

Service Manual

CD Stereo System

Model No. **SA-AK780PH**
SA-AK780PN

Product Color: (K)...Black Type



SB-WAK780



SB-AK780



SA-AK780



SB-AK780

Notes: This model's CD Mechanism Unit (CR14C). Please refer to the Original Service Manual (Order No. MD0805031CE) for this CD Mechanism Unit.

WARNING

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

IMPORTANT SAFETY NOTICE

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

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1 Safety Precautions

1.1. General Guidelines

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

1.1.1. Leakage Current Cold Check

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

1.1.2. Leakage Current Hot Check

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

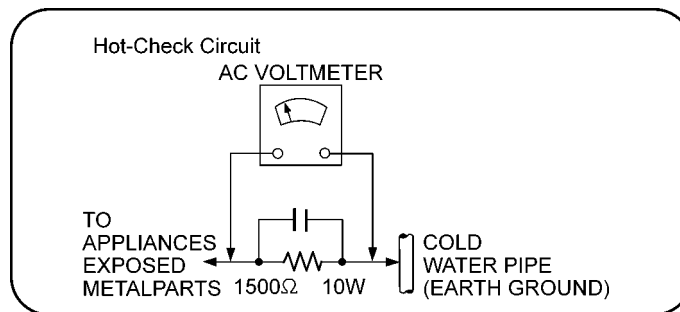


Figure 1

1.2. Before Use (For PH only)

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

Use a minus(-) screwdriver to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used. (If the power supply in your area is 110V ~ 127V or 220V ~ 240V, set to the "110V ~ 127V or 220V ~ 240V" position.)

Note that this unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries, the correct voltage is already set.)

1.3. Caution For Fuse Replacement

CAUTION:

Replace with the same type fuse:

(Manufacturer: Littelfuse, Type: 233, F1, 8A 125V) (For PN only)

CAUTION:

Replace with the same type fuse:

(Manufacturer: Littelfuse, Type: 215, F1, T8AH 250V) (For PH only)

1.4. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such (C5700, C5701, C5703, C5704, C5705, C5706, C5707) 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 110V~127V / 220V~240V, 50/60 Hz in NO SIGNAL mode volume minimal should be ~ 500 mA (For PH only).

Current consumption at AC 120V, 60 Hz in NO SIGNAL mode volume minimal should be ~ 500 mA (For PN only).

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 $\triangle$ in the Schematic Diagrams & 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.

Table 1

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
$\triangle$	6	REXX0687-1	BLUE WIRE (VOLT SELECTOR-SMPS)	PH
$\triangle$	13	REZX0024-1	BLACK WIRE (AC INLET-SMPS)	PH
$\triangle$	13	REXX0684-1	BLACK WIRE (AC INLET-SMPS)	PN
$\triangle$	14	REXX0685-1	RED WIRE (AC INLET-SMPS)	PN
$\triangle$	14	REZX0023-1	RED WIRE (AC INLET-SMPS)	PH
$\triangle$	15	REXX0686-1	WHITE WIRE (VOL SELECTOR-SMPS)	PH
$\triangle$	22	RGRX0070ABA2	REAR PANEL	PN
$\triangle$	22	RGRX0070ACA1	REAR PANEL	PH
$\triangle$	41	RKMX0144A-K	TOP CABINET	
$\triangle$	340	RAEX0190A-V	TRAVERSE ASS'Y (W/O CD SERVO P.C.B)	(RTL)
$\triangle$	A2	K2CB2CB00021	AC CORD	PN
$\triangle$	A2	K2CQ2CA00007	AC CORD	PH
$\triangle$	A3	RQTX0265-1M	O/I BOOK (En/Sp)	PN
$\triangle$	A3	RQTX0266-1M	O/I BOOK (Sp)	PH
$\triangle$	PCB1	REPX0714F	SMPS P.C.B.	(RTL) PH
$\triangle$	PCB1	REPX0714G	SMPS P.C.B.	(RTL) PN
$\triangle$	PCB4	REPX0714F	AC INLET P.C.B.	(RTL) PH
$\triangle$	PCB4	REPX0714G	AC INLET P.C.B.	(RTL) PN
$\triangle$	PCB9	REPX0714K	VOLTAGE SELECTOR P.C.B.	(RTL) PH
$\triangle$	DZ5701	ERZV10V511CS	ZNR	
$\triangle$	S5701	K0ABCA000007	SW VOLTAGE SELECTOR	PH
$\triangle$	L5702	ELF22V035B	LINE FILTER	
$\triangle$	T2900	G4D1A0000117	SWITCHING TRANSFORMER	
$\triangle$	T5701	ETS48AB116AC	MAIN TRANSFORMER	PH
$\triangle$	T5701	ETS48AB12GAC	MAIN TRANSFORMER	PN
$\triangle$	T5751	ETS19AB256AG	SUB TRANSFORMER	
$\triangle$	PC5701	B3PBA0000402	PHOTO COUPLER	
$\triangle$	PC5702	B3PBA0000402	PHOTO COUPLER	
$\triangle$	PC5720	B3PBA0000402	PHOTO COUPLER	
$\triangle$	PC5799	B3PBA0000402	PHOTO COUPLER	
$\triangle$	F1	K5D802APA008	FUSE	PN
$\triangle$	F1	K5D802BNA005	FUSE	PH

Safety	Ref. No.	Part No.	Part Name & Description	Remarks
⚠	FP2901	K5G4013A0001	FUSE PROTECTOR	
⚠	TH5701	D4CAA5R10001	THERMISTOR	PN
⚠	TH5702	D4CAA2R20001	THERMISTOR	PH
⚠	TH5860	D4CC11040013	THERMISTOR	
⚠	P5701	K2AA2B000017	AC INLET	PH
⚠	P5701	K2AB2B000011	AC INLET	PN
⚠	C5700	F1BAF1020020	1000pF	
⚠	C5701	F0CAF334A087	0.33uF	
⚠	C5703	F0CAF224A085	0.22uF	PN
⚠	C5703	F0C2H1040001	0.1uF 500V	PH
⚠	C5704	F1BAF1020020	1000pF	
⚠	C5705	F1BAF1020020	1000pF	
⚠	C5706	F1BAF1020020	1000pF	PH
⚠	C5707	F1BAF1020020	1000pF	PH

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:

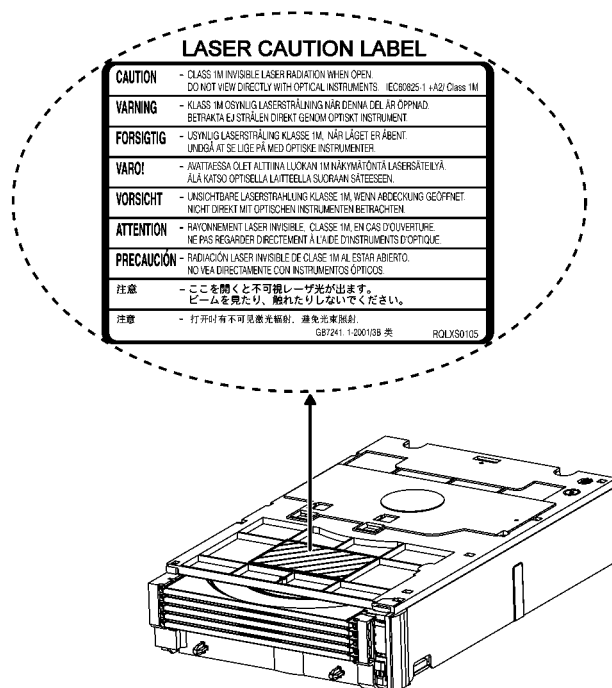
This product utilizes a laser diode with the unit turned “on”, invisible laser radiation is emitted from the pickup lens.

Wavelength: 795 nm (CD)

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

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

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



Inside product on
CD Mechanism Unit (CR14C)

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%

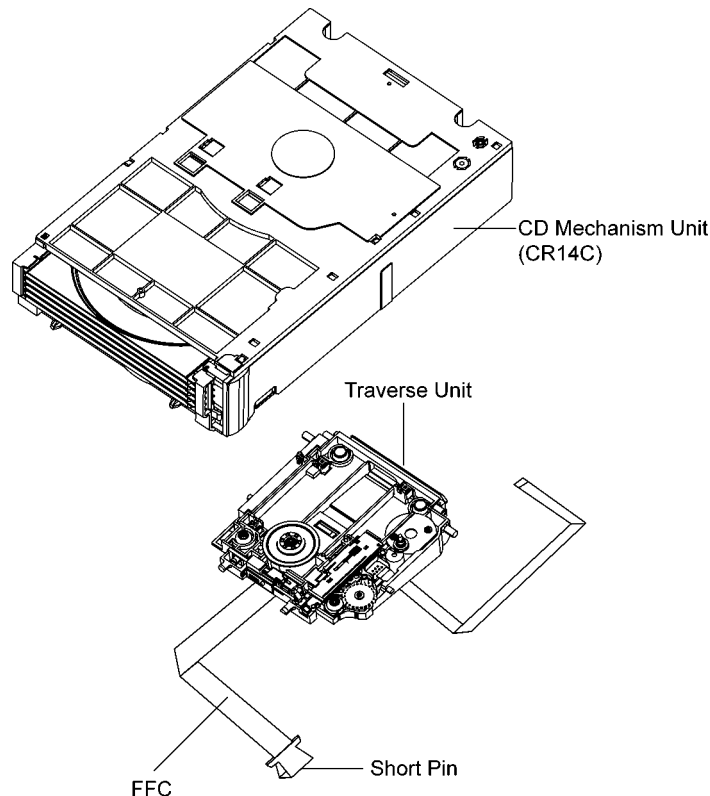
2.4. Handling Precautions for Traverse Unit

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

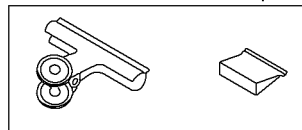
The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

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.



[Caution]

Ground the cable with a clip or a short pin.



2.4.2. Grounding for electrostatic breakdown prevention

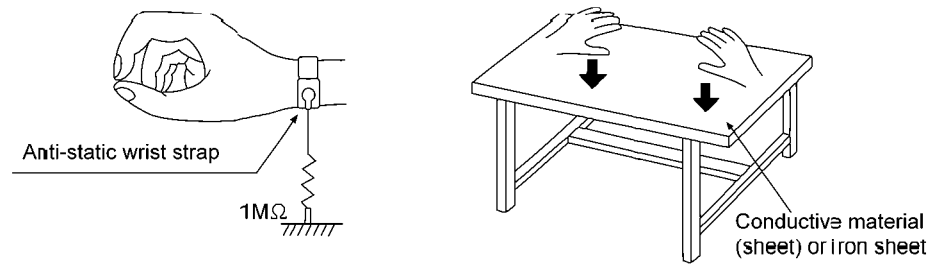
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

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 (CR14C):

- 1) This model uses CD Mechanism Unit (CR14C).
- 2) This service manual does not contain the following information on CD Mechanism Unit (CR14C)
 - Schematic Diagram, Block Diagram and P.C.B. layout of CD Mechanism Unit (CR14C) P.C.B.
 - Parts List for individual parts of CD Mechanism Unit (CR14C).
 - Exploded View and Part List for individual parts of CD Mechanism Unit (CR14C).Please refer to original service manual (Order No. MD0805031CE)

• Micro-processor, EEPROM & FLASH ROM IC:

- 1) The following components are supplied as an assembled part.
 - Micro-processor IC, IC2801 (RFKWMAK780PN)
 - EEPROM IC, IC2200 (RFKWEAK780PN)
 - FLASH ROM IC, IC701 (RFKWFAK780PN)

Before replacement of micro-processor IC, please check the version no. It may need matching with ROM correction.

• Speaker system:

- 1) The information, please refer to original service manual, SB-AK780PN/PNA-K & SB-WAK780PN-K (PSG0905028CE)

4 Specifications

■ AMPLIFIER SECTION

RMS output power

Front Ch (both channels driven) 250 W per channel (6 Ω), 1 kHz,
10% THD

Subwoofer Ch 250 W per channel (6 Ω), 100 Hz,
10% THD

Total RMS stereo mode power 750 W

PMPO Output Power
(For PN only) 8300 W

■ FM/AM TUNER, TERMINALS SECTION

Preset station FM 30 stations
AM 15 stations

Frequency Modulation (FM)

Frequency range
For PH only 87.50 MHz to 108.00 MHz
(200 kHz step)

For PN only 87.9 MHz to 107.9 MHz
(200 kHz step)

87.5 MHz to 108.0 MHz
(100 kHz step)

Antenna terminal(s) 75 Ω (unbalanced)

Amplitude Modulation (AM)

Frequency range
For PH only 522 KHz to 1629 kHz (9 kHz step)

520 KHz to 1630 kHz
(10 kHz step)

For PN only 520 KHz to 1710 kHz
(10 kHz step)

RCA pin jack

Aux input

Music Port (front) jack

Sensitivity 100 mV, 4.7 kΩ

Terminal Stereo, 3.5 mm jack

Headphone jack

Terminal Stereo, 3.5 mm jack

Output level (CD, 1kHz, -20dB) 32 Ω (Max)

Mic jack

Sensitivity 0.7 mV, 1.2 kΩ

Terminal Mono, 3.5 mm jack (1 system)

■ DISC SECTION

Disc 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, MPEG-2 Layer 3

Pick up

Wavelength 795 nm(CD)

Audio output (Disc)

Number of channels 2.1 (FL, FR, SW)

FL = Front left channel

FR = Front right channel

SW = Subwoofer channel

■ USB SECTION

USB port

USB standard USB 2.0 full speed

Media file format support MP3 (*.mp3)

USB device file system FAT 12, FAT 16, FAT 32

USB port power 500 mA (Max)

Bit rate 16 kbps to 320 kbps (P.B)

USB recording

Recording file format MP3 (*.mp3)

Bit rate 128 kbps / 192 kbps / 320 kbps

USB recording speed 1x, max 4x (CD only)

■ General

Power supply

For PH only

AC 110 to 127/220 to 240 V,

50/60 Hz

For PN only

AC 120 V, 60 Hz

Power consumption

145 W

Dimensions (W x H x D)

250 mm x 331 mm x 326 mm

Mass

4.6 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

0.5 W (Approximate)

For PN only

0.3 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-AK780PN-K

Main Unit: SA-AK780PN-K

Front Speakers: SB-AK780PN-K

Subwoofer: SB-WAK780PN-K

■ System: SC-AK780PH-K

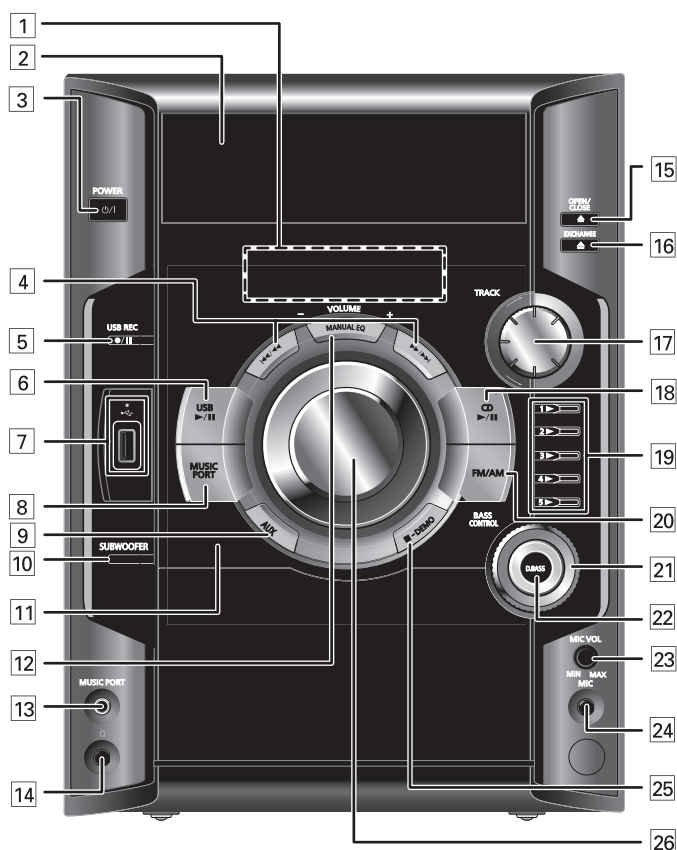
Main Unit: SA-AK780PH-K

Front Speakers: SB-AK780PN-K

Subwoofer: SB-WAK780PN-K

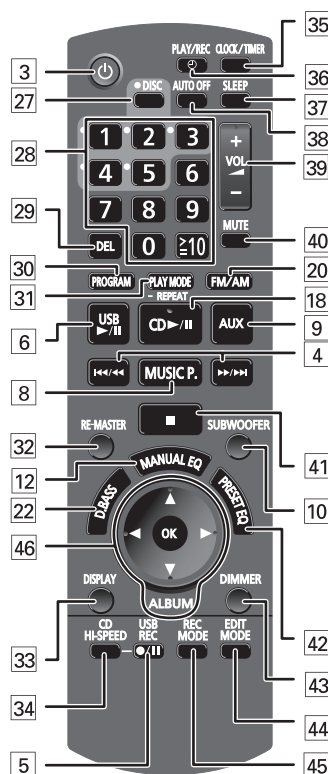
5 Location of Controls and Components

5.1. Main Unit Key Button Operation



- | | |
|---|--|
| <p>1 Display panel</p> <p>2 Disc trays</p> <p>3 Standby/on switch (⏻/⏻, 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</p> <p>4 Track skip or search, check program content, preset channel selection, tuning function, time adjustment, timer operation, manual EQ setting</p> <p>5 USB recording or pause</p> <p>6 USB play or pause</p> <p>7 USB port</p> <p>8 Music port selection</p> <p>9 AUX selection</p> <p>10 Subwoofer level selection</p> <p>11 Remote control signal sensor</p> <p>12 Manual EQ selection</p> <p>13 Music port jack</p> | <p>14 Headphone jack ()
Avoid listening for prolonged periods of time to prevent hearing damage.
Excessive sound pressure from earphones and headphones can cause hearing loss.
Plug type: Ø 3.5mm stereo (not included)</p> <p>15 Disc tray open or close</p> <p>16 Disc tray open or close</p> <p>17 Track skip function</p> <p>18 Disc play or pause</p> <p>19 Disc direct play</p> <p>20 Tuner (FM/AM) selection</p> <p>21 Manual EQ's bass control setting</p> <p>22 D.BASS selection</p> <p>23 Microphone volume control</p> <p>24 Microphone jack</p> <p>25 Stop playback, Demonstration function</p> <p>26 Volume control</p> |
|---|--|

5.2. Remote Control Key Button Operation



AUTO OFF ○ This auto off function allows you to turn off the unit in disc or USB mode only after left unused for 10 minutes. - Press the button to activate the function. - Press the button again to cancel. - The setting is maintained even if the unit is turned off.	DIMMER ○ To dim the display panel. - Press the button to activate the function. - Press the button again to cancel.	MUTE ○ To mute the sound. - Press the button to activate the function. - Press the button again or adjust the volume to cancel.
---	--	--

- | | | |
|---|---|---|
| <p>3 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.</p> <p>4 Track skip or search, check program content, preset channel selection, tuning function, time adjustment, timer operation, manual EQ setting</p> <p>5 USB recording or pause</p> <p>6 USB play or pause</p> <p>8 Music port selection</p> <p>9 AUX selection</p> <p>10 Subwoofer level selection</p> <p>12 Manual EQ selection</p> <p>18 Disc play or pause</p> <p>20 Tuner (FM/AM) selection</p> | <p>22 D.BASS selection</p> <p>27 Disc selection</p> <p>28 Numeric selection</p> <p>29 Delete function</p> <p>30 Program function</p> <p>31 Play mode function, Repeat function</p> <p>32 RE-MASTER selection</p> <p>33 Display function</p> <p>34 CD to USB high-speed recording function</p> <p>35 Clock or timer setting</p> <p>36 Play timer or record timer setting</p> <p>37 Sleep timer setting</p> | <p>38 Auto off function</p> <p>39 Volume control</p> <p>40 Muting function</p> <p>41 Stop playback or program clear</p> <p>42 Preset EQ selection</p> <p>43 Dimmer function</p> <p>44 Edit mode function</p> <p>45 Recording mode selection</p> <p>46 Album selection, Confirm selection</p> |
|---|---|---|

5.3. Disc Information

NOTE about using a DualDisc

The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback may not be possible.

NOTE on CDs

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

NOTE on MP3

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

When "PLAYERERROR" appears on the display, an unsupported MP3 format is being played. The unit will skip that track and play the next one.

Limitations on MP3 play

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

6 Self-Diagnosis and Special Mode Setting

This unit is equipped with features of self-diagnosis & special mode setting for checking the function & reliability.

Special Note: Checking of the reliability (ageing) & changer operation must be carry out to ensure good working condition in unit.

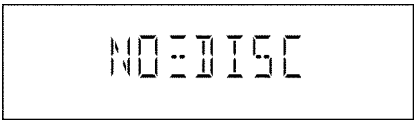
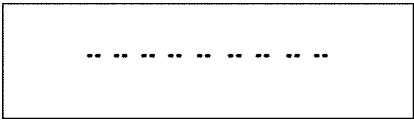
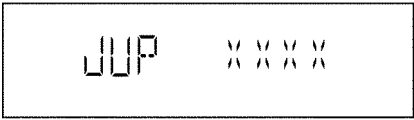
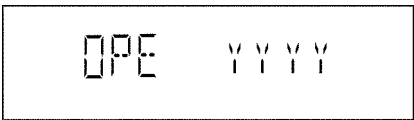
6.1 Doctor Mode Summary Table

Main unit buttons	Remote control unit buttons	Application	Note
[■-DEMO]	[4], [7]	Doctor Mode	(Refer to the section "6.2.1 Doctor Mode Table 1" for more information.)
Doctor Mode	[DISPLAY]	Cold Start	
	[2]	Micro-P Version Display	(Refer to the section "6.2.2 Doctor Mode Table 2" for more information.)
	[7]	Volume 50 Setting Check	
	[8]	Volume 35 Setting Check	
	[9]	Volume 0 Setting Check	
	[PLAYMODE/-REPEAT]	Volume 30 Setting Check	
	[1]	FL Display Check	
	[DEL]	CD Open Test	
	[≥10], [1], [1]	CR14 Reliability Test 1 (no retry)	(Refer to the section "6.2.3 Doctor Mode Table 3" for more information.)
	[≥10], [1], [2]	CR14 Reliability Test 2 (with retry)	
	[DISC]	CR14 Changer Mechanism Check	(Refer to the section "6.2.4 Doctor Mode Table 4" for more information.)
	[≥10], [9], [4]	CR14 Error Late Display	
	[4]	CD to USB Recording & Playing Inspection	(Refer to the section "6.2.4 Doctor Mode Table 4" for more information.)
	[FM/AM]	Tuner Inspection	
	[OK]	Exit Inspection Mode	

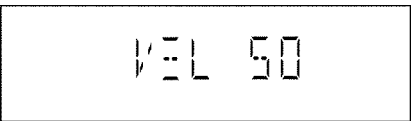
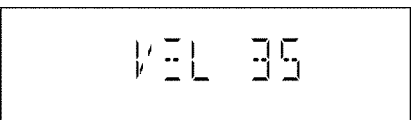
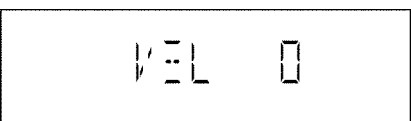
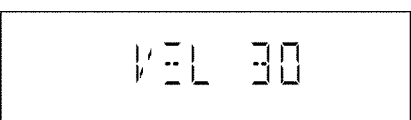
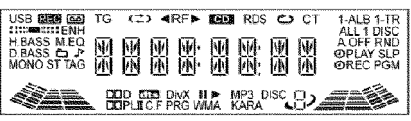
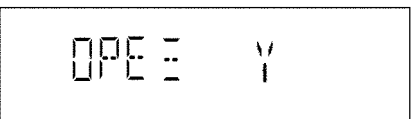
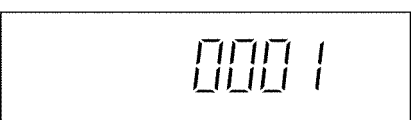
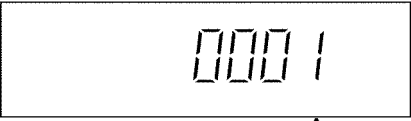
6.2. Doctor Mode Table

Below is the various special modes for checking:-

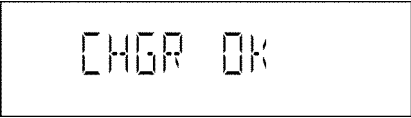
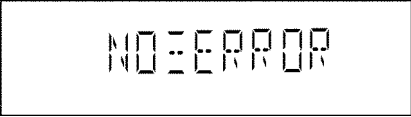
6.2.1. Doctor Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Doctor Mode	To enter into Doctor Mode.		In CD Mode: 1. Press [■-DEMO] button on main unit follow by [4] and [7] on remote control. To exit Doctor Mode, press [OK] button on remote control.
Cold Start	To activate cold start upon next power up when reset is execute the next time.		In Doctor Mode: 1. Press [DISPLAY] button on remote control.
Micro-P Version Display	To check the firmware version for Jupiter & Microprocessor IC.	Display 1  Jupiter Micro-P Version ↓ Display 2  Micro-processor Version	In Doctor Mode: 1. Press [2] button on remote control.

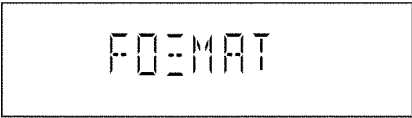
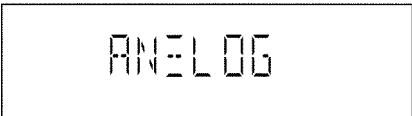
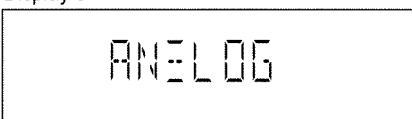
6.2.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Volume Setting Check	To check for the volume setting of the main unit. The volume will be automatically set to its respective level (in dB). During this mode, treble/bass/EQ will be set to '0'dB & OFF.	Display 1 	In Doctor Mode: 1. Press [7] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
		Display 1 	In Doctor Mode: 2. Press [8] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
		Display 1 	In Doctor Mode: 3. Press [9] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
		Display 1 	In Doctor Mode: 4. Press [PLAY MODE/-REPEAT] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
FL Display Check	To check the FL segments display (All segments will light up)		In Doctor Mode: 1. Press [1] button on remote control.
CD OPEN Test	To check the CD OPEN operation.	 Can be any Tray	In Doctor Mode: 1. Press [DEL] button on remote control. 2. Press [OPEN/CLOSE] button on main unit to close the disc tray.
CR14 Reliability Test1 (no retry)	Note: 1. If the mechanism error occurs, it should stop the test. (no retry, no recovery process). 2. The test mode is cleared by power OFF. 3. Reading and playback should not be done.	 The counter will increment by one. When reach 9999 will change to 0000	In Doctor Mode: 1. Press [≥10], [1], [1] button on remote control.
CR14 Reliability Test2 (with retry)	Note: 1. Even if the mechanism error occurs, it should retry as normal operation. 2. The test mode is cleared by power OFF. 3. Reading and playback should not be done.	 The counter will increment by one. When reach 9999 will change to 0000	In Doctor Mode: 1. Press [≥10], [1], [2] button on remote control.

6.2.3. Doctor Mode Table 3

Item		FL Display	Key Operation
Mode Name	Description		Front Key
CR14 Inspection	Below is the process: 1. Load TRAY 1 (Move to PLAY position) 2. After that, TRAY 2 is open (TRAY 1 still in LOAD condition) and close. 3. Next TRAY 3 is open (TRAY 1 still in LOAD condition) and close. 4. Then TRAY 4 is open (TRAY 1 still in LOAD condition) and close. 5. Finally TRAY 5 is open (TRAY 1 still in LOAD condition) and close. 6. Tray 1 is unloaded. (Move to the STOCK position) 7. Tray 1 is loaded. (Move to the PLAY position) When step 1 to 7 operates normally without any error, FL will display [CHGR_OK_]		In Doctor Mode: 1. Press [DISC] button on remote control.
CR14 Error Code Display	To display errors codes for CR14 changer mechanism. Refer to section 6.4.1 (CD Mechanism (CR14) Error code table).		In Doctor Mode: 1. Press [≥10], [9], [4] button on remote control.

6.2.4. Doctor Mode Table 4

Item		FL Display	Key Operation
Mode Name	Description		Front Key
CD to USB Recording & Playing Inspection	-Automatically change to CD -Set it to VOL 0 -Preset EQ Set to FLAT USB Formatted	Display 1 	In Doctor Mode: 1. Press [4] button on remote control.
		↓	
	When high-speed recording	Display 2 	
		↓	
	When analog recording	Display 3 	
		↓	
	- Switches to the USB selector after an analog recording ends (TRACK 1 of ALBUM1) During playback this track - Sets to VOL 50 (0dB) and start playback - It is enabled to accept the SKIP key and the ALBUM key	Display 4 	
		↓	
	Next, play the track analog recorded. (TRACK1 of ALBUM2) During playback this track - It is enabled to accept the SKIP key and the ALBUM key	Display 5 	

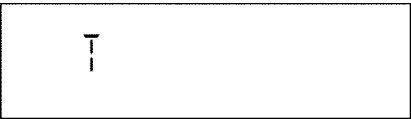
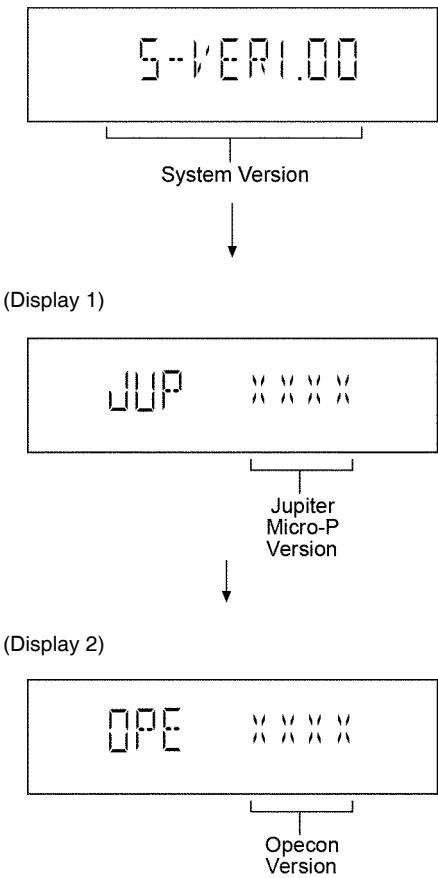
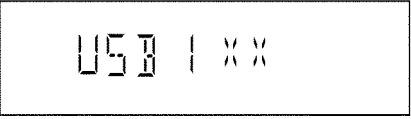
6.3. Service Mode Summary Table

Main unit buttons	Remote control unit buttons	Application	Note
[■-DEMO]	[▶▶!]	Service Mode	(Refer to the section “6.4.1 Service Mode Table 1” for more information.)
Service Mode	[1]	Error Code History	
	[2]	Micro-P Version Display	
	[5]	USB Error Code History	(Refer to the section “6.4.2 Service Mode Table 2” for more information.)
	[6]	CD Self Adjustment Result	
	[3]	Cold Start	

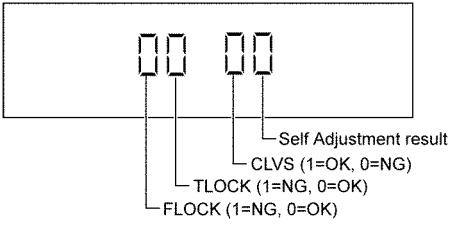
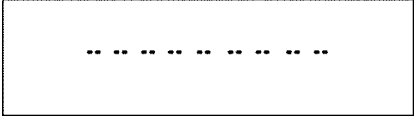
6.4. Service Mode Table

6.4.1. Service Mode Table 1

Below is the various special modes for checking:-

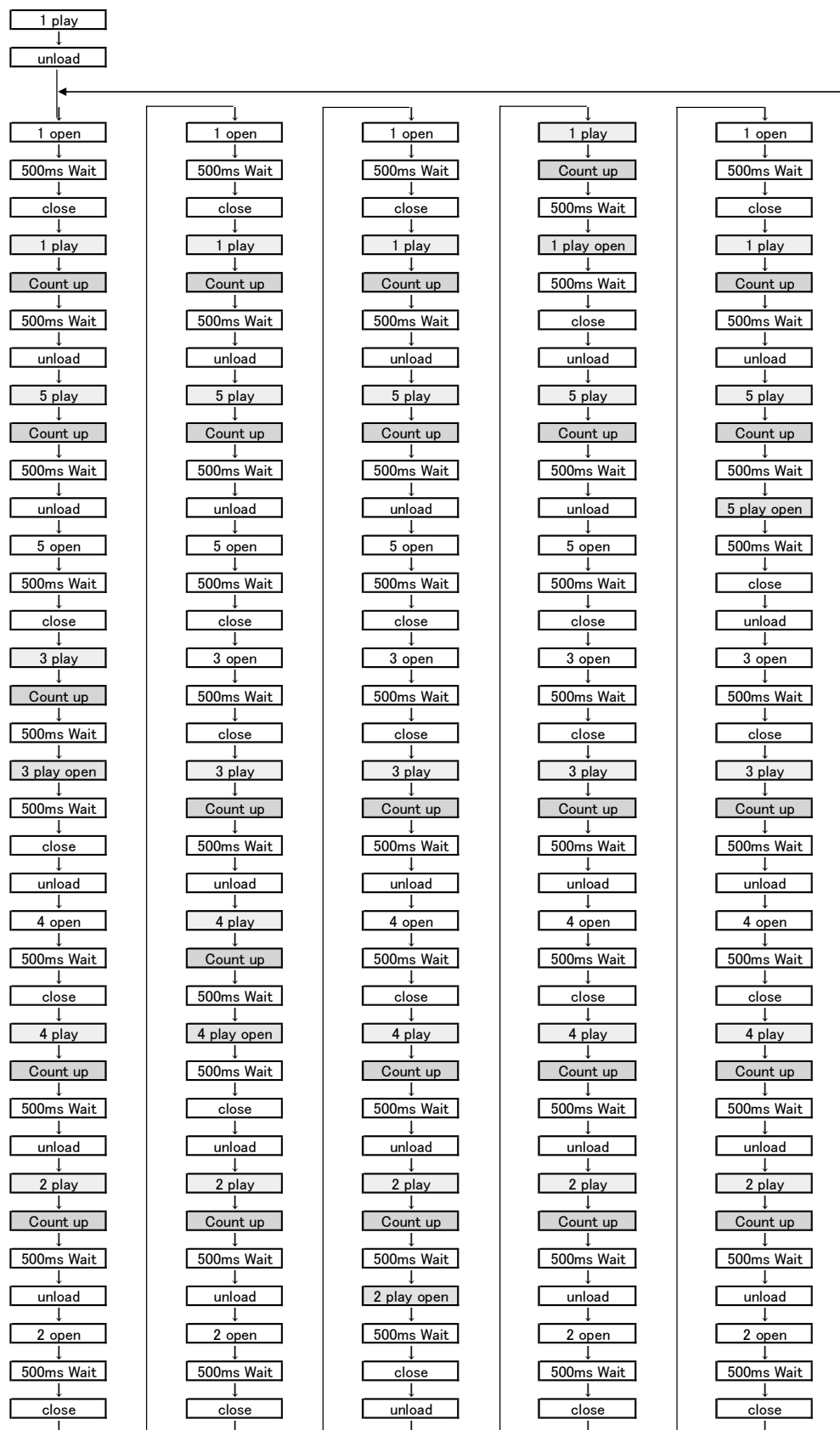
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Service Mode	To enter into Service Mode.		In CD Mode: Press and hold [■-DEMO] button on main unit for 2 seconds follow by [▶▶I] on remote control for 2 seconds. To exit, press [ON/OFF ⏻] button on main unit or remote control.
Error Code History	Checking the records for Error Code.		In Service Mode: 1. Press [1] button on remote control. To clear history, press & hold [0] for 5 seconds or more.
Micro-P Version Display	To Check for following: 1) System Version. 2) Jupiter Micro-processor version. 3) Micro-processor Version		In Service Mode: 1. Press [2] button on remote control.
USB Error Code History	To check for USB error codes.		In Service Mode: 1. Press [5] button on remote control. To clear history, press & hold [0] for 5 seconds or more.

6.4.2. Service Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
CD Self Adjust- ment Result	To check for CD operation (self-adjustment).		In Service Mode: 1. Press [6] button on remote control.
Cold Start	To reset to default setting.		In Service Mode: 1. Press [3] button on remote control.

6.5. Reliability Test Mode (CD Mechanism Unit CR14C)

Below is the progress flow chart of ageing for the Mechanism unit (CR14C).



6.6. Error Code Table

Self-Diagnosis Function (refer Section “6.4.1” Service Mode Table 1”) 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.

6.6.1. CD Mechanism Unit (CR14C) Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
LOAD	Load operation faulty	The load operation cannot complete when time out occurs.	LOAD	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
UNLD	Unload operation faulty	The unload operation cannot complete when time out occurs.	UNLD	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
UP	Exchange open operation faulty	The exchange open operation cannot complete when time out occurs.	UP	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
DOWN	Down operation faulty	The down operation cannot complete when time out occurs.	DOWN	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
OPEN	Open operation faulty	The open operation cannot complete when time out occurs.	OPEN	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
CLOSE	Close operation faulty	The open operation cannot complete when time out occurs.	CLOSE	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
MODEL	Mode change to updown operation faulty	The mode change to updown operation cannot complete when time out reversing occurs. It changes to up/down.	MODEL	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
MODEH	Mode change to horizontal operation faulty	The mode change to horizontal operation cannot complete when time out reversing occurs. (Mode change to horizontal.)	MODEH	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
INITIALIZE	Initialize operation faulty	The initialize operation cannot complete.	INIT	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.

6.6.2. Error Code Table (For Power Supply)

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F61	Power Amp IC output abnormal	Upon power on, PCNT=HIGH, DCDET2=L after checking LSI. DCDET2 = L, Power off process not executed PCNT = L ECONO = L, FL display off	F61 after 2 seconds	For power. Press [■-DEMO] on main unit for next error.
F76		DCDET1 = L (NG)	F76	
F61-76		Both DCDET1 and DCDET2 = L (NG)	F61-F76	

7 Troubleshooting Guide

7.1. Jupiter USB

No	Possible Symptoms	Checking Point	Judgment 1	Verification Point	Judgment 2	Verification Point	Judgment 3	Verification Point
1	Analog sound output abnormal or no output (L & R channel)	Check the supply pin 14 of IC552 (DAC IC) at +5V	NG	Check L552	NG	Replace L552		
					OK	Check LB623	NG	Replace LB623
			OK	Check LB628 & R556 (For R Channel) Check LB630 & R555 (For L Channel) Replace IC552 Check RX834 & LB801 & R835 & LB802 & R833	NG	Replace LB628 & R556		
					OK	Check CN601 or FFC		
					NG	Replace LB630 & R555		
					OK	Check CN601 or FFC		
2	Analog sound recording fails	Check the supply pin 6 of IC551 (ADC IC) at +5V & pin 7 at +3.3V (for HC4)	NG	Check L553 & L551	NG	Replace L553 & L551		
					OK	Check LB623 & LB614		
			OK	Check LB624 & LB626 Replace IC551 Check RX834 & LB801 & R835 & LB802 & R833 Check S651	NG	Replace LB624 & LB626		
					OK	Check CN601 or FFC		
					NG	Replace S651		
					OK	Check RX651 & R801 & R656-659 & R842-843		
3	No operation USB (for AK series)	Check the supply pin 2 & 3 of IC502 at +5V	NG	Check CN601 or FFC				
			OK	Check the supply pin 6-8 of IC502 at +5V	NG	Replace IC502		
				Check LB501 & R517 & LB502 & R518	OK	Check CN503		
4	No display after powering-up.	Check LB503 & LB504 & LB636	NG	Replace LB503 & LB504 & LB636				
			OK	Check pin 28-30 of CN601.				
5	No lights-up LED indicator.	Check D803 & R807	NG	Replace D803 & R807				
			OK	Check Q801 & LB641				
6	No operation	Check the supply +3.3V & +1.2V of IC801	NG	Check CN601 & LB614 & IC802				
			OK	Check pin 62 & 63 of IC801 at 16.934MHz.				
				Check pin 203 & 204 of IC801 at 12MHz.				
				Check shorted all bus line.(RX***)	NG	Touch-up soldering		
					OK	check IC801 & IC701 & IC751		

7.2. Troubleshooting Guide

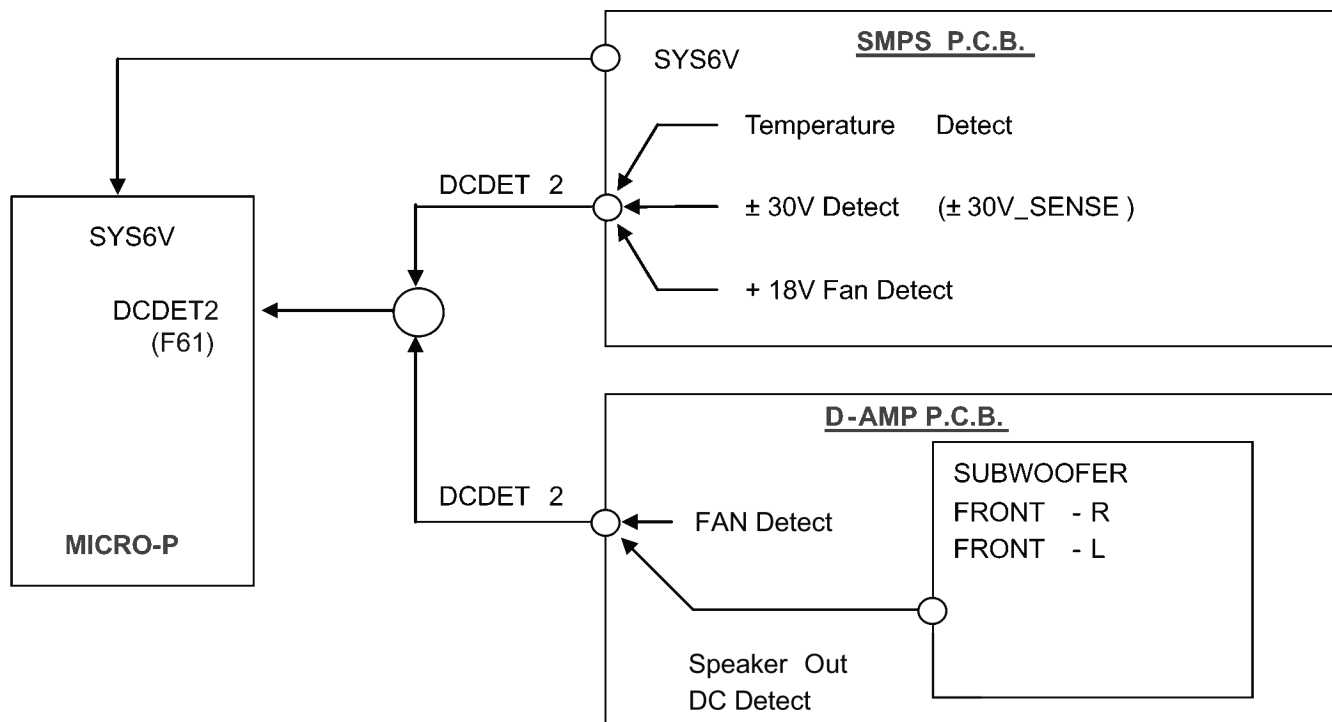
Symptom	Possible Cause	Checking Point	Replacement Parts	Remarks
No CD Operation / Tray not open	No +3.3V voltage supply to IC7001 (Servo Processor)	- Check pin 16, 22 at CN7002 - Check any pattern crack or solderability	- Replace connecting FFC if broken or damage. - Replace connector (CN7002)	CD Servo P.C.B
	No oscillator signal to IC7001 (Servo Processor IC)	Check oscillator signal at pin 73,74 of IC7001	Replace X7201	
	No traverse operation / OPU no movement	- Check pin 25 at IC7002 (+7.5V voltage supply) - Check pin 13 (SP_OUT), 14 (TRVP) at IC7001 - Check pin 1, 3 at IC7002 - Check pin 9, 10, 11 at IC7001 - Check pin 11,12 at IC7002 (Spindle motor) - Check pin 13, 14 at IC7002 (Traverse motor)	- Replace IC7002 - Replace IC7001 - Replace traverse assembly	
No audio speaker output	Speaker connection	- Check speaker connecting cables - Check solderability at speaker jack, JK50001	- Replace speaker cables - Replace speaker jack, JK5001	D-AMP P.C.B
	D-AMP IC abnormal	- Check PWM output at pin 10, 14 of IC5000/IC5200/IC5300/IC5400 (D-AMP IC) - Check +VDD/SS supply at pin 4 & 20 of D-AMP IC - Check pin 1 (OSC) & pin 23 (MODE) of D-AMP IC - Check pattern crack and solderability	Replace IC5000, IC5200, IC5400	
	No FHOP signal or (Clock generator IC) abnormal	- Check oscillator signal at pin 3,4,5 & 6 of IC5500 (Clock generator IC) - Check +VCC voltage at pin 1 of IC5500 - Check output oscillator signal at pin 8 (OSC) of IC5500	- Replace IC5500 - Replace oscillator: X5500, X5501 - Replace Q5601, Q5603, Q5604 - Replace IC2801	

		• Check Q5601, Q5603 & Q5604 (MOD_DA & MUTE_F) • Check pin 64 (MOD_DAMP), 65 (FHOP), 66 (MUTE_F) of IC2801		
	Open connection	• Check L5001, L5002, L5401, L5402, L5201, L5301	• Replace L5001, L5002, L5401, L5402, L5201, L5301	D-AMP P.C.B
	Jupiter Module abnormal	• Check +5V at pin 15, 19 of CN601 • Check output at pin 16, 18 of CN601 • Check +5 at pin 6 of IC551 (ADC IC) • Check +5V at pin 14 of IC552 (DAC OC) • Check +3.3V voltage supply at pin 37 of IC701 (FLASH ROM) • Check +3.3V voltage at pin 42, 73, 98, 109, 123, 137, 152 of IC760 (Memory IC) • Check +3.3V at pin 6, 19, 27, 44, 54, 199, 189, 178, 186, 153, 140, 127, 113 of IC801 • Check X801	• Replace connecting FFC if broken or damage. • Replace IC551, IC552 • Replace L551, L552, L553 • Replace IC701 • Replace IC760 • Replace IC801 • Replace X801	Jupiter Module P.C.B
	ASP IC (IC2803) abnormal	• Check VCC at pin 21 of IC2803 • Check L&R output at pin 17, 22 of IC2803 • Check input signal at pin 4, 36 (CD signal) of IC2803 • Check ASP_CLK at pin 20 of IC2803 • Check ASP_CLK at pin 50 of IC2801	• Replace IC2803 • Replace IC2801	Main P.C.B
	Micro-process IC (IC2801) abnormal	• Check oscillator signal at pin 15, 16 of IC2801 • Check oscillator signal at 12,13 of IC2801 • Check Vref+, +VDD3.3,+VDD1.8	• Replace IC2801 • Replace X2611 • Replace X2602	

7.3. Troubleshooting Guide for F61 and/or F76

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

7.3.1. Block Diagram



7.3.2. Troubleshooting Guide

Symptom	Checking Items	Repair Items	Remarks
FL display blinking with abnormal segment when power ON the set or "F61"	Check the soldering of the SMPS P.C.B. - Is there any solder crack at area (Q5860, Q5861, Q5862, TH5860, QR5801) - Check all the supply line $\pm 30V$ - Is there any solderability at area of feedback circuit - Check feedback circuit (IC5801, Q5802, D5806, PC5720, D5725)	Touch-up the solder crack area/ Change the defective parts. - Q5860, Q5861, Q5862, TH5860 (Temperature Detect) - QR5801 & QR5802 ($\pm 30V$ Detect) - Touch-up the necessary areas - IC5801, D5806, PC5720, D5725	SMPS P.C.B. Refer to Fig. 1
First Power ON Display immediate show "F61".	Check Speaker output by using multi-meter, - If there is a DC Voltage around $\pm 30V$ - Check Output IC (Pin 10 & 14) which have DC Voltage at Speaker output short to $\pm V_{dd}/V_{ss}$ - If shorted that means D-Amp damage already.	Change the defective parts. D-AMP IC: IC5000, IC5400, IC5200	D-Amp P.C.B. Refer to Fig. 2
Power ON for a while then only trigger "F61". (Symptom always happen)	Check the soldering of the SMPS P.C.B. - Is there any solder crack at area (Q5860, Q5861, Q5862, TH5860, QR5801) - Check all the supply line $\pm 30V$	Touch-up the solder crack area/ Change the defective parts. - Q5860, Q5861, Q5862, TH5860 (Temperature Detect) - QR5801 & QR5802 ($\pm 30V$ Detect) Feedback Circuit: IC5801, PC5720, D5725	SMPS P.C.B. Refer to Fig. 1
Power ON for a while and then trigger "F76"	Check all supply voltages as follows: Step 1: Check for supply voltages from SMPS P.C.B to Main P.C.B at pin 2, 5, 6, 7, 8, 9 of CN5802. If there are supply voltages, proceed to Step 2. If no voltages detected, check wire connection and circuitry connection from SMPS P.C.B. Step 2: Check if there is supply voltages for $-V_p$, FL1 & FL2 CN2806 - If there is supply voltages of $-13V$, $+7.5V$ (CR14), $+12V$ (Motor), $+6V$ (SYS6V), $+9V$ & $+18V$ at CN5802 - If there is supply voltages of $\pm 9V$ at CN6001	Check and change the possible defective parts. - FP2901 (Fuse Protector), T2900, D2901, D2906, D2908, D2909 - IC2701 (Switching Regulator IC) & related regulator circuit components - IC2761 (Regulator IC) & related regulator circuit components	Main P.C.B. Refer to Fig. 3

7.3.3. Part Location

7.3.3.1. SMPS P.C.B.

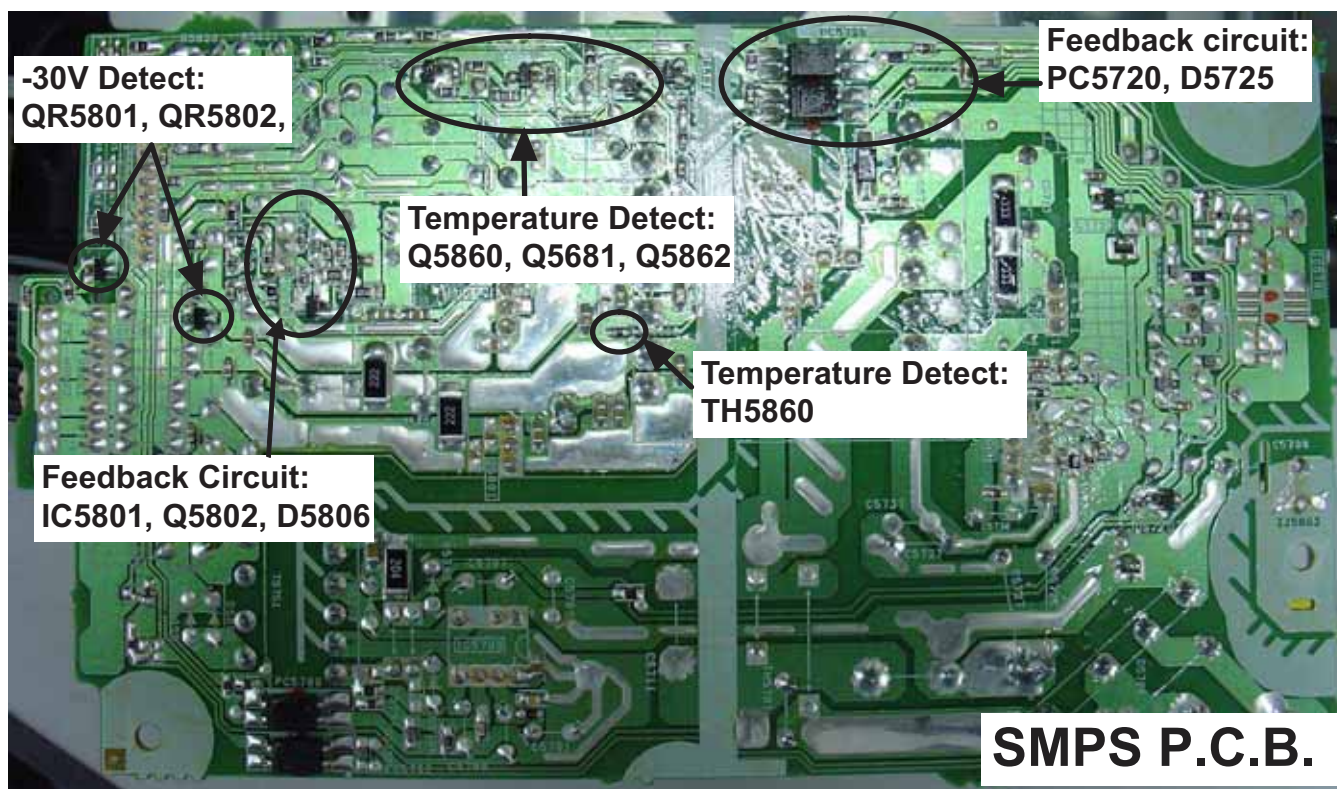


Fig. 1 SMPS P.C.B.

7.3.3.2. D-Amp P.C.B.

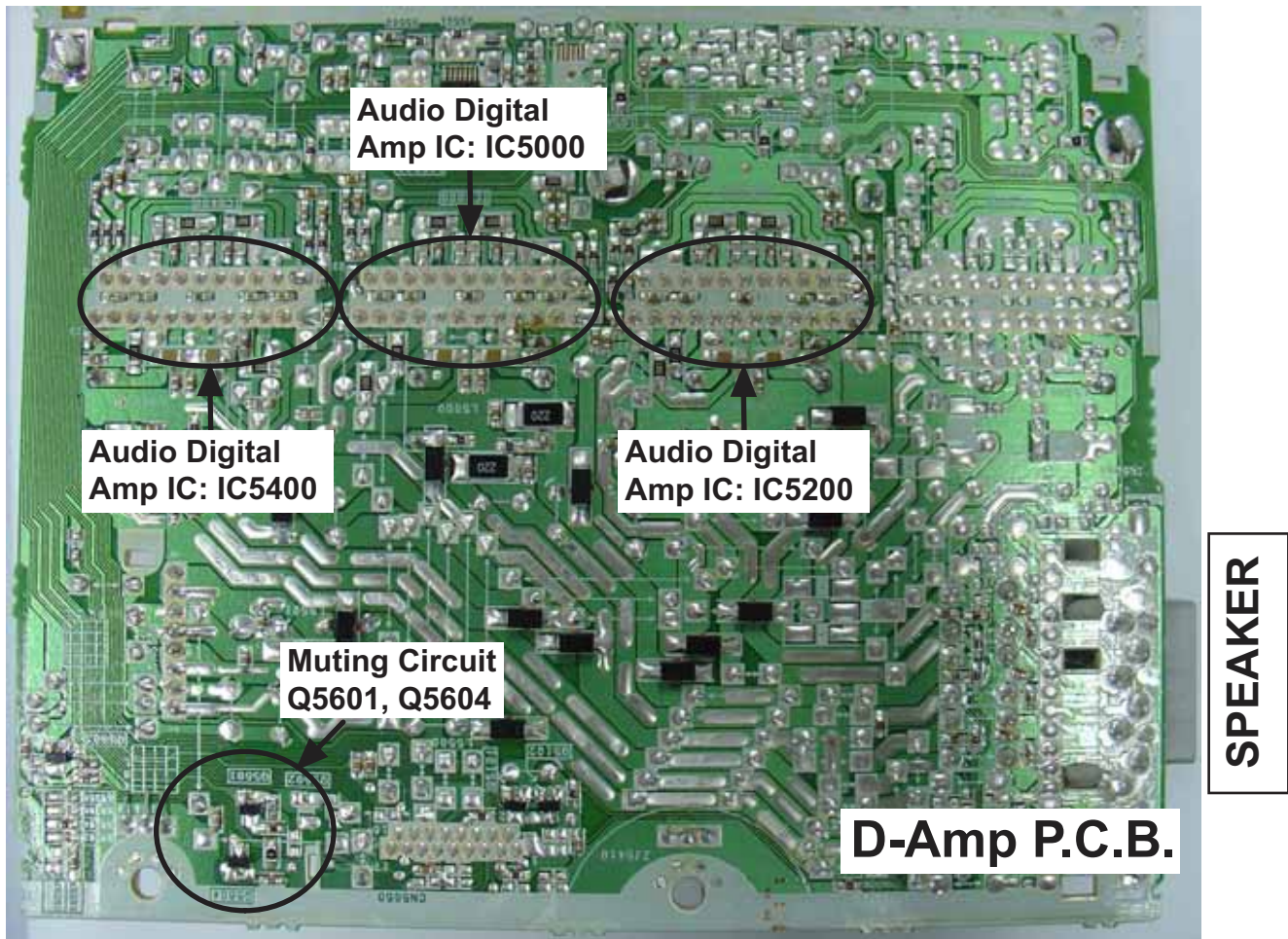


Fig. 2 D-Amp P.C.B.

