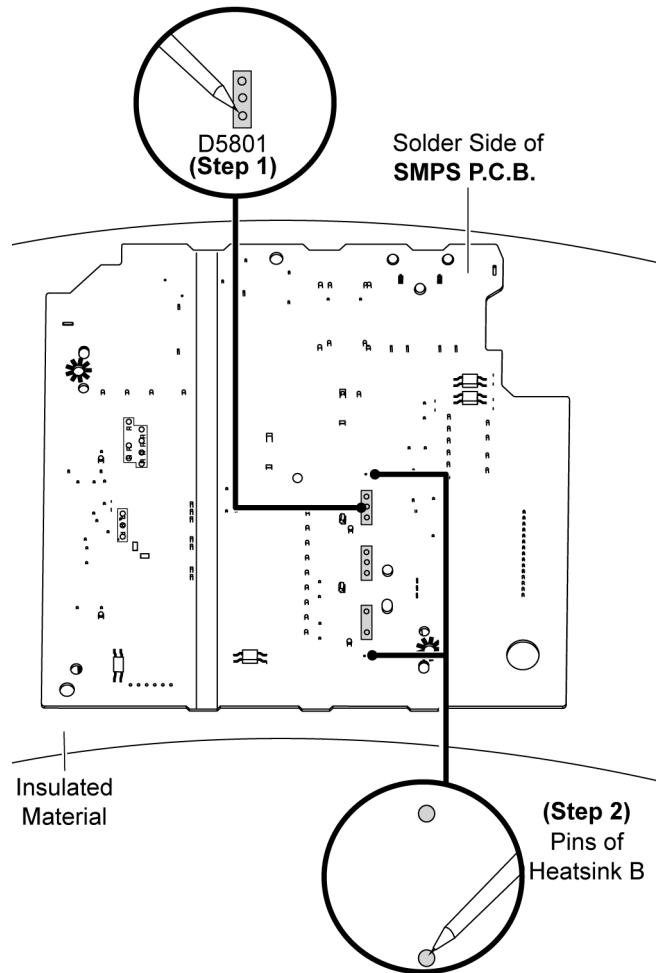
11.18. Replacement of Rectifier Diode (D5801)

• Refer to “Disassembly of SMPS P.C.B.”.

11.18.1. Disassembly of Rectifier Diode (D5801)

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

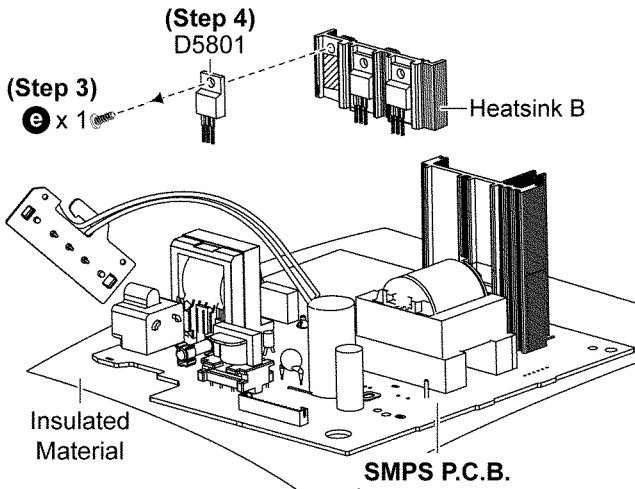
Step 2 Desolder pins of the Heatsink B.



Step 3 Remove 1 screw at Rectifier Diode (D5801).

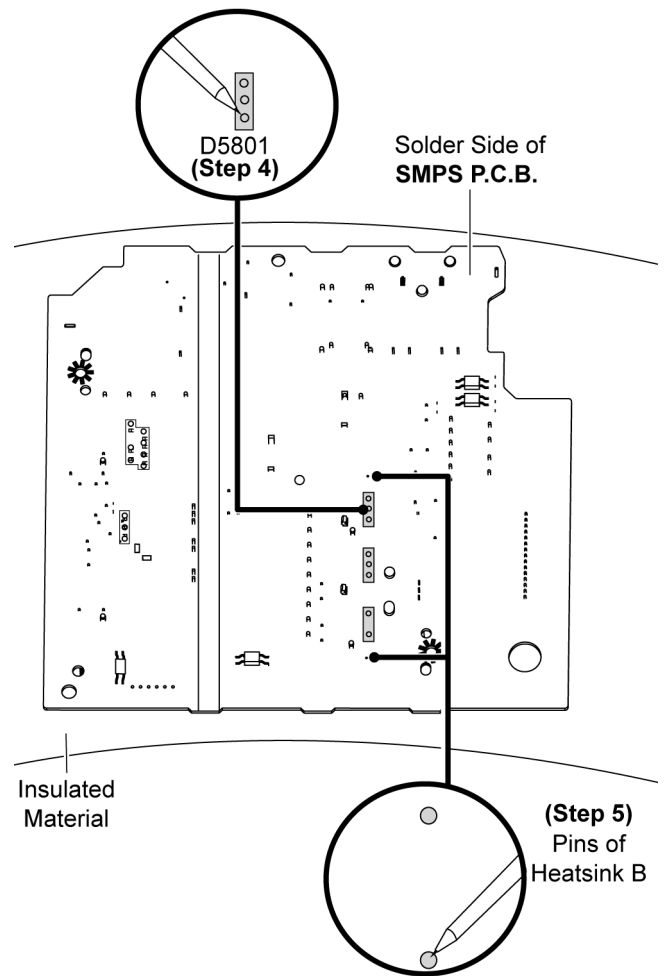
Step 4 Remove the Rectifier Diode (D5801) from the SMPS P.C.B..

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



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

Step 5 Solder pins of the Heatsink B..



11.18.2. Assembly of Rectifier Diode (D5801)

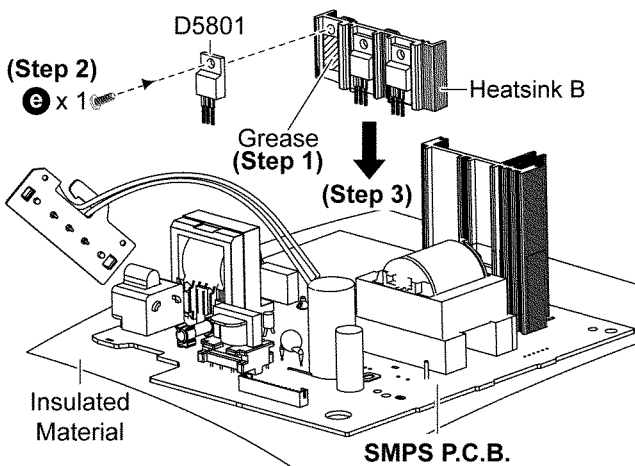
Step 1 Apply grease to the Heatsink B.

Step 2 Screw the Rectifier Diode (D5801) to the Heatsink B.

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

Step 3 Fix the Heatsink B with Rectifier Diode (D5801) on SMPS P.C.B. as shown.

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



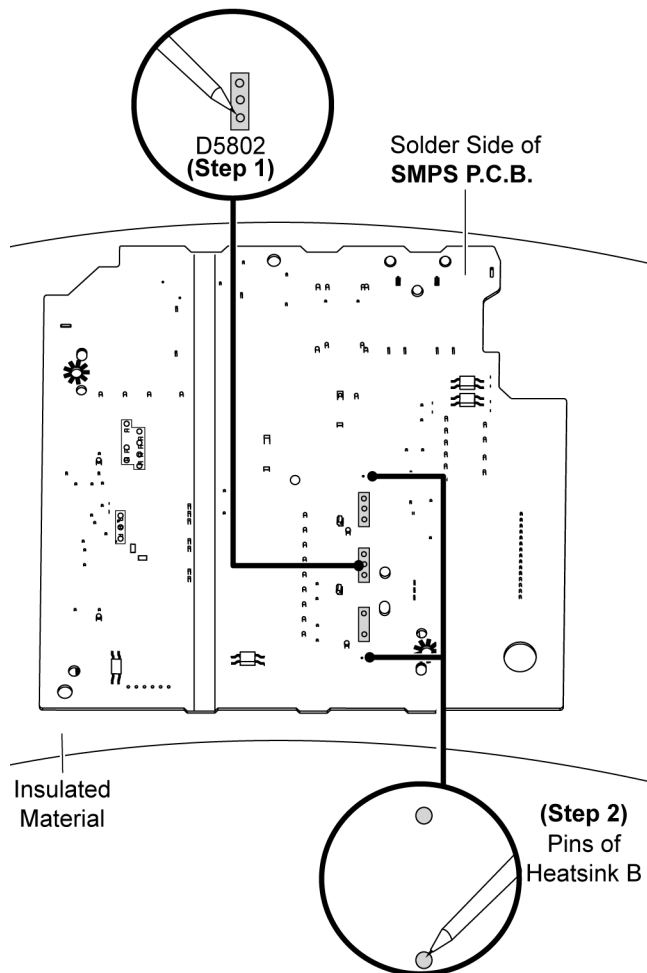
11.19. Replacement of Rectifier Diode (D5802)

- Refer to “Disassembly of SMPS P.C.B.”.

11.19.1. Disassembly of Rectifier Diode (D5802)

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

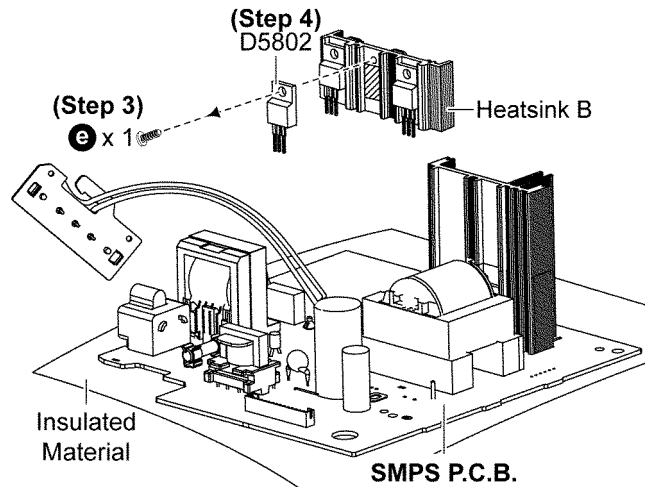
Step 2 Desolder pins of the Heatsink B.



Step 3 Remove 1 screw at Rectifier Diode (D5802).

Step 4 Remove the Rectifier Diode (D5802) from SMPS P.C.B..

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



11.19.2. Assembly of Rectifier Diode (D5802)

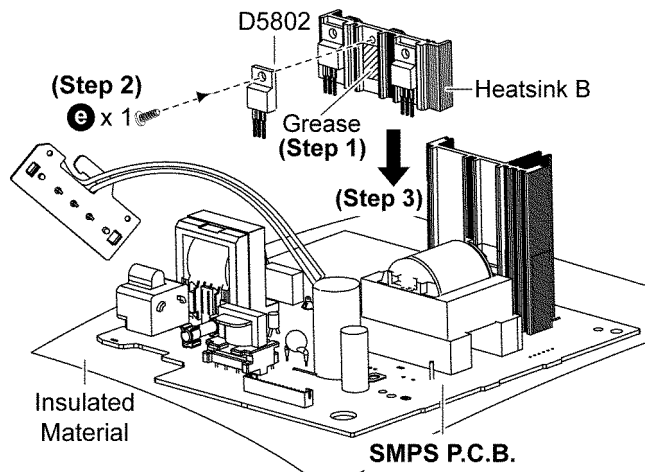
Step 1 Apply grease to the Heatsink B.

Step 2 Screw the Rectifier Diode (D5802) to the Heatsink B.

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

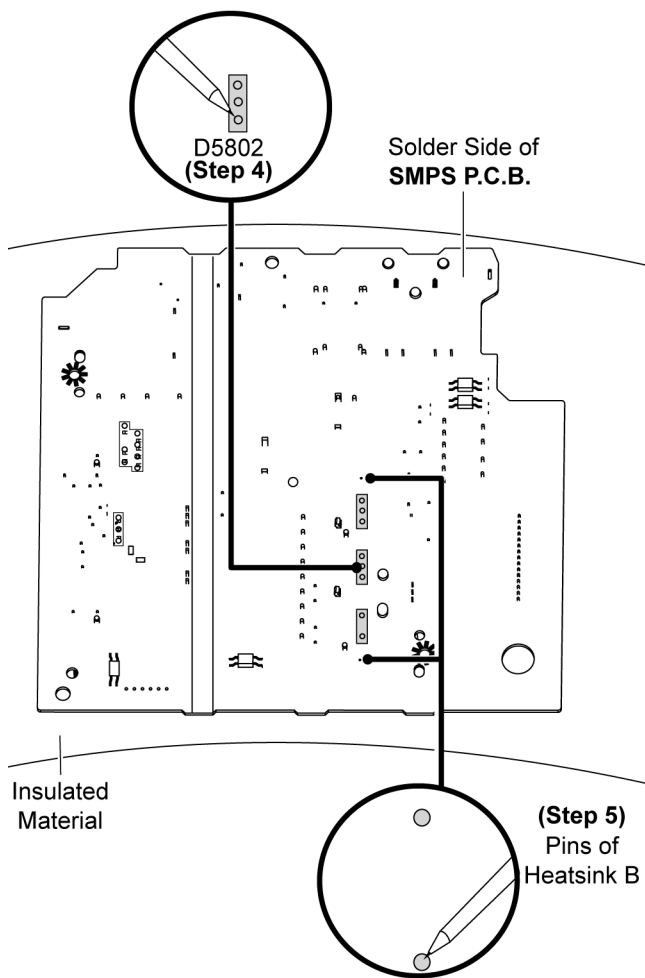
Step 3 Fix the Heatsink B with Rectifier Diode (D5802) on SMPS P.C.B. as shown.

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



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

Step 5 Solder pins of the Heatsink B..



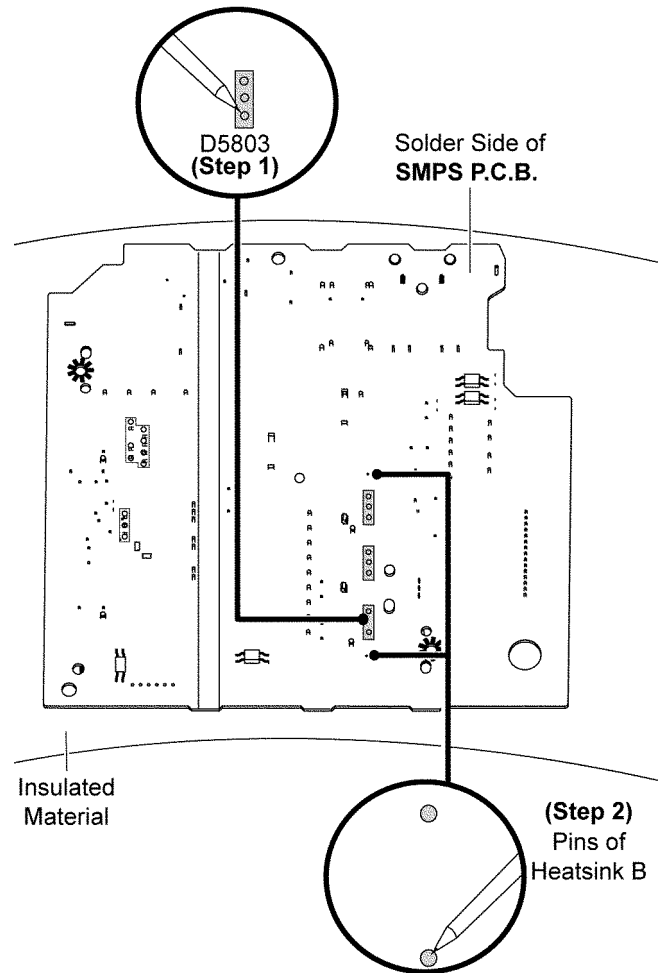
11.20. Replacement of Regulator Diode (D5803)

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

11.20.1. Disassembly of Rectifier Diode (D5803)

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

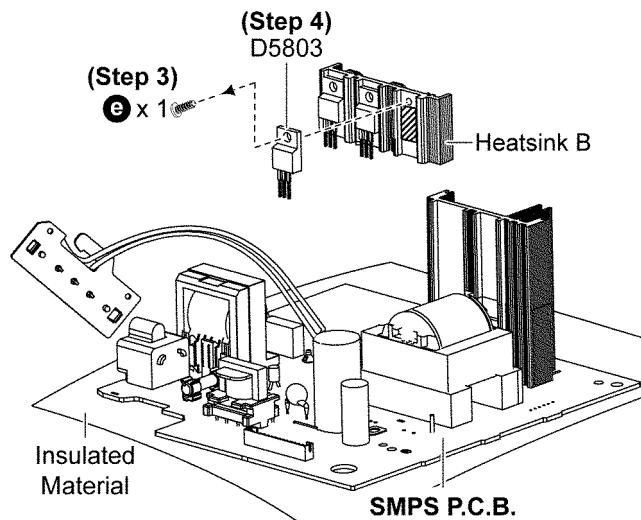
Step 2 Desolder pins of the Heatsink B.



Step 3 Remove 1 screw at Rectifier Diode (D5803).

Step 4 Remove the Rectifier Diode (D5803) from SMPS P.C.B..

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



11.20.2. Assembly of Rectifier Diode (D5803)

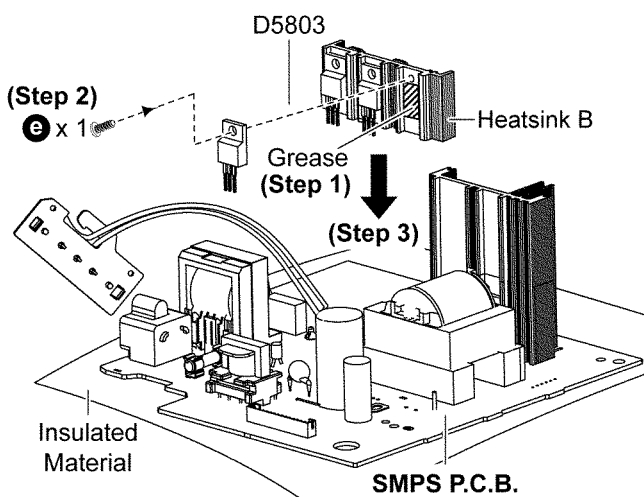
Step 1 Apply grease to the Heatsink B.

Step 2 Screw the Rectifier diode (D5803) to the Heatsink B.

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

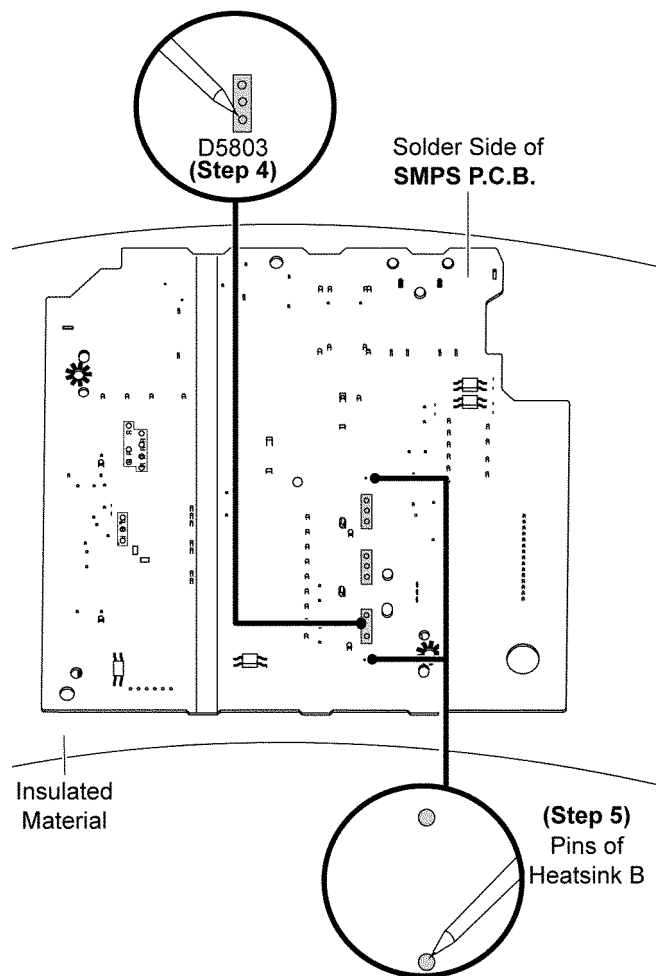
Step 3 Fix Heatsink B with Rectifier Diode (D5803) on SMPS P.C.B.

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



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

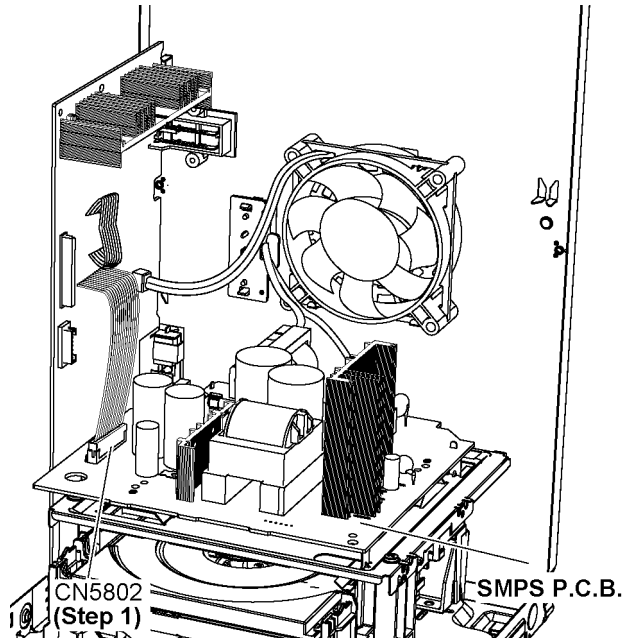
Step 5 Solder pins of the Heatsink B..



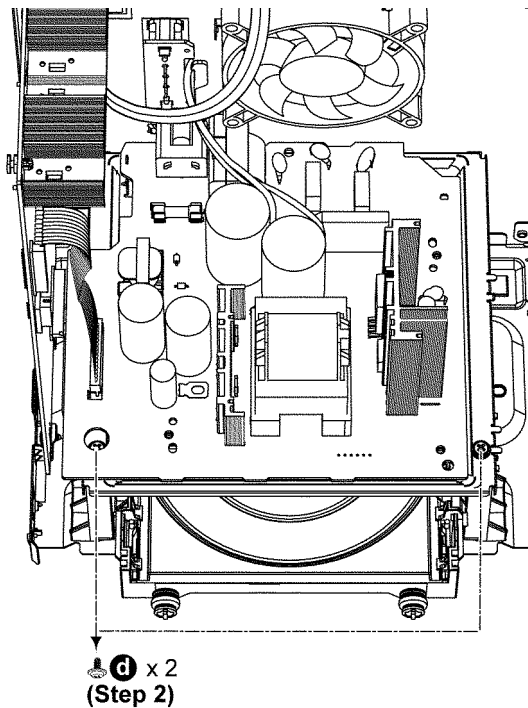
11.21. Disassembly of CD Mechanism Unit (BRS11C)

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

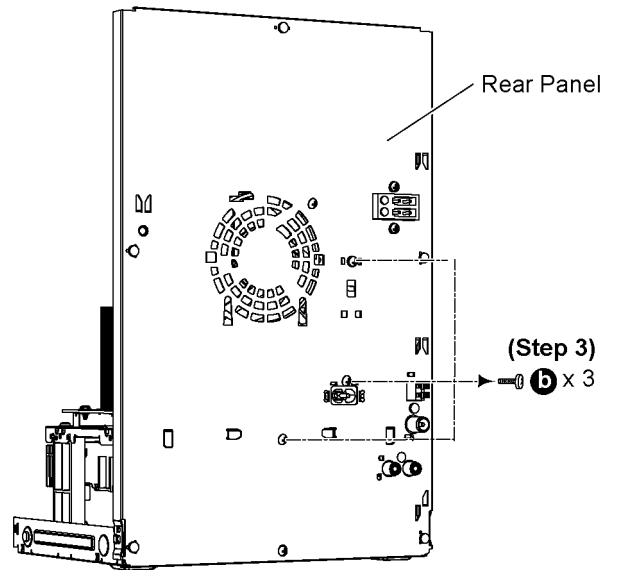
Step 1 Detach 15P Cable Wire at the connector (CN5802) on the SMPS P.C.B..



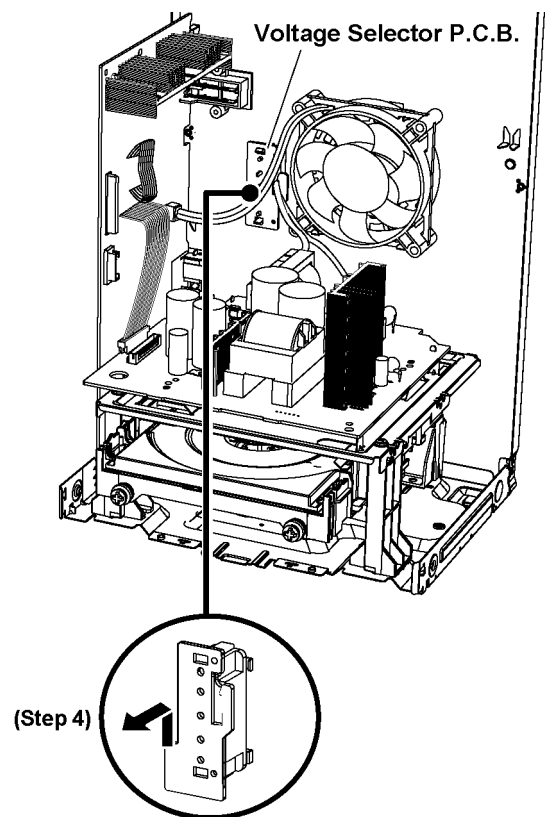
Step 2 Remove 2 screws.



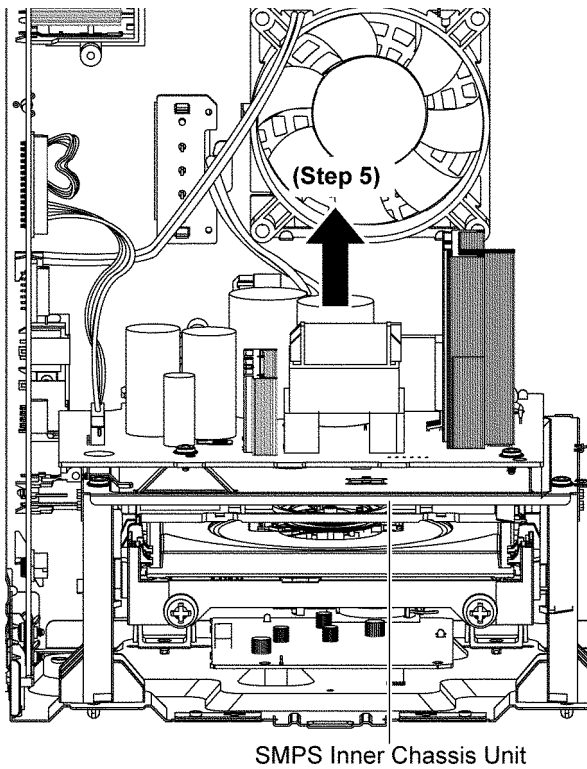
Step 3 Remove 3 screws.



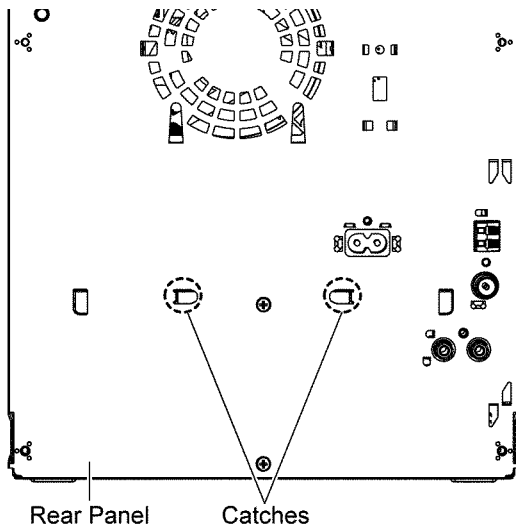
Step 4 Detach the Voltage Selector P.C.B. from Rear Panel as arrow shown.



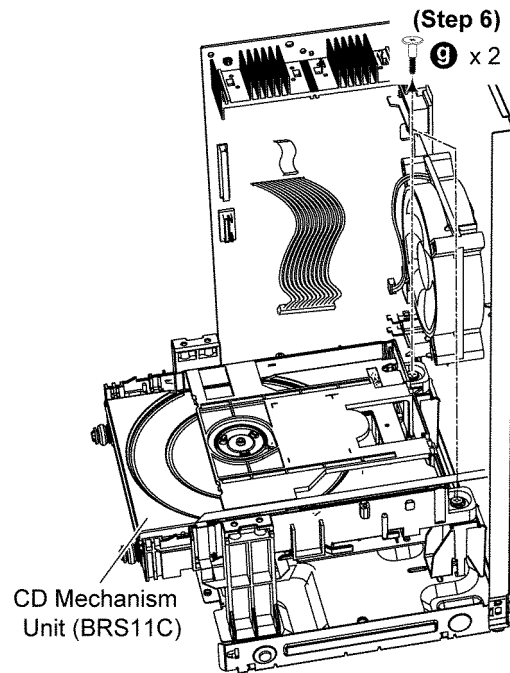
Step 5 Lift up and remove the SMPS Inner Chassis Unit.



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



Step 6 Remove 2 screws.



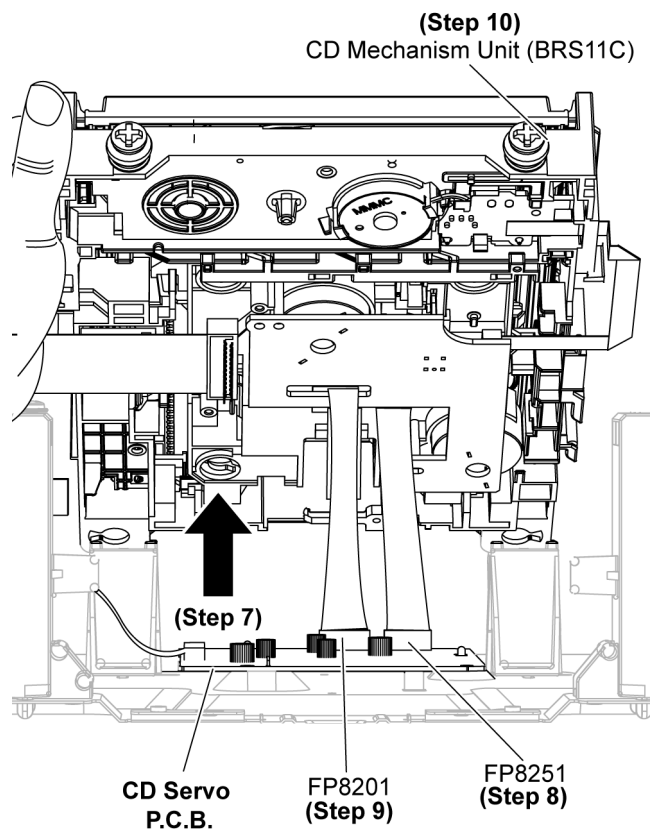
Step 7 Slightly lift up the CD Mechanism Unit (BRS11C) as shown.

Caution: Do not exert too much force as it may damage the wiring within.

Step 8 Detach 10P FFC at the connector (FP8251) on CD Servo P.C.B..

Step 9 Detach 24P FFC at the connector (FP8201) on CD Servo P.C.B..

Step 10 Remove the CD Mechanism Unit (BRS11C).



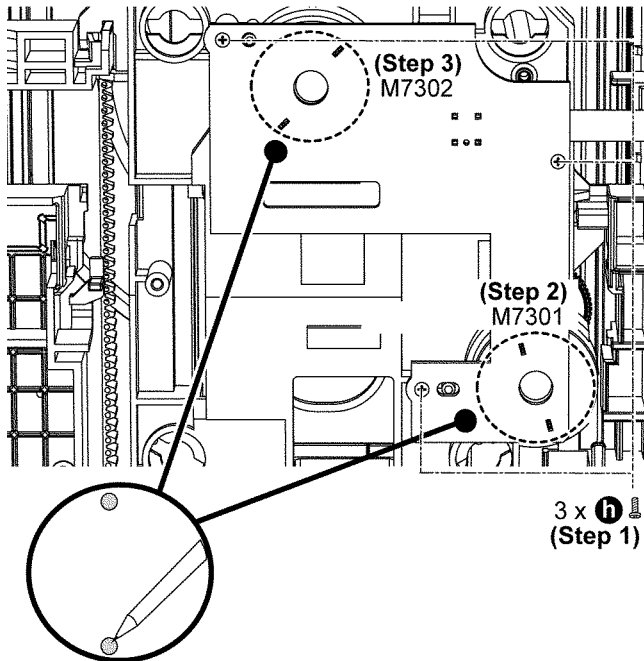
11.22. Disassembly of CD Interface P.C.B.

- Refer to “Disassembly of CD Mechanism Unit (BRS11C)”.

Step 1 Remove 3 screws.

Step 2 Desolder pins of the motor (M7301).

Step 3 Desolder pins of the motor (M7302).

