PSG1102025CE

Service Manual

CD Stereo System

Model No. SA-AKX32PH
SA-AKX32PN

Product Color: (K)...Black Type

Please refer to the original service manual for:
- **CD Mechanism Unit (BRS1C), Order No. PSG1102001CE**
- **Speaker system SB-AKX32PN-K, Order No. PSG1102027CE**

⚠ 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 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. Leakage Current Hot Check

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

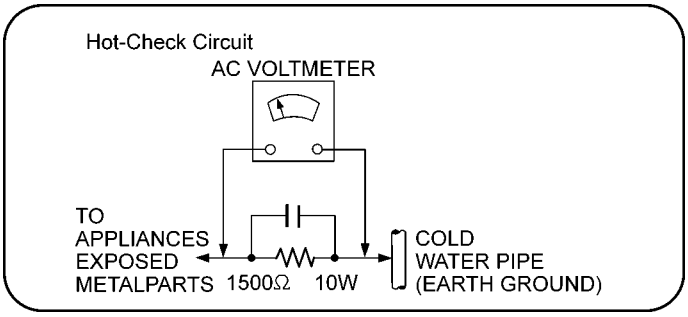


Figure 1

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. 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, 6.3AL, 250V) (For PH only)

1.4. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such (C5701, C5703, C5704, C5705, C5706, C5707, C5708) through a 10 Ω, 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 V, 60 Hz in Power ON, FM Tuner, No Signal, Volume minimal mode should be ~ 500 mA. (PN)

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 ~ 500 mA. (PH)

1.5. 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.

1.6. 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
⚠	4	REXX1122	1P BLACK WIRE (VOLTAGE SELECTOR-SMPS)	PH
⚠	5	REXX1123	1P RED WIRE (VOLTAGE SELECTOR-SMPS)	PH
⚠	8	RGRX1008C-A	REAR PANEL	PN
⚠	8	RGRX1008D-A	REAR PANEL	PH
⚠	14	RKMX1011-K	TOP CABINET	
⚠	301	RAEX1033Z-V	TRAVERSE ASS'Y	
⚠	A2	K2CB2CB00021	AC CORD	PN
⚠	A2	K2CQ2CA00007	AC CORD	PH
⚠	A3	RQTX1292-M	O/I BOOK (Sp)	PN
⚠	A3	RQTX1293-M	O/I BOOK (En)	PN
⚠	A3	RQTX1294-M	O/I BOOK (Sp)	PH
⚠	PCB10	REPX0886D	SMPS P.C.B.	(RTL) PN
⚠	PCB10	REPX0886F	SMPS P.C.B.	(RTL) PH
⚠	PCB11	REPX0886F	VOLTAGE SELECTOR P.C.B.	(RTL) PH
⚠	DZ5701	ERZV10V511CS	ZNR	
⚠	S5701	K0ABCA000007	SW VOLT ADJ	PH
⚠	L5701	G0B612H00002	LINE FILTER	
⚠	T5701	G4DYZ0000050	SWITCHING TRANSFORMER	PN
⚠	T5701	G4DYZ0000051	SWITCHING TRANSFORMER	PH
⚠	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
⚠	TH5702	D4CAA2R20001	THERMISTOR	
⚠	TH5860	D4CC11040013	THERMISTOR	
⚠	TH5900	D4CC11040013	THERMISTOR	
⚠	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	
⚠	C5705	F1BAF471A013	470pF	
⚠	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

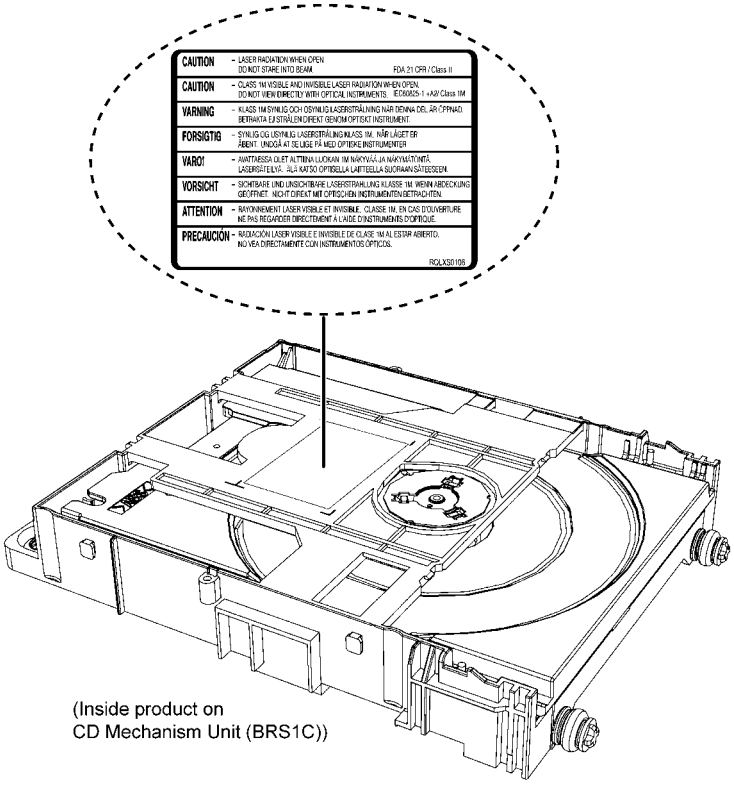
CAUTION:
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

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

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

(Back of product)



(Inside product on
CD Mechanism Unit (BRS1C))

2.3. Service caution based on Legal restrictions

2.3.1. General description about Lead Free Solder (PbF)

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

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

Definition of PCB Lead Free Solder being used

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

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

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

Recommended Lead Free Solder (Service Parts Route.)

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

Note

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

2.4. Handling Precautions for Traverse Unit

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

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

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

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

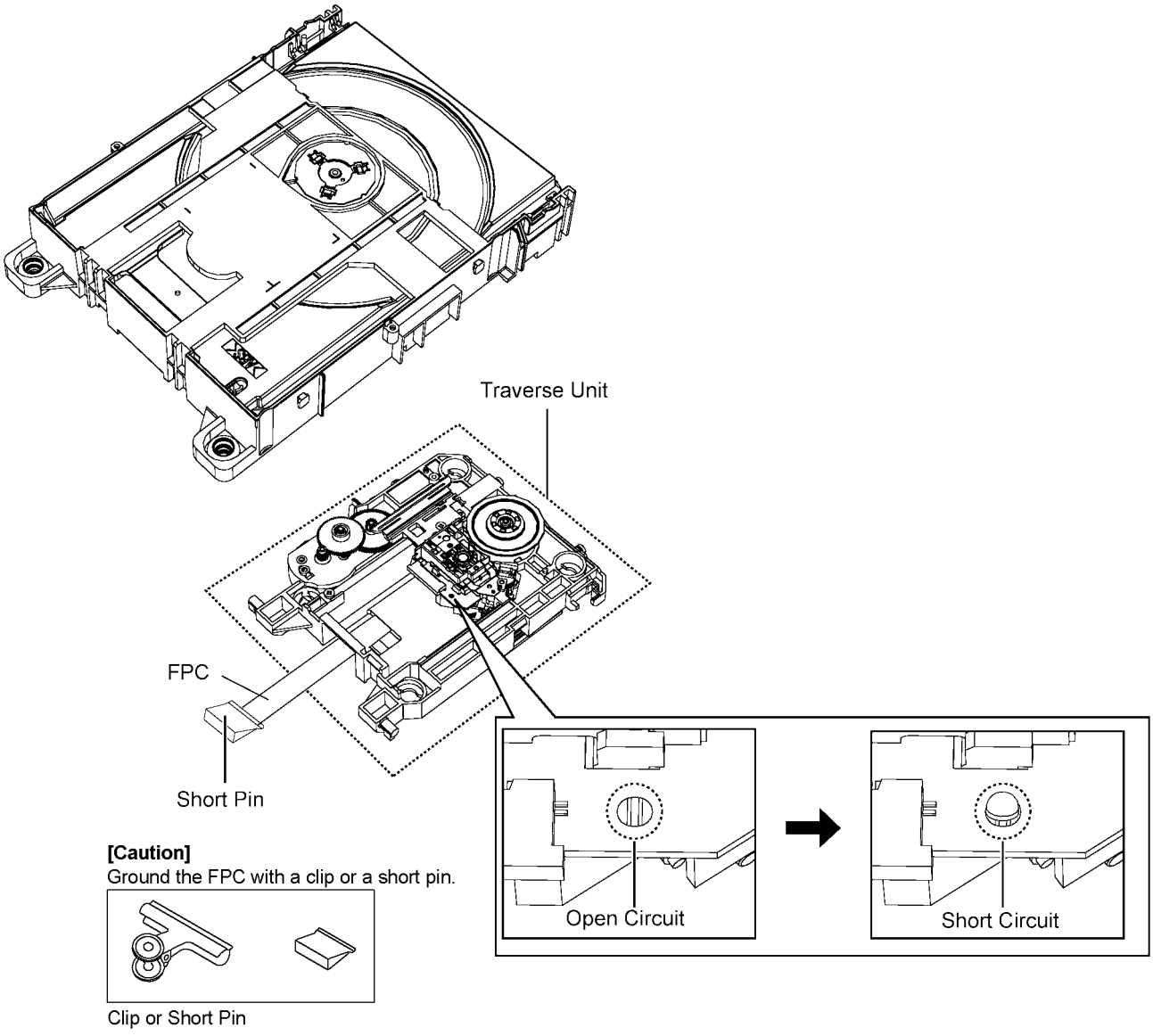


Figure A

2.4.2. Grounding for electrostatic breakdown prevention

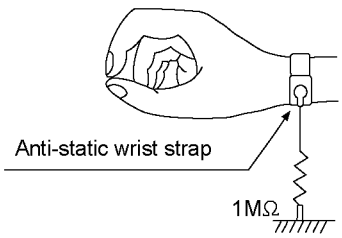
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

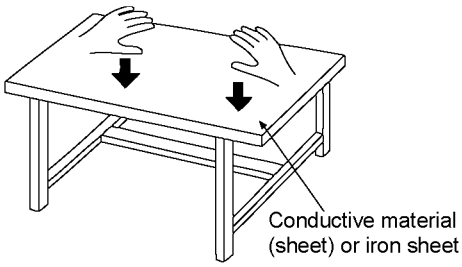
2.4.2.1. Worktable grounding

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

2.4.2.2. Human body grounding

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





3 Service Navigation

3.1. Service Information

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

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

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

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

- **Micro-processor:**

1) The following components are supplied as an assembled part.
   - Micro-processor IC, IC2003 (RFKWMAKX32M0)

- **Speaker System:**

1) This model uses Speaker System, SB-AKX32PN-K.

4 Specifications

■ AMPLIFIER SECTION

RMS output power stereo mode

Front Ch (both channels driven)
190 W per channel (4 Ω), 1 kHz, 10% THD

Total RMS stereo mode power
380 W

PMPO output power (For PN only)
4200 W

■ FM/AM TUNER, TERMINALS SECTION

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

■ DISC SECTION

Discs played (8 cm or 12 cm)

(1) CD-Audio (CD-DA)
(2) CD-R/RW (CD-DA, MP3* formatted disc)
(3) MP3*
*MPEG-1 layer 3

Pick up	
Wavelength	790 nm(CD)
Audio output (Disc)	
Number of channels	2 (FL, FR)

FL = Front left channel
FR = Front right channel

■ 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, 192 kbps, 320 kbps
USB recording speed	1x,4x (CD only)
recording file format	MP3 (*.mp3)

■ INTERNAL MEMORY SECTION

Memory	
Memory size	2 GB
Memory File format	MP3 (*.mp3)
Memory recording	
Bit Rate	128 kbps, 192 kbps, 320 kbps
Memory Recording speed	1x,4x, (CD only)
Recording file format	MP3 (*.mp3)
Capacity of total song recoreded	510 song

(Use 128 kbps, approximately 1 song = 4 mins)

■ GENERAL

Power supply	
For PH only	AC 110 to 127 V, 220 to 240 V, 50/60 Hz
For PN only	AC 120 V, 60 Hz
Power Consumption	
For PH only	82 W
For PN only	79 W
Dimensions (W x H x D)	220 mm x 334 mm x 245 mm
Mass	3.2 kg
Operating temperature range	0 °C to +40 °C
Operating humidity range	35% to 80% RH (no condensation)
Power Consumption in standby mode	
For PH only	0.3 W (Approximate)
For PN only	0.2 W (Approximate)

Notes

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

■ System: SC-AKX32PH-K

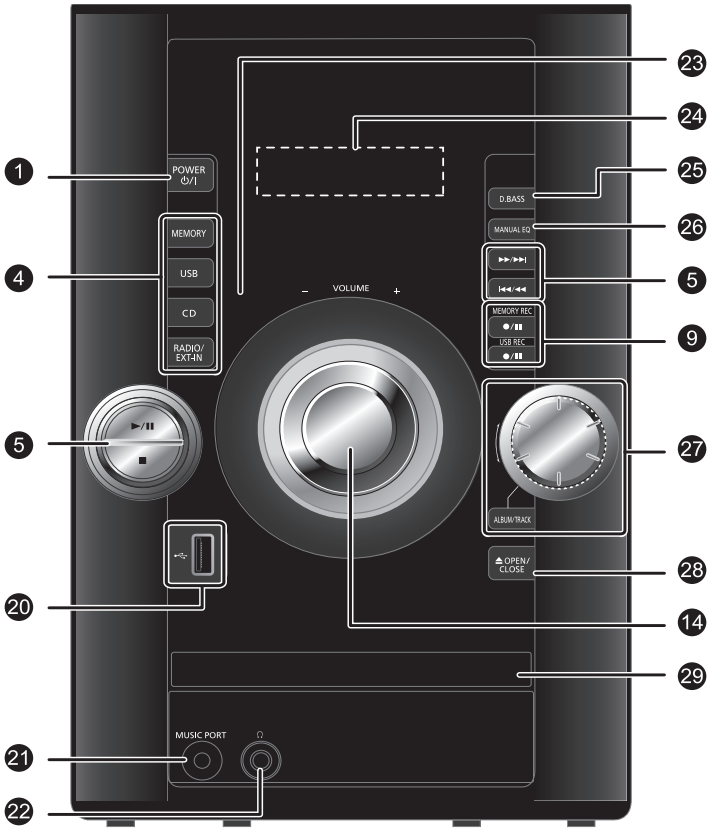
Main Unit: SA-AKX32PH-K
Front Speakers: SB-AKX32PN-K

■ System: SC-AKX32PN-K

Main Unit: SA-AKX32PN-K
Front Speakers: SB-AKX32PN-K

5 Location of Controls and Components

5.1. Main Unit Key Button Operation



Refer to the numbers in parentheses for chapter references.

1 **Standby/on switch [⏻], [⏻ /I, POWER]**
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 source:**
[MEMORY, USB]: Select internal memory or USB

[MEMORY]: Select internal memory
[USB]: Select USB
[CD]: Select disc
[RADIO, EXT-IN] : Select radio, USB, music port or AUX

5 **Basic operation**
[►/❚❚] : Playback or pause operation
[■]: Stop playback or recording
[I◄◄], [►►I]: Skip track
Select preset radio station
[◄◄], [►►]: Search track
Tune in to the radio station
[I◄◄/◄◄], [►► /►►I]: Skip and search track
Select preset radio station

9 **Recording operation for USB and internal memory**
[CD HI-SPEED REC]: CD high speed recording
[● /❚❚, USB REC]: USB recording
[● /❚❚, MEMORY REC]: Internal memory recording
[REC MODE]: Set the record mode

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

20 USB port (⇽•)

21 Music port

22 **Headphones jack (🎧)**
Plug type: Ø 3.5 mm stereo (not included)
- Avoid listening for prolonged periods of time to prevent hearing damage.
- Excessive sound pressure from earphones and headphones can cause hearing loss.
- Listening at full volume for long periods may damage the user's ears. Be sure to use the supplied or recommended headphones or earphones.

23 Remote control sensor

24 Display panel

25 Set D.Bass function

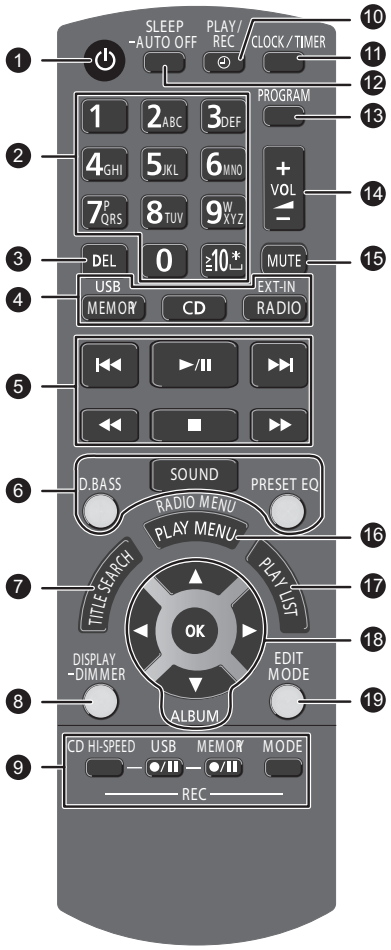
26 Set the Manual EQ effect

27 **Browse tracks or albums**
CD
Turn the knob to browse track.
Press [4 /9] to start playback from the selection.
MP3
Press [ALBUM/TRACK] to select albums or tracks and turn the knob to browse.
Press [4 /9] to start playback from the selection.

28 Open or close the disc tray

29 Disc tray

5.2. Remote Control Key Button Operation



Refer to the numbers in parentheses for chapter references.

1. **Standby/on switch [⏻], [⏻/I, POWER]**
   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 set 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 source:**
   [MEMORY, USB]: Select internal memory or USB
   [MEMORY]: Select internal memory
   [USB]: Select USB
   [CD]: Select disc
   [RADIO, EXT-IN] : Select radio, USB, music port or AUX

5. **Basic operation**
   [▶/II] : Playback or pause operation
   [■]: Stop playback or recording
   [I◀◀], [▶▶I]: Skip track
   Select preset radio station
   [◀◀], [▶▶]: Search track
   Tune in to the radio station
   [I◀◀/ ◀◀], [▶▶ /▶▶I]: Skip and search track
   Select preset radio station

6. Select the sound effects

7. Start the title search

8. View the information shown on the display panel.
   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 for USB and internal memory**
   [CD HI-SPEED REC]: CD high speed recording
   [●/II, USB REC]: USB recording
   [●/II, MEMORY REC]: Internal memory recording
   [REC MODE]: Set the record mode

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 or USB source, the auto of function switches off the system if you do not use the system for 30 minutes.
    Press and hold the button to use this function.
    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 playlists

18. **[▲, ▼]**: Skip album
    Adjust clock setting
    [◀, ▶]: Select the item in the menu
    [OK]: Confirm the setting

19. Set the edit mode for USB or internal memory

5.3. Media Information

Note on using a DualDisc

A DualDisc does not playback if the side of the digital audio content does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format.

Note on CDs

- This system can access up to 99 tracks.
- This system can play MP3 files and CD-DA format audio CD-R/RW that have been finalized.
- This system can fail to play some CD-R/RW because of the condition of the recording.

Note on MP3s

- Files are treated as tracks and folders are treated as albums.
- This system 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-digit numbers in the order you want them to play.

Limitations on MP3 playback

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

6 Self-Diagnostic and Special Mode Setting

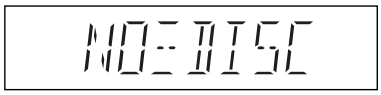
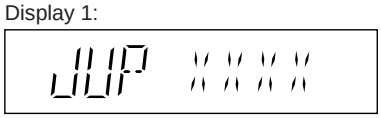
6.1. Cold-Start

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

6.2. Doctor Mode Table

6.2.1. Doctor Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Doctor Mode	To enter into Doctor Mode		1.In CD Mode: Press [■] button on main unit follow by [4] and [7] on remote control. 2.To exit, press [OK] button on remote control or press [POWER, ⏻ /I] button on main unit or remote control.
Micro-P Version Display	To check the firmware version for Jupiter & Microprocessor IC. Display 1 will display for 2 secs, followed by display 2.	Display 1:  Jupiter Micro-P Version Display 2:  Micro-processor Version	In Doctor Mode: 1.Press [2] button on remote control.

6.2.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Cold Start	To active cold start upon next AC power up when reset start is execute the next time.	-- -- -- -- -- -- -- -- --	In Doctor Mode: 1. Press [DISPLAY/-DIMMER] button on remote control.
Volume Setting Check	To check the volume setting of a main unit.	VOL 30 Volume Press [7]: VOL50 Press [8]: VOL35 Press [9]: VOL0 Press [PLAY/RADIO MODE]: VOL30	In Doctor Mode: 1. Press [7],[8],[9], [PLAY MENU/RADIO MENU] 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.
CD Open Check	To excute CD Open operation.	CD OPEN	In Doctor mode: 1. Press [DEL] button on remote control.
BRS1C Reliability Test (Traverse)	To determine CD Mechanism BRS1C Access Inner & Outer disc operation. In this mode,ensure the CD is in the main unit. Note: Refer to Section 6.3 Fig 2. for process flow.	0000-0000 The counter will increment by one. When reach 9999 will change to 0000 Cancellation Display CANCEL	In Doctor Mode: 1. Press [10]→[1]→[2] button on remote control. 2. To cancel, press [0] on remote control.
BRS1C Reliability Test (Combination)	To determine CD Mechanism Unit (BRS1C) Open/Close & Access Inner & Outer Disc Operation. In this mode,ensure the CD is in the main unit. Note: Refer to Section 6.3 Fig 3. for process flow.	0000-0000 The counter will increment by one. When reach 9999 will change to 0000 Cancellation Display CANCEL	In Doctor Mode: 1. Press [10]→[1]→[5] button on remote control. 2. To cancel, press [0] on remote control.
BRS1C Reliability Test (Loading)	To determine CD Mechanism Unit (BRS1C) Open/Close operation. In this mode, the tray will open & close. Note: Refer to Section 6.3 Fig 1 for process flow.	0000-0000 The counter will increment by one. When reach 9999 will change to 0000 Cancellation Display CANCEL	In Doctor Mode: 1. Press [10]→[2]→[1] button on remote control. 2. To cancel, press [0] on remote control.

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

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

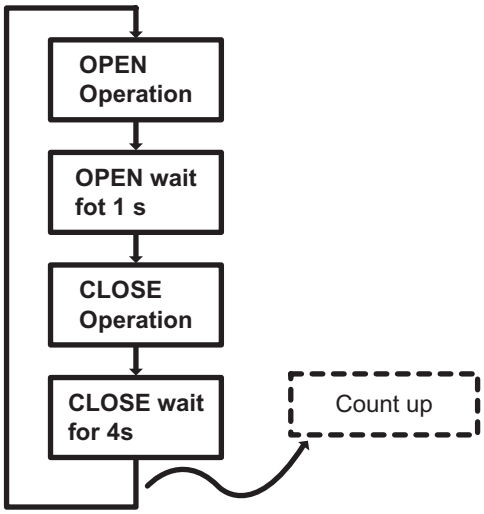


Fig. 1. Reliability Test (Loading)

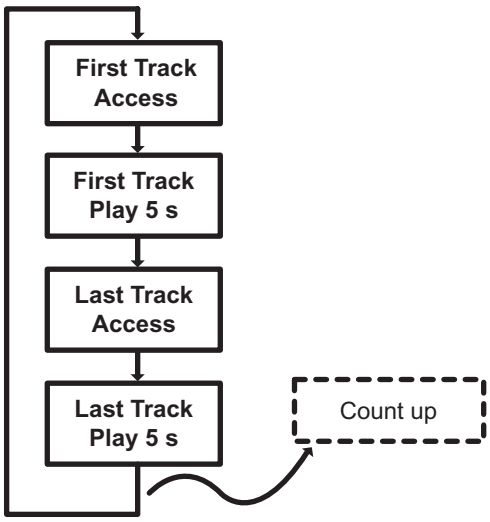


Fig. 2. Reliability Test (Traverse)

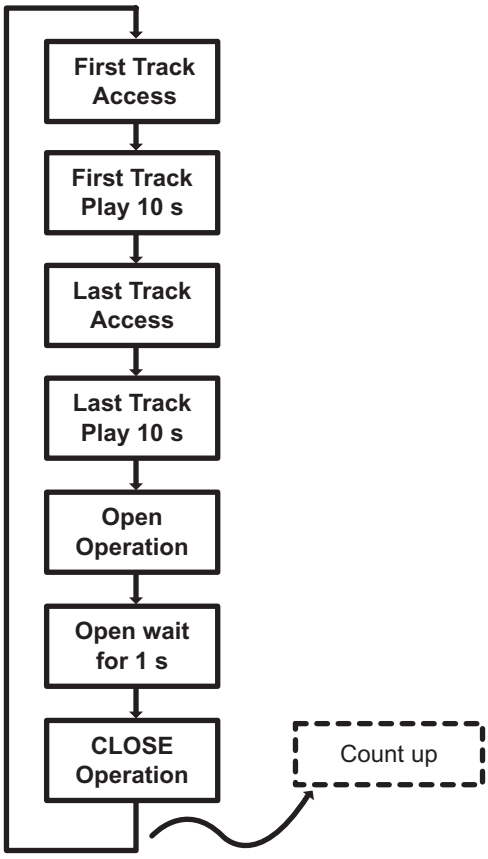
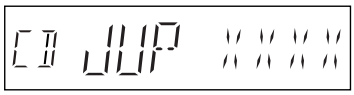
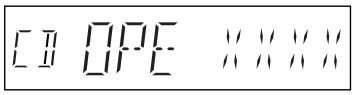
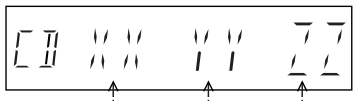
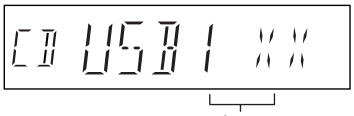


Fig. 3. Reliability Test (Combination)

6.4. Self-Diagnostic Mode

Mode Name	Item Description	FL Display	Key Operation Front Key
Service Mode	To enter into Service Mode		In CD Mode: 1.Press and hold [■] button on main unit for 2 secs. 2.Do not release [■] button, press and hold [▶▶/▶▶I] on the remote control for 2 secs. 3.To exit, press [POWER,⏻/I] button on main unit.
Error Code History	Checking the records for Error Code. If there's no error code.Display will remain as [T]		In Service Mode: 1.Press button [1] on remote control. 2.To clear history,press & hold [0] for 5 seconds or more
Software Display Version.	To check for following: 1)System Version.		In Service Mode: 1.Press button [2] on remote control.
	2)Jupiter Micro-processor Version.		2.Press button [2] on remote control.
	3) Opecon Version.		3.Press button [2] button on remote control.
Display of AD value of main body key	To check the AD input value	 AN2 AN3 AN4 XX: AN2 input value (2 hexadecimal value digits) --> KEY1 YY: AN3 input value (2 hexadecimal value digits) --> KEY2 ZZ: AN4 input value (2 hexadecimal value digits) --> KEY3	In Service Mode: 1.Press button [4] on remote control for 2 secs.
USB Error Code History	To check for USB error Codes.	 History number	In Service Mode: 1.Press button [5] on remote control. 2.To clear history,press & hold [0] for 5 seconds or more.

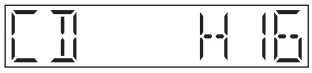
6.5. Self-Diagnostic Error Code Table

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

6.5.1. Power Supply Error Code Table

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

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

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

6.6. Sales Demonstration Lock Function

6.6.1. 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, press and hold [⏏OPEN/CLOSE] key and follow by [▶/⏸] key pressed within 0.5 sec.
Step 3: Hold both [⏏OPEN/CLOSE] and [▶/⏸] keys for 5 sec.
Step 4: The display will show upon entering into this mode.

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

6.6.2. Cancellation

Step 1: To cancel only can be triggered in CD Mode and Volume 19.
Step 2: Press and hold [⏏OPEN/CLOSE] key and follow by [▶/⏸] key pressed within 0.5 sec.
Step 3: Hold both [⏏OPEN/CLOSE] and [▶/⏸] keys for 5 sec.
Step 4: The display will show after exit from this mode.

7 Troubleshooting Guide

7.1. Troubleshooting Guide for F61 and/ or F76

This section illustrates the checking procedures when upon detecting the error of “F61” and “F76” after power up of the unit.It is for purpose of troubleshooting and checking in SMPS,D-Amp & 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 7.2.1 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	4	PC5702/PC5799 solder crack.	
		PC5702, PC5799		Dry joint, short circuit, open circuit.	
	5	Switching Regulator	5	IC5701 Faulty.	
		IC, IC5701			
	6	Switching Regulator	6	IC5799 Faulty.	
		IC, IC5799			
Set can ON then F61	1	Speaker Output	1	Faulty speaker unit, Loose connection, Short.	Refer to Section 7.2.3 Fig. 3. D-Amp P.C.B.
	2	D-AMP circuit	2a	D-AMP IC, IC5902 defective.	
				(DC voltage of +/-30V detected at speaker output)	
Set can ON then F76	1	Transformer T5701	1a	Short circuit between Pin 14 and Pin 15.	Refer to Section 7.2.1 Fig. 1. SMPS P.C.B.
			1b	Short circuit between Pin 15 and Pin 16.	
			1c	Short circuit between Pin 16 and Pin 17.	
	2	DC-DC Circuit	2a	Check cable wire connection between cable wire ZJ2007	Refer to Section 7.2.2 Fig. 2. Main P.C.B.
				(At Main P.C.B) & connector CN5802 (At SMPS P.C.B)	
			2b	Voltage Regulator IC (IC2010) &	
				Switching Regulator IC (IC2011) faulty.	
	3	Photocoupler	3	PC5720 solder crack,	Refer to Section 7.2.1 Fig. 1. SMPS P.C.B.
		PC5720		Dry joint, short circuit, open circuit.	
Set can ON working normally for some time then F76	1	Rectifier Diode D5801	1a	Improper contact between D5801 to Heatsink.	Refer to Section 7.2.1 Fig. 1. SMPS P.C.B.
		Rectifier Diode D5802		Improper contact between D5802 to Heatsink.	
	2	Thermistor TH5860	1b	Set trigger temperature protection.	

7.2. Part Location

7.2.1. SMPS P.C.B.

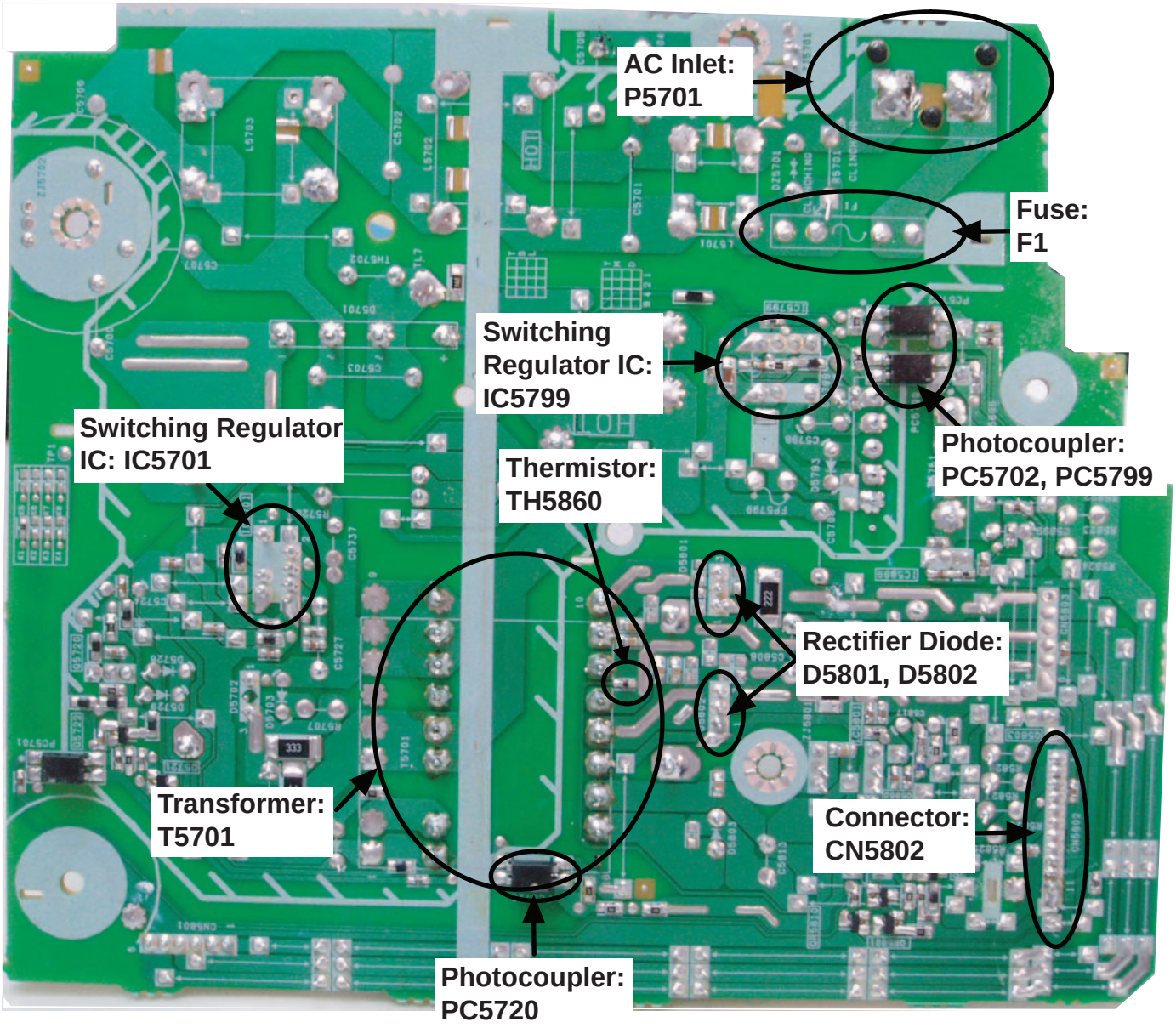


Fig. 1 SMPS P.C.B.

7.2.2. Main P.C.B.

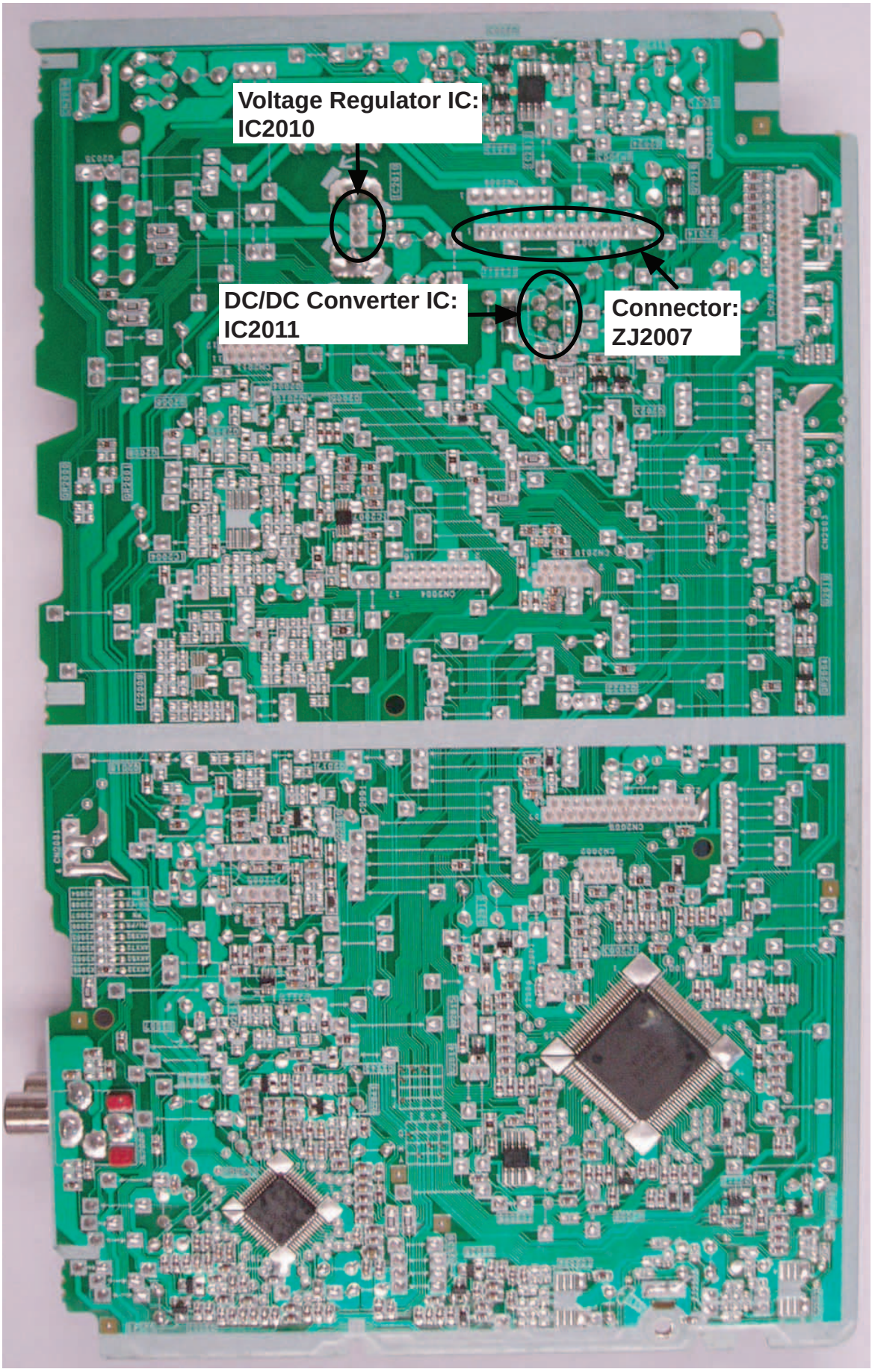


Fig. 2 Main P.C.B.

7.2.3. D-Amp P.C.B.

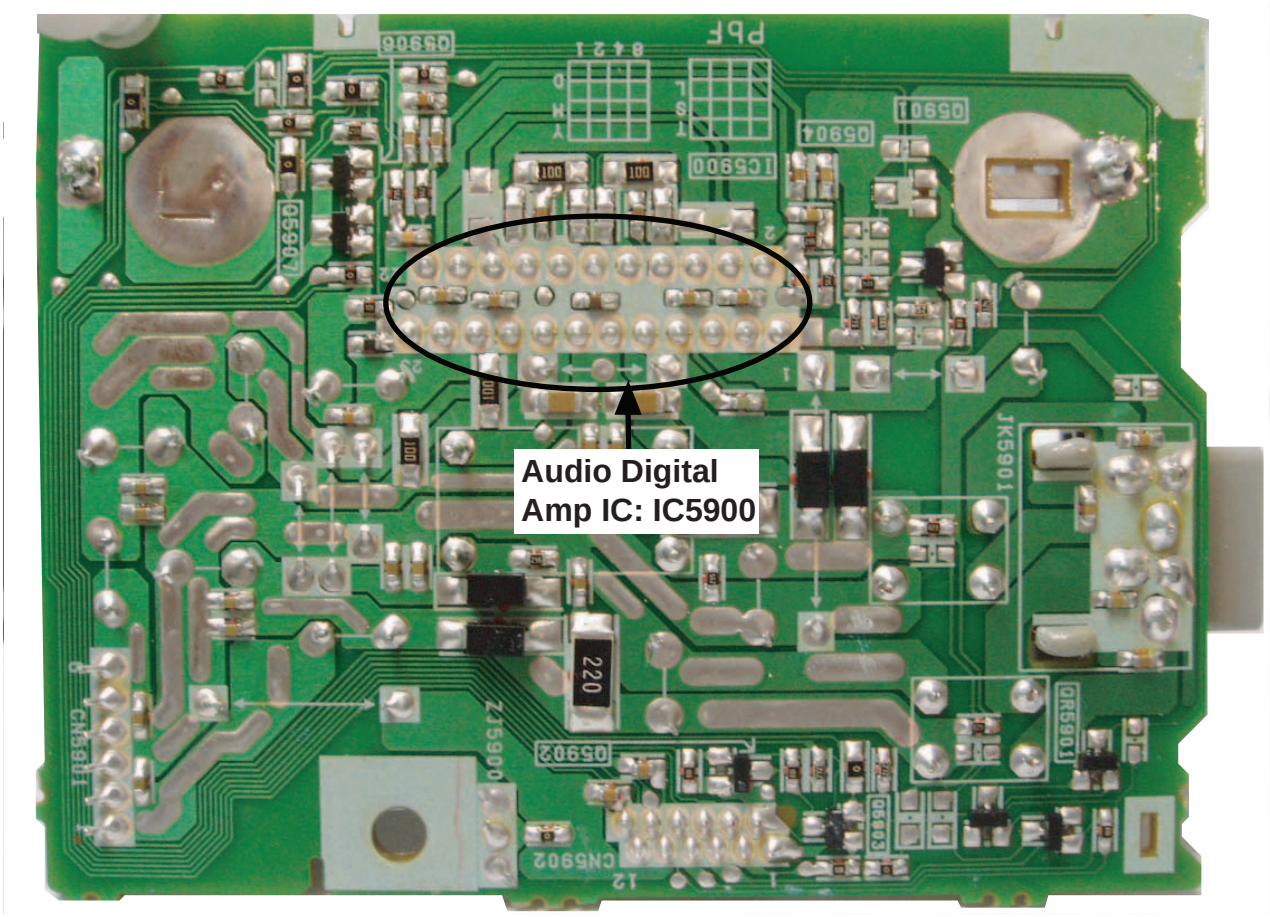


Fig. 3 D-Amp P.C.B.

7.3. D-Amp IC Operation & Control

D-AMP IC Operation & Control

1) D-AMP IC (C1AB00000497) was used for this model.
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	L	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	L	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.

8 Service Fixture & Tools

8.1. Service Tools and Equipment

Prepare service tools before process service position.

Service Tools		Remarks
Main P.C.B. (ZJ2007) - SMPS P.C.B. (CN5802)	REXX1206 (15P Cable Wire)	

9 Disassembly and Assembly Instructions

• Illustration is based on SA-AKX32PH-K

Caution Note:

• This section describes the disassembly and/or assembly procedures for all major printed circuit boards & main components for the unit. (You may refer to the section of “Main components and P.C.B Locations” as described in the service manual)

• **Before carrying out the disassembly process, please ensure all the safety precautions & procedures are followed.**

• **During the disassembly and/or assembly process, please handle with care as there may be chassis components with sharp edges.**

• **Avoid touching heatsinks due to its high temperature after prolong use. (See caution as described below)**

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

• **During disassembly and assembly, please ensure proper service tools, equipments or jigs is being used.**

• **During replacement of component parts, please refer to the section of “Replacement Parts List” as described in the service manual.**

• **Select items from the following indexes when disassembly or replacement are required.**

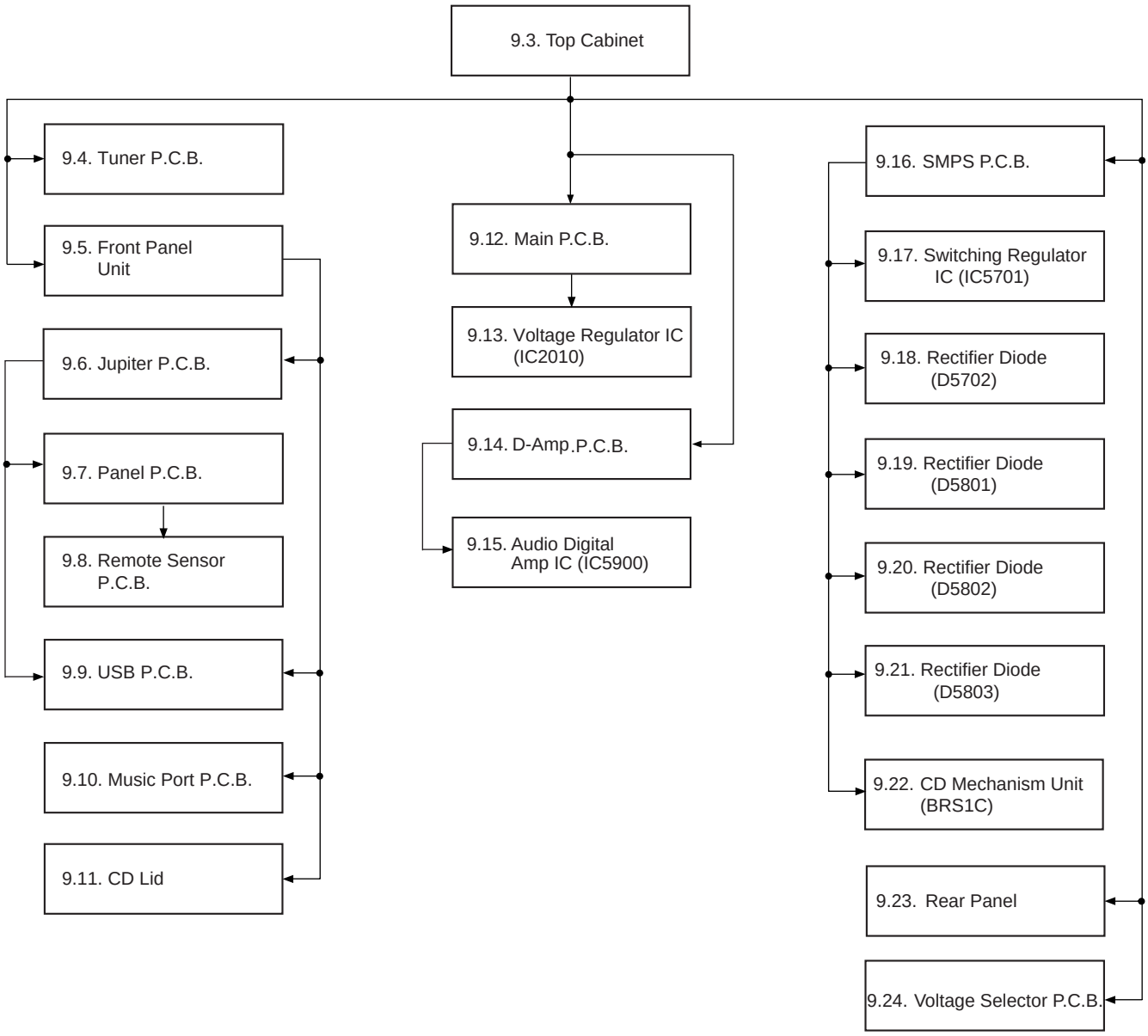
• Disassembly of Top Cabinet
• Disassembly of Tuner P.C.B.
• Disassembly of Front Panel Unit
• Disassembly of Panel P.C.B.
• Disassembly of Remote Sensor P.C.B.
• Disassembly of Jupiter P.C.B.
• Disassembly of USB P.C.B.
• Disassembly of Music Port P.C.B.
• Disassembly of CD Lid
• Disassembly of Main P.C.B.
• Replacement of Voltage Regulator IC (IC2010)
• Disassembly of D-Amp P.C.B.
• Replacement of Audio Digital Amp IC (IC5900)
• Disassembly of SMPS P.C.B.
• Replacement of Switching Regulator IC (IC5701)
• Replacement of Rectifier Diode (D5702)
• Replacement of Rectifier Diode (D5801)
• Replacement of Rectifier Diode (D5802)
• Replacement of Rectifier Diode (D5803)
• Disassembly of CD Mechanism Unit (BRS1C)
• Disassembly of Rear Panel
• Disassembly of Voltage Selector P.C.B.

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

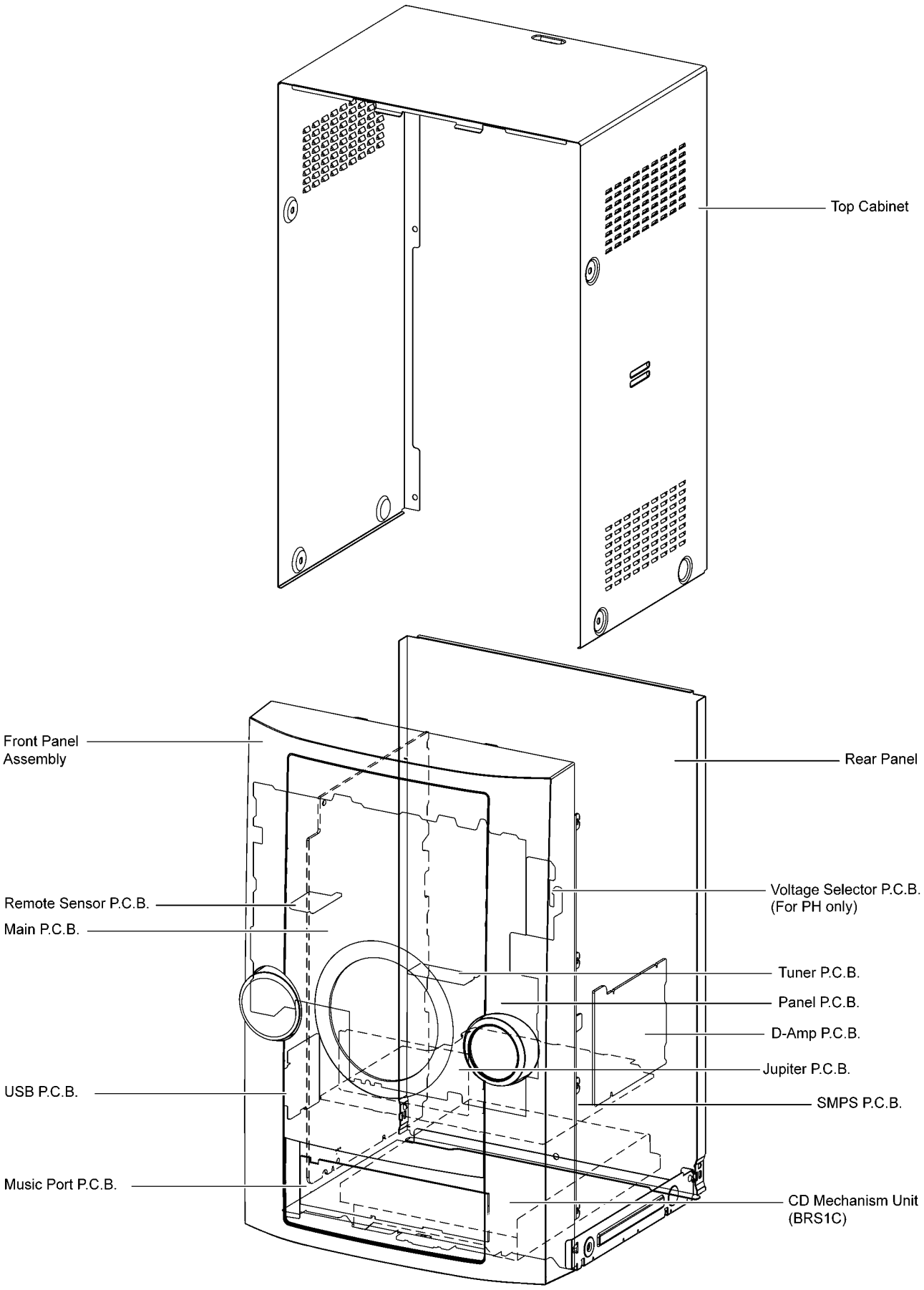
Below shown is part no. of different screw types used:

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

9.1. Disassembly Flow Chart

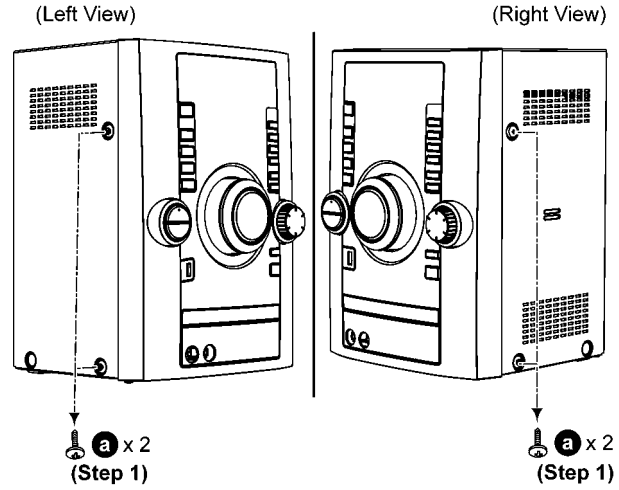


9.2. Main Components and P.C.B. Locations



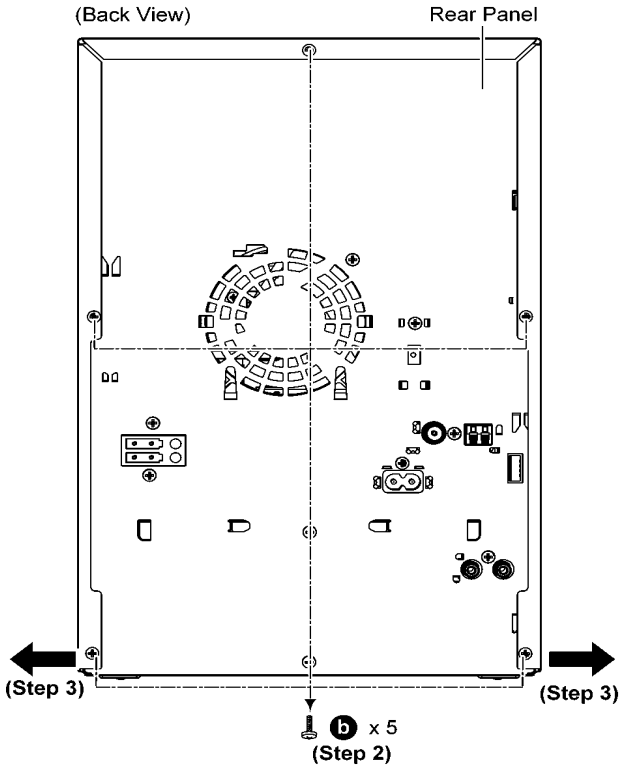
9.3. Disassembly of Top Cabinet

Step 1 Remove 2 screws on each side.



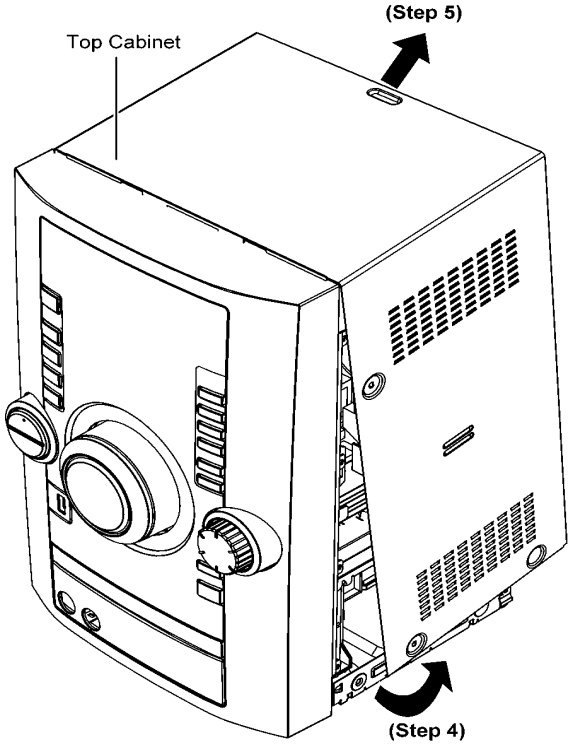
Step 2 Remove 5 screws.

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

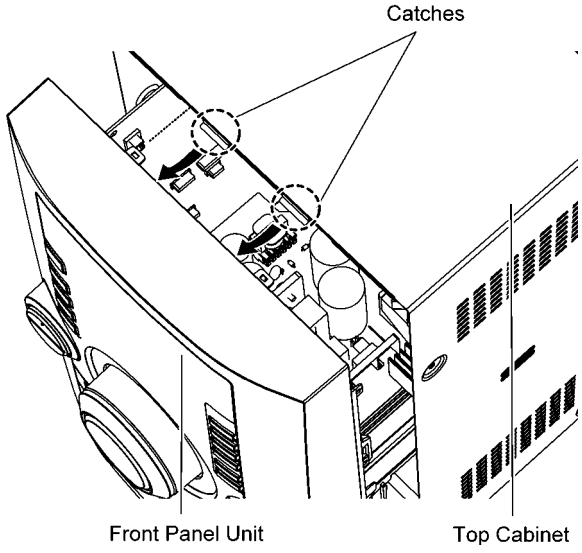


Step 4 Slightly lift up both side of Top Cabinet in an outward direction as shown.

Step 5 Remove Top Cabinet.



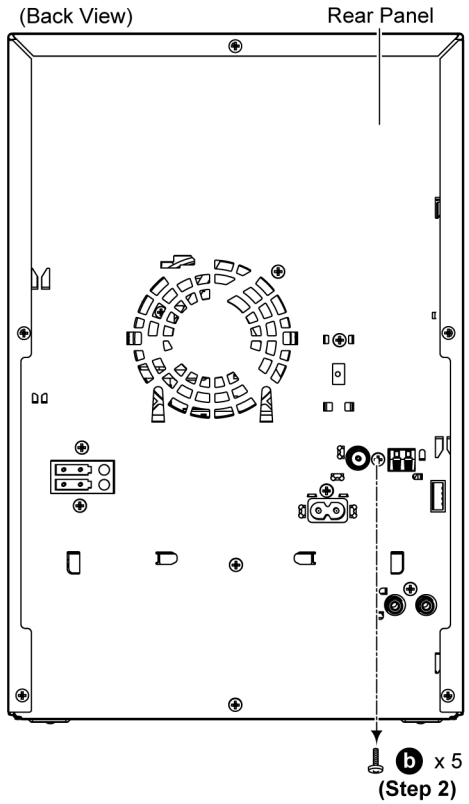
Caution: During assembling, ensure that the Top Cabinet catches are properly located into Front Panel Unit as shown.



9.4. Disassembly of Tuner P.C.B.

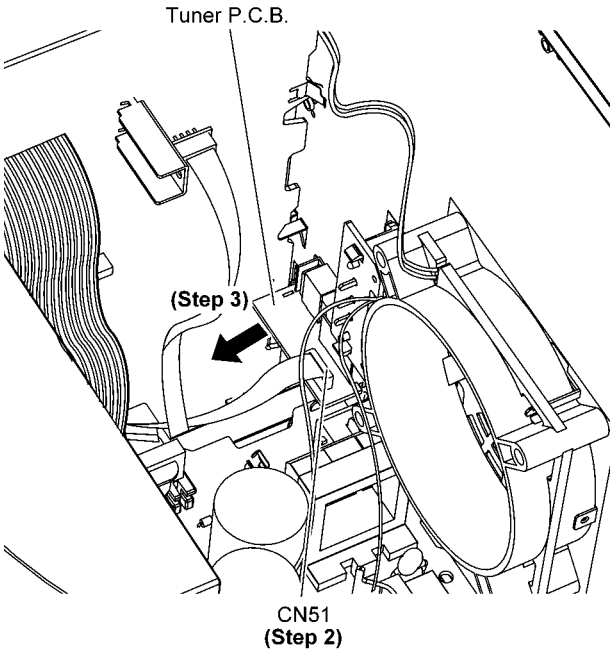
• **Refer to "Disassembly of Top Cabinet".**

Step 1 Remove 1 screw.



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

Step 3 Remove Tuner P.C.B..