7.3.3.3. Main P.C.B.

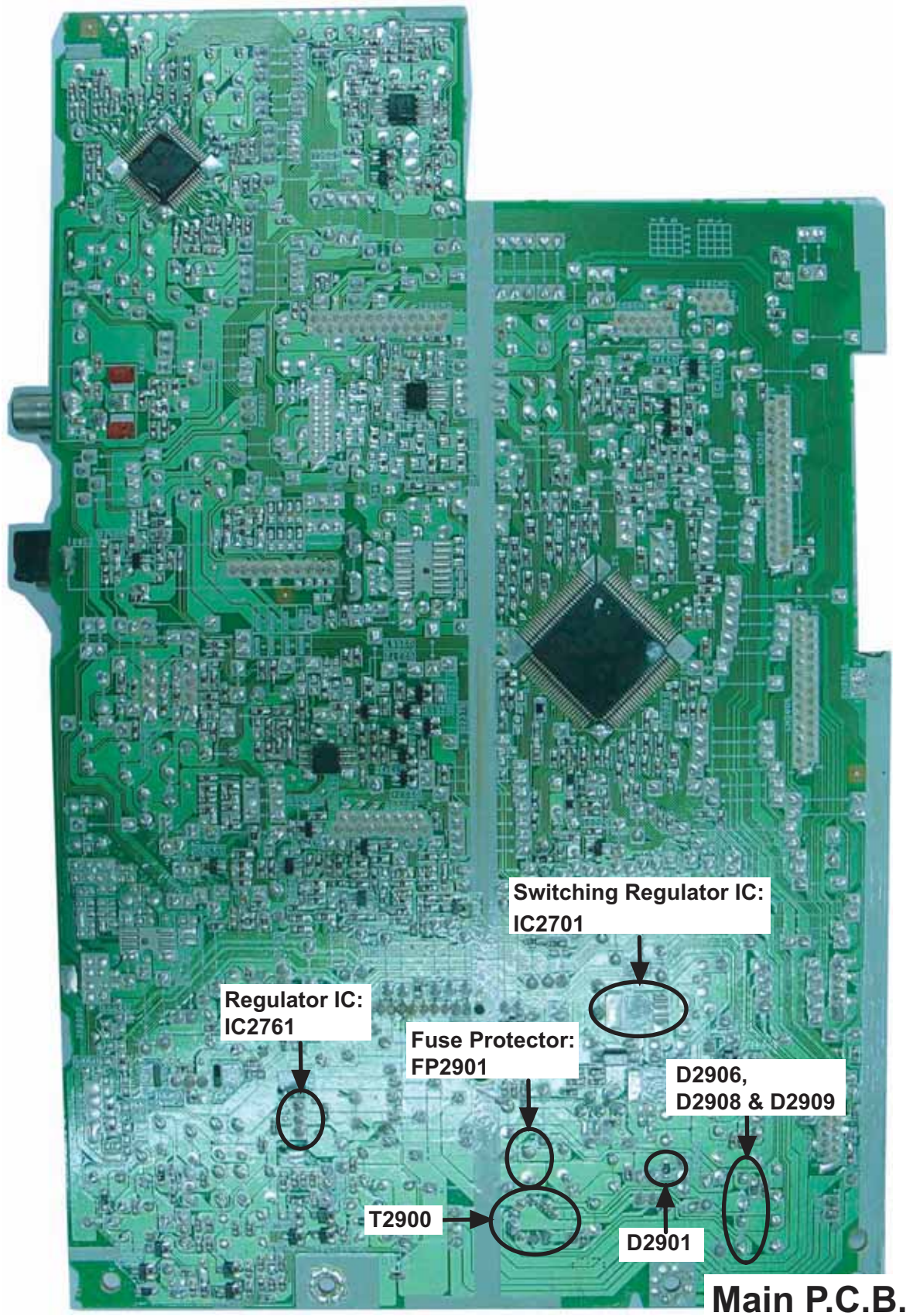


Fig. 3 Main P.C.B.

8 Service Fixture & Tools

8.1. Service Tools and Equipment

Prepare service tools before process service position.

Service Tools		Remarks
Main P.C.B. (CN5050) - D-Amp P.C.B. (CN5050)	REEX0930 (17P FFC)	(RTL)
Main P.C.B. (CN2701) - SMPS P.C.B. (CN5802)	REXX0680 (11P wire)	(RTL)
SMPS P.C.B. (H5801) - D-Amp P.C.B. (CN5500)	REXX0683-1 (8P wire)	(RTL)

9 Disassembly and Assembly Instructions

“ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges

Special Note:

1. This model uses a CD Mechanism Unit (CR14C). In this following section does not contain the necessary assembly and disassembly information except the assembly and disassembly of the traverse unit. Kindly refer to the original service manual for the CD Mechanism Unit. (Order No. MD0805031CE).
2. This section describes the disassembly procedures for all the major printed circuit boards and main components.
3. Before the disassembly process was carried out, do take special note that all safety precautions are to be carried out. (Ensure that no AC power supply is connected during disassembling.)
4. For assembly after operation checks or replacement, reverse the respective procedures.
Special reassembly procedures are described only when required.
5. Do take note of the locators on each printed circuit board during reassembling procedures.
6. The Switch Regulator IC may have high temperature after prolonged use.
7. Use caution when removing the top cabinet and avoid touching heat sinks located in the unit.

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

8. Select items from the following index when checks or replacement are required.

- Disassembly of Top Cabinet
- Disassembly of CD Mechanism Unit (CR14C)
- Disassembly of Rear Panel
- Disassembly of Fan Unit
- Disassembly of Front Panel Assembly
- Disassembly of Mic P.C.B.
- Disassembly of Panel P.C.B.
- Disassembly of Dynamic Bass Knob & Dynamic Bass Button Unit
- Disassembly of Memory P.C.B.
- Disassembly of MPort/Headphone P.C.B.
- Disassembly of CD Servo P.C.B.
- Disassembly of D-Amp P.C.B. & Fan
- Replacement of Audio Digital Amp IC (IC5400)
- Replacement of Audio Digital Amp IC (IC5000)
- Replacement of Audio Digital Amp IC (IC5200)
- Disassembly of Main P.C.B.
- Disassembly of SMPS P.C.B.
- Replacement of Switching Regulator IC (IC5701)
- Replacement of Rectifier Diode (D5702)
- Replacement of Regulator Diode (D5801)
- Replacement of Regulator Diode (D5802)
- Replacement of Regulator Diode (D5803)
- Disassembly of AC Inlet P.C.B.
- Disassembly of Jupiter P.C.B.
- Disassembly of Voltage Selector P.C.B. (For PH only)
- Replacement of Traverse Unit Assembly
- Disassembly of CD Lid

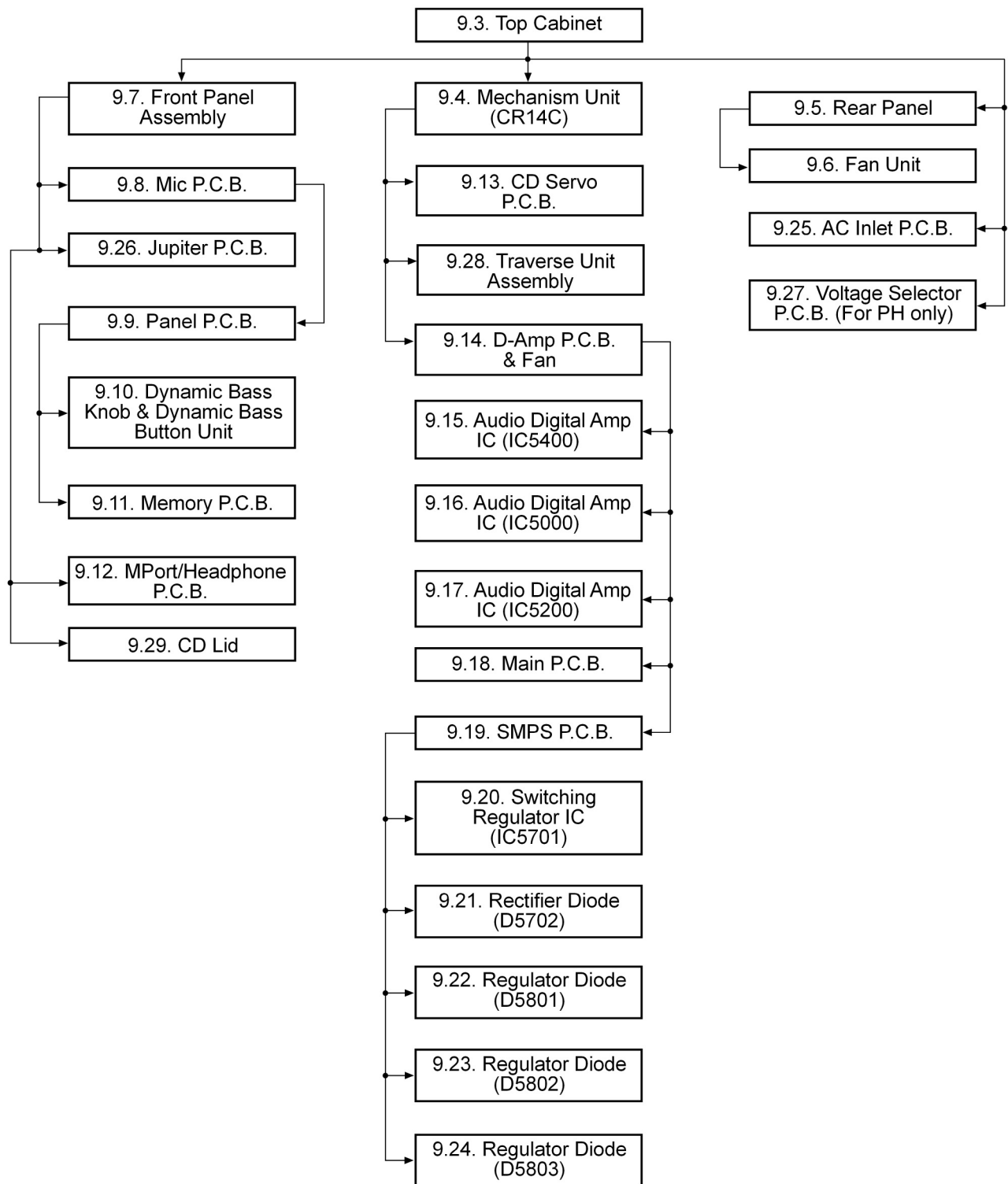
CAUTION NOTE:

Please use original screw and at correct locations.

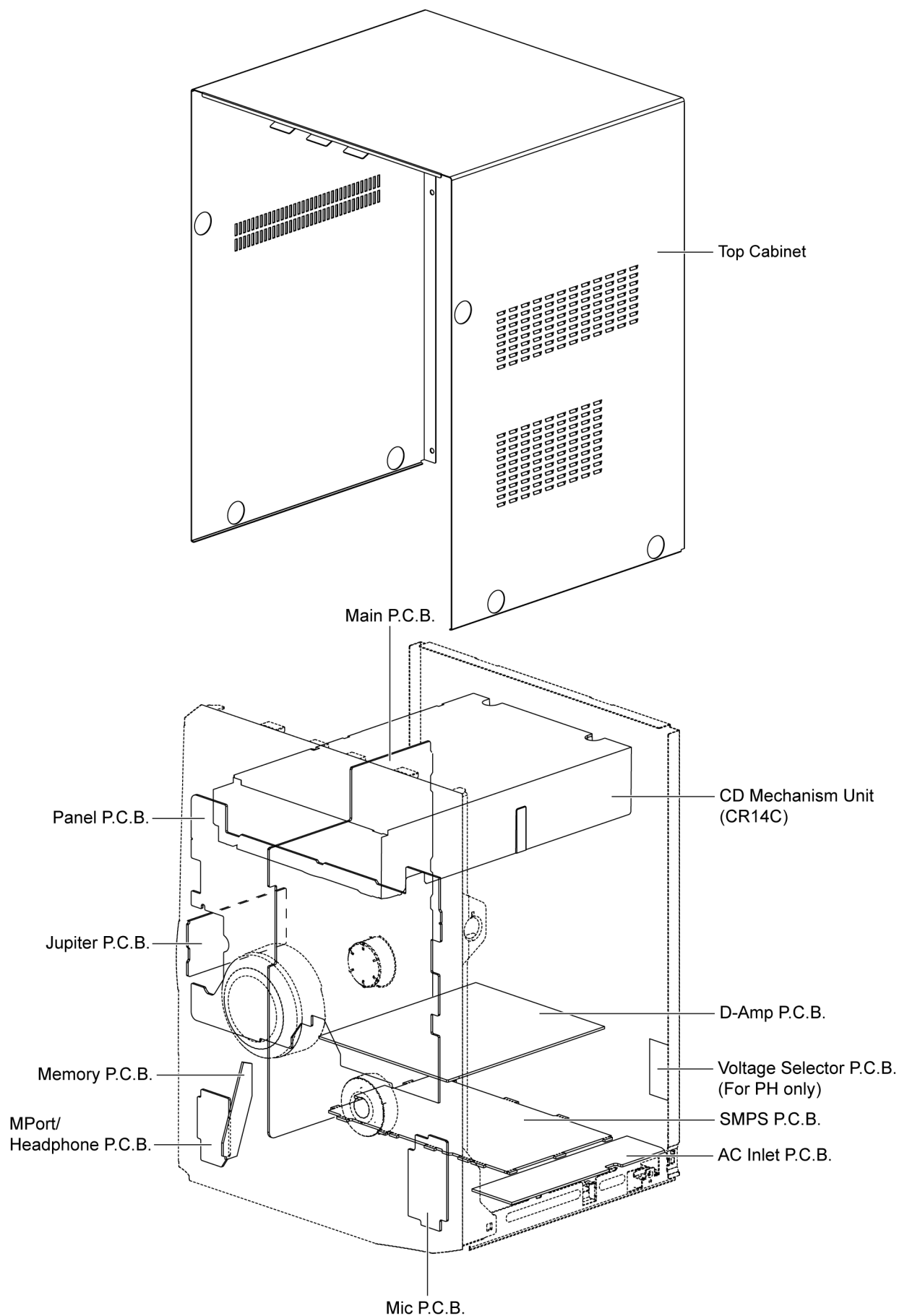
Below shown is the part no. of different screw types used:

- a** : RHD30007-K2J
- b** : RHD30119-S
- c** : XTW3+12TFJ
- d** : XTW3+20TFJ
- e** : RHD26046-L
- f** : XTW3+8TFJ
- g** : XTN2+6GFJ
- h** : RHD30111-31
- i** : XTB3+10JFJ

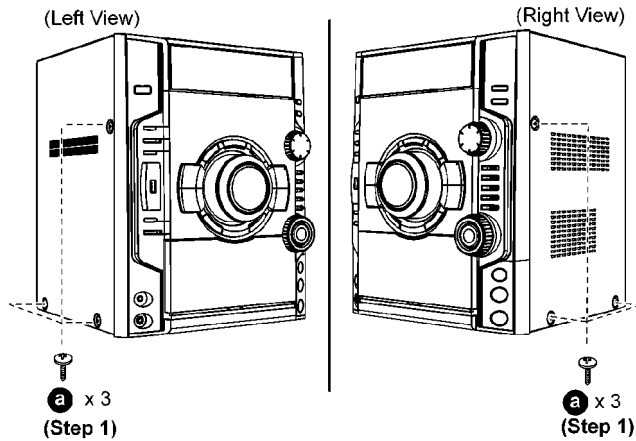
9.1. Disassembly Flow Chart



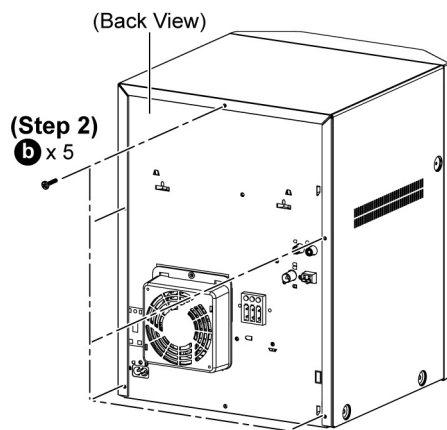
9.2. Main Components and P.C.B. Locations



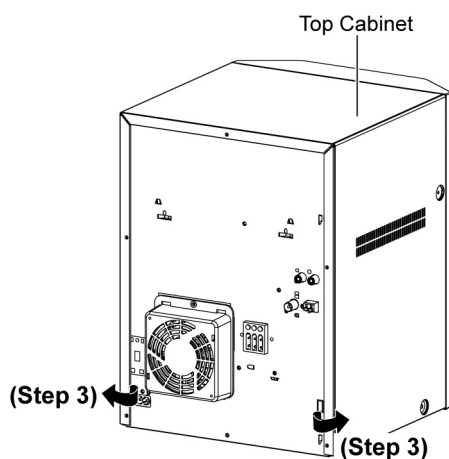
9.3. Disassembly of Top Cabinet



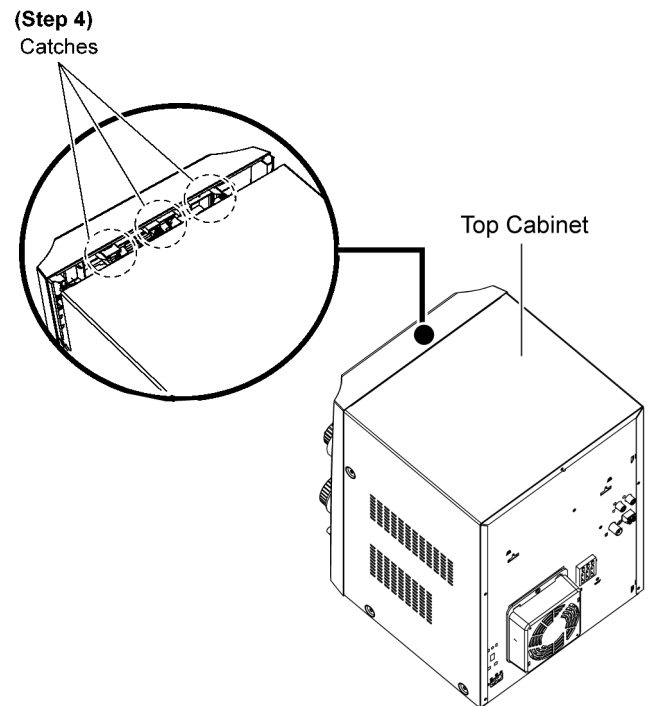
Step 1 : Remove 3 screws on each side.



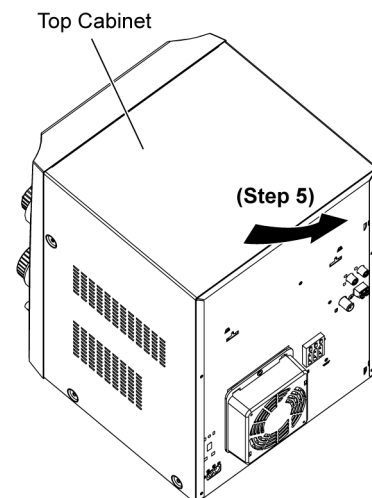
Step 2 : Remove 5 screws.



Step 3 : Slightly lift the sides of Top Cabinet outwards as arrow shown.



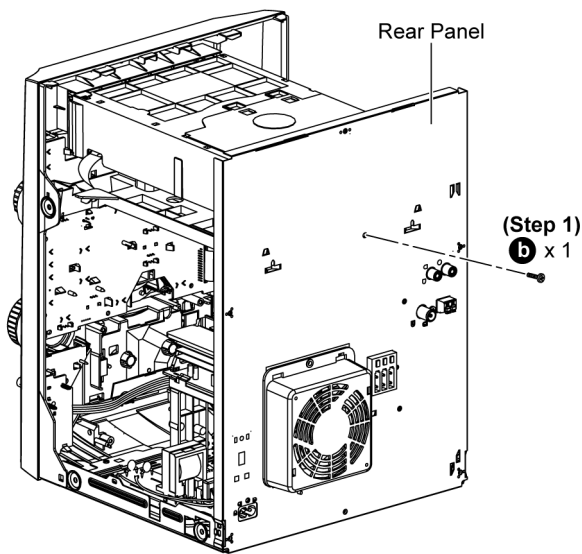
Step 4 : Push the Top Cabinet backwards as arrow shown to release the catches.



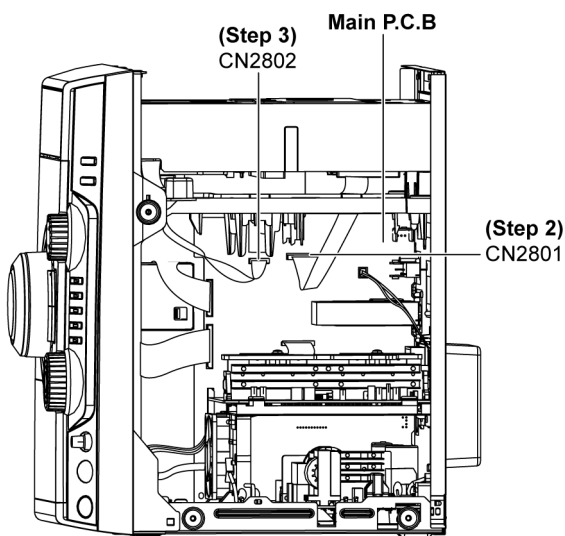
Step 5 : Remove the Top Cabinet.

9.4. Disassembly of CD Mechanism Unit (CR14C)

- Follow (Step 1) to (Step 5) of Item 9.3

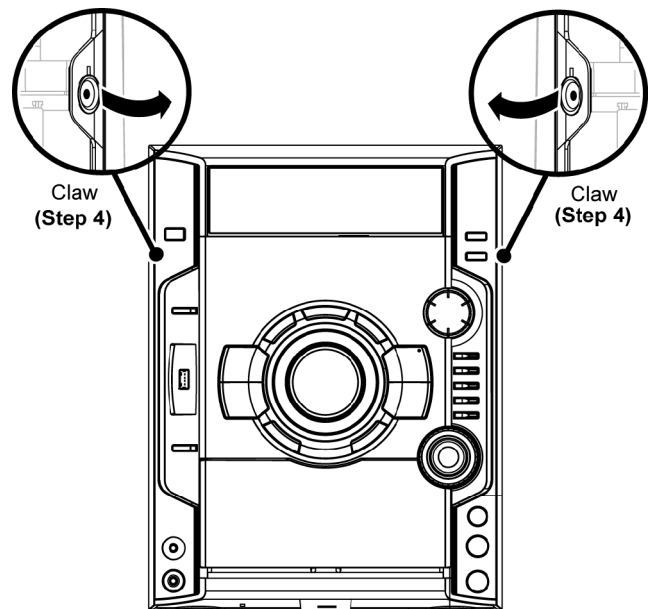


Step 1: Remove 1 screw.

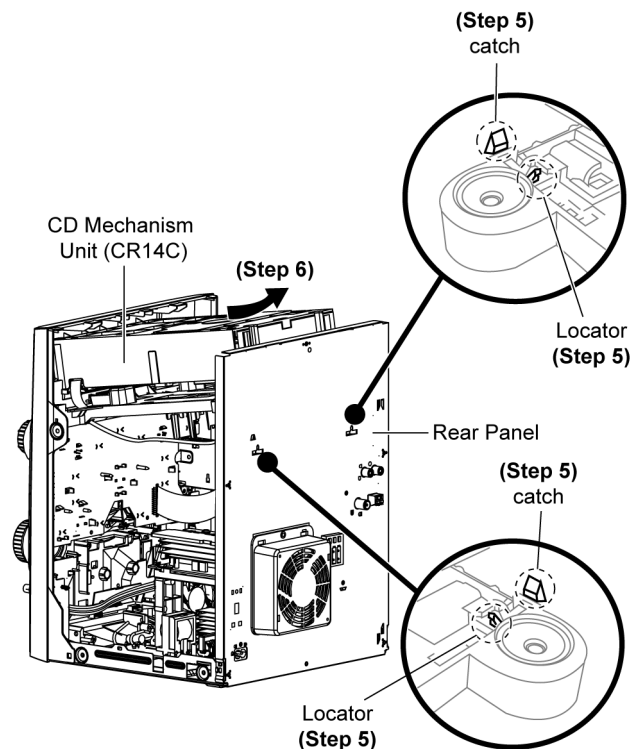


Step 2 : Detach 25P FFC at the connector (CN2801) on Main P.C.B.

Step 3 : Detach 11P FFC at the connector (CN2802) on Main P.C.B.



Step 4 : Release claws outwards on both sides.



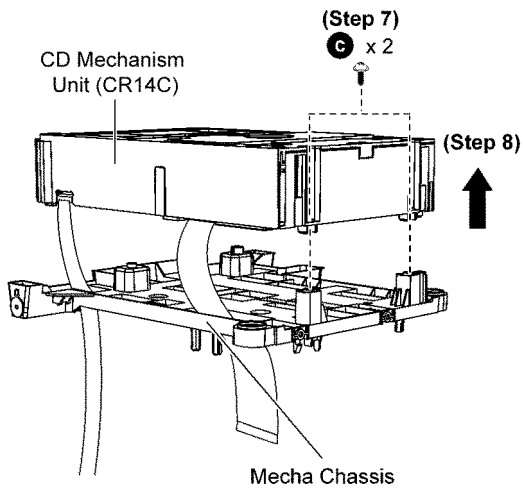
Step 5 : Release the CD Mechanism Unit (CR14C) from the catches & locators.

Step 6 : Lift up the CD Mechanism Unit (CR14C) as arrow shown to remove CD Mechanism Unit (CR14C).

Caution: During assembling, ensure the CD Mechanism Unit (CR14C) is seated properly on the locators.

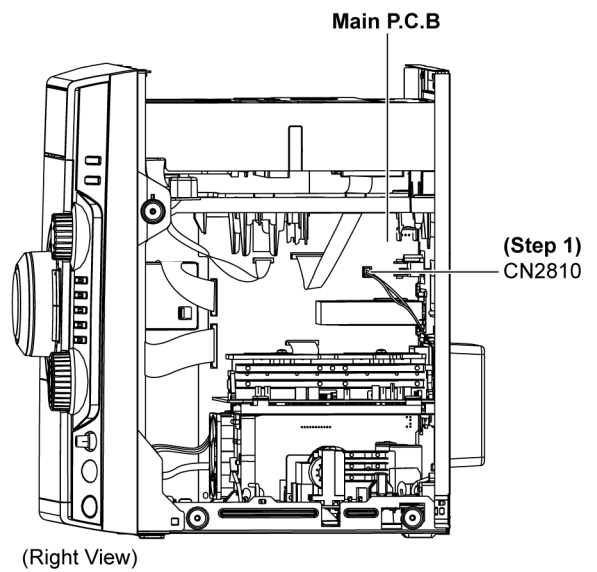
9.5. Disassembly of Rear Panel

- Follow (Step 1) to (Step 5) of Item 9.3



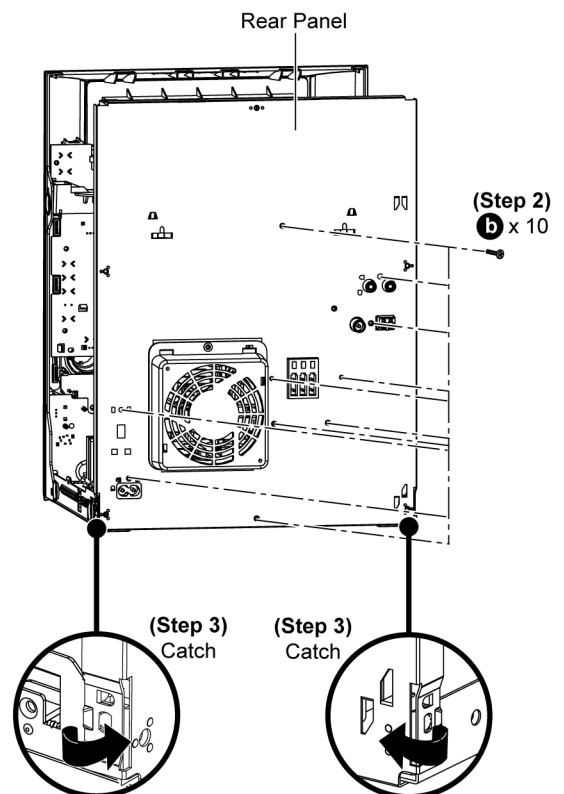
Step 7 : Remove 2 screws.

Step 8 : Remove the CD Mechanism Unit (CR14C).



Step 1 : Detach 2P wire at the connector (CN2810) on Main P.C.B..

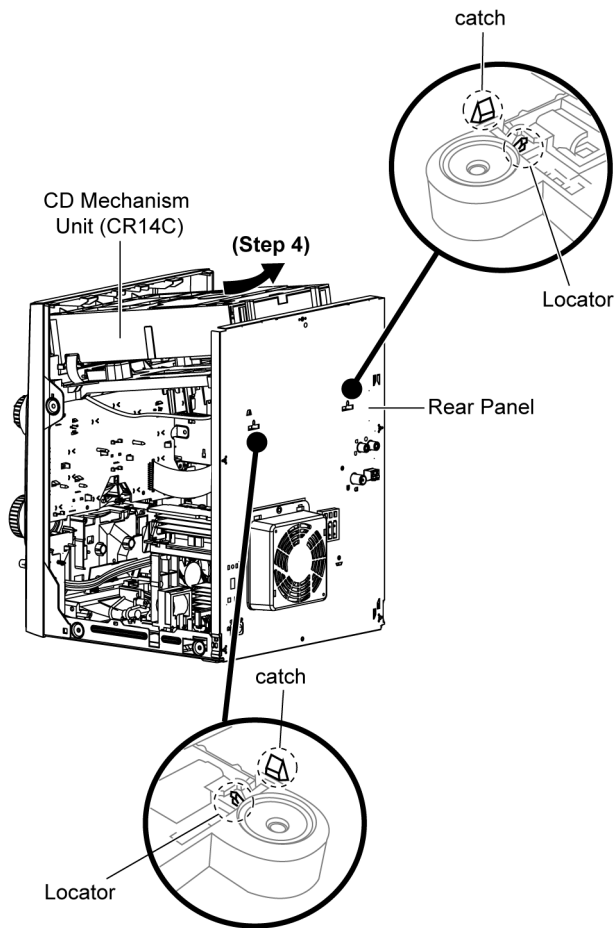
- For PH only



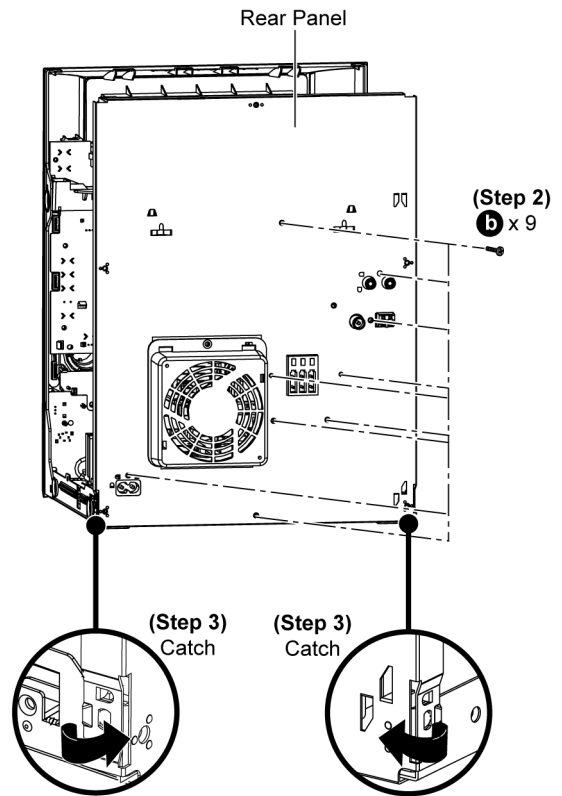
Step 2 : Remove 10 screws.

Step 3 : Release 2 catches from the each side of the Rear Panel.

• For PN only

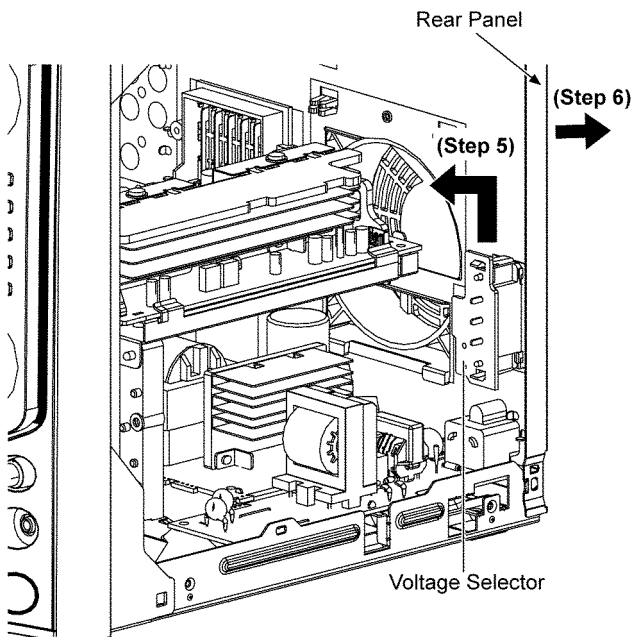


Step 4 : Slightly lift up the CD Mechanism Unit (CR14C) to release from the 2 locators.



Step 2 : Remove 9 screws.

Step 3 : Release 2 catches from the each side of the Rear Panel.

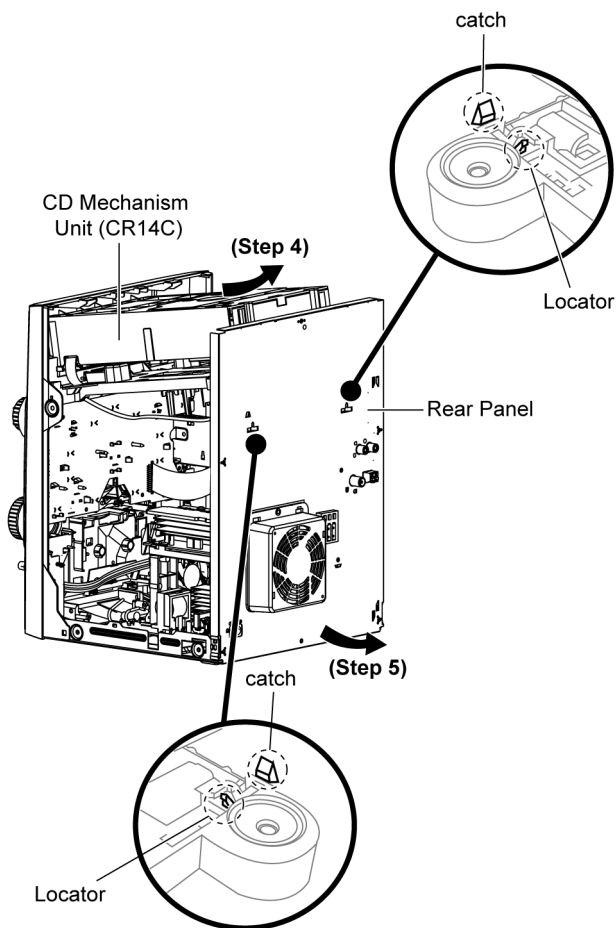


Step 5 : Detach Voltage Selector from Rear Panel as arrow shown.

Step 6 : Remove the Rear Panel.

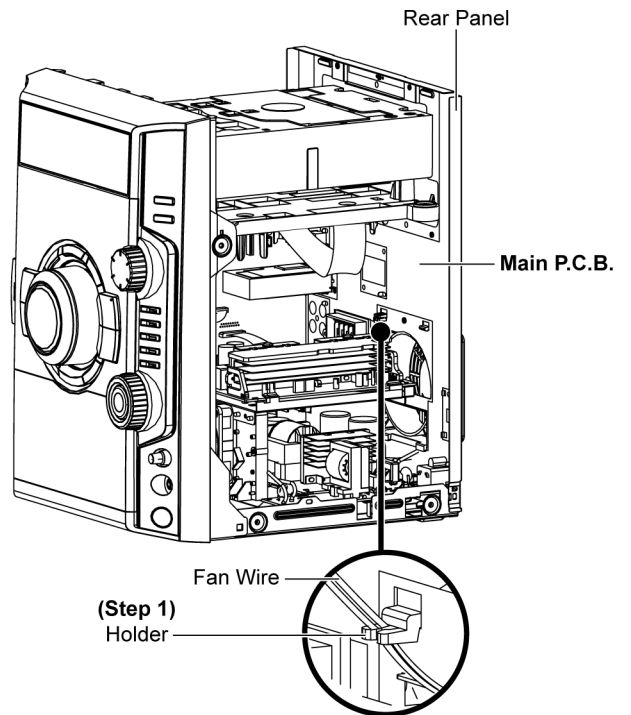
9.6. Disassembly of Fan Unit

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) of Item 9.5

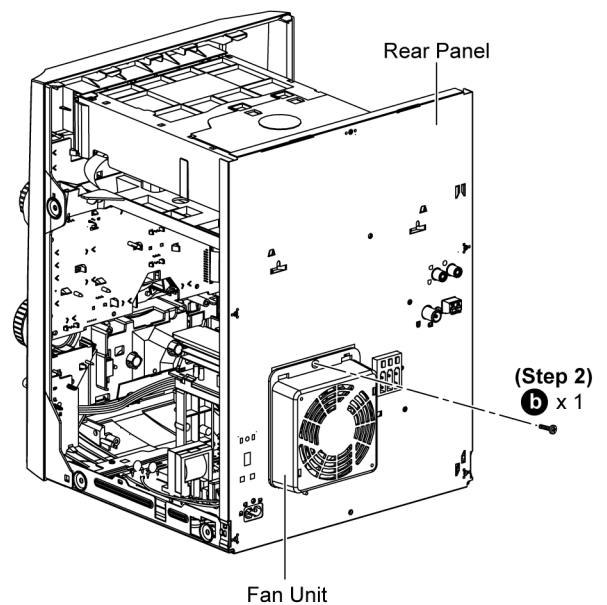


Step 4 : Slightly lift up the CD Mechanism Unit (CR14C) to release from the 2 locators.

Step 5 : Remove the Rear Panel.



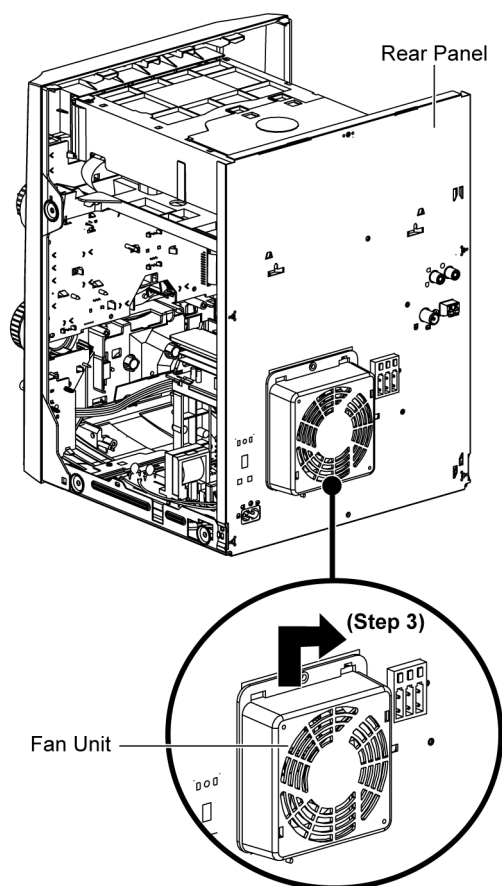
Step 1 : Release fan wire from the holder.



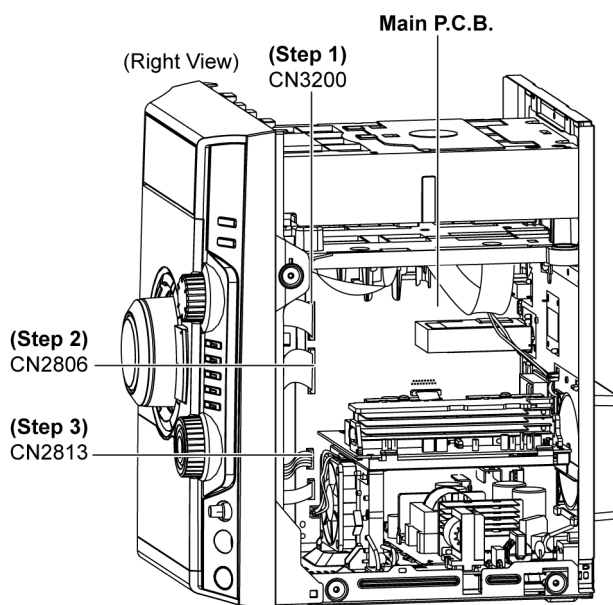
Step 2 : Remove 1 screw.

9.7. Disassembly of Front Panel Assembly

- Follow (Step 1) to (Step 5) of Item 9.3



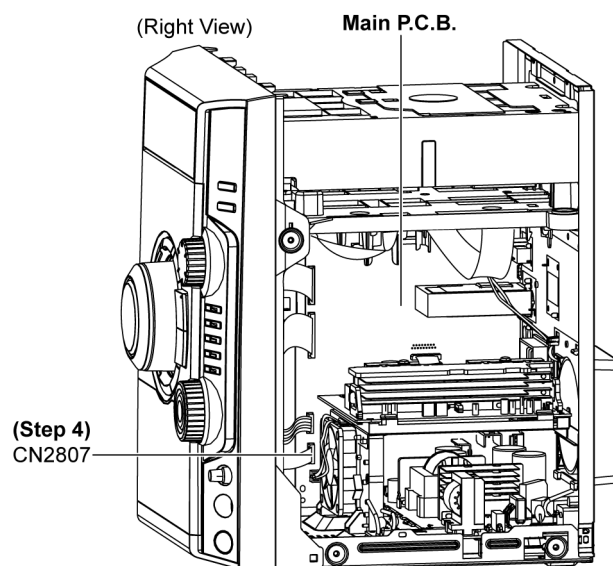
Step 3 : Remove the Fan Unit as arrow shown.



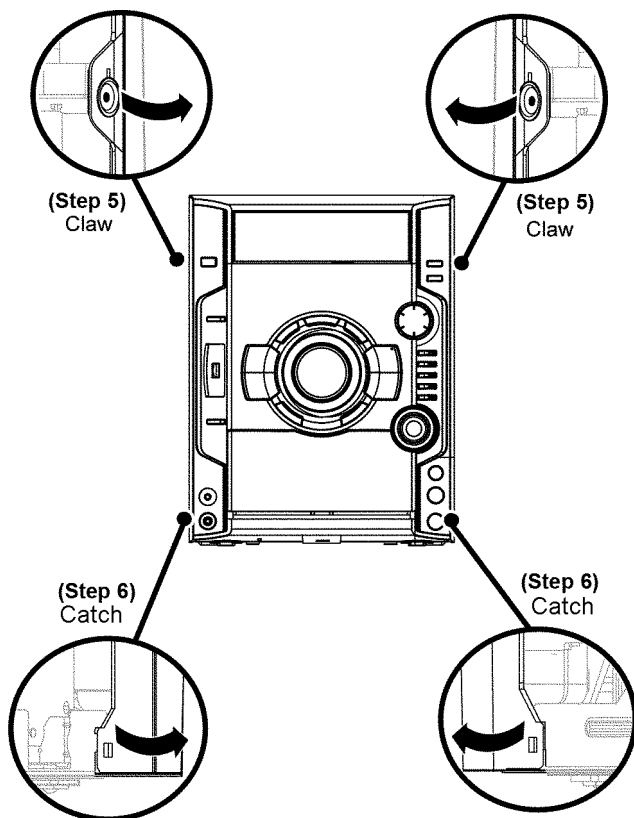
Step 1 : Detach 30P FFC at the connector (CN3200) on Main P.C.B.

Step 2 : Detach 27P FFC at the connector (CN2806) on Main P.C.B.

Step 3 : Detach 5P wire at the connector (CN2813) on Main P.C.B.



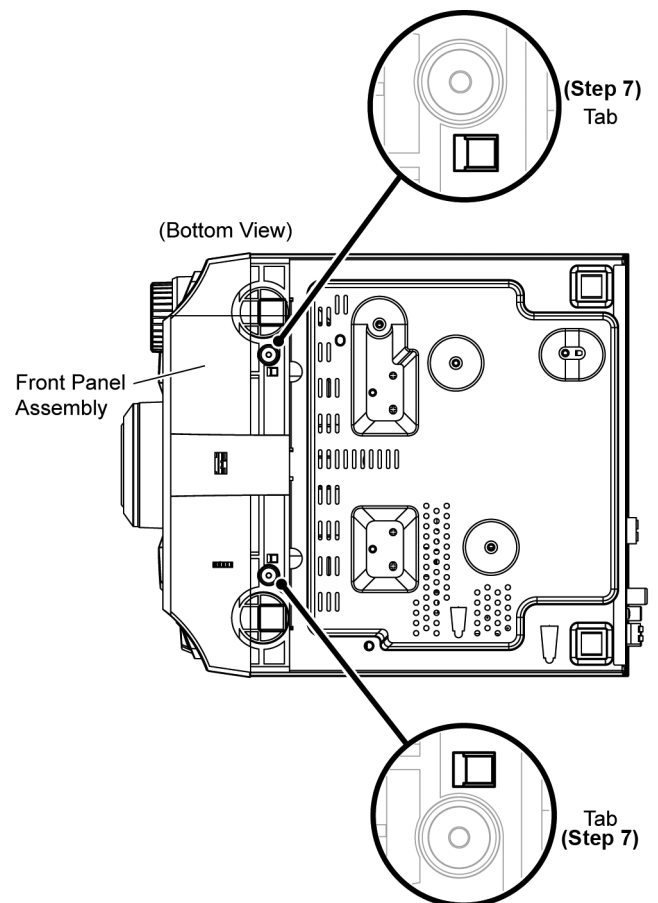
Step 4 : Detach 10P FFC at the connector (CN2807) on Main P.C.B.



Step 5 : Release claws on both sides.

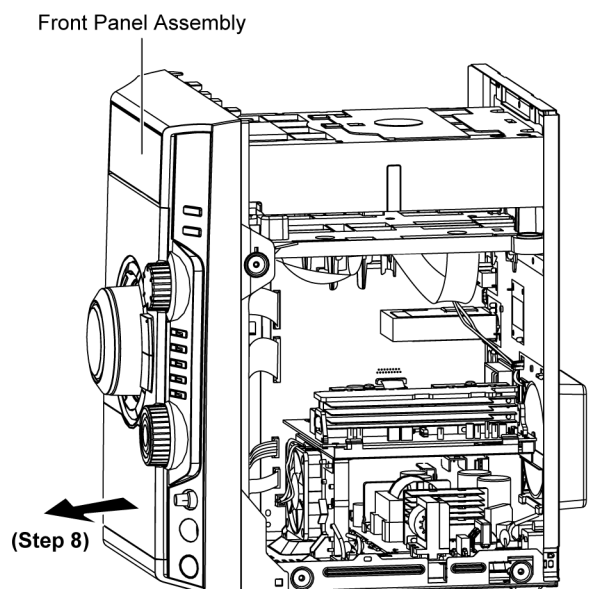
Step 6 : Release catches at both side.

Caution : During assembling, ensure both the claws and catches are fully caught.



Step 7 : Release tabs at the bottom.

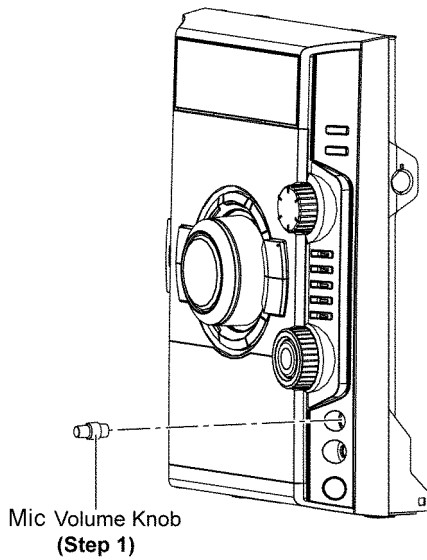
Caution : Do not exert strong force when releasing the tabs.



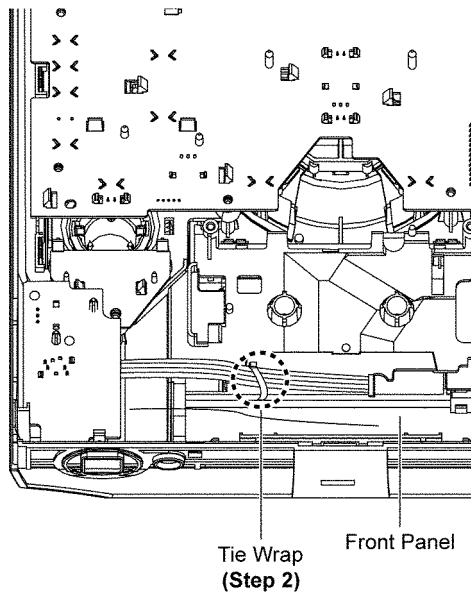
Step 8 : Remove the Front Panel Assembly as arrow shown.

9.8. Disassembly of Mic P.C.B.

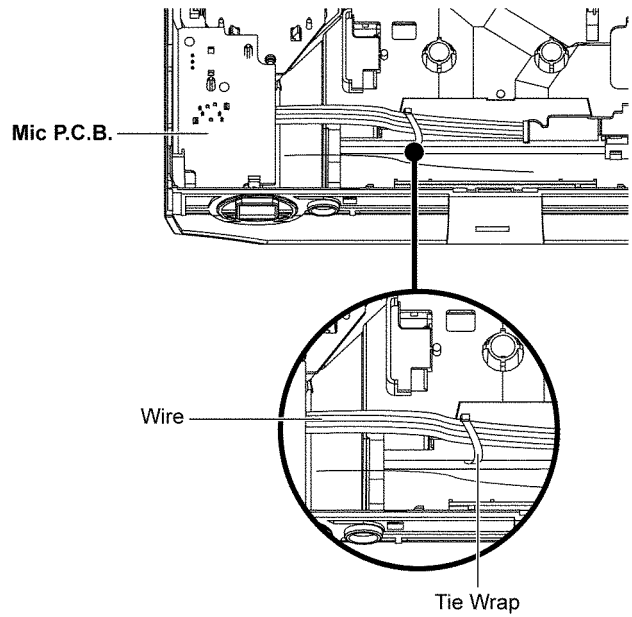
- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.7



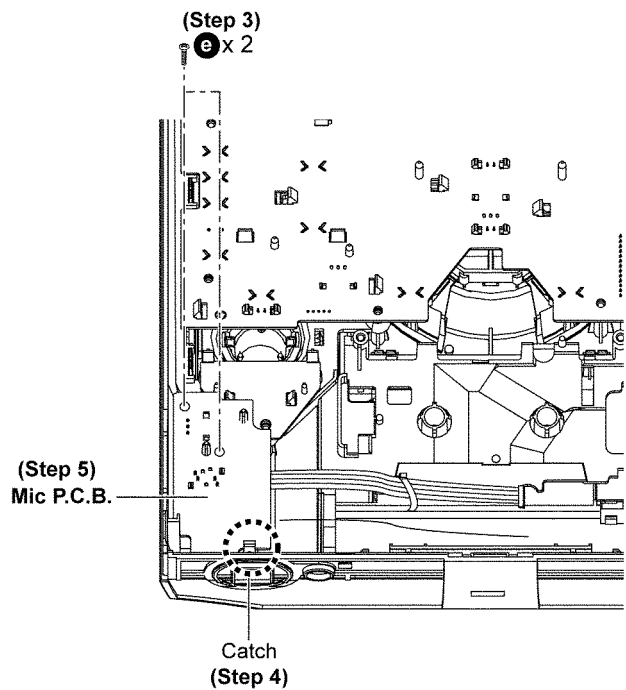
Step 1 : Remove the Mic Volume Knob.



Step 2 : Cut the tie wrap.



Caution : Remember to tie the 5P wire with tie wrap to the Front Panel as diagram shown.



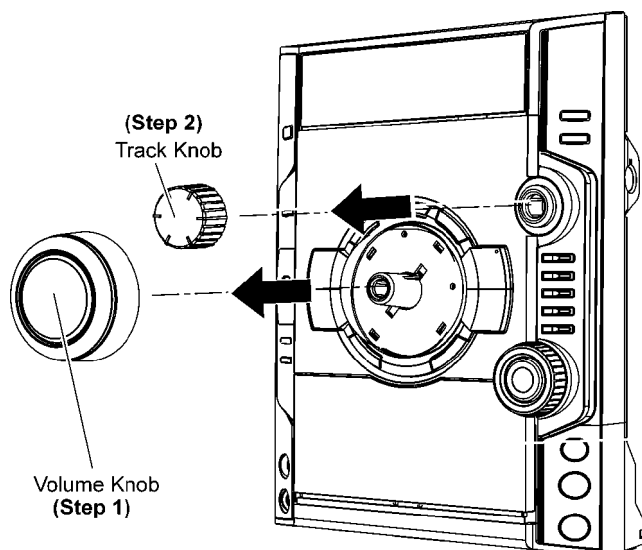
Step 3 : Remove 2 screws.

Step 4 : Release the catch.

Step 5 : Remove the Mic P.C.B..

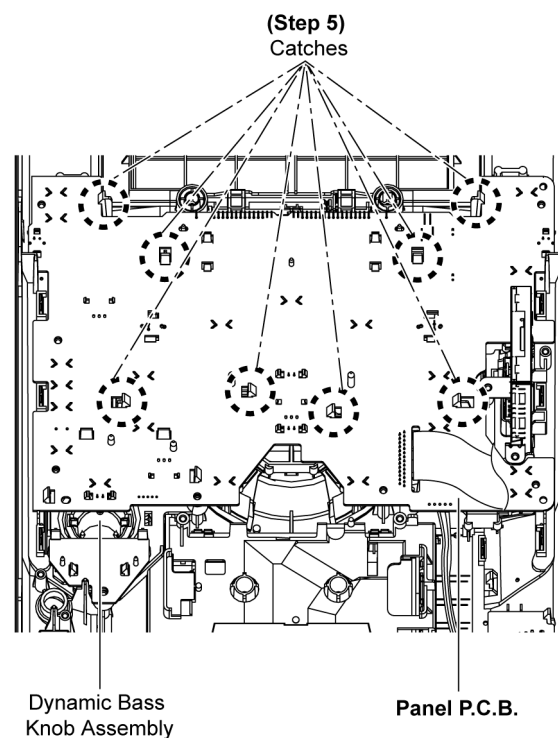
9.9. Disassembly of Panel P.C.B.

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.7
- Follow (Step 1) to (Step 5) of Item 9.8

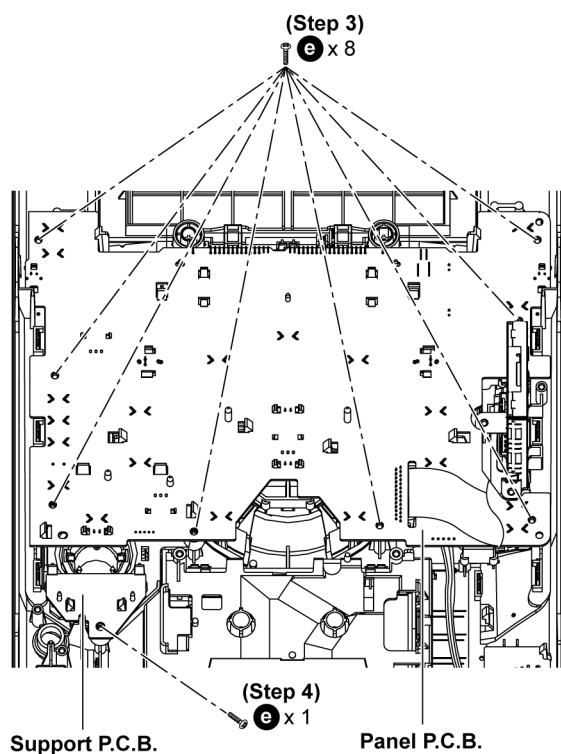


Step 1 : Remove the Volume Knob.

Step 2 : Remove the Track Knob.

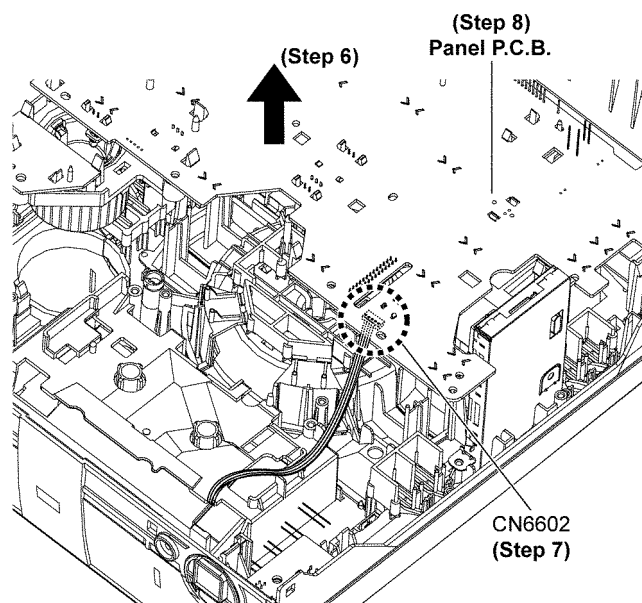


Step 5 : Release 8 catches.



Step 3 : Remove 8 screws.

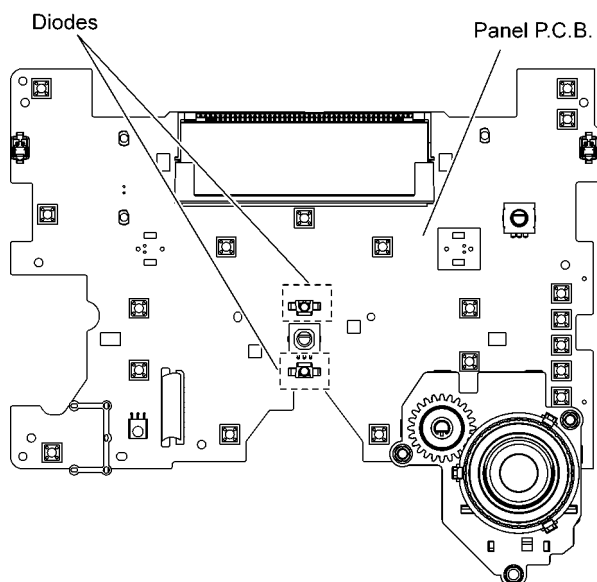
Step 4 : Remove 1 screw.



Step 6 : Lift up the Panel P.C.B. slightly.

Step 7 : Detach 5P wire at the connector (CN6602) on Panel P.C.B..

Step 8 : Remove the Panel P.C.B..

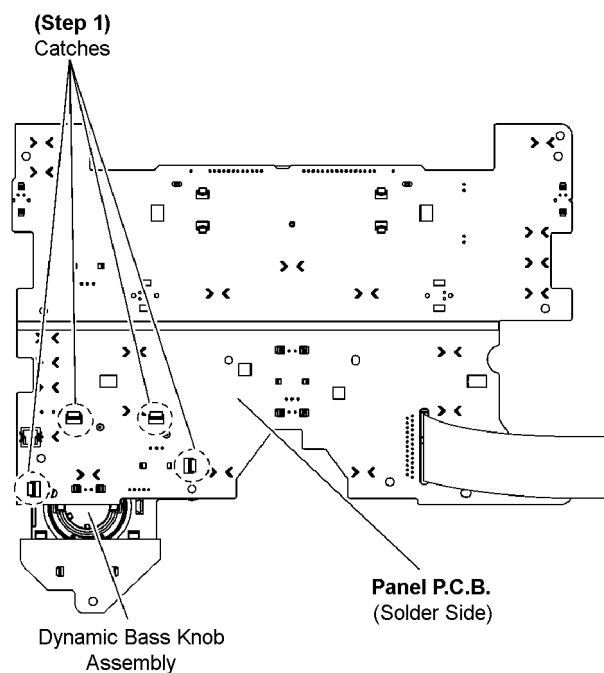


Caution : During assembling of Panel P.C.B., ensure that the diodes on Panel P.C.B. are in upright position.