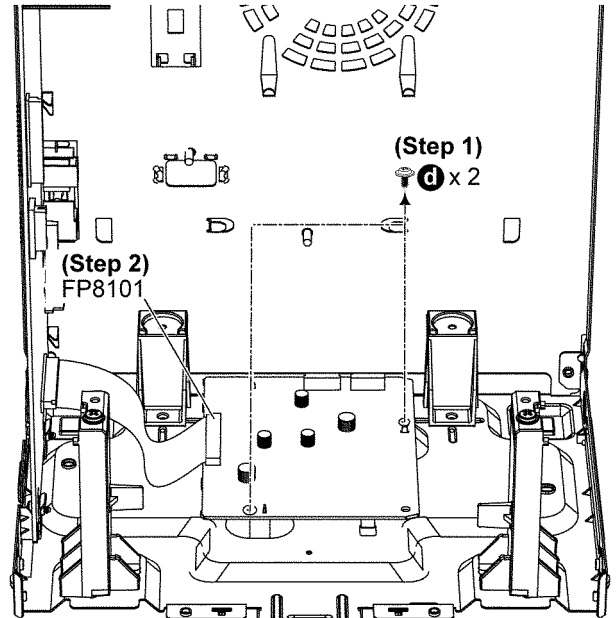


11.23. Disassembly of CD Servo P.C.B.

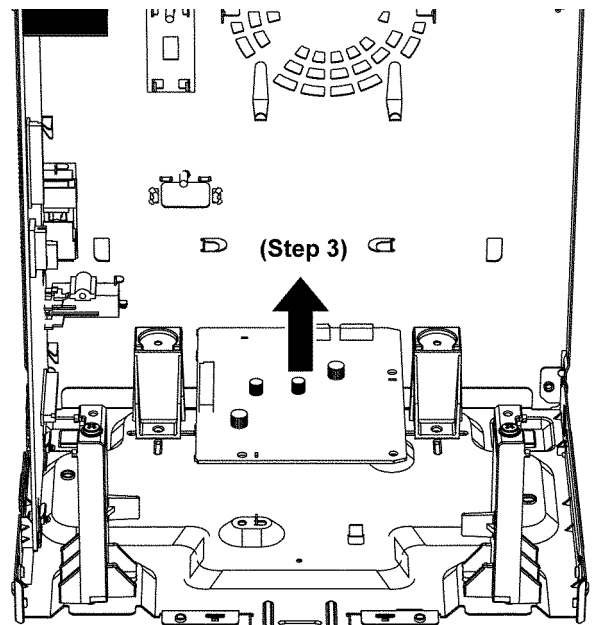
- Refer to “Disassembly of CD Mechanism Unit (BRS11C)”.

Step 1 Remove 2 screws.

Step 2 Detach 30P FFC at the connector (FP8101).



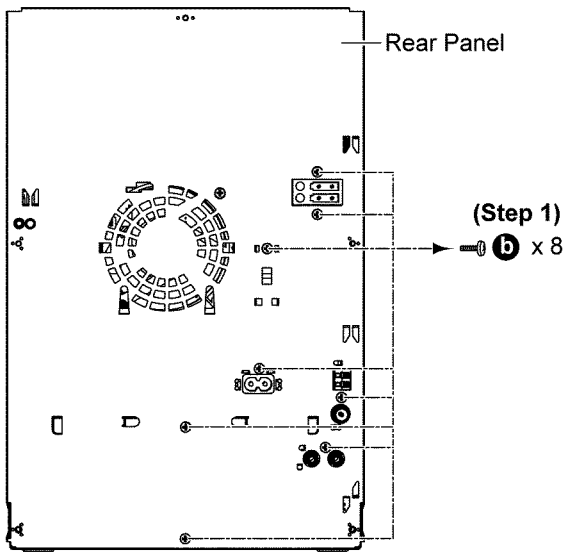
Step 3 Remove the CD Servo P.C.B..



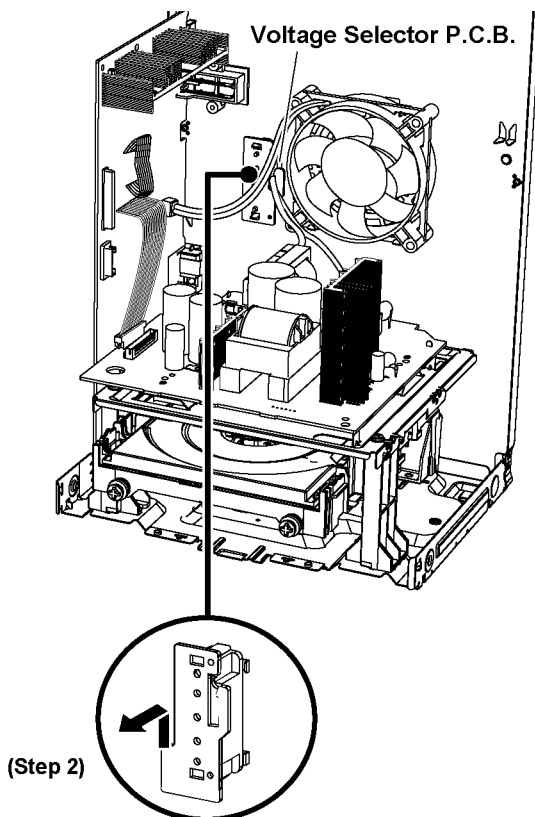
11.24. Disassembly of Rear Panel

- Refer to “Disassembly of Top Cabinet”.

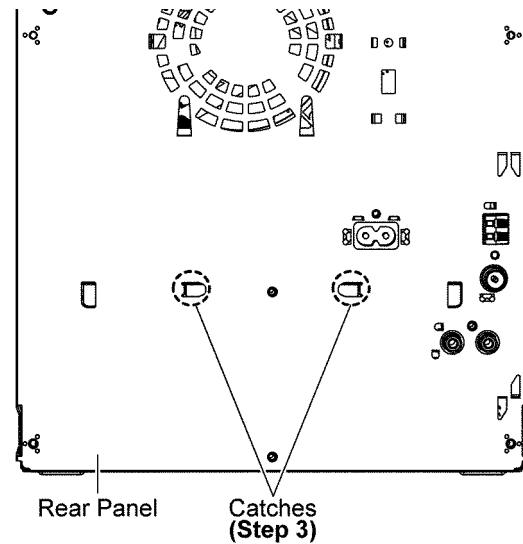
Step 1 Remove 8 screws.



Step 2 Detach the Voltage Selector P.C.B. from Rear Panel as arrow shown.

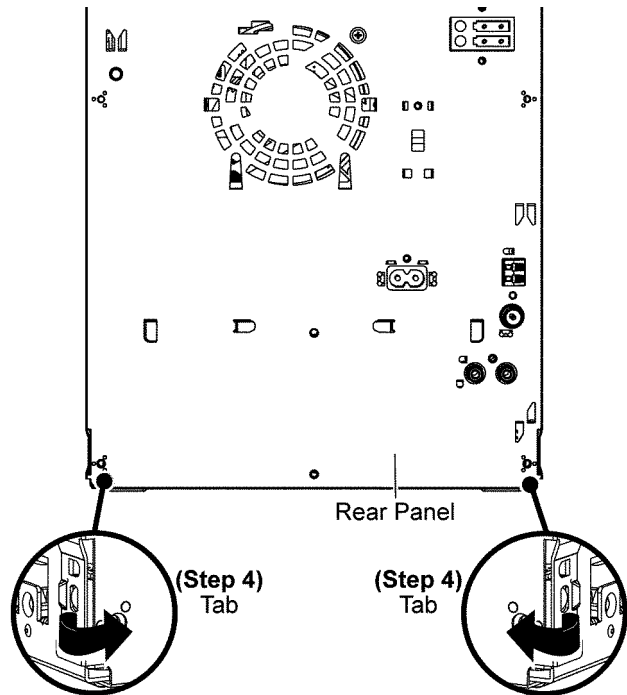


Step 3 Lift up the SMPS Inner Chassis Unit to release the catch between the SMPS Inner Chassis Unit & the Rear Panel.



Step 4 Release 2 tabs.

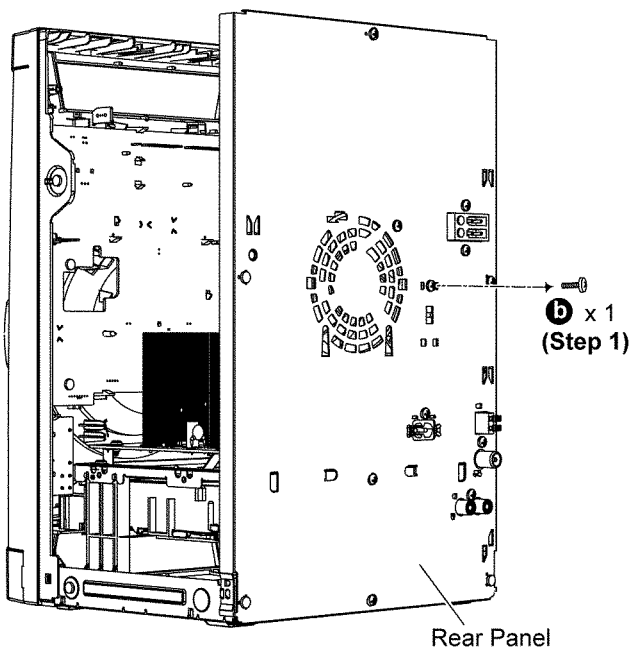
Step 5 Remove the Rear Panel.



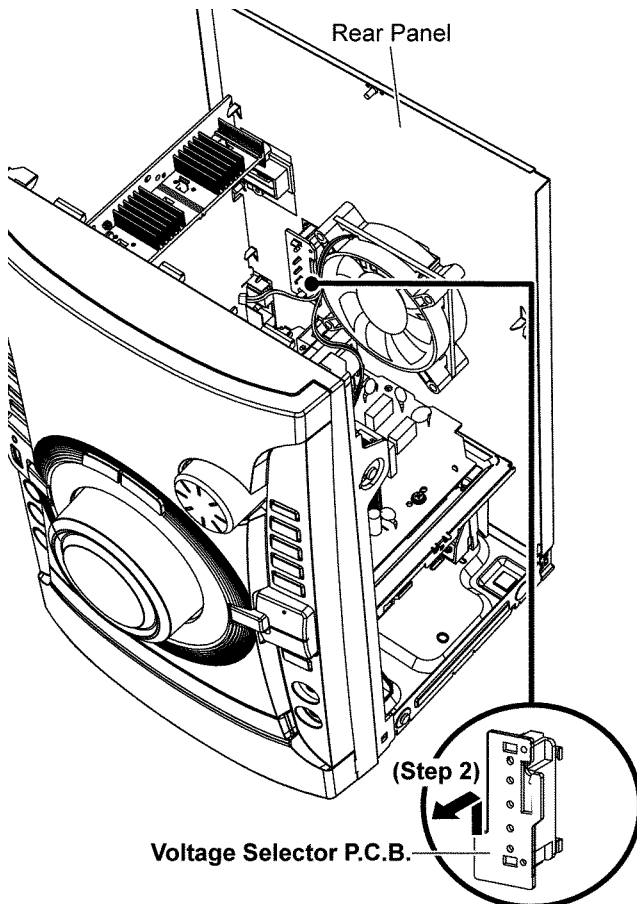
11.25. Disassembly of Voltage Selector P.C.B.

- Refer to “Disassembly of Top Cabinet”.

Step 1 Remove 1 screw.



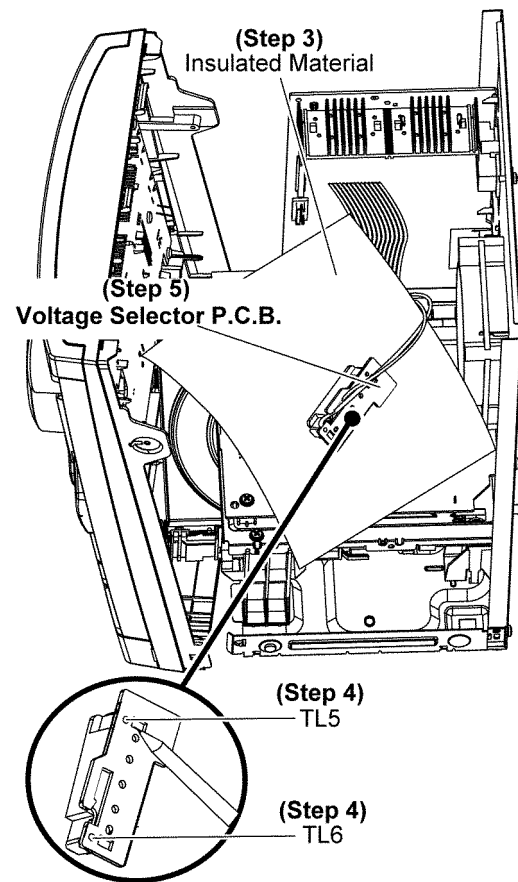
Step 2 Detach the Voltage Selector P.C.B. from Rear Panel.



Step 3 Place the Voltage Selector P.C.B. on Insulated Material.

Step 4 Desolder Black Wire (TL5) and Red Wire (TL6).

Step 5 Remove the Voltage Selector P.C.B..



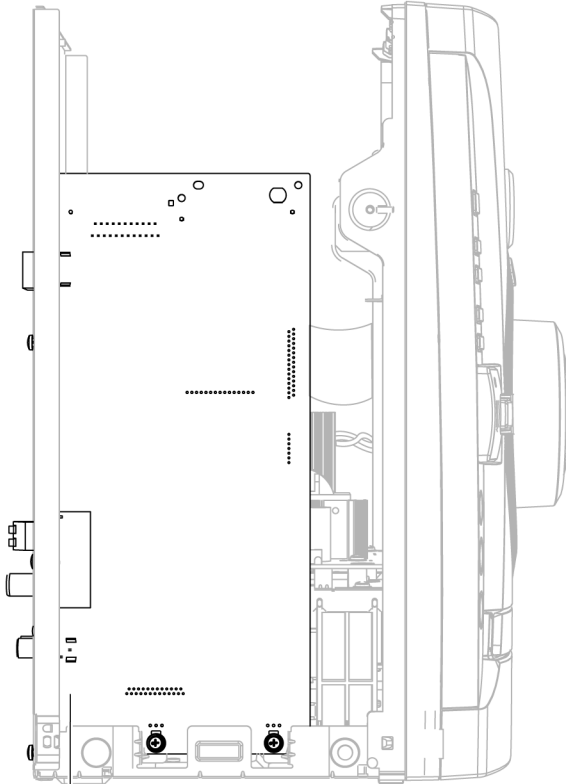
12 Service Position

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

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

Step 1 Remove Top Cabinet.

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



Main P.C.B.
(Step 2)

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

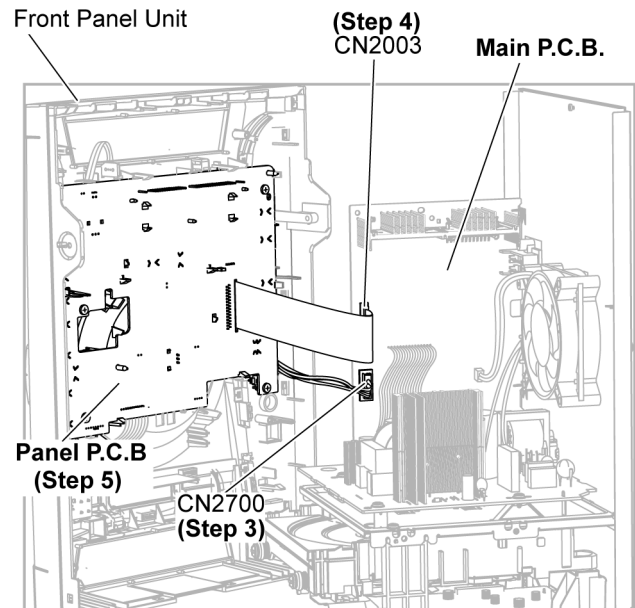
Step 1 Remove Top Cabinet.

Step 2 Remove Front Panel Unit.

Step 3 Attach 5P Cable Wire to the connector (CN2700) on Main P.C.B..

Step 4 Attach 27P FFC to the connector (CN2003) on Main P.C.B..

Step 5 Panel P.C.B. can be checked and repaired as diagram shown.



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

Step 1 Remove Top Cabinet.

Step 2 Remove Front Panel Unit.

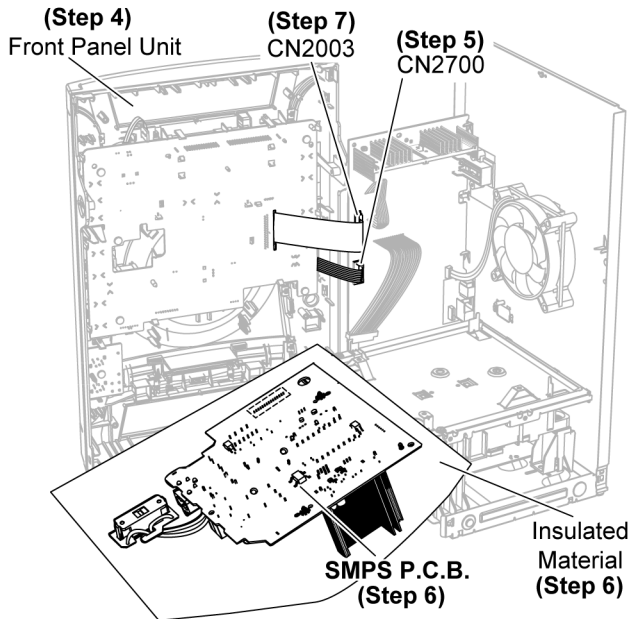
Step 3 Remove SMPS P.C.B..

Step 4 Place the Front Panel Unit as diagram shown.

Step 5 Attach 5P Cable Wire to the connector (CN2700) on Main P.C.B..

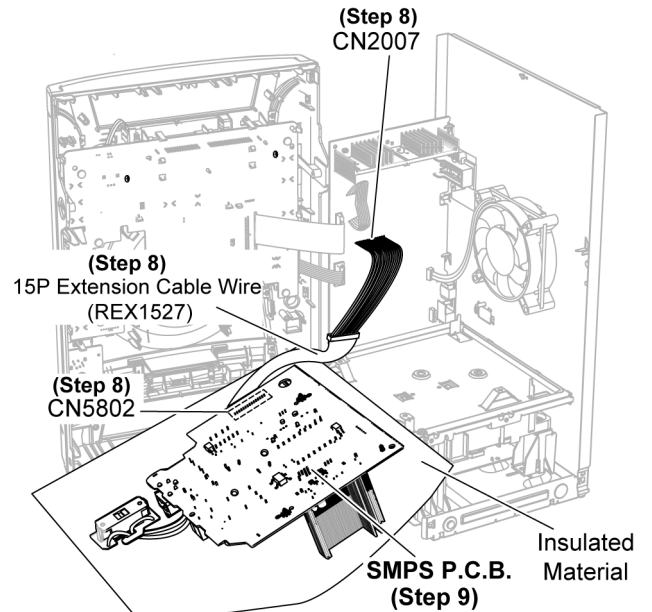
Step 6 Place the SMPS P.C.B. on the insulated material.

Step 7 Attach 27P FFC to the connector (CN2003) on Main P.C.B..



Step 8 Extend the Cable Wire with extension Cable Wire (REX1572 15P Cable Wire) from CN2007 on Main P.C.B. to CN5802 on SMPS P.C.B..

Step 9 SMPS P.C.B. can be checked and repaired as diagram shown.



12.4. Checking and Repairing of CD Servo P.C.B. (Side A)

Step 1 Remove Top Cabinet.

Step 2 Remove Front Panel Unit.

Step 3 Remove SMPS Inner Chassis Unit.

Step 4 Remove CD Mechanism Unit (BRS11C).

Step 5 Remove Main P.C.B..

Step 6 Remove Rear Panel.

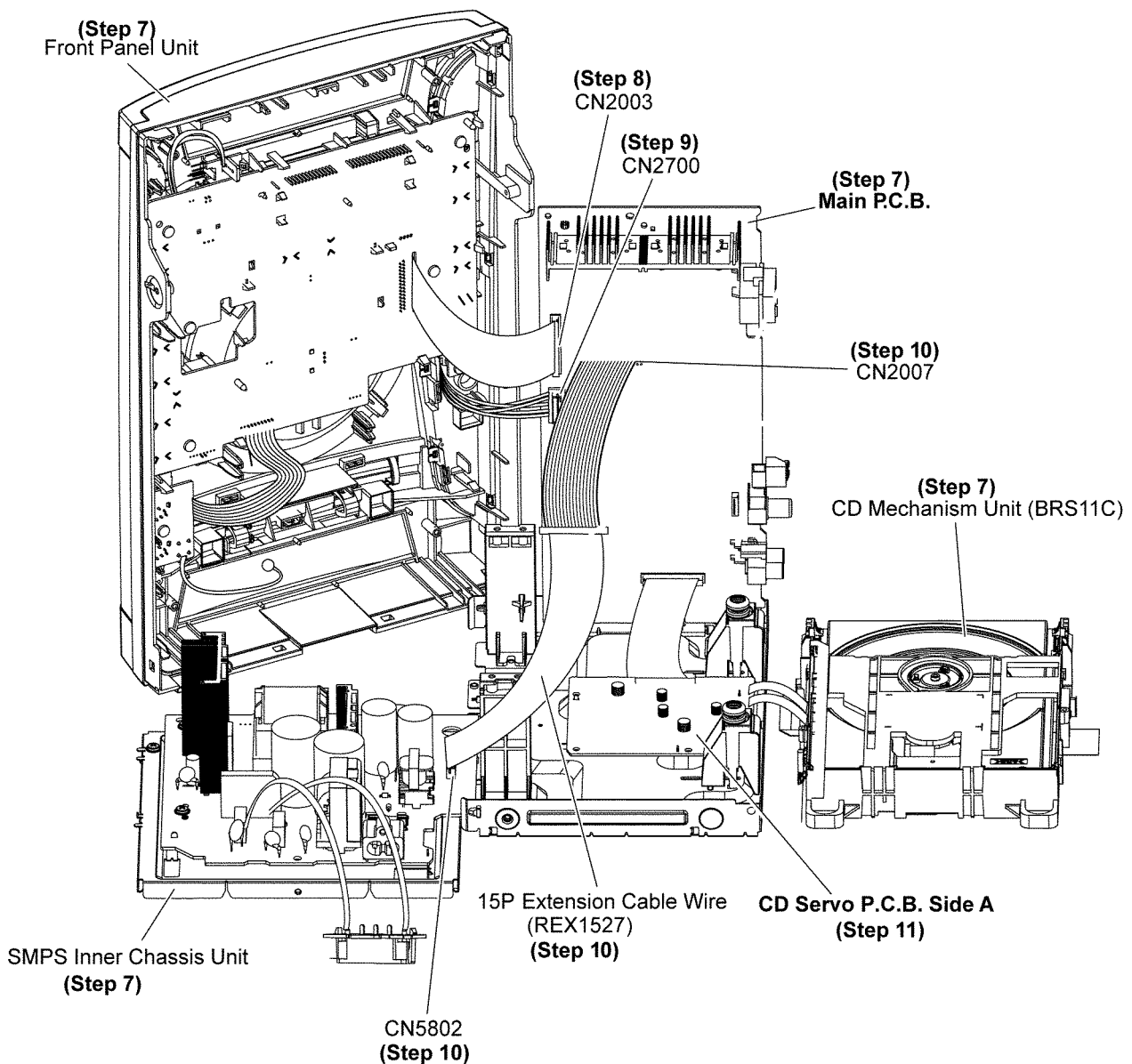
Step 7 Place the Front Panel Unit, SMPS Inner Chassis Unit, CD Mechanism Unit (BRS11C), Main P.C.B as diagram shown.

Step 8 Attach 27P FFC to the connector (CN2003) on Main P.C.B..

Step 9 Attach 5P FFC to the connector (CN2700) on Main P.C.B..

Step 10 Extend the Cable Wire with extension Cable Wire (REX1527 15P Cable Wire) from CN2007 on Main P.C.B. to CN5802 on SMPS P.C.B..

Step 11 CD Servo P.C.B. Side A can be checked and repaired as diagram shown.

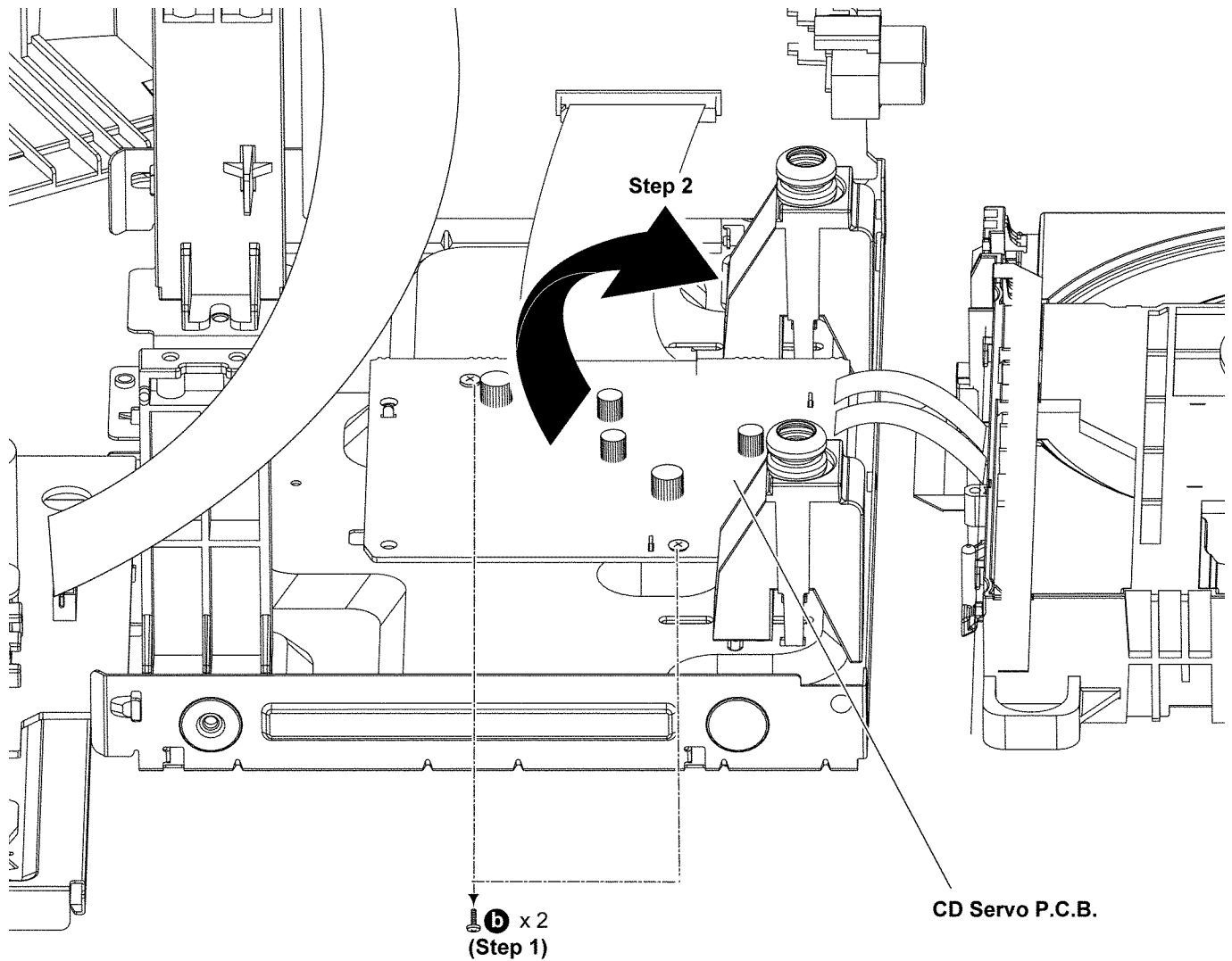


12.5. Checking and Repairing of CD Servo P.C.B. (Side B)

- Refer to “Checking and repairing of CD Servo P.C.B. (Side A)”.

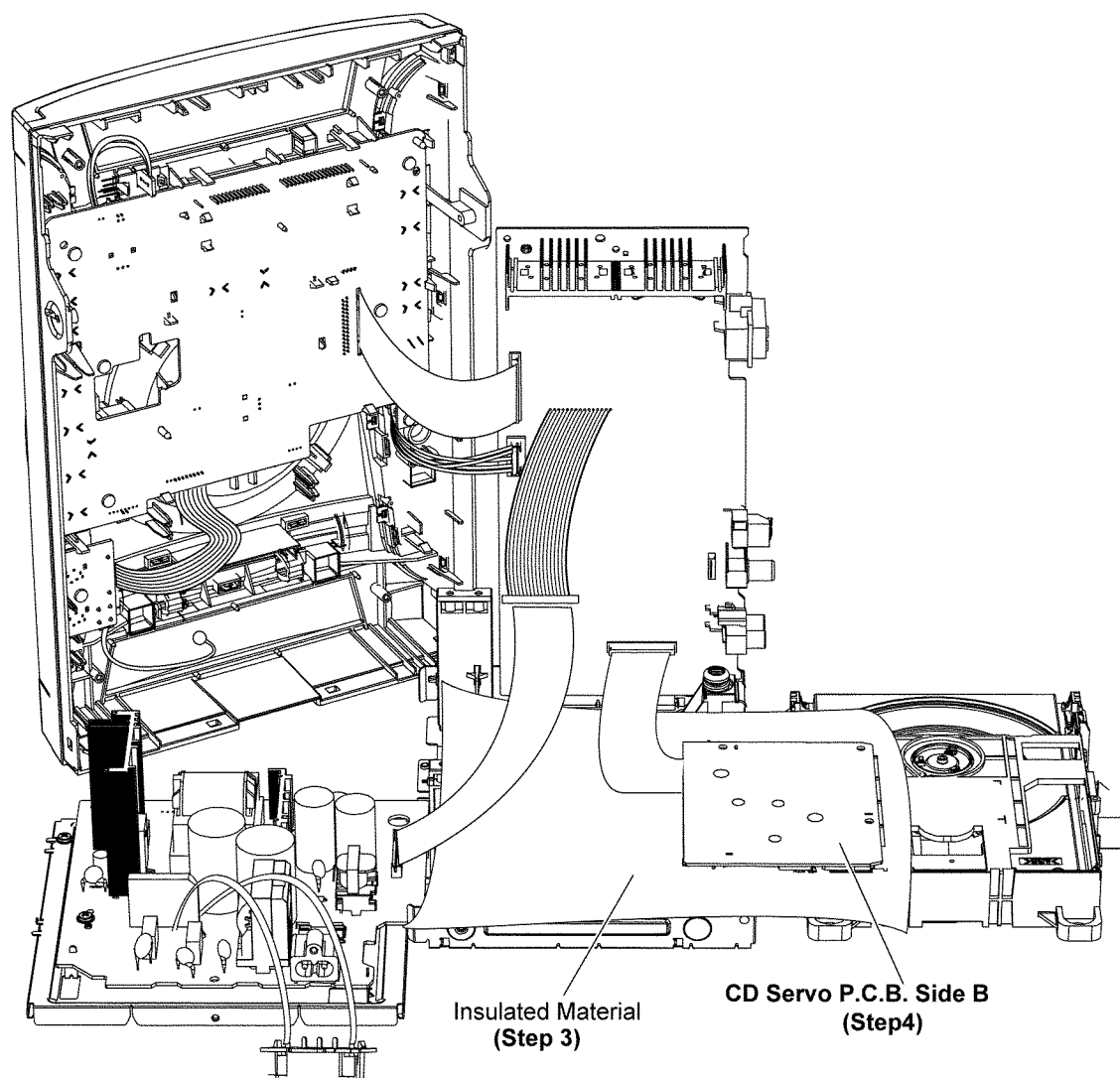
Step 1 Remove 2 screws.

Step 2 Flip the Servo P.C.B. as illustration show.



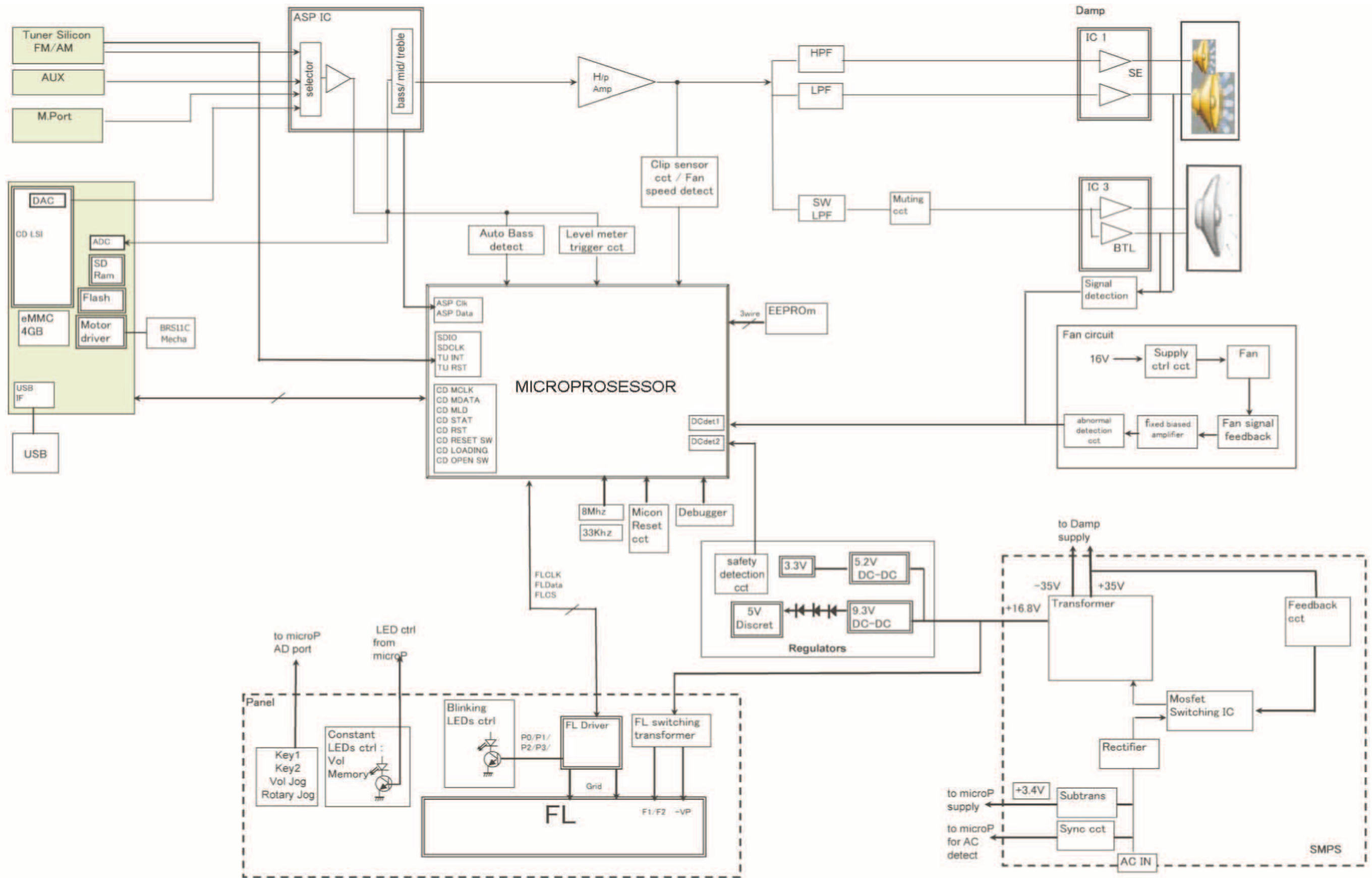
Step 3 Place the CD Servo P.C.B. on the insulated material.