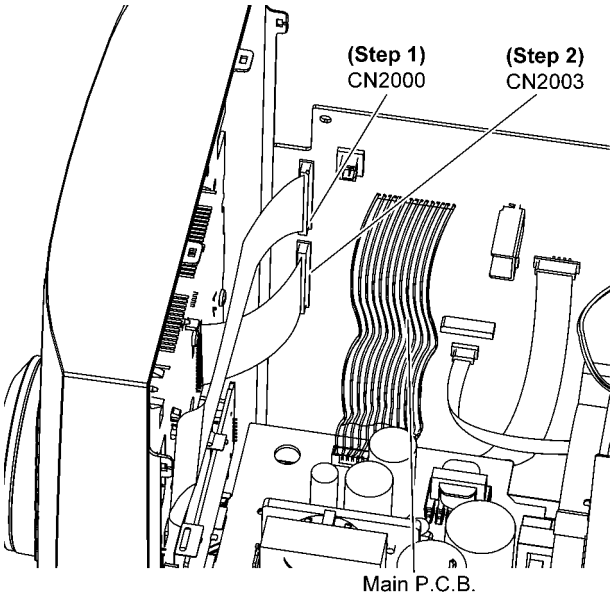


9.5. Disassembly of Front Panel Unit

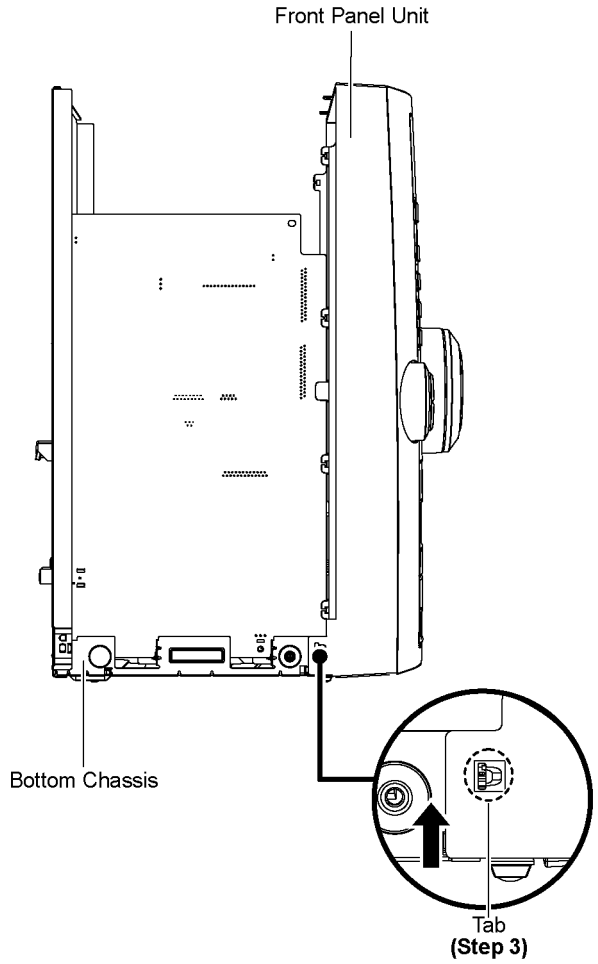
• **Refer to "Disassembly of Top Cabinet".**

Step 1 Detach 30P FFC at the connector (CN2000) on Jupiter P.C.B.

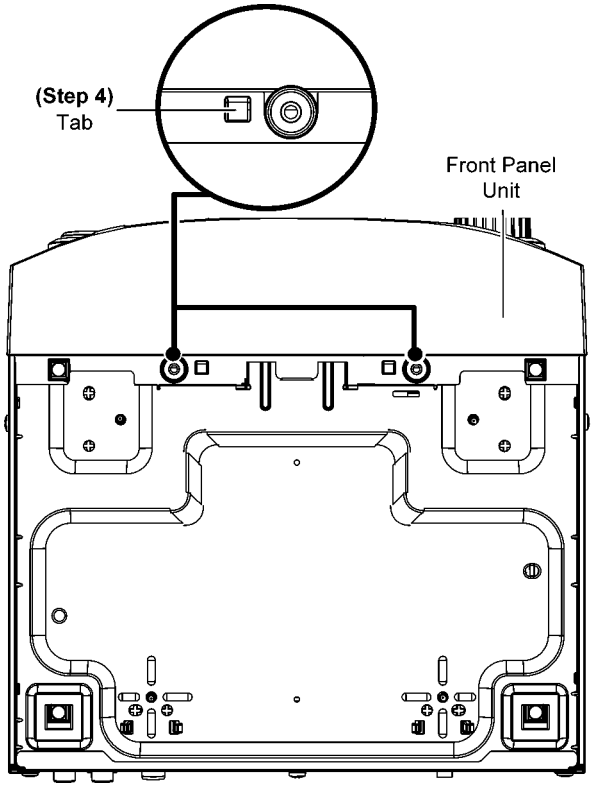
Step 2 Detach 30P FFC at the connector (CN2003) on Main P.C.B.



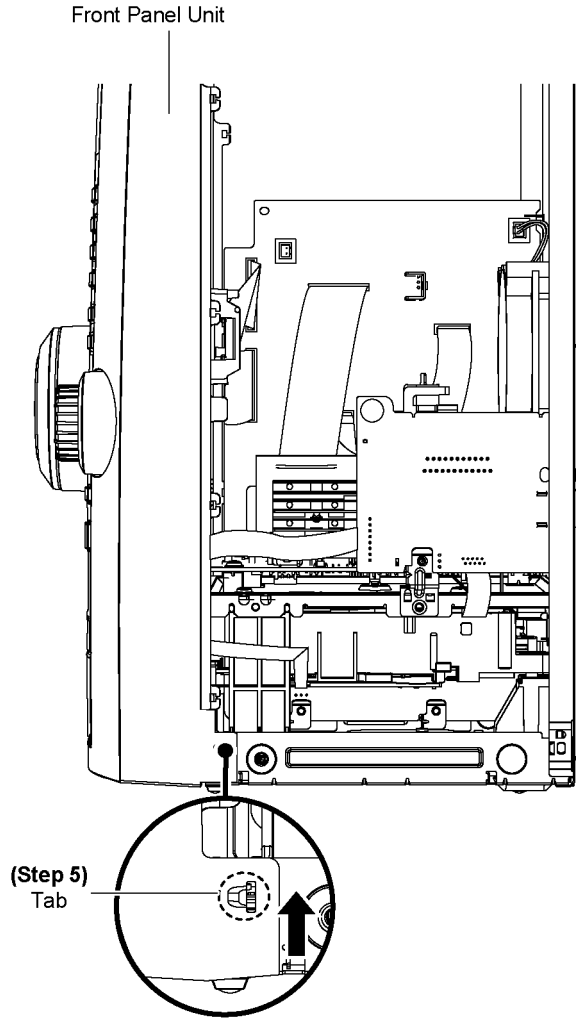
Step 3 Push inwards slightly at the Bottom Chassis and release tab at left side of Front Panel Unit..



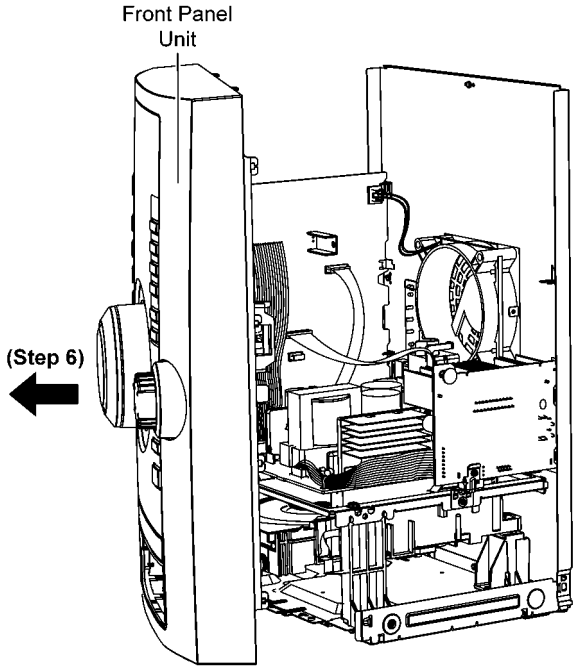
Step 4 Release tab at bottom.



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



Step 6 Remove Front Panel Unit.



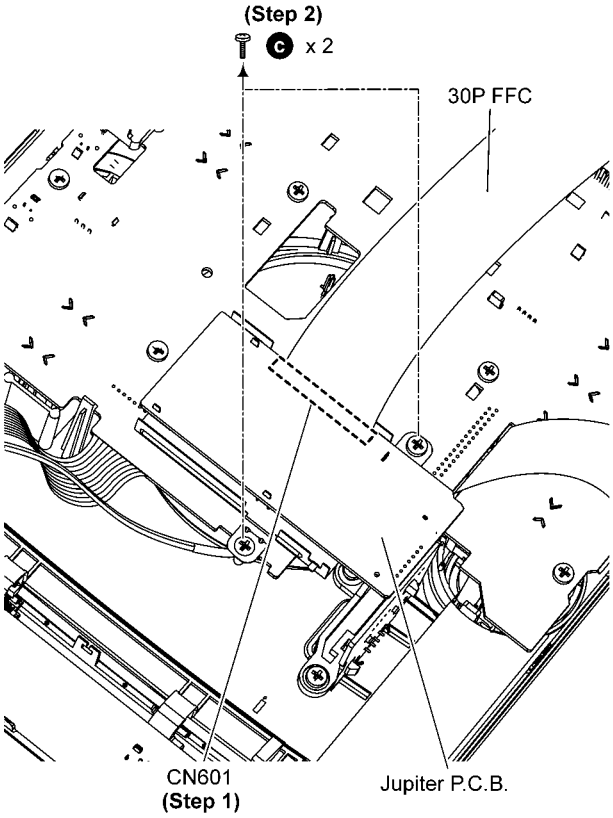
9.6. Disassembly of Jupiter P.C.B.

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

Step 1 Detach 30P FFC at the connector (CN601) on Jupiter P.C.B.

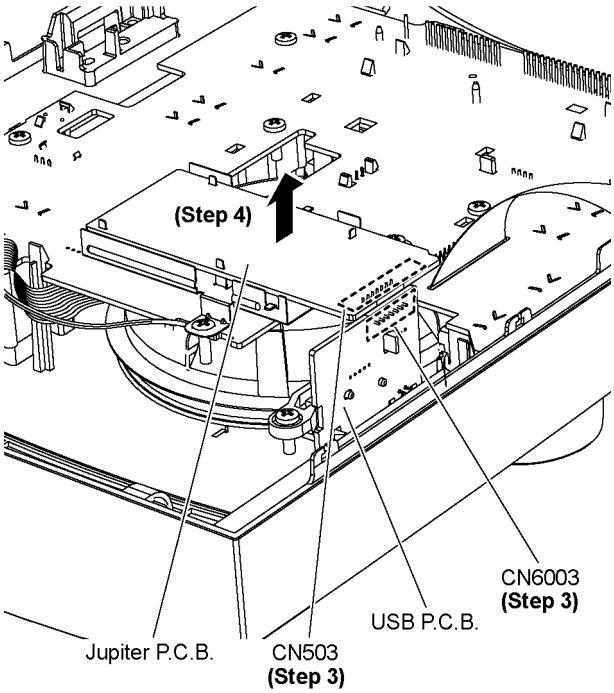
Caution: Keep the 30P FFC in safe place, place it back during assembling.

Step 2 Remove 2 screws.



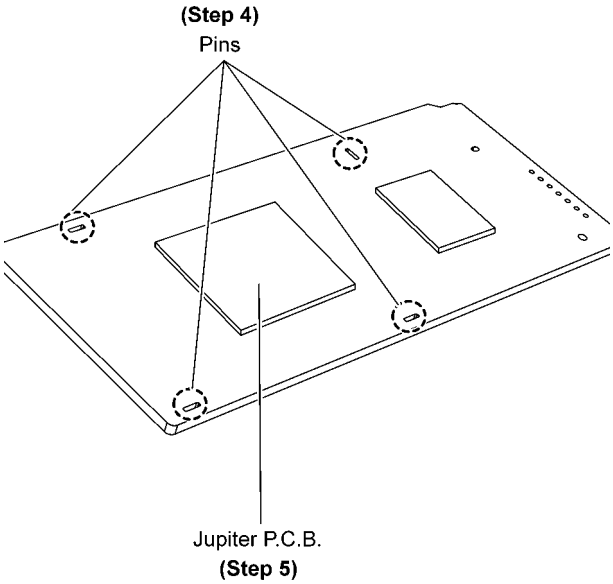
Step 3 Detach 7P connector (CN503) on Jupiter P.C.B. from 7P connector (CN6003) on USB P.C.B..

Step 4 Remove Jupiter Unit.



Step 5 Desolder 4 pins.

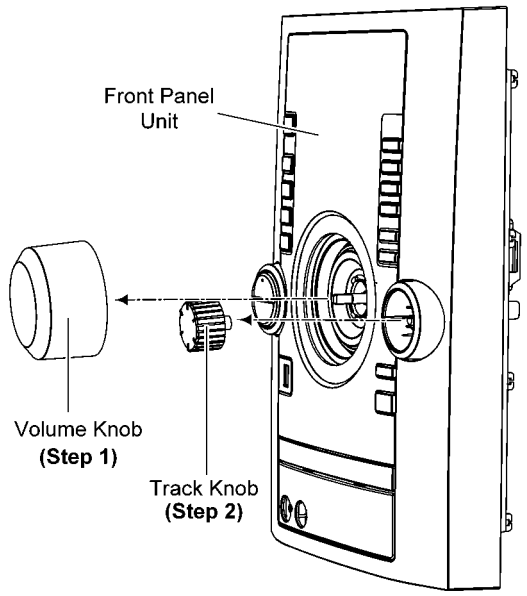
Step 6 Remove the Jupiter P.C.B..



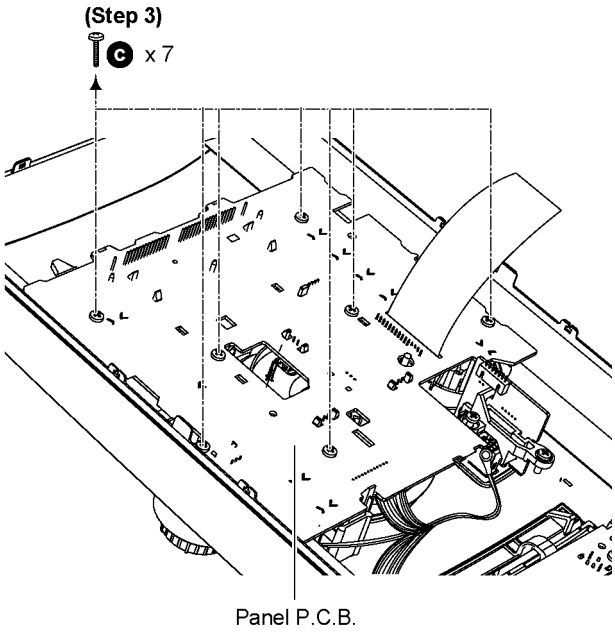
9.7. Disassembly of Panel P.C.B.

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

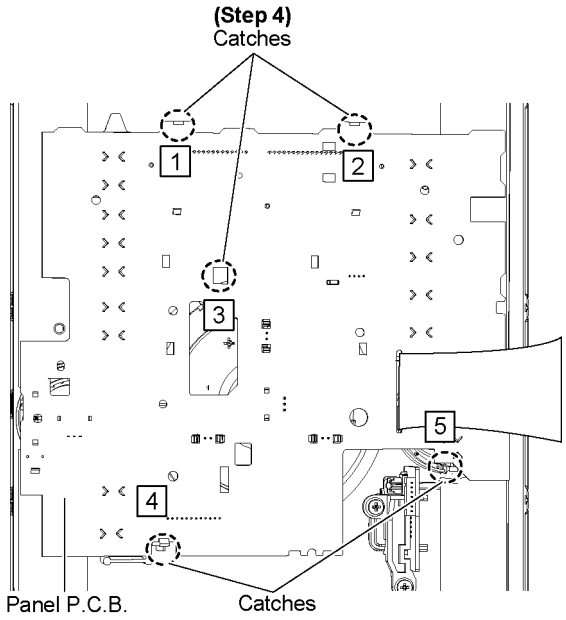
Step 1 Remove the Volume Knob.
Step 2 Remove the Track Knob.



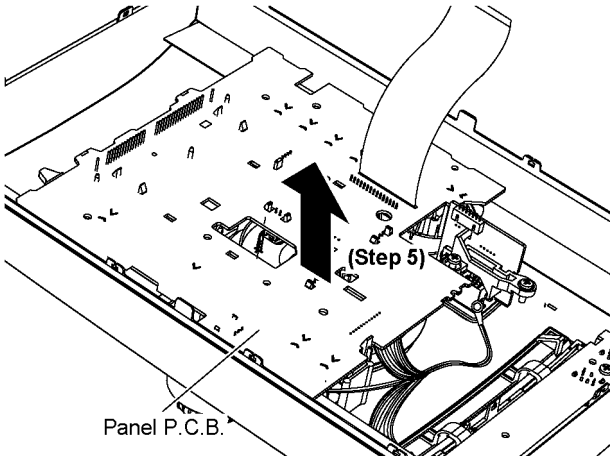
Step 3 Remove 7 screws.



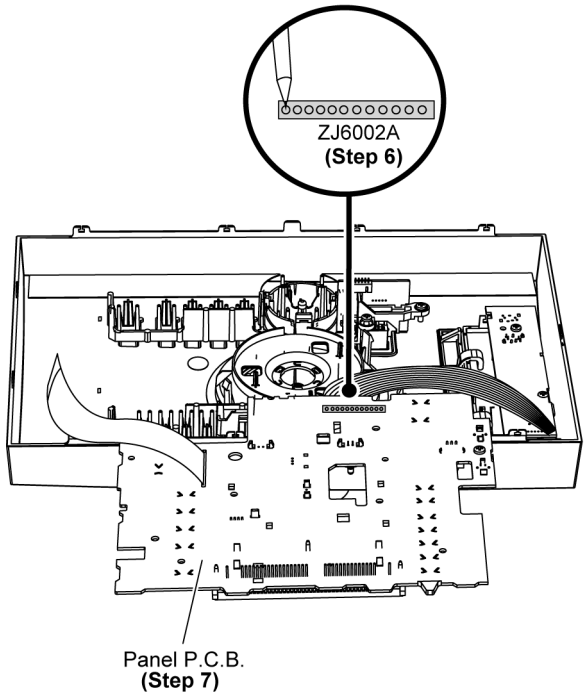
Step 4 Release catches by following the sequences (1-6).



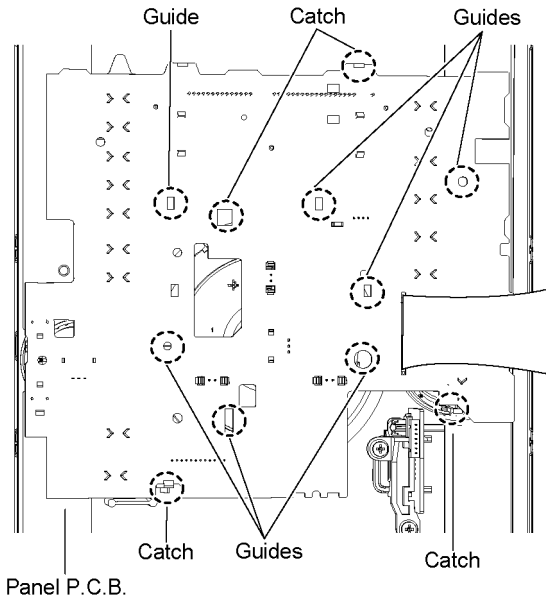
Step 5 Lift up Panel P.C.B..



Step 6 Desolder 12pins at (ZJ6002A) on Panel P.C.B.
Step 7 Remove the Panel P.C.B.



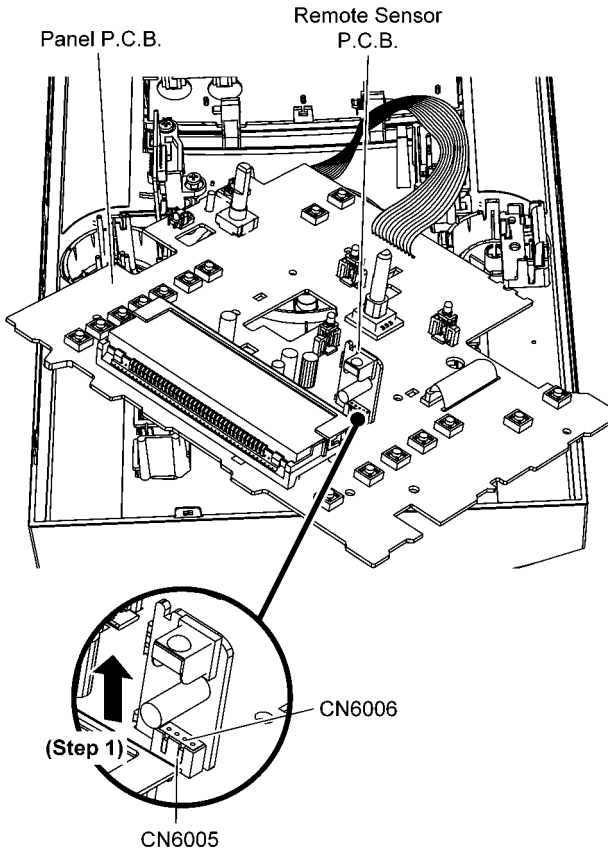
Caution: During assembling, ensure that Panel P.C.B. is seated properly through the guides & fully catched.



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

- **Refer to "Disassembly of Top Cabinet Unit".**
- **Refer to "Disassembly of Front Panel Unit".**
- **Refer to "Disassembly to Jupiter P.C.B.".**
- **Refer to (Step 1) to (Step 5) of item 9.7.**

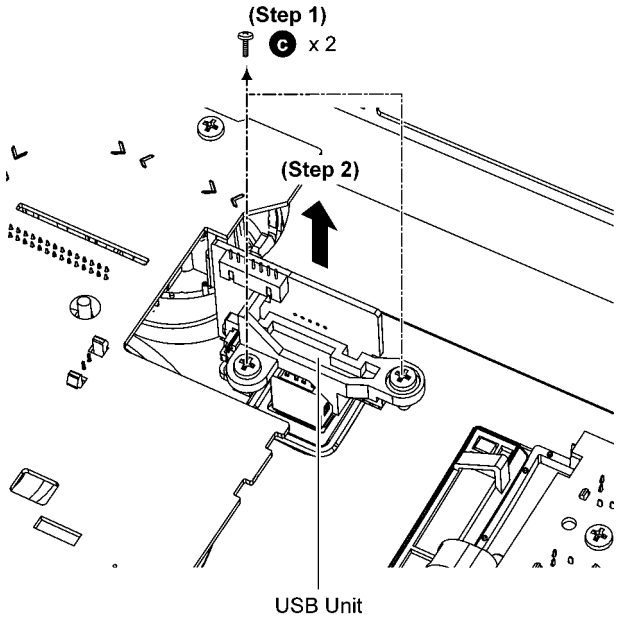
Step 1 Remove Remote Sensor P.C.B..
Caution: During assembling, ensure that Sensor P.C.B. is properly inserted & fully connected to Panel P.C.B..



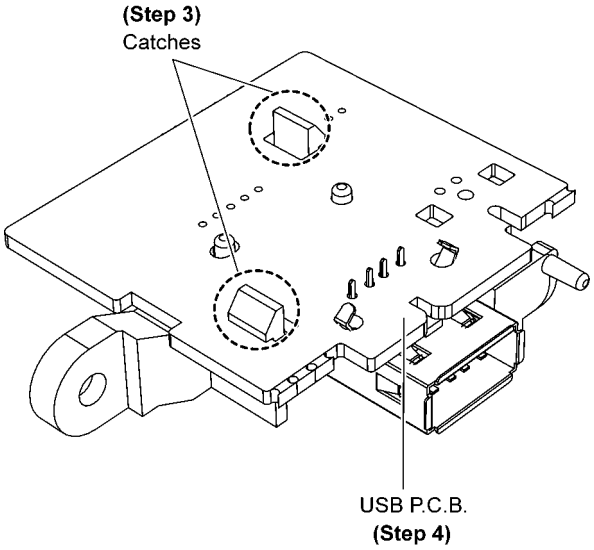
9.9. Disassembly of USB P.C.B.

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

Step 1 Remove 2 screws.
Step 2 Lift up USB unit.



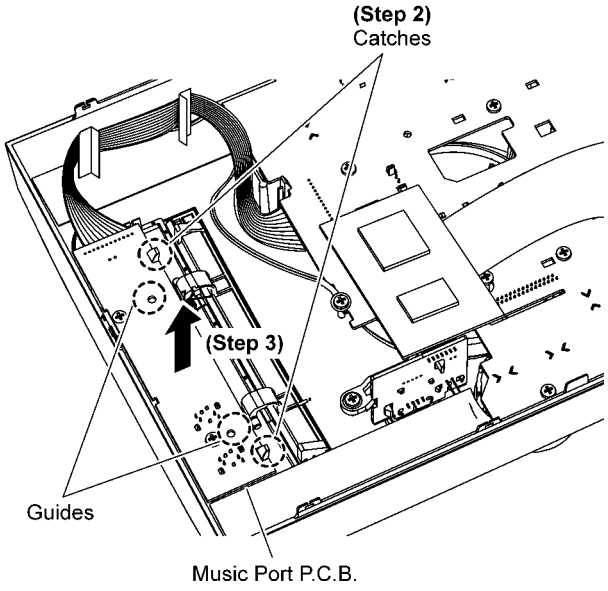
Step 3 Release 2 catches.
Step 4 Remove the USB P.C.B..



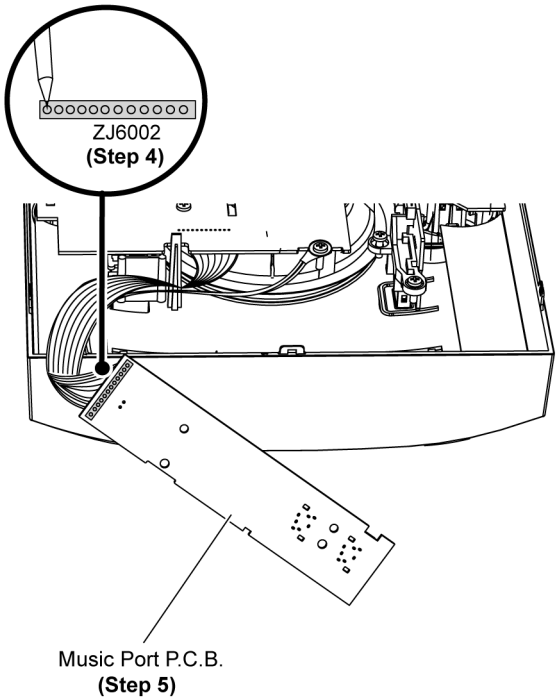
9.10. Disassembly of Music Port P.C.B.

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

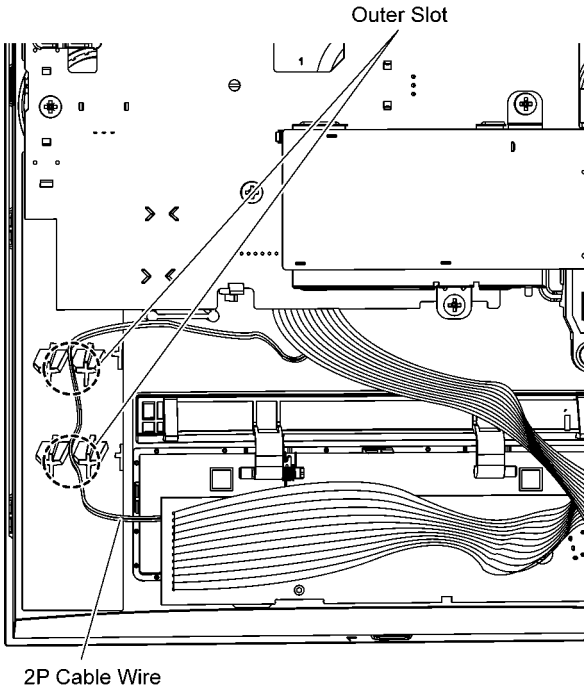
Step 1 Remove 2 screws.
Step 2 Release 2 catches.
Step 3 Lift up Music Port P.C.B.
Caution: During assembling, ensure that Music Port P.C.B. is properly located & fully catched onto Front Panel.



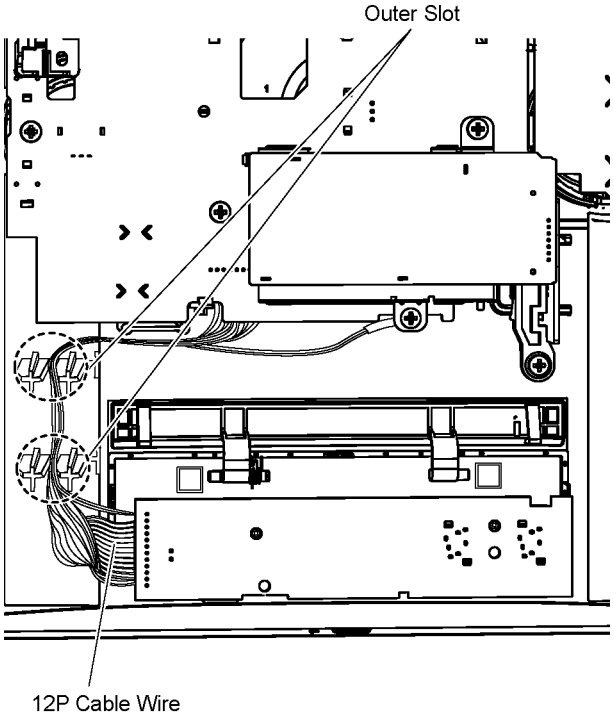
Step 4 Desolder 12 pins (ZJ6002) on Music Port P.C.B.
Step 5 Remove Music Port P.C.B..



Caution: During assembling, ensure the 2P Cable Wire is dressed into the outer slot properly.



Caution: During assembling, ensure the 12P Cable Wire is dressed into the outer slot properly.

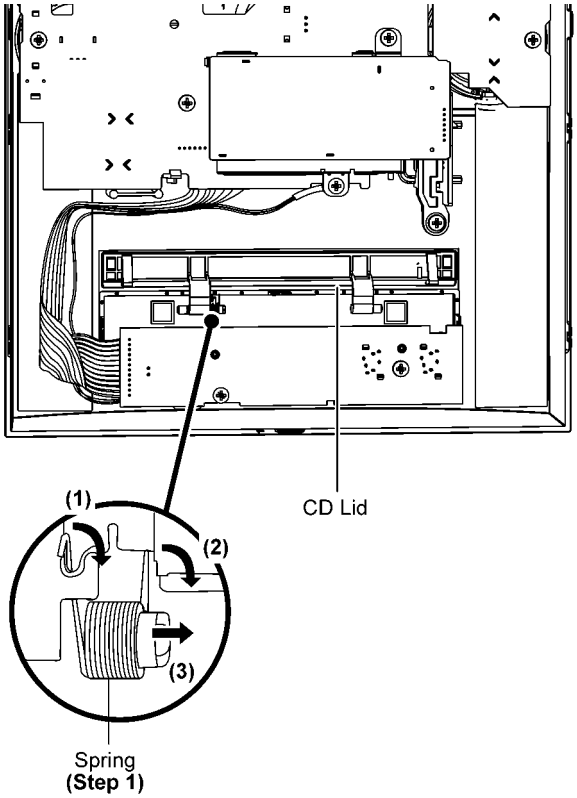


9.11. Disassembly of CD Lid

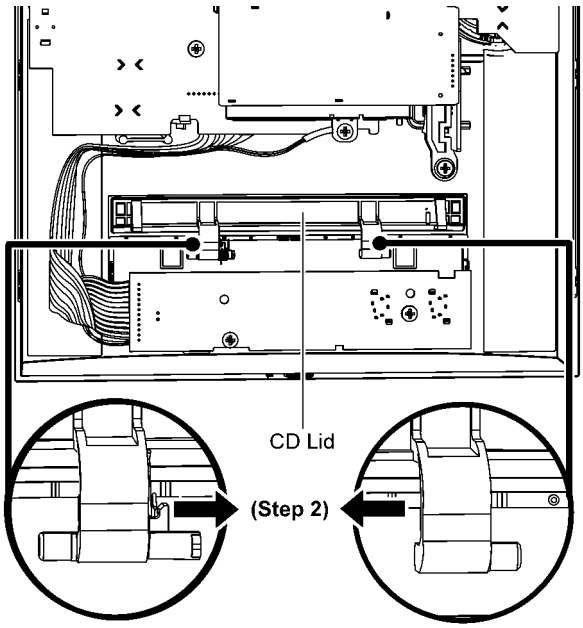
- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

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.



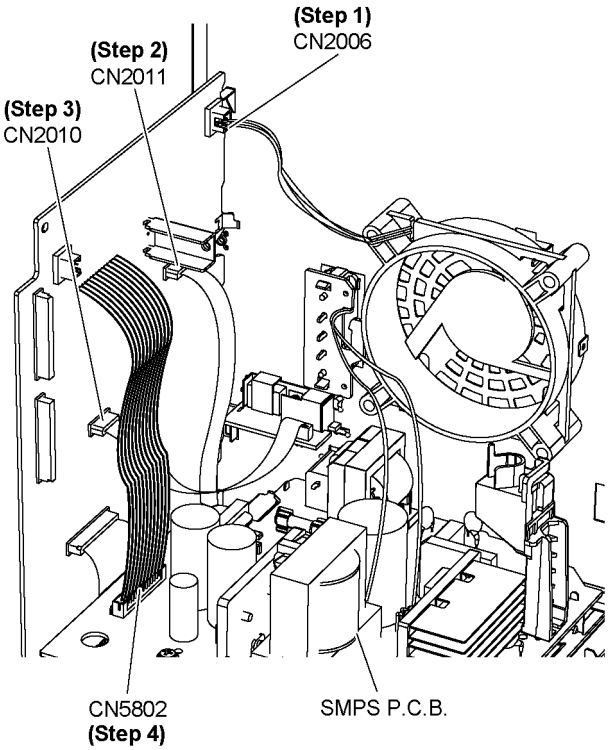
Step 2 Remove CD Lid as arrow shown.



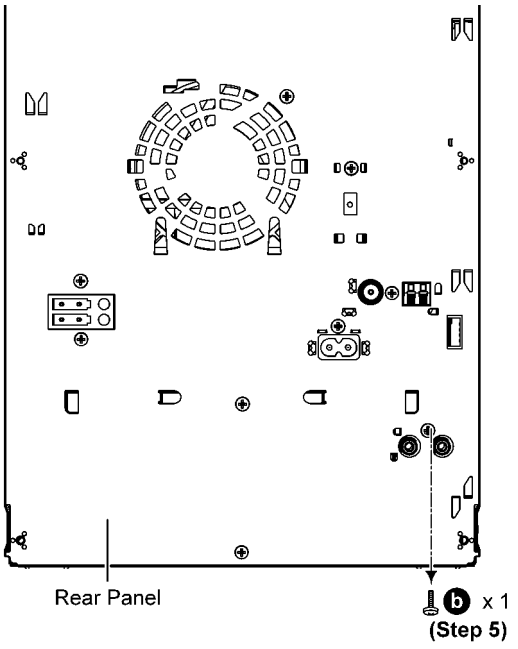
9.12. Disassembly of Main P.C.B.

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

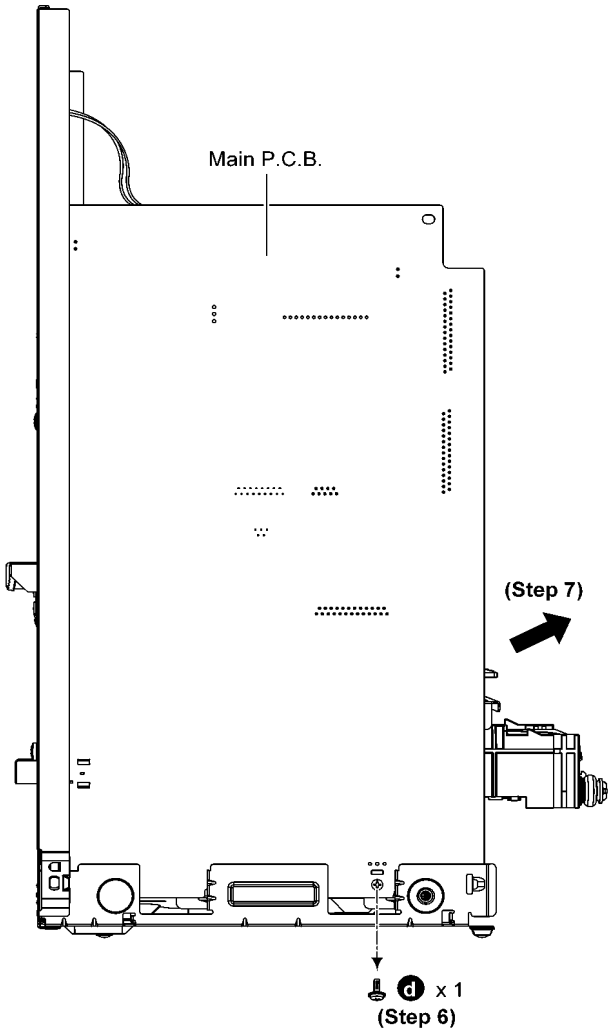
Step 1 Detach 2P Wire at the connector (CN2006) on Main P.C.B..
Step 2 Detach 12P FFC at the connector (CN2011) on Main P.C.B..
Step 3 Detach 9P FFC at the connector (CN2010) on Main P.C.B..
Step 4 Detach 15P Cable Wire at the connector (CN5802) on SMPS P.C.B..



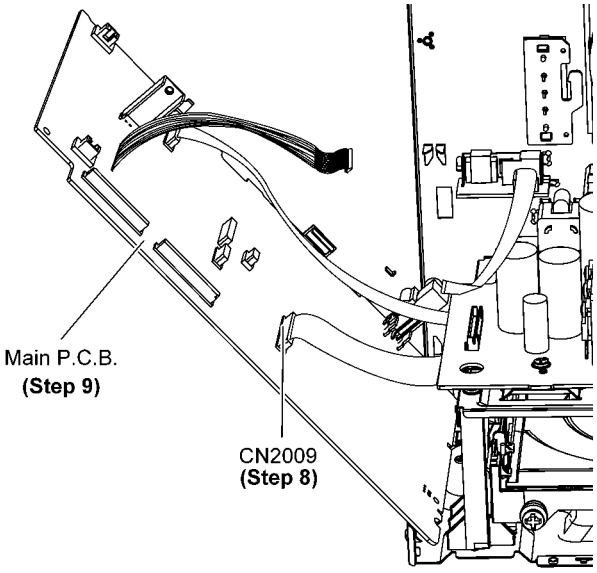
Step 5 Remove 1 screw.



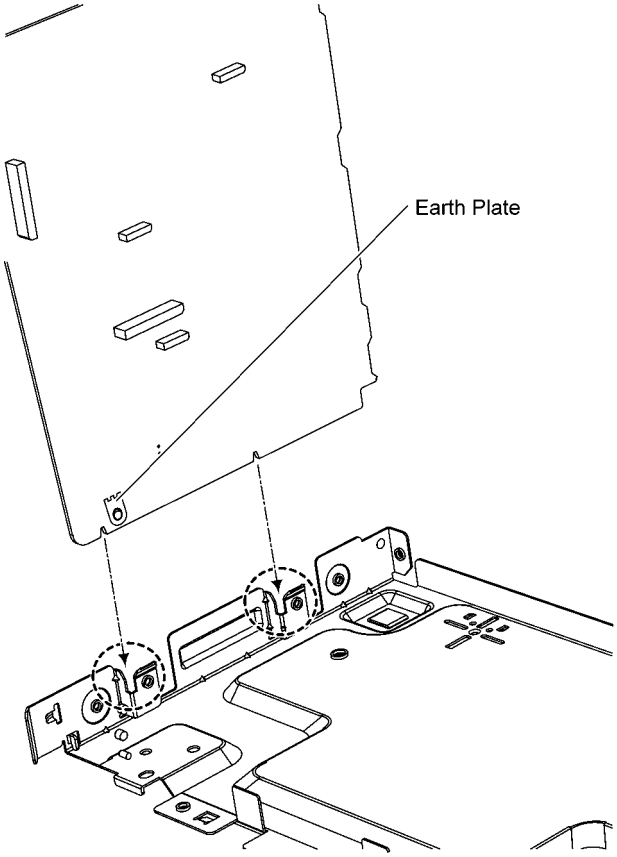
Step 6 Remove 1 screw.
Step 7 Detach Main P.C.B. from Rear Panel according to arrow shown.



Step 8 Detach 27P FFC at the connector (CN2009) on Main P.C.B..
Step 9 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.

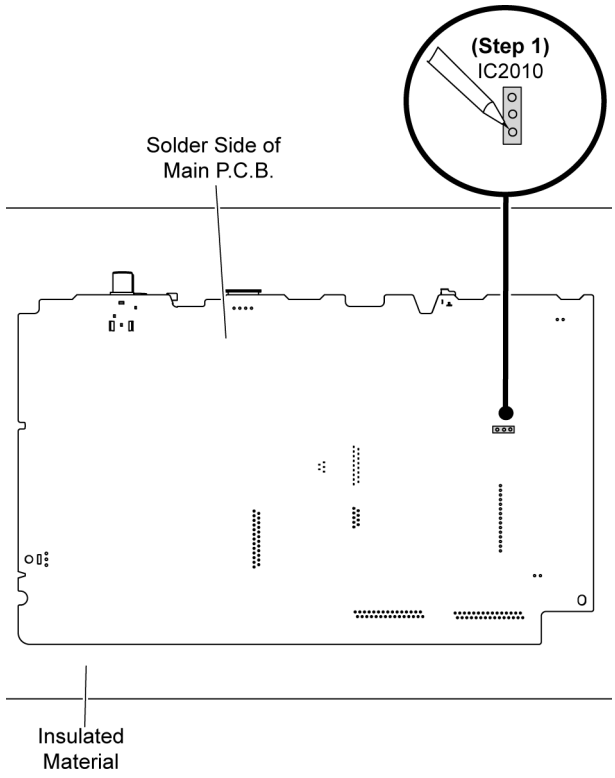


9.13. Replacement of Voltage Regulator IC (IC2010)

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

9.13.1. Disassembly of Voltage Regulator IC (IC2010)

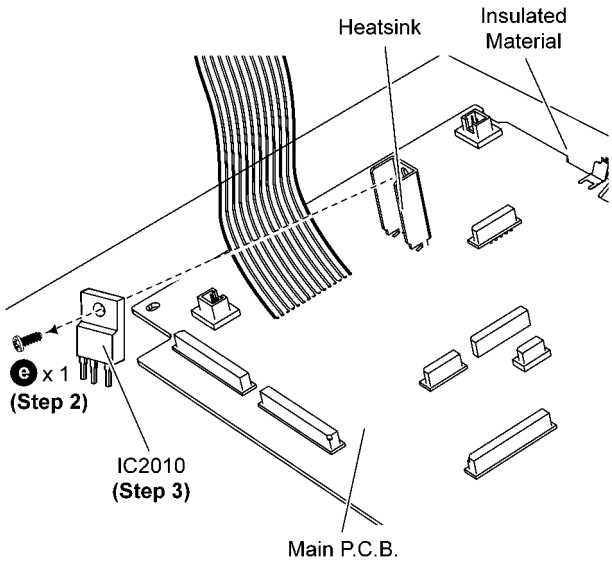
Step 1 Desolder pins of the Voltage Regulator IC (IC2010) on the solder side of Main P.C.B..



Step 2 Remove 1 screw.

Step 3 Remove the Voltage Regulator IC (IC2010) from the Main P.C.B..

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



9.13.2. Assembly of Voltage Regulator IC (IC2010)

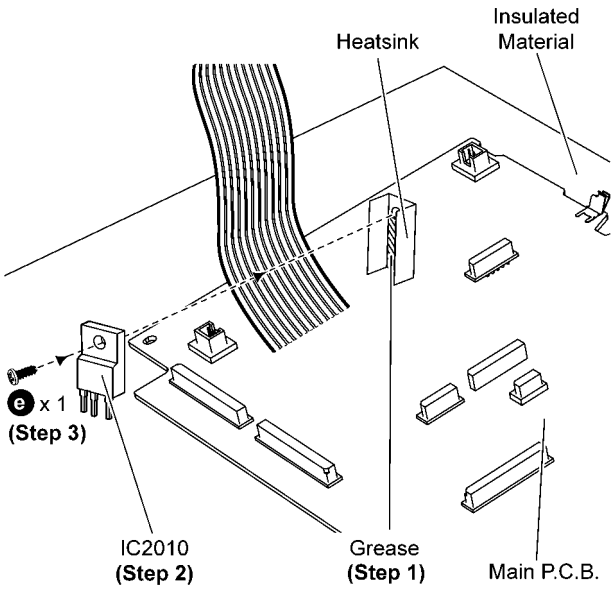
Step 1 Apply grease to the Heatsink.

Step 2 Fix the Voltage Regulator IC (IC2010) on Main P.C.B..

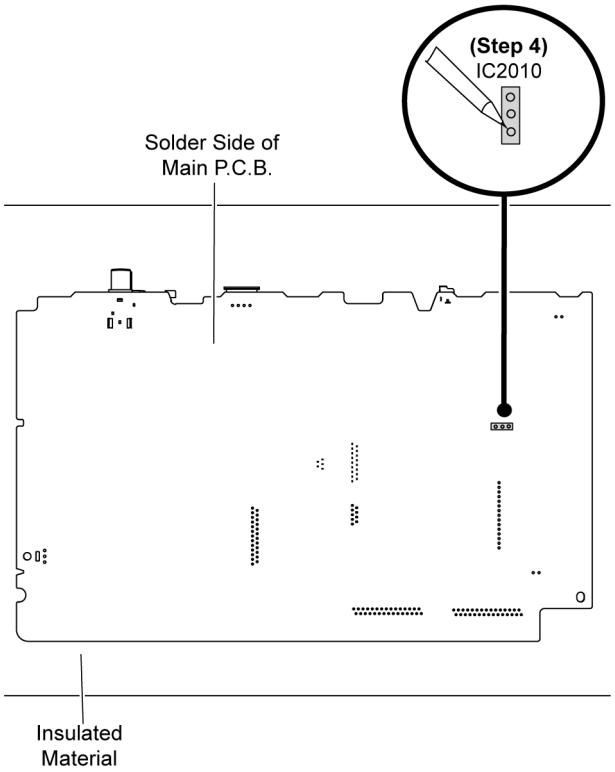
Caution: Ensure pins of the Voltage Regulator IC (IC2010) are properly seated on Main P.C.B..

Step 3 Screw the Voltage Regulator IC (IC2010) to the Heatsink.

Caution: Ensure the Voltage Regulator IC (IC2010) is tightly screwed to the Heatsink.



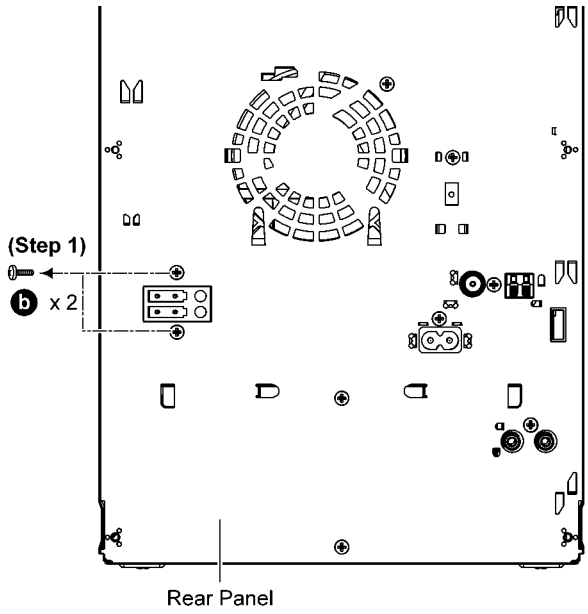
Step 4 Solder pins of the Voltage Regulator IC (IC2010) on the solder side of Main P.C.B..



9.14. Disassembly of D-Amp P.C.B.

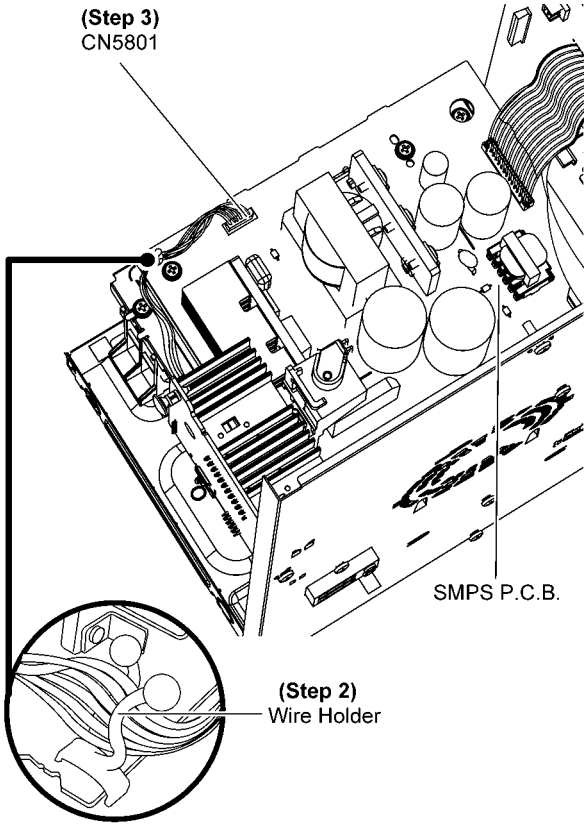
- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Front Panel Unit".**

Step 1 Remove 2 screws.

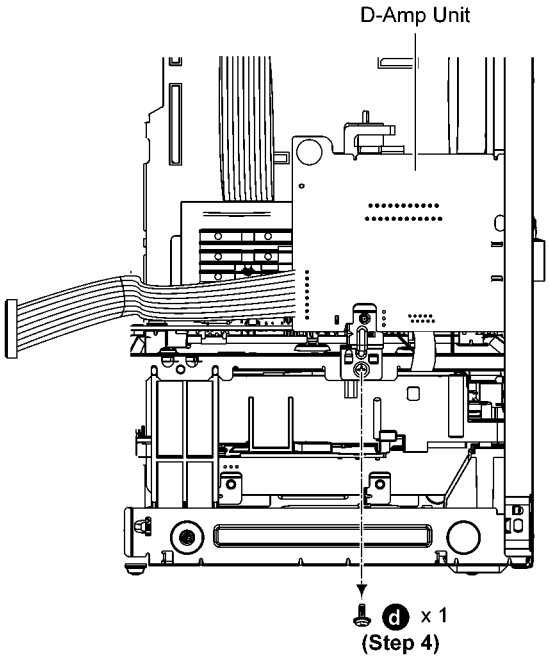


Step 2 Twist the Wire Holder to release 6P Cable Wire.

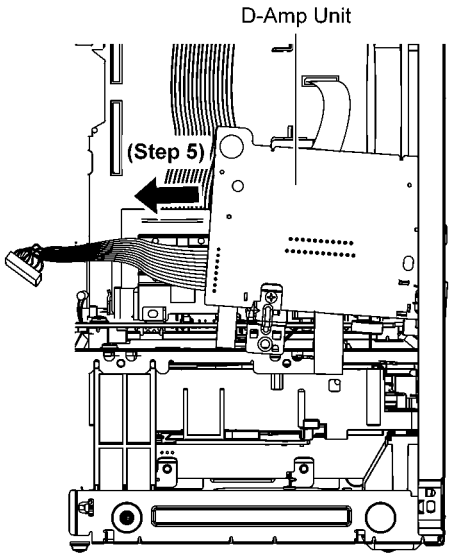
Step 3 Detach 6P Cable Wire at the connector (CN5801) on SMPS P.C.B.



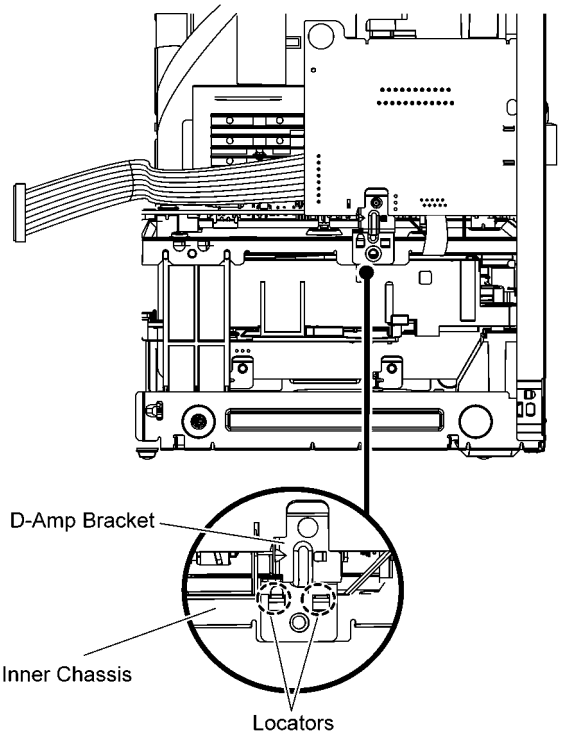
Step 4 Remove 1 screw.



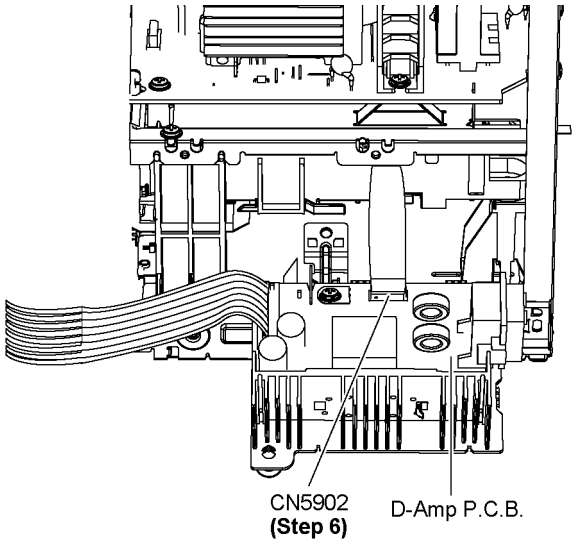
Step 5 Slightly lift up & remove D-Amp Unit as arrow shown.



Caution: During assembling, ensure that D-Amp Bracket is seated on the locator of Inner Chassis properly.



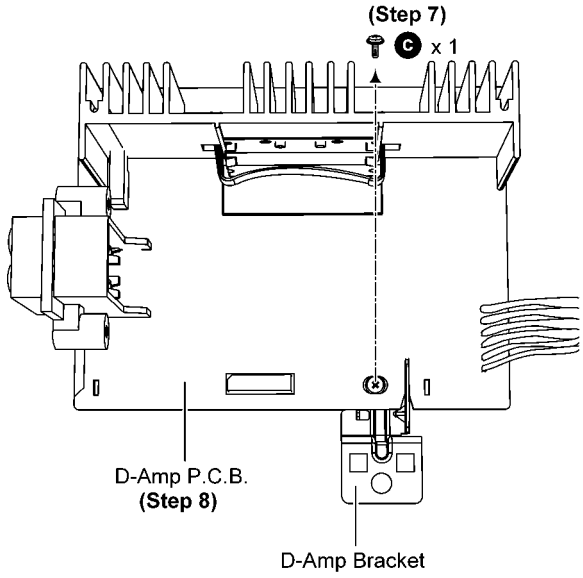
Step 6 Detach 12P FFC at the connector (CN5902) on D-Amp P.C.B..



Step 7 Remove 1 screw.

Step 8 Remove D-Amp P.C.B..

Caution: Keep the D-Amp Brackets in safe place, place it back during assembling.

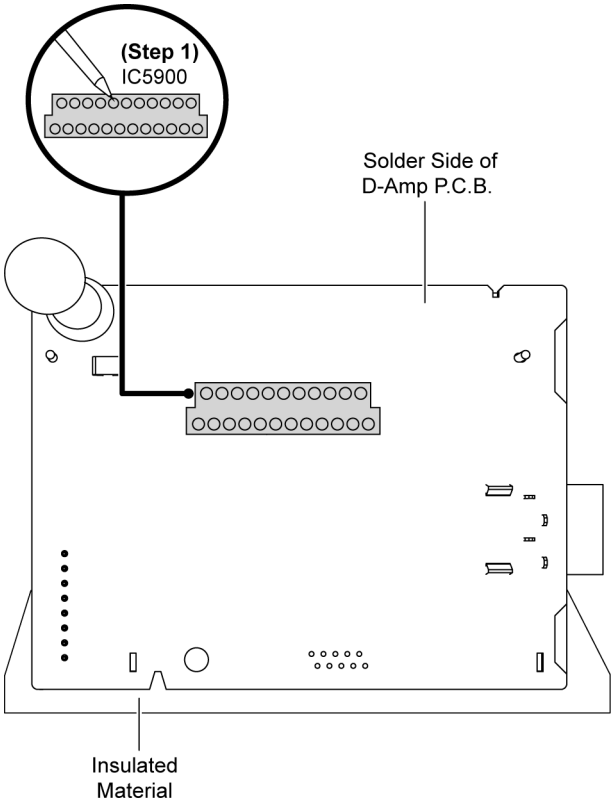


9.15. Replacement of Audio Digital Amp IC (IC5900)

- **Refer to "Disassembly of D-Amp P.C.B.".**

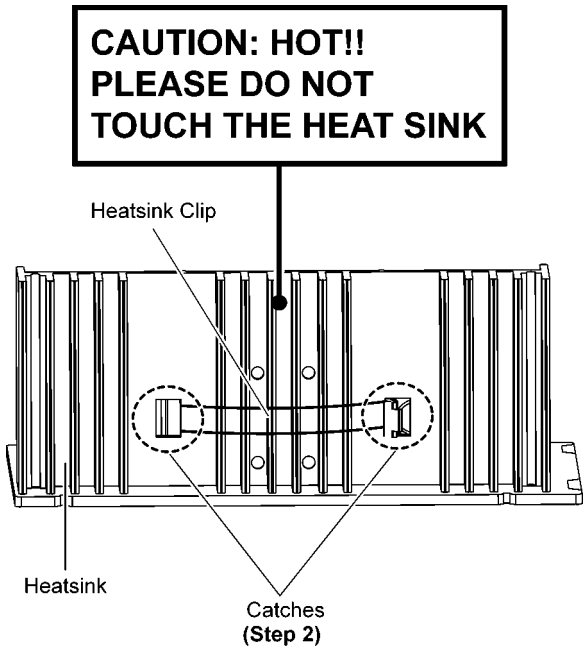
9.15.1. Disassembly of Audio Digital Amp IC (IC5900)

Step 1 Desolder pins of the Audio Digital Amp IC (IC5900) on the solder side of D-Amp P.C.B..



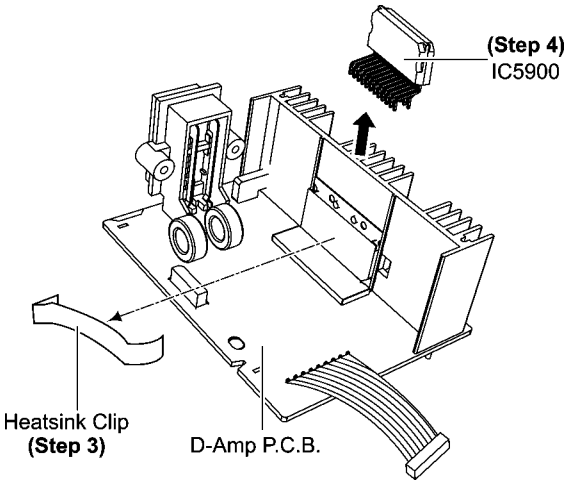
Step 2 Release 2 catches of Heatsink Clip.

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



Step 3 Remove Heatsink Clip.

Step 4 Remove Audio Digital Amp IC (IC5900).



9.15.2. Assembly of Audio Digital Amp IC (IC5900)

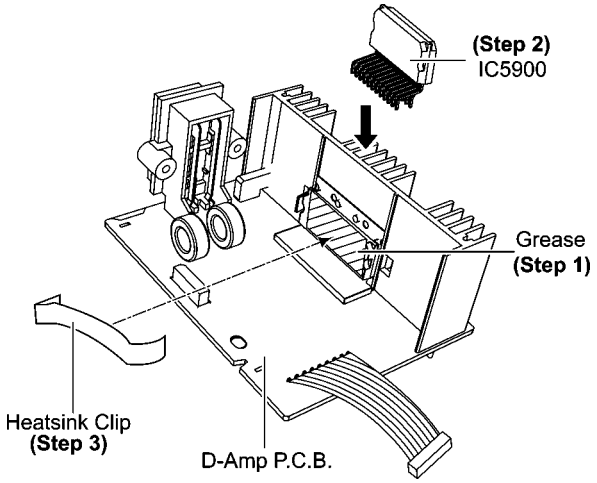
Step 1 Apply grease to the Heatsink.

Step 2 Fix the Audio Digital Amp IC (IC5900) on D-Amp P.C.B.