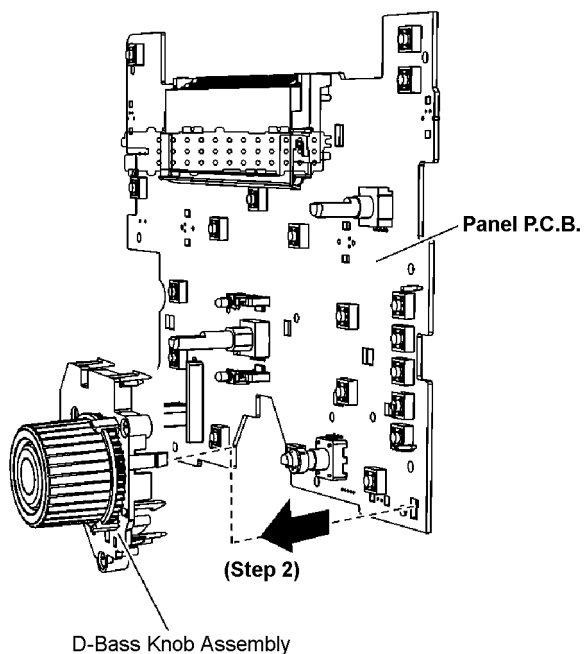
9.10. Disassembly of Dynamic Bass Knob & Dynamic Bass Button Unit

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.7
- Follow (Step 1) to (Step 5) of Item 9.8
- Follow (Step 1) to (Step 8) of Item 9.9

9.10.1. Disassembly of Dynamic Bass Knob

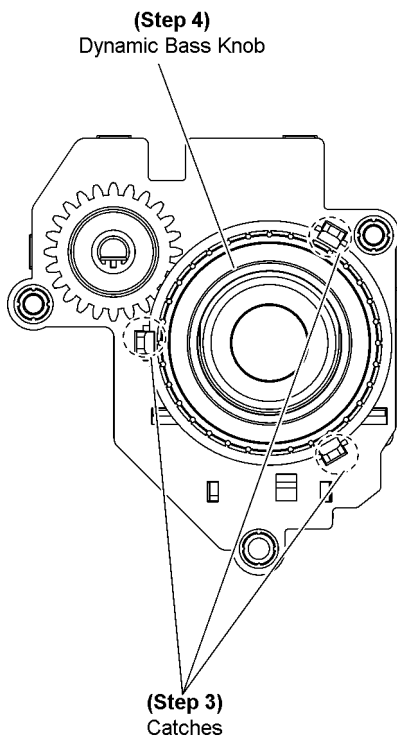


Step 1 : Release 4 catches.



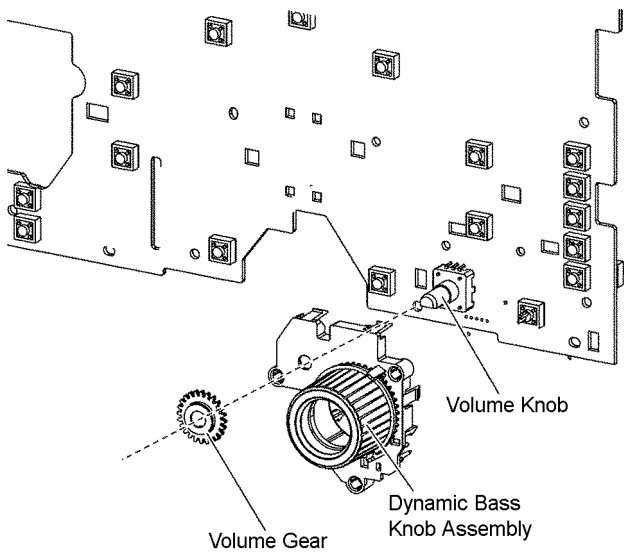
Step 2 : Remove the Dynamic Bass Knob Assembly.

9.10.2. Disassembly of Dynamic Bass Button Unit



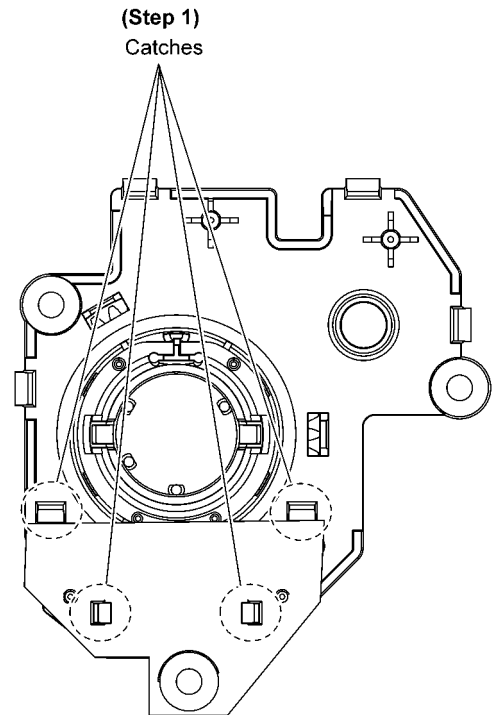
Step 3 : Release 3 catches.

Step 4 : Remove the Dynamic Bass Knob.

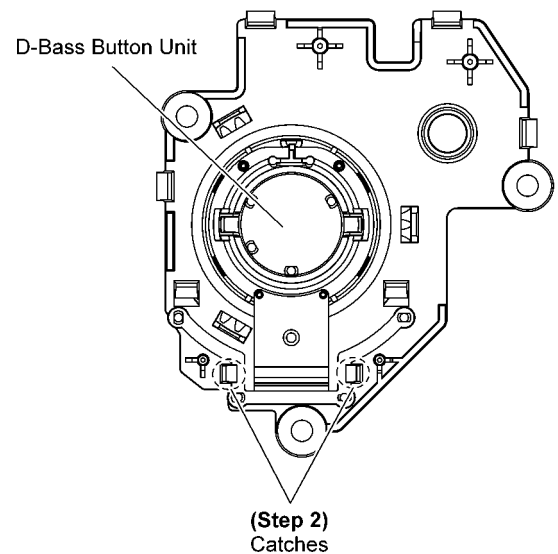


Caution 1 : Do not misplace the Volume Gear.

Caution 2 : Volume gear to align to Volume Knob & engage to Dynamic Bass Knob during assembly.



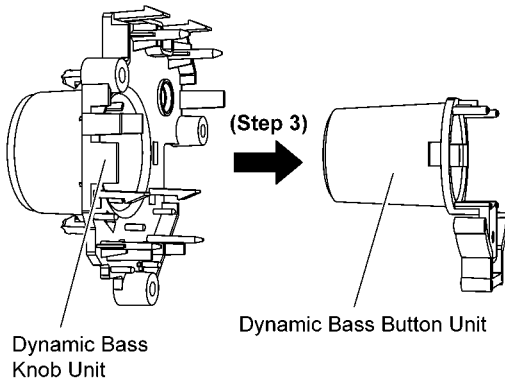
Step 1 : Release 4 catches.



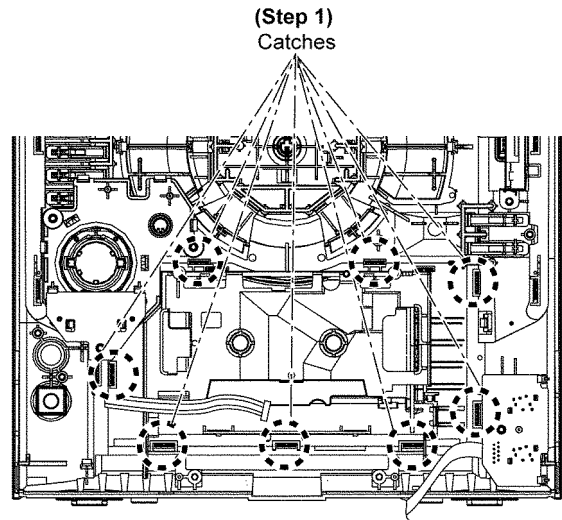
Step 2 : Release 2 catches.

9.11. Disassembly of Memory P.C.B.

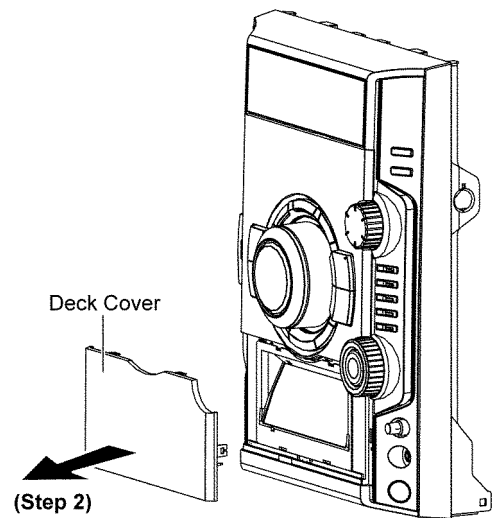
- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.7
- Follow (Step 1) to (Step 5) of Item 9.8
- Follow (Step 1) to (Step 8) of Item 9.9



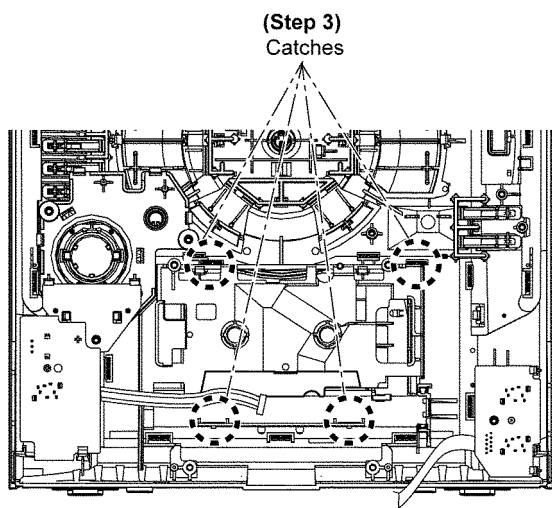
Step 3 : Remove the Dynamic Bass Button Unit.



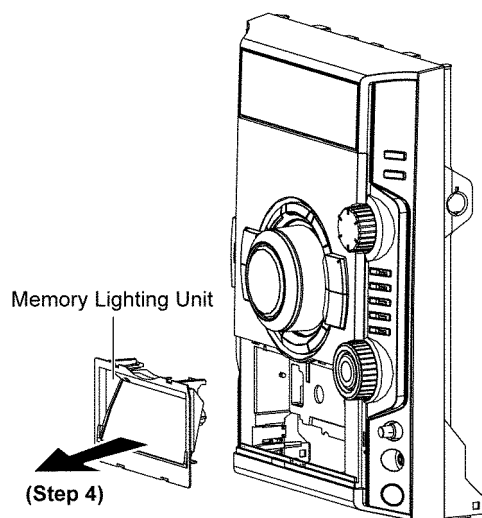
Step 1 : Release 8 catches.



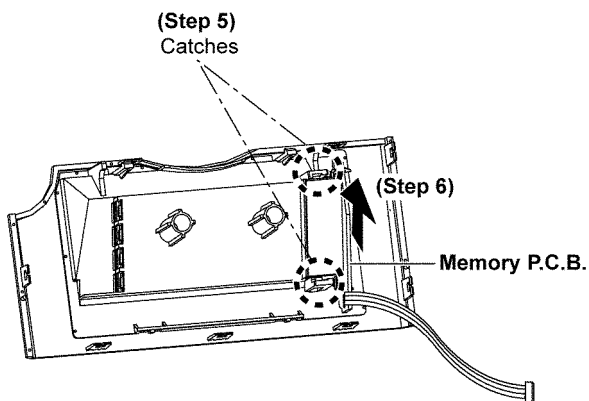
Step 2 : Remove the Deck Cover.



Step 3 : Release 4 catches.



Step 4 : Remove the Memory Lighting Unit.

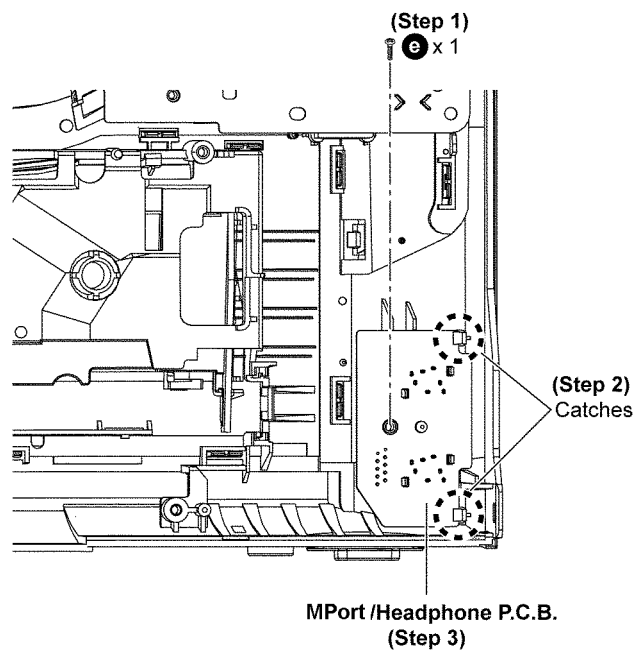


Step 5 : Release 2 catches.

Step 6 : Remove the Memory P.C.B. as arrow shown.

9.12. Disassembly of MPort/Headphone P.C.B.

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.7



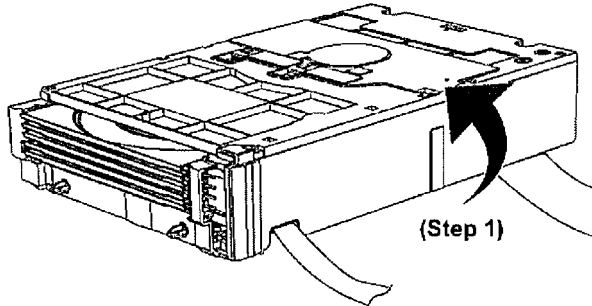
Step 1 : Remove 1 screw.

Step 2 : Release 2 catches.

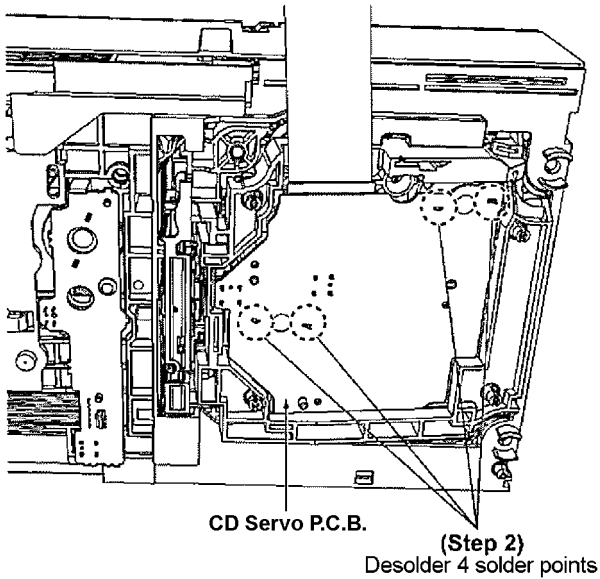
Step 3 : Remove the MPort/Headphone P.C.B..

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

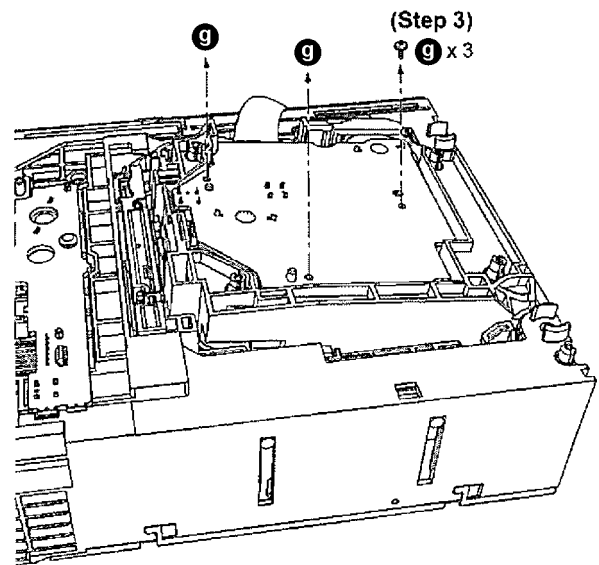
- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.4



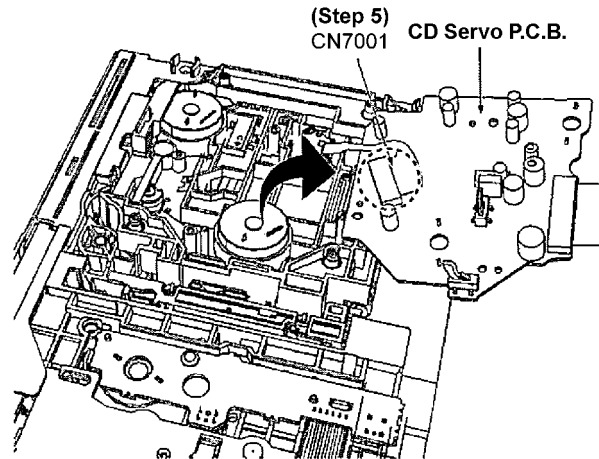
Step 1 : Upset the CD Mechanism Unit (CR14C).



Step 2 : Desolder 4 solder points.



Step 3 : Remove 3 screws.



Step 4 : Flip over the CD Servo P.C.B..

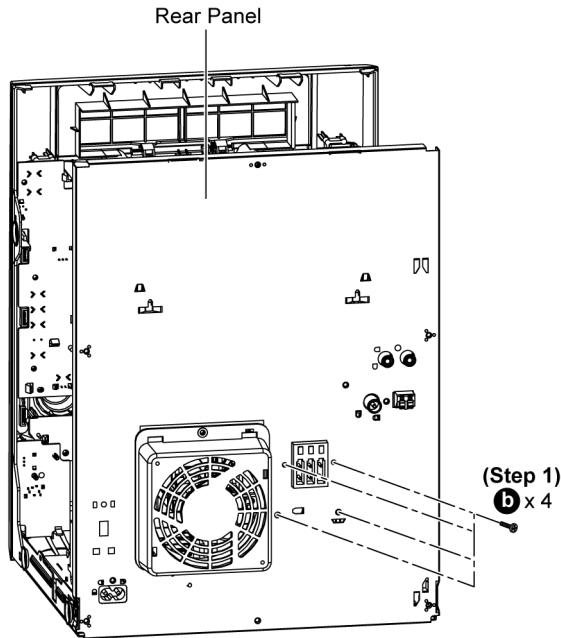
Step 5 : Detach the 16P FFC at connector (CN7001) at CD Servo P.C.B..

Step 6 : Remove CD Servo P.C.B..

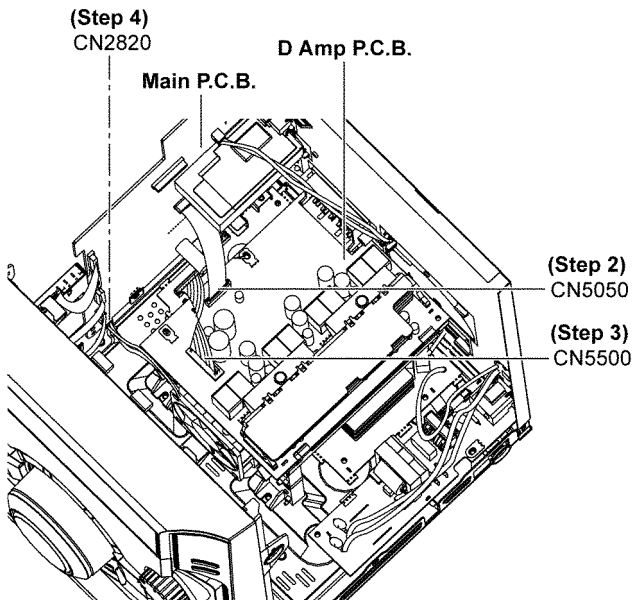
9.14. Disassembly of D-Amp P.C.B. & Fan

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4

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



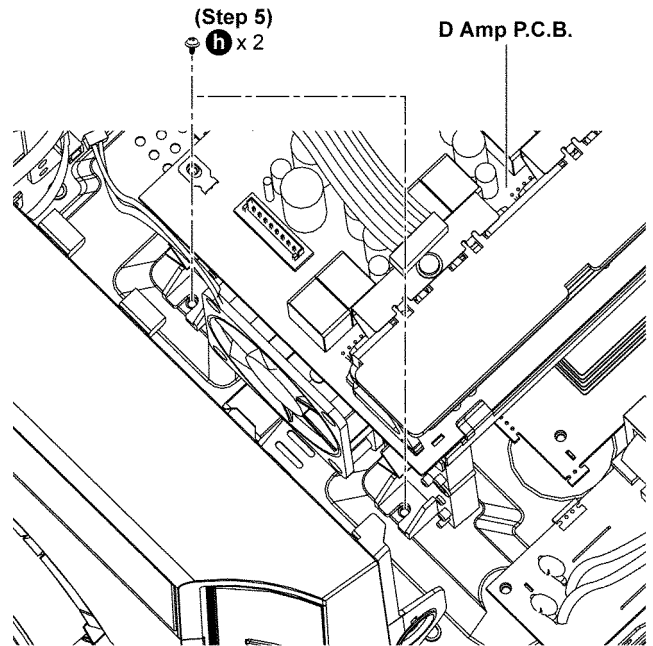
Step 1 : Remove 4 screws.



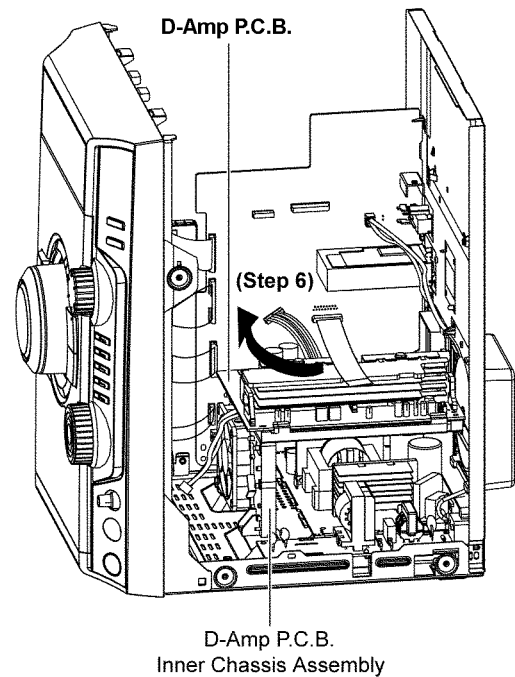
Step 2 : Detach 17P FFC at the connector (CN5050) on D-Amp P.C.B..

Step 3 : Detach 8P wire at the connector (CN5500) on D-Amp P.C.B..

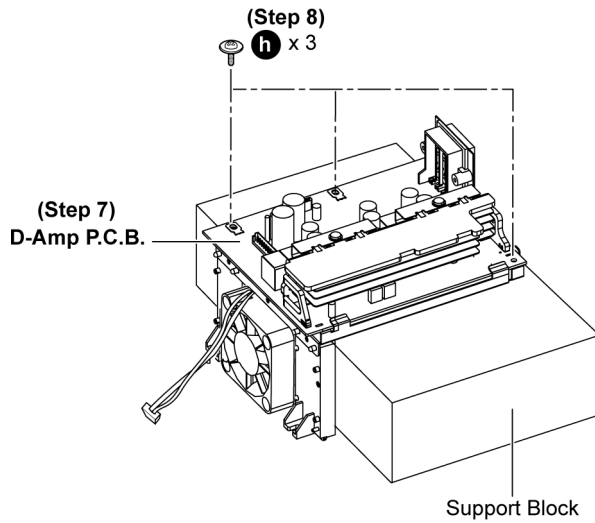
Step 4 : Detach 2P wire at the connector (CN2820) on Main P.C.B..



Step 5 : Remove 2 screws.

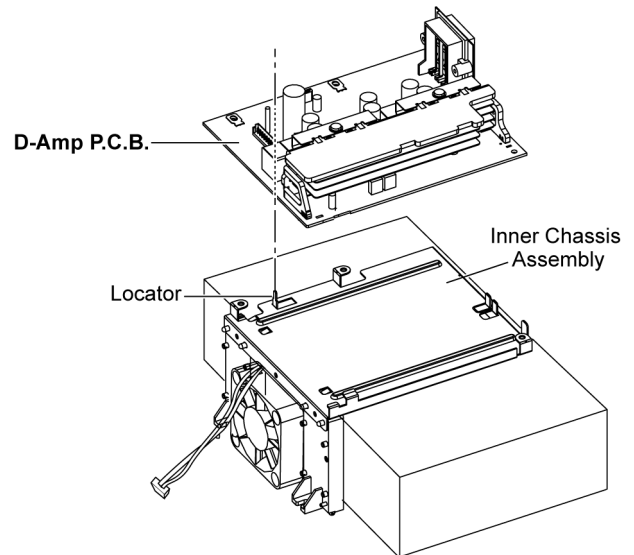


Step 6 : Lift up the D-Amp P.C.B. together with inner chassis assembly as arrow shown.



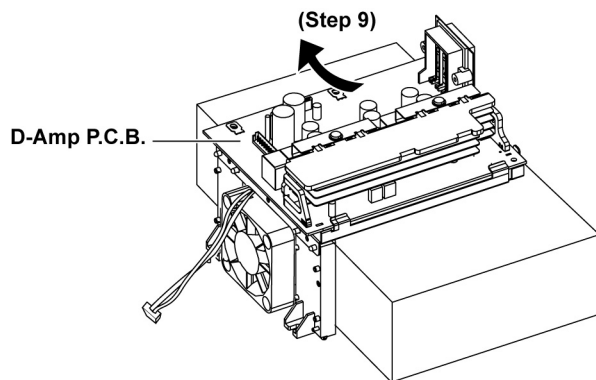
Step 7 : Place the D-Amp P.C.B. on a support block.

Step 8 : Remove 3 screws.

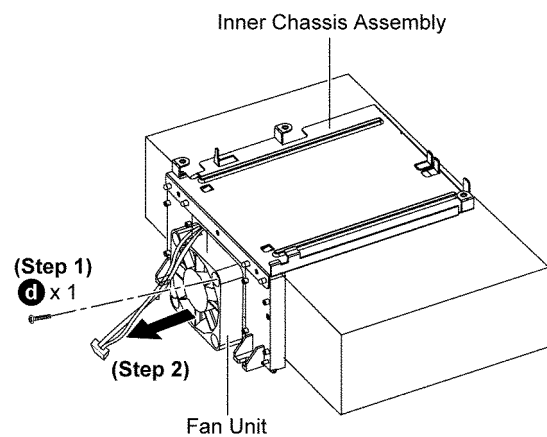


Caution: During assembling, ensure the D-Amp P.C.B. is seated properly on the locator of the Inner Chassis.

9.14.2. Disassembly of Fan Unit



Step 9 : Lift up to remove the D-Amp P.C.B..



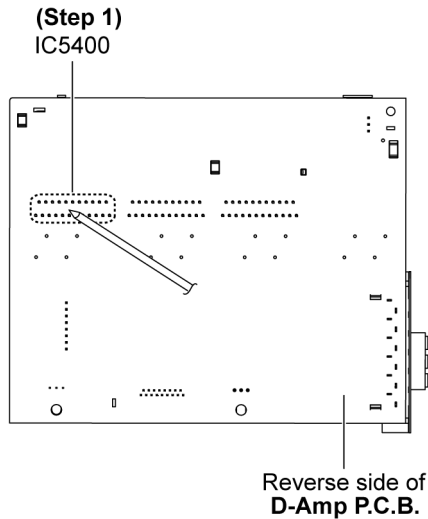
Step 1 : Remove 1 screw.

Step 2 : Remove the Fan Unit.

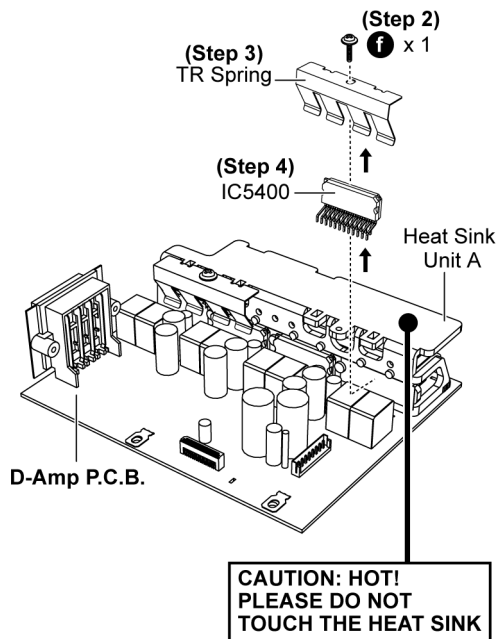
9.15. Replacement of Audio Digital Amp IC (IC5400)

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 9) of Item 9.14

9.15.1. Disassembly of Audio Digital Amp IC (IC5400)



Step 1 : Desolder pins of Audio Digital Amp IC (IC5400) on reverse side of D-Amp P.C.B..



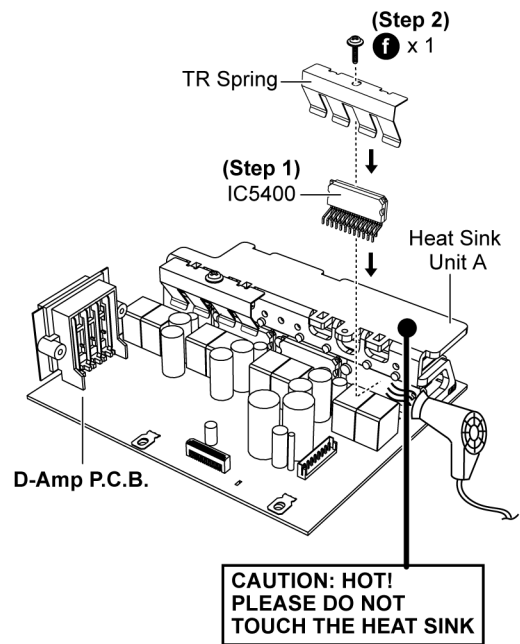
Step 2 : Remove 1 screw.

Step 3 : Remove TR Spring as arrow shown.

Step 4 : Remove Audio Digital Amp IC (IC5400) from the Heat-sink Unit A.

Caution : During replacement of the part, avoid touching the Heatsink, it may lead to injuries.

9.15.2. Assembly of Audio Digital Amp IC (IC5400)



Step 1 : Mount the Audio Digital Amp IC (IC5400) on to the D-Amp P.C.B..

Step 2 : Screw back TR Spring to hold the Audio Digital Amp IC (IC5400) onto the Heatsink Unit A.

Step 3 : Solder the pins of Audio Digital Amp IC (IC5400).

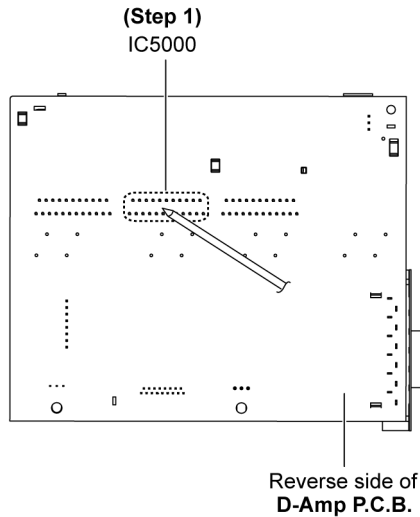
Step 4 : Use a blower to remove the minute particles after the screwing of TR Spring.

Caution : Ensure pins of the Audio Digital Amp IC (IC5400) are properly seated and soldered on D-Amp P.C.B..

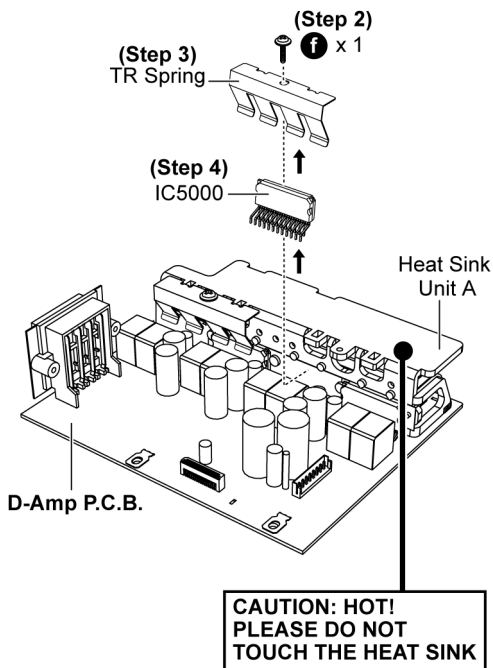
9.16. Replacement of Audio Digital Amp IC (IC5000)

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 9) of Item 9.14

9.16.1. Disassembly of Audio Digital Amp IC (IC5000)



Step 1 : Desolder pins of Audio Digital Amp IC (IC5000) on reverse side of D-Amp P.C.B..



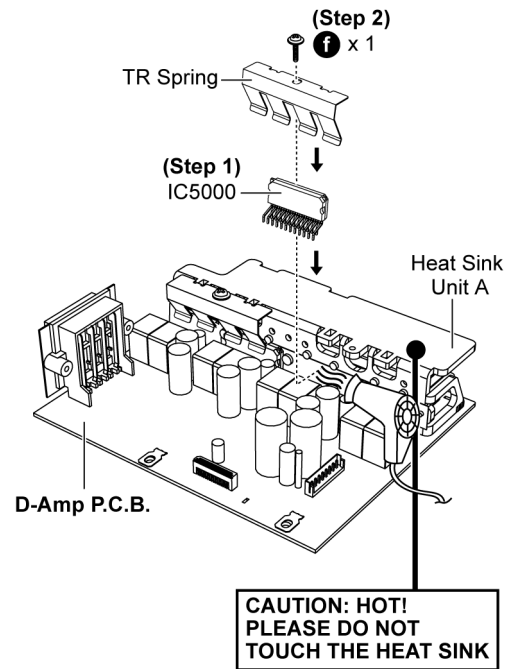
Step 2 : Remove 1 screw.

Step 3 : Remove TR Spring as arrow shown.

Step 4 : Remove Audio Digital Amp IC (IC5000) from the Heat-sink Unit A.

Caution : During replacement of the part, avoid touching the Heatsink, it may lead to injuries.

9.16.2. Assembly of Audio Digital Amp IC (IC5000)



Step 1 : Mount the Audio Digital Amp IC (IC5000) on to the D-Amp P.C.B..

Step 2 : Screw back TR Spring to hold the Audio Digital Amp IC (IC5000) onto the Heatsink Unit A.

Step 3 : Solder the pins of Audio Digital Amp IC (IC5000).

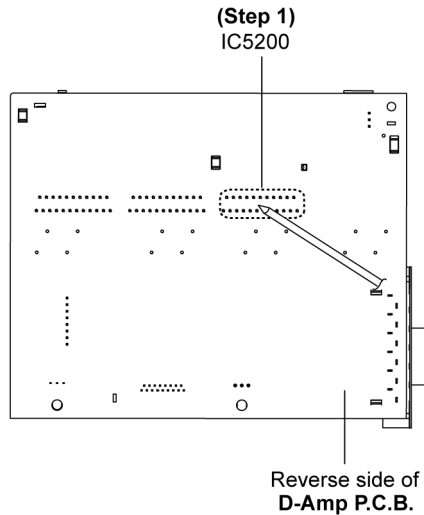
Step 4 : Use a blower to remove the minute particles after the screwing of TR Spring.

Caution : Ensure pins of the Audio Digital Amp IC (IC5000) are properly seated and soldered on D-Amp P.C.B..

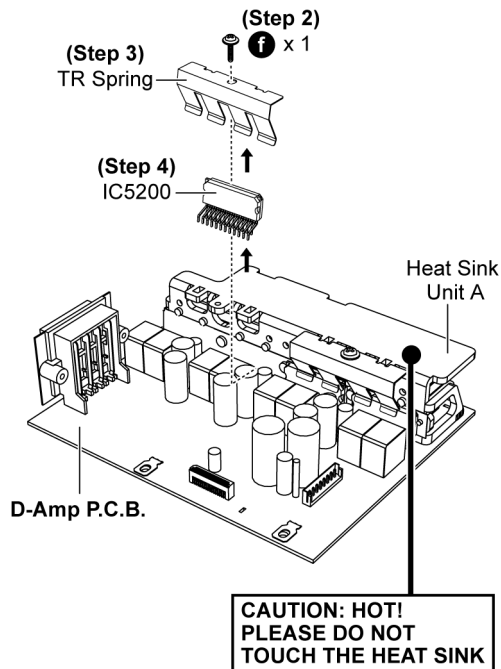
9.17. Replacement of Audio Digital Amp IC (IC5200)

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 9) of Item 9.14

9.17.1. Disassembly of Audio Digital Amp IC (IC5200)



Step 1 : Desolder pins of Audio Digital Amp IC (IC5200) on reverse side of D-Amp P.C.B..



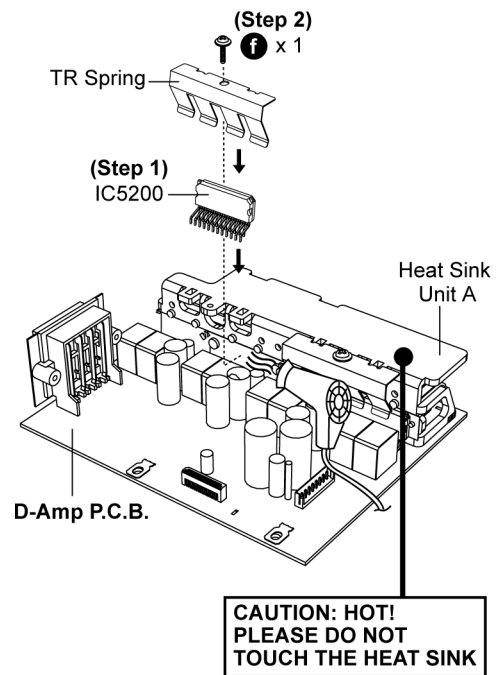
Step 2 : Remove 1 screw.

Step 3 : Remove TR Spring as arrow shown.

Step 4 : Remove Audio Digital Amp IC (IC5200) from the Heat-sink Unit A.

Caution : During replacement of the part, avoid touching the Heatsink, it may lead to injuries.

9.17.2. Assembly of Audio Digital Amp IC (IC5200)



Step 1 : Mount the Audio Digital Amp IC (IC5200) on to the D-Amp P.C.B..

Step 2 : Screw back TR Spring to hold the Audio Digital Amp IC (IC5200) onto the Heatsink Unit A.

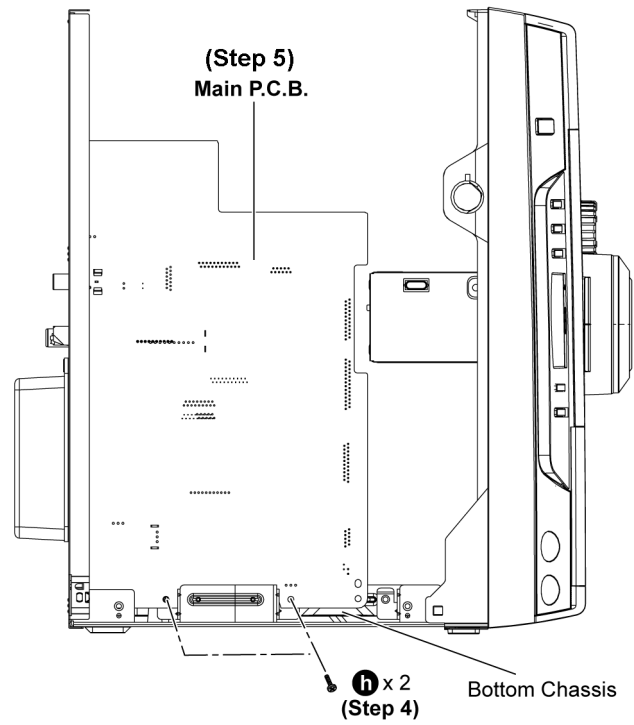
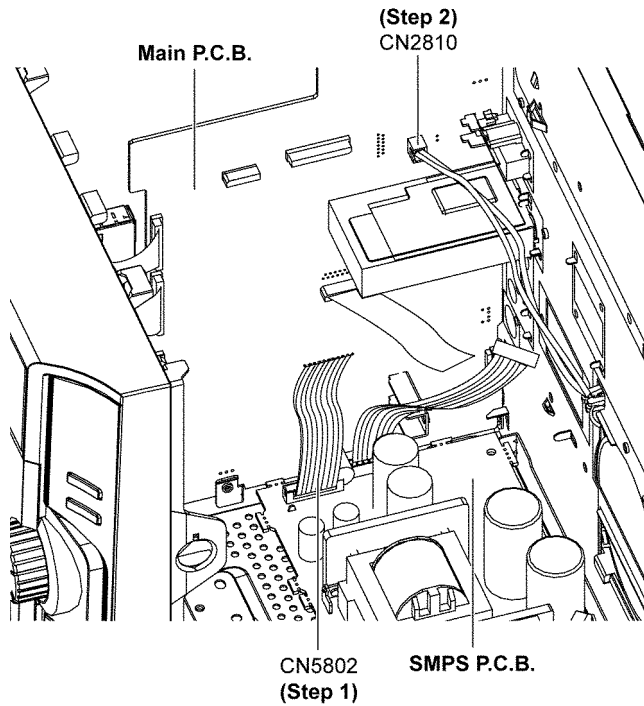
Step 3 : Solder the pins of Audio Digital Amp IC (IC5200).

Step 4 : Use a blower to remove the minute particles after the screwing of TR Spring.

Caution : Ensure pins of the Audio Digital Amp IC (IC5200) are properly seated and soldered on D-Amp P.C.B..

9.18. Disassembly of Main P.C.B.

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 4) of Item 9.7
- Follow (Step 1) to (Step 6) of Item 9.14

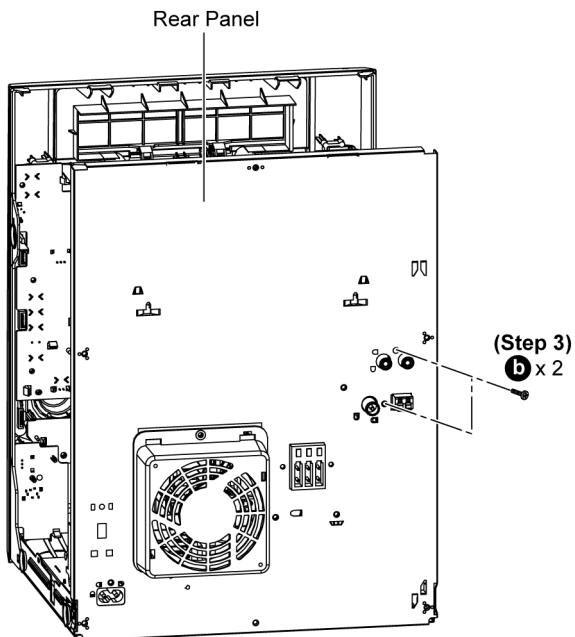


Step 4 : Remove 2 screws on at bottom chassis.

Step 5 : Remove the Main P.C.B..

Step 1 : Detach 11P wire at the connector (CN5802) on SMPS P.C.B..

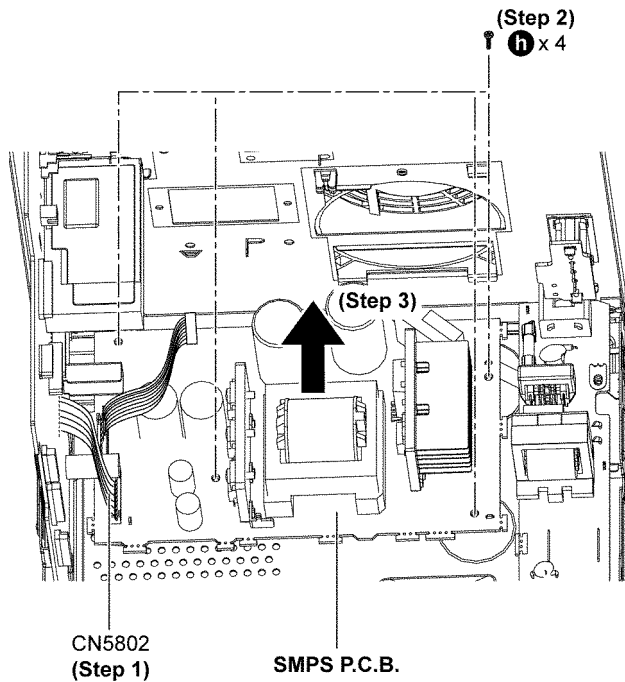
Step 2 : Detach 2P wire at the connector (CN2810) on Main P.C.B..



Step 3 : Remove 2 screws at the Rear Panel.

9.19. Disassembly of SMPS P.C.B.

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 6) of Item 9.14

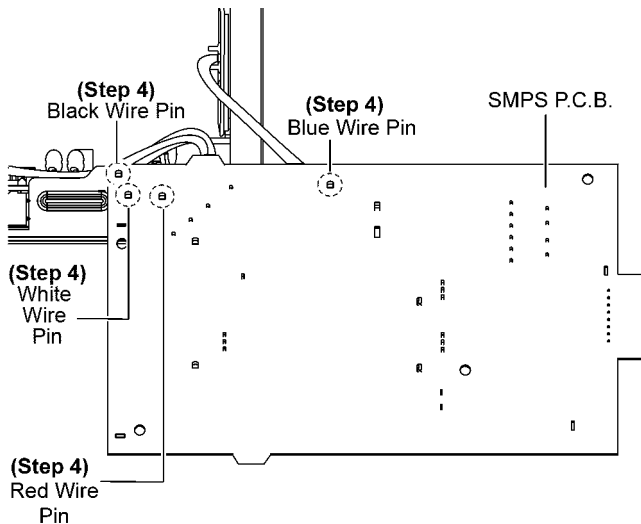


Step 1 : Detach 11P wire at the connector (CN5802) on SMPS P.C.B..

Step 2 : Remove 4 screws.

Step 3 : Lift up and remove the SMPS P.C.B. as arrow shown.

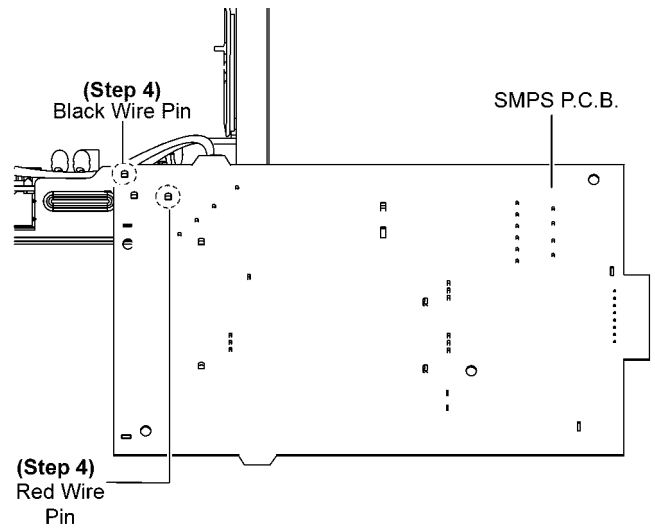
(This illustration shows is for PH only)



Step 4 : Flip the SMPS P.C.B. and desolder the wire's pin.

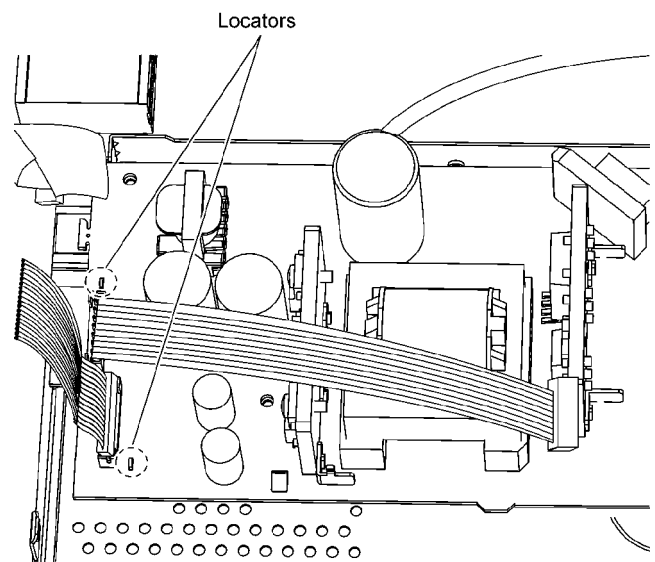
Caution: Red, Black, White, Blue wires.

(This illustration shows is for PN only)



Step 4 : Flip the SMPS P.C.B. and desolder the wire's pin.

Caution: Red, Black wires.

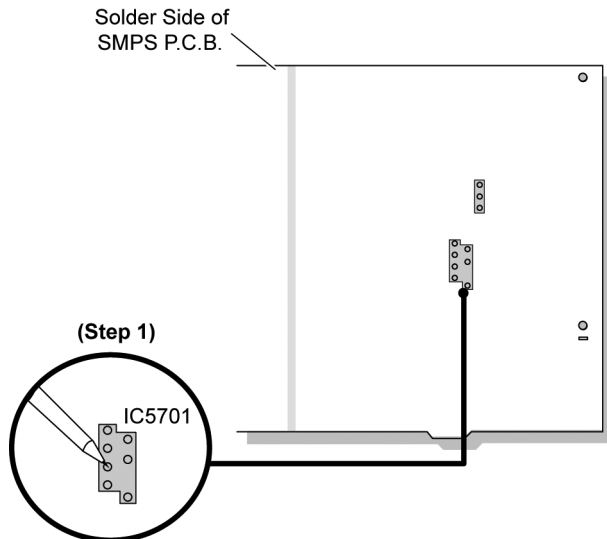


Caution : During assembly, ensure the SMPS P.C.B. is seated properly at the locators.

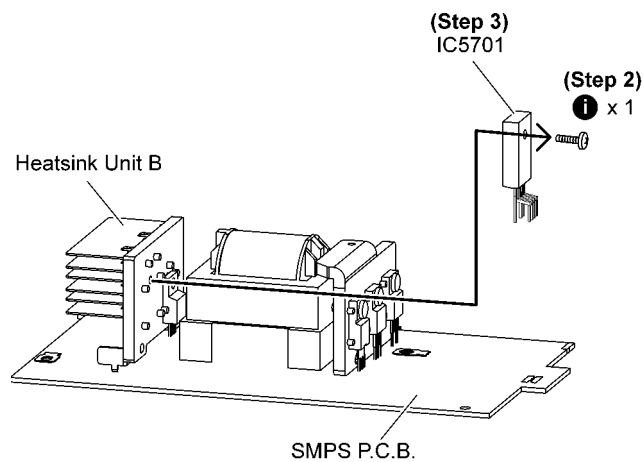
9.20. Replacement of Switching Regulator IC (IC5701)

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 6) of Item 9.14
- Follow (Step 1) to (Step 4) of Item 9.19

9.20.1. 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..

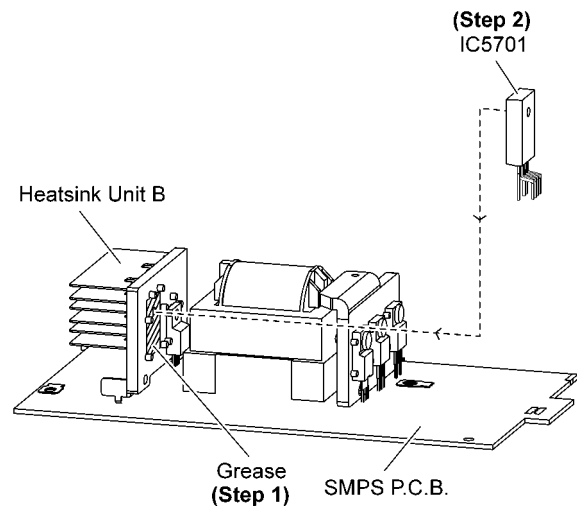


Step 2 : Remove 1 screw from the Switching Regulator IC (IC5701).

Step 3 : Remove the Switching Regulator IC (IC5701).

Caution : During replacement of the part, avoid touching the heatsink, it may lead to injuries.

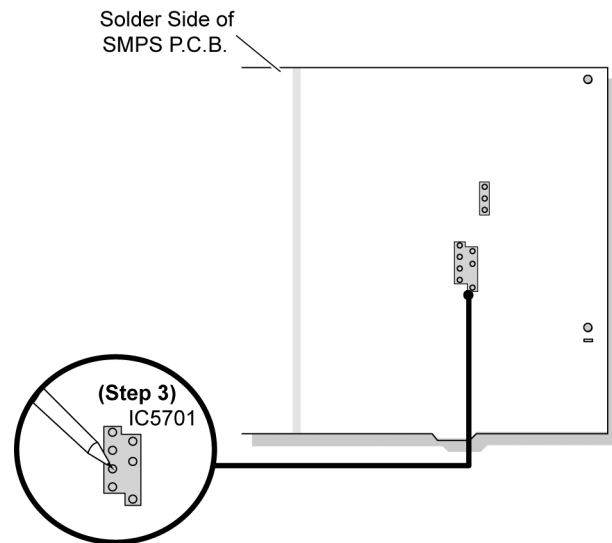
9.20.2. Assembly of Switching Regulator IC (IC5701)



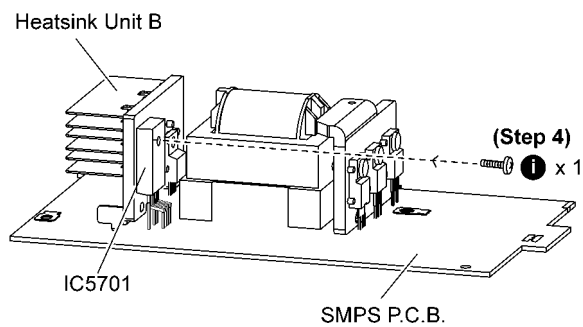
Step 1 : Apply grease to the Heatsink Unit B.

Step 2 : Mount the Switching Regulator IC (IC5701) on to SMPS P.C.B..

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



Step 3 : Solder pins of the Switching Regulator IC (IC5701) on the solder side of SMPS P.C.B..



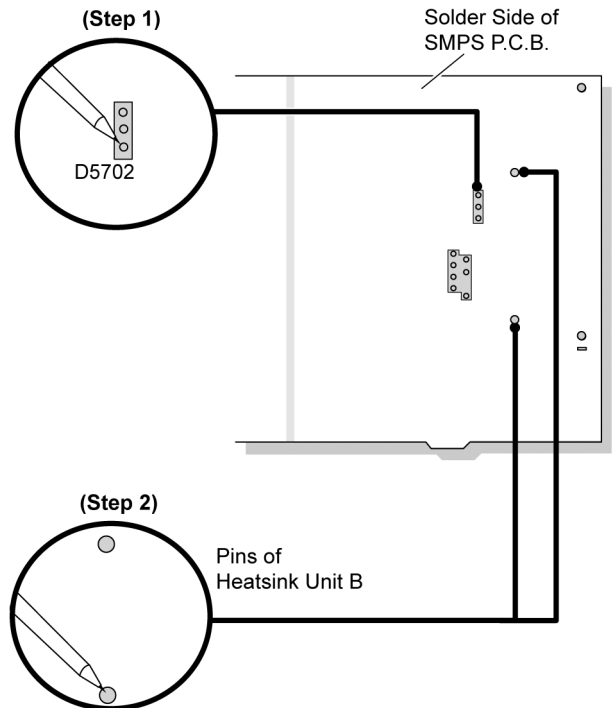
Step 4 : Screw the Switching Regulator IC (IC5701) to the Heatsink Unit B.

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

9.21. Replacement of Rectifier Diode (D5702)

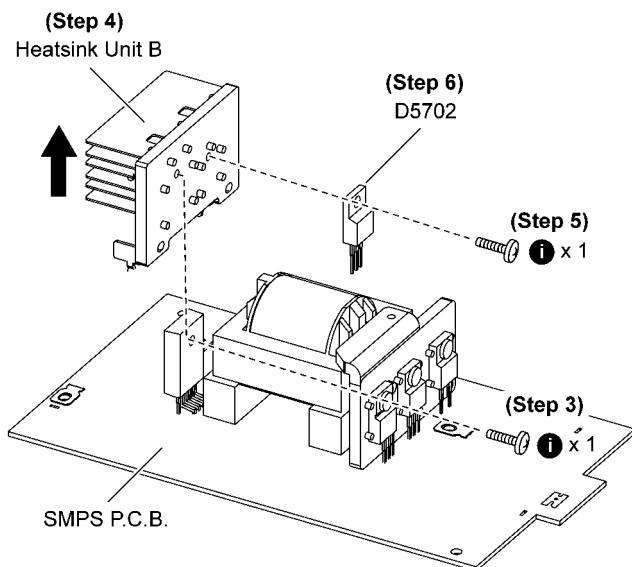
- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 6) of Item 9.14
- Follow (Step 1) to (Step 4) of Item 9.19

9.21.1. 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 Unit B.



Step 3 : Remove 1 screw.

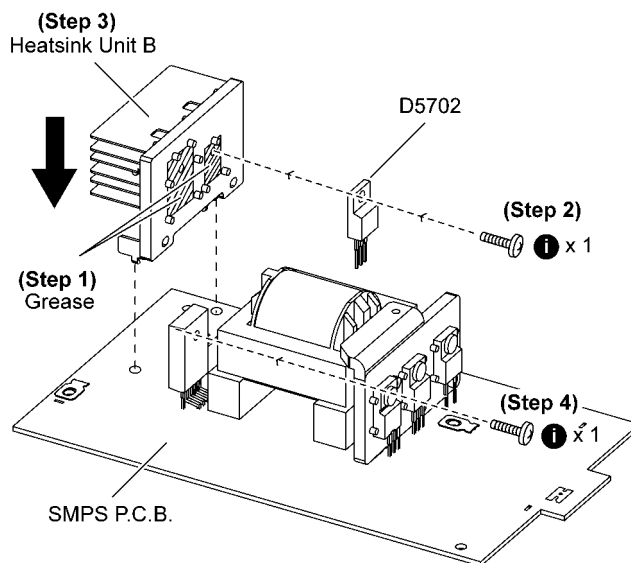
Step 4 : Remove the Heatsink Unit B as arrow shown.

Step 5 : Remove 1 screw.

Step 6 : Remove the Rectifier Diode (D5702) from the Heatsink Unit B.

Caution : During replacement of the part, avoid touching the heatsink, it may lead to injuries.

9.21.2. Assembly of Rectifier Diode (D5702)



Step 1 : Apply grease to the Heatsink Unit B.

Step 2 : Screw the Rectifier Diode (D5702) to the Heatsink Unit B.

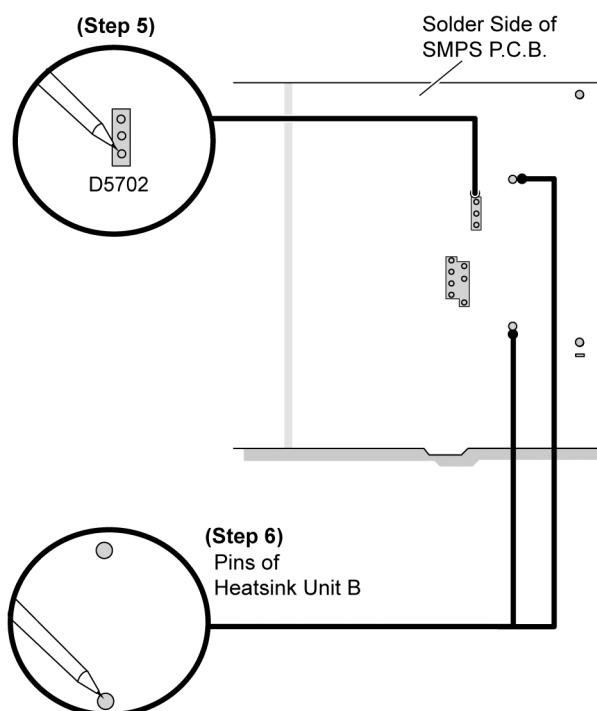
Caution : Ensure the Rectifier Diode (D5702) is well tightened to the Heatsink Unit B.