Step 4 CD Servo P.C.B. Side B can be checked and repaired as diagram shown.



13 Simplified Block Diagram

13.1. Power Block Diagram

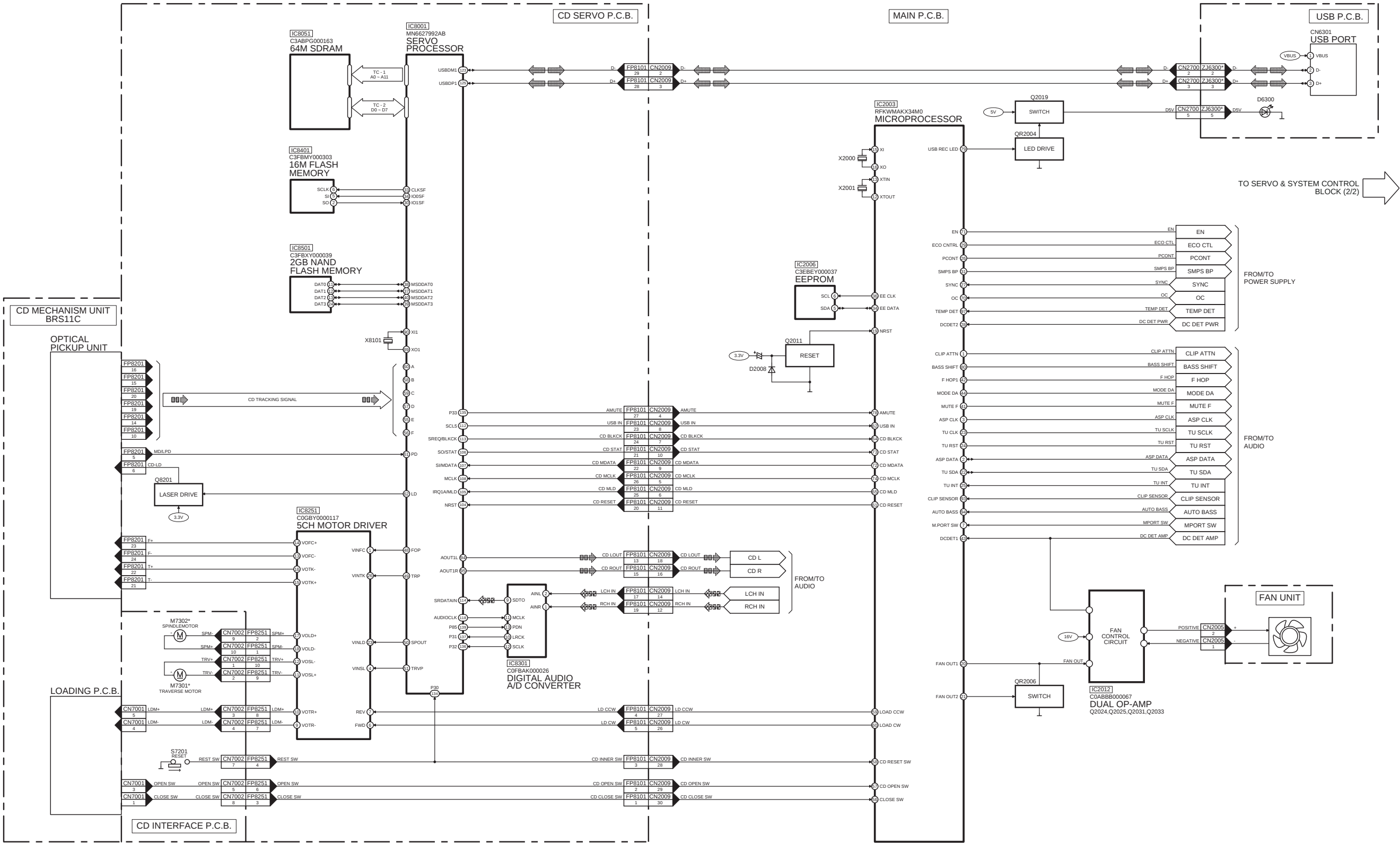


Panasonic AVC Networks Singapore Pte Ltd (PAVCSG)

14 Block Diagram

14.1. Servo & System Control

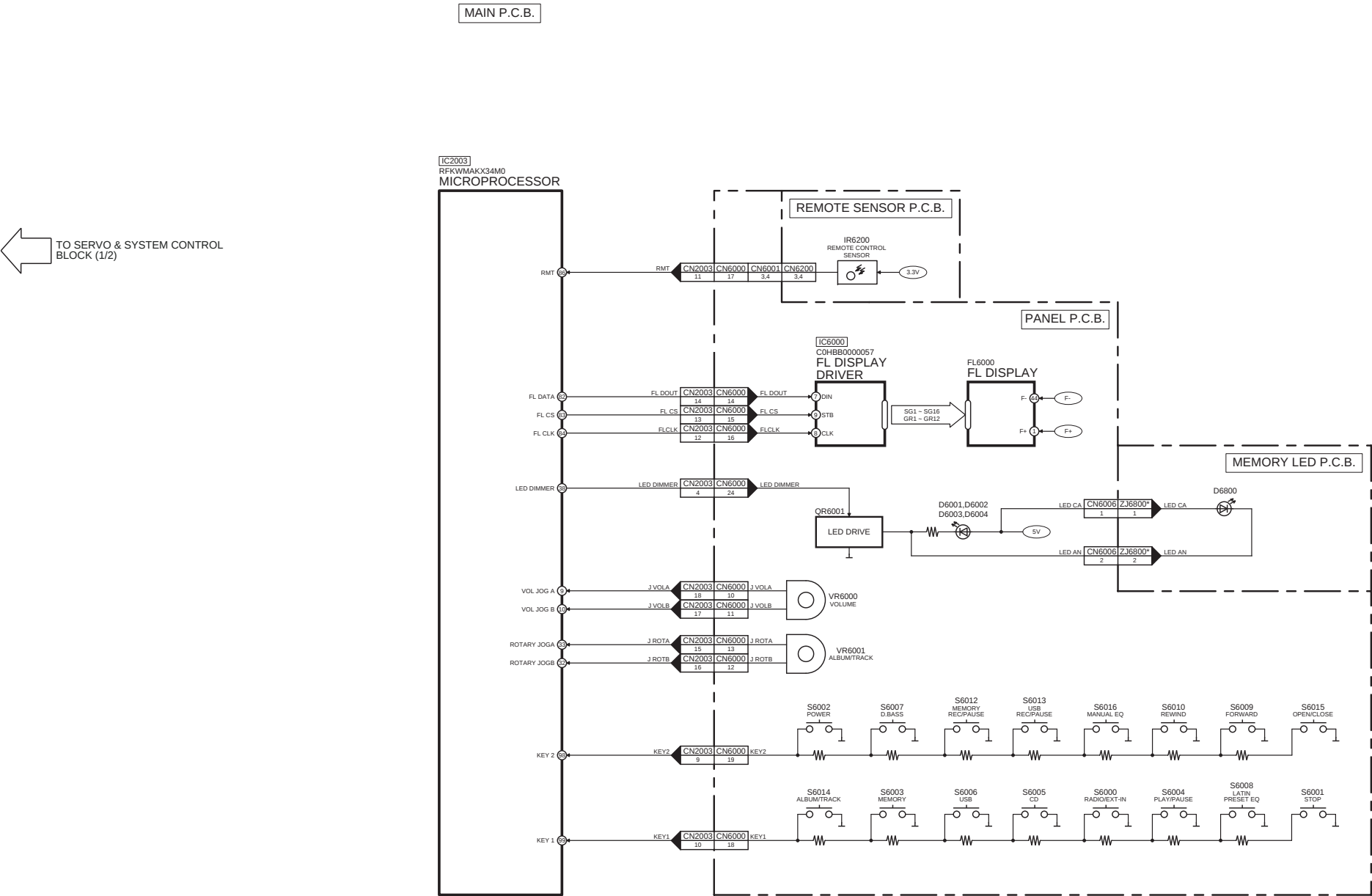
CD AUDIO INPUT SIGNAL LINE AUDIO OUTPUT SIGNAL LINE USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX34PH/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-AKX34PH/PN SERVO & SYSTEM CONTROL (2/2) BLOCK DIAGRAM

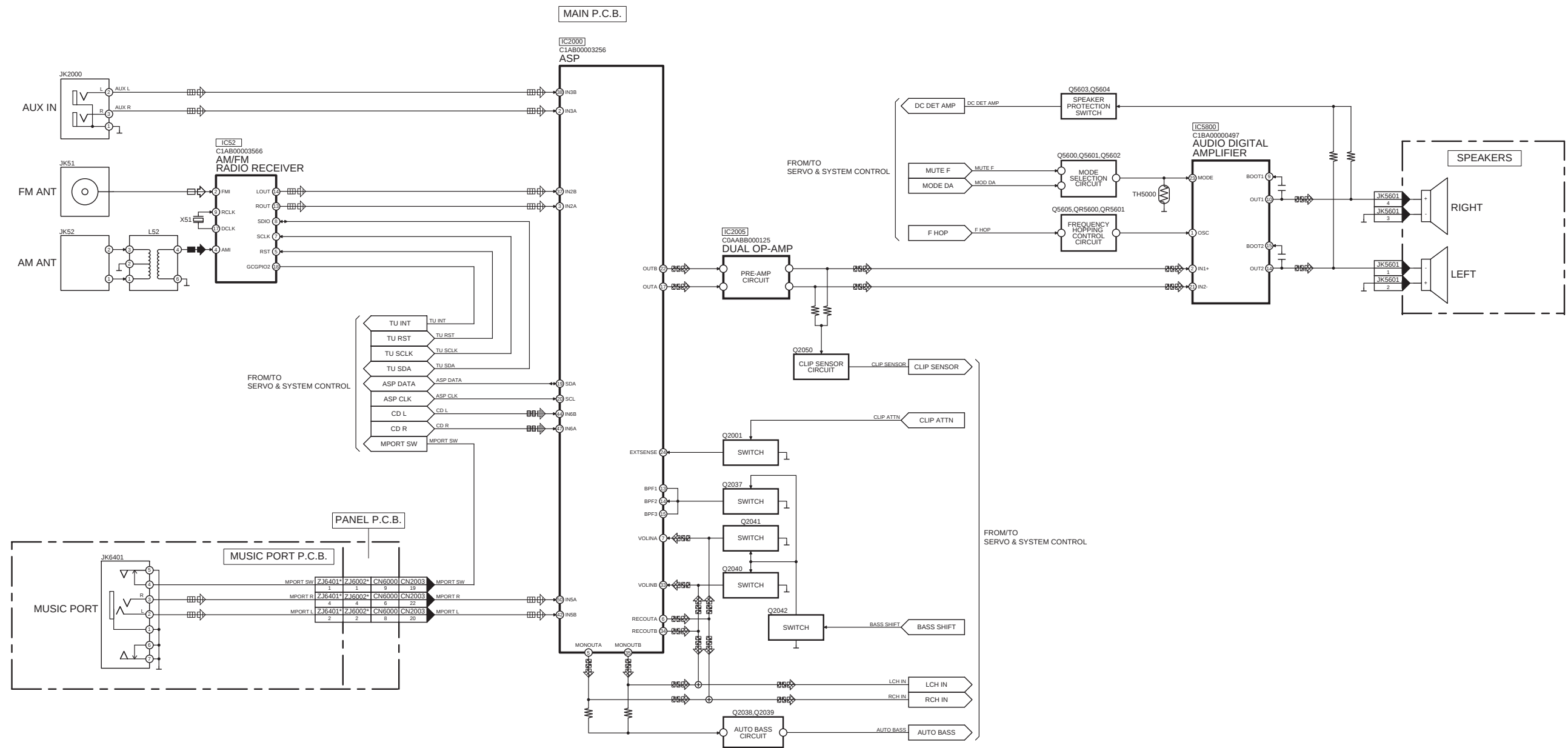
14.2. IC Terminal Chart

TC	IC8051 64M SDRAM		SIGNAL NAME	IC8001 SERVO PROCESSOR	
	PORT NAME	PIN NO		PIN NO	PORT NAME
1	A0	23	A0	14	A0
	A1	24	A1	15	A1
	A2	25	A2	16	A2
	A3	26	A3	17	A3
	A4	29	A4	20	A4
	A5	30	A5	21	A5
	A6	31	A6	22	A6
	A7	32	A7	23	A7
	A8	33	A8	24	A8
	A9	34	A9	25	A9
	A10	22	A10	13	A10
	A11	35	A11	26	A11

TC	IC8051 64M SDRAM		SIGNAL NAME	IC8001 SERVO PROCESSOR	
	PORT NAME	PIN NO		PIN NO	PORT NAME
2	DQ0 / DQ15	2 / 53	D0	142	D0
	DQ1 / DQ14	4 / 51	D1	143	D1
	DQ2 / DQ13	5 / 50	D2	144	D2
	DQ3 / DQ12	7 / 48	D3	2	D3
	DQ4 / DQ11	8 / 47	D4	3	D4
	DQ5 / DQ10	10 / 45	D5	4	D5
	DQ6 / DQ9	11 / 44	D6	5	D6
	DQ7 / DQ8	13 / 42	D7	6	D7

14.3. Audio

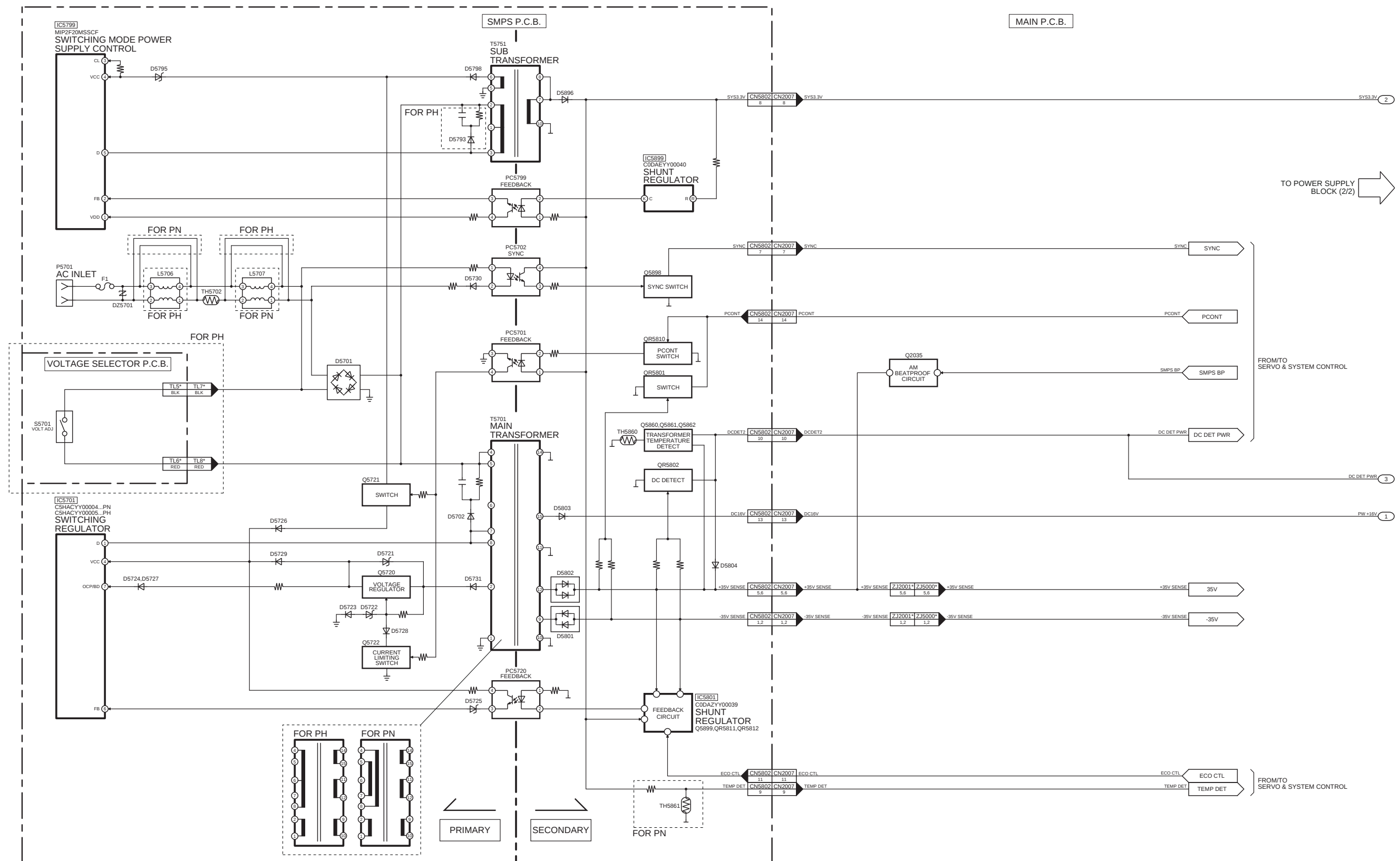
 : CD AUDIO INPUT SIGNAL LINE
  : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE
  : AUDIO OUTPUT SIGNAL LINE
  : AM SIGNAL LINE
  : FM SIGNAL LINE



NOTE: “ * ” REF IS FOR INDICATION ONLY

SA-AKX34PH/PN AUDIO BLOCK DIAGRAM

14.4. Power Supply

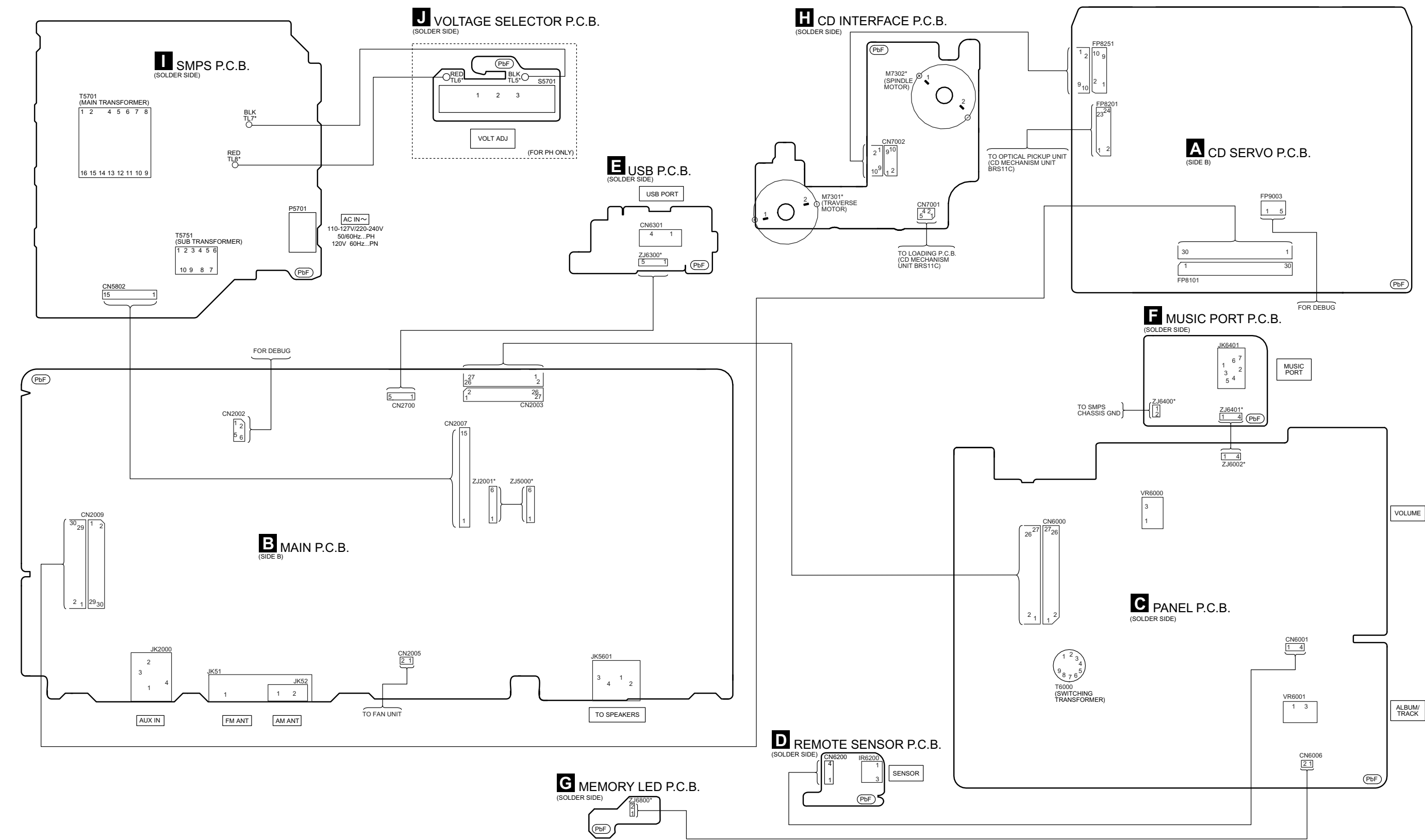


NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX34PH/PN POWER SUPPLY (1/2) BLOCK DIAGRAM



15 Wiring Connection Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX34PH/PN WIRING CONNECTION DIAGRAM

16 Schematic Diagram

16.1. Schematic Diagram Notes

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

Notes:

S5701:	Voltage ADJ switch (For PH only).
S6000:	Radio/EXT-IN switch.
S6001:	Stop (■) switch.
S6002:	Power (⏻/⏻) switch.
S6003:	Memory switch.
S6004:	Play/Pause (▶ / ⏸) switch.
S6005:	CD switch.
S6006:	USB switch.
S6007:	D.BASS switch.
S6008:	Latin Preset EQ switch.
S6009:	Forward (▶▶ / ▶▶) switch.
S6010:	Rewind (◀◀ / ◀◀) switch.
S6012:	Memory Rec/ Pause switch.
S6013:	USB Rec/ Pause switch.
S6014:	Album/Track switch.
S6015:	Open/Close switch (▲).
S6016:	Manual EQ switch.
S7201:	Reset switch.
VR6001:	Volume Jog.
VR6002:	Album/Track Jog.

- Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high quality sound (capacitors), low-noise (resistors), etc are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- In case of AC rated voltage Capacitors, the part no. and values will be indicated in the Schematic Diagram.

AC rated voltage capacitors:

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

- Resistor

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

- Capacitor

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

- Coil

Unit of inductance is H, unless otherwise noted.

- *

REF IS FOR INDICATION ONLY.

- Voltage and signal line

—	: +B signal line
—	: -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

- For PH only

CAUTION:
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 6.3A 250V FUSE

RISK OF FIRE-REPLACE FUSE AS MARKED.

- For PN only

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

RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

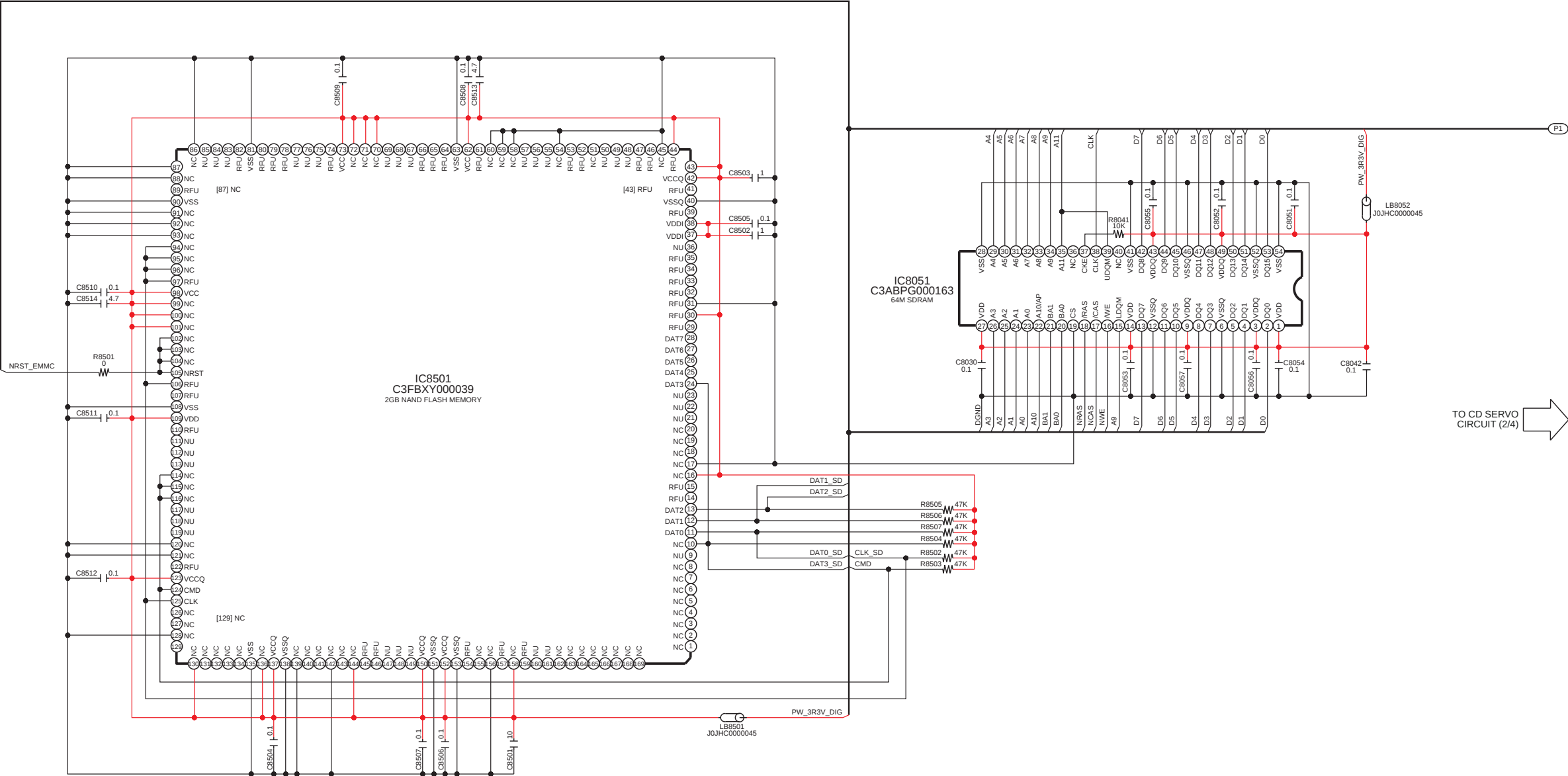
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For rating, refer to the marking adjacent to the symbol.

16.2. CD Servo Circuit

SCHEMATIC DIAGRAM - 1

A CD SERVO CIRCUIT

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



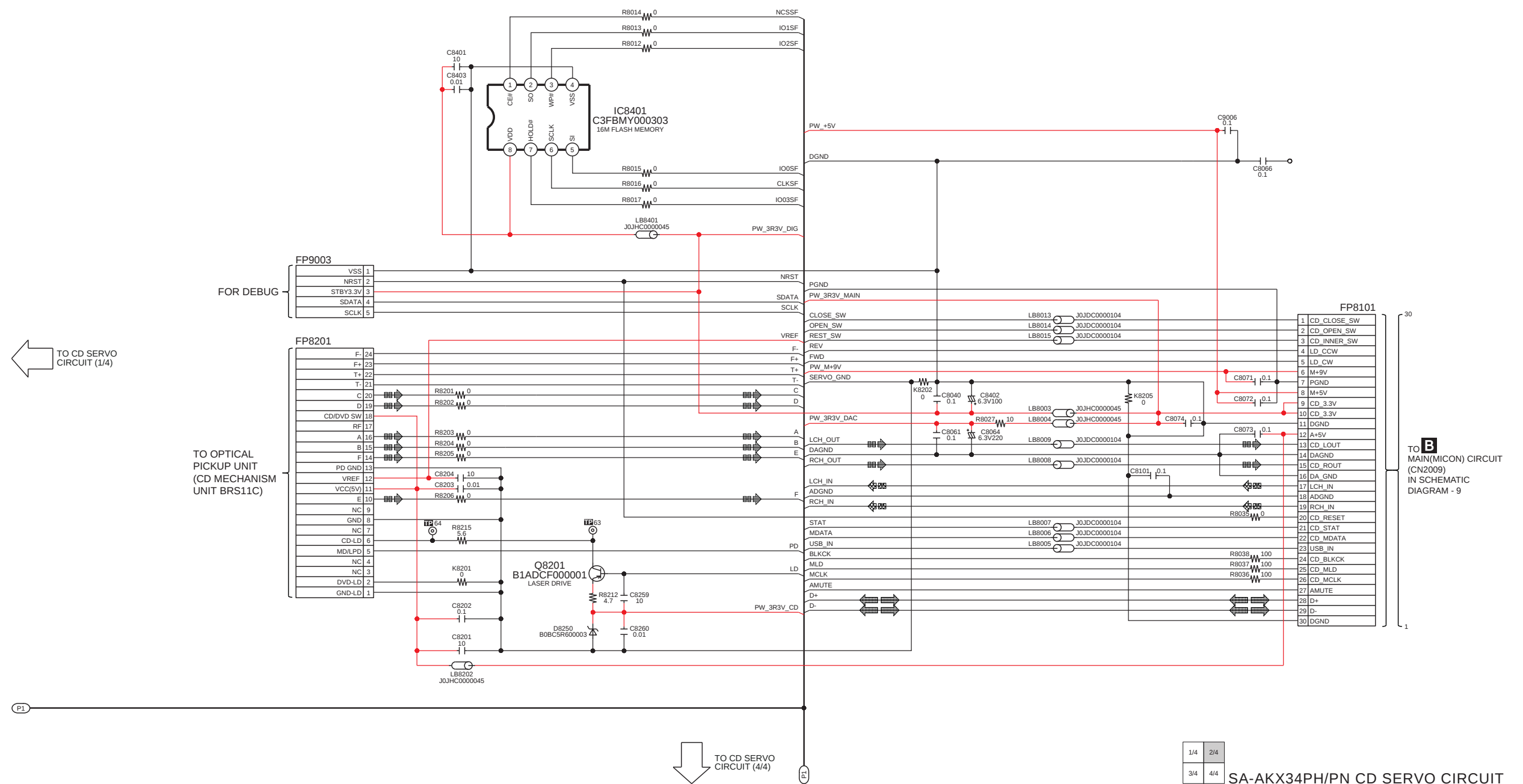
TO CD SERVO CIRCUIT (3/4)

TO CD SERVO CIRCUIT (2/4)

1/4 2/4
3/4 4/4
SA-AKX34PH/PN CD SERVO CIRCUIT

SCHEMATIC DIAGRAM - 2
A CD SERVO CIRCUIT

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



A CD SERVO CIRCUIT



A CD SERVO CIRCUIT

↑ TO CD SERVO
CIRCUIT (2/4)

SA-AKX34PH/PN CD SERVO CIRCUIT

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

B MAIN(MICON) CIRCUIT



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



↓ TO MAIN(MICON)
CIRCUIT (7/8)

$\frac{1}{8}$	$\frac{2}{8}$	$\frac{3}{8}$	$\frac{4}{8}$
$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	$\frac{8}{8}$

SA-AKX34PH/PN MAIN(MICON) CIRCUIT

SCHEMATIC DIAGRAM - 9
B 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 (1/8)

TO **A**
CD SERVO CIRCUIT
(FP8101)
IN SCHEMATIC
DIAGRAM - 2

→
TO MAIN(MICON)
CIRCUIT (6/8)