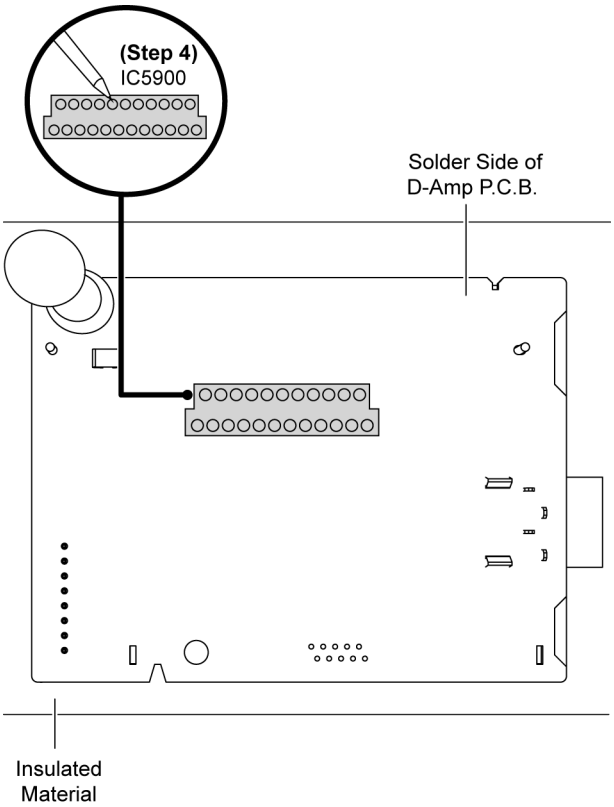
Caution: Ensure pins of the Audio Digital Amp IC (IC5900) are properly seated on D-Amp P.C.B.

Step 3 Fix Heatsink Clip to the Heatsink.

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



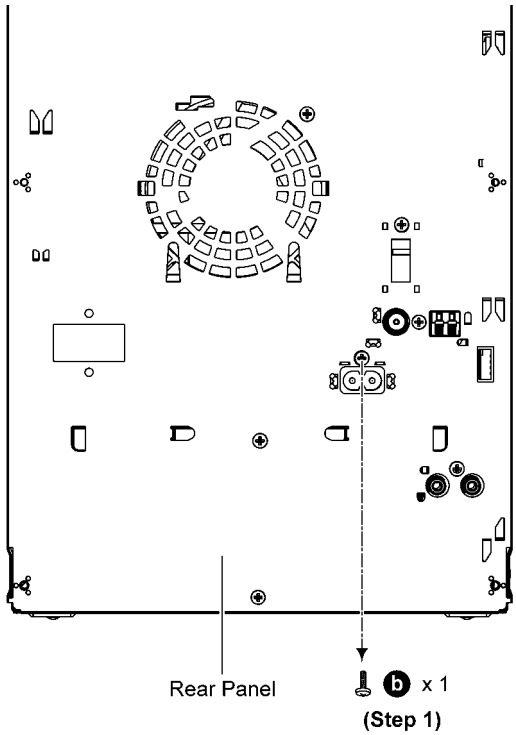
Step 4 Solder pins of the Audio Digital Amp IC (IC5900) on the solder side of D-Amp P.C.B..



9.16. Disassembly of SMPS P.C.B.

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

Step 1 Remove 1 screw.

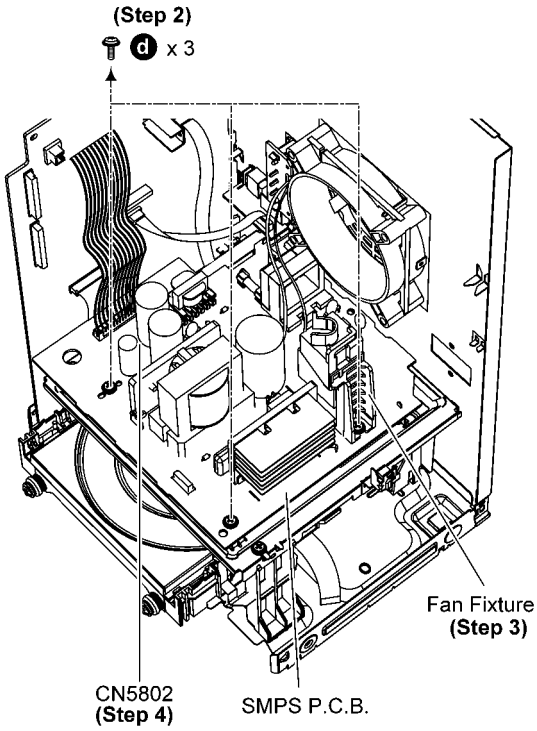


Step 2 Remove 3 screws.

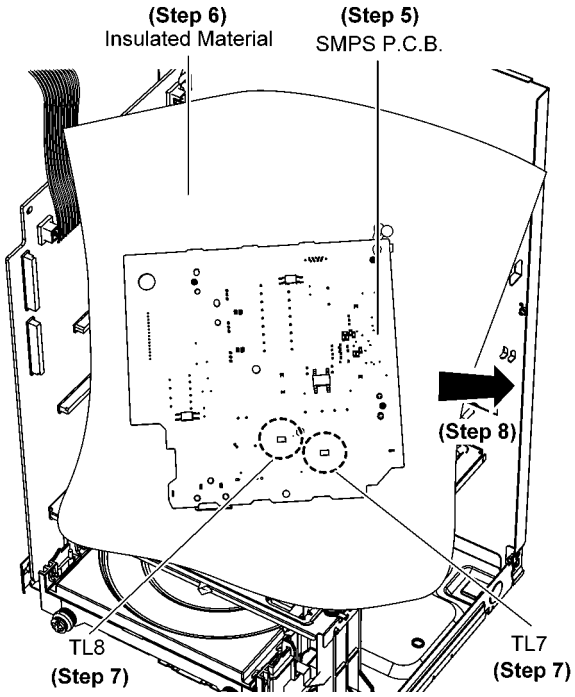
Step 3 Remove the Fan Fixture.

Caution: Keep the Fan Fixture in safe place, place it back during assembling.

Step 4 Detach 15P Cable Wire at the connector (CN5802) on SMPS P.C.B..



Step 5 Flip the SMPS P.C.B. and position it according to diagram shown.
Step 6 Position SMPS P.C.B. on the insulated material.
Step 7 Desolder 2 Wire pins, TL7 (Black), TL8 (Red) wires pin.
Step 8 Remove SMPS P.C.B..

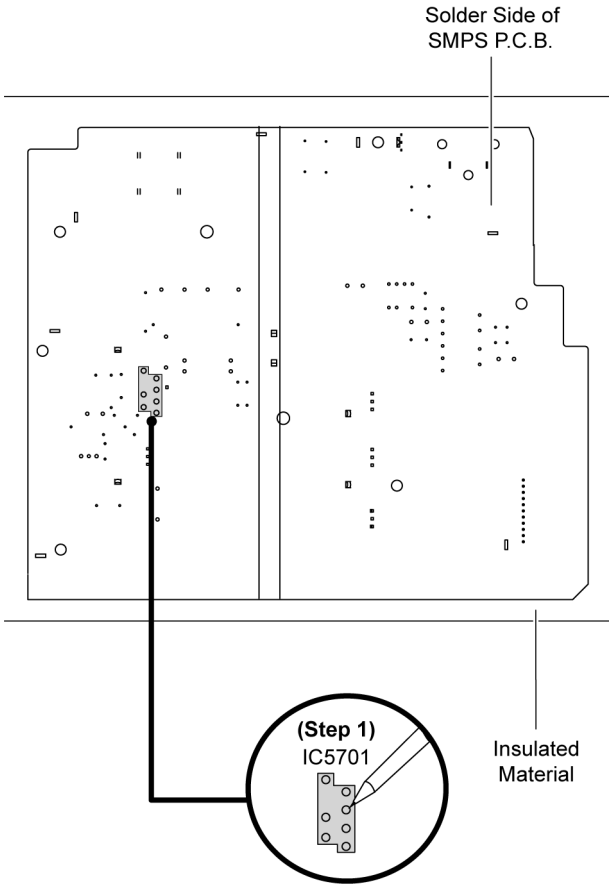


9.17. Replacement of Switching Regulator IC (IC5701)

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

9.17.1. Disassembly of Switching Regulator IC (IC5701)

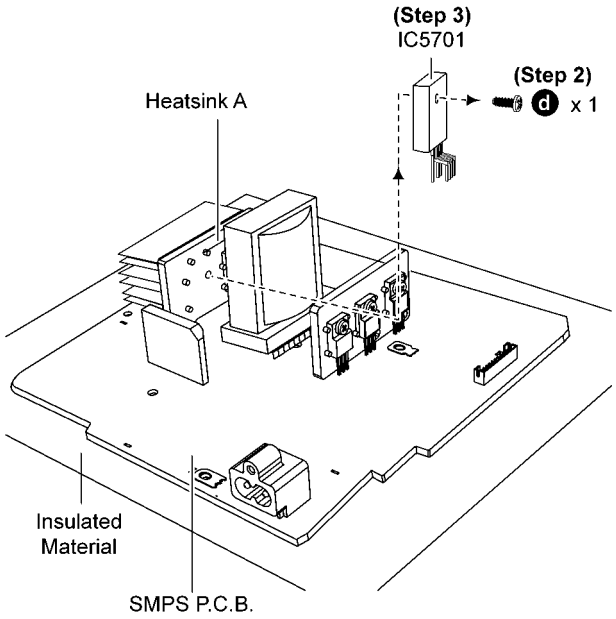
Step 1 Desolder pins of the Switching Regulator IC (IC5701) on the solder side of SMPS P.C.B..



Step 2 Remove 1 screw.

Step 3 Remove the Switching Regulator IC (IC5701).

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



9.17.2. Assembly of Switching Regulator IC (IC5701)

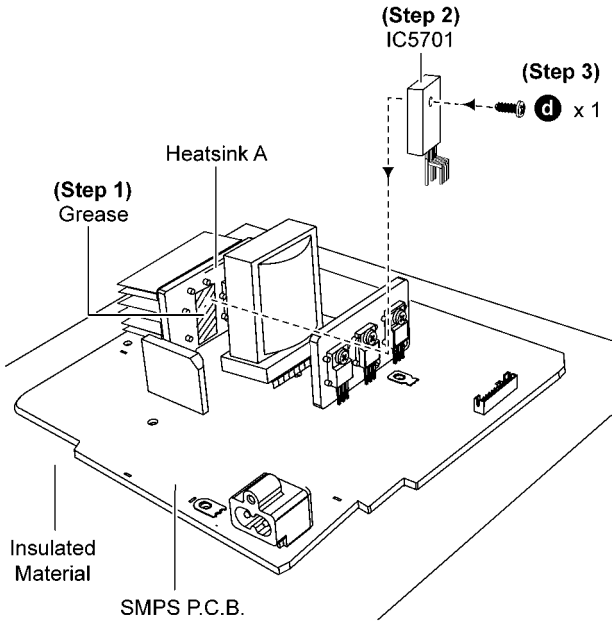
Step 1 Apply grease to the Heatsink A.

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

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

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

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



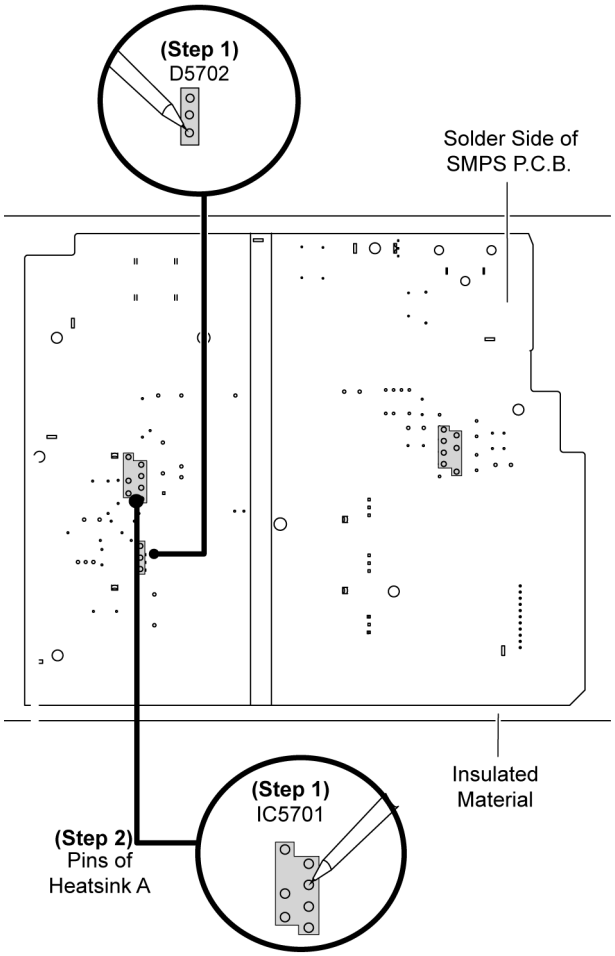
Step 4 Solder pins of the Switching Regulator IC (IC5701) on the solder side of SMPS P.C.B..

9.18. Replacement of Rectifier Diode (D5702)

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

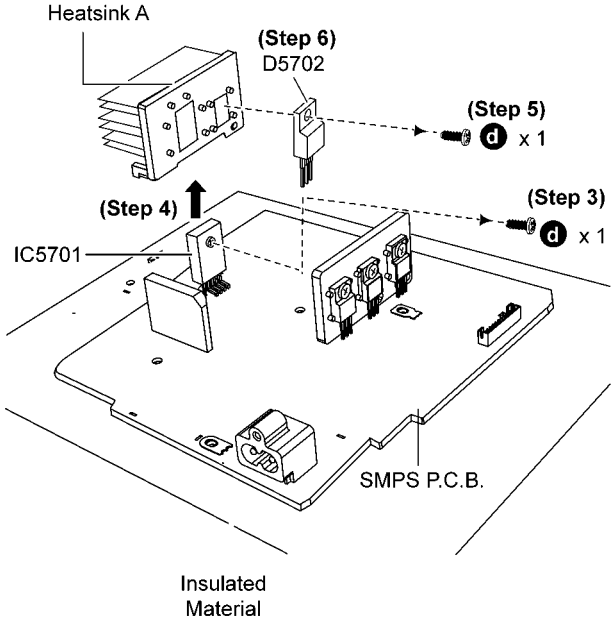
9.18.1. Disassembly of Rectifier Diode (D5702)

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



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

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



9.18.2. Assembly of Rectifier Diode (D5702)

Step 1 Apply grease to the Heatsink A.

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

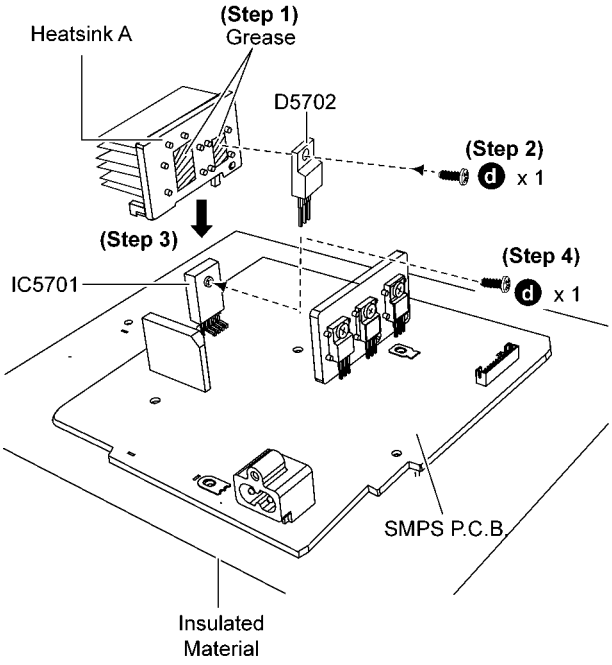
Caution: Ensure the Rectifier Diode (D5702) is tightly screwed to the Heatsink A.

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

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

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

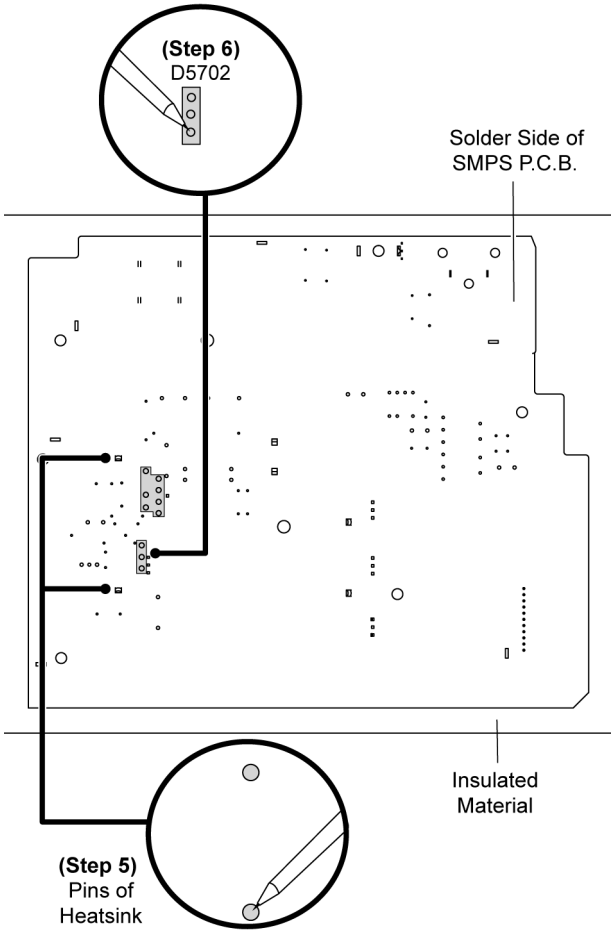
Caution: Ensure that Switching Regulator IC (IC5701) is tightly screwed to the Heatsink A.



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

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

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

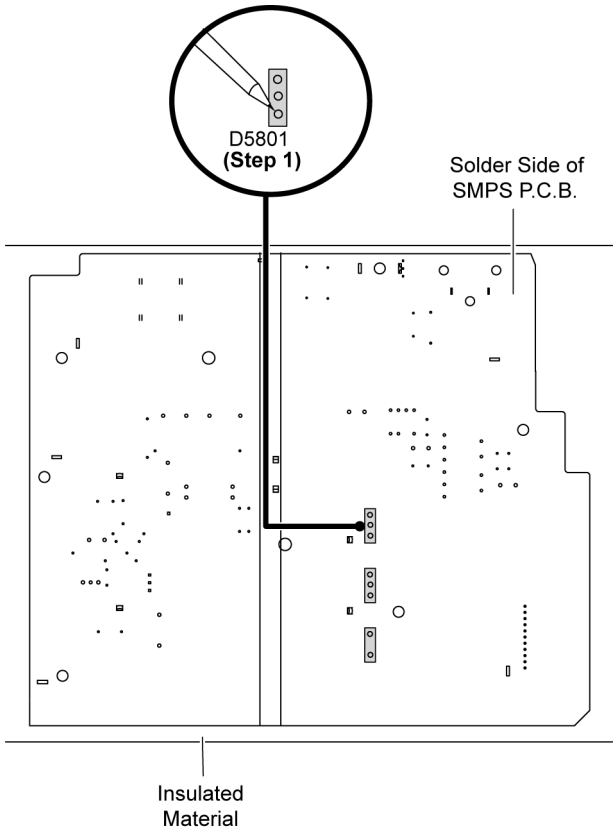


9.19. Replacement of Rectifier Diode (D5801)

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

9.19.1. Disassembly of Rectifier Diode (D5801)

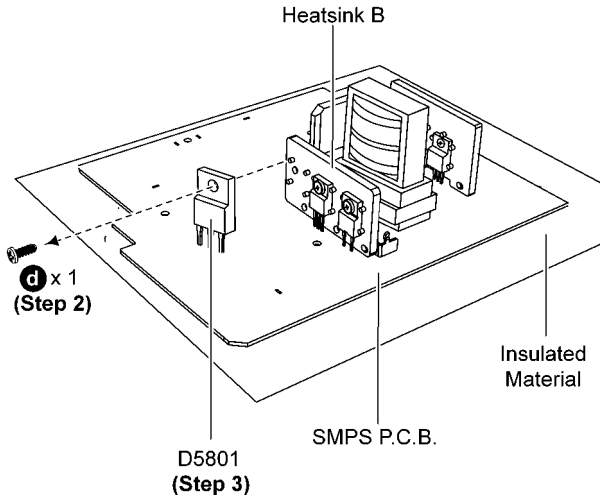
Step 1 Desolder pins of the Rectifier Diode (D5801) on the solder side of SMPS P.C.B.



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

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

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



9.19.2. Assembly of Rectifier Diode (D5801)

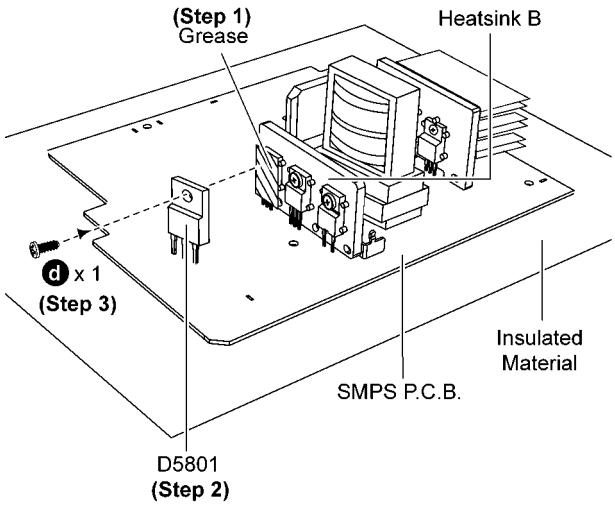
Step 1 Apply grease to the Heatsink B.

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

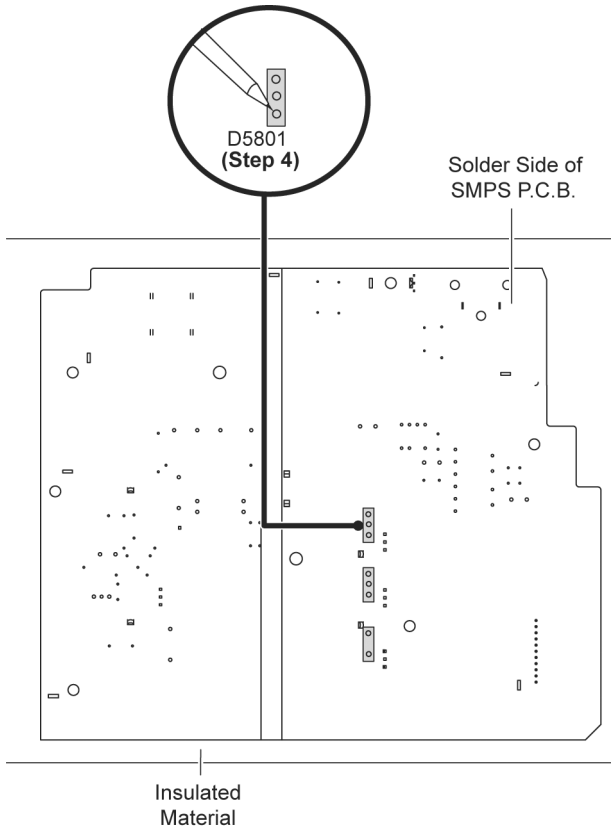
Caution: Ensure pins of the Rectifier Diode (D5801) is properly inserted on SMPS P.C.B.

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

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



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

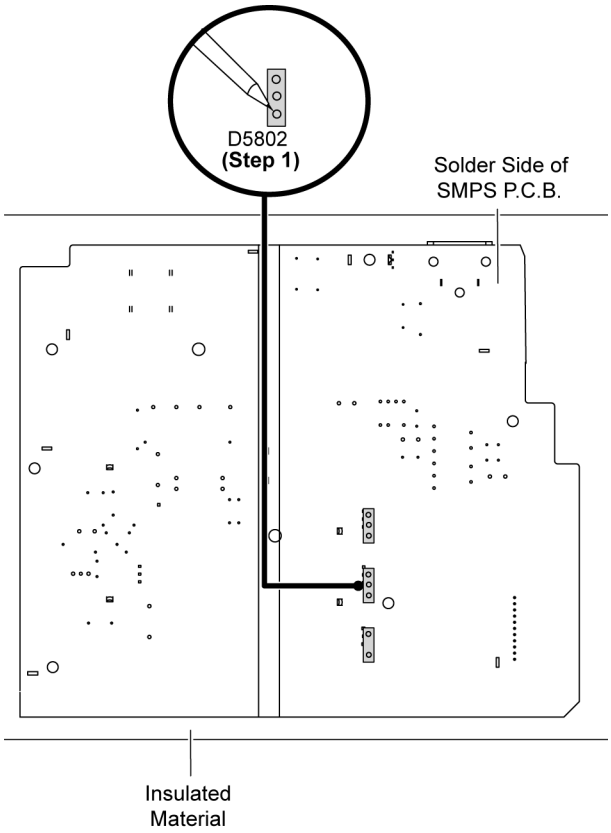


9.20. Replacement of Rectifier Diode (D5802)

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

9.20.1. Disassembly of Rectifier Diode (D5802)

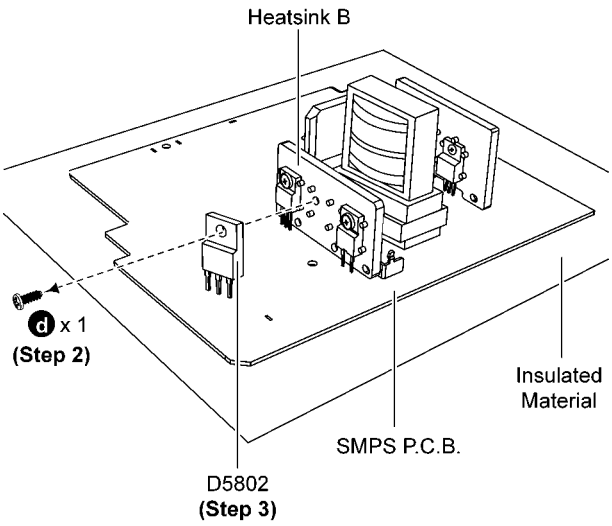
Step 1 Desolder pins of the Rectifier Diode (D5802) on the solder side of SMPS P.C.B.



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

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

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



9.20.2. Assembly of Rectifier Diode (D5802)

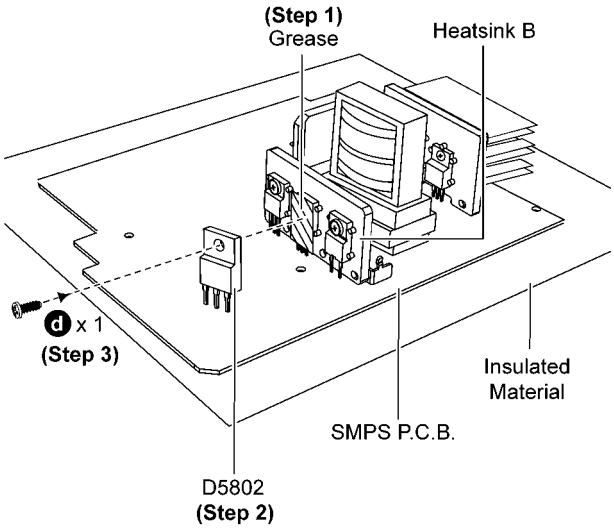
Step 1 Apply grease to the Heatsink B.

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

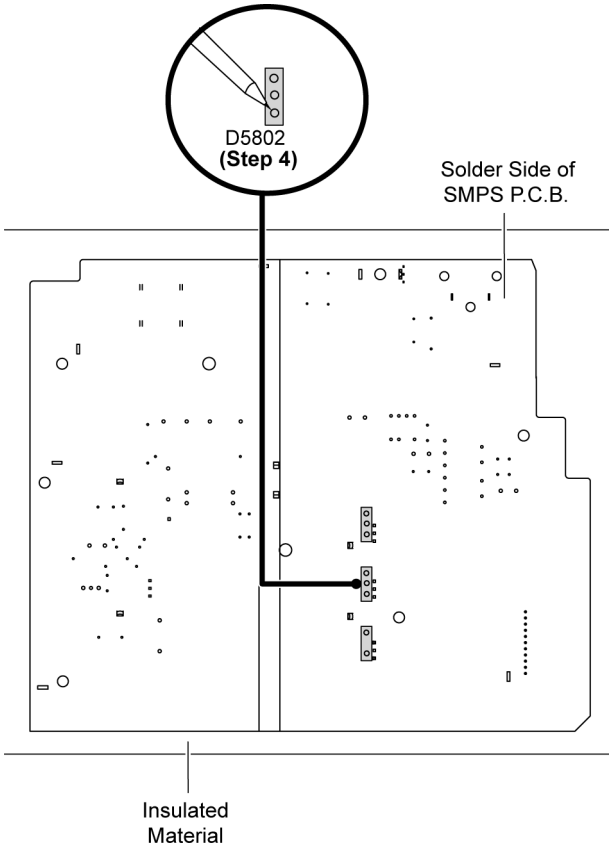
Caution: Ensure pins of the Rectifier Diode (D5802) is properly inserted on SMPS P.C.B.

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

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



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

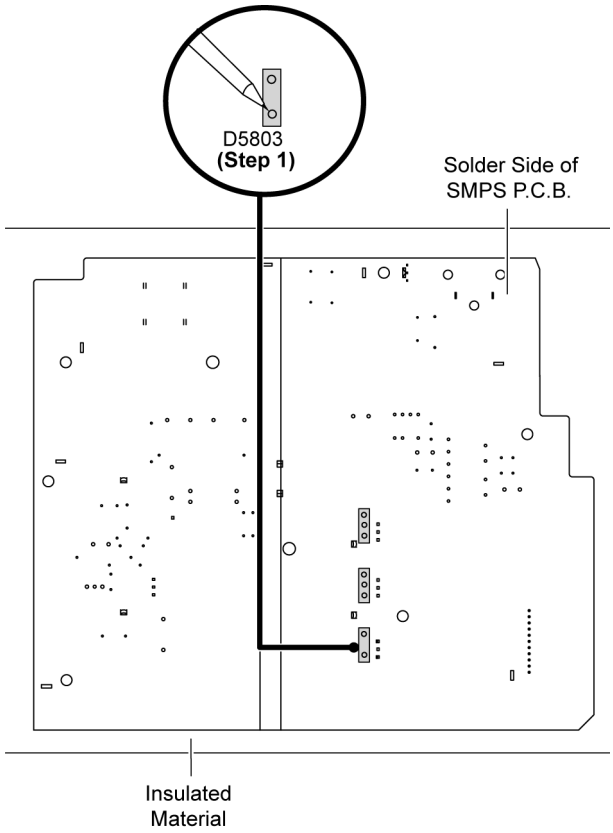


9.21. Replacement of Rectifier Diode (D5803)

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

9.21.1. Disassembly of Rectifier Diode (D5803)

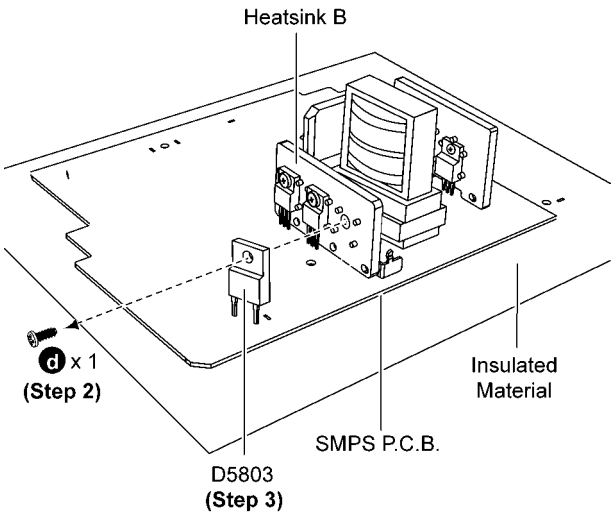
Step 1 Desolder pins of the Rectifier Diode (D5803) on the solder side of SMPS P.C.B.



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

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

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



9.21.2. Assembly of Rectifier Diode (D5803)

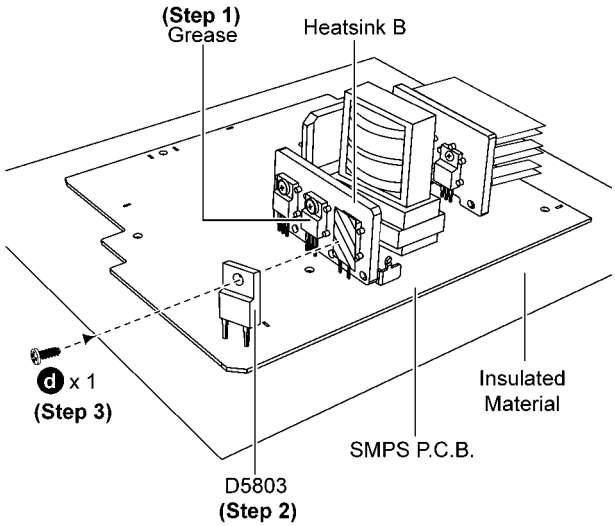
Step 1 Apply grease to the Heatsink B.

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

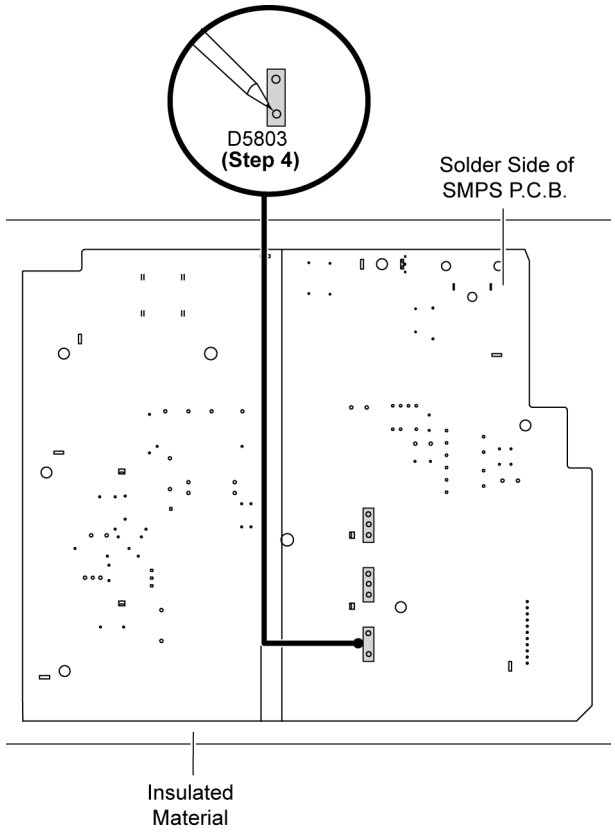
Caution: Ensure pins of the Rectifier Diode (D5803) are properly inserted on SMPS P.C.B.

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

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



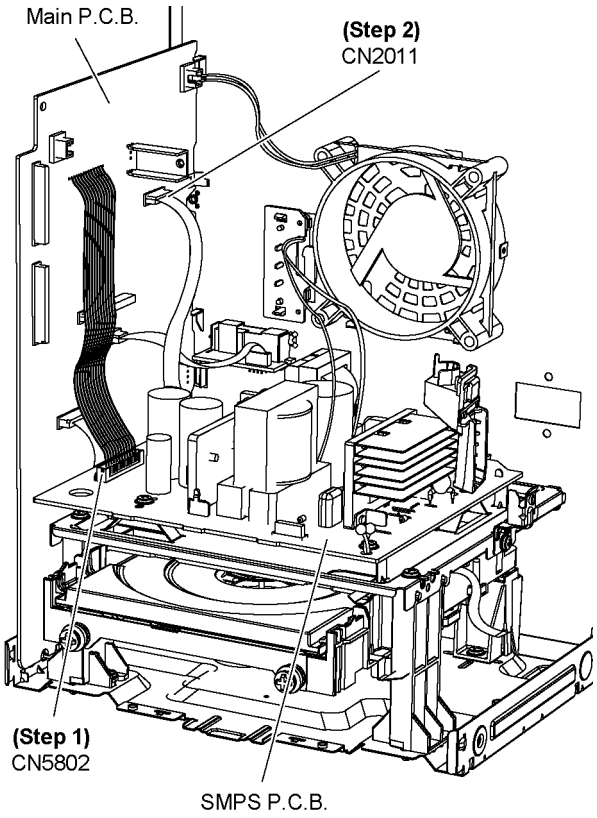
Step 4 Solder pins of the Rectifier Diode (D5803) on the solder side of SMPS P.C.B.



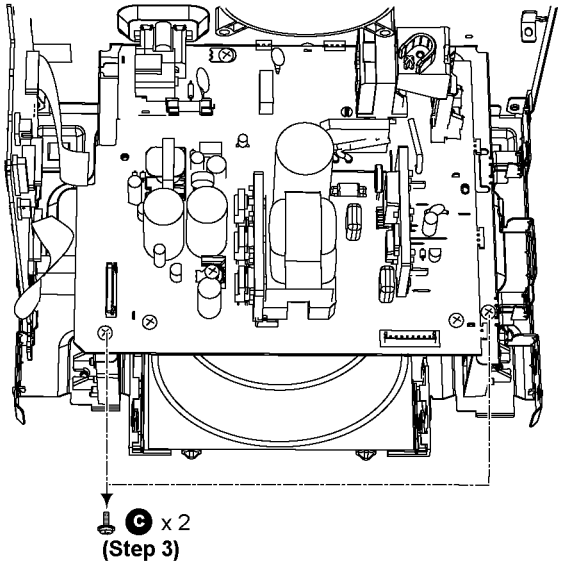
9.22. Disassembly of CD Mechanism Unit (BRS1C)

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

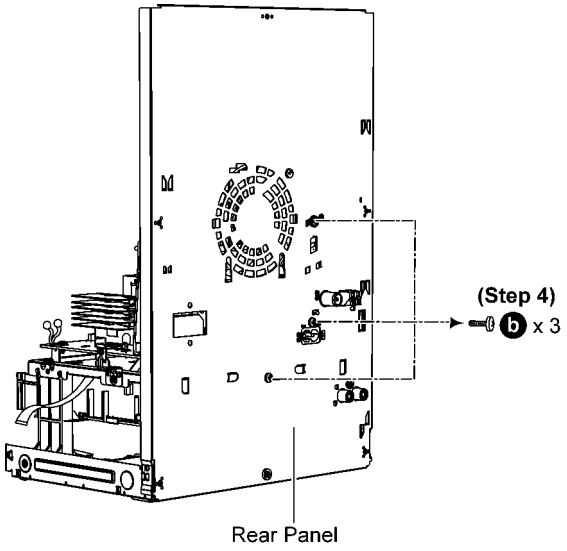
Step 1 Detach 15P Wire at the connector (CN5802) on SMPS P.C.B..
Step 2 Detach 12P FFC at the connector (CN2011) on Main P.C.B.



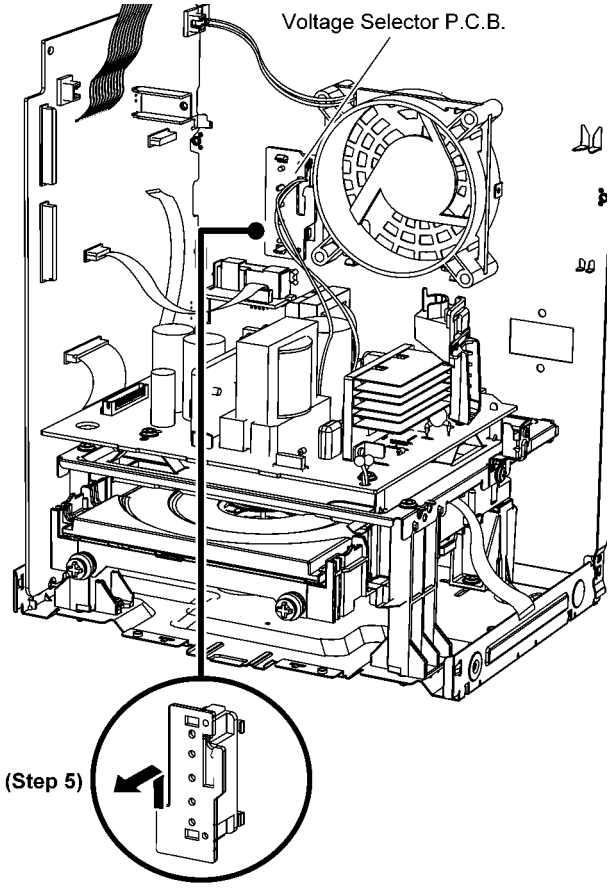
Step 3 Remove 2 screws.



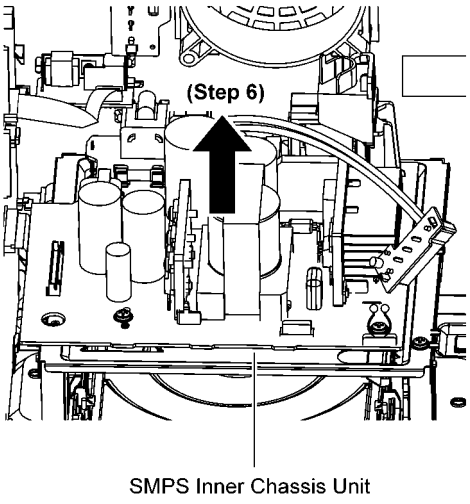
Step 4 Remove 3 screws.



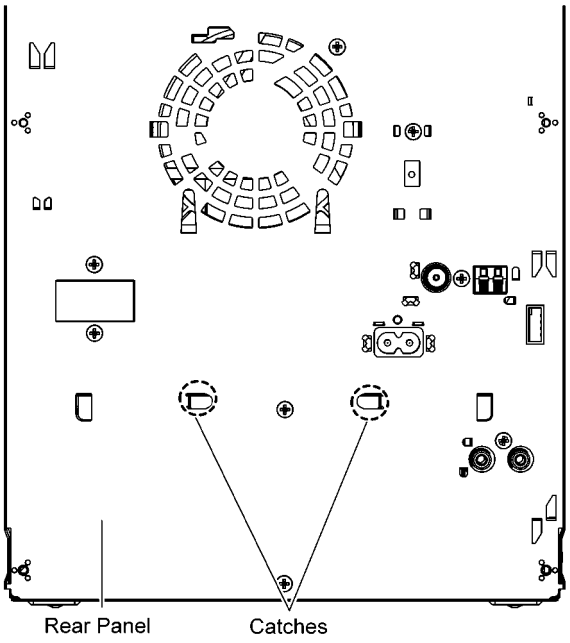
Step 5 Detach Voltage Selector P.C.B. from Rear Panel as arrow shown.



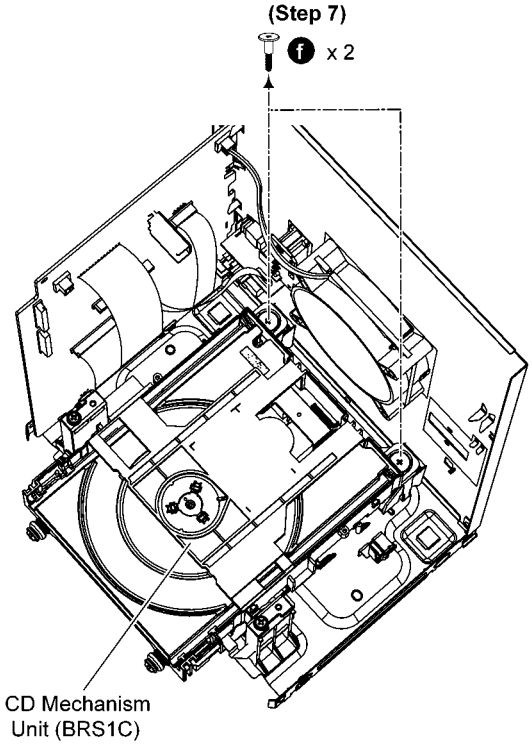
Step 6 Lift up SMPS Inner Chassis Unit.



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



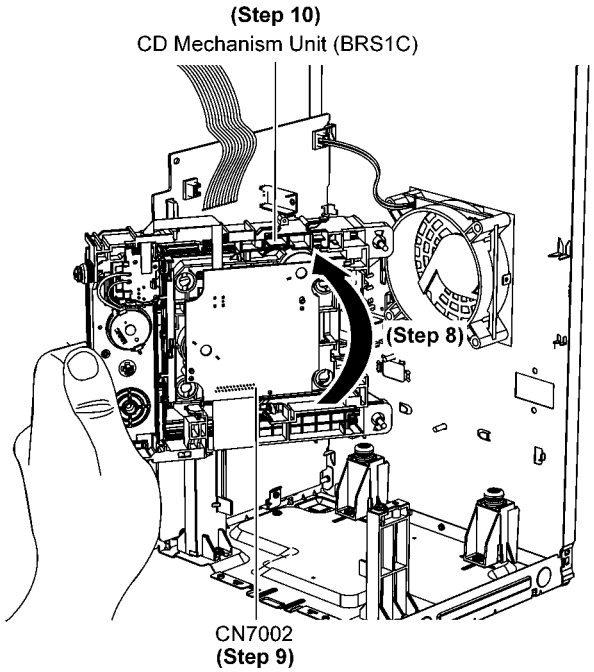
Step 7 Remove 2 screws.



Step 8 Lift up & upset the CD Mechanism Unit (BRS1C) as shown.

Step 9 Detach 27P FFC at the connector (CN7002) on CD Servo P.C.B..

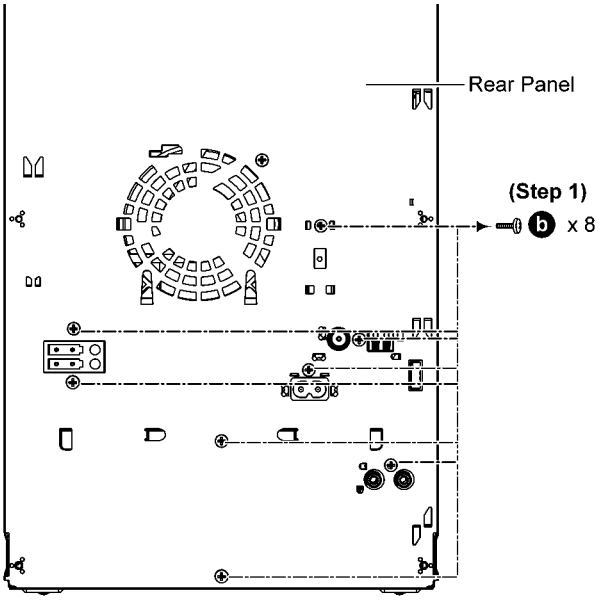
Step 10 Remove CD Mechanism Unit (BRS1C).



9.23. Disassembly of Rear Panel

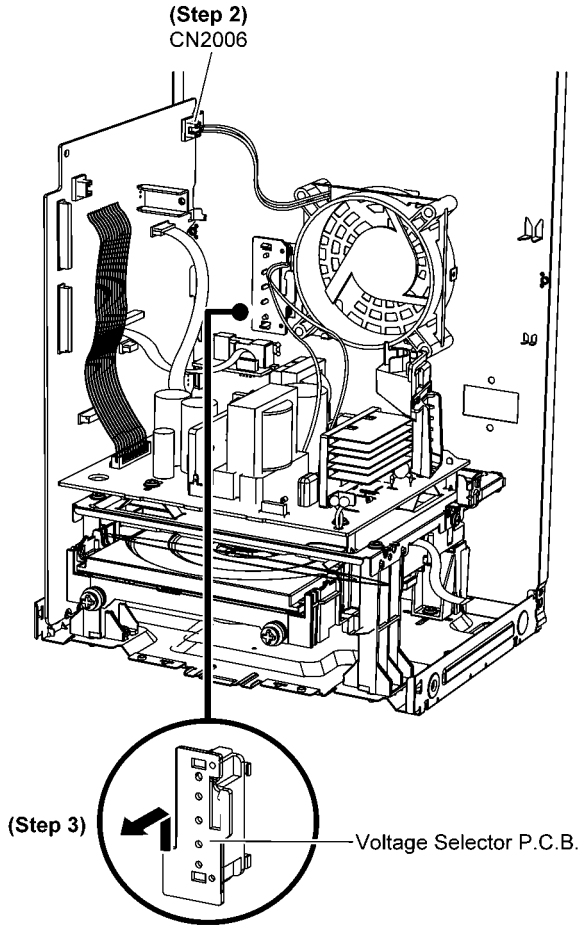
- **Refer to "Disassembly of Top Cabinet".**
- **Refer to "Disassembly of Tuner P.C.B.".**

Step 1 Remove 8 screws.

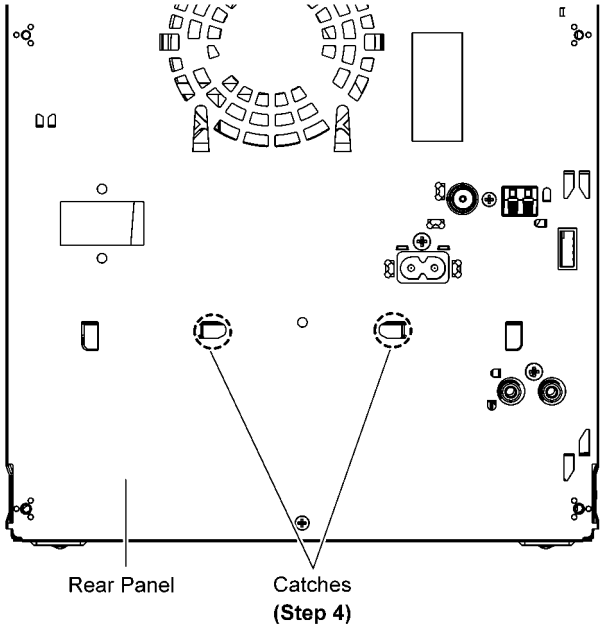


Step 2 Detach 2P Wire at the connector (CN2006) on Main P.C.B.

Step 3 Detach Voltage Selector P.C.B. from Rear Panel as arrow shown.

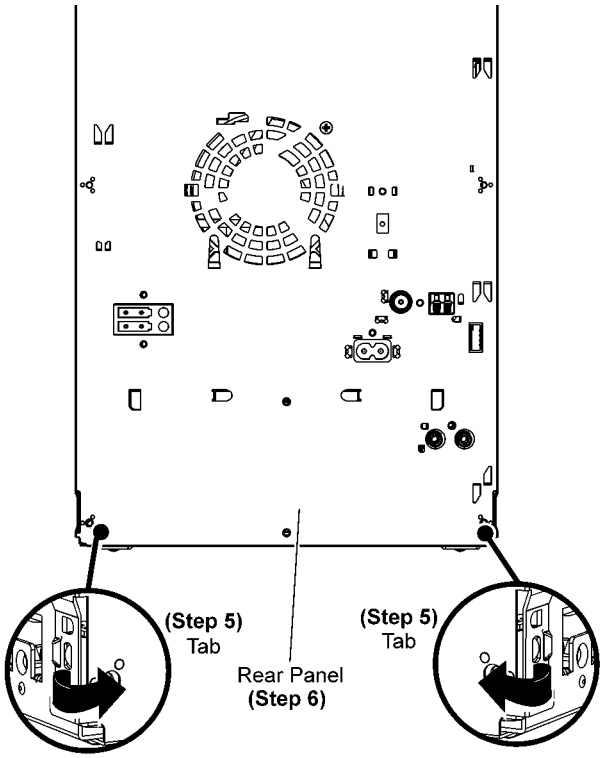


Step 4 Lift up SMPS Inner Chassis Unit to release the catch between the SMPS Inner Chassis Unit & the Rear Panel.



Step 5 Release 2 tabs.

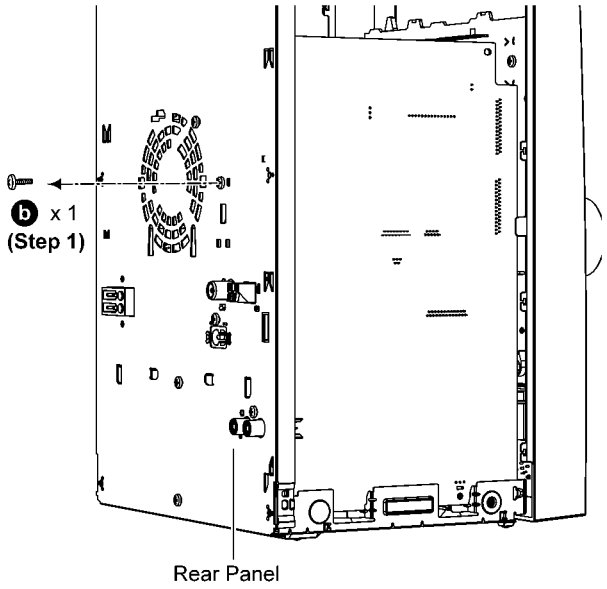
Step 6 Remove Rear Panel.



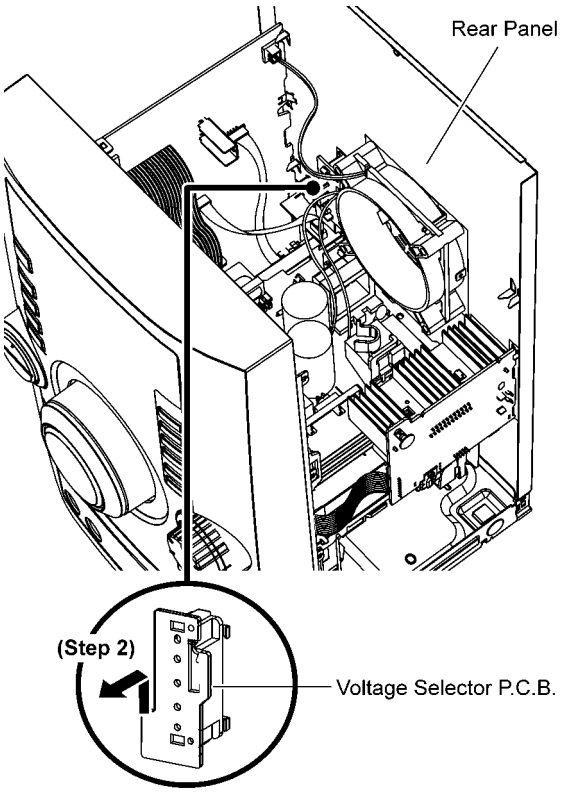
9.24. Disassembly of Voltage Selector P.C.B.

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

Step 1 Remove 1 screw.

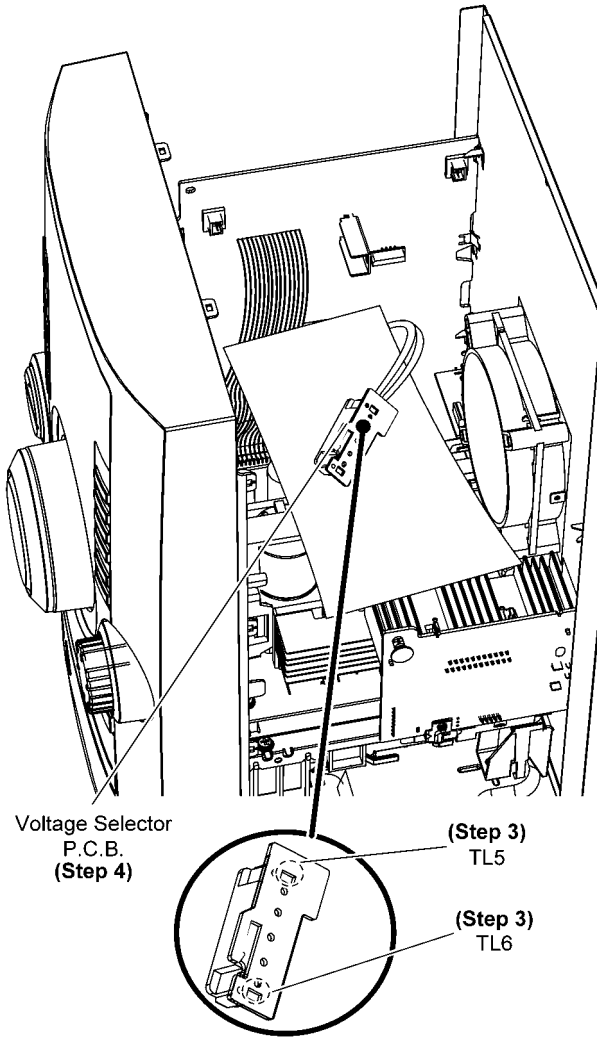


Step 2 Detach Voltage Selector P.C.B. from Rear Panel.



Step 3 Desolder 2 Wire pins, TL5 (Black), TL6 (Red) on the Voltage Selector P.C.B..

Step 4 Remove Voltage Selector P.C.B..



10 Replacement of Traverse Unit

10.1. Disassembly of Traverse Unit

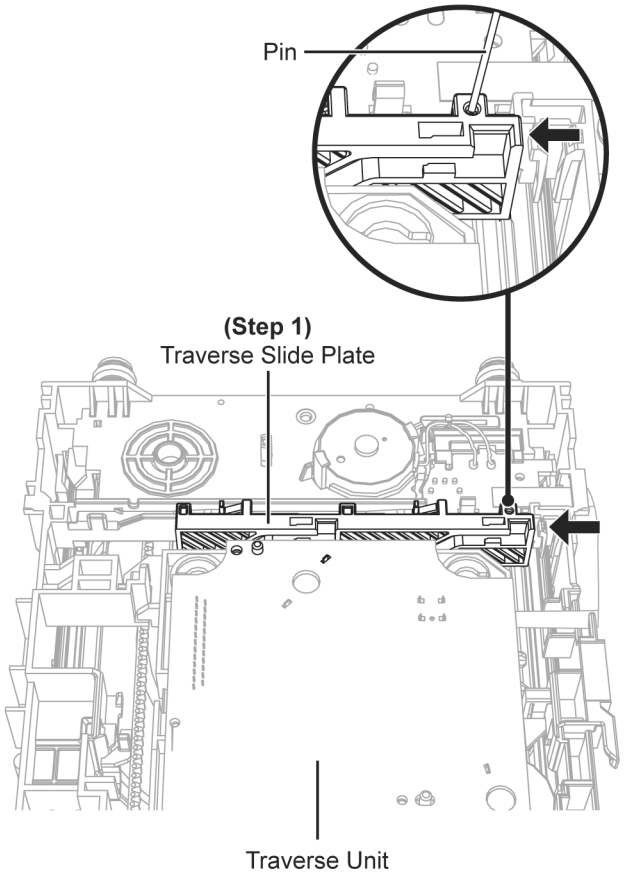
- **Refer to “Disassembly of CD Mechanism Unit (BRS1C)”.**

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

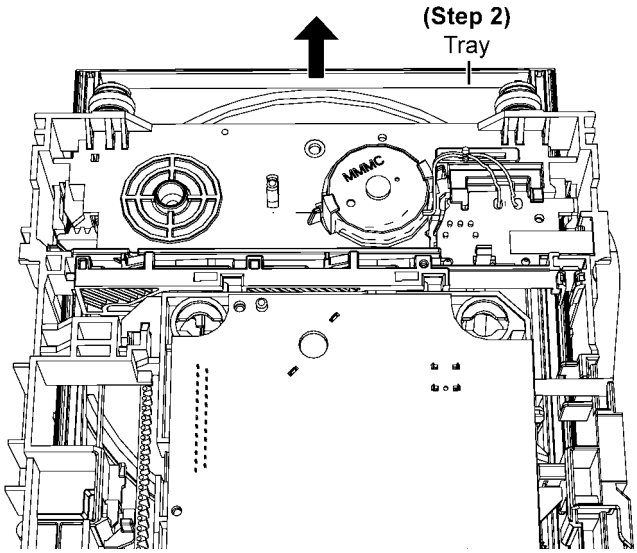
Note:

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

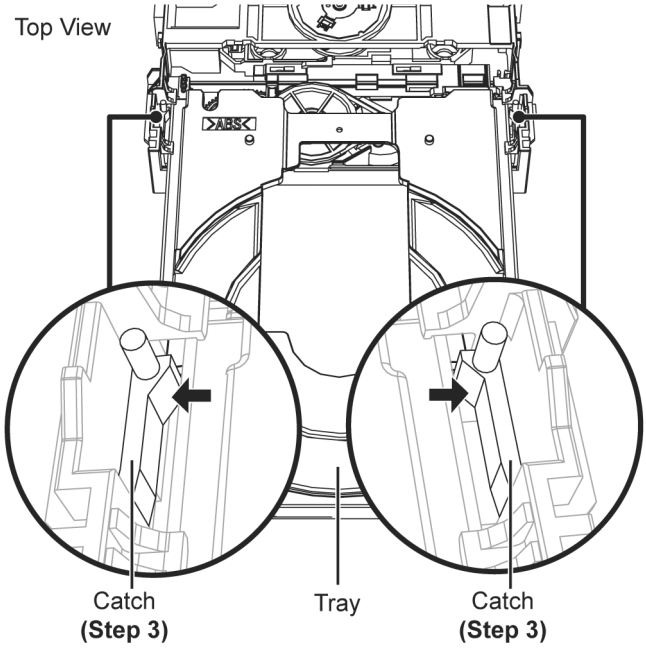
Step 1: Use a pin to slide the Traverse Slide Plate until it come to a stop.