Step 3 : Mount the Heatsink Unit B & Rectifier Diode (D5702) on to SMPS P.C.B..

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

Step 4 : Screw the Switch Regulator IC (IC5701) to the Heatsink Unit B.

Caution : Ensure the Heatsink Unit B is properly seated on SMPS P.C.B..



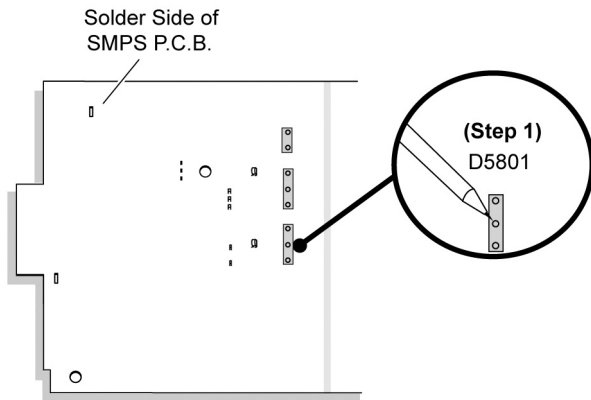
Step 5 : Solder pins of the Rectifier Diode (D5702) on the solder side of SMPS P.C.B..

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

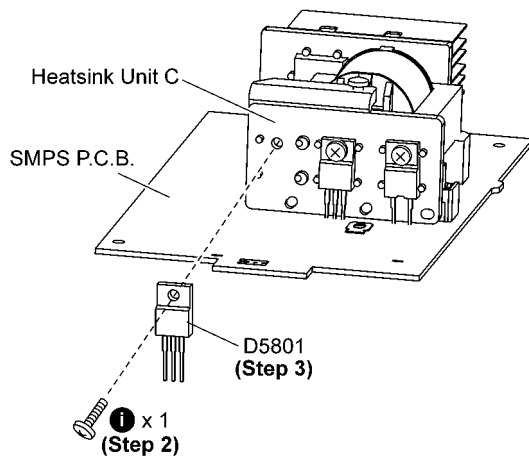
9.22. Replacement of Regulator Diode (D5801)

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 6) of Item 9.14
- Follow (Step 1) to (Step 4) of Item 9.19

9.22.1. Disassembly of Regulator Diode (D5801)



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

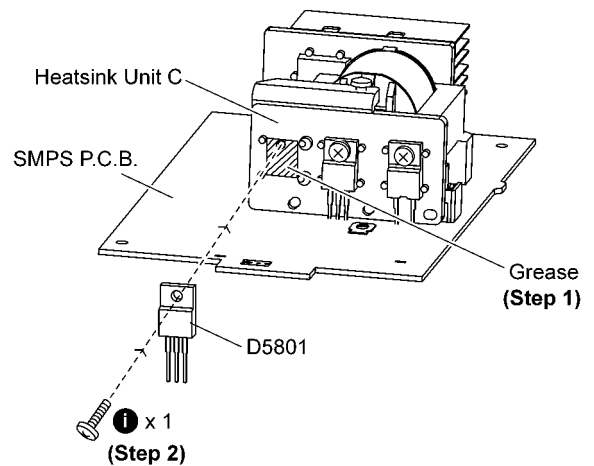


Step 2 : Remove 1 screw.

Step 3 : Remove the Regulator Diode (D5801).

Caution : During replacement of the part, avoid touching the heatsink, it may lead to injuries.

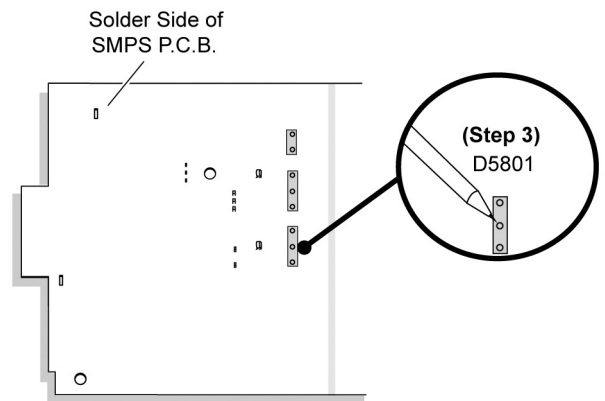
9.22.2. Assembly of Regulator Diode (D5801)



Step 1 : Apply grease to the Heatsink Unit C.

Step 2 : Mount & screw the Regulator Diode (D5801) to the Heatsink Unit C on the SMPS P.C.B..

Caution : Ensure the Regulator Diode (D5801) is well tightened to the Heatsink Unit C.



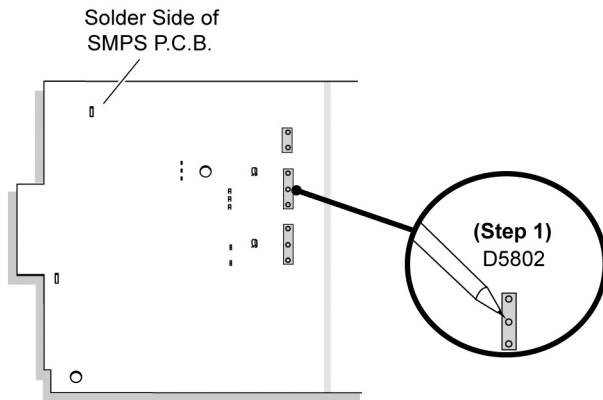
Step 3 : Solder pins of the Regulator Diode (D5801) on the solder side of SMPS P.C.B..

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

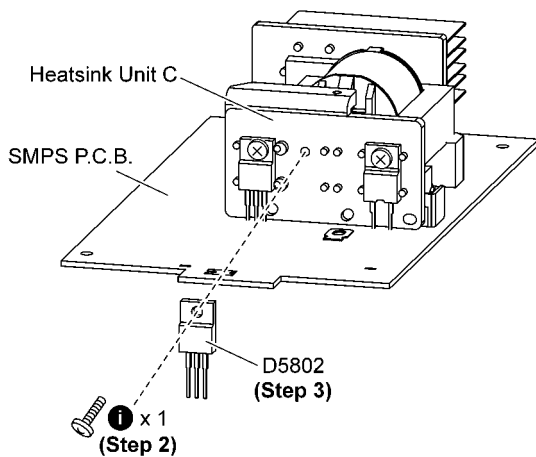
9.23. Replacement of Regulator Diode (D5802)

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 6) of Item 9.14
- Follow (Step 1) to (Step 4) of Item 9.19

9.23.1. Disassembly of Regulator Diode (D5802)



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

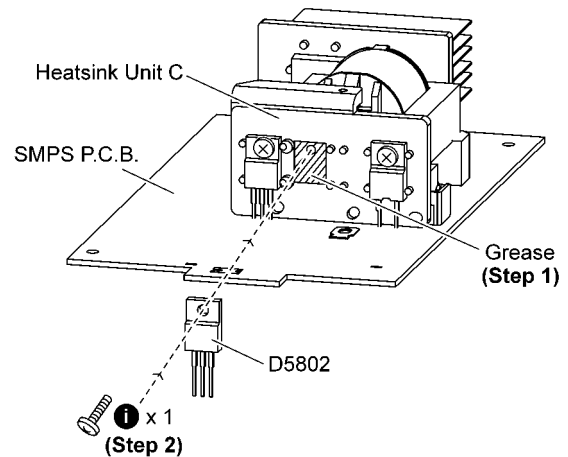


Step 2 : Remove 1 screw.

Step 3 : Remove the Regulator Diode (D5802) from the Heat-sink Unit C.

Caution : During replacement of the part, avoid touching the heatsink, it may lead to injuries.

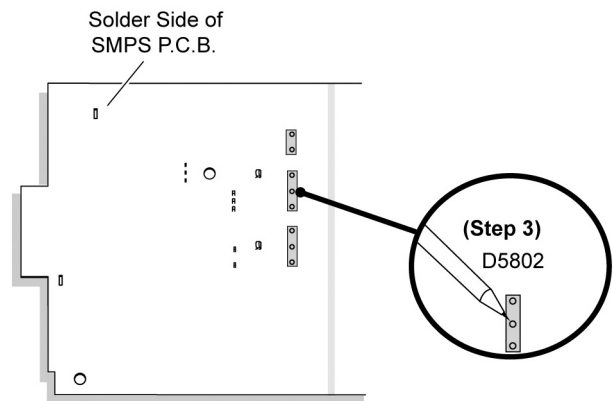
9.23.2. Assembly of Regulator Diode (D5802)



Step 1 : Apply grease to the Heatsink Unit C.

Step 2 : Mount & screw the Regulator Diode (D5802) to the Heatsink Unit C on SMPS P.C.B..

Caution : Ensure the Regulator Diode (D5802) is well tightened to the heatsink unit C.



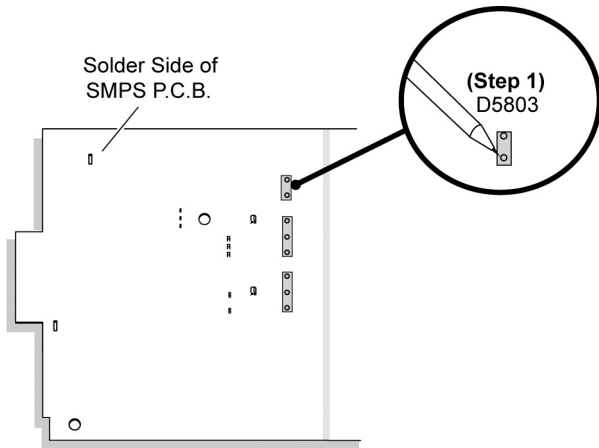
Step 3 : Solder pins of the Regulator Diode (D5802) on the solder side of SMPS P.C.B..

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

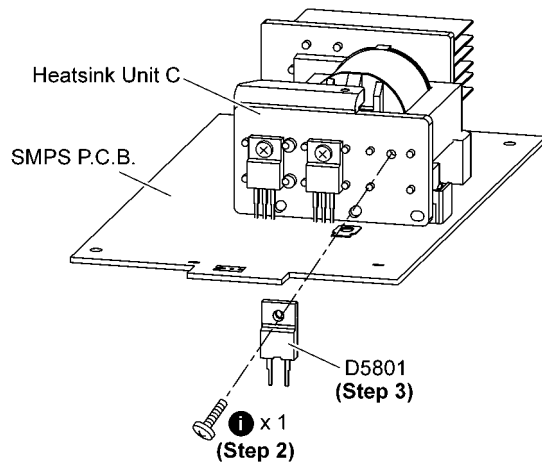
9.24. Replacement of Regulator Diode (D5803)

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 6) of Item 9.4
- Follow (Step 1) to (Step 6) of Item 9.14
- Follow (Step 1) to (Step 4) of Item 9.19

9.24.1. Disassembly of Regulator Diode (D5803)



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

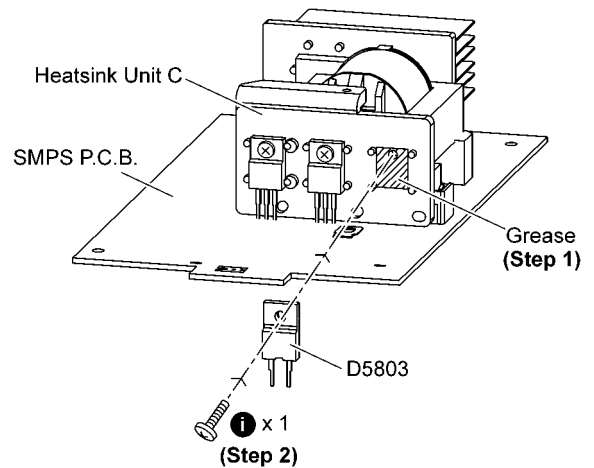


Step 2 : Remove 1 screw.

Step 3 : Remove the Regulator Diode (D5803) from the Heat-sink Unit C.

Caution : During replacement of the part, avoid touching the heatsink, it may lead to injuries.

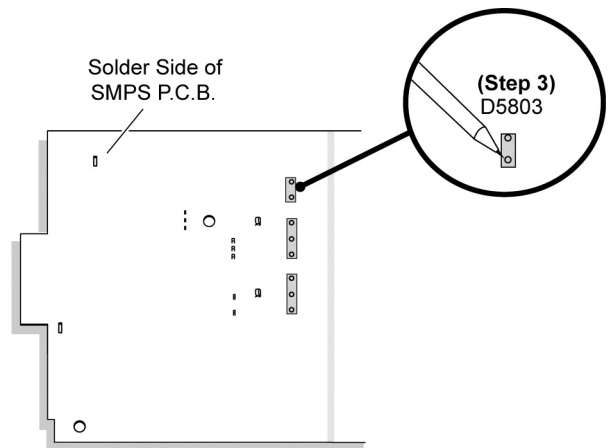
9.24.2. Assembly of Regulator Diode (D5803)



Step 1 : Apply grease to the Heatsink Unit C.

Step 2 : Mount & screw the regulator diode (D5803) to the Heatsink Unit C on SMPS P.C.B..

Caution : Ensure the Regulator Diode (D5803) is well tightened to the Heatsink Unit C.

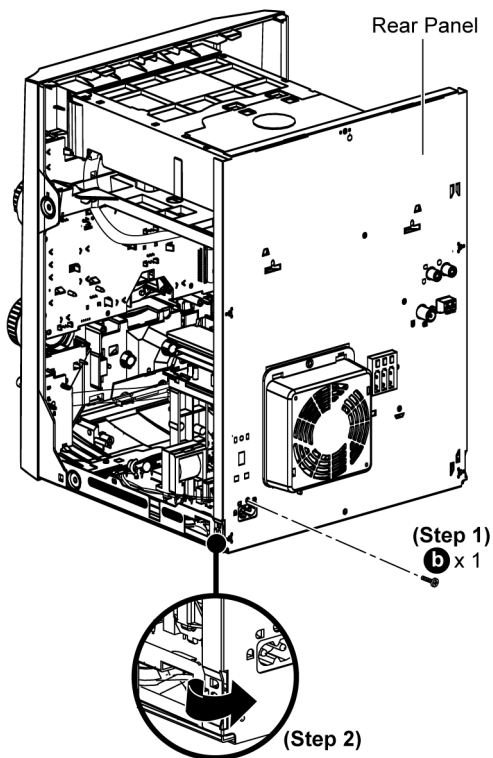


Step 3 : Solder pins of the Regulator Diode (D5803) on the solder side of SMPS P.C.B..

Caution : Ensure pins of the regulator diode (D5803) are properly seated and soldered on SMPS P.C.B..

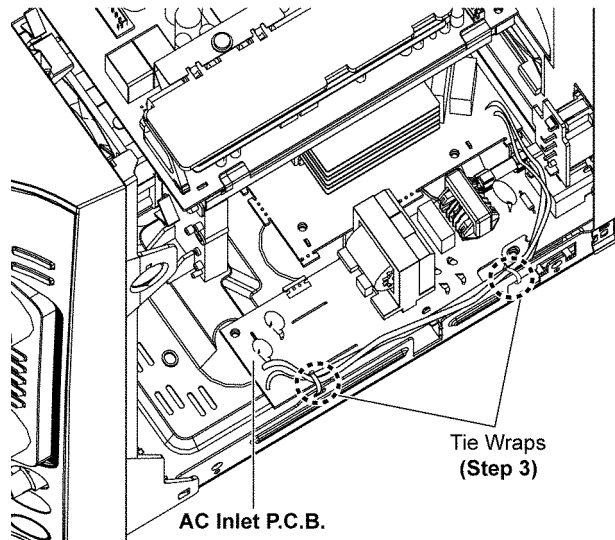
9.25. Disassembly of AC Inlet P.C.B.

- Follow (Step 1) to (Step 5) of Item 9.3



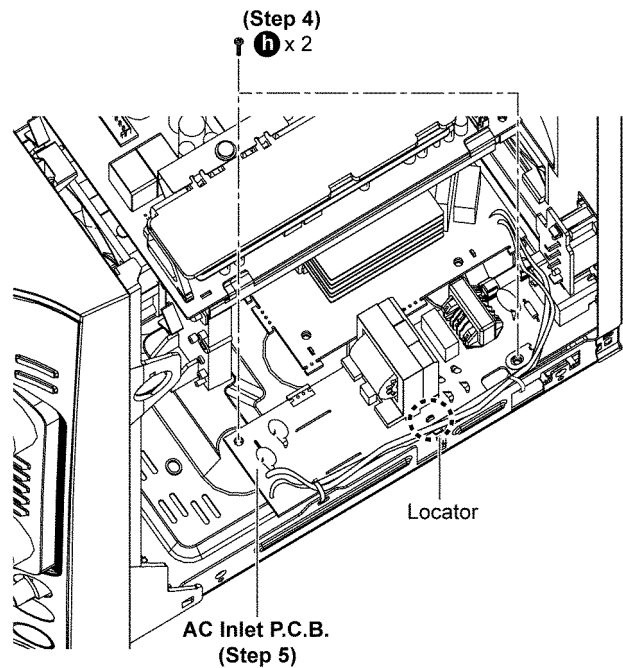
Step 1 : Remove 1 screw.

Step 2 : Release the tab at the Rear Panel as arrow show.



Step 3 : Cut 2 tie wraps.

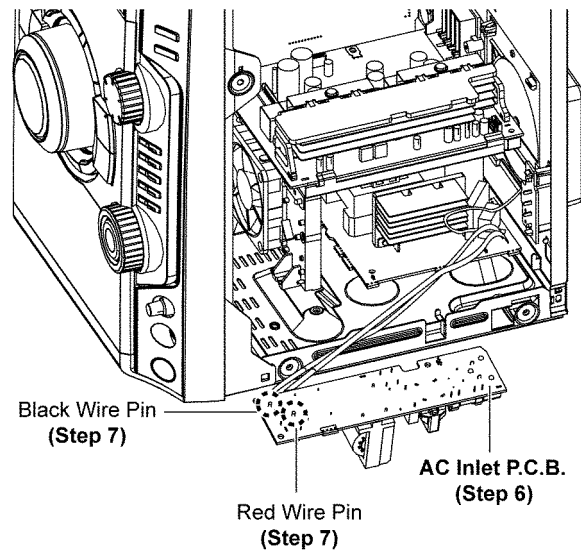
Caution : Remember to tie the red, black, blue wires with the wraps to the bottom chassis as diagram show.



Step 4 : Remove 2 screws on AC Inlet P.C.B..

Step 5 : Lift up AC inlet P.C.B. from bottom chassis.

Caution: During assembling, ensure the AC Inlet P.C.B. is seated properly at the locator, screw 2 screws at AC Inlet P.C.B..



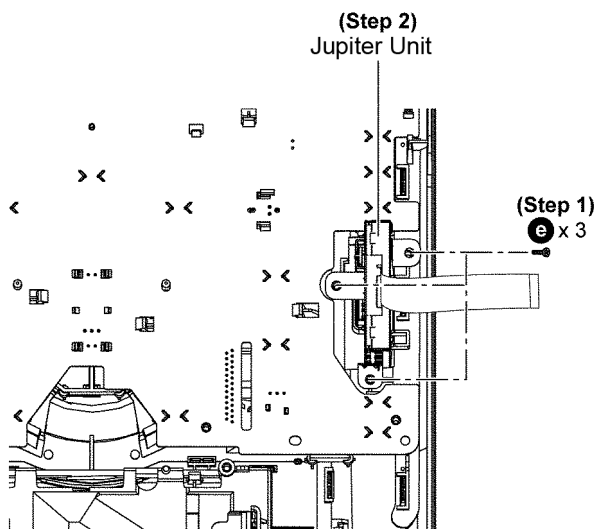
Step 6 : Turn over AC Inlet P.C.B. to the solder side.

Step 7 : Desolder black wire pin & red wire pin on AC Inlet P.C.B..

Step 8 : Remove the AC Inlet P.C.B..

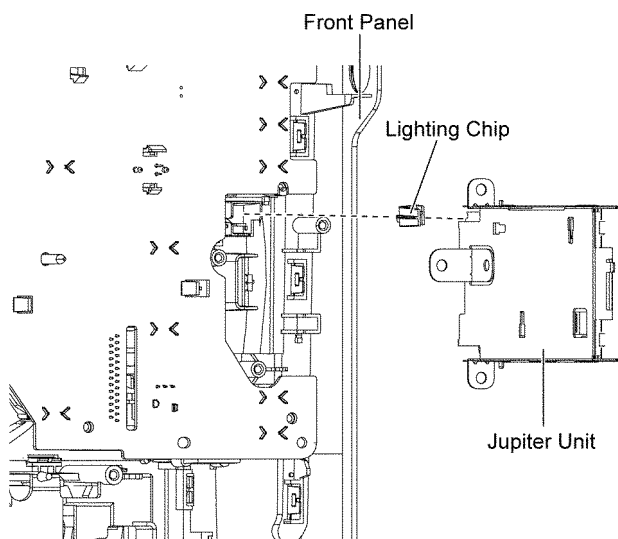
9.26. Disassembly of Jupiter P.C.B.

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.7

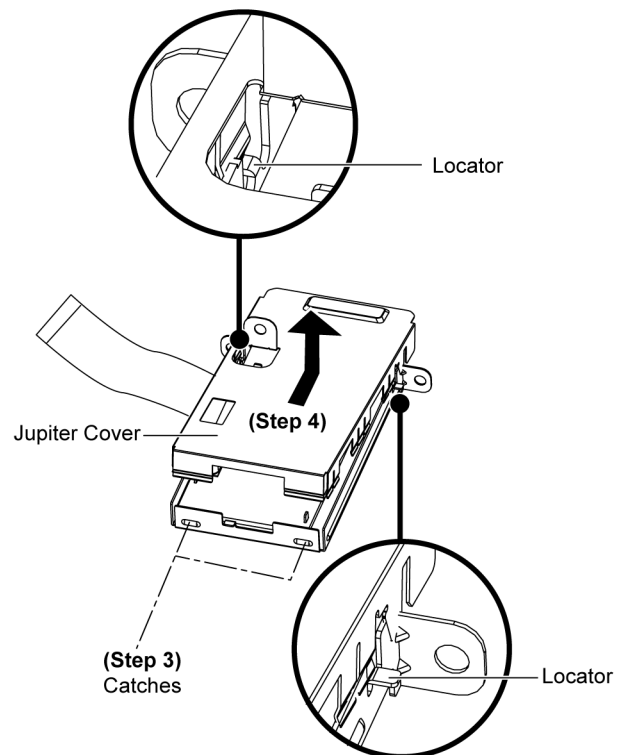


Step 1 : Remove 3 screws.

Step 2 : Remove the Jupiter Unit.

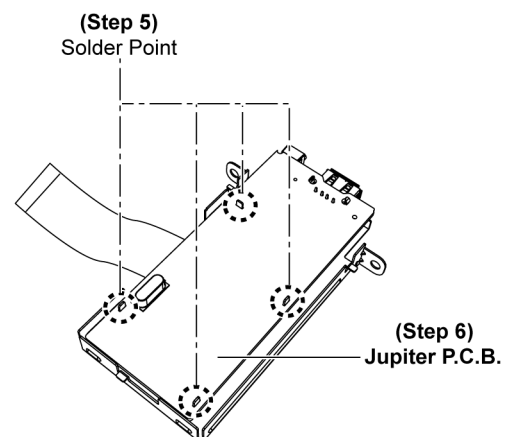


Caution: Do not misplace the Lighting Chip when remove the Jupiter Unit.



Step 3 : Release 2 catches.

Step 4 : Slightly lift up the Jupiter Cover to release from 2 locators.

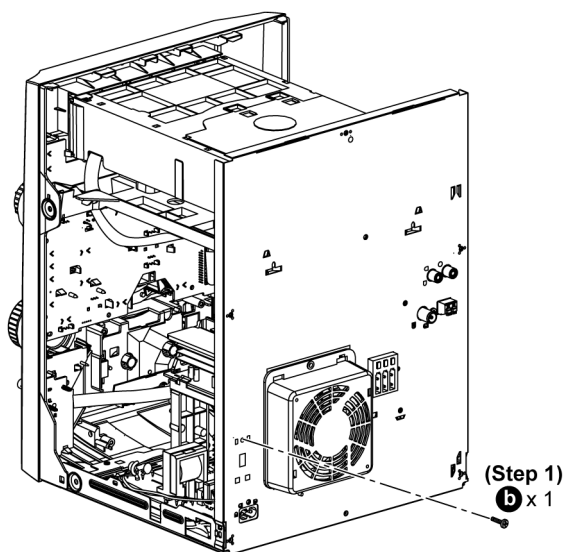


Step 5 : Desolder 4 points.

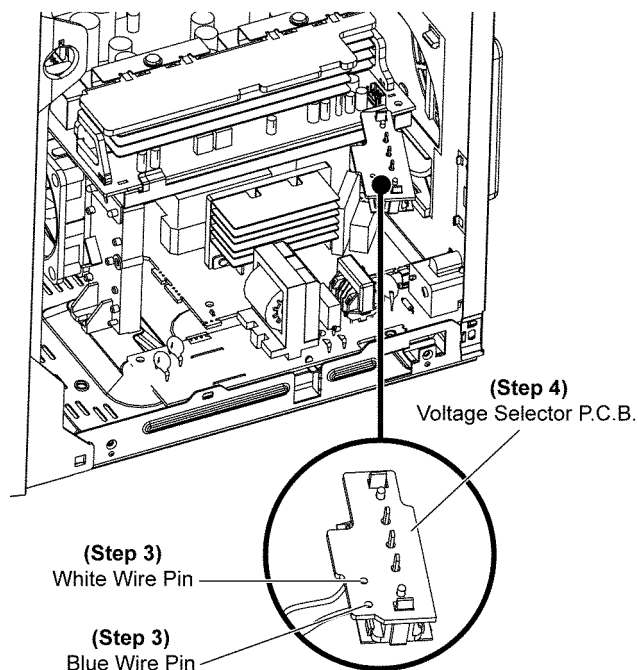
Step 6 : Remove the Jupiter P.C.B..

9.27. Disassembly of Voltage Selector P.C.B. (For PH only)

- Follow (Step 1) to (Step 5) of Item 9.3

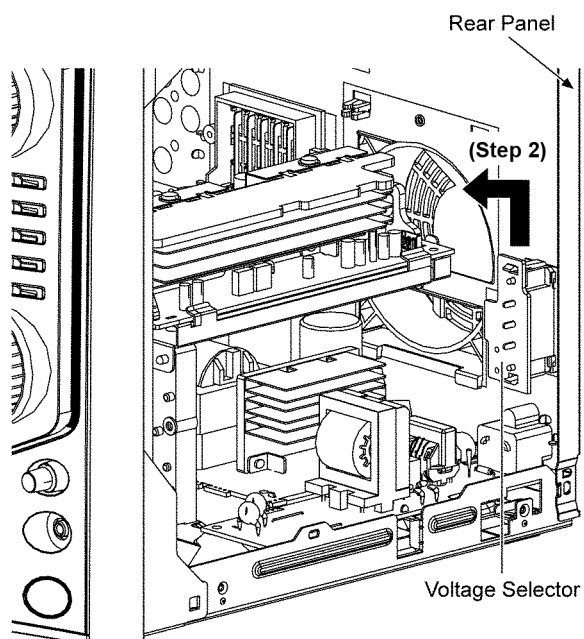


Step 1: Remove 1 screw.



Step 3 : Desolder blue wire pin & white wire pin on the Voltage Selector P.C.B..

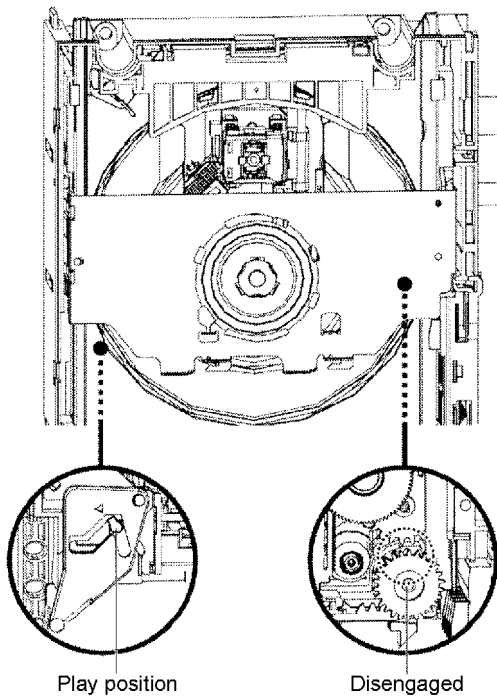
Step 4 : Remove the Voltage Selector P.C.B..



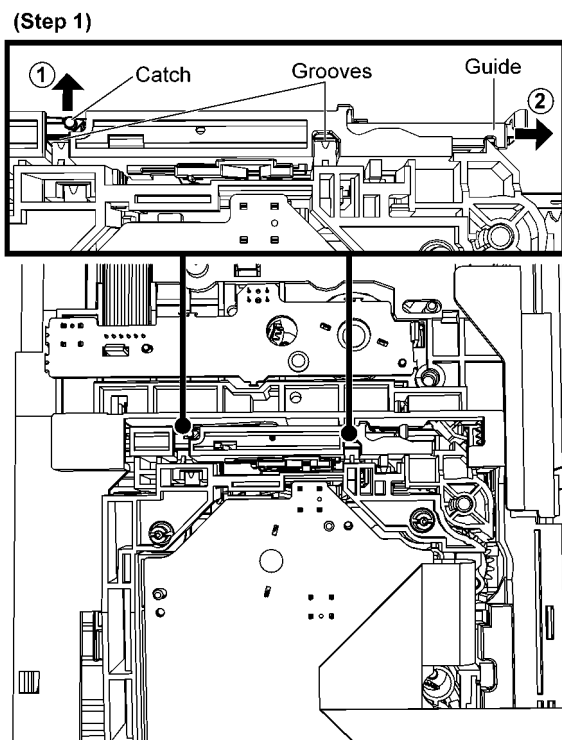
Step 2 : Detach Voltage Selector from Rear Panel as arrow shown.

9.28. Replacement of Traverse Unit Assembly

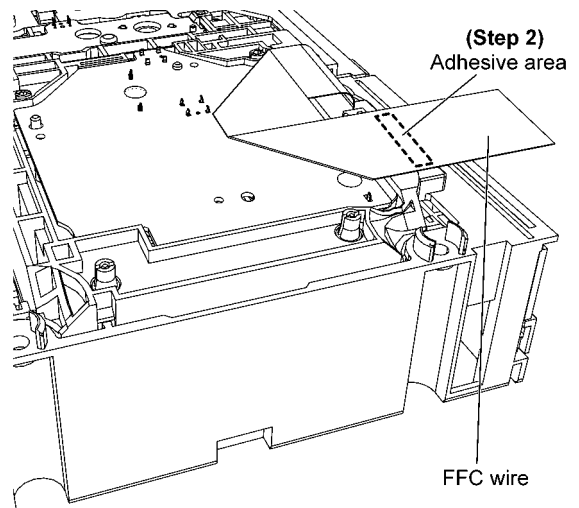
9.28.1. Disassembly of Traverse Unit Assembly



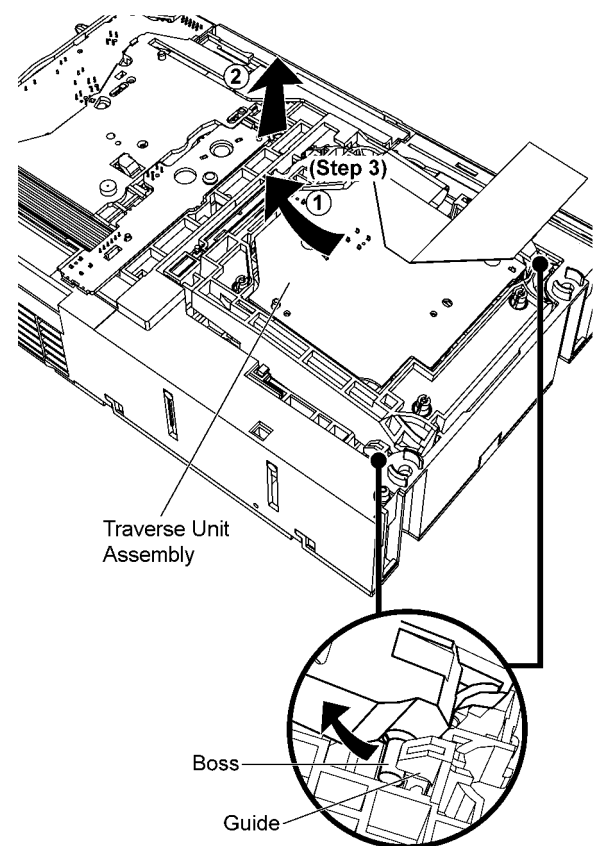
Caution: Disassembly of Traverse Unit Assembly in play position.



Step 1 : Release the catch and push the guide as arrows.

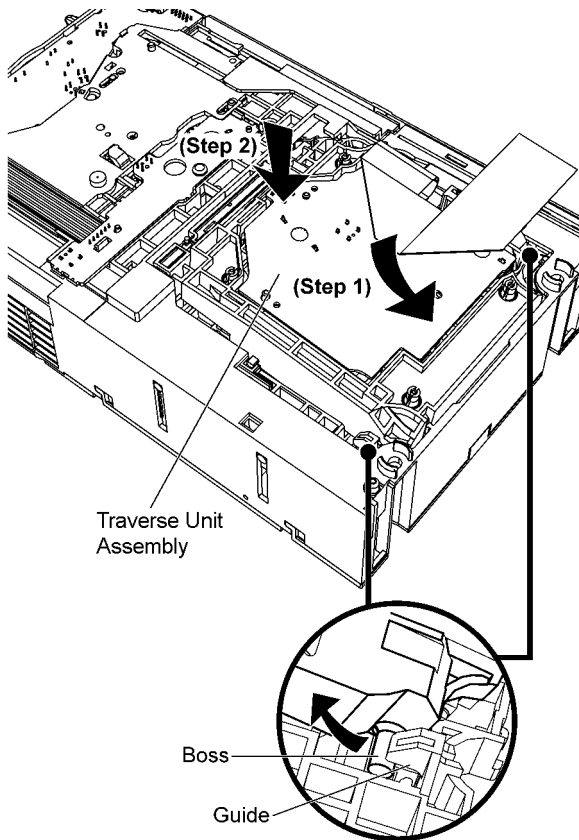


Step 2 : Detach the FFC wires from the adhesive area.



Step 3 : Remove the Traverse Unit Assembly as arrows shown.

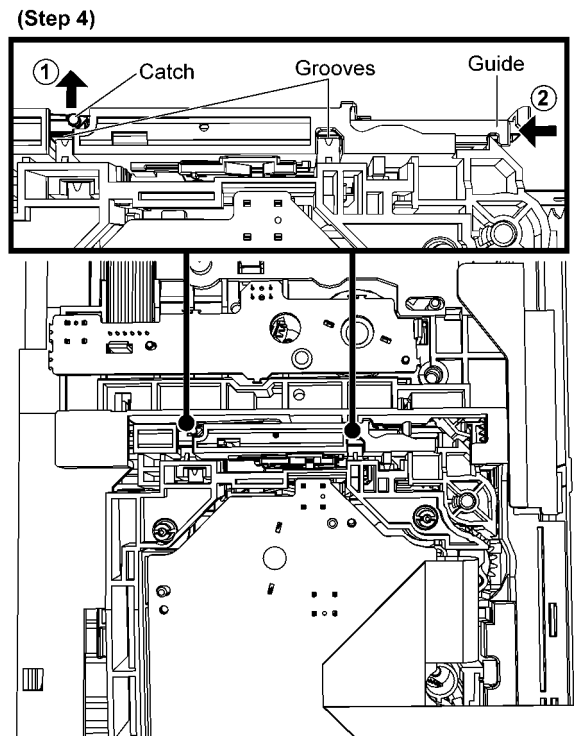
9.28.2. Assembly of Traverse Unit Assembly



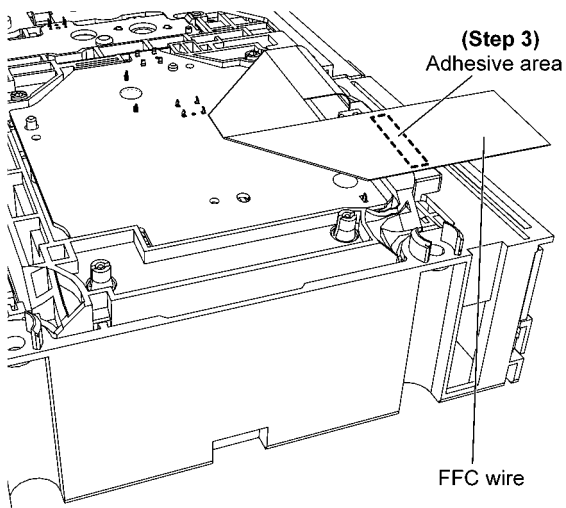
Step 1 : Slot the Traverse Unit Assembly into the guides as arrow shown.

Caution: Ensure the bosses fix exactly onto the guides.

Step 2 : Place down the Traverse Unit Assembly.



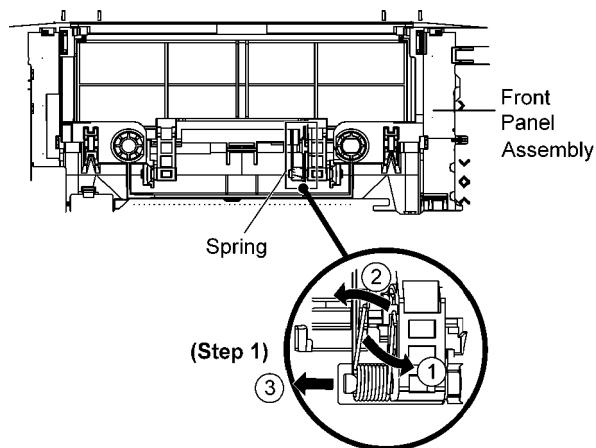
Step 4 : Release the catch and push the guide as arrows shown to close both grooves.



Step 3 : Fix the FFC wires by using the adhesive tape.

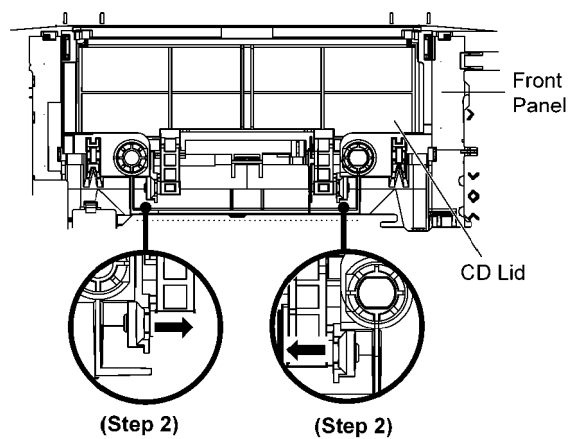
9.29. Disassembly of CD Lid

- Follow (Step 1) to (Step 5) of Item 9.3
- Follow (Step 1) to (Step 8) of Item 9.7



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

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



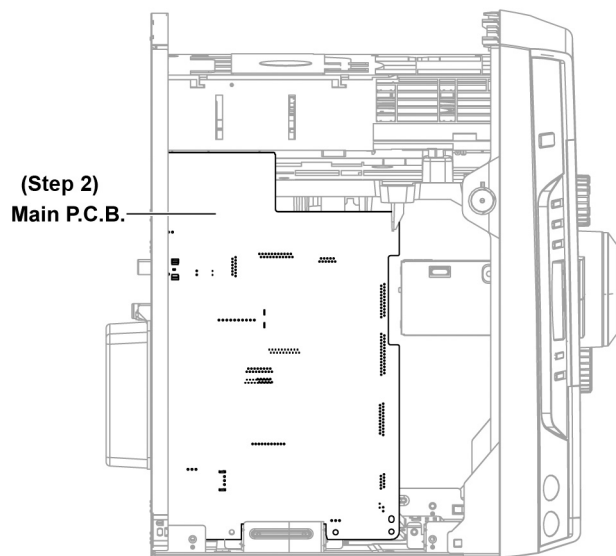
Step 2: Remove CD Lid as arrow shown.

10 Service Position

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

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

Step 1 : Remove Top Cabinet.



Step 2 : Main P.C.B. can be checked as above position.

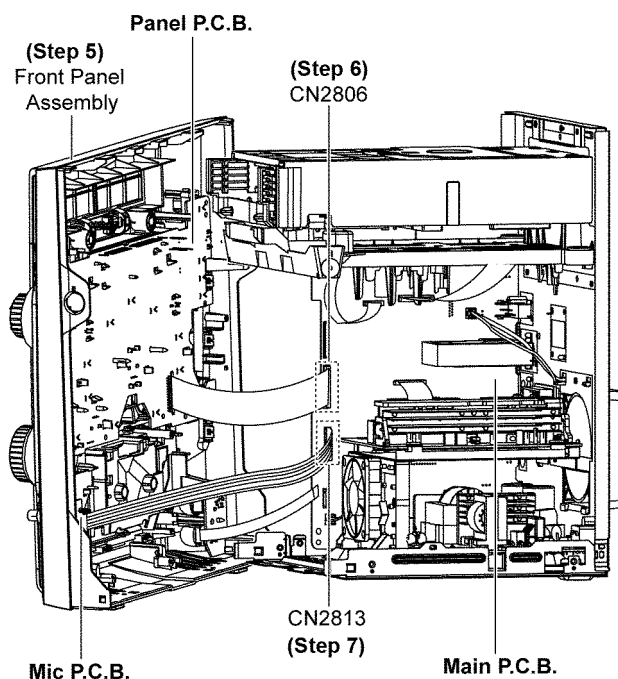
10.2. Checking and Repairing of Panel P.C.B., MIC P.C.B., Jupiter P.C.B. and MPort/Headphone P.C.B.

Step 1 : Remove Top Cabinet.

Step 2 : Remove Front Panel Assembly.

Step 3 : Remove MPort/Headphone P.C.B..

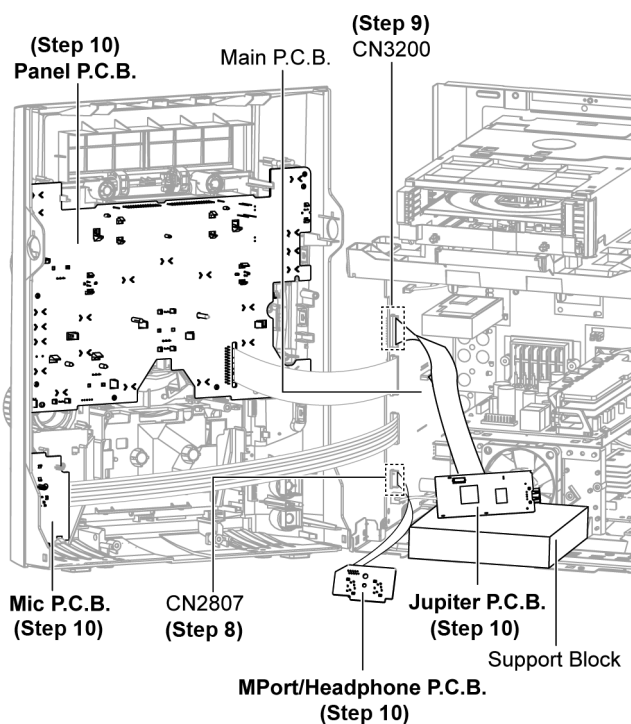
Step 4 : Remove Jupiter P.C.B..



Step 5 : Position Front Panel Assembly as diagram shown.

Step 6 : Connect 27P FFC at the connector (CN2806) on Main P.C.B..

Step 7 : Connect 5P wire at the connector (CN2813) on Main P.C.B..



Step 8 : Connect 10P FFC at the connector (CN2807) on Main P.C.B..

Step 9 : Connect 30P FFC at the connector (CN3200) on Main P.C.B..

Step 10 : Check and repair Panel P.C.B., Mic P.C.B., Jupiter P.C.B. and MPort/Headphone P.C.B..

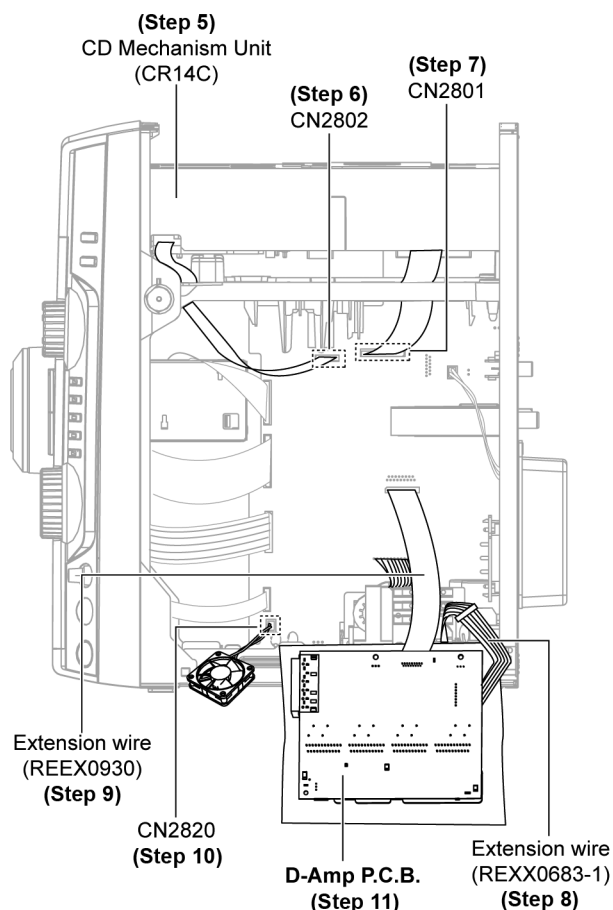
10.3. Checking and Repairing of D-Amp P.C.B.

Step 1 : Remove Top Cabinet.

Step 2 : Remove CD Mechanism Unit (CR14C).

Step 3 : Remove D-Amp P.C.B..

Step 4 : Remove Fan Unit.



Step 5 : Position Mechanism Unit (CR14C) according to the diagram show.

Step 6 : Connect 11P FFC at the connector (CN2802) on Main P.C.B..

Step 7 : Connect 25P FFC at the connector (CN2801) on Main P.C.B..

Step 8 : Extend the wire with extension wire (REXX0683-1) (8P wire from H5801 to CN5500).

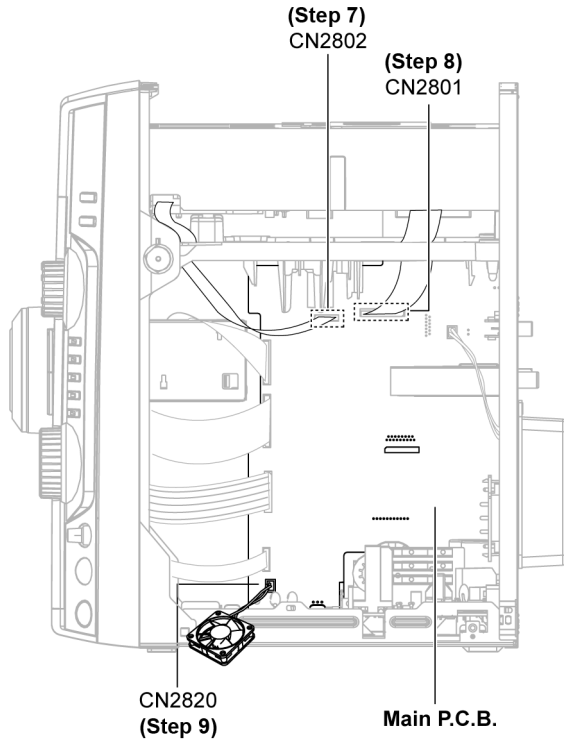
Step 9 : Connect extension FFC (REEX0930) (17P FFC from CN5050 to CN5050).

Step 10 : Connect 2P wire at the connector (CN2820) on Main P.C.B..

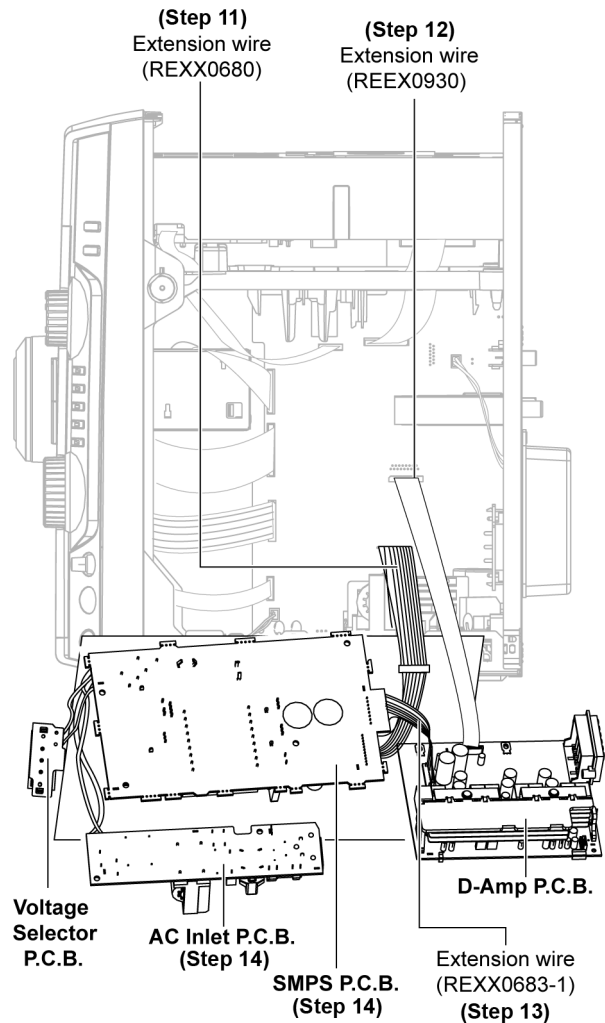
Step 11 : Check and repair D-Amp P.C.B..

10.4. Checking and Repairing of SMPS P.C.B. and AC Inlet P.C.B.

- Step 1 :** Remove Top Cabinet.
Step 2 : Remove CD Mechanism Unit (CR14C).
Step 3 : Remove D-Amp P.C.B..
Step 4 : Remove Fan Unit.
Step 5 : Remove AC Inlet P.C.B..
Step 6 : Remove Voltage Selector P.C.B..



- Step 7 :** Connect 11P FFC at the connector (CN2802) on Main P.C.B..
Step 8 : Connect 25P FFC at the connector (CN2801) on Main P.C.B..
Step 9 : Connect 2P wire at the connector (CN2820) on Main P.C.B..



- Step 10 :** Position SMPS P.C.B., AC Inlet P.C.B. & Voltage Selector as diagram show.
Step 11 : Extend the wire with extension wire (REXX0680) (11P wire from CN2701 to CN5802).
Step 12 : Connect extension FFC (REEX0930) (17P FFC from CN5050 to CN5050).
Step 13 : Extend the wire with extension wire (REXX0683-1) (8P wire from H5801 to CN5500).
Step 14 : Check and repair SMPS and AC Inlet P.C.B..

11 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.

11.1. CD Servo P.C.B.

Ref No.	IC7001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.5	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	1.6	1.6	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ref No.	IC7001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.0	0.0	1.8	1.8	2.0	0.0	3.3	1.5	2.4	3.3	0.0	0.3	0.3	1.8	0.0	2.0	1.8	1.7	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ref No.	IC7001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0.0	2.5	2.0	0.0	0.0	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0	1.4	1.5	1.5	0.0	3.0	1.5	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ref No.	IC7001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.5	3.3	0.0	0.6	0.0	0.0	3.0	3.0	3.2	1.3	0.0	0.0	1.6	2.8	3.3	0.0	0.0	0.0	0.0	0.0
STANDBY	1.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0

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	1.5	0.0	0.0	0.0	0.0	0.0	0.0	7.5	1.7	3.2	3.2	3.2	2.8	3.8	3.2	3.2	7.5	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ref No.	IC7002																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	0.0	0.0										
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0										

Ref No.	Q7601																			
MODE	E	C	B																	
CD PLAY	3.1	2.0	2.4																	
STANDBY	0.0	0.1	0.0																	

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

Ref No.	IC2121																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	4.7	4.7	4.7	0.0	4.7	4.7	4.7	9												
STANDBY	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0												
Ref No.	IC2200																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.0	0.0	0.0	0.0	0.0	2.7	0.0	3.3												
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3												
Ref No.	IC2701																			
MODE	1	2	3	4	5															
CD PLAY	16.8	5.0	0.0	1.0	3.0															
STANDBY	0.3	0.3	0.0	0.0	0.0															
Ref No.	IC2741																			
MODE	1	2	3	4	5															
CD PLAY	5.0	0.0	1.3	3.3	5.0															
STANDBY	5.0	0.0	1.4	3.3	5.0															
Ref No.	IC2761																			
MODE	1	2	3																	
CD PLAY	4.0	5.0	3.5																	
STANDBY	0.3	0.0	0.0																	
Ref No.	IC2801																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	3.3	3.3	3.3	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	1.5	0.0	1.5	1.7	4	1.8	3	0
STANDBY	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	1.5	0.0	1.5	1.7	4	1.8	3	0
Ref No.	IC2801																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	2.2	3.3	0.0	1.8	0.0	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	2	0.0	0.0	0.0
Ref No.	IC2801																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	3.3	3.3	3.3	3.3	0.0	3.3	3.3	3.3	0.0	0.0	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	3.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ref No.	IC2801																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0.0	3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	1.5	0.0	0.0	0.0	0.0	3.3	0.0	0.4
STANDBY	0.0	3.3	0.0	0.0	0.0	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ref No.	IC2801																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0.0	0.0	0.0	0.0	1.8	3.3	3.3	3.3	3.3	3.0	0.0	3.3	0.0	3.3	2.3	0.0	3.3	3.3	3.3	3.3
STANDBY	0.0	0.0	0.0	0.0	1.8	3.3	0.0	0.0	3.3	3.0	0.0	0.0	0.0	3.3	0.0	0.0	3.3	3.3	3.3	3.3

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

Ref No.	IC2803																			
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	4.7	4.7	4.7	4.7	0.0	0.0	0.0	0.0	1.2	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.0	3.3	3.3
STANDBY	0.0	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
Ref No.	IC2803																			
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	4.7	4.7	4.7	0.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.0	4.7
STANDBY	9.0	0.0	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.5
Ref No.	IC2803																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52								
CD PLAY	0.0	4.7	0.0	4.7	0.0	4.7	4.7	0.0	0.0	4.7	0.0	4.7								
STANDBY	0.0	0.5	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.3	0.0	0.3								
Ref No.	IC2804																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.0	0.0	0.0	-9.0	0.0	0.0	0.0	9.0												
STANDBY	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0												
Ref No.	IC2810																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.7	0.0	0.6	-9.0	0.0	0.0	0.0	9.0												
STANDBY	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0												
Ref No.	Q2310																			
MODE	1	2	3	4	5	6														
CD PLAY	0.0	-7.5	0.0	0.0	-7.5	0.0														
STANDBY	0.0	0.6	0.0	0.0	0.6	0.0														
Ref No.	Q2410																			
MODE	1	2	3	4	5	6														
CD PLAY	0.0	-7.5	0.0	0.0	-7.5	0.0														
STANDBY	0.0	0.6	0.0	0.0	0.6	0.0														
Ref No.	Q2510																			
MODE	1	2	3	4	5	6														
CD PLAY	0.0	-7.5	0.0	0.0	-7.5	0.0														
STANDBY	0.0	0.6	0.0	0.0	0.6	0.0														
Ref No.	Q2320 Q2371 Q2372 Q2373 Q2374																			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.0	0.0	0.0		0.0	0.0	-3.0		0.0	0.0	-7.5		0.0	0.0	-3.0		0.0	-3.0	0.0	
STANDBY	0.0	0.0	0.0		0.0	0.0	-3.0		0.0	0.0	0.6		0.0	0.0	-3.0		0.0	-3.0	0.0	
Ref No.	Q2375 Q2501 Q2559 Q2571 Q2708																			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.0	-3.0	0.0		0.7	5.7	0.8		0.0	0.0	-3.0		0.0	-3.0	0.0		0.0	-9.0	-0.6	
STANDBY	0.0	-3.0	0.0		0.0	0.0	0.0		0.0	0.0	-3.0		0.0	-3.0	0.0		0.0	0.0	0.0	

SA-AK780PH/PN MAIN P.C.B.

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

Ref No.	Q2711				Q2735				Q2743				Q2745				Q2751			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	2.5	5.0	4.0		8.5	10.2	9.0		3.3	3.3	2.6		0.0	0.0	3.3		9.0	16.8	10.0	
STANDBY	0.8	0.3	0.3		0.0	0.3	0.3		3.3	0.0	3.3		0.0	3.3	0.0		0.0	0.3	0.3	
Ref No.	Q2761				Q2771				Q2772				Q2812				Q2900			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	-9.0	-12.0	-10.0		0.0	3.3	0.3		0.0	3.3	0.3		0.0	3.3	0.0		0.0	16.8	-0.5	
STANDBY	0.3	0.0	0.0		0.7	0.0	0.0		0.0	0.7	0.0		0.0	3.3	0.0		0.0	0.0	0.0	
Ref No.	Q2942				Q2943				Q2947				Q2948				Q2949			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	11.8	7.8	11.8		0.0	11.8	0.5		0.0	0.0	0.5		0.0	0.0	0.3		0.0	3.3	0.0	
STANDBY	0.0	0.0	0.0		0.0	0.5	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	3.3	0.0	
Ref No.	Q2961				Q2967				Q3115				Q3116				Q3301			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	11.8	11.8	11.1		0.0	3.3	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	1.6	0.6	
STANDBY	0.0	0.0	0.0		0.0	3.3	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	1.8	0.5	
Ref No.	QR2317																			
MODE	E	C	B																	
CD PLAY	0.0	-7.5	0.0																	
STANDBY	2.0	2.0	0.0																	

SA-AK780PH/PN MAIN P.C.B.

11.5. Panel P.C.B.

Ref No.	IC6601																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	3.3	3.3	3.3	1.9	1.6	0.0	3.3	3.3	3.3	0.0	0.0	3.3	-14.5	-16.8	-22.2	-22.2	-22.2	-22.2	-20.2
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ref No.	IC6601																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-16.8	-22.2	-22.2	-20.4	-16.8	-20.2	-20.3	-24.0	-20.2	0.0	-24.7	-22.2	-22.2	-22.2	-22.2	-22.2	-22.4	-22.4	-22.4	-22.4
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ref No.	IC6601																			
MODE	41	42	43	44																
CD PLAY	-22.4	-22.4	3.3	0.0																
STANDBY	0.0	0.0	0.0	0.0																
Ref No.	Q6511				Q6512				Q6600				Q6601				Q6602			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.0	0.0	3.0		0.0	0.0	3.0		0.0	0.0	3.3		0.0	0.0	3.3		0.0	0.0	3.3	
STANDBY	0.0	0.0	3.0		0.0	0.0	3.0		0.0	2.4	0.0		0.0	2.4	0.0		0.0	2.4	0.0	
Ref No.	Q6603																			
MODE	E	C	B																	
CD PLAY	0.0	0.0	3.3																	
STANDBY	0.0	2.4	0.0																	

SA-AK780PH/PN PANEL P.C.B.