MI: MAIN(MICON): SCHEMATIC DIAGRAM - 5 ~ 12
DA: MAIN(D-AMP): SCHEMATIC DIAGRAM - 13 ~ 14

1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

SA-AKX34PH/PN MAIN(MICON) CIRCUIT

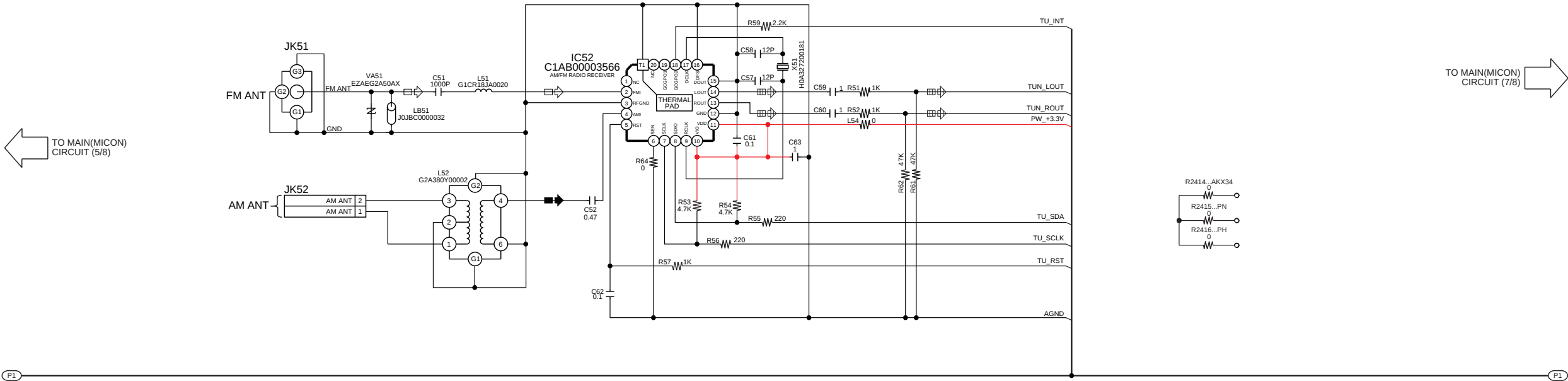
SCHEMATIC DIAGRAM - 10

B MAIN(MICON) CIRCUIT

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

— : -B SIGNAL LINE  : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE  : AM SIGNAL LINE  : USB SIGNAL LINE

↑ TO MAIN(MICON)
CIRCUIT (2/8)



MI: MAIN(MICON); SCHEMATIC DIAGRAM - 5 ~ 12
DA: MAIN(D-AMP); SCHEMATIC DIAGRAM - 13 ~ 14

1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

SA-AKX34PH/PN MAIN(MICON) CIRCUIT

SCHEMATIC DIAGRAM - 11

B

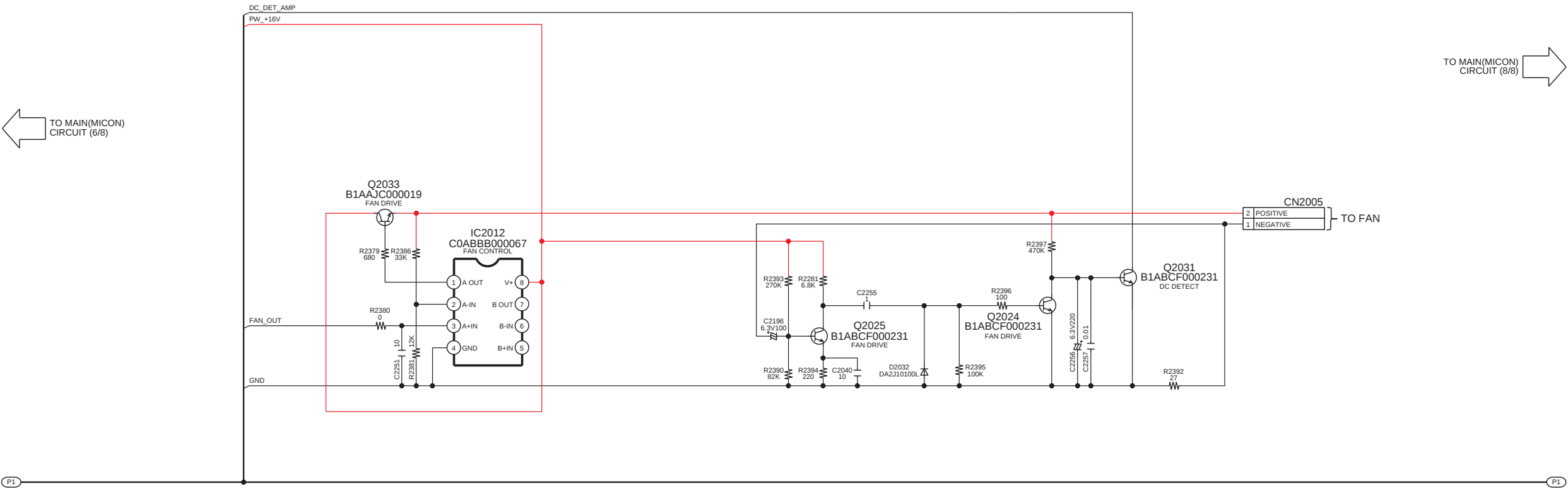
MAIN(MICON) CIRCUIT

- : +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 (3/8)

←
TO MAIN(MICON)
CIRCUIT (6/8)

→
TO MAIN(MICON)
CIRCUIT (8/8)



MI: MAIN(MICON): SCHEMATIC DIAGRAM - 5 ~ 12
DA: MAIN(D-AMP): SCHEMATIC DIAGRAM - 13 ~ 14

1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

SA-AKX34PH/PN MAIN(MICON) CIRCUIT

SCHEMATIC DIAGRAM - 12

B MAIN(MICON) CIRCUIT

- +B SIGNAL LINE

-B SIGNAL LINE

CD AUDIO INPUT SIGNAL LINE

AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE

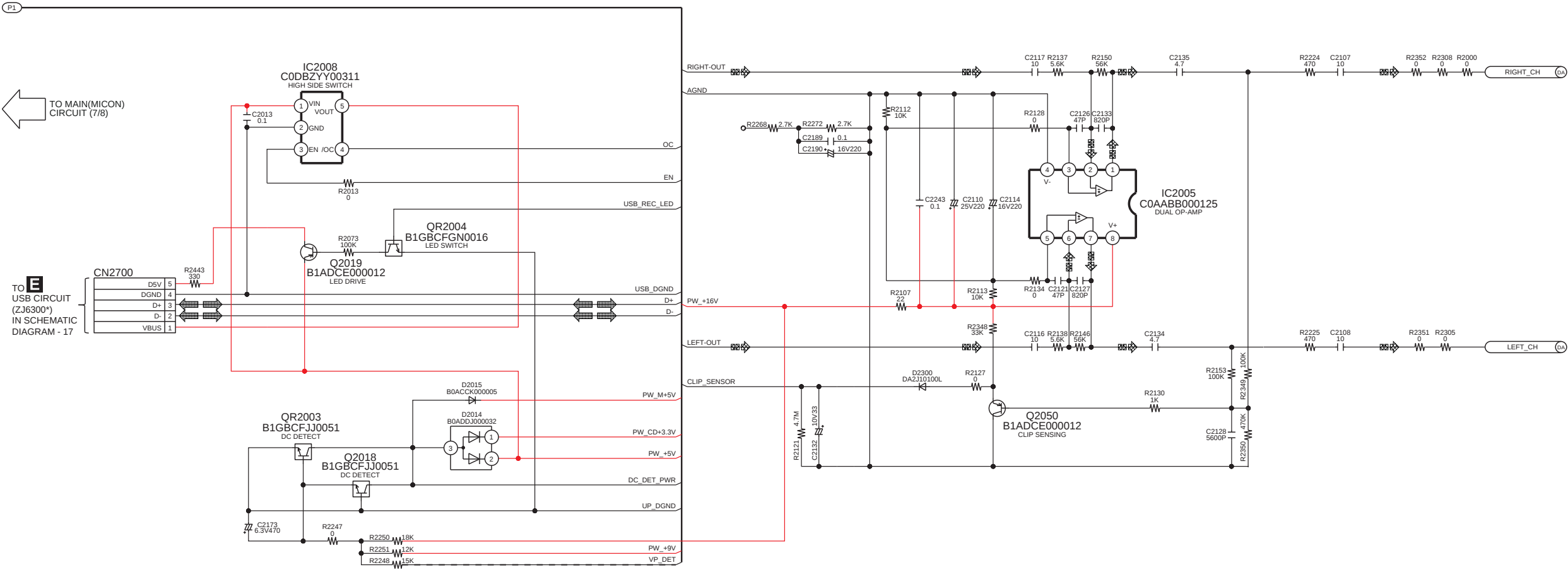
AUDIO OUTPUT SIGNAL LINE

FM SIGNAL LINE

AM SIGNAL LINE

USB SIGNAL LINE

↑ TO MAIN(MICON)
CIRCUIT (4/8)



MI: MAIN(MICON): SCHEMATIC DIAGRAM - 5 ~ 12
DA: MAIN(D-AMP): SCHEMATIC DIAGRAM - 13 ~ 14

1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

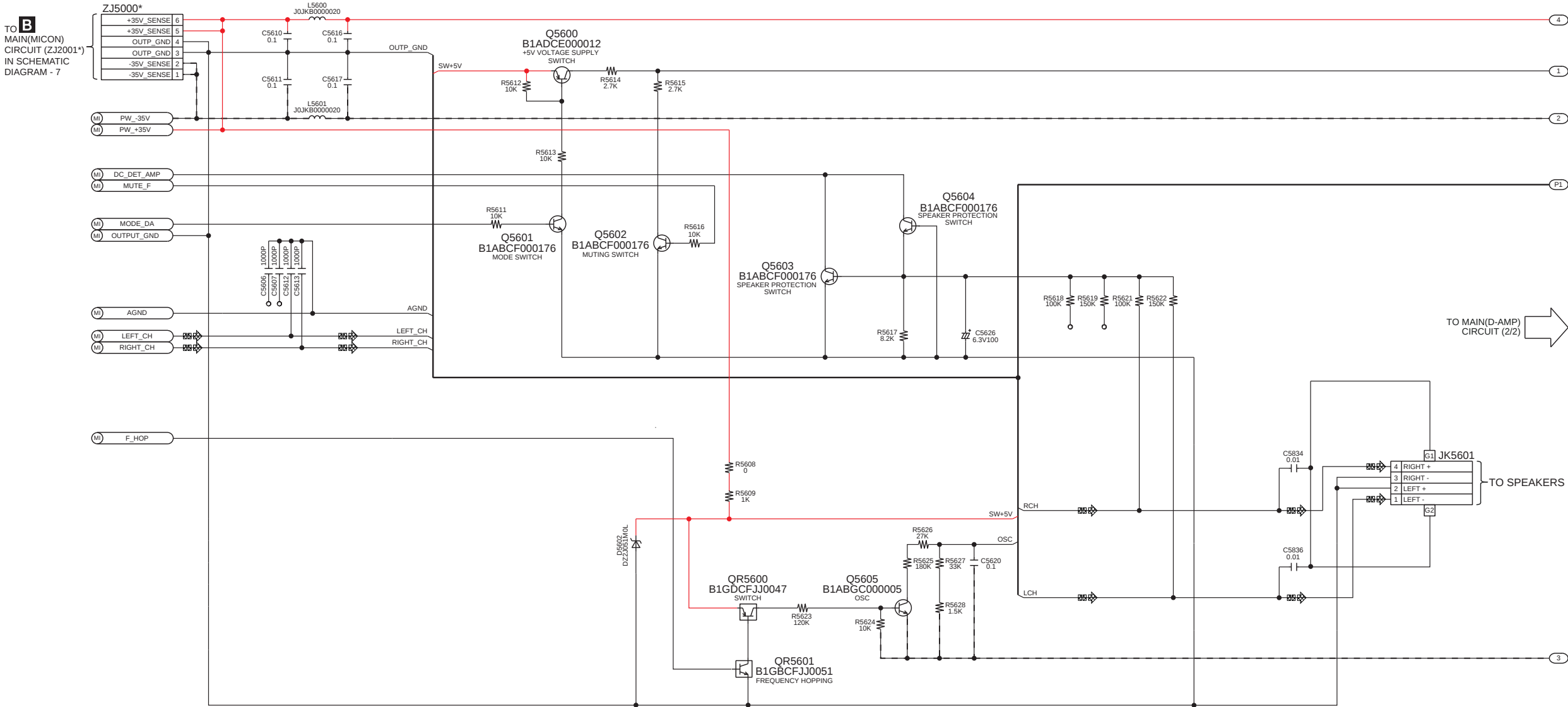
SA-AKX34PH/PN MAIN(MICON) CIRCUIT

16.4. Main(D-Amp) Circuit

SCHEMATIC DIAGRAM - 13

B MAIN(D-AMP) CIRCUIT

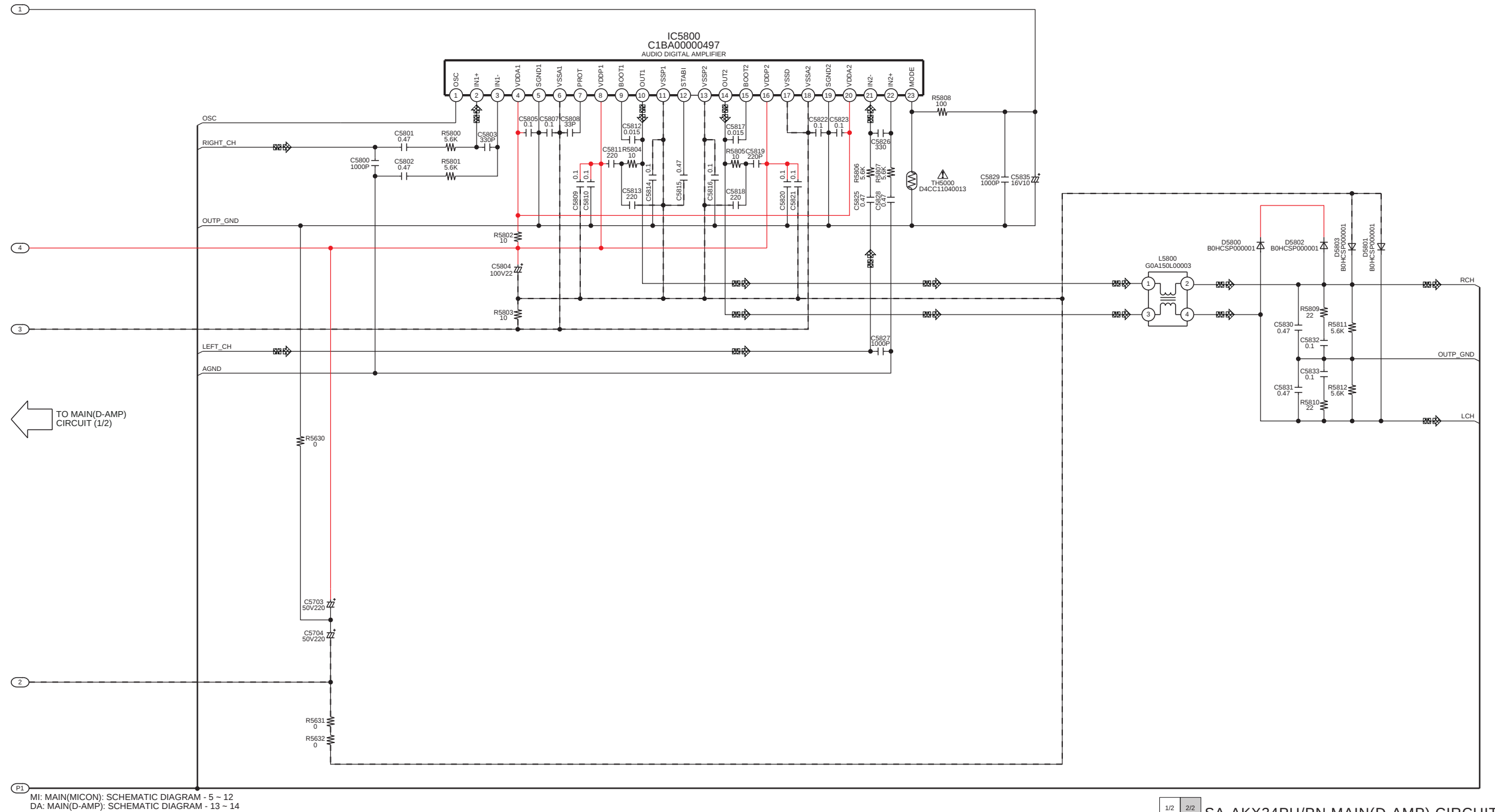
— : +B SIGNAL LINE — : -B SIGNAL LINE  : AUDIO OUTPUT SIGNAL LINE



1/2 2/2 SA-AKX34PH/PN MAIN(D-AMP) CIRCUIT

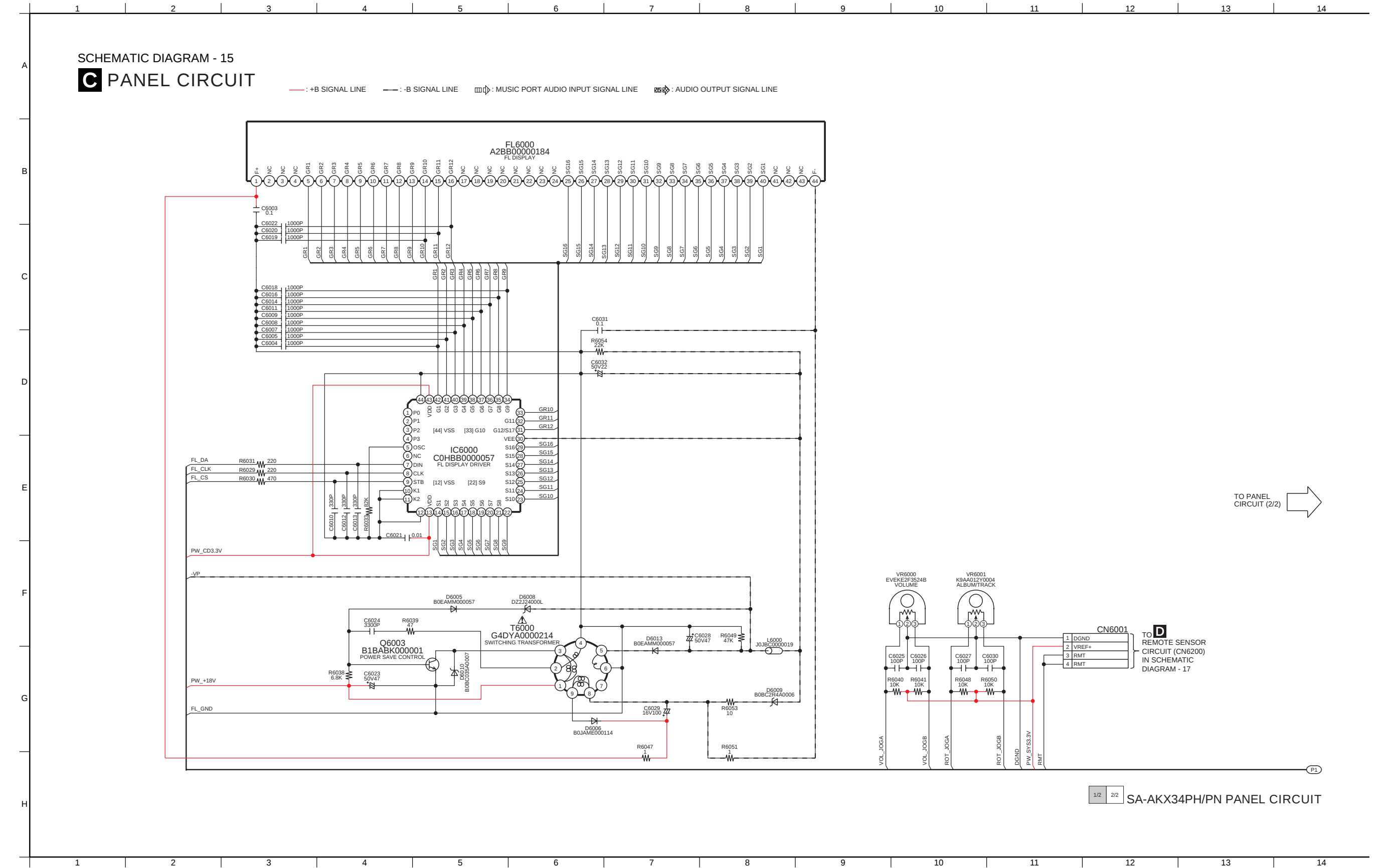
B MAIN(D-AMP) CIRCUIT

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



1/2 2/2 SA-AKX34PH/PN MAIN(D-AMP) CIRCUIT

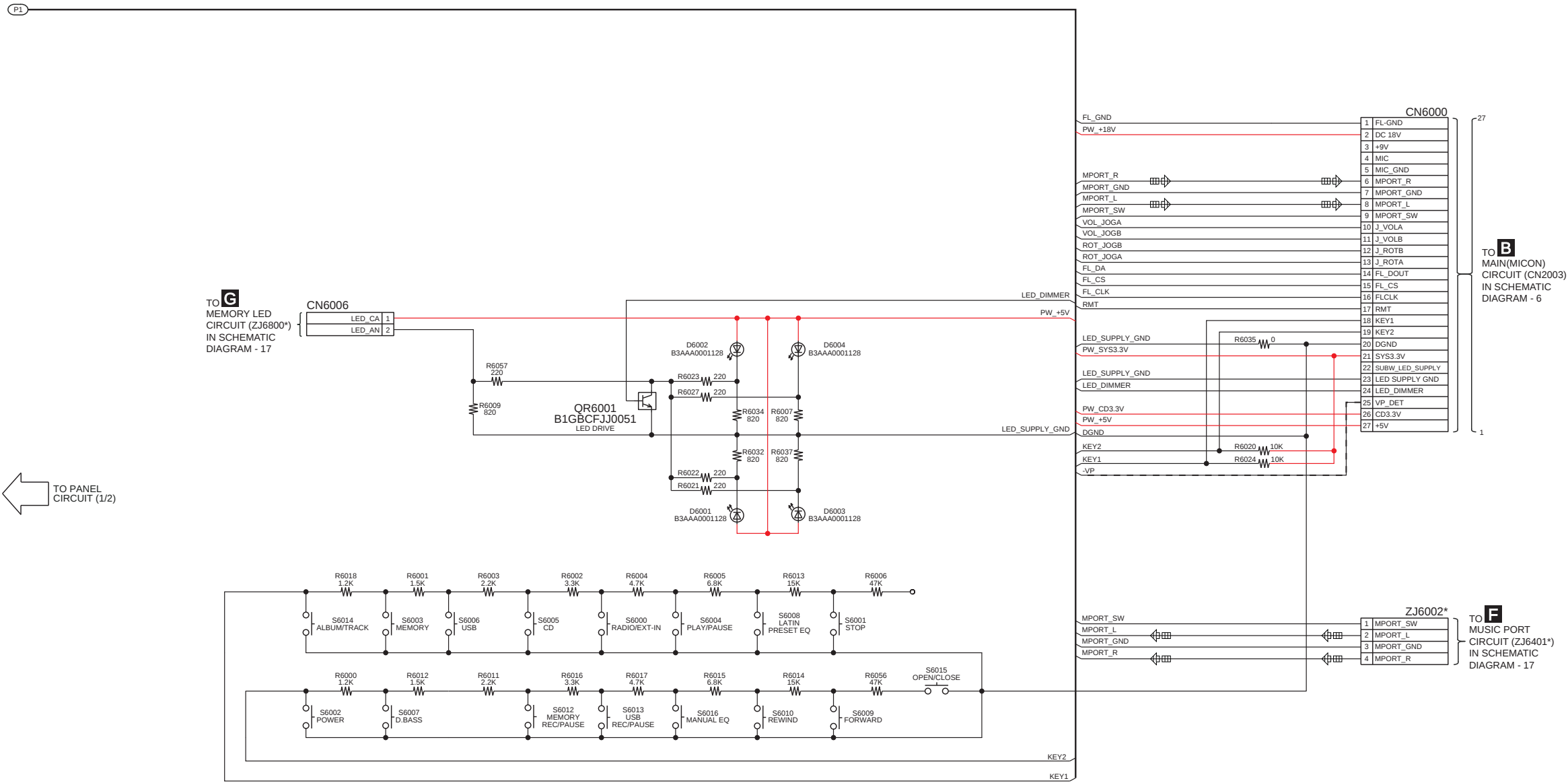
16.5. Panel Circuit



SCHEMATIC DIAGRAM - 16

C PANEL CIRCUIT

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



NOTE: " * " REF IS FOR INDICATION ONLY

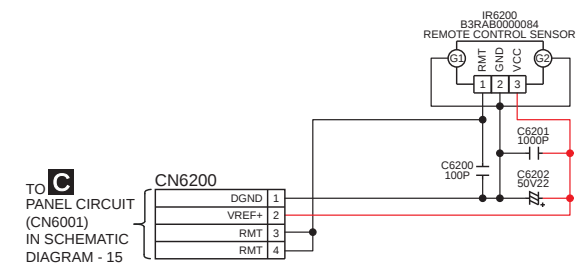
1/2 2/2 SA-AKX34PH/PN PANEL CIRCUIT

16.6. Remote Sensor, USB, Music Port and Memory LED Circuit

SCHEMATIC DIAGRAM - 17

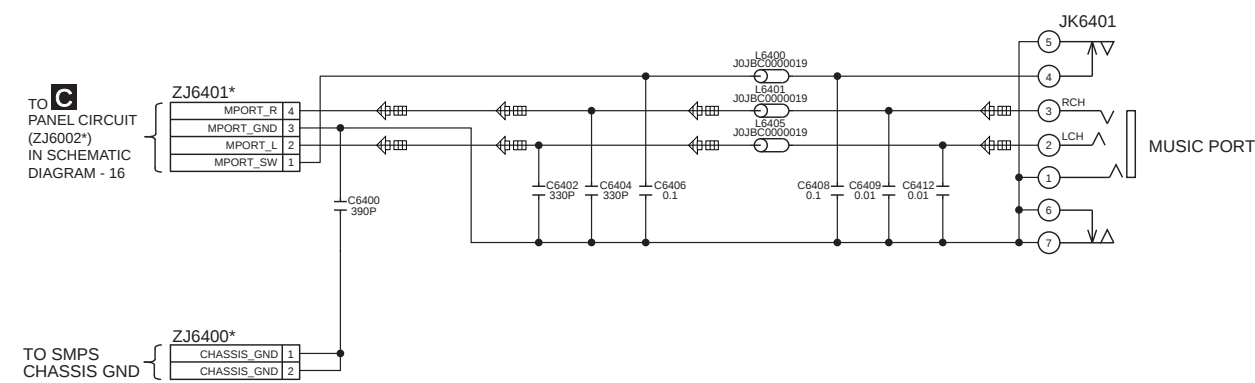
D REMOTE SENSOR CIRCUIT

—: +B SIGNAL LINE



F MUSIC PORT CIRCUIT

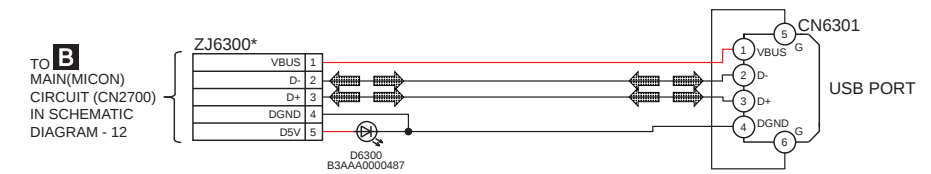
: MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

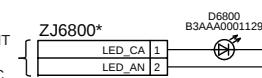
E USB CIRCUIT

— : +B SIGNAL LINE ➡ : USB SIGNAL LINE



G MEMORY LED CIRCUIT

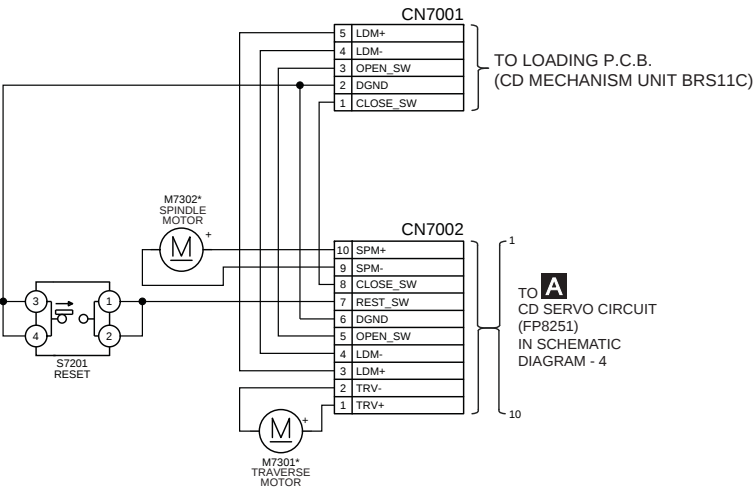
TO  PANEL CIRCUIT
(CN6006)
IN SCHEMATIC
DIAGRAM - 16