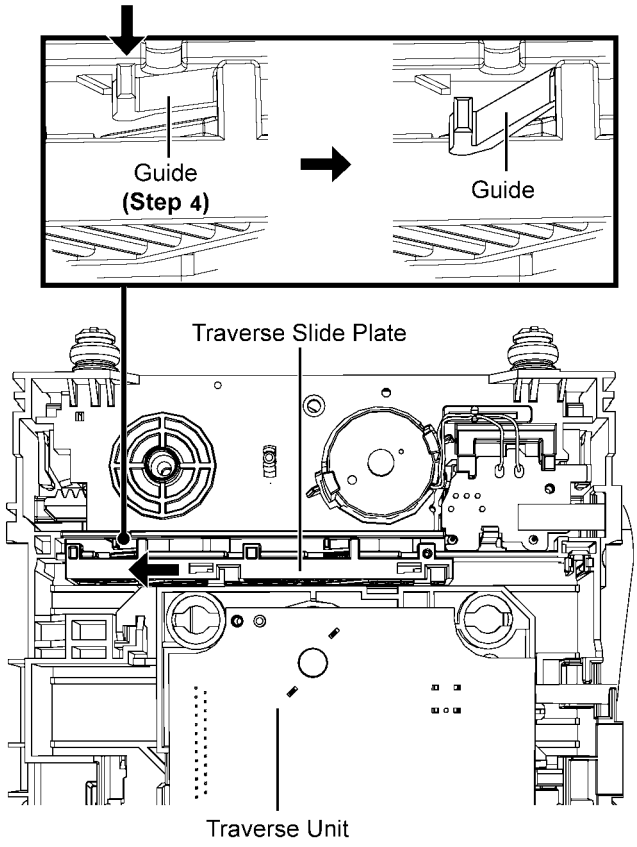
Step 2: Slide the tray out fully.



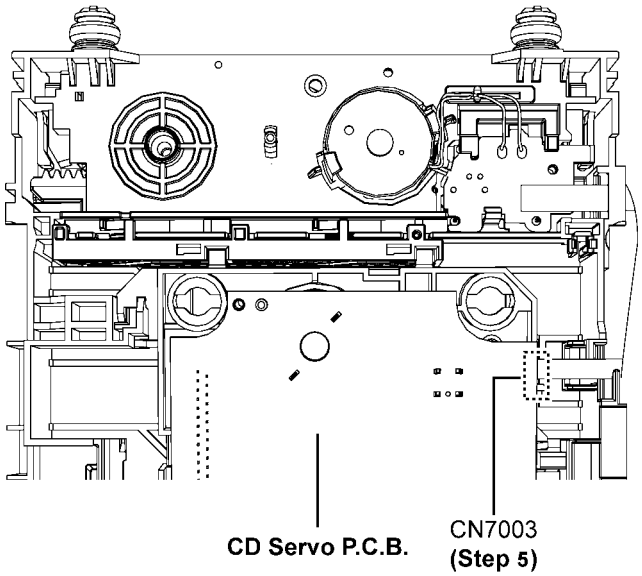
Step 3: Release the catches & remove the tray.



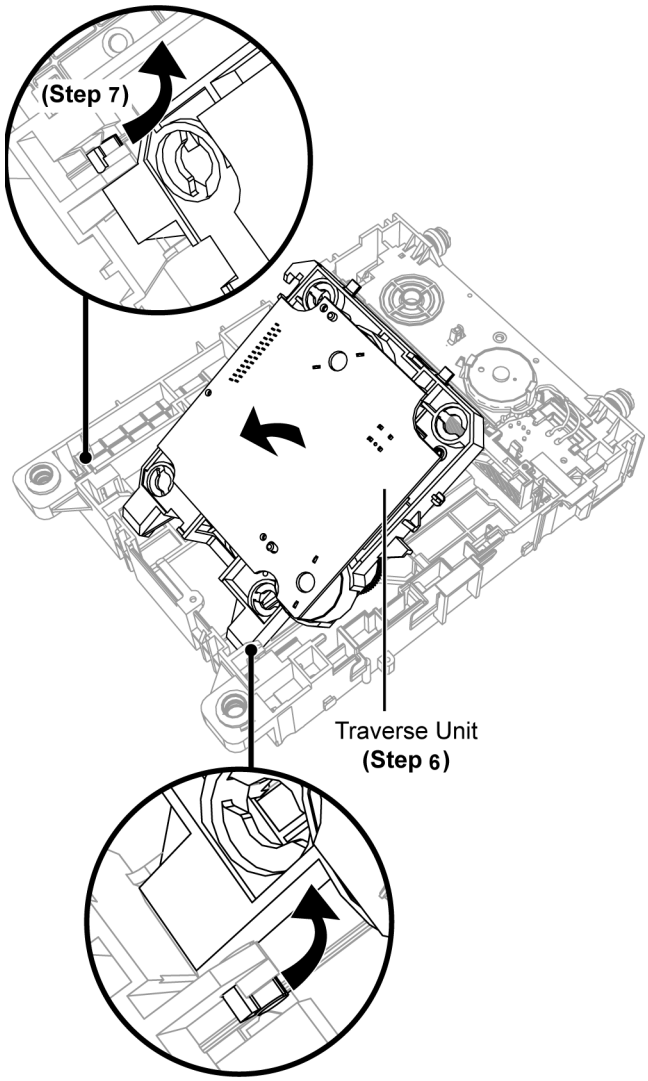
Step 4: Release the guide as shown & slide the Traverse Slide Plate to the end.



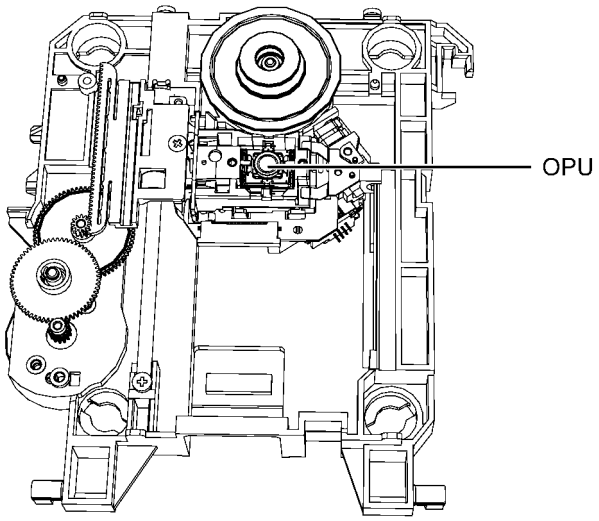
Step 5: Detach 5P FFC at the connector (CN7003) on CD Servo P.C.B..



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

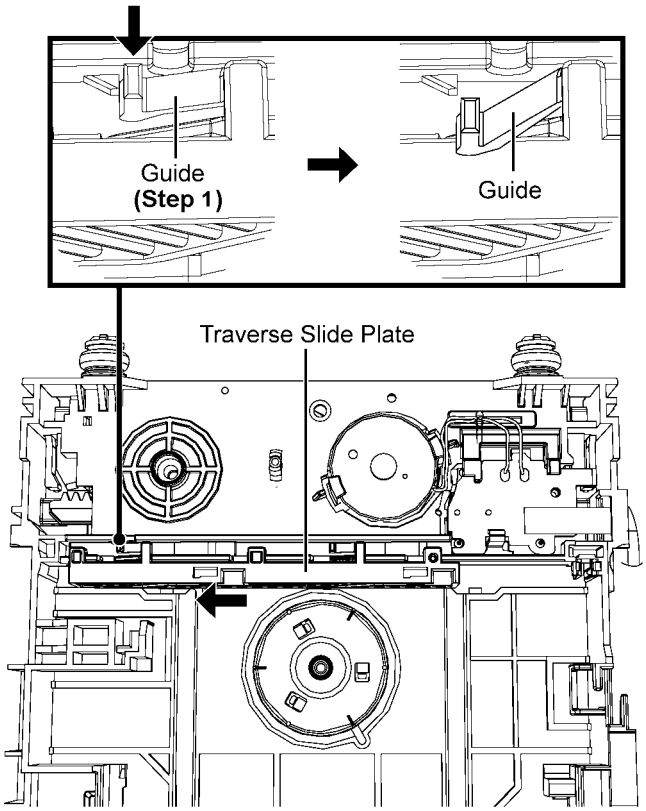


Caution: Avoid touching the surface of the Optical Pickup Unit.

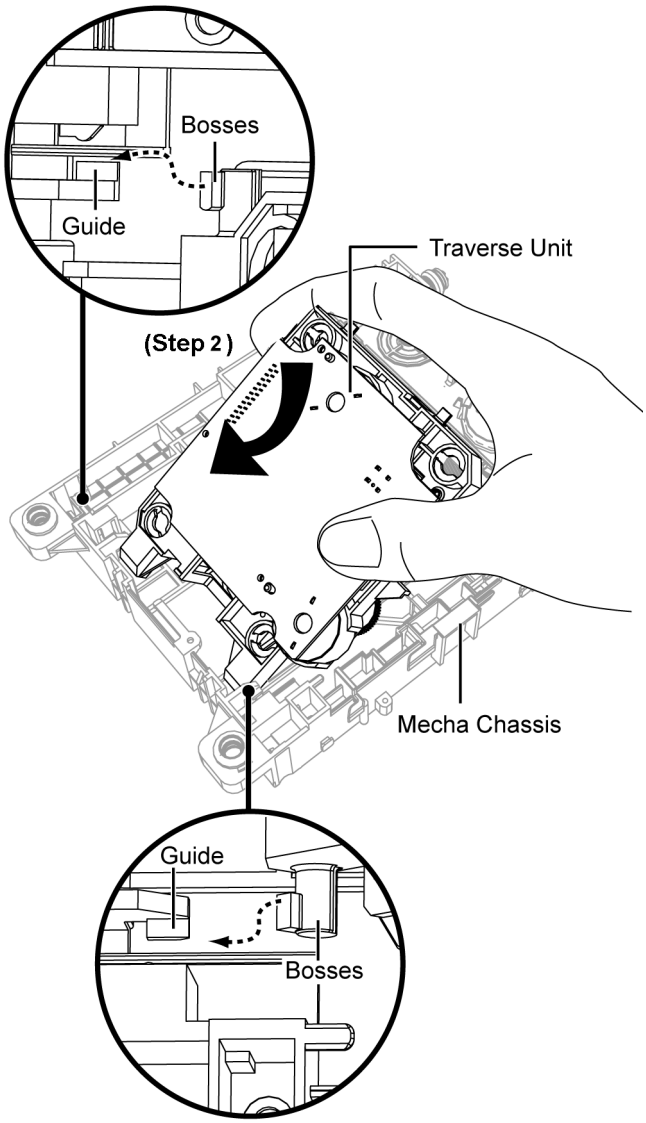


10.2. Assembly of Traverse Unit

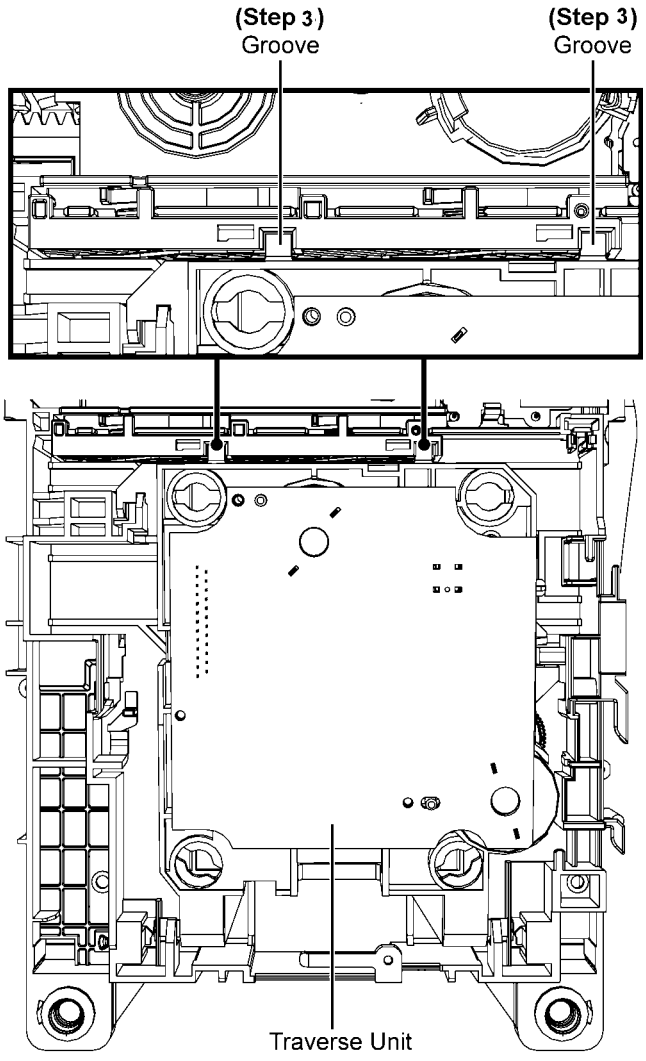
Step 1: Release the guide as shown & slide the Traverse Slide Plate to the end.



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

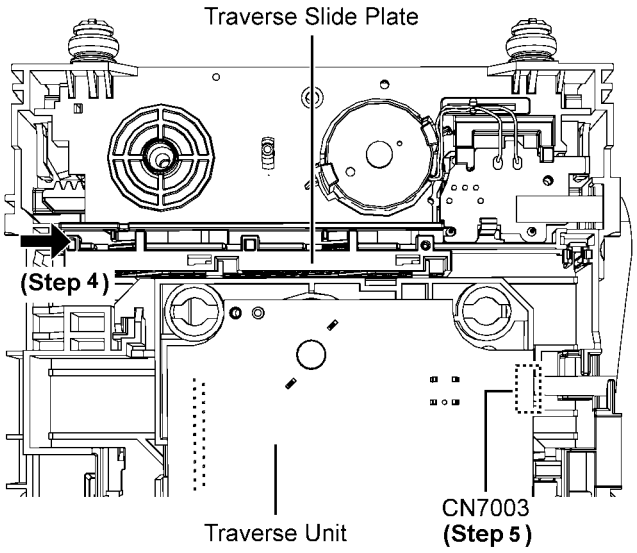


Step 3: Ensure the Traverse Unit seated properly onto the Groove..

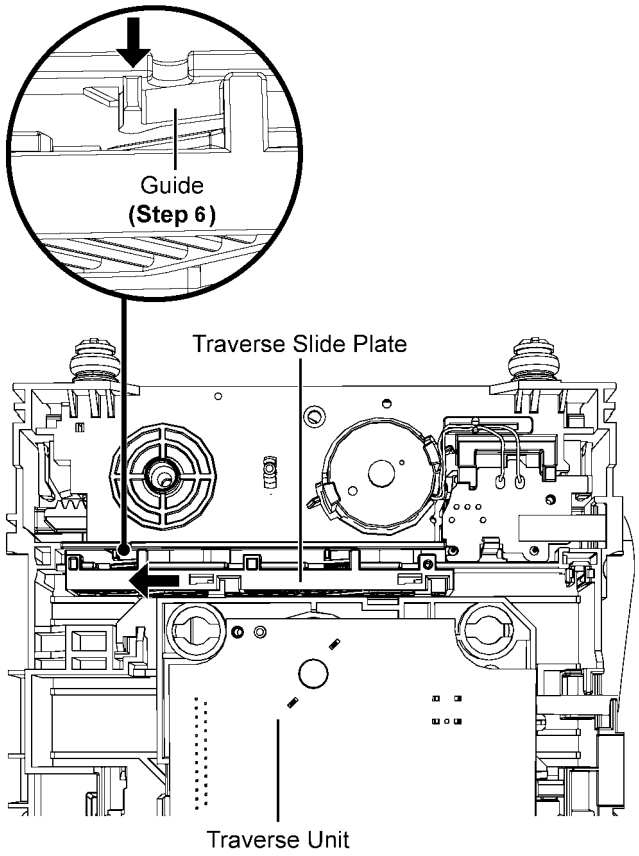


Step 4: Slide Traverse Slide Plate to lock the Traverse Unit as shown.

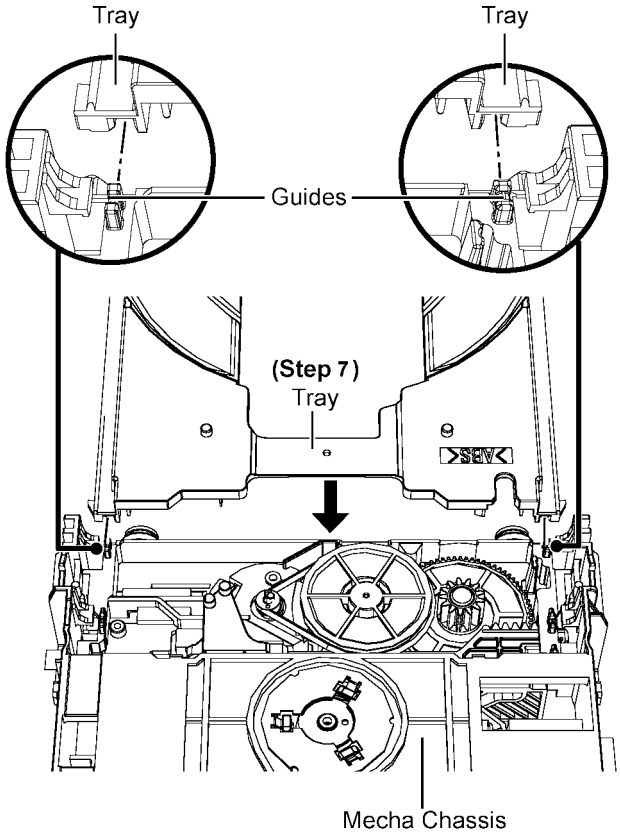
Step 5: Connect 5P FFC at the connector (CN7003) on CD Servo P.C.B..



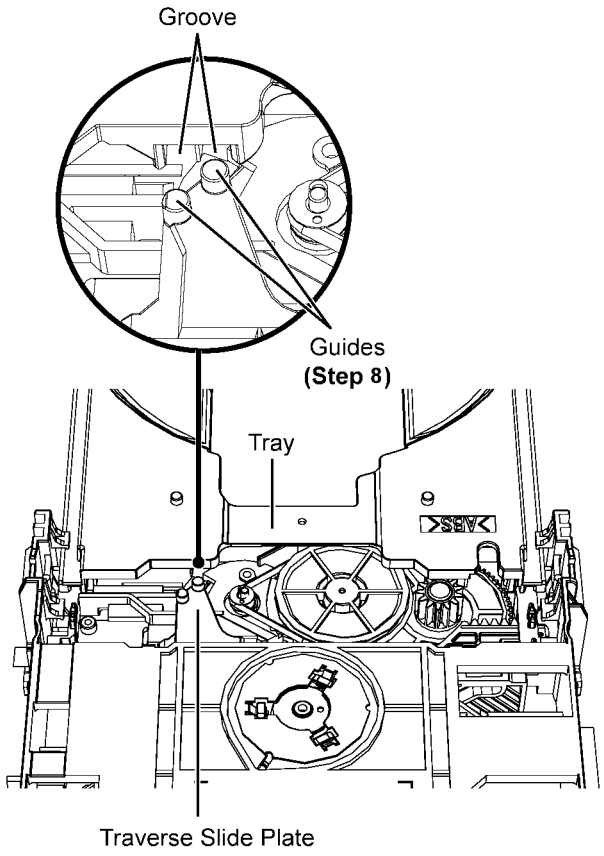
Step 6: Slide the Traverse Slide Plate unit it stop at the Guide..



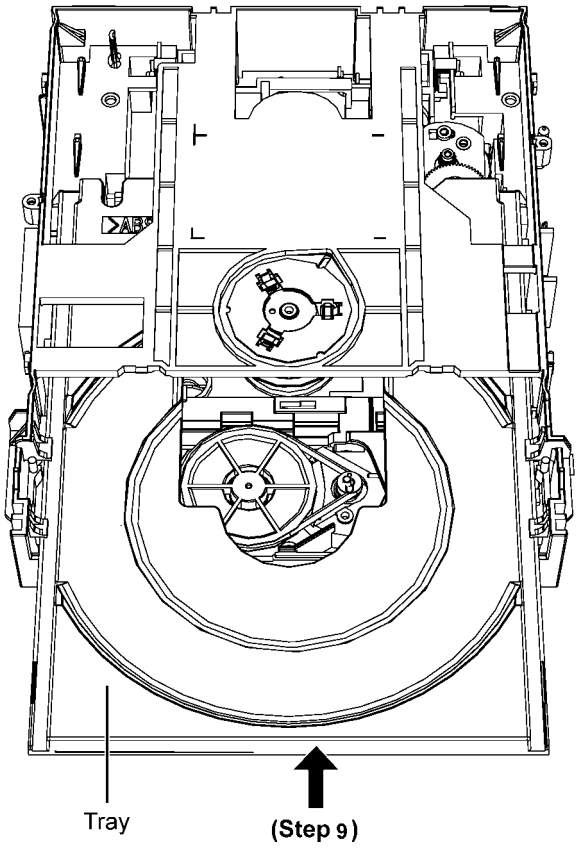
Step 7: Slot the Tray into the guides as Picture shown.



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



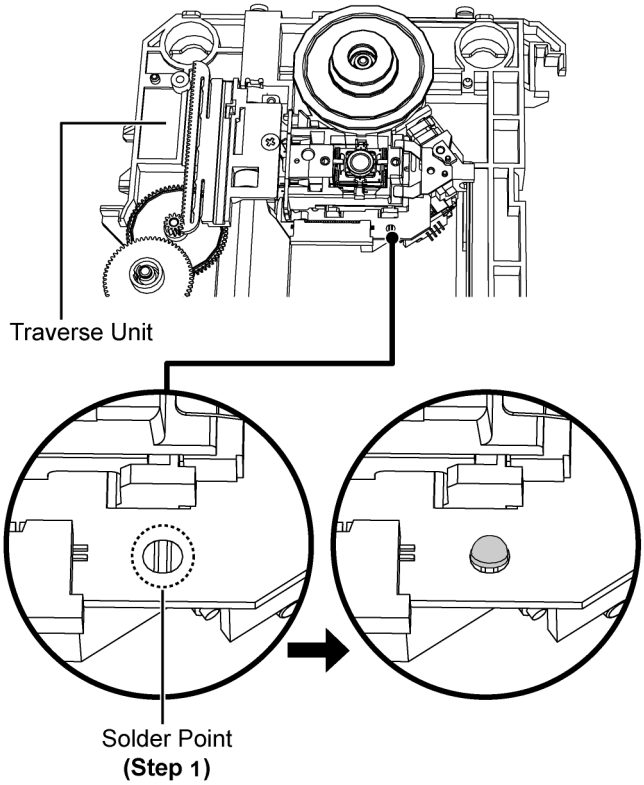
Step 9: Slide the tray in fully..



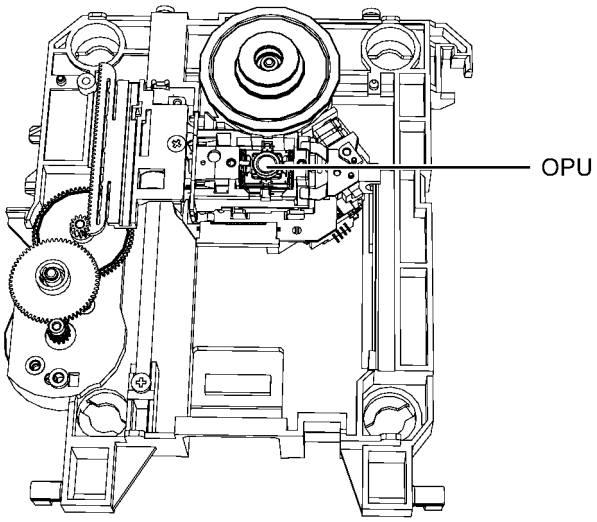
10.3. Disassembly of CD Servo P.C.B.

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

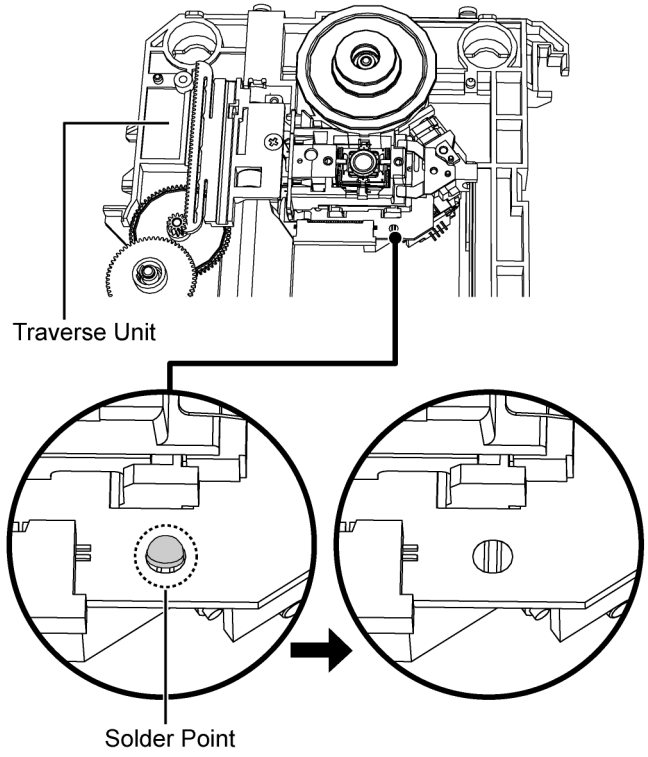
Caution: It is required to short the circuit.
Step 1: Solder the 3 solder points.



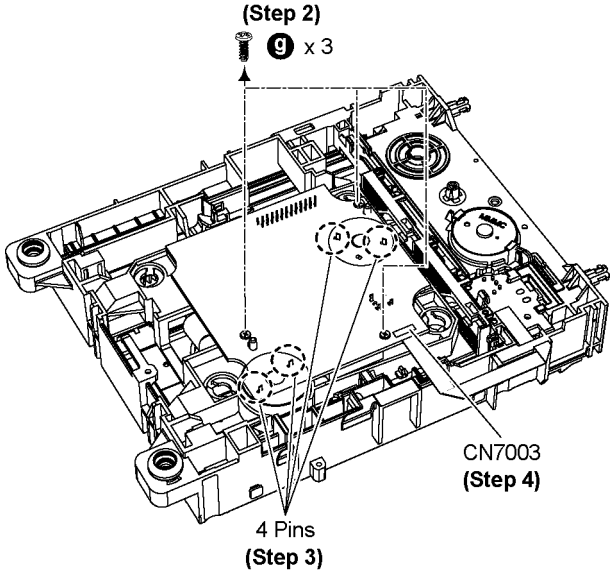
Caution 1: Avoid touching the surface of the Traverse Unit.



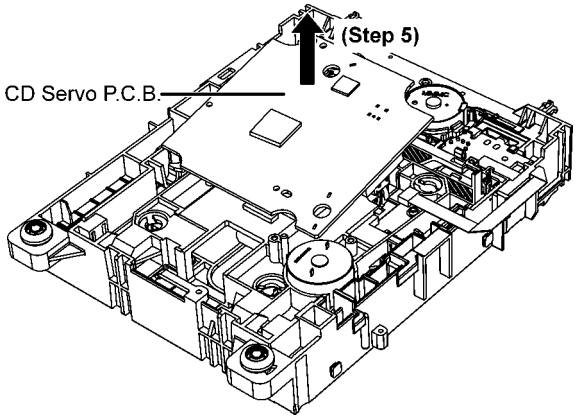
Caution 2: During assembling, desolder the solder points.



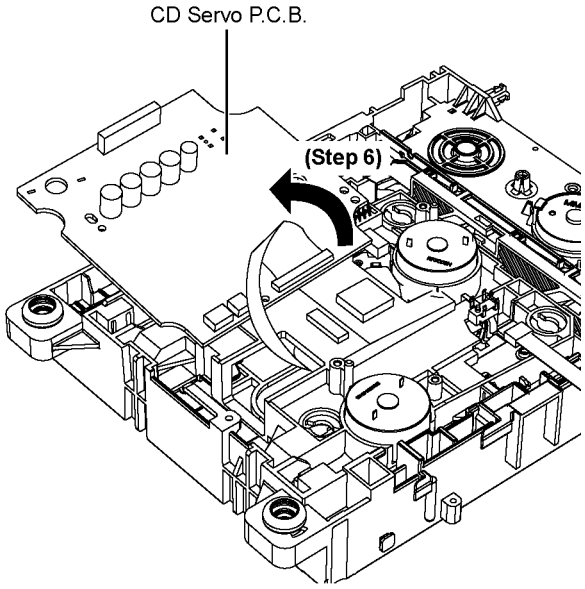
Step 2 Remove 3 screws.
Step 3 Desolder 4 pins.
Step 4 Detach 5P FFC at the connector (CN7003) on CD Servo P.C.B..



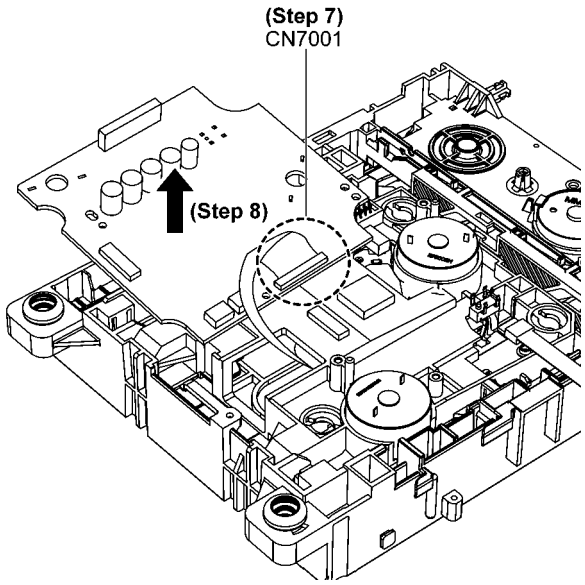
Step 5 Slightly lift up the CD Servo P.C.B.



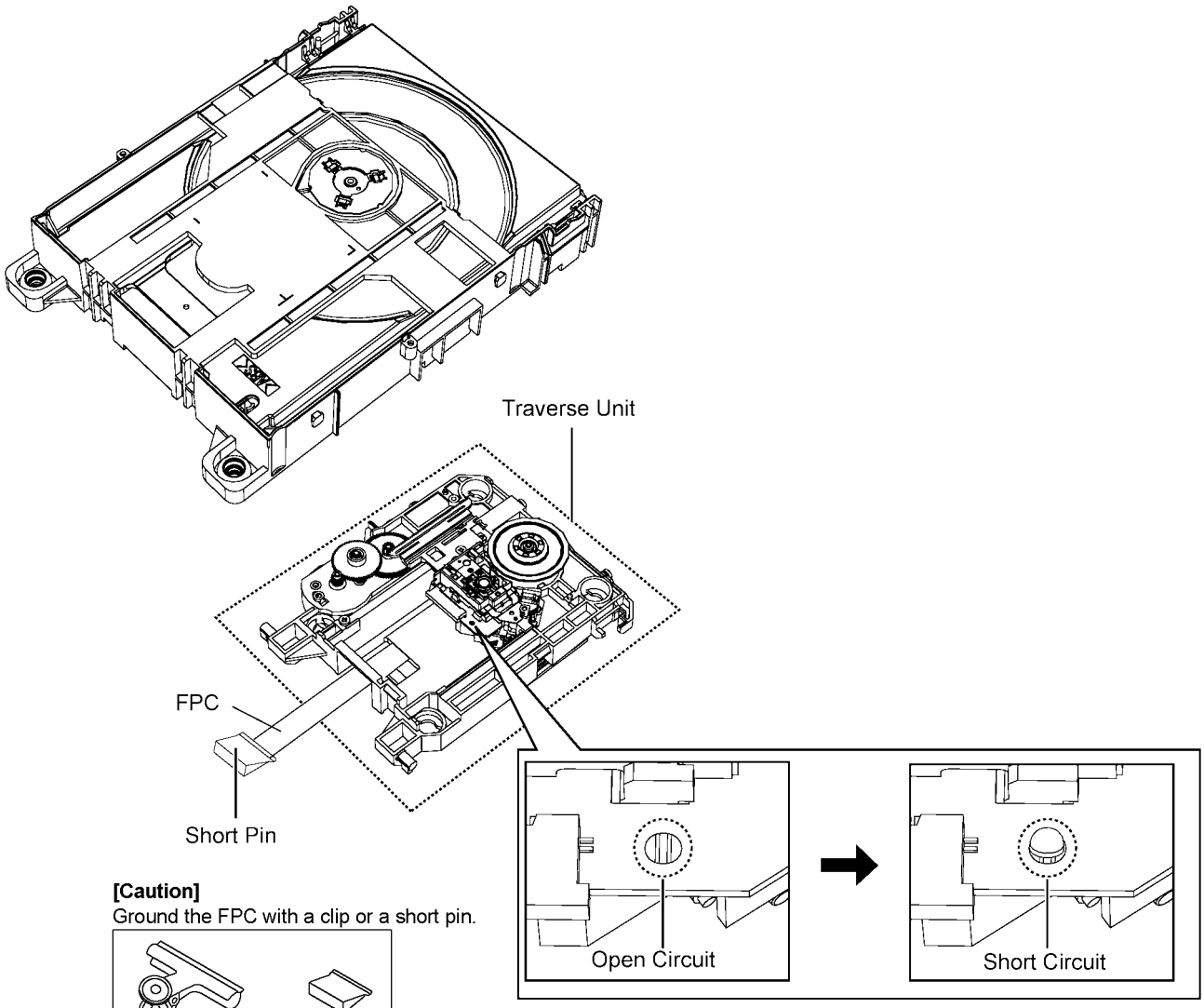
Step 6 Flip the CD Servo P.C.B.



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



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



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

Clip or Short Pin

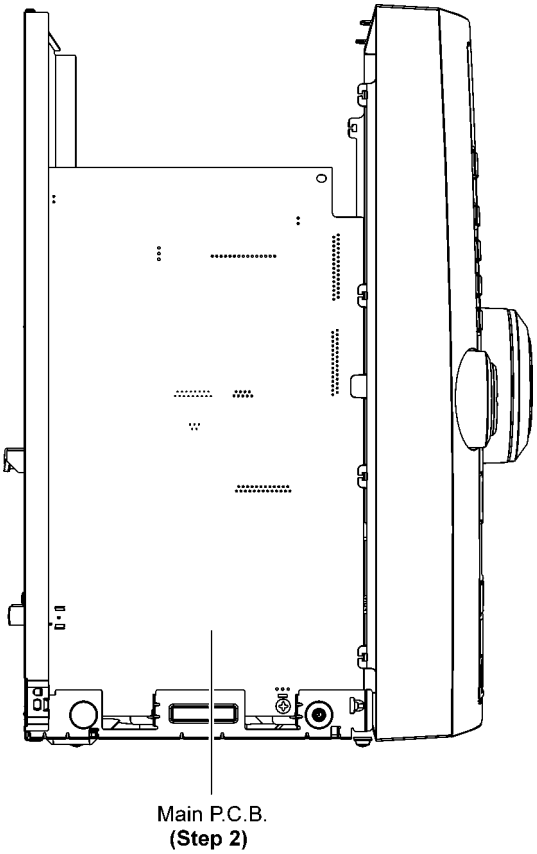
Figure A

11 Service Position

Note: For description of the disassembly procedures, see the Section 9.

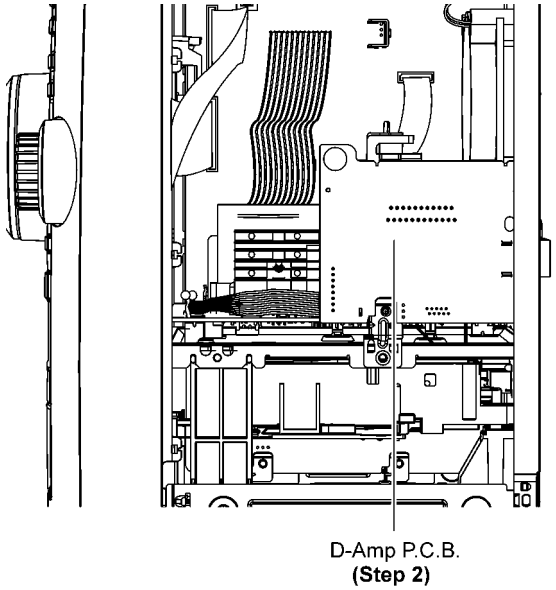
11.1. Checking and Repairing of Main P.C.B.

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



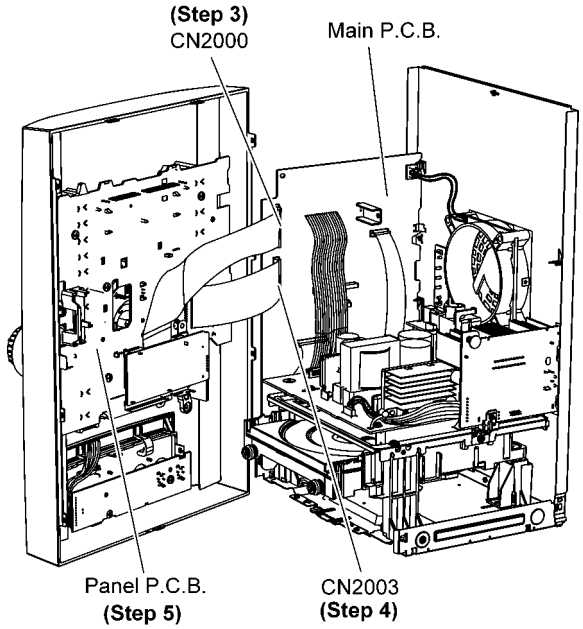
11.2. Checking and Repairing of D-Amp P.C.B.

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



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

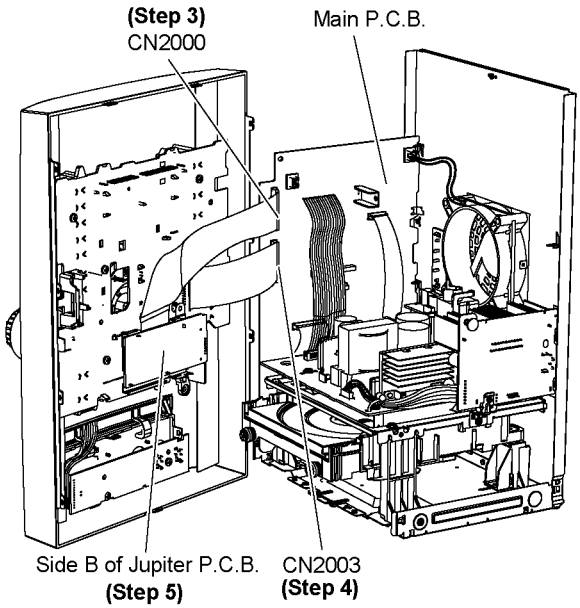
Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Attach 30P FFC to the connector (CN2000) on Main P.C.B..
Step 4 Attach 30P FFC to the connector (CN2003) on Main P.C.B..
Step 5 Panel P.C.B. can be checked and repaired as diagram shown.



11.4. Checking and Repairing of Jupiter P.C.B.

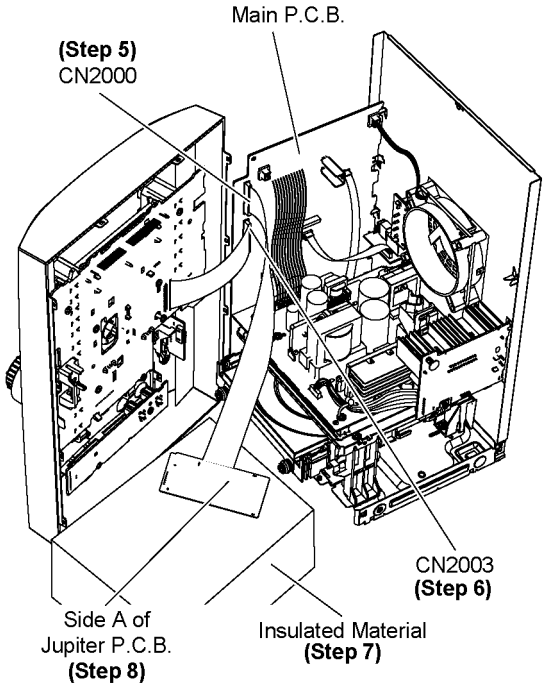
11.4.1. Checking and Repairing side B of Jupiter P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Attach 30P FFC to the connector (CN2000) on Main P.C.B..
Step 4 Attach 30P FFC to the connector (CN2003) on Main P.C.B..
Step 5 Side B of Jupiter P.C.B. can be checked and repaired as diagram shown.



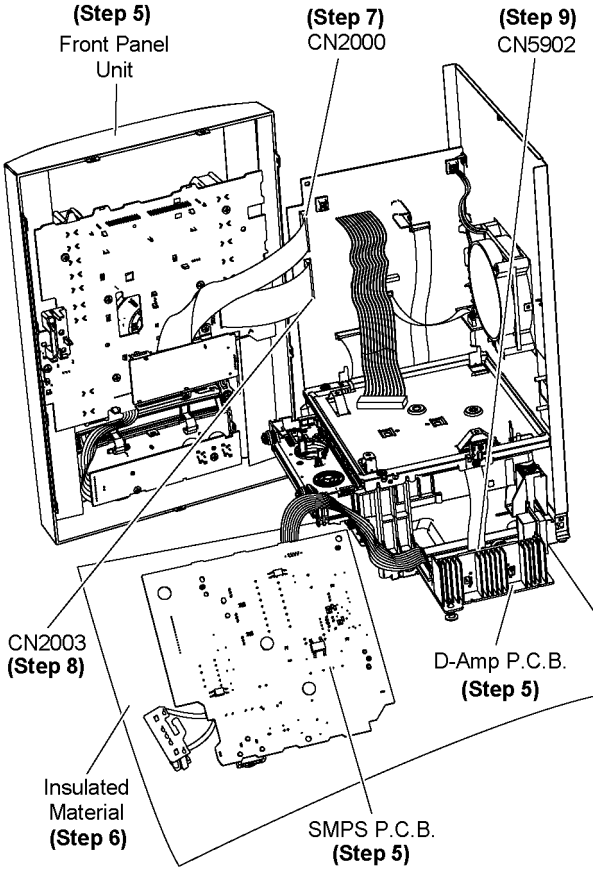
11.4.2. Checking and Repairing side A of Jupiter P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove the Jupiter P.C.B.
Step 4 Position Front Panel Unit as shown.
Step 5 Attach 30P FFC to the connector (CN2000) on Main P.C.B.
Step 6 Attach 30P FFC to the connector (CN2003) on Main P.C.B..
Step 7 Position Jupiter P.C.B. on the insulated material.
Step 8 Side A of Jupiter P.C.B. can be checked & repaired as diagram shown.

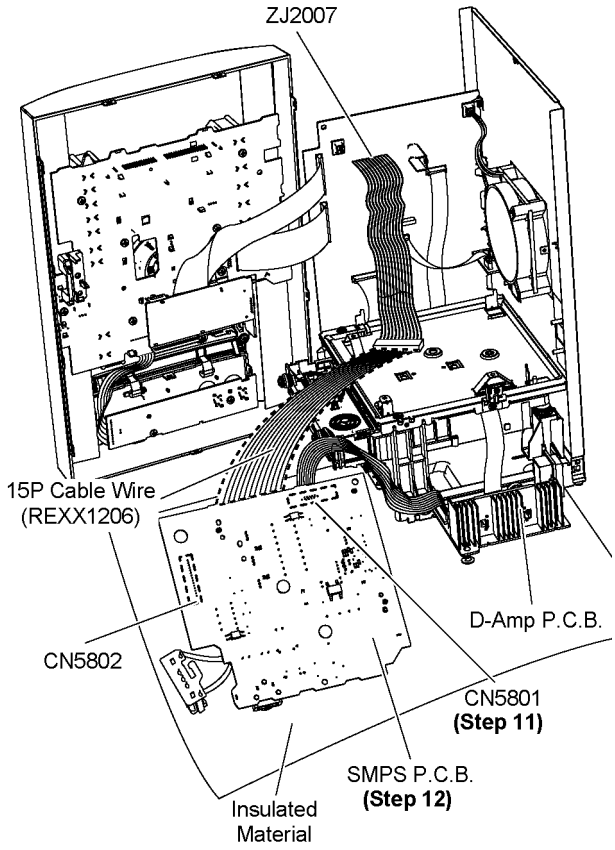


11.5. Checking and Repairing of SMPS P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove D-Amp P.C.B..
Step 4 Remove SMPS P.C.B..
Step 5 Position Front Panel Unit, SMPS P.C.B. & D-Amp P.C.B. as diagram shown.
Step 6 Position SMPS P.C.B., D-Amp P.C.B. on the insulated material.
Step 7 Attach 30P FFC to the connector (CN2000) on Main P.C.B..
Step 8 Attach 30P FFC to the connector (CN2003) on Main P.C.B..
Step 9 Attach 12P FFC to the connector (CN5902) on D-Amp P.C.B..

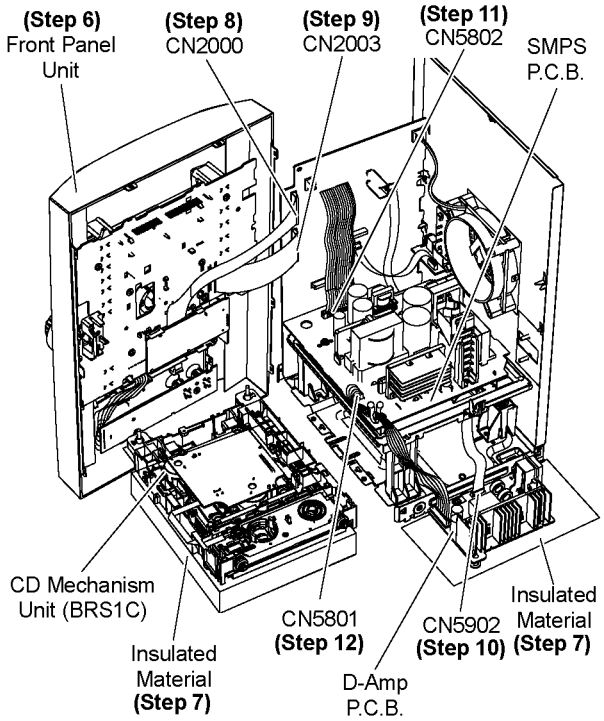


Step 10 Extend the Cable Wire with extension Cable Wire (REXX1206) (15P Cable Wire from ZJ2007 to CN5802).
Step 11 Connect 6P Cable Wire to the connector (CN5801) on SMPS P.C.B..
Step 12 SMPS P.C.B. can be checked & repaired as diagram shown.

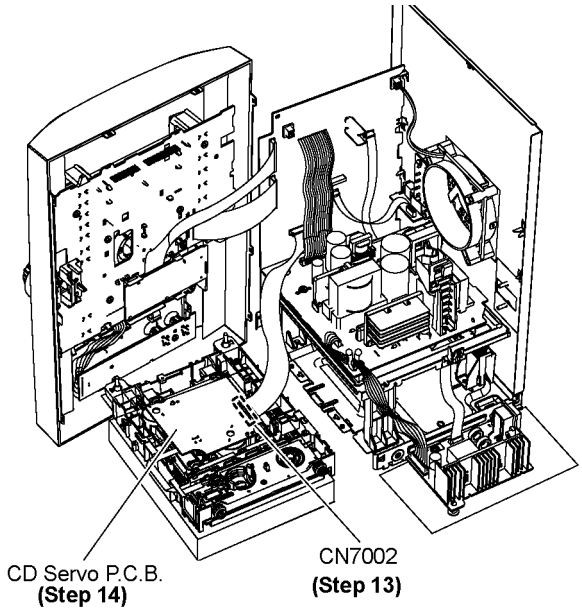


11.6. Checking and Repairing of CD Servo P.C.B.

Step 1 Remove Top Cabinet.
Step 2 Remove Front Panel Unit.
Step 3 Remove D-Amp P.C.B..
Step 4 Remove SMPS Chassis Unit.
Step 5 Remove CD Mechanism Unit (BRS1C).
Step 6 Position Front Panel Unit, SMPS Chassis Unit & D-Amp P.C.B. as diagram shown.
Step 7 Position CD Mechanism Unit (BRS1C) & D-Amp P.C.B. on the insulated materials.
Step 8 Attach 30P FFC to the connector (CN2000) on Main P.C.B..
Step 9 Attach 30P FFC to the connector (CN2003) on Main P.C.B..
Step 10 Attach 12P FFC to the connector (CN5902) on D-Amp P.C.B..
Step 11 Attach 15P Cable Wire to the connector (CN5802) on SMPS P.C.B..
Step 12 Attach 6P Cable Wire to the connector (CN5801) on SMPS P.C.B..



Step 13 Attach 27P FFC to the connector (CN7002) on CD Servo P.C.B..
Step 14 CD Servo P.C.B. can be checked and repaired as diagram shown.



12 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.

12.1. CD Servo P.C.B.

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

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

REF NO.	Q7601																			
MODE	E	C	B																	
CD PLAY	3.1	2.0	2.4																	

SA-AKX32PH/PN CD SERVO P.C.B.

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

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	0.1	3.3	0	0	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	0.1	3.3	0	0	0	3.3	3.3	0	1.5	1.6	0	1.1	1.7	3.3	1.8	3.2	3.2

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	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

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	0	0	0	3.3	3.3	3.3	0	0	0.3	3.3	3.3	0	0	0	0	0	0	0
STANDBY	0	0	0	0	0	3.3	3.3	3.3	0	0	0.3	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	0	0	0	0	0	3.3	0	0	0	3.3	3.3	3.3	3.3	3.3	3.3	0	0
STANDBY	0	0	0	0	0	0	0	0	3.3	0	0	0	3.3	3.3	3.3	3.3	3.3	3.3	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.	IC2006																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	0	0	0	0	0	0	0	3.3												
STANDBY	0	0	0	0	0	0	0	3.3												

REF NO.	IC2010																			
MODE	1	2	3																	
POWER ON	16.0	0	12.2																	
STANDBY	16.0	0	12.2																	

REF NO.	IC2011																			
MODE	1	2	3	4	5															
POWER ON	16.0	5.3	0	1.0	2.5															
STANDBY	16.0	5.3	0	1.0	2.5															

REF NO.	IC2012																			
MODE	1	2	3	4	5	6	7	8												
POWER ON	12.7	3.2	3.2	0	0	0	0	16.5												
STANDBY	12.7	3.2	3.2	0	0	0	0	16.5												

REF NO.	Q2002				Q2003				Q2011				Q2014				Q2015			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	0	1.0	0.7		0	3.3	0		0	3.2	0		0	0	3.1		3.2	3.2	2.5	
STANDBY	0	1.0	0.7		0	3.3	0		0	3.2	0		0	0	3.1		3.2	3.2	2.5	

SA-AKX32PH/PN MAIN P.C.B.

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

REF NO.	Q2020				Q2021				Q2022				Q2023				Q2033			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	3.4	5.2	4.3		0	5.9	0		7.5	12.0	8.1		16.1	0	16.1		16.4	16.5	11.6	
TUNER	3.4	5.2	4.3		0	5.9	0		7.5	12.0	8.1		16.1	0	16.1		16.4	16.5	11.6	

REF NO.	QR2005				QR2006															
MODE	E	C	B		E	C	B													
POWER ON	0	3.2	0		0	3.2	0													
TUNER	0	3.2	0		0	3.2	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
CD PLAY	0	4.2	2.3	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.6	0	3.2	3.3
STANDBY	0	4.4	2.3	4.4	4.5	4.5	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	0	3.2	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
CD PLAY	9.0	4.6	4.5	4.6	0.8	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.4	2.3	4.5	0	0
STANDBY	9.1	4.6	4.6	4.6	0.7	4.5	4.4	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	2.3	4.6	0	0

REF NO.	IC2000																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52								
CD PLAY	0	4.4	0	4.5	4.4	4.5	4.4	0	0	4.4	0	0								
STANDBY	0	4.6	0	4.6	4.6	4.6	4.6	0	0	4.6	0	0								

REF NO.	IC2005																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	6.0	6.0	6.0	0	6.0	6.0	6.0	11.9												
STANDBY	6.0	6.0	6.0	0	6.0	6.0	6.0	11.9												

REF NO.	IC2007																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	7.6	7.6	7.6	0	7.5	7.6	7.6	11.9												
STANDBY	7.6	7.6	7.6	0	7.5	7.6	7.6	11.9												

REF NO.	Q2001				Q2012							Q2013								
MODE	E	C	B		1	2	3	4	5	6		1	2	3	4	5	6			
CD PLAY	0	0	0		0	0.7	0	0	0.7	0		0	0.7	0	0	0.7	0			
STANDBY	0	0	0		0	0.7	0	0	0.7	0		0	0.7	0	0	0.7	0			

REF NO.	Q2018				Q2019				Q2035				Q2037				Q2038			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.1	3.3	0		4.4	5.2	5.0		7.3	8.5	7.6		0	2.9	0		0	0.8	0.6	
STANDBY	0.1	3.3	0		4.4	5.2	5.0		7.4	8.6	7.7		0	2.9	0		0	0.8	0.6	

REF NO.	Q2039				Q2040				Q2041				Q2042				Q2050			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.7	0	0.1		0	4.1	0		0	4.1	0		0	0	0		0.8	0	0.2	
STANDBY	0.7	0	0.1		0	4.1	0		0	4.1	0		0	0	0		0.8	0	0.2	

SA-AKX32PH/PN MAIN P.C.B.

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

REF NO.	QR2002				QR2003				QR2004											
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	1.5	1.4	0		0	3.3	0		0	5.0	0									
STANDBY	1.5	1.4	0		0	3.3	0		0	5.0	0									

SA-AKX32PH/PN MAIN P.C.B.

12.5. Panel P.C.B.

REF NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POWER ON	0.1	0.1	0.1	0.1	2.0	0.8	0	3.4	3.4	0.1	0.1	0.1	3.5	-14.4	-14.3	-18.2	-22.1	-20.2	-22.1	-18.2
STANDBY	0.1	0.1	0.1	0.1	2.0	1.1	0	3.4	3.4	0.1	0.1	0	3.5	-12.5	-16.3	-14.3	-22.1	-20.2	-22.1	-12.4

REF NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
POWER ON	-12.4	-22.1	-22.1	-20.1	-14.2	-22.1	-18.2	-22.1	-24.1	-24.6	-22.5	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4
STANDBY	-12.4	-22.1	-22.1	-20.1	-12.2	-20.1	-13.3	-22.1	-24.1	-24.6	-22.5	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4	-22.4

REF NO.	IC6001																			
MODE	41	42	43	44																
POWER ON	-22.4	-22.4	3.5	0.1																
STANDBY	-22.4	-22.4	3.5	0.1																

REF NO.	Q6005																			
MODE	E	C	B																	
POWER ON	0	16.5	0																	
STANDBY	0	16.7	0																	

SA-AKX32PH/PN PANEL P.C.B.

12.6. Tuner P.C.B.

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

SA-AKX32PH/PN TUNER P.C.B.

12.7. Jupiter P.C.B. (1/3)

REF NO.	IC503																			
MODE	1	2	3	4	5															
CD PLAY	5.2	0	0	0	5.0															
STANDBY	5.2	0	0	0	5.0															

REF NO.	IC551																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	0	0	0	2.6	0	5.2	3.4	0	1.3	1.7	1.7	1.7	3.3	3.4	0	0				
STANDBY	0	0	0	2.6	0	5.2	3.4	0	1.3	1.7	1.7	1.7	3.3	3.4	0	0				

REF NO.	IC552																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	1.7	1.7	0.9	1.7	3.3	0	0	5.2	5.2	0	0	2.6	0	5.2	0	0				
STANDBY	1.7	1.7	0.9	1.7	3.3	0	0	5.2	5.2	0	0	2.6	0	5.2	0	0				

REF NO.	IC701																			
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	3.4	3.4	0	3.4	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	3.4	3.4	0	3.4	0	0	0	0	0	0

REF NO.	IC701																			
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	3.4	0	3.4	3.4	0.7	3.4	0.7	3.4	0.7	3.4	0	3.4	3.4	0	3.4
STANDBY	0	0	0	0	0	3.4	0	3.4	3.4	0.5	3.4	0.7	3.4	0.7	3.4	0	3.4	3.4	0	3.4

REF NO.	IC701																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	0	3.4	0	3.4	0	0	0	0												
STANDBY	0	3.4	0	3.4	0	0	0	0												

REF NO.	IC751																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.4	1.5	3.4	1.5	1.5	0	1.5	1.6	3.4	1.4	1.7	0	1.4	3.4	3.3	3.4	3.4	3.4	3.4	0.1
STANDBY	3.4	1.5	3.4	1.5	1.5	0	1.5	1.6	3.4	1.4	1.7	0	1.4	3.4	3.3	3.4	3.4	3.4	3.4	0.1

REF NO.	IC751																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.4	0	0	0	0	0	3.4	0	0	0	0	0	0	0	0	0	3.4	1.6	3.3	0
STANDBY	0.4	0	0	0	0	0	3.4	0	0	0	0	0	0	0	0	0	3.4	1.6	3.3	0

REF NO.	IC751																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0	1.3	3.4	1.4	1.4	0	1.4	1.7	3.4	1.4	1.7	0	1.4	0						
STANDBY	0	1.3	3.4	1.4	1.4	0	1.4	1.7	3.4	1.4	1.7	0	1.4	0						

REF NO.	IC801																			
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	3.4	0	0	0	0	0	0	3.4	0	0	0	0	0	3.4	1.6
STANDBY	0	0	0	0	0	3.4	0	0	0	0	0	0	3.4	0	0	0	0	0	3.4	1.6

SA-AKX32PH/PN JUPITER P.C.B.

12.8. Jupiter P.C.B. (2/3)

REF NO.	IC801																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.6	1.2	3.4	0	3.4	3.4	3.4	3.3	3.4	0	3.4	3.3	3.4	1.4	1.5	1.4	1.4	0	1.4	1.4
STANDBY	1.6	1.2	3.4	0	3.4	3.4	3.4	3.3	3.4	0	3.4	3.3	3.4	1.4	1.5	1.4	1.4	0	1.4	1.4

REF NO.	IC801																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	1.4	1.3	1.2	3.4	1.4	1.5	1.4	1.5	0	1.4	1.4	1.4	1.4	3.4	3.4	0	0	3.4	0	0
STANDBY	1.4	1.3	1.2	3.4	1.4	1.5	1.4	1.5	0	1.4	1.4	1.4	1.4	3.4	3.4	0	0	3.4	0	0

REF NO.	IC801																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	1.7	0	0	0	0	3.4	0	3.4	3.4	3.3	3.4	3.4	1.2	3.4	3.3	3.4	3.4	0.4	3.4
STANDBY	0	1.7	0	0	0	0	3.4	0	3.4	3.4	3.3	3.4	3.4	1.2	3.4	3.3	3.4	3.4	0.4	3.4

REF NO.	IC801																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	3.3	3.4	3.4	0.9	0	0	0	0	0	0	0	0	0	3.4	0	1.2	0.3	0	0
STANDBY	0	3.3	3.4	3.4	0.9	0	0	0	0	0	0	0	0	0	3.4	0	1.2	0.3	0	0

REF NO.	IC801																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	3.4	0	0	0	0	0	0	0	0	3.1	2.9	3.4	0	1.7	0	1.7	0.5	1.7	1.2
STANDBY	0	3.4	0	0	0	0	0	0	0	0	3.1	2.9	3.4	0	1.7	0	1.7	0.5	1.7	1.2

REF NO.	IC801																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	0.2	0	0	0	0	1.3	3.4	3.4	3.4	3.4	1.2	3.4	3.4	0	3.4	3.4	3.4	0	0	3.4
STANDBY	0.2	0	0	0	0	1.3	3.4	3.4	3.4	3.4	1.2	3.4	3.4	0	3.4	3.4	3.4	0	0	3.4

REF NO.	IC801																			
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	0	0	1.2	0	0	0	3.4	3.4	3.4	3.4	0	0	0	0	0	0	0
STANDBY	0	0	0	0	0	1.2	0	0	0	3.4	3.4	3.4	3.4	0	0	0	0	0	0	0

REF NO.	IC801																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
CD PLAY	0	0	0	0	0	3.4	1.2	0	0	0	0	0	3.4	3.4	3.4	3.4	3.4	3.4	0	0
STANDBY	0	0	0	0	0	3.4	1.2	0	0	0	0	0	3.4	3.4	3.4	3.4	3.4	3.4	0	0

REF NO.	IC801																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
CD PLAY	3.4	0	0	1.2	3.4	3.4	3.4	3.4	3.4	0	0	3.4	3.4	3.4	3.4	3.4	3.4	0	3.4	3.4
STANDBY	3.4	0	0	1.2	3.4	3.4	3.4	3.4	3.4	0	0	3.4	3.4	3.4	3.4	3.4	3.4	0	3.4	3.4

REF NO.	IC801																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216				
CD PLAY	0	1.2	1.6	1.6	0	1.2	0	0	0	3.4	0	0	1.2	0	0	3.4				
STANDBY	0	1.2	1.6	1.6	0	1.2	0	0	0	3.4	0	0	1.2	0	0	3.4				

SA-AKX32PH/PN JUPITER P.C.B.