11.6. D-Amp P.C.B.

Ref No. MODE	IC5000																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	0	0.0	29.0	0	-29.0	-20.6	29.3	8.9	0.0	-29.3	-19.2	-29.3	-0.1	8.9	29.3	-29.0	-29.0	0.0	29.0
STANDBY	2.5	0	0.0	29.0	0	-29.0	-20.6	29.3	8.9	0.1	-29.3	-19.2	-29.3	-0.1	8.9	29.3	-29.0	-29.0	0.0	29.0
Ref No. MODE	IC5000																			
	21	22	23																	
CD PLAY	0	0	2.5																	
STANDBY	0	0	2.5																	
Ref No. MODE	IC5200																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	0	0.0	29.0	0	-29.0	-20.6	29.3	8.9	0.0	-29.3	-19.2	-29.3	-0.1	8.9	29.3	-29.0	-29.0	0.0	29.0
STANDBY	2.5	0	0.0	29.0	0	-29.0	-20.6	29.3	8.9	0.1	-29.3	-19.2	-29.3	-0.1	8.9	29.3	-29.0	-29.0	0.0	29.0
Ref No. MODE	IC5200																			
	21	22	23																	
CD PLAY	0	0	2.5																	
STANDBY	0	0	2.5																	
Ref No. MODE	IC5400																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	0	0.0	29.0	0	-29.0	-20.6	29.3	8.9	0.0	-29.3	-19.2	-29.3	-0.1	8.9	29.3	-29.0	-29.0	0.0	29.0
STANDBY	2.5	0	0.0	29.0	0	-29.0	-20.6	29.3	8.9	0.1	-29.3	-19.2	-29.3	-0.1	8.9	29.3	-29.0	-29.0	0.0	29.0
Ref No. MODE	IC5400																			
	21	22	23																	
CD PLAY	0	0	2.5																	
STANDBY	0	0	2.5																	
Ref No. MODE	IC5500																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	5.2	4.9	0	2.7	2.2	0	2.5	2.6	2.6	2.5	2.5	2.6	5.2						
STANDBY	0	5.2	4.9	0	2.7	2.2	0	2.5	2.6	2.6	2.5	2.5	2.6	5.2						
Ref No. MODE	Q5101				Q5102				Q5601				Q5603				Q5604			
	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	5.2	3.0		0	5.1	3.0		0	0	0.7		5.2	5.2	4.5		0	0	0.7	
STANDBY	0	5.2	3.0		0	5.2	3.0		0	0	0.7		5.2	5.2	4.5		0	0	0.7	

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11.7. Jupiter P.C.B. (1/2)

Ref No.	IC503																			
MODE	1	2	3	4	5															
CD PLAY	5.0	0.0	3.3	3.3	0.5															
STANDBY	5.0	0.0	0.7	0.7	0.5															
Ref No.	IC551																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	2.6	2.6	0.0	2.6	0.0	5.2	3.3	0.0	1.2	1.6	1.6	1.6	3.3	3.3	0.0	0.0				
STANDBY	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0				
Ref No.	IC552																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	1.6	1.6	0.0	1.6	3.3	0.0	0.0	5.1	5.1	2.6	2.6	2.6	0.0	5.2	0.0	5.2				
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.2	0.0	0.1	0.0	0.1				
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	0.0	0.0	0.0	0.0	0.0	3.3	3.3	0.0	3.3	0.1	0.0	0.0	0.0	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	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	0.0	0.0	0.0	3.3	0.0	3.3	3.2	0.1	3.2	0.1	3.3	0.1	3.2	0.1	3.3	3.3	0.1	3.3
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	3.3	0.0	0.1	0.0
Ref No.	IC701																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	0.1	3.3	0.1	3.3	0.0	0.0	0.0	0.0												
STANDBY	0.1	0.0	0.1	0.0	0.0	0.0	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	3.3	0.1	3.3	0.1	0.1	0.0	0.1	1.1	3.3	0.2	1.2	0.0	0.1	3.3	3.2	3.3	3.3	0.0	3.3	0.0
STANDBY	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
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	3.1	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.5	3.3	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ref No.	IC751																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0.0	0.0	3.3	3.3	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0						
STANDBY	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0						
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	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	1.5
STANDBY	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
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	1.2	0.0	0.0	3.3	3.3	3.3	3.3	0.0	3.3	3.3	3.3	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

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11.8. Jupiter P.C.B. (2/2)

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	0.0	0.0	1.2	3.3	0.0	3.3	3.3	0.0	0.0	3.3	0.0	3.3	0.0	3.3	3.3	0.1	0.0	3.3	0.0	0.0
STANDBY	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	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	1.5	1.6	1.6	0.0	0.0	3.2	0.0	3.3	3.3	3.3	3.3	3.3	1.2	3.3	3.3	3.3	3.3	3.3	3.3	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	3.3	3.3	3.2	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	1.2	1.2	0.0	0.0
STANDBY	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	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	3.3	3.3	1.2	0.0	0.0	1.7	1.6	1.2	0.0	0.1	0.1	0.0	3.3	0.0	1.6	0.0	1.6	0.0	1.6	1.2
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	1.2	0.0	0.0	0.0	0.0	0.0	3.3	3.3	3.3	3.3	0.0	3.3	3.2	3.3	0.0	3.3	0.0	0.0	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
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	0.0	0.0	0.0	1.2	0.0	0.0	0.0	3.3	3.3	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	3.3	1.2	0.0	0.0	0.0	0.0	0.0	3.3	3.2	3.2	3.2	3.2	3.3	0.0	0.0
STANDBY	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1
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	3.2	3.2	3.2	1.2	3.2	3.2	3.2	3.2	3.3	0.0	0.0	3.2	3.2	3.2	3.2	3.2	3.2	0.0	0.0	3.3
STANDBY	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0
Ref No.	IC801																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216				
CD PLAY	0.0	1.2	1.6	0.0	0.0	1.2	0.0	0.0	0.0	3.3	0.0	0.0	1.2	0.0	0.0	3.3				
STANDBY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1				
Ref No.	IC802																			
MODE	1	2	3	4	5															
CD PLAY	2.2	0.0	0.0	2.2	0.0															
STANDBY	0.4	0.0	0.0	0.4	0.0															
Ref No.	Q801																			
MODE	E	C	B																	
CD PLAY	0.0	4.8	2.8																	
STANDBY	0.0	4.8	0.3																	

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11.9. Mic P.C.B.

Ref No.	IC1000															
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
CD PLAY	4.5	4.5	4.5	4.5	4.5	4.5	4.5	0.0	9.0	4.5	0.0	0.0	4.5	9.0		
STANDBY	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.4		

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11.10. SMPS P.C.B.

Ref No.	IC5701															
MODE	1	2	3	4	5	6	7									
CD PLAY	162.0	0	0	19.3	0.1	1.4	0.5									
STANDBY	162.0	0	0	19.3	0.1	1.4	0.5									

Ref No.	IC5799															
MODE	1	2	3	4	5	6	7	8								
CD PLAY	6.0	1.6	1.8	20.3	162.2	0	0	0								
STANDBY	6.0	1.6	2.0	20.3	163.0	0	0	0								

Ref No.	IC5801															
MODE	1	2	3													
CD PLAY	-2.2	-29.5	-26.8													
STANDBY	-2.2	-29.5	-26.8													

Ref No.	IC5899															
MODE	1	2	3													
CD PLAY	4.2	0	2.5													
STANDBY	4.2	0	2.5													

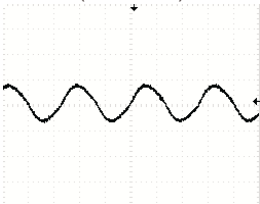
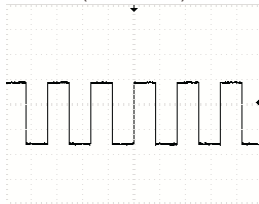
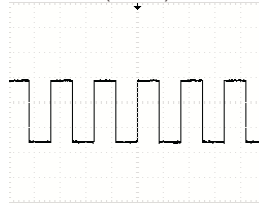
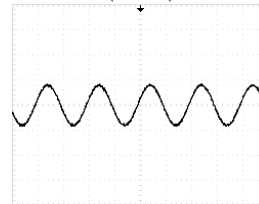
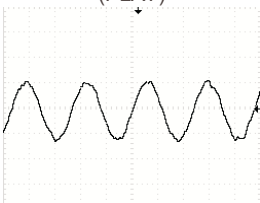
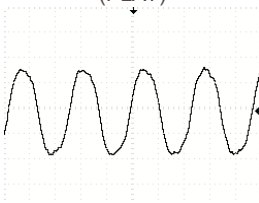
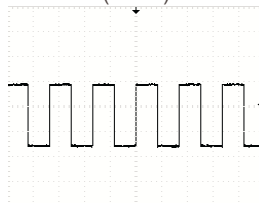
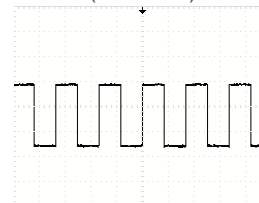
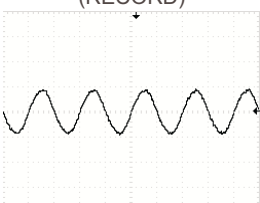
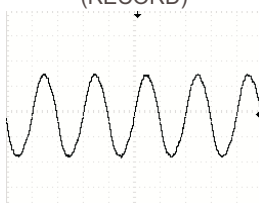
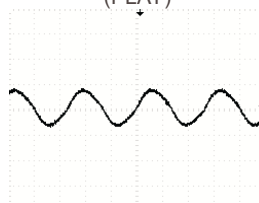
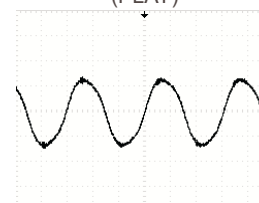
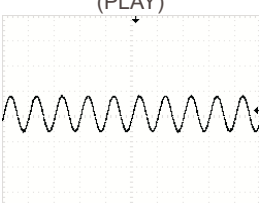
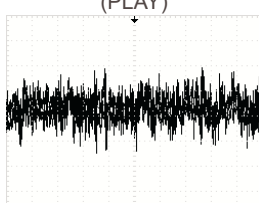
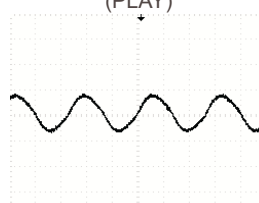
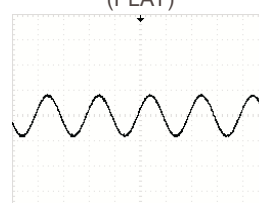
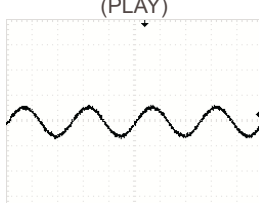
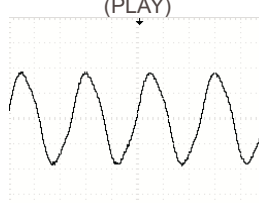
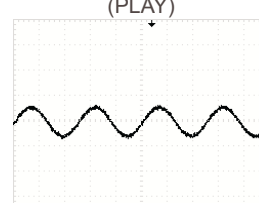
Ref No.	Q5720				Q5721				Q5722				Q5802				Q5803			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	5.9	6.5	5.6		19.9	19.9	19.2		0	17.0	0.1		-21.9	-2.2	-22.0		0	5.8	0	
STANDBY	5.9	6.5	5.6		19.9	19.9	19.2		0	16.8	0.1		-21.8	-2.2	-22.0		0	5.8	0	

Ref No.	Q5860				Q5861				Q5862				QR5801				QR5802			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	1.3	0	0.7		0	0	0.7		0	5.2	0		0	5.0	0		0	4.5	0	
STANDBY	1.3	0	0.7		0	0	0.7		0	5.2	0		0	5.0	0		1.5	1.5	0	

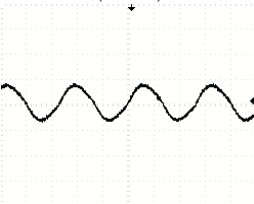
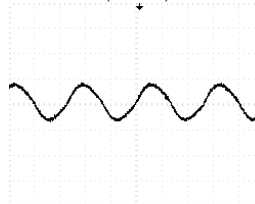
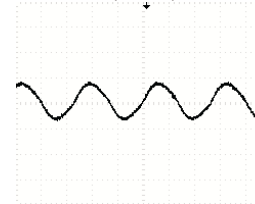
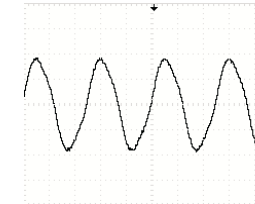
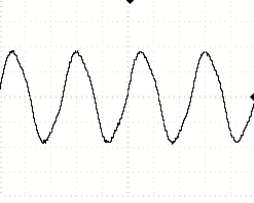
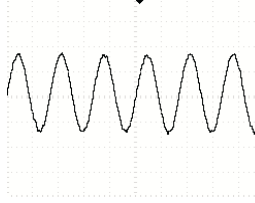
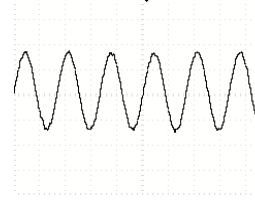
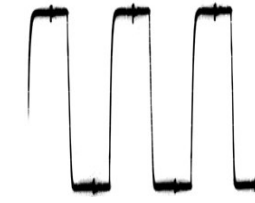
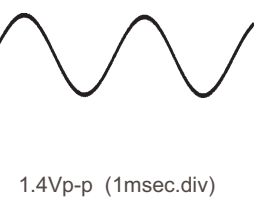
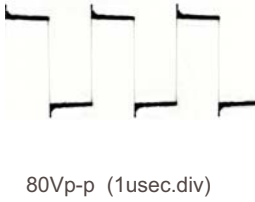
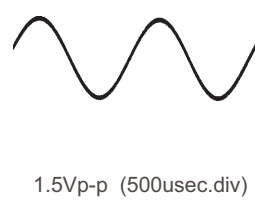
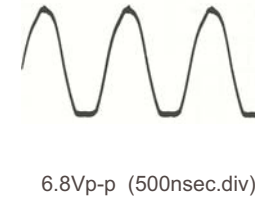
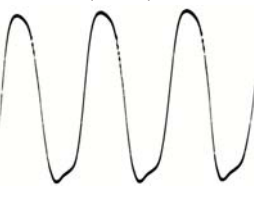
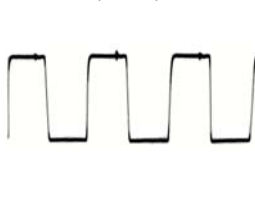
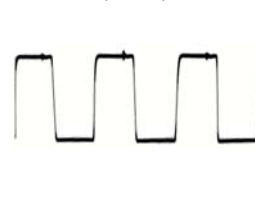
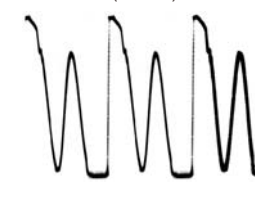
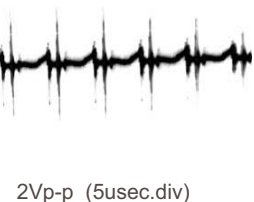
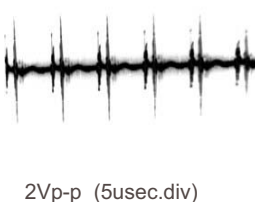
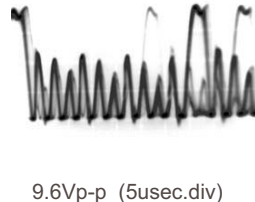
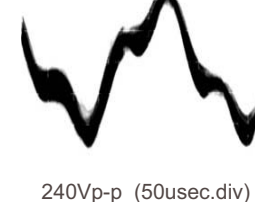
Ref No.	QR5810																			
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CD PLAY	0	0.1	5.0																	
STANDBY	0	0	5.0																	

SA-AK780PH/PN SMPS P.C.B.

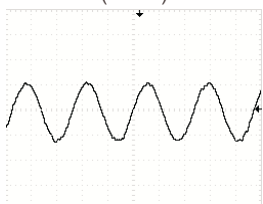
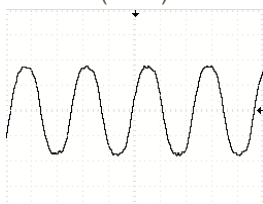
11.11. Waveform Table (1/3)

WF No. IC551 - 1,2 (RECORD)  108mVp-p (50nsec.div)	WF No. IC551 - 9 (RECORD)  3.92Vp-p (500nsec.div)	WF No. IC552 - 3 (PLAY)  3.8Vp-p (500nsec.div)	WF No. IC552 - 9,10 (PLAY)  3.36Vp-p (500usec.div)
WF No. IC801 - 62 (PLAY)  1.2Vp-p (2.5nsec.div)	WF No. IC801 - 63 (PLAY)  3.44Vp-p (25nsec.div)	WF No. IC801 - 118 (PLAY)  3.9Vp-p (500nsec.div)	WF No. IC801 - 121 (RECORD)  3.8Vp-p (500nsec.div)
WF No. IC2801 - 12 (RECORD)  1.84Vp-p (50nsec.div)	WF No. IC2801 - 13 (RECORD)  3.32Vp-p (50nsec.div)	WF No. IC2801 - 15 (PLAY)  880mVp-p (500nsec.div)	WF No. IC2801 - 16 (PLAY)  2.84Vp-p (10usec.div)
WF No. IC2803 - 2,38 (PLAY)  500mVp-p (50 nsec.div)	WF No. IC2803 - 3,37 (PLAY)  700mVp-p (10msec.div)	WF No. IC2803 - 17,22 (PLAY)  804mVp-p (50nsec.div)	WF No. IC2803 - 40,52 (PLAY)  3Vp-p (500usec.div)
WF No. IC2803 - 42,50 (PLAY)  350mVp-p (50usec.div)	WF No. IC2803 - 44,47 (PLAY)  600mVp-p (50nsec.div)	WF No. IC2804 - 1,7 (PLAY)  1.02Vp-p (500usec.div)	WF No. IC2804 - 2,3 (PLAY)  600mVp-p (250nsec.div)

11.12. Waveform Table (2/3)

WF No. IC2804 - 5,6 (PLAY)  109mVp-p (250 nsec.div)	WF No. IC2810 - 1,7 (PLAY)  104mVp-p (250nsec.div)	WF No. IC2810 - 2,3 (PLAY)  164mVp-p (250nsec.div)	WF No. IC2810 - 5,6 (PLAY)  508mVp-p (250usec.div)
WF No. IC2121 - 1,7 (PLAY)  2.88Vp-p (250usec.div)	WF No. IC2121 - 2,3 (PLAY)  1.32Vp-p (250usec.div)	WF No. IC2121 - 5,6 (PLAY)  1.3Vp-p (250usec.div)	WF No. IC5000 - 1 (PLAY)  5.6Vp-p (1sec.div)
WF No. IC5000 - 2 (PLAY)  1.4Vp-p (1msec.div)	WF No. IC5000 - 10,14 (PLAY)  80Vp-p (1usec.div)	WF No. IC5000 - 21 (PLAY)  1.5Vp-p (500usec.div)	WF No. IC5500 - 5 (PLAY)  6.8Vp-p (500nsec.div)
WF No. IC5500 - 6 (PLAY)  5.6Vp-p (500nsec.div)	WF No. IC5500 - 8 (PLAY)  5.8Vp-p (500nsec.div)	WF No. IC5501 - 1 (PLAY)  5.2Vp-p (1usec.div)	WF No. IC5701 - 1 (PLAY)  400Vp-p (2usec.div)
WF No. IC5701 - 4,6 (PLAY)  2Vp-p (5usec.div)	WF No. IC5799 - 2 (PLAY)  2Vp-p (5usec.div)	WF No. IC5799 - 3 (PLAY)  9.6Vp-p (5usec.div)	WF No. IC5799 - 5 (PLAY)  240Vp-p (50usec.div)

11.13. Waveform Table (3/3)

WF No. IC5899 - 1,2,3 (PLAY)  1.65Vp-p (5msec.div)	WF No. IC7001 - 13 (PLAY)  3.56Vp-p (25nsec.div)	WF No. IC7001 - 14 (PLAY)  1.2Vp-p (25nsec.div)	
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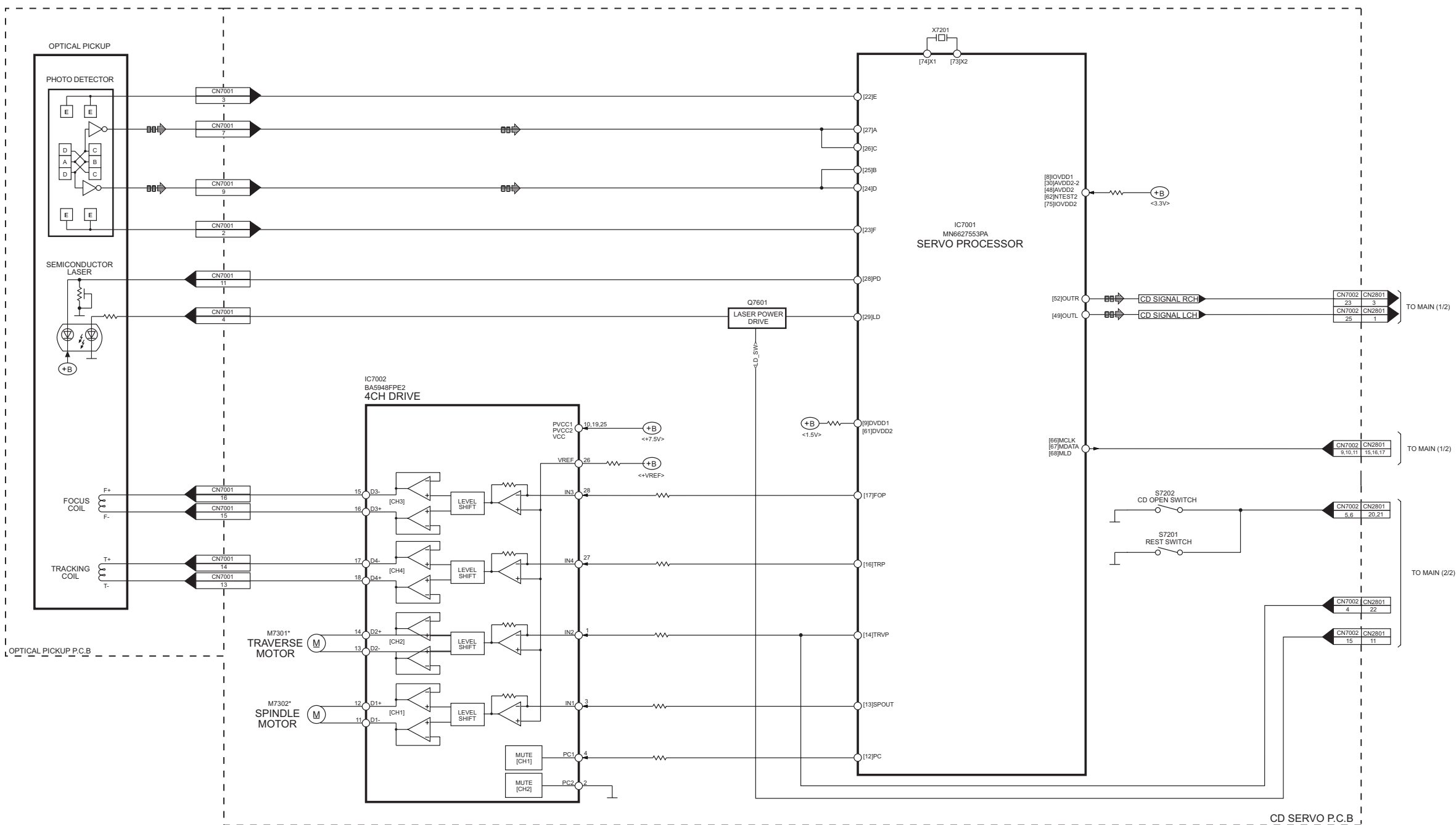
12 Illustration of ICs, Transistor and Diode

 C0HBB0000057 (44P) C1AB00003093 (52P) MN2WS0042AA (216P) MN6627553PA (80P) RFKWMK780PN (100P)	 C0FBBY000027 (16P) C0FBAK000026 (16P) C0JBAB000902 (14P) C0ABBB000230 (8P) RFKWFAK780PN (48P) RFKWEAK780PN (8P)	 C3ABQG000105 (54P) C1AB00003130 (14P)	 BA5948FPE2	 C0CAAKG00046	
 C0AABB000125 (8P)	 C1BA00000492 (23P)	 C0DABFC00002 (3P) C0DAEMZ00001 (3P)	 C0DBZY00293 (5P) C0DBGYY00089 (5P)	 MIP4110MSSCF	 C5HACYY00004 (7P)
 C0DBZHE00026 (5P)	 C0DAAYG00001 (5P)	 B1BACD000018	 B1ACKD000006	 B1BABK000001	 B1GFGCAA0001 (5P)
 B1BACG000023 B1BCCG000002	 B1GBCFJJ0051 B1ABCF000176 B1ADCE000012 B1GBCFJN0033 B1GDCFGA0018	 B1GBCFLL0037 B1GBCFGN0016 2SA207700L UNR221400L B1GDCFJJ0047 B1ADCF000001	 2SC3940ARA	 ERZV10V511CS	
 B0ADCC000002 B0ADCJ000020	 B0ACCK000005 B0JCMD000022	 B0HFRJ000012	 B0BC035A0007 B0HCSP000001	 B0HBSM000043	 B0FBAR000041
 B0HCM0000019	 MAZ8056GML MAZ8180GML MAZ8051GML MAZ8075GML MAZ8100G0L MAZ8240GHL B0BC5R600003 B0BC019A0007	 B0BC9R000008 B0BC010A0007	 B0BC2R4A0006 B0BC6R100010 B0BC4R3A0006	 B3AEA0000131	
 MA2J1110GL MA27D2900L MA2J7280GL	 B0JAME000114 B0EAMM000057 B0HAMP000094 B0EAKM000117	 B0ZAZ0000052	 B3AAB0000322		
 B0JCPD000025					

13 Block Diagram

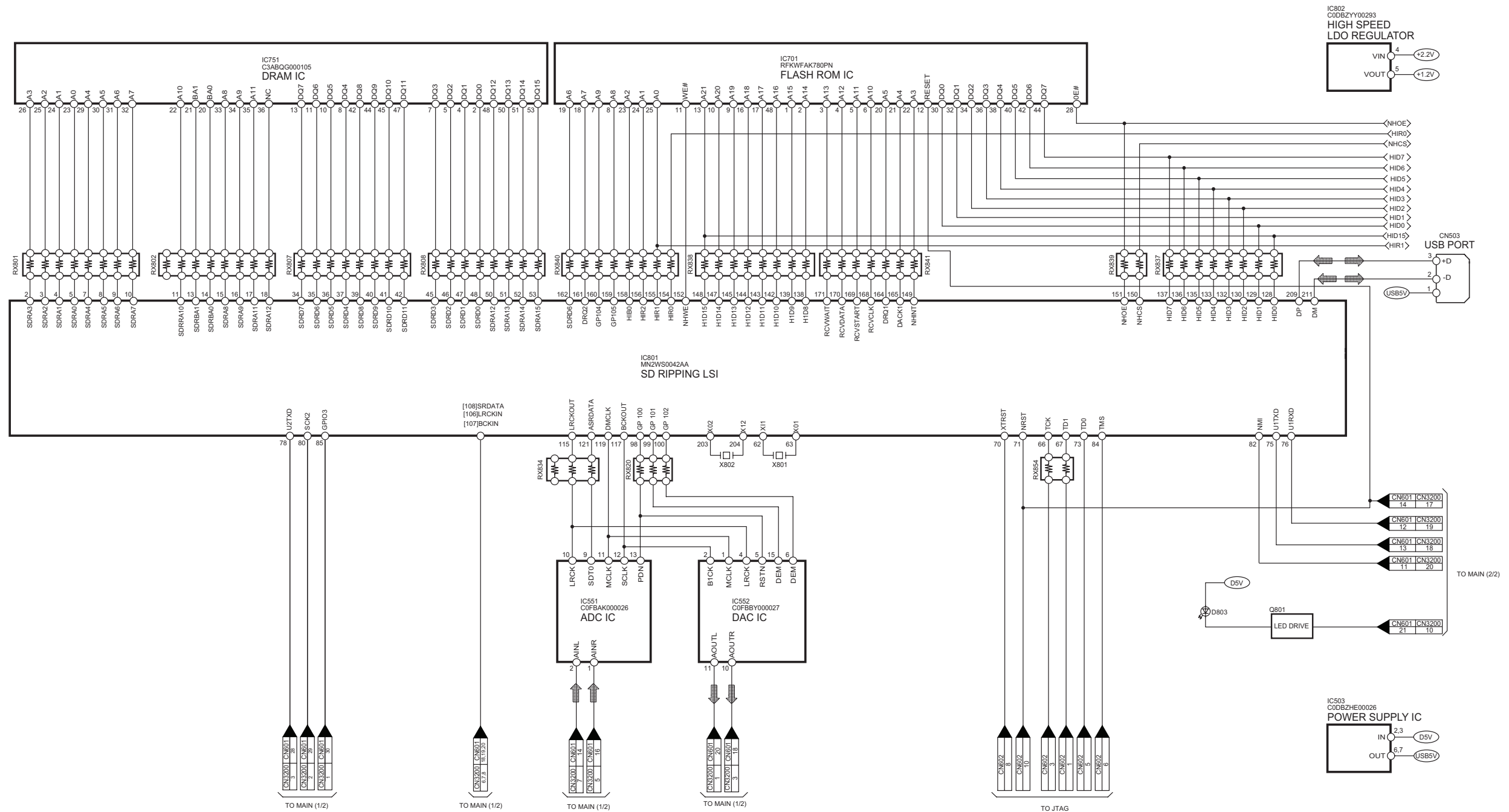
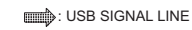
13.1. CD Servo Block Diagram

CD AUDIO INPUT SIGNAL LINE



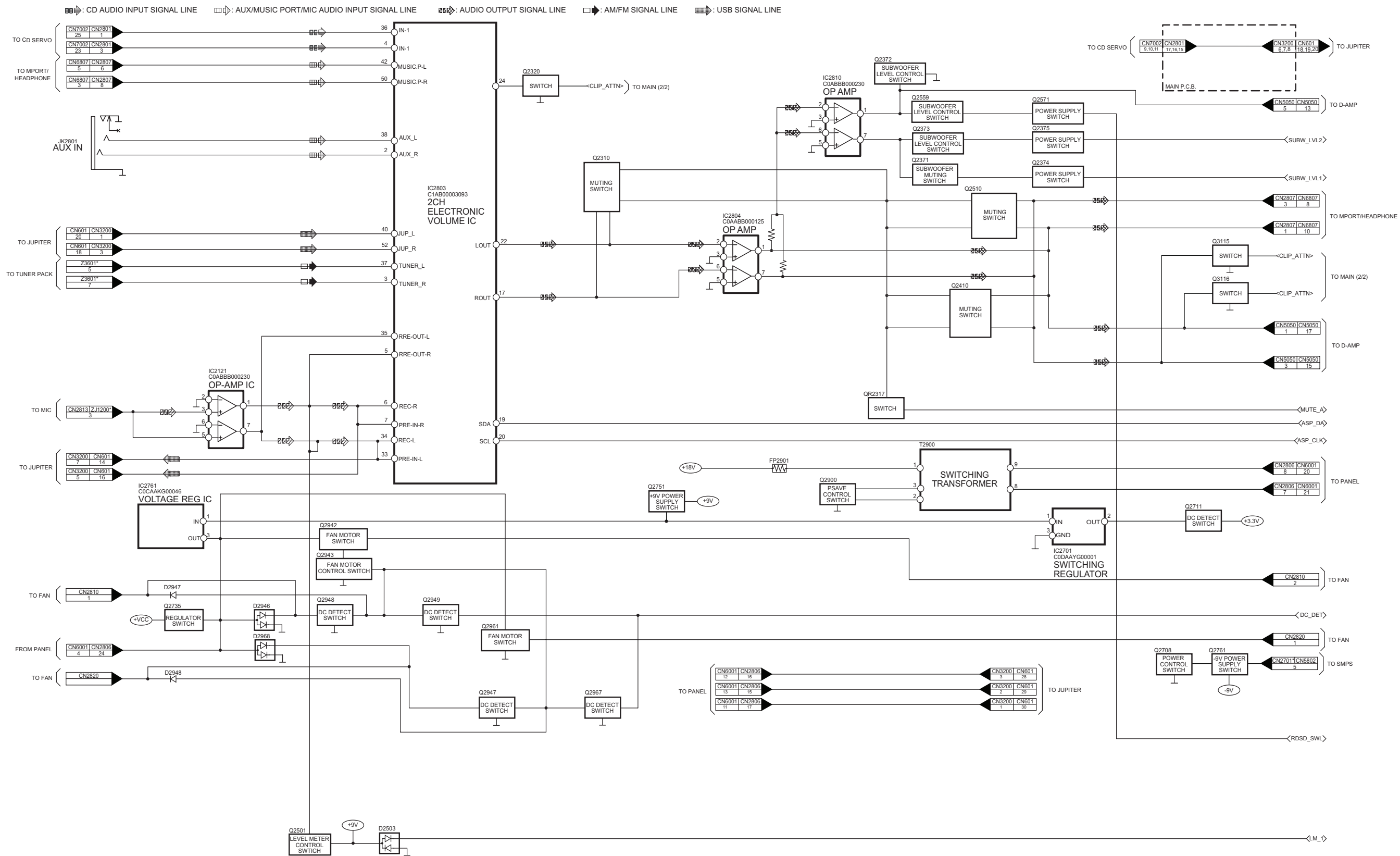
SA-AK780PH/PN CD SERVO BLOCK DIAGRAM

13.2. Jupiter Block Diagram



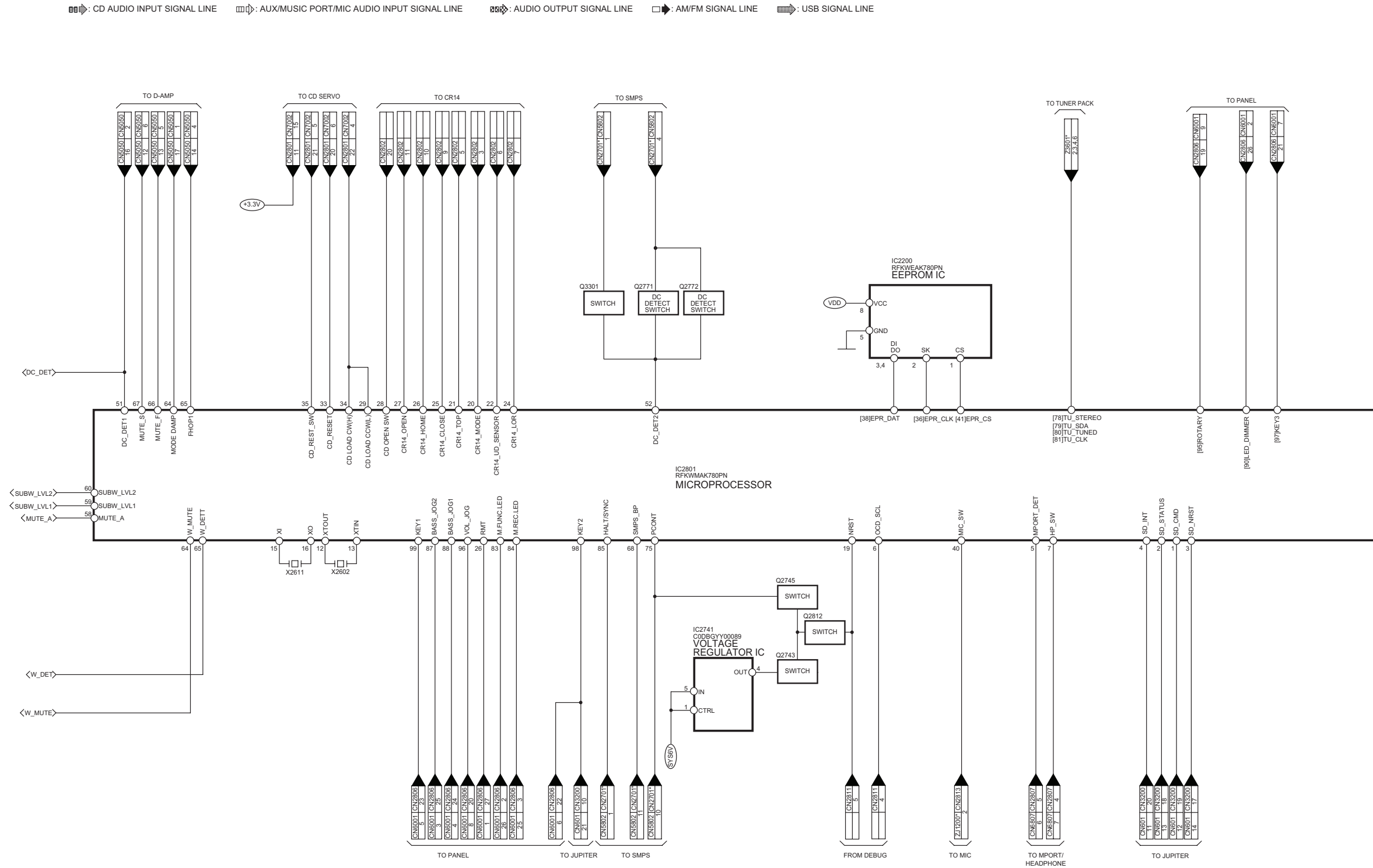
SA-AK780PH/PN JUPITER BLOCK DIAGRAM

13.3. Main(1/2) Block Diagram



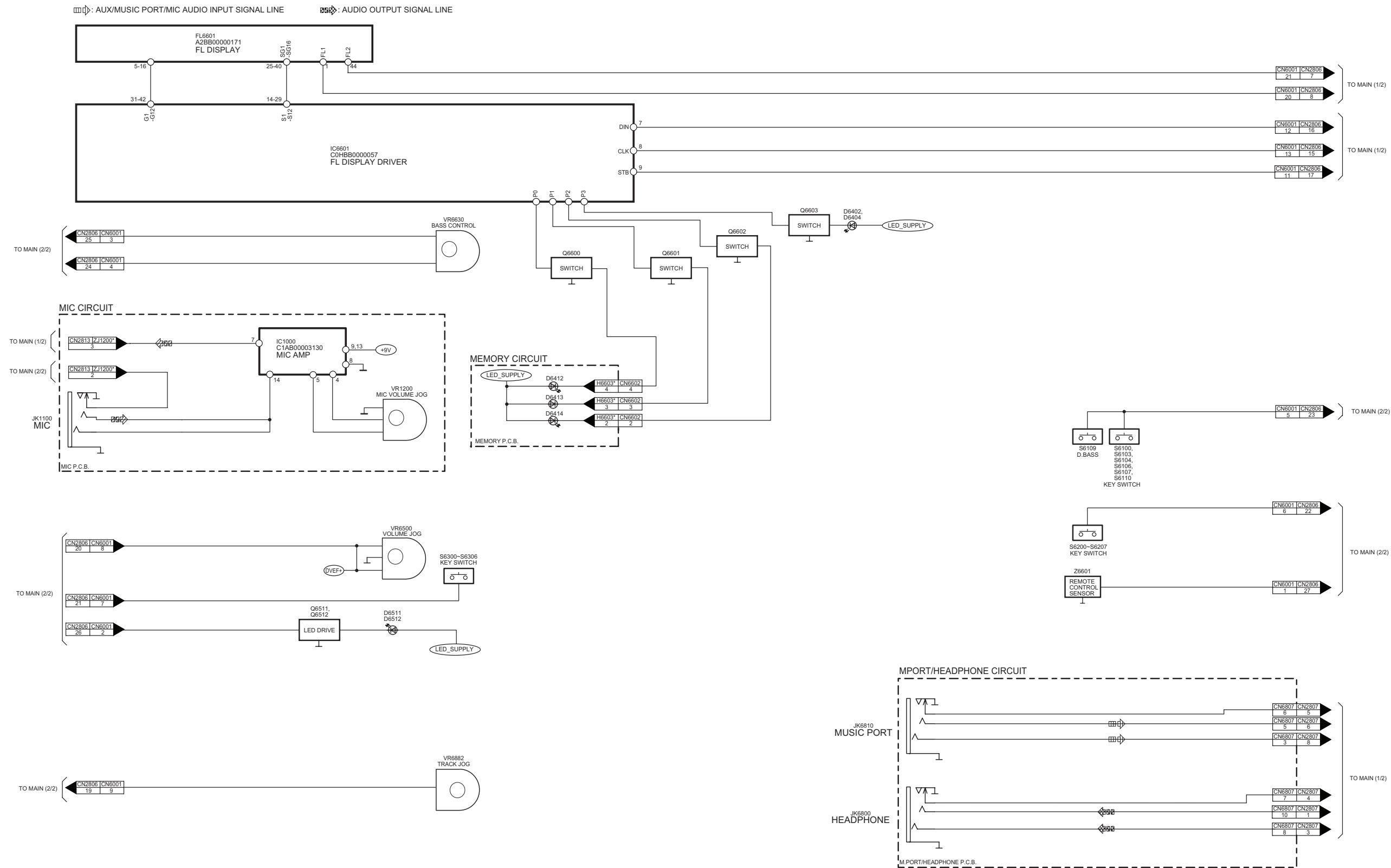
SA-AK780PH/PN MAIN(1/2) BLOCK DIAGRAM

13.4. Main(2/2) Block Diagram



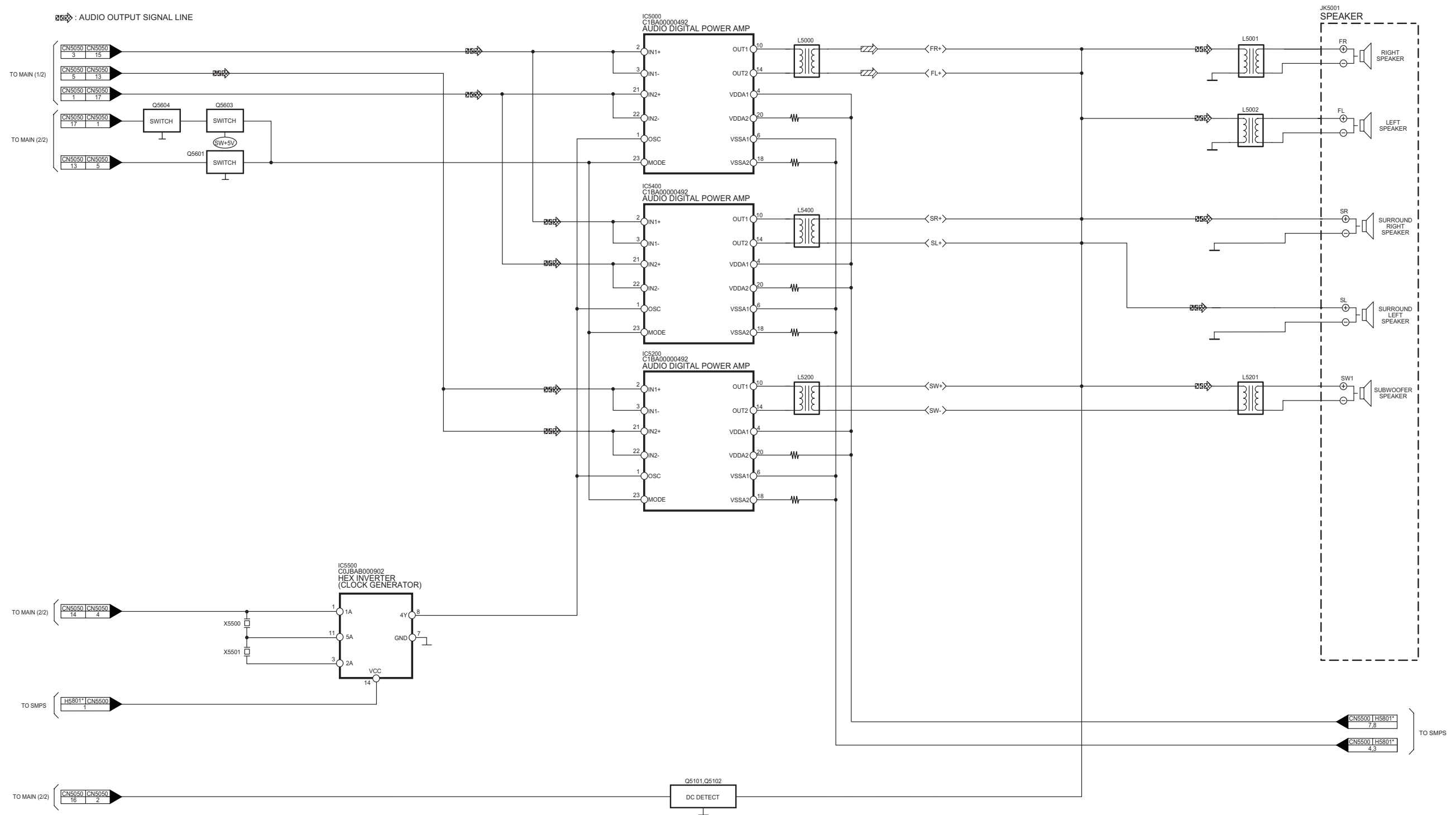
SA-AK780PH/PN MAIN(2/2) BLOCK DIAGRAM

13.5. Panel / MPort/Headphone / Mic / Memory Block Diagram



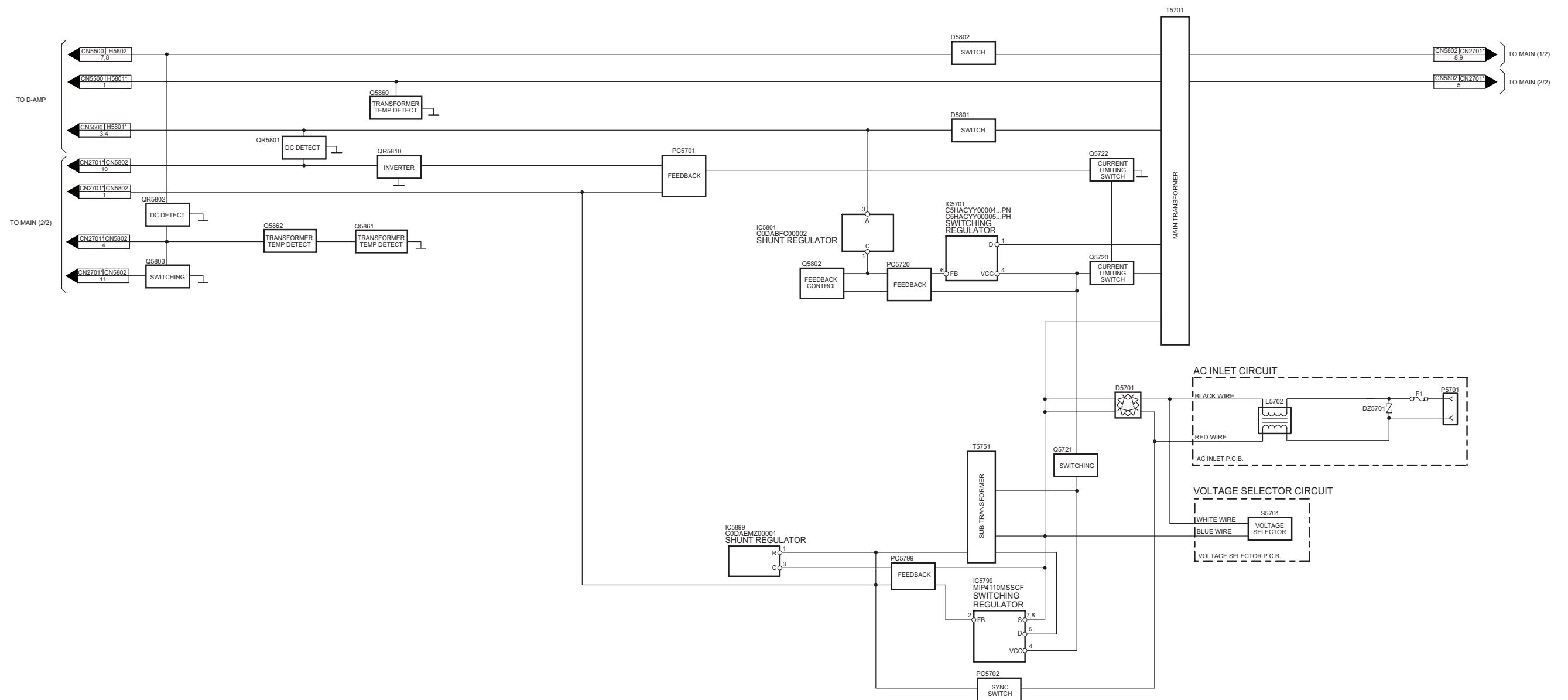
SA-AK780PH/PN PANEL / MPORT/HEADPHONE / MIC / MEMORY BLOCK DIAGRAM

13.6. D-Amp Block Diagram



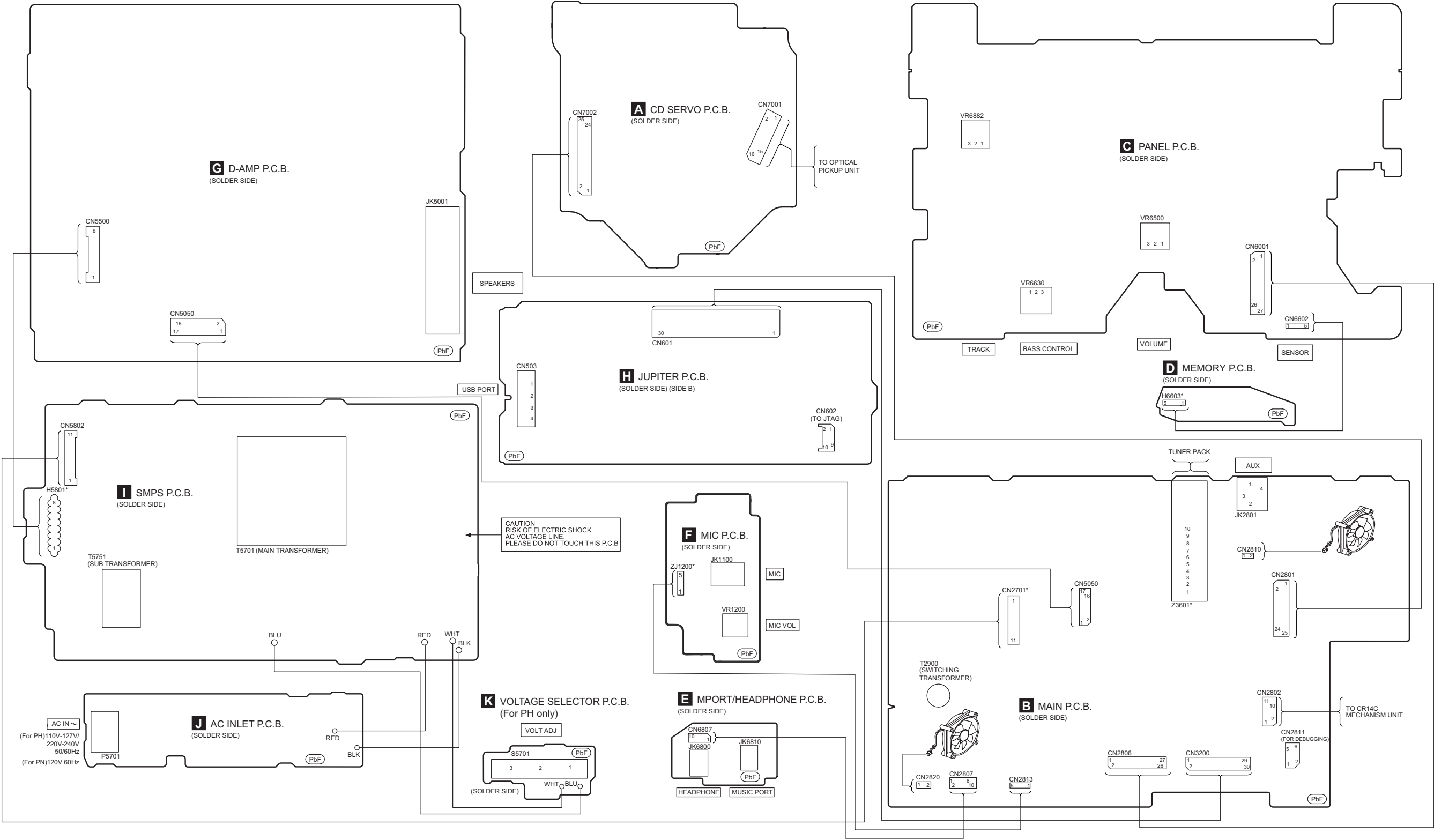
SA-AK780PH/PN D-AMP BLOCK DIAGRAM

13.7. SMPS / AC Inlet / Voltage Selector Block Diagram



SA-AK780PH/PN SMPS / AC INLET / VOLTAGE SELECTOR BLOCK DIAGRAM

14 Wiring Connection Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AK780PN/PH WIRING CONNECTION

15 Schematic Diagram Notes

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

Notes:

S5701:	Voltage Selector switch.
S6100:	Power switch (⏻/⏻).
S6104:	USB REC switch (▶/).
S6107:	Subwoofer.
S6109:	D.Bass.
S6200:	Open/Close switch (▲).
S6201:	Exchange (▲) switch.
S6202:	CD Disc 1 (1 ▶) switch.
S6203:	CD Disc 2 (2 ▶) switch.
S6204:	CD Disc 3 (3 ▶) switch.
S6205:	CD Disc 4 (4 ▶) switch.
S6206:	CD Disc 5 (5 ▶) switch.
S6207:	Stop/-Demo (■ -DEMO) switch.
S6300:	Manual EQ- (◀◀◀/◀◀◀) switch.
S6301:	Manual EQ (MANUAL EQ) switch.
S6302:	Manual EQ+ (▶▶▶/▶▶▶) switch.
S6303:	CD (▶/) switch.
S6304:	FM/AM switch.
S6305:	AUX switch.
S6306:	Music Port switch.
S6307:	USB (▶/) switch.
S7201:	Rest switch.
S7202:	CD open switch.
VR1200:	MIC Vol Jog.
VR6500:	Volume Jog.
VR6630:	BASS Control Jog.
VR6882:	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, C5706, C5707

- Resistor

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

- Capacitor

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

- Coil

Unit of inductance is H, unless otherwise noted.

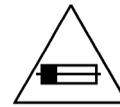
- *

REF IS FOR INDICATION ONLY.

- Voltage and signal line

	: +B signal line
	: -B signal line
	: CD Audio input signal line
	: AUX/MUSIC PORT/MIC/Audio input signal line
	: Audio output signal line
	: USB signal line
	: AM/FM signal line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE 233 F1 8A, 125V FUSE (For PN)
TYPE 215 F1 T8AH, 250V FUSE (For PH)



RISK OF FIRE-REPLACE FUSE AS MARKED.