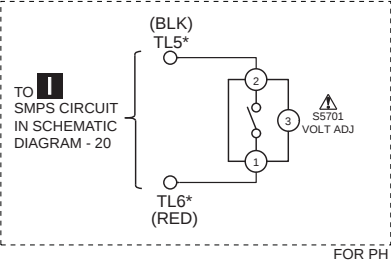
SA-AKX34PH/PN REMOTE SENSOR / USB / MUSIC PORT / MEMORY LED CIRCUIT

16.7. CD Interface and Voltage Selector Circuit

SCHEMATIC DIAGRAM - 18
H CD INTERFACE CIRCUIT



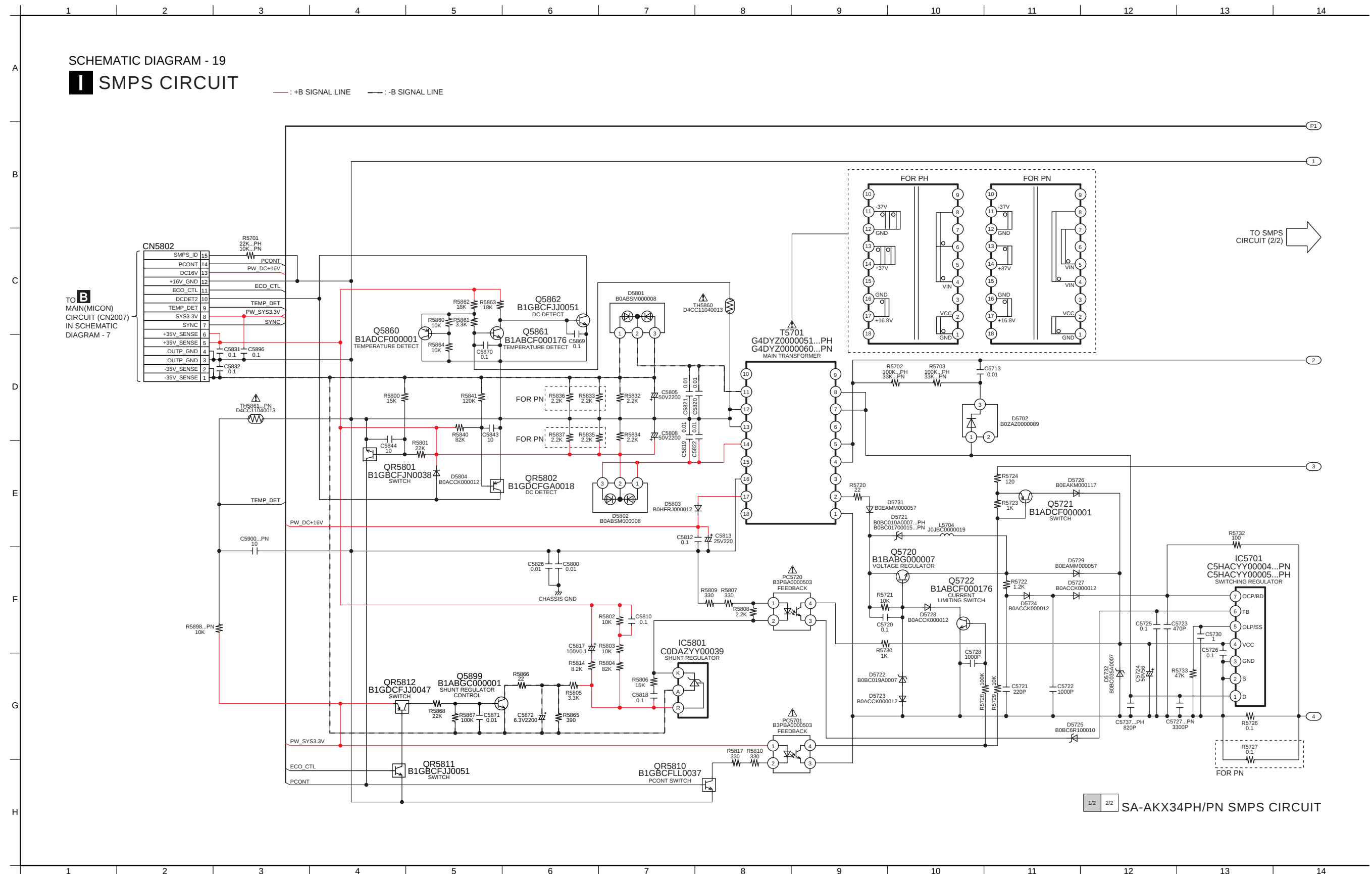
J VOLTAGE SELECTOR CIRCUIT



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX34PH/PN CD INTERFACE / VOLTAGE SELECTOR CIRCUIT

16.8. SMPS Circuit



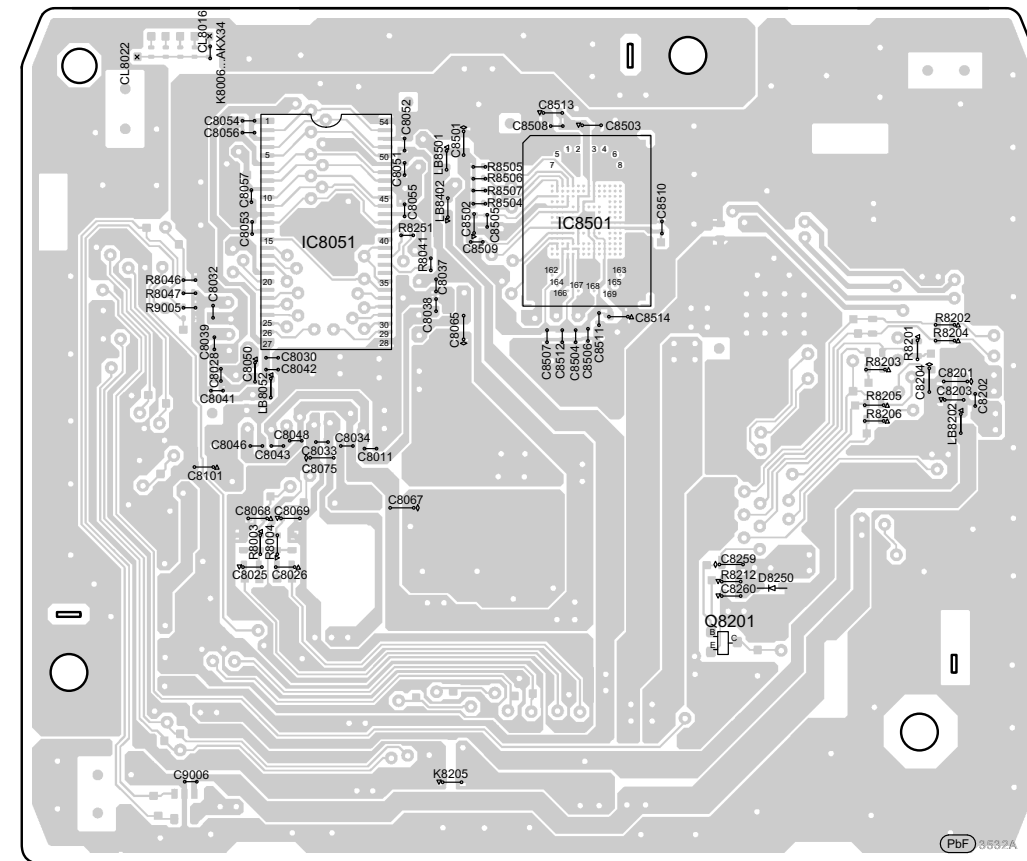
I SMPS CIRCUIT



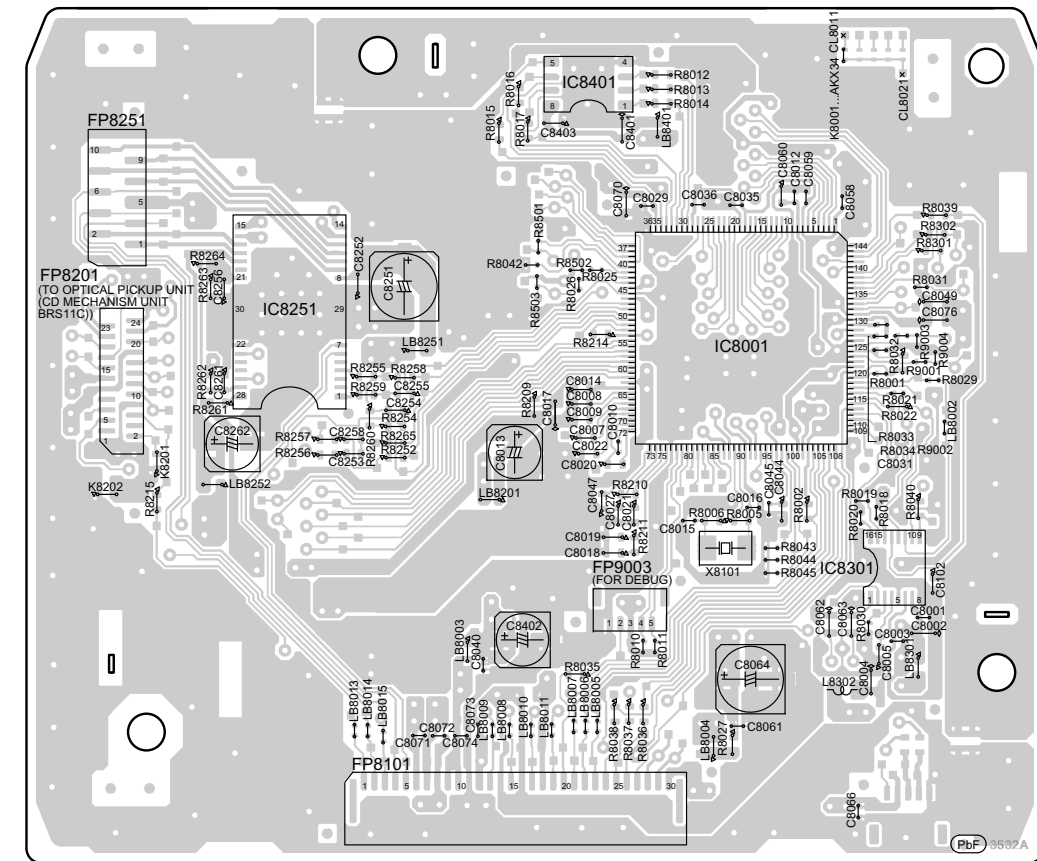
SA-AKX34PH/PN SMPS CIRCUIT

17.1. CD Servo P.C.B.

A CD SERVO P.C.B. (REP4749A)



(SIDE A)

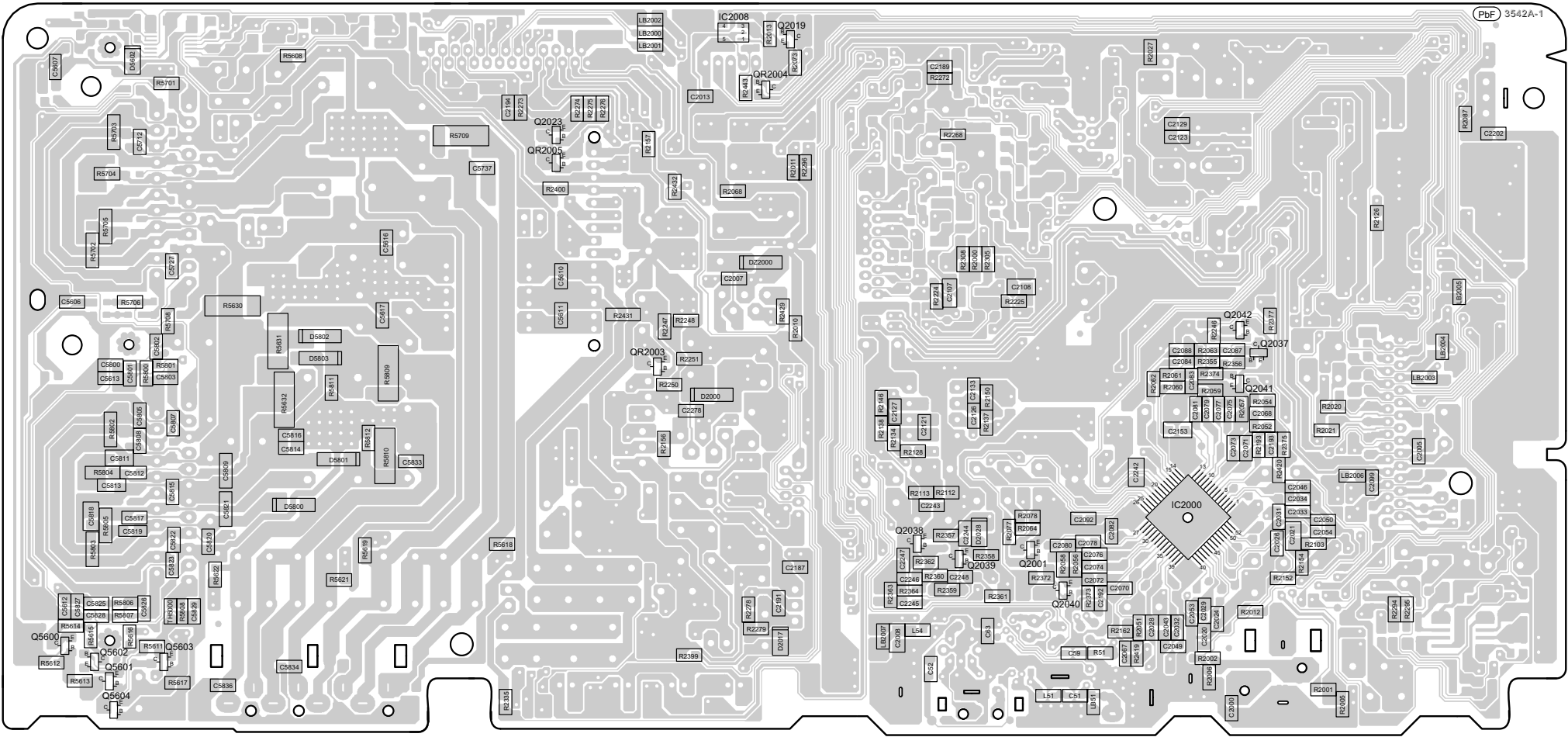


(SIDE B)

SA-AKX34PH/PN
CD SERVO P.C.B.

17.2. Main P.C.B. (Side A)

B MAIN P.C.B. (REP4768J...PH)
(REP4768H...PN)



(SIDE A)

SA-AKX34PH/PN
MAIN P.C.B.

H

G

F

F

D

c

D

•



1

2

3

4

5

6

7

8

Q

10

11

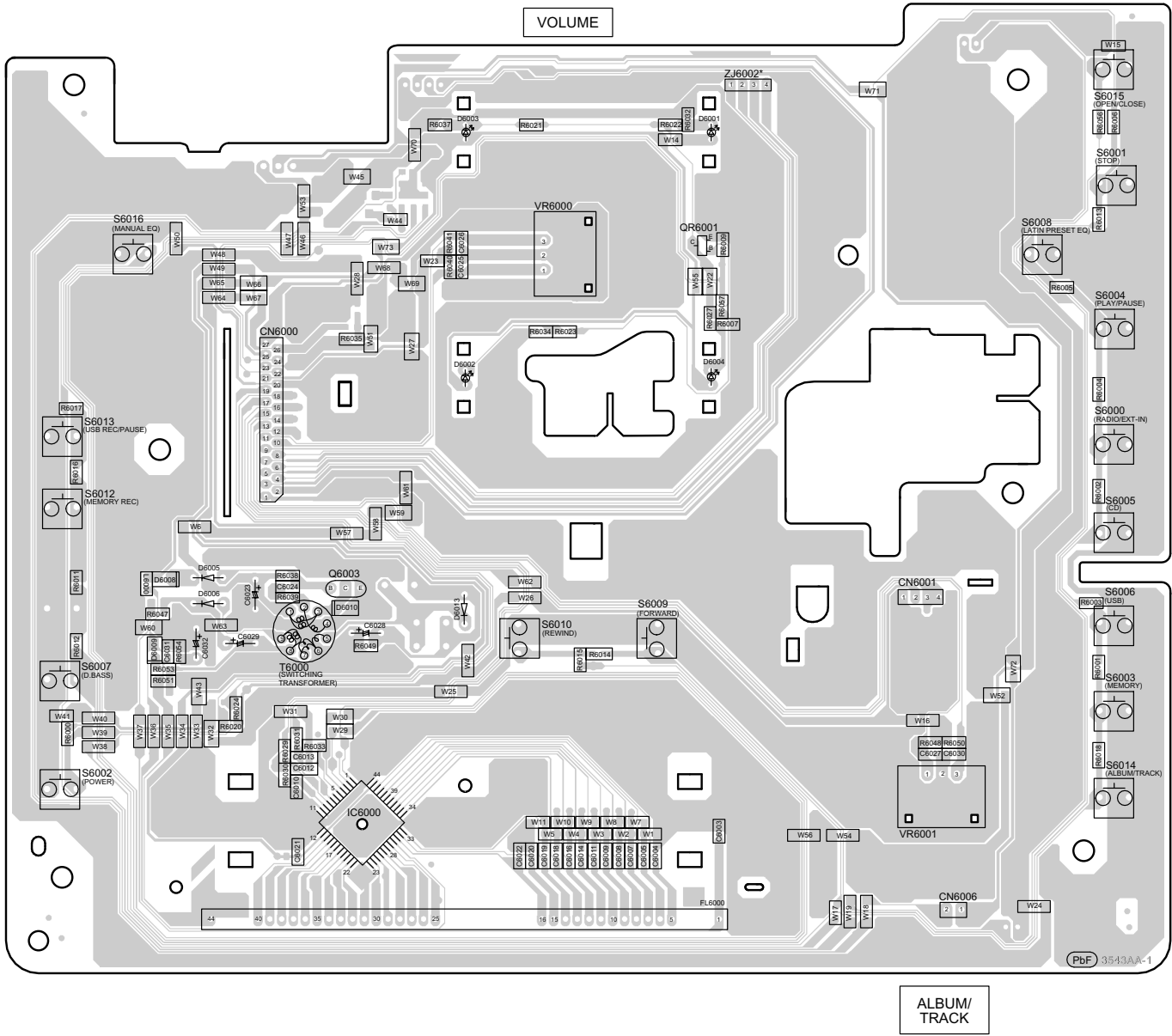
14

14

SA-AKX34PH/PN
MAIN P.C.B.

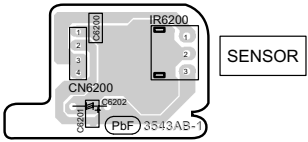
17.4. Panel, Remote Sensor, USB and Music Port P.C.B.

C PANEL P.C.B. (REP4793AA)

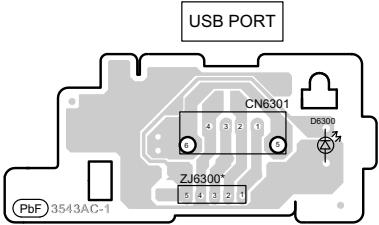


NOTE: " * " REF IS FOR INDICATION ONLY.

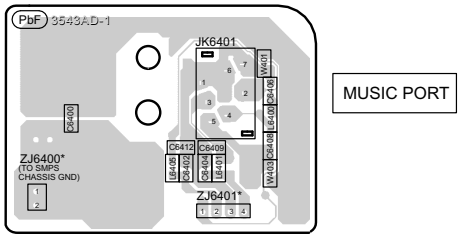
D REMOTE SENSOR P.C.B. (REP4793AB)



E USB P.C.B. (REP4793AC)

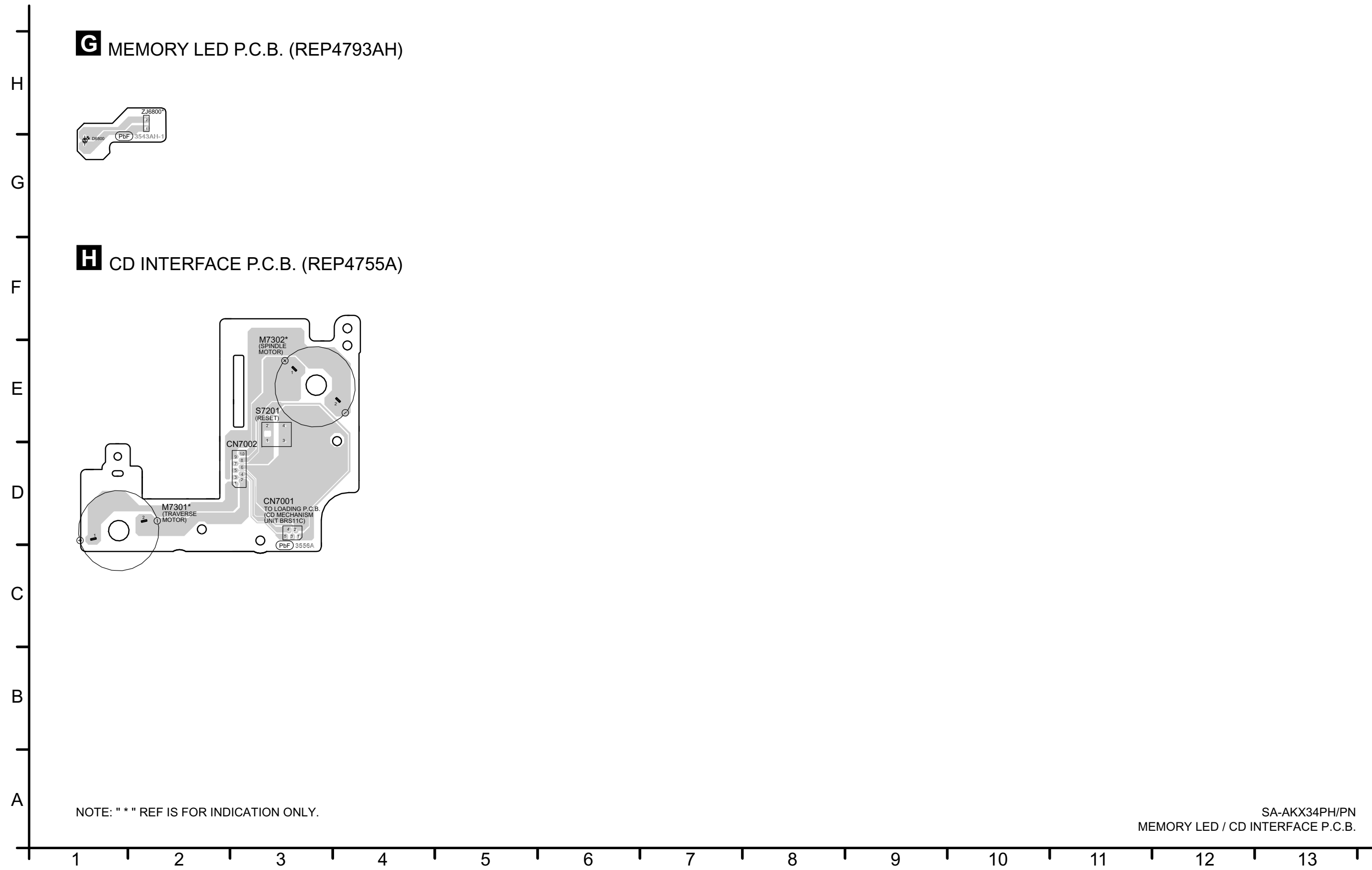


F MUSIC PORT P.C.B. (REP4793AA)



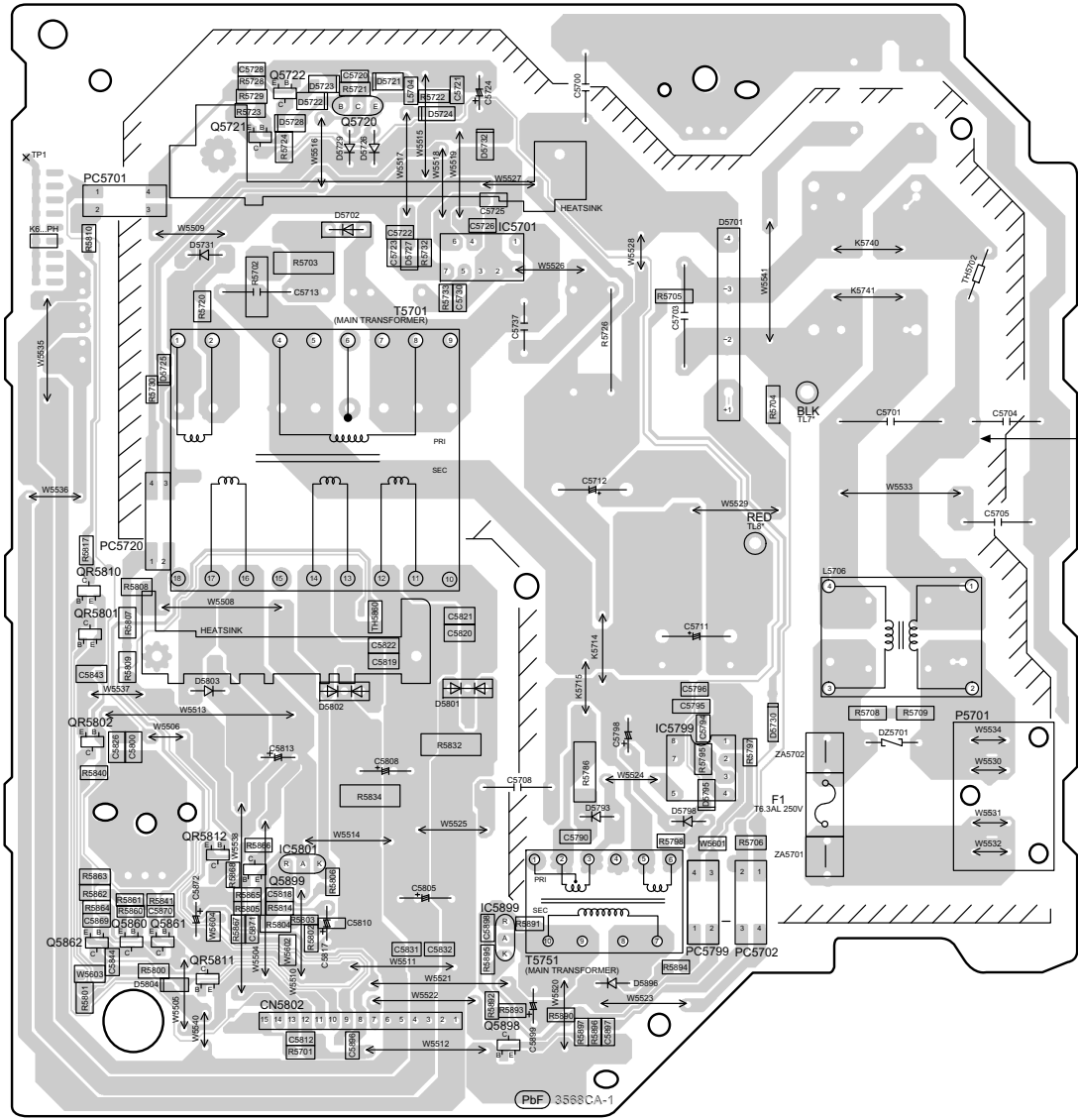
SA-AKX34PH/PN
PANEL / REMOTE SENSOR / USB / MUSIC PORT P.C.B.

17.5. Memory LED and CD Interface P.C.B

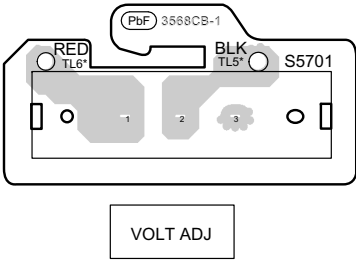


17.6. SMPS and Voltage Selector (PH)

I SMPS P.C.B. (REP4783F...PH)



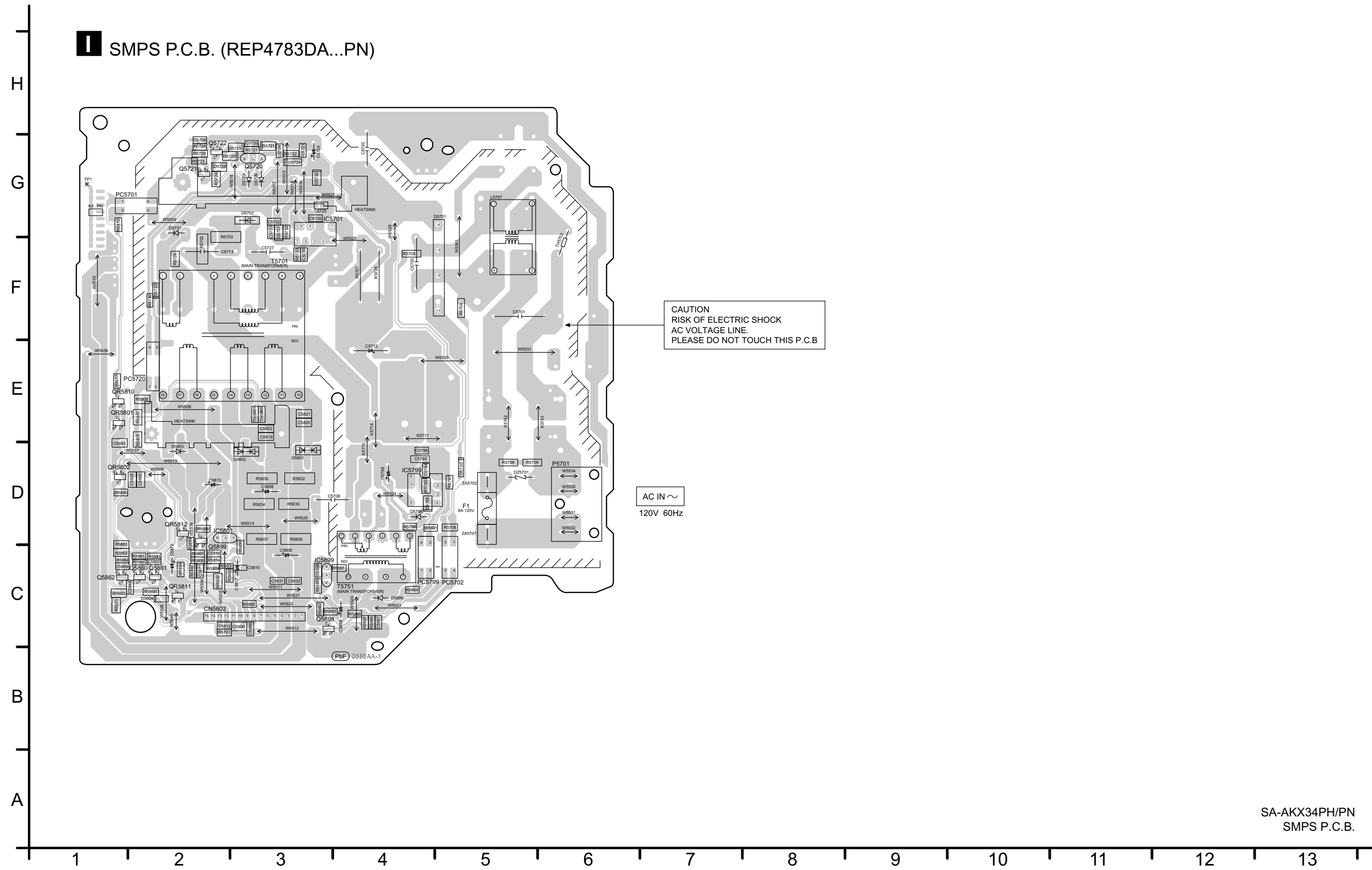
J VOLTAGE SELECTOR P.C.B. (REP4783F...PH)



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX34PH/PN
SMPS / VOLTAGE SELECTOR P.C.B.

17.7. SMPS P.C.B. (PN)



18 Appendix Information of Schematic Diagram

18.1. 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.

18.1.1. CD Servo P.C.B. (1/3)

REF NO.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.2	1.4	1.4	0.7	0.7	1.2	3.3	1.2	0	3.3	3.2	3.3	0	0.1	1.8	1.8	1.7	3.3	0	1.7
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	1.7	1.7	1.7	0	3.3	3.3	1.5	3.3	3.3	2.5	8	3.3	0.7	3.2	3.3	0	3.3	3.3	3.3	3.3
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	3.3	3.3	0	3.3	3.3	0	1.2	1.7	1.7	1.5	1.6	0	1.7	1.7	2	2	1.8	1.9	1.9	1.8
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	0.2	2.4	0	3.3	1.7	1.7	1	1	1	1.2	1.3	1.7	1.7	1.4	1.4	0.5	0	3.3	3.3	0.9
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	3.2	1.5	0	0	3.3	0	1.7	1.7	1.2	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	3.3	3.3	3.2	3.3	3.3	3.3	1.5	1.5	1.32	3.3	3.3	0	1.3	1.3	1.3	1.3	3.3	3.3
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	0	3.3	0	0	0	3.3	0	0	3.3	0	3.2	3.2	0	0.8	0.8	1.6	0	0
REF NO.	IC8001																			
MODE	141	142	143	144																
CD PLAY	0	1.2	1.4	0.7																
REF NO.	IC8051																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	0.7	3.3	0.7	1.4	0	1.4	0.7	3.3	1.4	1.4	0	1.4	3.3	3.3	3.3	3.3	3.3	0	0
REF NO.	IC8051																			
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	0.1	1.8	1.8	1.7	3.3	0	1.7	1.7	1.7	1.7	0	3.3	3.3	0	3.3	1.5	3.3	0
REF NO.	IC8051																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0	0.6	3.3	1.2	1.2	0	1.2	0.6	3.3	1.2	1.2	0	1.2	0						
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	1.6	9.1	2.5	1.6	2.4	3	3	9	0	0	4.6	4.6	2.6	2.7	2.6	2.7	2	3.1	5	0

SA-AKX34PH/PN CD SERVO P.C.B.

18.1.2. CD Servo P.C.B. (2/3)

REF NO.	IC8251																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	1.5	0	1.5	9.3	9.3	1.7	1.7	3.3	0	0										
REF NO.	IC8301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	2.3	1.5	0	0	0	5	3.2	0	0	0.9	0.9	0.9	0	3.3	0	0				
REF NO.	IC8401																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	1.8	2.5	3.3	0	3.2	0.8	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	0	0	0	0	0	0	0	0	0	3.0	3.0	3.0	0	0	3.0	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	0	0	0	0	0	0	0	0	3.0	0	0	0	0	0	0	3.0	3.0	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	3.0	3.0	3.0	0	0	0	0	0	0	0	0	0	0	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	3.0	0	0	0	0	0	0	0	3.0	3.0	3.0	3.0	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	0	0	0	0	0	0	0	0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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	3.0	3.0	3.0	3.0	3.0	3.0	0	0	3.0	0	0	0	0	3.0	3.0	3.0	0	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	0	3.0	3.0	3.0	0	0	0	0	3.0	0	0	0	0	0	3.0	3.0	0	0	0
REF NO.	IC8501																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
CD PLAY	0	0	0	3.0	0	0	0	0	0	3.0	0	3.0	0	0	0	0	0	3.0	0	0
REF NO.	IC8501																			
MODE	161	162	163	164	165	166	167	168	169											
CD PLAY	0	0	0	0	0	0	0	0	0											

SA-AKX34PH/PN CD SERVO P.C.B.

18.1.3. CD Servo P.C.B. (3/3)

REF NO.	Q8201																			
MODE	E	C	B																	
CD PLAY	2.4	2	3																	

SA-AKX34PH/PN CD SERVO P.C.B.

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

REF NO.	IC52																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TUNER	0	1.5	0	3.0	3.0	0	3.0	3.3	3.3	3.3	3.3	0	1.4	0.3	0	0	3.3	3.0	0	0
REF NO.	IC2000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER ON	0	3.1	2.0	0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0	0	3.3	3.3
STANDBY	0	0	0	0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	0	0	3.3	3.3
REF NO.	IC2000																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER ON	8.6	0	0.2	0	0.7	4.4	4.4	0.3	4.2	4.2	4.2	4.2	4.3	4.4	4.4	0	2.0	3.1	0	0
STANDBY	8.6	0	0.2	0	0.7	4.4	4.4	0.3	4.2	4.2	4.2	4.2	4.3	4.4	4.4	0	0	0	0	0
REF NO.	IC2000																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52								
POWER ON	0	3.0	0	4.0	0	4.3	4.0	0	0	3.0	0	0								
STANDBY	0	0	0	0	0	4.3	0	0	0	0	0	0								
REF NO.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER ON	0	3.3	3.3	0	0	0	1.2	0	3.3	3.3	0	1.5	1.6	0	1.1	1.7	3.3	1.8	3.2	3.2
STANDBY	0	3.3	3.3	0	0	0	1.2	0	3.3	3.3	0	1.5	1.6	0	1.1	1.7	3.3	1.8	3.2	0
REF NO.	IC2003																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER ON	3.2	3.2	3.3	0	3.0	0	1.9	3.3	0	3.3	0	0	0	0	0	1.7	1.8	0	0	0
STANDBY	0	3.2	3.3	0	3.0	0	1.9	3.3	0	3.3	0	0	0	0	0	1.7	1.8	0	0	0
REF NO.	IC2003																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
POWER ON	0	0	3.0	0	0	0	0	3.3	0	0	0	3.3	3.3	0	0	0	0	0	0	0
STANDBY	0	0	3.0	0	0	0	0	3.3	0	0	0	3.3	3.3	0	0	0	0	0	0	0
REF NO.	IC2003																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
POWER ON	0	0	0	3.0	3.0	0	0	0	3.3	0	0	0	3.3	3.3	3.3	3.3	3.3	0	0	0
STANDBY	0	0	0	3.0	3.0	0	0	0	3.3	0	0	0	3.3	3.3	3.3	3.3	3.3	0	0	0
REF NO.	IC2003																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
POWER ON	0	3.3	3.3	0	0	3.3	3.3	3.3	3.3	0	0	0	0.6	0.9	3.3	0	0.9	3.3	2.6	3.3
STANDBY	0	3.3	3.3	0	0	3.3	3.3	3.3	3.3	0	0	0	0.6	0.9	3.3	0	0.9	3.3	2.6	3.3
REF NO.	IC2005																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	9.0	9.0	9.0	0	9.0	9.0	9.0	17.8												
STANDBY	0	0	0	0	0	0	0	17.8												

SA-AKX34PH/PN MAIN P.C.B.