12.9. Jupiter P.C.B. (3/3)

REF NO.	IC802																			
MODE	1	2	3	4	5															
CD PLAY	3.0	0	0	0	1.2															
STANDBY	3.0	0	0	3.0	1.2															

REF NO.	Q801																			
MODE	E	C	B																	
CD PLAY	0	3.9	0																	
STANDBY	0	3.9	0																	

SA-AKX32PH/PN JUPITER P.C.B.

12.10. D-Amp P.C.B.

REF NO.	IC5900																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	7.7	0	35.1	0	-35.1	-26.7	35.4	8.9	16.8	-35.3	-25.3	-35.3	17.0	8.9	35.4	-35.1	-35.1	0	35.0
STANDBY	2.5	7.7	0	35.1	0	-35.1	-26.7	35.4	8.9	16.8	-35.3	-25.3	-35.3	17.0	8.9	35.4	-35.1	-35.1	0	35.0

REF NO.	IC5900																			
MODE	21	22	23																	
CD PLAY	7.7	0	0																	
STANDBY	7.7	0	0																	

REF NO.	Q5901				Q5902				Q5903				Q5905				Q5906			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	-35.0	2.5	-35.1		5.0	0	4.6		0	4.6	0.6		0	0	3.3		0	3.3	0	
STANDBY	-35.0	2.5	-35.1		5.0	0	4.6		0	4.6	0.6		0	0	3.3		0	3.3	0	

REF NO.	Q5907				QR5900				QR5901											
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	0	3.3	0		0	0	3.3		5.2	-34.6	5.2									
STANDBY	0	3.3	0		0	5.2	0		5.2	-34.6	5.2									

SA-AKX32PH/PN D-AMP P.C.B.

12.11. 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	1.4	0.5													
STANDBY	164.8	0	0	19.1	0.1	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	1	2	3																	
POWER ON	2.4	2.0	-30.0																	
STANDBY	2.4	2.0	-30.0																	

REF NO.	IC5899																			
MODE	1	2	3																	
POWER ON	1.2	0	0																	
STANDBY	1.2	0	0																	

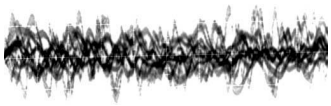
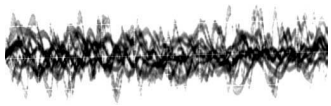
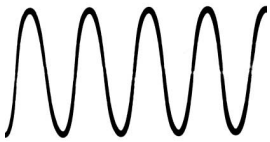
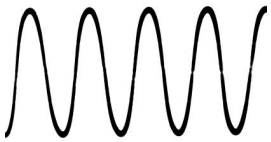
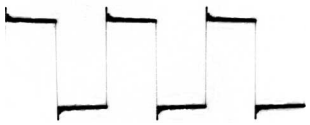
REF NO.	Q5720				Q5721				Q5722				Q5860				Q5861			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
POWER ON	7.3	8.5	7.6		19.7	19.7	19.0		0	19.6	0.2		0	35.2	0		1.3	0	0.7	
STANDBY	7.4	8.6	7.7		19.7	19.7	19.0		0	19.6	0.2		0	35.2	0		1.3	0	0.7	

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	1.9	0		0	2.1	0.4		0	3.1	-3.0		0	3.3	6.6	
STANDBY	0	3.3	0		0	1.9	0		0	2.1	0.4		0	3.1	-2.9		0	3.3	6.6	

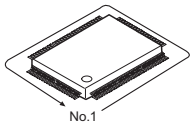
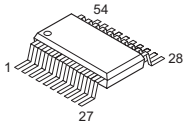
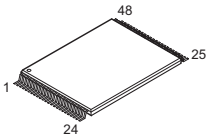
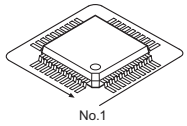
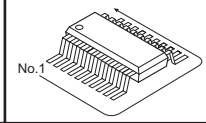
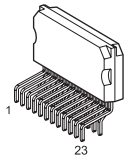
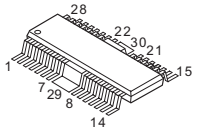
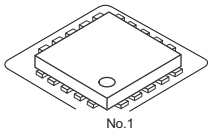
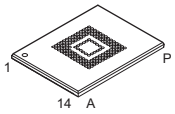
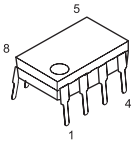
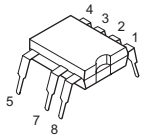
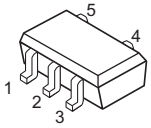
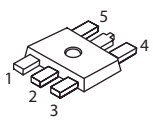
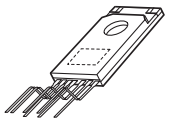
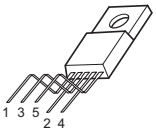
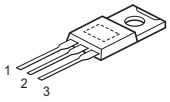
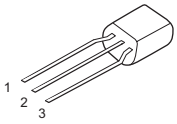
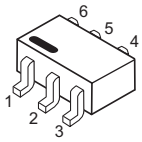
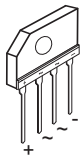
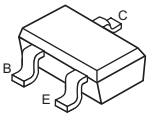
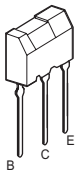
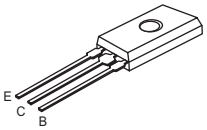
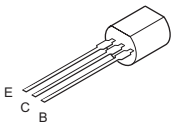
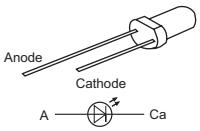
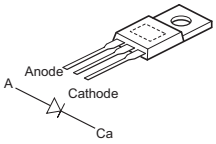
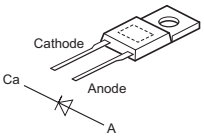
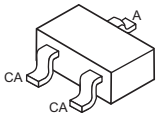
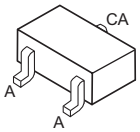
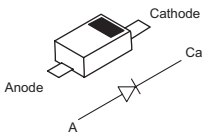
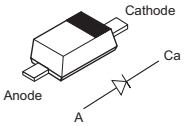
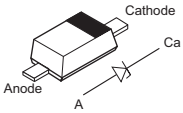
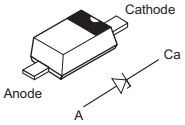
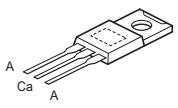
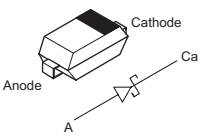
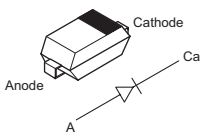
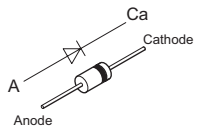
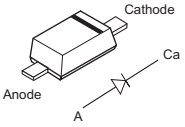
REF NO.	QR5810				QR5811				QR5812											
MODE	E	C	B		E	C	B		E	C	B									
POWER ON	0	0.1	3.1		0	5.2	0		5.2	-34.5	5.2									
STANDBY	0	0.1	3.1		0	5.2	0		5.2	-34.6	5.2									

SA-AKX32PH/PN SMPS P.C.B.

12.12. Waveform Table

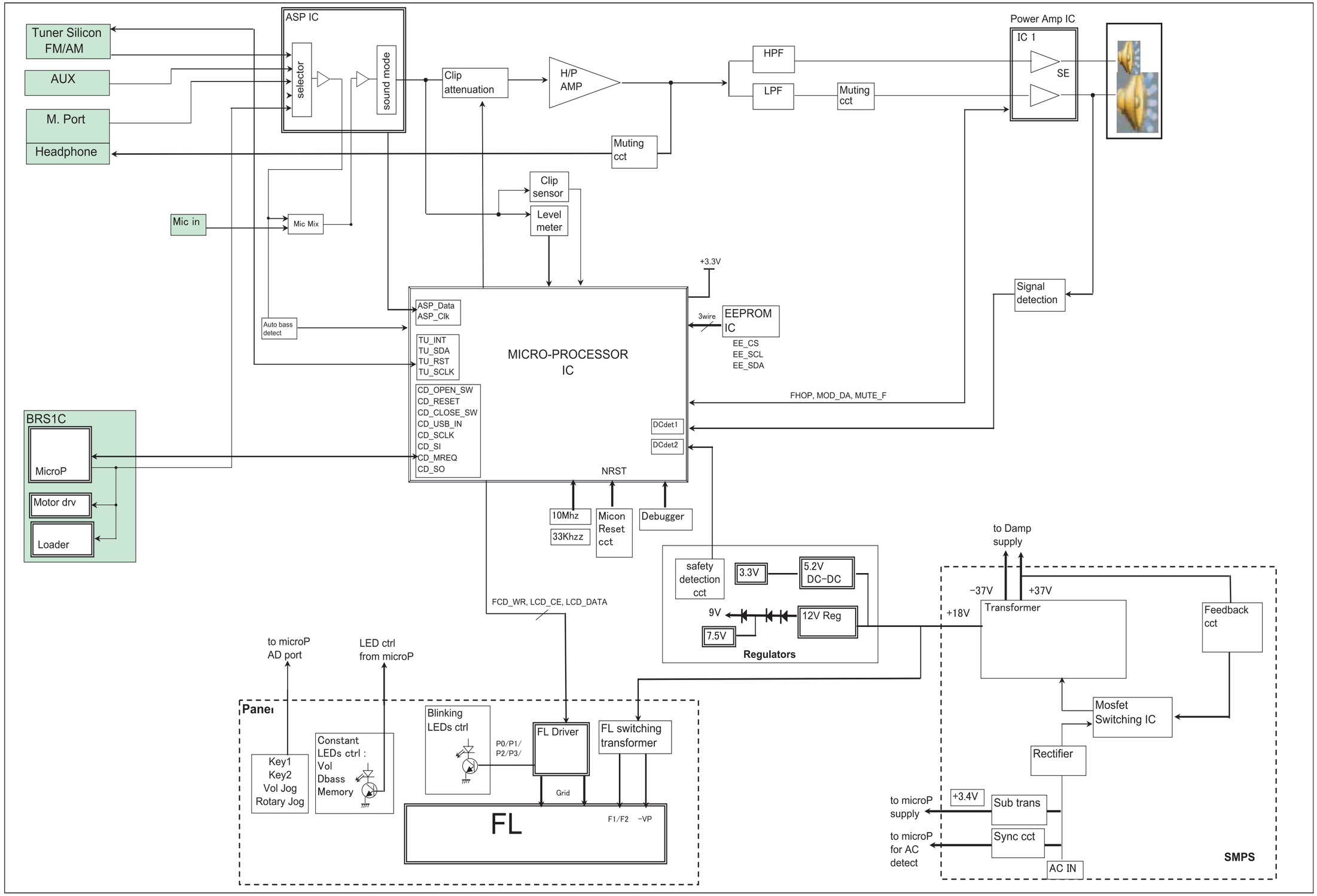
WF No. IC52-2,13,14 (TUNER)  0.1Vp-p(200usec/div)	WF No. IC2000-2,38 (PLAY)  4Vp-p(200usec/div)	WF No. IC2000-3,37 (TUNER)  0.2Vp-p(200usec/div)	WF No. IC2000-4,36 (PLAY)  1.3Vp-p(200usec/div)
WF No. IC2000-17,22 (PLAY)  2Vp-p(200usec/div)	WF No. IC2000-44,47 (PLAY)  2.4Vp-p(200usec/div)	WF No. IC2003-12 (PLAY)  3.6Vp-p(50nsec/div)	WF No. IC2003-13 (PLAY)  2.2Vp-p(50nsec/div)
WF No. IC2003-15 (PLAY)  1.4Vp-p(5usec/div)	WF No. IC2003-16 (PLAY)  2.8Vp-p(5usec/div)	WF No. IC5900-2,21 (PLAY)  1.9Vp-p(200usec/div)	WF No. IC5900-10,14 (PLAY)  100Vp-p(1usec/div)
WF No. IC6000-5 (PLAY)  1.5Vp-p(1usec/div)			

13 Illustration of ICs, Transistor and Diode

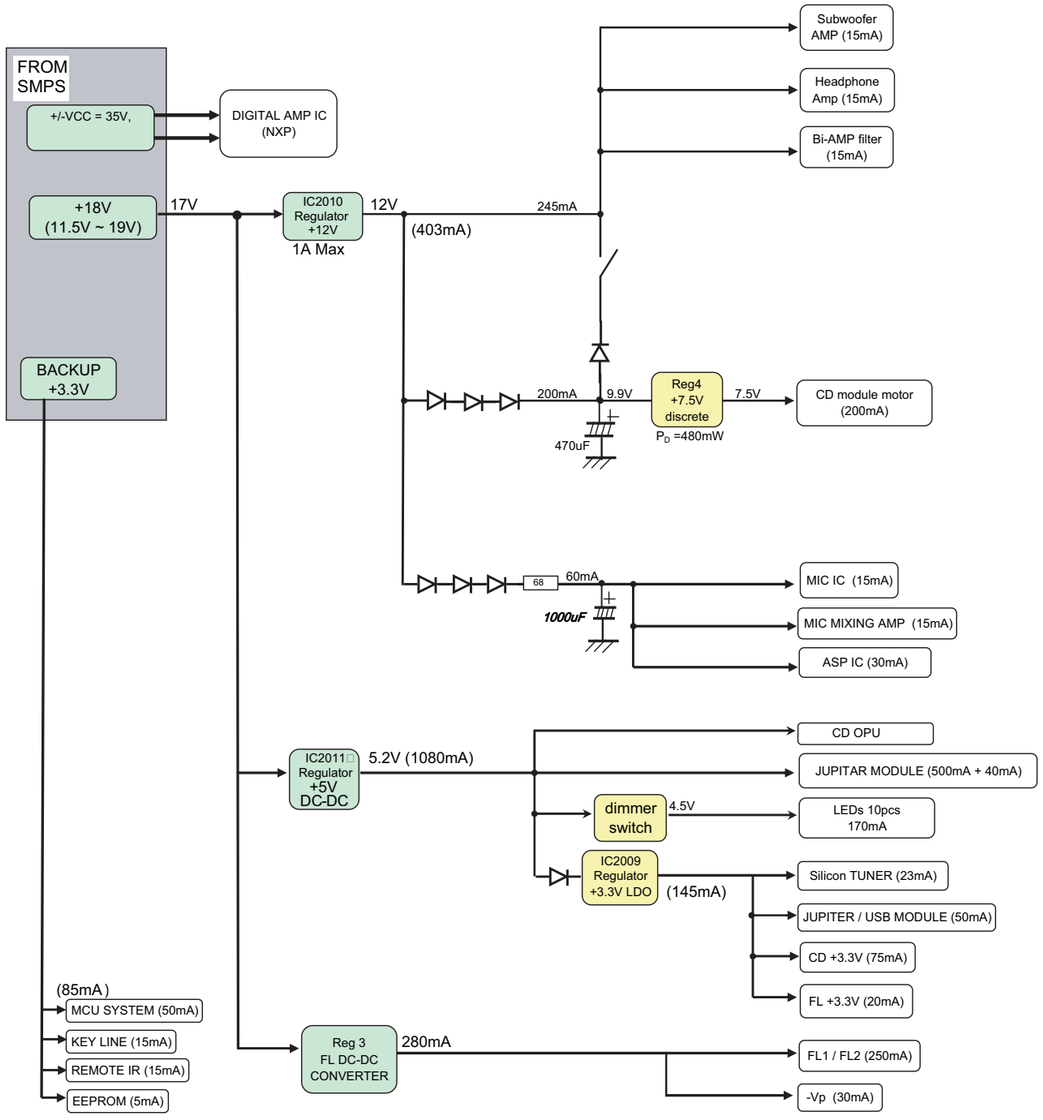
RFKWMAKX32M0 (100P) 	C3ABQY000058 (64P) C0ABBA000159 (8P) 	RFKWFAKX32J0 (48P) 		MN2WS0042NA (216P) C0HBB0000057 (44P) C1AB00003256 (52P) MN6627553PA (80P)	C0ABBB000230 (8P) C3EBFY000006 (8P) C0FBAK000026 (16P) C0FBBY000027 (16P) 
C1BA00000497 (23P) 	C0GBY0000117 	C1AB00003202 (20P) 	C3FBXY000026 	C0AABB000125 (8P) 	MIP2F20MSSCF (8P) 
C0DBZHE00026 	C0DBZYY00293 	C5HACYY00004 (7P) C5HACYY00005 (7P) 	C0DAAYG00001 (5P) 	C0CAAKG00046 	C0DABFC00002 C0DAEMZ00001 
B1GFGCAA0001 	B0FBAR000043 	B1ABEB000002 B1ABCF000176 B1ABGC000001 	B1ABGC000005 B1ADCE000012 B1ADCF000001 B1GBCFGN0016 B1GBCFJJ0051 B1GBCFLL0037 B1GDCFGA0018 B1GDCFJJ0047 B1ABGC000001 B1ABGC000005	B1BABK000001 	B1BABG000007 B1BACD000018 
B1AAJC000019 B1ACKD000006 	B3AAA0001031 	B0ZAZ0000052 	B0HFRJ000012 	B0ADCJ000020 	B1GBCFJN0038 
B0ECET000002 	 B0ACCK000012 B0ACCK000005 B0JCCD000002 B0JCMD000022		B0BC018A0267 B0BC5R6A0266 B0BC8R100004 		B0BC010A0007 B0BC019A0007 B0BC035A0007 B0BC2R4A0006 B0BC6R100010 B0BC9R000008
B0ABSM000008 	B0JCPD000025 	B0ECKM000016 B0HCSP000001 		B0EAKM000117 B0EAMM000057 B0HAMP000094 B0JAME000114	DZ2J24000L DZ2J033M0L DZ2J043M0L 

14 Simplified Block Diagram

14.1. Overall Simplified Block Diagram



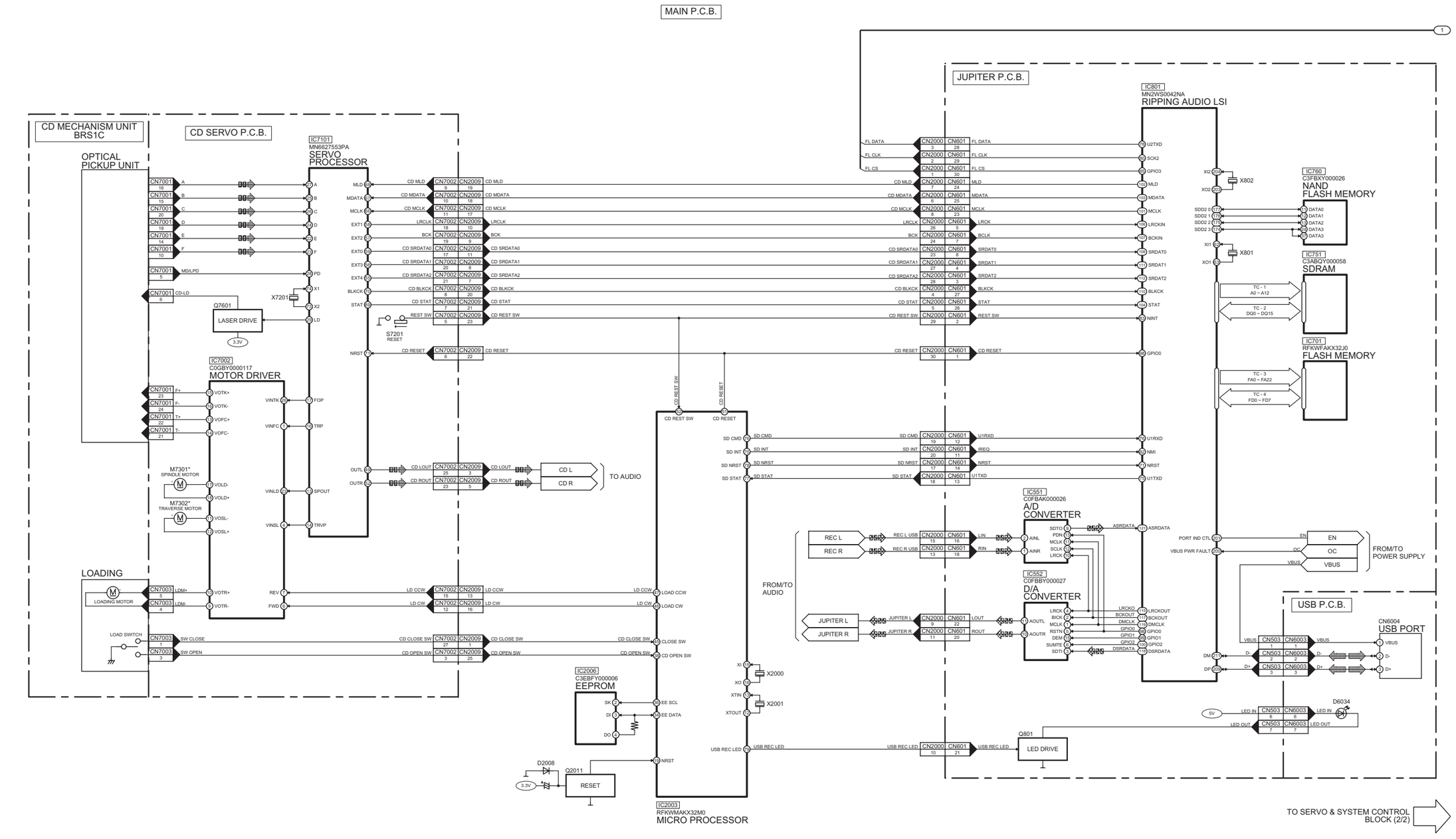
14.2. D-Amp Block Diagram



15 Block Diagram

15.1. Servo & System Control

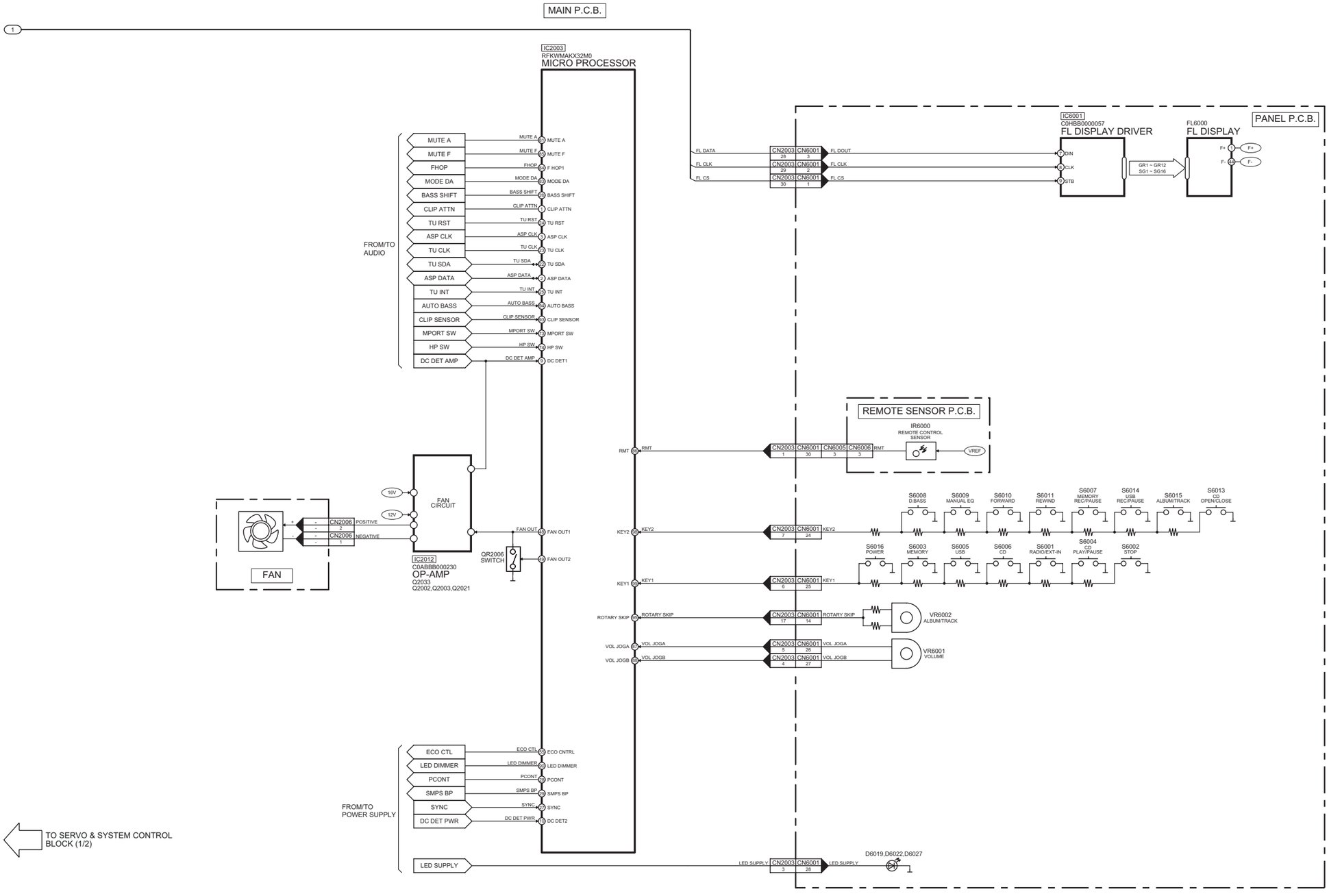
: CD AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX32PH/PN SERVO & SYSTEM CONTROL (1/2) BLOCK DIAGRAM

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



SA-AKX32PH/PN SERVO & SYSTEM CONTROL (2/2) BLOCK DIAGRAM

15.2. IC Terminal Chart

TC	IC751 SDRAM		SIGNAL NAME	IC801 RIPPING AUDIO LSI	
	PORT NAME	PIN NO		PIN NO	PORT NAME
1	A0	23	A0	5	SDRA0
	A1	24	A1	4	SDRA1
	A2	25	A2	3	SDRA2
	A3	26	A3	2	SDRA3
	A4	29	A4	7	SDRA4
	A5	30	A5	8	SDRA5
	A6	31	A6	9	SDRA6
	A7	32	A7	10	SDRA7
	A8	33	A8	15	SDRA8
	A9	34	A9	16	SDRA9
	A10	22	A10	11	SDRA10
	A11	35	A11	17	SDRA11
	A12	36	A12	18	SDRA12

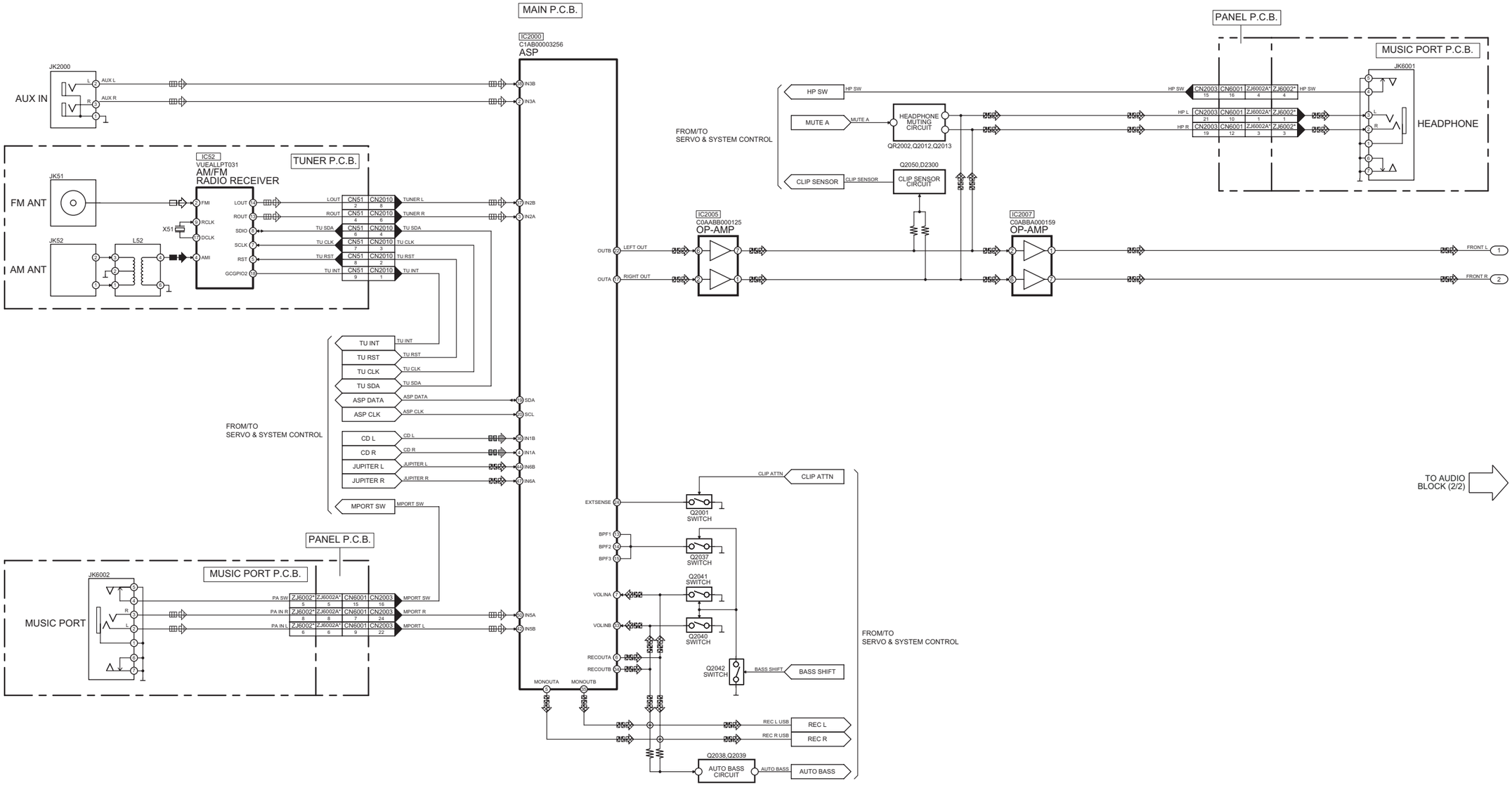
TC	IC751 SDRAM		SIGNAL NAME	IC801 RIPPING AUDIO LSI	
	PORT NAME	PIN NO		PIN NO	PORT NAME
2	DQ0	2	DQ0	48	SDRD0
	DQ1	4	DQ1	47	SDRD1
	DQ2	5	DQ2	46	SDRD2
	DQ3	7	DQ3	45	SDRD3
	DQ4	8	DQ4	37	SDRD4
	DQ5	10	DQ5	36	SDRD5
	DQ6	11	DQ6	35	SDRD6
	DQ7	13	DQ7	34	SDRD7
	DQ8	42	DQ8	39	SDRD8
	DQ9	44	DQ9	40	SDRD9
	DQ10	45	DQ10	41	SDRD10
	DQ11	47	DQ11	42	SDRD11
	DQ12	48	DQ12	50	SDRD12
	DQ13	50	DQ13	51	SDRD13
	DQ14	51	DQ14	52	SDRD14
	DQ15	53	DQ15	53	SDRD15

TC	IC701 FLASH MEMORY		SIGNAL NAME	IC801 RIPPING AUDIO LSI	
	PORT NAME	PIN NO		PIN NO	PORT NAME
3	DQ15	45	FA0	154	HIR0
	A0	25	FA1	155	HIR1
	A1	24	FA2	156	HIR2
	A2	23	FA3	158	HIB0
	A3	22	FA4	149	NHINT
	A4	21	FA5	165	DACK1
	A5	20	FA6	164	DRQ1
	A6	19	FA7	162	DACK2
	A7	18	FA8	161	DRQ2
	A8	8	FA9	159	GPIO5
	A9	7	FA10	160	GPIO4
	A10	6	FA11	168	RCVCLK
	A11	5	FA12	169	RCVSTART
	A12	4	FA13	170	RCVDATA
	A13	3	FA14	171	RCVWAIT
	A14	2	FA15	138	HID8
	A15	1	FA16	139	HID9
	A16	48	FA17	142	HID10
	A17	17	FA18	143	HID11
	A18	16	FA19	144	HID12
	A19	9	FA20	145	HID13
	A20	10	FA21	147	HID14
	A21	13	FA22	148	HID15

TC	IC701 FLASH MEMORY		SIGNAL NAME	IC801 RIPPING AUDIO LSI	
	PORT NAME	PIN NO		PIN NO	PORT NAME
4	DQ0	29	FD0	128	HID0
	DQ1	31	FD1	129	HID1
	DQ2	33	FD2	130	HID2
	DQ3	35	FD3	132	HID3
	DQ4	38	FD4	133	HID4
	DQ5	40	FD5	135	HID5
	DQ6	42	FD6	136	HID6
	DQ7	44	FD7	137	HID7

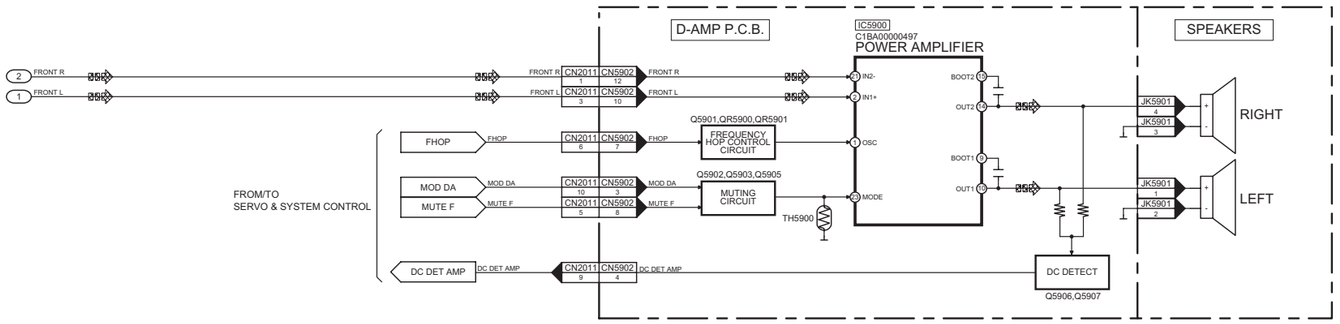
15.3. Audio

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



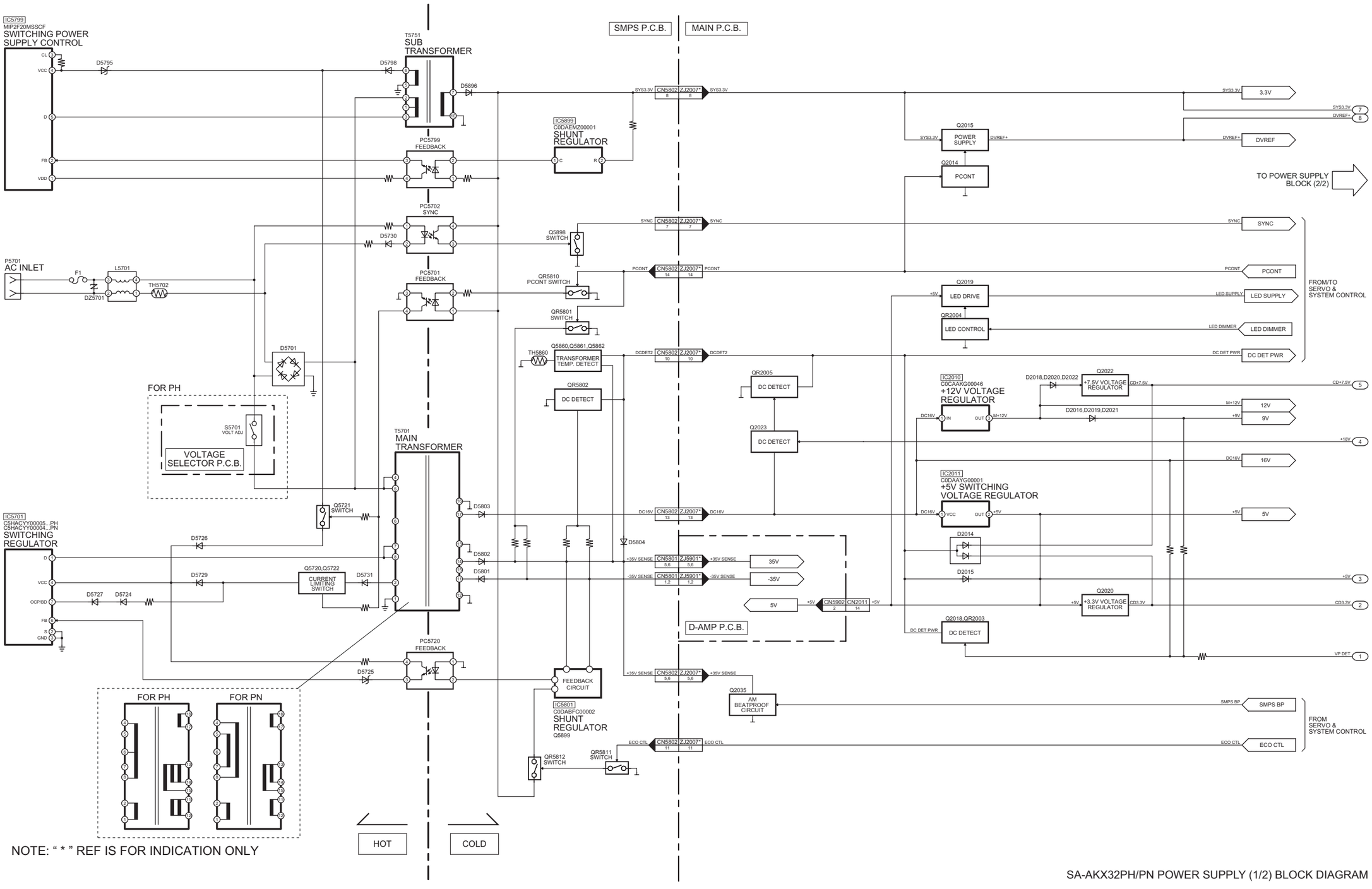
SA-AKX32PH/PN AUDIO (1/2) BLOCK DIAGRAM

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

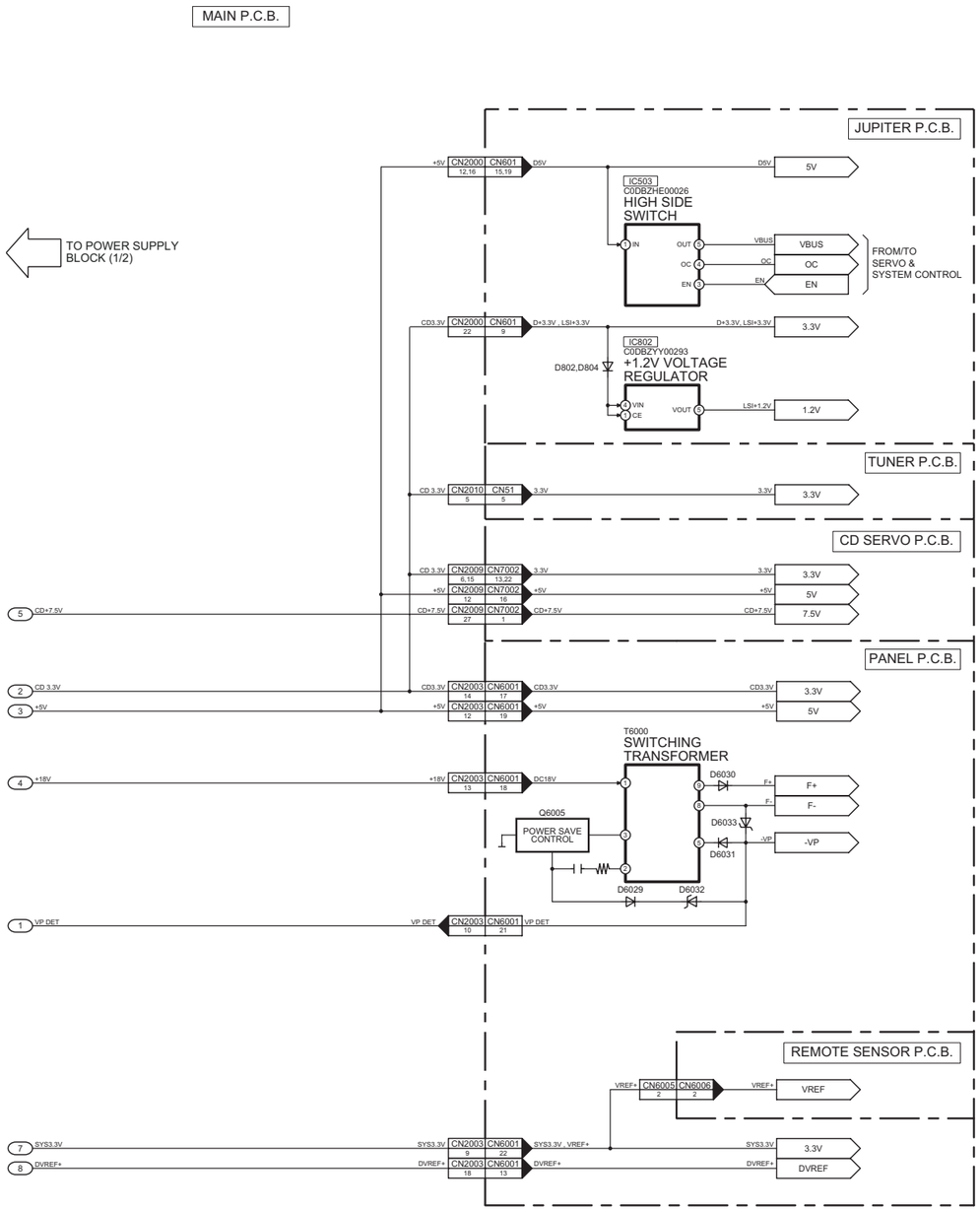


SA-AKX32PH/PN AUDIO (2/2) BLOCK DIAGRAM

15.4. Power Supply

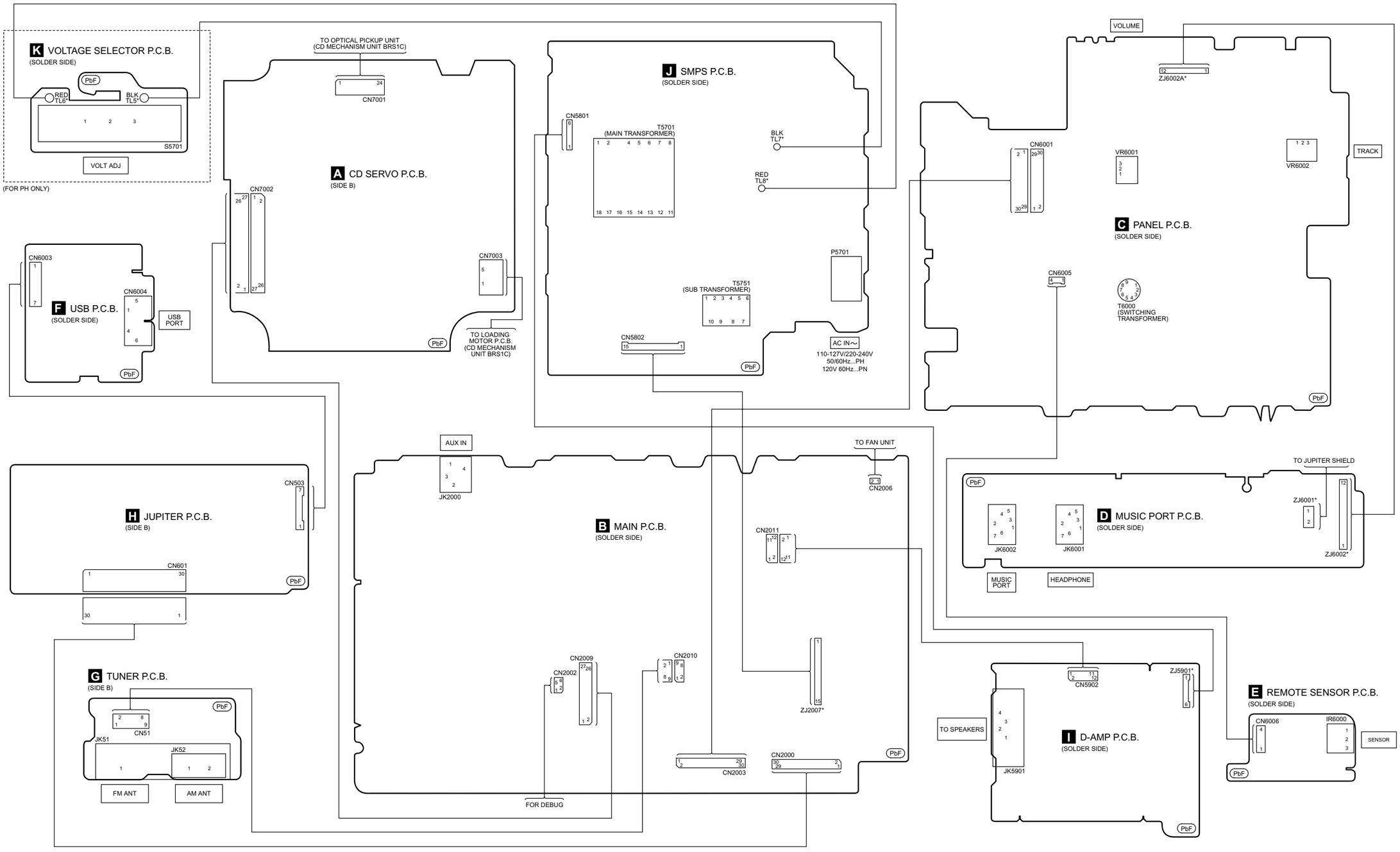


SA-AKX32PH/PN POWER SUPPLY (1/2) BLOCK DIAGRAM



SA-AKX32PH/PN POWER SUPPLY (2/2) BLOCK DIAGRAM

16 Wiring Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX32PH/PN WIRING CONNECTION DIAGRAM

17 Schematic Diagram

17.1. Schematic Diagram Notes

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

Notes:

S5701: Voltage ADJ switch (For PH only).
S6001: Radio/EXT-IN switch.
S6002: Stop (■) switch.
S6003: Memory switch.
S6004: CD Play/Pause (▶ / ▮▮) switch.
S6005: USB switch.
S6006: CD switch.
S6007: Memory REC/PAUSE (●/▮▮) switch.
S6008: D.BASS switch.
S6009: Manual EQ switch.
S6010: Forward (▶▶ / ▶▶\|) switch.
S6011: Rewind (\|◀◀ / ◀◀) switch.
S6013: Open/Close switch (⏏).
S6014: USB REC/PAUSE (●/▮▮) switch.
S6015: Album/Track switch.
S6016: Power 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, C5705, C5708

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

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

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

- *****

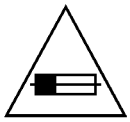
  REF IS FOR INDICATION ONLY.

- Voltage and signal line

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

- For PH only

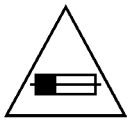
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 T6.3AL 250V FUSE



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

17.2. CD Servo Circuit

SCHEMATIC DIAGRAM - 1

A CD SERVO CIRCUIT

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

TO CD SERVO CIRCUIT (2/2)

IC7101
MN6627553PA
SERVO PROCESSOR

Q7601
B1ADCF000001
LASER DRIVE

S7201
RESET

X7201
H0J1695000039

D7650
B0BC5R6A0266

CN7003
1 SW_CLOSE
2 GND
3 SW_OPEN
4 LDM-
5 LDM+

TO LOADING MOTOR P.C.B. (CD MECHANISM UNIT BRS1C)

CN7002
1 7.5V
2 PGND
3 OPEN_SW SW
4 LOADING
5 REST SW
6 RST
7 STAT
8 BLKCK
9 MLD
10 MDATA
11 MCLK
12 LID_RIGHT/CW
13 LDSW
14 DGND
15 LID_LEFT/CCW
16 5V
17 SRDATA(ST IN)/EXT0
18 LRCK(ST REQ)/EXT1
19 BCL(ST CLK)
20 SRDATA1/EXT3
21 SRDATA2/EXT4
22 3.3V
23 RCHOUT
24 AGND
25 LCHOUT
26 AGND
27 CLOSE_SW

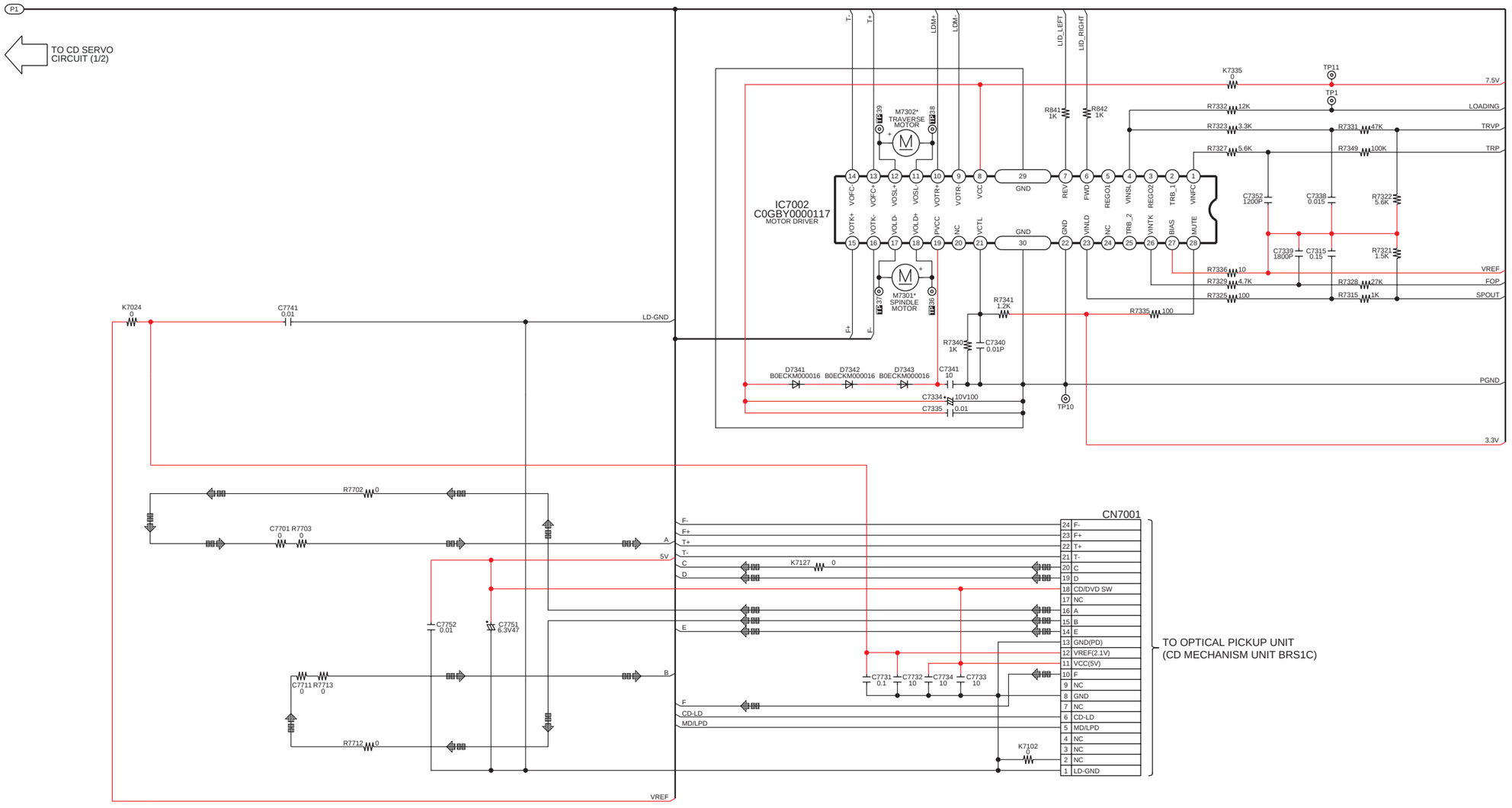
TO **B** MAIN CIRCUIT (CN2009) IN SCHEMATIC DIAGRAM - 10

1/2 2/2 SA-AKX32PH/PN CD SERVO CIRCUIT

SCHEMATIC DIAGRAM - 2

A CD SERVO CIRCUIT

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



NOTE: “ * ” REF IS FOR INDICATION ONLY

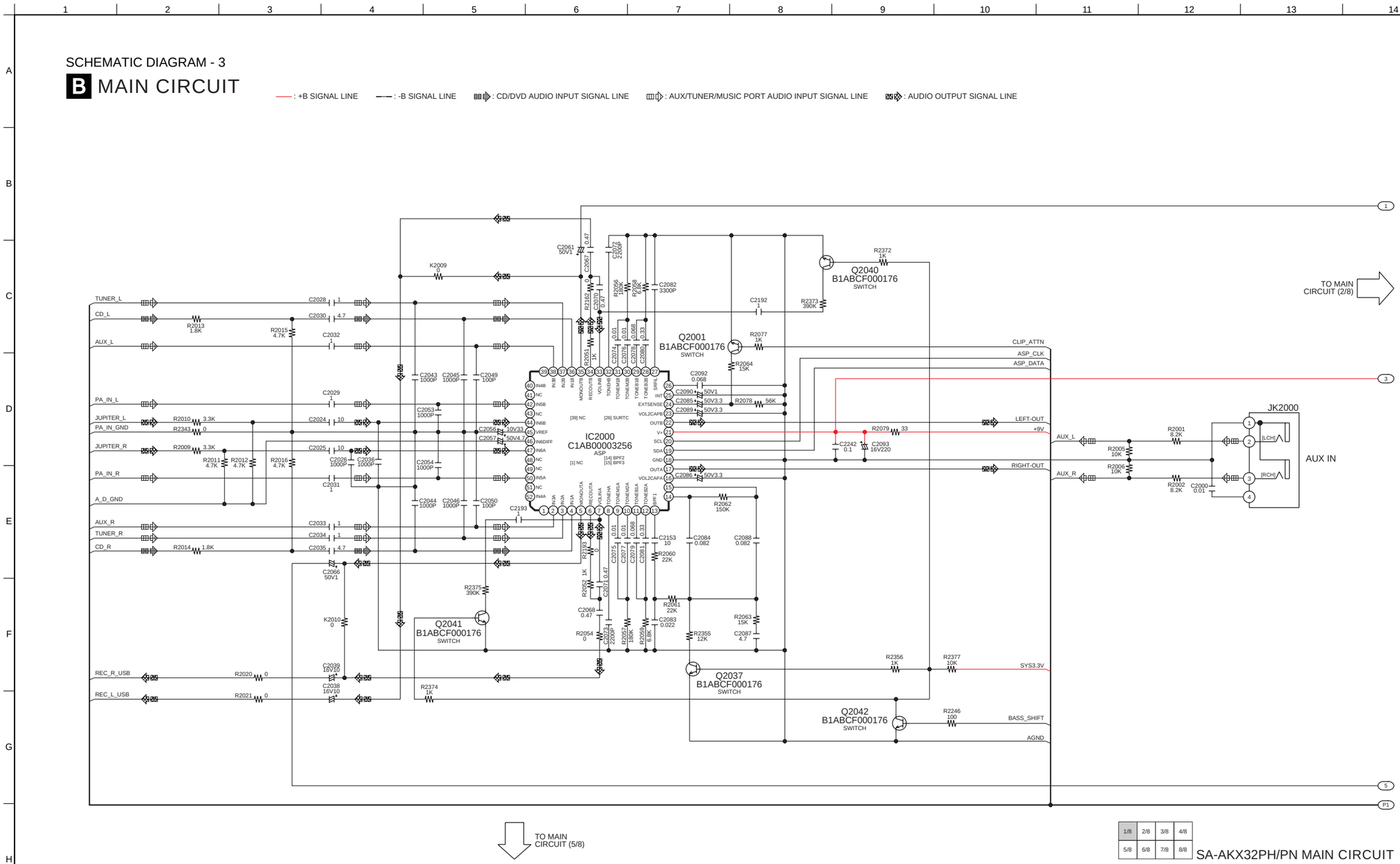
1/2 2/2 SA-AKX32PH/PN CD SERVO CIRCUIT

17.3. Main Circuit

SCHEMATIC DIAGRAM - 3

B MAIN CIRCUIT

—— : +B SIGNAL LINE —— : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



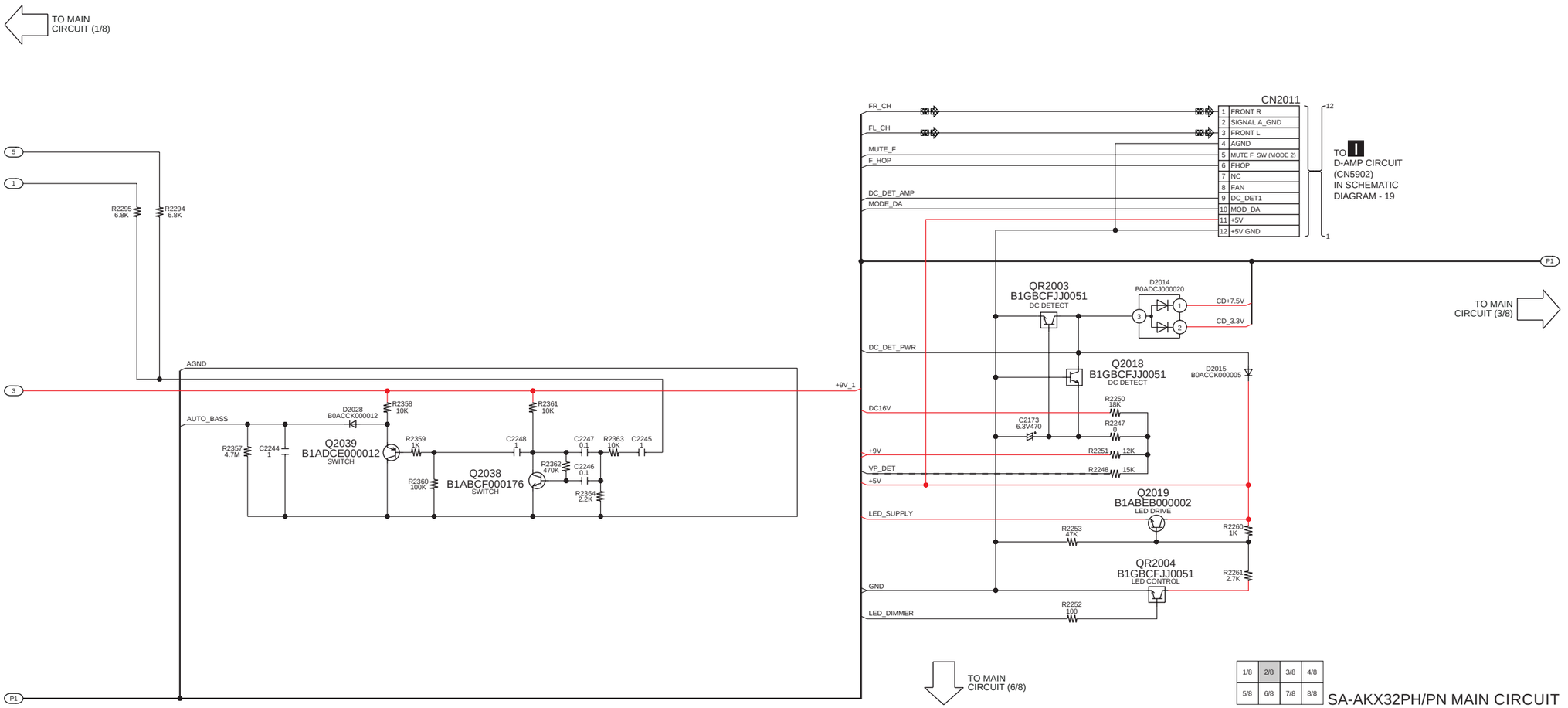
1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