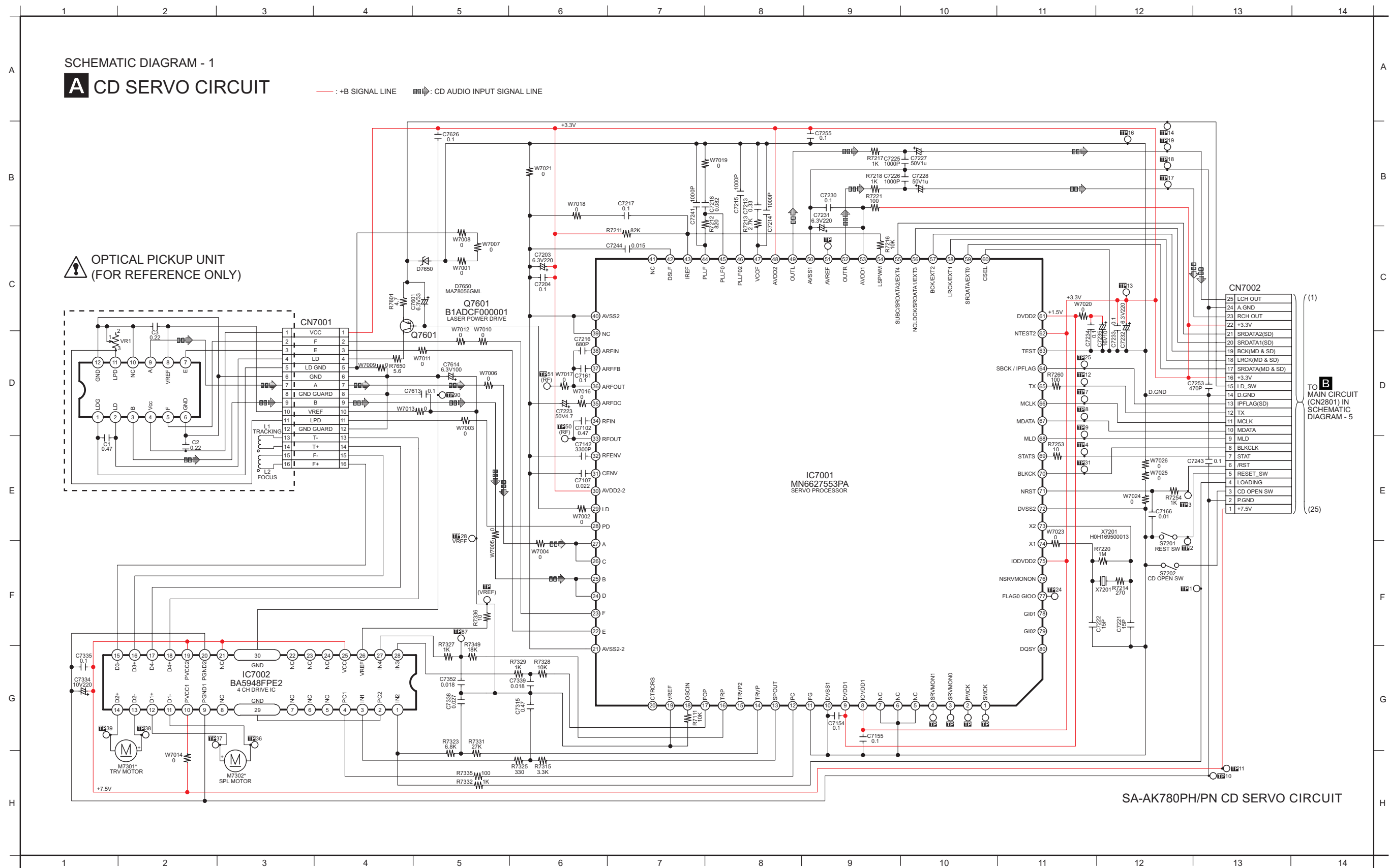
FUSE CAUTION



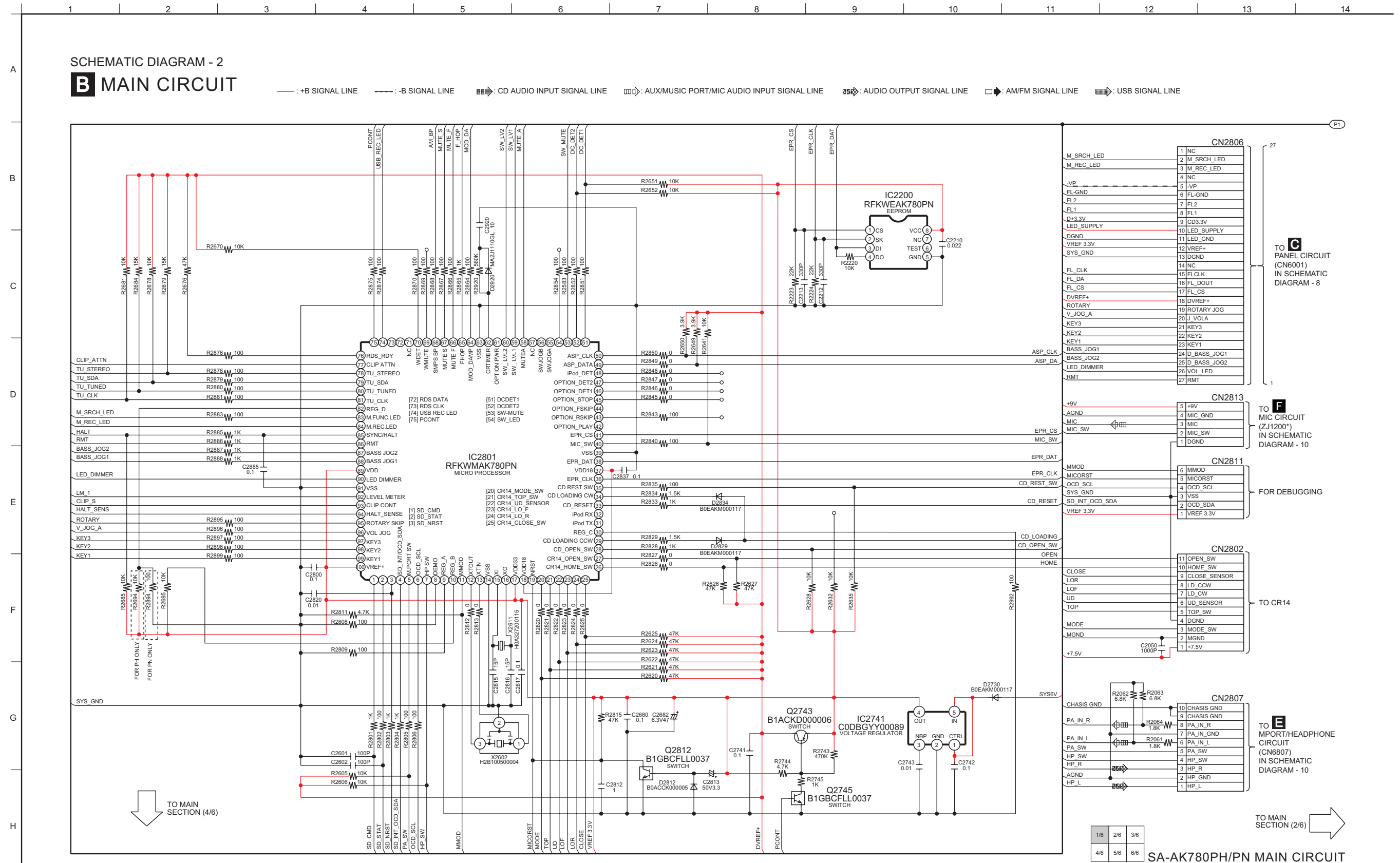
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

16 Schematic Diagram

16.1. CD Servo Circuit



16.2. Main Circuit (1/6)



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

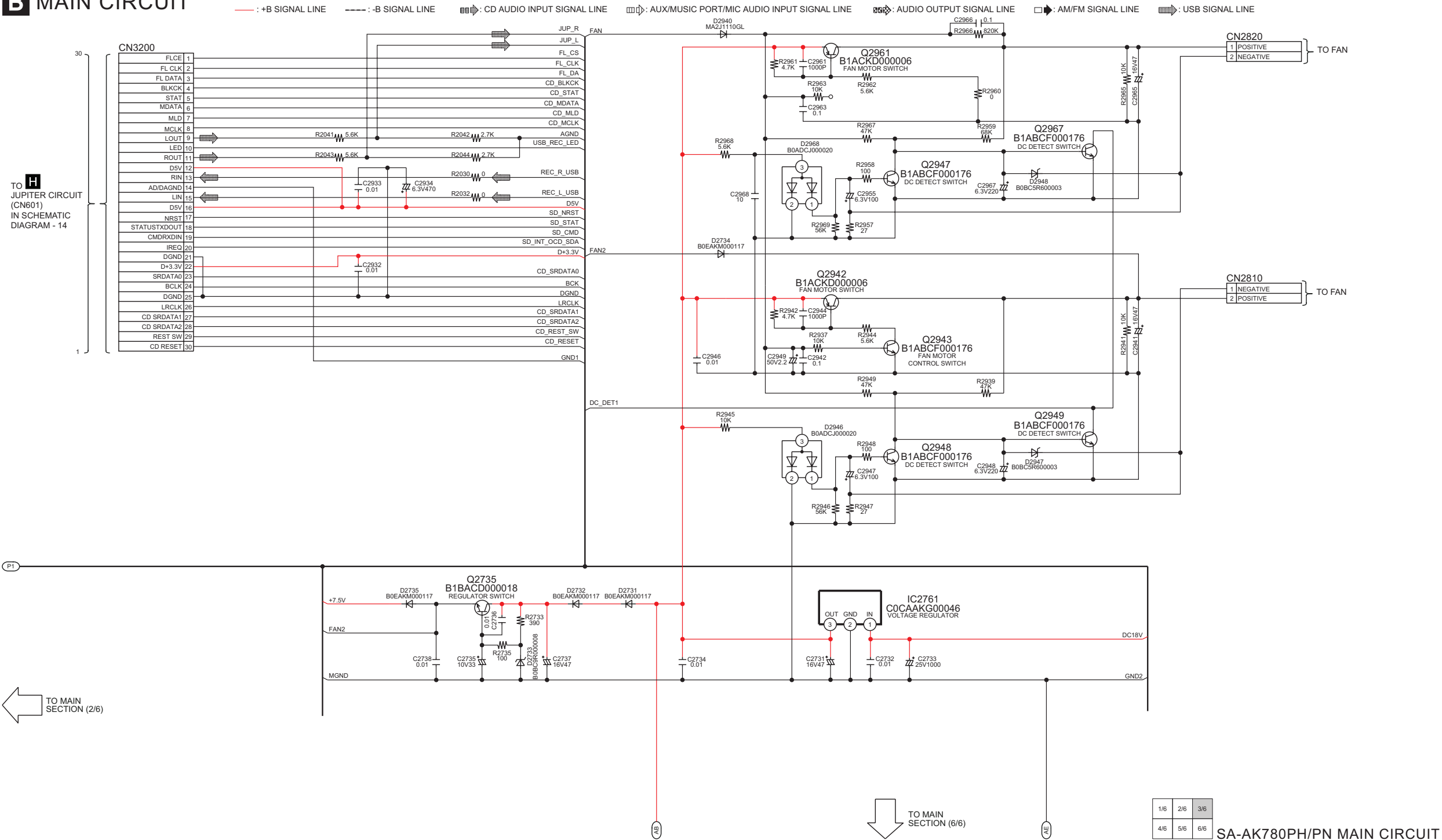
B MAIN CIRCUIT



16.4. Main Circuit (3/6)

SCHEMATIC DIAGRAM - 4

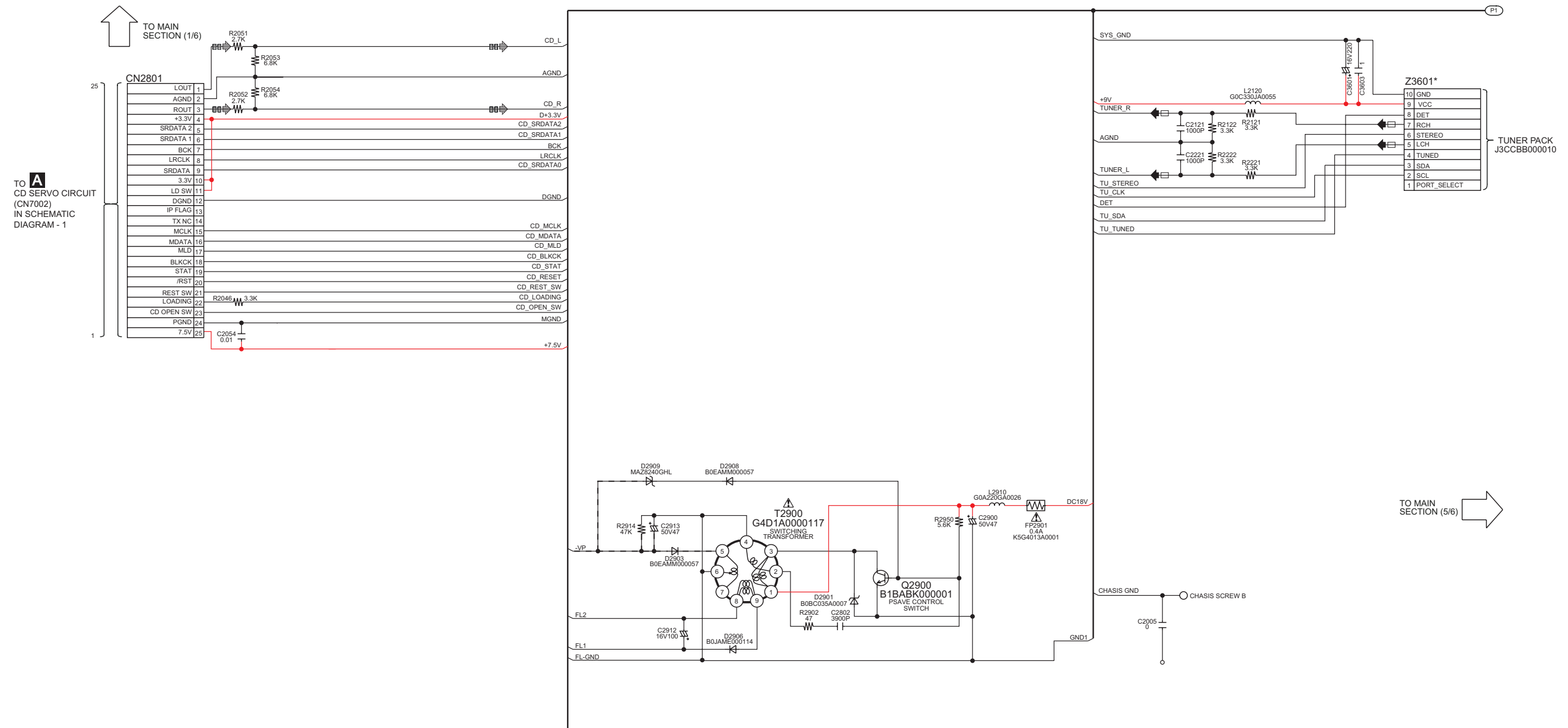
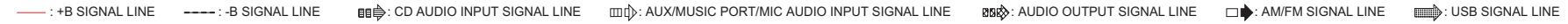
B MAIN CIRCUIT



16.5. Main Circuit (4/6)



B MAIN CIRCUIT



1/6	2/6	3/6
4/6	5/6	6/6

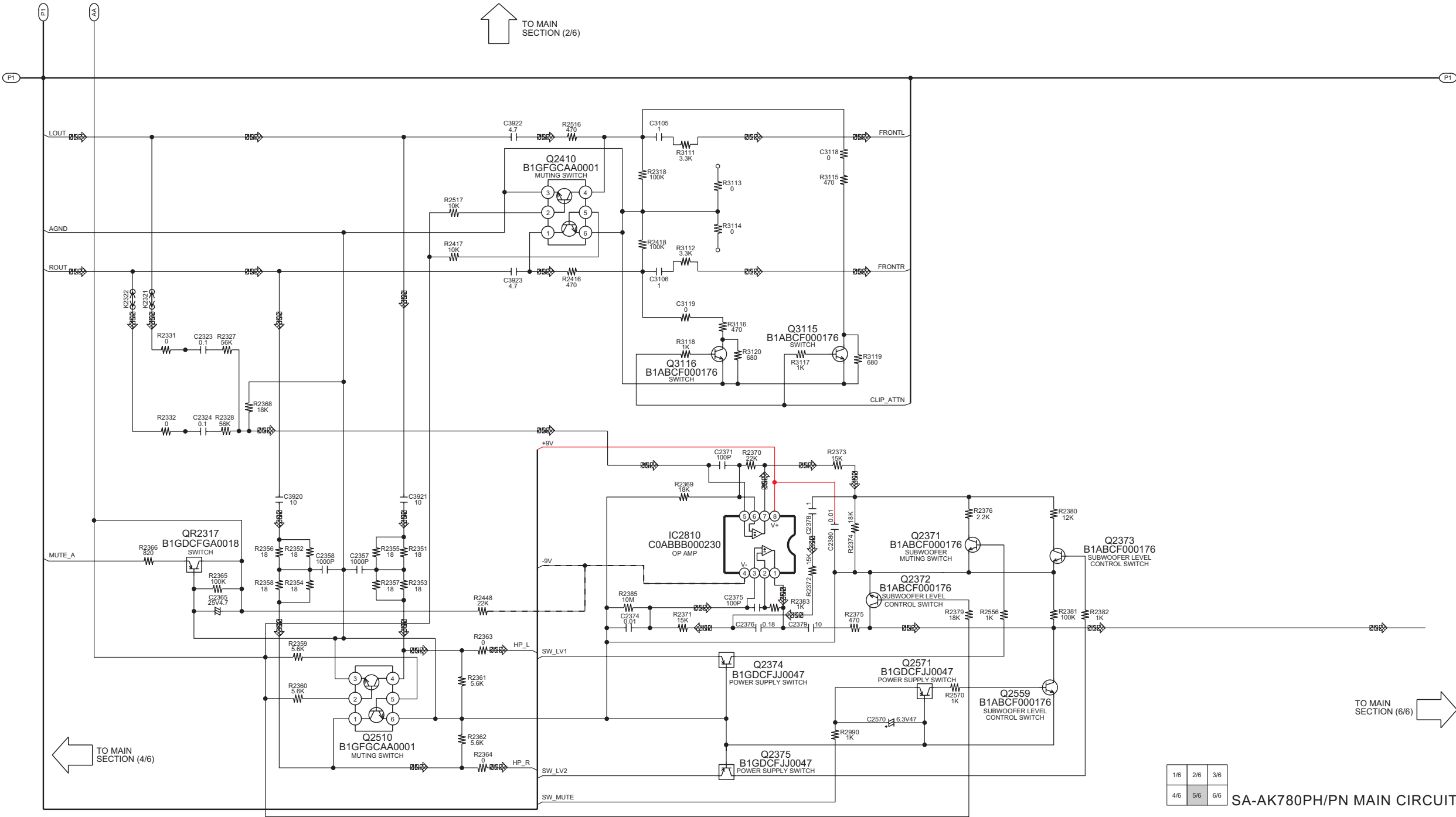
SA-AK780PH/PN MAIN CIRCUIT

16.6. Main Circuit (5/6)

SCHEMATIC DIAGRAM - 6

B MAIN CIRCUIT

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

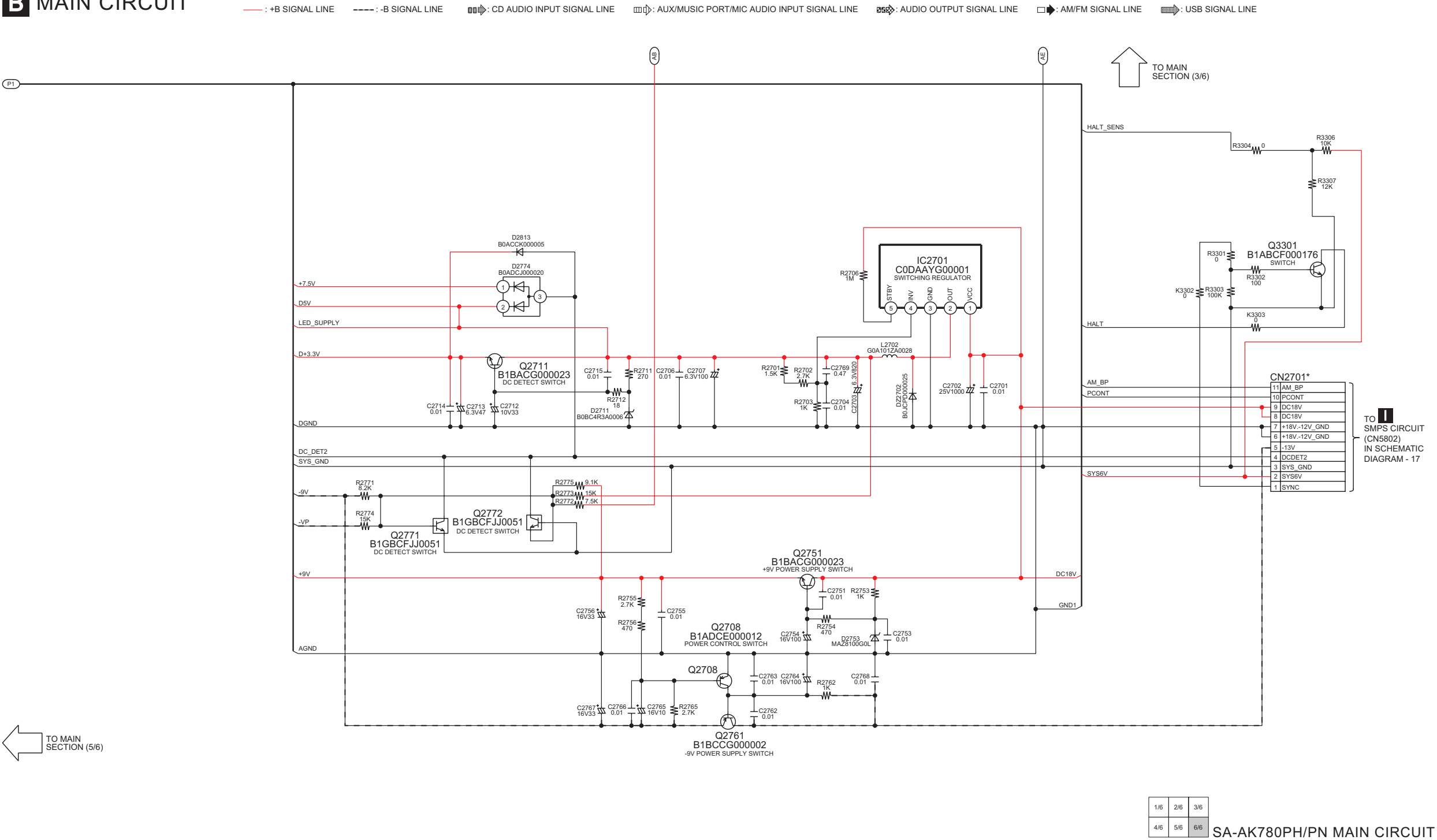


1/6	2/6	3/6
4/6	5/6	6/6

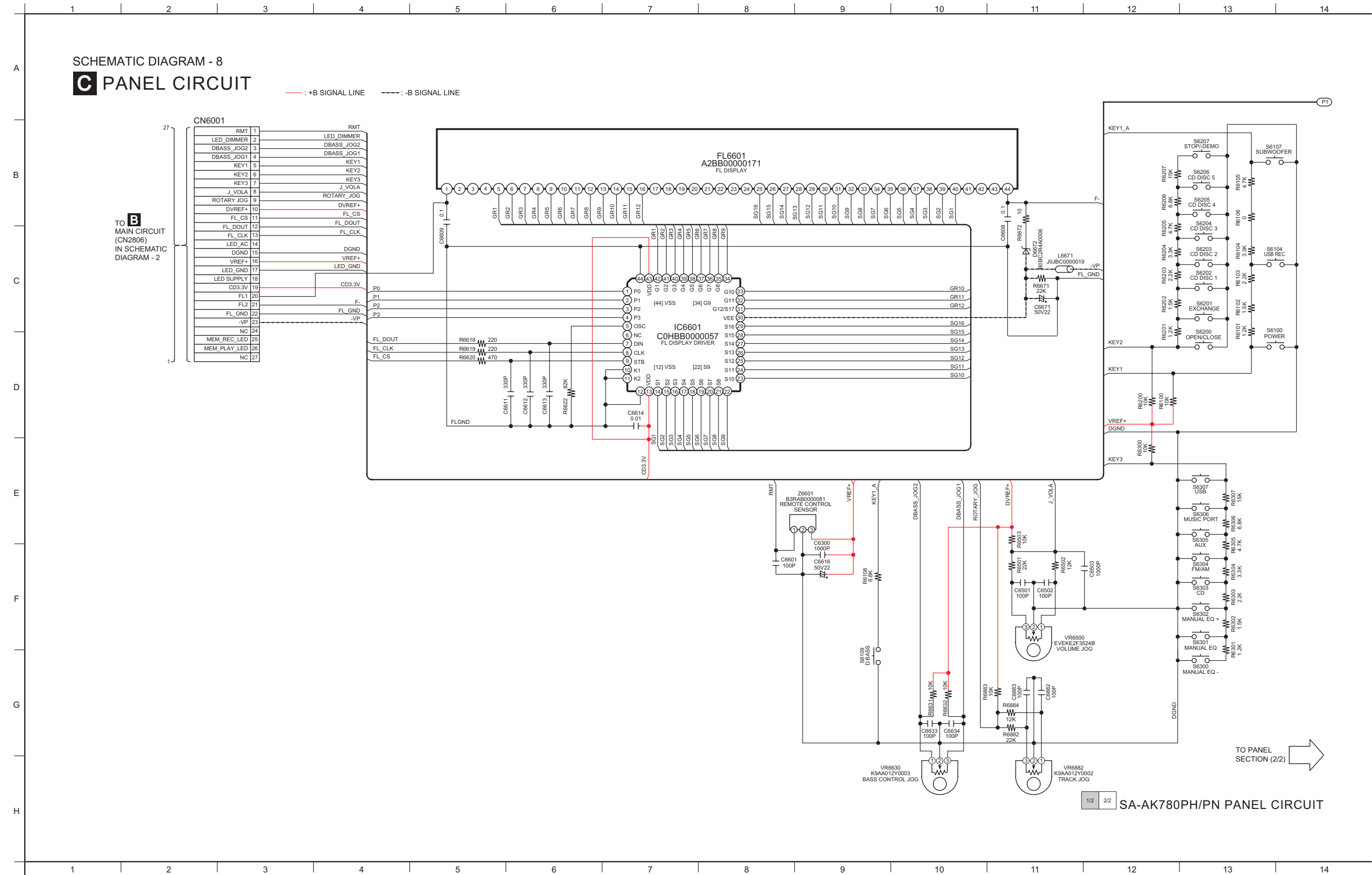
SA-AK780PH/PN MAIN CIRCUIT

16.7. Main Circuit (6/6)

SCHEMATIC DIAGRAM - 7
B MAIN CIRCUIT



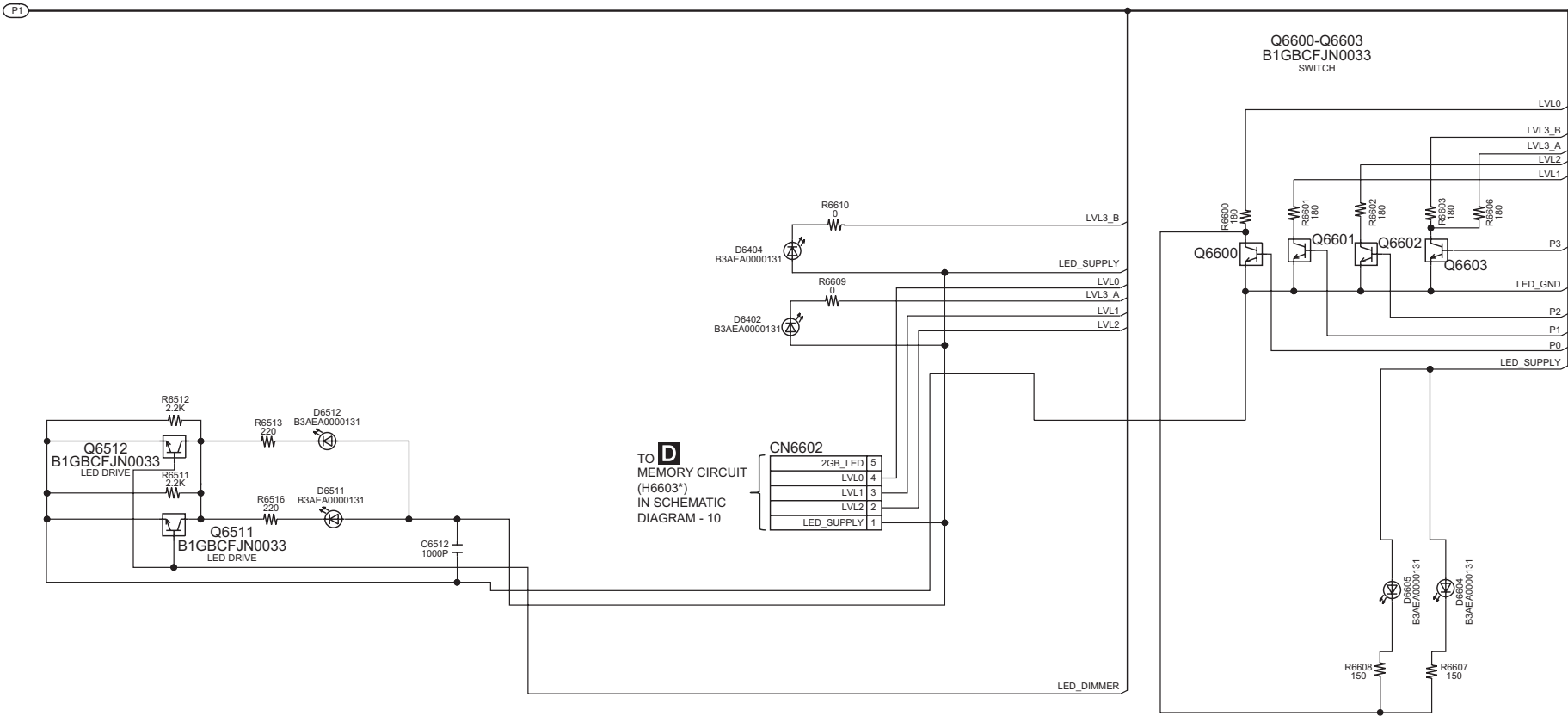
16.8. Panel Circuit (1/2)



16.9. Panel Circuit (2/2)

SCHEMATIC DIAGRAM - 9
C PANEL CIRCUIT

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

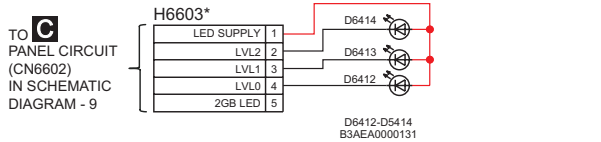


TO PANEL
SECTION (1/2)

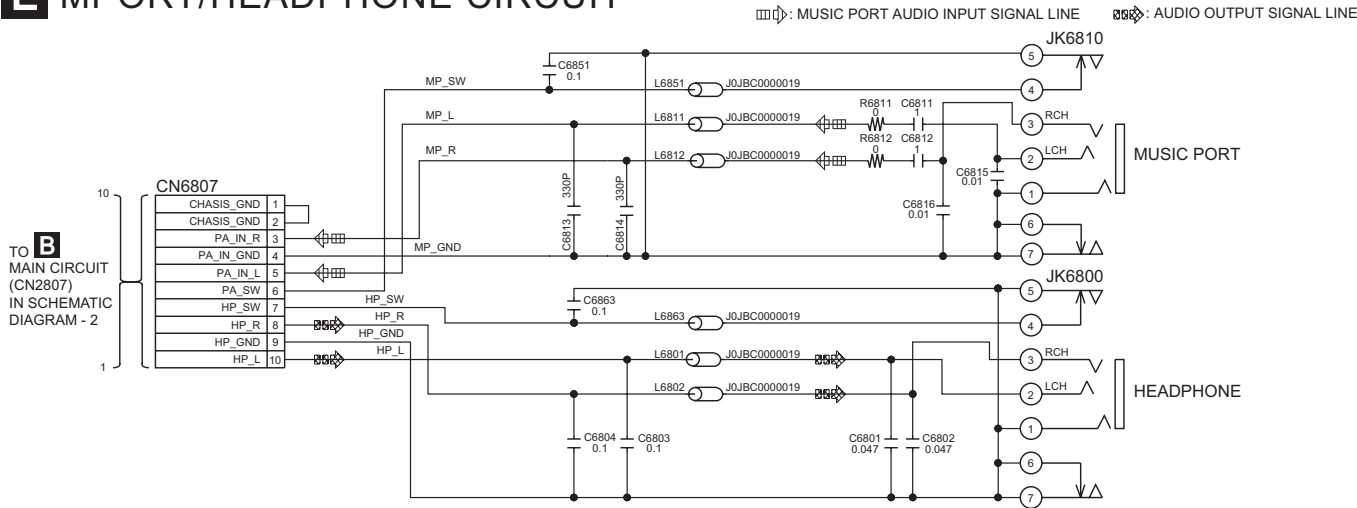
16.10. Memory / MPort/Headphone / Mic Circuit

SCHEMATIC DIAGRAM - 10

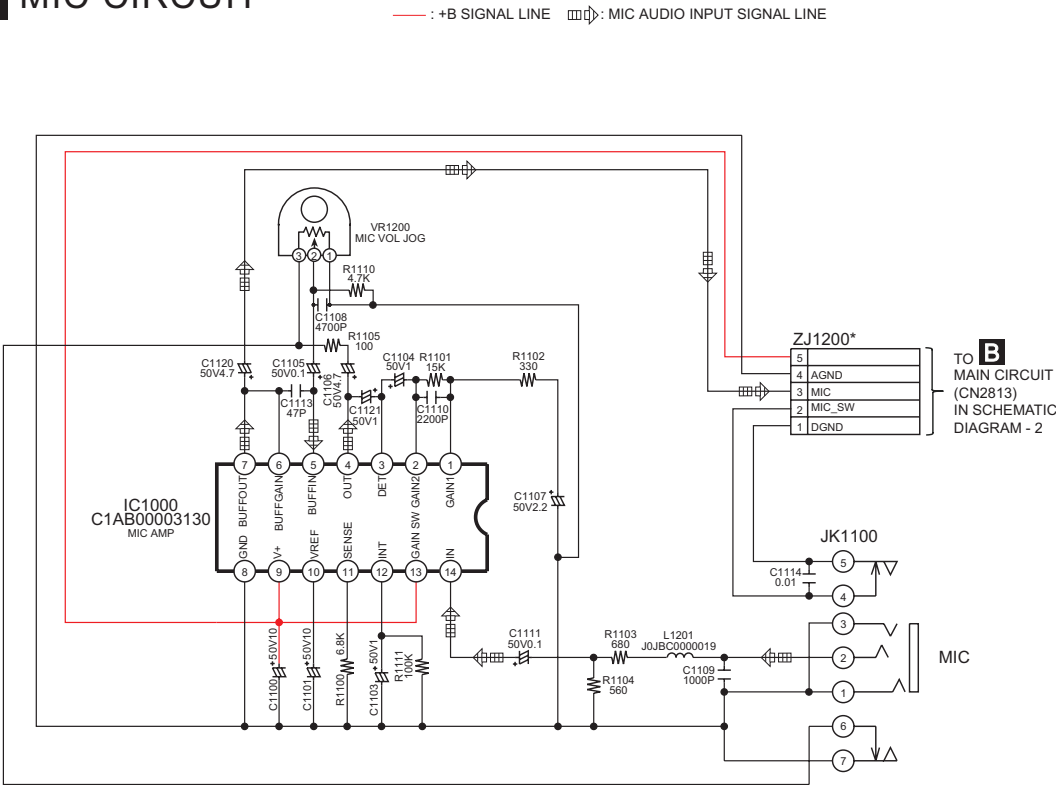
D MEMORY CIRCUIT



E MPORT/HEADPHONE CIRCUIT

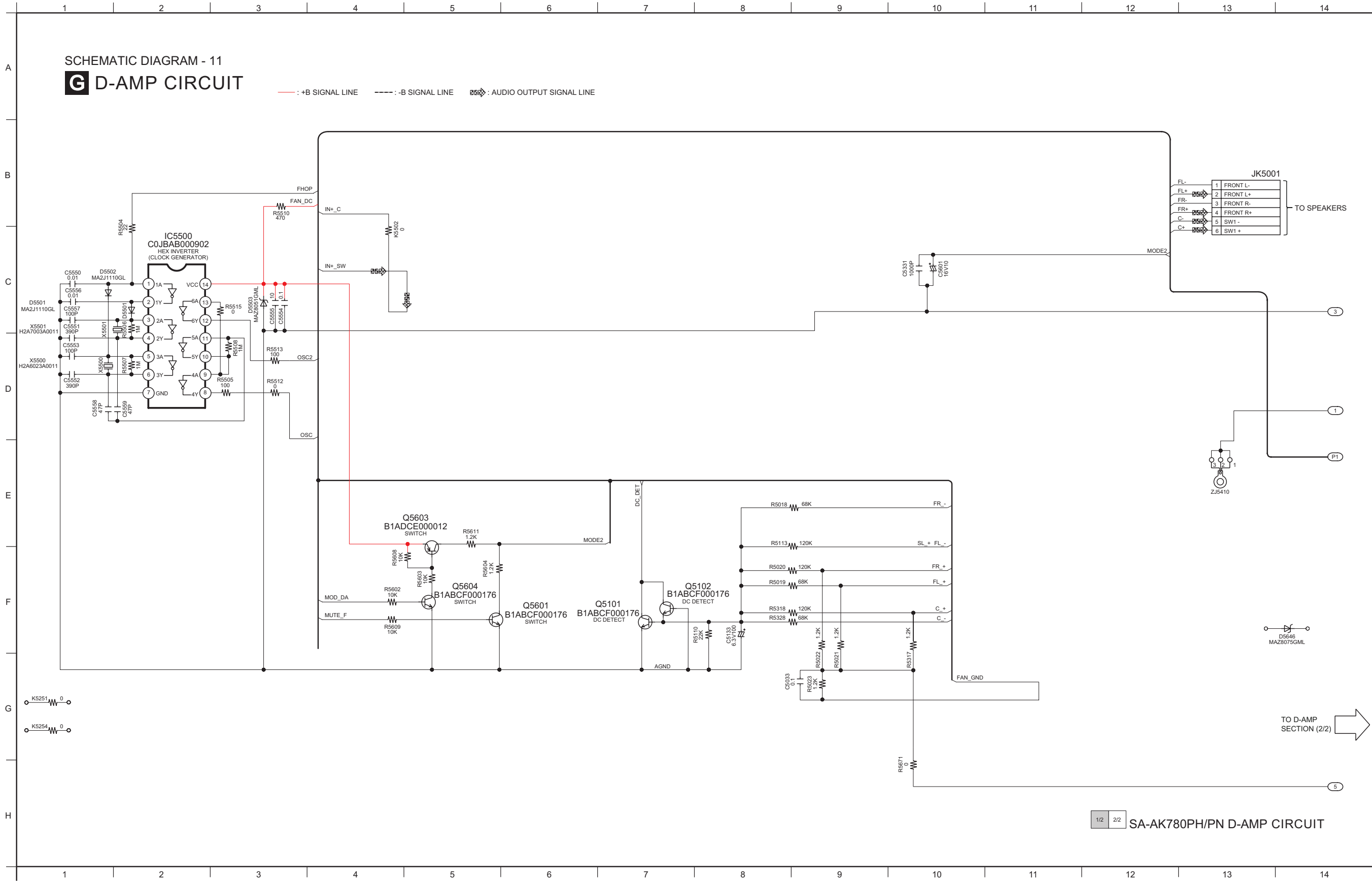


F MIC CIRCUIT



SA-AK780PH/PN MEMORY / MPORT/HEADPHONE / MIC CIRCUIT

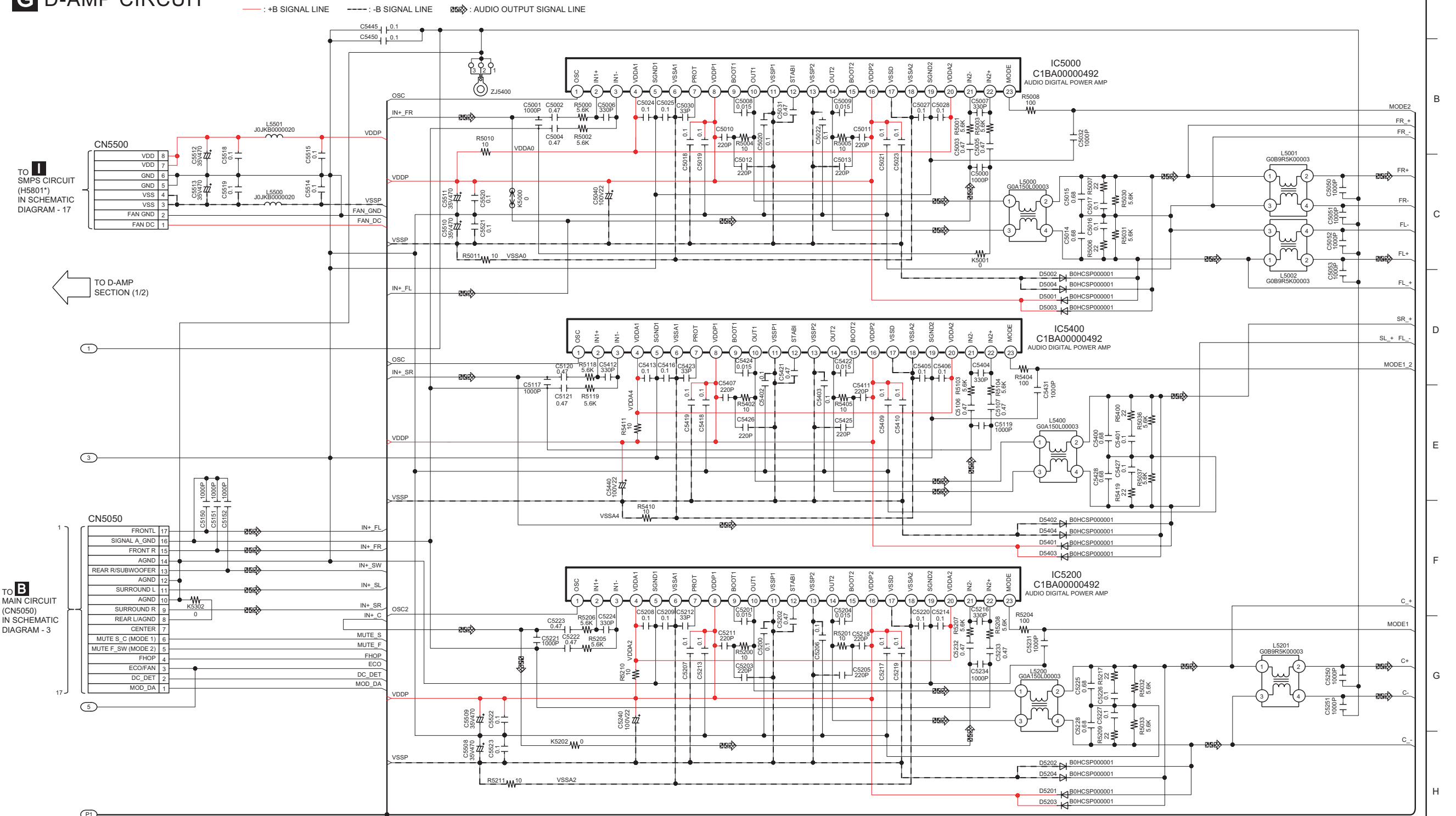
16.11. D-Amp Circuit (1/2)



16.12. D-Amp Circuit (2/2)

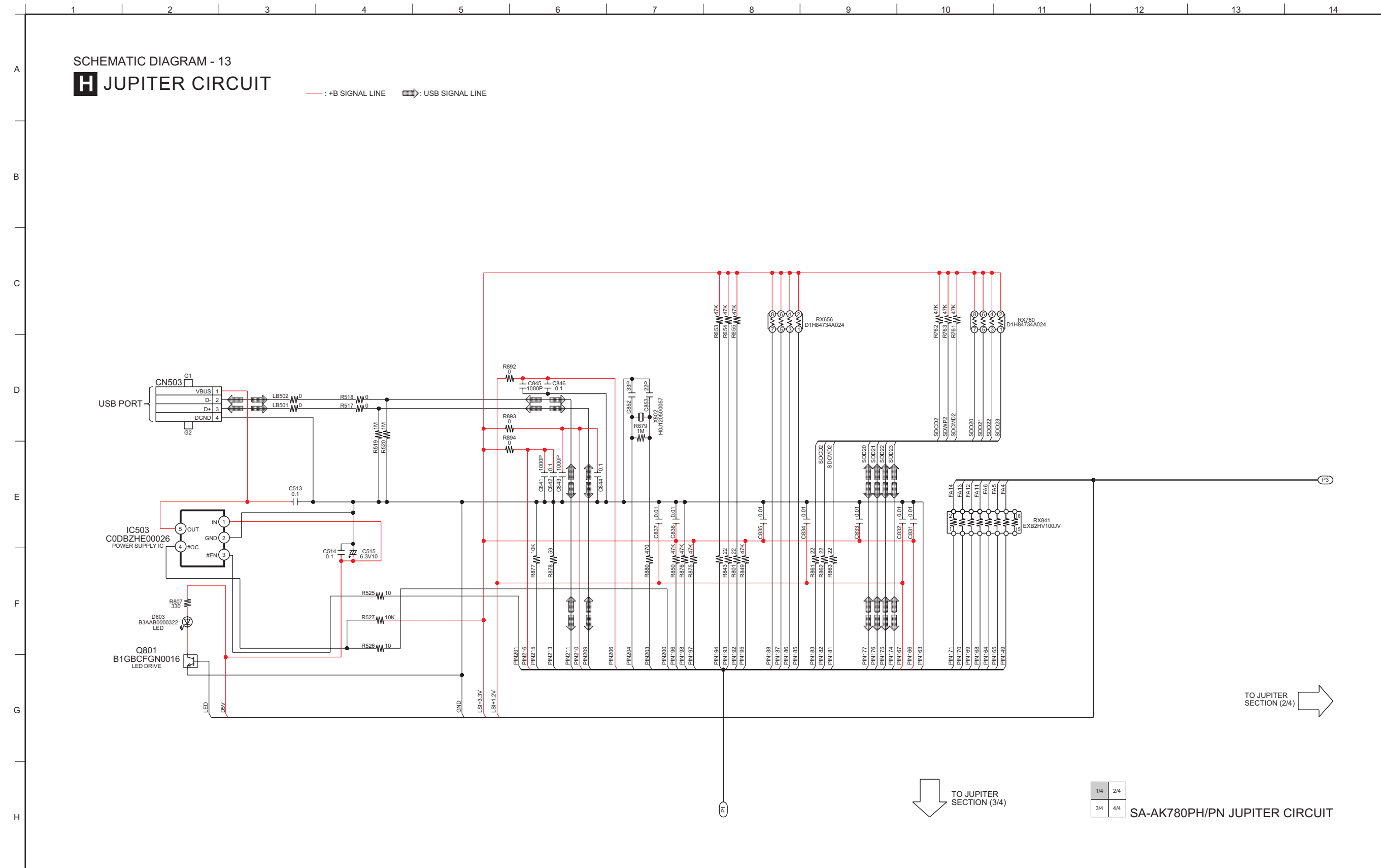
SCHEMATIC DIAGRAM - 12

G D-AMP CIRCUIT



1/2 2/2 SA-AK780PH/PN D-AMP CIRCUIT

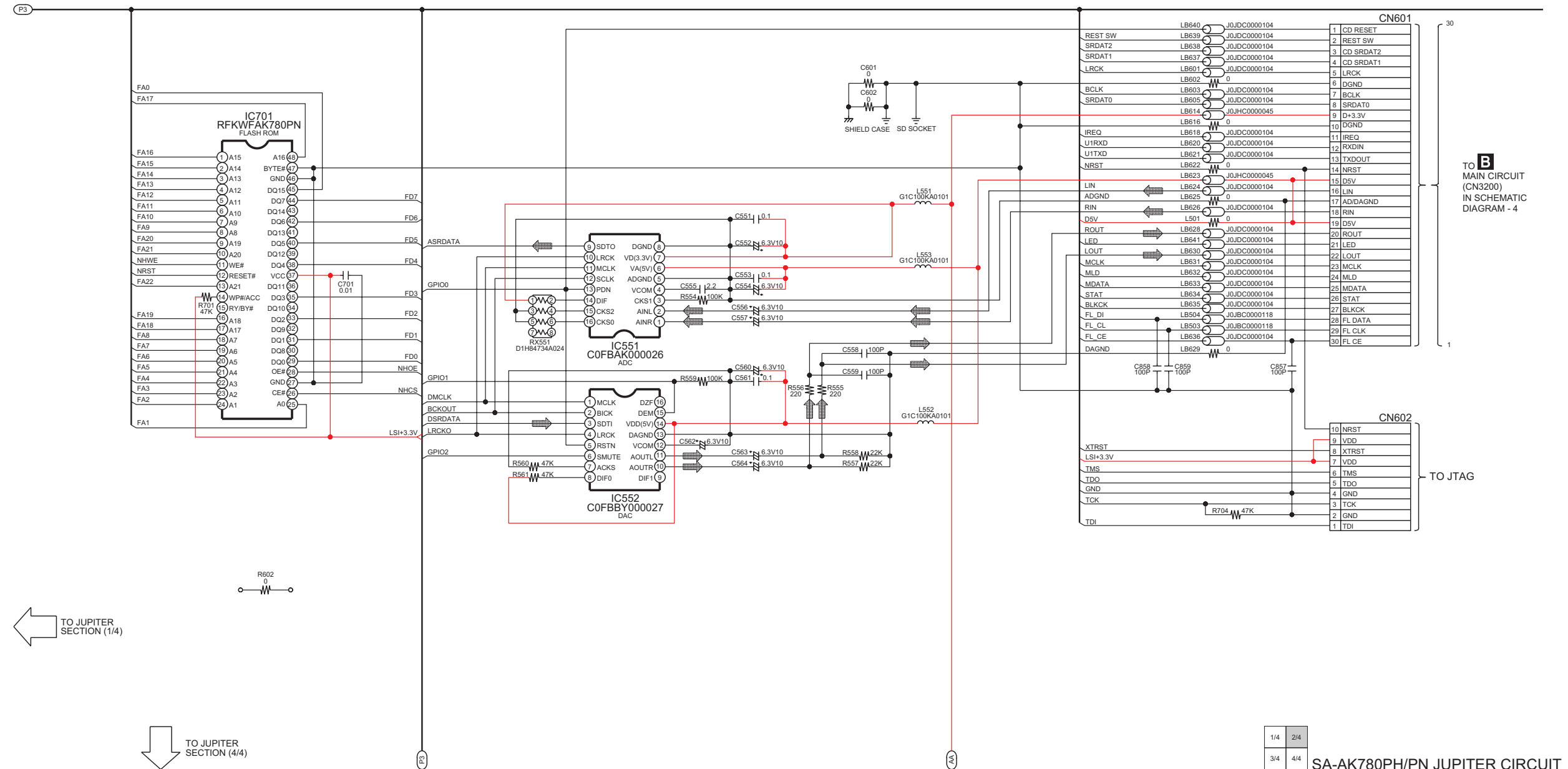
16.13. Jupiter Circuit (1/4)



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

H JUPITER CIRCUIT

— : +B SIGNAL LINE ➡ : USB SIGNAL LINE

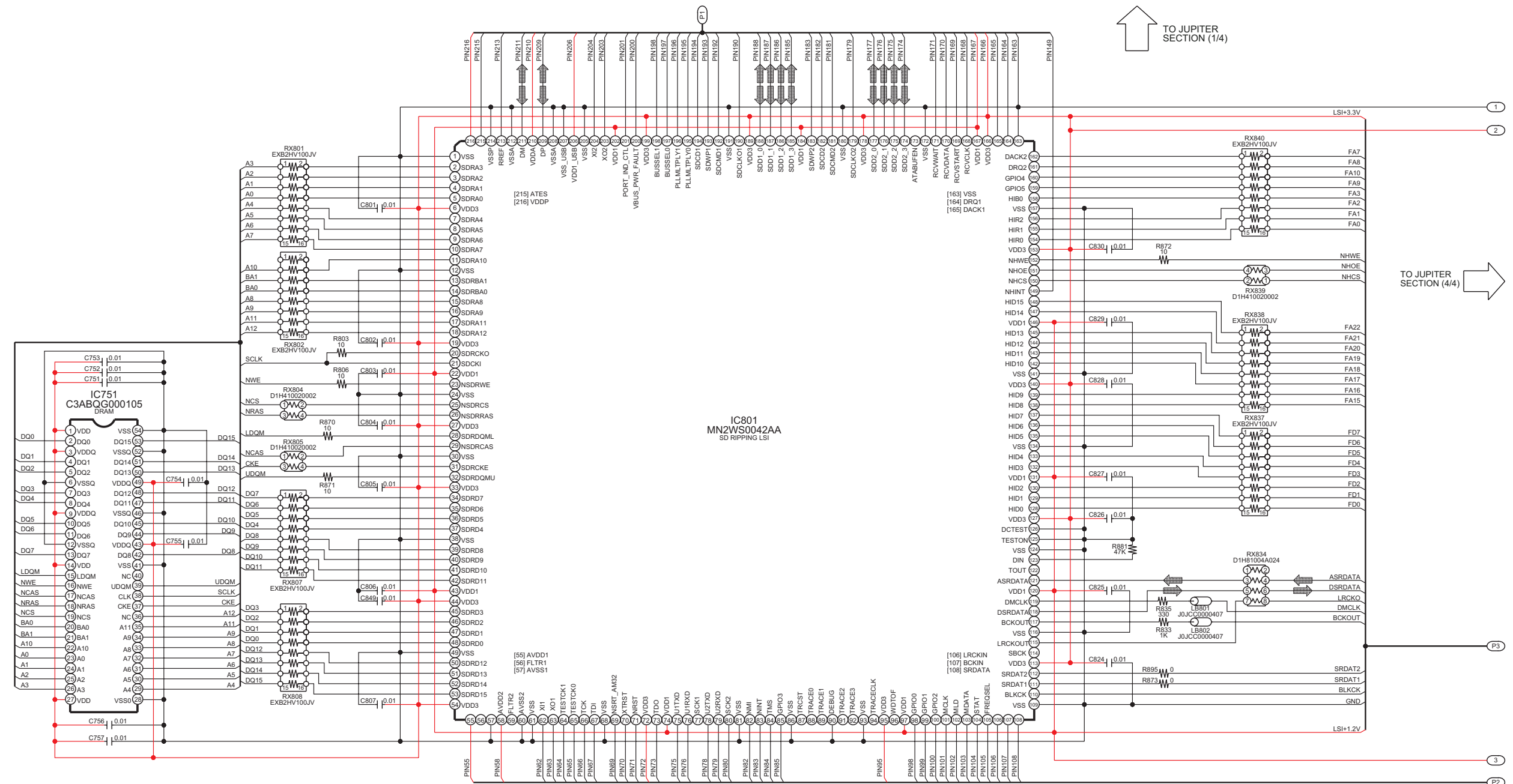


16.15. Jupiter Circuit (3/4)

SCHEMATIC DIAGRAM - 15

H JUPITER CIRCUIT

— : +B SIGNAL LINE : USB SIGNAL LINE



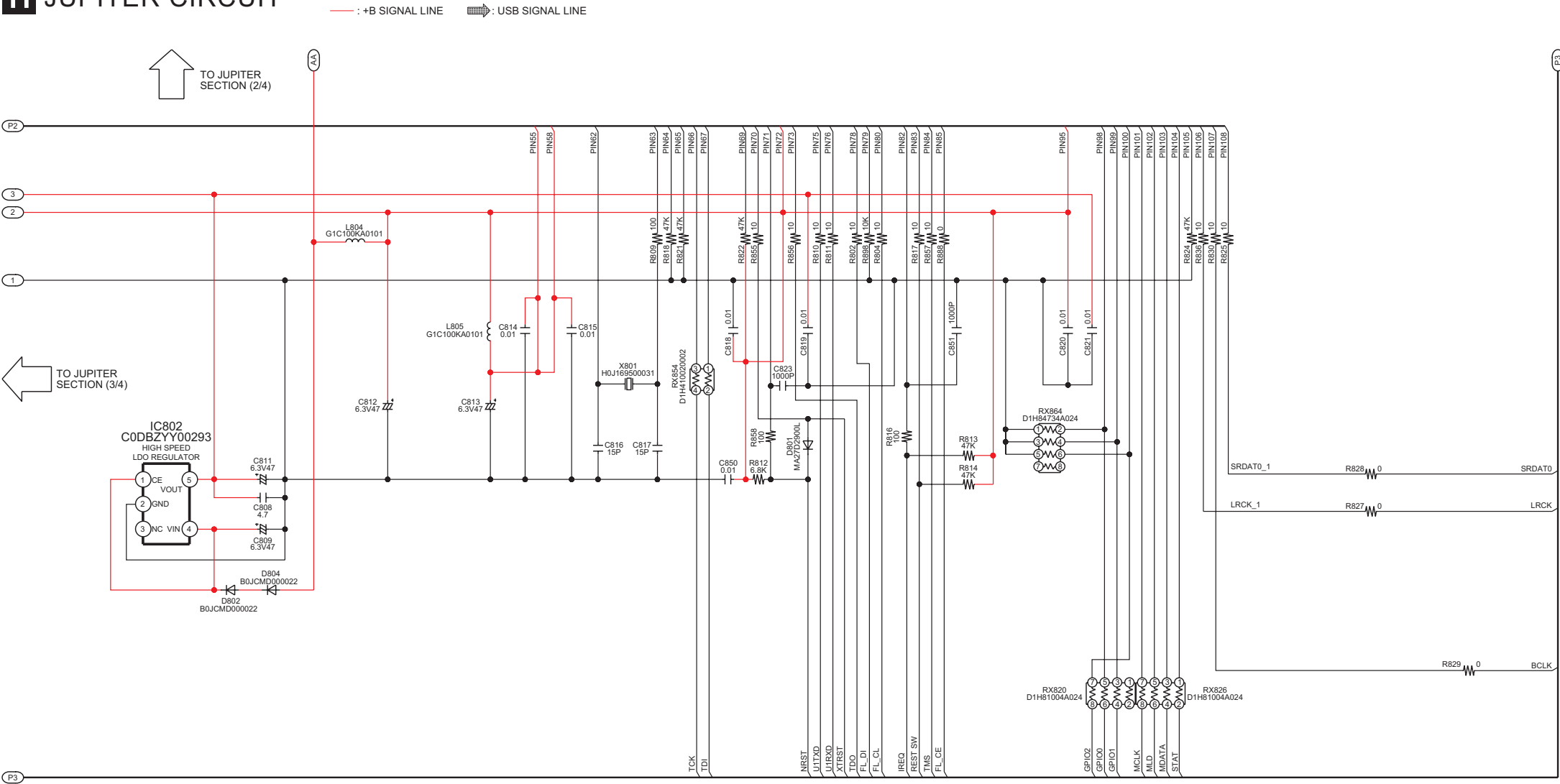
1/4	2/4
3/4	4/4

SA-AK780PH/PN JUPITER CIRCUIT

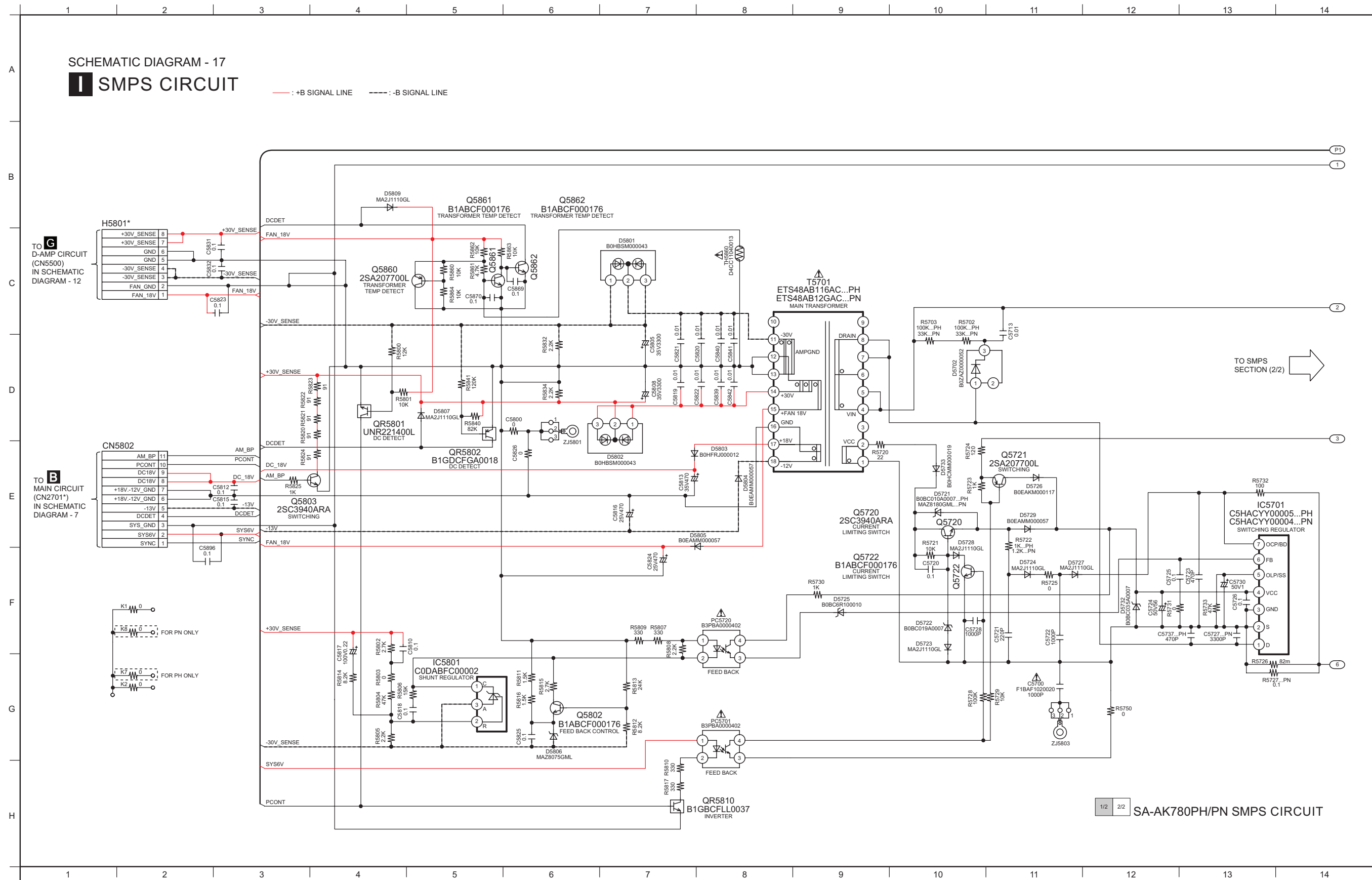
16.16. Jupiter Circuit (4/4)

SCHEMATIC DIAGRAM - 16

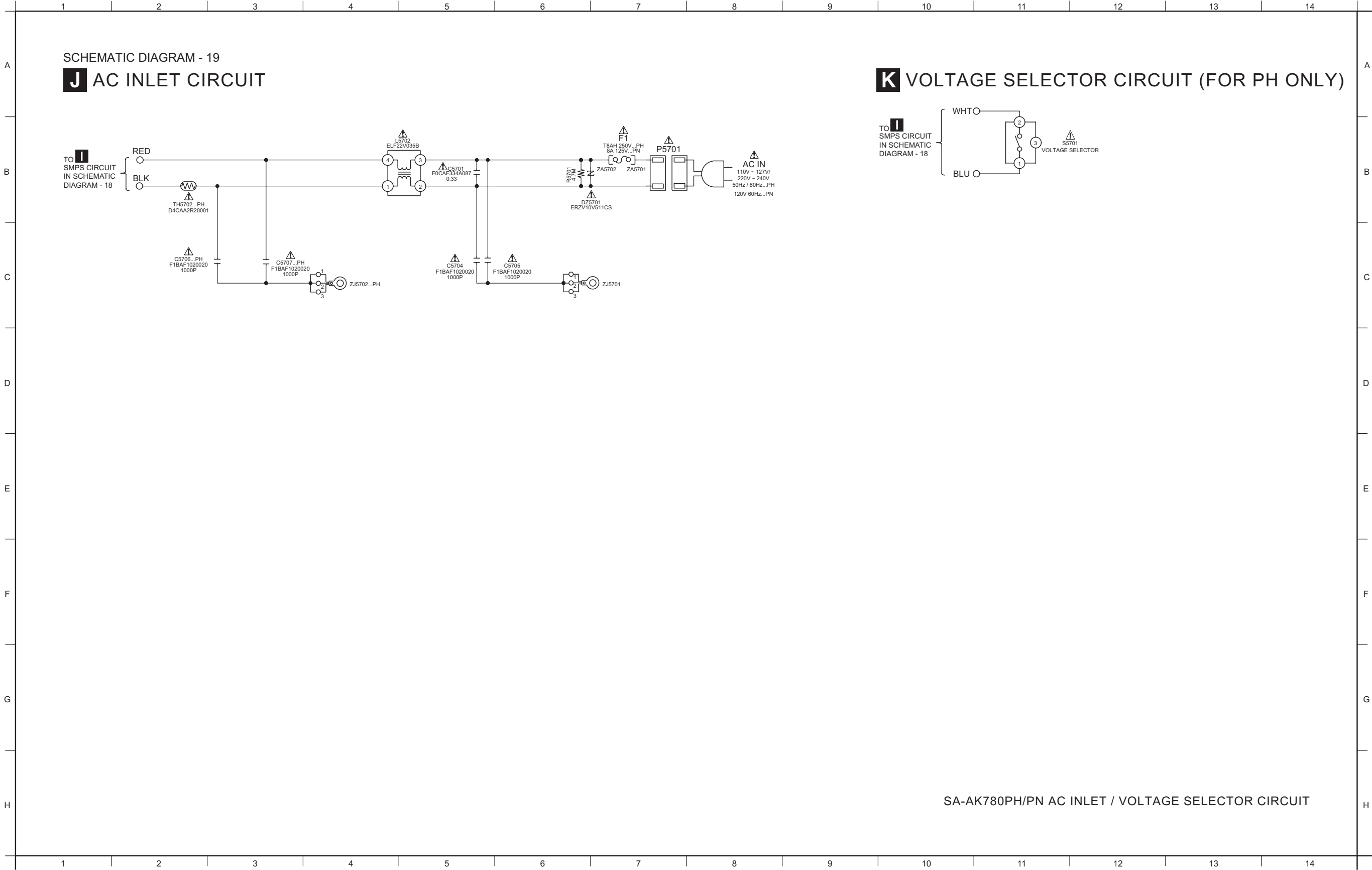
JUPITER CIRCUIT



16.17. SMPS Circuit (1/2)

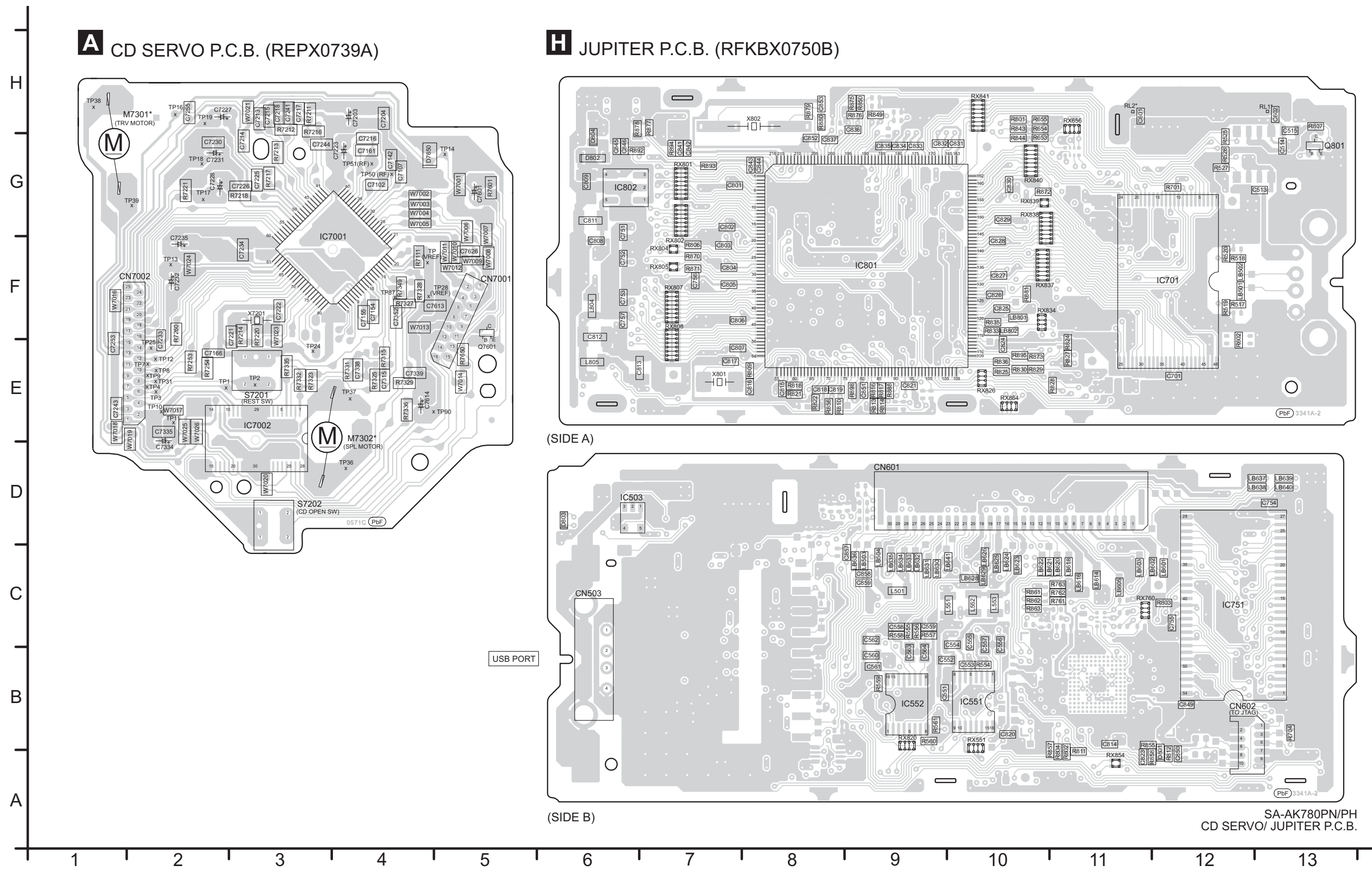


16.19. AC Inlet / Voltage Selector Circuit



17 Printed Circuit Board

17.1. CD Servo / Jupiter P.C.B.



A vertical number line with tick marks labeled A, B, C, D, E, F, G, and H from bottom to top.