18.1.5. Main P.C.B. (2/3)

REF NO.	IC2006																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	0	0	0	0	2.0	3.0	3.0	3.3												
STANDBY	0	0	0	0	2.0	3.0	3.0	3.3												
REF NO.	IC2008																			
MODE	1	2	3	4	5															
POWER ON	5.2	0	3.3	3.3	5.2															
STANDBY	5.2	0	3.3	3.3	5.2															
REF NO.	IC2010																			
MODE	1	2	3	4	5															
POWER ON	18.2	9.3	0	1	2.9															
STANDBY	18.2	9.3	0	1	2.9															
REF NO.	IC2011																			
MODE	1	2	3	4	5															
POWER ON	18.0	5.2	0	1.0	2.9															
STANDBY	18.0	5.2	0	1.0	2.9															
REF NO.	IC2012																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	7.1	0.5	0.5	0	0	0	0	18.0												
STANDBY	7.1	0.5	0.5	0	0	0	0	18.0												
REF NO.	IC2014																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	3.4	0.8	0	0	5.1	0	0	5.2												
STANDBY	3.4	0.8	0	0	5.1	0	0	5.2												
REF NO.	IC5800																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	-11.0	0	0	34.5	0	-32.9	-24.6	35.6	0	0	-34.0	-31.0	-34.0	0	9.0	34.6	-34.0	-34.0	0	34.0
STANDBY	-11.0	0	0	34.5	0	-32.9	-24.6	35.6	0	0	-34.0	-31.0	-34.0	0	9.0	34.6	-34.0	-34.0	0	34.0
REF NO.	IC5800																			
MODE	21	22	23																	
CD PLAY	0	0	5.0																	
STANDBY	0	0	2.3																	
REF NO.	Q2001				Q2011				Q2023				Q2035				Q2037			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0		0	3.3	0		18.2	0	18.1		0	34.1	2.0		0	4.4	3.0	
STANDBY	0	0	0		0	3.3	0		18.2	0	18.1		0	34.1	2.0		0	4.4	3.0	
REF NO.	Q2038				Q2039				Q2040				Q2041				Q2042			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	1.9	1.5		0.9	0	1.9		0	4.3	4.4		0	4.4	4.3		0	3.3	0	
STANDBY	0	1.9	1.5		0.9	0	1.9		0	4.3	4.4		0	4.4	4.3		0	3.3	0	

SA-AKX34PH/PN MAIN P.C.B.

18.1.6. Main P.C.B. (3/3)

REF NO.	Q2050				Q5603				Q5604				Q5605				QR5600			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	9.0		0	3.3	0		0	3.3	0		-37.1	2.4	1.0		5.0	1.0	4.8	
STANDBY	0	0	0.2		0	3.3	0		0	3.3	0		-37.1	2.4	1.0		5.0	1.0	4.8	
REF NO.	QR5601																			
MODE	E	C	B																	
CD PLAY	0	4.8	0																	
STANDBY	0	4.8	0																	
REF NO.	Q2018				Q2022				Q2024				Q2025				Q2027			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	0	5.0	0		5.1	7.0	5.8		0	3.2	1.0		0	1.0	5.0		9.0	8.9	9.0	
STANDBY	0	5.0	0		5.1	7.0	5.8		0	3.2	1.0		0	1.0	5.0		9.0	8.9	9.0	
REF NO.	Q2031				Q2033				Q5600				Q5601				Q5602			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	0	3.3	3.2		16.0	18.2	7.1		5.1	5.1	4.5		0	5	0		0	0	0.6	
STANDBY	0	3.3	3.2		16.0	18.2	7.1		5.1	5.1	4.5		0	5	0		0	0	0.6	
REF NO.	QR2000				QR2003				QR2005				QR2006							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
POWER ON	0	0	8.9		0	3.3	0		0	3.3	0		0	3.2	3.2					
STANDBY	0	0	8.9		0	3.3	0		0	3.3	0		0	3.2	3.2					
REF NO.	Q2019				QR2004															
MODE	E	C	B		E	C	B													
USB	5.2	5.0	0		0	0	3.3													
STANDBY	5.2	0	0		0	0	0													

SA-AKX34PH/PN MAIN P.C.B.

18.1.7. Panel P.C.B.

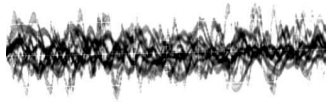
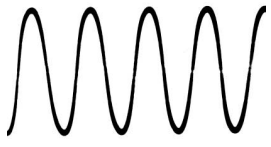
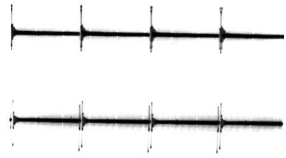
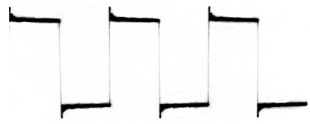
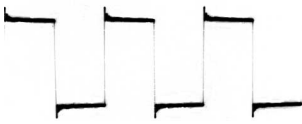
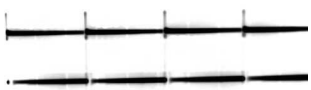
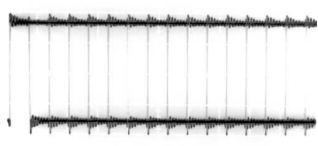
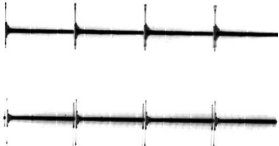
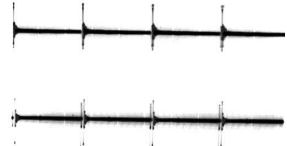
REF NO.	IC6000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER ON	0	0	0	0	2.0	0	0	0	2.3	0	0	0	3.4	-16.2	-16.2	-19.9	-21.9	-20.0	-21.9	-19.9
STANDBY	0	0	0	0	2.0	0	0	0	2.3	0	0	0	3.4	-16.2	-16.2	-19.9	-21.9	-20.0	-21.9	-19.9
REF NO.	IC6000																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER ON	-19.9	-21.9	-23.7	-21.9	-14.2	-21.9	-16.2	-21.9	-23.9	-24.3	-24.3	-22.0	-21.9	3.40	-21.9	-21.9	-21.9	21.9	-21.9	-21.9
STANDBY	-19.9	-21.9	-23.7	-21.9	-14.2	-21.9	-16.2	-21.9	-23.9	-24.3	-24.3	-22.0	-21.9	3.40	-21.9	-21.9	-21.9	21.9	-21.9	-21.9
REF NO.	IC6000																			
MODE	41	42	43	44																
POWER ON	-22.0	-22.0	3.4	0																
STANDBY	-22.0	-22.0	3.4	0																
REF NO.	Q6003				QR6001															
MODE	E	C	B		E	C	B													
POWER ON	0	17.8	0		0	0	0													
STANDBY	0	17.8	0		0	0	0													

SA-AKX34PH/PN PANEL P.C.B.

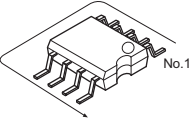
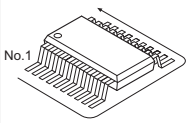
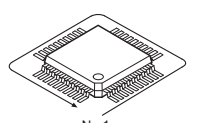
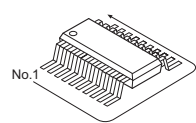
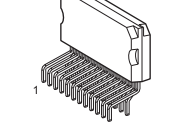
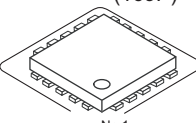
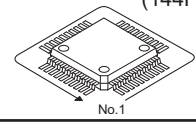
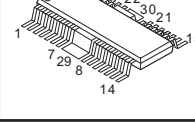
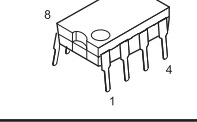
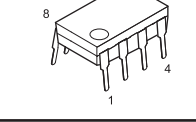
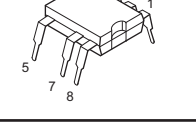
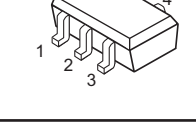
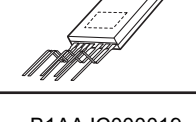
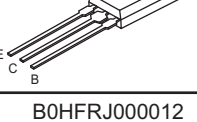
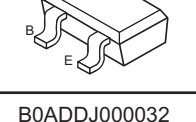
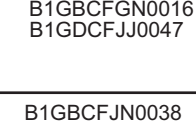
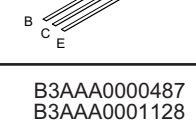
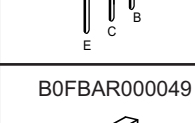
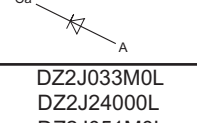
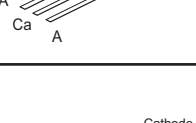
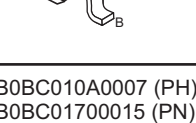
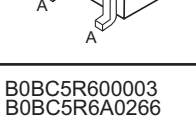
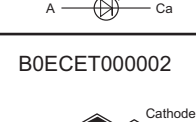
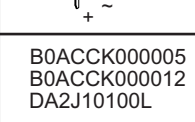
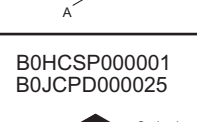
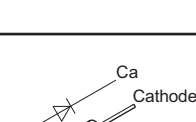
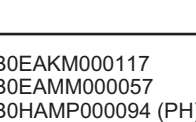
18.1.8. SMPS P.C.B.

REF NO.	IC5701																			
MODE	1	2	3	4	5	6	7													
POWER ON	164.8	0	0	19.1	0	1.4	0.5													
STANDBY	164.8	0	0	19.1	0	1.4	0.5													
REF NO.	IC5799																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	5.9	1.0	2.3	11.0	164.2	0	0	0												
STANDBY	5.9	1.0	2.3	11.0	164.2	0	0	0												
REF NO.	IC5801																			
MODE	K	A	R																	
POWER ON	2.4	2.0	-30.0																	
STANDBY	2.4	2.0	-30.0																	
REF NO.	IC5899																			
MODE	K	A	R																	
POWER ON	1.2	0	0																	
STANDBY	1.2	0	0																	
REF NO.	Q5720				Q5721				Q5722				Q5860				Q5861			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	7.3	8.5	7.6		19.7	19.7	19.0		0	19.6	0		0	35.2	0		1.3	0	0.7	
STANDBY	7.4	8.6	7.7		19.7	19.7	19.0		0	19.6	0		0	35.2	0		1.3	0	0.7	
REF NO.	Q5862				Q5898				Q5899				QR5801				QR5802			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	0	0	0.7		0	3.3	0		-30.0	-30.0	0		0	3.1	0		0	3.3	6.6	
STANDBY	0	3.3	0		0	3.3	0		-30.0	-30.0	0		0	3.1	0		0	3.3	6.6	
REF NO.	QR5810				QR5811				QR5812											
MODE	E	C	B		E	C	B		E	C	B									
POWER ON	0	0	3.1		0	0.5	2.0		3.3	0	0.5									
STANDBY	0	0	3.1		0	0.5	2.0		3.3	0	0.5									
SA-AKX34PH/PN SMPS P.C.B.																				

18.1.9. Waveform Table

WF No. IC52-2,13,14 (PLAY)  0.1Vp-p(200usec/div)	WF No. IC2000-2,3,42,50 (PLAY)  0.48Vp-p(1usec/div)	WF No. IC2000-5,6,7 (PLAY)  2Vp-p(200usec/div)	WF No. IC2000-17,22 (PLAY)  0.48Vp-p(1usec/div)
WF No. IC2000-44,47 (PLAY)  1.1Vp-p(50usec/div)	WF No. IC2003-12,13 (PLAY)  4Vp-p(50nsec/div)	WF No. IC2003-15,16 (PLAY)  3Vp-p(10usec/div)	WF No. IC2005-1,2,6,7 (PLAY)  0.52Vp-p(1usec/div)
WF No. IC5800-10,14 (PLAY)  44Vp-p(1usec/div)	WF No. IC5800-2,21 (PLAY)  2Vp-p(1usec/div)	WF No. IC8001-55,56,57,58,59, 60 (PLAY)  0.5Vp-p(2usec/div)	WF No. IC8001-94,95 (PLAY)  2.5Vp-p(200usec/div)
WF No. IC8001-123,125 (PLAY)  0.4Vp-p(5usec/div)	WF No. IC8301-1,2 (PLAY)  2Vp-p(200usec/div)	WF No. IC8301-9 (PLAY)  0.4Vp-p(1usec/div)	

18.2. Illustration of ICs, Transistor and Diode

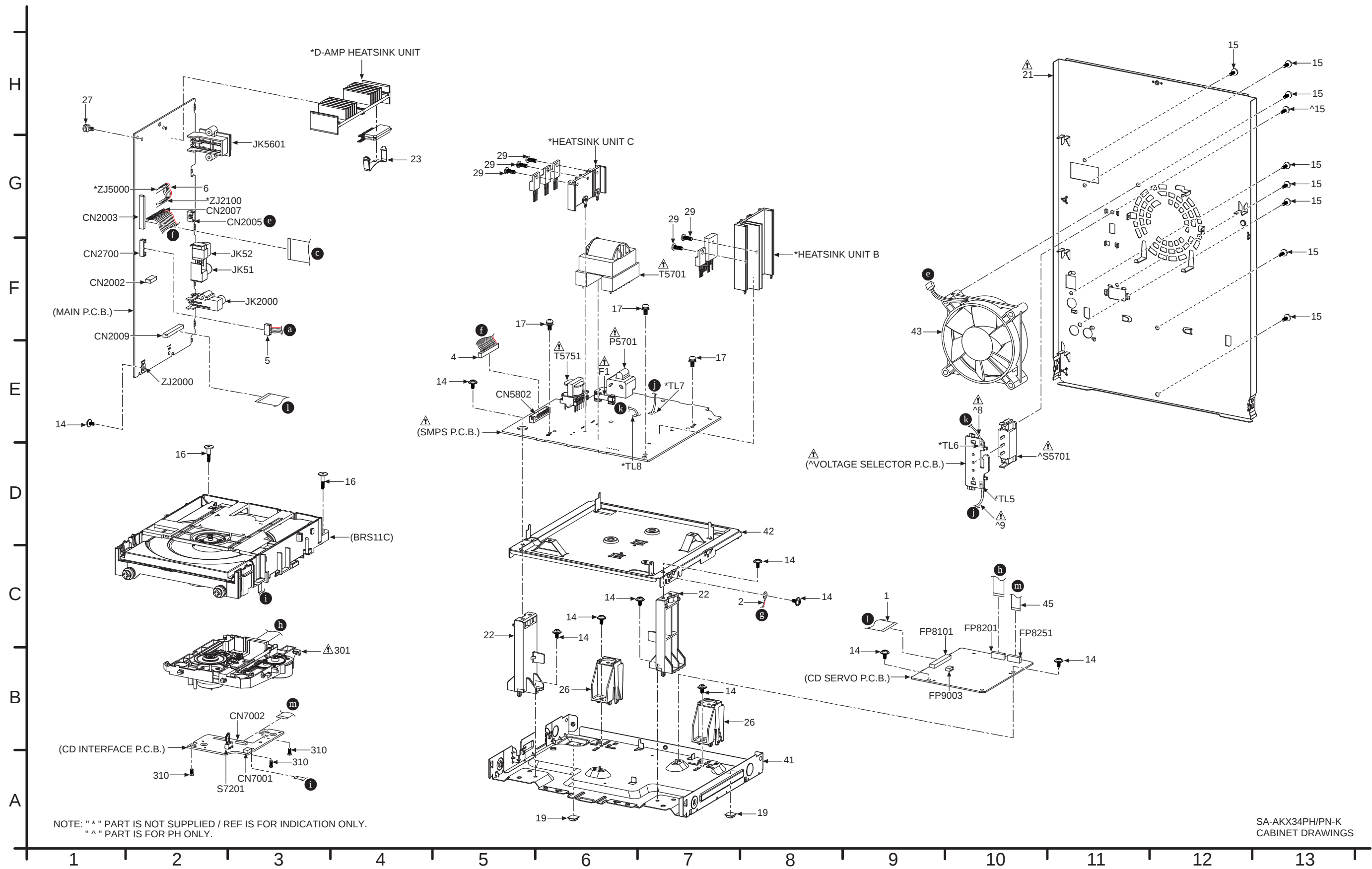
C0ABBB000067 (8P) 	C0FBAK000026(16P) C3ABPG000163(54P) 	C0HBB0000057 (44P) 	C0DBEYY00123 (8P) C3FBMY000303 (8P) 	C1BA00000497 (23P) 	C1AB00003566 (20P) C3FBXY000039 (169P) 
C1AB00003256 (52P) RFKWMAXX34M0 (100P) MN6627992AB (144P) 	C0GBY0000117 	C3EBEY000037 (8P) 	C0AABB000125 (8P) 	MIP2F20MSSCF (8P) 	C0DBZYY00311 
C5HACYY00004 (7P) (PN) C5HACYY00005 (7P) (PH) 	C0DAAYG00001 	B1BABG000007 	C0DAZYY00039 C0DAEYY00040 	B1ABCF000176 B1ABGC000001 B1ABGC000005 	B1ADCE000012 B1ADCF000001 B1GBCFJJ0051 B1GBCFLL0037 B1GDCFGA0018 B1GBCFGN0016 B1GDCFJJ0047 
B1AAJC000019 	B1BABK000001 	B0HFRJ000012 B0ZAZ0000089 	B0ABSM000008 	B0ADDJ000032 B1ABCF000231 	B1GBCFJN0038 
B3AAA0000487 B3AAA0001128 B3AAA0001129 	B0FBAR000049 	DZ2J033M0L DZ2J24000L DZ2J051M0L 	B0BC010A0007 (PH) B0BC01700015 (PN) B0BC019A0007 B0BC035A0007 B0BC2R4A0006 B0BC6R100010 B0BC9R000008 	B0BC5R600003 B0BC5R6A0266 	
B0ECET000002 	B0ACCK000005 B0ACCK000012 DA2J10100L 	B0HCSP000001 B0JCPD000025 	B0EAKM000117 B0EAMM000057 B0HAMP000094 (PH) B0JAME000114 		

18.3. Terminal Function of ICs

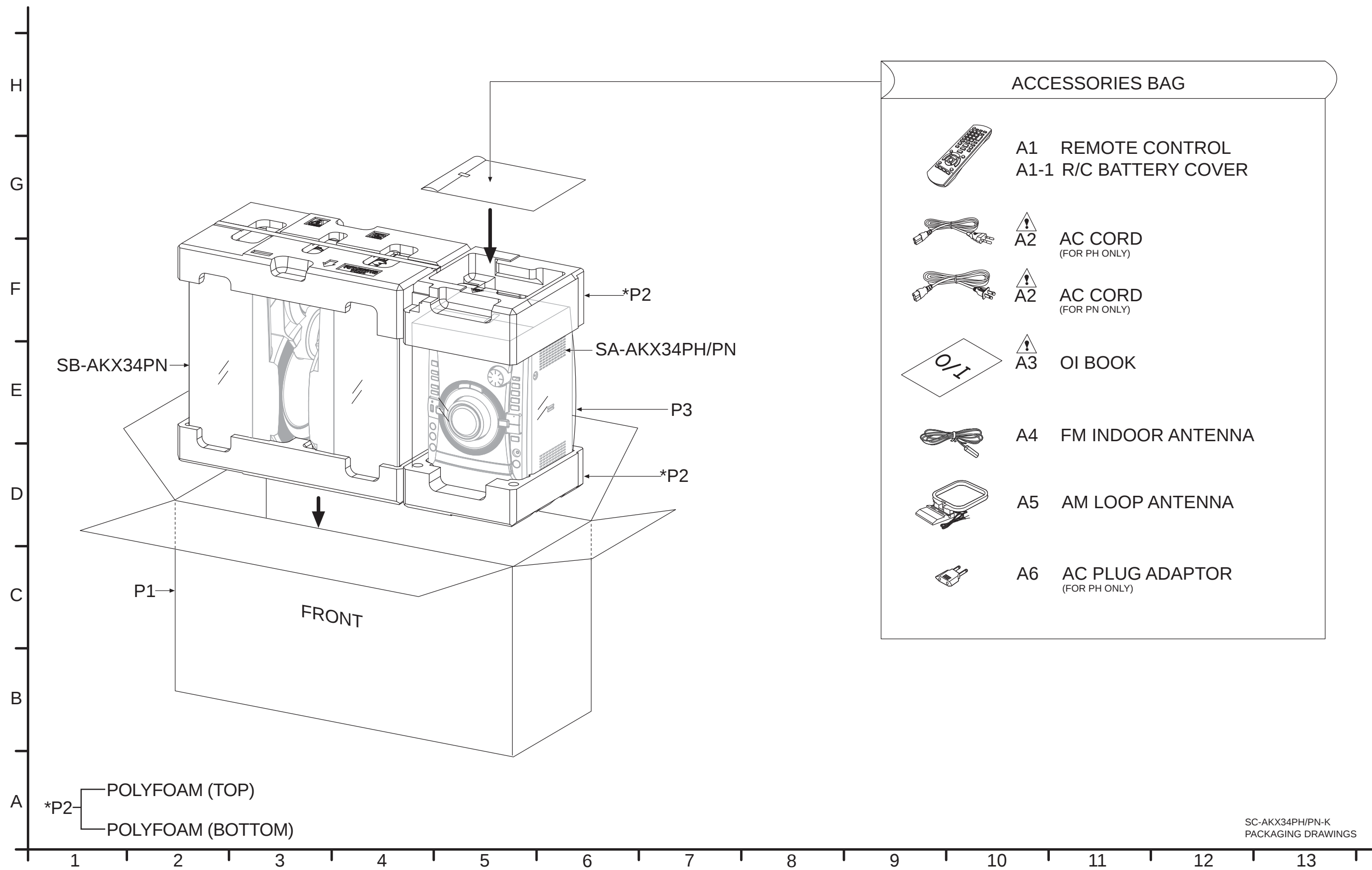
18.3.1. IC2003 (RFKWMAX34M0): IC MICRO-PROCESSOR

Pin No.	Terminal Name	I/O	Function
1	CLIP_ATTN	O	Clipping attenuation
2	ASP_DATA	O	ASP data
3	ASP_CLK	O	ASP Clock
4	OCD_SDA	O	OCD Serial data
5	SW_MUTE	O	Subwoofer Muting
6	OCD_SCL	O	OC Serial Clock
7	M.PORT_SW	I	Music Port Detect
8	HP_SW	I	Headphone Detect
9	VOL_JOGA	I	Volume Jog A Signal
10	VOL_JOGB	I	Volume Jog B Signal
11	MM0D0 (GND)	-	Ground
12	XTOUT	O	Oscillator Output
13	XTIN	I	Oscillator Input
14	VSS	-	Ground
15	XI	I	Oscillator Input
16	XO	O	Oscillator Output
17	VDD3.3	-	+3.3 Voltage Supply
18	VDD1.8	-	+1.8 Voltage Supply
19	NRST	I	Reset Input (Active L)
20	FAN_OUT1	O	Fan Speed Control 1
21	FAN_OUT2	O	Fan Speed Control 2
22	TU_SDA	O	Tuner Serial Data
23	TU_CLK	O	Tuner Clock
24	TU_RST	O	Tuner Reset
25	TU_INT	I	Tuner Interrupt
26	PCONT	O	Power Control
27	SYNC	I	AC Failure Detection Input
28	DCDET2	I	DC Detect (D-AMP IC Failure Detection)
29	ECO_CNTRL	O	Eco Mode Control
30	NC	-	No Connection
31	SMPS_BP	O	SMPS Breatproof
32	ROTARY JOGB	O	Rotary jog for browse operation (Album & Track)
33	ROTARY JOGA	O	Rotary jog for browse operation (Album & Track)
34	EE_DATA	O	EEPROM IC Serial data
35	EE_CS	O	EEPROM IC Chip select
36	EE_CLK	O	EEPROM IC Serial clock
37	VDD18	-	+1.8V Voltage Supply
38	LED DIMMER	O	LCD Display Brightness Control
39	VSS	-	Ground
40	NC	-	No Connection
41	MUTE_F	O	Digital Amp Muting control
42	F_HOP1	O	Frequency Hopping
43	DCDECT1	I	DC Detect (Power Supply Failure Detection)
44	MODE_DA	O	Digital Amp On/Off control
45	BASS_CTR	O	Bass Control
46	MUSIC_CTR	O	Music Control
47	NC	-	No Connection
48	NC	-	No Connection
49	NC	-	No Connection
50	NC	-	No Connection
51	SW_LVL_1	O	Subwoofer Level Setting 1
52	SW_LVL_2	O	Subwoofer Level Setting 2
53	NC	-	No Connection
54	NC	-	No Connection

Pin No.	Terminal Name	I/O	Function
55	NC	-	No Connection
56	CLOSE_SW	I	CD Close Switch Detection
57	CD_OPEN_SW	I	CD Open Switch Detection
58	CD_RESET_SW	I	CD Reset Detection
59	LOAD_CCW	O	Loading Motor Turning Counter-Clockwise (Tray Close)
60	LOAD_CW	O	Loading Motor Turning Counter-Clockwise (Tray Open)
61	CD_RESET	O	CD Reset
62	USB_IN	I	USB Input Detection
63	VSS	-	Ground
64	CD_BLKCK	I	CD Block Clock
65	CD_MLD	O	CD Loading
66	NC	-	No Connection
67	REGION 3	I	Region Setting 3
68	NC	-	No Connection
69	CR TIMER	I	CR Timer
70	OC	I	USB Over Current
71	EN	O	USB Enable
72	CD_MDATA (SYS_RXD)	O	CD data
73	CD_STAT (SYS_TXD)	I	CD Status
74	CD_MCLK	O	CD Clock
75	NC	-	No Connection
76	NC	-	No Connection
77	NC	-	No Connection
78	AMUTE	I	Amp Muting control
79	USB REC LED	O	USB Rec LED Drive
80	BASS_SHIFT	O	Bass Level Meter Adjustment
81	MUTE_A	O	Audio Output Muting
82	FL_DATA	O	FL Display data input
83	FL_CS	O	FL Display Data Input
84	FL_CLK	O	FL Display Clock
85	REGION 2	I	Region Setting 2
86	RMT	I	Remote Control Signal
87	NC	-	No Connection
88	NC	-	No Connection
89	VDD	-	Voltage supply
90	NC	-	No Connection
91	VSS	-	Ground
92	REGION 1	AN0	Region Setting 1
93	CLIP SENSOR	AN1	Clipping sensor (Volume & ASP Bass control)
94	AUTO BASS	AN2	Auto Bass setting adjustment
95	SMPS_ID	AN3	SMPS Type Detection
96	LVL MTR	AN4	Bass Lever Meter Control
97	TEMP_DET	AN5	Temperature Detect
98	KEY 2	AN6	Key 2 Input
99	KEY 1	AN7	Key 1 Input
100	VREF+	-	Voltage Supply



19.1.2. Packaging



19.1.3. Mechanical Replacement Part List

Important Safety Notice

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

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

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

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	REE1708	30P FFC (MAIN-CD SERVO)	1	
	2	REXX1159-1	2P CABLE WIRE (MUSIC PORT - INNER CHASSIS)	1	
	3	REX1487	4P CABLE WIRE (PANEL-MUSIC PORT)	1	
	4	REX1527	15P CABLE WIRE (MAIN-SMPS)	1	
	5	REX1472	5P CABLE WIRE (USB-MAIN)	1	
	6	REX1531	6P CABLE WIRE (MAIN-MAIN)	1	
	7	REE1647	27P FFC (MAIN-PANEL)	1	
$\triangle$	8	REX1536	1P RED WIRE (VOLTAGE SELECTOR-SMPS)	1	PH
$\triangle$	9	REXX1122-J	1P BLACK WIRE (VOLTAGE SELECTOR-SMPS)	1	PH
	10	RGW0428-S	VOLUME KNOB	1	
	11	RGW0429-K	SKIP KNOB	1	
	12	RHD26046-L	SCREW	8	
	13	RHD30007-K2J	SCREW	4	
	14	RHD30111-31	SCREW	10	
	15	RHD30119-S	SCREW	14	PH
	15	RHD30119-S	SCREW	13	PH
	16	RHDX031008	SCREW	2	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	17	RHDX30005-J	SCREW	3	
	18	RFKGAKX34PHK	FRONT PANEL ASS'Y	1	
	18-1	RMGX0033A-K	CD LID CUSHION	1	
	18-2	RGK2307B-K1	CD LID	1	
	18-3	RKAX0042-K	LEG CUSHION	2	
	18-4	RKW0984-K1	LCD WINDOW	1	
	18-5	RMB0930	CD LID SPRING	1	
	19	RKAX0042-K	LEG CUSHION	2	
$\triangle$	20	RKMX1011-K1	TOP CABINET	1	
$\triangle$	21	RGRX1008M-A	REAR PANEL	1	PN
$\triangle$	21	RGRX1008N-A	REAR PANEL	1	PH
	22	RMAX1007	CHASSIS SUPPORT	2	
	23	RMGX0035	HEAT SINK CLIP A	1	
	24	RMNX0151	LED HOLDER	4	
	26	RMQX1088	MECHA HOLDER	2	
	27	RMX0444	PCB SPACER	1	
	29	XTB3+10JFJ	SCREW	5	
	31	RGK2308A-K1	SIDE ORNAMENT L	1	
	32	RGK2309A-K	SIDE ORNAMENT R	1	
	33	RGK2325A-S	USB ORNAMENT	1	
	34	RGK2328-S	PLAY BUTTON ORNAMENT	1	
	35	RGU2764-K	POWER BUTTON	1	
	36	RGU2791-K	FUNCTION BUTTON	1	
	37	RGU2763-S	PUSH/PLAY BUTTON	1	
	38	RGU2765-K	CD OPEN CLOSE BUTTON	1	
	39	RGU2792-K	SKIP BUTTON	1	
	41	RMKX1031A-1	BOTTOM CHASSIS	1	
	42	RMKX1037-3	INNER CHASSIS	1	
	43	L6FALEFH0030	FAN UNIT ASS'Y	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	44	REX1521	2P CABLE WIRE (PANEL-MEMORY LED)	1	
	45	REE1671	10P FFC (CD SERVO-CD INTER-FACE)	1	
	46	RMNV0079-1	FL HOLDER	1	
	47	RGL0764-Q	USB REC LIGHT PIECE	1	
			TRAVERSE DECK		
⚠	301	RAE1034Z-V	TRAVERSE ASS'Y	1	
	310	XTN2+6GFJ	SCREW	3	
			PACKING MATERIALS		
	P1	RPG9749	PACKING CASE	1	PN
	P1	RPG9750	PACKING CASE	1	PH
	P2	RPN2350	POLYFOAM	1	
	P3	RPF0198	MIRAMAT SHEET	1	
			ACCESSORIES		
	A1	N2QAYB000637	REMOTE CONTROL	1	
	A1-1	RKK-PM500EBK	R/C BATTERY COVER	1	
⚠	A2	K2CB2YY00059	AC CORD	1	PN
⚠	A2	K2CQ2CA00007	AC CORD	1	PH
⚠	A3	RQT9617-M	O/I BOOK (Sp)	1	PN
⚠	A3	RQT9619-M	O/I BOOK (Sp)	1	PH
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	N1DY000010	AM LOOP ANTENNA	1	
	A6	K2DAY00002	AC PLUG ADAPTOR	1	PH

19.2. Electrical Replacement Part List

Important Safety Notice

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

RTL (Retention Time Limited)

Note: The marking (RTL) indicates that the Retention Time is Limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- This product uses a laser diode. Refer to "Precaution of Laser Diode".
- Capacitor value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1000 (OHM).
- All parts mentioned are supplied by PAVCSG unless indicated likewise.
- Parts mentioned [SPG] in the Remarks column are supplied by PAVC-CSG.