SA-AKX32PH/PN MAIN CIRCUIT

SCHEMATIC DIAGRAM - 4

B MAIN CIRCUIT

—— : +B SIGNAL LINE —— : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



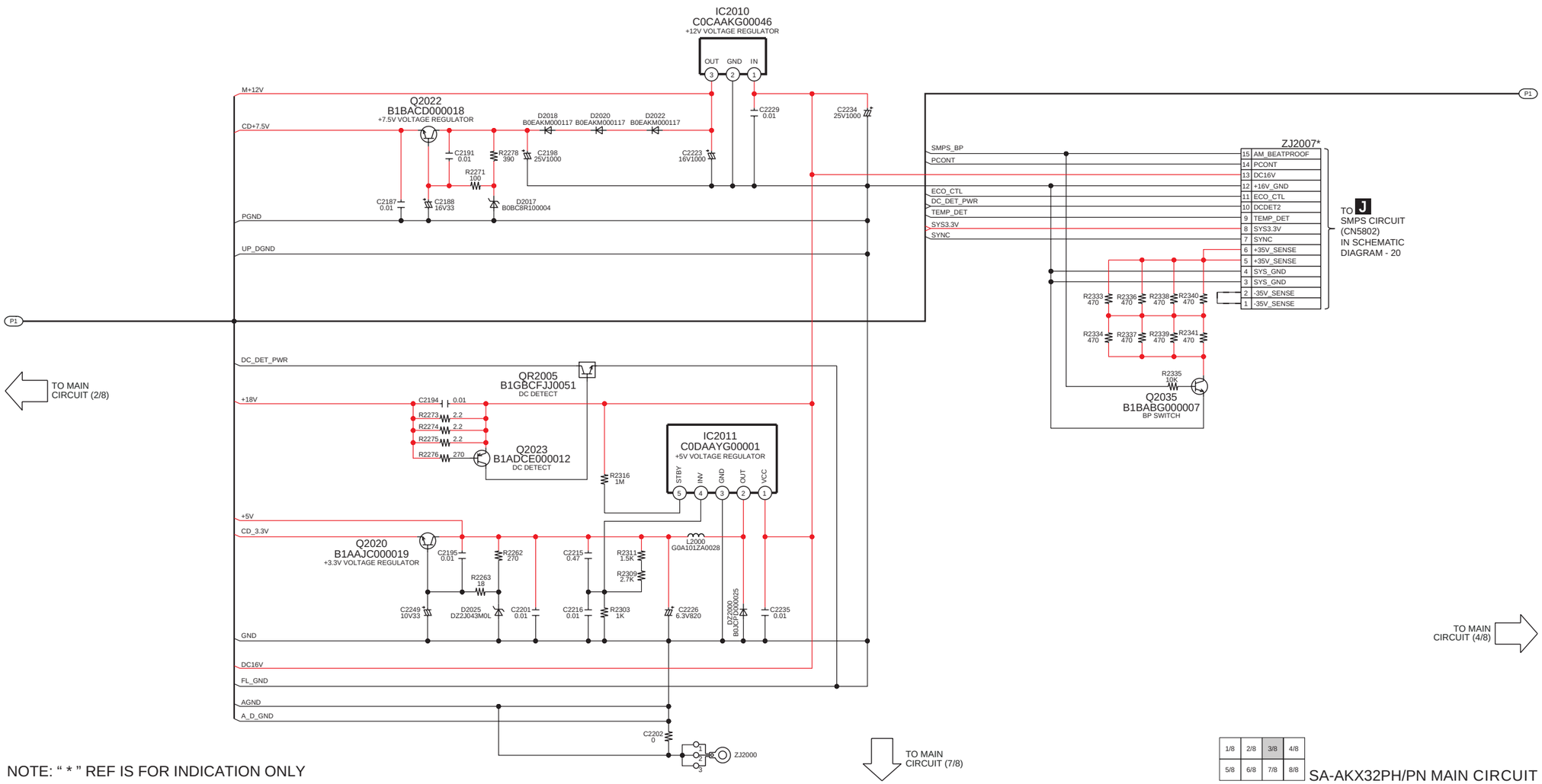
1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

SA-AKX32PH/PN MAIN CIRCUIT

SCHEMATIC DIAGRAM - 5

B MAIN CIRCUIT

—— : +B SIGNAL LINE —— : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

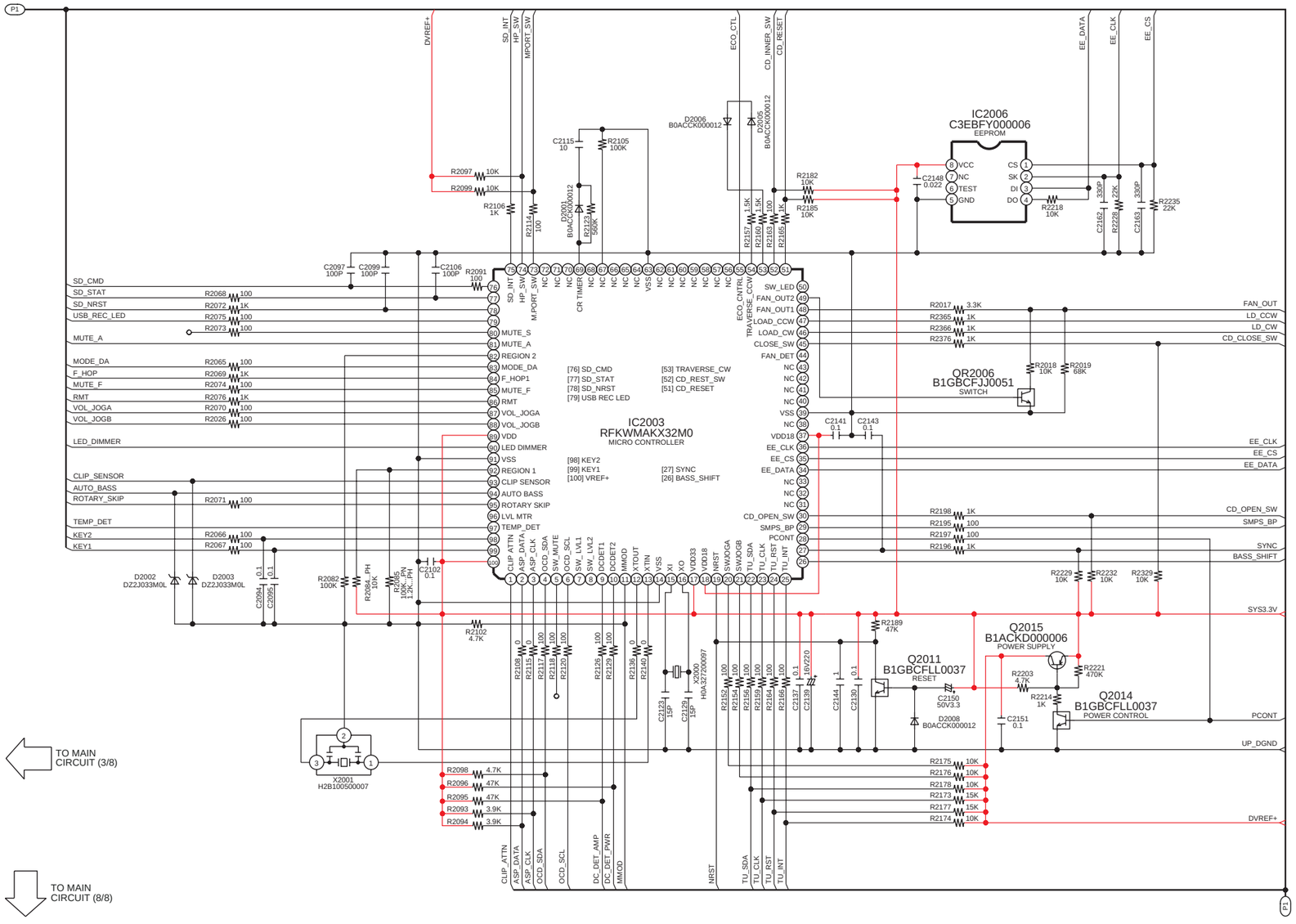
1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

SA-AKX32PH/PN MAIN CIRCUIT

SCHEMATIC DIAGRAM - 6

B MAIN CIRCUIT

—— : +B SIGNAL LINE —— : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



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

SA-AKX32PH/PN MAIN CIRCUIT

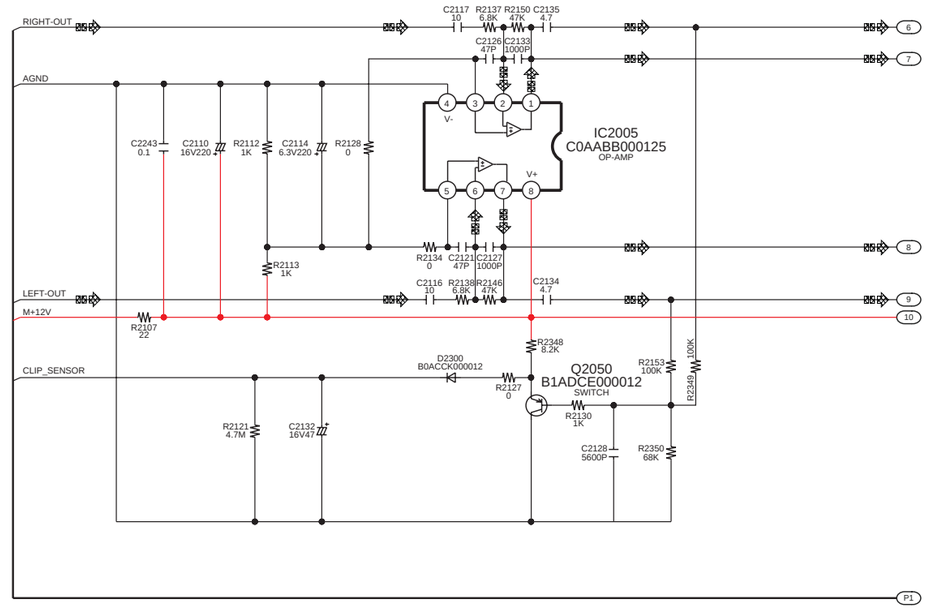
SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT

—— : +B SIGNAL LINE —•— : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE

TO MAIN CIRCUIT (1/8)

TO MAIN CIRCUIT (6/8)



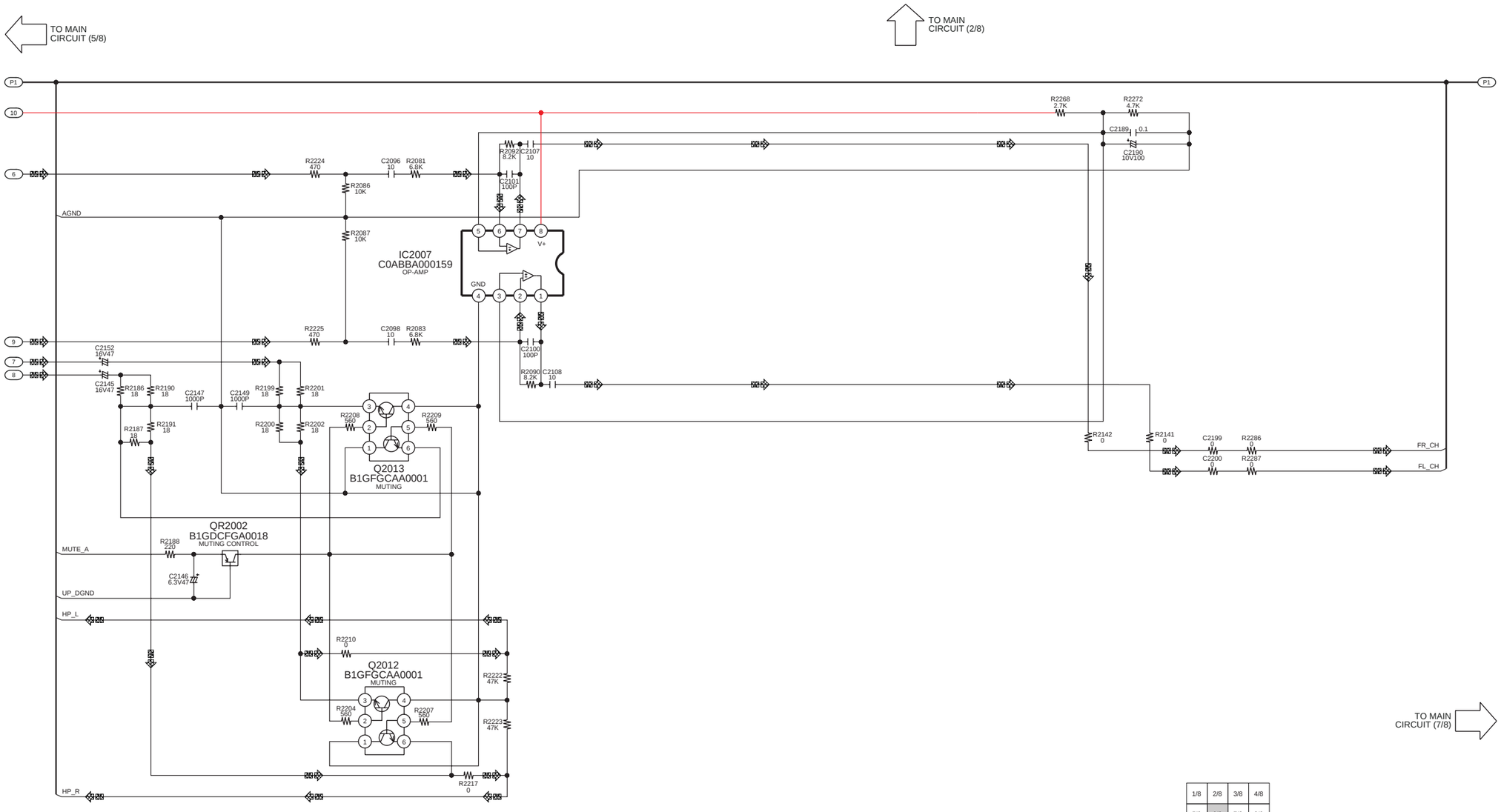
1/8	2/8	3/8	4/8
5/8	6/8	7/8	8/8

SA-AKX32PH/PN MAIN CIRCUIT

SCHEMATIC DIAGRAM - 8

B MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



TO MAIN CIRCUIT (7/8)

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

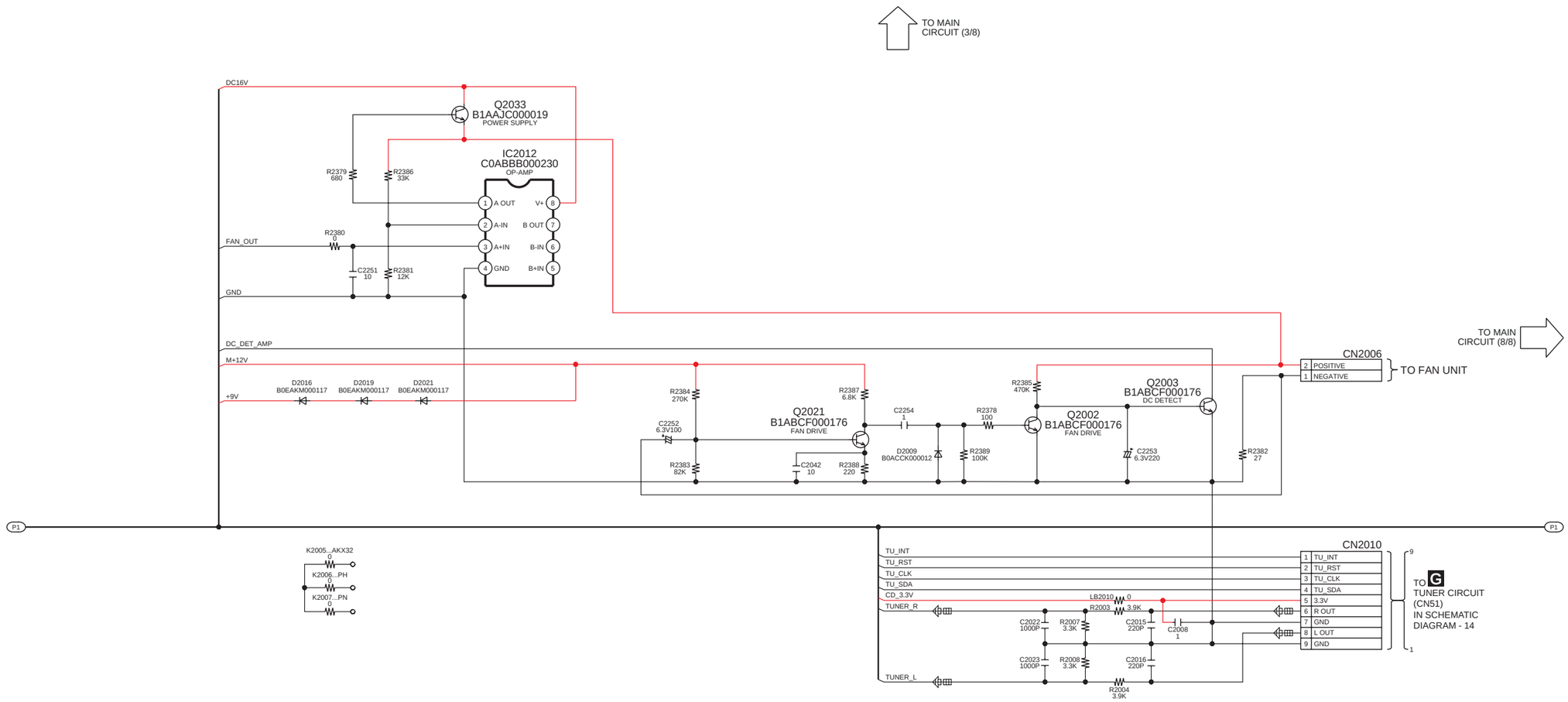
SA-AKX32PH/PN MAIN CIRCUIT

15 16 17 18 19 20 21 22 23 24 25 26 27 28

SCHEMATIC DIAGRAM - 9

B MAIN CIRCUIT

—— : +B SIGNAL LINE —— : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



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

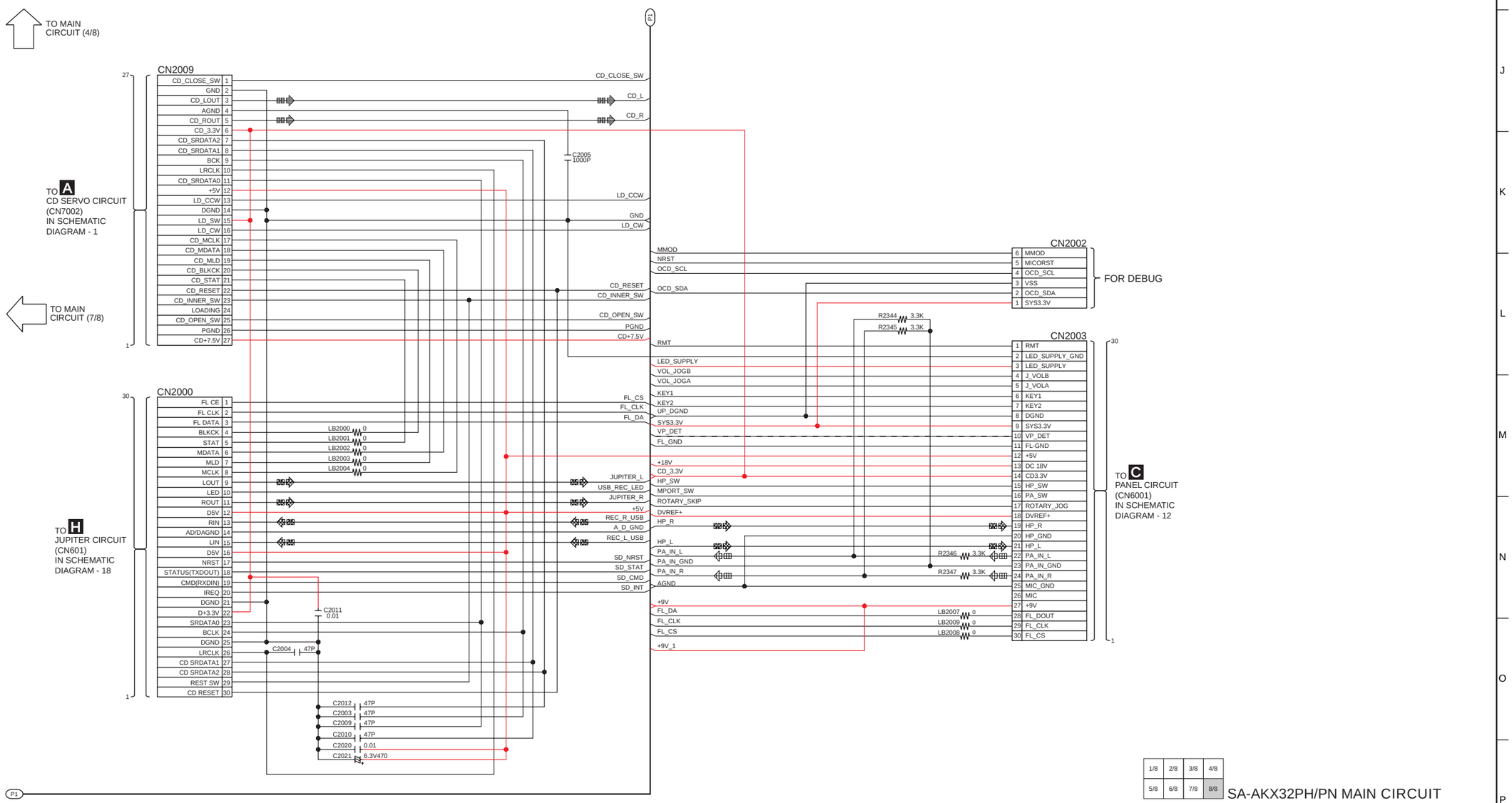
SA-AKX32PH/PN MAIN CIRCUIT

29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42

SCHEMATIC DIAGRAM - 10

B MAIN CIRCUIT

: +B SIGNAL LINE : -B SIGNAL LINE : CD/DVD AUDIO INPUT SIGNAL LINE : AUX/TUNER/MUSIC PORT AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE



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

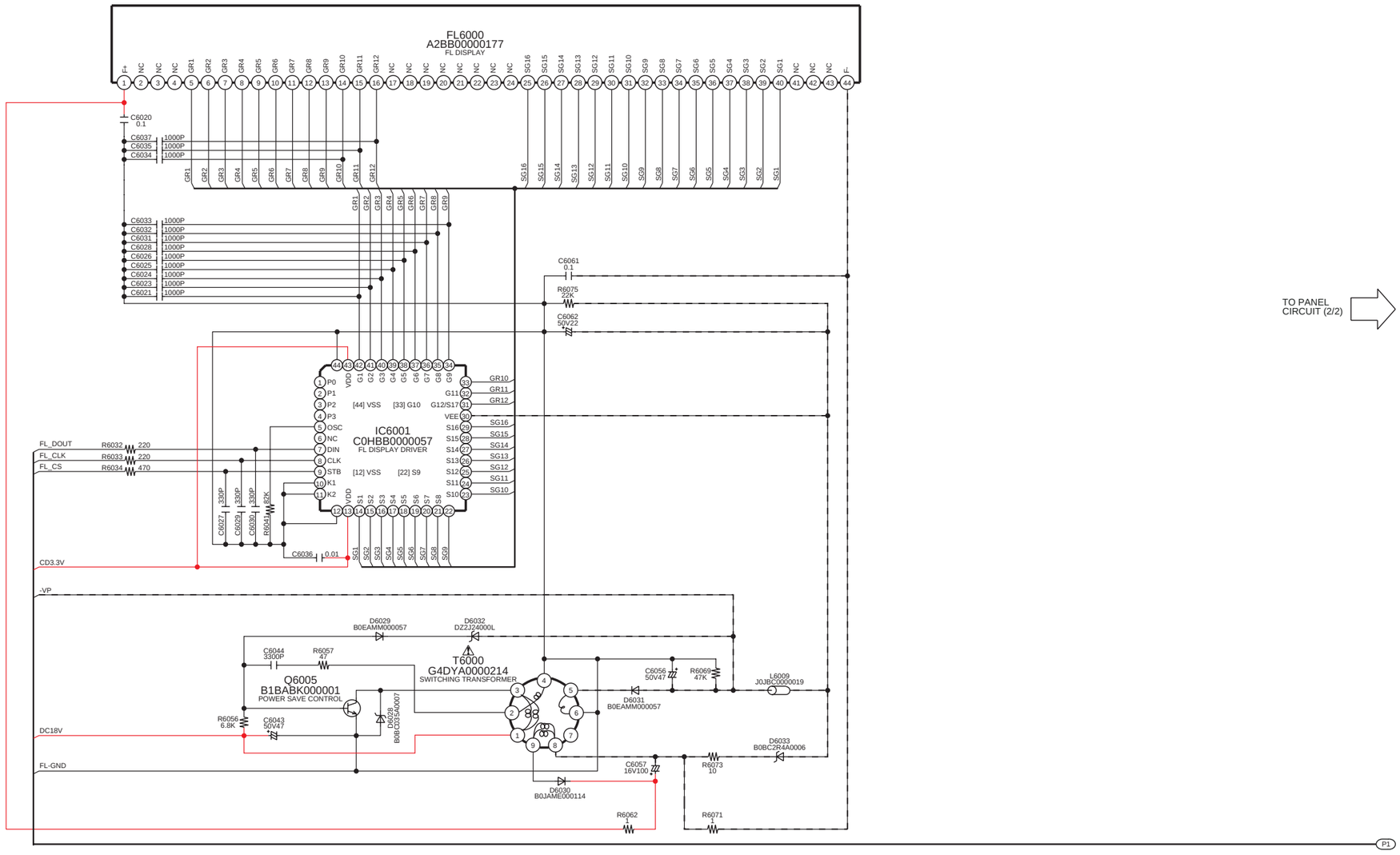
SA-AKX32PH/PN MAIN CIRCUIT

17.4. Panel Circuit

SCHEMATIC DIAGRAM - 11

C PANEL CIRCUIT

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

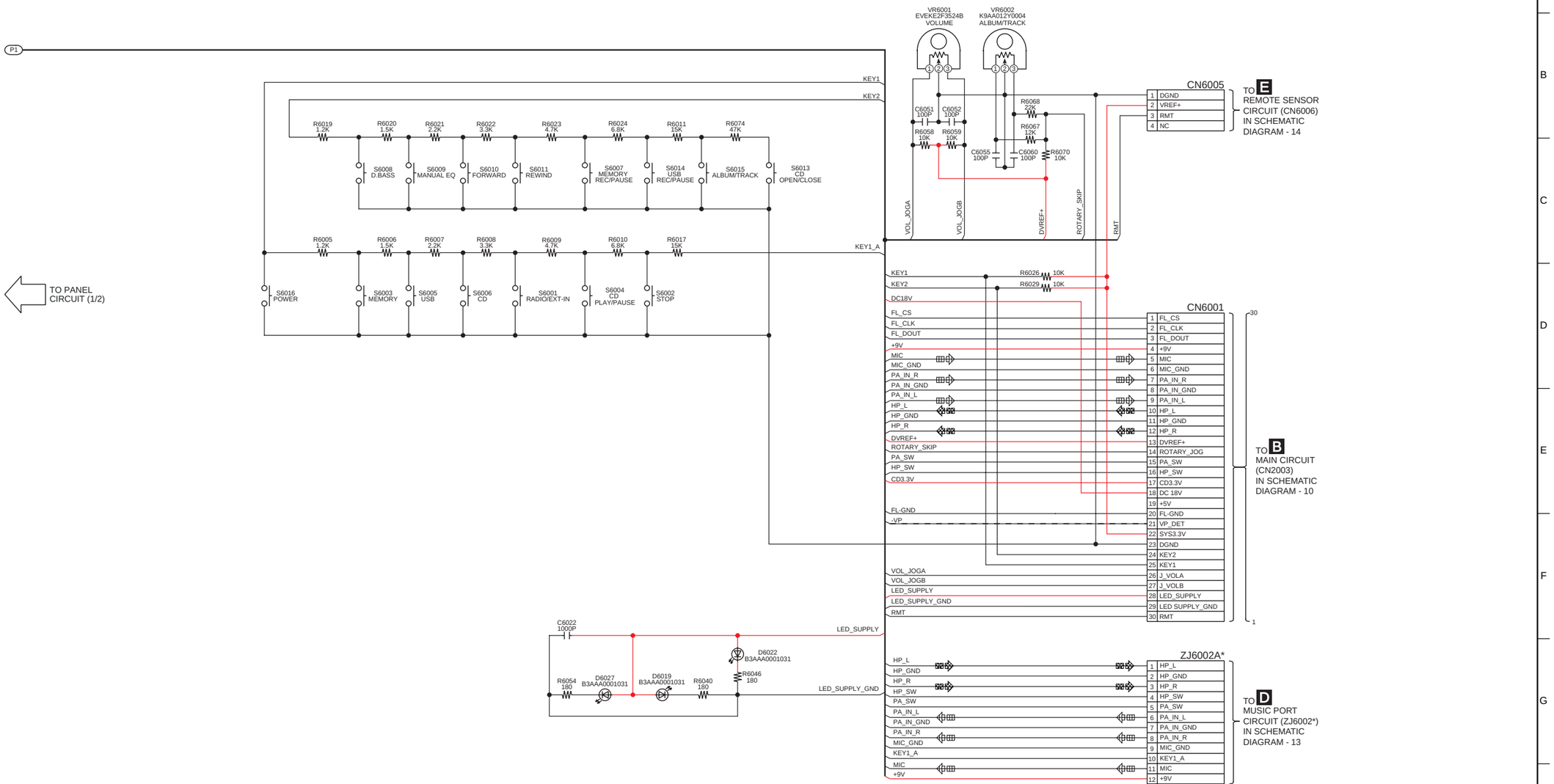


1/2 2/2 SA-AKX32PH/PN PANEL CIRCUIT

SCHEMATIC DIAGRAM - 12

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

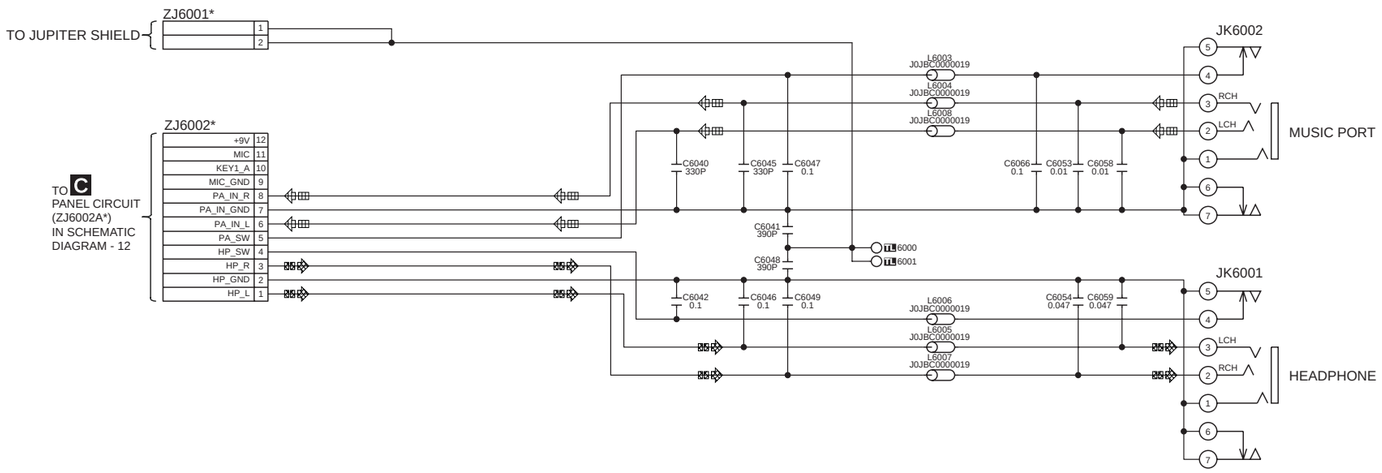
1/2 2/2 SA-AKX32PH/PN PANEL CIRCUIT

17.5. Music Port Circuit

SCHEMATIC DIAGRAM - 13

D MUSIC PORT CIRCUIT

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



NOTE: " * " REF IS FOR INDICATION ONLY

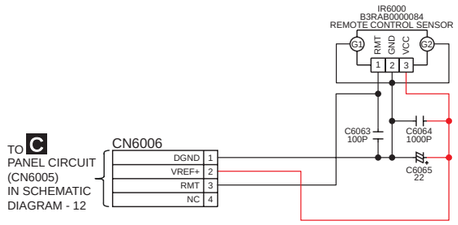
SA-AKX32PH/PN MUSIC PORT CIRCUIT

17.6. Remote Sensor, USB & Tuner Circuit

SCHEMATIC DIAGRAM - 14

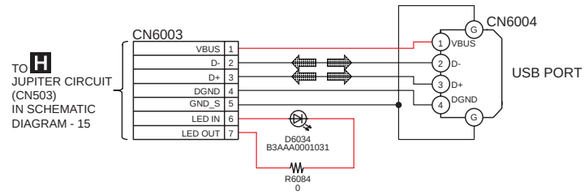
E REMOTE SENSOR CIRCUIT

: +B SIGNAL LINE



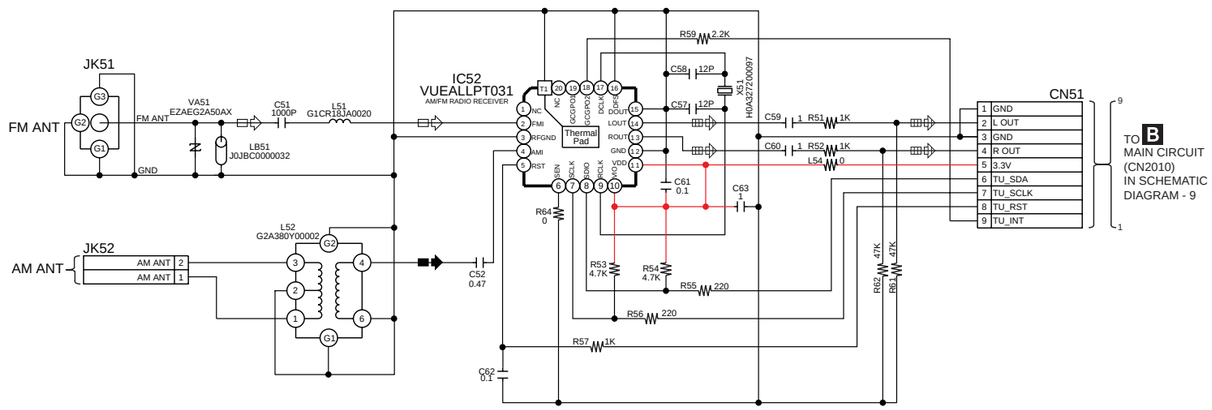
F USB CIRCUIT

: +B SIGNAL LINE : USB SIGNAL LINE



G TUNER CIRCUIT

: +B SIGNAL LINE : TUNER AUDIO INPUT SIGNAL LINE : AM SIGNAL LINE : FM SIGNAL LINE



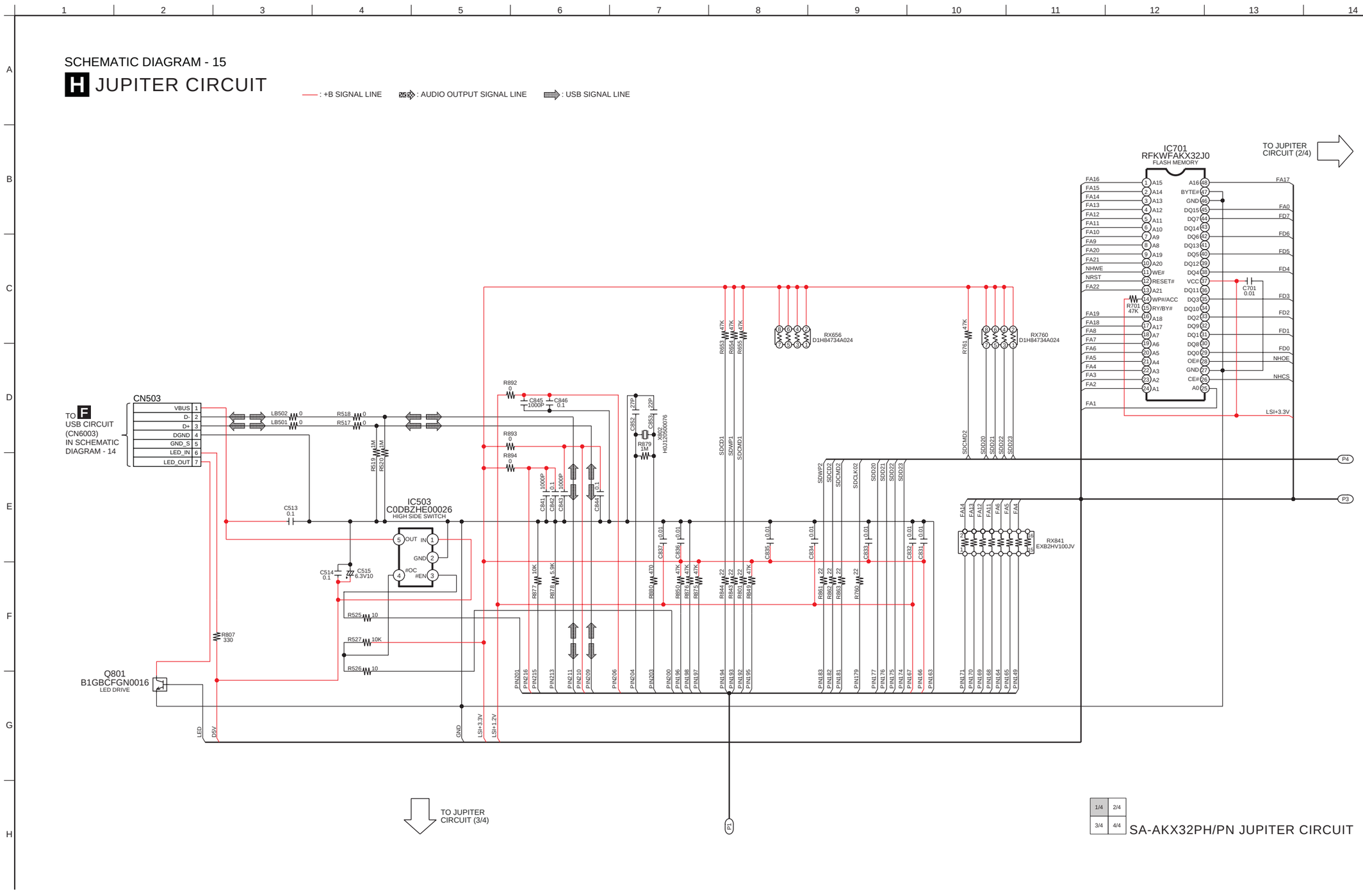
SA-AKX32PH/PN REMOTE SENSOR / USB / TUNER CIRCUIT

17.7. Jupiter Circuit

SCHEMATIC DIAGRAM - 15

H JUPITER CIRCUIT

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



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

SA-AKX32PH/PN JUPITER CIRCUIT

SCHEMATIC DIAGRAM - 16

H JUPITER CIRCUIT

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

TO JUPITER CIRCUIT (1/4)

P3

ASRDATA
GPIO0
GPIO1
DMCLK
BCKOUT
DSRDATA
LRCKO
GPIO2

RX551 D1H84734A024

IC551
C0FBAK000026
A/D CONVERTER
SDTO LRCK MCLK SCLK PDN DIF CKS2 CKS0
DGND VD(3.3V) VA(5V) ADGND VCOM CKS1 AINL AINR

IC552
C0FBBY000027
D/A CONVERTER
MCLK BICK SDTI LRCK RSTN SMUTE ACKS DIF0
DZF DEM VDD(5V) DAGND VCOM AOUTL AOUTR DIF1

L551 J0JHC0000045
L553 J0JHC0000045
L552 J0JHC0000045

D+3.3V
D5V_2
ADGND
GND
LIN
RIN
ROUT
DAGND
LOUT
LSI+3.3V

RX761 D1H82204A024

IC760
C3FBXY000026
NAND FLASH MEMORY
[130] RFU
[43] RFU
[87] RFU

P4
P3
AA

TO JUPITER CIRCUIT (4/4)

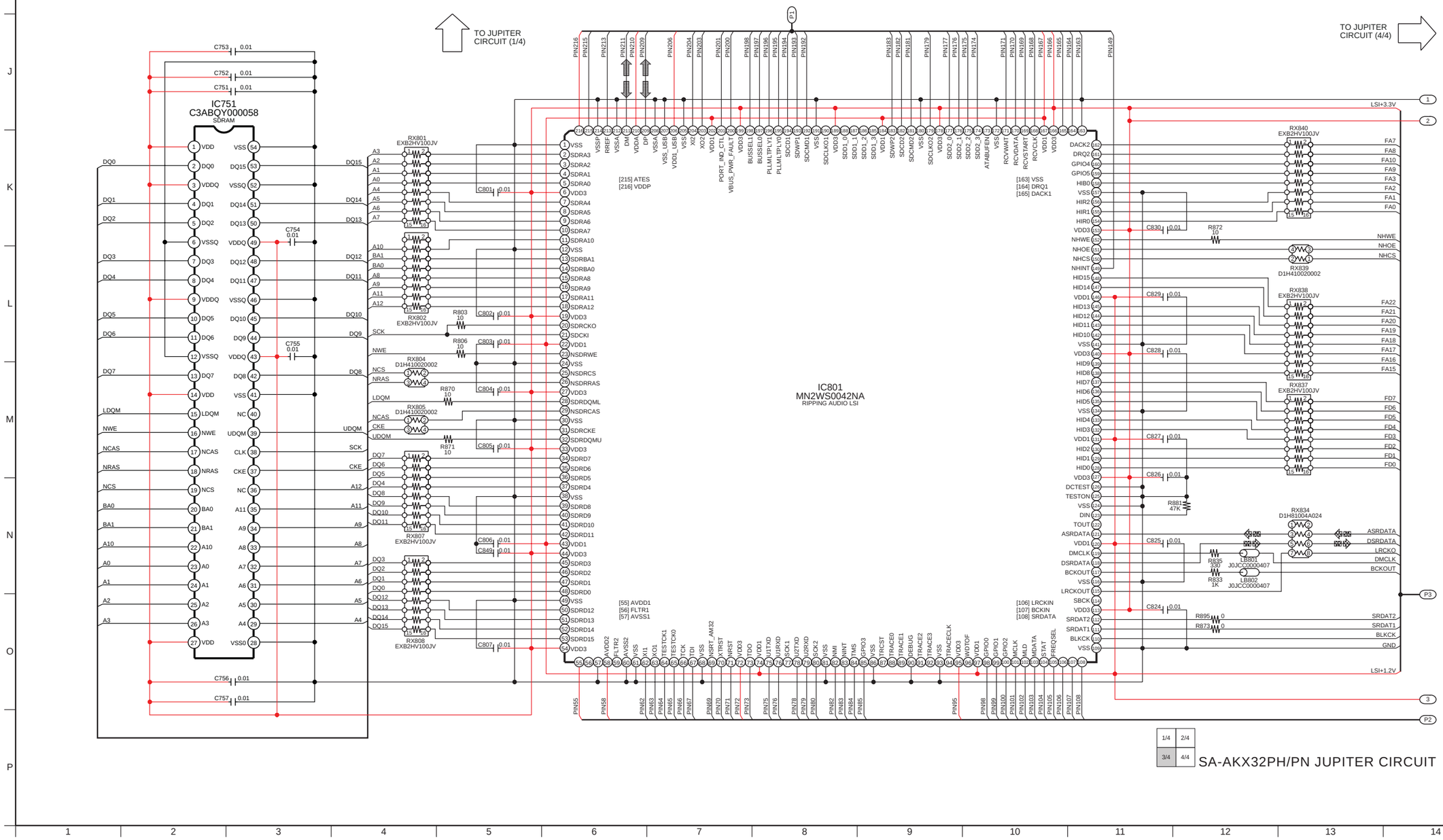
1/4 2/4 3/4 4/4

SA-AKX32PH/PN JUPITER CIRCUIT

SCHEMATIC DIAGRAM - 17

H JUPITER CIRCUIT

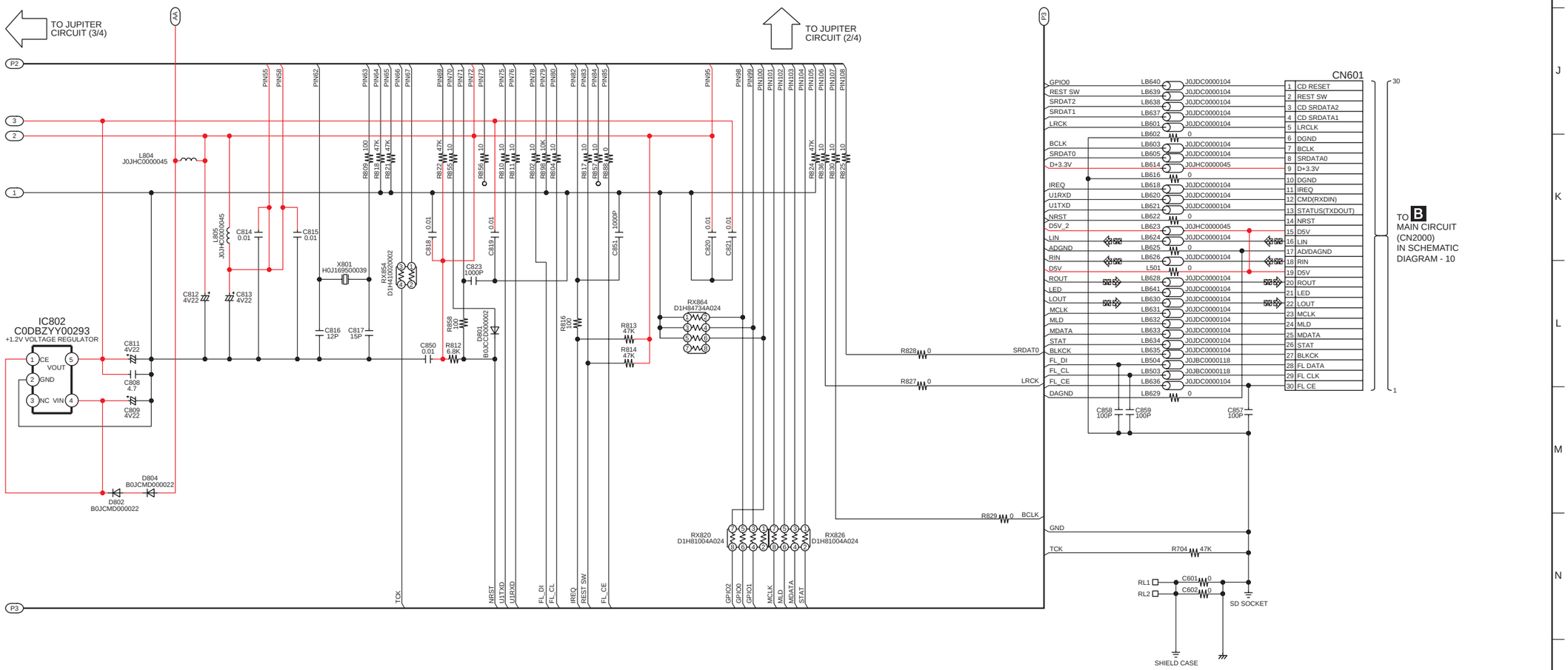
—— : +B SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



SCHEMATIC DIAGRAM - 18

H JUPITER CIRCUIT

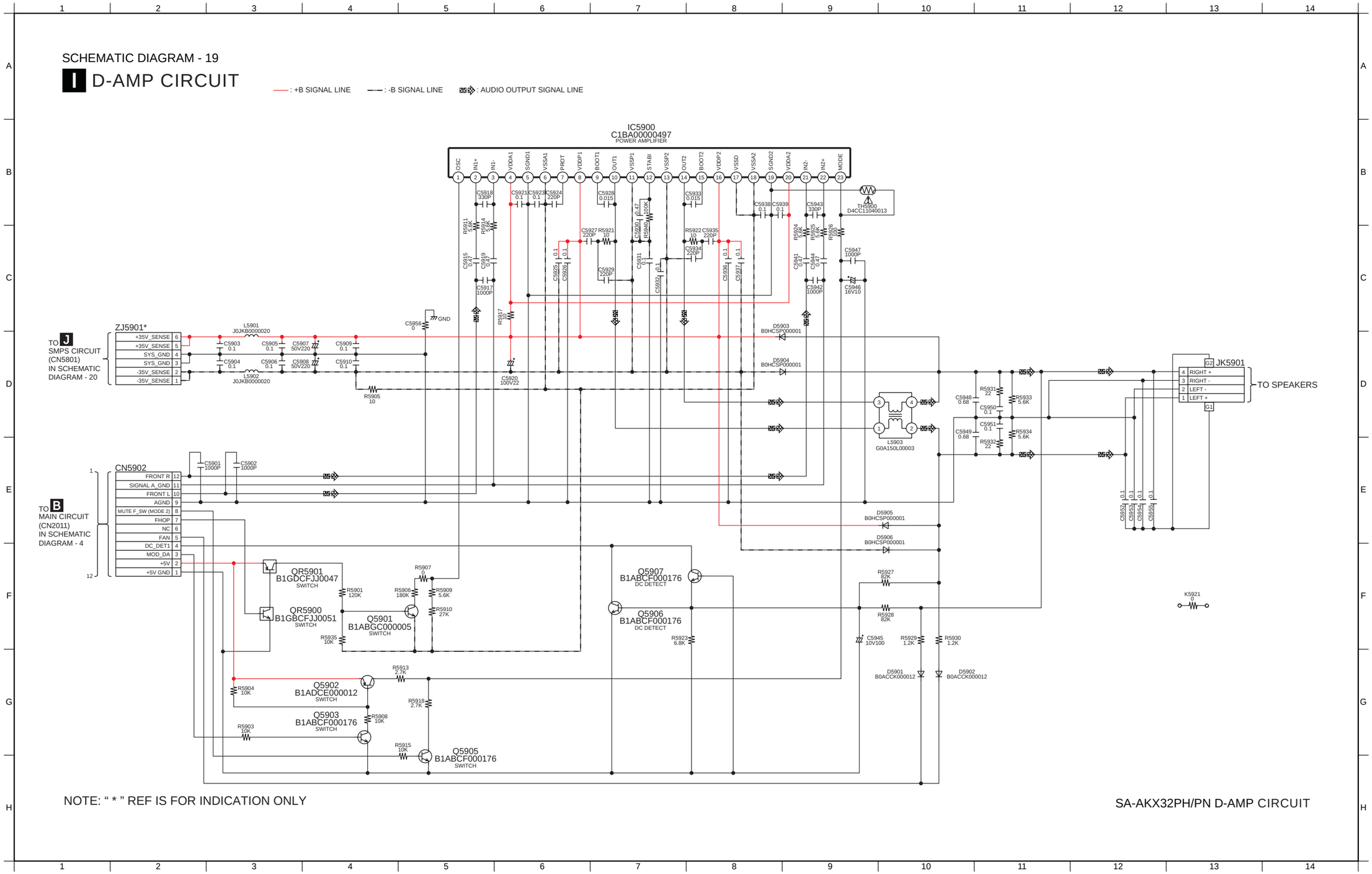
: +B SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : USB SIGNAL LINE



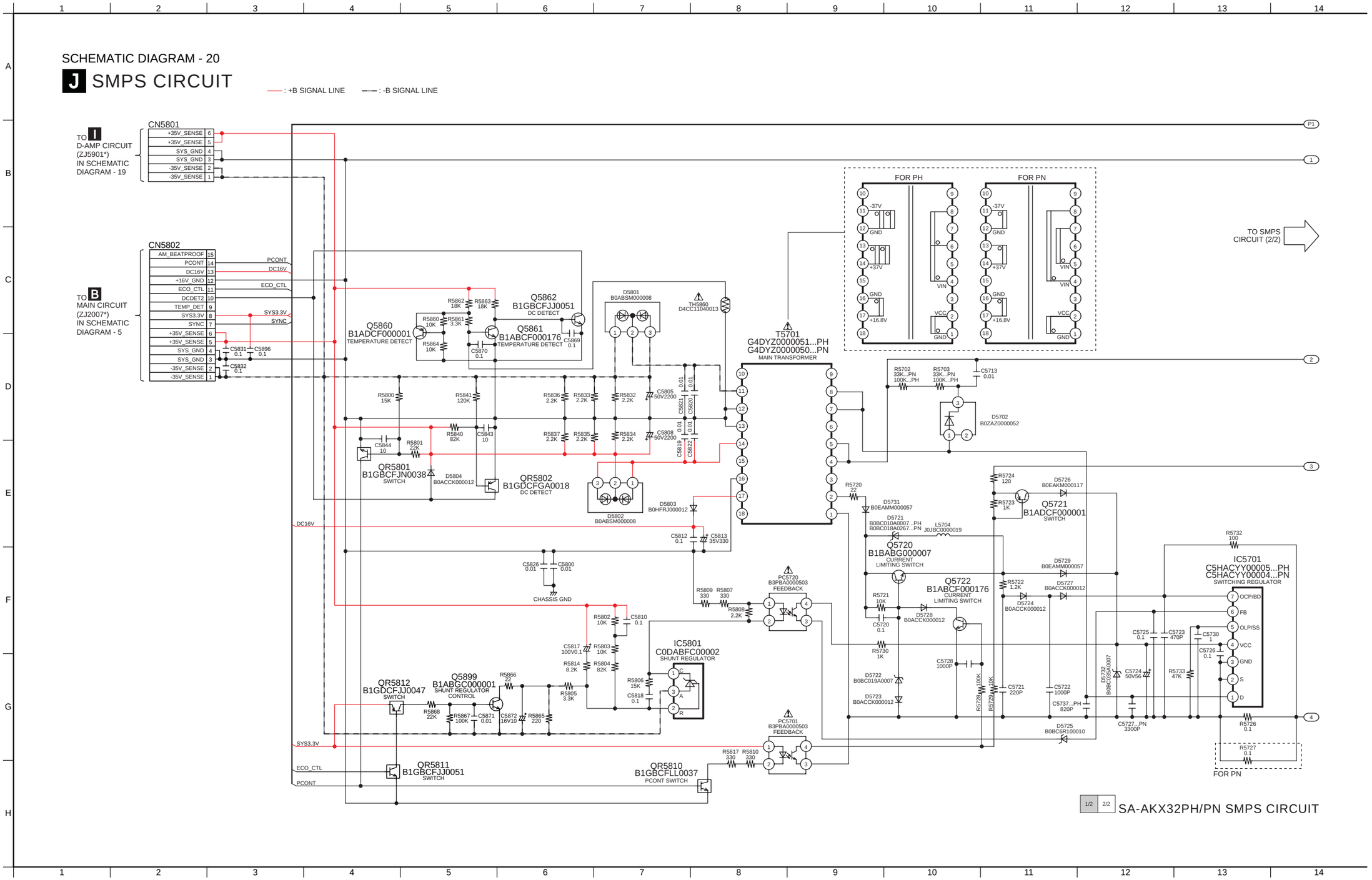
1/4	2/4
3/4	4/4

SA-AKX32PH/PN JUPITER CIRCUIT

17.8. D-Amp Circuit



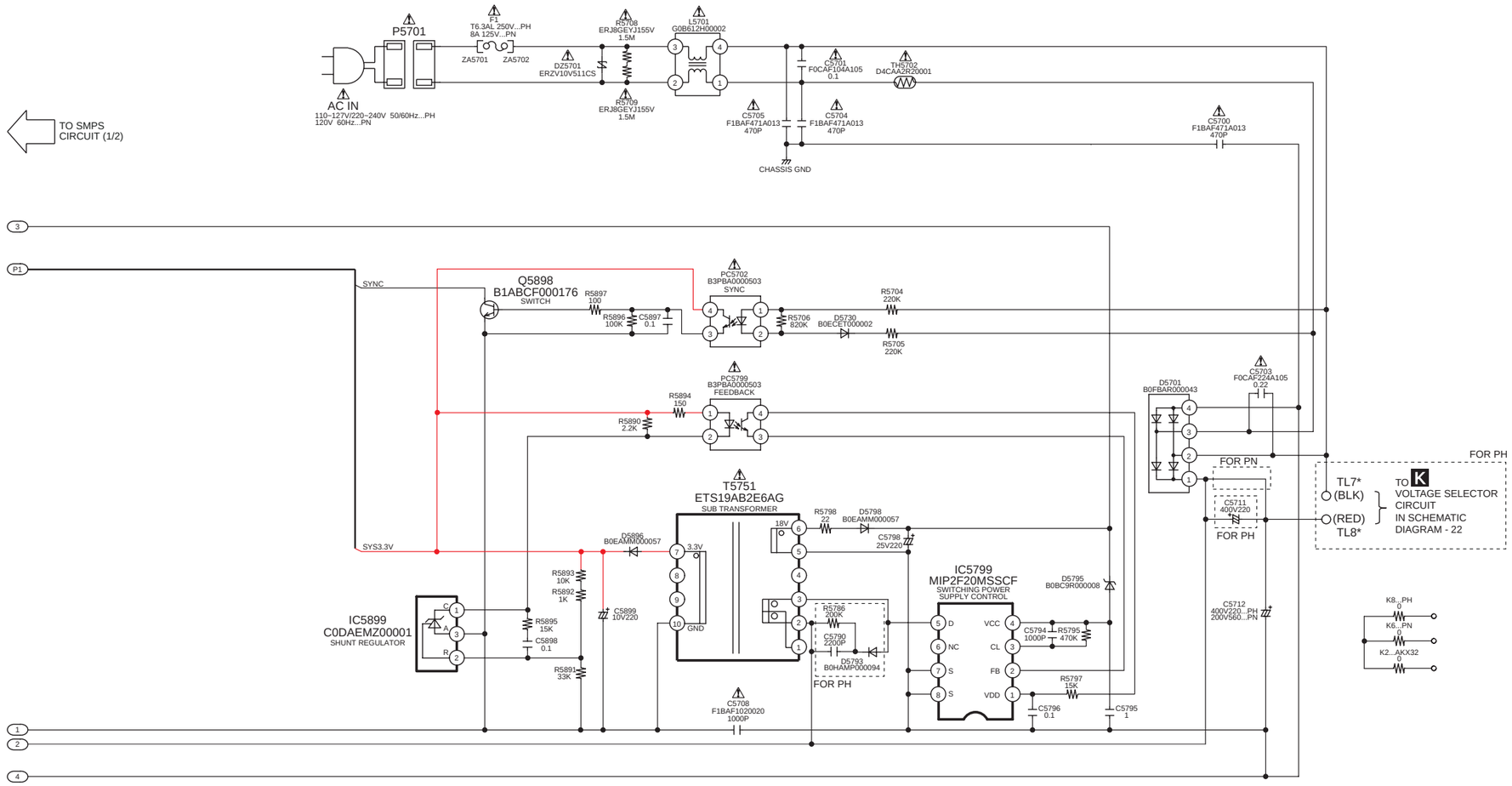
17.9. SMPS Circuit



SCHEMATIC DIAGRAM - 21

J SMPS CIRCUIT

—— : +B SIGNAL LINE —— : -B SIGNAL LINE



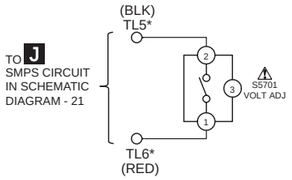
NOTE: “ * ” REF IS FOR INDICATION ONLY

1/2 2/2 SA-AKX32PH/PN SMPS CIRCUIT

17.10. Voltage Selector Circuit

SCHEMATIC DIAGRAM - 22

K VOLTAGE SELECTOR CIRCUIT (FOR PH)



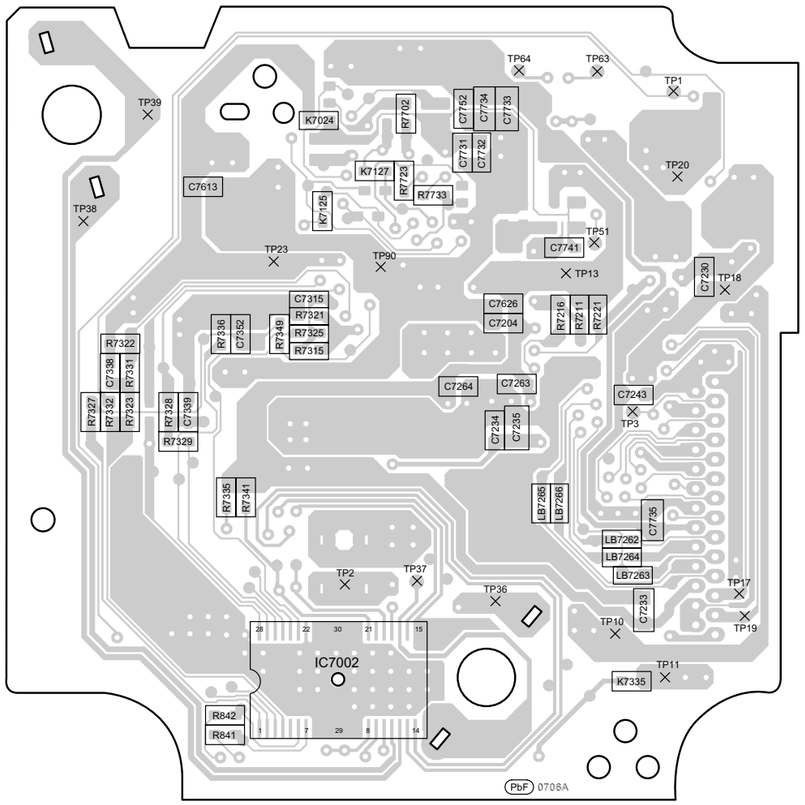
NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX32PH/PN VOLTAGE SELECTOR CIRCUIT

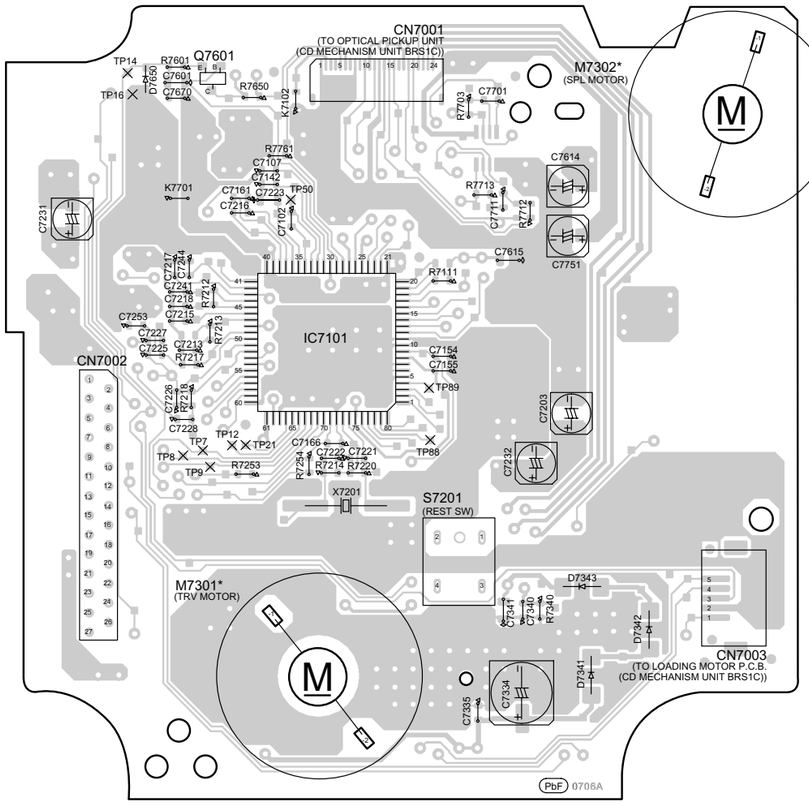
18 Printed Circuit Board

18.1. CD Servo P.C.B.

A CD SERVO P.C.B. (REPX0919A)



(SIDE A)



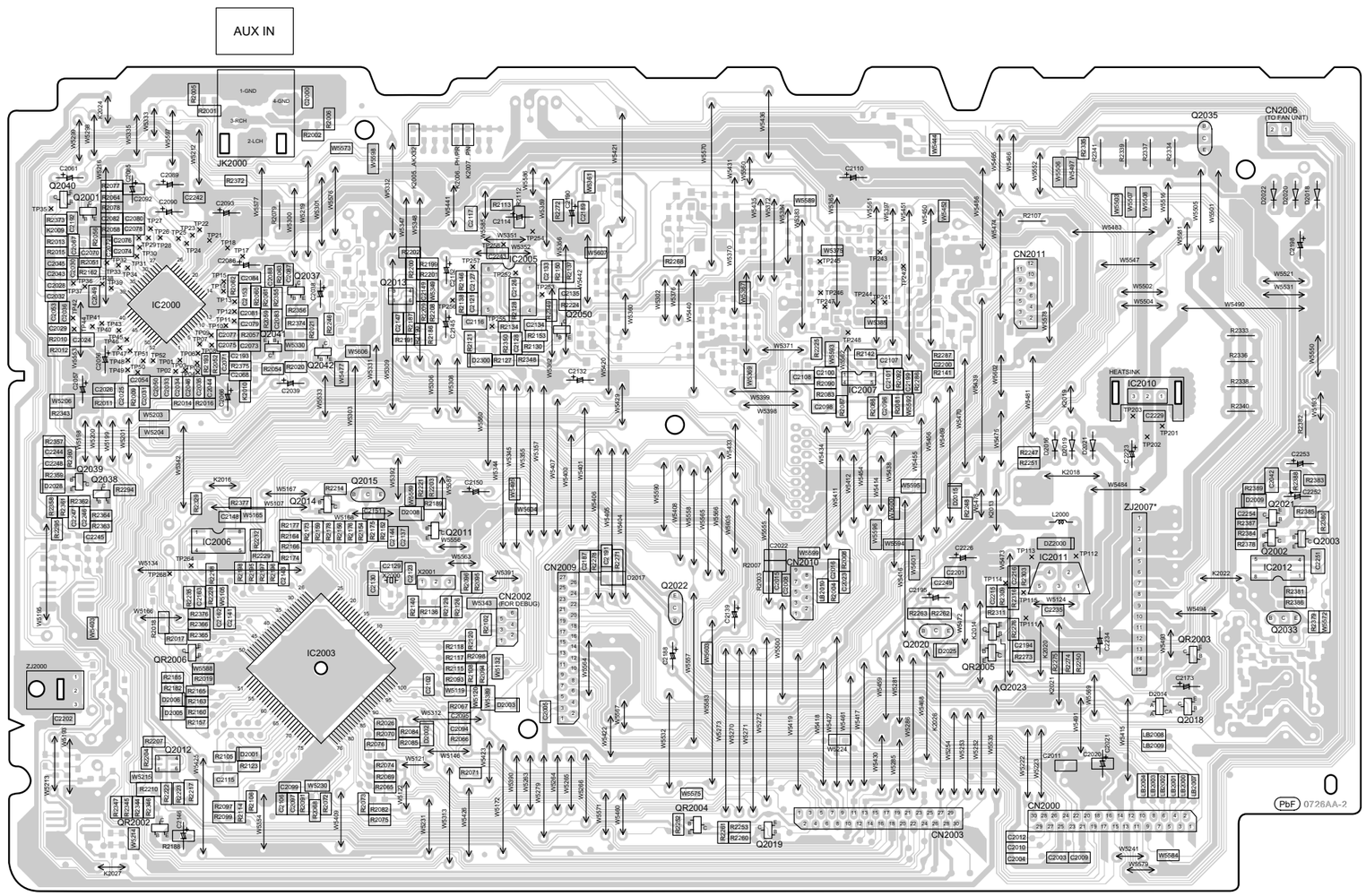
(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX32PH/PN
CD SERVO P.C.B.