B

SA-AK780PN/PH
MAIN P.C.B.

NOTE: " * " REF IS FOR INDICATION ONLY

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

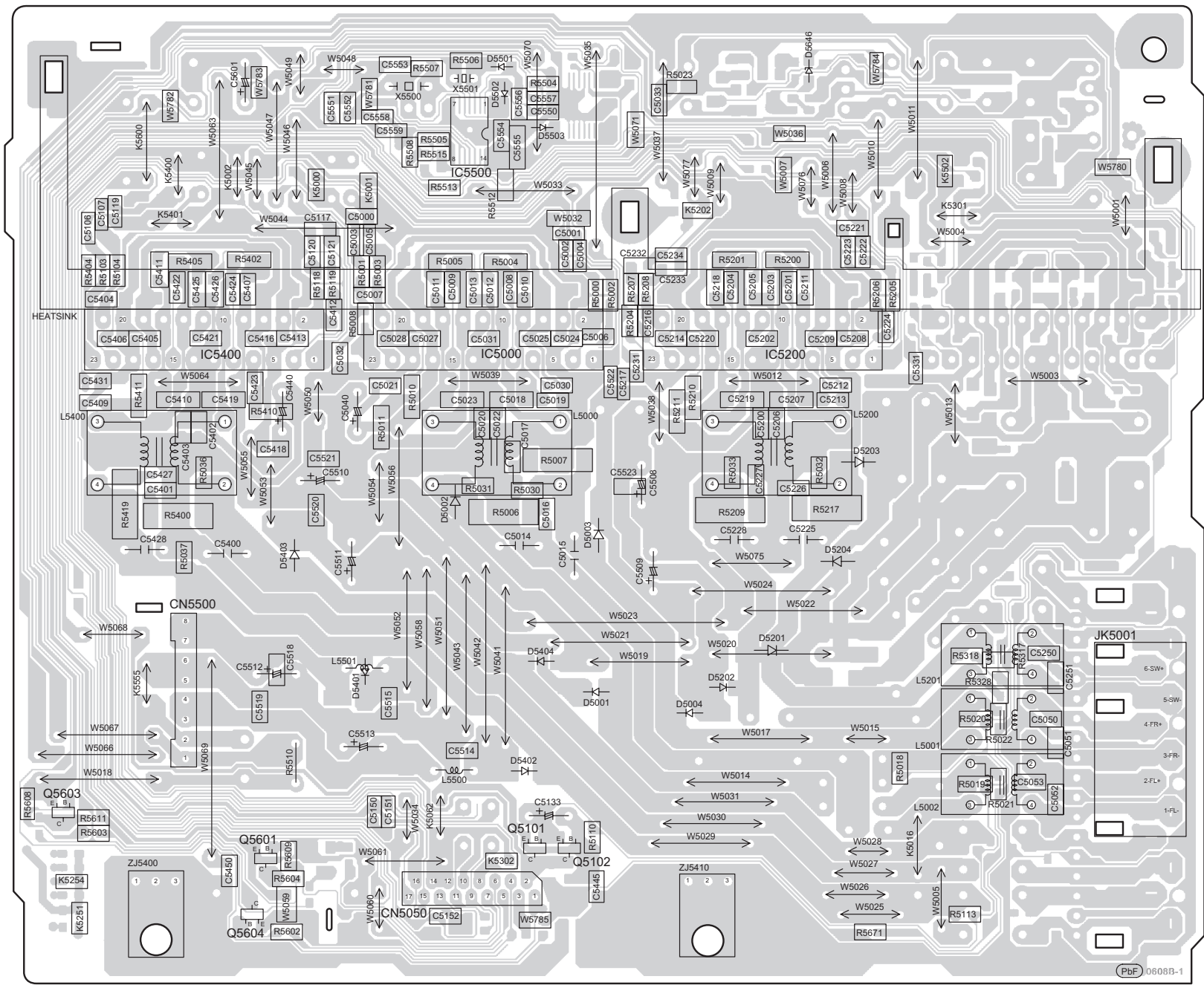
A horizontal number line with arrows at both ends. It is marked with integers from 1 to 10. Between each integer, there is a tick mark representing the half-integer value (e.g., 1.5, 2.5, etc.).

Top view of the H6603* module. The component locations are marked as follows:

- H6603***: Located at the top left, with a pinout diagram showing pins 5, 4, 3, 2, and 1.
- D6412**: Located in the center, with a pinout diagram showing pins 1, 2, 3, 4, 5, and 6.
- D6413**: Located to the right of D6412, with a pinout diagram showing pins 1, 2, 3, 4, 5, and 6.
- D6414**: Located to the right of D6413, with a pinout diagram showing pins 1, 2, 3, 4, 5, and 6.
- REF 0635AC**: Located at the bottom right, with a pinout diagram showing pins 1, 2, 3, 4, 5, and 6.

17.4. D-Amp P.C.B.

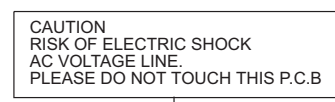
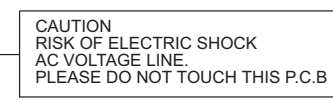
G D-AMP P.C.B. (REPX0727D)



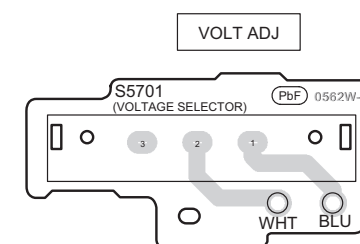
SPEAKERS

SA-AK780PN/PH
D-AMP P.C.B.

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



K



A

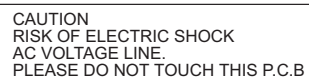
SMPS/ AC INLET/ VOLTAGE SELECTOR P.C.B.

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

1



J



NOTE: " * " REF IS FOR INDICATION ONLY.

SA- AK780PN/PH
SMPS/ AC INLET P.C.B.

18 Terminal Function of ICs

18.1. IC2801 (RFKWMAK780PN): IC Microprocessor

Pin No	Pin Name	I/O	Fucntions
1	SD_CMD	O	Jupiter and CD communication UART(TX)
2	SD_STAT	I	Jupiter and CD communication UART(RX)
3	SD_NRST	O	Jupiter and CD Communication line NRST
4	SD_INT/OCD_SDA	O	Jupiter and CD Communication line interrupt/ Micro P flashing
5	M.Port SW	I	Detection of Mport Jack connectivity . Hi - connect
6	OCD_SCL	O	Flashing of microp communication line
7	HP SW	I	Detection of Headphone Jack connectivity . Hi - connect
8	DEMO	I	Activation of Demo . Preset to demo off
9	REG_A	I	Country Region setting A
10	REG_B	-	N.C.
11	MMOD	I	Flashing of microp communication line
12	XTOUT	O	Resonator Oscillation . 10Mhz
13	XTIN	I	Resonator Oscillation . 10Mhz
14	VSS	-	Ground
15	XI	I	crystal clk Oscillation .32.7khz
16	XO	O	crystal clk Oscillation .32.7khz
17	VDD33	-	3.3V supply
18	VDD18	-	3.3V supply
19	NRST	I	Reset for mircop for programme initialize
20	CR14_Mode_SW	I	CR14 mode detection
21	CR14_Top_SW	I	CR14 Top SW detection
22	CR14_UD_Sensor	I	CR14 UD sensor detection
23	CR14_LO_F	O	CR 14 loader motor forward movement
24	CR14_LO_R	O	CR14 loader motor reverse movement
25	CR14_Close_SW	I	CR14 close sw detection
26	CR14_Home_SW	I	CR14 Home sw detection
27	CR14_Open_SW	I	CR14 Open sw detection
28	CD_OPEN_SW	O	CD Open sw detection
29	CD Loading CCW	O	CD loading counterclockwise
30	REG_C	I	Country Region setting C
31	Ipod TX	-	Not used
32	Ipod RX	-	Not used
33	CD_RESET	O	CD reset pin
34	CD loading CW	O	CD loading clockwise
35	CD REST SW	I	CD rest sw detection
36	EPR_CLK	O	EEPROM communication line
37	VDD18	-	3.3V supply
38	EPR_DAT	O	EEPROM communication line
39	VSS	-	Ground
40	MIC_SW	I	Detection of mic
41	EPR_CS	O	EEPROM communication line
42	Option_PLAY	-	Not used
43	Option_RSKIP	-	Not used
44	option_FSKIP	-	Not used
45	option_stop	-	Not used
46	Option_DET1	-	Not used
47	Option_DET2	-	Not used
48	IPOD_DET	-	Not used
49	ASP_DATA	O	ASP commiunication line

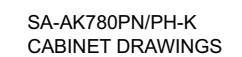
Pin No	Pin Name	I/O	Fucntions
50	ASP_CLK	O	ASP commiunication line
51	DCdet1	I	Detect of DAMP faulty (F61)
52	DCdet2	I	Detect of Power Supply & SMPS faulty (F76)
53	SW-MUTE	O	Muting for subwoofer
54	SW_LED	-	Not used
55	SWJOGA	-	Not used
56	SWJOGB	-	Not used
57	NC	-	Not used
58	MUTE A	O	Muting control
59	SW_LVL1	O	Subwoofer Level control
60	SW_LVL2	O	Subwoofer Level control
61	Option Pwr	-	Not used
62	CRTIMER	I	CR timer pin
63	VSS	-	Ground
64	MOD_DAMP	O	To activate Damp . Active hi
65	FHOP	O	To shift Damp switching freq from interference to AM freq
66	MUTE F	O	To mute Damp for speaker ouput muting
67	MUTES	O	Not used
68	SMPS BP	O	To shift SMPS switching freq from interference to AM freq
69	WMUTE	-	N.C.
70	WDET	-	Not used
71	NC	-	Not used
72	RDS DATA	-	N.C.
73	RDS CLK	-	N.C.
74	USB rec LED	O	to activate LED blinking effect when USB recording
75	Pcont	O	To switch on all power supply.Active Hi
76	RDS_RDY	-	Not used
77	Clip Attn	O	TO level down outoutput to reduce distortion. Active Hi
78	TU_STEREO	I	Tuner stereo mode detection line
79	TU_SDA	O	Tuner communication line
80	TU_TUNED	I	Tuner communication line
81	TU_CLK	O	Tuner communication line
82	REG_D	I	Country Region setting D
83	M.FUNC.LED	O	Memory LED light up when reading. Active Hi
84	M.REC.LED	O	Memort rec LED light up when recording to Memory. Active Hi
85	Sync/Halt	I	Pulse wave from SMPS to Detect of AC plug in or out
86	RMT	I	Remote controller detection communication line
87	BASS JOG2	I	Detection of basss jog
88	BASS JOG1	I	Detection of basss jog
89	VDD	-	3.3V supply
90	LED dimmer	O	Dim down the LED when dimmer on . Active Lo
91	VSS	-	Ground
92	Level meter	AD	To detect signal level for LED light up and light off
93	Clip cont	AD	To detect signal and distortion by level adjustment
94	Halt_sense	AD	Not used
95	Rotary SKIP	AD	TO detect rotary pulse for track search

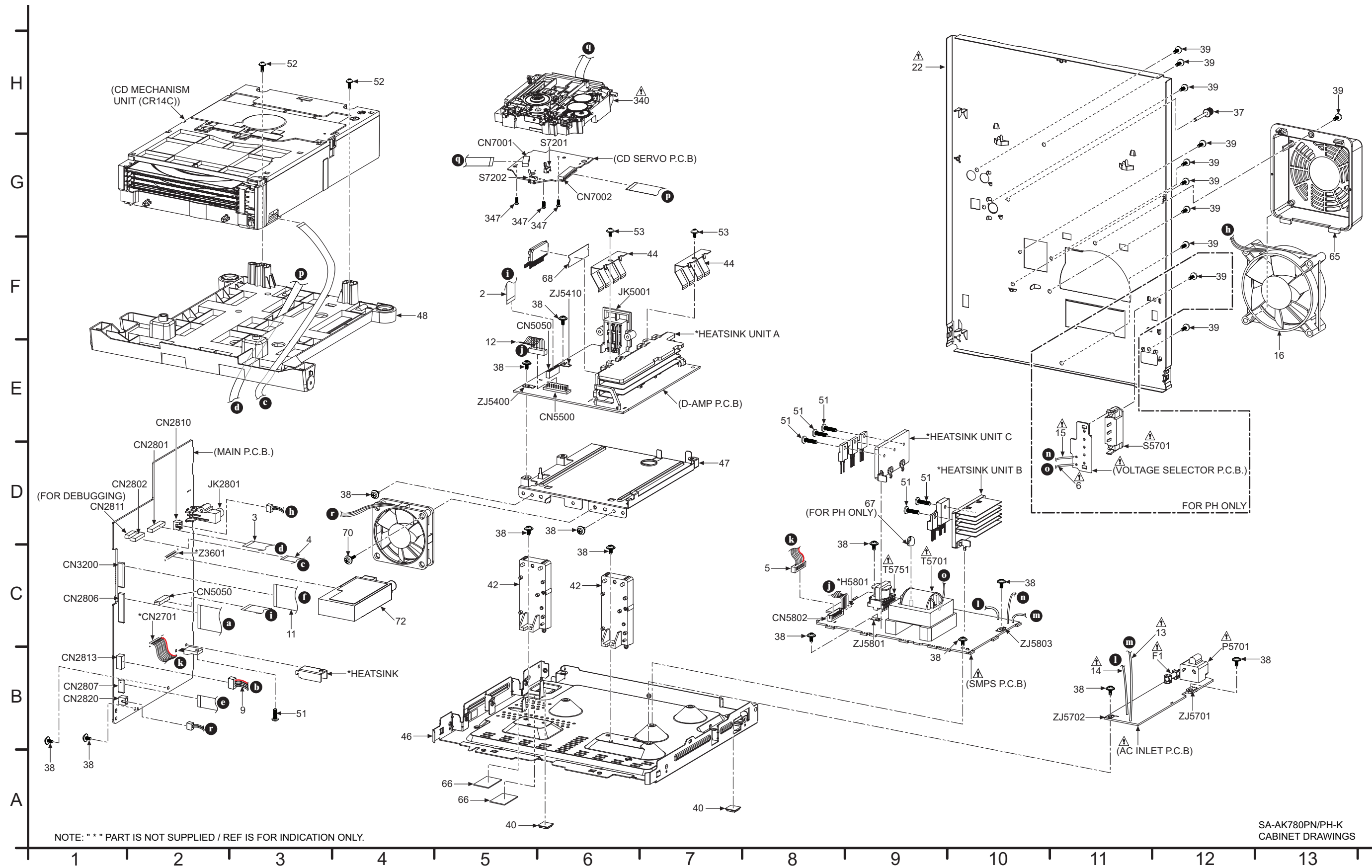
Pin No	Pin Name	I/O	Fucntions
96	Vol jog	AD	To detect vol jog pulses for volume control
97	Key3	AD	manual EQ/ CD/ FM-AM/ Mport-Aux /Memory/USB button detect
98	Key2	AD	tray Open_close/ change/CD1/CD2/CD3/CD4/CD5/Stop button detect
99	Key1	AD	Power/USB Rec/Memory rec/Subwoofer/ Dbass button detect
100	VREF+	-	3.3V supply

18.2. IC6601(C0HBB0000057): IC FL Driver

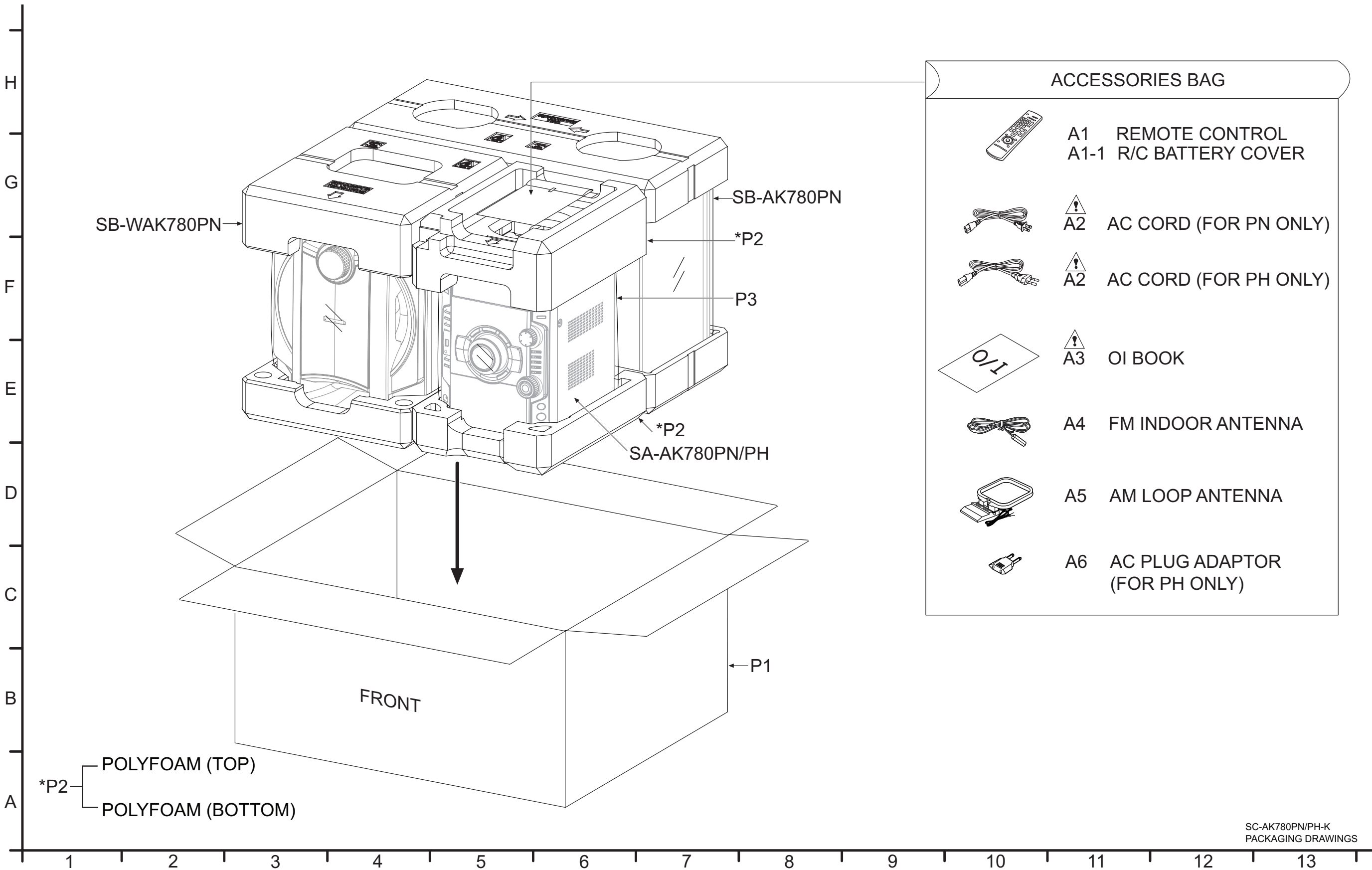
Pin No.	Terminal Name	I/O	Function
1	P0	O	No Connection
2	P1	-	No Connection
3	P2	-	No Connection
4	P3	-	No Connection
5	OSC	I	Oscillator Input
6	NC	-	No Connection
7	DIN	I	Data Input
8	CLK	I	Clock Input
9	STB	I	Serial Interface Strobe
10	K1	-	Key Data Input 1 (No Connection)
11	K2	-	Key Data Input 2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

19.1.1. Cabinet Parts Location





19.1.2. Packaging



19.1.3. Mechanical Repacement Parts List

Important Safety Notice

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

RTL (Retention Time Limited)

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

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

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- This product uses a laser diode. Refer to "Precaution of Laser Diode".
- All parts mentioned are supplied by 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	RDGX0040A	VOLUME GEAR	1	
	2	REEX0881	17P FFC (MAIN-DAMP)	1	
	3	REEX0999	25P FFC (MAIN-CD)	1	
	4	REEX0904-J	11P FFC (OPU-MAIN)	1	
	5	REXX0680	11P WIRE (MAIN-SMPS)	1	
	6	REXX0687-1	BLUE WIRE (VOLT SELECTOR -SMPS)	1	PH
	7	REEX0971	27P FFC (MAIN-PANEL)	1	
	8	REXX0756	5P WIRE (SUB PANEL-MEMORY)	1	
	9	REXX0780	5P WIRE (MAIN-MIC)	1	
	10	REEX0987	8P FFC (MPORT-MAIN)	1	
	11	REEX0998	30P FFC (MAIN-JUPITER)	1	
	12	REXX0683-1	8P WIRE (SMPS-DAMP)	1	
	13	REZZ0024-1	BLACK WIRE (AC INLET-SMPS)	1	PH
	13	REXX0684-1	BLACK WIRE (AC INLET-SMPS)	1	PN
	14	REXX0685-1	RED WIRE (AC INLET-SMPS)	1	PN
	14	REZZ0023-1	RED WIRE (AC INLET-SMPS)	1	PH

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	15	REXX0686-1	WHITE WIRE (VOL SELECTOR-SMPS)	1	PH
	16	L6FALEFH0023	FAN UNIT ASS'Y	1	
	17	RFGAK780PHK	FRONT PANEL ASS'Y	1	
	18	RGLX0180-Q	MEMORY/USB LIGHT BAR	4	
	19	RGKX0506B-K	CD LID	1	
	20	RGWX0117A-K	MEMORY/USB LIGHT FILTER	1	
	21	RGLX0174-Q	VOLUME LIGHT PIECE	1	
	22	RGRX0070ABA2	REAR PANEL	1	PN
	22	RGRX0070ACA1	REAR PANEL	1	PH
	23	RMNX0314-K	MEMORY/USB LIGHT HOLDER	1	
	24	RKWX0295-Q	DECK COVER	1	
	25	RGUX0791A-S	MAIN FUNCTION BUTTON L	1	
	26	RGUX0792-S	MAIN FUNCTION BUTTON R	1	
	27	RGUX0793-S	FUNCTION BUTTON TOP	1	
	28	RGUX0794A-S	FUNCTION BUTTON BOTTOM	1	
	29	RGUX0795-K	5 CD BUTTON	1	
	30	RGUX0796-K	RECORD BUTTON	1	
	31	RGUX0797A-K	CASSETTE EJECT BUTTON	1	
	32	RGUX0798-K	CD CHANGE BUTTON	1	
	33	RGWX0112-S1	VOLUME KNOB	1	
	34	RGWX0113-S	SKIP KNOB	1	
	35	RHD26046-L	SCREW	15	
	36	RHD30007-K2J	SCREW	6	
	37	RHD30070	SCREW	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	38	RHD30111-31	SCREW	14	
	39	RHD30119-S	SCREW	15	PN
	39	RHD30119-S	SCREW	16	PH
	40	RKA0072-KJ	LEG CUSHION	2	
⚠	41	RKMX0144A-K	TOP CABINET	1	
	42	RMAX0333-2	CHASSIS SUPPORT	2	
	43	RMBX0091	CD LID OPEN SPRING	1	
	44	RMC0465	TR SPRING	2	
	45	RMGX0033	CUSHION RUBBER	2	
	46	RMKX0148A-3	BOTTOM CHASSIS	1	
	47	RMKX0149-2	INNER CHASSIS	1	
	48	RMKX0151B	CD CHASSIS	1	
	49	RMNV0079-1	FL HOLDER	1	
	50	RMNX0151	LED HOLDER	2	
	51	XTB3+10JFJ	SCREW	6	
	52	XTW3+12TFJ	SCREW	2	
	53	XTW3+8TFJ	SCREW	2	
	54	RGUX0790-K	POWER BUTTON	1	
	55	RYPX0393-S1	DYNAMIC BASS KNOB UNIT	1	
	56	RYPX0321G-S1	DYNAMIC BASS BUTTON UNIT	1	
	57	RSCX0207A	SD SHIELD PLATE A	1	
	58	RSCX0208A	SD SHIELD PLATE B	1	
	59	RKAX0042-K	LEG CUSHION	2	
	61	RMNX0297	LED HOLDER (SIDE LIGHT BAR)	2	
	62	RMNX0315-K	MEMORY/USB LED HOLDER	1	
	63	RMNX0316	LED HOLDER (CENTRE LIGHT PIECE)	2	
	65	RMQX0318-K2	FAN COVER	1	
	66	RMVX0126	HOLE COVER	2	
	67	RMZ0339	ZNR COVER	1	PH
	68	RMZX0039	IC INSULATOR	1	
	69	RGWX0056-1K1	MIC VOL KNOB	1	
	70	XTW3+20TFJ	SCREW	1	
	71	RGLX0179-Q	USB RECORD LIGHT PIECE	1	
	72	J3CCBB000010	TUNER PACK	1	
			TRAVERSE DECK		
⚠	340	RAEX0190A-V	TRAVERSE ASS'Y (W/O CD SERVO P.C.B)	1	(RTL)
	347	XTN2+6GFJ	SCREW	3	
			PACKING MATERIALS		
	P1	RPGX2090	PACKING CASE	1	PN
	P1	RPGX2091	PACKING CASE	1	PH
	P2	RPNX0601	POLYFOAM	1	
	P3	RPFX0198	MIRAMAT SHEET	1	
			ACCESSORIES		
	A1	N2QAYB000425	REMOTE CONTROL	1	
	A1-1	RKK-PT470EBK	R/C BATTERY COVER	1	
⚠	A2	K2CB2CB00021	AC CORD	1	PN
⚠	A2	K2CQ2CA00007	AC CORD	1	PH
⚠	A3	RQTX0265-1M	O/I BOOK (En/Sp)	1	PN
⚠	A3	RQTX0266-1M	O/I BOOK (Sp)	1	PH
	A4	RSAX0002	FM INDOOR ANTENNA	1	
	A5	N1DY000003	AM LOOP ANTENNA	1	
	A6	K2DAY00002	AC PLUG ADAPTER	1	PH

19.2. Electrical Replacement Part List

Important Safety Notice

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

RTL (Retention Time Limited)

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

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

Note:

- When replacing any of these components, be sure to use only manufacturer's specified parts shown in the replacement part list.
- The parenthesized indications on the Remarks column specify the destination & product color (Refer to the cover page for the information).
- Parts without these indications shall be used for all areas.
- This product uses a laser diode. Refer to "Precaution of Laser Diode".
- Capacitor value are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF), F=Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1000 (OHM).
- All parts mentioned are supplied by 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		
Δ	PCB1	REPX0714F	SMPS P.C.B.	1	(RTL) PH
Δ	PCB1	REPX0714G	SMPS P.C.B.	1	(RTL) PN
	PCB2	REPX0735B	MAIN P.C.B.	1	(RTL) PN
	PCB2	REPX0735C	MAIN P.C.B.	1	(RTL) PH
	PCB3	REPX0727D	D-AMP P.C.B.	1	(RTL)
Δ	PCB4	REPX0714F	AC INLET P.C.B.	1	(RTL) PH
Δ	PCB4	REPX0714G	AC INLET P.C.B.	1	(RTL) PN
	PCB5	REPX0739A	CD SERVO P.C.B.	1	(RTL)
	PCB6	RFBX0750B	JUPITER P.C.B.	1	(RTL)
	PCB7	REPX0749B	PANEL P.C.B.	1	(RTL)
	PCB8	REPX0735B	MIC P.C.B.	1	(RTL) PN
	PCB8	REPX0735C	MIC P.C.B.	1	(RTL) PH
Δ	PCB9	REPX0714F	VOLTAGE SELEC- TOR P.C.B.	1	(RTL) PH
	PCB10	REPX0749B	MEMORY P.C.B.	1	(RTL)
	PCB11	REPX0749B	MPORT/ HEAD- PHONE P.C.B.	1	(RTL)
			INTEGRATED CIR- CUITS		
	IC503	C0DBZHE00026	IC	1	
	IC551	C0FBAK000026	IC	1	
	IC552	C0FBBY000027	IC	1	
	IC701	RFKWFAK780PN	IC	1	
	IC751	C3ABQG000105	IC	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	IC801	MN2WS0042AA	IC	1	
	IC802	C0DBZYY00293	IC	1	
	IC1000	C1AB00003130	IC	1	
	IC2121	C0ABBB000230	IC	1	
	IC2200	RFKWEAK780PN	IC	1	
	IC2701	C0DAAYG00001	IC	1	
	IC2741	C0DBGYY00089	IC	1	
	IC2761	C0CAAKG00046	IC	1	
	IC2801	RFKWMAK780PN	IC	1	
	IC2803	C1AB00003093	IC	1	
	IC2804	C0AABB000125	IC	1	
	IC2810	C0ABBB000230	IC	1	
	IC5000	C1BA00000492	IC	1	
	IC5200	C1BA00000492	IC	1	
	IC5400	C1BA00000492	IC	1	
	IC5500	C0JBAB000902	IC	1	
	IC5701	C5HACYY00004	IC	1	PN
	IC5701	C5HACYY00005	IC	1	PH
	IC5799	MIP4110MSSCF	IC	1	
	IC5801	C0DABFC00002	IC	1	
	IC5899	C0DAEMZ00001	IC	1	
	IC6601	C0HBB0000057	IC	1	
	IC7001	MN6627553PA	IC	1	
	IC7002	BA5948FPE2	IC	1	
			TRANSISTORS		
	Q801	B1GBCFGN00016	TRANSISTOR	1	
	Q2310	B1GFGCAA00001	TRANSISTOR	1	
	Q2320	B1ABCF000176	TRANSISTOR	1	
	Q2371	B1ABCF000176	TRANSISTOR	1	
	Q2372	B1ABCF000176	TRANSISTOR	1	
	Q2373	B1ABCF000176	TRANSISTOR	1	
	Q2374	B1GDCFJJ00047	TRANSISTOR	1	
	Q2375	B1GDCFJJ00047	TRANSISTOR	1	
	Q2410	B1GFGCAA00001	TRANSISTOR	1	
	Q2501	B1ABCF000176	TRANSISTOR	1	
	Q2510	B1GFGCAA00001	TRANSISTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	Q2559	B1ABCF000176	TRANSISTOR	1	
	Q2571	B1GDCFJJ0047	TRANSISTOR	1	
	Q2708	B1ADCE000012	TRANSISTOR	1	
	Q2711	B1BACG000023	TRANSISTOR	1	
	Q2735	B1BACD000018	TRANSISTOR	1	
	Q2743	B1ACKD000006	TRANSISTOR	1	
	Q2745	B1GBCFLL0037	TRANSISTOR	1	
	Q2751	B1BACG000023	TRANSISTOR	1	
	Q2761	B1BCCG000002	TRANSISTOR	1	
	Q2771	B1GBCFJJ0051	TRANSISTOR	1	
	Q2772	B1GBCFJJ0051	TRANSISTOR	1	
	Q2812	B1GBCFLL0037	TRANSISTOR	1	
	Q2900	B1BABK000001	TRANSISTOR	1	
	Q2942	B1ACKD000006	TRANSISTOR	1	
	Q2943	B1ABCF000176	TRANSISTOR	1	
	Q2947	B1ABCF000176	TRANSISTOR	1	
	Q2948	B1ABCF000176	TRANSISTOR	1	
	Q2949	B1ABCF000176	TRANSISTOR	1	
	Q2961	B1ACKD000006	TRANSISTOR	1	
	Q2967	B1ABCF000176	TRANSISTOR	1	
	Q3115	B1ABCF000176	TRANSISTOR	1	
	Q3116	B1ABCF000176	TRANSISTOR	1	
	Q3301	B1ABCF000176	TRANSISTOR	1	
	Q5101	B1ABCF000176	TRANSISTOR	1	
	Q5102	B1ABCF000176	TRANSISTOR	1	
	Q5601	B1ABCF000176	TRANSISTOR	1	
	Q5603	B1ADCE000012	TRANSISTOR	1	
	Q5604	B1ABCF000176	TRANSISTOR	1	
	Q5720	2SC3940ARA	TRANSISTOR	1	
	Q5721	2SA207700L	TRANSISTOR	1	
	Q5722	B1ABCF000176	TRANSISTOR	1	
	Q5802	B1ABCF000176	TRANSISTOR	1	
	Q5803	2SC3940ARA	TRANSISTOR	1	
	Q5860	2SA207700L	TRANSISTOR	1	
	Q5861	B1ABCF000176	TRANSISTOR	1	
	Q5862	B1ABCF000176	TRANSISTOR	1	
	Q6511	B1GBCFJN0033	TRANSISTOR	1	
	Q6512	B1GBCFJN0033	TRANSISTOR	1	
	Q6600	B1GBCFJN0033	TRANSISTOR	1	
	Q6601	B1GBCFJN0033	TRANSISTOR	1	
	Q6602	B1GBCFJN0033	TRANSISTOR	1	
	Q6603	B1GBCFJN0033	TRANSISTOR	1	
	Q7601	B1ADCF000001	TRANSISTOR	1	
	QR2317	B1GDCFGA0018	TRANSISTOR	1	
	QR5801	UNR221400L	TRANSISTOR	1	
	QR5802	B1GDCFGA0018	TRANSISTOR	1	
	QR5810	B1GBCFLL0037	TRANSISTOR	1	
			DIODES		
	D801	MA27D2900L	DIODE	1	
	D802	B0JCMD000022	DIODE	1	
	D803	B3AAB0000322	DIODE	1	
	D804	B0JCMD000022	DIODE	1	
	D2503	B0ADCC000002	DIODE	1	
	D2711	B0BC4R3A0006	DIODE	1	
	D2730	B0EAKM000117	DIODE	1	
	D2731	B0EAKM000117	DIODE	1	
	D2732	B0EAKM000117	DIODE	1	
	D2733	B0BC9R000008	DIODE	1	
	D2734	B0EAKM000117	DIODE	1	
	D2735	B0EAKM000117	DIODE	1	
	D2753	MAZ8100G0L	DIODE	1	
	D2774	B0ADCJ000020	DIODE	1	
	D2812	B0ACCK000005	DIODE	1	
	D2813	B0ACCK000005	DIODE	1	
	D2829	B0EAKM000117	DIODE	1	
	D2834	B0EAKM000117	DIODE	1	
	D2901	B0BC035A0007	DIODE	1	
	D2903	B0EAMM000057	DIODE	1	
	D2906	B0JAME000114	DIODE	1	
	D2908	B0EAMM000057	DIODE	1	
	D2909	MAZ8240GHL	DIODE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	D2920	MA2J1110GL	DIODE	1	
	D2940	MA2J1110GL	DIODE	1	
	D2946	B0ADCJ000020	DIODE	1	
	D2947	B0BC5R600003	DIODE	1	
	D2948	B0BC5R600003	DIODE	1	
	D2968	B0ADCJ000020	DIODE	1	
	D3920	B0EAMM000057	DIODE	1	
	D3921	B0EAMM000057	DIODE	1	
	D5001	B0HCSP000001	DIODE	1	
	D5002	B0HCSP000001	DIODE	1	
	D5003	B0HCSP000001	DIODE	1	
	D5004	B0HCSP000001	DIODE	1	
	D5201	B0HCSP000001	DIODE	1	
	D5202	B0HCSP000001	DIODE	1	
	D5203	B0HCSP000001	DIODE	1	
	D5204	B0HCSP000001	DIODE	1	
	D5401	B0HCSP000001	DIODE	1	
	D5402	B0HCSP000001	DIODE	1	
	D5403	B0HCSP000001	DIODE	1	
	D5404	B0HCSP000001	DIODE	1	
	D5501	MA2J1110GL	DIODE	1	
	D5502	MA2J1110GL	DIODE	1	
	D5503	MAZ8051GML	DIODE	1	
	D5646	MAZ8075GML	DIODE	1	
	D5701	B0FBAR000041	DIODE	1	
	D5702	B0ZAZ0000052	DIODE	1	
	D5721	B0BC010A0007	DIODE	1	PH
	D5721	MAZ8180GML	DIODE	1	FN
	D5722	B0BC019A0007	DIODE	1	
	D5723	MA2J1110GL	DIODE	1	
	D5724	MA2J1110GL	DIODE	1	
	D5725	B0BC6R100010	DIODE	1	
	D5726	B0EAKM000117	DIODE	1	
	D5727	MA2J1110GL	DIODE	1	
	D5728	MA2J1110GL	DIODE	1	
	D5729	B0EAMM000057	DIODE	1	
	D5730	MA2J1110GL	DIODE	1	
	D5732	B0BC035A0007	DIODE	1	
	D5733	B0HCMM000019	DIODE	1	
	D5793	B0HAMP000094	DIODE	1	
	D5797	MA2J7280GL	DIODE	1	
	D5798	B0HAMP000094	DIODE	1	
	D5801	B0HBSM000043	DIODE	1	
	D5802	B0HBSM000043	DIODE	1	
	D5803	B0HFRJ000012	DIODE	1	
	D5804	B0EAMM000057	DIODE	1	
	D5805	B0EAMM000057	DIODE	1	
	D5806	MAZ8075GML	DIODE	1	
	D5807	MA2J1110GL	DIODE	1	
	D5809	MA2J1110GL	DIODE	1	
	D5896	B0EAMM000057	DIODE	1	
	D6402	B3AEA0000131	DIODE	1	
	D6404	B3AEA0000131	DIODE	1	
	D6412	B3AEA0000131	DIODE	1	
	D6413	B3AEA0000131	DIODE	1	
	D6414	B3AEA0000131	DIODE	1	
	D6511	B3AEA0000131	DIODE	1	
	D6512	B3AEA0000131	DIODE	1	
	D6604	B3AEA0000131	DIODE	1	
	D6605	B3AEA0000131	DIODE	1	
	D6672	B0BC2R4A0006	DIODE	1	
	D7650	MAZ8056GML	DIODE	1	
	DZ2702	B0JCPD000025	DIODE	1	
⚠	DZ5701	ERZV10V511CS	ZNR	1	
			VARIABLE RESIS- TORS		
	VR1200	EVUF2AF15B14	MIC VOL JOG	1	
	VR6500	EVEKE2F3524B	VOLUME JOG	1	
	VR6630	K9AA012Y0003	BASS CONTROL JOG	1	
	VR6882	K9AA012Y0002	TRACK JOG	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
			SWITCHES		
△	S5701	K0ABCA000007	SW VOLTAGE SELECTOR	1	PH
	S6100	EVQ21405RJ	SW POWER	1	
	S6104	EVQ21405RJ	SW USB REC	1	
	S6107	EVQ21405RJ	SW SUBWOOFER	1	
	S6109	EVQ21405RJ	SW D.BASS	1	
	S6200	EVQ21405RJ	SW OPEN/CLOSE	1	
	S6201	EVQ21405RJ	SW EXCHANGE	1	
	S6202	EVQ21405RJ	SW CD DISC 1	1	
	S6203	EVQ21405RJ	SW CD DISC 2	1	
	S6204	EVQ21405RJ	SW CD DISC 3	1	
	S6205	EVQ21405RJ	SW CD DISC 4	1	
	S6206	EVQ21405RJ	SW CD DISC 5	1	
	S6207	EVQ21405RJ	SW STOP/DEMO	1	
	S6300	EVQ21405RJ	SW MANUAL EQ-	1	
	S6301	EVQ21405RJ	SW MANUAL EQ	1	
	S6302	EVQ21405RJ	SW MANUAL EQ+	1	
	S6303	EVQ21405RJ	SW CD	1	
	S6304	EVQ21405RJ	SW FM/AM	1	
	S6305	EVQ21405RJ	SW AUX	1	
	S6306	EVQ21405RJ	SW MUSIC PORT	1	
	S6307	EVQ21405RJ	SW USB	1	
	S7201	K0L1BA000133	SW REST	1	
	S7202	K0L1BA000133	SW CD OPEN	1	
	SW3	K0L1BA000134	SW	1	
			CONNECTORS		
	CN503	K1FY104B0011	4P CONNECTOR (USB)	1	
	CN601	K1MY30BA0046	30P CONNECTOR	1	
	CN602	K1MY10AA0021	10P CONNECTOR	1	
	CN2801	K1MN25AA0004	25P CONNECTOR	1	
	CN2802	K1MN11AA0003	11P CONNECTOR	1	
	CN2806	K1MY27AA0124	27P CONNECTOR	1	
	CN2807	K1MN10AA0003	10P CONNECTOR	1	
	CN2810	K1KA02AA0186	2P CONNECTOR	1	
	CN2811	K1MY06AA0124	6P CONNECTOR	1	
	CN2813	K1KA05AA0193	5P CONNECTOR	1	
	CN2820	K1KA02AA0186	2P CONNECTOR	1	
	CN3200	K1MN30AA0004	30P CONNECTOR	1	
	CN5050	K1MN17AA0004	17P CONNECTOR	2	
	CN5500	K1KA08AA0180	8P CONNECTOR	1	
	CN5802	K1KA11AA0194	11P CONNECTOR	1	
	CN6001	K1MY27AA0124	27P CONNECTOR	1	
	CN6602	K1KA05AA0193	5P CONNECTOR	1	
	CN6807	K1MN10AA0003	10P CONNECTOR	1	
	CN7001	K1MN16B00154	16P CONNECTOR	1	
	CN7002	K1MN25B00019	25P CONNECTOR	1	
			COILS AND INDUCTORS		
	L551	G1C100KA0101	INDUCTOR	1	
	L552	G1C100KA0101	INDUCTOR	1	
	L553	G1C100KA0101	INDUCTOR	1	
	L804	G1C100KA0101	INDUCTOR	1	
	L805	G1C100KA0101	INDUCTOR	1	
	L1201	J0JBC0000019	INDUCTOR	1	
	L2120	G0C330JA0055	INDUCTOR	1	
	L2702	G0A101ZA0028	CHOKE COIL	1	
	L2910	G0A220GA0026	CHOKE COIL	1	
	L5000	G0A150L00003	CHOKE COIL	1	
	L5001	G0B9R5K00003	LINE FILTER	1	
	L5002	G0B9R5K00003	LINE FILTER	1	
	L5200	G0A150L00003	CHOKE COIL	1	
	L5201	G0B9R5K00003	LINE FILTER	1	
	L5400	G0A150L00003	CHOKE COIL	1	
	L5500	J0JKB0000020	INDUCTOR	1	
	L5501	J0JKB0000020	INDUCTOR	1	
△	L5702	ELF22V035B	LINE FILTER	1	
	L6671	J0JBC0000019	INDUCTOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	L6801	J0JBC0000019	INDUCTOR	1	
	L6802	J0JBC0000019	INDUCTOR	1	
	L6811	J0JBC0000019	INDUCTOR	1	
	L6812	J0JBC0000019	INDUCTOR	1	
	L6851	J0JBC0000019	INDUCTOR	1	
	L6863	J0JBC0000019	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		
△	T2900	G4D1A0000117	SWITCHING TRANSFORMER	1	
△	T5701	ETS48AB116AC	MAIN TRANSFORMER	1	PH
△	T5701	ETS48AB12GAC	MAIN TRANSFORMER	1	PN
△	T5751	ETS19AB256AG	SUB TRANSFORMER	1	
			COMPONENT COMBINATION		
	Z6601	B3RAB0000081	REMOTE CONTROL SENSOR	1	
	ZJ5400	K4CZ01000027	TERMINAL	1	
	ZJ5410	K4CZ01000027	TERMINAL	1	
	ZJ5701	K4CZ01000027	TERMINAL	1	
	ZJ5702	K4CZ01000027	TERMINAL	1	PH
	ZJ5801	K4CZ01000027	TERMINAL	1	
	ZJ5803	K4CZ01000027	TERMINAL	1	
			PHOTO COUPLERS		
△	PC5701	B3PBA0000402	PHOTO COUPLER	1	
△	PC5702	B3PBA0000402	PHOTO COUPLER	1	
△	PC5720	B3PBA0000402	PHOTO COUPLER	1	
△	PC5799	B3PBA0000402	PHOTO COUPLER	1	
			OSCILLATORS		
	X801	H0J169500031	CRYSTAL OSCILLATOR	1	
	X802	H0J120500057	CRYSTAL OSCILLATOR	1	
	X2602	H2B100500004	CRYSTAL OSCILLATOR	1	
	X2611	H0A327200115	CRYSTAL OSCILLATOR	1	
	X5500	H2A6023A0011	CRYSTAL OSCILLATOR	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	X5501	H2A7003A0011	CRYSTAL OSCILLATOR	1	
	X7201	H0H169500013	CRYSTAL OSCILLATOR	1	
			FL DISPLAY		
	FL6601	A2BB00000171	LCD DISPLAY	1	
			FUSE HOLDERS		
	ZA5701	K3GE1ZZ00001	FUSE HOLDER	1	
	ZA5702	K3GE1ZZ00001	FUSE HOLDER	1	
			FUSES		
⚠	F1	K5D802APA008	FUSE	1	PN
⚠	F1	K5D802BNA005	FUSE	1	PH
			FUSE PROTECTOR		
⚠	FP2901	K5G4013A0001	FUSE PROTECTOR	1	
			THERMISTORS		
⚠	TH5701	D4CAA5R10001	THERMISTOR	1	PN
⚠	TH5702	D4CAA2R20001	THERMISTOR	1	PH
⚠	TH5860	D4CC11040013	THERMISTOR	1	
			JACKS		
	JK1100	K2HC103A0031	JK MIC	1	
	JK2801	K2HA204B0153	JK AUX IN	1	
	JK5001	K4AL06B00001	JK SPEAKER	1	
	JK6800	K2HC103A0031	JK HEADPHONE	1	
	JK6810	K2HC1YYA0002	JK MUSIC PORT	1	
⚠	P5701	K2AA2B000017	AC INLET	1	PH
⚠	P5701	K2AB2B000011	AC INLET	1	PN
			CHIP JUMPERS		
	K1	D0GBR00JA008	0 1/16W	1	
	K2	D0GBR00JA008	0 1/16W	1	
	K7	D0GBR00JA008	0 1/16W	1	PH
	K8	D0GBR00JA008	0 1/16W	1	PN
	K2321	D0GBR00JA008	0 1/16W	1	
	K2322	D0GBR00JA008	0 1/16W	1	
	K3302	D0GBR00JA008	0 1/16W	1	
	K3303	D0GBR00JA008	0 1/16W	1	
	K3901	D0GBR00JA008	0 1/16W	1	
	K5000	D0GBR00JA008	0 1/16W	1	
	K5001	D0GDR00JA017	0 1/10W	1	
	K5202	D0GBR00JA008	0 1/16W	1	
	K5251	D0GBR00JA008	0 1/16W	1	
	K5254	D0GBR00JA008	0 1/16W	1	
	K5302	D0GBR00JA008	0 1/16W	1	
	K5502	D0GBR00JA008	0 1/16W	1	
	K5899	D0GBR00JA008	0 1/16W	1	
	L501	D0GDR00JA017	0 1/10W	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	
	W231	D0GBR00JA008	0 1/16W	1	
	W233	D0GDR00JA017	0 1/10W	1	
	W234	D0GBR00JA008	0 1/16W	1	
	W235	D0GBR00JA008	0 1/16W	1	
	W503	D0GDR00JA017	0 1/10W	1	
	W508	D0GBR00JA008	0 1/16W	1	
	W509	D0GBR00JA008	0 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	W513	D0GBR00JA008	0 1/16W	1	
	W514	D0GDR00JA017	0 1/10W	1	
	W515	D0GDR00JA017	0 1/10W	1	
	W516	D0GBR00JA008	0 1/16W	1	
	W517	D0GDR00JA017	0 1/10W	1	
	W518	D0GDR00JA017	0 1/10W	1	
	W519	D0GDR00JA017	0 1/10W	1	
	W520	D0GBR00JA008	0 1/16W	1	
	W535	D0GBR00JA008	0 1/16W	1	
	W538	D0GDR00JA017	0 1/10W	1	
	W540	D0GBR00JA008	0 1/16W	1	
	W541	D0GDR00JA017	0 1/10W	1	
	W560	D0GDR00JA017	0 1/10W	1	
	W564	D0GDR00JA017	0 1/10W	1	
	W566	D0GDR00JA017	0 1/10W	1	
	W567	D0GDR00JA017	0 1/10W	1	
	W577	D0GDR00JA017	0 1/10W	1	
	W578	D0GBR00JA008	0 1/16W	1	
	W580	D0GBR00JA008	0 1/16W	1	
	W581	D0GDR00JA017	0 1/10W	1	
	W5007	D0GDR00JA017	0 1/10W	1	
	W5032	ERJ8GEY0R00V	0 1/4W	1	
	W5036	D0GBR00JA008	0 1/16W	1	
	W5059	D0GDR00JA017	0 1/10W	1	
	W5071	D0GDR00JA017	0 1/10W	1	
	W5780	D0GDR00JA017	0 1/10W	1	
	W5781	D0GBR00JA008	0 1/16W	1	
	W5782	D0GBR00JA008	0 1/16W	1	
	W5783	D0GBR00JA008	0 1/16W	1	
	W5784	D0GBR00JA008	0 1/16W	1	
	W5785	D0GBR00JA008	0 1/16W	1	
	W5801	D0GBR00JA008	0 1/16W	1	
	W5803	D0GDR00JA017	0 1/10W	1	
	W5804	D0GBR00JA008	0 1/16W	1	
	W5805	D0GDR00JA017	0 1/10W	1	
	W5806	D0GDR00JA017	0 1/10W	1	
	W5807	D0GDR00JA017	0 1/10W	1	
	W6641	D0GDR00JA017	0 1/10W	1	
	W6652	D0GDR00JA017	0 1/10W	1	
	W6655	D0GDR00JA017	0 1/10W	1	
	W6656	D0GDR00JA017	0 1/10W	1	
	W6657	D0GBR00JA008	0 1/16W	1	
	W6668	D0GBR00JA008	0 1/16W	1	
	W7001	D0GDR00JA017	0 1/10W	1	
	W7002	D0GBR00JA008	0 1/16W	1	
	W7003	D0GBR00JA008	0 1/16W	1	
	W7004	D0GBR00JA008	0 1/16W	1	
	W7005	D0GBR00JA008	0 1/16W	1	
	W7006	D0GBR00JA008	0 1/16W	1	
	W7007	D0GDR00JA017	0 1/10W	1	
	W7008	D0GBR00JA008	0 1/16W	1	
	W7009	D0GBR00JA008	0 1/16W	1	
	W7010	D0GBR00JA008	0 1/16W	1	
	W7011	D0GBR00JA008	0 1/16W	1	
	W7012	D0GBR00JA008	0 1/16W	1	
	W7013	D0GBR00JA008	0 1/16W	1	
	W7014	D0GBR00JA008	0 1/16W	1	
	W7016	D0GBR00JA008	0 1/16W	1	
	W7017	D0GBR00JA008	0 1/16W	1	
	W7018	D0GBR00JA008	0 1/16W	1	
	W7019	D0GBR00JA008	0 1/16W	1	
	W7020	D0GBR00JA008	0 1/16W	1	
	W7021	D0GBR00JA008	0 1/16W	1	
	W7023	D0GBR00JA008	0 1/16W	1	
	W7024	D0GBR00JA008	0 1/16W	1	
	W7025	D0GDR00JA017	0 1/10W	1	
	W7026	D0GDR00JA017	0 1/10W	1	
			RESISTORS		
	D3922	D0GB474JA008	470K 1/16W	1	
	R517	ERJ2GE0R00X	0 1/16W	1	
	R518	ERJ2GE0R00X	0 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	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	
	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	
	R761	D0GA473JA023	47K 1/16W	1	
	R762	D0GA473JA023	47K 1/16W	1	
	R763	D0GA473JA023	47K 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	
	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	59 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	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R894	ERJ2GE0R00X	0 1/16W	1	
	R895	ERJ2GE0R00X	0 1/16W	1	
	R898	D0GA103JA023	10K 1/16W	1	
	R1100	D0GB682JA008	6.8K 1/16W	1	
	R1101	D0GB153JA008	15K 1/16W	1	
	R1102	D0GB331JA008	330 1/16W	1	
	R1103	D0GB681JA008	680 1/16W	1	
	R1104	D0GB561JA008	560 1/16W	1	
	R1105	D0GB101JA008	100 1/16W	1	
	R1110	D0GB472JA008	4.7K 1/16W	1	
	R1111	D0GB104JA008	100K 1/16W	1	
	R2030	D0GBR00JA008	0 1/16W	1	
	R2032	D0GBR00JA008	0 1/16W	1	
	R2041	D0GB562JA008	5.6K 1/16W	1	
	R2042	D0GB272JA008	2.7K 1/16W	1	
	R2043	D0GB562JA008	5.6K 1/16W	1	
	R2044	D0GB272JA008	2.7K 1/16W	1	
	R2046	D0GB332JA008	3.3K 1/16W	1	
	R2051	D0GB272JA008	2.7K 1/16W	1	
	R2052	D0GB272JA008	2.7K 1/16W	1	
	R2053	D0GB682JA008	6.8K 1/16W	1	
	R2054	D0GB682JA008	6.8K 1/16W	1	
	R2061	D0GB182JA008	1.8K 1/16W	1	
	R2062	D0GB682JA008	6.8K 1/16W	1	
	R2063	D0GB682JA008	6.8K 1/16W	1	
	R2064	D0GB182JA008	1.8K 1/16W	1	
	R2081	D0GB682JA008	6.8K 1/16W	1	
	R2082	D0GB682JA008	6.8K 1/16W	1	
	R2083	D0GB822JA008	8.2K 1/16W	1	
	R2084	D0GB822JA008	8.2K 1/16W	1	
	R2118	D0GB392JA008	3.9K 1/16W	1	
	R2120	D0GB392JA008	3.9K 1/16W	1	
	R2121	D0GB332JA008	3.3K 1/16W	1	
	R2122	D0GB332JA008	3.3K 1/16W	1	
	R2123	D0GB123JA008	12K 1/16W	1	
	R2124	D0GB123JA008	12K 1/16W	1	
	R2125	D0GB183JA008	18K 1/16W	1	
	R2126	D0GB183JA008	18K 1/16W	1	
	R2127	D0GB223JA008	22K 1/16W	1	
	R2128	D0GB223JA008	22K 1/16W	1	
	R2131	D0GB223JA008	22K 1/16W	1	
	R2132	D0GB223JA008	22K 1/16W	1	
	R2133	D0GB223JA008	22K 1/16W	1	
	R2134	D0GB223JA008	22K 1/16W	1	
	R2137	D0GB273JA008	27K 1/16W	1	
	R2138	D0GB273JA008	27K 1/16W	1	
	R2143	D0GBR00JA008	0 1/16W	1	
	R2181	D0GB821JA008	820 1/16W	1	
	R2182	D0GB821JA008	820 1/16W	1	
	R2183	D0GB103JA008	10K 1/16W	1	
	R2184	D0GB103JA008	10K 1/16W	1	
	R2185	D0GB472JA008	4.7K 1/16W	1	
	R2186	D0GB472JA008	4.7K 1/16W	1	
	R2220	D0GB103JA008	10K 1/16W	1	
	R2221	D0GB332JA008	3.3K 1/16W	1	
	R2222	D0GB332JA008	3.3K 1/16W	1	
	R2223	D0GB223JA008	22K 1/16W	1	
	R2224	D0GB223JA008	22K 1/16W	1	
	R2301	D0GB563JA008	56K 1/16W	1	
	R2302	D0GB823JA008	82K 1/16W	1	
	R2303	D0GB223JA008	22K 1/16W	1	
	R2304	D0GB103JA008	10K 1/16W	1	
	R2305	D0GB223JA008	22K 1/16W	1	
	R2311	D0GB471JA008	470 1/16W	1	
	R2312	D0GB471JA008	470 1/16W	1	
	R2313	D0GB104JA008	100K 1/16W	1	
	R2314	D0GB104JA008	100K 1/16W	1	
	R2315	D0GB153JA008	15K 1/16W	1	
	R2316	D0GB153JA008	15K 1/16W	1	
	R2318	D0GB104JA008	100K 1/16W	1	
	R2320	D0GD223JA017	22K 1/10W	1	
	R2321	D0GB103JA008	10K 1/16W	1	
	R2322	D0GB103JA008	10K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2323	D0GB563JA008	56K 1/16W	1	
	R2324	D0GB563JA008	56K 1/16W	1	
	R2327	D0GB563JA008	56K 1/16W	1	
	R2328	D0GB563JA008	56K 1/16W	1	
	R2331	D0GBR00JA008	0 1/16W	1	
	R2332	D0GBR00JA008	0 1/16W	1	
	R2351	ERJ3GEYJ180V	18 1/10W	1	
	R2352	ERJ3GEYJ180V	18 1/10W	1	
	R2353	ERJ3GEYJ180V	18 1/10W	1	
	R2354	ERJ3GEYJ180V	18 1/10W	1	
	R2355	ERJ3GEYJ180V	18 1/10W	1	
	R2356	ERJ3GEYJ180V	18 1/10W	1	
	R2357	ERJ3GEYJ180V	18 1/10W	1	
	R2358	ERJ3GEYJ180V	18 1/10W	1	
	R2359	D0GB562JA008	5.6K 1/16W	1	
	R2360	D0GB562JA008	5.6K 1/16W	1	
	R2361	D0GB562JA008	5.6K 1/16W	1	
	R2362	D0GB562JA008	5.6K 1/16W	1	
	R2363	D0GDR00JA017	0 1/10W	1	
	R2364	D0GDR00JA017	0 1/10W	1	
	R2365	D0GB104JA008	100K 1/16W	1	
	R2366	D0GB821JA008	820 1/16W	1	
	R2368	D0GB183JA008	18K 1/16W	1	
	R2369	D0GB183JA008	18K 1/16W	1	
	R2370	D0GB223JA008	22K 1/16W	1	
	R2371	D0GB153JA008	15K 1/16W	1	
	R2372	D0GB153JA008	15K 1/16W	1	
	R2373	D0GB153JA008	15K 1/16W	1	
	R2374	D0GB183JA008	18K 1/16W	1	
	R2375	D0GB471JA008	470 1/16W	1	
	R2376	D0GB222JA008	2.2K 1/16W	1	
	R2379	D0GB183JA008	18K 1/16W	1	
	R2380	D0GB123JA008	12K 1/16W	1	
	R2381	D0GB104JA008	100K 1/16W	1	
	R2382	D0GB102JA008	1K 1/16W	1	
	R2383	D0GB102JA008	1K 1/16W	1	
	R2385	D0GB106JA008	10M 1/16W	1	
	R2416	D0GB471JA008	470 1/16W	1	
	R2417	D0GB103JA008	10K 1/16W	1	
	R2418	D0GB104JA008	100K 1/16W	1	
	R2448	D0GD223JA017	22K 1/10W	1	
	R2501	D0GB334JA008	330K 1/16W	1	
	R2502	D0GB823JA008	82K 1/16W	1	
	R2503	D0GB392JA008	3.9K 1/16W	1	
	R2504	D0GB101JA008	100 1/16W	1	
	R2505	D0GB681JA008	680 1/16W	1	
	R2506	D0GB473JA008	47K 1/16W	1	
	R2508	D0GB102JA008	1K 1/16W	1	
	R2509	D0GB101JA008	100 1/16W	1	
	R2510	D0GB563JA008	56K 1/16W	1	
	R2516	D0GB471JA008	470 1/16W	1	
	R2517	D0GB103JA008	10K 1/16W	1	
	R2556	D0GB102JA008	1K 1/16W	1	
	R2570	D0GB102JA008	1K 1/16W	1	
	R2583	D0GB101JA008	100 1/16W	1	
	R2605	D0GB103JA008	10K 1/16W	1	
	R2606	D0GB103JA008	10K 1/16W	1	
	R2620	D0GB473JA008	47K 1/16W	1	
	R2621	D0GB473JA008	47K 1/16W	1	
	R2622	D0GB473JA008	47K 1/16W	1	
	R2623	D0GB473JA008	47K 1/16W	1	
	R2624	D0GB473JA008	47K 1/16W	1	
	R2625	D0GB473JA008	47K 1/16W	1	
	R2626	D0GB473JA008	47K 1/16W	1	
	R2627	D0GB473JA008	47K 1/16W	1	
	R2628	D0GB103JA008	10K 1/16W	1	
	R2632	D0GB103JA008	10K 1/16W	1	
	R2635	D0GB103JA008	10K 1/16W	1	
	R2641	D0GB103JA008	10K 1/16W	1	
	R2649	D0GB392JA008	3.9K 1/16W	1	
	R2650	D0GB392JA008	3.9K 1/16W	1	
	R2651	D0GB103JA008	10K 1/16W	1	
	R2652	D0GB103JA008	10K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2670	D0GB103JA008	10K 1/16W	1	
	R2676	D0GB473JA008	47K 1/16W	1	
	R2678	D0GB103JA008	10K 1/16W	1	
	R2679	D0GB153JA008	15K 1/16W	1	
	R2681	D0GB103JA008	10K 1/16W	1	
	R2684	D0GB153JA008	15K 1/16W	1	
	R2685	D0GB103JA008	10K 1/16W	1	
	R2694	D0GB103JA008	10K 1/16W	1	PH
	R2695	D0GB103JA008	10K 1/16W	1	
	R2701	D0HB152ZA002	1.5K 1/16W	1	
	R2702	ERJ3RBD272V	2.7K 1/16W	1	
	R2703	D0HB102ZA002	1K 1/16W	1	
	R2706	D0GB105JA008	1M 1/16W	1	
	R2711	D0GB271JA008	270 1/16W	1	
	R2712	ERJ3GEYJ180V	18 1/10W	1	
	R2733	D0GB391JA008	390 1/16W	1	
	R2735	D0GB101JA008	100 1/16W	1	
	R2743	D0GB474JA008	470K 1/16W	1	
	R2744	D0GB472JA008	4.7K 1/16W	1	
	R2745	D0GB102JA008	1K 1/16W	1	
	R2753	D0GD102JA017	1K 1/10W	1	
	R2754	D0GB471JA008	470 1/16W	1	
	R2755	D0GB272JA008	2.7K 1/16W	1	
	R2756	D0GB471JA008	470 1/16W	1	
	R2762	D0GB102JA008	1K 1/16W	1	
	R2765	D0GB272JA008	2.7K 1/16W	1	
	R2771	D0GB822JA008	8.2K 1/16W	1	
	R2772	D0GB752JA008	7.5K 1/16W	1	
	R2773	D0GB153JA008	15K 1/16W	1	
	R2774	D0GB153JA008	15K 1/16W	1	
	R2775	D0GB912JA041	9.1K 1/16W	1	
	R2801	D0GB102JA008	1K 1/16W	1	
	R2802	D0GB101JA008	100 1/16W	1	
	R2803	D0GD102JA017	1K 1/10W	1	
	R2804	D0GB102JA008	1K 1/16W	1	
	R2805	D0GB101JA008	100 1/16W	1	
	R2806	D0GB101JA008	100 1/16W	1	
	R2808	D0GB101JA008	100 1/16W	1	
	R2809	D0GB101JA008	100 1/16W	1	
	R2811	D0GB472JA008	4.7K 1/16W	1	
	R2812	D0GBR00JA008	0 1/16W	1	
	R2813	D0GBR00JA008	0 1/16W	1	
	R2815	D0GB473JA008	47K 1/16W	1	
	R2820	D0GBR00JA008	0 1/16W	1	
	R2821	D0GBR00JA008	0 1/16W	1	
	R2822	D0GBR00JA008	0 1/16W	1	
	R2823	D0GBR00JA008	0 1/16W	1	
	R2824	D0GBR00JA008	0 1/16W	1	
	R2825	D0GBR00JA008	0 1/16W	1	
	R2826	D0GBR00JA008	0 1/16W	1	
	R2827	D0GBR00JA008	0 1/16W	1	
	R2828	D0GB102JA008	1K 1/16W	1	
	R2829	D0GB152JA008	1.5K 1/16W	1	
	R2833	D0GB102JA008	1K 1/16W	1	
	R2834	D0GB152JA008	1.5K 1/16W	1	
	R2835	D0GB101JA008	100 1/16W	1	
	R2840	D0GD101JA017	100 1/10W	1	
	R2843	D0GB101JA008	100 1/16W	1	
	R2845	D0GDR00JA017	0 1/10W	1	
	R2846	D0GBR00JA008	0 1/16W	1	
	R2847	D0GBR00JA008	0 1/16W	1	
	R2848	D0GDR00JA017	0 1/10W	1	
	R2849	D0GBR00JA008	0 1/16W	1	
	R2850	D0GBR00JA008	0 1/16W	1	
	R2851	D0GB101JA008	100 1/16W	1	
	R2852	D0GB101JA008	100 1/16W	1	
	R2854	D0GB101JA008	100 1/16W	1	
	R2864	D0GB101JA008	100 1/16W	1	
	R2865	D0GB102JA008	1K 1/16W	1	
	R2866	D0GB101JA008	100 1/16W	1	
	R2867	D0GB101JA008	100 1/16W	1	
	R2868	D0GB101JA008	100 1/16W	1	
	R2869	D0GB101JA008	100 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R2870	D0GB101JA008	100 1/16W	1	
	R2874	D0GB101JA008	100 1/16W	1	
	R2875	D0GB101JA008	100 1/16W	1	
	R2876	D0GB101JA008	100 1/16W	1	
	R2878	D0GB101JA008	100 1/16W	1	
	R2879	D0GB101JA008	100 1/16W	1	
	R2880	D0GB101JA008	100 1/16W	1	
	R2881	D0GB101JA008	100 1/16W	1	
	R2883	D0GB101JA008	100 1/16W	1	
	R2885	D0GB102JA008	1K 1/16W	1	
	R2886	D0GB102JA008	1K 1/16W	1	
	R2887	D0GB102JA008	1K 1/16W	1	
	R2888	D0GB102JA008	1K 1/16W	1	
	R2894	D0GB101JA008	100 1/16W	1	PN
	R2895	D0GB101JA008	100 1/16W	1	
	R2896	D0GB101JA008	100 1/16W	1	
	R2897	D0GB101JA008	100 1/16W	1	
	R2898	D0GB101JA008	100 1/16W	1	
	R2899	D0GB101JA008	100 1/16W	1	
	R2902	D0GB470JA008	47 1/16W	1	
	R2914	D0GB473JA008	47K 1/16W	1	
	R2920	ERJ3GEYJ564V	560K 1/10W	1	
	R2937	D0GB103JA017	10K 1/10W	1	
	R2939	D0GB473JA008	47K 1/16W	1	
	R2941	D0GB103JA008	10K 1/16W	1	
	R2942	D0GB472JA008	4.7K 1/16W	1	
	R2944	D0GB562JA008	5.6K 1/16W	1	
	R2945	D0GB103JA008	10K 1/16W	1	
	R2946	D0GB563JA008	56K 1/16W	1	
	R2947	D0AF270JA039	27 1/2W	1	
	R2948	D0GB101JA008	100 1/16W	1	
	R2949	D0GB473JA008	47K 1/16W	1	
	R2950	D0GB562JA008	5.6K 1/16W	1	
	R2957	D0AF270JA039	27 1/2W	1	
	R2958	D0GB101JA008	100 1/16W	1	
	R2959	D0GB683JA008	68K 1/16W	1	
	R2960	D0GBR00JA017	0 1/10W	1	
	R2961	D0GB472JA008	4.7K 1/16W	1	
	R2962	D0GB562JA008	5.6K 1/16W	1	
	R2963	D0GB103JA008	10K 1/16W	1	
	R2965	D0GB103JA008	10K 1/16W	1	
	R2966	D0GB824JA008	820K 1/16W	1	
	R2967	D0GB473JA008	47K 1/16W	1	
	R2968	D0GB562JA008	5.6K 1/16W	1	
	R2969	D0GB563JA008	56K 1/16W	1	
	R2990	D0GB102JA008	1K 1/16W	1	
	R2992	D0GB101JA008	100 1/16W	1	
	R3111	D0GB332JA008	3.3K 1/16W	1	
	R3112	D0GB332JA008	3.3K 1/16W	1	
	R3113	D0GBR00JA008	0 1/16W	1	
	R3114	D0GBR00JA008	0 1/16W	1	
	R3115	D0GB471JA008	470 1/16W	1	
	R3116	D0GB471JA008	470 1/16W	1	
	R3117	D0GB102JA008	1K 1/16W	1	
	R3118	D0GB102JA008	1K 1/16W	1	
	R3119	D0GB681JA008	680 1/16W	1	
	R3120	D0GB681JA008	680 1/16W	1	
	R3301	D0GBR00JA008	0 1/16W	1	
	R3302	D0GB101JA008	100 1/16W	1	
	R3303	D0GB104JA008	100K 1/16W	1	
	R3304	D0GBR00JA008	0 1/16W	1	
	R3306	D0GB103JA008	10K 1/16W	1	
	R3307	D0GB123JA008	12K 1/16W	1	
	R3930	D0GB102JA008	1K 1/16W	1	
	R3931	D0GB824JA008	820K 1/16W	1	
	R5000	D0GB562JA008	5.6K 1/16W	1	
	R5001	D0GB562JA008	5.6K 1/16W	1	
	R5002	D0GB562JA008	5.6K 1/16W	1	
	R5003	D0GB562JA008	5.6K 1/16W	1	
	R5004	D0GF100JA014	10 1/8W	1	
	R5005	D0GF100JA014	10 1/8W	1	
	R5006	D0GZ220JA012	22 1W	1	
	R5007	D0GZ220JA012	22 1W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5008	D0GB101JA008	100 1/16W	1	
	R5010	D0GF100JA014	10 1/8W	1	
	R5011	D0GF100JA014	10 1/8W	1	
	R5018	D0GB683JA008	68K 1/16W	1	
	R5019	D0GB683JA008	68K 1/16W	1	
	R5020	D0GB124JA008	120K 1/16W	1	
	R5021	D0GB122JA008	1.2K 1/16W	1	
	R5022	D0GB122JA008	1.2K 1/16W	1	
	R5023	D0GB122JA008	1.2K 1/16W	1	
	R5030	D0GB562JA008	5.6K 1/16W	1	
	R5031	D0GB562JA008	5.6K 1/16W	1	
	R5032	D0GB562JA008	5.6K 1/16W	1	
	R5033	D0GB562JA008	5.6K 1/16W	1	
	R5036	D0GB562JA008	5.6K 1/16W	1	
	R5037	D0GB562JA008	5.6K 1/16W	1	
	R5103	D0GB562JA008	5.6K 1/16W	1	
	R5104	D0GB562JA008	5.6K 1/16W	1	
	R5110	D0GB223JA008	22K 1/16W	1	
	R5113	D0GB124JA008	120K 1/16W	1	
	R5118	D0GB562JA008	5.6K 1/16W	1	
	R5119	D0GB562JA008	5.6K 1/16W	1	
	R5200	D0GF100JA014	10 1/8W	1	
	R5201	D0GF100JA014	10 1/8W	1	
	R5204	D0GB101JA008	100 1/16W	1	
	R5205	D0GB562JA008	5.6K 1/16W	1	
	R5206	D0GB562JA008	5.6K 1/16W	1	
	R5207	D0GB562JA008	5.6K 1/16W	1	
	R5208	D0GB562JA008	5.6K 1/16W	1	
	R5209	D0GZ220JA012	22 1W	1	
	R5210	D0GF100JA014	10 1/8W	1	
	R5211	D0GF100JA014	10 1/8W	1	
	R5217	D0GZ220JA012	22 1W	1	
	R5317	D0GB122JA008	1.2K 1/16W	1	
	R5318	D0GB124JA008	120K 1/16W	1	
	R5328	D0GB683JA008	68K 1/16W	1	
	R5400	D0GZ220JA012	22 1W	1	
	R5402	D0GF100JA014	10 1/8W	1	
	R5404	D0GB101JA008	100 1/16W	1	
	R5405	D0GF100JA014	10 1/8W	1	
	R5410	D0GF100JA014	10 1/8W	1	
	R5411	D0GF100JA014	10 1/8W	1	
	R5419	D0GZ220JA012	22 1W	1	
	R5504	D0GB220JA008	22 1/16W	1	
	R5505	D0GB101JA008	100 1/16W	1	
	R5506	D0GB105JA008	1M 1/16W	1	
	R5507	D0GB105JA008	1M 1/16W	1	
	R5508	D0GB105JA008	1M 1/16W	1	
	R5510	ERG28SJ471E	470 2W	1	
	R5512	D0GBR00JA008	0 1/16W	1	
	R5513	D0GB101JA008	100 1/16W	1	
	R5515	D0GBR00JA008	0 1/16W	1	
	R5602	D0GB103JA008	10K 1/16W	1	
	R5603	D0GB103JA008	10K 1/16W	1	
	R5604	D0GB122JA008	1.2K 1/16W	1	
	R5608	D0GB103JA008	10K 1/16W	1	
	R5609	D0GB103JA008	10K 1/16W	1	
	R5611	D0GB122JA008	1.2K 1/16W	1	
	R5671	D0GBR00JA008	0 1/16W	1	
	R5701	ERDS1TJ475B	4.7M 1W	1	
	R5702	D0GZ333JA012	33K W	1	PN
	R5702	ERJ1TYJ104U	100K 1W	1	PH
	R5703	D0GZ333JA012	33K W	1	PN
	R5703	ERJ1TYJ104U	100K 1W	1	PH
	R5704	D0GF394JA017	390K 1/8W	1	
	R5705	D0GF394JA017	390K 1/8W	1	
	R5720	D0GD220JA017	22 1/10W	1	
	R5721	D0GD103JA017	10K 1/10W	1	
	R5722	D0GD102JA017	1K 1/10W	1	PH
	R5722	D0GD122JA017	1.2K 1/10W	1	PN
	R5723	D0GB102JA008	1K 1/16W	1	
	R5724	D0GD121JA017	120 1/10W	1	
	R5725	D0GBR00JA008	0 1/16W	1	
	R5726	ERX2LJ82MP	82m 2W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R5727	ERX2SZJR10P	0.1 2W	1	PN
	R5728	D0GB104JA008	100K 1/16W	1	
	R5729	D0GD103JA017	10K 1/10W	1	
	R5730	D0GB102JA008	1K 1/16W	1	
	R5731	D0GBR00JA008	0 1/16W	1	
	R5732	D0GB101JA008	100 1/16W	1	
	R5733	D0GB473JA008	47K 1/16W	1	
	R5750	D0GBR00JA008	0 1/16W	1	
	R5786	ERJ1TYJ204U	200K 1W	1	
	R5787	D0GB753JA008	75K 1/16W	1	
	R5795	ERJ6GEYJ433V	43K 1/8W	1	
	R5796	D0AF222JA039	2.2K 1/2W	1	
	R5797	D0GD472JA017	4.7K 1/10W	1	
	R5798	D0GD100JA017	10 1/10W	1	
	R5800	ERJ6GEYJ123V	12K 1/8W	1	
	R5801	D0GD103JA017	10K 1/10W	1	
	R5802	ERJ3RBD272V	2.7K 1/16W	1	
	R5803	D0GDR00JA017	0 1/10W	1	
	R5804	D1BD4702A077	47 1/10W	1	
	R5805	ERJ3RBD222V	2.2K 1/16W	1	
	R5806	D0GB153JA008	15K 1/16W	1	
	R5807	ERJ6GEYJ331V	330 1/8W	1	
	R5808	D0GD222JA017	2.2K 1/10W	1	
	R5809	ERJ6GEYJ331V	330 1/8W	1	
	R5810	D0GB331JA008	330 1/16W	1	
	R5811	ERJ8GEYJ152V	1.5K 1/4W	1	
	R5812	D0HB822ZA002	8.2K 1/16W	1	
	R5813	ERJ3RBD243V	24K 1/16W	1	
	R5814	D0GB822JA008	8.2K 1/16W	1	
	R5815	D0GB272JA008	2.7K 1/16W	1	
	R5816	ERJ8GEYJ152V	1.5K 1/4W	1	
	R5817	D0GB331JA008	330 1/16W	1	
	R5820	ERG2SJ910E	91 2W	1	
	R5821	ERG2SJ910E	91 2W	1	
	R5822	ERG2SJ910E	91 2W	1	
	R5823	ERG2SJ910E	91 2W	1	
	R5824	ERG2SJ910E	91 2W	1	
	R5825	D0GB102JA008	1K 1/16W	1	
	R5832	D0GZ222JA012	2.2K 1W	1	
	R5834	D0GZ222JA012	2.2K 1W	1	
	R5840	D0GB823JA008	82K 1/16W	1	
	R5841	D0GB124JA008	120K 1/16W	1	
	R5860	ERJ3GEYF103V	10K 1/10W	1	
	R5861	ERJ3GEYF472V	4.7K 1/10W	1	
	R5862	D0GD103JA017	10K 1/10W	1	
	R5863	D0GD103JA017	10K 1/10W	1	
	R5864	ERJ6GEYF103V	10K 1/8W	1	
	R5890	D0GB222JA008	2.2K 1/16W	1	
	R5891	ERJ3RBD333V	33K 1/16W	1	
	R5892	ERJ3RBD472V	4.7K 1/16W	1	
	R5893	ERJ3RBD393V	39K 1/16W	1	
	R5894	D0GB102JA008	1K 1/16W	1	
	R5895	D0GB101JA008	100 1/16W	1	
	R6100	D0GB103JA008	10K 1/16W	1	
	R6101	D0GB122JA008	1.2K 1/16W	1	
	R6102	D0GB152JA008	1.5K 1/16W	1	
	R6103	D0GB222JA008	2.2K 1/16W	1	
	R6104	D0GB332JA008	3.3K 1/16W	1	
	R6105	D0GB472JA008	4.7K 1/16W	1	
	R6106	D0GBR00JA008	0 1/16W	1	
	R6108	D0GB682JA008	6.8K 1/16W	1	
	R6200	D0GB103JA008	10K 1/16W	1	
	R6201	D0GB122JA008	1.2K 1/16W	1	
	R6202	D0GB152JA008	1.5K 1/16W	1	
	R6203	D0GB222JA008	2.2K 1/16W	1	
	R6204	D0GB332JA008	3.3K 1/16W	1	
	R6205	D0GB472JA008	4.7K 1/16W	1	
	R6206	D0GB682JA008	6.8K 1/16W	1	
	R6207	D0GB153JA008	15K 1/16W	1	
	R6300	D0GB103JA008	10K 1/16W	1	
	R6301	D0GB122JA008	1.2K 1/16W	1	
	R6302	D0GB152JA008	1.5K 1/16W	1	
	R6303	D0GB222JA008	2.2K 1/16W	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	R6304	D0GB332JA008	3.3K 1/16W	1	
	R6305	D0GB472JA008	4.7K 1/16W	1	
	R6306	D0GB682JA008	6.8K 1/16W	1	
	R6307	D0GB153JA008	15K 1/16W	1	
	R6501	D0GB223JA008	22K 1/16W	1	
	R6502	D0GB123JA008	12K 1/16W	1	
	R6503	D0GB103JA008	10K 1/16W	1	
	R6511	D0GB222JA008	2.2K 1/16W	1	
	R6512	D0GB222JA008	2.2K 1/16W	1	
	R6513	D0GB221JA007	220 1/10W	1	
	R6516	D0GB221JA007	220 1/10W	1	
	R6600	D0GB181JA008	180 1/16W	1	
	R6601	D0GB181JA008	180 1/16W	1	
	R6602	D0GB181JA008	180 1/16W	1	
	R6603	D0GB181JA008	180 1/16W	1	
	R6606	D0GB181JA008	180 1/16W	1	
	R6607	D0GB151JA008	150 1/16W	1	
	R6608	D0GB151JA008	150 1/16W	1	
	R6609	D0GBR00JA008	0 1/16W	1	
	R6610	D0GBR00JA008	0 1/16W	1	
	R6618	D0GB221JA007	220 1/10W	1	
	R6619	D0GB221JA007	220 1/10W	1	
	R6620	D0GB471JA008	470 1/16W	1	
	R6622	D0GB823JA008	82K 1/16W	1	
	R6631	D0GB103JA008	10K 1/16W	1	
	R6632	D0GB103JA008	10K 1/16W	1	
	R6671	D0GB223JA008	22K 1/16W	1	
	R6672	D0GB100JA008	10 1/16W	1	
	R6811	D0GBR00JA008	0 1/16W	1	
	R6812	D0GBR00JA008	0 1/16W	1	
	R6882	D0GB223JA008	22K 1/16W	1	
	R6883	D0GB103JA008	10K 1/16W	1	
	R6884	D0GB123JA008	12K 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	D0GB271JA008	270 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	
	R7260	D0GB101JA008	100 1/16W	1	
	R7315	D0GB332JA008	3.3K 1/16W	1	
	R7323	D0GB682JA008	6.8K 1/16W	1	
	R7325	D0GB331JA008	330 1/16W	1	
	R7327	D0GB102JA008	1K 1/16W	1	
	R7328	D0GB103JA008	10K 1/16W	1	
	R7329	D0GB102JA008	1K 1/16W	1	
	R7331	D0GB273JA008	27K 1/16W	1	
	R7332	D0GB102JA008	1K 1/16W	1	
	R7335	D0GB101JA008	100 1/16W	1	
	R7336	D0GB100JA008	10 1/16W	1	
	R7349	D0GB183JA008	18K 1/16W	1	
	R7601	D0GB4R7JA008	4.7 1/16W	1	
	R7650	D0GB5R6JA008	5.6 1/16W	1	
	RX551	D1H84734A024	RESISTOR NETWORK	1	
	RX656	D1H84734A024	RESISTOR NETWORK	1	
	RX760	D1H84734A024	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	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	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		
	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	ECJ1VB0J225M	2.2uF 6.3V	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	
	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	
	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	ECJ1VB0J475M	4.7uF 6.3V	1	
	C809	F3G0J476A030	47uF 6.3V	1	
	C811	F3G0J476A030	47uF 6.3V	1	
	C812	F3G0J476A030	47uF 6.3V	1	
	C813	F3G0J476A030	47uF 6.3V	1	
	C814	F1G1C1030007	0.01uF 16V	1	
	C815	F1G1C1030007	0.01uF 16V	1	
	C816	F1G1H150A565	15pF 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	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	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	F1G1H330A565	33pF 50V	1	
	C853	F1G1H220A565	22pF 50V	1	
	C857	F1G1H101A566	100pF 50V	1	
	C858	F1G1H101A566	100pF 50V	1	
	C859	F1G1H101A566	100pF 50V	1	
	C1100	F2A1C100A207	10uF 16V	1	
	C1101	F2A1C100A207	10uF 16V	1	
	C1103	F2A1H1R0A213	1.0uF 50V	1	
	C1104	F2A1H1R0A213	1.0uF 50V	1	
	C1105	F2A1HR10A015	0.10uF 50V	1	
	C1106	F2A1H4R7A213	4.7uF 50V	1	
	C1107	F2A1H2R2A234	2.2uF 50V	1	
	C1108	F1H1H472A013	4700pF 50V	1	
	C1109	F1H1H102A219	1000pF 50V	1	
	C1110	F1H1H222A013	2200pF 50V	1	
	C1111	F2A1HR10A015	0.10uF 50V	1	
	C1113	F1H1H470A004	47pF 50V	1	
	C1114	F1H1H103A219	0.01uF 50V	1	
	C1120	F2A1H4R7A213	4.7uF 50V	1	
	C2005	D0GBR00JA008	0 1/16W	1	
	C2025	F1H0J1050013	1uF 6.3V	1	
	C2026	F1H0J1050013	1uF 6.3V	1	
	C2050	F1H1H102A219	1000pF 50V	1	
	C2054	F1H1H103A219	0.01uF 50V	1	
	C2055	F1H0J1050013	1uF 6.3V	1	
	C2056	F1H0J1050013	1uF 6.3V	1	
	C2065	F1H0J1050013	1uF 6.3V	1	
	C2066	F1H0J1050013	1uF 6.3V	1	
	C2075	F1H0J1050013	1uF 6.3V	1	
	C2076	F1H0J1050013	1uF 6.3V	1	
	C2081	F1H1H101A720	100pF 50V	1	
	C2082	F1H1H101A720	100pF 50V	1	
	C2083	F1H1H102A219	1000pF 50V	1	
	C2084	F1H1H102A219	1000pF 50V	1	
	C2085	F1H0J1050013	1uF 6.3V	1	
	C2086	F1H0J1050013	1uF 6.3V	1	
	C2091	F1H1H102A219	1000pF 50V	1	
	C2092	F1H1C104A042	0.1uF 16V	1	
	C2095	F1H0J1050013	1uF 6.3V	1	
	C2096	F1H0J1050013	1uF 6.3V	1	
	C2105	F2A1H4R7A213	4.7uF 50V	1	
	C2106	F2A1H4R7A213	4.7uF 50V	1	
	C2119	F2A0J101A181	100uF 6.3V	1	
	C2120	F1H1H103A219	0.01uF 50V	1	
	C2121	F1H1H102A219	1000pF 50V	1	
	C2123	F1H0J1050013	1uF 6.3V	1	
	C2129	F2A1H1R0A213	1.0uF 50V	1	
	C2130	F2A1H1R0A213	1.0uF 50V	1	
	C2135	F1H1H470A004	47pF 50V	1	
	C2136	F1H1H470A004	47pF 50V	1	
	C2139	F1H1H100A017	10pF 50V	1	
	C2140	F1H1H100A017	10pF 50V	1	
	C2170	F2A1A330A159	33uF 10V	1	
	C2172	F2A1H4R7A213	4.7uF 50V	1	
	C2181	F2A1H1R0A213	1.0uF 50V	1	
	C2182	F2A1H1R0A213	1.0uF 50V	1	
	C2183	F1H1C474A008	0.47uF 16V	1	
	C2184	F1H1C474A008	0.47uF 16V	1	
	C2185	F1H1C474A008	0.47uF 16V	1	
	C2186	F1H1C474A008	0.47uF 16V	1	
	C2187	F1H1H222A013	2200pF 50V	1	
	C2188	F1H1H222A013	2200pF 50V	1	
	C2189	F1H1H103A219	0.01uF 50V	1	
	C2190	F1H1H103A219	0.01uF 50V	1	
	C2191	F1H1H103A219	0.01uF 50V	1	
	C2192	F1H1H103A219	0.01uF 50V	1	
	C2193	F1H1C333A071	0.033uF 16V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2194	F1H1C333A071	0.033uF 16V	1	
	C2195	F1H1C474A008	0.47uF 16V	1	
	C2196	F1H1C474A008	0.47uF 16V	1	
	C2197	F1H1H332A013	3300pF 50V	1	
	C2210	F1H1H223A219	0.022uF 50V	1	
	C2212	F1H1H331A013	330pF 50V	1	
	C2213	F1H1H331A013	330pF 50V	1	
	C2221	F1H1H102A219	1000pF 50V	1	
	C2300	F1H1C683A087	0.068uF 16V	1	
	C2302	F2A1H1R0A213	1.0uF 50V	1	
	C2303	F2A1H3R3A213	3.3uF 50V	1	
	C2304	F2A1H3R3A213	3.3uF 50V	1	
	C2305	F2A1H3R3A213	3.3uF 50V	1	
	C2307	F1H1C823A001	0.082uF 16V	1	
	C2308	F1H0J4750003	4.7uF 6.3V	1	
	C2310	F2A1A101A159	100uF 10V	1	
	C2311	F1J0J106A020	10uF 6.3V	1	
	C2312	F1J0J106A020	10uF 6.3V	1	
	C2313	F1H1H223A219	0.022uF 50V	1	
	C2315	F1H0J1050013	1uF 6.3V	1	
	C2316	F1H0J1050013	1uF 6.3V	1	
	C2321	F1H1H470A004	47pF 50V	1	
	C2322	F1H1H470A004	47pF 50V	1	
	C2323	F1H1C104A042	0.1uF 16V	1	
	C2324	F1H1C104A042	0.1uF 16V	1	
	C2341	F1H1H101A720	100pF 50V	1	
	C2342	F1H1H101A720	100pF 50V	1	
	C2357	F1H1H102A219	1000pF 50V	1	
	C2358	F1H1H102A219	1000pF 50V	1	
	C2365	ECEA1EKN4R7B	4.7uF 25V	1	
	C2371	F1H1H101A720	100pF 50V	1	
	C2374	F1H1H103A219	0.01uF 50V	1	
	C2375	F1H1H101A720	100pF 50V	1	
	C2376	F1H1A184A012	0.18uF 10V	1	
	C2378	F1H0J1050013	1uF 6.3V	1	
	C2379	F1J0J106A020	10uF 6.3V	1	
	C2380	F1H1H103A219	0.01uF 50V	1	
	C2501	F1H0J1050013	1uF 6.3V	1	
	C2503	F1H1A225A051	2.2uF 10V	1	
	C2505	F2A1C100A207	10uF 16V	1	
	C2507	F1H1A224A007	0.22uF 10V	1	
	C2509	F2A1A330A159	33uF 10V	1	
	C2561	F1J0J106A020	10uF 6.3V	1	
	C2570	F2A0J470A167	47uF 6.3V	1	
	C2601	F1H1H101A720	100pF 50V	1	
	C2602	F1H1H101A720	100pF 50V	1	
	C2680	F1H1C104A042	0.1uF 16V	1	
	C2682	F2A0J470A167	47uF 6.3V	1	
	C2701	F1H1H103A219	0.01uF 50V	1	
	C2702	F2A1E102A207	1000uF 25V	1	
	C2703	EEUFC0J821B	820uF 6.3V	1	
	C2704	F1H1H103A219	0.01uF 50V	1	
	C2706	F1H1H103A219	0.01uF 50V	1	
	C2707	F2A0J101A181	100uF 6.3V	1	
	C2712	F2A1A330A159	33uF 10V	1	
	C2713	F2A0J470A167	47uF 6.3V	1	
	C2714	F1H1H103A219	0.01uF 50V	1	
	C2715	F1H1H103A219	0.01uF 50V	1	
	C2731	F2A1C470A180	47uF 16V	1	
	C2732	F1H1H103A219	0.01uF 50V	1	
	C2733	F2A1E102A207	1000uF 25V	1	
	C2734	F1H1H103A219	0.01uF 50V	1	
	C2735	F2A1A330A159	33uF 10V	1	
	C2736	F1H1H103A219	0.01uF 50V	1	
	C2737	F2A1C470A180	47uF 16V	1	
	C2738	F1H1H103A219	0.01uF 50V	1	
	C2741	F1H1C104A042	0.1uF 16V	1	
	C2742	F1H1C104A042	0.1uF 16V	1	
	C2743	F1H1H103A219	0.01uF 50V	1	
	C2751	F1H1H103A219	0.01uF 50V	1	
	C2753	F1H1H103A219	0.01uF 50V	1	
	C2754	F2A1C101A208	100uF 16V	1	
	C2755	F1H1H103A219	0.01uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C2756	F2A1C330A234	33uF 16V	1	
	C2762	F1H1H103A219	0.01uF 50V	1	
	C2763	F1H1H103A219	0.01uF 50V	1	
	C2764	F2A1C101A208	100uF 16V	1	
	C2765	F2A1C100A207	10uF 16V	1	
	C2766	F1H1H103A219	0.01uF 50V	1	
	C2767	F2A1C330A234	33uF 16V	1	
	C2768	F1H1H103A219	0.01uF 50V	1	
	C2769	F1H1C474A008	0.47uF 16V	1	
	C2800	F1H1C104A042	0.1uF 16V	1	
	C2802	F0A2A392A010	3900pF 100V	1	
	C2812	F1H0J1050013	1uF 6.3V	1	
	C2813	F2A1H3R3A213	3.3uF 50V	1	
	C2815	ECJ1VC1H150J	15pF 50V	1	
	C2816	ECJ1VC1H150J	15pF 50V	1	
	C2817	F1J1H104A459	0.1uF 50V	1	
	C2820	F1J1H103A592	0.01uF 50V	1	
	C2837	F1H1C104A042	0.1uF 16V	1	
	C2885	F1H1C104A042	0.1uF 16V	1	
	C2900	F2A1H470A147	47uF 50V	1	
	C2912	F2A1C101A155	100uF 16V	1	
	C2913	F2A1H470A147	47uF 50V	1	
	C2920	F1J0J106A020	10uF 6.3V	1	
	C2932	F1H1H103A219	0.01uF 50V	1	
	C2933	F1H1H103A219	0.01uF 50V	1	
	C2934	F2A0J471A247	470uF 6.3V	1	
	C2941	F2A1C470A180	47uF 16V	1	
	C2942	F1H1C104A042	0.1uF 16V	1	
	C2944	F1H1H102A219	1000pF 50V	1	
	C2946	F1H1H103A219	0.01uF 50V	1	
	C2947	F2A0J101A181	100uF 6.3V	1	
	C2948	F2A0J221A181	220uF 6.3V	1	
	C2949	F2A1H2R2A234	2.2uF 50V	1	
	C2955	F2A0J101A181	100uF 6.3V	1	
	C2961	F1H1H102A219	1000pF 50V	1	
	C2963	F1H1C104A042	0.1uF 16V	1	
	C2965	F2A1C470A180	47uF 16V	1	
	C2966	F1H1C104A042	0.1uF 16V	1	
	C2967	F2A0J221A181	220uF 6.3V	1	
	C2968	ECJ2FB0J106M	10uF 6.3V	1	
	C3105	F1H0J1050013	1uF 6.3V	1	
	C3106	F1H0J1050013	1uF 6.3V	1	
	C3118	D0GDR00JA017	0 1/10W	1	
	C3119	D0GDR00JA017	0 1/10W	1	
	C3601	F2A1C221A019	220uF 16V	1	
	C3603	F1H1C105A097	1uF 16V	1	
	C3701	F2A1H1R0A213	1.0uF 50V	1	
	C3702	F2A1H1R0A213	1.0uF 50V	1	
	C3910	F1H1C474A008	0.47uF 16V	1	
	C3911	F2A1H1R0A013	1.0uF 50V	1	
	C3912	F2A1H2R2A013	2.2uF 50V	1	
	C3920	F1J0J106A020	10uF 6.3V	1	
	C3921	F1J0J106A020	10uF 6.3V	1	
	C3922	F1H0J4750003	4.7uF 6.3V	1	
	C3923	F1H0J4750003	4.7uF 6.3V	1	
	C5000	F1H1H102A219	1000pF 50V	1	
	C5001	F1H1H102A219	1000pF 50V	1	
	C5002	F1H1A474A001	0.47uF 10V	1	
	C5003	F1H1A474A001	0.47uF 10V	1	
	C5004	F1H1A474A001	0.47uF 10V	1	
	C5005	F1H1A474A001	0.47uF 10V	1	
	C5006	F1H1H331A013	330pF 50V	1	
	C5007	F1H1H331A013	330pF 50V	1	
	C5008	F1H1H153A219	0.015uF 50V	1	
	C5009	F1H1H153A219	0.015uF 50V	1	
	C5010	F1J2A221A030	220pF 100V	1	
	C5011	F1J2A221A030	220pF 100V	1	
	C5012	F1J2A221A030	220pF 100V	1	
	C5013	F1J2A221A030	220pF 100V	1	
	C5014	ECQV1H684JL3	0.68uF 50V	1	
	C5015	ECQV1H684JL3	0.68uF 50V	1	
	C5016	F1H1H104A013	0.1uF 50V	1	
	C5017	F1H1H104A013	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C5018	F1K2A1040007	0.1uF 100V	1	
	C5019	F1H1H104A013	0.1uF 50V	1	
	C5020	F1H1H104A013	0.1uF 50V	1	
	C5021	F1H1H104A013	0.1uF 50V	1	
	C5022	F1H1H104A013	0.1uF 50V	1	
	C5023	F1K2A1040007	0.1uF 100V	1	
	C5024	F1H1H104A013	0.1uF 50V	1	
	C5025	F1H1H104A013	0.1uF 50V	1	
	C5027	F1H1H104A013	0.1uF 50V	1	
	C5028	F1H1H104A013	0.1uF 50V	1	
	C5030	F1H1H330A230	33pF 50V	1	
	C5031	ECJ1VB1C474K	0.47uF 16V	1	
	C5032	F1H1H102A219	1000pF 50V	1	
	C5033	F1H1H104A013	0.1uF 50V	1	
	C5040	F2A2A2200035	22uF 100V	1	
	C5050	F1H1H102A219	1000pF 50V	1	
	C5051	F1H1H102A219	1000pF 50V	1	
	C5052	F1H1H102A219	1000pF 50V	1	
	C5053	F1H1H102A219	1000pF 50V	1	
	C5106	F1H1A474A001	0.47uF 10V	1	
	C5107	F1H1A474A001	0.47uF 10V	1	
	C5117	F1H1H102A219	1000pF 50V	1	
	C5119	F1H1H102A219	1000pF 50V	1	
	C5120	F1H1A474A001	0.47uF 10V	1	
	C5121	F1H1A474A001	0.47uF 10V	1	
	C5133	F2A0J101A245	100uF 6.3V	1	
	C5150	F1H1H102A219	1000pF 50V	1	
	C5151	F1H1H102A219	1000pF 50V	1	
	C5152	F1H1H102A219	1000pF 50V	1	
	C5200	F1H1H104A013	0.1uF 50V	1	
	C5201	F1H1H153A219	0.015uF 50V	1	
	C5202	ECJ1VB1C474K	0.47uF 16V	1	
	C5203	F1J2A221A030	220pF 100V	1	
	C5204	F1H1H153A219	0.015uF 50V	1	
	C5205	F1J2A221A030	220pF 100V	1	
	C5206	F1H1H104A013	0.1uF 50V	1	
	C5207	F1K2A1040007	0.1uF 100V	1	
	C5208	F1H1H104A013	0.1uF 50V	1	
	C5209	F1H1H104A013	0.1uF 50V	1	
	C5211	F1J2A221A030	220pF 100V	1	
	C5212	F1H1H330A230	33pF 50V	1	
	C5213	F1H1H104A013	0.1uF 50V	1	
	C5214	F1H1H104A013	0.1uF 50V	1	
	C5216	F1H1H331A013	330pF 50V	1	
	C5217	F1H1H104A013	0.1uF 50V	1	
	C5218	F1J2A221A030	220pF 100V	1	
	C5219	F1K2A1040007	0.1uF 100V	1	
	C5220	F1H1H104A013	0.1uF 50V	1	
	C5221	F1H1H102A219	1000pF 50V	1	
	C5222	F1H1A474A001	0.47uF 10V	1	
	C5223	F1H1A474A001	0.47uF 10V	1	
	C5224	F1H1H331A013	330pF 50V	1	
	C5225	ECQV1H684JL3	0.68uF 50V	1	
	C5226	F1H1H104A013	0.1uF 50V	1	
	C5227	F1H1H104A013	0.1uF 50V	1	
	C5228	ECQV1H684JL3	0.68uF 50V	1	
	C5231	F1H1H102A219	1000pF 50V	1	
	C5232	F1H1A474A001	0.47uF 10V	1	
	C5233	F1H1A474A001	0.47uF 10V	1	
	C5234	F1H1H102A219	1000pF 50V	1	
	C5240	F2A2A2200035	22uF 100V	1	
	C5250	F1H1H102A219	1000pF 50V	1	
	C5251	F1H1H102A219	1000pF 50V	1	
	C5331	F1H1H102A219	1000pF 50V	1	
	C5400	ECQV1H684JL3	0.68uF 50V	1	
	C5401	F1H1H104A013	0.1uF 50V	1	
	C5402	F1H1H104A013	0.1uF 50V	1	
	C5403	F1H1H104A013	0.1uF 50V	1	
	C5404	F1H1H331A013	330pF 50V	1	
	C5405	F1H1H104A013	0.1uF 50V	1	
	C5406	F1H1H104A013	0.1uF 50V	1	
	C5407	F1J2A221A030	220pF 100V	1	
	C5409	F1H1H104A013	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C5410	F1K2A1040007	0.1uF 100V	1	
	C5411	F1J2A221A030	220pF 100V	1	
	C5412	F1H1H331A013	330pF 50V	1	
	C5413	F1H1H104A013	0.1uF 50V	1	
	C5416	F1H1H104A013	0.1uF 50V	1	
	C5418	F1H1H104A013	0.1uF 50V	1	
	C5419	F1K2A1040007	0.1uF 100V	1	
	C5421	ECJ1VB1C474K	0.47uF 16V	1	
	C5422	F1H1H153A219	0.015uF 50V	1	
	C5423	F1H1H330A230	33pF 50V	1	
	C5424	F1H1H153A219	0.015uF 50V	1	
	C5425	F1J2A221A030	220pF 100V	1	
	C5426	F1J2A221A030	220pF 100V	1	
	C5427	F1H1H104A013	0.1uF 50V	1	
	C5428	ECQV1H684JL3	0.68uF 50V	1	
	C5431	F1H1H102A219	1000pF 50V	1	
	C5440	F2A2A2200035	22uF 100V	1	
	C5445	F1H1H104A013	0.1uF 50V	1	
	C5450	F1H1H104A013	0.1uF 50V	1	
	C5508	F2A1V4710074	470uF 35V	1	
	C5509	F2A1V4710074	470uF 35V	1	
	C5510	F2A1V4710074	470uF 35V	1	
	C5511	F2A1V4710074	470uF 35V	1	
	C5512	F2A1V4710074	470uF 35V	1	
	C5513	F2A1V4710074	470uF 35V	1	
	C5514	F1H1H104A013	0.1uF 50V	1	
	C5515	F1H1H104A013	0.1uF 50V	1	
	C5518	F1H1H104A013	0.1uF 50V	1	
	C5519	F1H1H104A013	0.1uF 50V	1	
	C5520	F1H1H104A013	0.1uF 50V	1	
	C5521	F1H1H104A013	0.1uF 50V	1	
	C5522	F1H1H104A013	0.1uF 50V	1	
	C5523	F1H1H104A013	0.1uF 50V	1	
	C5550	F1H1H103A219	0.01uF 50V	1	
	C5551	ECJ1VB1H391K	390pF 50V	1	
	C5552	ECJ1VB1H391K	390pF 50V	1	
	C5553	F1H1H101A230	100pF 50V	1	
	C5554	F1H1H104A013	0.1uF 50V	1	
	C5555	F1K1C1060001	10uF 16V	1	
	C5556	F1H1H103A219	0.01uF 50V	1	
	C5557	F1H1H101A230	100pF 50V	1	
	C5558	F1H1H470A004	47pF 50V	1	
	C5559	F1H1H470A004	47pF 50V	1	
	C5601	F2A1C100A234	10uF 16V	1	
△	C5700	F1BAF1020020	1000pF	1	
△	C5701	F0CAF334A087	0.33uF	1	
△	C5703	F0C2H1040001	0.1uF 500V	1	PH
△	C5703	F0CAF224A085	0.22uF	1	PN
△	C5704	F1BAF1020020	1000pF	1	
△	C5705	F1BAF1020020	1000pF	1	
△	C5706	F1BAF1020020	1000pF	1	PH
△	C5707	F1BAF1020020	1000pF	1	PH
	C5711	F2B2G471A083	470uF 400V	1	PH
	C5712	F2B2D8210010	820uF 200V	1	PN
	C5712	F2B2G471A083	470uF 400V	1	PH
	C5713	F0C2J1030005	0.01uF 630V	1	
	C5720	F1H1H104A013	0.1uF 50V	1	
	C5721	ECJ1VB1H221K	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	ECEA1HKS010B	1uF 50V	1	
	C5737	F1A3A471A035	470pF 1000V	1	PH
	C5790	F1K2J2220002	2200pF 630V	1	
	C5791	F2A1H2R2A213	2.2uF 50V	1	
	C5794	F1H1H220A004	22pF 50V	1	
	C5795	F1J1H473A022	0.047uF 50V	1	
	C5796	F1J1H104A717	0.1uF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C5797	F1A3A470A023	47pF 1000V	1	
	C5798	F2A1H5600009	56uF 50V	1	
	C5800	ERJ6GEY0R00A	0 1/8W	1	
	C5805	F2B1V332A007	3300uF 35V	1	
	C5808	F2B1V332A007	3300uF 35V	1	
	C5810	F1H1H104A013	0.1uF 50V	1	
	C5812	F1H1H104A013	0.1uF 50V	1	
	C5813	F2A1V4710035	470uF 35V	1	
	C5815	F1H1H104A013	0.1uF 50V	1	
	C5816	F2A1E471A652	470uF 25V	1	
	C5817	F2A2AR22A358	0.22uF 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	
	C5823	F1H1H104A013	0.1uF 50V	1	
	C5824	F2A1E471A652	470uF 25V	1	
	C5825	F1H1H104A013	0.1uF 50V	1	
	C5826	ERJ6GEY0R00A	0 1/8W	1	
	C5831	F1H1H104A013	0.1uF 50V	1	
	C5832	F1H1H104A013	0.1uF 50V	1	
	C5839	F1J2E1030004	0.01uF 250V	1	
	C5840	F1J2E1030004	0.01uF 250V	1	
	C5841	F1J2E1030004	0.01uF 250V	1	
	C5842	F1J2E1030004	0.01uF 250V	1	
	C5869	F1H1H104A013	0.1uF 50V	1	
	C5870	F1H1H104A013	0.1uF 50V	1	
	C5896	F1H1H104A013	0.1uF 50V	1	
	C5898	F1H1H104A013	0.1uF 50V	1	
	C5899	F2A1C221A104	220uF 16V	1	
	C6300	F1H1H102A219	1000pF 50V	1	
	C6501	F1H1H101A720	100pF 50V	1	
	C6502	F1H1H101A720	100pF 50V	1	
	C6503	F1H1H102A219	1000pF 50V	1	
	C6512	F1H1H102A219	1000pF 50V	1	
	C6601	F1H1H101A720	100pF 50V	1	
	C6608	F1H1H104A013	0.1uF 50V	1	
	C6609	F1H1H104A013	0.1uF 50V	1	
	C6611	F1H1H331A013	330pF 50V	1	
	C6612	F1H1H331A013	330pF 50V	1	
	C6613	F1H1H331A013	330pF 50V	1	
	C6614	F1H1H103A219	0.01uF 50V	1	
	C6616	F2A1H220A182	22uF 50V	1	
	C6633	F1H1H101A720	100pF 50V	1	
	C6634	F1H1H101A720	100pF 50V	1	
	C6671	F2A1H220A182	22uF 50V	1	
	C6801	F1H1H473A783	0.047uF 50V	1	
	C6802	F1H1H473A783	0.047uF 50V	1	
	C6803	F1H1C104A042	0.1uF 16V	1	
	C6804	F1H1C104A042	0.1uF 16V	1	
	C6811	F1H0J1050013	1uF 6.3V	1	
	C6812	F1H0J1050013	1uF 6.3V	1	
	C6813	F1H1H331A013	330pF 50V	1	
	C6814	F1H1H331A013	330pF 50V	1	
	C6815	F1H1H103A219	0.01uF 50V	1	
	C6816	F1H1H103A219	0.01uF 50V	1	
	C6851	F1H1C104A042	0.1uF 16V	1	
	C6863	F1H1C104A042	0.1uF 16V	1	
	C6882	F1H1H101A230	100pF 50V	1	
	C6883	F1H1H101A230	100pF 50V	1	
	C7102	F1H1A474A025	0.47uF 10V	1	
	C7107	F1H1H223A219	0.022uF 50V	1	
	C7142	F1H1H332A013	3300pF 50V	1	
	C7154	F1H1C104A042	0.1uF 16V	1	
	C7155	F1H1C104A042	0.1uF 16V	1	
	C7161	F1H1C104A042	0.1uF 16V	1	
	C7166	F1H1H103A219	0.01uF 50V	1	
	C7203	F2A0J221A200	220uF 6.3V	1	
	C7204	F1H1C104A042	0.1uF 16V	1	
	C7213	ECJ1VB1A334K	0.33uF 10V	1	
	C7214	F1H1H102A219	1000pF 50V	1	
	C7215	F1H1H102A219	1000pF 50V	1	

Safety	Ref. No.	Part No.	Part Name & Description	Qty	Remarks
	C7216	ECJ1VB1H681K	680pF 50V	1	
	C7217	F1H1C104A042	0.1uF 16V	1	
	C7218	ECJ1VB1C823K	0.082uF 16V	1	
	C7221	ECJ1VC1H150J	15pF 50V	1	
	C7222	ECJ1VC1H150J	15pF 50V	1	
	C7223	F2A1H4R70037	4.7uF 50V	1	
	C7225	F1H1H102A219	1000pF 50V	1	
	C7226	F1H1H102A219	1000pF 50V	1	
	C7227	ECA1HAK010XI	1uF 50V	1	
	C7228	ECA1HAK010XI	1uF 50V	1	
	C7230	F1H1C104A042	0.1uF 16V	1	
	C7231	F2A0J221A200	220uF 6.3V	1	
	C7232	F2A0J221A200	220uF 6.3V	1	
	C7233	F1H1C104A008	0.1uF 16V	1	
	C7234	F1H1C104A042	0.1uF 16V	1	
	C7235	ECEA1CKA100I	10uF 16V	1	
	C7241	F1H1H102A219	1000pF 50V	1	
	C7243	F1H1C104A008	0.1uF 16V	1	
	C7244	F1H1C153A001	0.015uF 16V	1	
	C7253	F1H1H471A219	470pF 50V	1	
	C7255	F1H1C104A042	0.1uF 16V	1	
	C7315	F1H1A474A025	0.47uF 10V	1	
	C7334	ECEA1AKA221I	220uF 10V	1	
	C7335	F1H1C104A008	0.1uF 16V	1	
	C7338	F1H1E2730002	0.027uF 25V	1	
	C7339	F1H1C183A001	0.018uF 16V	1	
	C7352	F1H1C183A001	0.018uF 16V	1	
	C7601	ECEA0JKA330I	33uF 6.3V	1	
	C7613	F1H1C104A042	0.1uF 16V	1	
	C7614	F2A0J101A209	100uF 6.3V	1	
	C7626	F1H1C104A042	0.1uF 16V	1	