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PRINTED CIRCUIT BOARDS		
	PCB1	REP4749A	CD SERVO P.C.B.	1	(RTL)
	PCB2	REP4768J	MAIN P.C.B.	1	(RTL) PH
	PCB2	REP4768H	MAIN P.C.B.	1	(RTL) PN
	PCB3	REP4793AA	PANEL P.C.B.	1	(RTL)
	PCB4	REP4793AB	REMOTE SENSOR P.C.B.	1	(RTL)
	PCB5	REP4793AC	USE P.C.B.	1	(RTL)
	PCB6	REP4793AA	MUSIC PORT P.C.B.	1	(RTL)
	PCB7	REP4793AH	MEMORY LED P.C.B.	1	(RTL)
	PCB8	REP4755A	CD INTERFACE P.C.B.	1	(RTL)
	PCB9	REP4783F	SMPS P.C.B.	1	(RTL) PH
	PCB9	REP4783DA	SMPS P.C.B.	1	(RTL) PN
	PCB10	REP4783F	VOLTAGE SELECTOR P.C.B.	1	(RTL) PH
			INTERGRATED CIRCUITS		
	IC52	C1AB00003566	IC	1	
	IC2000	C1AB00003256	IC	1	
	IC2003	RFKWMAX34M0	IC	1	
	IC2005	C0AABB000125	IC	1	
	IC2006	C3EBEY000037	IC	1	
	IC2008	C0DBZY00311	IC	1	
	IC2010	C0DAAYG00001	IC	1	
	IC2011	C0DAAYG00001	IC	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC2012	C0ABBB000067	IC	1	
	IC2014	C0DBEYY00123	IC	1	
	IC5701	C5HACY000004	IC	1	PN
	IC5701	C5HACY000005	IC	1	PH
	IC5799	MIP2F20MSSCF	IC	1	
	IC5800	C1BA00000497	IC	1	
	IC5801	C0DAZYY00039	IC	1	
	IC5899	C0DAEYY00040	IC	1	
	IC6000	C0HBB0000057	IC	1	
	IC8001	MN6627992AB	IC	1	
	IC8051	C3ABPG000163	IC	1	
	IC8251	C0GBY0000117	IC	1	
	IC8301	C0FBAK000026	IC	1	
	IC8401	C3FBMY000303	IC	1	
	IC8501	C3FBXY000039	IC	1	
			TRANSISTORS		
	Q2001	B1ABCF000231	TRANSISTOR	1	
	Q2011	B1GBCFL0037	TRANSISTOR	1	
	Q2018	B1GBCFJJ0051	TRANSISTOR	1	
	Q2019	B1ADCE000012	TRANSISTOR	1	
	Q2022	B1AAJC000019	TRANSISTOR	1	
	Q2023	B1ADCE000012	TRANSISTOR	1	
	Q2024	B1ABCF000231	TRANSISTOR	1	
	Q2025	B1ABCF000231	TRANSISTOR	1	
	Q2027	B1ADCE000012	TRANSISTOR	1	
	Q2031	B1ABCF000231	TRANSISTOR	1	
	Q2033	B1AAJC000019	TRANSISTOR	1	
	Q2035	B1BAG0000007	TRANSISTOR	1	
	Q2037	B1ABCF000176	TRANSISTOR	1	
	Q2038	B1ABCF000176	TRANSISTOR	1	
	Q2039	B1ADCE000012	TRANSISTOR	1	
	Q2040	B1ABCF000176	TRANSISTOR	1	
	Q2041	B1ABCF000176	TRANSISTOR	1	
	Q2042	B1ABCF000176	TRANSISTOR	1	
	Q2050	B1ADCE000012	TRANSISTOR	1	
	Q5600	B1ADCE000012	TRANSISTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Q5601	B1ABCF000176	TRANSISTOR	1	
	Q5602	B1ABCF000176	TRANSISTOR	1	
	Q5603	B1ABCF000176	TRANSISTOR	1	
	Q5604	B1ABCF000176	TRANSISTOR	1	
	Q5605	B1ABGC000005	TRANSISTOR	1	
	Q5720	B1BAG0000007	TRANSISTOR	1	
	Q5721	B1ADCF000001	TRANSISTOR	1	
	Q5722	B1ABCF000176	TRANSISTOR	1	
	Q5860	B1ADCF000001	TRANSISTOR	1	
	Q5861	B1ABCF000176	TRANSISTOR	1	
	Q5862	B1GBCFJJ0051	TRANSISTOR	1	
	Q5898	B1ABCF000176	TRANSISTOR	1	
	Q5899	B1ABGC000001	TRANSISTOR	1	
	Q6003	B1BABK000001	TRANSISTOR	1	
	Q8201	B1ADCF000001	TRANSISTOR	1	
	QR2000	B1GBCFJJ0051	TRANSISTOR	1	
	QR2003	B1GBCFJJ0051	TRANSISTOR	1	
	QR2004	B1GBCFGN0016	TRANSISTOR	1	
	QR2005	B1GBCFJJ0051	TRANSISTOR	1	
	QR2006	B1GBCFJJ0051	TRANSISTOR	1	
	QR5600	B1GDCFJJ0047	TRANSISTOR	1	
	QR5601	B1GBCFJJ0051	TRANSISTOR	1	
	QR5801	B1GBCFJN0038	TRANSISTOR	1	
	QR5802	B1GDCFGA0018	TRANSISTOR	1	
	QR5810	B1GBCFLL0037	TRANSISTOR	1	
	QR5811	B1GBCFJJ0051	TRANSISTOR	1	
	QR5812	B1GDCFJJ0047	TRANSISTOR	1	
	QR6001	B1GBCFJJ0051	TRANSISTOR	1	
			DIODES		
	D2000	B0JCPD000025	DIODE	1	
	D2001	DA2J10100L	DIODE	1	
	D2002	DZ2J033M0L	DIODE	1	
	D2003	DZ2J033M0L	DIODE	1	
	D2008	DA2J10100L	DIODE	1	
	D2011	DZ2J033M0L	DIODE	1	
	D2014	B0ADDJ000032	DIODE	1	
	D2015	B0ACCK000005	DIODE	1	
	D2017	B0BC5R6A0266	DIODE	1	
	D2018	B0EAKM000117	DIODE	1	
	D2020	B0EAKM000117	DIODE	1	
	D2022	B0EAKM000117	DIODE	1	
	D2028	DA2J10100L	DIODE	1	
	D2032	DA2J10100L	DIODE	1	
	D2300	DA2J10100L	DIODE	1	
	D5602	DZ2J051M0L	DIODE	1	
	D5701	B0FBAR000049	DIODE	1	
	D5702	B0ZAZ0000089	DIODE	1	
	D5721	B0BC010A0007	DIODE	1	PH
	D5721	B0BC01700015	DIODE	1	PN
	D5722	B0BC019A0007	DIODE	1	
	D5723	B0ACCK000012	DIODE	1	
	D5724	B0ACCK000012	DIODE	1	
	D5725	B0BC6R100010	DIODE	1	
	D5726	B0EAKM000117	DIODE	1	
	D5727	B0ACCK000012	DIODE	1	
	D5728	B0ACCK000012	DIODE	1	
	D5729	B0EAMM000057	DIODE	1	
	D5730	B0ECET000002	DIODE	1	
	D5731	B0EAMM000057	DIODE	1	
	D5732	B0BC035A0007	DIODE	1	
	D5793	B0HAMP000094	DIODE	1	PH
	D5795	B0BC9R000008	DIODE	1	
	D5798	B0EAMM000057	DIODE	1	
	D5800	B0HCSP000001	DIODE	1	
	D5801	B0ABSM000008	DIODE	1	
	D5801	B0HCSP000001	DIODE	1	
	D5802	B0ABSM000008	DIODE	1	
	D5802	B0HCSP000001	DIODE	1	
	D5803	B0HCSP000001	DIODE	1	
	D5803	B0HFRJ000012	DIODE	1	
	D5804	B0ACCK000012	DIODE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	D5896	B0EAMM000057	DIODE	1	
	D6001	B3AAA0001128	DIODE	1	
	D6002	B3AAA0001128	DIODE	1	
	D6003	B3AAA0001128	DIODE	1	
	D6004	B3AAA0001128	DIODE	1	
	D6005	B0EAMM000057	DIODE	1	
	D6006	B0JAME000114	DIODE	1	
	D6008	DZ2J24000L	DIODE	1	
	D6009	B0BC2R4A0006	DIODE	1	
	D6010	B0BC035A0007	DIODE	1	
	D6013	B0EAMM000057	DIODE	1	
	D6300	B3AAA0000487	DIODE	1	
	D6800	B3AAA0001129	DIODE	1	
	D8250	B0BC5R600003	DIODE	1	
	DZ2000	B0JCPD000025	DIODE	1	
⚠	DZ5701	ERZV05Z471CS	ZNR	1	
			VARISTOR		
	VA51	EZAEG2A50AX	VARISTOR	1	
			SWITCHES		
⚠	S5701	K0ABCA000007	SW AC VOLTAGE SELECTOR	1	PH
	S6000	EVQ21405RJ	SW RADIO/EXT-IN	1	
	S6001	EVQ21405RJ	SW STOP	1	
	S6002	EVQ21405RJ	SW POWER	1	
	S6003	EVQ21405RJ	SW MEMORY	1	
	S6004	EVQ21405RJ	SW PLAY/PAUSE	1	
	S6005	EVQ21405RJ	SW CD	1	
	S6006	EVQ21405RJ	SW USB	1	
	S6007	EVQ21405RJ	SW D.BASS	1	
	S6008	EVQ21405RJ	SW LATIN/PRESET EQ	1	
	S6009	EVQ21405RJ	SW FORWARD	1	
	S6010	EVQ21405RJ	SW REWIND	1	
	S6012	EVQ21405RJ	SW MEMORY REC/PAUSE	1	
	S6013	EVQ21405RJ	SW USB REC / PAUSE	1	
	S6014	EVQ21405RJ	SW ALBUM/TRACK	1	
	S6015	EVQ21405RJ	SW OPEN/CLOSE	1	
	S6016	EVQ21405RJ	SW MANUAL EQ	1	
	S7201	K0L1BA000158	SW RESET	1	
			CONNECTORS		
	CN2002	K1MY06AA0124	6P CONNECTOR	1	
	CN2003	K1MY27AA0124	27P CONNECTOR	1	
	CN2005	K1KA02AA0186	2P CONNECTOR	1	
	CN2007	K1YZ15000001	15P CONNECTOR	1	
	CN2009	K1MY30AA0124	30P CONNECTOR	1	
	CN2700	K1KA05AA0193	5P CONNECTOR	1	
	CN5802	K1KA15AA0194	15P CONNECTOR	1	
	CN6000	K1MY27AA0124	27P CONNECTOR	1	
	CN6001	K1KA04A00553	4P CONNECTOR	1	
	CN6006	K1KA02BA0125	2P CONNECTOR	1	
	CN6200	K1KB04B00043	4P CONNECTOR	1	
	CN6301	K1FY104A0007	USB CONNECTOR	1	
	CN7001	K1MY05BA0539	5P CONNECTOR	1	
	CN7002	K1MY10BA0539	10P CONNECTOR	1	
	FP8101	K1MY30BA0046	30P CONNECTOR	1	
	FP8201	K1MN24A00062	24P CONNECTOR	1	
	FP8251	K1MN10AA0076	10P CONNECTOR	1	
	FP9003	K1KA05AA0051	5P CONNECTOR	1	
			COILS AND INDUCTORS		
	L51	G1CR18JA0020	INDUCTOR	1	
	L52	G2A380Y00002	ANTENNA COIL	1	
	L2000	G0A330ZA0045	CHOKE COIL	1	
	L2001	G0A330ZA0045	CHOKE COIL	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	L2004	G1C100KA0101	INDUCTOR	1	
	L5600	J0JKB0000020	INDUCTOR	1	
	L5601	J0JKB0000020	INDUCTOR	1	
	L5704	J0JBC0000019	INDUCTOR	1	
△	L5706	G0B612H00002	LINE FILTER	1	PH
△	L5707	G0B612H00002	LINE FILTER	1	PN
	L5800	G0A150L00003	CHOKE COIL	1	
	L6000	J0JBC0000019	INDUCTOR	1	
	L6400	J0JBC0000019	INDUCTOR	1	
	L6401	J0JBC0000019	INDUCTOR	1	
	L6405	J0JBC0000019	INDUCTOR	1	
	L8302	G1C100KA0101	INDUCTOR	1	
	LB51	J0JBC0000032	INDUCTOR	1	
	LB2006	J0JBC0000019	INDUCTOR	1	
	LB8002	J0JCC00000407	INDUCTOR	1	
	LB8003	J0JHC0000045	INDUCTOR	1	
	LB8004	J0JHC0000045	INDUCTOR	1	
	LB8005	J0JDC0000104	INDUCTOR	1	
	LB8006	J0JDC0000104	INDUCTOR	1	
	LB8007	J0JDC0000104	INDUCTOR	1	
	LB8008	J0JDC0000104	INDUCTOR	1	
	LB8009	J0JDC0000104	INDUCTOR	1	
	LB8010	J0JDC0000104	INDUCTOR	1	
	LB8011	J0JDC0000104	INDUCTOR	1	
	LB8013	J0JDC0000104	INDUCTOR	1	
	LB8014	J0JDC0000104	INDUCTOR	1	
	LB8015	J0JDC0000104	INDUCTOR	1	
	LB8052	J0JHC0000045	INDUCTOR	1	
	LB8201	J0JHC0000045	INDUCTOR	1	
	LB8202	J0JHC0000045	INDUCTOR	1	
	LB8251	J0JHC0000045	INDUCTOR	1	
	LB8252	J0JHC0000045	INDUCTOR	1	
	LB8301	J0JHC0000045	INDUCTOR	1	
	LB8401	J0JHC0000045	INDUCTOR	1	
	LB8402	J0JHC0000045	INDUCTOR	1	
	LB8501	J0JHC0000045	INDUCTOR	1	
			TRANSFORMERS		
△	T5701	G4DYZ0000051	MAIN TRANSFORMER	1	PH
△	T5701	G4DYZ0000060	MAIN TRANSFORMER	1	PN
△	T5751	ETS19AB2E6AG	SUB TRANSFORMER	1	
△	T6000	G4DYA0000214	SWITCHING TRANSFORMER	1	
			PHOTO COUPLERS		
△	PC5701	B3PBA0000503	PHOTO COUPLER	1	
△	PC5702	B3PBA0000503	PHOTO COUPLER	1	
△	PC5720	B3PBA0000503	PHOTO COUPLER	1	
△	PC5799	B3PBA0000503	PHOTO COUPLER	1	
			EARTH PLATE		
	ZJ2000	K9ZZ00001279	EARTH PLATE	1	
			OSCILLATORS		
	X51	H0A327200181	CRYSTAL OSCILLATOR	1	
	X2000	H0A327200181	CRYSTAL OSCILLATOR	1	
	X2001	H2B800400007	CRYSTAL OSCILLATOR	1	
	X8101	H0J338300002	CRYSTAL OSCILLATOR	1	
			VARIABLE RESISTORS		
	VR6000	EVEKE2F3524B	VOLUME JOG	1	
	VR6001	K9AA012Y0004	VARIABLE RESISTORS	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			REMOTE SENSOR		
	IR6200	B3RAB0000084	REMOTE SENSOR	1	
			LCD DISPLAY		
	FL6000	A2BB00000184	LCD DISPLAY	1	
			FUSE		
△	F1	K5D632BK0007	FUSE	1	PH
△	F1	K5D802APA008	FUSE	1	PN
			FUSE HOLDERS		
	ZA5701	K3GE1ZZ00001	FUSE HOLDER	1	
	ZA5702	K3GE1ZZ00001	FUSE HOLDER	1	
			THERMISTORS		
△	TH5000	D4CC11040013	THERMISTOR	1	
△	TH5702	D4CAA2R20001	THERMISTOR	1	
△	TH5860	D4CC11040013	THERMISTOR	1	
△	TH5861	D4CC11040013	THERMISTOR	1	PN
			JACKS		
	JK51	K4ZZ02000103	JK FM ANT	1	
	JK52	K4AC02B00042	JK AM ANT	1	
	JK2000	K2HA204B0153	JK AUX IN	1	
	JK5601	K4AL04B00001	JK SPEAKER	1	
	JK6401	K2HC103A0031	JK HEADPHONE	1	
△	P5701	K2AA2B000011	AC INLET	1	PH
△	P5701	K2AB2B000007	AC INLET	1	PN
			CHIP JUMPERS		
	K4	D0GBR00JA008	0 1/10W	1	PN
	K6	D0GBR00JA008	0 1/10W	1	PH
	K8001	ERJ2GE0R00X	0 1/16W	1	
	K8006	ERJ2GE0R00X	0 1/16W	1	
	K8201	D0GBR00JA008	0 1/10W	1	
	K8202	D0GBR00JA008	0 1/10W	1	
	K8205	D0GBR00JA008	0 1/10W	1	
	L54	D0GBR00JA008	0 1/10W	1	
	LB2000	D0GBR00JA008	0 1/10W	1	
	LB2001	D0GBR00JA008	0 1/10W	1	
	LB2002	D0GBR00JA008	0 1/10W	1	
	LB2003	D0GBR00JA008	0 1/10W	1	
	LB2004	D0GBR00JA008	0 1/10W	1	
	LB2005	D0GBR00JA008	0 1/10W	1	
	LB2007	D0GBR00JA008	0 1/10W	1	
	C2202	D0GBR00JA008	0 1/10W	1	
	W1	D0GBR00JA008	0 1/10W	1	
	W2	D0GBR00JA008	0 1/10W	1	
	W3	D0GBR00JA008	0 1/10W	1	
	W4	D0GBR00JA008	0 1/10W	1	
	W5	D0GBR00JA008	0 1/10W	1	
	W6	D0GFR00JA017	0 1/4W	1	
	W7	D0GBR00JA008	0 1/10W	1	
	W8	D0GBR00JA008	0 1/10W	1	
	W9	D0GBR00JA008	0 1/10W	1	
	W10	D0GBR00JA008	0 1/10W	1	
	W11	D0GBR00JA008	0 1/10W	1	
	W14	D0GBR00JA008	0 1/10W	1	
	W15	D0GBR00JA008	0 1/10W	1	
	W16	D0GFR00JA017	0 1/4W	1	
	W17	D0GBR00JA008	0 1/10W	1	
	W18	D0GFR00JA017	0 1/4W	1	
	W19	D0GFR00JA017	0 1/4W	1	
	W22	D0GDR00JA017	0 1/8W	1	
	W23	D0GBR00JA008	0 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W24	D0GFR00JA017	0 1/4W	1	
	W25	D0GFR00JA017	0 1/4W	1	
	W26	D0GFR00JA017	0 1/4W	1	
	W27	D0GDR00JA017	0 1/8W	1	
	W28	D0GFR00JA017	0 1/4W	1	
	W29	D0GDR00JA017	0 1/8W	1	
	W30	D0GDR00JA017	0 1/8W	1	
	W31	D0GFR00JA017	0 1/4W	1	
	W32	D0GDR00JA017	0 1/8W	1	
	W33	D0GFR00JA017	0 1/4W	1	
	W34	D0GFR00JA017	0 1/4W	1	
	W35	D0GFR00JA017	0 1/4W	1	
	W36	D0GFR00JA017	0 1/4W	1	
	W37	D0GFR00JA017	0 1/4W	1	
	W38	D0GFR00JA017	0 1/4W	1	
	W39	D0GFR00JA017	0 1/4W	1	
	W40	D0GFR00JA017	0 1/4W	1	
	W41	D0GBR00JA008	0 1/10W	1	
	W42	D0GFR00JA017	0 1/4W	1	
	W43	D0GDR00JA017	0 1/8W	1	
	W44	D0GBR00JA008	0 1/10W	1	
	W45	D0GDR00JA017	0 1/8W	1	
	W46	D0GFR00JA017	0 1/4W	1	
	W47	D0GFR00JA017	0 1/4W	1	
	W48	D0GFR00JA017	0 1/4W	1	
	W49	D0GFR00JA017	0 1/4W	1	
	W50	D0GFR00JA017	0 1/4W	1	
	W51	D0GDR00JA017	0 1/8W	1	
	W52	D0GDR00JA017	0 1/8W	1	
	W53	D0GFR00JA017	0 1/4W	1	
	W54	D0GFR00JA017	0 1/4W	1	
	W55	D0GDR00JA017	0 1/8W	1	
	W56	D0GFR00JA017	0 1/4W	1	
	W57	D0GFR00JA017	0 1/4W	1	
	W58	D0GFR00JA017	0 1/4W	1	
	W59	D0GDR00JA017	0 1/8W	1	
	W60	D0GDR00JA017	0 1/8W	1	
	W61	D0GFR00JA017	0 1/4W	1	
	W62	D0GFR00JA017	0 1/4W	1	
	W63	D0GFR00JA017	0 1/4W	1	
	W64	D0GFR00JA017	0 1/4W	1	
	W65	D0GFR00JA017	0 1/4W	1	
	W66	D0GDR00JA017	0 1/8W	1	
	W67	D0GDR00JA017	0 1/8W	1	
	W68	D0GFR00JA017	0 1/4W	1	
	W69	D0GDR00JA017	0 1/8W	1	
	W70	D0GFR00JA017	0 1/4W	1	
	W71	D0GDR00JA017	0 1/8W	1	
	W72	D0GDR00JA017	0 1/8W	1	
	W73	D0GDR00JA017	0 1/8W	1	
	W401	D0GBR00JA008	0 1/10W	1	
	W403	D0GBR00JA008	0 1/10W	1	
	W5601	D0GBR00JA008	0 1/10W	1	
	W5602	D0GDR00JA017	0 1/8W	1	
	W5603	D0GDR00JA017	0 1/8W	1	
	W5604	D0GBR00JA008	0 1/10W	1	
			RESISTORS		
	R51	D0GB102JA008	1K 1/10W	1	
	R52	D0GB102JA008	1K 1/10W	1	
	R53	D0GA472JA023	4.7K 1/16W	1	
	R54	D0GA472JA023	4.7K 1/16W	1	
	R55	D0GA221JA023	220 1/16W	1	
	R56	D0GB221JA007	220 1/10W	1	
	R57	D0GA102JA023	1K 1/16W	1	
	R59	D0GB222JA008	2.2K 1/10W	1	
	R61	D0GB473JA008	47K 1/10W	1	
	R62	D0GB473JA008	47K 1/10W	1	
	R64	D0GBR00JA008	0 1/10W	1	
	R2000	D0GBR00JA008	0 1/10W	1	
	R2001	D0GB822JA008	8.2K 1/10W	1	
	R2002	D0GB822JA008	8.2K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2003	D0GB392JA008	3.9K 1/10W	1	
	R2004	D0GB392JA008	3.9K 1/10W	1	
	R2005	D0GB103JA008	10K 1/10W	1	
	R2006	D0GB103JA008	10K 1/10W	1	
	R2007	D0GB332JA008	3.3K 1/10W	1	
	R2008	D0GB332JA008	3.3K 1/10W	1	
	R2010	D0GBR00JA008	0 1/10W	1	
	R2011	D0GBR00JA008	0 1/10W	1	
	R2012	D0GB182JA008	1.8K 1/10W	1	
	R2013	D0GBR00JA008	0 1/10W	1	
	R2014	D0GB103JA008	10K 1/10W	1	
	R2017	D0GB332JA008	3.3K 1/10W	1	
	R2018	D0GB332JA008	3.3K 1/10W	1	
	R2019	D0GB683JA008	68K 1/10W	1	
	R2020	D0GBR00JA008	0 1/10W	1	
	R2021	D0GBR00JA008	0 1/10W	1	
	R2026	D0GB473JA008	47K 1/10W	1	
	R2027	D0GBR00JA008	0 1/10W	1	
	R2028	D0GB2R2JA007	2.2 1/10W	1	
	R2035	D0GB271JA008	270 1/10W	1	
	R2051	D0GB122JA008	1.2K 1/10W	1	
	R2052	D0GB122JA008	1.2K 1/10W	1	
	R2054	D0GBR00JA008	0 1/10W	1	
	R2056	D0GB332JA008	3.3K 1/10W	1	
	R2057	D0GB332JA008	3.3K 1/10W	1	
	R2058	D0GB273JA008	27K 1/10W	1	
	R2059	D0GB273JA008	27K 1/10W	1	
	R2060	D0GB223JA008	22K 1/10W	1	
	R2061	D0GB223JA008	22K 1/10W	1	
	R2062	D0GB154JA008	150K 1/10W	1	
	R2063	D0GB822JA008	8.2K 1/10W	1	
	R2064	D0GB822JA008	8.2K 1/10W	1	
	R2065	D0GB473JA008	47K 1/10W	1	
	R2066	D0GB473JA008	47K 1/10W	1	
	R2067	D0GB473JA008	47K 1/10W	1	
	R2068	D0GBR00JA008	0 1/10W	1	
	R2069	D0GB102JA008	1K 1/10W	1	
	R2070	D0GB473JA008	47K 1/10W	1	
	R2073	D0GB104JA008	100K 1/10W	1	
	R2074	D0GB473JA008	47K 1/10W	1	
	R2075	D0GB473JA008	47K 1/10W	1	
	R2076	D0GB102JA008	1K 1/10W	1	
	R2077	D0GB102JA008	1K 1/10W	1	
	R2078	D0GB563JA008	56K 1/10W	1	
	R2079	D0AF330JA039	33 1/2W	1	
	R2082	D0GB104JA008	100K 1/10W	1	
	R2083	D0GB473JA008	47K 1/10W	1	
	R2084	D0GB103JA008	10K 1/10W	1	PH
	R2085	D0GB104JA008	100K 1/10W	1	PN
	R2085	D0GB122JA008	1.2K 1/10W	1	PH
	R2087	D0GBR00JA008	0 1/10W	1	
	R2093	D0GB392JA008	3.9K 1/10W	1	
	R2094	D0GB392JA008	3.9K 1/10W	1	
	R2095	D0GB473JA008	47K 1/10W	1	
	R2096	D0GB473JA008	47K 1/10W	1	
	R2098	D0GB472JA008	4.7K 1/10W	1	
	R2099	D0GB103JA008	10K 1/10W	1	
	R2102	D0GB472JA008	4.7K 1/10W	1	
	R2103	D0GB182JA008	1.8K 1/10W	1	
	R2105	D0GB104JA008	100K 1/10W	1	
	R2107	D0AF220JA039	22 1/2W	1	
	R2108	D0GB473JA008	47K 1/10W	1	
	R2112	D0GB103JA008	10K 1/10W	1	
	R2113	D0GB103JA008	10K 1/10W	1	
	R2114	D0GB473JA008	47K 1/10W	1	
	R2115	D0GB473JA008	47K 1/10W	1	
	R2117	D0GB473JA008	47K 1/10W	1	
	R2118	D0GB473JA008	47K 1/10W	1	
	R2120	D0GB473JA008	47K 1/10W	1	
	R2121	D0GB475JA008	4.7M 1/10W	1	
	R2123	D0GB564JA008	560K 1/10W	1	
	R2126	D0GB473JA008	47K 1/10W	1	PH
	R2126	ERJ3GEYJ473V	47K 1/10W	1	PN