18.2. Main P.C.B.

B MAIN P.C.B. (REPX0887KA...PH)
(REPX0887HA...PN)

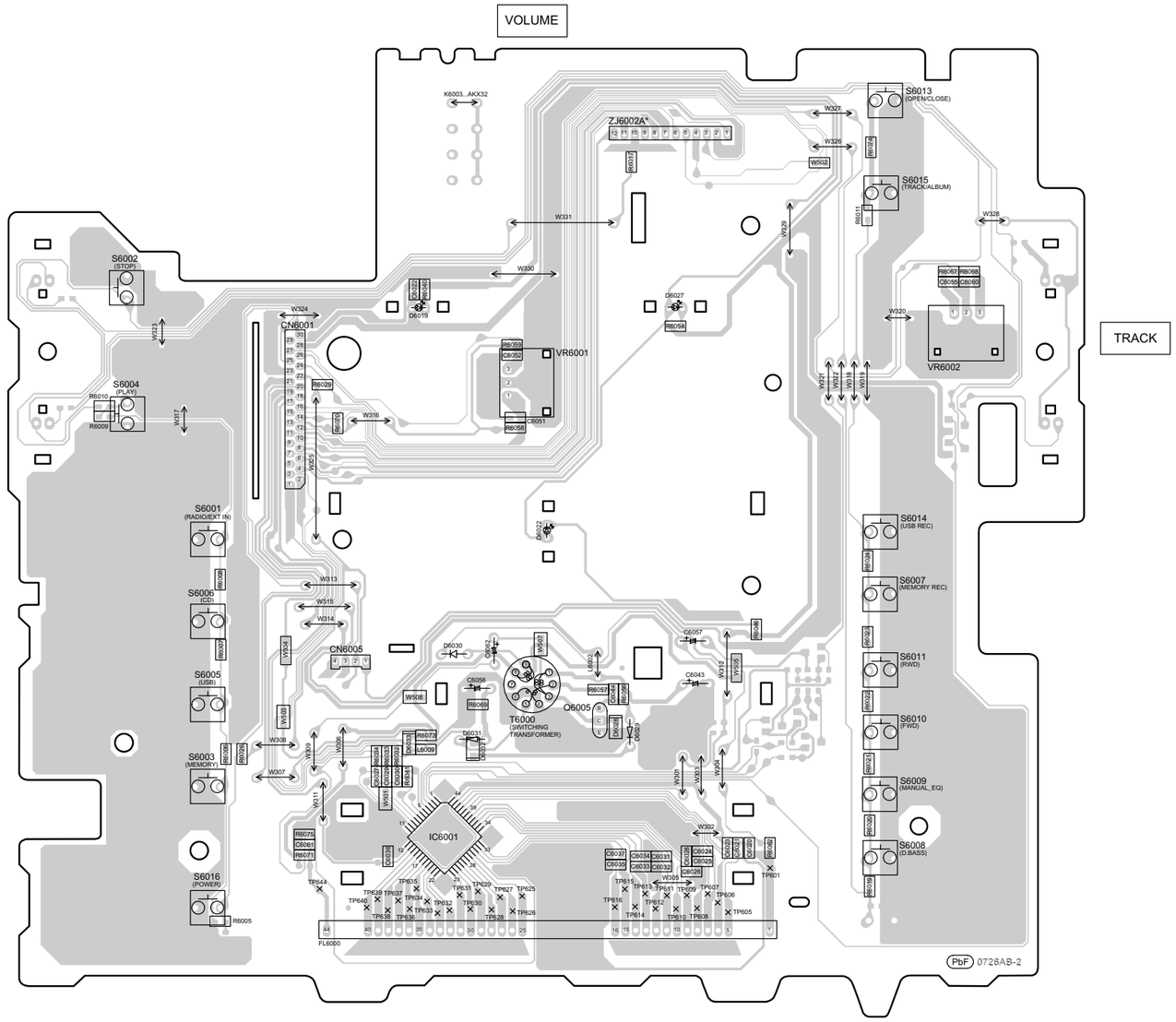


NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX32PH/PN
MAIN P.C.B.

18.3. Panel P.C.B.

C PANEL P.C.B. (REPX0887KB...PH)
(REPX0887HB...PN)

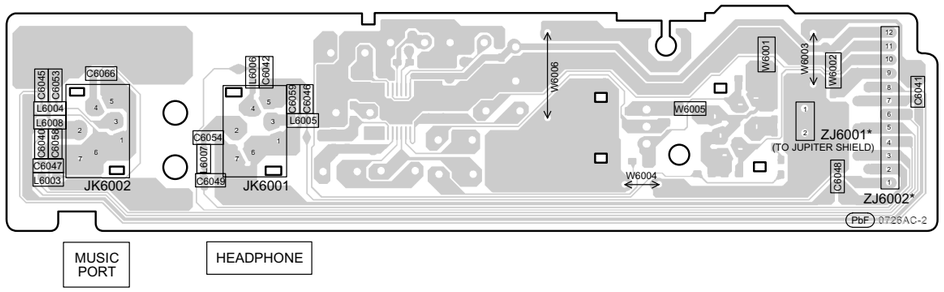


NOTE: " * " REF IS FOR INDICATION ONLY.

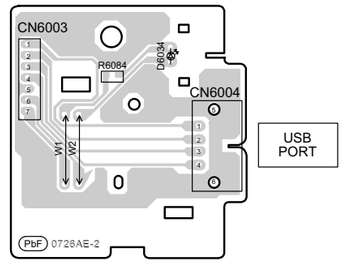
SA-AKX32PH/PN
PANEL P.C.B.

18.4. Music Port, Remote Sensor, USB & Tuner P.C.B.

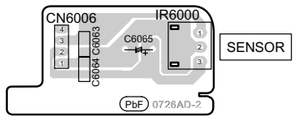
D MUSIC PORT P.C.B. (REPX0887KB...PH)
(REPX0887HB...PN)



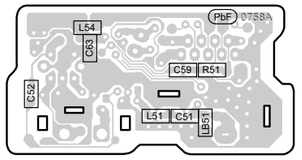
F USB P.C.B. (REPX0887KE...PH)
(REPX0887HE...PN)



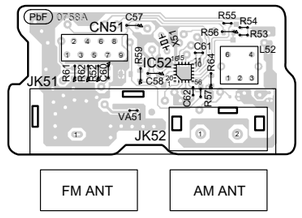
E REMOTE SENSOR P.C.B. (REPX0887KD...PH)
(REPX0887HD...PN)



G TUNER P.C.B. (REPX0928A)



(SIDE A)



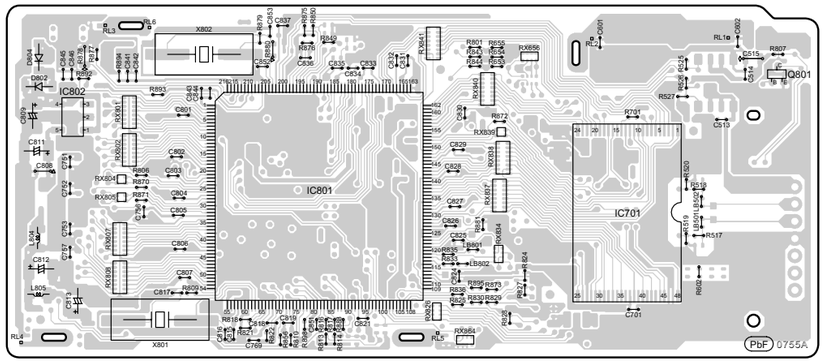
(SIDE B)

NOTE: " * " REF IS FOR INDICATION ONLY.

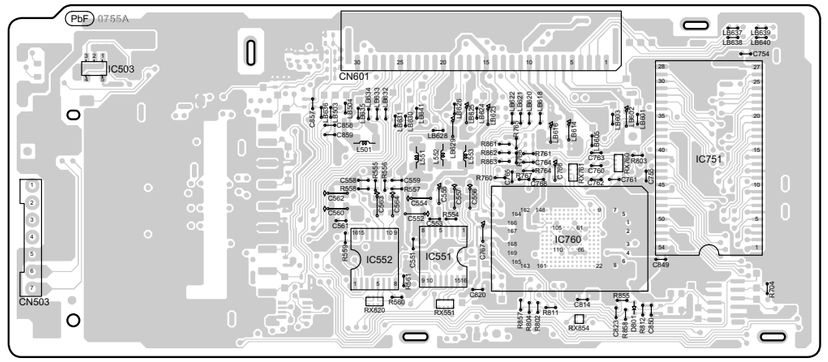
SA-AKX32PH/PN
MUSIC PORT / REMOTE SENSOR / USB / TUNER P.C.B.

18.5. Jupiter P.C.B.

H JUPITER P.C.B. (RFKBX0922B)



(SIDE A)

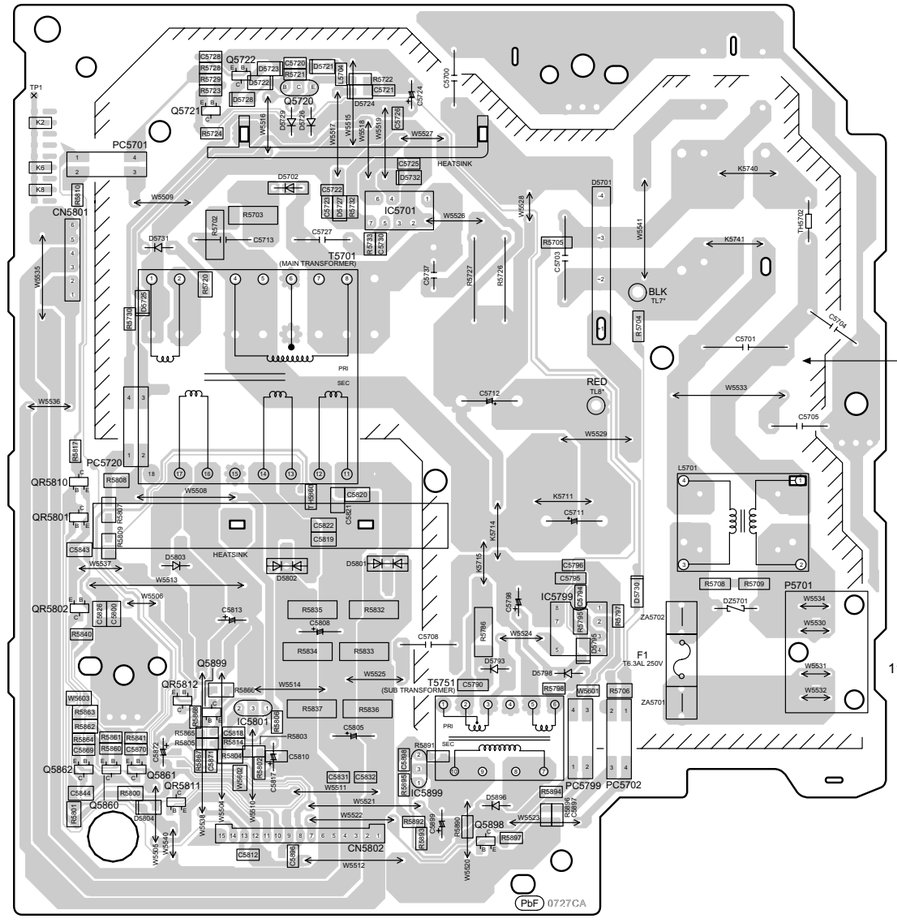


(SIDE B)

SA-AKX32PH/PN
JUPITER P.C.B.

18.6. SMPS & Voltage Selector P.C.B. (For PH Only)

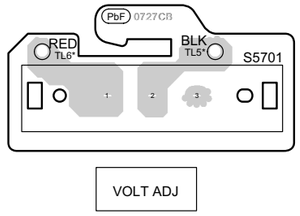
J SMPS P.C.B. (REPX0886F...PH)



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

AC IN ~
110-127V/220-240V
50/60Hz

K VOLTAGE SELECTOR P.C.B. (REPX0886F...PH)



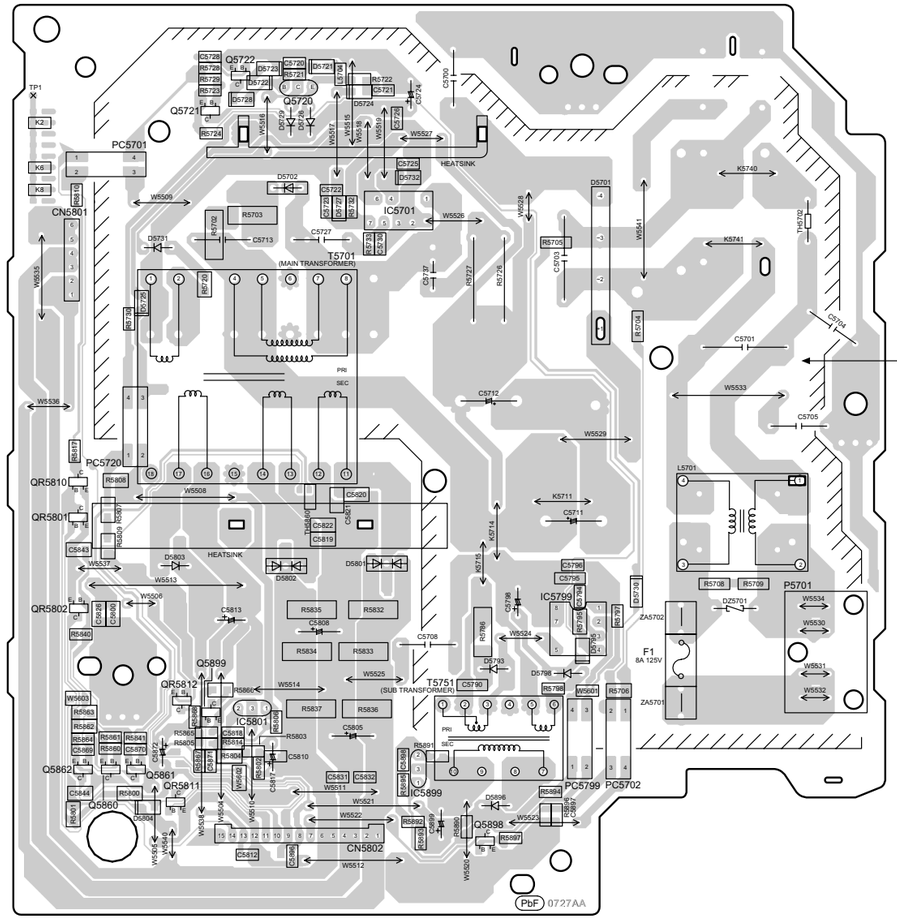
VOLT ADJ

NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX32PH/PN
SMPS / VOLTAGE SELECTOR P.C.B.

18.7. SMPS (For PN Only) & D-Amp P.C.B.

J SMPS P.C.B. (REPX0886D...PN)

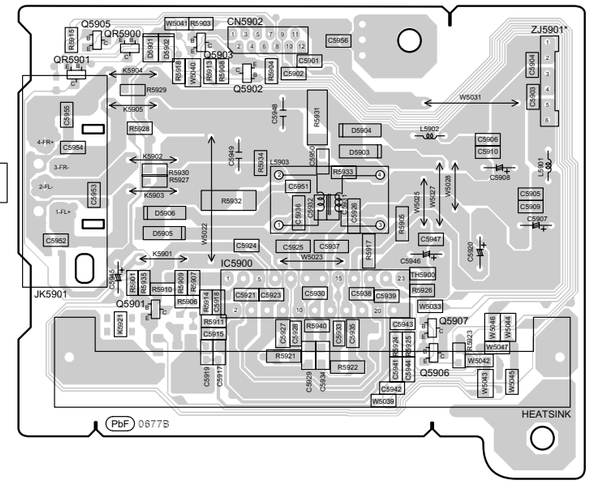


CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

AC IN ~
120V 60Hz

I D-AMP P.C.B. (REPX0822H)

TO SPEAKERS



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX32PH/PN
D-AMP / SMPS P.C.B.

19 Terminal Function of ICs

19.1. IC2003 (RFKWMAKX32M0): IC MICRO-PROCESSOR

No	Pin 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	SW_Lvl1	O	Subwoofer Level Setting 1
8	SW_Lvl2	O	Subwoofer Level Setting 2
9	DCDET1	I	DC DETECT (Power Supply Failure Detection)
10	DCDET2	I	DC Detect (D-AMP IC Failure Detection)
11	MMOD	-	Ground
12	XTOUT	O	Oscillator Output
13	XTIN	I	Oscillator Input
14	VSS	-	Ground
15	XI	I	Oscillator Output
16	XO	O	Oscillator Input
17	VDD33	-	+3.3V Voltage Supply
18	VDD18	-	+1.8V Voltage Supply
19	NRST	I	Active Low Reset Signal
20	SWJOGA	O	Subwoofer Jog A Control
21	SWJOGB	O	Subwoofer Jog B Control
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	BASS_SHIFT	O	Bass Level Meter Adjustment
27	SYNC	I	AC Failure Detection Input
28	PCONT	O	Power Control
29	SMPS_BP	O	SMPS Breatproof
30	CD_OPEN_SW	I	CD Open Switch Detection
31	NC	-	No connection
32	NC	-	No connection
33	NC	-	No connection
34	EE_DATA	O	EEPROM Serial Data
35	EE_CS	O	EEPROM Chip select
36	EE_CLK	O	EEPROM Clock
37	VDD18	-	+1.8V Voltage Supply
38	NC	O	No connection
39	VSS	-	Ground
40	NC	O	No connection
41	NC	-	No connection
42	NC	-	No connection
43	NC	-	No connection
44	Fan_Det	O	Fan Detection
45	CLOSE_SW	I	CD Close Switch Detection
46	LOAD_CW	O	Loading Motor Turning Clockwise (Tray Open)
47	LOAD_CCW	O	Loading Motor Turning Counter-Clockwise (Tray Close)
48	Fan_Out1	O	Fan Speed Control 1
49	Fan_Out2	I	Fan Speed Control 2
50	SW_LED	O	Subwoofer LED Drive
51	CD_RESET	O	CD Reset
52	CD_REST_SW	I	CD Reset Switch Detect
53	TRAVERSE_CW	O	Traverse motor turning clockwise
54	TRAVERSE_CCW	O	Traverse motor turning counter-clockwise
55	ECO_CNTRL	O	Eco Mode Control
56	NC	O	No connection
57	NC	O	No connection
58	NC	-	No connection
59	NC	-	No connection
60	NC	-	No connection
61	NC	-	No connection
62	NC	-	No connection
63	VSS	-	Ground
64	NC	-	No connection
65	NC	-	No connection
66	NC	-	No connection
67	NC	-	No connection
68	NC	-	No connection
69	CR TIMER	I	CR Timer
70	NC	-	No connection
71	NC	-	No connection
72	NC	-	No connection
73	M.PORT_SW	I	Music Port Detect
74	HP_SW	I	Headphone Detect
75	SD_INT	O	SD Interrupt
76	SD_CMD	O	SD Command
77	SD_STAT	I	SD Status
78	SD_NRST	O	SD Active Low Reset
79	USB REC LED	O	USB Rec LED Drive
80	MUTE_S	O	Surround Muting
81	MUTE_A	O	Audio Output Muting
82	REGION 2	I	Region Setting 2
83	MODE_DA	O	D-AMP IC Mode Switch
84	F_HOP1	O	Frequency Hopping
85	MUTE_F	O	Digital Amp Muting control
86	RMT	I	Remote control Signal
87	Vol_Jog A	O	Volume Jog A Signal
88	Vol_Jog B	O	Volume Jog B Signal
89	VDD	-	Voltage Supply
90	LED DIMMER	O	LCD Display Brightness Control
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	ROTARY SKIP	AN3	Rotary skip for browse operation (Album - Track)
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

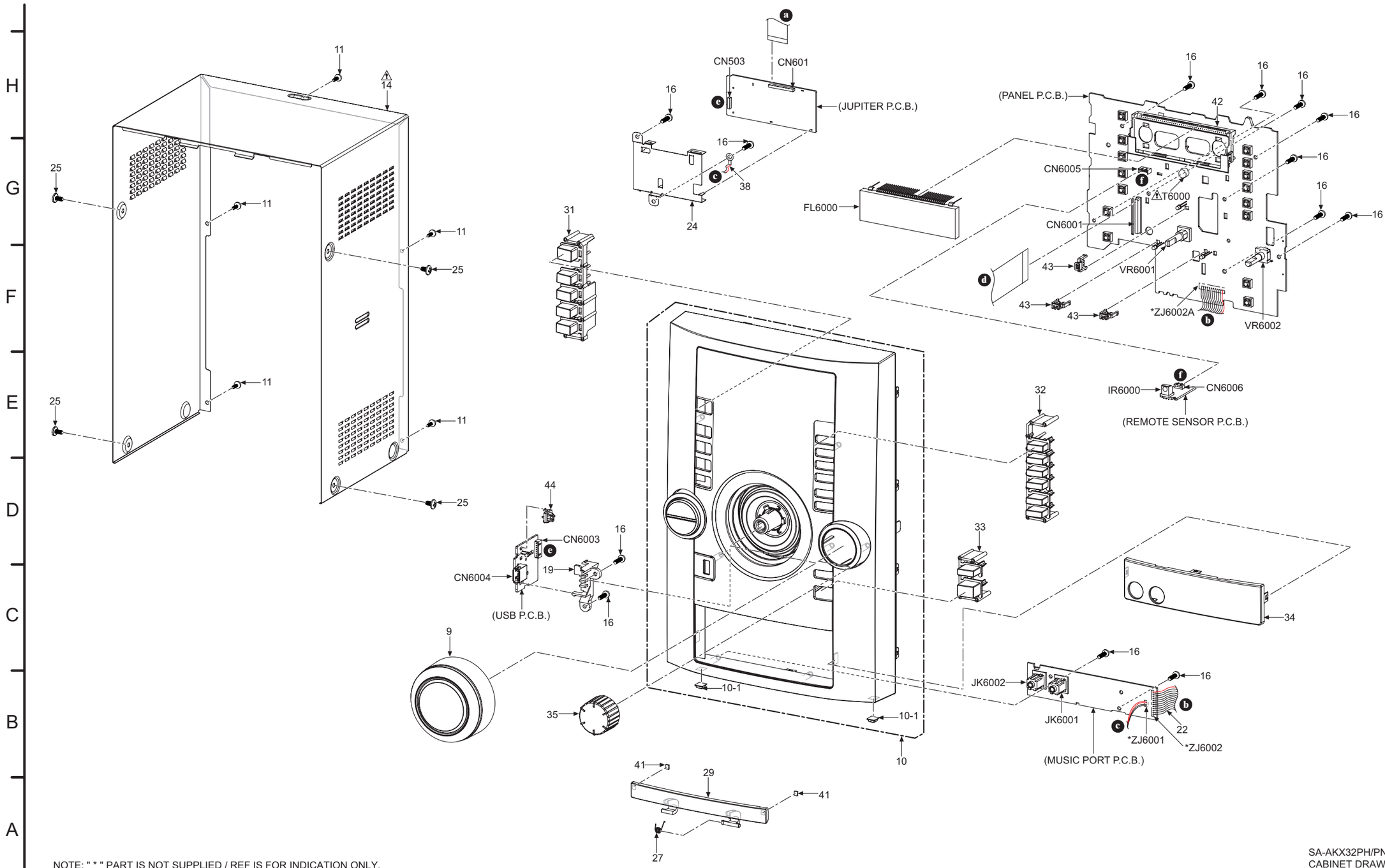
19.2. IC6001(C0HBB0000057): IC FL Driver

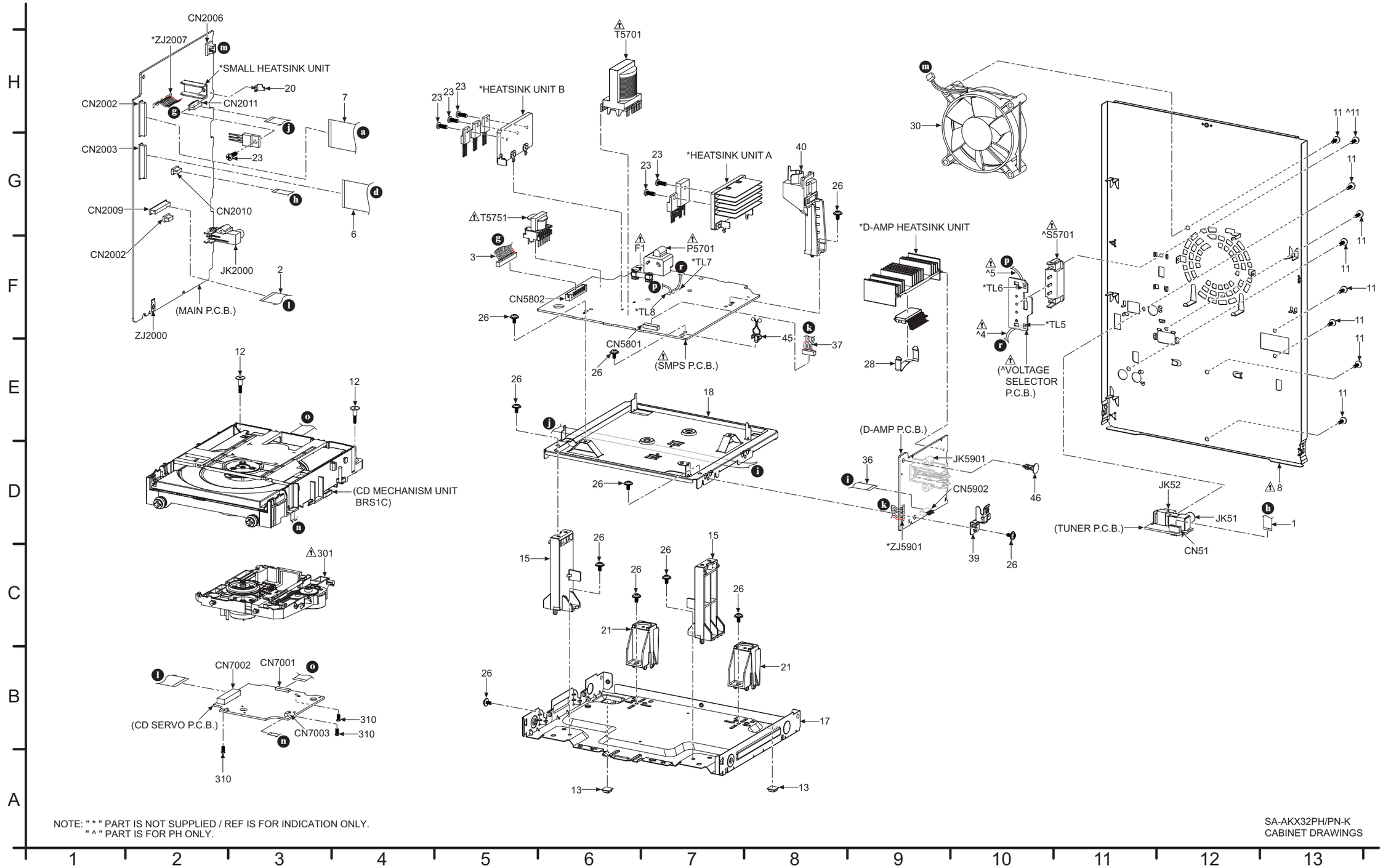
Pin No.	Terminal Name	I/O	Function
1	P0	-	No Connection
2	P1	-	No Connection
3	P2	-	No Connection
4	P3	-	No Connection
5	OSC	I	Oscillator Input
6	NC	-	No Connection
7	DIN	I	Data Input
8	CLK	I	Clock Input
9	STB	I	Serial Interface Strobe Pin
10	K1	I	Key Data Input 1
11	K2	I	Key Data Input 2
12	VSS	-	GND
13	VDD	-	Power Supply (+5V)
14	S1	O	Segment Output 1
15	S2	O	Segment Output 2
16	S3	O	Segment Output 3
17	S4	O	Segment Output 4
18	S5	O	Segment Output 5
19	S6	O	Segment Output 6
20	S7	O	Segment Output 7
21	S8	O	Segment Output 8
22	S9	O	Segment Output 9
23	S10	O	Segment Output 10
24	S11	O	Segment Output 11
25	S12	O	Segment Output 12
26	S13	O	Segment Output 13
27	S14	O	Segment Output 14
28	S15	O	Segment Output 15
29	S16	O	Segment Output 16
30	VEE	-	Negative Power Supply
31	G12	O	Grid Segment Output 12
32	G11	O	Grid Segment Output 11
33	G10	O	Grid Segment Output 10
34	G9	O	Grid Segment Output 9
35	G8	O	Grid Segment Output 8
36	G7	O	Grid Segment Output 7
37	G6	O	Grid Segment Output 6
38	G5	O	Grid Segment Output 5
39	G4	O	Grid Segment Output 4
40	G3	O	Grid Segment Output 3
41	G2	O	Grid Segment Output 2
42	G1	O	Grid Segment Output 1
43	VDD	-	Positive Power Supply
44	VSS	-	GND

20 Exploded View and Replacement Parts List

20.1. Exploded View and Mechanical replacement Part List

20.1.1. Cabinet Parts Location

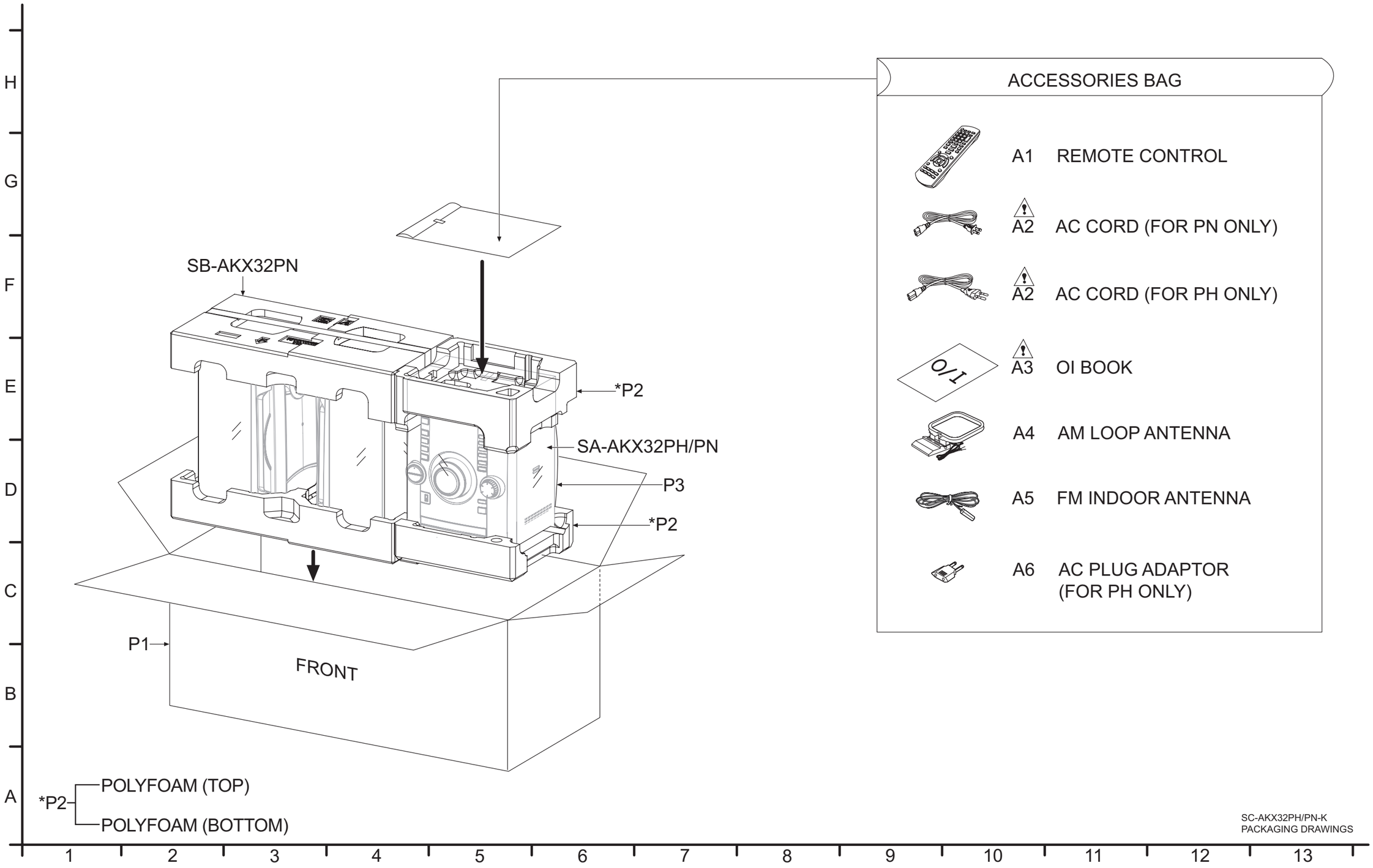




NOTE: " * " PART IS NOT SUPPLIED / REF IS FOR INDICATION ONLY.
" ^ " PART IS FOR PH ONLY.

SA-AKX32PH/PN-K
CABINET DRAWINGS

20.1.2. Packaging



SC-AKX32PH/PN-K
PACKAGING DRAWINGS

20.1.3. Mechanical Replacement Part List

Important Safety Notice

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

RTL (Retention Time Limited)

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

Note:

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

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			CABINET AND CHASSIS		
	1	REEX1261	9P FFC (MAIN-TUNER)	1	
	2	REEX1259	27P FFC (MAIN-CD)	1	
	3	REXX1206	15P CABLE WIRE (MAIN-SMPS)	1	
⚠	4	REXX1122	1P BLACK WIRE (VOLTAGE SELECTOR-SMPS)	1	PH
⚠	5	REXX1123	1P RED WIRE (VOLTAGE SELECTOR-SMPS)	1	PH
	6	REEX1255	30P FFC (MAIN-PANEL)	1	
	7	REEX1258	30P FFC (MAIN-JUPITER)	1	
⚠	8	RGRX1008C-A	REAR PANEL	1	PN
⚠	8	RGRX1008D-A	REAR PANEL	1	PH
	9	RGWX0112-S1	VOLUME KNOB	1	
	10	RFKGAKX32PHK	FRONT PANEL ASS'Y	1	
	10-1	RKAX0042-K	LEG RUBBER	2	
	11	RHD30119-S	SCREW	14	PH
	11	RHD30119-S	SCREW	13	PN
	12	RHDX031008	SCREW	2	
	13	RKAX0042-K	LEG CUSHION	2	
⚠	14	RKMX1011-K	TOP CABINET	1	
	15	RMAX1007	CHASSIS SUPPORT	2	
	16	RHD26046-L	SCREW	13	
	17	RMKX1031	BOTTOM CHASSIS	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	18	RMKX1037	INNER CHASSIS	1	
	19	RMNX0287B	USB JACK HOLDER	1	
	20	RMCX1010	JACK PCB GROUND SPRING	1	
	21	RMQX1088	MECHA SUPPORT	2	
	22	RWJA012210XX	12P CABLE WIRE (PANEL-MUSIC PORT)	1	
	23	XTB3+10JFJ	SCREW	6	
	24	RSCX1056	JUPITER SHIELD PLATE	1	
	25	RHD30007-K2J	SCREW	4	
	26	RHD30111-31	SCREW	11	
	27	RMBX0073	CD LID OPEN SPRING	1	
	28	RMCX0035	HEAT SINK CLIP A	1	
	29	RGKX1073B-K	CD LID	1	
	30	L6FALEFH0030	FAN UNIT ASS'Y	1	
	31	RGUX1044B-K	POWER BUTTON	1	
	32	RGUX1045A-K	MANUAL EQ BUTTON	1	
	33	RGUX1046-K	CD OPEN BUTTON	1	
	34	RGKX1076A-K	UNDER ORNAMENT	1	
	35	RGWX0113-S	SKIP KNOB	1	
	36	REEX1262	12P FFC (MAIN TO DAMP)	1	
	37	REXX1156	6P CABLE WIRE (DAMP-SMPS)	1	
	38	REXX1208	2P WIRE (MUSIC PORT-JUPITER SHIELD)	1	
	39	RMAX1002-1	D-AMP BRACKET	1	
	40	RMKX1016-3	FAN FIXTURE	1	
	41	RMGX0033	CD LID CUSHION	2	
	42	RMNV0079-1	FL HOLDER	1	
	43	RMNX0151	LED HOLDER	3	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	44	RMNX0190	LED HOLDER	1	
	45	RMNX1025	WIRE HOLDER	1	
	46	RMQ1702	PCB SPACER	1	
				1	
			TRAVERSE DECK		
⚠	301	RAEX1033Z-V	TRAVERSE ASS'Y	1	
	310	XTN2+6GFJ	SCREW	3	
			PACKING MATERI-ALS		
	P1	RPGX3503	PACKING CASE	1	PN
	P1	RPGX3504	PACKING CASE	1	PH
	P2	RPNX1103	POLYFOAM	1	
	P3	RPFX0198	MIRAMAT	1	
			ACCESSORIES		
	A1	N2QAYB000637	REMOTE CONTROL	1	
⚠	A2	K2CB2CB00021	AC CORD	1	PN
⚠	A2	K2CQ2CA00007	AC CORD	1	PH
⚠	A3	RQTX1292-M	O/I BOOK (Sp)	1	PN
⚠	A3	RQTX1293-M	O/I BOOK (En)	1	PN
⚠	A3	RQTX1294-M	O/I BOOK (Sp)	1	PH
	A4	N1DYYY00010	AM LOOP ANTENNA	1	
	A5	RSAX0002	FM INDOOR ANTENNA	1	
	A6	K2DAYYY00002	AC PLUG ADAPTOR	1	PH

20.2. Electrical Replacement Part List

Important Safety Notice

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

RTL (Retention Time Limited)

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

Note:

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

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			PRINTED CIRCUIT BOARDS		
	PCB1	REPX0919A	CD SERVO P.C.B.	1	(RTL)
	PCB2	REPX0887HA	MAIN P.C.B.	1	(RTL) PN
	PCB2	REPX0887KA	MAIN P.C.B.	1	(RTL) PH
	PCB3	REPX0887HB	PANEL P.C.B.	1	(RTL) PN
	PCB3	REPX0887KB	PANEL P.C.B.	1	(RTL) PH
	PCB4	REPX0887HB	MUSIC PORT P.C.B.	1	(RTL) PN
	PCB4	REPX0887KB	MUSIC PORT P.C.B.	1	(RTL) PH
	PCB5	REPX0887HD	REMOTE SENSOR P.C.B.	1	(RTL) PN
	PCB5	REPX0887KD	REMOTE SENSOR P.C.B.	1	(RTL) PH
	PCB6	REPX0887HE	USB P.C.B.	1	(RTL) PN
	PCB6	REPX0887KE	USB P.C.B.	1	(RTL) PH
	PCB7	REPX0928A	TUNER P.C.B.	1	(RTL)
	PCB8	RFKBX0922B	JUPITER P.C.B.	1	(RTL)
	PCB9	REPX0822H	D-AMP P.C.B.	1	(RTL)
⚠	PCB10	REPX0886D	SMPS P.C.B.	1	(RTL) PN
⚠	PCB10	REPX0886F	SMPS P.C.B.	1	(RTL) PH
⚠	PCB11	REPX0886F	VOLTAGE SELECTOR P.C.B.	1	(RTL) PH
			INTEGRATED CIRCUITS		
	IC52	VUEALLPT031	IC	1	[SPG]

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC503	C0DBZHE00026	IC	1	
	IC551	C0FBAK000026	IC	1	
	IC552	C0FBBY000027	IC	1	
	IC701	RFKWFAKX32J0	IC	1	
	IC751	C3ABQY000058	IC	1	
	IC760	C3FBXY000026	IC	1	
	IC801	MN2WS0042NA	IC	1	
	IC802	C0DBZYY00293	IC	1	
	IC2000	C1AB00003256	IC	1	
	IC2003	RFKWMAKX32M0	IC	1	
	IC2005	C0AABB000125	IC	1	
	IC2006	C3EBFY000006	IC	1	
	IC2007	C0ABBA000159	IC	1	
	IC2010	C0CAAKG00046	IC	1	
	IC2011	C0DAAYG00001	IC	1	
	IC2012	C0ABBB000230	IC	1	
	IC5701	C5HACYY00004	IC	1	PN
	IC5701	C5HACYY00005	IC	1	PH
	IC5799	MIP2F20MSSCF	IC	1	
	IC5801	C0DABFC00002	IC	1	
	IC5899	C0DAEMZ00001	IC	1	
	IC5900	C1BA00000497	IC	1	
	IC6001	C0HBB0000057	IC	1	
	IC7002	C0GBY0000117	IC	1	
	IC7101	MN6627553PA	IC	1	
			TRANSISTORS		
	Q801	B1GBCFGN0016	TRANSISTOR	1	
	Q2001	B1ABCF000176	TRANSISTOR	1	
	Q2002	B1ABCF000176	TRANSISTOR	1	
	Q2003	B1ABCF000176	TRANSISTOR	1	
	Q2011	B1GBCFLL0037	TRANSISTOR	1	
	Q2012	B1GFGCAA0001	TRANSISTOR	1	
	Q2013	B1GFGCAA0001	TRANSISTOR	1	
	Q2014	B1GBCFLL0037	TRANSISTOR	1	
	Q2015	B1ACKD000006	TRANSISTOR	1	
	Q2018	B1GBCFJJ0051	TRANSISTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Q2019	B1ABEB000002	TRANSISTOR	1	
	Q2020	B1AAJC000019	TRANSISTOR	1	
	Q2021	B1ABCF000176	TRANSISTOR	1	
	Q2022	B1BACD000018	TRANSISTOR	1	
	Q2023	B1ADCE000012	TRANSISTOR	1	
	Q2033	B1AAJC000019	TRANSISTOR	1	
	Q2035	B1BABG000007	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	
	Q5720	B1BABG000007	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	
	Q5901	B1ABGC000005	TRANSISTOR	1	
	Q5902	B1ADCE000012	TRANSISTOR	1	
	Q5903	B1ABCF000176	TRANSISTOR	1	
	Q5905	B1ABCF000176	TRANSISTOR	1	
	Q5906	B1ABCF000176	TRANSISTOR	1	
	Q5907	B1ABCF000176	TRANSISTOR	1	
	Q6005	B1BABK000001	TRANSISTOR	1	
	Q7601	B1ADCF000001	TRANSISTOR	1	
	QR2002	B1GDCFGA0018	TRANSISTOR	1	
	QR2003	B1GBCFJJ0051	TRANSISTOR	1	
	QR2004	B1GBCFJJ0051	TRANSISTOR	1	
	QR2005	B1GBCFJJ0051	TRANSISTOR	1	
	QR2006	B1GBCFJJ0051	TRANSISTOR	1	
	QR5801	B1GBCFJN0038	TRANSISTOR	1	
	QR5802	B1GDCFGA0018	TRANSISTOR	1	
	QR5810	B1GBCFLL0037	TRANSISTOR	1	
	QR5811	B1GBCFJJ0051	TRANSISTOR	1	
	QR5812	B1GDCFJJ0047	TRANSISTOR	1	
	QR5900	B1GBCFJJ0051	TRANSISTOR	1	
	QR5901	B1GDCFJJ0047	TRANSISTOR	1	
			DIODES		
	D801	B0JCCD000002	DIODE	1	
	D802	B0JCMD000022	DIODE	1	
	D804	B0JCMD000022	DIODE	1	
	D2001	B0ACCK000012	DIODE	1	
	D2002	DZ2J033M0L	DIODE	1	
	D2003	DZ2J033M0L	DIODE	1	
	D2005	B0ACCK000012	DIODE	1	
	D2006	B0ACCK000012	DIODE	1	
	D2008	B0ACCK000012	DIODE	1	
	D2009	B0ACCK000012	DIODE	1	
	D2014	B0ADCJ000020	DIODE	1	
	D2015	B0ACCK000005	DIODE	1	
	D2016	B0EAKM000117	DIODE	1	
	D2017	B0BC8R100004	DIODE	1	
	D2018	B0EAKM000117	DIODE	1	
	D2019	B0EAKM000117	DIODE	1	
	D2020	B0EAKM000117	DIODE	1	
	D2021	B0EAKM000117	DIODE	1	
	D2022	B0EAKM000117	DIODE	1	
	D2025	DZ2J043M0L	DIODE	1	
	D2028	B0ACCK000012	DIODE	1	
	D2300	B0ACCK000012	DIODE	1	
	D5701	B0FBAR000043	DIODE	1	
	D5702	B0ZAZ0000052	DIODE	1	
	D5721	B0BC010A0007	DIODE	1	PH
	D5721	B0BC018A0267	DIODE	1	PN
	D5722	B0BC019A0007	DIODE	1	
	D5723	B0ACCK000012	DIODE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	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	
	D5801	B0ABSM000008	DIODE	1	
	D5802	B0ABSM000008	DIODE	1	
	D5803	B0HFRJ000012	DIODE	1	
	D5804	B0ACCK000012	DIODE	1	
	D5896	B0EAMM000057	DIODE	1	
	D5901	B0ACCK000012	DIODE	1	
	D5902	B0ACCK000012	DIODE	1	
	D5903	B0HCSP000001	DIODE	1	
	D5904	B0HCSP000001	DIODE	1	
	D5905	B0HCSP000001	DIODE	1	
	D5906	B0HCSP000001	DIODE	1	
	D6019	B3AAA0001031	DIODE	1	
	D6022	B3AAA0001031	DIODE	1	
	D6027	B3AAA0001031	DIODE	1	
	D6028	B0BC035A0007	DIODE	1	
	D6029	B0EAMM000057	DIODE	1	
	D6030	B0JAME000114	DIODE	1	
	D6031	B0EAMM000057	DIODE	1	
	D6032	DZ2J24000L	DIODE	1	
	D6033	B0BC2R4A0006	DIODE	1	
	D6034	B3AAA0001031	DIODE	1	
	D7341	B0ECKM000016	DIODE	1	
	D7342	B0ECKM000016	DIODE	1	
	D7343	B0ECKM000016	DIODE	1	
	D7650	B0BC5R6A0266	DIODE	1	
	DZ2000	B0JCPD000025	DIODE	1	
⚠	DZ5701	ERZV10V511CS	ZNR	1	
			VARISTOR		
	VA51	EZAEG2A50AX	VARISTOR	1	
			SWITCHES		
⚠	S5701	K0ABCA000007	SW VOLT ADJ	1	PH
	S6001	EVQ21405RJ	SW RADIO /EXT IN	1	
	S6002	EVQ21405RJ	SW STOP	1	
	S6003	EVQ21405RJ	SW MEMORY	1	
	S6004	EVQ21405RJ	SW PLAY/PAUSE	1	
	S6005	EVQ21405RJ	SW USB	1	
	S6006	EVQ21405RJ	SW CD	1	
	S6007	EVQ21405RJ	SW MEMORY REC	1	
	S6008	EVQ21405RJ	SW DBASS	1	
	S6009	EVQ21405RJ	SW MANUAL EQ	1	
	S6010	EVQ21405RJ	SW FWD	1	
	S6011	EVQ21405RJ	SW RWD	1	
	S6013	EVQ21405RJ	SW CD OPEN/CLOSE	1	
	S6014	EVQ21405RJ	SW USB REC	1	
	S6015	EVQ21405RJ	SW POWER	1	
	S6016	EVQ21405RJ	SW TRACK/ALBUM	1	
	S7201	K0L1BA000158	SW RESET	1	
			CONNECTORS		
	CN51	K1MY09AA0124	9P CONNECTOR	1	
	CN503	K1KA07AA0031	7P CONNECTOR	1	
	CN601	K1MY30BA0046	30P CONNECTOR	1	
	CN2000	K1MY30AA0124	30P CONNECTOR	1	
	CN2002	K1MY06AA0124	6P CONNECTOR	1	
	CN2003	K1MY30AA0124	30P CONNECTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	CN2006	K1KA02AA0186	2P CONNECTOR (FAN)	1	
	CN2009	K1MY27AA0124	27P CONNECTOR	1	
	CN2010	K1MY09AA0124	9P CONNECTOR	1	
	CN2011	K1MY12AA0124	12P CONNECTOR	1	
	CN5801	K1KA06AA0180	6P CONNECTOR	1	
	CN5802	K1KA15AA0194	15P CONNECTOR	1	
	CN5902	K1MY12AA0124	12P CONNECTOR	1	
	CN6001	K1MY30AA0124	30P CONNECTOR	1	
	CN6003	K1KB07B00026	7P CONNECTOR	1	
	CN6004	K1FY104B0011	USB CONNECTOR	1	
	CN6005	K1KA04AA0031	4P CONNECTOR	1	
	CN6006	K1KB04B00038	4P CONNECTOR	1	
	CN7001	K1MN24BA0197	24P CONNECTOR	1	
	CN7002	K1MN27B00016	27P CONNECTOR	1	
	CN7003	K1MN05BA0147	5P CONNECTOR	1	
			COILS AND INDUCTORS		
	L51	G1CR18JA0020	INDUCTOR	1	
	L52	G2A380Y00002	COIL	1	
	L551	J0JHC0000045	INDUCTOR	1	
	L552	J0JHC0000045	INDUCTOR	1	
	L553	J0JHC0000045	INDUCTOR	1	
	L804	J0JHC0000045	INDUCTOR	1	
	L805	J0JHC0000045	INDUCTOR	1	
	L2000	G0A101ZA0028	COIL	1	
⚠	L5701	G0B612H00002	LINE FILTER	1	
	L5704	J0JBC0000019	INDUCTOR	1	
	L5901	J0JKB0000020	INDUCTOR	1	
	L5902	J0JKB0000020	INDUCTOR	1	
	L5903	G0A150L00003	COIL	1	
	L6003	J0JBC0000019	INDUCTOR	1	
	L6004	J0JBC0000019	INDUCTOR	1	
	L6005	J0JBC0000019	INDUCTOR	1	
	L6006	J0JBC0000019	INDUCTOR	1	
	L6007	J0JBC0000019	INDUCTOR	1	
	L6008	J0JBC0000019	INDUCTOR	1	
	L6009	J0JBC0000019	INDUCTOR	1	
	LB51	J0JBC0000032	INDUCTOR	1	
	LB503	J0JBC0000118	INDUCTOR	1	
	LB504	J0JBC0000118	INDUCTOR	1	
	LB601	J0JDC0000104	INDUCTOR	1	
	LB603	J0JDC0000104	INDUCTOR	1	
	LB605	J0JDC0000104	INDUCTOR	1	
	LB614	J0JHC0000045	INDUCTOR	1	
	LB618	J0JDC0000104	INDUCTOR	1	
	LB620	J0JDC0000104	INDUCTOR	1	
	LB621	J0JDC0000104	INDUCTOR	1	
	LB623	J0JHC0000045	INDUCTOR	1	
	LB624	J0JDC0000104	INDUCTOR	1	
	LB626	J0JDC0000104	INDUCTOR	1	
	LB628	J0JDC0000104	INDUCTOR	1	
	LB630	J0JDC0000104	INDUCTOR	1	
	LB631	J0JDC0000104	INDUCTOR	1	
	LB632	J0JDC0000104	INDUCTOR	1	
	LB633	J0JDC0000104	INDUCTOR	1	
	LB634	J0JDC0000104	INDUCTOR	1	
	LB635	J0JDC0000104	INDUCTOR	1	
	LB636	J0JDC0000104	INDUCTOR	1	
	LB637	J0JDC0000104	INDUCTOR	1	
	LB638	J0JDC0000104	INDUCTOR	1	
	LB639	J0JDC0000104	INDUCTOR	1	
	LB640	J0JDC0000104	INDUCTOR	1	
	LB641	J0JDC0000104	INDUCTOR	1	
	LB801	J0JCC0000407	INDUCTOR	1	
	LB802	J0JCC0000407	INDUCTOR	1	
			TRANSFORMERS		
⚠	T5701	G4DYZ0000050	SWITCHING TRANSFORMER	1	PN
⚠	T5701	G4DYZ0000051	SWITCHING TRANSFORMER	1	PH
⚠	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	H0A327200097	CRYSTAL OSCILLATOR	1	
	X801	H0J169500039	CRYSTAL OSCILLATOR	1	
	X802	H0J120500076	CRYSTAL OSCILLATOR	1	
	X2000	H0A327200097	CRYSTAL OSCILLATOR	1	
	X2001	H2B100500007	CRYSTAL OSCILLATOR	1	
	X7201	H0J169500039	CRYSTAL OSCILLATOR	1	
			VARIABLE RESISTORS		
	VR6001	EVEKE2F3524B	VOLUME JOG	1	
	VR6002	K9AA012Y0004	VARIABLE RESISTORS	1	
			REMOTE CONTROL SENSOR		
	IR6000	B3RAB0000084	REMOTE CONTROL SENSOR	1	
			FL DISPLAY		
	FL6000	A2BB00000177	LCD DISPLAY	1	
			FUSES		
⚠	F1	K5D632BK0007	FUSE	1	PH
⚠	F1	K5D802APA008	FUSE	1	PN
			FUSE HOLDERS		
	ZA5701	K3GE1ZZ00001	FUSE HOLDER	1	
	ZA5702	K3GE1ZZ00001	FUSE HOLDER	1	
			THERMISTORS		
⚠	TH5702	D4CAA2R20001	THERMISTOR	1	
⚠	TH5860	D4CC11040013	THERMISTOR	1	
⚠	TH5900	D4CC11040013	THERMISTOR	1	
			JACKS		
	JK51	K4ZZ02000103	2P CONNECTOR	1	
	JK52	K4AC02B00042	JK FM/AM ANTENNA	1	
	JK2000	K2HA204B0153	JK AUX	1	
	JK5901	K4AL04B00001	JK SPEAKER	1	
	JK6001	K2HC103A0031	JK HEADPHONE	1	
	JK6002	K2HC103A0031	JK MUSIC PORT	1	
⚠	P5701	K2AA2B000011	AC INLET	1	PH

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	P5701	K2AB2B000007	AC INLET	1	PN
			CHIP JUMPERS		
	K2	D0GBR00JA008	0 1/16W	1	
	K6	D0GBR00JA008	0 1/16W	1	PN
	K8	D0GBR00JA008	0 1/16W	1	PH
	K2005	D0GBR00JA008	0 1/16W	1	
	K2006	D0GBR00JA008	0 1/16W	1	PH
	K2007	D0GBR00JA008	0 1/16W	1	PN
	K2009	D0GBR00JA008	0 1/16W	1	
	K2010	D0GBR00JA008	0 1/16W	1	
	K5921	D0GBR00JA008	0 1/16W	1	
	K7024	D0GBR00JA008	0 1/16W	1	
	K7102	D0GBR00JA008	0 1/16W	1	
	K7125	D0GBR00JA008	0 1/16W	1	
	K7127	D0GBR00JA008	0 1/16W	1	
	K7335	D0GBR00JA008	0 1/16W	1	
	K7701	D0GBR00JA008	0 1/16W	1	
	L54	D0GBR00JA008	0 1/16W	1	
	L501	D0GDR00JA017	0 1/8W	1	
	LB501	ERJ2GE0R00X	0 1/16W	1	
	LB502	ERJ2GE0R00X	0 1/16W	1	
	LB602	D0GBR00JA008	0 1/16W	1	
	LB616	D0GBR00JA008	0 1/16W	1	
	LB622	ERJ2GE0R00X	0 1/16W	1	
	LB625	D0GBR00JA008	0 1/16W	1	
	LB629	D0GBR00JA008	0 1/16W	1	
	LB2000	D0GBR00JA008	0 1/16W	1	
	LB2001	D0GBR00JA008	0 1/16W	1	
	LB2002	D0GBR00JA008	0 1/16W	1	
	LB2003	D0GBR00JA008	0 1/16W	1	
	LB2004	D0GBR00JA008	0 1/16W	1	
	LB2007	D0GBR00JA008	0 1/16W	1	
	LB2008	D0GBR00JA008	0 1/16W	1	
	LB2009	D0GBR00JA008	0 1/16W	1	
	LB2010	D0GBR00JA008	0 1/16W	1	
	LB7262	D0GBR00JA008	0 1/16W	1	
	LB7263	D0GBR00JA008	0 1/16W	1	
	LB7264	D0GBR00JA008	0 1/16W	1	
	LB7265	D0GBR00JA008	0 1/16W	1	
	LB7266	D0GBR00JA008	0 1/16W	1	
	W501	D0GDR00JA017	0 1/8W	1	
	W502	D0GBR00JA008	0 1/16W	1	
	W503	D0GDR00JA017	0 1/8W	1	
	W504	D0GFR00JA017	0 1/4W	1	
	W505	D0GFR00JA017	0 1/4W	1	
	W507	D0GDR00JA017	0 1/8W	1	
	W508	D0GDR00JA017	0 1/8W	1	
	W5033	D0GBR00JA008	0 1/16W	1	
	W5039	D0GBR00JA008	0 1/16W	1	
	W5040	D0GDR00JA017	0 1/8W	1	
	W5041	D0GBR00JA008	0 1/16W	1	
	W5042	D0GDR00JA017	0 1/8W	1	
	W5043	D0GDR00JA017	0 1/8W	1	
	W5044	D0GDR00JA017	0 1/8W	1	
	W5045	D0GBR00JA008	0 1/16W	1	
	W5046	D0GDR00JA017	0 1/8W	1	
	W5047	D0GBR00JA008	0 1/16W	1	
	W5105	D0GBR00JA008	0 1/16W	1	
	W5119	D0GBR00JA008	0 1/16W	1	
	W5120	D0GBR00JA008	0 1/16W	1	
	W5132	D0GDR00JA017	0 1/8W	1	
	W5165	D0GDR00JA017	0 1/8W	1	
	W5203	D0GFR00JA017	0 1/4W	1	
	W5204	D0GFR00JA017	0 1/4W	1	
	W5206	D0GDR00JA017	0 1/8W	1	
	W5214	D0GBR00JA008	0 1/16W	1	
	W5215	D0GBR00JA008	0 1/16W	1	
	W5224	D0GBR00JA008	0 1/16W	1	
	W5230	D0GDR00JA017	0 1/8W	1	
	W5330	D0GBR00JA008	0 1/16W	1	
	W5343	D0GFR00JA017	0 1/4W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W5349	D0GBR00JA008	0 1/16W	1	
	W5361	D0GBR00JA008	0 1/16W	1	
	W5367	D0GBR00JA008	0 1/16W	1	
	W5369	D0GDR00JA017	0 1/8W	1	
	W5375	D0GBR00JA008	0 1/16W	1	
	W5385	D0GBR00JA008	0 1/16W	1	
	W5389	D0GDR00JA017	0 1/8W	1	
	W5403	D0GBR00JA008	0 1/16W	1	
	W5444	D0GBR00JA008	0 1/16W	1	
	W5452	D0GBR00JA008	0 1/16W	1	
	W5477	D0GDR00JA017	0 1/8W	1	
	W5495	D0GBR00JA008	0 1/16W	1	
	W5497	D0GFR00JA017	0 1/4W	1	
	W5503	D0GBR00JA008	0 1/16W	1	
	W5506	D0GFR00JA017	0 1/4W	1	
	W5507	D0GFR00JA017	0 1/4W	1	
	W5508	D0GFR00JA017	0 1/4W	1	
	W5559	D0GBR00JA008	0 1/16W	1	
	W5572	D0GBR00JA008	0 1/16W	1	
	W5573	D0GBR00JA008	0 1/16W	1	
	W5575	D0GBR00JA008	0 1/16W	1	
	W5584	D0GBR00JA008	0 1/16W	1	
	W5588	D0GBR00JA008	0 1/16W	1	
	W5589	D0GBR00JA008	0 1/16W	1	
	W5592	D0GBR00JA008	0 1/16W	1	
	W5593	D0GDR00JA017	0 1/8W	1	
	W5594	D0GFR00JA017	0 1/4W	1	
	W5595	D0GDR00JA017	0 1/8W	1	
	W5596	D0GFR00JA017	0 1/4W	1	
	W5598	D0GFR00JA017	0 1/4W	1	
	W5599	D0GBR00JA008	0 1/16W	1	
	W5600	D0GBR00JA008	0 1/16W	1	
	W5601	D0GBR00JA008	0 1/16W	1	
	W5601	D0GFR00JA017	0 1/4W	1	
	W5602	D0GBR00JA008	0 1/16W	1	
	W5603	D0GBR00JA008	0 1/16W	1	
	W5603	D0GDR00JA017	0 1/8W	1	
	W5604	D0GBR00JA008	0 1/16W	1	
	W5606	D0GDR00JA017	0 1/8W	1	
	W5607	D0GBR00JA008	0 1/16W	1	
	W6001	D0GDR00JA017	0 1/8W	1	
	W6002	D0GDR00JA017	0 1/8W	1	
	W6005	D0GBR00JA008	0 1/16W	1	
			RESISTORS		
	R51	D0GB102JA008	1K 1/16W	1	
	R52	D0GB102JA008	1K 1/16W	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 1/16W	1	
	R61	D0GB473JA008	47K 1/16W	1	
	R62	D0GB473JA008	47K 1/16W	1	
	R64	D0GBR00JA008	0 1/16W	1	
	R517	ERJ2GE0R00X	0 1/16W	1	
	R518	ERJ2GE0R00X	0 1/16W	1	
	R519	D0GA105JA023	1M 1/16W	1	
	R520	D0GA105JA023	1M 1/16W	1	
	R525	D0GA100JA023	10 1/16W	1	
	R526	D0GA100JA023	10 1/16W	1	
	R527	D0GA103JA023	10K 1/16W	1	
	R554	D0GA104JA023	100K 1/16W	1	
	R555	D0GA221JA023	220 1/16W	1	
	R556	D0GA221JA023	220 1/16W	1	
	R557	D0GA223JA023	22K 1/16W	1	
	R558	D0GA223JA023	22K 1/16W	1	
	R559	D0GA104JA023	100K 1/16W	1	
	R560	D0GA473JA023	47K 1/16W	1	
	R561	D0GA473JA023	47K 1/16W	1	
	R602	ERJ2GE0R00X	0 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R653	D0GA473JA023	47K 1/16W	1	
	R654	D0GA473JA023	47K 1/16W	1	
	R655	D0GA473JA023	47K 1/16W	1	
	R701	D0GA473JA023	47K 1/16W	1	
	R704	D0GA473JA023	47K 1/16W	1	
	R760	D0GA220JA023	22 1/16W	1	
	R761	D0GA473JA023	47K 1/16W	1	
	R764	D0GA100JA023	10 1/16W	1	
	R765	ERJ2GE0R00X	0 1/16W	1	
	R766	ERJ2GE0R00X	0 1/16W	1	
	R767	D0GA100JA023	10 1/16W	1	
	R801	D0GA220JA023	22 1/16W	1	
	R802	D0GA100JA023	10 1/16W	1	
	R803	D0GA100JA023	10 1/16W	1	
	R804	D0GA100JA023	10 1/16W	1	
	R806	D0GA100JA023	10 1/16W	1	
	R807	D0GA331JA023	330 1/16W	1	
	R809	D0GA101JA023	100 1/16W	1	
	R810	D0GA100JA023	10 1/16W	1	
	R811	D0GA100JA023	10 1/16W	1	
	R812	D0GA682JA023	6.8K 1/16W	1	
	R813	D0GA473JA023	47K 1/16W	1	
	R814	D0GA473JA023	47K 1/16W	1	
	R816	D0GA101JA023	100 1/16W	1	
	R817	D0GA100JA023	10 1/16W	1	
	R818	D0GA473JA023	47K 1/16W	1	
	R821	D0GA473JA023	47K 1/16W	1	
	R822	D0GA473JA023	47K 1/16W	1	
	R824	D0GA473JA023	47K 1/16W	1	
	R825	D0GA100JA023	10 1/16W	1	
	R827	ERJ2GE0R00X	0 1/16W	1	
	R828	ERJ2GE0R00X	0 1/16W	1	
	R829	ERJ2GE0R00X	0 1/16W	1	
	R830	D0GA100JA023	10 1/16W	1	
	R833	D0GA102JA023	1K 1/16W	1	
	R835	D0GA331JA023	330 1/16W	1	
	R836	D0GA100JA023	10 1/16W	1	
	R841	D0GB102JA008	1K 1/16W	1	
	R842	D0GB102JA008	1K 1/16W	1	
	R843	D0GA220JA023	22 1/16W	1	
	R844	D0GA220JA023	22 1/16W	1	
	R849	D0GA473JA023	47K 1/16W	1	
	R850	D0GA473JA023	47K 1/16W	1	
	R855	D0GA100JA023	10 1/16W	1	
	R856	D0GA100JA023	10 1/16W	1	
	R857	D0GA100JA023	10 1/16W	1	
	R858	D0GA101JA023	100 1/16W	1	
	R861	D0GA220JA023	22 1/16W	1	
	R862	D0GA220JA023	22 1/16W	1	
	R863	D0GA220JA023	22 1/16W	1	
	R870	D0GA100JA023	10 1/16W	1	
	R871	D0GA100JA023	10 1/16W	1	
	R872	D0GA100JA023	10 1/16W	1	
	R873	ERJ2GE0R00X	0 1/16W	1	
	R875	D0GA473JA023	47K 1/16W	1	
	R876	D0GA473JA023	47K 1/16W	1	
	R877	D0GA103JA023	10K 1/16W	1	
	R878	D1BD5901A030	5.9K 1/10W	1	
	R879	D0GA105JA023	1M 1/16W	1	
	R880	D0GB471JA008	470 1/16W	1	
	R881	D0GA473JA023	47K 1/16W	1	
	R888	ERJ2GE0R00X	0 1/16W	1	
	R892	ERJ2GE0R00X	0 1/16W	1	
	R893	ERJ2GE0R00X	0 1/16W	1	
	R894	ERJ2GE0R00X	0 1/16W	1	
	R895	ERJ2GE0R00X	0 1/16W	1	
	R898	D0GA103JA023	10K 1/16W	1	
	R2001	D0GB822JA008	8.2K 1/16W	1	
	R2002	D0GB822JA008	8.2K 1/16W	1	
	R2003	D0GB392JA008	3.9K 1/16W	1	
	R2004	D0GB392JA008	3.9K 1/16W	1	
	R2005	D0GB103JA008	10K 1/16W	1	
	R2006	D0GB103JA008	10K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2007	D0GB332JA008	3.3K 1/16W	1	
	R2008	D0GB332JA008	3.3K 1/16W	1	
	R2009	D0GB332JA008	3.3K 1/16W	1	
	R2010	D0GB332JA008	3.3K 1/16W	1	
	R2011	D0GB472JA008	4.7K 1/16W	1	
	R2012	D0GB472JA008	4.7K 1/16W	1	
	R2013	D0GB182JA008	1.8K 1/16W	1	
	R2014	D0GB182JA008	1.8K 1/16W	1	
	R2015	D0GB472JA008	4.7K 1/16W	1	
	R2016	D0GB472JA008	4.7K 1/16W	1	
	R2017	D0GB332JA008	3.3K 1/16W	1	
	R2018	D0GB103JA008	10K 1/16W	1	
	R2019	D0GB683JA008	68K 1/16W	1	
	R2020	D0GBR00JA008	0 1/16W	1	
	R2021	D0GBR00JA008	0 1/16W	1	
	R2026	D0GB101JA008	100 1/16W	1	
	R2051	D0GB102JA008	1K 1/16W	1	
	R2052	D0GB102JA008	1K 1/16W	1	
	R2054	D0GBR00JA008	0 1/16W	1	
	R2056	D0GB184JA008	180K 1/16W	1	
	R2057	D0GB184JA008	180K 1/16W	1	
	R2058	D0GB682JA008	6.8K 1/16W	1	
	R2059	D0GB682JA008	6.8K 1/16W	1	
	R2060	D0GB223JA008	22K 1/16W	1	
	R2061	D0GB223JA008	22K 1/16W	1	
	R2062	D0GB154JA008	150K 1/16W	1	
	R2063	D0GB153JA008	15K 1/16W	1	
	R2064	D0GB153JA008	15K 1/16W	1	
	R2065	D0GB101JA008	100 1/16W	1	
	R2066	D0GB101JA008	100 1/16W	1	
	R2067	D0GB101JA008	100 1/16W	1	
	R2068	D0GB101JA008	100 1/16W	1	
	R2069	D0GB102JA008	1K 1/16W	1	
	R2070	D0GB101JA008	100 1/16W	1	
	R2071	D0GB101JA008	100 1/16W	1	
	R2072	D0GB102JA008	1K 1/16W	1	
	R2073	D0GB101JA008	100 1/16W	1	
	R2074	D0GB101JA008	100 1/16W	1	
	R2075	D0GB101JA008	100 1/16W	1	
	R2076	D0GB102JA008	1K 1/16W	1	
	R2077	D0GB102JA008	1K 1/16W	1	
	R2078	D0GB563JA008	56K 1/16W	1	
	R2079	D0AF330JA039	33 1/2W	1	
	R2081	D0GB682JA008	6.8K 1/16W	1	
	R2082	D0GB104JA008	100K 1/16W	1	
	R2083	D0GB682JA008	6.8K 1/16W	1	
	R2084	D0GB103JA008	10K 1/16W	1	PH
	R2085	D0GB104JA008	100K 1/16W	1	PN
	R2085	D0GB122JA008	1.2K 1/16W	1	PH
	R2086	D0GB103JA008	10K 1/16W	1	
	R2087	D0GB103JA008	10K 1/16W	1	
	R2090	D0GB822JA008	8.2K 1/16W	1	
	R2091	D0GB101JA008	100 1/16W	1	
	R2092	D0GB822JA008	8.2K 1/16W	1	
	R2093	D0GB392JA008	3.9K 1/16W	1	
	R2094	D0GB392JA008	3.9K 1/16W	1	
	R2095	D0GB473JA008	47K 1/16W	1	
	R2096	D0GB473JA008	47K 1/16W	1	
	R2097	D0GB103JA008	10K 1/16W	1	
	R2098	D0GB472JA008	4.7K 1/16W	1	
	R2099	D0GB103JA008	10K 1/16W	1	
	R2102	D0GB472JA008	4.7K 1/16W	1	
	R2105	D0GB104JA008	100K 1/16W	1	
	R2106	D0GB102JA008	1K 1/16W	1	
	R2107	D0AF220JA039	22 1/2W	1	
	R2108	D0GBR00JA008	0 1/16W	1	
	R2112	D0GB102JA008	1K 1/16W	1	
	R2113	D0GB102JA008	1K 1/16W	1	
	R2114	D0GB101JA008	100 1/16W	1	
	R2115	D0GBR00JA008	0 1/16W	1	
	R2117	D0GB101JA008	100 1/16W	1	
	R2118	D0GB101JA008	100 1/16W	1	
	R2120	D0GB101JA008	100 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2121	D0GB475JA008	4.7M 1/16W	1	
	R2123	D0GB564JA008	560K 1/16W	1	
	R2126	D0GB101JA008	100 1/16W	1	
	R2127	D0GBR00JA008	0 1/16W	1	
	R2128	D0GBR00JA008	0 1/16W	1	
	R2129	D0GB101JA008	100 1/16W	1	
	R2130	D0GB102JA008	1K 1/16W	1	
	R2134	D0GBR00JA008	0 1/16W	1	
	R2136	D0GBR00JA008	0 1/16W	1	
	R2137	D0GB682JA008	6.8K 1/16W	1	
	R2138	D0GB682JA008	6.8K 1/16W	1	
	R2140	D0GBR00JA008	0 1/16W	1	
	R2141	D0GBR00JA008	0 1/16W	1	
	R2142	D0GBR00JA008	0 1/16W	1	
	R2146	D0GB473JA008	47K 1/16W	1	
	R2150	D0GB473JA008	47K 1/16W	1	
	R2152	D0GB101JA008	100 1/16W	1	
	R2153	D0GB104JA008	100K 1/16W	1	
	R2154	D0GB101JA008	100 1/16W	1	
	R2156	D0GB101JA008	100 1/16W	1	
	R2157	D0GB152JA008	1.5K 1/16W	1	
	R2159	D0GB101JA008	100 1/16W	1	
	R2160	D0GB152JA008	1.5K 1/16W	1	
	R2162	ERJ3GEY0R00V	0 1/16W	1	
	R2163	D0GB101JA008	100 1/16W	1	
	R2164	D0GB101JA008	100 1/16W	1	
	R2165	D0GB102JA008	1K 1/16W	1	
	R2166	D0GB101JA008	100 1/16W	1	
	R2173	D0GB153JA008	15K 1/16W	1	
	R2174	D0GB103JA008	10K 1/16W	1	
	R2175	D0GB103JA008	10K 1/16W	1	
	R2176	D0GB103JA008	10K 1/16W	1	
	R2177	D0GB153JA008	15K 1/16W	1	
	R2178	D0GB103JA008	10K 1/16W	1	
	R2182	D0GB103JA008	10K 1/16W	1	
	R2185	D0GB103JA008	10K 1/16W	1	
	R2186	D0GB180JA008	18 1/16W	1	
	R2187	D0GB180JA008	18 1/16W	1	
	R2188	D0GB221JA007	220 1/10W	1	
	R2189	D0GB473JA008	47K 1/16W	1	
	R2190	D0GB180JA008	18 1/16W	1	
	R2191	D0GB180JA008	18 1/16W	1	
	R2193	ERJ3GEY0R00V	0 1/16W	1	
	R2195	D0GB101JA008	100 1/16W	1	
	R2196	D0GB102JA008	1K 1/16W	1	
	R2197	D0GB101JA008	100 1/16W	1	
	R2198	D0GB102JA008	1K 1/16W	1	
	R2199	D0GB180JA008	18 1/16W	1	
	R2200	D0GB180JA008	18 1/16W	1	
	R2201	D0GB180JA008	18 1/16W	1	
	R2202	D0GB180JA008	18 1/16W	1	
	R2203	D0GB472JA008	4.7K 1/16W	1	
	R2204	D0GB561JA008	560 1/16W	1	
	R2207	D0GB561JA008	560 1/16W	1	
	R2208	D0GB561JA008	560 1/16W	1	
	R2209	D0GB561JA008	560 1/16W	1	
	R2210	D0GDR00JA017	0 1/8W	1	
	R2214	D0GB102JA008	1K 1/16W	1	
	R2217	D0GDR00JA017	0 1/8W	1	
	R2218	D0GB103JA008	10K 1/16W	1	
	R2221	D0GB474JA008	470K 1/16W	1	
	R2222	D0GB473JA008	47K 1/16W	1	
	R2223	D0GB473JA008	47K 1/16W	1	
	R2224	D0GB471JA008	470 1/16W	1	
	R2225	D0GB471JA008	470 1/16W	1	
	R2228	D0GB223JA008	22K 1/16W	1	
	R2229	D0GB103JA008	10K 1/16W	1	
	R2232	D0GB103JA008	10K 1/16W	1	
	R2235	D0GB223JA008	22K 1/16W	1	
	R2246	D0GB101JA008	100 1/16W	1	
	R2247	D0GBR00JA008	0 1/16W	1	
	R2248	D0GB153JA008	15K 1/16W	1	
	R2250	D0GB183JA008	18K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2251	D0GB123JA008	12K 1/16W	1	
	R2252	D0GB101JA008	100 1/16W	1	
	R2253	D0GB473JA008	47K 1/16W	1	
	R2260	D0GB102JA008	1K 1/16W	1	
	R2261	D0GB272JA008	2.7K 1/16W	1	
	R2262	D0GB271JA008	270 1/16W	1	
	R2263	D0GB180JA008	18 1/16W	1	
	R2268	D0GB272JA008	2.7K 1/16W	1	
	R2271	D0GB101JA008	100 1/16W	1	
	R2272	D0GB472JA008	4.7K 1/16W	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 1/16W	1	
	R2278	D0GB391JA008	390 1/16W	1	
	R2286	D0GBR00JA008	0 1/16W	1	
	R2287	D0GBR00JA008	0 1/16W	1	
	R2294	D0GD682JA017	6.8K 1/8W	1	
	R2295	D0GD682JA017	6.8K 1/8W	1	
	R2303	D0HB102ZA002	1K 1/16W	1	
	R2309	ERJ3RBD272V	2.7K 1/16W	1	
	R2311	D0HB152ZA002	1.5K 1/16W	1	
	R2316	D0GB105JA008	1M 1/16W	1	
	R2329	D0GB103JA008	10K 1/16W	1	
	R2333	ERG2SJ471E	470 2W	1	
	R2334	ERG2SJ471E	470 2W	1	
	R2335	D0GB103JA008	10K 1/16W	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 1/16W	1	
	R2344	D0GB332JA008	3.3K 1/16W	1	
	R2345	D0GB332JA008	3.3K 1/16W	1	
	R2346	D0GB332JA008	3.3K 1/16W	1	
	R2347	D0GB332JA008	3.3K 1/16W	1	
	R2348	D0GB822JA008	8.2K 1/16W	1	
	R2349	D0GB104JA008	100K 1/16W	1	
	R2350	D0GB683JA008	68K 1/16W	1	
	R2355	D0GB123JA008	12K 1/16W	1	
	R2356	D0GB102JA008	1K 1/16W	1	
	R2357	D0GB475JA008	4.7M 1/16W	1	
	R2358	D0GB103JA008	10K 1/16W	1	
	R2359	D0GB102JA008	1K 1/16W	1	
	R2360	D0GB104JA008	100K 1/16W	1	
	R2361	D0GB103JA008	10K 1/16W	1	
	R2362	D0GB474JA008	470K 1/16W	1	
	R2363	D0GB103JA008	10K 1/16W	1	
	R2364	D0GB222JA008	2.2K 1/16W	1	
	R2365	D0GB102JA008	1K 1/16W	1	
	R2366	D0GB102JA008	1K 1/16W	1	
	R2372	D0GB102JA008	1K 1/16W	1	
	R2373	D0GB394JA008	390K 1/16W	1	
	R2374	D0GB102JA008	1K 1/16W	1	
	R2375	D0GB394JA008	390K 1/16W	1	
	R2376	D0GB102JA008	1K 1/16W	1	
	R2377	D0GB103JA008	10K 1/16W	1	
	R2378	D0GB101JA008	100 1/16W	1	
	R2379	D0GB681JA008	680 1/16W	1	
	R2380	D0GBR00JA008	0 1/16W	1	
	R2381	D0GB123JA008	12K 1/16W	1	
	R2382	D0AF270JA039	27 1/2W	1	
	R2383	D0GB823JA008	82K 1/16W	1	
	R2384	D0GB274JA008	270K 1/16W	1	
	R2385	D0GB474JA008	470K 1/16W	1	
	R2386	D0GB333JA008	33K 1/16W	1	
	R2387	D0GB682JA008	6.8K 1/16W	1	
	R2388	D0GB221JA008	220 1/16W	1	
	R2389	D0GB104JA008	100K 1/16W	1	
	R5702	D0GZ104JA012	100K 1W	1	PH
	R5702	D0GZ333JA012	33K 1W	1	PN

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	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 1/16W	1	
	R5724	D0GD121JA017	120 1/8W	1	
	R5726	ERX2SZJR10P	0.1 2W	1	
	R5727	ERX2SZJR10P	0.1 2W	1	PN
	R5728	D0GB104JA008	100K 1/16W	1	
	R5729	D0GD103JA017	10K 1/8W	1	
	R5730	D0GB102JA008	1K 1/16W	1	
	R5732	D0GB101JA008	100 1/16W	1	
	R5733	D0GB473JA008	47K 1/16W	1	
	R5786	D0GZ204JA012	200K 1W	1	PH
	R5795	D0GD474JA017	470K 1/8W	1	
	R5797	D0GB153JA008	15K 1/16W	1	
	R5798	D0GB220JA008	22 1/16W	1	
	R5800	D0GD153JA017	15K 1/8W	1	
	R5801	D0GD223JA017	22K 1/8W	1	
	R5802	ERJ3RBD103V	10K 1/16W	1	
	R5803	ERJ3RBD103V	10K 1/16W	1	
	R5804	ERJ6RBD823V	82K 1/10W	1	
	R5805	ERJ3RBD332V	3.3K 1/16W	1	
	R5806	D0GB153JA008	15K 1/16W	1	
	R5807	D0GD331JA017	330 1/8W	1	
	R5808	D0GD222JA017	2.2K 1/8W	1	
	R5809	D0GD331JA017	330 1/8W	1	
	R5810	D0GB331JA008	330 1/16W	1	
	R5814	D0GB822JA008	8.2K 1/16W	1	
	R5817	D0GB331JA008	330 1/16W	1	
	R5832	D0GZ222JA012	2.2K 1W	1	
	R5833	D0GZ222JA012	2.2K 1W	1	
	R5834	D0GZ222JA012	2.2K 1W	1	
	R5835	D0GZ222JA012	2.2K 1W	1	
	R5836	D0GZ222JA012	2.2K 1W	1	
	R5837	D0GZ222JA012	2.2K 1W	1	
	R5840	D0GB823JA008	82K 1/16W	1	
	R5841	D0GB124JA008	120K 1/16W	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	
	R5865	ERJ3RBD221V	220 1/16W	1	
	R5866	D0GD220JA017	22 1/8W	1	
	R5867	D0GB104JA008	100K 1/16W	1	
	R5868	D0GB223JA008	22K 1/16W	1	
	R5890	D0GB222JA008	2.2K 1/16W	1	
	R5891	ERJ3RBD333V	33K 1/16W	1	
	R5892	D0HB102ZA002	1K 1/16W	1	
	R5893	ERJ3RBD103V	10K 1/16W	1	
	R5894	D0GB151JA008	150 1/16W	1	
	R5895	D0GB153JA008	15K 1/16W	1	
	R5896	D0GB104JA008	100K 1/16W	1	
	R5897	D0GB101JA008	100 1/16W	1	
	R5901	D0GB124JA008	120K 1/16W	1	
	R5903	D0GB103JA008	10K 1/16W	1	
	R5904	D0GB103JA008	10K 1/16W	1	
	R5905	D0GF100JA014	10 1/4W	1	
	R5906	D0GB184JA008	180K 1/16W	1	
	R5907	D0GBR00JA008	0 1/16W	1	
	R5908	D0GB103JA008	10K 1/16W	1	
	R5909	ERJ3RBD562V	5.6K 1/16W	1	
	R5910	ERJ3RBD273V	27K 1/16W	1	
	R5911	D0GB562JA008	5.6K 1/16W	1	
	R5913	ERJ3RBD272V	2.7K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5914	D0GB562JA008	5.6K 1/16W	1	
	R5915	D0GB103JA008	10K 1/16W	1	
	R5917	D0GF100JA014	10 1/4W	1	
	R5918	ERJ3RBD272V	2.7K 1/16W	1	
	R5921	D0GF100JA014	10 1/4W	1	
	R5922	D0GF100JA014	10 1/4W	1	
	R5923	D0GB682JA008	6.8K 1/16W	1	
	R5924	D0GB562JA008	5.6K 1/16W	1	
	R5925	D0GB562JA008	5.6K 1/16W	1	
	R5926	D0GB101JA008	100 1/16W	1	
	R5927	D0GB823JA008	82K 1/16W	1	
	R5928	D0GB823JA008	82K 1/16W	1	
	R5929	D0GB122JA008	1.2K 1/16W	1	
	R5930	D0GB122JA008	1.2K 1/16W	1	
	R5931	ERJ1TYJ220U	22 1W	1	
	R5932	ERJ1TYJ220U	22 1W	1	
	R5933	D0GB562JA008	5.6K 1/16W	1	
	R5934	D0GB562JA008	5.6K 1/16W	1	
	R5935	D0GB103JA008	10K 1/16W	1	
	R5940	D0GB104JA008	100K 1/16W	1	
	R6005	D0GB122JA008	1.2K 1/16W	1	
	R6006	D0GB152JA008	1.5K 1/16W	1	
	R6007	D0GB222JA008	2.2K 1/16W	1	
	R6008	D0GB332JA008	3.3K 1/16W	1	
	R6009	D0GB472JA008	4.7K 1/16W	1	
	R6010	D0GB682JA008	6.8K 1/16W	1	
	R6011	D0GB153JA008	15K 1/16W	1	
	R6017	D0GB153JA008	15K 1/16W	1	
	R6019	D0GB122JA008	1.2K 1/16W	1	
	R6020	D0GB152JA008	1.5K 1/16W	1	
	R6021	D0GB222JA008	2.2K 1/16W	1	
	R6022	D0GB332JA008	3.3K 1/16W	1	
	R6023	D0GB472JA008	4.7K 1/16W	1	
	R6024	D0GB682JA008	6.8K 1/16W	1	
	R6026	D0GB103JA008	10K 1/16W	1	
	R6029	D0GB103JA008	10K 1/16W	1	
	R6032	D0GB221JA007	220 1/10W	1	
	R6033	D0GB221JA007	220 1/10W	1	
	R6034	D0GB471JA008	470 1/16W	1	
	R6040	D0GB181JA008	180 1/16W	1	
	R6041	D0GB823JA008	82K 1/16W	1	
	R6046	D0GB181JA008	180 1/16W	1	
	R6054	D0GB181JA008	180 1/16W	1	
	R6056	D0GB682JA008	6.8K 1/16W	1	
	R6057	D0GB470JA008	47 1/16W	1	
	R6058	D0GB103JA008	10K 1/16W	1	
	R6059	D0GB103JA008	10K 1/16W	1	
	R6062	D0GB1R0JA008	1 1/16W	1	
	R6067	D0GB123JA008	12K 1/16W	1	
	R6068	D0GB223JA008	22K 1/16W	1	
	R6069	D0GB473JA008	47K 1/16W	1	
	R6070	D0GB103JA008	10K 1/16W	1	
	R6071	D0GB1R0JA008	1 1/16W	1	
	R6073	D0GB100JA008	10 1/16W	1	
	R6074	D0GB473JA008	47K 1/16W	1	
	R6075	D0GB223JA008	22K 1/16W	1	
	R6084	D0GBR00JA008	0 1/16W	1	
	R7111	D0GB103JA008	10K 1/16W	1	
	R7211	D0GB823JA008	82K 1/16W	1	
	R7212	D0GB821JA008	820 1/16W	1	
	R7213	D0GB272JA008	2.7K 1/16W	1	
	R7214	D0GB471JA008	470 1/16W	1	
	R7216	D0GB103JA008	10K 1/16W	1	
	R7217	D0GB102JA008	1K 1/16W	1	
	R7218	D0GB102JA008	1K 1/16W	1	
	R7220	D0GB105JA008	1M 1/16W	1	
	R7221	D0GB101JA008	100 1/16W	1	
	R7253	D0GB100JA008	10 1/16W	1	
	R7254	D0GB102JA008	1K 1/16W	1	
	R7315	D0GB102JA008	1K 1/16W	1	
	R7321	D0GB152JA008	1.5K 1/16W	1	
	R7322	D0GB562JA008	5.6K 1/16W	1	
	R7323	D0GB332JA008	3.3K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R7325	D0GB101JA008	100 1/16W	1	
	R7327	D0GB562JA008	5.6K 1/16W	1	
	R7328	D0GB273JA008	27K 1/16W	1	
	R7329	D0GB472JA008	4.7K 1/16W	1	
	R7331	D0GB473JA008	47K 1/16W	1	
	R7332	D0GB123JA008	12K 1/16W	1	
	R7335	D0GB101JA008	100 1/16W	1	
	R7336	D0GB100JA008	10 1/16W	1	
	R7340	D0GB102JA008	1K 1/16W	1	
	R7341	D0GB122JA008	1.2K 1/16W	1	
	R7349	D0GB104JA008	100K 1/16W	1	
	R7601	D0GB4R7JA008	4.7 1/16W	1	
	R7650	D0GB5R6JA008	5.6 1/16W	1	
	R7702	D0GBR00JA008	0 1/16W	1	
	R7703	D0GBR00JA008	0 1/16W	1	
	R7712	D0GBR00JA008	0 1/16W	1	
	R7713	D0GBR00JA008	0 1/16W	1	
	R7723	D0GBR00JA008	0 1/16W	1	
	R7733	D0GBR00JA008	0 1/16W	1	
	R7761	D0GB225JA008	2.2M 1/16W	1	
			RESISTOR NETWORKS		
	RX551	D1H84734A024	RESISTOR NETWORK	1	
	RX656	D1H84734A024	RESISTOR NETWORK	1	
	RX760	D1H84734A024	RESISTOR NETWORK	1	
	RX761	D1H82204A024	RESISTOR NETWORK	1	
	RX801	EXB2HV100JV	RESISTOR NETWORK	1	
	RX802	EXB2HV100JV	RESISTOR NETWORK	1	
	RX804	D1H410020002	RESISTOR NETWORK	1	
	RX805	D1H410020002	RESISTOR NETWORK	1	
	RX807	EXB2HV100JV	RESISTOR NETWORK	1	
	RX808	EXB2HV100JV	RESISTOR NETWORK	1	
	RX820	D1H81004A024	RESISTOR NETWORK	1	
	RX826	D1H81004A024	RESISTOR NETWORK	1	
	RX834	D1H81004A024	RESISTOR NETWORK	1	
	RX837	EXB2HV100JV	RESISTOR NETWORK	1	
	RX838	EXB2HV100JV	RESISTOR NETWORK	1	
	RX839	D1H410020002	RESISTOR NETWORK	1	
	RX840	EXB2HV100JV	RESISTOR NETWORK	1	
	RX841	EXB2HV100JV	RESISTOR NETWORK	1	
	RX854	D1H410020002	RESISTOR NETWORK	1	
	RX864	D1H84734A024	RESISTOR NETWORK	1	
			CAPACITORS		
	C51	F1H1H102A219	1000pF 50V	1	
	C52	F1H1A474A001	0.47uF 10V	1	
	C57	F1H1H120A230	12pF 50V	1	
	C58	F1H1H120A230	12pF 50V	1	
	C59	F1H1A105A025	1uF 10V	1	
	C60	F1H1A105A025	1uF 10V	1	
	C61	F1G1C104A077	0.1uF 16V	1	
	C62	F1G1C104A077	0.1uF 16V	1	
	C63	F1H0J1050012	1uF 6.3V	1	
	C513	F1G1A1040006	0.1uF 10V	1	
	C514	F1G1A1040006	0.1uF 10V	1	
	C515	F1J0J106A004	10uF 6.3V	1	
	C551	F1G1A1040006	0.1uF 10V	1	
	C552	F1J0J106A004	10uF 6.3V	1	
	C553	F1G1A1040006	0.1uF 10V	1	
	C554	F1J0J106A004	10uF 6.3V	1	
	C555	F1H1A225A051	2.2uF 10V	1	
	C556	F1J0J106A004	10uF 6.3V	1	
	C557	F1J0J106A004	10uF 6.3V	1	
	C558	F1G1H101A566	100pF 50V	1	
	C559	F1G1H101A566	100pF 50V	1	
	C560	F1J0J106A004	10uF 6.3V	1	
	C561	F1G1A1040006	0.1uF 10V	1	
	C562	F1J0J106A004	10uF 6.3V	1	
	C563	F1J0J106A004	10uF 6.3V	1	
	C564	F1J0J106A004	10uF 6.3V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C601	ERJ2GE0R00X	0 1/16W	1	
	C602	ERJ2GE0R00X	0 1/16W	1	
	C701	F1G1C1030007	0.01uF 16V	1	
	C751	F1G1C1030007	0.01uF 16V	1	
	C752	F1G1C1030007	0.01uF 16V	1	
	C753	F1G1C1030007	0.01uF 16V	1	
	C754	F1G1C1030007	0.01uF 16V	1	
	C755	F1G1C1030007	0.01uF 16V	1	
	C756	F1G1C1030007	0.01uF 16V	1	
	C757	F1G1C1030007	0.01uF 16V	1	
	C760	F1G1H100A565	10pF 50V	1	
	C761	F1G1H100A565	10pF 50V	1	
	C762	F1G1H100A565	10pF 50V	1	
	C763	F1G1H100A565	10pF 50V	1	
	C764	F1G1H100A565	10pF 50V	1	
	C765	F1G1H5R0A445	5pF 50V	1	
	C766	F1H1A105A025	1uF 10V	1	
	C767	F1H1A105A025	1uF 10V	1	
	C768	F1G1A1040006	0.1uF 10V	1	
	C769	F1G1A1040006	0.1uF 10V	1	
	C801	F1G1C1030007	0.01uF 16V	1	
	C802	F1G1C1030007	0.01uF 16V	1	
	C803	F1G1C1030007	0.01uF 16V	1	
	C804	F1G1C1030007	0.01uF 16V	1	
	C805	F1G1C1030007	0.01uF 16V	1	
	C806	F1G1C1030007	0.01uF 16V	1	
	C807	F1G1C1030007	0.01uF 16V	1	
	C808	F1H0J4750004	4.7uF 6.3V	1	
	C809	F4Z0G226A009	22uF 4V	1	
	C811	F4Z0G226A009	22uF 4V	1	
	C812	F4Z0G226A009	22uF 4V	1	
	C813	F4Z0G226A009	22uF 4V	1	
	C814	F1G1C1030007	0.01uF 16V	1	
	C815	F1G1C1030007	0.01uF 16V	1	
	C816	F1G1H120A565	12pF 50V	1	
	C817	F1G1H150A565	15pF 50V	1	
	C818	F1G1C1030007	0.01uF 16V	1	
	C819	F1G1C1030007	0.01uF 16V	1	
	C820	F1G1C1030007	0.01uF 16V	1	
	C821	F1G1C1030007	0.01uF 16V	1	
	C823	F1G1E1020001	1000pF 25V	1	
	C824	F1G1C1030007	0.01uF 16V	1	
	C825	F1G1C1030007	0.01uF 16V	1	
	C826	F1G1C1030007	0.01uF 16V	1	
	C827	F1G1C1030007	0.01uF 16V	1	
	C828	F1G1C1030007	0.01uF 16V	1	
	C829	F1G1C1030007	0.01uF 16V	1	
	C830	F1G1C1030007	0.01uF 16V	1	
	C831	F1G1C1030007	0.01uF 16V	1	
	C832	F1G1C1030007	0.01uF 16V	1	
	C833	F1G1C1030007	0.01uF 16V	1	
	C834	F1G1C1030007	0.01uF 16V	1	
	C835	F1G1C1030007	0.01uF 16V	1	
	C836	F1G1C1030007	0.01uF 16V	1	
	C837	F1G1C1030007	0.01uF 16V	1	
	C841	F1G1E1020001	1000pF 25V	1	
	C842	F1G1A1040006	0.1uF 10V	1	
	C843	F1G1E1020001	1000pF 25V	1	
	C844	F1G1A1040006	0.1uF 10V	1	
	C845	F1G1E1020001	1000pF 25V	1	
	C846	F1G1A1040006	0.1uF 10V	1	
	C849	F1G1C1030007	0.01uF 16V	1	
	C850	F1G1C1030007	0.01uF 16V	1	
	C851	F1G1E1020001	1000pF 25V	1	
	C852	F1G1H270A565	27pF 50V	1	
	C853	F1G1H220A565	22pF 50V	1	
	C857	F1G1H101A566	100pF 50V	1	
	C858	F1G1H101A566	100pF 50V	1	
	C859	F1G1H101A566	100pF 50V	1	
	C2000	F1H1H103A219	0.01uF 50V	1	
	C2003	F1H1H470A004	47pF 50V	1	
	C2004	F1H1H470A004	47pF 50V	1	
	C2005	F1H1H102A219	1000pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2008	F1H0J1050012	1uF 6.3V	1	
	C2009	F1H1H470A004	47pF 50V	1	
	C2010	F1H1H470A004	47pF 50V	1	
	C2011	F1H1H103A219	0.01uF 50V	1	
	C2012	F1H1H470A004	47pF 50V	1	
	C2015	F1H1H2210001	220pF 50V	1	
	C2016	F1H1H2210001	220pF 50V	1	
	C2020	F1H1H103A219	0.01uF 50V	1	
	C2021	F2A0J471B035	470uF 6.3V	1	
	C2022	F1H1H102A219	1000pF 50V	1	
	C2023	F1H1H102A219	1000pF 50V	1	
	C2024	F1J0J106A020	10uF 6.3V	1	
	C2025	F1J0J106A020	10uF 6.3V	1	
	C2026	F1H1H102A219	1000pF 50V	1	
	C2028	F1H0J1050012	1uF 6.3V	1	
	C2029	F1H0J1050012	1uF 6.3V	1	
	C2030	F1H0J4750004	4.7uF 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	
	C2035	F1H0J4750004	4.7uF 6.3V	1	
	C2036	F1H1H102A219	1000pF 50V	1	
	C2038	F2A1C100A207	10uF 16V	1	
	C2039	F2A1C100A207	10uF 16V	1	
	C2042	F1J0J106A020	10uF 6.3V	1	
	C2043	F1H1H102A219	1000pF 50V	1	
	C2044	F1H1H102A219	1000pF 50V	1	
	C2045	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	F1H1A474A025	0.47uF 10V	1	
	C2068	F1H1A474A025	0.47uF 10V	1	
	C2070	F1H1A474A025	0.47uF 10V	1	
	C2071	F1H1A474A025	0.47uF 10V	1	
	C2072	F1H1H222A219	2200pF 50V	1	
	C2073	F1H1H222A219	2200pF 50V	1	
	C2074	F1H1H103A219	0.01uF 50V	1	
	C2075	F1H1H103A219	0.01uF 50V	1	
	C2076	F1H1H103A219	0.01uF 50V	1	
	C2077	F1H1H103A219	0.01uF 50V	1	
	C2078	F1H1H683A783	0.068uF 50V	1	
	C2079	F1H1H683A783	0.068uF 50V	1	
	C2080	F1H1A334A028	0.33uF 10V	1	
	C2081	F1H1A334A028	0.33uF 10V	1	
	C2082	F1H1H332A013	3300pF 50V	1	
	C2083	F1H1H223A219	0.022uF 50V	1	
	C2084	F1H1C823A001	0.082uF 16V	1	
	C2085	F2A1H3R3A213	3.3uF 50V	1	
	C2086	F2A1H3R3A213	3.3uF 50V	1	
	C2087	F1H0J4750004	4.7uF 6.3V	1	
	C2088	F1H1C823A001	0.082uF 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	
	C2096	F1J0J106A020	10uF 6.3V	1	
	C2097	F1H1H101A720	100pF 50V	1	
	C2098	F1J0J106A020	10uF 6.3V	1	
	C2099	F1H1H101A720	100pF 50V	1	
	C2100	F1H1H101A720	100pF 50V	1	
	C2101	F1H1H101A230	100pF 50V	1	
	C2102	F1H1C104A042	0.1uF 16V	1	
	C2106	F1H1H101A720	100pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2107	F1J0J106A020	10uF 6.3V	1	
	C2108	F1J0J106A020	10uF 6.3V	1	
	C2110	F2A1C221B456	220uF 16V	1	
	C2114	F2A0J221B034	220uF 6.3V	1	
	C2115	F1J0J106A020	10uF 6.3V	1	
	C2116	F1J0J106A020	10uF 6.3V	1	
	C2117	F1J0J106A020	10uF 6.3V	1	
	C2121	F1H1H470A004	47pF 50V	1	
	C2123	F1H1H1500009	15pF 50V	1	
	C2126	F1H1H470A004	47pF 50V	1	
	C2127	F1H1H102A219	1000pF 50V	1	
	C2128	F1H1H562A219	5600pF 50V	1	
	C2129	F1H1H1500009	15pF 50V	1	
	C2130	F1J1H104A459	0.1uF 50V	1	
	C2132	F2A1C470B455	47uF 16V	1	
	C2133	F1H1H102A219	1000pF 50V	1	
	C2134	F1H0J4750004	4.7uF 6.3V	1	
	C2135	F1H0J4750004	4.7uF 6.3V	1	
	C2137	F1H1C104A042	0.1uF 16V	1	
	C2139	F2A1C221B456	220uF 16V	1	
	C2141	F1H1C104A042	0.1uF 16V	1	
	C2143	F1H1C104A042	0.1uF 16V	1	
	C2144	F1H0J1050012	1uF 6.3V	1	
	C2145	F2A1C470B455	47uF 16V	1	
	C2146	F2A0J4700052	47uF 6.3V	1	
	C2147	F1H1H102A219	1000pF 50V	1	
	C2148	F1H1H223A219	0.022uF 50V	1	
	C2149	F1H1H102A219	1000pF 50V	1	
	C2150	F2A1H3R3A213	3.3uF 50V	1	
	C2151	F1H1C104A042	0.1uF 16V	1	
	C2152	F2A1C470B455	47uF 16V	1	
	C2153	F1J0J106A020	10uF 6.3V	1	
	C2162	F1H1H331A013	330pF 50V	1	
	C2163	F1H1H331A013	330pF 50V	1	
	C2173	F2A0J471B035	470uF 6.3V	1	
	C2187	F1H1H103A219	0.01uF 50V	1	
	C2188	F2A1C330A698	33uF 16V	1	
	C2189	F1H1C104A042	0.1uF 16V	1	
	C2190	F2A1A101B138	100uF 10V	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	
	C2195	F1H1H103A219	0.01uF 50V	1	
	C2198	F2A1E102B694	1000uF 25V	1	
	C2199	D0GBR00JA008	0 1/16W	1	
	C2200	D0GBR00JA008	0 1/16W	1	
	C2201	F1H1H103A219	0.01uF 50V	1	
	C2202	D0GBR00JA008	0 1/16W	1	
	C2215	F1H1A474A025	0.47uF 10V	1	
	C2216	F1H1H103A219	0.01uF 50V	1	
	C2223	F2A1C102A019	1000uF 16V	1	
	C2226	F2A0J821B044	820uF 6.3V	1	
	C2229	F1H1H103A219	0.01uF 50V	1	
	C2234	F2A1E102B694	1000uF 25V	1	
	C2235	F1H1H103A219	0.01uF 50V	1	
	C2242	F1H1C104A042	0.1uF 16V	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	F2A1A330A159	33uF 10V	1	
	C2251	F1J0J106A020	10uF 6.3V	1	
	C2252	F2A0J101A181	100uF 6.3V	1	
	C2253	F2A0J221A181	220uF 6.3V	1	
	C2254	F1H0J1050012	1uF 6.3V	1	
⚠	C5700	F1BAF471A013	470pF	1	
⚠	C5701	F0CAF104A105	0.1uF	1	
⚠	C5703	F0CAF224A105	0.22uF	1	
⚠	C5704	F1BAF471A013	470pF	1	
⚠	C5705	F1BAF471A013	470pF	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
⚠	C5708	F1BAF1020020	1000pF	1	
	C5711	F2B2G2210025	220uF 400V	1	PH
	C5712	F2B2D5610024	560uF 200V	1	PN
	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	F1J2E1030004	0.01uF 250V	1	
	C5805	F2A1H2220043	2200uF 50V	1	
	C5808	F2A1H2220043	2200uF 50V	1	
	C5810	F1H1H104A013	0.1uF 50V	1	
	C5812	F1H1H104A013	0.1uF 50V	1	
	C5813	F2A1V331B150	330uF 35V	1	
	C5817	F2A2AR100002	0.10uF 100V	1	
	C5818	F1H1H104A013	0.1uF 50V	1	
	C5819	F1J2E1030004	0.01uF 250V	1	
	C5820	F1J2E1030004	0.01uF 250V	1	
	C5821	F1J2E1030004	0.01uF 250V	1	
	C5822	F1J2E1030004	0.01uF 250V	1	
	C5826	F1J2E1030004	0.01uF 250V	1	
	C5831	F1H1H104A013	0.1uF 50V	1	
	C5832	F1H1H104A013	0.1uF 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	F2A1C100A207	10uF 16V	1	
	C5896	F1H1H104A013	0.1uF 50V	1	
	C5897	F1H1H104A013	0.1uF 50V	1	
	C5898	F1H1H104A013	0.1uF 50V	1	
	C5899	F2A1A221B161	220uF 10V	1	
	C5901	F1H1H102A219	1000pF 50V	1	
	C5902	F1H1H102A219	1000pF 50V	1	
	C5903	F1H1H104A013	0.1uF 50V	1	
	C5904	F1H1H104A013	0.1uF 50V	1	
	C5905	F1H1H104A013	0.1uF 50V	1	
	C5906	F1H1H104A013	0.1uF 50V	1	
	C5907	F2A1H221B436	220uF 50V	1	
	C5908	F2A1H221B436	220uF 50V	1	
	C5909	F1H1H104A013	0.1uF 50V	1	
	C5910	F1H1H104A013	0.1uF 50V	1	
	C5915	F1H1A474A001	0.47uF 10V	1	
	C5917	F1H1H102A219	1000pF 50V	1	
	C5918	F1H1H331A013	330pF 50V	1	
	C5919	F1H1A474A001	0.47uF 10V	1	
	C5920	F2A2A220A388	22uF 100V	1	
	C5921	F1H1H104A013	0.1uF 50V	1	
	C5923	F1H1H104A013	0.1uF 50V	1	
	C5924	F1H1H221A219	220pF 50V	1	
	C5925	F1K2A1040007	0.1uF 100V	1	
	C5926	F1K2A1040007	0.1uF 100V	1	
	C5927	F1J2A221A030	220pF 100V	1	
	C5928	F1H1H153A219	0.015uF 50V	1	
	C5929	F1J2A221A030	220pF 100V	1	
	C5930	F1H1C474A140	0.47uF 16V	1	
	C5931	F1H1H104A013	0.1uF 50V	1	
	C5932	F1H1H104A013	0.1uF 50V	1	
	C5933	F1H1H153A219	0.015uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C5934	F1J2A221A030	220pF 100V	1	
	C5935	F1J2A221A030	220pF 100V	1	
	C5936	F1K2A1040007	0.1uF 100V	1	
	C5937	F1K2A1040007	0.1uF 100V	1	
	C5938	F1H1H104A013	0.1uF 50V	1	
	C5939	F1H1H104A013	0.1uF 50V	1	
	C5941	F1H1A474A001	0.47uF 10V	1	
	C5942	F1H1H102A219	1000pF 50V	1	
	C5943	F1H1H331A013	330pF 50V	1	
	C5944	F1H1A474A001	0.47uF 10V	1	
	C5945	F2A1A101A159	100uF 10V	1	
	C5946	F2A1C100A234	10uF 16V	1	
	C5947	F1H1H102A219	1000pF 50V	1	
	C5948	ECQV1H684JL3	0.68uF 50V	1	
	C5949	ECQV1H684JL3	0.68uF 50V	1	
	C5950	F1H1H104A013	0.1uF 50V	1	
	C5951	F1H1H104A013	0.1uF 50V	1	
	C5952	F1H1H104A013	0.1uF 50V	1	
	C5953	F1H1H104A013	0.1uF 50V	1	
	C5954	F1H1H104A013	0.1uF 50V	1	
	C5955	F1H1H104A013	0.1uF 50V	1	
	C5956	D0GBR00JA008	0 1/16W	1	
	C6020	F1H1H104A013	0.1uF 50V	1	
	C6021	F1H1H102A219	1000pF 50V	1	
	C6022	F1H1H102A219	1000pF 50V	1	
	C6023	F1H1H102A219	1000pF 50V	1	
	C6024	F1H1H102A219	1000pF 50V	1	
	C6025	F1H1H102A219	1000pF 50V	1	
	C6026	F1H1H102A219	1000pF 50V	1	
	C6027	F1H1H331A013	330pF 50V	1	
	C6028	F1H1H102A219	1000pF 50V	1	
	C6029	F1H1H331A013	330pF 50V	1	
	C6030	F1H1H331A013	330pF 50V	1	
	C6031	F1H1H102A219	1000pF 50V	1	
	C6032	F1H1H102A219	1000pF 50V	1	
	C6033	F1H1H102A219	1000pF 50V	1	
	C6034	F1H1H102A219	1000pF 50V	1	
	C6035	F1H1H102A219	1000pF 50V	1	
	C6036	F1H1H103A219	0.01uF 50V	1	
	C6037	F1H1H102A219	1000pF 50V	1	
	C6040	F1H1H331A013	330pF 50V	1	
	C6041	F1H1H391A013	390pF 50V	1	
	C6042	F1H1C104A041	0.1uF 16V	1	
	C6043	F2A1H470B412	47uF 50V	1	
	C6044	F1H1H332A013	3300pF 50V	1	
	C6045	F1H1H331A013	330pF 50V	1	
	C6046	F1H1C104A041	0.1uF 16V	1	
	C6047	F1H1C104A008	0.1uF 16V	1	
	C6048	F1H1H391A013	390pF 50V	1	
	C6049	F1H1C104A008	0.1uF 16V	1	
	C6051	F1H1H101A720	100pF 50V	1	
	C6052	F1H1H101A720	100pF 50V	1	
	C6053	F1H1H103A219	0.01uF 50V	1	
	C6054	F1H1H473A783	0.047uF 50V	1	
	C6055	F1H1H101A230	100pF 50V	1	
	C6056	F2A1H470B412	47uF 50V	1	
	C6057	F2A1C101A155	100uF 16V	1	
	C6058	F1H1H103A219	0.01uF 50V	1	
	C6059	F1H1H473A783	0.047uF 50V	1	
	C6060	F1H1H101A230	100pF 50V	1	
	C6061	F1H1H104A013	0.1uF 50V	1	
	C6062	F2A1H220B411	22uF 50V	1	
	C6063	F1H1H101A720	100pF 50V	1	
	C6064	F1H1H102A219	1000pF 50V	1	
	C6065	F2A1H220A182	22uF 50V	1	
	C6066	F1H1H104A013	0.1uF 50V	1	
	C7102	F1H1A474A025	0.47uF 10V	1	
	C7107	F1H1H223A219	0.022uF 50V	1	
	C7142	F1H1H332A013	3300pF 50V	1	
	C7154	F1H1C104A120	0.1uF 16V	1	
	C7155	F1H1C104A120	0.1uF 16V	1	
	C7161	F1H1C104A120	0.1uF 16V	1	
	C7166	F1H1H103A885	0.01uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C7203	F2G0J470A031	47uF 6.3V	1	
	C7204	F1H1C104A120	0.1uF 16V	1	
	C7213	F1H1A334A028	0.33uF 10V	1	
	C7215	F1H1H102A219	1000pF 50V	1	
	C7216	F1H1H681A013	680pF 50V	1	
	C7217	F1H1C104A120	0.1uF 16V	1	
	C7218	F1H1C823A001	0.082uF 16V	1	
	C7221	F1H1H150A971	15pF 50V	1	
	C7222	F1H1H150A971	15pF 50V	1	
	C7223	F1J1A106A041	10uF 10V	1	
	C7225	F1H1H102A219	1000pF 50V	1	
	C7226	F1H1H102A219	1000pF 50V	1	
	C7227	F1H1A105A004	1uF 10V	1	
	C7228	F1H1A105A004	1uF 10V	1	
	C7230	F1H1C104A120	0.1uF 16V	1	
	C7231	F2G0J470A031	47uF 6.3V	1	
	C7232	F2G0J470A031	47uF 6.3V	1	
	C7233	F1J1A106A041	10uF 10V	1	
	C7234	F1H1C104A120	0.1uF 16V	1	
	C7235	F1J1A106A041	10uF 10V	1	
	C7241	F1H1H102A219	1000pF 50V	1	
	C7243	F1H1H103A885	0.01uF 50V	1	
	C7244	F1H1C153A001	0.015uF 16V	1	
	C7253	F1H1H471A219	470pF 50V	1	
	C7263	F1H1C104A120	0.1uF 16V	1	
	C7264	F1H1C104A120	0.1uF 16V	1	
	C7315	F1H1A154A001	0.15uF 10V	1	
	C7334	F2G1A101A019	100uF 10V	1	
	C7335	F1H1H103A885	0.01uF 50V	1	
	C7338	F1H1H153A885	0.015uF 50V	1	
	C7339	F1H1H182A219	1800pF 50V	1	
	C7340	F1H1H103A885	0.01uF 50V	1	
	C7341	F1J1A106A041	10uF 10V	1	
	C7352	F1H1H122A219	1200pF 50V	1	
	C7601	F1J1A106A041	10uF 10V	1	
	C7613	F1H1C104A120	0.1uF 16V	1	
	C7614	F2G0J470A031	47uF 6.3V	1	
	C7615	F1J1A106A041	10uF 10V	1	
	C7626	F1H1C104A120	0.1uF 16V	1	
	C7670	F1H1H103A885	0.01uF 50V	1	
	C7701	D0GBR00JA008	0 1/16W	1	
	C7711	D0GBR00JA008	0 1/16W	1	
	C7731	F1H1C104A120	0.1uF 16V	1	
	C7732	F1J1A106A041	10uF 10V	1	
	C7733	F1J1A106A041	10uF 10V	1	
	C7734	F1J1A106A041	10uF 10V	1	
	C7735	F1J1A106A041	10uF 10V	1	
	C7741	F1H1H103A885	0.01uF 50V	1	
	C7751	F2G0J470A031	47uF 6.3V	1	
	C7752	F1H1H103A885	0.01uF 50V	1	