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2127	D0GBR00JA008	0 1/10W	1	
	R2128	D0GBR00JA008	0 1/10W	1	
	R2130	D0GB102JA008	1K 1/10W	1	
	R2134	D0GBR00JA008	0 1/10W	1	
	R2136	D0GBR00JA008	0 1/10W	1	
	R2137	D0GB562JA008	5.6K 1/10W	1	
	R2138	D0GB562JA008	5.6K 1/10W	1	
	R2140	D0GBR00JA008	0 1/10W	1	
	R2146	D0GB563JA008	56K 1/10W	1	
	R2150	D0GB563JA008	56K 1/10W	1	
	R2152	D0GB822JA008	8.2K 1/10W	1	
	R2153	D0GB104JA008	100K 1/10W	1	
	R2154	D0GB822JA008	8.2K 1/10W	1	
	R2156	D0GB105JA008	1M 1/10W	1	
	R2157	D0GBR00JA008	0 1/10W	1	
	R2162	D0GB330JA008	33 1/10W	1	
	R2163	D0GBR00JA008	0 1/10W	1	
	R2165	D0GB102JA008	1K 1/10W	1	
	R2173	D0GB153JA008	15K 1/10W	1	
	R2174	D0GB103JA008	10K 1/10W	1	
	R2176	D0HB152ZA002	1.5K 1/16W	1	
	R2177	D0GB153JA008	15K 1/10W	1	
	R2178	D0GB103JA008	10K 1/10W	1	
	R2182	D0GB103JA008	10K 1/10W	1	
	R2185	D0GB103JA008	10K 1/10W	1	
	R2189	D0GB473JA008	47K 1/10W	1	
	R2192	D0HB102ZA002	1K 1/16W	1	
	R2193	D0GB330JA008	33 1/10W	1	
	R2196	D0GB102JA008	1K 1/10W	1	
	R2198	D0GB102JA008	1K 1/10W	1	
	R2205	D0GB472JA008	4.7K 1/10W	1	
	R2206	D0GB472JA008	4.7K 1/10W	1	
	R2218	D0GBR00JA008	0 1/10W	1	
	R2224	D0GB471JA008	470 1/10W	1	
	R2225	D0GB471JA008	470 1/10W	1	
	R2226	D0GB473JA008	47K 1/10W	1	
	R2227	D0GB473JA008	47K 1/10W	1	
	R2229	D0GB103JA008	10K 1/10W	1	
	R2246	D0GB101JA008	100 1/10W	1	
	R2247	D0GBR00JA008	0 1/10W	1	
	R2248	D0GB153JA008	15K 1/10W	1	
	R2250	D0GB183JA008	18K 1/10W	1	
	R2251	D0GB123JA008	12K 1/10W	1	
	R2268	D0GB272JA008	2.7K 1/10W	1	
	R2272	D0GB272JA008	2.7K 1/10W	1	
	R2273	D0GB2R2JA007	2.2 1/10W	1	
	R2274	D0GB2R2JA007	2.2 1/10W	1	
	R2275	D0GB2R2JA007	2.2 1/10W	1	
	R2276	D0GB271JA008	270 1/10W	1	
	R2278	D0GB101JA008	100 1/10W	1	
	R2279	D0GBR00JA008	0 1/10W	1	
	R2281	D0GB682JA008	6.8K 1/10W	1	
	R2294	D0GB682JA008	6.8K 1/10W	1	
	R2295	D0GB682JA008	6.8K 1/10W	1	
	R2296	D0GBR00JA008	0 1/10W	1	
	R2305	D0GBR00JA008	0 1/10W	1	
	R2308	D0GBR00JA008	0 1/10W	1	
	R2310	ERJ3RBD1002V	10K 1/16W	1	PN
	R2310	ERJ3RBD223V	22K 1/16W	1	PH
	R2311	D0HB152ZA002	1.5K 1/16W	1	
	R2329	D0GB103JA008	10K 1/10W	1	
	R2332	D0GB103JA008	10K 1/10W	1	
	R2333	ERG2SJ471E	470 2W	1	
	R2334	ERG2SJ471E	470 2W	1	
	R2335	D0GB102JA008	1K 1/10W	1	
	R2336	ERG2SJ471E	470 2W	1	
	R2337	ERG2SJ471E	470 2W	1	
	R2338	ERG2SJ471E	470 2W	1	
	R2339	ERG2SJ471E	470 2W	1	
	R2340	ERG2SJ471E	470 2W	1	
	R2341	ERG2SJ471E	470 2W	1	
	R2343	D0GBR00JA008	0 1/10W	1	
	R2344	D0GB332JA008	3.3K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2345	D0GB332JA008	3.3K 1/10W	1	
	R2346	D0GB332JA008	3.3K 1/10W	1	
	R2347	D0GB332JA008	3.3K 1/10W	1	
	R2348	D0GB333JA008	33K 1/10W	1	
	R2349	D0GB104JA008	100K 1/10W	1	
	R2350	D0GB474JA008	470K 1/10W	1	
	R2351	D0GBR00JA008	0 1/10W	1	
	R2352	D0GBR00JA008	0 1/10W	1	
	R2353	D0GBR00JA008	0 1/10W	1	
	R2355	D0GB153JA008	15K 1/10W	1	
	R2356	D0GB102JA008	1K 1/10W	1	
	R2357	D0GB475JA008	4.7M 1/10W	1	
	R2358	D0GB103JA008	10K 1/10W	1	
	R2359	D0GB102JA008	1K 1/10W	1	
	R2360	D0GB104JA008	100K 1/10W	1	
	R2361	D0GB103JA008	10K 1/10W	1	
	R2362	D0GB474JA008	470K 1/10W	1	
	R2363	D0GB333JA008	33K 1/10W	1	
	R2364	D0GB222JA008	2.2K 1/10W	1	
	R2365	D0GB102JA008	1K 1/10W	1	
	R2366	D0GB102JA008	1K 1/10W	1	
	R2372	D0GB102JA008	1K 1/10W	1	
	R2373	D0GB183JA008	18K 1/10W	1	
	R2374	D0GB102JA008	1K 1/10W	1	
	R2375	D0GB183JA008	18K 1/10W	1	
	R2376	D0GB102JA008	1K 1/10W	1	
	R2377	D0GB102JA008	1K 1/10W	1	
	R2379	D0GB681JA008	680 1/10W	1	
	R2380	D0GBR00JA008	0 1/10W	1	
	R2381	D0GB123JA008	12K 1/10W	1	
	R2386	ERJ3GEYJ333V	33K 1/10W	1	
	R2390	D0GB823JA008	82K 1/10W	1	
	R2392	D0AF270JA039	27 1/2W	1	
	R2393	D0GB274JA008	270K 1/10W	1	
	R2394	D0GB221JA008	220 1/10W	1	
	R2395	D0GB104JA008	100K 1/10W	1	
	R2396	D0GB101JA008	100 1/10W	1	
	R2397	D0GB474JA008	470K 1/10W	1	
	R2398	D0GBR00JA008	0 1/10W	1	
	R2399	D0GBR00JA008	0 1/10W	1	
	R2400	D0GBR00JA008	0 1/10W	1	
	R2406	D0GB473JA008	47K 1/10W	1	
	R2408	D0HB102ZA002	1K 1/16W	1	
	R2409	ERJ3RBD272V	2.7K 1/16W	1	
	R2414	D0GBR00JA008	0 1/10W	1	
	R2415	D0GBR00JA008	0 1/10W	1	PN
	R2416	D0GBR00JA008	0 1/10W	1	PH
	R2419	D0GBR00JA008	0 1/10W	1	
	R2420	D0GBR00JA008	0 1/10W	1	
	R2421	D0GB153JA008	15K 1/10W	1	
	R2422	D0GBR00JA008	0 1/10W	1	
	R2424	ERJ3RBD682V	6.8K 1/16W	1	
	R2425	D0GB472JA008	4.7K 1/10W	1	
	R2429	D0GB105JA008	1M 1/10W	1	
	R2431	D0GFR00JA017	0 1/4W	1	
	R2432	D0GBR00JA008	0 1/10W	1	
	R2442	D0GB473JA008	47K 1/10W	1	
	R2443	D0GB331JA008	330 1/10W	1	
	R5608	D0GBR00JA008	0 1/10W	1	
	R5609	ERG2SJ102E	1K 2W	1	
	R5611	D0GB103JA008	10K 1/10W	1	
	R5612	D0GB103JA008	10K 1/10W	1	
	R5613	D0GB103JA008	10K 1/10W	1	
	R5614	D0GB272JA008	2.7K 1/10W	1	
	R5615	D0GB272JA008	2.7K 1/10W	1	
	R5616	D0GB103JA008	10K 1/10W	1	
	R5617	D0GB822JA008	8.2K 1/10W	1	
	R5618	D0GB104JA008	100K 1/10W	1	
	R5619	D0GB154JA008	150K 1/10W	1	
	R5621	D0GB104JA008	100K 1/10W	1	
	R5622	D0GB154JA008	150K 1/10W	1	
	R5623	D0GB124JA008	120K 1/10W	1	
	R5624	D0GB103JA008	10K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5625	D0GB184JA008	180K 1/10W	1	
	R5626	ERJ3RBD273V	27K 1/16W	1	
	R5627	ERJ3RBD333V	33K 1/16W	1	
	R5628	D0HB152ZA002	1.5K 1/16W	1	
	R5630	D0YRR0000001	0 1W	1	
	R5631	D0YRR0000001	0 1W	1	
	R5632	D0YRR0000001	0 1W	1	
	R5701	ERJ3RBD1002V	10K 1/16W	1	PN
	R5701	ERJ3RBD223V	22K 1/16W	1	PH
	R5702	D0GZ104JA012	100K 1W	1	PH
	R5702	D0GZ333JA012	33K 1W	1	PN
	R5703	D0GZ104JA012	100K 1W	1	PH
	R5703	D0GZ333JA012	33K 1W	1	PN
	R5704	ERJ8GEYJ224V	220K 1/4W	1	
	R5705	ERJ8GEYJ224V	220K 1/4W	1	
	R5706	D0GD824JA017	820K 1/8W	1	
⚠	R5708	ERJ8GEYJ155V	1.5M 1/4W	1	
⚠	R5709	ERJ8GEYJ155V	1.5M 1/4W	1	
	R5720	D0GD220JA017	22 1/8W	1	
	R5721	D0GD103JA017	10K 1/8W	1	
	R5722	D0GD122JA017	1.2K 1/8W	1	
	R5723	D0GB102JA008	1K 1/10W	1	
	R5724	D0GD121JA017	120 1/8W	1	
	R5726	ERX2SZJR10P	0.1 2W	1	
	R5727	ERX2SZJR10P	0.1 2W	1	PN
	R5728	D0GB104JA008	100K 1/10W	1	
	R5729	D0GD103JA017	10K 1/8W	1	
	R5730	D0GB102JA008	1K 1/10W	1	
	R5732	D0GB101JA008	100 1/10W	1	
	R5733	D0GB473JA008	47K 1/10W	1	
	R5786	D0GZ204JA012	200K 1W	1	PH
	R5795	D0GD474JA017	470K 1/8W	1	
	R5797	D0GB153JA008	15K 1/10W	1	
	R5798	D0GB220JA008	22 1/10W	1	
	R5800	D0GB562JA008	5.6K 1/10W	1	
	R5800	D0GD153JA017	15K 1/8W	1	
	R5801	D0GB562JA008	5.6K 1/10W	1	
	R5801	D0GD223JA017	22K 1/8W	1	
	R5802	D0GF100JA014	10 1/4W	1	
	R5802	ERJ3RBD103V	10K 1/16W	1	
	R5803	D0GF100JA014	10 1/4W	1	
	R5803	ERJ3RBD103V	10K 1/16W	1	
	R5804	D0GF100JA014	10 1/4W	1	
	R5804	ERJ6RBD823V	82K 1/10W	1	
	R5805	D0GF100JA014	10 1/4W	1	
	R5805	ERJ3RBD332V	3.3K 1/16W	1	
	R5806	D0GB153JA008	15K 1/10W	1	
	R5806	D0GB562JA008	5.6K 1/10W	1	
	R5807	D0GB562JA008	5.6K 1/10W	1	
	R5807	D0GD331JA017	330 1/8W	1	
	R5808	D0GB101JA008	100 1/10W	1	
	R5808	D0GD222JA017	2.2K 1/8W	1	
	R5809	D0GD331JA017	330 1/8W	1	
	R5809	D0GZ220JA012	22 1W	1	
	R5810	D0GB331JA008	330 1/10W	1	
	R5810	D0GZ220JA012	22 1W	1	
	R5811	D0GB562JA008	5.6K 1/10W	1	
	R5812	D0GB562JA008	5.6K 1/10W	1	
	R5814	D0GB822JA008	8.2K 1/10W	1	
	R5817	D0GB331JA008	330 1/10W	1	
	R5832	D0GZ222JA012	2.2K 1W	1	
	R5833	D0GZ222JA012	2.2K 1W	1	PN
	R5834	D0GZ222JA012	2.2K 1W	1	
	R5835	D0GZ222JA012	2.2K 1W	1	PN
	R5836	D0GZ222JA012	2.2K 1W	1	PN
	R5837	D0GZ222JA012	2.2K 1W	1	PN
	R5840	D0GB823JA008	82K 1/10W	1	
	R5841	D0GB124JA008	120K 1/10W	1	
	R5860	ERJ3GEYF103V	10K 1/10W	1	
	R5861	ERJ3GEYF332V	3.3K 1/10W	1	
	R5862	D0GD183JA017	18K 1/8W	1	
	R5863	D0GD183JA017	18K 1/8W	1	
	R5864	ERJ3GEYF103V	10K 1/10W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5865	ERJ3RBD391V	390 1/16W	1	
	R5866	D0GD220JA017	22 1/8W	1	
	R5867	D0GB104JA008	100K 1/10W	1	
	R5868	D0GB223JA008	22K 1/10W	1	
	R5890	D0GB222JA008	2.2K 1/10W	1	
	R5891	ERJ3RBD333V	33K 1/16W	1	
	R5892	D0HB102ZA002	1K 1/16W	1	
	R5893	ERJ3RBD103V	10K 1/16W	1	
	R5894	D0GB151JA008	150 1/10W	1	
	R5895	D0GB153JA008	15K 1/10W	1	
	R5896	D0GB104JA008	100K 1/10W	1	
	R5897	D0GB101JA008	100 1/10W	1	
	R5898	ERJ3GEYF103V	10K 1/10W	1	PN
	R6000	D0GB122JA008	1.2K 1/10W	1	
	R6001	D0GB152JA008	1.5K 1/10W	1	
	R6002	D0GB332JA008	3.3K 1/10W	1	
	R6003	D0GB222JA008	2.2K 1/10W	1	
	R6004	D0GB472JA008	4.7K 1/10W	1	
	R6005	D0GB682JA008	6.8K 1/10W	1	
	R6006	D0GB473JA008	47K 1/10W	1	
	R6007	ERJ3GEYJ821V	820 1/10W	1	
	R6009	ERJ3GEYJ821V	820 1/10W	1	
	R6011	D0GB222JA008	2.2K 1/10W	1	
	R6012	D0GB152JA008	1.5K 1/10W	1	
	R6013	D0GB153JA008	15K 1/10W	1	
	R6014	D0GB153JA008	15K 1/10W	1	
	R6015	D0GB682JA008	6.8K 1/10W	1	
	R6016	D0GB332JA008	3.3K 1/10W	1	
	R6017	D0GB472JA008	4.7K 1/10W	1	
	R6018	D0GB122JA008	1.2K 1/10W	1	
	R6020	D0GB103JA008	10K 1/10W	1	
	R6021	ERJ3GEYJ221V	220 1/10W	1	
	R6022	ERJ3GEYJ221V	220 1/10W	1	
	R6023	ERJ3GEYJ221V	220 1/10W	1	
	R6024	D0GB103JA008	10K 1/10W	1	
	R6027	ERJ3GEYJ221V	220 1/10W	1	
	R6029	D0GB221JA007	220 1/10W	1	
	R6030	D0GB471JA008	470 1/10W	1	
	R6031	D0GB221JA007	220 1/10W	1	
	R6032	ERJ3GEYJ821V	820 1/10W	1	
	R6033	D0GB823JA008	82K 1/10W	1	
	R6034	ERJ3GEYJ821V	820 1/10W	1	
	R6035	D0GBR00JA008	0 1/10W	1	
	R6037	ERJ3GEYJ821V	820 1/10W	1	
	R6038	D0GB682JA008	6.8K 1/10W	1	
	R6039	D0GB470JA008	47 1/10W	1	
	R6040	D0GB103JA008	10K 1/10W	1	
	R6041	D0GB103JA008	10K 1/10W	1	
	R6047	D0GB1R0JA008	1 1/10W	1	
	R6048	D0GB103JA008	10K 1/10W	1	
	R6049	D0GB473JA008	47K 1/10W	1	
	R6050	D0GB103JA008	10K 1/10W	1	
	R6051	D0GB1R0JA008	1 1/10W	1	
	R6053	D0GB100JA008	10 1/10W	1	
	R6054	D0GB223JA008	22K 1/10W	1	
	R6056	D0GB473JA008	47K 1/10W	1	
	R6057	ERJ3GEYJ221V	220 1/10W	1	
	R8001	ERJ2GEOR00X	0 1/16W	1	
	R8002	D0GB103JA008	10K 1/10W	1	
	R8003	D0GB102JA008	1K 1/10W	1	
	R8004	D0GB102JA008	1K 1/10W	1	
	R8005	D0GB105JA008	1M 1/10W	1	
	R8006	D0GB221JA008	220 1/10W	1	
	R8010	D0GA104JA023	100K 1/16W	1	
	R8011	D0GA104JA023	100K 1/16W	1	
	R8012	D0GBR00JA008	0 1/10W	1	
	R8013	D0GBR00JA008	0 1/10W	1	
	R8014	D0GBR00JA008	0 1/10W	1	
	R8015	D0GBR00JA008	0 1/10W	1	
	R8016	D0GBR00JA008	0 1/10W	1	
	R8017	D0GBR00JA008	0 1/10W	1	
	R8018	D0GA473JA023	47K 1/16W	1	
	R8019	D0GA473JA023	47K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R8020	D0GA473JA023	47K 1/16W	1	
	R8021	D0GA330JA023	33 1/16W	1	
	R8022	D0GB100JA008	10 1/10W	1	
	R8025	ERJ2GE0R00X	0 1/16W	1	
	R8026	ERJ2GE0R00X	0 1/16W	1	
	R8027	D0GB100JA008	10 1/10W	1	
	R8029	D0GA330JA023	33 1/16W	1	
	R8030	D0GA104JA023	100K 1/16W	1	
	R8031	D0GA103JA023	10K 1/16W	1	
	R8032	D0GBR00JA008	0 1/10W	1	
	R8033	ERJ2GE0R00X	0 1/16W	1	
	R8034	ERJ2GE0R00X	0 1/16W	1	
	R8035	D0GBR00JA008	0 1/10W	1	
	R8036	D0GB101JA008	100 1/10W	1	
	R8037	D0GB101JA008	100 1/10W	1	
	R8038	D0GB101JA008	100 1/10W	1	
	R8039	D0GBR00JA008	0 1/10W	1	
	R8040	D0GB101JA008	100 1/10W	1	
	R8041	D0GA103JA023	10K 1/16W	1	
	R8042	D0GA103JA023	10K 1/16W	1	
	R8043	ERJ2GE0R00X	0 1/16W	1	
	R8044	ERJ2GE0R00X	0 1/16W	1	
	R8045	ERJ2GE0R00X	0 1/16W	1	
	R8046	D0GA103JA023	10K 1/16W	1	
	R8047	D0GA103JA023	10K 1/16W	1	
	R8201	D0GBR00JA008	0 1/10W	1	
	R8202	D0GBR00JA008	0 1/10W	1	
	R8203	D0GBR00JA008	0 1/10W	1	
	R8204	D0GBR00JA008	0 1/10W	1	
	R8205	D0GBR00JA008	0 1/10W	1	
	R8206	D0GBR00JA008	0 1/10W	1	
	R8209	D0GB225JA008	2.2M 1/10W	1	
	R8210	D0GB821JA008	820 1/10W	1	
	R8211	D0GB272JA008	2.7K 1/10W	1	
	R8212	D0GB4R7JA008	4.7 1/10W	1	
	R8214	D0GB103JA008	10K 1/10W	1	
	R8215	D0GB5R6JA008	5.6 1/10W	1	
	R8251	D0GA330JA023	33 1/16W	1	
	R8252	D0GB102JA008	1K 1/10W	1	
	R8254	D0GB562JA008	5.6K 1/10W	1	
	R8255	D0GB332JA008	3.3K 1/10W	1	
	R8256	D0GB101JA008	100 1/10W	1	
	R8257	D0GB562JA008	5.6K 1/10W	1	
	R8258	D0GB273JA008	27K 1/10W	1	
	R8259	D0GB472JA008	4.7K 1/10W	1	
	R8260	D0GB473JA008	47K 1/10W	1	
	R8261	D0GB101JA008	100 1/10W	1	
	R8262	D0GB100JA008	10 1/10W	1	
	R8263	D0GB102JA008	1K 1/10W	1	
	R8264	D0GB122JA008	1.2K 1/10W	1	
	R8265	D0GB104JA008	100K 1/10W	1	
	R8301	D0GBR00JA008	0 1/10W	1	
	R8302	D0GBR00JA008	0 1/10W	1	
	R8501	ERJ2GE0R00X	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	
	R9005	D0GA103JA023	10K 1/16W	1	
			CAPACITORS		
	C51	F1H1H102A219	1000pF 50V	1	
	C52	F1H1A474A107	0.47uF 10V	1	
	C57	F1H1H120A230	12pF 50V	1	
	C58	F1H1H120A230	12pF 50V	1	
	C59	F1H1A105A025	1uF 10V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C60	F1H1A105A025	1uF 10V	1	
	C61	F1G1C104A077	0.1uF 16V	1	
	C62	F1G1C104A077	0.1uF 16V	1	
	C63	F1H0J1050012	1uF 6.3V	1	
	C2000	F1H1H103A219	0.01uF 50V	1	
	C2003	F1H1H103A219	0.01uF 50V	1	
	C2004	F1H1H103A219	0.01uF 50V	1	
	C2005	F1H1H102A219	1000pF 50V	1	
	C2007	F1H1H103A219	0.01uF 50V	1	
	C2008	F1J1A106A043	10uF 10V	1	
	C2009	F1H1H103A219	0.01uF 50V	1	
	C2010	F1H1A474A107	0.47uF 10V	1	
	C2013	F1H1H104A013	0.1uF 50V	1	
	C2015	F1H1H2210001	220pF 50V	1	
	C2016	F1H1H2210001	220pF 50V	1	
	C2020	F1J1A106A043	10uF 10V	1	
	C2021	F1J1A106A043	10uF 10V	1	
	C2022	F1H1H102A219	1000pF 50V	1	
	C2023	F1H1H102A219	1000pF 50V	1	
	C2024	F1H1H102A219	1000pF 50V	1	
	C2026	F1H1H102A219	1000pF 50V	1	
	C2028	F1H0J1050012	1uF 6.3V	1	
	C2029	F1H0J1050012	1uF 6.3V	1	
	C2031	F1H0J1050012	1uF 6.3V	1	
	C2032	F1H0J1050012	1uF 6.3V	1	
	C2033	F1H0J1050012	1uF 6.3V	1	
	C2034	F1H0J1050012	1uF 6.3V	1	
	C2038	F2A1C100A207	10uF 16V	1	
	C2039	F2A1C100A207	10uF 16V	1	
	C2040	F1J1A106A043	10uF 10V	1	
	C2043	F1H1H102A219	1000pF 50V	1	
	C2046	F1H1H102A219	1000pF 50V	1	
	C2049	F1H1H101A720	100pF 50V	1	
	C2050	F1H1H101A720	100pF 50V	1	
	C2053	F1H1H102A219	1000pF 50V	1	
	C2054	F1H1H102A219	1000pF 50V	1	
	C2056	F2A1A330B138	33uF 10V	1	
	C2057	F2A1H4R7A213	4.7uF 50V	1	
	C2061	F2A1H1R0A213	1.0uF 50V	1	
	C2066	F2A1H1R0A213	1.0uF 50V	1	
	C2067	F1H1A474A107	0.47uF 10V	1	
	C2068	F1H1A474A107	0.47uF 10V	1	
	C2070	F1H1A474A107	0.47uF 10V	1	
	C2071	F1H1A474A107	0.47uF 10V	1	
	C2072	F1H1H333A220	0.033uF 50V	1	
	C2073	F1H1H333A220	0.033uF 50V	1	
	C2074	F1H1H333A220	0.033uF 50V	1	
	C2075	F1H1H333A220	0.033uF 50V	1	
	C2076	F1H1H333A220	0.033uF 50V	1	
	C2077	F1H1H333A220	0.033uF 50V	1	
	C2078	F1H1H563A748	0.056uF 50V	1	
	C2079	F1H1H563A748	0.056uF 50V	1	
	C2080	F1H1H563A748	0.056uF 50V	1	
	C2081	F1H1H563A748	0.056uF 50V	1	
	C2082	F1H1H332A013	3300pF 50V	1	
	C2083	F1H1H223A219	0.022uF 50V	1	
	C2084	F1H1C683A087	0.068uF 16V	1	
	C2085	F2A1H3R3A213	3.3uF 50V	1	
	C2086	F2A1H3R3A213	3.3uF 50V	1	
	C2087	F1H0J4750004	4.7uF 6.3V	1	
	C2088	F1H1C683A087	0.068uF 16V	1	
	C2089	F2A1H3R3A213	3.3uF 50V	1	
	C2090	F2A1H1R0A213	1.0uF 50V	1	
	C2092	F1H1C683A087	0.068uF 16V	1	
	C2093	F2A1C221B456	220uF 16V	1	
	C2094	F1H1C104A042	0.1uF 16V	1	
	C2095	F1H1C104A042	0.1uF 16V	1	
	C2099	F1H1H103A219	0.01uF 50V	1	
	C2102	F1H1C104A042	0.1uF 16V	1	
	C2107	F1J1A106A043	10uF 10V	1	
	C2108	F1J1A106A043	10uF 10V	1	
	C2110	F2A1E2210093	220uF 25V	1	
	C2114	F2A1C221B456	220uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2115	F1J1A106A043	10uF 10V	1	
	C2116	F1J1A106A043	10uF 10V	1	
	C2117	F1J1A106A043	10uF 10V	1	
	C2121	F1H1H470A004	47pF 50V	1	
	C2123	F1H1H180A230	18pF 50V	1	
	C2126	F1H1H470A004	47pF 50V	1	
	C2127	F1H1H821A831	820pF 50V	1	
	C2128	F1H1H562A219	5600pF 50V	1	
	C2129	F1H1H180A230	18pF 50V	1	
	C2130	F1J1H104A459	0.1uF 50V	1	
	C2132	F2A1A330B138	33uF 10V	1	
	C2133	F1H1H821A831	820pF 50V	1	
	C2134	F1H0J4750004	4.7uF 6.3V	1	
	C2135	F1H0J4750004	4.7uF 6.3V	1	
	C2137	F1H1C104A042	0.1uF 16V	1	
	C2139	F2A0J221B034	220uF 6.3V	1	
	C2141	F1H1C104A042	0.1uF 16V	1	
	C2143	F1H1C104A042	0.1uF 16V	1	
	C2144	F1H0J1050012	1uF 6.3V	1	
	C2148	F1H1H223A219	0.022uF 50V	1	
	C2150	F2A1H3R3A213	3.3uF 50V	1	
	C2153	F1J1A106A043	10uF 10V	1	
	C2163	F1H1H331A013	330pF 50V	1	
	C2167	F1H1A474A107	0.47uF 10V	1	
	C2171	F2A1C102A019	1000uF 16V	1	
	C2173	F2A0J471B035	470uF 6.3V	1	
	C2187	F1H1H103A219	0.01uF 50V	1	
	C2188	F2A1A330B138	33uF 10V	1	
	C2189	F1H1C104A042	0.1uF 16V	1	
	C2190	F2A1C221B456	220uF 16V	1	
	C2191	F1H1H103A219	0.01uF 50V	1	
	C2192	F1H0J1050012	1uF 6.3V	1	
	C2193	F1H0J1050012	1uF 6.3V	1	
	C2194	F1H1H103A219	0.01uF 50V	1	
	C2196	F2A0J101A181	100uF 6.3V	1	
	C2198	F2A1C102A019	1000uF 16V	1	
	C2201	F1H1H103A219	0.01uF 50V	1	
	C2226	F2A0J821B044	820uF 6.3V	1	
	C2234	F2A1E102B396	1000uF 25V	1	
	C2242	F1J1E1040003	0.1uF 25V	1	
	C2243	F1H1C104A042	0.1uF 16V	1	
	C2244	F1H0J1050012	1uF 6.3V	1	
	C2245	F1H0J1050012	1uF 6.3V	1	
	C2246	F1H1C104A042	0.1uF 16V	1	
	C2247	F1H1C104A042	0.1uF 16V	1	
	C2248	F1H0J1050012	1uF 6.3V	1	
	C2249	F2A1A330B138	33uF 10V	1	
	C2251	F1J1A106A043	10uF 10V	1	
	C2255	F1H0J1050012	1uF 6.3V	1	
	C2256	F2A0J221B034	220uF 6.3V	1	
	C2257	F1H1H103A219	0.01uF 50V	1	
	C2277	F1J1A106A043	10uF 10V	1	
	C2278	F1H1H103A219	0.01uF 50V	1	
	C5607	F1H1H102A219	1000pF 50V	1	
	C5607	F1H1H102A219	1000pF 50V	1	
	C5610	F1H1H104A013	0.1uF 50V	1	
	C5611	F1H1H104A013	0.1uF 50V	1	
	C5612	F1H1H102A219	1000pF 50V	1	
	C5613	F1H1H102A219	1000pF 50V	1	
	C5616	F1H1H104A013	0.1uF 50V	1	
	C5617	F1H1H104A013	0.1uF 50V	1	
	C5620	F1H1H104A013	0.1uF 50V	1	
	C5626	F2A0J101A245	100uF 6.3V	1	
⚠	C5700	F1BAF471A013	470pF	1	
⚠	C5701	F0CAF104A105	0.1uF	1	
⚠	C5703	F0CAF224A105	0.22uF	1	
	C5703	F2A1H221B436	220uF 50V	1	
⚠	C5704	F1BAF471A013	470pF	1	PH
	C5704	F2A1H221B436	220uF 50V	1	
⚠	C5705	F1BAF471A013	470pF	1	PH
⚠	C5708	F1BAF1020020	1000pF	1	
	C5711	F2B2G2210025	220uF 400V	1	PH
	C5712	F2B2D5610024	560uF 200V	1	PN

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C5712	F2B2G2210025	220uF 400V	1	PH
	C5713	F0C2J1030007	0.01uF 630V	1	
	C5720	F1H1H104A013	0.1uF 50V	1	
	C5721	F1H1H2210001	220pF 50V	1	
	C5722	F1H1H102A219	1000pF 50V	1	
	C5723	F1H1H471A219	470pF 50V	1	
	C5724	F2A1H5600009	56uF 50V	1	
	C5725	F1H1H104A013	0.1uF 50V	1	
	C5726	F1H1H104A013	0.1uF 50V	1	
	C5727	F1B3A3320012	3300pF 1000V	1	PN
	C5728	F1H1H102A219	1000pF 50V	1	
	C5730	F1H1E105A116	1uF 25V	1	
	C5737	F1B3D821A084	820pF 2000V	1	PH
	C5790	F1K2J2220002	2200pF 630V	1	PH
	C5794	F1H1H102A219	1000pF 50V	1	
	C5795	F1K1H105A149	1uF 50V	1	
	C5796	F1H1H104A013	0.1uF 50V	1	
	C5798	F2A1E221B422	220uF 25V	1	
	C5800	F1H1H102A219	1000pF 50V	1	
	C5800	F1J2E1030004	0.01uF 250V	1	
	C5801	F1H1A474A107	0.47uF 10V	1	
	C5802	F1H1A474A107	0.47uF 10V	1	
	C5803	F1H1H331A013	330pF 50V	1	
	C5804	F2A2A220A388	22uF 100V	1	
	C5805	F1H1H104A013	0.1uF 50V	1	
	C5805	F2A1H2220043	2200uF 50V	1	
	C5807	F1H1H104A013	0.1uF 50V	1	
	C5808	F1H1H330A230	33pF 50V	1	
	C5808	F2A1H2220043	2200uF 50V	1	
	C5809	F1K2A1040007	0.1uF 100V	1	
	C5810	F1H1H104A013	0.1uF 50V	2	
	C5811	F1J2A221A030	220pF 100V	1	
	C5812	F1H1H104A013	0.1uF 50V	1	
	C5812	F1H1H153A219	0.015uF 50V	1	
	C5813	F1J2A221A030	220pF 100V	1	
	C5813	F2A1E221B422	220uF 25V	1	
	C5814	F1H1H104A013	0.1uF 50V	1	
	C5815	F1H1C474A140	0.47uF 16V	1	
	C5816	F1H1H104A013	0.1uF 50V	1	
	C5817	F1H1H153A219	0.015uF 50V	1	
	C5817	F2A2AR100002	0.10uF 100V	1	
	C5818	F1H1H104A013	0.1uF 50V	1	
	C5818	F1J2A221A030	220pF 100V	1	
	C5819	F1J2A221A030	220pF 100V	1	
	C5819	F1J2E1030004	0.01uF 250V	1	
	C5820	F1H1H104A013	0.1uF 50V	1	
	C5820	F1J2E1030004	0.01uF 250V	1	
	C5821	F1J2E1030004	0.01uF 250V	1	
	C5821	F1K2A1040007	0.1uF 100V	1	
	C5822	F1H1H104A013	0.1uF 50V	1	
	C5822	F1J2E1030004	0.01uF 250V	1	
	C5823	F1H1H104A013	0.1uF 50V	1	
	C5825	F1H1A474A107	0.47uF 10V	1	
	C5826	F1H1H331A013	330pF 50V	1	
	C5826	F1J2E1030004	0.01uF 250V	1	
	C5827	F1H1H102A219	1000pF 50V	1	
	C5828	F1H1A474A107	0.47uF 10V	1	
	C5829	F1H1H102A219	1000pF 50V	1	
	C5830	ECQV1H474JL3	0.47uF 50V	1	
	C5831	ECQV1H474JL3	0.47uF 50V	1	
	C5831	F1H1H104A013	0.1uF 50V	1	
	C5832	F1H1H104A013	0.1uF 50V	2	
	C5833	F1H1H104A013	0.1uF 50V	1	
	C5834	F1H1H103A219	0.01uF 50V	1	
	C5835	F2A1C100A207	10uF 16V	1	
	C5836	F1H1H103A219	0.01uF 50V	1	
	C5843	F1J1A106A043	10uF 10V	1	
	C5844	F1J1A106A043	10uF 10V	1	
	C5869	F1H1H104A013	0.1uF 50V	1	
	C5870	F1H1H104A013	0.1uF 50V	1	
	C5871	F1H1H103A219	0.01uF 50V	1	
	C5872	F2A0J222A247	2200uF 6.3V	1	
	C5896	F1H1H104A013	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C5897	F1H1H103A219	0.01uF 50V	1	
	C5898	F1H1H104A013	0.1uF 50V	1	
	C5899	F2A1A221B161	220uF 10V	1	
	C5900	F1J1A106A043	10uF 10V	1	PN
	C6003	F1H1H104A013	0.1uF 50V	1	
	C6004	F1H1H102A219	1000pF 50V	1	
	C6005	F1H1H102A219	1000pF 50V	1	
	C6007	F1H1H102A219	1000pF 50V	1	
	C6008	F1H1H102A219	1000pF 50V	1	
	C6009	F1H1H102A219	1000pF 50V	1	
	C6010	F1H1H331A013	330pF 50V	1	
	C6011	F1H1H102A219	1000pF 50V	1	
	C6012	F1H1H331A013	330pF 50V	1	
	C6013	F1H1H331A013	330pF 50V	1	
	C6014	F1H1H102A219	1000pF 50V	1	
	C6016	F1H1H102A219	1000pF 50V	1	
	C6018	F1H1H102A219	1000pF 50V	1	
	C6019	F1H1H102A219	1000pF 50V	1	
	C6020	F1H1H102A219	1000pF 50V	1	
	C6021	F1H1H103A219	0.01uF 50V	1	
	C6022	F1H1H102A219	1000pF 50V	1	
	C6023	F2A1H470B412	47uF 50V	1	
	C6024	F1H1H332A013	3300pF 50V	1	
	C6025	F1H1H101A720	100pF 50V	1	
	C6026	F1H1H101A720	100pF 50V	1	
	C6027	F1H1H101A720	100pF 50V	1	
	C6028	F2A1H470B412	47uF 50V	1	
	C6029	F2A1C101A155	100uF 16V	1	
	C6030	F1H1H101A720	100pF 50V	1	
	C6031	F1H1H104A013	0.1uF 50V	1	
	C6032	F2A1H220B411	22uF 50V	1	
	C6200	F1H1H101A720	100pF 50V	1	
	C6201	F1H1H102A219	1000pF 50V	1	
	C6202	F2A1H220A182	22uF 50V	1	
	C6400	F1H1H391A013	390pF 50V	1	
	C6402	F1H1H331A013	330pF 50V	1	
	C6404	F1H1H331A013	330pF 50V	1	
	C6406	F1H1C104A008	0.1uF 16V	1	
	C6408	F1H1H104A013	0.1uF 50V	1	
	C6409	F1H1H103A219	0.01uF 50V	1	
	C6412	F1H1H103A219	0.01uF 50V	1	
	C8001	F1G1A1040006	0.1uF 10V	1	
	C8002	F1J1A106A043	10uF 10V	1	
	C8003	F1G1A1040006	0.1uF 10V	1	
	C8004	F1J1A106A043	10uF 10V	1	
	C8005	F1H0J225A005	2.2uF 6.3V	1	
	C8007	F1H1A334A025	0.33uF 10V	1	
	C8008	F1H1H223A219	0.022uF 50V	1	
	C8009	F1H1H680A230	68pF 50V	1	
	C8010	F1G1A1040006	0.1uF 10V	1	
	C8011	F1G1A1040006	0.1uF 10V	1	
	C8012	F1G1A1040006	0.1uF 10V	1	
	C8013	F2G0J101A031	100uF 6.3V	1	
	C8014	F1H1H103A885	0.01uF 50V	1	
	C8015	F1G1H120A565	12pF 50V	1	
	C8016	F1G1H120A565	12pF 50V	1	
	C8017	F1J1A106A043	10uF 10V	1	
	C8018	F1H1A334A028	0.33uF 10V	1	
	C8019	F1H1H102A219	1000pF 50V	1	
	C8020	F1H1H681A013	680pF 50V	1	
	C8021	F1H1C823A001	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	F1H1H102A219	1000pF 50V	1	
	C8028	F1G1A1040006	0.1uF 10V	1	
	C8029	F1G1A1040006	0.1uF 10V	1	
	C8030	F1G1A1040006	0.1uF 10V	1	
	C8031	F1G1A1040006	0.1uF 10V	1	
	C8032	F1G1A1040006	0.1uF 10V	1	
	C8033	F1G1A1040006	0.1uF 10V	1	
	C8034	F1G1A1040006	0.1uF 10V	1	
	C8035	F1G1A1040006	0.1uF 10V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C8036	F1G1A1040006	0.1uF 10V	1	
	C8037	F1G1A1040006	0.1uF 10V	1	
	C8038	F1G1A1040006	0.1uF 10V	1	
	C8039	F1G1A1040006	0.1uF 10V	1	
	C8040	F1G1A1040006	0.1uF 10V	1	
	C8041	F1G1A1040006	0.1uF 10V	1	
	C8042	F1G1A1040006	0.1uF 10V	1	
	C8043	F1G1A1040006	0.1uF 10V	1	
	C8044	F1H0J4750005	4.7uF 6.3V	1	
	C8045	F1G1A1040006	0.1uF 10V	1	
	C8046	F1G1A1040006	0.1uF 10V	1	
	C8047	F1H1H153A885	0.015uF 50V	1	
	C8048	F1G1A1040006	0.1uF 10V	1	
	C8049	F1J1A106A043	10uF 10V	1	
	C8050	F1H1A105A025	1uF 10V	1	
	C8051	F1G1A1040006	0.1uF 10V	1	
	C8052	F1G1A1040006	0.1uF 10V	1	
	C8053	F1G1A1040006	0.1uF 10V	1	
	C8054	F1G1A1040006	0.1uF 10V	1	
	C8055	F1G1A1040006	0.1uF 10V	1	
	C8056	F1G1A1040006	0.1uF 10V	1	
	C8057	F1G1A1040006	0.1uF 10V	1	
	C8058	F1G1A1040006	0.1uF 10V	1	
	C8059	F1G1A1040006	0.1uF 10V	1	
	C8060	F1H1A105A025	1uF 10V	1	
	C8061	F1G1A1040006	0.1uF 10V	1	
	C8062	F1J1A106A043	10uF 10V	1	
	C8063	F1J1A106A043	10uF 10V	1	
	C8064	F2G0J221A031	220uF 6.3V	1	
	C8065	F1J1A106A043	10uF 10V	1	
	C8066	F1G1A1040006	0.1uF 10V	1	
	C8067	F1J1A106A043	10uF 10V	1	
	C8068	F1H1H332A013	3300pF 50V	1	
	C8069	F1H1H332A013	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	F1H1C104A008	0.1uF 16V	1	
	C8102	F1H1C104A008	0.1uF 16V	1	
	C8201	F1J1A106A043	10uF 10V	1	
	C8202	F1G1A1040006	0.1uF 10V	1	
	C8203	F1H1H103A885	0.01uF 50V	1	
	C8204	F1J1A106A043	10uF 10V	1	
	C8251	F2G1C4700061	47uF 16V	1	
	C8252	F1H1H103A885	0.01uF 50V	1	
	C8253	F1H1A154A001	0.15uF 10V	1	
	C8254	F1H1H153A885	0.015uF 50V	1	
	C8255	F1H1H182A219	1800pF 50V	1	
	C8256	F1H1H102A219	1000pF 50V	1	
	C8258	F1H1H122A219	1200pF 50V	1	
	C8259	F1J1A106A043	10uF 10V	1	
	C8260	F1H1H103A885	0.01uF 50V	1	
	C8261	F1H1A105A025	1uF 10V	1	
	C8262	F2G0J101A031	100uF 6.3V	1	
	C8401	F1J1A106A043	10uF 10V	1	
	C8402	F2G0J101A031	100uF 6.3V	1	
	C8403	F1H1H103A885	0.01uF 50V	1	
	C8501	F1J1A106A043	10uF 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	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C8513	F1H0J4750005	4.7uF 6.3V	1	
	C8514	F1H0J4750005	4.7uF 6.3V	1	
	C9006	F1G1A1040006	0.1uF 10V	1	
			SERVICE FIXTURE & TOOLS		
	SFT1	REX1527	15P CABLE WIRE (MAIN-SMPS)	1	

MMH1202